Università degli Studi del Molise

Lavori di realizzazione di una stazione sperimentale per prove termofisiche a servizio del Dipartimento di Medicina e Scienze della Salute "Vincenzo Tiberio" dell'Universita' degli Studi del Molise - Campobasso

PROGETTO DEFINITIVO

Progettazione:
Università degli Studi del Molise
Area Servizi Tecnici
Ing. Giovanni LANZA
Ing. Ramona TUCCI
Geom. Antonio RAMACCIATI

RUP: Ing. Giovanni LANZA

RTS.2

RELAZIONE TECNICA SPECIALISTICA E DI CALCOLO DELLE STRUTTURE

Rapp.:

Spazio per visti, pareri e autorizzazioni

Data:
Agosto 2022

Agg.to:

Rev.:

UNIVERSITA' DEGLI STUDI DEL MOLISE

COMUNE DI CAMPOBASSO

PROGETTO STRUTTURALE

Include Relazione Generale, Relazione sui materiali, Relazione di calcolo, Piano di manutenzione e Tabulati di calcolo e verifica.

LAVORI DI REALIZZAZIONE DI UNA STAZIONE SPERIMENTALE PER PROVE TERMOFISICHE A SERVIZIO DEL DIPARTIMENTO DI MEDICINA E SCIENZE DELLA SALUTE "VINCENZO TIBERIO" DELL'UNIVERSITA' DEGLI STUDI DEL MOLISE – CAMPOBASSO.

Committente: Università degli Studi del Molise

Progettazione

Area Servizi Tecnici

Ing. Giovanni LANZA

Ing. Ramona TUCCI

Geom. Antonio RAMACCIATI

CAPITOLO 1: RELAZIONE GENERALE

(Ai sensi del D.M. 17.01.2018, Norme Tecniche per le costruzioni)

1. DESCRIZIONE DELL'OPERA E COLLOCAZIONE NEL TERRITORIO

La presente relazione riguarda la progettazione strutturale e il dimensionamento di una stazione sperimentale per prove termofisiche a servizio del Dipartimento di Medicina e Scienze della Salute "Vincenzo Tiberio" dell'Università degli Studi del Molise – Campobasso.
L'edificio si compone di un piano terra, a destinazione laboratorio sperimentale, ed è costituito tre camere a controllo microclimatico, di cui una a controllo speciale, e spazi connettivi e di servizio.
Le dimensioni complessive del fabbricato sono di 18,00m x 9m (in pianta) con altezza di 5,70m.
La struttura sarà realizzata con fondazioni in c.a. e struttura in elevazione in acciaio.

2. PRESTAZIONI DI PROGETTO, CLASSE DELLA STRUTTURA, VITA UTILE E PROCEDURE DI QUALITÀ

Le prestazioni della struttura e le condizioni per la sua sicurezza sono state individuate comunemente dal progettista e dal committente. A tal fine è stata posta attenzione al tipo della struttura, al suo uso e alle possibili conseguenze di azioni anche accidentali; particolare rilievo è stato dato alla sicurezza delle persone.
La classe della struttura è di tipo 2. Risulta così definito l'insieme degli stati limite riscontrabili nella vita della struttura ed è stato accertato, in fase di dimensionamento, che essi non siano superati.
Altrettanta cura è stata posta per garantire la durabilità della struttura, con la consapevolezza che tutte le prestazioni attese potranno essere adeguatamente realizzate solo mediante opportune procedure da seguire non solo in fase di progettazione, ma anche di costruzione, manutenzione e gestione dell'opera. Per quanto riguarda la durabilità si sono presi tutti gli accorgimenti utili alla conservazione delle caratteristiche fisiche e dinamiche dei materiali e delle strutture, in considerazione dell'ambiente in cui l'opera dovrà vivere e dei cicli di carico a cui sarà sottoposta. La qualità dei materiali e le dimensioni degli elementi sono coerenti con tali obiettivi.
In fase di costruzione saranno attuate severe procedure di controllo sulla qualità, in particolare per quanto riguarda materiali, componenti, lavorazione, metodi costruttivi.
Saranno seguiti tutti gli inderogabili suggerimenti previsti nelle "Norme Tecniche per le Costruzioni".

3. NORMATIVE DI RIFERIMENTO

- STRUTTURA

Legge 5 novembre 1971 N. 1086 - Norme per la disciplina delle opere in conglomerato cementizio armato normale e precompresso ed a struttura metallica.

Norme tecniche delle Costruzioni – D.M. 17/01/2018

Istruzioni per l'applicazione delle Norme Tecniche delle Costruzioni, Circolare Ministero Infrastrutture e Trasporti n° 7 21/01/2019

Norme di cui è consentita l'applicazione ai sensi del cap. 12 del D.M. 17 gennaio 2018:

UNI EN 1990: 2006 - Eurocodice 1 – Criteri generali di progettazione strutturale.

UNI ENV 1991-1-1: 2010; -1-2; 1-3; 1-4; 1.5; Azioni sulla struttura.

Eurocodice 2 - Progettazione delle strutture in calcestruzzo.

UNI ENV 1992-1-1 Parte 1-1: Regole generali e regole per gli edifici.

Eurocodice 3 – Progettazione delle strutture in acciaio.

UNI ENV 1993-1-1 - Parte 1-1: Regole generali e regole per gli edifici.

UNI EN 206:2016 - Calcestruzzo. Specificazioni, prestazioni, produzione e conformità.

Servizio Tecnico Centrale del Ministero dei Lavori Pubblici – "Linee Guida sul calcestruzzo strutturale" –

Circ. MIN.LL.PP. N.11951 del 14 febbraio 1992 - Circolare illustrativa della legge N. 1086.

D.M. 14 febbraio 1992 - Norme tecniche per l'esecuzione delle opere in cemento armato normale, precompresso e per le strutture metalliche.

Circ. MIN.LL.PP. N.37406 del 24 giugno 1993 – Istruzioni relative alle norme tecniche per l'esecuzione delle opere in c.a. normale e precompresso e per le strutture metalliche di cui al D.M. 14 febbraio 1992.

D.M. 9 gennaio 1996 – Norme tecniche per l'esecuzione delle opere in cemento armato normale e precompresso e per le strutture metalliche.

Circ. Min. LL.PP. 15.10.1996 n.252 AA.GG./S.T.C. - Istruzioni per l'applicazione delle «Norme tecniche per il calcolo e l'esecuzione ed il collaudo delle strutture in cemento armato normale e precompresso e per le strutture metalliche» di cui al D.M. 09.01.1996.

- CARICHI E SOVRACCARICHI

D.M. 16 gennaio 1996 – Norme tecniche relative ai criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi

Circ. MIN.LL.PP. N.156 AA.GG./STC del 4 luglio 1996 – Istruzioni per l'applicazione delle "Norme tecniche relative ai criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi" di cui al D.M. 16 gennaio 1996.

D.M. 16.1.1996 - Norme tecniche relative alle costruzioni in zone sismiche

Circ. Min. LL.PP. 10.4.1997, n. 65 - Istruzioni per l'applicazione delle "Norme tecniche relative alle costruzioni in zone sismiche" di cui al D.M. 16 gennaio 1996

Norme tecniche per le Costruzioni – D.M. 14/01/2008

Norme tecniche per le Costruzioni – D.M. 17/01/2018

- TERRENI E FONDAZIONI

D.M. 11 marzo 1988 – Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione ed il collaudo delle opere di sostegno delle terre e delle opere di fondazione.

Circ. MIN.LL.PP. N.30483 del 24 settembre 1988 - Istruzioni riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione ed il collaudo delle opere di sostegno delle terre.

CAPITOLO 2: RELAZIONE SUI MATERIALI

(Ai sensi del D.M. 17.01.2018, Norme Tecniche per le costruzioni)

1. CEMENTO ARMATO

Calcestruzzi

Riferimenti: D.M. 17.01.2018, par. 11.2;
Linee Guida per la messa in opera del calcestruzzo strutturale;
UNI EN 206-1/2016;

Tipologia strutturale:	**Fondazioni**
Classe di resistenza necessaria ai fini statici:	C25/30 Rck 300
Condizioni ambientali:	*Strutture completamente interrate in terreno permeabile.*
Classe di esposizione:	*XC2*
Rapporto acqua/cemento max:	*0.60*
Classe di consistenza:	*S3*
Diametro massimo aggregati:	*16 mm*

Qualità dei componenti

La sabbia deve essere viva, con grani assortiti in grossezza da 0 a 3 mm, non proveniente da rocce in decomposizione, scricchiolante alla mano, pulita, priva di materie organiche, melmose, terrose e di salsedine.
La ghiaia deve contenere elementi assortiti, di dimensioni fino a 16 mm, resistenti e non gelivi, non friabili, scevri di sostanze estranee, terra e salsedine. Le ghiaie sporche vanno accuratamente lavate. Anche il pietrisco proveniente da rocce compatte, non gessose né gelive, dovrà essere privo di impurità od elementi in decomposizione. In definitiva gli inerti dovranno essere lavati ed esenti da corpi terrosi ed organici. Non sarà consentito assolutamente il misto di fiume. L'acqua da utilizzare per gli impasti dovrà essere potabile, priva di sali (cloruri e solfuri). Potranno essere impiegati additivi fluidificanti o superfluidificanti per contenere il rapporto acqua/cemento mantenendo la lavorabilità necessaria.

Prescrizione per inerti

Sabbia viva 0-7 mm, pulita, priva di materie organiche e terrose; sabbia fino a 30 mm (70 mm per fondazioni), non geliva, lavata; pietrisco di roccia compatta.
Assortimento granulometrico in composizione compresa tra le curve granulometriche sperimentali:

- passante al vaglio di mm 16 = 100%
- passante al vaglio di mm 8 = 88-60%
- passante al vaglio di mm 4 = 78-36%
- passante al vaglio di mm 2 = 62-21%
- passante al vaglio di mm 1 = 49-12%
- passante al vaglio di mm 0.25 = 18-3%

Prescrizione per il disarmo

Indicativamente: pilastri 3-4 giorni; solette modeste 10-12 giorni; travi, archi 24-25 giorni, mensole 28 giorni.
Per ogni porzione di struttura, il disarmo non può essere eseguito se non previa autorizzazione della Direzione Lavori.

Provini da prelevarsi in cantiere

Almeno un gruppo di due provini.

Preparazione, forma, dimensioni e stagionatura dei provini secondo quanto previsto delle norma UNI EN 12390-1 e UNI EN 12390-2.

Controlli di accettazione

Controllo di tipo A

Riferito ad un quantitativo di miscela omogenea non maggiore di 300 m^3 ed è costituito da tre prelievi, ciascuno dei quali eseguito su un massimo di 100 m^3 di getto di miscela omogenea. Risulta quindi un controllo di accettazione ogni 300 m^3 massimo di getto. Per ogni giorno di getto va comunque effettuato almeno un prelievo.

Nelle costruzioni con meno di 100 m^3 di getto di miscela omogenea, fermo restando l'obbligo di almeno 3 prelievi e del rispetto delle limitazioni di cui sopra, è consentito derogare dall'obbligo di prelievo giornaliero.

Controllo di tipo B

Nella realizzazione di opere strutturali che richiedano l'impiego di più di 1500 m^3 di miscela omogenea è obbligatorio il controllo di accettazione di tipo statistico (tipo B).

Il controllo è riferito ad una miscela omogenea e va eseguito con frequenza non minore di un controllo ogni 1500 m3 di calcestruzzo. Ogni controllo di accettazione di tipo B è costituito da almeno 15 prelievi, ciascuno dei quali eseguito su 100 m^3 di getto di miscela omogenea. Per ogni giorno di getto va comunque effettuato almeno un prelievo.

Parametri caratteristici e tensioni limite

Tabella riassuntiva per vari R_{ck}

R_{ck}	f_{ck}	f_{cd}	f_{ctm}	u.m.
25	20.75	11.75	2.26	[N/mm2]
30	**24.90**	**14.11**	**2.56**	**[N/mm2]**
35	29.05	16.46	2.84	[N/mm2]
40	33.20	18.81	3.10	[N/mm2]
45	37.35	21.16	3.35	[N/mm2]
50	41.50	23.51	3.60	[N/mm2]

Legenda:

- f_{ck} (resistenza cilindrica a compressione);

  $f_{ck} = 0.83\ R_{ck}$;
- f_{cd} (resistenza di calcolo a compressione);

  $fcd = \alpha_{cc} * f_{ck}/\gamma_c$
- f_{ctd} (resistenza di calcolo a trazione);

  $f_{ctd} = f_{ctk}/\gamma_c$;

  $f_{ctk} = 0.7 * f_{ctm}$;

  $f_{ctm} = 0.30 * f_{ck}^{2/3}$ per classi ≤ C50/60

  $f_{ctm} = 2.12 * \ln[1+f_{cm}/10]$ per classi > C50/60

Valori indicativi di alcune caratteristiche meccaniche dei calcestruzzi impiegati:

Ritiro (valori stimati): 0.25 mm/m (dopo 5 anni, strutture non armate);
0.10mm/m (strutture armate).

Rigonfiamento in acqua (valori stimati): 0.20 mm/m (dopo 5 anni in strutture armate).

Dilatazione termica: 10*10^(-6) °C^(-1).

Viscosità φ = 1.70.

Prospetto classi di esposizione e composizione uni en 206-1

Classe	Descrizione dell'ambiente	Esempi informativi di situazioni a cui possono applicarsi le classi di esposizione	UNI 9858	A/C MAX	R'ck min.	Dos. Min. Cem. KG.
1 Assenza di rischio di corrosione o attacco						
X0	Per calcestruzzo privo di armatura o inserti metallici: tutte le esposizioni eccetto dove c'è gelo e disgelo o attacco chimico. Calcestruzzi con armatura o inserti metallici: in ambiente molto asciutto	Interno di edifici con umidità relativa molto bassa. Calcestruzzo non armato all'interno di edifici. Calcestruzzo non armato immerso in suolo non aggressivo o in acqua non aggressiva. Calcestruzzo non armato soggetto ad cicli di bagnato asciutto ma non soggetto ad abrasioni, gelo o attacco chimico	1	---	15	---
2 Corrosione indotta da carbonatazione Nota – Le condizioni di umidità si riferiscono a quelle presenti nel copriferro e nel ricomprimento di inserti metallici, ma in molti casi si può considerare che tali condizioni riflettano quelle dell'ambiente circostante, in questi la classificazione dell'ambiente circostante può essere adeguata. Questo può non essere il caso se c'è una barriera fra il calcestruzzo ed il suo ambiente.						
XC1	Asciutto o permanentemente bagnato	Interni di edifici con umidità relativa bassa. Calcestruzzo armato ordinario o precompresso con le superfici all'interno di strutture con eccezione delle parti esposte a condensa o immerse in acqua	2a	0,60	30	300
XC2	Bagnato, raramente asciutto	Parti di strutture di contenimento liquidi, fondazioni. Calcestruzzo armato ordinario o precompresso prevalentemente immerso in acqua o terreno non aggressivo.	2a	0,60	30	300
XC3	Umidità moderata	Calcestruzzo armato ordinario o precompresso in esterni con superfici esterne riparate dalla pioggia o in interni con umidità da moderata ad alta	5a	0,55	35	320
XC4	Ciclicamente asciutto e bagnato	Calcestruzzo armato ordinario o precompresso in esterni con superfici soggette ad alternanze di asciutto ed umido. Calcestruzzi a vista in ambienti urbani.	4a, 5b	0,50	40	340
3 Corrosione indotta da cloruri esclusi quelli provenienti dall'acqua di mare						
XD1	Umidità moderata	Calcestruzzo armato ordinario o precompresso in superfici o parti di ponti e viadotti esposti a spruzzi d'acqua contenenti cloruri	5a	0,55	35	320
XD2	Bagnato, raramente asciutto	Calcestruzzo armato ordinario o precompresso in elementi strutturali totalmente immersi in acqua industriali contenente cloruri (piscine)	4a, 5b	0,50	40	340
XD3	Ciclicamente asciutto e bagnato	Calcestruzzo armato ordinario o precompresso, di elementi strutturali direttamente soggetti agli agenti disgelanti o agli spruzzi contenenti agenti disgelanti. Calcestruzzo armato o precompresso, elementi con una superficie immersa in acqua contenente cloruri e l'altra esposta all'aria. Parti di ponti, pavimentazioni e parcheggi per auto.	5c	0,45	45	360
4 Corrosione indotta da cloruri presenti nell'acqua di mare						
XS1	Esposto alla salsedine marina ma non direttamente in contatto con l'acqua	Calcestruzzo armato ordinario o precompresso con elementi strutturali sulle coste o in prossimità	4a, 5b	0,50	40	340
XS2	Permanentemente sommerso	Calcestruzzo armato ordinario o precompresso di strutture marine completamente immersa in acqua	5c	0,45	45	360
XS3	Zone esposte agli spruzzi oppure alla marea	Calcestruzzo armato ordinario o precompresso con elementi strutturali esposti alla battigia o alle zone soggette agli spruzzi ed onde del mare	5c	0,45	45	360
5 Attacco dei cicli gelo/disgelo con o senza disgelanti *(NB XF2 – XF3 – XF4 contenuto minimo aria 3%)						
XF1	Moderata saturazione d'acqua, in assenza di agente disgelante	Superfici verticali di calcestruzzo come facciate o colonne esposte alla pioggia ed al gelo. Superfici non verticali e non soggette alla completa saturazione ma esposte al gelo, alla pioggia o all'acqua	4a, 5b	0,50	40	320
XF2*	Moderata saturazione d'acqua in presenza di agente disgelante	Elementi come parti di ponti che in altro modo sarebbero classificati come XF1 ma che sono esposti direttamente o indirettamente agli agenti disgelanti	3, 4b	0,50	30	340
XF3*	Elevata saturazione d'acqua in assenza di agente disgelante	Superfici orizzontali in edifici dove l'acqua può accumularsi e che possono essere soggetti ai fenomeni di gelo, elementi soggetti a frequenti bagnature ed esposti al gelo	2b, 4b	0,50	30	340
XF4*	Elevata saturazione d'acqua con presenza di agente antigelo oppure acqua di mare	Superfici orizzontali quali strade o pavimentazioni esposte al gelo ed ai sali disgelanti in modo diretto od indiretto, elementi esposti al gelo e soggetti a frequenti bagnature in presenza di agenti disgelanti o di acqua di mare	3, 4b	0,45	35	360

6 Attacco chimico **)						
XA1	Ambiente chimicamente debolmente aggressivo secondo il prospetto 2 della UNI EN 206-1	Contenitori di fanghi e vasche di decantazione. Contenitori e vasche per acqua reflue	5a	0,55	35	320
XA2	Ambiente chimicamente moderatamente aggressivo secondo il prospetto 2 della UNI EN 206-1	Elementi strutturali o pareti a contatto di terreni aggressivi	5b	0,50	40	340
XA3	Ambiente chimicamente fortemente aggressivo secondo il prospetto 2 della UNI EN 206-1	Elementi strutturali o pareti a contatto di acqua industriali fortemente aggressive. Contenitori di foraggi, mangimi e liquami provenienti dall'allevamento animale. Torri di raffreddamento di fumi e gas di scarico industriali.	5c	0,45	45	360

*) il grado di saturazione della seconda colonna riflette la relativa frequenza con cui si verifica il gelo in condizioni di saturazione: *moderato* occasionalmente gelato in condizioni di saturazione; elevato alta frequenza di gelo in condizioni di saturazione.
**) da parte di acque del terreno o acqua fluenti

Acciaio per C.A.
(Rif. D.M. 17.01.2018, par. 11.3.2)

Acciaio per C.A. B450C	
f_{yk} tensione nominale di snervamento:	≥ 4580 kg/cm^2 (≥ 450 N/mm^2)
f_{tk} tensione nominale di rottura:	≥ 5500 kg/cm^2 (≥ 540 N/mm^2)
f_{td} tensione di progetto a rottura:	$f_{yk} / \gamma_S = f_{yk} / 1.15$ = 3980 kg/cm^2 (= 391 N/mm^2)

L'acciaio dovrà rispettare i seguenti rapporti:

$f_y / f_{yk} < 1.35$ $f_t / f_y \geq 1.15$

Diametro delle barre: $6 \leq \varphi$ 40 mm.
E' ammesso l'uso di acciai forniti in rotoli per diametri ≤ 16 mm.
Reti e tralicci con elementi base di diametro $6 \leq \varphi$ 16 mm.
Rapporto tra i diametri delle barre componenti reti e tralicci: $\varphi_{min} / \varphi_{max} \geq 0.6$

2. ACCIAIO PER CARPENTERIA METALLICA

Riferimenti:

- D.M. 17.01.2018, par. 4.2.1.1, par 11.3.4
- UNI EN 10025-2:2005: Prodotti laminati a caldo di acciai per impieghi strutturali.

Proprietà dei materiali per la fase di analisi strutturale

Modulo Elastico: E = 2.100.000 kg/cm^2 (210.000 N/mm^2)

Coefficiente di Poisson: □ = 0.3

Modulo di elasticità trasversale: G = E / [2*(1+□)] (N/mm^2)

Coefficiente di espansione termica lineare: $\alpha = 12*10^{-6}$ per $°C^{-1}$ (per T < 100°C)

Densità: $\rho = 7850\ kg/m^3$

Caratteristiche minime dei materiali

	S235	S275	S355	S450
tensione di rottura	360 N/mm^2	**430 N/mm^2**	510 N/mm^2	550 N/mm^2
tensione di snervamento	235 N/mm^2	**275 N/mm^2**	355 N/mm^2	440 N/mm^2

Bulloneria

Nelle unioni con bulloni si assumono le seguenti resistenze di calcolo:

STATO DI TENSIONE					
CLASSE VITE	**f_{tb} (N/mm^2)**	**f_{yb} (N/mm^2)**	**$f_{k,N}$ (N/mm^2)**	**$f_{d,N}$ (N/mm^2)**	**$f_{d,V}$ (N/mm^2)**
4.6	400	240	240	240	170
5.6	500	300	300	300	212
6.8	600	480	360	360	255
8.8	**800**	**640**	**560**	**560**	**396**
10.9	1000	900	700	700	495

legenda:

$f_{k,N}$ è assunto pari al minore dei due valori $f_{k,N} = 0.7\ f_t$ ($f_{k,N} = 0.6\ f_t$ per viti di classe 6.8)

$f_{k,N} = f_y$ essendo f_{tb} ed f_{yb} le tensioni di rottura e di snervamento

$f_{d,N} = f_{k,N}$ = resistenza di calcolo a trazione

$f_{d,V} = f_{k,N} / \sqrt{2}$ = resistenza di calcolo a taglio

Saldature

Su tutte le saldature è stato eseguito un controllo visivo e dimensionale. Le saldature più importanti (ad esempio le saldature delle giunzioni flangiate) sono state controllate a mezzo di particelle magnetiche e/o ultrasuoni.
Il filo di saldatura utilizzato è di tipo IT-SG3 (Saldature ad alta resistenza, fino a 600N/mm2), ed ha le seguenti caratteristiche:

Caratteristiche meccaniche: R=590N/mm^2; S=420N/mm^2; KV (20°C) = 50J
Composizione chimica media: C = 0.08%; Mn =1.4%; Si = 0.8%; P = 0.02%; S = 0.02%.
I saldatori utilizzati per la costruzione delle strutture sono certificati secondo la UNI EN 287/1.

CAPITOLO 3: RELAZIONE SUL CALCOLO DELLE STRUTTURE

(Ai sensi del D.M. 17.01.2018, Norme Tecniche per le costruzioni)

1. CRITERI DI CONCEZIONE E DI SCHEMATIZZAZIONE STRUTTURALE, MODELLAZIONE DEL TERRENO, PROPRIETÀ DEI MATERIALI, EFFICACIA DEL MODELLO

La struttura e il suo comportamento sotto le azioni statiche e dinamiche sono stati adeguatamente valutati, interpretati e trasferiti nel modello che si caratterizza per la sua impostazione completamente tridimensionale. A tal fine ai nodi strutturali possono convergere diverse tipologie di elementi, che corrispondono nel codice numerico di calcolo in altrettante tipologie di elementi finiti. Travi e pilastri, ovvero componenti in cui una dimensione prevale sulle altre due, vengono modellati con elementi "beam", il cui comportamento può essere opportunamente perfezionato attraverso alcune opzioni quali quelle in grado di definire le modalità di connessione all'estremità. Eventuali elementi soggetti a solo sforzo normale possono essere trattati come elementi "truss" oppure con elementi "beam" opportunamente svincolati. Le pareti, le piastre, le platee ovvero in generale i componenti strutturali bidimensionali, con due dimensioni prevalenti sulla terza (lo spessore), sono stati modellati con elementi "shell" a comportamento flessionale e membranale. I vincoli con il mondo esterno vengono rappresentati, nei casi più semplici (apparecchi d'appoggio, cerniere, carrelli), con elementi in grado di definire le modalità di vincolo e le rigidezze nello spazio. Questi elementi, coniugati con i precedenti, consentono di modellare i casi più complessi ma più frequenti di interazione con il terreno, realizzabile tipicamente mediante fondazioni, pali, platee nonché attraverso una combinazione di tali situazioni. Il comportamento del terreno è sostanzialmente rappresentato tramite una schematizzazione lineare alla Winkler, principalmente caratterizzabile attraverso una opportuna costante di sottofondo, che può essere anche variata nella superficie di contatto fra struttura e terreno e quindi essere in grado di descrivere anche situazioni più complesse. Nel caso dei pali il comportamento del terreno implica anche l'introduzione di vincoli per la traslazione orizzontale.
I parametri dei materiali utilizzati per la modellazione riguardano il modulo di Young, il coefficiente di Poisson, ma sono disponibili anche opzioni per ridurre la rigidezza flessionale e tagliante dei materiali per considerare l'effetto di fenomeni fessurativi nei materiali.
Il calcolo viene condotto mediante analisi lineare, ma vengono considerati gli effetti del secondo ordine e si può simulare il comportamento di elementi resistenti a sola trazione o compressione.
La presenza di diaframmi orizzontali, se rigidi, nel piano viene gestita attraverso l'impostazione di un'apposita relazione fra i nodi strutturali coinvolti, che ne condiziona il movimento relativo. Relazioni analoghe possono essere impostate anche fra elementi contigui.
Si ritiene che il modello utilizzato sia rappresentativo del comportamento reale della struttura. Sono stati inoltre valutate tutti i possibili effetti o le azioni anche transitorie che possano essere significative e avere implicazione per la struttura.
E' stata impiegata un'analisi dinamica in campo lineare con adozione di spettro di risposta conforme al D.M. 17.01.2018. Agli effetti del dimensionamento è stato quindi impiegato il metodo degli stati limite.

2. CRITERI PER LA MISURA DELLA SICUREZZA

METODO DI CALCOLO AGLI STATI LIMITE

In generale ai fini della sicurezza sono stati adottati i criteri contemplati dal metodo semiprobabilistico agli stati limite. In particolare sono stati soddisfatti i requisiti per la sicurezza allo stato limite ultimo (anche sotto l'azione sismica), allo stato limite di esercizio, nei confronti di eventuali azioni eccezionali. Per quanto riguarda le azioni sismiche verranno anche esaminate le deformazioni relative, che controllano eventuali danni alle opere secondarie e agli impianti.

3. SCHEMATIZZAZIONE DELLE AZIONI, CONDIZIONI E COMBINAZIONI DI CARICO

Le azioni sono state schematizzate applicando i carichi previsti dalla norma. In particolare i carichi gravitazionali, derivanti dalle azioni permanenti o variabili, sono applicati in direzione verticale (ovvero – Z nel sistema globale di riferimento del modello). Le azioni del vento sono applicate prevalentemente nelle due direzioni orizzontali o ortogonalmente alla falda in copertura. Le azioni sismiche, statiche o dinamiche, derivano dall'eccitazione delle masse assegnate alla struttura in proporzione ai carichi a cui sono associate per norma. I carichi sono suddivisi in più condizioni elementari di carico in modo da poter generare le combinazioni necessarie.

▪ COMBINAZIONI DI CARICO

Le combinazioni di carico s.l.u. statiche (in assenza di azioni sismiche) sono ottenute mediante diverse combinazioni dei carichi permanenti ed accidentali in modo da considerare tutte le situazioni più sfavorevoli agenti sulla struttura. I carichi vengono applicati mediante opportuni coefficienti parziali di sicurezza, considerando l'eventualità più gravosa per la sicurezza della struttura.
Le azioni sismiche sono valutate in conformità a quanto stabilito dalle norme e specificato nel paragrafo sulle azioni. Vengono in particolare controllate le deformazioni allo stato limite ultimo, allo stato limite di danno e gli effetti del second'ordine.
In sede di dimensionamento vengono analizzate tutte le combinazioni, anche sismiche, impostate ai fini della verifica s.l.u. Vengono anche processate le specifiche combinazioni di carico introdotte per valutare lo stato limite di esercizio (tensioni, fessurazione, deformabilità).
Oltre all'impostazione spaziale delle situazioni di carico potenzialmente più critiche, in sede di dimensionamento vengono ulteriormente valutate, per le varie travate, tutte le condizioni di lavoro statico derivanti dall'alternanza dei carichi variabili, i cui effetti si sovrappongono a quelli dei pesi propri e dei carichi permanenti. Vengono anche imposte delle sollecitazioni flettenti di sicurezza in campata e risultano controllate le deformazioni in luce degli elementi.

4. METODOLOGIE DI CALCOLO, TIPO DI ANALISI E STRUMENTI UTILIZZATI.

L'analisi di tipo numerico è stata realizzata mediante il programma di calcolo MasterSap, prodotto da Studio Software AMV di Ronchi dei Legionari (Gorizia). E' stato utilizzata un'analisi dinamica modale nel rispetto delle norme indicate in precedenza. Le procedure di verifica adottate seguono il metodo di calcolo agli stati limite ultimo / esercizio secondo quanto previsto dal DM 17.01.2018, Norme Tecniche per le Costruzioni.

▪ ANALISI DINAMICA MODALE

Il programma effettua l'analisi dinamica con il metodo dello spettro di risposta.
Il sistema da analizzare è essere visto come un oscillatore a n gradi di libertà, di cui vanno individuati i modi propri di vibrazione. Il numero di frequenze da considerare è un dato di ingresso che l'utente deve assegnare. In generale si osservi che il numero di modi propri di vibrazione non può superare il numero di gradi di libertà del sistema.
La procedura attua l'analisi dinamica in due fasi distinte: la prima si occupa di calcolare le frequenze proprie di vibrazione, la seconda calcola spostamenti e sollecitazioni conseguenti allo spettro di risposta assegnato in input.
Nell'analisi spettrale il programma utilizza lo spettro di risposta assegnato in input, coerentemente con quanto previsto dalla normativa. L'eventuale spettro nella direzione globale Z è unitario. L'ampiezza degli spettri di risposta è determinata dai parametri sismici previsti dalla normativa e assegnati in input dall'utente.
La procedura calcola inizialmente i coefficienti di partecipazione modale per ogni direzione del sisma e per ogni frequenza. Tali coefficienti possono essere visti come il contributo dinamico di ogni modo di vibrazione nelle direzioni assegnate. Si potrà perciò notare in quale direzione il singolo modo di vibrazione ha effetti predominanti.
Successivamente vengono calcolati, per ogni modo di vibrazione, gli spostamenti e le sollecitazioni relative a ciascuna direzione dinamica attivata, per ogni modo di vibrazione. Per ogni direzione dinamica viene calcolato l'effetto globale, dovuto ai singoli modi di vibrazione, mediante la radice quadrata della somma dei quadrati dei singoli effetti. È prevista una specifica fase di stampa per tali risultati.

L'ultima elaborazione riguarda il calcolo degli effetti complessivi, ottenuti considerando tutte le direzioni dinamiche applicate. Tale risultato (inviluppo) può essere ottenuto, a discrezione dell'utente in tre modi distinti, inclusi quelli suggeriti della normativa italiana e dall'Eurocodice 8.

▪ PRESENTAZIONE DEL MODELLO STRUTTURALE E SUE PROPRIETÀ

Per l'analisi della struttura è stato elaborato il modello a elementi finiti di cui si riporta la descrizione.

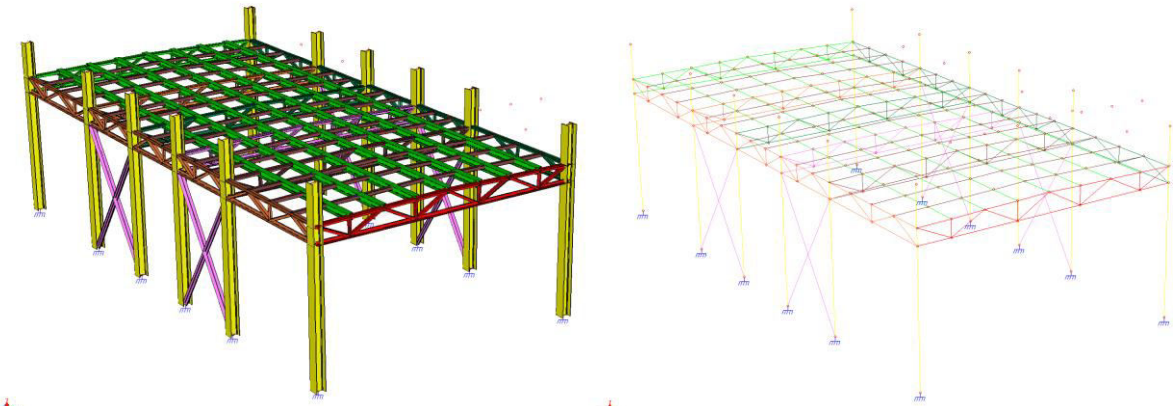


Figura 1 – Modellazione agli elementi finiti

La struttura è stata modellata mediante elementi finiti monodimensionali (beam). Per tenere in considerazione l'infinita rigidezza offerta all'impalcato dalla soletta di 5 cm superiore al solaio di copertura, è stata inserita una relazione di piano rigido.

I NODI

La struttura è individuata da nodi riportati in coordinate.
Ogni nodo possiede sei gradi di libertà, associati alle sei possibili deformazioni. I gradi di libertà possono essere liberi (spostamenti generalizzati incogniti), bloccati (spostamenti generalizzati corrispondente uguale a zero), di tipo slave o linked (il parametro cinematico dipende dalla relazione con altri gradi di libertà).
Si può intervenire sui gradi di libertà bloccando uno o più gradi. I blocchi vengono applicate nella direzione della terna locale del nodo.
Le relazioni complesse creano un legame tra uno o più gradi di libertà di un nodo detto slave con quelli di un altro nodo detto master. Esistono tre tipi di relazioni complesse.
Le relazioni di tipo link prescrivono l'uguaglianza tra gradi di libertà analoghi di nodi diversi. Specificare una relazione di tipo link significa specificare il nodo slave assieme ai gradi di libertà che partecipano al vincolo ed il nodo master. I gradi di libertà slave saranno eguagliati ai rispettivi gradi di libertà del nodo master.
La relazione di piano rigido prescrive che il nodo slave appartiene ad un piano rigido e quindi che i due spostamenti in piano e la rotazione normale al piano sono legati ai tre parametri di roto-traslazione rigida di un piano.
Il Corpo rigido prescrive che il nodo slave fa parte di un corpo rigido e tutti e sei i suoi gradi di libertà sono legati ai sei gradi di libertà posseduti dal corpo rigido (i gradi di libertà del suo nodo master).

I MATERIALI

I materiali sono individuati da un codice specifico e descritti dal modulo di elasticità, dal coefficiente di Poisson, dal peso specifico, dal coefficiente di dilatazione termica.

LE SEZIONI

Le sezioni sono individuate in ogni caso da un codice numerico specifico, dal tipo e dai relativi parametri identificativi.
La simbologia adottata dal programma è la seguente:

- Rettangolare piena (Rp);

- Rettangolare cava (Rc);
- Circolare piena (Cp);
- Circolare cava (Cc);
- T (T.);
- T rovescia (Tr);
- L (L.);
- C (C.);
- C rovescia (Cr);
- Cassone (Ca);
- Profilo singolo (Ps);
- Profilo doppio (Pd);
- Generica (Ge).

I CARICHI

I carichi agenti sulla struttura possono essere suddivisi in carichi nodali e carichi elementari. I carichi nodali sono forze e coppie concentrate applicate ai nodi della discretizzazione. I carichi elementari sono forze, coppie e sollecitazioni termiche.

I carichi in luce sono individuati da un codice numerico, da una azione, una categoria, una condizione e da una descrizione. Sono previsti carichi distribuiti trapezoidali riferiti agli assi globali (fX, fY, fZ, fV) e locali (fx, fy, fz), forze concentrate riferite agli assi globali (FX, FY, FZ, FV) o locali (Fx, Fy, Fz), momenti concentrati riferiti agli assi locali (Mx, My, Mz), momento torcente distribuito riferito all'asse locale x (mx), carichi termici (tx, ty, tz), descritti con i relativi parametri identificativi, aliquote inerziali comprese, rispetto al riferimento locale. I carichi in luce possono essere attribuiti solo a elementi finiti del tipo trave o trave di fondazione.

GLI ELEMENTI FINITI

La struttura può essere suddivisa in sottostrutture, chiamate gruppi.

ELEMENTO FRAME (TRAVE E PILASTRO)

L'elemento frame implementa il modello della trave nello spazio tridimensionale. E' caratterizzato da 2 nodi principali I e J posti alle sue estremità ed un nodo geometrico facoltativo K che serve solamente a fissare univocamente la posizione degli assi locali.

L'elemento frame possiede 12 gradi di libertà.

Ogni elemento viene riferito a una terna locale destra x, y, z. L'elemento frame supporta varie opzioni tra cui:

1. deformabilità da taglio (travi tozze);
2. sconnessioni totali o parziali alle estremità;
3. connessioni elastiche alle estremità;
4. offsets, ovvero tratti rigidi eventualmente fuori asse alle estremità;
5. suolo elastico alla Winkler nelle tre direzioni locali e a torsione.

L'elemento frame supporta i seguenti carichi:

1. carichi distribuiti trapezoidali in tutte le direzioni locali o globali;
2. sollecitazioni termiche uniformi e gradienti termici nelle due direzioni principali;
3. forza concentrata in tutte le direzioni locali o globali applicata in un punto arbitrario;
4. carichi generici mediante prescrizione delle reazioni di incastro perfetto.

I gruppi formati da elementi del tipo trave riportano, in ordine, i numeri dei nodi iniziale (I), finale (J) e di riferimento (K), la situazione degli svincoli ai nodi I e J (indicate in legenda eventuali situazioni diverse dall'incastro perfetto ad entrambi i nodi), i codici dei materiali e delle sezioni, eventuali offset strutturali o conci rigidi applicati. Un'ulteriore tabella riporta anche eventuali valori di offset architettonici.

Per ogni asta vengono riportati i carichi applicati: ogni carico è identificato dal suo codice e da un moltiplicatore.

I gruppi relativi all'elemento trave di fondazione riportano informazioni analoghe. È indicata la caratteristica del suolo, la larghezza di contatto con il terreno e il numero di suddivisioni interne. Per la trave di fondazione il programma abilita automaticamente solo i gradi di libertà relativi alla rotazione intorno agli assi globali X, Y e alla traslazione secondo Z, bloccando gli altri gradi di libertà. Ogni trave di fondazione è suddivisa in un numero adeguato di parti (aste). Ogni singola asta interagisce con il terreno mediante un elemento finito del tipo vincolo elastico alla traslazione verticale t_Z convergente ai suoi nodi (vedi figura), il cui valore di rigidezza viene determinato da programma moltiplicando la costante di sottofondo assegnata dall'utente per l'area di contatto con il terreno in corrispondenza del nodo.
I tipi di carichi ammessi sono solo di tipo distribuito fZ, fV, fy. Inoltre accade che:
Vi=Vf; di=df=0, ovvero il carico è di tipo rettangolare esteso per tutta la lunghezza della trave.

ELEMENTO BOUNDARY (VINCOLO)
L'elemento boundary è sostanzialmente un elemento molla con rigidezza assiale in una direzione specificata e rigidezza torsionale attorno alla stessa direzione. È utile quando si vogliono determinare le reazioni vincolari oppure quando si vogliono imporre degli spostamenti o delle rotazioni di alcuni nodi (cedimenti vincolari).
I parametri relativi ad ogni singolo vincolo sono:

1. il nodo a cui è collegato il vincolo (o i vincoli, massimo sei);
2. la traslazione imposta (L) o la rotazione imposta (radianti);
3. la rigidezza (per le traslazioni in F/L, per le rotazioni in F*L/rad).

- **DATI DI INPUT**

INTESTAZIONE E DATI CARATTERISTICI DELLA STRUTTURA

Nome dell'archivio di lavoro	**STAZIONE SPERIMENTALE**
Intestazione del lavoro	**LABORATORIO SPERIMENTALE**
Tipo di struttura	Nello Spazio
Tipo di analisi	Statica e Dinamica
Tipo di soluzione	Lineare
Unita' di misura delle forze	kN
Unita' di misura delle lunghezze	m
Normativa	NTC-2018

NORMATIVA

Vita nominale costruzione	50 anni
Classe d'uso costruzione	II
Vita di riferimento	50 anni
Localita'	Campobasso - Viale Alessandro Manzoni 14
Longitudine (WGS84)	14.6641
Latitudine (WGS84)	41.5534
Categoria del suolo	B
Coefficiente topografico	1.0
Coefficiente di smorzamento	5%
Eccentricità accidentale	5%
Numero di frequenze	10
Periodo proprio T1 in direzione X	0.277
Periodo proprio T1 in direzione Y	0.150
Comportamento strutturale	NON Dissipativo

PARAMETRI SISMICI

	TR	ag/g	FO	TC*	CC	Ss	Pga (ag*S) (m/s^2)
SLO	30	0.0613	2.3860	0.29	1.41	1.50	0.722
SLD	50	0.0802	2.3560	0.31	1.39	1.50	0.944
SLV	475	0.2304	2.4420	0.36	1.35	1.36	2.656
SLE	475	0.2304	2.4420	0.36	1.35	1.36	2.656
SLC	975	0.3080	2.4190	0.38	1.33	1.25	3.330

STATO LIMITE ULTIMO

Fattore di comportamento q per sisma orizzontale	qor=1.5

STATO LIMITE DI DANNO

Fattore di comportamento q per sisma orizzontale	qor=1.5
Coeff. moltiplicativo sisma	1.000

PARAMETRI SISMICI

Angolo del sisma nel piano orizzontale	0
Sisma verticale	Assente
Combinazione dei modi	CQC
Combinazione componenti azioni sismiche	NTC - Eurocodice 8
λ	0.3
μ	0.3

RIEPILOGO DELLE SEZIONI UTILIZZATE NEL MODELLO STRUTTURALE

SEZIONE A T

Codice	B	H	h	b
8	1.400	1.400	0.700	0.400

SEZIONI A PROFILO SEMPLICE

Codice	Codice sezione	Asse Y capovolto
5	HEB 300	No
7	HEB 200	No

SEZIONI A PROFILO DOPPIO

Codice	Codice sezione	Tipo accoppiamento	Distanza	Ali	Lati
1	L 75X 50X 8	__a_'T'__	0.010		maggiori
3	L 80X 10	__a_'T'__	0.010		
4	L 100X 10	__a_'T'__	0.010		

LISTA MATERIALI UTILIZZATI

Codice	Descrizione	Tipo	Mod.	Coef.	Peso	Dil.	Aliq.	Rigid.	Rigid.

		materiale	elast.	Poisson	unit.	term.	inerz.	taglio	fless.
1	Acciaio	Acciaio	+2.06e+08	0.300	77.00851	+1.20e-05	1.000	+1.00e+00	+1.00e+00
2	Calcestruzzo C25/30 (Rck 300)	Calcestruzzo	+3.15e+07	0.120	24.52500	+1.00e-05	1.000	+1.00e+00	+1.00e+00

GRUPPI DELLA STRUTTURA

ELEMENTO FINITO: TRAVE

Numero gruppo	Descrizione gruppo
1	CAPRIATA 1
2	CAPRIATA 2
3	CAPRIATA 3
4	CAPRIATA 4
5	CAPRIATA 5
6	CAPRIATA 6
7	PILASTRI
8	ARCARECCI
9	CAPRIATA 7
10	CAPRIATA 8
11	CONTROVENTI

ELEMENTO FINITO: VINCOLO

Numero gruppo	Descrizione gruppo
1	BASE

5. CARICHI

- **CARICHI VARIABILI**

Cat.	Ambienti	q_k [kN/m^2]	Q_k [kN]	H_k [kN/m]
A	**Ambienti ad uso residenziale**			
	Aree per attività domestiche e residenziali; sono compresi in questa categoria i locali di abitazione e relativi servizi, gli alberghi (ad esclusione delle aree soggette ad affollamento), camere di degenza di ospedali	2,00	2,00	1,00
	Scale comuni, balconi	4,00	4,00	1,00
B	**Uffici**			
	Cat. B1 – Uffici non aperti al pubblico	2,00	2,00	1,00

	Cat. B2 – Uffici aperti al pubblico	3,00	2,00	1,00
	Scale comuni, balconi	4,00	4,00	2,00
C	**Ambienti suscettibili di affollamento.**			
	Cat. C1 – Aree con tavoli, quali scuole, caffè, ristoranti, sale banchetti, lettura e ricevimento.	3,00	3,00	1,00
	Cat. C2 – Aree con posti a sedere fissi, quali chiese, teatri, cinema, sale per conferenze e attesa, aule universitarie e aule magne.	4,00	4,00	2,00
	Cat. C3 – Ambienti privi di ostacoli al movimento delle persone, quali musei, sale per esposizioni, aree d'accesso a uffici, ad alberghi e ospedali, ad atri di stazioni ferroviarie.	5,00	5,00	3,00
	Cat. C4 – Aree con possibile svolgimento di attività fisiche, quali sale da ballo, palestre, palcoscenici.	5,00	5,00	3,00
	Cat. C5 – Aree suscettibili di grandi affollamenti, quali edifici per eventi pubblici, sale da concerto, palazzetti per lo sport e relative tribune, gradinate e piattaforme ferroviarie.	5,00	5,00	3,00
	Scale comuni, balconi	Secondo categoria d'uso servita, con le seguenti limitazioni		
		4,00	4,00	2,00
D	**Ambienti ad uso commerciali.**			
	Cat. D1 – Negozi	4,00	4,00	2,00
	Cat. D2 – Centri commerciali, mercati, grandi magazzini.	5,00	5,00	2,00
	Scale comuni, balconi	Secondo categoria d'uso servita, con le seguenti limitazioni		
E	**Aree per immagazzinamento e uso commerciale ed uso industriale**			
	Cat. E1 – Aree per accumulo di merci e relative aree d'accesso, quali biblioteche, archivi, magazzini, depositi, laboratori manifatturieri.	6,00	7,00	1,00*
	Cat. E2 – Ambienti ad uso industriale.	Da valutarsi caso per caso		
F-G	**Rimesse e aree per traffico di veicoli (esclusi i ponti)**			
	Cat. F – Rimesse, aree per traffico, parcheggio e sosta di veicoli leggeri (peso a pieno carico fino a 30 kN)	2,50	2x10,00	1,00**
	Cat. G Aree per traffico e parcheggio di veicoli medi (peso a pieno carico compreso fra 30 kN e 160 kN), quali rampe d'accesso, zone di carico e scarico merci.	da valutarsi caso per caso e comunque non minori di		
		5,00	2x50,00	1,00**
H-I-K	**Coperture**			
	Cat. H – Coperture accessibili per sola manutenzione e riparazione	0,50	1,20	1,00

	Cat. I – Coperture praticabili di ambienti di categoria d'uso compresa fra A e D	Secondo categorie di appartenenza
	Cat. K Coperture per usi speciali, quali impianti, eliporti.	da valutarsi caso per caso

* non comprende le azioni orizzontali eventualmente esercitate dai materiali immagazzinati.

** per i soli parapetti o partizioni nelle zone pedonali. Le azioni sulle barriere esercitate dagli automezzi dovranno essere valutate caso per caso.

- **CARICO DA NEVE**

Per il carico da neve si considerano i seguenti valore di riferimento al suolo:

Zona II

q_{sk} = 1.00 kN/m^2 (102 kg/mq) per $a_s \leq 200$ m

$q_{sk} = 0.85*[1+(a_s/481)^2]$ kN/m^2 per $a_s > 200$ m

Normativa : D.M. 17/01/2018 (NTC 2018, Circolare 21/01/2019, n.7)

Il carico provocato dalla presenza della neve agisce in direzione verticale ed è riferito alla proiezione orizzontale della superfice della copertura. Esso è valutato con la seguente espressione:

$$q_s = \mu_i \cdot q_{sk} \cdot C_E \cdot C_t$$

Provincia : Campobasso
Zona : II
Altitudine : 678 m s.l.m.

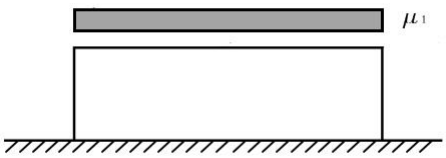
Valore caratteristico neve al suolo : q_{sk} = 2.54 kN/m^2

Coefficiente di esposizione C_E : 1 (Normale)

Coefficiente termico C_t : 1

Tipo di copertura: a due falde (α = 1°)

Dimensione minima in pianta della copertura: 9 m.
Dimensione massima in pianta della copertura: 18 m.
Dimensione in pianta equivalente L_c: 13.5 m.
Coefficiente $C_{e,F}$ = 1



Si deve considerare la condizione di carico riportata nella figura a lato.

Carico da neve:

$q_s(\mu_1(C_{e,F}))$ = 2.03 kN/m^2 [μ_1 = 0.8]

$q_s(\mu_1=0.8)$ = 2.03 kN/m^2

- **CARICHI DA VENTO**

Normativa: D.M. 17/01/2018 (NTC 2018, Circolare 17/01/2019, n.7)
La pressione del vento è calcolata secondo l'espressione:

$$p = q_r \cdot c_e \cdot c_p \cdot c_d$$

Provincia: Campobasso
Zona: 3
Altitudine: 678 m s.l.m
Tempo di ritorno T_r: 50 anni;
Velocità di riferimento $v_r(T_r)$: 30.56 m/s
Pressione cinetica di riferimento q_r: 583.56 N/m^2
Altezza della costruzione z: 5 m (z_{min}: 12m)
Distanza dalla costa: Terra, oltre i 40 km dalla costa, tra i 500 e i 750 m
Classe di rugosità del terreno: A
Categoria di esposizione del sito: V
Coefficiente topografico c_t: 1
Coefficiente dinamico c_d: 1

Coefficiente di esposizione $c_e(z)$:
$c_e(z = 5m) = c_e(z_{min} = 12\ m) = 1.48$

Edifici a pianta rettangolare con coperture piane, a falde inclinate o curvilinee

Dimensioni in pianta: 18 * 9 m
Altezza: 5 m

Pareti verticali
Faccia sopravento: $c_{pe} = 0.756$
Faccia laterale: $c_{pe} = -0.9$
Faccia sottovento: $c_{pe} = -0.411$

Copertura a falda doppia
Angolo della falda sopravento: 1°
Vento perpendicolare alla direzione del colmo
Valore negativo $c_{pe} = -0.787$
Valore positivo $c_{pe} = +0.013$
Vento parallelo alla direzione del colmo
Fascia sopravento di profondità pari a 5 m: $c_{pe,A} = -0.807$
Restanti zone: $c_{pe,B} = -0.59$
Angolo della falda sottovento: 1°
Vento perpendicolare alla direzione del colmo
$c_{pe} = -0.6$
Vento parallelo alla direzione del colmo
Fascia sopravento di profondità pari a 5 m: $c_{pe,A} = -0.807$
Restanti zone: $c_{pe,B} = -0.59$

Pressione del vento con coefficiente di forma c_{pe} = -0.9
$p(z = 5\ m) = p(z_{min} = 12\ m) = -776.98\ N/m^2$

Pressione del vento con coefficiente di forma c_{pe} = -0.81
$p(z = 5\ m) = p(z_{min} = 12\ m) = -699.28\ N/m^2$
Pressione del vento con coefficiente di forma c_{pe} = -0.79

$p(z = 5\ m) = p(z_{min} = 12\ m) = -682.01\ N/m^2$

Pressione del vento con coefficiente di forma c_{pe} = -0.6

$p(z = 5\ m) = p(z_{min} = 12\ m) = -517.99\ N/m^2$

Pressione del vento con coefficiente di forma c_{pe} = -0.59

$p(z = 5\ m) = p(z_{min} = 12\ m) = -509.35\ N/m^2$

Pressione del vento con coefficiente di forma c_{pe} = -0.41

$p(z = 5\ m) = p(z_{min} = 12\ m) = -353.96\ N/m^2$

Pressione del vento con coefficiente di forma c_{pe} = 0.01

$p(z = 5\ m) = p(z_{min} = 12\ m) = 8.63\ N/m^2$

Pressione del vento con coefficiente di forma c_{pe} = 0.76

$p(z = 5\ m) = p(z_{min} = 12\ m) = 656.11\ N/m^2$

▪ CARICHI PER ELEMENTI TRAVE, TRAVE DI FONDAZIONE E RETICOLARE

Carico distribuito con riferimento globale X

Descrizione	Cod.	Cond. carico	Tipo Azione/categoria	Val. iniz.	Dist. iniz. nodo I	Val. finale	Dist.fin. nodo I	Aliq.inerz.	Aliq.inerz. SLD
Vento + X Cpe=+0.756	5	Condizione 3	Variabile: Vento	-0.656000	0.000	-0.656000	0.000	0.0000	0.0000
Vento +X Cpe=-0.411	7	Condizione 3	Variabile: Vento	0.353960	0.000	0.353960	0.000	0.0000	0.0000
Vento - X Cpe=+0.756	10	Condizione 4	Variabile: Vento	-0.656000	0.000	-0.656000	0.000	0.0000	0.0000
Vento -X Cpe=-0.411	12	Condizione 4	Variabile: Vento	0.353960	0.000	0.353960	0.000	0.0000	0.0000
Vento +Y Cpe=-0.9	16	Condizione 5	Variabile: Vento	0.776980	0.000	0.776980	0.000	0.0000	0.0000
Vento -Y Cpe=-0.90	20	Condizione 6	Variabile: Vento	0.776980	0.000	0.776980	0.000	0.0000	0.0000

Carico distribuito con riferimento globale Y

Descrizione	Cod.	Cond. carico	Tipo Azione/categoria	Val. iniz.	Dist. iniz. nodo I	Val. finale	Dist.fin. nodo I	Aliq.inerz.	Aliq.inerz. SLD
Vento +X Cpe=-0.9	6	Condizione 3	Variabile: Vento	0.776980	0.000	0.776980	0.000	0.0000	0.0000
Vento -X Cpe=-0.9	11	Condizione 4	Variabile: Vento	0.776980	0.000	0.776980	0.000	0.0000	0.0000
Vento +Y Cpe=+0.76	15	Condizione 5	Variabile: Vento	-0.656000	0.000	-0.656000	0.000	0.0000	0.0000
Vento +Y Cpe=-0.41	17	Condizione 5	Variabile: Vento	0.353960	0.000	0.353960	0.000	0.0000	0.0000
Vento -Y Cpe=+0.76	19	Condizione 6	Variabile: Vento	-0.656000	0.000	-0.656000	0.000	0.0000	0.0000
Vento -Y Cpe=-0.41	21	Condizione 6	Variabile: Vento	0.353960	0.000	0.353960	0.000	0.0000	0.0000

Carico distribuito con riferimento globale Z

Descrizione	Cod.	Cond. carico	Tipo Azione/categoria	Val. iniz.	Dist. iniz. nodo I	Val. finale	Dist.fin. nodo I	Aliq.inerz.	Aliq.inerz. SLD
Neve Zona II	3	Condizione 2	Variabile: Neve	-2.030000	0.000	-2.030000	0.000	0.0000	0.0000
Vento +X Cpe=-0.81	8	Condizione 3	Variabile: Vento	0.699280	0.000	0.699280	0.000	0.0000	0.0000
Vento +X Cpe=-0.60	9	Condizione 3	Variabile: Vento	0.517990	0.000	0.517990	0.000	0.0000	0.0000
Vento -X Cpe=-0.81	13	Condizione 4	Variabile: Vento	0.699280	0.000	0.699280	0.000	0.0000	0.0000
Vento -X Cpe=-0.60	14	Condizione 4	Variabile: Vento	0.517990	0.000	0.517990	0.000	0.0000	0.0000
Vento +Y Cpe=-0.807	18	Condizione 5	Variabile: Vento	0.699280	0.000	0.699280	0.000	0.0000	0.0000
Vento -Y Cpe=-0.807	22	Condizione 6	Variabile: Vento	0.699280	0.000	0.699280	0.000	0.0000	0.0000

Carico distribuito con riferimento globale Z, agente sulla lunghezza reale

Descrizione	Cod.	Cond. carico	Tipo Azione/categoria	Val. iniz.	Dist.iniz. nodo I	Val. finale	Dist.fin. nodo I	Aliq.inerz.	Aliq.inerz. SLD
Peso proprio solaio in lamiera grecata e soletta	1	Condizione 1	Permanente: Permanente portato	-1.350000	0.000	-1.350000	0.000	1.0000	1.0000
Permanente tetto verde	2	Condizione 1	Permanente: Permanente portato	-3.860000	0.000	-3.860000	0.000	1.0000	1.0000
Tamponatura	4	Condizione 1	Permanente: Permanente portato	-1.000000	0.000	-1.000000	0.000	1.0000	1.0000

- **AZIONI ECCEZIONALI**

Per l'opera in progetto non è stato ritenuto opportuno tenere in conto esplicito azioni eccezionali quali urti, incendi ed esplosioni. La concezione strutturale, i dettagli costruttivi ed i materiali con i quali verrà realizzata la struttura portante del fabbricato sono comunque tali da evitare che la struttura stessa possa avere danneggiamenti sproporzionati rispetto ad eventuali cause legate a questo tipo di eventi.
Qualora esigenze legate a specifiche destinazioni d'uso prevedano particolari caratteristiche di resistenza al fuoco delle strutture e le stesse non siano in grado di garantirle, dovrà essere per esse prevista un'adeguata protezione.

6. COMBINAZIONI DI CARICO

Nel calcolo delle strutture si è tenuto conto delle situazioni derivanti dall'effetto combinato dei carichi accidentali e permanenti.

- **Combinazione fondamentale SLU**:

$\gamma G1 \cdot G1 + \gamma G2 \cdot G2 + \gamma P \cdot P + \gamma Q1 \cdot Qk1 + \gamma Q2 \cdot \psi 02 \cdot Qk2 + \gamma Q3 \cdot \psi 03 \cdot Qk3 + \cdots$

- **Combinazione caratteristica (rara) SLE**:

$G1 + G2 + P + Qk1 + \psi 02 \cdot Qk2 + \psi 03 \cdot Qk3 + \cdots$

- **Combinazione frequente SLE:**

$G1 + G2 + P + \psi 11 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \cdots$

- **Combinazione quasi permanente SLE:**

$G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \psi 23 \cdot Qk3 + \cdots$

- **Combinazione sismica** (impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E):

$E + G1 + G2 + P + \psi 21 \cdot Qk1 + \psi 22 \cdot Qk2 + \cdots$

.

- **COMBINAZIONI PER LE VERIFICHE ALLO STATO LIMITE ULTIMO**

Num.	Descrizione	Parametri	Tipo azione/categoria	Condizione	Moltiplicatore
1	Dinamica	Azione sismica: Presente	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	0.000
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
2	Statica Neve	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Neve	Condizione 2	1.500
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
7	Statica Vento +X	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Vento	Condizione 3	1.500

Num.	Descrizione	Parametri	Tipo azione/categoria	Condizione	Moltiplicatore
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
8	Statica Vento -X	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	1.500
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
9	Statica Vento +Y	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	1.500
			Variabile: Vento	Condizione 6	0.000
10	Statica Vento -Y	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	1.500
11	Statica Neve dominante Vento +X	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Neve	Condizione 2	1.500
			Variabile: Vento	Condizione 3	0.900
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
12	Statica Neve dominante Vento -X	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Neve	Condizione 2	1.500
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.900
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
13	Statica Neve dominante Vento +Y	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Neve	Condizione 2	1.500
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.900
			Variabile: Vento	Condizione 6	0.000
14	Statica Neve dominante Vento -Y	Azione sismica: Sisma assente	Permanente: Peso Proprio	Condizione peso proprio	1.300
			Permanente: Permanente portato	Condizione 1	1.300
			Variabile: Neve	Condizione 2	1.500
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.900

▪ COMBINAZIONI PER LE VERIFICHE ALLO STATO LIMITE D'ESERCIZIO

Num.	Descrizione	Parametri	Tipo azione/categoria	Condizione	Moltiplicatore
3	Rara Neve e Vento - X	Tipologia: Rara	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	1.000
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.600
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
4	Frequente Vento +X	Tipologia: Frequente	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	0.000
			Variabile: Vento	Condizione 3	0.200
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
5	Quasi permanente	Tipologia: Quasi permanente	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	0.000
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
15	Rara Neve e Vento +X	Tipologia: Rara	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	1.000
			Variabile: Vento	Condizione 3	0.600
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
16	Rara Neve e Vento +Y	Tipologia: Rara	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	1.000
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.600
			Variabile: Vento	Condizione 6	0.000
17	Rara Neve e Vento - Y	Tipologia: Rara	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	1.000
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.600
18	Frequente Vento -X	Tipologia: Frequente	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	0.000
			Variabile: Vento	Condizione 3	0.000

Num.	Descrizione	Parametri	Tipo azione/categoria	Condizione	Moltiplicatore
			Variabile: Vento	Condizione 4	0.200
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000
19	Frequente Vento +Y	Tipologia: Frequente	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	0.000
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.200
			Variabile: Vento	Condizione 6	0.000
20	Frequente Vento -Y	Tipologia: Frequente	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	0.000
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.200

- **COMBINAZIONI PER LE VERIFICHE ALLO STATO LIMITE DI DANNO**

Num.	Descrizione	Parametri	Tipo azione/categoria	Condizione	Moltiplicatore
6	S.L.D.	Azione sismica: Presente	Permanente: Peso Proprio	Condizione peso proprio	1.000
			Permanente: Permanente portato	Condizione 1	1.000
			Variabile: Neve	Condizione 2	0.000
			Variabile: Vento	Condizione 3	0.000
			Variabile: Vento	Condizione 4	0.000
			Variabile: Vento	Condizione 5	0.000
			Variabile: Vento	Condizione 6	0.000

7. PRESENTAZIONE DEI RISULTATI DELL'ANALISI STRUTTURALE

Questa parte richiede di precisare una serie di proprietà che possono essere ricavate in forma grafica direttamente da MasterSap. In particolare:

- Deformazioni (statiche e dinamiche)
- Deformazioni relative
- Frecce
- Sollecitazioni
- Effetti II ordine
- Masse eccitate

- Modi propri di vibrazione

DEFORMATE

Per ogni combinazione di carico e per tutti i nodi non completamente bloccati il programma calcola spostamenti (unità di misura L) e rotazioni (radianti). Viene anche rappresentata la deformata in luce dell'asta che riproduce il comportamento di una funzione polinomiale di quarto grado. Gli spostamenti sono positivi se diretti nel verso degli assi globali X Y Z, le rotazioni positive se antiorarie rispetto all'asse di riferimento, per un osservatore disteso lungo il corrispondente semiasse positivo (vedi figura a lato).
Viene anche determinato il valore massimo assoluto (con segno) di ogni singola deformazione e il valore massimo dello spostamento nello spazio (radice quadrata della somma dei quadrati degli spostamenti).

ASPETTI PARTICOLARI DELL'ANALISI DINAMICA

Nella stampa degli autovettori vengono riportati i relativi risultati, pertinenti ad ogni nodo.
Nel calcolo della risposta spettrale vengono determinate, per ogni verso del sisma, le deformazioni relative ai vari modi di vibrare e la corrispondente media quadratica. Tali risultati vengono successivamente combinati e danno luogo ad uno o più inviluppi in relazione a quanto imposto dall'utente nella fase iniziale di intestazione del lavoro.
Nel caso dell'applicazione dell'Ordinanza 3431 (ex 3272) vengono anche determinate le deformazioni allo stato limite ultimo, che risultano amplificate per effetto dei fattori di struttura q rassegnati alle due direzioni orizzontali e a quella verticale.

TRAVI E PILASTRI

Il programma calcola ai due nodi estremi di ogni elemento e per ogni combinazione di carico sei sollecitazioni, riferite agli assi locali (come indicato nella figura a lato):

- Fx = forza assiale nella direzione locale x;
- Fy = taglio nella direzione locale y;
- Fz = taglio nella direzione locale z;
- Mx = momento torcente attorno all'asse locale x;
- My = momento flettente attorno all'asse locale y;
- Mz = momento flettente attorno all'asse locale z,

con le seguenti convenzioni sui segni:

- forze positive se concordi con gli assi locali (F);
- momenti positivi se antiorari rispetto gli assi locali, per un osservatore disteso lungo il corrispondente semiasse positivo (F*L).

Tali convenzioni sono caratteristiche dei codici di calcolo numerico e sono mantenute soltanto nelle stampe globali. Nelle rappresentazioni grafiche e nelle stampe delle verifiche di sicurezza vengono invece adottate le convenzioni tipiche della Scienza delle Costruzioni.
In caso di analisi sismica con il metodo statico equivalente viene riportato un prospetto riguardante il peso sismico del gruppo, le coordinate baricentriche relative, il coefficiente di distribuzione globale del gruppo funzione della sua quota, il coefficiente globale ricavato dal precedente in base ai parametri sismici, la forza sismica relativa.
Nell'analisi dinamica vengono calcolate le medesime sollecitazioni per ognuna delle tre azioni sismiche previste (Z eventuale). Viene evidenziato il modo di vibrazione che dà luogo all'effetto massimo, il valore di tale effetto (con segno), la risultante dovuta alla combinazione di tutti i modi di vibrazione mediante il criterio prescelto dall'utente.
Per le travi di fondazione il programma calcola ai due nodi estremi della trave e in tutti i punti intermedi generati per effetto della suddivisione della trave di fondazione, per ogni combinazione di carico:

- Fy = taglio nella direzione locale y (F);
- Mx = momento torcente attorno asse locale x (F*L);
- Mz = momento flettente attorno asse locale z (F*L);
- UZ = spostamento lungo Z (L);
- rX = rotazione intorno X (rad);

- rY = rotazione intorno Y (rad);
- pressione sul suolo (F/L^2).

VINCOLI

In stampa vengono fornite, per ogni nodo vincolato, le reazioni corrispondenti ai vincoli assegnati. Per quanto concerne i versi si tenga presente che è stata adottata la convenzione tradizionale. In generale le forze vincolari (unità di misura F) sono positive se vanno nel verso dell'asse di riferimento, i momenti (F*L) sono positivi se antiorari per un osservatore disposto lungo il corrispondente semiasse positivo; tali sollecitazioni tendono a contrastare deformazioni di segno opposto.
Per quanto concerne i vincoli comunque disposti nello spazio vale la stessa regola: se uno spostamento è positivo tende ad allontanare il nodo N da I; la conseguente reazione è di segno opposto, cioè negativa.
Nell'analisi dinamica, per ogni direzione, per ogni nodo vincolato, viene indicato il modo che dà luogo all'effetto massimo e il relativo valore; viene anche indicato il risultato complessivo calcolato a partire dai singoli effetti modali. Nella stampa degli inviluppi viene calcolata la risultante obbedendo alla modalità scelta dall'utente.

- **VERIFICA SLD (DEFORMAZIONI RELATIVE)**

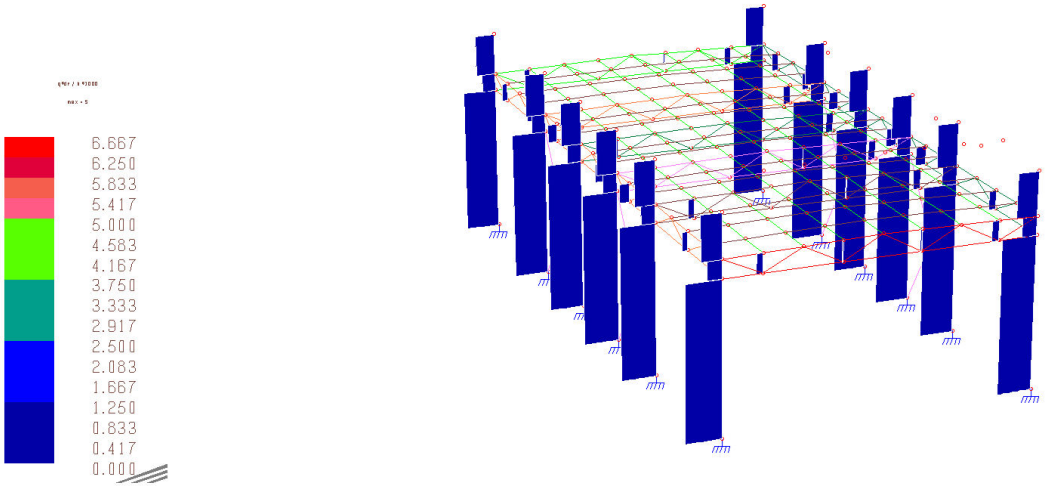


Figura 2 - Verifica di danneggiabilità 0.005h

- **SOLLECITAZIONI**

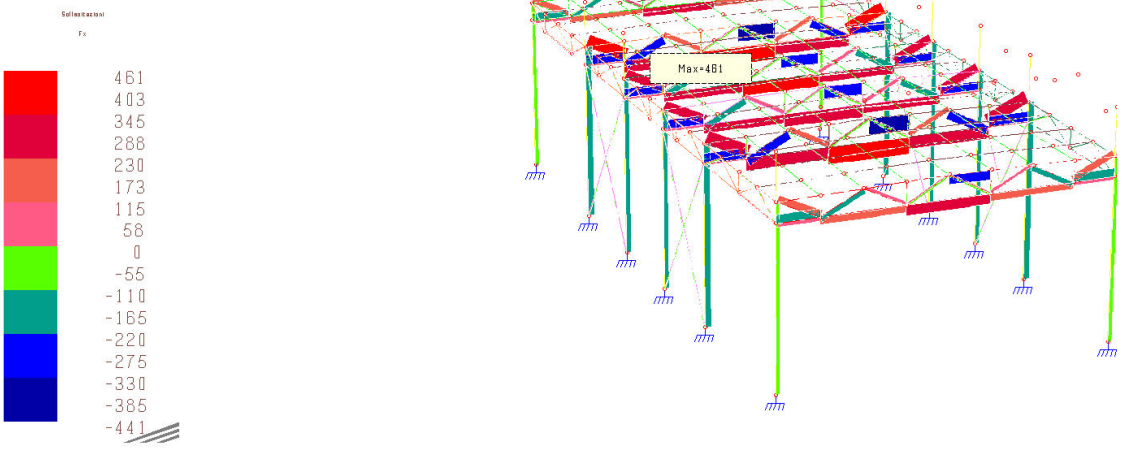


Figura 3 - Sforzo Normale Fx [kN]

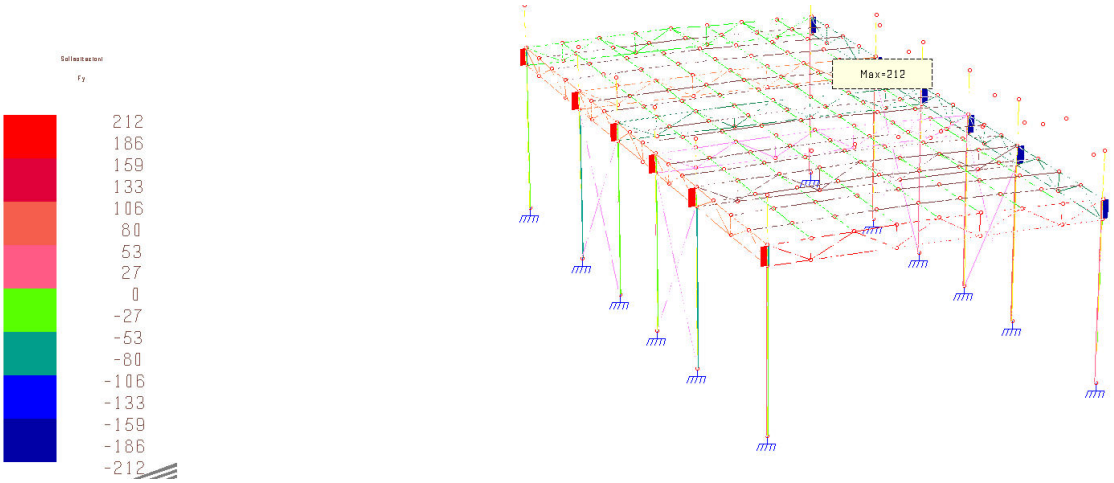


Figura 4 – Taglio Fy [kN]

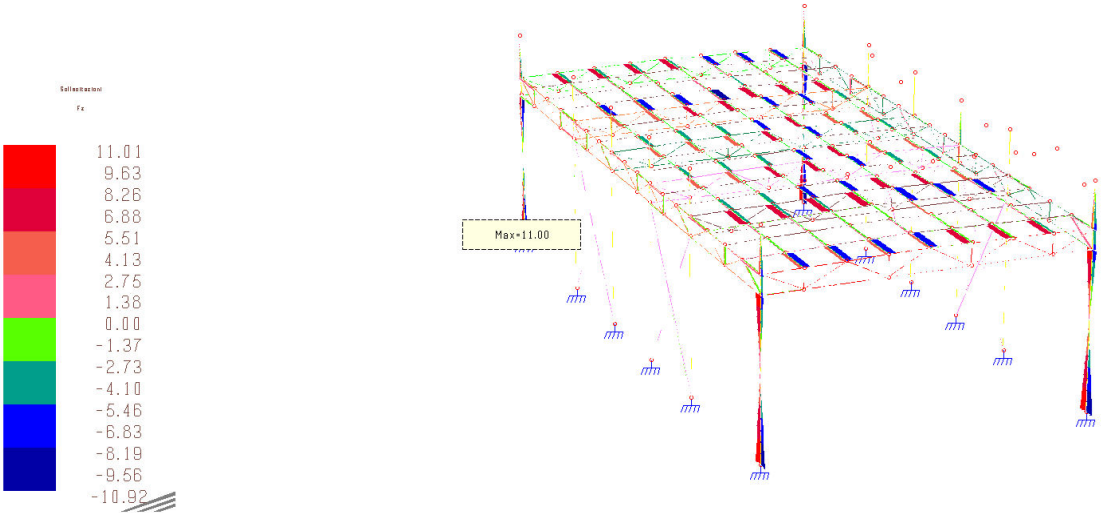


Figura 5 – Taglio Fz [kN]

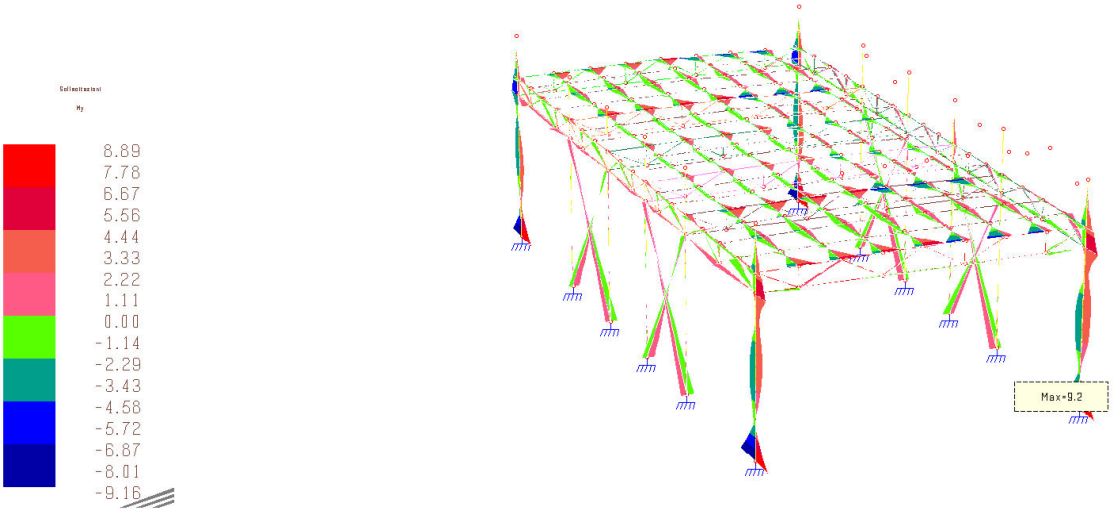


Figura 6 - Momento Flettente My [kNm]

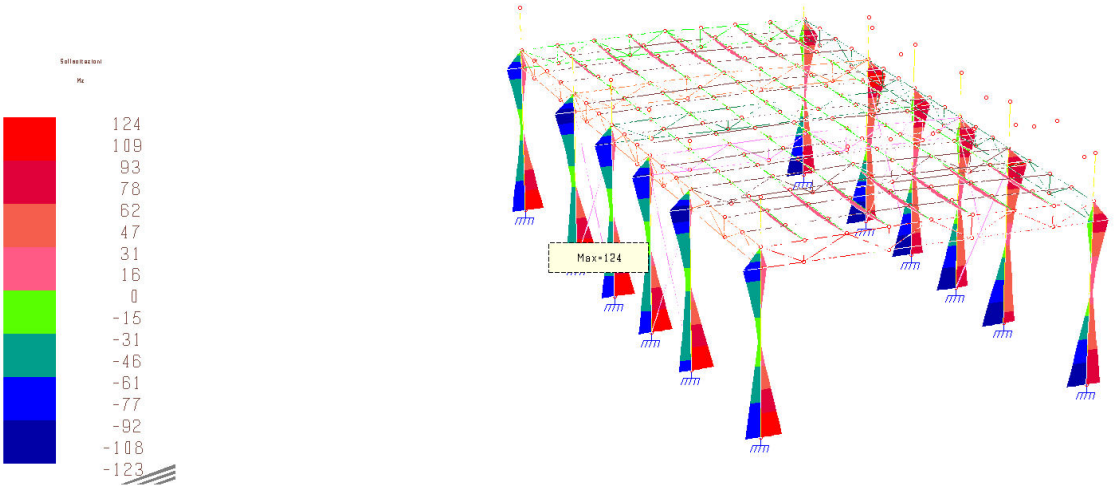


Figura 7 - Momento Flettente Mz [kNm]

- **EFFETTI DEL II ORDINE**

Nome archivio di lavoro: STAZIONE SPERIMENTALE
Intestazione del lavoro: LABORATORIO SPERIMENTALE
Tipo di analisi : Statica e Dinamica
Unita' di misura delle Forze: kN
Unita' di misura Lunghezze: m
Sisma lungo l'asse Z: No
Combinazione dei modi: CQC
Combinazione componenti azioni sismiche: Eurocodice 8
l : 0.3
m : 0.3

***** Gruppo di copertura: CONTROVENTI**

C.C		Δ_X [cm]	Δ_Y [cm]
1	Statica+(EX+λ*EY)	0.74	0.00
1	Statica+(λ*EX+EY)	0.23	0.01

2	-0.01	0.00
3	0.03	0.00
4	-0.01	0.00
5	-0.00	0.00
7	-0.03	0.00
8	0.08	0.00
9	-0.01	-0.01
10	-0.01	0.01
11	-0.02	0.00
12	0.04	0.00
13	-0.01	-0.00
14	-0.01	0.00
15	-0.02	0.00
16	-0.01	-0.00
17	-0.01	0.00
18	0.01	0.00
19	-0.00	-0.00
20	-0.00	0.00

***** Gruppo di copertura: ARCARECCI**

C.C	Δ_X [cm]	Δ_Y [cm]
1 Statica+(EX+λ*EY)	1.59	0.00
1 Statica+(λ*EX+EY)	0.50	0.01
2	-0.02	-0.00
3	0.06	-0.00
4	-0.02	0.00
5	-0.01	-0.00
7	-0.07	0.00
8	0.17	-0.00
9	-0.01	-0.01
10	-0.01	0.01
11	-0.05	0.00
12	0.09	-0.00
13	-0.02	-0.01
14	-0.02	0.01
15	-0.04	0.00
16	-0.01	-0.01
17	-0.01	0.01
18	0.01	-0.00
19	-0.01	-0.00
20	-0.01	0.00

***** analisi alla quota: 0.000**

Gruppo di copertura: CONTROVENTI altezza interpiano: 2.10
Gruppo di copertura: ARCARECCI altezza interpiano: 4.76
altezza media di interpiano: 3.87

C.C	Δ_X [cm]	Δ_Y [cm]	d_{rX} [cm]	d_{rY} [cm]	FX	FY	FZ	ϑ_X	ϑ_Y
1 Statica+(EX+λ*EY)	0.00	0.00	-1.31	-0.00	445.85	18.82	1044.44	0.01	0.00
1 Statica+(λ*EX+EY)	0.00	0.00	-0.41	-0.01	139.00	25.73	1044.44	0.01	0.00
2	0.00	0.00	0.01	0.00	0.00	0.00	1818.63	0.00	0.00
3	0.00	0.00	-0.05	0.00	64.36	0.00	1241.02	0.00	0.00
4	-0.00	0.00	0.01	-0.00	6.76	0.78	1007.63	0.00	0.00
5	0.00	0.00	0.01	0.00	0.00	0.00	1044.44	0.00	0.00
7	-0.00	0.00	0.06	-0.00	50.82	5.94	1081.43	0.00	0.00
8	0.00	0.00	-0.14	0.00	160.90	0.00	1081.42	0.00	0.00
9	0.00	-0.00	0.01	0.01	0.01	76.88	1199.08	0.00	0.00
10	0.00	0.00	0.01	-0.01	0.00	76.87	1198.91	0.00	0.00
11	-0.00	0.00	0.04	-0.00	30.50	3.57	1652.88	0.00	0.00
12	0.00	0.00	-0.08	0.00	96.54	0.01	1652.85	0.00	0.00
13	0.00	-0.00	0.01	0.01	0.01	46.12	1723.29	0.00	0.00
14	0.00	0.00	0.01	-0.01	0.01	46.12	1723.51	0.00	0.00
15	-0.00	0.00	0.03	-0.00	20.32	2.37	1241.21	0.00	0.00
16	0.00	-0.00	0.01	0.00	0.01	30.75	1288.28	0.00	0.00
17	0.00	0.00	0.01	-0.00	0.01	30.74	1288.23	0.00	0.00
18	0.00	0.00	-0.01	0.00	21.44	0.01	1007.59	0.00	0.00
19	-0.00	-0.00	0.01	0.00	0.00	10.25	1023.28	0.00	0.00
20	0.00	0.00	0.01	-0.00	0.01	10.25	1023.32	0.00	0.00

CONTROLLO REGOLARITÀ DELLA VARIAZIONE DELLA RIGIDEZZA LATERALE IN ALTEZZA

	Quota [m]	Rigidezza laterale X [KN/cm]	Variazione [%]	Rigidezza laterale Y [KN/cm]	Variazione [%]
Livello 0	0.00	898.70	---	6208.08	---

RIPARTIZIONE DELLE AZIONI TAGLIANTI AI PIANI

***** Piano rigido alla quota: 0.000**

C.C	FX(Tot)	FX(Pil.)	(%)	FX(Setti)	(%)	FX(Pareti)	(%)	FY(Tot)	FY(Pil.)	(%)	FY(Setti)	(%)	FY(Pareti)	(%)
1 Statica+(EX+λ*EY)	446	446	100	0	0	0	0	19	19	100	0	0	0	0
1 Statica+(λ*EX+EY)	139	139	100	0	0	0	0	26	26	100	0	0	0	0

▪ MASSE ECCITATE E MODI PROPRI DI VIBRAZIONE

PROSPETTO RIASSUNTIVO MODI PRINCIPALI

Periodo principale	T1	Massa	Massa %	Modo	Note
Direzione X	+2.77e-01	+1.03e+02	99	1	--
Direzione Y	+1.08e-01	+1.02e+02	98	6	--
Direzione Z	+1.50e-01	+5.73e+01	55	4	--
Rotazione Z	+1.50e-01	+1.89e+02	19	3	--

PROSPETTO RIASSUNTIVO MASSE ECCITATE PER QUOTA MAGGIORE DI: 0.00

Analisi	Direz.X	%	Direz.Y	%	Direz. Z	%	Rotaz. Z	%
--	+1.03e+02	100	+1.02e+02	99	+7.44e+01	72	+2.22e+02	23

FREQUENZE PROPRIE DI OSCILLAZIONE

Numero	Pulsazione	Frequenza	Periodo	Precisione
1	2.266e+01	3.606e+00	2.773e-01	0.000e+00
2	4.121e+01	6.558e+00	1.525e-01	0.000e+00
3	4.189e+01	6.667e+00	1.500e-01	0.000e+00
4	4.200e+01	6.684e+00	1.496e-01	0.000e+00
5	5.095e+01	8.109e+00	1.233e-01	0.000e+00
6	5.795e+01	9.222e+00	1.084e-01	4.755e-26
7	6.425e+01	1.023e+01	9.779e-02	4.490e-24
8	7.136e+01	1.136e+01	8.805e-02	4.512e-18
9	7.152e+01	1.138e+01	8.785e-02	1.692e-17
10	8.322e+01	1.325e+01	7.550e-02	1.897e-14

COEFFICIENTI DI PARTECIPAZIONE MODALE

Modo	Direz.X	Direz.Y
1	-1.014e+01	8.851e-04
2	2.315e-02	3.520e-01
3	2.562e-03	5.295e-01
4	9.208e-02	5.731e-02
5	3.065e-02	-4.972e-02
6	3.658e-04	-1.009e+01
7	1.718e-03	-6.398e-02
8	1.241e-01	1.284e-01
9	1.467e-01	-1.092e-01
10	1.443e-02	6.773e-03

MASSA ECCITATA PER QUOTA Z MAGGIORE DI :0.00

Modo	Direz.X	%	Direz.Y	%	Direz.Z	%	Rotaz.Z	%
Modo: 1	+1.03e+02	100	+7.83e-07	0	+5.74e-03	0	+1.33e+01	1
Progressiva	+1.03e+02	100	+7.83e-07	0	+5.74e-03	0	+1.33e+01	1
Modo: 2	+5.36e-04	0	+1.24e-01	0	+2.72e+00	3	+4.35e+00	0
Progressiva	+1.03e+02	100	+1.24e-01	0	+2.73e+00	3	+1.76e+01	2
Modo: 3	+6.56e-06	0	+2.80e-01	0	+3.62e+00	4	+1.89e+02	19
Progressiva	+1.03e+02	100	+4.04e-01	0	+6.35e+00	6	+2.07e+02	21
Modo: 4	+8.48e-03	0	+3.28e-03	0	+5.73e+01	56	+9.13e+00	1
Progressiva	+1.03e+02	100	+4.08e-01	0	+6.37e+01	62	+2.16e+02	22
Modo: 5	+9.39e-04	0	+2.47e-03	0	+8.71e+00	8	+4.79e-04	0
Progressiva	+1.03e+02	100	+4.10e-01	0	+7.24e+01	70	+2.16e+02	22

Modo	Direz.X	%	Direz.Y	%	Direz.Z	%	Rotaz.Z	%
Modo: 6	+1.34e-07	0	+1.02e+02	99	+9.22e-05	0	+5.26e+00	1
Progressiva	+1.03e+02	100	+1.02e+02	99	+7.24e+01	70	+2.21e+02	23
Modo: 7	+2.95e-06	0	+4.09e-03	0	+3.37e-02	0	+3.97e-04	0
Progressiva	+1.03e+02	100	+1.02e+02	99	+7.24e+01	70	+2.21e+02	23
Modo: 8	+1.54e-02	0	+1.65e-02	0	+1.18e-02	0	+2.69e-01	0
Progressiva	+1.03e+02	100	+1.02e+02	99	+7.24e+01	70	+2.22e+02	23
Modo: 9	+2.15e-02	0	+1.19e-02	0	+1.61e-02	0	+3.27e-01	0
Progressiva	+1.03e+02	100	+1.02e+02	99	+7.24e+01	70	+2.22e+02	23
Modo: 10	+2.08e-04	0	+4.59e-05	0	+1.94e+00	2	+8.90e-06	0
Progressiva	+1.03e+02	100	+1.02e+02	99	+7.44e+01	72	+2.22e+02	23

MASSA TOTALE ECCITABILE

Direzione X	Direzione Y	Direzione Z	Rotazione Z
+1.03e+02	+1.03e+02	+1.03e+02	+9.71e+02

8. VERIFICHE DI SICUREZZA DEGLI ELEMENTI IN ACCIAIO CON IL METODO DELLE NTC 2018 E DELL'EUROCODICE 3

▪ I RISULTATI PER ASTE RETICOLARI

Il tabulato riporta una descrizione dei parametri di progetto e successivamente, in sequenza per ogni asta:

- numero combinazione di carico;
- sforzo normale N (corrispondente a Fx), positivo se di trazione;
- classe della sezione; non viene riportata se agisce la trazione;
- Anet oppure Aeff: viene riportato il valore della sezione (cm2) utilizzata in fase di verifica;
- snellezza adimensionale; dipende dalla snellezza dell'asta nei due piani di e quella ulteriore, eventuale, derivante da assi principali di inerzia della sezione non coincidenti con gli assi locali y e z (come avviene per la sezione a L); viene ovviamente determinata solo per aste compresse;
- minimo: rappresenta il minimo fra i coefficienti di riduzione del modo di instabilità intorno agli assi coinvolti nella verifica, che possono riguardare anche gli assi principali di inerzia;
- I.R., indice di resistenza: viene determinato l'indice di verifica a resistenza, ottenuto come rapporto fra la sollecitazione esterna Nsd e la resistenza di progetto, comunemente indicate con il termine Nt.Rd (nel caso trazione) oppure Nc.Rd (nel caso compressione);
- I.S., indice di stabilità: viene determinato l'indice all'instabilità flessionale, ottenuto come rapporto fra la sollecitazione esterna Nsd e la resistenza di progetto all'instabilità Nb.Rd nei piani di flessione sopra specificati.

A fine riga compaiono due note; la prima indica il piano di massima snellezza e il suo valore; la seconda, eventuali informazioni di commento.

Se è abilitata la verifica di stabilità per aste consecutive (superelementi) viene riportato un ulteriore tabulato riguardante la verifica globale delle aste che costituiscono il superelemento; la sola differenza con il precedente riguarda l'indicazione, nel prospetto, della lunghezza totale che influisce sul valore di snellezza e quindi sul risultato finale della verifica.

I RISULTATI PER TRAVI E PILASTRI

Il tabulato riporta:

- numero combinazione di carico;
- ascissa di calcolo (cm);
- in sequenza Fx, Fy, Fz (F), Mx, My, Mz (F*m).

Le convenzioni sui segni delle sollecitazioni sono:

- Fx (sforzo normale) è positivo se di trazione;
- Fy (forza tagliante) è positiva se agisce, a sinistra della sezione interessata, nel verso positivo dell'asse locale corrispondente;
- Fz (forza tagliante) è positiva se agisce, a sinistra della sezione interessata, nel verso negativo dell'asse locale corrispondente;
- Mx (momento torcente) è positivo se antiorario intorno a x a sinistra dell'ascissa in esame;
- My (momento flettente) è positivo se tende le fibre posteriori, cioè quelle disposte nel verso negativo dell'asse z;
- Mz (momento flettente) è positivo se tende le fibre inferiori, cioè quelle disposte nel verso negativo dell'asse y.

Vengono poi riportate:

- classe: rappresenta la classe della sezione; qualora i singoli componenti della sezione (ad esempio ala e anima) abbiano classi diverse viene presa quella più alta; non viene riportata in caso di trazione o taglio puro.

Il potenziale svergolamento viene indagato solo per sezioni a I. Viene riportato il valore di LT, che determina il momento resistente di progetto. La stabilità euleriana comporta la determinazione di tre coefficienti min, ky, kz. Il tabulato propone:

- numero combinazione di carico;
- valore dello sforzo normale Fx (compressione più elevata trovata);
- momento flettente My più elevato riscontrato in tutte le ascisse;
- momento flettente Mz più elevato riscontrato in tutte le ascisse;
- classe: rappresenta la classe della sezione;
- minimo: rappresenta il minimo fra i coefficienti di riduzione del modo di instabilità intorno agli assi coinvolti nella verifica.

CAPITOLO 4: VALUTAZIONE DEI RISULTATI E GIUDIZIONE MOTIVATO SULLA LORO ACCETTABILITA'

(Ai sensi del D.M. 17.01.2018, Norme Tecniche per le costruzioni)

Il programma di calcolo utilizzato MasterSap è idoneo a riprodurre nel modello matematico il comportamento della struttura e gli elementi finiti disponibili e utilizzati sono rappresentativi della realtà costruttiva. Le funzioni di controllo disponibili, innanzitutto quelle grafiche, consentono di verificare la riproduzione della realtà costruttiva ed accertare la corrispondenza del modello con la geometria strutturale e con le condizioni di carico ipotizzate. Si evidenzia che il modello viene generato direttamente dal disegno architettonico riproducendone così fedelmente le proporzioni geometriche. In ogni caso sono stati effettuati alcuni controlli dimensionali con gli strumenti software a disposizione dell'utente. Tutte le proprietà di rilevanza strutturale (materiali, sezioni, carichi, sconnessioni, etc.) sono state controllate attraverso le funzioni di indagine specificatamente previste.
Sono state sfruttate le funzioni di autodiagnostica presenti nel software che hanno accertato che non sussistono difetti formali di impostazione.
E' stato accertato che le risultanti delle azioni verticali sono in equilibrio con i carichi applicati.
Sono state controllate le azioni taglianti di piano ed accertata la loro congruenza con quella ricavabile da semplici ed agevoli elaborazioni. Le sollecitazioni prodotte da alcune combinazioni di carico di prova hanno prodotto valori prossimi a quelli ricavabili adottando consolidate formulazioni ricavate della Scienza delle Costruzioni. Anche le deformazioni risultano prossime ai valori attesi. Il dimensionamento e le verifiche di sicurezza hanno determinato risultati che sono in linea con casi di comprovata validità, confortati anche dalla propria esperienza.

Informazioni integrative sull'uso dei codici di calcolo

Titolo del codice di calcolo: MasterSap;
Autore, produttore e distributore: AMV s.r.l., via San Lorenzo 106, 34077 Ronchi dei Legionari (Go);
Versione: MasterSap 2021

1. AFFIDABILITA' DEL CODICE DI CALCOLO

In base a quanto richiesto al par. 10.2 del D.M. 17.01.2018 (Norme Tecniche per le Costruzioni) il produttore e distributore Studio Software AMV s.r.l. espone la seguente relazione riguardante il solutore numerico e, più in generale, la procedura di analisi e dimensionamento MasterSap. Si fa presente che sul proprio sito (www.amv.it) è disponibile sia il manuale teorico del solutore sia il documento comprendente i numerosi esempi di validazione. Essendo tali documenti (formati da centinaia di pagine) di pubblico dominio, si ritiene pertanto sufficiente proporre una sintesi, sia pure adeguatamente esauriente, dell'argomento.
Il motore di calcolo adottato da MasterSap, denominato LiFE-Pack, è un programma ad elementi finiti che permette l'analisi statica e dinamica in ambito lineare e non lineare, con estensioni per il calcolo degli effetti del secondo ordine.
Il solutore lineare usato in analisi statica ed in analisi modale è basato su un classico algoritmo di fattorizzazione multifrontale per matrici sparse che utilizza la tecnica di condensazione supernodale ai fini di velocizzare le operazioni. Prima della fattorizzazione viene eseguito un riordino simmetrico delle righe e delle colonne del sistema lineare al fine di calcolare un percorso di eliminazione ottimale che massimizza la sparsità del fattore.
Il solutore modale è basato sulla formulazione inversa dell'algoritmo di *Lanczos* noto come *Thick Restarted Lanczos* ed è particolarmente adatto alla soluzione di problemi di grande e grandissima dimensione ovvero con molti gradi di libertà. L'algoritmo di Lanczos oltre ad essere supportato da una rigorosa teoria matematica, è estremamente efficiente e competitivo e non ha limiti superiori nella dimensione dei problemi, se non quelli delle risorse hardware della macchina utilizzata per il calcolo.

Per la soluzione modale di piccoli progetti, caratterizzati da un numero di gradi di libertà inferiore a 500, l'algoritmo di Lanczos non è ottimale e pertanto viene utilizzato il classico solutore modale per matrici dense simmetriche contenuto nella ben nota libreria *LAPACK*.
L'analisi con i contributi del secondo ordine viene realizzata aggiornando la matrice di rigidezza elastica del sistema con i contributi della matrice di rigidezza geometrica.
Un'estensione non lineare, che introduce elementi a comportamento multilineare, si avvale di un solutore incrementale che utilizza nella fase iterativa della soluzione il metodo del gradiente coniugato precondizionato.
Grande attenzione è stata riservata agli esempi di validazione del solutore. Gli esempi sono stati tratti dalla letteratura tecnica consolidata e i confronti sono stati realizzati con i risultati teorici e, in molti casi, con quelli prodotti, sugli esempi stessi, da prodotti internazionali di comparabile e riconosciuta validità. Il manuale di validazione è disponibile sul sito www.amv.it.
È importante segnalare, forse ancora con maggior rilievo, che l'affidabilità del programma trova riscontro anche nei risultati delle prove di collaudo eseguite su sistemi progettati con MasterSap. I verbali di collaudo (per alcuni progetti di particolare importanza i risultati sono disponibili anche nella letteratura tecnica) documentano che i risultati delle prove, sia in campo statico che dinamico, sono corrispondenti con quelli dedotti dalle analisi numeriche, anche per merito della possibilità di dar luogo, con MasterSap, a raffinate modellazioni delle strutture.

In MasterSap sono presenti moltissime procedure di controllo e filtri di autodiagnostica. In fase di input, su ogni dato, viene eseguito un controllo di compatibilità. Un ulteriore procedura di controllo può essere lanciata dall'utente in modo da individuare tutti gli errori gravi o gli eventuali difetti della modellazione. Analoghi controlli vengono eseguiti da MasterSap in fase di calcolo prima della preparazione dei dati per il solutore. I dati trasferiti al solutore sono facilmente consultabili attraverso la lettura del file di input in formato XML, leggibili in modo immediato dall'utente.
Apposite procedure di controllo sono predisposte per i programmi di dimensionamento per il c.a., acciaio, legno, alluminio, muratura etc.
Tali controlli riguardano l'esito della verifica: vengono segnalati, per via numerica e grafica (vedi esempio a fianco), i casi in contrasto con le comuni tecniche costruttive e gli errori di dimensionamento (che bloccano lo sviluppo delle fasi successive della progettazione, ad esempio il disegno esecutivo). Nei casi previsti dalla norma, ad esempio qualora contemplato dalle disposizioni sismiche in applicazione, vengono eseguiti i controlli sulla geometria strutturale, che vengono segnalati con la stessa modalità dei difetti di progettazione.
Ulteriori funzioni, a disposizione dell'utente, agevolano il controllo dei dati e dei risultati. E' possibile eseguire una funzione di ricerca su tutte le proprietà (geometriche, fisiche, di carico etc) del modello individuando gli elementi interessati.
Si possono rappresentare e interrogare graficamente, in ogni sezione desiderata, tutti i risultati dell'analisi e del dimensionamento strutturale. Nel caso sismico viene evidenziata la posizione del centro di massa e di rigidezza del sistema.
Per gli edifici è possibile, per ogni piano, a partire delle fondazioni, conoscere la risultante delle azioni verticali orizzontali. Analoghi risultati sono disponibili per i vincoli esterni.
Il rilascio di ogni nuova versione dei programmi è sottoposto a rigorosi check automatici che mettono a confronto i risultati della release in esame con quelli già validati realizzati da versioni precedenti. Inoltre, sessioni specifiche di lavoro sono condotte da personale esperto per controllare il corretto funzionamento delle varie procedure software, con particolare riferimento a quelle che sono state oggetto di interventi manutentivi o di aggiornamento.

CAPITOLO 5: PIANO DI MANUTENZIONE DELLA PARTE STRUTTURALE DELL'OPERA

(Ai sensi del D.M. 17.01.2018, Norme Tecniche per le costruzioni art. 10.1)

1. PREMESSA.

Il presente Piano di manutenzione è da considerarsi come elemento complementare al progetto strutturale che ne prevede, pianifica e programma l'attività di manutenzione dell'intervento al fine di mantenerne nel tempo la funzionalità, le caratteristiche di qualità, l'efficienza ed il valore economico.

Tale piano di manutenzione delle strutture, coordinato con quello generale della costruzione, costituisce parte essenziale della progettazione strutturale. Viene corredato del manuale d'uso, del manuale di manutenzione e del programma di manutenzione delle strutture.
I manuali rappresentano gli strumenti con cui l'utente gestisce l'immobile evitando comportamenti anomali che possano danneggiarne o comprometterne la durabilità e le caratteristiche, attraverso i manutentori che utilizzeranno così metodologie più confacenti ad una gestione che coniughi economicità e durabilità del bene.
I manuali definiscono le procedure di raccolta e di registrazione delle informazioni relative all'immobile, nonché le azioni necessarie per impostare il piano di manutenzione e per organizzare in modo efficiente, sia sul piano tecnico che su quello economico, il servizio di manutenzione.

2. CONTENUTI

Il piano di manutenzione è organizzato nei tre strumenti individuati dall'art. 40 del regolamento LLPP ovvero:
a) il manuale d'uso;
b) il manuale di manutenzione;
c) il programma di manutenzione;

c1) il sottoprogramma delle prestazioni, che prende in considerazione, per classe di requisito, le prestazioni fornite dal bene e dalle sue parti nel corso del suo ciclo di vita;

c2) il sottoprogramma dei controlli, che definisce il programma delle verifiche e dei controlli al fine di rilevare il livello prestazionale (qualitativo e quantitativo) nei successivi momenti della vita del bene, individuando la dinamica della caduta delle prestazioni aventi come estremi il valore di collaudo e quello minimo di norma;

c3) il sottoprogramma degli interventi di manutenzione, che riporta in ordine temporale i differenti interventi di manutenzione, al fine di fornire le informazioni per una corretta conservazione del bene.

Tali strumenti devono consentire di raggiungere i seguenti obiettivi, raggruppati in base alla loro natura:

1) Obiettivi tecnico - funzionali:

- istituire un sistema di raccolta delle informazioni iniziali e del loro aggiornamento a seguito degli interventi, per conoscere e manutenere correttamente l'immobile e le sue parti;
- consentire l'individuazione delle strategie di manutenzione più adeguate in relazione alle caratteristiche dell'immobile;
- istruire gli operatori tecnici sugli interventi di ispezione e manutenzione da eseguire, favorendo la corretta ed efficiente esecuzione degli interventi;
- istruire gli utenti sul corretto uso dell'immobile e delle sue parti, su eventuali interventi di piccola manutenzione che possono eseguire direttamente; sulla corretta interpretazione degli indicatori di uno stato di guasto o di malfunzionamento e sulle procedure per la sua segnalazione alle competenti strutture di manutenzione;
- definire le istruzioni e le procedure per controllare la qualità del servizio di manutenzione.

2) Obiettivi economici:
- ottimizzare l'utilizzo del bene immobile e prolungarne il ciclo di vita con l'effettuazione d'interventi manutentivi mirati;
- conseguire il risparmio di gestione sia con il contenimento dei consumi, sia con la riduzione dei guasti e del tempo di non utilizzazione del bene immobile;
- consentire la pianificazione e l'organizzazione più efficiente ed economica del servizio di manutenzione.

Il presente "Piano di manutenzione riguardante le strutture" previsto dalle nuove Norme Tecniche per le Costruzioni (D.M. 17 gennaio 2018 e dalla relativa Circolare Esplicativa 19 gennaio 2019).

3. SCHEDA IDENTIFICATIVA DELL'OPERA

I lavori consistono nella realizzazione di una stazione sperimentale per prove termofisiche a servizio del Dipartimento di Medicina e Scienze della Salute "Vincenzo Tiberio" dell'Università degli Studi del Molise – Campobasso.

Nel seguito si forniscono alcuni dati necessari.

- Indirizzo: Viale Manzoni – Campobasso (CB)
- Proprietà: Università degli Studi del Molise
- Progettazione strutturale: Area Servizi Tecnici

4. MANUALE D'USO

Il **manuale d'uso** definisce le ispezioni ai manufatti per individuare (sulla base dei requisiti fissati dal progettista in fase di redazione del progetto), la serie di danni che possono influenzare la durabilità dell'immobile e per i quali un intervento manutentivo potrebbe rappresentare allungamento della vita utile e mantenimento del valore patrimoniale.

- **Platea in c.a.**

Descrizione: Elemento strutturale in conglomerato cementizio armato a sviluppo superficiale orizzontale con superfici a contatto con il terreno o magrone di calcestruzzo.
Funzione: ripartizione dei carichi della struttura sul terreno.
Modalità d'uso corretto: la platea è concepita per resistere ai carichi di progetto della struttura in elevazione. Non ne deve essere compromessa l'integrità e la funzionalità. Qualora ispezionabili, va controllato periodicamente il grado di usura e vanno rilevate eventuali anomalie.

- **Pali in c.a.**

Descrizione: elementi strutturali in conglomerato cementizio armato a sviluppo lineare verticale con superfici a contatto con il terreno.
Funzione: ripartizione dei carichi della struttura sul terreno.
Modalità d'uso corretto: i pali sono concepiti per resistere ai carichi di progetto della struttura in elevazione.

- **Travi in acciaio**

Descrizione: elementi strutturali in acciaio a sviluppo lineare orizzontale o sub-orizzontale.
Funzione: sostegno delle murature di tamponamento e dei solai.
Modalità d'uso corretto: le travi in acciaio sono concepite per resistere ai carichi di progetto trasmessi dai solai e dai tamponamenti. Non ne deve essere compromessa l'integrità e la funzionalità. Controllo periodico del grado di usura con contestuale rilievo di eventuali anomalie.

Solai in lamiera grecata e soletta collaborante

Descrizione: Elementi strutturali costituiti dall'assemblaggio di elementi in c.a. gettati in opera e lamiera grecata in acciaio 8/10.

Funzione: creazione di superfici resistenti eventualmente praticabili, con funzione di collegamento delle strutture verticali.
Modalità d'uso corretto: i solai sono concepiti per resistere ai carichi di progetto della struttura. Non ne deve essere compromessa l'integrità e la funzionalità. Controllo periodico del grado di usura con contestuale rilievo di eventuali anomalie.

5. MANUALE DI MANUTENZIONE

Il **manuale di manutenzione** rappresenta lo strumento con cui il tecnico amministra il bene in fase di gestione di un contratto di manutenzione programmata.

- **DESCRIZIONE DELL'ELEMENTO STRUTTURALE: Opere di fondazione**

Elementi del sistema edilizio atti a trasmettere al terreno le azioni esterne e il peso proprio della struttura.

LIVELLO MINIMO DELLE PRESTAZIONI

- Resistenza ai carichi e alle sollecitazioni previste in fase di progettazione.

MODALITA' DI CONTROLLO

- Controllo visivo atto a riscontrare possibili anomali che precedano fenomeni di cedimenti strutturali.

PERIODICITA'

- Annuale.

PROBLEMI RISCONTRABILI

- Formazione di fessurazioni o crepe.
- Corrosione delle armature.
- Disgregazione del copriferro con evidenza barre di armatura

POSSIBILI CAUSE

- Alternanza di penetrazione e di ritiro dell'acqua.

TIPO DI INTERVENTO (in ogni caso consultare preventivamente un tecnico strutturale).

- Riparazioni localizzate delle parti strutturali.
- Ripristino di parti strutturali in calcestruzzo armato.
- Protezione dei calcestruzzi da azioni disgreganti.
- Protezione delle armature da azioni disgreganti.

STRUMENTI ATTI A MIGLIORARE LA CONSERVAZIONE DELL'OPERA

- Vernici, malte e trattamenti speciali.
- Prodotti contenenti resine idrofuganti e altri additivi specifici.

- **DESCRIZIONE DELL'ELEMENTO STRUTTURALE: Opere orizzontali o inclinate in cemento armato.**

Elementi del sistema edilizio aventi il compito di resistere alle azioni verticali e di trasmetterle alle altre parti strutturali ad essi collegate. Fungono da collegamento alle pareti perimetrali.

LIVELLO MINIMO DELLE PRESTAZIONI

- Resistenza ai carichi e alle sollecitazioni previste in fase di progettazione.

- Buona resistenza termica.
- Coibenza acustica soddisfacente.
- Adeguata resistenza al fuoco.

CARATTERISTICHE MINIME DEI MATERIALI

- Calcestruzzo: Rck minimo: 30 N/mmq.
- …

MODALITA' DI CONTROLLO

- Controllo visivo atto a riscontrare possibili anomali che precedano fenomeni di cedimenti strutturali.

PERIODICITA'

- Annuale.

PROBLEMI RISCONTRABILI

- Insorgere di efflorescenze o comparsa di muffe.
- Formazione di fessurazioni o crepe.
- Corrosione delle armature.
- Disgregazione o deterioramento del cemento con conseguente perdita degli aggregati.
- Movimenti relativi fra i giunti.
- Formazioni di bolle d'aria.

POSSIBILI CAUSE

- Anomali incrementi dei carichi da sopportare.

TIPO DI INTERVENTO (in ogni caso consultare preventivamente un tecnico strutturale).

- Riparazioni localizzate delle parti strutturali.
- Ripristino di parti strutturali in calcestruzzo armato.
- Protezione dei calcestruzzi da azioni disgreganti,
- Protezione delle armature da azioni disgreganti.

STRUMENTI ATTI A MIGLIORARE LA CONSERVAZIONE DELL'OPERA

- Vernici, malte e trattamenti speciali.
- Prodotti contenenti resine idrofuganti e altri additivi specifici.

- **DESCRIZIONE DELL'ELEMENTO STRUTTURALE: Opere in acciaio.**

Elementi del sistema edilizio orizzontali e verticali, aventi il compito di resistere alle azioni di progetto e di trasmetterle alle fondazioni ed alle altre parti strutturali ad essi collegate.

LIVELLO MINIMO DELLE PRESTAZIONI

- Elevata resistenza meccanica.
- Adeguata resistenza al fuoco.

MODALITA' DI CONTROLLO

- Controllo visivo atto a riscontrare possibili anomali che precedano fenomeni di cedimenti strutturali.

PERIODICITA'

- Annuale.

PROBLEMI RISCONTRABILI

- Possibili distacchi fra i vari componenti.
- Perdita della capacità portante.
- Rottura dei punti di saldatura.
- Cedimento delle giunzioni bullonate.
- Fenomeni di corrosione.
- Perdita della protezione ignifuga.

POSSIBILI CAUSE

- Anomali incrementi dei carichi da sopportare.
- Fenomeni atmosferici.
- Incendi.

TIPO DI INTERVENTO (in ogni caso consultare preventivamente un tecnico strutturale).

- Riparazioni localizzate delle parti strutturali.
- Verifica del serraggio fra gli elementi giuntati.
- Ripristino della protezione ignifuga.
- Verniciatura.

EVENTUALI ACCORGIMENTI ATTI A MIGLIORARE LA CONSERVAZIONE DELL'OPERA

- Vernici ignifughe.
- Altri additivi specifici.

6. PROGRAMMA DI MANUTENZIONE

Il **programma di manutenzione** è lo strumento con cui chi ha il compito di gestire il bene programma le attività in riferimento alla previsione del complesso di interventi inerenti alla manutenzione di cui si individuano la frequenza, gli indici di costo orientativi e le strategie di attuazione nel medio e nel lungo periodo.

- **PRESTAZIONI**

Strutture di fondazione

Platee in c.a.
Pali in c.a.

Le strutture di fondazione dovranno garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Strutture in elevazione

Pilastri in acciaio
Travi in acciaio

Le strutture in elevazione dovranno garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

Strutture orizzontali

Solai in lamiera grecata e soletta in c.a. collaborante

Le strutture orizzontali dovranno garantire le specifiche prestazioni indicate nel progetto strutturale, comunque non inferiori alle prestazioni prescritte dalle normative vigenti.

- **CONTROLLI**

L'esito di ogni ispezione deve essere oggetto di uno specifico rapporto da conservare insieme alla relativa documentazione tecnica. A conclusione di ogni ispezione il tecnico incaricato deve, se necessario, indicare gli eventuali interventi di manutenzione ed esprimere un giudizio riassuntivo sullo stato d'opera.

Controlli delle strutture di fondazione

Platee in c.a.
Pali in c.a.

Periodicità: annuale (in caso di eventi eccezionali, procedere comunque al controllo)
Esecutore: personale tecnico specializzato
Forma di controllo: visivo, integrato da eventuali prove non distruttive
Risorse: necessità di strumentazione tecnica a richiesta dell'esecutore

Controlli delle strutture in elevazione

Pilastri in acciaio
Travi in acciaio

Periodicità: annuale (in caso di eventi eccezionali, procedere comunque al controllo)
Esecutore: personale tecnico specializzato
Forma di controllo: visivo, integrato da eventuali prove non distruttive
Risorse: necessità di strumentazione tecnica a richiesta dell'esecutore

Controlli delle strutture orizzontali

Solai in lamiera grecata e soletta in c.a. collaborante

Periodicità: annuale (in caso di eventi eccezionali, procedere comunque al controllo)

Esecutore: personale tecnico specializzato
Forma di controllo: visivo, integrato da eventuali prove non distruttive
Risorse: necessità di strumentazione tecnica a richiesta dell'esecutore

INTERVENTI

Da adattare al caso specifico.

RELAZIONE DI CALCOLO. DIMENSIONAMENTO TRAVI MISTE ACCIAIO E CALCESTRUZZO CON CONNETTORI TECNARIA.

Normativa di riferimento: NTC2018 D.M. 17-01-2018 / EN 1994-1-1:2004 Versione programma: 5.0.0.2
Riferimento per le caratteristiche meccaniche dei connettori: Valutazioni Tecniche Europee ETA-18/0447 ed ETA-18/0355.

Progetto:
Progettista:
Solaio:

Tipologia

Soletta su lamiera perpendicolare ai profili.
Trave non puntellata
Trave in semplice appoggio con carichi uniformemente distribuiti.
Ambiente: secco

Limite all'inflessione delta 2=L / 250
Limite all'inflessione finale = L / 200

Coefficienti di sicurezza DM17/01/2018

Azioni - Permanenti:	1.30
Azioni - Perm. non strutturali:	1.30
Azioni - Variabili:	1.50
Materiali - Acciaio:	1.05
Materiali - Calcestruzzo:	1.50
Materiali - Connettori:	1.25
Materiali - Acciaio per barre :	1.15
Materiali - Lamiera Grecata:	1.10

Geometria

Luce di calcolo:	450.0 cm
Interasse travi: (b)	110.0 cm
Spessore soletta: (hc)	6.5 cm
-	
Altezza lamiera grecata: (hp)	5.5 cm
Largh. media nervatura: (b0)	7.50 cm
Largh. inferiore nerv.: (binf)	6.15 cm
Interasse nervature: (bd)	15.0 cm

Profilo metallico

Tipo:	HE 200 B
Altezza trave - ha:	200.0 mm
Larghezza ala superiore - bf:	200.0 mm
Spessore ala superiore - tf:	15.0 mm
Larghezza ala inferiore - bfi:	200.0 mm
Spessore ala inferiore - tfi:	15.0 mm
Spessore anima - tw:	9.0 mm
Raggio - r0:	18.0 mm
Raggio - r1:	0.0 mm
Area:	7808 mm2
Iy:	5696.0 cm4
Wy Sup:	569600 mm3
Wy Inf:	569600 mm3
W Ply:	642500 mm3

Cls Leca CLS 1600

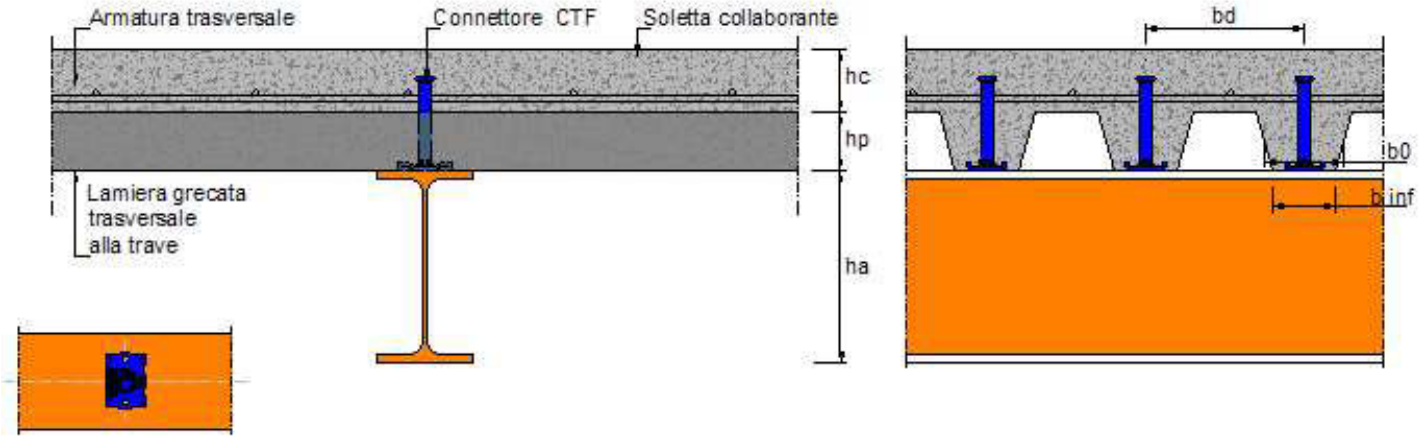
fck:	30 N/mm2
Rck:	33 N/mm2
Peso specifico:	17.5 kN/m3
Ecm:	20000 N/mm2

Acciaio S275

fy:	275 N/mm2
Es	210000 N/mm2

Carichi

Peso proprio:	2.33 kN/m2		
Altri permanenti di 1° fase:	0.00 kN/m2	Tramezzi:	0.00 kN/m2
Sottofondo:	0.00 kN/m2	Altri:	3.55 kN/m2
Pavimento:	0.00 kN/m2	Variabili	2.00 kN/m2



RELAZIONE DI CALCOLO. DIMENSIONAMENTO TRAVI MISTE ACCIAIO E CALCESTRUZZO CON CONNETTORI TECNARIA.

Normativa di riferimento: NTC2018 D.M. 17-01-2018 / EN 1994-1-1:2004 Versione programma: 5.0.0.2

Progetto:
Progettista:
Solaio:

Fase 1 - sola trave in acciaio - SLU - Calcolo elastico

Azioni fase 1:	3.33 kN/m	Classe sezione acciaio:	1
Momento sollecitante - MEd1:	8.4 kNm	Taglio sollecitante - VEd1:	7.5 kN
Momento resistente - MRd:	149.2 kNm	Taglio resistente - VRd1:	272.2 kN
Verifica momento:	0.06	Verifica taglio:	0.03

Fase 1+2 - Sezione mista - STATO LIMITE ULTIMO

Classe sezione mista:	1	Calcolo elastico	
Base efficace (Beff):	110.0 cm	Azioni:	11.71 kN/m
Asse neutro el. da estradosso:	16.3 cm	Altezza totale:	32.0 cm
Momento sollecitante - MEd:	29.6 kNm	Taglio sollecitante - VEd:	26.3 kN
Momento resistente - MRd:	29.9 kNm	Taglio resistente VRd:	272.2 kN
Verifica momento:	0.99	Verifica taglio:	0.10

Fase 1+2 - SLS - STATO LIMITE DI SERVIZIO

Delta 0 Controfreccia iniziale:		0.0 mm	
Delta 1 Trave in acciaio Peso proprio + Altri di prima fase:		1.1 mm	
Delta 1 Trave mista	Ulteriore carico permanente:	0.5 mm	
Delta 2 Trave mista	Carico variabile + Effetto viscosità:	0.6 mm	
Delta 2 Trave mista	Effetto ritiro cls:	2.7 mm	
Delta 2 Totale:		3.2 mm	= L / 1393
Delta Finale Totale:		4.9 mm	= L / 918

Asse neutro elastico dall'estradosso cls:	16.3 cm		
Coeff. di omogeneizzazione - n	- istantaneo: 10.50	- a tempo infinito: 21.00	
Momento di inerzia sezione omog. - I	- istantaneo: 18723.2 cm4	- a tempo infinito: 14151.1 cm4	
Incremento freccia per interazione incompleta:	1.0		
Frequenza fondamentale naturale:	17.7 Hz	calcolata con combinazione frequente.	psi1= 0.7

Fase 1+2 - sezione mista - Connessione

Connessione elastica

Nc Compressione nella soletta in calcestruzzo nel caso di calcolo (kN):	68
Nc,f Compressione nella soletta in calcestruzzo nel caso di completo ripristino di resistenza (kN):	1216
Nc,el Compressione nella soletta in calcestruzzo corrispondente al massimo momento elastico Mel,Rd (kN):	705

Tipo Connettore:	CTF 12/105
Altezza:	105 mm
Resistenza del connettore - PRd:	31.90 kN
Coeff. riduttivo relativo ad 1 conn. per nerv. k:	0.85
Coeff. riduttivo relativo a 2 o più conn. per nerv. k2:	0.61
Resistenza connettore con 1 conn. per nerv. PRd * k:	27.12 kN
Resistenza connettore con più di 1 conn. per nerv. PRd * k2:	19.57 kN
Connettore duttile	Distribuzione connettori elastica variabile

Posizionamento connettori:		Nervature per trave	Connettori per trave	-
Distribuzione uniforme:		30	10	-
-- alternativa --		Nervature per settore	Connettori per settore	
Distribuzione variabile:	settore a sinistra	8	3	-
	settore centrale	14	4	-
	settore a destra	8	3	-
	Totale		10	

Fase 1+2 - sezione mista - armatura trasversale in acciaio B450C

Soletta	Armatura trasversale soletta:	1.3 cm2/m

-

Note:

Densità cls < 1800 kg/m3, minimo da NTC 2018. Vedasi derogabilità per esistenti in base alla Sentenza del Consiglio di Stato n 2458/2013.
Il connettore è marcato CE anche per questo contesto.
La verifica del solaio nella direzione trasversale alle travi (lamiera grecata + soletta) non è inclusa nella presente verifica.

RELAZIONE DI CALCOLO. DIMENSIONAMENTO TRAVI MISTE ACCIAIO E CALCESTRUZZO CON CONNETTORI TECNARIA.

Normativa di riferimento: NTC2018 D.M. 17-01-2018 / EN 1994-1-1:2004 Versione programma: 5.0.0.2
Riferimento per le caratteristiche meccaniche dei connettori: Valutazioni Tecniche Europee ETA-18/0447 ed ETA-18/0355.

Progetto:
Progettista:
Solaio:

Tipologia

Soletta su lamiera perpendicolare ai profili.
Trave non puntellata
Trave in semplice appoggio con carichi uniformemente distribuiti.
Ambiente: secco

Limite all'inflessione delta 2=L / 250
Limite all'inflessione finale = L / 200

Coefficienti di sicurezza DM17/01/2018

Azioni - Permanenti:	1.30
Azioni - Perm. non strutturali:	1.30
Azioni - Variabili:	1.50
Materiali - Acciaio:	1.05
Materiali - Calcestruzzo:	1.50
Materiali - Connettori:	1.25
Materiali - Acciaio per barre :	1.15
Materiali - Lamiera Grecata:	1.10

Geometria

Luce di calcolo:	290.0 cm
Interasse travi: (b)	110.0 cm
Spessore soletta: (hc)	6.5 cm
-	
Altezza lamiera grecata: (hp)	5.5 cm
Largh. media nervatura: (b0)	7.50 cm
Largh. inferiore nerv.: (binf)	6.15 cm
Interasse nervature: (bd)	15.0 cm

Profilo metallico

Tipo:	HE 200 B
Altezza trave - ha:	200.0 mm
Larghezza ala superiore - bf:	200.0 mm
Spessore ala superiore - tf:	15.0 mm
Larghezza ala inferiore - bfi:	200.0 mm
Spessore ala inferiore - tfi:	15.0 mm
Spessore anima - tw:	9.0 mm
Raggio - r0:	18.0 mm
Raggio - r1:	0.0 mm
Area:	7808 mm2
Iy:	5696.0 cm4
Wy Sup:	569600 mm3
Wy Inf:	569600 mm3
W Ply:	642500 mm3

Cls

Leca CLS 1600

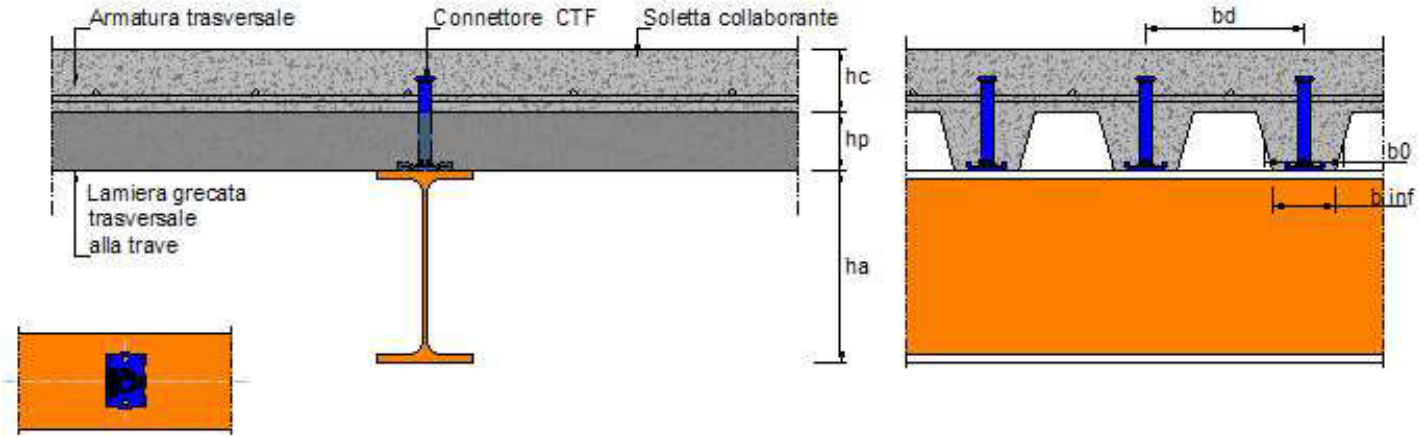
fck:	30 N/mm2
Rck:	33 N/mm2
Peso specifico:	17.5 kN/m3
Ecm:	20000 N/mm2

Acciaio S275

fy:	275 N/mm2
Es	210000 N/mm2

Carichi

Peso proprio:	2.33 kN/m2		
Altri permanenti di 1° fase:	0.00 kN/m2	Tramezzi:	0.00 kN/m2
Sottofondo:	0.00 kN/m2	Altri:	3.55 kN/m2
Pavimento:	0.00 kN/m2	Variabili	2.00 kN/m2



RELAZIONE DI CALCOLO. DIMENSIONAMENTO TRAVI MISTE ACCIAIO E CALCESTRUZZO CON CONNETTORI TECNARIA.

Normativa di riferimento: NTC2018 D.M. 17-01-2018 / EN 1994-1-1:2004 Versione programma: 5.0.0.2

Progetto:
Progettista:
Solaio:

Fase 1 - sola trave in acciaio - SLU - Calcolo elastico

Azioni fase 1:	3.33 kN/m	Classe sezione acciaio:	1
Momento sollecitante - MEd1:	3.5 kNm	Taglio sollecitante - VEd1:	4.8 kN
Momento resistente - MRd:	149.2 kNm	Taglio resistente - VRd1:	272.2 kN
Verifica momento:	0.02	Verifica taglio:	0.02

Fase 1+2 - Sezione mista - STATO LIMITE ULTIMO

Classe sezione mista:	1	Calcolo elastico	
Base efficace (Beff):	72.5 cm	Azioni:	11.71 kN/m
Asse neutro el. da estradosso:	17.8 cm	Altezza totale:	32.0 cm
Momento sollecitante - MEd:	12.3 kNm	Taglio sollecitante - VEd:	17.0 kN
Momento resistente - MRd:	13.5 kNm	Taglio resistente VRd:	272.2 kN
Verifica momento:	0.91	Verifica taglio:	0.06

Fase 1+2 - SLS - STATO LIMITE DI SERVIZIO

Delta 0 Controfreccia iniziale:		0.0 mm	
Delta 1 Trave in acciaio Peso proprio + Altri di prima fase:		0.2 mm	
Delta 1 Trave mista	Ulteriore carico permanente:	0.1 mm	
Delta 2 Trave mista	Carico variabile + Effetto viscosità:	0.1 mm	
Delta 2 Trave mista	Effetto ritiro cls:	1.0 mm	
Delta 2 Totale:		1.1 mm	= L / 2675
Delta Finale Totale:		1.4 mm	= L / 2088

Asse neutro elastico dall'estradosso cls:	17.8 cm		
Coeff. di omogeneizzazione - n	- istantaneo: 10.50	- a tempo infinito: 21.00	
Momento di inerzia sezione omog. - I	- istantaneo: 15873.3 cm4	- a tempo infinito: 11903.0 cm4	
Incremento freccia per interazione incompleta:	1.0		
Frequenza fondamentale naturale:	39.3 Hz	calcolata con combinazione frequente.	psi1= 0.7

Fase 1+2 - sezione mista - Connessione

Connessione elastica

Nc Compressione nella soletta in calcestruzzo nel caso di calcolo (kN):	27
Nc,f Compressione nella soletta in calcestruzzo nel caso di completo ripristino di resistenza (kN):	801
Nc,el Compressione nella soletta in calcestruzzo corrispondente al massimo momento elastico Mel,Rd (kN):	583

Tipo Connettore:	CTF 12/105
Altezza:	105 mm
Resistenza del connettore - PRd:	31.90 kN
Coeff. riduttivo relativo ad 1 conn. per nerv. k:	0.85
Coeff. riduttivo relativo a 2 o più conn. per nerv. k2:	0.61
Resistenza connettore con 1 conn. per nerv. PRd * k:	27.12 kN
Resistenza connettore con più di 1 conn. per nerv. PRd * k2:	19.57 kN
Connettore duttile	Distribuzione connettori elastica variabile

Posizionamento connettori:		Nervature per trave	Connettori per trave	-
Distribuzione uniforme:		20	5	-
-- alternativa --		Nervature per settore	Connettori per settore	
Distribuzione variabile:	settore a sinistra	5	1	-
	settore centrale	10	3	-
	settore a destra	5	1	-
	Totale		5	

Fase 1+2 - sezione mista - armatura trasversale in acciaio B450C

Soletta	Armatura trasversale soletta:	1.3 cm2/m

-

Note:

Densità cls < 1800 kg/m3, minimo da NTC 2018. Vedasi derogabilità per esistenti in base alla Sentenza del Consiglio di Stato n 2458/2013.
Il connettore è marcato CE anche per questo contesto.
La verifica del solaio nella direzione trasversale alle travi (lamiera grecata + soletta) non è inclusa nella presente verifica.

AMV s.r.l.
Via San Lorenzo, 106 Tel. 0481/779903
34077 Ronchi dei Legionari (GO)

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **1** Descrizione: **CAPRIATA 1**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice_____**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 24 NF 46 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-275.432	2	38.40	0.41	0.8911	0.27	0.31	Snell.'yx'= 35
1B	154.892	--	38.40	--	0.8911	0.15	--	
1I	-130.162	2	38.40	0.41	0.8911	0.13	0.15	Snell.'yx'= 35
1J	9.622	--	38.40	--	0.8911	0.01	--	
2	-107.600	2	38.40	0.41	0.8911	0.11	0.12	Snell.'yx'= 35
7	-68.270	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
8	-30.300	2	38.40	0.41	0.8911	0.03	0.03	Snell.'yx'= 35
9	-72.480	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
10	-72.540	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
11	-101.500	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
12	-78.750	2	38.40	0.41	0.8911	0.08	0.09	Snell.'yx'= 35
13	-104.100	2	38.40	0.41	0.8911	0.10	0.12	Snell.'yx'= 35
14	-104.100	2	38.40	0.41	0.8911	0.10	0.12	Snell.'yx'= 35

ASTA NUM. 2 NI 46 NF 47 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-0.898	2	38.40	0.82	0.6474	0.00	0.00	Snell.'yx'= 71
1B	198.438	--	38.40	--	0.6474	0.20	--	
1I	67.965	--	38.40	--	0.6474	0.07	--	
1J	129.575	--	38.40	--	0.6474	0.13	--	
2	176.300	--	38.40	--	0.6474	0.18	--	
7	98.170	--	38.40	--	0.6474	0.10	--	
8	114.300	--	38.40	--	0.6474	0.11	--	
9	106.900	--	38.40	--	0.6474	0.11	--	
10	107.000	--	38.40	--	0.6474	0.11	--	
11	158.100	--	38.40	--	0.6474	0.16	--	
12	167.800	--	38.40	--	0.6474	0.17	--	
13	163.400	--	38.40	--	0.6474	0.16	--	
14	163.500	--	38.40	--	0.6474	0.16	--	

ASTA NUM. 3 NI 47 NF 44 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	139.235	--	38.40	--	0.6474	0.14	--	
1B	141.565	--	38.40	--	0.6474	0.14	--	
1I	137.542	--	38.40	--	0.6474	0.14	--	
1J	143.258	--	38.40	--	0.6474	0.14	--	
2	250.700	--	38.40	--	0.6474	0.25	--	
7	145.200	--	38.40	--	0.6474	0.14	--	
8	142.900	--	38.40	--	0.6474	0.14	--	
9	153.500	--	38.40	--	0.6474	0.15	--	
10	153.600	--	38.40	--	0.6474	0.15	--	
11	228.300	--	38.40	--	0.6474	0.23	--	
12	226.900	--	38.40	--	0.6474	0.23	--	
13	233.300	--	38.40	--	0.6474	0.23	--	
14	233.300	--	38.40	--	0.6474	0.23	--	

ASTA NUM. 4 NI 44 NF 42 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.047	--	38.40	--	0.6474	0.00	--	
1B	197.693	--	38.40	--	0.6474	0.20	--	
1I	65.513	--	38.40	--	0.6474	0.07	--	
1J	132.227	--	38.40	--	0.6474	0.13	--	
2	176.500	--	38.40	--	0.6474	0.18	--	
7	107.600	--	38.40	--	0.6474	0.11	--	

8	87.470	--	38.40	--	0.6474	0.09	--
9	107.000	--	38.40	--	0.6474	0.11	--
10	107.100	--	38.40	--	0.6474	0.11	--
11	163.900	--	38.40	--	0.6474	0.16	--
12	151.800	--	38.40	--	0.6474	0.15	--
13	163.600	--	38.40	--	0.6474	0.16	--
14	163.600	--	38.40	--	0.6474	0.16	--

ASTA NUM. 5 NI 42 NF 23 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-270.429	2	38.40	0.41	0.8911	0.27	0.30	Snell.'yx'= 35
1B	149.369	--	38.40	--	0.8911	0.15	--	
1I	-126.832	2	38.40	0.41	0.8911	0.13	0.14	Snell.'yx'= 35
1J	5.772	--	38.40	--	0.8911	0.01	--	
2	-108.000	2	38.40	0.41	0.8911	0.11	0.12	Snell.'yx'= 35
7	-48.270	2	38.40	0.41	0.8911	0.05	0.05	Snell.'yx'= 35
8	-89.390	2	38.40	0.41	0.8911	0.09	0.10	Snell.'yx'= 35
9	-72.880	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
10	-72.940	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
11	-89.750	2	38.40	0.41	0.8911	0.09	0.10	Snell.'yx'= 35
12	-114.400	2	38.40	0.41	0.8911	0.11	0.13	Snell.'yx'= 35
13	-104.500	2	38.40	0.41	0.8911	0.10	0.12	Snell.'yx'= 35
14	-104.600	2	38.40	0.41	0.8911	0.10	0.12	Snell.'yx'= 35

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 1 a 5 Lung. tot. 860.0 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

ASTA NUM. 6 NI 25 NF 52 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.021	--	38.40	--	0.0000	0.00	--	
1B	0.033	--	38.40	--	0.0000	0.00	--	
1I	0.025	--	38.40	--	0.0000	0.00	--	
1J	0.029	--	38.40	--	0.0000	0.00	--	
2	0.050	--	38.40	--	0.0000	0.00	--	
7	0.026	--	38.40	--	0.0000	0.00	--	
8	0.027	--	38.40	--	0.0000	0.00	--	
9	0.029	--	38.40	--	0.0000	0.00	--	
10	0.029	--	38.40	--	0.0000	0.00	--	
11	0.045	--	38.40	--	0.0000	0.00	--	
12	0.045	--	38.40	--	0.0000	0.00	--	
13	0.047	--	38.40	--	0.0000	0.00	--	
14	0.047	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 7 NI 52 NF 53 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.020	--	38.40	--	0.0000	0.00	--	
1B	0.028	--	38.40	--	0.0000	0.00	--	
1I	0.022	--	38.40	--	0.0000	0.00	--	
1J	0.026	--	38.40	--	0.0000	0.00	--	
2	0.045	--	38.40	--	0.0000	0.00	--	
7	0.023	--	38.40	--	0.0000	0.00	--	
8	0.024	--	38.40	--	0.0000	0.00	--	
9	0.026	--	38.40	--	0.0000	0.00	--	
10	0.026	--	38.40	--	0.0000	0.00	--	
11	0.040	--	38.40	--	0.0000	0.00	--	
12	0.040	--	38.40	--	0.0000	0.00	--	
13	0.041	--	38.40	--	0.0000	0.00	--	
14	0.041	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 8 NI 53 NF 54 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.0000	0.00	--	
1B	0.017	--	38.40	--	0.0000	0.00	--	
1I	0.008	--	38.40	--	0.0000	0.00	--	
1J	0.013	--	38.40	--	0.0000	0.00	--	
2	0.021	--	38.40	--	0.0000	0.00	--	
7	0.010	--	38.40	--	0.0000	0.00	--	
8	0.009	--	38.40	--	0.0000	0.00	--	
9	0.011	--	38.40	--	0.0000	0.00	--	
10	0.011	--	38.40	--	0.0000	0.00	--	
11	0.018	--	38.40	--	0.0000	0.00	--	
12	0.018	--	38.40	--	0.0000	0.00	--	
13	0.019	--	38.40	--	0.0000	0.00	--	
14	0.019	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 9 NI 54 NF 40 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.000	--	38.40	--	0.0000	0.00	--	
1B	0.013	--	38.40	--	0.0000	0.00	--	
1I	0.004	--	38.40	--	0.0000	0.00	--	
1J	0.009	--	38.40	--	0.0000	0.00	--	
2	0.013	--	38.40	--	0.0000	0.00	--	
7	0.006	--	38.40	--	0.0000	0.00	--	
8	0.005	--	38.40	--	0.0000	0.00	--	
9	0.006	--	38.40	--	0.0000	0.00	--	
10	0.006	--	38.40	--	0.0000	0.00	--	
11	0.012	--	38.40	--	0.0000	0.00	--	
12	0.011	--	38.40	--	0.0000	0.00	--	
13	0.012	--	38.40	--	0.0000	0.00	--	
14	0.012	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 10 NI 40 NF 48 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-173.429	2	38.40	0.41	0.8910	0.17	0.19	Snell.'yx'= 35
1B	-92.971	2	38.40	0.41	0.8910	0.09	0.10	Snell.'yx'= 35
1I	-148.451	2	38.40	0.41	0.8910	0.15	0.17	Snell.'yx'= 35
1J	-117.949	2	38.40	0.41	0.8910	0.12	0.13	Snell.'yx'= 35
2	-237.700	2	38.40	0.41	0.8910	0.24	0.27	Snell.'yx'= 35
7	-132.900	2	38.40	0.41	0.8910	0.13	0.15	Snell.'yx'= 35
8	-127.800	2	38.40	0.41	0.8910	0.13	0.14	Snell.'yx'= 35
9	-157.000	2	38.40	0.41	0.8910	0.16	0.18	Snell.'yx'= 35
10	-156.800	2	38.40	0.41	0.8910	0.16	0.17	Snell.'yx'= 35
11	-213.500	2	38.40	0.41	0.8910	0.21	0.24	Snell.'yx'= 35
12	-210.400	2	38.40	0.41	0.8910	0.21	0.23	Snell.'yx'= 35
13	-227.900	2	38.40	0.41	0.8910	0.23	0.25	Snell.'yx'= 35
14	-227.800	2	38.40	0.41	0.8910	0.23	0.25	Snell.'yx'= 35

ASTA NUM. 11 NI 48 NF 50 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 12 NI 50 NF 45 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 13 NI 45 NF 26 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 6 a 13 Lung. tot. 860.2 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

ASTA NUM. 14 NI 25 NF 46 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	43.476	--	30.20	--	0.0000	0.05	--	
1B	160.524	--	30.20	--	0.0000	0.20	--	
1I	81.853	--	30.20	--	0.0000	0.10	--	
1J	122.147	--	30.20	--	0.0000	0.15	--	
2	181.800	--	30.20	--	0.0000	0.23	--	
7	106.100	--	30.20	--	0.0000	0.13	--	
8	94.990	--	30.20	--	0.0000	0.12	--	
9	115.100	--	30.20	--	0.0000	0.15	--	
10	115.200	--	30.20	--	0.0000	0.15	--	
11	165.900	--	30.20	--	0.0000	0.21	--	
12	159.200	--	30.20	--	0.0000	0.20	--	
13	171.300	--	30.20	--	0.0000	0.22	--	
14	171.400	--	30.20	--	0.0000	0.22	--	

ASTA NUM. 15 NI 46 NF 53 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-138.971	1	30.20	0.58	0.7952	0.18	0.22	Snell.'yx'= 50
1B	-4.909	1	30.20	0.58	0.7952	0.01	0.01	Snell.'yx'= 50
1I	-94.599	1	30.20	0.58	0.7952	0.12	0.15	Snell.'yx'= 50
1J	-49.281	1	30.20	0.58	0.7952	0.06	0.08	Snell.'yx'= 50
2	-128.600	1	30.20	0.58	0.7952	0.16	0.20	Snell.'yx'= 50
7	-75.880	1	30.20	0.58	0.7952	0.10	0.12	Snell.'yx'= 50
8	-63.260	1	30.20	0.58	0.7952	0.08	0.10	Snell.'yx'= 50
9	-81.120	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
10	-81.160	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
11	-118.000	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
12	-110.500	1	30.20	0.58	0.7952	0.14	0.18	Snell.'yx'= 50
13	-121.200	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
14	-121.200	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50

ASTA NUM. 16 NI 53 NF 47 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-14.433	1	30.20	0.58	0.7952	0.02	0.02	Snell.'yx'= 50
1B	97.813	--	30.20	--	0.7952	0.12	--	
1I	22.874	--	30.20	--	0.7952	0.03	--	
1J	60.506	--	30.20	--	0.7952	0.08	--	
2	74.250	--	30.20	--	0.7952	0.09	--	
7	45.130	--	30.20	--	0.7952	0.06	--	
8	34.620	--	30.20	--	0.7952	0.04	--	
9	46.780	--	30.20	--	0.7952	0.06	--	
10	46.810	--	30.20	--	0.7952	0.06	--	
11	68.810	--	30.20	--	0.7952	0.09	--	
12	62.500	--	30.20	--	0.7952	0.08	--	
13	69.800	--	30.20	--	0.7952	0.09	--	
14	69.810	--	30.20	--	0.7952	0.09	--	

ASTA NUM. 17 NI 47 NF 40 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-60.305	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	50.869	--	30.20	--	0.7885	0.06	--	
1I	-22.780	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	13.344	--	30.20	--	0.7885	0.02	--	
2	-8.582	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
7	-7.360	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	2.834	--	30.20	--	0.7885	0.00	--	
9	-5.110	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-5.123	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
11	-9.317	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
12	-3.201	1	30.20	0.59	0.7885	0.00	0.01	Snell.'yx'= 51
13	-7.967	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
14	-7.975	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51

ASTA NUM. 18 NI 40 NF 44 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-60.904	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	47.536	--	30.20	--	0.7885	0.06	--	
1I	-23.950	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	10.582	--	30.20	--	0.7885	0.01	--	
2	-12.140	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51

7	-4.109	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-13.990	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
9	-7.438	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-7.447	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
11	-9.392	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
12	-15.320	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
13	-11.390	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
14	-11.390	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51

ASTA NUM. 19 NI 44 NF 50 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-14.751	1	30.20	0.58	0.7952	0.02	0.02	Snell.'yx'= 50
1B	95.331	--	30.20	--	0.7952	0.12	--	
1I	23.260	--	30.20	--	0.7952	0.03	--	
1J	57.320	--	30.20	--	0.7952	0.07	--	
2	71.790	--	30.20	--	0.7952	0.09	--	
7	38.440	--	30.20	--	0.7952	0.05	--	
8	48.490	--	30.20	--	0.7952	0.06	--	
9	45.140	--	30.20	--	0.7952	0.06	--	
10	45.170	--	30.20	--	0.7952	0.06	--	
11	63.430	--	30.20	--	0.7952	0.08	--	
12	69.460	--	30.20	--	0.7952	0.09	--	
13	67.450	--	30.20	--	0.7952	0.09	--	
14	67.470	--	30.20	--	0.7952	0.09	--	

ASTA NUM. 20 NI 50 NF 42 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-136.749	1	30.20	0.58	0.7952	0.17	0.22	Snell.'yx'= 50
1B	-7.091	1	30.20	0.58	0.7952	0.01	0.01	Snell.'yx'= 50
1I	-91.851	1	30.20	0.58	0.7952	0.12	0.15	Snell.'yx'= 50
1J	-51.989	1	30.20	0.58	0.7952	0.07	0.08	Snell.'yx'= 50
2	-128.600	1	30.20	0.58	0.7952	0.16	0.20	Snell.'yx'= 50
7	-69.450	1	30.20	0.58	0.7952	0.09	0.11	Snell.'yx'= 50
8	-81.720	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
9	-81.100	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
10	-81.140	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
11	-114.200	1	30.20	0.58	0.7952	0.14	0.18	Snell.'yx'= 50
12	-121.600	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
13	-121.200	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
14	-121.200	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50

ASTA NUM. 21 NI 42 NF 26 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	45.696	--	30.20	--	0.7952	0.06	--	
1B	158.504	--	30.20	--	0.7952	0.20	--	
1I	84.410	--	30.20	--	0.7952	0.11	--	
1J	119.790	--	30.20	--	0.7952	0.15	--	
2	182.100	--	30.20	--	0.7952	0.23	--	
7	100.600	--	30.20	--	0.7952	0.13	--	
8	111.300	--	30.20	--	0.7952	0.14	--	
9	115.200	--	30.20	--	0.7952	0.15	--	
10	115.400	--	30.20	--	0.7952	0.15	--	
11	162.800	--	30.20	--	0.7952	0.21	--	
12	169.200	--	30.20	--	0.7952	0.21	--	
13	171.600	--	30.20	--	0.7952	0.22	--	
14	171.600	--	30.20	--	0.7952	0.22	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 14 a 21 Lung. tot. 966.4 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

ASTA NUM. 22 NI 46 NF 52 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-14.962	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1B	-3.766	2	16.82	0.27	0.9650	0.01	0.01	Snell.'zx'= 23
1I	-11.124	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
1J	-7.604	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
2	-16.920	2	16.82	0.27	0.9650	0.03	0.04	Snell.'zx'= 23
7	-9.076	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
8	-10.090	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
9	-10.470	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
10	-10.520	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
11	-15.060	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
12	-15.670	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
13	-15.900	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
14	-15.920	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23

ASTA NUM. 23 NI 47 NF 54 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-16.485	2	16.82	0.29	0.9520	0.03	0.04	Snell.'zx'= 25
1B	-13.755	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1I	-15.759	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1J	-14.482	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
2	-27.270	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
7	-15.120	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
8	-15.250	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
9	-16.900	2	16.82	0.29	0.9520	0.03	0.04	Snell.'zx'= 25
10	-16.910	2	16.82	0.29	0.9520	0.03	0.04	Snell.'zx'= 25
11	-24.550	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
12	-24.630	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
13	-25.620	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
14	-25.630	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25

ASTA NUM. 24 NI 44 NF 48 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-15.350	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1B	-13.010	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1I	-14.828	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1J	-13.532	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
2	-25.600	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
7	-14.270	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
8	-14.090	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
9	-15.800	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
10	-15.810	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
11	-23.100	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
12	-22.990	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
13	-24.020	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
14	-24.020	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25

ASTA NUM. 25 NI 42 NF 45 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-14.906	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1B	-3.754	2	16.82	0.27	0.9650	0.01	0.01	Snell.'zx'= 23
1I	-11.227	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
1J	-7.433	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
2	-16.860	2	16.82	0.27	0.9650	0.03	0.04	Snell.'zx'= 23
7	-9.566	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
8	-8.527	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
9	-10.430	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
10	-10.470	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
11	-15.320	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
12	-14.700	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
13	-15.840	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
14	-15.860	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **2** Descrizione: **CAPRIATA 2**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 21 NI 33 NF 27 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-324.492	2	38.40	0.41	0.8911	0.32	0.36	Snell.'yx'= 35
1B	104.292	--	38.40	--	0.8911	0.10	--	
1I	-178.337	2	38.40	0.41	0.8911	0.18	0.20	Snell.'yx'= 35
1J	-41.863	2	38.40	0.41	0.8911	0.04	0.05	Snell.'yx'= 35
2	-198.400	2	38.40	0.41	0.8911	0.20	0.22	Snell.'yx'= 35
7	-114.700	2	38.40	0.41	0.8911	0.11	0.13	Snell.'yx'= 35
8	-81.240	2	38.40	0.41	0.8911	0.08	0.09	Snell.'yx'= 35
9	-131.600	2	38.40	0.41	0.8911	0.13	0.15	Snell.'yx'= 35
10	-131.400	2	38.40	0.41	0.8911	0.13	0.15	Snell.'yx'= 35
11	-181.300	2	38.40	0.41	0.8911	0.18	0.20	Snell.'yx'= 35
12	-161.200	2	38.40	0.41	0.8911	0.16	0.18	Snell.'yx'= 35
13	-191.400	2	38.40	0.41	0.8911	0.19	0.21	Snell.'yx'= 35
14	-191.300	2	38.40	0.41	0.8911	0.19	0.21	Snell.'yx'= 35

ASTA NUM. 22 NI 27 NF 14 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	83.395	--	38.40	--	0.8911	0.08	--	
1B	285.805	--	38.40	--	0.8911	0.28	--	
1I	152.404	--	38.40	--	0.8911	0.15	--	
1J	216.796	--	38.40	--	0.8911	0.22	--	
2	332.600	--	38.40	--	0.8911	0.33	--	
7	184.800	--	38.40	--	0.8911	0.18	--	
8	198.600	--	38.40	--	0.8911	0.20	--	
9	201.100	--	38.40	--	0.8911	0.20	--	
10	200.700	--	38.40	--	0.8911	0.20	--	
11	299.400	--	38.40	--	0.8911	0.30	--	
12	307.700	--	38.40	--	0.8911	0.31	--	
13	309.200	--	38.40	--	0.8911	0.31	--	
14	309.000	--	38.40	--	0.8911	0.31	--	

ASTA NUM. 23 NI 14 NF 13 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	253.697	--	38.40	--	0.8911	0.25	--	
1B	257.703	--	38.40	--	0.8911	0.26	--	
1I	250.626	--	38.40	--	0.8911	0.25	--	
1J	260.774	--	38.40	--	0.8911	0.26	--	
2	460.600	--	38.40	--	0.8911	0.46	--	
7	260.300	--	38.40	--	0.8911	0.26	--	
8	257.300	--	38.40	--	0.8911	0.26	--	
9	281.100	--	38.40	--	0.8911	0.28	--	
10	280.500	--	38.40	--	0.8911	0.28	--	
11	417.300	--	38.40	--	0.8911	0.41	--	
12	415.500	--	38.40	--	0.8911	0.41	--	
13	429.800	--	38.40	--	0.8911	0.43	--	
14	429.400	--	38.40	--	0.8911	0.43	--	

ASTA NUM. 24 NI 13 NF 15 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	81.433	--	38.40	--	0.8911	0.08	--	
1B	282.967	--	38.40	--	0.8911	0.28	--	
1I	147.885	--	38.40	--	0.8911	0.15	--	
1J	216.515	--	38.40	--	0.8911	0.22	--	
2	328.100	--	38.40	--	0.8911	0.33	--	
7	190.800	--	38.40	--	0.8911	0.19	--	
8	171.300	--	38.40	--	0.8911	0.17	--	
9	198.400	--	38.40	--	0.8911	0.20	--	

10	198.000	--	38.40	--	0.8911	0.20	--
11	300.600	--	38.40	--	0.8911	0.30	--
12	288.800	--	38.40	--	0.8911	0.29	--
13	305.100	--	38.40	--	0.8911	0.30	--
14	304.800	--	38.40	--	0.8911	0.30	--

ASTA NUM. 25 NI 15 NF 36 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-322.656	2	38.40	0.41	0.8911	0.32	0.36	Snell.'yx'= 35
1B	94.456	--	38.40	--	0.8911	0.09	--	
1I	-177.444	2	38.40	0.41	0.8911	0.18	0.20	Snell.'yx'= 35
1J	-50.756	2	38.40	0.41	0.8911	0.05	0.06	Snell.'yx'= 35
2	-205.600	2	38.40	0.41	0.8911	0.20	0.23	Snell.'yx'= 35
7	-100.000	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
8	-139.500	2	38.40	0.41	0.8911	0.14	0.16	Snell.'yx'= 35
9	-136.100	2	38.40	0.41	0.8911	0.14	0.15	Snell.'yx'= 35
10	-135.900	2	38.40	0.41	0.8911	0.14	0.15	Snell.'yx'= 35
11	-176.600	2	38.40	0.41	0.8911	0.18	0.20	Snell.'yx'= 35
12	-200.300	2	38.40	0.41	0.8911	0.20	0.22	Snell.'yx'= 35
13	-198.200	2	38.40	0.41	0.8911	0.20	0.22	Snell.'yx'= 35
14	-198.100	2	38.40	0.41	0.8911	0.20	0.22	Snell.'yx'= 35

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **2** Descrizione: **CAPRIATA 2**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 15 NF 16 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-27.660	2	16.82	0.27	0.9650	0.06	0.06	Snell.'zx'= 23
1B	-13.840	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1I	-23.074	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
1J	-18.426	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
2	-37.640	2	16.82	0.27	0.9650	0.08	0.08	Snell.'zx'= 23
7	-20.900	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
8	-19.730	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
9	-23.230	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
10	-23.200	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
11	-33.980	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
12	-33.290	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
13	-35.380	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
14	-35.370	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23

ASTA NUM. 2 NI 13 NF 18 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-28.560	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
1B	-24.320	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
1I	-27.654	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
1J	-25.226	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
2	-47.900	2	16.82	0.29	0.9520	0.10	0.10	Snell.'zx'= 25
7	-26.440	2	16.82	0.29	0.9520	0.05	0.06	Snell.'zx'= 25
8	-26.200	2	16.82	0.29	0.9520	0.05	0.06	Snell.'zx'= 25
9	-29.510	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
10	-29.460	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
11	-43.140	2	16.82	0.29	0.9520	0.09	0.09	Snell.'zx'= 25
12	-43.000	2	16.82	0.29	0.9520	0.09	0.09	Snell.'zx'= 25
13	-44.990	2	16.82	0.29	0.9520	0.09	0.10	Snell.'zx'= 25
14	-44.960	2	16.82	0.29	0.9520	0.09	0.10	Snell.'zx'= 25

ASTA NUM. 3 NI 14 NF 19 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-31.745	2	16.82	0.29	0.9520	0.06	0.07	Snell.'zx'= 25
1B	-27.135	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
1I	-30.611	2	16.82	0.29	0.9520	0.06	0.07	Snell.'zx'= 25
1J	-28.269	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
2	-53.310	2	16.82	0.29	0.9520	0.11	0.11	Snell.'zx'= 25
7	-29.300	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
8	-29.490	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
9	-32.940	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25
10	-32.890	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25
11	-47.930	2	16.82	0.29	0.9520	0.10	0.10	Snell.'zx'= 25
12	-48.040	2	16.82	0.29	0.9520	0.10	0.10	Snell.'zx'= 25
13	-50.110	2	16.82	0.29	0.9520	0.10	0.11	Snell.'zx'= 25
14	-50.080	2	16.82	0.29	0.9520	0.10	0.11	Snell.'zx'= 25

ASTA NUM. 4 NI 27 NF 21 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-28.039	2	16.82	0.27	0.9650	0.06	0.06	Snell.'zx'= 23
1B	-14.241	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1I	-23.271	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
1J	-19.009	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23

2	-38.330	2	16.82	0.27	0.9650	0.08	0.08	Snell.'zx'= 23
7	-20.710	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
8	-21.820	2	16.82	0.27	0.9650	0.04	0.05	Snell.'zx'= 23
9	-23.660	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
10	-23.640	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
11	-34.270	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
12	-34.930	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
13	-36.040	2	16.82	0.27	0.9650	0.07	0.08	Snell.'zx'= 23
14	-36.020	2	16.82	0.27	0.9650	0.07	0.08	Snell.'zx'= 23

ASTA NUM. 5 NI 30 NF 21 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.047	--	38.40	--	0.0000	0.00	--	
1B	0.060	--	38.40	--	0.0000	0.00	--	
1I	0.051	--	38.40	--	0.0000	0.00	--	
1J	0.056	--	38.40	--	0.0000	0.00	--	
2	0.098	--	38.40	--	0.0000	0.00	--	
7	0.053	--	38.40	--	0.0000	0.00	--	
8	0.053	--	38.40	--	0.0000	0.00	--	
9	0.059	--	38.40	--	0.0000	0.00	--	
10	0.059	--	38.40	--	0.0000	0.00	--	
11	0.088	--	38.40	--	0.0000	0.00	--	
12	0.089	--	38.40	--	0.0000	0.00	--	
13	0.092	--	38.40	--	0.0000	0.00	--	
14	0.092	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 6 NI 21 NF 20 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.043	--	38.40	--	0.0000	0.00	--	
1B	0.051	--	38.40	--	0.0000	0.00	--	
1I	0.045	--	38.40	--	0.0000	0.00	--	
1J	0.049	--	38.40	--	0.0000	0.00	--	
2	0.087	--	38.40	--	0.0000	0.00	--	
7	0.046	--	38.40	--	0.0000	0.00	--	
8	0.047	--	38.40	--	0.0000	0.00	--	
9	0.051	--	38.40	--	0.0000	0.00	--	
10	0.051	--	38.40	--	0.0000	0.00	--	
11	0.078	--	38.40	--	0.0000	0.00	--	
12	0.078	--	38.40	--	0.0000	0.00	--	
13	0.081	--	38.40	--	0.0000	0.00	--	
14	0.081	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 7 NI 20 NF 19 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.016	--	38.40	--	0.0000	0.00	--	
1B	0.029	--	38.40	--	0.0000	0.00	--	
1I	0.020	--	38.40	--	0.0000	0.00	--	
1J	0.025	--	38.40	--	0.0000	0.00	--	
2	0.042	--	38.40	--	0.0000	0.00	--	
7	0.022	--	38.40	--	0.0000	0.00	--	
8	0.020	--	38.40	--	0.0000	0.00	--	
9	0.024	--	38.40	--	0.0000	0.00	--	
10	0.024	--	38.40	--	0.0000	0.00	--	
11	0.038	--	38.40	--	0.0000	0.00	--	
12	0.037	--	38.40	--	0.0000	0.00	--	
13	0.039	--	38.40	--	0.0000	0.00	--	
14	0.039	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 8 NI 19 NF 22 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.008	--	38.40	--	0.0000	0.00	--	
1B	0.021	--	38.40	--	0.0000	0.00	--	
1I	0.012	--	38.40	--	0.0000	0.00	--	
1J	0.017	--	38.40	--	0.0000	0.00	--	
2	0.028	--	38.40	--	0.0000	0.00	--	
7	0.014	--	38.40	--	0.0000	0.00	--	
8	0.012	--	38.40	--	0.0000	0.00	--	
9	0.015	--	38.40	--	0.0000	0.00	--	
10	0.015	--	38.40	--	0.0000	0.00	--	
11	0.025	--	38.40	--	0.0000	0.00	--	
12	0.024	--	38.40	--	0.0000	0.00	--	
13	0.026	--	38.40	--	0.0000	0.00	--	
14	0.026	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 9 NI 22 NF 18 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-285.448	2	38.40	0.41	0.8910	0.28	0.32	Snell.'yx'= 35

1B	-203.753	2	38.40	0.41	0.8910	0.20	0.23	Snell.'yx'= 35
1I	-261.427	2	38.40	0.41	0.8910	0.26	0.29	Snell.'yx'= 35
1J	-227.773	2	38.40	0.41	0.8910	0.23	0.25	Snell.'yx'= 35
2	-440.500	2	38.40	0.41	0.8910	0.44	0.49	Snell.'yx'= 35
7	-243.800	2	38.40	0.41	0.8910	0.24	0.27	Snell.'yx'= 35
8	-238.100	2	38.40	0.41	0.8910	0.24	0.27	Snell.'yx'= 35
9	-280.200	2	38.40	0.41	0.8910	0.28	0.31	Snell.'yx'= 35
10	-280.500	2	38.40	0.41	0.8910	0.28	0.31	Snell.'yx'= 35
11	-395.900	2	38.40	0.41	0.8910	0.39	0.44	Snell.'yx'= 35
12	-392.500	2	38.40	0.41	0.8910	0.39	0.44	Snell.'yx'= 35
13	-417.700	2	38.40	0.41	0.8910	0.42	0.47	Snell.'yx'= 35
14	-417.900	2	38.40	0.41	0.8910	0.42	0.47	Snell.'yx'= 35

ASTA NUM. 10 NI 18 NF 17 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 11 NI 17 NF 16 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 12 NI 16 NF 31 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 5 a 12 Lung. tot. 860.2 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

ASTA NUM. 13 NI 30 NF 27 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	135.989	--	30.20	--	0.0000	0.17	--	
1B	248.811	--	30.20	--	0.0000	0.31	--	
1I	172.228	--	30.20	--	0.0000	0.22	--	
1J	212.572	--	30.20	--	0.0000	0.27	--	
2	346.400	--	30.20	--	0.0000	0.44	--	
7	194.900	--	30.20	--	0.0000	0.25	--	
8	185.100	--	30.20	--	0.0000	0.23	--	
9	217.100	--	30.20	--	0.0000	0.27	--	
10	216.700	--	30.20	--	0.0000	0.27	--	
11	313.300	--	30.20	--	0.0000	0.40	--	
12	307.400	--	30.20	--	0.0000	0.39	--	
13	326.600	--	30.20	--	0.0000	0.41	--	

14	326.400	--	30.20	--	0.0000	0.41	--

ASTA NUM. 14 NI 27 NF 20 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-197.613	1	30.20	0.58	0.7952	0.25	0.31	Snell.'yx'= 50
1B	-61.987	1	30.20	0.58	0.7952	0.08	0.10	Snell.'yx'= 50
1I	-153.035	1	30.20	0.58	0.7952	0.19	0.24	Snell.'yx'= 50
1J	-106.565	1	30.20	0.58	0.7952	0.13	0.17	Snell.'yx'= 50
2	-234.000	1	30.20	0.58	0.7952	0.30	0.37	Snell.'yx'= 50
7	-132.500	1	30.20	0.58	0.7952	0.17	0.21	Snell.'yx'= 50
8	-120.900	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
9	-146.600	1	30.20	0.58	0.7952	0.19	0.23	Snell.'yx'= 50
10	-146.400	1	30.20	0.58	0.7952	0.19	0.23	Snell.'yx'= 50
11	-212.300	1	30.20	0.58	0.7952	0.27	0.34	Snell.'yx'= 50
12	-205.300	1	30.20	0.58	0.7952	0.26	0.33	Snell.'yx'= 50
13	-220.700	1	30.20	0.58	0.7952	0.28	0.35	Snell.'yx'= 50
14	-220.600	1	30.20	0.58	0.7952	0.28	0.35	Snell.'yx'= 50

ASTA NUM. 15 NI 20 NF 14 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	18.219	--	30.20	--	0.7952	0.02	--	
1B	130.401	--	30.20	--	0.7952	0.16	--	
1I	55.386	--	30.20	--	0.7952	0.07	--	
1J	93.234	--	30.20	--	0.7952	0.12	--	
2	133.600	--	30.20	--	0.7952	0.17	--	
7	77.050	--	30.20	--	0.7952	0.10	--	
8	67.550	--	30.20	--	0.7952	0.09	--	
9	83.540	--	30.20	--	0.7952	0.11	--	
10	83.400	--	30.20	--	0.7952	0.11	--	
11	121.900	--	30.20	--	0.7952	0.15	--	
12	116.200	--	30.20	--	0.7952	0.15	--	
13	125.800	--	30.20	--	0.7952	0.16	--	
14	125.700	--	30.20	--	0.7952	0.16	--	

ASTA NUM. 16 NI 14 NF 22 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-61.832	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	52.404	--	30.20	--	0.7885	0.07	--	
1I	-22.784	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	13.356	--	30.20	--	0.7885	0.02	--	
2	-8.615	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
7	-6.972	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	2.368	--	30.20	--	0.7885	0.00	--	
9	-5.351	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-5.325	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
11	-9.122	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
12	-3.517	1	30.20	0.59	0.7885	0.00	0.01	Snell.'yx'= 51
13	-8.149	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
14	-8.133	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51

ASTA NUM. 17 NI 22 NF 13 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-67.055	1	30.20	0.59	0.7885	0.08	0.11	Snell.'yx'= 51
1B	44.615	--	30.20	--	0.7885	0.06	--	
1I	-28.440	1	30.20	0.59	0.7885	0.04	0.05	Snell.'yx'= 51
1J	6.000	--	30.20	--	0.7885	0.01	--	
2	-20.420	1	30.20	0.59	0.7885	0.03	0.03	Snell.'yx'= 51
7	-8.648	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-17.930	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
9	-12.750	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
10	-12.730	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
11	-16.860	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
12	-22.420	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
13	-19.320	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
14	-19.310	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51

ASTA NUM. 18 NI 13 NF 17 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	16.807	--	30.20	--	0.7885	0.02	--	
1B	127.233	--	30.20	--	0.7885	0.16	--	
1I	54.537	--	30.20	--	0.7885	0.07	--	
1J	89.503	--	30.20	--	0.7885	0.11	--	
2	129.600	--	30.20	--	0.7885	0.16	--	
7	69.970	--	30.20	--	0.7885	0.09	--	
8	79.260	--	30.20	--	0.7885	0.10	--	
9	80.880	--	30.20	--	0.7885	0.10	--	
10	80.740	--	30.20	--	0.7885	0.10	--	

11	115.400	--	30.20	--	0.7885	0.15	--
12	120.900	--	30.20	--	0.7885	0.15	--
13	121.900	--	30.20	--	0.7885	0.15	--
14	121.800	--	30.20	--	0.7885	0.15	--

ASTA NUM. 19 NI 17 NF 15 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-196.211	1	30.20	0.58	0.7952	0.25	0.31	Snell.'yx'= 50
1B	-65.189	1	30.20	0.58	0.7952	0.08	0.10	Snell.'yx'= 50
1I	-152.176	1	30.20	0.58	0.7952	0.19	0.24	Snell.'yx'= 50
1J	-109.224	1	30.20	0.58	0.7952	0.14	0.17	Snell.'yx'= 50
2	-235.700	1	30.20	0.58	0.7952	0.30	0.37	Snell.'yx'= 50
7	-127.400	1	30.20	0.58	0.7952	0.16	0.20	Snell.'yx'= 50
8	-139.200	1	30.20	0.58	0.7952	0.18	0.22	Snell.'yx'= 50
9	-147.600	1	30.20	0.58	0.7952	0.19	0.23	Snell.'yx'= 50
10	-147.400	1	30.20	0.58	0.7952	0.19	0.23	Snell.'yx'= 50
11	-210.200	1	30.20	0.58	0.7952	0.27	0.33	Snell.'yx'= 50
12	-217.300	1	30.20	0.58	0.7952	0.27	0.35	Snell.'yx'= 50
13	-222.300	1	30.20	0.58	0.7952	0.28	0.35	Snell.'yx'= 50
14	-222.200	1	30.20	0.58	0.7952	0.28	0.35	Snell.'yx'= 50

ASTA NUM. 20 NI 15 NF 31 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	138.728	--	30.20	--	0.7952	0.18	--	
1B	247.072	--	30.20	--	0.7952	0.31	--	
1I	174.063	--	30.20	--	0.7952	0.22	--	
1J	211.737	--	30.20	--	0.7952	0.27	--	
2	347.300	--	30.20	--	0.7952	0.44	--	
7	190.300	--	30.20	--	0.7952	0.24	--	
8	200.100	--	30.20	--	0.7952	0.25	--	
9	217.600	--	30.20	--	0.7952	0.28	--	
10	217.200	--	30.20	--	0.7952	0.27	--	
11	311.000	--	30.20	--	0.7952	0.39	--	
12	316.900	--	30.20	--	0.7952	0.40	--	
13	327.400	--	30.20	--	0.7952	0.41	--	
14	327.200	--	30.20	--	0.7952	0.41	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 13 a 20 Lung. tot. 966.4 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **3** Descrizione: **CAPRIATA 3**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 21 NI 32 NF 57 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-292.986	2	38.40	0.41	0.8911	0.29	0.33	Snell.'yx'= 35
1B	123.166	--	38.40	--	0.8911	0.12	--	
1I	-147.563	2	38.40	0.41	0.8911	0.15	0.16	Snell.'yx'= 35
1J	-22.257	2	38.40	0.41	0.8911	0.02	0.02	Snell.'yx'= 35
2	-152.400	2	38.40	0.41	0.8911	0.15	0.17	Snell.'yx'= 35
7	-72.180	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
8	-112.100	2	38.40	0.41	0.8911	0.11	0.13	Snell.'yx'= 35
9	-101.400	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
10	-101.700	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
11	-129.500	2	38.40	0.41	0.8911	0.13	0.14	Snell.'yx'= 35
12	-153.500	2	38.40	0.41	0.8911	0.15	0.17	Snell.'yx'= 35
13	-147.000	2	38.40	0.41	0.8911	0.15	0.16	Snell.'yx'= 35
14	-147.200	2	38.40	0.41	0.8911	0.15	0.16	Snell.'yx'= 35

ASTA NUM. 22 NI 28 NF 32 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	38.503	--	38.40	--	0.8911	0.04	--	
1B	234.897	--	38.40	--	0.8911	0.23	--	
1I	106.007	--	38.40	--	0.8911	0.11	--	
1J	167.393	--	38.40	--	0.8911	0.17	--	
2	245.300	--	38.40	--	0.8911	0.24	--	
7	145.600	--	38.40	--	0.8911	0.14	--	
8	125.600	--	38.40	--	0.8911	0.12	--	
9	147.700	--	38.40	--	0.8911	0.15	--	
10	148.400	--	38.40	--	0.8911	0.15	--	
11	226.100	--	38.40	--	0.8911	0.22	--	
12	214.100	--	38.40	--	0.8911	0.21	--	
13	227.300	--	38.40	--	0.8911	0.23	--	
14	227.800	--	38.40	--	0.8911	0.23	--	

ASTA NUM. 23 NI 29 NF 28 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	193.396	--	38.40	--	0.8911	0.19	--	
1B	195.004	--	38.40	--	0.8911	0.19	--	
1I	192.594	--	38.40	--	0.8911	0.19	--	
1J	195.806	--	38.40	--	0.8911	0.19	--	
2	348.600	--	38.40	--	0.8911	0.35	--	
7	199.300	--	38.40	--	0.8911	0.20	--	
8	196.400	--	38.40	--	0.8911	0.20	--	
9	212.000	--	38.40	--	0.8911	0.21	--	
10	212.900	--	38.40	--	0.8911	0.21	--	
11	316.700	--	38.40	--	0.8911	0.31	--	
12	314.900	--	38.40	--	0.8911	0.31	--	
13	324.300	--	38.40	--	0.8911	0.32	--	
14	324.800	--	38.40	--	0.8911	0.32	--	

ASTA NUM. 24 NI 37 NF 29 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	37.292	--	38.40	--	0.8911	0.04	--	
1B	236.708	--	38.40	--	0.8911	0.24	--	
1I	106.518	--	38.40	--	0.8911	0.11	--	
1J	167.482	--	38.40	--	0.8911	0.17	--	
2	245.800	--	38.40	--	0.8911	0.24	--	
7	137.100	--	38.40	--	0.8911	0.14	--	
8	151.900	--	38.40	--	0.8911	0.15	--	
9	148.000	--	38.40	--	0.8911	0.15	--	

10	148.700	--	38.40	--	0.8911	0.15	--
11	221.300	--	38.40	--	0.8911	0.22	--
12	230.100	--	38.40	--	0.8911	0.23	--
13	227.800	--	38.40	--	0.8911	0.23	--
14	228.200	--	38.40	--	0.8911	0.23	--

ASTA NUM. 25 NI 56 NF 37 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-295.715	2	38.40	0.41	0.8911	0.29	0.33	Snell.'yx'= 35
1B	129.995	--	38.40	--	0.8911	0.13	--	
1I	-147.793	2	38.40	0.41	0.8911	0.15	0.16	Snell.'yx'= 35
1J	-17.927	2	38.40	0.41	0.8911	0.02	0.02	Snell.'yx'= 35
2	-148.700	2	38.40	0.41	0.8911	0.15	0.17	Snell.'yx'= 35
7	-89.110	2	38.40	0.41	0.8911	0.09	0.10	Snell.'yx'= 35
8	-53.480	2	38.40	0.41	0.8911	0.05	0.06	Snell.'yx'= 35
9	-99.000	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
10	-99.350	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
11	-137.600	2	38.40	0.41	0.8911	0.14	0.15	Snell.'yx'= 35
12	-116.200	2	38.40	0.41	0.8911	0.12	0.13	Snell.'yx'= 35
13	-143.500	2	38.40	0.41	0.8911	0.14	0.16	Snell.'yx'= 35
14	-143.700	2	38.40	0.41	0.8911	0.14	0.16	Snell.'yx'= 35

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **3** Descrizione: **CAPRIATA 3**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 32 NF 34 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-21.005	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
1B	-7.435	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
1I	-16.363	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1J	-12.077	2	16.82	0.27	0.9650	0.02	0.03	Snell.'zx'= 23
2	-25.770	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
7	-14.520	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
8	-13.280	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
9	-15.780	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
10	-15.940	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
11	-23.390	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
12	-22.640	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
13	-24.140	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
14	-24.240	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23

ASTA NUM. 2 NI 28 NF 43 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-22.198	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
1B	-19.002	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
1I	-21.254	2	16.82	0.29	0.9520	0.04	0.05	Snell.'zx'= 25
1J	-19.946	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
2	-37.280	2	16.82	0.29	0.9520	0.08	0.08	Snell.'zx'= 25
7	-20.720	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
8	-20.440	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
9	-22.860	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
10	-22.940	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
11	-33.640	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25
12	-33.470	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25
13	-34.920	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25
14	-34.970	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25

ASTA NUM. 3 NI 29 NF 49 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-24.147	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
1B	-20.373	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
1I	-22.973	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
1J	-21.547	2	16.82	0.29	0.9520	0.04	0.05	Snell.'zx'= 25
2	-40.250	2	16.82	0.29	0.9520	0.08	0.09	Snell.'zx'= 25
7	-22.240	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
8	-22.400	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
9	-24.790	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
10	-24.860	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
11	-36.230	2	16.82	0.29	0.9520	0.07	0.08	Snell.'zx'= 25
12	-36.320	2	16.82	0.29	0.9520	0.07	0.08	Snell.'zx'= 25
13	-37.750	2	16.82	0.29	0.9520	0.08	0.08	Snell.'zx'= 25
14	-37.800	2	16.82	0.29	0.9520	0.08	0.08	Snell.'zx'= 25

ASTA NUM. 4 NI 37 NF 39 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-21.377	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
1B	-7.583	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
1I	-16.578	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1J	-12.382	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23

2	-26.230	2	16.82	0.27	0.9650	0.05	0.06	Snell.'zx'= 23
7	-14.160	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
8	-15.310	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
9	-16.080	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
10	-16.240	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
11	-23.430	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
12	-24.120	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
13	-24.580	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
14	-24.680	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23

ASTA NUM. 5 NI 51 NF 39 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.033	--	38.40	--	0.0000	0.00	--	
1B	0.045	--	38.40	--	0.0000	0.00	--	
1I	0.037	--	38.40	--	0.0000	0.00	--	
1J	0.041	--	38.40	--	0.0000	0.00	--	
2	0.072	--	38.40	--	0.0000	0.00	--	
7	0.039	--	38.40	--	0.0000	0.00	--	
8	0.039	--	38.40	--	0.0000	0.00	--	
9	0.042	--	38.40	--	0.0000	0.00	--	
10	0.043	--	38.40	--	0.0000	0.00	--	
11	0.065	--	38.40	--	0.0000	0.00	--	
12	0.065	--	38.40	--	0.0000	0.00	--	
13	0.067	--	38.40	--	0.0000	0.00	--	
14	0.067	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 6 NI 39 NF 41 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.030	--	38.40	--	0.0000	0.00	--	
1B	0.039	--	38.40	--	0.0000	0.00	--	
1I	0.033	--	38.40	--	0.0000	0.00	--	
1J	0.036	--	38.40	--	0.0000	0.00	--	
2	0.064	--	38.40	--	0.0000	0.00	--	
7	0.034	--	38.40	--	0.0000	0.00	--	
8	0.034	--	38.40	--	0.0000	0.00	--	
9	0.037	--	38.40	--	0.0000	0.00	--	
10	0.037	--	38.40	--	0.0000	0.00	--	
11	0.057	--	38.40	--	0.0000	0.00	--	
12	0.057	--	38.40	--	0.0000	0.00	--	
13	0.059	--	38.40	--	0.0000	0.00	--	
14	0.059	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 7 NI 41 NF 49 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.010	--	38.40	--	0.0000	0.00	--	
1B	0.022	--	38.40	--	0.0000	0.00	--	
1I	0.014	--	38.40	--	0.0000	0.00	--	
1J	0.018	--	38.40	--	0.0000	0.00	--	
2	0.031	--	38.40	--	0.0000	0.00	--	
7	0.016	--	38.40	--	0.0000	0.00	--	
8	0.014	--	38.40	--	0.0000	0.00	--	
9	0.017	--	38.40	--	0.0000	0.00	--	
10	0.017	--	38.40	--	0.0000	0.00	--	
11	0.028	--	38.40	--	0.0000	0.00	--	
12	0.027	--	38.40	--	0.0000	0.00	--	
13	0.029	--	38.40	--	0.0000	0.00	--	
14	0.029	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 8 NI 49 NF 38 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.0000	0.00	--	
1B	0.016	--	38.40	--	0.0000	0.00	--	
1I	0.008	--	38.40	--	0.0000	0.00	--	
1J	0.012	--	38.40	--	0.0000	0.00	--	
2	0.020	--	38.40	--	0.0000	0.00	--	
7	0.009	--	38.40	--	0.0000	0.00	--	
8	0.008	--	38.40	--	0.0000	0.00	--	
9	0.010	--	38.40	--	0.0000	0.00	--	
10	0.011	--	38.40	--	0.0000	0.00	--	
11	0.018	--	38.40	--	0.0000	0.00	--	
12	0.017	--	38.40	--	0.0000	0.00	--	
13	0.018	--	38.40	--	0.0000	0.00	--	
14	0.018	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 9 NI 38 NF 43 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-223.369	2	38.40	0.41	0.8910	0.22	0.25	Snell.'yx'= 35

1B	-144.631	2	38.40	0.41	0.8910	0.14	0.16	Snell.'yx'= 35
1I	-197.174	2	38.40	0.41	0.8910	0.20	0.22	Snell.'yx'= 35
1J	-170.826	2	38.40	0.41	0.8910	0.17	0.19	Snell.'yx'= 35
2	-330.200	2	38.40	0.41	0.8910	0.33	0.37	Snell.'yx'= 35
7	-183.800	2	38.40	0.41	0.8910	0.18	0.21	Snell.'yx'= 35
8	-178.200	2	38.40	0.41	0.8910	0.18	0.20	Snell.'yx'= 35
9	-212.700	2	38.40	0.41	0.8910	0.21	0.24	Snell.'yx'= 35
10	-212.700	2	38.40	0.41	0.8910	0.21	0.24	Snell.'yx'= 35
11	-296.900	2	38.40	0.41	0.8910	0.30	0.33	Snell.'yx'= 35
12	-293.500	2	38.40	0.41	0.8910	0.29	0.33	Snell.'yx'= 35
13	-314.200	2	38.40	0.41	0.8910	0.31	0.35	Snell.'yx'= 35
14	-314.200	2	38.40	0.41	0.8910	0.31	0.35	Snell.'yx'= 35

ASTA NUM. 10 NI 43 NF 35 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 11 NI 35 NF 34 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 12 NI 34 NF 55 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 5 a 12 Lung. tot. 860.2 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

ASTA NUM. 13 NI 51 NF 37 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	86.375	--	30.20	--	0.0000	0.11	--	
1B	198.225	--	30.20	--	0.0000	0.25	--	
1I	124.626	--	30.20	--	0.0000	0.16	--	
1J	159.974	--	30.20	--	0.0000	0.20	--	
2	255.200	--	30.20	--	0.0000	0.32	--	
7	145.900	--	30.20	--	0.0000	0.18	--	
8	135.400	--	30.20	--	0.0000	0.17	--	
9	159.900	--	30.20	--	0.0000	0.20	--	
10	160.600	--	30.20	--	0.0000	0.20	--	
11	231.700	--	30.20	--	0.0000	0.29	--	
12	225.500	--	30.20	--	0.0000	0.29	--	
13	240.100	--	30.20	--	0.0000	0.30	--	

14	240.600	--	30.20	--	0.0000	0.30	--

ASTA NUM. 14 NI 37 NF 41 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-165.483	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
1B	-30.637	1	30.20	0.58	0.7952	0.04	0.05	Snell.'yx'= 50
1I	-119.145	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
1J	-76.975	1	30.20	0.58	0.7952	0.10	0.12	Snell.'yx'= 50
2	-176.200	1	30.20	0.58	0.7952	0.22	0.28	Snell.'yx'= 50
7	-101.500	1	30.20	0.58	0.7952	0.13	0.16	Snell.'yx'= 50
8	-89.220	1	30.20	0.58	0.7952	0.11	0.14	Snell.'yx'= 50
9	-110.300	1	30.20	0.58	0.7952	0.14	0.18	Snell.'yx'= 50
10	-110.600	1	30.20	0.58	0.7952	0.14	0.18	Snell.'yx'= 50
11	-160.600	1	30.20	0.58	0.7952	0.20	0.26	Snell.'yx'= 50
12	-153.200	1	30.20	0.58	0.7952	0.19	0.24	Snell.'yx'= 50
13	-165.800	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
14	-166.100	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50

ASTA NUM. 15 NI 41 NF 29 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	3.340	--	30.20	--	0.7952	0.00	--	
1B	113.560	--	30.20	--	0.7952	0.14	--	
1I	41.281	--	30.20	--	0.7952	0.05	--	
1J	75.620	--	30.20	--	0.7952	0.10	--	
2	104.700	--	30.20	--	0.7952	0.13	--	
7	61.610	--	30.20	--	0.7952	0.08	--	
8	51.590	--	30.20	--	0.7952	0.07	--	
9	65.380	--	30.20	--	0.7952	0.08	--	
10	65.560	--	30.20	--	0.7952	0.08	--	
11	96.090	--	30.20	--	0.7952	0.12	--	
12	90.080	--	30.20	--	0.7952	0.11	--	
13	98.360	--	30.20	--	0.7952	0.12	--	
14	98.460	--	30.20	--	0.7952	0.12	--	

ASTA NUM. 16 NI 29 NF 38 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-61.036	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	50.570	--	30.20	--	0.7885	0.06	--	
1I	-22.257	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	11.791	--	30.20	--	0.7885	0.01	--	
2	-9.556	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
7	-7.638	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	2.133	--	30.20	--	0.7885	0.00	--	
9	-5.803	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-5.809	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
11	-10.060	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
12	-4.195	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
13	-8.957	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
14	-8.960	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51

ASTA NUM. 17 NI 38 NF 28 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-63.221	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	46.009	--	30.20	--	0.7885	0.06	--	
1I	-25.126	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	7.914	--	30.20	--	0.7885	0.01	--	
2	-15.670	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
7	-6.051	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-15.640	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
9	-9.700	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
10	-9.705	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
11	-12.580	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
12	-18.330	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
13	-14.770	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
14	-14.780	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51

ASTA NUM. 18 NI 28 NF 35 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	1.756	--	30.20	--	0.7885	0.00	--	
1B	111.084	--	30.20	--	0.7885	0.14	--	
1I	39.734	--	30.20	--	0.7885	0.05	--	
1J	73.106	--	30.20	--	0.7885	0.09	--	
2	101.100	--	30.20	--	0.7885	0.13	--	
7	54.640	--	30.20	--	0.7885	0.07	--	
8	64.150	--	30.20	--	0.7885	0.08	--	
9	63.020	--	30.20	--	0.7885	0.08	--	
10	63.200	--	30.20	--	0.7885	0.08	--	

11	89.910	--	30.20	--	0.7885	0.11	--
12	95.620	--	30.20	--	0.7885	0.12	--
13	94.940	--	30.20	--	0.7885	0.12	--
14	95.050	--	30.20	--	0.7885	0.12	--

ASTA NUM. 19 NI 35 NF 32 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-164.739	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
1B	-33.241	1	30.20	0.58	0.7952	0.04	0.05	Snell.'yx'= 50
1I	-119.287	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
1J	-78.693	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
2	-177.900	1	30.20	0.58	0.7952	0.22	0.28	Snell.'yx'= 50
7	-96.310	1	30.20	0.58	0.7952	0.12	0.15	Snell.'yx'= 50
8	-108.300	1	30.20	0.58	0.7952	0.14	0.17	Snell.'yx'= 50
9	-111.300	1	30.20	0.58	0.7952	0.14	0.18	Snell.'yx'= 50
10	-111.700	1	30.20	0.58	0.7952	0.14	0.18	Snell.'yx'= 50
11	-158.500	1	30.20	0.58	0.7952	0.20	0.25	Snell.'yx'= 50
12	-165.600	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
13	-167.500	1	30.20	0.58	0.7952	0.21	0.27	Snell.'yx'= 50
14	-167.700	1	30.20	0.58	0.7952	0.21	0.27	Snell.'yx'= 50

ASTA NUM. 20 NI 32 NF 55 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	88.493	--	30.20	--	0.7952	0.11	--	
1B	197.507	--	30.20	--	0.7952	0.25	--	
1I	125.776	--	30.20	--	0.7952	0.16	--	
1J	160.224	--	30.20	--	0.7952	0.20	--	
2	256.600	--	30.20	--	0.7952	0.32	--	
7	141.500	--	30.20	--	0.7952	0.18	--	
8	151.300	--	30.20	--	0.7952	0.19	--	
9	160.600	--	30.20	--	0.7952	0.20	--	
10	161.400	--	30.20	--	0.7952	0.20	--	
11	229.900	--	30.20	--	0.7952	0.29	--	
12	235.800	--	30.20	--	0.7952	0.30	--	
13	241.400	--	30.20	--	0.7952	0.31	--	
14	241.900	--	30.20	--	0.7952	0.31	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 13 a 20 Lung. tot. 966.4 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **4** Descrizione: **CAPRIATA 4**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 21 NI 71 NF 68 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-294.392	2	38.40	0.41	0.8911	0.29	0.33	Snell.'yx'= 35
1B	131.752	--	38.40	--	0.8911	0.13	--	
1I	-146.672	2	38.40	0.41	0.8911	0.15	0.16	Snell.'yx'= 35
1J	-15.968	2	38.40	0.41	0.8911	0.02	0.02	Snell.'yx'= 35
2	-145.900	2	38.40	0.41	0.8911	0.15	0.16	Snell.'yx'= 35
7	-87.520	2	38.40	0.41	0.8911	0.09	0.10	Snell.'yx'= 35
8	-51.930	2	38.40	0.41	0.8911	0.05	0.06	Snell.'yx'= 35
9	-97.630	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
10	-97.270	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
11	-135.000	2	38.40	0.41	0.8911	0.13	0.15	Snell.'yx'= 35
12	-113.600	2	38.40	0.41	0.8911	0.11	0.13	Snell.'yx'= 35
13	-141.100	2	38.40	0.41	0.8911	0.14	0.16	Snell.'yx'= 35
14	-140.800	2	38.40	0.41	0.8911	0.14	0.16	Snell.'yx'= 35

ASTA NUM. 22 NI 68 NF 59 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	34.046	--	38.40	--	0.8911	0.03	--	
1B	233.354	--	38.40	--	0.8911	0.23	--	
1I	102.973	--	38.40	--	0.8911	0.10	--	
1J	164.427	--	38.40	--	0.8911	0.16	--	
2	239.900	--	38.40	--	0.8911	0.24	--	
7	134.000	--	38.40	--	0.8911	0.13	--	
8	148.700	--	38.40	--	0.8911	0.15	--	
9	145.100	--	38.40	--	0.8911	0.14	--	
10	144.400	--	38.40	--	0.8911	0.14	--	
11	216.000	--	38.40	--	0.8911	0.21	--	
12	224.800	--	38.40	--	0.8911	0.22	--	
13	222.700	--	38.40	--	0.8911	0.22	--	
14	222.200	--	38.40	--	0.8911	0.22	--	

ASTA NUM. 23 NI 59 NF 58 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	189.213	--	38.40	--	0.8911	0.19	--	
1B	191.187	--	38.40	--	0.8911	0.19	--	
1I	187.985	--	38.40	--	0.8911	0.19	--	
1J	192.415	--	38.40	--	0.8911	0.19	--	
2	341.400	--	38.40	--	0.8911	0.34	--	
7	195.400	--	38.40	--	0.8911	0.19	--	
8	192.500	--	38.40	--	0.8911	0.19	--	
9	208.400	--	38.40	--	0.8911	0.21	--	
10	207.600	--	38.40	--	0.8911	0.21	--	
11	310.200	--	38.40	--	0.8911	0.31	--	
12	308.500	--	38.40	--	0.8911	0.31	--	
13	318.000	--	38.40	--	0.8911	0.32	--	
14	317.500	--	38.40	--	0.8911	0.32	--	

ASTA NUM. 24 NI 58 NF 60 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	35.427	--	38.40	--	0.8911	0.04	--	
1B	231.773	--	38.40	--	0.8911	0.23	--	
1I	102.470	--	38.40	--	0.8911	0.10	--	
1J	164.730	--	38.40	--	0.8911	0.16	--	
2	239.700	--	38.40	--	0.8911	0.24	--	
7	142.800	--	38.40	--	0.8911	0.14	--	
8	122.600	--	38.40	--	0.8911	0.12	--	
9	145.000	--	38.40	--	0.8911	0.14	--	

10	144.200	--	38.40	--	0.8911	0.14	--
11	221.200	--	38.40	--	0.8911	0.22	--
12	209.000	--	38.40	--	0.8911	0.21	--
13	222.500	--	38.40	--	0.8911	0.22	--
14	222.000	--	38.40	--	0.8911	0.22	--

ASTA NUM. 25 NI 60 NF 72 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-291.507	2	38.40	0.41	0.8911	0.29	0.33	Snell.'yx'= 35
1B	125.027	--	38.40	--	0.8911	0.12	--	
1I	-145.922	2	38.40	0.41	0.8911	0.15	0.16	Snell.'yx'= 35
1J	-20.558	2	38.40	0.41	0.8911	0.02	0.02	Snell.'yx'= 35
2	-149.300	2	38.40	0.41	0.8911	0.15	0.17	Snell.'yx'= 35
7	-69.650	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
8	-110.500	2	38.40	0.41	0.8911	0.11	0.12	Snell.'yx'= 35
9	-99.840	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
10	-99.470	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
11	-126.200	2	38.40	0.41	0.8911	0.13	0.14	Snell.'yx'= 35
12	-150.700	2	38.40	0.41	0.8911	0.15	0.17	Snell.'yx'= 35
13	-144.300	2	38.40	0.41	0.8911	0.14	0.16	Snell.'yx'= 35
14	-144.100	2	38.40	0.41	0.8911	0.14	0.16	Snell.'yx'= 35

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **4** Descrizione: **CAPRIATA 4**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 60 NF 61 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-20.361	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
1B	-7.039	2	16.82	0.27	0.9650	0.01	0.01	Snell.'zx'= 23
1I	-15.832	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1J	-11.568	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
2	-24.820	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
7	-14.010	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
8	-12.780	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
9	-15.360	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
10	-15.200	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
11	-22.540	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
12	-21.800	2	16.82	0.27	0.9650	0.04	0.05	Snell.'zx'= 23
13	-23.350	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
14	-23.250	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23

ASTA NUM. 2 NI 58 NF 63 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-21.888	2	16.82	0.29	0.9520	0.04	0.05	Snell.'zx'= 25
1B	-18.712	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
1I	-21.021	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
1J	-19.579	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
2	-36.720	2	16.82	0.29	0.9520	0.07	0.08	Snell.'zx'= 25
7	-20.390	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
8	-20.140	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
9	-22.600	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
10	-22.520	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
11	-33.120	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25
12	-32.970	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25
13	-34.440	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25
14	-34.400	2	16.82	0.29	0.9520	0.07	0.07	Snell.'zx'= 25

ASTA NUM. 3 NI 59 NF 64 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-23.742	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
1B	-19.978	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
1I	-22.633	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
1J	-21.087	2	16.82	0.29	0.9520	0.04	0.04	Snell.'zx'= 25
2	-39.500	2	16.82	0.29	0.9520	0.08	0.08	Snell.'zx'= 25
7	-21.830	2	16.82	0.29	0.9520	0.04	0.05	Snell.'zx'= 25
8	-22.000	2	16.82	0.29	0.9520	0.04	0.05	Snell.'zx'= 25
9	-24.410	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
10	-24.330	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
11	-35.550	2	16.82	0.29	0.9520	0.07	0.08	Snell.'zx'= 25
12	-35.660	2	16.82	0.29	0.9520	0.07	0.08	Snell.'zx'= 25
13	-37.100	2	16.82	0.29	0.9520	0.08	0.08	Snell.'zx'= 25
14	-37.050	2	16.82	0.29	0.9520	0.08	0.08	Snell.'zx'= 25

ASTA NUM. 4 NI 68 NF 66 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-20.695	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
1B	-7.205	2	16.82	0.27	0.9650	0.01	0.02	Snell.'zx'= 23
1I	-15.985	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1J	-11.915	2	16.82	0.27	0.9650	0.02	0.03	Snell.'zx'= 23

2	-25.270	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
7	-13.640	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
8	-14.790	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
9	-15.650	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
10	-15.490	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
11	-22.570	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
12	-23.260	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
13	-23.770	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
14	-23.680	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23

ASTA NUM. 5 NI 69 NF 66 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.032	--	38.40	--	0.0000	0.00	--	
1B	0.044	--	38.40	--	0.0000	0.00	--	
1I	0.036	--	38.40	--	0.0000	0.00	--	
1J	0.040	--	38.40	--	0.0000	0.00	--	
2	0.070	--	38.40	--	0.0000	0.00	--	
7	0.038	--	38.40	--	0.0000	0.00	--	
8	0.038	--	38.40	--	0.0000	0.00	--	
9	0.041	--	38.40	--	0.0000	0.00	--	
10	0.041	--	38.40	--	0.0000	0.00	--	
11	0.063	--	38.40	--	0.0000	0.00	--	
12	0.063	--	38.40	--	0.0000	0.00	--	
13	0.065	--	38.40	--	0.0000	0.00	--	
14	0.065	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 6 NI 66 NF 65 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.029	--	38.40	--	0.0000	0.00	--	
1B	0.038	--	38.40	--	0.0000	0.00	--	
1I	0.032	--	38.40	--	0.0000	0.00	--	
1J	0.035	--	38.40	--	0.0000	0.00	--	
2	0.062	--	38.40	--	0.0000	0.00	--	
7	0.033	--	38.40	--	0.0000	0.00	--	
8	0.033	--	38.40	--	0.0000	0.00	--	
9	0.036	--	38.40	--	0.0000	0.00	--	
10	0.036	--	38.40	--	0.0000	0.00	--	
11	0.056	--	38.40	--	0.0000	0.00	--	
12	0.056	--	38.40	--	0.0000	0.00	--	
13	0.058	--	38.40	--	0.0000	0.00	--	
14	0.058	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 7 NI 65 NF 64 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.010	--	38.40	--	0.0000	0.00	--	
1B	0.022	--	38.40	--	0.0000	0.00	--	
1I	0.014	--	38.40	--	0.0000	0.00	--	
1J	0.018	--	38.40	--	0.0000	0.00	--	
2	0.030	--	38.40	--	0.0000	0.00	--	
7	0.015	--	38.40	--	0.0000	0.00	--	
8	0.014	--	38.40	--	0.0000	0.00	--	
9	0.017	--	38.40	--	0.0000	0.00	--	
10	0.017	--	38.40	--	0.0000	0.00	--	
11	0.027	--	38.40	--	0.0000	0.00	--	
12	0.026	--	38.40	--	0.0000	0.00	--	
13	0.028	--	38.40	--	0.0000	0.00	--	
14	0.028	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 8 NI 64 NF 67 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.003	--	38.40	--	0.0000	0.00	--	
1B	0.016	--	38.40	--	0.0000	0.00	--	
1I	0.008	--	38.40	--	0.0000	0.00	--	
1J	0.012	--	38.40	--	0.0000	0.00	--	
2	0.019	--	38.40	--	0.0000	0.00	--	
7	0.009	--	38.40	--	0.0000	0.00	--	
8	0.008	--	38.40	--	0.0000	0.00	--	
9	0.010	--	38.40	--	0.0000	0.00	--	
10	0.010	--	38.40	--	0.0000	0.00	--	
11	0.017	--	38.40	--	0.0000	0.00	--	
12	0.017	--	38.40	--	0.0000	0.00	--	
13	0.018	--	38.40	--	0.0000	0.00	--	
14	0.018	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 9 NI 67 NF 63 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-219.460	2	38.40	0.41	0.8910	0.22	0.24	Snell.'yx'= 35

1B	-140.540	2	38.40	0.41	0.8910	0.14	0.16	Snell.'yx'= 35
1I	-193.750	2	38.40	0.41	0.8910	0.19	0.22	Snell.'yx'= 35
1J	-166.250	2	38.40	0.41	0.8910	0.17	0.19	Snell.'yx'= 35
2	-322.700	2	38.40	0.41	0.8910	0.32	0.36	Snell.'yx'= 35
7	-179.900	2	38.40	0.41	0.8910	0.18	0.20	Snell.'yx'= 35
8	-174.200	2	38.40	0.41	0.8910	0.17	0.19	Snell.'yx'= 35
9	-208.200	2	38.40	0.41	0.8910	0.21	0.23	Snell.'yx'= 35
10	-208.100	2	38.40	0.41	0.8910	0.21	0.23	Snell.'yx'= 35
11	-290.300	2	38.40	0.41	0.8910	0.29	0.32	Snell.'yx'= 35
12	-286.900	2	38.40	0.41	0.8910	0.29	0.32	Snell.'yx'= 35
13	-307.300	2	38.40	0.41	0.8910	0.31	0.34	Snell.'yx'= 35
14	-307.200	2	38.40	0.41	0.8910	0.31	0.34	Snell.'yx'= 35

ASTA NUM. 10 NI 63 NF 62 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 11 NI 62 NF 61 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 12 NI 61 NF 70 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 5 a 12 Lung. tot. 860.2 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

ASTA NUM. 13 NI 69 NF 68 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	82.639	--	30.20	--	0.0000	0.10	--	
1B	195.361	--	30.20	--	0.0000	0.25	--	
1I	120.815	--	30.20	--	0.0000	0.15	--	
1J	157.185	--	30.20	--	0.0000	0.20	--	
2	249.200	--	30.20	--	0.0000	0.32	--	
7	142.600	--	30.20	--	0.0000	0.18	--	
8	132.100	--	30.20	--	0.0000	0.17	--	
9	156.900	--	30.20	--	0.0000	0.20	--	
10	156.100	--	30.20	--	0.0000	0.20	--	
11	226.300	--	30.20	--	0.0000	0.29	--	
12	220.000	--	30.20	--	0.0000	0.28	--	
13	234.900	--	30.20	--	0.0000	0.30	--	

14	234.400	--	30.20	--	0.0000	0.30	--

ASTA NUM. 14 NI 68 NF 65 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-163.651	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
1B	-28.649	1	30.20	0.58	0.7952	0.04	0.05	Snell.'yx'= 50
1I	-117.586	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
1J	-74.714	1	30.20	0.58	0.7952	0.09	0.12	Snell.'yx'= 50
2	-172.700	1	30.20	0.58	0.7952	0.22	0.27	Snell.'yx'= 50
7	-99.600	1	30.20	0.58	0.7952	0.13	0.16	Snell.'yx'= 50
8	-87.320	1	30.20	0.58	0.7952	0.11	0.14	Snell.'yx'= 50
9	-108.500	1	30.20	0.58	0.7952	0.14	0.17	Snell.'yx'= 50
10	-108.100	1	30.20	0.58	0.7952	0.14	0.17	Snell.'yx'= 50
11	-157.400	1	30.20	0.58	0.7952	0.20	0.25	Snell.'yx'= 50
12	-150.100	1	30.20	0.58	0.7952	0.19	0.24	Snell.'yx'= 50
13	-162.800	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
14	-162.600	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50

ASTA NUM. 15 NI 65 NF 59 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	2.486	--	30.20	--	0.7952	0.00	--	
1B	112.694	--	30.20	--	0.7952	0.14	--	
1I	40.196	--	30.20	--	0.7952	0.05	--	
1J	74.984	--	30.20	--	0.7952	0.09	--	
2	103.200	--	30.20	--	0.7952	0.13	--	
7	60.760	--	30.20	--	0.7952	0.08	--	
8	50.740	--	30.20	--	0.7952	0.06	--	
9	64.600	--	30.20	--	0.7952	0.08	--	
10	64.420	--	30.20	--	0.7952	0.08	--	
11	94.690	--	30.20	--	0.7952	0.12	--	
12	88.680	--	30.20	--	0.7952	0.11	--	
13	96.990	--	30.20	--	0.7952	0.12	--	
14	96.880	--	30.20	--	0.7952	0.12	--	

ASTA NUM. 16 NI 59 NF 67 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-61.012	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	50.398	--	30.20	--	0.7885	0.06	--	
1I	-22.367	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	11.753	--	30.20	--	0.7885	0.01	--	
2	-9.692	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
7	-7.739	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	2.066	--	30.20	--	0.7885	0.00	--	
9	-5.890	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-5.886	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
11	-10.200	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
12	-4.314	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
13	-9.087	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
14	-9.085	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51

ASTA NUM. 17 NI 67 NF 58 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-62.946	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	46.044	--	30.20	--	0.7885	0.06	--	
1I	-24.935	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	8.033	--	30.20	--	0.7885	0.01	--	
2	-15.380	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
7	-5.811	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-15.490	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
9	-9.529	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
10	-9.527	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
11	-12.280	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
12	-18.090	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
13	-14.510	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
14	-14.510	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51

ASTA NUM. 18 NI 58 NF 62 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.913	--	30.20	--	0.7885	0.00	--	
1B	110.247	--	30.20	--	0.7885	0.14	--	
1I	38.763	--	30.20	--	0.7885	0.05	--	
1J	72.397	--	30.20	--	0.7885	0.09	--	
2	99.610	--	30.20	--	0.7885	0.13	--	
7	53.660	--	30.20	--	0.7885	0.07	--	
8	63.340	--	30.20	--	0.7885	0.08	--	
9	62.260	--	30.20	--	0.7885	0.08	--	
10	62.080	--	30.20	--	0.7885	0.08	--	

11	88.450	--	30.20	--	0.7885	0.11	--
12	94.260	--	30.20	--	0.7885	0.12	--
13	93.610	--	30.20	--	0.7885	0.12	--
14	93.510	--	30.20	--	0.7885	0.12	--

ASTA NUM. 19 NI 62 NF 60 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-162.921	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
1B	-31.239	1	30.20	0.58	0.7952	0.04	0.05	Snell.'yx'= 50
1I	-117.653	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
1J	-76.507	1	30.20	0.58	0.7952	0.10	0.12	Snell.'yx'= 50
2	-174.400	1	30.20	0.58	0.7952	0.22	0.28	Snell.'yx'= 50
7	-94.120	1	30.20	0.58	0.7952	0.12	0.15	Snell.'yx'= 50
8	-106.400	1	30.20	0.58	0.7952	0.13	0.17	Snell.'yx'= 50
9	-109.600	1	30.20	0.58	0.7952	0.14	0.17	Snell.'yx'= 50
10	-109.200	1	30.20	0.58	0.7952	0.14	0.17	Snell.'yx'= 50
11	-155.200	1	30.20	0.58	0.7952	0.20	0.25	Snell.'yx'= 50
12	-162.500	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
13	-164.400	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50
14	-164.200	1	30.20	0.58	0.7952	0.21	0.26	Snell.'yx'= 50

ASTA NUM. 20 NI 60 NF 70 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	84.759	--	30.20	--	0.7952	0.11	--	
1B	194.641	--	30.20	--	0.7952	0.25	--	
1I	122.002	--	30.20	--	0.7952	0.15	--	
1J	157.398	--	30.20	--	0.7952	0.20	--	
2	250.500	--	30.20	--	0.7952	0.32	--	
7	137.900	--	30.20	--	0.7952	0.17	--	
8	148.100	--	30.20	--	0.7952	0.19	--	
9	157.700	--	30.20	--	0.7952	0.20	--	
10	156.900	--	30.20	--	0.7952	0.20	--	
11	224.300	--	30.20	--	0.7952	0.28	--	
12	230.400	--	30.20	--	0.7952	0.29	--	
13	236.200	--	30.20	--	0.7952	0.30	--	
14	235.700	--	30.20	--	0.7952	0.30	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 13 a 20 Lung. tot. 966.4 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **5** Descrizione: **CAPRIATA 5**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 21 NI 75 NF 87 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-317.900	2	38.40	0.41	0.8911	0.32	0.35	Snell.'yx'= 35
1B	97.300	--	38.40	--	0.8911	0.10	--	
1I	-173.188	2	38.40	0.41	0.8911	0.17	0.19	Snell.'yx'= 35
1J	-47.412	2	38.40	0.41	0.8911	0.05	0.05	Snell.'yx'= 35
2	-198.600	2	38.40	0.41	0.8911	0.20	0.22	Snell.'yx'= 35
7	-96.700	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
8	-135.700	2	38.40	0.41	0.8911	0.13	0.15	Snell.'yx'= 35
9	-131.600	2	38.40	0.41	0.8911	0.13	0.15	Snell.'yx'= 35
10	-131.800	2	38.40	0.41	0.8911	0.13	0.15	Snell.'yx'= 35
11	-170.600	2	38.40	0.41	0.8911	0.17	0.19	Snell.'yx'= 35
12	-194.000	2	38.40	0.41	0.8911	0.19	0.22	Snell.'yx'= 35
13	-191.500	2	38.40	0.41	0.8911	0.19	0.21	Snell.'yx'= 35
14	-191.600	2	38.40	0.41	0.8911	0.19	0.21	Snell.'yx'= 35

ASTA NUM. 22 NI 73 NF 75 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	76.045	--	38.40	--	0.8911	0.08	--	
1B	277.555	--	38.40	--	0.8911	0.28	--	
1I	141.403	--	38.40	--	0.8911	0.14	--	
1J	212.197	--	38.40	--	0.8911	0.21	--	
2	318.200	--	38.40	--	0.8911	0.32	--	
7	185.500	--	38.40	--	0.8911	0.18	--	
8	165.900	--	38.40	--	0.8911	0.16	--	
9	191.900	--	38.40	--	0.8911	0.19	--	
10	192.400	--	38.40	--	0.8911	0.19	--	
11	291.700	--	38.40	--	0.8911	0.29	--	
12	279.900	--	38.40	--	0.8911	0.28	--	
13	295.500	--	38.40	--	0.8911	0.29	--	
14	295.800	--	38.40	--	0.8911	0.29	--	

ASTA NUM. 23 NI 74 NF 73 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	245.437	--	38.40	--	0.8911	0.24	--	
1B	250.163	--	38.40	--	0.8911	0.25	--	
1I	241.029	--	38.40	--	0.8911	0.24	--	
1J	254.571	--	38.40	--	0.8911	0.25	--	
2	446.100	--	38.40	--	0.8911	0.44	--	
7	252.600	--	38.40	--	0.8911	0.25	--	
8	249.500	--	38.40	--	0.8911	0.25	--	
9	271.700	--	38.40	--	0.8911	0.27	--	
10	272.200	--	38.40	--	0.8911	0.27	--	
11	404.400	--	38.40	--	0.8911	0.40	--	
12	402.500	--	38.40	--	0.8911	0.40	--	
13	415.800	--	38.40	--	0.8911	0.41	--	
14	416.200	--	38.40	--	0.8911	0.41	--	

ASTA NUM. 24 NI 83 NF 74 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	77.893	--	38.40	--	0.8911	0.08	--	
1B	280.307	--	38.40	--	0.8911	0.28	--	
1I	145.986	--	38.40	--	0.8911	0.15	--	
1J	212.214	--	38.40	--	0.8911	0.21	--	
2	322.500	--	38.40	--	0.8911	0.32	--	
7	179.600	--	38.40	--	0.8911	0.18	--	
8	193.200	--	38.40	--	0.8911	0.19	--	
9	194.600	--	38.40	--	0.8911	0.19	--	

10	195.000	--	38.40	--	0.8911	0.19	--
11	290.600	--	38.40	--	0.8911	0.29	--
12	298.700	--	38.40	--	0.8911	0.30	--
13	299.600	--	38.40	--	0.8911	0.30	--
14	299.800	--	38.40	--	0.8911	0.30	--

ASTA NUM. 25 NI 86 NF 83 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-320.220	2	38.40	0.41	0.8911	0.32	0.36	Snell.'yx'= 35
1B	107.020	--	38.40	--	0.8911	0.11	--	
1I	-175.295	2	38.40	0.41	0.8911	0.17	0.20	Snell.'yx'= 35
1J	-37.905	2	38.40	0.41	0.8911	0.04	0.04	Snell.'yx'= 35
2	-191.900	2	38.40	0.41	0.8911	0.19	0.21	Snell.'yx'= 35
7	-110.800	2	38.40	0.41	0.8911	0.11	0.12	Snell.'yx'= 35
8	-77.730	2	38.40	0.41	0.8911	0.08	0.09	Snell.'yx'= 35
9	-127.400	2	38.40	0.41	0.8911	0.13	0.14	Snell.'yx'= 35
10	-127.600	2	38.40	0.41	0.8911	0.13	0.14	Snell.'yx'= 35
11	-175.200	2	38.40	0.41	0.8911	0.17	0.20	Snell.'yx'= 35
12	-155.400	2	38.40	0.41	0.8911	0.15	0.17	Snell.'yx'= 35
13	-185.200	2	38.40	0.41	0.8911	0.18	0.21	Snell.'yx'= 35
14	-185.300	2	38.40	0.41	0.8911	0.18	0.21	Snell.'yx'= 35

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **5** Descrizione: **CAPRIATA 5**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 75 NF 76 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-27.199	2	16.82	0.27	0.9650	0.06	0.06	Snell.'zx'= 23
1B	-12.961	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1I	-22.525	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
1J	-17.635	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
2	-36.410	2	16.82	0.27	0.9650	0.07	0.08	Snell.'zx'= 23
7	-20.210	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
8	-19.020	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
9	-22.470	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
10	-22.450	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
11	-32.870	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
12	-32.160	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
13	-34.230	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
14	-34.220	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23

ASTA NUM. 2 NI 73 NF 78 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-27.767	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
1B	-23.433	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
1I	-27.015	2	16.82	0.29	0.9520	0.05	0.06	Snell.'zx'= 25
1J	-24.185	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
2	-46.370	2	16.82	0.29	0.9520	0.09	0.10	Snell.'zx'= 25
7	-25.620	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
8	-25.370	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
9	-28.520	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
10	-28.570	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
11	-41.780	2	16.82	0.29	0.9520	0.08	0.09	Snell.'zx'= 25
12	-41.630	2	16.82	0.29	0.9520	0.08	0.09	Snell.'zx'= 25
13	-43.510	2	16.82	0.29	0.9520	0.09	0.09	Snell.'zx'= 25
14	-43.550	2	16.82	0.29	0.9520	0.09	0.09	Snell.'zx'= 25

ASTA NUM. 3 NI 74 NF 79 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-30.914	2	16.82	0.29	0.9520	0.06	0.07	Snell.'zx'= 25
1B	-26.186	2	16.82	0.29	0.9520	0.05	0.06	Snell.'zx'= 25
1I	-29.929	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
1J	-27.171	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
2	-51.700	2	16.82	0.29	0.9520	0.10	0.11	Snell.'zx'= 25
7	-28.440	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
8	-28.620	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
9	-31.900	2	16.82	0.29	0.9520	0.06	0.07	Snell.'zx'= 25
10	-31.950	2	16.82	0.29	0.9520	0.06	0.07	Snell.'zx'= 25
11	-46.490	2	16.82	0.29	0.9520	0.09	0.10	Snell.'zx'= 25
12	-46.600	2	16.82	0.29	0.9520	0.09	0.10	Snell.'zx'= 25
13	-48.560	2	16.82	0.29	0.9520	0.10	0.10	Snell.'zx'= 25
14	-48.600	2	16.82	0.29	0.9520	0.10	0.10	Snell.'zx'= 25

ASTA NUM. 4 NI 83 NF 81 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-27.571	2	16.82	0.27	0.9650	0.06	0.06	Snell.'zx'= 23
1B	-13.349	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1I	-22.678	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
1J	-18.242	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23

2	-37.100	2	16.82	0.27	0.9650	0.08	0.08	Snell.'zx'= 23
7	-20.020	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
8	-21.140	2	16.82	0.27	0.9650	0.04	0.04	Snell.'zx'= 23
9	-22.900	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
10	-22.890	2	16.82	0.27	0.9650	0.05	0.05	Snell.'zx'= 23
11	-33.150	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
12	-33.820	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
13	-34.880	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23
14	-34.870	2	16.82	0.27	0.9650	0.07	0.07	Snell.'zx'= 23

ASTA NUM. 5 NI 84 NF 81 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.046	--	38.40	--	0.0000	0.00	--	
1B	0.058	--	38.40	--	0.0000	0.00	--	
1I	0.049	--	38.40	--	0.0000	0.00	--	
1J	0.055	--	38.40	--	0.0000	0.00	--	
2	0.095	--	38.40	--	0.0000	0.00	--	
7	0.051	--	38.40	--	0.0000	0.00	--	
8	0.052	--	38.40	--	0.0000	0.00	--	
9	0.057	--	38.40	--	0.0000	0.00	--	
10	0.057	--	38.40	--	0.0000	0.00	--	
11	0.086	--	38.40	--	0.0000	0.00	--	
12	0.086	--	38.40	--	0.0000	0.00	--	
13	0.089	--	38.40	--	0.0000	0.00	--	
14	0.089	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 6 NI 81 NF 80 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.041	--	38.40	--	0.0000	0.00	--	
1B	0.050	--	38.40	--	0.0000	0.00	--	
1I	0.043	--	38.40	--	0.0000	0.00	--	
1J	0.048	--	38.40	--	0.0000	0.00	--	
2	0.084	--	38.40	--	0.0000	0.00	--	
7	0.045	--	38.40	--	0.0000	0.00	--	
8	0.045	--	38.40	--	0.0000	0.00	--	
9	0.049	--	38.40	--	0.0000	0.00	--	
10	0.050	--	38.40	--	0.0000	0.00	--	
11	0.075	--	38.40	--	0.0000	0.00	--	
12	0.075	--	38.40	--	0.0000	0.00	--	
13	0.078	--	38.40	--	0.0000	0.00	--	
14	0.078	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 7 NI 80 NF 79 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.015	--	38.40	--	0.0000	0.00	--	
1B	0.028	--	38.40	--	0.0000	0.00	--	
1I	0.019	--	38.40	--	0.0000	0.00	--	
1J	0.024	--	38.40	--	0.0000	0.00	--	
2	0.040	--	38.40	--	0.0000	0.00	--	
7	0.021	--	38.40	--	0.0000	0.00	--	
8	0.020	--	38.40	--	0.0000	0.00	--	
9	0.023	--	38.40	--	0.0000	0.00	--	
10	0.023	--	38.40	--	0.0000	0.00	--	
11	0.036	--	38.40	--	0.0000	0.00	--	
12	0.036	--	38.40	--	0.0000	0.00	--	
13	0.038	--	38.40	--	0.0000	0.00	--	
14	0.038	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 8 NI 79 NF 82 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.007	--	38.40	--	0.0000	0.00	--	
1B	0.020	--	38.40	--	0.0000	0.00	--	
1I	0.011	--	38.40	--	0.0000	0.00	--	
1J	0.016	--	38.40	--	0.0000	0.00	--	
2	0.026	--	38.40	--	0.0000	0.00	--	
7	0.013	--	38.40	--	0.0000	0.00	--	
8	0.012	--	38.40	--	0.0000	0.00	--	
9	0.014	--	38.40	--	0.0000	0.00	--	
10	0.015	--	38.40	--	0.0000	0.00	--	
11	0.024	--	38.40	--	0.0000	0.00	--	
12	0.023	--	38.40	--	0.0000	0.00	--	
13	0.025	--	38.40	--	0.0000	0.00	--	
14	0.025	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 9 NI 82 NF 78 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-277.789	2	38.40	0.41	0.8910	0.28	0.31	Snell.'yx'= 35

1B	-195.611	2	38.40	0.41	0.8910	0.19	0.22	Snell.'yx'= 35
1I	-255.091	2	38.40	0.41	0.8910	0.25	0.28	Snell.'yx'= 35
1J	-218.309	2	38.40	0.41	0.8910	0.22	0.24	Snell.'yx'= 35
2	-426.100	2	38.40	0.41	0.8910	0.42	0.48	Snell.'yx'= 35
7	-236.100	2	38.40	0.41	0.8910	0.23	0.26	Snell.'yx'= 35
8	-230.300	2	38.40	0.41	0.8910	0.23	0.26	Snell.'yx'= 35
9	-271.600	2	38.40	0.41	0.8910	0.27	0.30	Snell.'yx'= 35
10	-271.300	2	38.40	0.41	0.8910	0.27	0.30	Snell.'yx'= 35
11	-383.000	2	38.40	0.41	0.8910	0.38	0.43	Snell.'yx'= 35
12	-379.600	2	38.40	0.41	0.8910	0.38	0.42	Snell.'yx'= 35
13	-404.400	2	38.40	0.41	0.8910	0.40	0.45	Snell.'yx'= 35
14	-404.200	2	38.40	0.41	0.8910	0.40	0.45	Snell.'yx'= 35

ASTA NUM. 10 NI 78 NF 77 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 11 NI 77 NF 76 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 12 NI 76 NF 85 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 5 a 12 Lung. tot. 860.2 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

ASTA NUM. 13 NI 84 NF 83 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	130.334	--	30.20	--	0.0000	0.16	--	
1B	242.666	--	30.20	--	0.0000	0.31	--	
1I	165.385	--	30.20	--	0.0000	0.21	--	
1J	207.615	--	30.20	--	0.0000	0.26	--	
2	335.600	--	30.20	--	0.0000	0.42	--	
7	189.000	--	30.20	--	0.0000	0.24	--	
8	179.200	--	30.20	--	0.0000	0.23	--	
9	210.200	--	30.20	--	0.0000	0.27	--	
10	210.500	--	30.20	--	0.0000	0.27	--	
11	303.500	--	30.20	--	0.0000	0.38	--	
12	297.700	--	30.20	--	0.0000	0.38	--	
13	316.200	--	30.20	--	0.0000	0.40	--	

14	316.400	--	30.20	--	0.0000	0.40	--

ASTA NUM. 14 NI 83 NF 80 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-193.794	1	30.20	0.58	0.7952	0.25	0.31	Snell.'yx'= 50
1B	-57.806	1	30.20	0.58	0.7952	0.07	0.09	Snell.'yx'= 50
1I	-149.942	1	30.20	0.58	0.7952	0.19	0.24	Snell.'yx'= 50
1J	-101.658	1	30.20	0.58	0.7952	0.13	0.16	Snell.'yx'= 50
2	-226.700	1	30.20	0.58	0.7952	0.29	0.36	Snell.'yx'= 50
7	-128.600	1	30.20	0.58	0.7952	0.16	0.20	Snell.'yx'= 50
8	-117.000	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
9	-141.900	1	30.20	0.58	0.7952	0.18	0.23	Snell.'yx'= 50
10	-142.200	1	30.20	0.58	0.7952	0.18	0.23	Snell.'yx'= 50
11	-205.700	1	30.20	0.58	0.7952	0.26	0.33	Snell.'yx'= 50
12	-198.800	1	30.20	0.58	0.7952	0.25	0.32	Snell.'yx'= 50
13	-213.700	1	30.20	0.58	0.7952	0.27	0.34	Snell.'yx'= 50
14	-213.900	1	30.20	0.58	0.7952	0.27	0.34	Snell.'yx'= 50

ASTA NUM. 15 NI 80 NF 74 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	15.862	--	30.20	--	0.7952	0.02	--	
1B	127.998	--	30.20	--	0.7952	0.16	--	
1I	52.447	--	30.20	--	0.7952	0.07	--	
1J	91.413	--	30.20	--	0.7952	0.12	--	
2	129.200	--	30.20	--	0.7952	0.16	--	
7	74.650	--	30.20	--	0.7952	0.09	--	
8	65.200	--	30.20	--	0.7952	0.08	--	
9	80.730	--	30.20	--	0.7952	0.10	--	
10	80.880	--	30.20	--	0.7952	0.10	--	
11	117.900	--	30.20	--	0.7952	0.15	--	
12	112.300	--	30.20	--	0.7952	0.14	--	
13	121.600	--	30.20	--	0.7952	0.15	--	
14	121.700	--	30.20	--	0.7952	0.15	--	

ASTA NUM. 16 NI 74 NF 82 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-61.313	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	52.563	--	30.20	--	0.7885	0.07	--	
1I	-22.480	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	13.730	--	30.20	--	0.7885	0.02	--	
2	-7.998	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
7	-6.567	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	2.709	--	30.20	--	0.7885	0.00	--	
9	-4.948	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-4.972	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
11	-8.526	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
12	-2.960	1	30.20	0.59	0.7885	0.00	0.00	Snell.'yx'= 51
13	-7.554	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
14	-7.569	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51

ASTA NUM. 17 NI 82 NF 73 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-66.336	1	30.20	0.59	0.7885	0.08	0.11	Snell.'yx'= 51
1B	44.876	--	30.20	--	0.7885	0.06	--	
1I	-27.765	1	30.20	0.59	0.7885	0.04	0.04	Snell.'yx'= 51
1J	6.305	--	30.20	--	0.7885	0.01	--	
2	-19.520	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
7	-8.235	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-17.450	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
9	-12.180	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
10	-12.200	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
11	-16.090	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
12	-21.620	1	30.20	0.59	0.7885	0.03	0.03	Snell.'yx'= 51
13	-18.460	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
14	-18.470	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51

ASTA NUM. 18 NI 73 NF 77 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	14.464	--	30.20	--	0.7885	0.02	--	
1B	124.856	--	30.20	--	0.7885	0.16	--	
1I	51.717	--	30.20	--	0.7885	0.07	--	
1J	87.603	--	30.20	--	0.7885	0.11	--	
2	125.200	--	30.20	--	0.7885	0.16	--	
7	67.750	--	30.20	--	0.7885	0.09	--	
8	76.940	--	30.20	--	0.7885	0.10	--	
9	78.090	--	30.20	--	0.7885	0.10	--	
10	78.240	--	30.20	--	0.7885	0.10	--	

11	111.600	--	30.20	--	0.7885	0.14	--
12	117.100	--	30.20	--	0.7885	0.15	--
13	117.800	--	30.20	--	0.7885	0.15	--
14	117.800	--	30.20	--	0.7885	0.15	--

ASTA NUM. 19 NI 77 NF 75 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-192.320	1	30.20	0.58	0.7952	0.24	0.31	Snell.'yx'= 50
1B	-60.880	1	30.20	0.58	0.7952	0.08	0.10	Snell.'yx'= 50
1I	-148.926	1	30.20	0.58	0.7952	0.19	0.24	Snell.'yx'= 50
1J	-104.274	1	30.20	0.58	0.7952	0.13	0.17	Snell.'yx'= 50
2	-228.200	1	30.20	0.58	0.7952	0.29	0.36	Snell.'yx'= 50
7	-123.600	1	30.20	0.58	0.7952	0.16	0.20	Snell.'yx'= 50
8	-135.200	1	30.20	0.58	0.7952	0.17	0.21	Snell.'yx'= 50
9	-142.800	1	30.20	0.58	0.7952	0.18	0.23	Snell.'yx'= 50
10	-143.100	1	30.20	0.58	0.7952	0.18	0.23	Snell.'yx'= 50
11	-203.600	1	30.20	0.58	0.7952	0.26	0.32	Snell.'yx'= 50
12	-210.600	1	30.20	0.58	0.7952	0.27	0.33	Snell.'yx'= 50
13	-215.100	1	30.20	0.58	0.7952	0.27	0.34	Snell.'yx'= 50
14	-215.300	1	30.20	0.58	0.7952	0.27	0.34	Snell.'yx'= 50

ASTA NUM. 20 NI 75 NF 85 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	132.793	--	30.20	--	0.7952	0.17	--	
1B	240.807	--	30.20	--	0.7952	0.30	--	
1I	166.996	--	30.20	--	0.7952	0.21	--	
1J	206.604	--	30.20	--	0.7952	0.26	--	
2	336.300	--	30.20	--	0.7952	0.43	--	
7	184.500	--	30.20	--	0.7952	0.23	--	
8	194.100	--	30.20	--	0.7952	0.25	--	
9	210.500	--	30.20	--	0.7952	0.27	--	
10	210.900	--	30.20	--	0.7952	0.27	--	
11	301.300	--	30.20	--	0.7952	0.38	--	
12	307.000	--	30.20	--	0.7952	0.39	--	
13	316.900	--	30.20	--	0.7952	0.40	--	
14	317.100	--	30.20	--	0.7952	0.40	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 13 a 20 Lung. tot. 966.4 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **6** Descrizione: **CAPRIATA 6**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 21 NI 101 NF 98 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-273.846	2	38.40	0.41	0.8911	0.27	0.31	Snell.'yx'= 35
1B	153.406	--	38.40	--	0.8911	0.15	--	
1I	-130.149	2	38.40	0.41	0.8911	0.13	0.15	Snell.'yx'= 35
1J	9.709	--	38.40	--	0.8911	0.01	--	
2	-107.500	2	38.40	0.41	0.8911	0.11	0.12	Snell.'yx'= 35
7	-67.500	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
8	-30.260	2	38.40	0.41	0.8911	0.03	0.03	Snell.'yx'= 35
9	-72.500	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
10	-72.420	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
11	-101.000	2	38.40	0.41	0.8911	0.10	0.11	Snell.'yx'= 35
12	-78.680	2	38.40	0.41	0.8911	0.08	0.09	Snell.'yx'= 35
13	-104.000	2	38.40	0.41	0.8911	0.10	0.12	Snell.'yx'= 35
14	-104.000	2	38.40	0.41	0.8911	0.10	0.12	Snell.'yx'= 35

ASTA NUM. 22 NI 98 NF 89 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.270	--	38.40	--	0.8911	0.00	--	
1B	197.810	--	38.40	--	0.8911	0.20	--	
1I	69.014	--	38.40	--	0.8911	0.07	--	
1J	129.066	--	38.40	--	0.8911	0.13	--	
2	176.800	--	38.40	--	0.8911	0.18	--	
7	98.730	--	38.40	--	0.8911	0.10	--	
8	114.600	--	38.40	--	0.8911	0.11	--	
9	107.300	--	38.40	--	0.8911	0.11	--	
10	107.200	--	38.40	--	0.8911	0.11	--	
11	158.700	--	38.40	--	0.8911	0.16	--	
12	168.300	--	38.40	--	0.8911	0.17	--	
13	163.900	--	38.40	--	0.8911	0.16	--	
14	163.800	--	38.40	--	0.8911	0.16	--	

ASTA NUM. 23 NI 89 NF 88 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	139.330	--	38.40	--	0.8911	0.14	--	
1B	142.270	--	38.40	--	0.8911	0.14	--	
1I	136.705	--	38.40	--	0.8911	0.14	--	
1J	144.895	--	38.40	--	0.8911	0.14	--	
2	251.400	--	38.40	--	0.8911	0.25	--	
7	145.600	--	38.40	--	0.8911	0.14	--	
8	143.300	--	38.40	--	0.8911	0.14	--	
9	154.100	--	38.40	--	0.8911	0.15	--	
10	153.900	--	38.40	--	0.8911	0.15	--	
11	228.900	--	38.40	--	0.8911	0.23	--	
12	227.600	--	38.40	--	0.8911	0.23	--	
13	234.000	--	38.40	--	0.8911	0.23	--	
14	233.900	--	38.40	--	0.8911	0.23	--	

ASTA NUM. 24 NI 88 NF 90 Lungh. 215.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.722	--	38.40	--	0.8911	0.00	--	
1B	197.538	--	38.40	--	0.8911	0.20	--	
1I	65.093	--	38.40	--	0.8911	0.06	--	
1J	133.167	--	38.40	--	0.8911	0.13	--	
2	176.900	--	38.40	--	0.8911	0.18	--	
7	107.400	--	38.40	--	0.8911	0.11	--	
8	87.730	--	38.40	--	0.8911	0.09	--	
9	107.400	--	38.40	--	0.8911	0.11	--	

10	107.300	--	38.40	--	0.8911	0.11	--
11	164.100	--	38.40	--	0.8911	0.16	--
12	152.300	--	38.40	--	0.8911	0.15	--
13	164.100	--	38.40	--	0.8911	0.16	--
14	164.000	--	38.40	--	0.8911	0.16	--

ASTA NUM. 25 NI 90 NF 102 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-268.608	2	38.40	0.41	0.8911	0.27	0.30	Snell.'yx'= 35
1B	147.628	--	38.40	--	0.8911	0.15	--	
1I	-125.710	2	38.40	0.41	0.8911	0.12	0.14	Snell.'yx'= 35
1J	4.730	--	38.40	--	0.8911	0.00	--	
2	-107.900	2	38.40	0.41	0.8911	0.11	0.12	Snell.'yx'= 35
7	-48.920	2	38.40	0.41	0.8911	0.05	0.05	Snell.'yx'= 35
8	-89.320	2	38.40	0.41	0.8911	0.09	0.10	Snell.'yx'= 35
9	-72.910	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
10	-72.830	2	38.40	0.41	0.8911	0.07	0.08	Snell.'yx'= 35
11	-90.110	2	38.40	0.41	0.8911	0.09	0.10	Snell.'yx'= 35
12	-114.300	2	38.40	0.41	0.8911	0.11	0.13	Snell.'yx'= 35
13	-104.500	2	38.40	0.41	0.8911	0.10	0.12	Snell.'yx'= 35
14	-104.500	2	38.40	0.41	0.8911	0.10	0.12	Snell.'yx'= 35

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **6** Descrizione: **CAPRIATA 6**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 90 NF 91 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-14.908	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1B	-3.650	2	16.82	0.27	0.9650	0.01	0.01	Snell.'zx'= 23
1I	-11.235	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
1J	-7.323	2	16.82	0.27	0.9650	0.01	0.02	Snell.'zx'= 23
2	-16.770	2	16.82	0.27	0.9650	0.03	0.04	Snell.'zx'= 23
7	-9.478	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
8	-8.455	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
9	-10.430	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
10	-10.360	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
11	-15.210	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
12	-14.600	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
13	-15.790	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
14	-15.740	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23

ASTA NUM. 2 NI 88 NF 93 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-15.442	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1B	-12.998	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1I	-15.014	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1J	-13.426	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
2	-25.670	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
7	-14.300	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
8	-14.130	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
9	-15.850	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
10	-15.840	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
11	-23.160	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
12	-23.060	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
13	-24.090	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
14	-24.080	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25

ASTA NUM. 3 NI 89 NF 94 Lungh. 57.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-16.546	2	16.82	0.29	0.9520	0.03	0.04	Snell.'zx'= 25
1B	-13.754	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1I	-15.924	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
1J	-14.376	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
2	-27.330	2	16.82	0.29	0.9520	0.06	0.06	Snell.'zx'= 25
7	-15.150	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
8	-15.280	2	16.82	0.29	0.9520	0.03	0.03	Snell.'zx'= 25
9	-16.950	2	16.82	0.29	0.9520	0.03	0.04	Snell.'zx'= 25
10	-16.940	2	16.82	0.29	0.9520	0.03	0.04	Snell.'zx'= 25
11	-24.600	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
12	-24.680	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
13	-25.680	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25
14	-25.680	2	16.82	0.29	0.9520	0.05	0.05	Snell.'zx'= 25

ASTA NUM. 4 NI 98 NF 96 Lungh. 52.5 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-14.943	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
1B	-3.687	2	16.82	0.27	0.9650	0.01	0.01	Snell.'zx'= 23
1I	-11.052	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
1J	-7.578	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23

2	-16.830	2	16.82	0.27	0.9650	0.03	0.04	Snell.'zx'= 23
7	-9.025	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
8	-10.030	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
9	-10.480	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
10	-10.410	2	16.82	0.27	0.9650	0.02	0.02	Snell.'zx'= 23
11	-14.980	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
12	-15.580	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
13	-15.850	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23
14	-15.810	2	16.82	0.27	0.9650	0.03	0.03	Snell.'zx'= 23

ASTA NUM. 5 NI 99 NF 96 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.021	--	38.40	--	0.0000	0.00	--	
1B	0.033	--	38.40	--	0.0000	0.00	--	
1I	0.025	--	38.40	--	0.0000	0.00	--	
1J	0.029	--	38.40	--	0.0000	0.00	--	
2	0.050	--	38.40	--	0.0000	0.00	--	
7	0.027	--	38.40	--	0.0000	0.00	--	
8	0.027	--	38.40	--	0.0000	0.00	--	
9	0.029	--	38.40	--	0.0000	0.00	--	
10	0.029	--	38.40	--	0.0000	0.00	--	
11	0.045	--	38.40	--	0.0000	0.00	--	
12	0.045	--	38.40	--	0.0000	0.00	--	
13	0.047	--	38.40	--	0.0000	0.00	--	
14	0.047	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 6 NI 96 NF 95 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.020	--	38.40	--	0.0000	0.00	--	
1B	0.028	--	38.40	--	0.0000	0.00	--	
1I	0.022	--	38.40	--	0.0000	0.00	--	
1J	0.026	--	38.40	--	0.0000	0.00	--	
2	0.045	--	38.40	--	0.0000	0.00	--	
7	0.023	--	38.40	--	0.0000	0.00	--	
8	0.024	--	38.40	--	0.0000	0.00	--	
9	0.026	--	38.40	--	0.0000	0.00	--	
10	0.026	--	38.40	--	0.0000	0.00	--	
11	0.040	--	38.40	--	0.0000	0.00	--	
12	0.040	--	38.40	--	0.0000	0.00	--	
13	0.041	--	38.40	--	0.0000	0.00	--	
14	0.041	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 7 NI 95 NF 94 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.005	--	38.40	--	0.0000	0.00	--	
1B	0.017	--	38.40	--	0.0000	0.00	--	
1I	0.008	--	38.40	--	0.0000	0.00	--	
1J	0.013	--	38.40	--	0.0000	0.00	--	
2	0.021	--	38.40	--	0.0000	0.00	--	
7	0.010	--	38.40	--	0.0000	0.00	--	
8	0.009	--	38.40	--	0.0000	0.00	--	
9	0.011	--	38.40	--	0.0000	0.00	--	
10	0.011	--	38.40	--	0.0000	0.00	--	
11	0.018	--	38.40	--	0.0000	0.00	--	
12	0.018	--	38.40	--	0.0000	0.00	--	
13	0.019	--	38.40	--	0.0000	0.00	--	
14	0.019	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 8 NI 94 NF 97 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.000	--	38.40	--	0.0000	0.00	--	
1B	0.013	--	38.40	--	0.0000	0.00	--	
1I	0.004	--	38.40	--	0.0000	0.00	--	
1J	0.009	--	38.40	--	0.0000	0.00	--	
2	0.013	--	38.40	--	0.0000	0.00	--	
7	0.006	--	38.40	--	0.0000	0.00	--	
8	0.005	--	38.40	--	0.0000	0.00	--	
9	0.006	--	38.40	--	0.0000	0.00	--	
10	0.006	--	38.40	--	0.0000	0.00	--	
11	0.012	--	38.40	--	0.0000	0.00	--	
12	0.011	--	38.40	--	0.0000	0.00	--	
13	0.012	--	38.40	--	0.0000	0.00	--	
14	0.012	--	38.40	--	0.0000	0.00	--	

ASTA NUM. 9 NI 97 NF 93 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-173.181	2	38.40	0.41	0.8910	0.17	0.19	Snell.'yx'= 35

1B	-92.819	2	38.40	0.41	0.8910	0.09	0.10	Snell.'yx'= 35
1I	-149.335	2	38.40	0.41	0.8910	0.15	0.17	Snell.'yx'= 35
1J	-116.665	2	38.40	0.41	0.8910	0.12	0.13	Snell.'yx'= 35
2	-237.200	2	38.40	0.41	0.8910	0.24	0.26	Snell.'yx'= 35
7	-132.700	2	38.40	0.41	0.8910	0.13	0.15	Snell.'yx'= 35
8	-127.600	2	38.40	0.41	0.8910	0.13	0.14	Snell.'yx'= 35
9	-156.500	2	38.40	0.41	0.8910	0.16	0.17	Snell.'yx'= 35
10	-156.600	2	38.40	0.41	0.8910	0.16	0.17	Snell.'yx'= 35
11	-213.100	2	38.40	0.41	0.8910	0.21	0.24	Snell.'yx'= 35
12	-210.000	2	38.40	0.41	0.8910	0.21	0.23	Snell.'yx'= 35
13	-227.300	2	38.40	0.41	0.8910	0.23	0.25	Snell.'yx'= 35
14	-227.400	2	38.40	0.41	0.8910	0.23	0.25	Snell.'yx'= 35

ASTA NUM. 10 NI 93 NF 92 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 11 NI 92 NF 91 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

ASTA NUM. 12 NI 91 NF 100 Lungh. 107.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.004	--	38.40	--	0.8910	0.00	--	
1B	0.004	--	38.40	--	0.8910	0.00	--	
1I	0.004	--	38.40	--	0.8910	0.00	--	
1J	0.004	--	38.40	--	0.8910	0.00	--	
2	0.005	--	38.40	--	0.8910	0.00	--	
7	0.005	--	38.40	--	0.8910	0.00	--	
8	0.005	--	38.40	--	0.8910	0.00	--	
9	0.005	--	38.40	--	0.8910	0.00	--	
10	0.005	--	38.40	--	0.8910	0.00	--	
11	0.005	--	38.40	--	0.8910	0.00	--	
12	0.005	--	38.40	--	0.8910	0.00	--	
13	0.005	--	38.40	--	0.8910	0.00	--	
14	0.005	--	38.40	--	0.8910	0.00	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 5 a 12 Lung. tot. 860.2 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

ASTA NUM. 13 NI 99 NF 98 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	43.920	--	30.20	--	0.0000	0.06	--	
1B	160.280	--	30.20	--	0.0000	0.20	--	
1I	81.310	--	30.20	--	0.0000	0.10	--	
1J	122.890	--	30.20	--	0.0000	0.16	--	
2	181.900	--	30.20	--	0.0000	0.23	--	
7	106.000	--	30.20	--	0.0000	0.13	--	
8	95.050	--	30.20	--	0.0000	0.12	--	
9	115.300	--	30.20	--	0.0000	0.15	--	
10	115.200	--	30.20	--	0.0000	0.15	--	
11	165.900	--	30.20	--	0.0000	0.21	--	
12	159.300	--	30.20	--	0.0000	0.20	--	
13	171.500	--	30.20	--	0.0000	0.22	--	

14	171.400	--	30.20	--	0.0000	0.22	--

ASTA NUM. 14 NI 98 NF 95 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-138.888	1	30.20	0.58	0.7952	0.18	0.22	Snell.'yx'= 50
1B	-5.332	1	30.20	0.58	0.7952	0.01	0.01	Snell.'yx'= 50
1I	-95.322	1	30.20	0.58	0.7952	0.12	0.15	Snell.'yx'= 50
1J	-48.898	1	30.20	0.58	0.7952	0.06	0.08	Snell.'yx'= 50
2	-128.900	1	30.20	0.58	0.7952	0.16	0.20	Snell.'yx'= 50
7	-75.820	1	30.20	0.58	0.7952	0.10	0.12	Snell.'yx'= 50
8	-63.440	1	30.20	0.58	0.7952	0.08	0.10	Snell.'yx'= 50
9	-81.330	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
10	-81.320	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
11	-118.200	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
12	-110.700	1	30.20	0.58	0.7952	0.14	0.18	Snell.'yx'= 50
13	-121.500	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
14	-121.500	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50

ASTA NUM. 15 NI 95 NF 89 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-14.048	1	30.20	0.58	0.7952	0.02	0.02	Snell.'yx'= 50
1B	97.647	--	30.20	--	0.7952	0.12	--	
1I	22.657	--	30.20	--	0.7952	0.03	--	
1J	60.943	--	30.20	--	0.7952	0.08	--	
2	74.450	--	30.20	--	0.7952	0.09	--	
7	45.040	--	30.20	--	0.7952	0.06	--	
8	34.730	--	30.20	--	0.7952	0.04	--	
9	46.930	--	30.20	--	0.7952	0.06	--	
10	46.910	--	30.20	--	0.7952	0.06	--	
11	68.870	--	30.20	--	0.7952	0.09	--	
12	62.680	--	30.20	--	0.7952	0.08	--	
13	70.000	--	30.20	--	0.7952	0.09	--	
14	69.980	--	30.20	--	0.7952	0.09	--	

ASTA NUM. 16 NI 89 NF 97 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-59.964	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	50.460	--	30.20	--	0.7885	0.06	--	
1I	-22.778	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	13.274	--	30.20	--	0.7885	0.02	--	
2	-8.642	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
7	-7.203	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	2.799	--	30.20	--	0.7885	0.00	--	
9	-5.161	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-5.149	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
11	-9.258	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
12	-3.257	1	30.20	0.59	0.7885	0.00	0.01	Snell.'yx'= 51
13	-8.033	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
14	-8.025	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51

ASTA NUM. 17 NI 97 NF 88 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-60.550	1	30.20	0.59	0.7885	0.08	0.10	Snell.'yx'= 51
1B	47.118	--	30.20	--	0.7885	0.06	--	
1I	-23.788	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	10.356	--	30.20	--	0.7885	0.01	--	
2	-12.200	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
7	-4.327	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-14.020	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
9	-7.484	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-7.475	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
11	-9.556	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
12	-15.370	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
13	-11.450	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
14	-11.440	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51

ASTA NUM. 18 NI 88 NF 92 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-14.112	1	30.20	0.58	0.7952	0.02	0.02	Snell.'yx'= 50
1B	94.932	--	30.20	--	0.7952	0.12	--	
1I	23.866	--	30.20	--	0.7952	0.03	--	
1J	56.954	--	30.20	--	0.7952	0.07	--	
2	72.010	--	30.20	--	0.7952	0.09	--	
7	38.730	--	30.20	--	0.7952	0.05	--	
8	48.610	--	30.20	--	0.7952	0.06	--	
9	45.310	--	30.20	--	0.7952	0.06	--	
10	45.280	--	30.20	--	0.7952	0.06	--	

11	63.730	--	30.20	--	0.7952	0.08	--
12	69.660	--	30.20	--	0.7952	0.09	--
13	67.680	--	30.20	--	0.7952	0.09	--
14	67.660	--	30.20	--	0.7952	0.09	--

ASTA NUM. 19 NI 92 NF 90 Lungh. 120.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-136.513	1	30.20	0.58	0.7952	0.17	0.22	Snell.'yx'= 50
1B	-7.667	1	30.20	0.58	0.7952	0.01	0.01	Snell.'yx'= 50
1I	-92.093	1	30.20	0.58	0.7952	0.12	0.15	Snell.'yx'= 50
1J	-52.087	1	30.20	0.58	0.7952	0.07	0.08	Snell.'yx'= 50
2	-128.900	1	30.20	0.58	0.7952	0.16	0.20	Snell.'yx'= 50
7	-69.830	1	30.20	0.58	0.7952	0.09	0.11	Snell.'yx'= 50
8	-81.890	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
9	-81.320	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
10	-81.300	1	30.20	0.58	0.7952	0.10	0.13	Snell.'yx'= 50
11	-114.600	1	30.20	0.58	0.7952	0.14	0.18	Snell.'yx'= 50
12	-121.800	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
13	-121.500	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50
14	-121.500	1	30.20	0.58	0.7952	0.15	0.19	Snell.'yx'= 50

ASTA NUM. 20 NI 90 NF 100 Lungh. 118.6 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	46.176	--	30.20	--	0.7952	0.06	--	
1B	158.224	--	30.20	--	0.7952	0.20	--	
1I	84.017	--	30.20	--	0.7952	0.11	--	
1J	120.383	--	30.20	--	0.7952	0.15	--	
2	182.200	--	30.20	--	0.7952	0.23	--	
7	100.800	--	30.20	--	0.7952	0.13	--	
8	111.300	--	30.20	--	0.7952	0.14	--	
9	115.500	--	30.20	--	0.7952	0.15	--	
10	115.300	--	30.20	--	0.7952	0.15	--	
11	163.000	--	30.20	--	0.7952	0.21	--	
12	169.300	--	30.20	--	0.7952	0.21	--	
13	171.800	--	30.20	--	0.7952	0.22	--	
14	171.700	--	30.20	--	0.7952	0.22	--	

VERIFICA DI STABILITA' PER PIU' CAMPI CONSECUTIVI, aste da 13 a 20 Lung. tot. 966.4 cm

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **9** Descrizione: **CAPRIATA 7**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice_____**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 116 NF 121 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-4.850	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-4.836	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-4.848	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-4.838	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-8.798	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
7	-4.677	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-4.676	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-5.549	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-5.361	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-7.827	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
12	-7.827	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
13	-8.351	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
14	-8.238	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22

ASTA NUM. 2 NI 101 NF 116 Lungh. 225.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	11.968	--	38.40	--	0.9715	0.01	--	
1B	12.192	--	38.40	--	0.9715	0.01	--	
1I	11.959	--	38.40	--	0.9715	0.01	--	
1J	12.201	--	38.40	--	0.9715	0.01	--	
2	21.340	--	38.40	--	0.9715	0.02	--	
7	2.613	--	38.40	--	0.9715	0.00	--	
8	2.592	--	38.40	--	0.9715	0.00	--	
9	21.830	--	38.40	--	0.9715	0.02	--	
10	9.465	--	38.40	--	0.9715	0.01	--	
11	13.490	--	38.40	--	0.9715	0.01	--	
12	13.480	--	38.40	--	0.9715	0.01	--	
13	25.020	--	38.40	--	0.9715	0.02	--	
14	17.600	--	38.40	--	0.9715	0.02	--	

ASTA NUM. 3 NI 116 NF 86 Lungh. 225.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	5.659	--	38.40	--	0.9715	0.01	--	
1B	7.319	--	38.40	--	0.9715	0.01	--	
1I	5.025	--	38.40	--	0.9715	0.00	--	
1J	7.953	--	38.40	--	0.9715	0.01	--	
2	11.560	--	38.40	--	0.9715	0.01	--	
7	2.716	--	38.40	--	0.9715	0.00	--	
8	2.916	--	38.40	--	0.9715	0.00	--	
9	12.830	--	38.40	--	0.9715	0.01	--	
10	3.360	--	38.40	--	0.9715	0.00	--	
11	8.124	--	38.40	--	0.9715	0.01	--	
12	8.244	--	38.40	--	0.9715	0.01	--	
13	14.190	--	38.40	--	0.9715	0.01	--	
14	8.510	--	38.40	--	0.9715	0.01	--	

ASTA NUM. 4 NI 86 NF 115 Lungh. 186.7 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	2.172	--	38.40	--	0.9715	0.00	--	
1B	5.256	--	38.40	--	0.9715	0.01	--	
1I	2.600	--	38.40	--	0.9715	0.00	--	
1J	4.828	--	38.40	--	0.9715	0.00	--	
2	6.426	--	38.40	--	0.9715	0.01	--	
7	3.433	--	38.40	--	0.9715	0.00	--	
8	3.177	--	38.40	--	0.9715	0.00	--	

9	3.697	--	38.40	--	0.9715	0.00	--
10	5.104	--	38.40	--	0.9715	0.01	--
11	5.589	--	38.40	--	0.9715	0.01	--
12	5.435	--	38.40	--	0.9715	0.01	--
13	5.747	--	38.40	--	0.9715	0.01	--
14	6.591	--	38.40	--	0.9715	0.01	--

ASTA NUM. 5 NI 115 NF 71 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.813	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-1.297	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-3.881	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-1.229	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.614	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
7	-2.620	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.699	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-0.964	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-4.824	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
11	-4.193	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
12	-4.240	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-3.199	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
14	-5.515	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31

ASTA NUM. 6 NI 71 NF 112 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-11.366	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
1B	-6.652	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
1I	-11.910	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
1J	-6.108	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
2	-15.690	2	38.40	0.36	0.9196	0.02	0.02	Snell.'yx'= 31
7	-9.229	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
8	-9.188	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
9	-14.550	2	38.40	0.36	0.9196	0.01	0.02	Snell.'yx'= 31
10	-6.159	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
11	-14.200	2	38.40	0.36	0.9196	0.01	0.02	Snell.'yx'= 31
12	-14.180	2	38.40	0.36	0.9196	0.01	0.02	Snell.'yx'= 31
13	-17.390	2	38.40	0.36	0.9196	0.02	0.02	Snell.'yx'= 31
14	-12.360	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31

ASTA NUM. 7 NI 112 NF 56 Lungh. 186.7 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.812	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
1B	-1.902	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
1I	-4.093	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
1J	-1.621	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
2	-4.979	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
7	-3.079	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
8	-2.868	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
9	-1.476	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
10	-5.073	2	38.40	0.71	0.7154	0.01	0.01	Snell.'yx'= 61
11	-4.597	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
12	-4.471	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
13	-3.636	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
14	-5.794	2	38.40	0.71	0.7154	0.01	0.01	Snell.'yx'= 61

ASTA NUM. 8 NI 56 NF 104 Lungh. 200.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	4.004	--	38.40	--	0.7154	0.00	--	
1B	6.406	--	38.40	--	0.7154	0.01	--	
1I	4.679	--	38.40	--	0.7154	0.00	--	
1J	5.731	--	38.40	--	0.7154	0.01	--	
2	8.978	--	38.40	--	0.7154	0.01	--	
7	5.292	--	38.40	--	0.7154	0.01	--	
8	5.072	--	38.40	--	0.7154	0.01	--	
9	5.464	--	38.40	--	0.7154	0.01	--	
10	6.641	--	38.40	--	0.7154	0.01	--	
11	8.093	--	38.40	--	0.7154	0.01	--	
12	7.961	--	38.40	--	0.7154	0.01	--	
13	8.196	--	38.40	--	0.7154	0.01	--	
14	8.903	--	38.40	--	0.7154	0.01	--	

ASTA NUM. 9 NI 104 NF 33 Lungh. 100.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-2.029	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1B	0.913	--	38.40	--	0.9063	0.00	--	
1I	-2.366	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1J	1.250	--	38.40	--	0.9063	0.00	--	

2	-0.941	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
7	-1.300	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
8	-1.313	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
9	1.541	--	38.40	--	0.9063	0.00	--	
10	-2.572	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
11	-1.285	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
12	-1.293	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
13	0.419	--	38.40	--	0.9063	0.00	--	
14	-2.049	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33

ASTA NUM. 10 NI 33 NF 105 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-11.864	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1B	-7.432	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1I	-12.353	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1J	-6.943	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
2	-16.740	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
7	-10.670	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
8	-10.610	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
9	-15.300	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
10	-6.597	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
11	-15.620	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
12	-15.580	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
13	-18.400	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
14	-13.170	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37

ASTA NUM. 11 NI 105 NF 103 Lungh. 225.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	16.849	--	38.40	--	0.8808	0.02	--	
1B	17.971	--	38.40	--	0.8808	0.02	--	
1I	16.593	--	38.40	--	0.8808	0.02	--	
1J	18.227	--	38.40	--	0.8808	0.02	--	
2	30.730	--	38.40	--	0.8808	0.03	--	
7	11.160	--	38.40	--	0.8808	0.01	--	
8	11.150	--	38.40	--	0.8808	0.01	--	
9	15.560	--	38.40	--	0.8808	0.02	--	
10	26.720	--	38.40	--	0.8808	0.03	--	
11	23.850	--	38.40	--	0.8808	0.02	--	
12	23.840	--	38.40	--	0.8808	0.02	--	
13	26.490	--	38.40	--	0.8808	0.03	--	
14	33.190	--	38.40	--	0.8808	0.03	--	

ASTA NUM. 12 NI 103 NF 24 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-1.170	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1B	-0.706	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1I	-1.691	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1J	-0.185	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
2	-1.586	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
7	-14.100	2	38.40	0.43	0.8808	0.01	0.02	Snell.'yx'= 37
8	-14.050	2	38.40	0.43	0.8808	0.01	0.02	Snell.'yx'= 37
9	-5.722	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
10	8.601	--	38.40	--	0.8808	0.01	--	
11	-9.318	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
12	-9.288	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
13	-4.288	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
14	4.306	--	38.40	--	0.8808	0.00	--	

ASTA NUM. 13 NI 101 NF 122 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-15.825	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
1B	-14.835	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
1I	-16.121	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
1J	-14.539	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
2	-26.980	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
7	-19.500	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
8	-19.510	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
9	-15.550	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
10	-17.970	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
11	-26.720	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
12	-26.730	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
13	-24.350	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
14	-25.800	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51

ASTA NUM. 14 NI 122 NF 116 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	3.947	--	30.20	--	0.7885	0.00	--	

1B	4.823	--	30.20	--	0.7885	0.01	--
1I	3.550	--	30.20	--	0.7885	0.00	--
1J	5.220	--	30.20	--	0.7885	0.01	--
2	7.438	--	30.20	--	0.7885	0.01	--
7	7.635	--	30.20	--	0.7885	0.01	--
8	7.755	--	30.20	--	0.7885	0.01	--
9	3.881	--	30.20	--	0.7885	0.00	--
10	5.144	--	30.20	--	0.7885	0.01	--
11	8.599	--	30.20	--	0.7885	0.01	--
12	8.670	--	30.20	--	0.7885	0.01	--
13	6.346	--	30.20	--	0.7885	0.01	--
14	7.104	--	30.20	--	0.7885	0.01	--

ASTA NUM. 15 NI 116 NF 120 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	9.930	--	30.20	--	0.7885	0.01	--	
1B	10.730	--	30.20	--	0.7885	0.01	--	
1I	9.517	--	30.20	--	0.7885	0.01	--	
1J	11.143	--	30.20	--	0.7885	0.01	--	
2	17.900	--	30.20	--	0.7885	0.02	--	
7	7.393	--	30.20	--	0.7885	0.01	--	
8	7.273	--	30.20	--	0.7885	0.01	--	
9	13.480	--	30.20	--	0.7885	0.02	--	
10	11.620	--	30.20	--	0.7885	0.01	--	
11	14.280	--	30.20	--	0.7885	0.02	--	
12	14.210	--	30.20	--	0.7885	0.02	--	
13	17.930	--	30.20	--	0.7885	0.02	--	
14	16.810	--	30.20	--	0.7885	0.02	--	

ASTA NUM. 16 NI 120 NF 86 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-22.168	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1B	-20.212	1	30.20	0.59	0.7885	0.03	0.03	Snell.'yx'= 51
1I	-22.233	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	-20.147	1	30.20	0.59	0.7885	0.03	0.03	Snell.'yx'= 51
2	-37.300	1	30.20	0.59	0.7885	0.05	0.06	Snell.'yx'= 51
7	-18.820	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
8	-18.600	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
9	-25.350	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
10	-24.210	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
11	-32.060	1	30.20	0.59	0.7885	0.04	0.05	Snell.'yx'= 51
12	-31.930	1	30.20	0.59	0.7885	0.04	0.05	Snell.'yx'= 51
13	-35.980	1	30.20	0.59	0.7885	0.05	0.06	Snell.'yx'= 51
14	-35.290	1	30.20	0.59	0.7885	0.04	0.06	Snell.'yx'= 51

ASTA NUM. 17 NI 86 NF 118 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-9.970	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
1B	-7.016	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
1I	-9.784	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
1J	-7.202	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
2	-14.840	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
7	-9.027	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
8	-8.918	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
9	-11.150	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
10	-8.224	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
11	-13.630	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
12	-13.570	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
13	-14.910	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
14	-13.150	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44

ASTA NUM. 18 NI 118 NF 115 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.213	--	30.20	--	0.8365	0.00	--	
1B	1.107	--	30.20	--	0.8365	0.00	--	
1I	-0.362	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
1J	1.682	--	30.20	--	0.8365	0.00	--	
2	0.900	--	30.20	--	0.8365	0.00	--	
7	1.043	--	30.20	--	0.8365	0.00	--	
8	1.082	--	30.20	--	0.8365	0.00	--	
9	2.260	--	30.20	--	0.8365	0.00	--	
10	-0.709	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
11	1.012	--	30.20	--	0.8365	0.00	--	
12	1.035	--	30.20	--	0.8365	0.00	--	
13	1.741	--	30.20	--	0.8365	0.00	--	
14	-0.040	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44

ASTA NUM. 19 NI 115 NF 69 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

1A	6.513	--	30.20	--	0.8365	0.01	--
1B	8.249	--	30.20	--	0.8365	0.01	--
1I	6.231	--	30.20	--	0.8365	0.01	--
1J	8.531	--	30.20	--	0.8365	0.01	--
2	12.830	--	30.20	--	0.8365	0.02	--
7	7.457	--	30.20	--	0.8365	0.01	--
8	7.299	--	30.20	--	0.8365	0.01	--
9	7.109	--	30.20	--	0.8365	0.01	--
10	10.030	--	30.20	--	0.8365	0.01	--
11	11.550	--	30.20	--	0.8365	0.01	--
12	11.450	--	30.20	--	0.8365	0.01	--
13	11.340	--	30.20	--	0.8365	0.01	--
14	13.090	--	30.20	--	0.8365	0.02	--

ASTA NUM. 20 NI 69 NF 112 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	5.979	--	30.20	--	0.8365	0.01	--	
1B	8.823	--	30.20	--	0.8365	0.01	--	
1I	5.250	--	30.20	--	0.8365	0.01	--	
1J	9.552	--	30.20	--	0.8365	0.01	--	
2	12.750	--	30.20	--	0.8365	0.02	--	
7	7.630	--	30.20	--	0.8365	0.01	--	
8	7.673	--	30.20	--	0.8365	0.01	--	
9	11.870	--	30.20	--	0.8365	0.02	--	
10	5.249	--	30.20	--	0.8365	0.01	--	
11	11.560	--	30.20	--	0.8365	0.01	--	
12	11.580	--	30.20	--	0.8365	0.01	--	
13	14.110	--	30.20	--	0.8365	0.02	--	
14	10.130	--	30.20	--	0.8365	0.01	--	

ASTA NUM. 21 NI 112 NF 113 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-0.251	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
1B	1.409	--	30.20	--	0.8365	0.00	--	
1I	-1.448	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
1J	2.607	--	30.20	--	0.8365	0.00	--	
2	0.887	--	30.20	--	0.8365	0.00	--	
7	0.805	--	30.20	--	0.8365	0.00	--	
8	0.656	--	30.20	--	0.8365	0.00	--	
9	-2.681	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
10	4.095	--	30.20	--	0.8365	0.01	--	
11	0.918	--	30.20	--	0.8365	0.00	--	
12	0.829	--	30.20	--	0.8365	0.00	--	
13	-1.173	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
14	2.892	--	30.20	--	0.8365	0.00	--	

ASTA NUM. 22 NI 113 NF 56 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-10.231	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
1B	-7.297	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
1I	-10.956	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
1J	-6.572	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
2	-15.420	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
7	-9.139	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
8	-8.820	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
9	-6.667	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
10	-13.390	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
11	-14.070	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
12	-13.880	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
13	-12.590	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
14	-16.620	1	30.20	0.51	0.8365	0.02	0.03	Snell.'yx'= 44

ASTA NUM. 23 NI 104 NF 30 Lungh. 111.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	7.053	--	30.20	--	0.8365	0.01	--	
1B	8.443	--	30.20	--	0.8365	0.01	--	
1I	6.728	--	30.20	--	0.8365	0.01	--	
1J	8.768	--	30.20	--	0.8365	0.01	--	
2	13.340	--	30.20	--	0.8365	0.02	--	
7	8.418	--	30.20	--	0.8365	0.01	--	
8	8.249	--	30.20	--	0.8365	0.01	--	
9	7.473	--	30.20	--	0.8365	0.01	--	
10	10.350	--	30.20	--	0.8365	0.01	--	
11	12.350	--	30.20	--	0.8365	0.02	--	
12	12.250	--	30.20	--	0.8365	0.02	--	
13	11.780	--	30.20	--	0.8365	0.01	--	
14	13.510	--	30.20	--	0.8365	0.02	--	

ASTA NUM. 24 NI 111 NF 104 Lungh. 111.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	1.076	--	30.20	--	0.8365	0.00	--	
1B	2.230	--	30.20	--	0.8365	0.00	--	
1I	0.616	--	30.20	--	0.8365	0.00	--	
1J	2.690	--	30.20	--	0.8365	0.00	--	
2	2.760	--	30.20	--	0.8365	0.00	--	
7	1.478	--	30.20	--	0.8365	0.00	--	
8	1.535	--	30.20	--	0.8365	0.00	--	
9	3.475	--	30.20	--	0.8365	0.00	--	
10	0.523	--	30.20	--	0.8365	0.00	--	
11	2.357	--	30.20	--	0.8365	0.00	--	
12	2.392	--	30.20	--	0.8365	0.00	--	
13	3.556	--	30.20	--	0.8365	0.00	--	
14	1.784	--	30.20	--	0.8365	0.00	--	

ASTA NUM. 25 NI 56 NF 111 Lungh. 111.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-11.607	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
1B	-8.473	1	30.20	0.54	0.8203	0.01	0.01	Snell.'yx'= 46
1I	-11.376	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
1J	-8.704	1	30.20	0.54	0.8203	0.01	0.01	Snell.'yx'= 46
2	-17.680	1	30.20	0.54	0.8203	0.02	0.03	Snell.'yx'= 46
7	-10.020	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
8	-9.932	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
9	-13.000	1	30.20	0.54	0.8203	0.02	0.02	Snell.'yx'= 46
10	-10.060	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
11	-15.860	1	30.20	0.54	0.8203	0.02	0.02	Snell.'yx'= 46
12	-15.810	1	30.20	0.54	0.8203	0.02	0.02	Snell.'yx'= 46
13	-17.650	1	30.20	0.54	0.8203	0.02	0.03	Snell.'yx'= 46
14	-15.890	1	30.20	0.54	0.8203	0.02	0.02	Snell.'yx'= 46

ASTA NUM. 26 NI 103 NF 25 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	15.470	--	30.20	--	0.8203	0.02	--	
1B	16.350	--	30.20	--	0.8203	0.02	--	
1I	15.046	--	30.20	--	0.8203	0.02	--	
1J	16.774	--	30.20	--	0.8203	0.02	--	
2	27.850	--	30.20	--	0.8203	0.04	--	
7	19.900	--	30.20	--	0.8203	0.03	--	
8	19.830	--	30.20	--	0.8203	0.03	--	
9	18.370	--	30.20	--	0.8203	0.02	--	
10	16.710	--	30.20	--	0.8203	0.02	--	
11	27.380	--	30.20	--	0.8203	0.03	--	
12	27.340	--	30.20	--	0.8203	0.03	--	
13	26.470	--	30.20	--	0.8203	0.03	--	
14	25.470	--	30.20	--	0.8203	0.03	--	

ASTA NUM. 27 NI 107 NF 103 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.862	1	30.20	0.59	0.7885	0.00	0.01	Snell.'yx'= 51
1B	-3.050	1	30.20	0.59	0.7885	0.00	0.00	Snell.'yx'= 51
1I	-4.271	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
1J	-2.641	1	30.20	0.59	0.7885	0.00	0.00	Snell.'yx'= 51
2	-6.326	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
7	-6.874	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-6.873	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
9	-4.077	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-2.314	1	30.20	0.59	0.7885	0.00	0.00	Snell.'yx'= 51
11	-7.755	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
12	-7.754	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
13	-6.076	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
14	-5.019	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51

ASTA NUM. 28 NI 105 NF 107 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-9.215	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
1B	-7.479	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
1I	-9.375	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
1J	-7.319	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
2	-14.790	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
7	-5.412	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-5.403	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
9	-9.539	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
10	-10.620	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
11	-11.530	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
12	-11.520	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
13	-14.000	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51

14	-14.650	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51

ASTA NUM. 29 NI 30 NF 105 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	19.777	--	30.20	--	0.7885	0.03	--	
1B	21.583	--	30.20	--	0.7885	0.03	--	
1I	19.694	--	30.20	--	0.7885	0.02	--	
1J	21.666	--	30.20	--	0.7885	0.03	--	
2	36.110	--	30.20	--	0.7885	0.05	--	
7	18.000	--	30.20	--	0.7885	0.02	--	
8	17.920	--	30.20	--	0.7885	0.02	--	
9	23.570	--	30.20	--	0.7885	0.03	--	
10	25.150	--	30.20	--	0.7885	0.03	--	
11	30.780	--	30.20	--	0.7885	0.04	--	
12	30.730	--	30.20	--	0.7885	0.04	--	
13	34.120	--	30.20	--	0.7885	0.04	--	
14	35.070	--	30.20	--	0.7885	0.04	--	

ASTA NUM. 30 NI 105 NF 108 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-4.191	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-4.131	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-4.197	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-4.125	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-7.563	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
7	-4.063	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-4.034	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-4.606	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-4.760	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-6.755	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-6.738	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-7.081	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
14	-7.174	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22

ASTA NUM. 31 NI 103 NF 106 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-4.265	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-4.259	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-4.268	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-4.256	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-7.740	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
7	-4.223	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-4.195	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-4.776	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-4.793	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-6.950	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-6.933	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-7.282	2	16.82	0.26	0.9715	0.01	0.02	Snell.'zx'= 22
14	-7.292	2	16.82	0.26	0.9715	0.01	0.02	Snell.'zx'= 22

ASTA NUM. 32 NI 104 NF 110 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.807	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-3.115	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-3.591	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-3.331	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-6.280	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
7	-3.431	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-3.379	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-3.918	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-3.875	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-5.639	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-5.608	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-5.932	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
14	-5.905	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22

ASTA NUM. 33 NI 112 NF 114 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.411	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-2.775	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-3.219	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-2.967	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-5.615	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22

7	-3.074	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-3.020	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-3.433	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-3.526	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-5.047	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-5.014	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-5.263	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
14	-5.318	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22

ASTA NUM. 34 NI 115 NF 117 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.486	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-2.760	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-3.234	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-3.013	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-5.661	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
7	-3.107	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-3.048	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-3.533	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-3.501	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-5.089	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-5.054	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-5.345	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
14	-5.326	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22

ASTA NUM. 35 NI 30 NF 108 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	1.581	--	38.40	--	0.9715	0.00	--	
1B	3.105	--	38.40	--	0.9715	0.00	--	
1I	1.559	--	38.40	--	0.9715	0.00	--	
1J	3.127	--	38.40	--	0.9715	0.00	--	
2	4.066	--	38.40	--	0.9715	0.00	--	
7	-0.623	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
8	-0.625	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
9	2.616	--	38.40	--	0.8808	0.00	--	
10	3.934	--	38.40	--	0.8808	0.00	--	
11	1.864	--	38.40	--	0.8808	0.00	--	
12	1.864	--	38.40	--	0.8808	0.00	--	
13	3.808	--	38.40	--	0.8808	0.00	--	
14	4.599	--	38.40	--	0.8808	0.00	--	

ASTA NUM. 36 NI 108 NF 107 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.535	--	38.40	--	0.8808	0.00	--	
1B	3.605	--	38.40	--	0.8808	0.00	--	
1I	0.912	--	38.40	--	0.8808	0.00	--	
1J	3.228	--	38.40	--	0.8808	0.00	--	
2	3.619	--	38.40	--	0.8808	0.00	--	
7	-0.839	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
8	-0.844	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
9	2.299	--	38.40	--	0.8808	0.00	--	
10	3.586	--	38.40	--	0.8808	0.00	--	
11	1.501	--	38.40	--	0.8808	0.00	--	
12	1.497	--	38.40	--	0.8808	0.00	--	
13	3.384	--	38.40	--	0.8808	0.00	--	
14	4.156	--	38.40	--	0.8808	0.00	--	

ASTA NUM. 37 NI 107 NF 106 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.098	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1B	-1.540	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1I	-3.132	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1J	-1.506	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
2	-4.026	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
7	0.575	--	38.40	--	0.8808	0.00	--	
8	0.576	--	38.40	--	0.8808	0.00	--	
9	-2.581	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
10	-3.880	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
11	-1.873	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
12	-1.872	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
13	-3.767	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
14	-4.546	2	38.40	0.43	0.8808	0.00	0.01	Snell.'yx'= 37

ASTA NUM. 38 NI 106 NF 25 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.632	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37

1B	-0.558	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1I	-3.230	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1J	-0.960	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
2	-3.658	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
7	0.888	--	38.40	--	0.8808	0.00	--	
8	0.893	--	38.40	--	0.8808	0.00	--	
9	-2.334	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
10	-3.640	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
11	-1.492	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
12	-1.488	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
13	-3.424	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
14	-4.208	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37

ASTA NUM. 39 NI 51 NF 111 Lungh. 100.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	5.639	--	38.40	--	0.8808	0.01	--	
1B	7.761	--	38.40	--	0.8808	0.01	--	
1I	5.393	--	38.40	--	0.8808	0.01	--	
1J	8.007	--	38.40	--	0.8808	0.01	--	
2	11.750	--	38.40	--	0.8808	0.01	--	
7	6.553	--	38.40	--	0.8808	0.01	--	
8	6.543	--	38.40	--	0.8808	0.01	--	
9	9.506	--	38.40	--	0.8808	0.01	--	
10	5.982	--	38.40	--	0.8808	0.01	--	
11	10.460	--	38.40	--	0.8808	0.01	--	
12	10.450	--	38.40	--	0.8808	0.01	--	
13	12.230	--	38.40	--	0.8808	0.01	--	
14	10.110	--	38.40	--	0.8808	0.01	--	

ASTA NUM. 40 NI 111 NF 110 Lungh. 100.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.618	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1B	-3.074	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1I	-3.923	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1J	-2.769	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
2	-5.848	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
7	-3.290	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
8	-3.285	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
9	-4.734	2	38.40	0.38	0.9063	0.00	0.01	Snell.'yx'= 33
10	-3.009	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
11	-5.212	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
12	-5.209	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
13	-6.079	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
14	-5.044	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33

ASTA NUM. 41 NI 110 NF 30 Lungh. 100.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-4.143	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1B	-2.565	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1I	-4.083	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1J	-2.625	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
2	-5.903	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
7	-3.264	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
8	-3.259	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
9	-4.772	2	38.40	0.38	0.9063	0.00	0.01	Snell.'yx'= 33
10	-2.973	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
11	-5.245	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
12	-5.242	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
13	-6.149	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
14	-5.070	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33

ASTA NUM. 42 NI 69 NF 114 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.317	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-2.015	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-3.888	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-1.444	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.655	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
7	-2.840	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.703	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-1.032	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-5.095	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
11	-4.280	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
12	-4.198	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-3.195	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
14	-5.633	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31

ASTA NUM. 43 NI 114 NF 113 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

1A	-3.164	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-2.278	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-3.872	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-1.570	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.723	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
7	-2.913	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.781	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-1.184	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-5.083	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
11	-4.348	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
12	-4.269	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-3.310	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
14	-5.649	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31

ASTA NUM. 44 NI 113 NF 51 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	4.508	--	38.40	--	0.9196	0.00	--	
1B	6.268	--	38.40	--	0.9196	0.01	--	
1I	3.079	--	38.40	--	0.9196	0.00	--	
1J	7.697	--	38.40	--	0.9196	0.01	--	
2	9.378	--	38.40	--	0.9196	0.01	--	
7	5.754	--	38.40	--	0.9196	0.01	--	
8	5.485	--	38.40	--	0.9196	0.01	--	
9	2.216	--	38.40	--	0.9196	0.00	--	
10	10.180	--	38.40	--	0.9196	0.01	--	
11	8.628	--	38.40	--	0.9196	0.01	--	
12	8.466	--	38.40	--	0.9196	0.01	--	
13	6.505	--	38.40	--	0.9196	0.01	--	
14	11.280	--	38.40	--	0.9196	0.01	--	

ASTA NUM. 45 NI 84 NF 118 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	4.195	--	38.40	--	0.9196	0.00	--	
1B	6.087	--	38.40	--	0.9196	0.01	--	
1I	3.866	--	38.40	--	0.9196	0.00	--	
1J	6.416	--	38.40	--	0.9196	0.01	--	
2	8.868	--	38.40	--	0.9196	0.01	--	
7	5.653	--	38.40	--	0.9196	0.01	--	
8	5.618	--	38.40	--	0.9196	0.01	--	
9	7.598	--	38.40	--	0.9196	0.01	--	
10	4.122	--	38.40	--	0.9196	0.00	--	
11	8.250	--	38.40	--	0.9196	0.01	--	
12	8.229	--	38.40	--	0.9196	0.01	--	
13	9.418	--	38.40	--	0.9196	0.01	--	
14	7.332	--	38.40	--	0.9196	0.01	--	

ASTA NUM. 46 NI 118 NF 117 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-2.854	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-2.324	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-3.178	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-2.000	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.453	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
7	-2.853	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.836	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-3.806	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-2.104	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
11	-4.145	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
12	-4.134	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-4.717	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
14	-3.696	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31

ASTA NUM. 47 NI 117 NF 69 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.232	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-1.870	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-3.237	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-1.865	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.415	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
7	-2.799	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.782	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-3.791	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-2.018	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
11	-4.104	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
12	-4.094	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-4.700	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
14	-3.635	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31

ASTA NUM. 48 NI 99 NF 122 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	4.363	--	38.40	--	0.9196	0.00	--	
1B	7.437	--	38.40	--	0.9196	0.01	--	
1I	4.194	--	38.40	--	0.9196	0.00	--	
1J	7.606	--	38.40	--	0.9196	0.01	--	
2	10.290	--	38.40	--	0.9196	0.01	--	
7	12.150	--	38.40	--	0.9196	0.01	--	
8	12.330	--	38.40	--	0.9196	0.01	--	
9	3.975	--	38.40	--	0.9196	0.00	--	
10	7.170	--	38.40	--	0.9196	0.01	--	
11	12.980	--	38.40	--	0.9196	0.01	--	
12	13.090	--	38.40	--	0.9196	0.01	--	
13	8.072	--	38.40	--	0.9196	0.01	--	
14	9.989	--	38.40	--	0.9196	0.01	--	

ASTA NUM. 49 NI 122 NF 121 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-12.216	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1B	-10.684	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1I	-11.741	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1J	-11.159	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
2	-20.000	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
7	-11.900	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
8	-11.860	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
9	-13.030	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
10	-13.160	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
11	-18.210	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
12	-18.190	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
13	-18.890	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
14	-18.970	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37

ASTA NUM. 50 NI 121 NF 120 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-12.146	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1B	-10.634	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1I	-11.640	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1J	-11.140	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
2	-19.910	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
7	-11.890	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
8	-11.860	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
9	-12.950	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
10	-13.110	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
11	-18.160	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
12	-18.140	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
13	-18.790	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
14	-18.890	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37

ASTA NUM. 51 NI 120 NF 84 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	16.190	--	38.40	--	0.8808	0.02	--	
1B	17.690	--	38.40	--	0.8808	0.02	--	
1I	15.554	--	38.40	--	0.8808	0.02	--	
1J	18.326	--	38.40	--	0.8808	0.02	--	
2	29.620	--	38.40	--	0.8808	0.03	--	
7	11.640	--	38.40	--	0.8808	0.01	--	
8	11.390	--	38.40	--	0.8808	0.01	--	
9	22.010	--	38.40	--	0.8808	0.02	--	
10	19.100	--	38.40	--	0.8808	0.02	--	
11	23.390	--	38.40	--	0.8808	0.02	--	
12	23.240	--	38.40	--	0.8808	0.02	--	
13	29.610	--	38.40	--	0.8808	0.03	--	
14	27.870	--	38.40	--	0.8808	0.03	--	

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **10** Descrizione: **CAPRIATA 8**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice_____**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 102 NF 138 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-15.872	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
1B	-14.808	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
1I	-16.375	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
1J	-14.305	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
2	-26.990	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
7	-19.210	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
8	-19.570	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
9	-15.560	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
10	-17.980	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
11	-26.560	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
12	-26.770	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
13	-24.370	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
14	-25.820	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51

ASTA NUM. 2 NI 138 NF 109 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	3.910	--	30.20	--	0.7885	0.00	--	
1B	4.884	--	30.20	--	0.7885	0.01	--	
1I	3.370	--	30.20	--	0.7885	0.00	--	
1J	5.424	--	30.20	--	0.7885	0.01	--	
2	7.461	--	30.20	--	0.7885	0.01	--	
7	7.390	--	30.20	--	0.7885	0.01	--	
8	7.672	--	30.20	--	0.7885	0.01	--	
9	3.893	--	30.20	--	0.7885	0.00	--	
10	5.157	--	30.20	--	0.7885	0.01	--	
11	8.465	--	30.20	--	0.7885	0.01	--	
12	8.634	--	30.20	--	0.7885	0.01	--	
13	6.367	--	30.20	--	0.7885	0.01	--	
14	7.125	--	30.20	--	0.7885	0.01	--	

ASTA NUM. 3 NI 109 NF 137 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	9.945	--	30.20	--	0.7885	0.01	--	
1B	10.735	--	30.20	--	0.7885	0.01	--	
1I	9.447	--	30.20	--	0.7885	0.01	--	
1J	11.233	--	30.20	--	0.7885	0.01	--	
2	17.920	--	30.20	--	0.7885	0.02	--	
7	7.645	--	30.20	--	0.7885	0.01	--	
8	7.376	--	30.20	--	0.7885	0.01	--	
9	13.490	--	30.20	--	0.7885	0.02	--	
10	11.630	--	30.20	--	0.7885	0.01	--	
11	14.440	--	30.20	--	0.7885	0.02	--	
12	14.280	--	30.20	--	0.7885	0.02	--	
13	17.950	--	30.20	--	0.7885	0.02	--	
14	16.830	--	30.20	--	0.7885	0.02	--	

ASTA NUM. 4 NI 137 NF 87 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-22.158	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1B	-20.362	1	30.20	0.59	0.7885	0.03	0.03	Snell.'yx'= 51
1I	-22.285	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
1J	-20.235	1	30.20	0.59	0.7885	0.03	0.03	Snell.'yx'= 51
2	-37.420	1	30.20	0.59	0.7885	0.05	0.06	Snell.'yx'= 51
7	-19.100	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
8	-18.920	1	30.20	0.59	0.7885	0.02	0.03	Snell.'yx'= 51
9	-25.430	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51

10	-24.290	1	30.20	0.59	0.7885	0.03	0.04	Snell.'yx'= 51
11	-32.300	1	30.20	0.59	0.7885	0.04	0.05	Snell.'yx'= 51
12	-32.190	1	30.20	0.59	0.7885	0.04	0.05	Snell.'yx'= 51
13	-36.100	1	30.20	0.59	0.7885	0.05	0.06	Snell.'yx'= 51
14	-35.410	1	30.20	0.59	0.7885	0.04	0.06	Snell.'yx'= 51

ASTA NUM. 5 NI 87 NF 136 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-10.038	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
1B	-7.130	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
1I	-10.017	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
1J	-7.152	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
2	-15.000	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
7	-8.158	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
8	-9.266	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
9	-11.250	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
10	-8.328	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
11	-13.200	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
12	-13.870	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
13	-15.060	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
14	-13.310	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44

ASTA NUM. 6 NI 136 NF 123 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.164	--	30.20	--	0.8365	0.00	--	
1B	1.192	--	30.20	--	0.8365	0.00	--	
1I	-0.453	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
1J	1.810	--	30.20	--	0.8365	0.00	--	
2	0.934	--	30.20	--	0.8365	0.00	--	
7	0.065	--	30.20	--	0.8365	0.00	--	
8	1.131	--	30.20	--	0.8365	0.00	--	
9	2.281	--	30.20	--	0.8365	0.00	--	
10	-0.689	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
11	0.444	--	30.20	--	0.8365	0.00	--	
12	1.083	--	30.20	--	0.8365	0.00	--	
13	1.774	--	30.20	--	0.8365	0.00	--	
14	-0.009	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44

ASTA NUM. 7 NI 123 NF 70 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	6.629	--	30.20	--	0.8365	0.01	--	
1B	8.239	--	30.20	--	0.8365	0.01	--	
1I	6.229	--	30.20	--	0.8365	0.01	--	
1J	8.639	--	30.20	--	0.8365	0.01	--	
2	12.920	--	30.20	--	0.8365	0.02	--	
7	8.146	--	30.20	--	0.8365	0.01	--	
8	7.508	--	30.20	--	0.8365	0.01	--	
9	7.169	--	30.20	--	0.8365	0.01	--	
10	10.090	--	30.20	--	0.8365	0.01	--	
11	12.010	--	30.20	--	0.8365	0.02	--	
12	11.630	--	30.20	--	0.8365	0.01	--	
13	11.430	--	30.20	--	0.8365	0.01	--	
14	13.180	--	30.20	--	0.8365	0.02	--	

ASTA NUM. 8 NI 70 NF 125 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	5.964	--	30.20	--	0.8365	0.01	--	
1B	9.006	--	30.20	--	0.8365	0.01	--	
1I	4.947	--	30.20	--	0.8365	0.01	--	
1J	10.024	--	30.20	--	0.8365	0.01	--	
2	12.900	--	30.20	--	0.8365	0.02	--	
7	6.699	--	30.20	--	0.8365	0.01	--	
8	7.899	--	30.20	--	0.8365	0.01	--	
9	11.970	--	30.20	--	0.8365	0.02	--	
10	5.344	--	30.20	--	0.8365	0.01	--	
11	11.080	--	30.20	--	0.8365	0.01	--	
12	11.800	--	30.20	--	0.8365	0.01	--	
13	14.250	--	30.20	--	0.8365	0.02	--	
14	10.270	--	30.20	--	0.8365	0.01	--	

ASTA NUM. 9 NI 125 NF 135 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-0.402	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
1B	1.541	--	30.20	--	0.8365	0.00	--	
1I	-1.854	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
1J	2.993	--	30.20	--	0.8365	0.00	--	
2	0.870	--	30.20	--	0.8365	0.00	--	

7	2.062	--	30.20	--	0.8365	0.00	--	
8	0.665	--	30.20	--	0.8365	0.00	--	
9	-2.695	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
10	4.086	--	30.20	--	0.8365	0.01	--	
11	1.663	--	30.20	--	0.8365	0.00	--	
12	0.825	--	30.20	--	0.8365	0.00	--	
13	-1.191	1	30.20	0.51	0.8365	0.00	0.00	Snell.'yx'= 44
14	2.877	--	30.20	--	0.8365	0.00	--	

ASTA NUM. 10 NI 135 NF 57 Lungh. 105.9 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-10.343	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
1B	-7.361	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
1I	-11.410	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
1J	-6.294	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
2	-15.580	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
7	-10.290	1	30.20	0.51	0.8365	0.01	0.02	Snell.'yx'= 44
8	-9.191	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
9	-6.770	1	30.20	0.51	0.8365	0.01	0.01	Snell.'yx'= 44
10	-13.490	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
11	-14.850	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
12	-14.190	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
13	-12.740	1	30.20	0.51	0.8365	0.02	0.02	Snell.'yx'= 44
14	-16.770	1	30.20	0.51	0.8365	0.02	0.03	Snell.'yx'= 44

ASTA NUM. 11 NI 127 NF 31 Lungh. 111.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	7.122	--	30.20	--	0.8365	0.01	--	
1B	8.476	--	30.20	--	0.8365	0.01	--	
1I	6.637	--	30.20	--	0.8365	0.01	--	
1J	8.961	--	30.20	--	0.8365	0.01	--	
2	13.430	--	30.20	--	0.8365	0.02	--	
7	8.788	--	30.20	--	0.8365	0.01	--	
8	8.453	--	30.20	--	0.8365	0.01	--	
9	7.530	--	30.20	--	0.8365	0.01	--	
10	10.410	--	30.20	--	0.8365	0.01	--	
11	12.620	--	30.20	--	0.8365	0.02	--	
12	12.420	--	30.20	--	0.8365	0.02	--	
13	11.870	--	30.20	--	0.8365	0.02	--	
14	13.590	--	30.20	--	0.8365	0.02	--	

ASTA NUM. 12 NI 134 NF 127 Lungh. 111.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	1.068	--	30.20	--	0.8365	0.00	--	
1B	2.299	--	30.20	--	0.8365	0.00	--	
1I	0.524	--	30.20	--	0.8365	0.00	--	
1J	2.842	--	30.20	--	0.8365	0.00	--	
2	2.815	--	30.20	--	0.8365	0.00	--	
7	1.122	--	30.20	--	0.8365	0.00	--	
8	1.589	--	30.20	--	0.8365	0.00	--	
9	3.510	--	30.20	--	0.8365	0.00	--	
10	0.557	--	30.20	--	0.8365	0.00	--	
11	2.175	--	30.20	--	0.8365	0.00	--	
12	2.455	--	30.20	--	0.8365	0.00	--	
13	3.608	--	30.20	--	0.8365	0.00	--	
14	1.836	--	30.20	--	0.8365	0.00	--	

ASTA NUM. 13 NI 57 NF 134 Lungh. 111.8 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-11.608	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
1B	-8.612	1	30.20	0.54	0.8203	0.01	0.01	Snell.'yx'= 46
1I	-11.521	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
1J	-8.699	1	30.20	0.54	0.8203	0.01	0.01	Snell.'yx'= 46
2	-17.810	1	30.20	0.54	0.8203	0.02	0.03	Snell.'yx'= 46
7	-9.629	1	30.20	0.54	0.8203	0.01	0.01	Snell.'yx'= 46
8	-10.240	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
9	-13.080	1	30.20	0.54	0.8203	0.02	0.02	Snell.'yx'= 46
10	-10.140	1	30.20	0.54	0.8203	0.01	0.02	Snell.'yx'= 46
11	-15.700	1	30.20	0.54	0.8203	0.02	0.02	Snell.'yx'= 46
12	-16.070	1	30.20	0.54	0.8203	0.02	0.02	Snell.'yx'= 46
13	-17.770	1	30.20	0.54	0.8203	0.02	0.03	Snell.'yx'= 46
14	-16.010	1	30.20	0.54	0.8203	0.02	0.02	Snell.'yx'= 46

ASTA NUM. 14 NI 129 NF 26 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	15.353	--	30.20	--	0.8203	0.02	--	
1B	16.467	--	30.20	--	0.8203	0.02	--	

1I	14.804	--	30.20	--	0.8203	0.02	--
1J	17.016	--	30.20	--	0.8203	0.02	--
2	27.860	--	30.20	--	0.8203	0.04	--
7	20.160	--	30.20	--	0.8203	0.03	--
8	19.850	--	30.20	--	0.8203	0.03	--
9	18.370	--	30.20	--	0.8203	0.02	--
10	16.710	--	30.20	--	0.8203	0.02	--
11	27.550	--	30.20	--	0.8203	0.03	--
12	27.360	--	30.20	--	0.8203	0.03	--
13	26.480	--	30.20	--	0.8203	0.03	--
14	25.480	--	30.20	--	0.8203	0.03	--

ASTA NUM. 15 NI 133 NF 129 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.940	1	30.20	0.59	0.7885	0.00	0.01	Snell.'yx'= 51
1B	-2.974	1	30.20	0.59	0.7885	0.00	0.00	Snell.'yx'= 51
1I	-4.465	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
1J	-2.449	1	30.20	0.59	0.7885	0.00	0.00	Snell.'yx'= 51
2	-6.327	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
7	-7.155	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-6.795	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
9	-4.077	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
10	-2.314	1	30.20	0.59	0.7885	0.00	0.00	Snell.'yx'= 51
11	-7.924	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
12	-7.708	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
13	-6.077	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
14	-5.019	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51

ASTA NUM. 16 NI 131 NF 133 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-9.248	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
1B	-7.484	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
1I	-9.520	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
1J	-7.212	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
2	-14.820	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
7	-5.130	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
8	-5.512	1	30.20	0.59	0.7885	0.01	0.01	Snell.'yx'= 51
9	-9.561	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
10	-10.640	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
11	-11.380	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
12	-11.600	1	30.20	0.59	0.7885	0.01	0.02	Snell.'yx'= 51
13	-14.030	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51
14	-14.680	1	30.20	0.59	0.7885	0.02	0.02	Snell.'yx'= 51

ASTA NUM. 17 NI 31 NF 131 Lungh. 123.1 cm SEZ. Pd L 80X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 30.20 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	19.902	--	30.20	--	0.7885	0.03	--	
1B	21.638	--	30.20	--	0.7885	0.03	--	
1I	19.728	--	30.20	--	0.7885	0.02	--	
1J	21.812	--	30.20	--	0.7885	0.03	--	
2	36.280	--	30.20	--	0.7885	0.05	--	
7	17.760	--	30.20	--	0.7885	0.02	--	
8	18.200	--	30.20	--	0.7885	0.02	--	
9	23.670	--	30.20	--	0.7885	0.03	--	
10	25.250	--	30.20	--	0.7885	0.03	--	
11	30.730	--	30.20	--	0.7885	0.04	--	
12	31.000	--	30.20	--	0.7885	0.04	--	
13	34.280	--	30.20	--	0.7885	0.04	--	
14	35.230	--	30.20	--	0.7885	0.04	--	

ASTA NUM. 18 NI 131 NF 132 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-4.213	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-4.163	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-4.246	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-4.130	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-7.613	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
7	-4.083	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-4.105	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-4.637	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-4.791	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-6.796	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-6.809	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-7.129	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
14	-7.221	2	16.82	0.26	0.9715	0.01	0.02	Snell.'zx'= 22

ASTA NUM. 19 NI 129 NF 130 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-4.279	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-4.247	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-4.286	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-4.240	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-7.743	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
7	-4.212	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-4.239	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-4.778	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-4.795	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-6.945	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-6.961	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-7.285	2	16.82	0.26	0.9715	0.01	0.02	Snell.'zx'= 22
14	-7.295	2	16.82	0.26	0.9715	0.01	0.02	Snell.'zx'= 22

ASTA NUM. 20 NI 127 NF 128 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.811	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-3.187	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-3.603	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-3.395	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-6.349	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
7	-3.437	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-3.500	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-3.962	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-3.919	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-5.682	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-5.720	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-5.997	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
14	-5.971	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22

ASTA NUM. 21 NI 125 NF 126 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.422	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-2.830	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-3.245	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-3.007	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-5.676	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
7	-3.230	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-3.135	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-3.472	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-3.566	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-5.175	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-5.118	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-5.320	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
14	-5.376	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22

ASTA NUM. 22 NI 123 NF 124 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.500	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-2.816	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-3.272	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-3.044	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-5.725	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
7	-2.966	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-3.176	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-3.574	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-3.543	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-5.041	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
12	-5.167	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
13	-5.406	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
14	-5.387	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22

ASTA NUM. 23 NI 109 NF 119 Lungh. 50.0 cm SEZ. Pd L 75X 50X 8 Dist.= 0.010 m __a_'T'__ lati maggiori Area lorda: 18.82 cmq

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-4.877	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1B	-4.825	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1I	-4.896	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
1J	-4.806	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
2	-8.813	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
7	-4.680	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
8	-4.685	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
9	-5.558	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
10	-5.369	2	16.82	0.26	0.9715	0.01	0.01	Snell.'zx'= 22
11	-7.838	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22

12	-7.841	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
13	-8.364	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22
14	-8.251	2	16.82	0.26	0.9715	0.02	0.02	Snell.'zx'= 22

ASTA NUM. 24 NI 129 NF 23 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-1.223	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1B	-0.645	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1I	-1.844	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1J	-0.024	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
2	-1.580	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
7	-14.350	2	38.40	0.43	0.8808	0.01	0.02	Snell.'yx'= 37
8	-14.050	2	38.40	0.43	0.8808	0.01	0.02	Snell.'yx'= 37
9	-5.718	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
10	8.605	--	38.40	--	0.8808	0.01	--	
11	-9.458	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
12	-9.281	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
13	-4.282	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
14	4.312	--	38.40	--	0.8808	0.00	--	

ASTA NUM. 25 NI 131 NF 129 Lungh. 225.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	16.758	--	38.40	--	0.8808	0.02	--	
1B	18.122	--	38.40	--	0.8808	0.02	--	
1I	16.369	--	38.40	--	0.8808	0.02	--	
1J	18.511	--	38.40	--	0.8808	0.02	--	
2	30.780	--	38.40	--	0.8808	0.03	--	
7	11.450	--	38.40	--	0.8808	0.01	--	
8	11.120	--	38.40	--	0.8808	0.01	--	
9	15.590	--	38.40	--	0.8808	0.02	--	
10	26.750	--	38.40	--	0.8808	0.03	--	
11	24.050	--	38.40	--	0.8808	0.02	--	
12	23.850	--	38.40	--	0.8808	0.02	--	
13	26.540	--	38.40	--	0.8808	0.03	--	
14	33.230	--	38.40	--	0.8808	0.03	--	

ASTA NUM. 26 NI 36 NF 131 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-11.981	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1B	-7.363	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1I	-12.797	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1J	-6.547	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
2	-16.780	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
7	-9.861	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
8	-10.950	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
9	-15.330	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
10	-6.624	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
11	-15.160	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
12	-15.810	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
13	-18.440	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
14	-13.210	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37

ASTA NUM. 27 NI 127 NF 36 Lungh. 100.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-2.053	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1B	0.912	--	38.40	--	0.9063	0.00	--	
1I	-2.461	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1J	1.320	--	38.40	--	0.9063	0.00	--	
2	-0.963	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
7	-1.811	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
8	-1.145	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
9	1.527	--	38.40	--	0.9063	0.00	--	
10	-2.587	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
11	-1.605	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
12	-1.205	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
13	0.398	--	38.40	--	0.9063	0.00	--	
14	-2.070	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33

ASTA NUM. 28 NI 57 NF 127 Lungh. 200.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	4.042	--	38.40	--	0.9063	0.00	--	
1B	6.450	--	38.40	--	0.9063	0.01	--	
1I	4.564	--	38.40	--	0.9063	0.00	--	
1J	5.928	--	38.40	--	0.9063	0.01	--	
2	9.051	--	38.40	--	0.9063	0.01	--	
7	5.471	--	38.40	--	0.9063	0.01	--	
8	5.414	--	38.40	--	0.9063	0.01	--	

9	5.509	--	38.40	--	0.9063	0.01	--
10	6.688	--	38.40	--	0.9063	0.01	--
11	8.242	--	38.40	--	0.9063	0.01	--
12	8.208	--	38.40	--	0.9063	0.01	--
13	8.265	--	38.40	--	0.9063	0.01	--
14	8.972	--	38.40	--	0.9063	0.01	--

ASTA NUM. 29 NI 125 NF 57 Lungh. 186.7 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.842	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
1B	-1.872	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
1I	-4.272	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
1J	-1.442	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
2	-4.978	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
7	-2.570	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
8	-3.079	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
9	-1.475	2	38.40	0.71	0.7154	0.00	0.00	Snell.'yx'= 61
10	-5.071	2	38.40	0.71	0.7154	0.01	0.01	Snell.'yx'= 61
11	-4.292	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
12	-4.597	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
13	-3.635	2	38.40	0.71	0.7154	0.00	0.01	Snell.'yx'= 61
14	-5.793	2	38.40	0.71	0.7154	0.01	0.01	Snell.'yx'= 61

ASTA NUM. 30 NI 72 NF 125 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-11.503	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
1B	-6.589	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
1I	-12.439	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
1J	-5.653	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
2	-15.760	2	38.40	0.36	0.9196	0.02	0.02	Snell.'yx'= 31
7	-6.697	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
8	-9.544	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
9	-14.590	2	38.40	0.36	0.9196	0.01	0.02	Snell.'yx'= 31
10	-6.201	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
11	-12.720	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
12	-14.430	2	38.40	0.36	0.9196	0.01	0.02	Snell.'yx'= 31
13	-17.460	2	38.40	0.36	0.9196	0.02	0.02	Snell.'yx'= 31
14	-12.420	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31

ASTA NUM. 31 NI 123 NF 72 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.921	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-1.199	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-4.155	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-0.965	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.622	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
7	-4.779	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
8	-2.486	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-0.969	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-4.830	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
11	-5.493	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
12	-4.117	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-3.207	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
14	-5.524	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31

ASTA NUM. 32 NI 87 NF 123 Lungh. 186.7 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	2.312	--	38.40	--	0.9196	0.00	--	
1B	5.208	--	38.40	--	0.9196	0.01	--	
1I	2.769	--	38.40	--	0.9196	0.00	--	
1J	4.751	--	38.40	--	0.9196	0.00	--	
2	6.509	--	38.40	--	0.9196	0.01	--	
7	2.802	--	38.40	--	0.9196	0.00	--	
8	3.556	--	38.40	--	0.9196	0.00	--	
9	3.751	--	38.40	--	0.9196	0.00	--	
10	5.157	--	38.40	--	0.9196	0.01	--	
11	5.257	--	38.40	--	0.9196	0.01	--	
12	5.710	--	38.40	--	0.9196	0.01	--	
13	5.827	--	38.40	--	0.9196	0.01	--	
14	6.670	--	38.40	--	0.9196	0.01	--	

ASTA NUM. 33 NI 109 NF 87 Lungh. 225.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	5.568	--	38.40	--	0.9196	0.01	--	
1B	7.426	--	38.40	--	0.9196	0.01	--	
1I	4.690	--	38.40	--	0.9196	0.00	--	
1J	8.304	--	38.40	--	0.9196	0.01	--	

2	11.570	--	38.40	--	0.9196	0.01	--
7	2.237	--	38.40	--	0.9196	0.00	--
8	2.766	--	38.40	--	0.9196	0.00	--
9	12.840	--	38.40	--	0.9196	0.01	--
10	3.369	--	38.40	--	0.9196	0.00	--
11	7.846	--	38.40	--	0.9196	0.01	--
12	8.162	--	38.40	--	0.9196	0.01	--
13	14.200	--	38.40	--	0.9196	0.01	--
14	8.525	--	38.40	--	0.9196	0.01	--

ASTA NUM. 34 NI 102 NF 109 Lungh. 225.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	11.974	--	38.40	--	0.9196	0.01	--	
1B	12.206	--	38.40	--	0.9196	0.01	--	
1I	12.038	--	38.40	--	0.9196	0.01	--	
1J	12.142	--	38.40	--	0.9196	0.01	--	
2	21.360	--	38.40	--	0.9196	0.02	--	
7	2.605	--	38.40	--	0.9196	0.00	--	
8	2.624	--	38.40	--	0.9196	0.00	--	
9	21.840	--	38.40	--	0.9196	0.02	--	
10	9.478	--	38.40	--	0.9196	0.01	--	
11	13.500	--	38.40	--	0.9196	0.01	--	
12	13.510	--	38.40	--	0.9196	0.01	--	
13	25.040	--	38.40	--	0.9196	0.02	--	
14	17.620	--	38.40	--	0.9196	0.02	--	

ASTA NUM. 35 NI 137 NF 85 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	16.144	--	38.40	--	0.9196	0.02	--	
1B	17.756	--	38.40	--	0.9196	0.02	--	
1I	15.392	--	38.40	--	0.9196	0.02	--	
1J	18.508	--	38.40	--	0.9196	0.02	--	
2	29.630	--	38.40	--	0.9196	0.03	--	
7	12.090	--	38.40	--	0.9196	0.01	--	
8	11.630	--	38.40	--	0.9196	0.01	--	
9	22.010	--	38.40	--	0.9196	0.02	--	
10	19.110	--	38.40	--	0.9196	0.02	--	
11	23.670	--	38.40	--	0.9196	0.02	--	
12	23.400	--	38.40	--	0.9196	0.02	--	
13	29.620	--	38.40	--	0.9196	0.03	--	
14	27.880	--	38.40	--	0.9196	0.03	--	

ASTA NUM. 36 NI 119 NF 137 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-12.105	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1B	-10.615	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1I	-11.660	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1J	-11.060	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
2	-19.840	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
7	-11.830	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
8	-11.880	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
9	-12.910	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
10	-13.070	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
11	-18.080	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
12	-18.110	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
13	-18.730	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
14	-18.820	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37

ASTA NUM. 37 NI 138 NF 119 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-12.182	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1B	-10.678	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1I	-11.778	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
1J	-11.082	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
2	-19.970	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
7	-11.870	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
8	-11.910	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
9	-13.010	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
10	-13.140	2	38.40	0.43	0.8808	0.01	0.01	Snell.'yx'= 37
11	-18.180	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
12	-18.200	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
13	-18.860	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37
14	-18.940	2	38.40	0.43	0.8808	0.02	0.02	Snell.'yx'= 37

ASTA NUM. 38 NI 100 NF 138 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	4.278	--	38.40	--	0.8808	0.00	--	

1B	7.396	--	38.40	--	0.8808	0.01	--
1I	3.855	--	38.40	--	0.8808	0.00	--
1J	7.819	--	38.40	--	0.8808	0.01	--
2	10.180	--	38.40	--	0.8808	0.01	--
7	11.610	--	38.40	--	0.8808	0.01	--
8	12.150	--	38.40	--	0.8808	0.01	--
9	3.903	--	38.40	--	0.8808	0.00	--
10	7.097	--	38.40	--	0.8808	0.01	--
11	12.590	--	38.40	--	0.8808	0.01	--
12	12.910	--	38.40	--	0.8808	0.01	--
13	7.965	--	38.40	--	0.8808	0.01	--
14	9.881	--	38.40	--	0.8808	0.01	--

ASTA NUM. 39 NI 124 NF 70 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.246	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-1.962	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-3.342	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-1.866	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.510	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
7	-2.257	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.910	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-3.852	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-2.080	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
11	-3.832	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
12	-4.224	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-4.789	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
14	-3.726	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31

ASTA NUM. 40 NI 136 NF 124 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-2.912	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-2.218	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-3.243	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-1.887	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.411	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
7	-2.269	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.899	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-3.779	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-2.075	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
11	-3.771	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
12	-4.149	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-4.677	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
14	-3.655	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31

ASTA NUM. 41 NI 85 NF 136 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	4.181	--	38.40	--	0.9196	0.00	--	
1B	6.159	--	38.40	--	0.9196	0.01	--	
1I	3.754	--	38.40	--	0.9196	0.00	--	
1J	6.586	--	38.40	--	0.9196	0.01	--	
2	8.921	--	38.40	--	0.9196	0.01	--	
7	4.525	--	38.40	--	0.9196	0.00	--	
8	5.809	--	38.40	--	0.9196	0.01	--	
9	7.631	--	38.40	--	0.9196	0.01	--	
10	4.156	--	38.40	--	0.9196	0.00	--	
11	7.603	--	38.40	--	0.9196	0.01	--	
12	8.373	--	38.40	--	0.9196	0.01	--	
13	9.467	--	38.40	--	0.9196	0.01	--	
14	7.381	--	38.40	--	0.9196	0.01	--	

ASTA NUM. 42 NI 135 NF 55 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	4.435	--	38.40	--	0.9196	0.00	--	
1B	6.413	--	38.40	--	0.9196	0.01	--	
1I	2.670	--	38.40	--	0.9196	0.00	--	
1J	8.178	--	38.40	--	0.9196	0.01	--	
2	9.442	--	38.40	--	0.9196	0.01	--	
7	7.170	--	38.40	--	0.9196	0.01	--	
8	5.691	--	38.40	--	0.9196	0.01	--	
9	2.258	--	38.40	--	0.9196	0.00	--	
10	10.220	--	38.40	--	0.9196	0.01	--	
11	9.514	--	38.40	--	0.9196	0.01	--	
12	8.627	--	38.40	--	0.9196	0.01	--	
13	6.567	--	38.40	--	0.9196	0.01	--	
14	11.340	--	38.40	--	0.9196	0.01	--	

ASTA NUM. 43 NI 126 NF 135 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note

1A	-3.171	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-2.179	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-4.051	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-1.299	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.640	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
7	-3.533	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.822	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-1.127	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-5.031	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
11	-4.673	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
12	-4.247	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-3.230	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
14	-5.572	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31

ASTA NUM. 44 NI 70 NF 126 Lungh. 93.3 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.421	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1B	-2.077	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1I	-4.181	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
1J	-1.317	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
2	-4.803	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
7	-3.637	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
8	-2.869	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
9	-1.131	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
10	-5.188	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31
11	-4.841	2	38.40	0.36	0.9196	0.00	0.01	Snell.'yx'= 31
12	-4.380	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
13	-3.337	2	38.40	0.36	0.9196	0.00	0.00	Snell.'yx'= 31
14	-5.772	2	38.40	0.36	0.9196	0.01	0.01	Snell.'yx'= 31

ASTA NUM. 45 NI 128 NF 31 Lungh. 100.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-4.117	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1B	-2.667	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1I	-4.155	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1J	-2.629	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
2	-5.970	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
7	-3.048	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
8	-3.366	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
9	-4.815	2	38.40	0.38	0.9063	0.00	0.01	Snell.'yx'= 33
10	-3.018	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
11	-5.153	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
12	-5.344	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
13	-6.213	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
14	-5.135	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33

ASTA NUM. 46 NI 134 NF 128 Lungh. 100.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.663	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1B	-2.985	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1I	-3.988	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
1J	-2.660	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
2	-5.809	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
7	-3.018	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
8	-3.342	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
9	-4.709	2	38.40	0.38	0.9063	0.00	0.01	Snell.'yx'= 33
10	-2.983	2	38.40	0.38	0.9063	0.00	0.00	Snell.'yx'= 33
11	-5.027	2	38.40	0.38	0.9063	0.00	0.01	Snell.'yx'= 33
12	-5.221	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
13	-6.041	2	38.40	0.38	0.9063	0.01	0.01	Snell.'yx'= 33
14	-5.005	2	38.40	0.38	0.9063	0.00	0.01	Snell.'yx'= 33

ASTA NUM. 47 NI 55 NF 134 Lungh. 100.0 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	5.653	--	38.40	--	0.9063	0.01	--	
1B	7.781	--	38.40	--	0.9063	0.01	--	
1I	5.289	--	38.40	--	0.9063	0.01	--	
1J	8.145	--	38.40	--	0.9063	0.01	--	
2	11.780	--	38.40	--	0.9063	0.01	--	
7	6.067	--	38.40	--	0.9063	0.01	--	
8	6.707	--	38.40	--	0.9063	0.01	--	
9	9.525	--	38.40	--	0.9063	0.01	--	
10	6.001	--	38.40	--	0.9063	0.01	--	
11	10.180	--	38.40	--	0.9063	0.01	--	
12	10.560	--	38.40	--	0.9063	0.01	--	
13	12.250	--	38.40	--	0.9063	0.01	--	
14	10.140	--	38.40	--	0.9063	0.01	--	

ASTA NUM. 48 NI 130 NF 26 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.638	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1B	-0.628	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1I	-3.375	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1J	-0.891	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
2	-3.727	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
7	1.117	--	38.40	--	0.8808	0.00	--	
8	0.780	--	38.40	--	0.8808	0.00	--	
9	-2.378	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
10	-3.685	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
11	-1.392	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
12	-1.595	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
13	-3.490	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
14	-4.274	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37

ASTA NUM. 49 NI 133 NF 130 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-3.039	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1B	-1.513	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1I	-3.217	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
1J	-1.335	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
2	-3.950	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
7	0.882	--	38.40	--	0.8808	0.00	--	
8	0.539	--	38.40	--	0.8808	0.00	--	
9	-2.532	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
10	-3.830	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
11	-1.646	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
12	-1.852	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
13	-3.694	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
14	-4.473	2	38.40	0.43	0.8808	0.00	0.01	Snell.'yx'= 37

ASTA NUM. 50 NI 132 NF 133 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	0.636	--	38.40	--	0.8808	0.00	--	
1B	3.656	--	38.40	--	0.8808	0.00	--	
1I	0.875	--	38.40	--	0.8808	0.00	--	
1J	3.417	--	38.40	--	0.8808	0.00	--	
2	3.755	--	38.40	--	0.8808	0.00	--	
7	-1.026	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
8	-0.696	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
9	2.386	--	38.40	--	0.8808	0.00	--	
10	3.674	--	38.40	--	0.8808	0.00	--	
11	1.465	--	38.40	--	0.8808	0.00	--	
12	1.663	--	38.40	--	0.8808	0.00	--	
13	3.513	--	38.40	--	0.8808	0.00	--	
14	4.285	--	38.40	--	0.8808	0.00	--	

ASTA NUM. 51 NI 31 NF 132 Lungh. 112.5 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	1.514	--	38.40	--	0.8808	0.00	--	
1B	3.012	--	38.40	--	0.8808	0.00	--	
1I	1.353	--	38.40	--	0.8808	0.00	--	
1J	3.173	--	38.40	--	0.8808	0.00	--	
2	3.921	--	38.40	--	0.8808	0.00	--	
7	-0.973	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
8	-0.622	2	38.40	0.43	0.8808	0.00	0.00	Snell.'yx'= 37
9	2.524	--	38.40	--	0.8808	0.00	--	
10	3.842	--	38.40	--	0.8808	0.00	--	
11	1.573	--	38.40	--	0.8808	0.00	--	
12	1.783	--	38.40	--	0.8808	0.00	--	
13	3.671	--	38.40	--	0.8808	0.00	--	
14	4.461	--	38.40	--	0.8808	0.00	--	

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **11** Descrizione: **CONTROVENTI**
Tabella: **Tabella reticolare travi e pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Tipo asta: **Asta semplice**
Coeff. riduzione dell' area: **0.000** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Anima** Più di una fila di bulloni

ASTA NUM. 1 NI 33 NF 5 Lungh. 516.1 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-22.051	2	38.40	1.98	0.2001	0.02	0.11	Snell.'yx'=170
1B	-9.510	2	38.40	1.98	0.2001	0.01	0.05	Snell.'yx'=170
1I	-22.944	2	38.40	1.98	0.2001	0.02	0.11	Snell.'yx'=170
1J	-8.616	2	38.40	1.98	0.2001	0.01	0.04	Snell.'yx'=170
2	-28.210	2	38.40	1.98	0.2001	0.03	0.14	Snell.'yx'=170
7	-15.580	2	38.40	1.98	0.2001	0.02	0.08	Snell.'yx'=170
8	-15.350	2	38.40	1.98	0.2001	0.02	0.08	Snell.'yx'=170
9	-27.580	2	38.40	1.98	0.2001	0.03	0.14	Snell.'yx'=170
10	-8.236	2	38.40	1.98	0.2001	0.01	0.04	Snell.'yx'=170
11	-25.240	2	38.40	1.98	0.2001	0.03	0.13	Snell.'yx'=170
12	-25.110	2	38.40	1.98	0.2001	0.02	0.12	Snell.'yx'=170
13	-32.450	2	38.40	1.98	0.2001	0.03	0.16	Snell.'yx'=170
14	-20.840	2	38.40	1.98	0.2001	0.02	0.10	Snell.'yx'=170

ASTA NUM. 2 NI 56 NF 4 Lungh. 516.1 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-15.596	2	38.40	1.98	0.2001	0.02	0.08	Snell.'yx'=170
1B	-6.624	2	38.40	1.98	0.2001	0.01	0.03	Snell.'yx'=170
1I	-17.653	2	38.40	1.98	0.2001	0.02	0.09	Snell.'yx'=170
1J	-4.567	2	38.40	1.98	0.2001	0.00	0.02	Snell.'yx'=170
2	-19.790	2	38.40	1.98	0.2001	0.02	0.10	Snell.'yx'=170
7	-11.800	2	38.40	1.98	0.2001	0.01	0.06	Snell.'yx'=170
8	-10.730	2	38.40	1.98	0.2001	0.01	0.05	Snell.'yx'=170
9	-2.533	2	38.40	1.98	0.2001	0.00	0.01	Snell.'yx'=170
10	-22.660	2	38.40	1.98	0.2001	0.02	0.11	Snell.'yx'=170
11	-18.200	2	38.40	1.98	0.2001	0.02	0.09	Snell.'yx'=170
12	-17.560	2	38.40	1.98	0.2001	0.02	0.09	Snell.'yx'=170
13	-12.640	2	38.40	1.98	0.2001	0.01	0.06	Snell.'yx'=170
14	-24.720	2	38.40	1.98	0.2001	0.02	0.12	Snell.'yx'=170

ASTA NUM. 3 NI 71 NF 10 Lungh. 504.8 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-17.761	2	38.40	1.93	0.2079	0.02	0.08	Snell.'yx'=166
1B	-4.919	2	38.40	1.93	0.2079	0.00	0.02	Snell.'yx'=166
1I	-18.233	2	38.40	1.93	0.2079	0.02	0.09	Snell.'yx'=166
1J	-4.447	2	38.40	1.93	0.2079	0.00	0.02	Snell.'yx'=166
2	-20.160	2	38.40	1.93	0.2079	0.02	0.10	Snell.'yx'=166
7	-11.270	2	38.40	1.93	0.2079	0.01	0.05	Snell.'yx'=166
8	-10.950	2	38.40	1.93	0.2079	0.01	0.05	Snell.'yx'=166
9	-22.550	2	38.40	1.93	0.2079	0.02	0.11	Snell.'yx'=166
10	-3.176	2	38.40	1.93	0.2079	0.00	0.02	Snell.'yx'=166
11	-18.080	2	38.40	1.93	0.2079	0.02	0.09	Snell.'yx'=166
12	-17.890	2	38.40	1.93	0.2079	0.02	0.09	Snell.'yx'=166
13	-24.850	2	38.40	1.93	0.2079	0.02	0.12	Snell.'yx'=166
14	-13.220	2	38.40	1.93	0.2079	0.01	0.06	Snell.'yx'=166

ASTA NUM. 4 NI 86 NF 8 Lungh. 504.8 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-20.882	2	38.40	1.93	0.2079	0.02	0.10	Snell.'yx'=166
1B	-11.818	2	38.40	1.93	0.2079	0.01	0.06	Snell.'yx'=166
1I	-22.952	2	38.40	1.93	0.2079	0.02	0.11	Snell.'yx'=166
1J	-9.748	2	38.40	1.93	0.2079	0.01	0.05	Snell.'yx'=166
2	-29.190	2	38.40	1.93	0.2079	0.03	0.14	Snell.'yx'=166
7	-16.920	2	38.40	1.93	0.2079	0.02	0.08	Snell.'yx'=166
8	-15.920	2	38.40	1.93	0.2079	0.02	0.08	Snell.'yx'=166
9	-9.147	2	38.40	1.93	0.2079	0.01	0.04	Snell.'yx'=166

10	-27.980	2	38.40	1.93	0.2079	0.03	0.13	Snell.'yx'=166
11	-26.590	2	38.40	1.93	0.2079	0.03	0.13	Snell.'yx'=166
12	-25.990	2	38.40	1.93	0.2079	0.03	0.12	Snell.'yx'=166
13	-21.930	2	38.40	1.93	0.2079	0.02	0.10	Snell.'yx'=166
14	-33.230	2	38.40	1.93	0.2079	0.03	0.16	Snell.'yx'=166

ASTA NUM. 5 NI 87 NF 7 Lungh. 504.8 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-20.916	2	38.40	1.93	0.2079	0.02	0.10	Snell.'yx'=166
1B	-11.884	2	38.40	1.93	0.2079	0.01	0.06	Snell.'yx'=166
1I	-23.433	2	38.40	1.93	0.2079	0.02	0.11	Snell.'yx'=166
1J	-9.367	2	38.40	1.93	0.2079	0.01	0.04	Snell.'yx'=166
2	-29.280	2	38.40	1.93	0.2079	0.03	0.14	Snell.'yx'=166
7	-18.330	2	38.40	1.93	0.2079	0.02	0.09	Snell.'yx'=166
8	-16.930	2	38.40	1.93	0.2079	0.02	0.08	Snell.'yx'=166
9	-9.201	2	38.40	1.93	0.2079	0.01	0.04	Snell.'yx'=166
10	-28.030	2	38.40	1.93	0.2079	0.03	0.13	Snell.'yx'=166
11	-27.480	2	38.40	1.93	0.2079	0.03	0.13	Snell.'yx'=166
12	-26.640	2	38.40	1.93	0.2079	0.03	0.13	Snell.'yx'=166
13	-22.010	2	38.40	1.93	0.2079	0.02	0.11	Snell.'yx'=166
14	-33.310	2	38.40	1.93	0.2079	0.03	0.16	Snell.'yx'=166

ASTA NUM. 6 NI 72 NF 9 Lungh. 504.8 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-18.107	2	38.40	1.93	0.2079	0.02	0.09	Snell.'yx'=166
1B	-4.653	2	38.40	1.93	0.2079	0.00	0.02	Snell.'yx'=166
1I	-19.526	2	38.40	1.93	0.2079	0.02	0.09	Snell.'yx'=166
1J	-3.234	2	38.40	1.93	0.2079	0.00	0.02	Snell.'yx'=166
2	-20.240	2	38.40	1.93	0.2079	0.02	0.10	Snell.'yx'=166
7	-9.496	2	38.40	1.93	0.2079	0.01	0.05	Snell.'yx'=166
8	-12.030	2	38.40	1.93	0.2079	0.01	0.06	Snell.'yx'=166
9	-22.600	2	38.40	1.93	0.2079	0.02	0.11	Snell.'yx'=166
10	-3.225	2	38.40	1.93	0.2079	0.00	0.02	Snell.'yx'=166
11	-17.060	2	38.40	1.93	0.2079	0.02	0.08	Snell.'yx'=166
12	-18.580	2	38.40	1.93	0.2079	0.02	0.09	Snell.'yx'=166
13	-24.920	2	38.40	1.93	0.2079	0.02	0.12	Snell.'yx'=166
14	-13.300	2	38.40	1.93	0.2079	0.01	0.06	Snell.'yx'=166

ASTA NUM. 7 NI 57 NF 3 Lungh. 516.1 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-15.931	2	38.40	1.98	0.2001	0.02	0.08	Snell.'yx'=170
1B	-6.449	2	38.40	1.98	0.2001	0.01	0.03	Snell.'yx'=170
1I	-18.949	2	38.40	1.98	0.2001	0.02	0.09	Snell.'yx'=170
1J	-3.431	2	38.40	1.98	0.2001	0.00	0.02	Snell.'yx'=170
2	-19.930	2	38.40	1.98	0.2001	0.02	0.10	Snell.'yx'=170
7	-13.400	2	38.40	1.98	0.2001	0.01	0.07	Snell.'yx'=170
8	-11.800	2	38.40	1.98	0.2001	0.01	0.06	Snell.'yx'=170
9	-2.623	2	38.40	1.98	0.2001	0.00	0.01	Snell.'yx'=170
10	-22.740	2	38.40	1.98	0.2001	0.02	0.11	Snell.'yx'=170
11	-19.240	2	38.40	1.98	0.2001	0.02	0.10	Snell.'yx'=170
12	-18.280	2	38.40	1.98	0.2001	0.02	0.09	Snell.'yx'=170
13	-12.780	2	38.40	1.98	0.2001	0.01	0.06	Snell.'yx'=170
14	-24.850	2	38.40	1.98	0.2001	0.02	0.12	Snell.'yx'=170

ASTA NUM. 8 NI 36 NF 6 Lungh. 516.1 cm SEZ. Pd L 100X 10 Dist.= 0.010 m __a_'T'__ Area lorda: 38.40 cmq
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

N.comb.	NSd (kN)	Classe	Anet;Aeff (cmq)	Snell.adim.	χminimo	I.R.	I.S.	Note
1A	-22.169	2	38.40	1.98	0.2001	0.02	0.11	Snell.'yx'=170
1B	-9.431	2	38.40	1.98	0.2001	0.01	0.05	Snell.'yx'=170
1I	-23.642	2	38.40	1.98	0.2001	0.02	0.12	Snell.'yx'=170
1J	-7.958	2	38.40	1.98	0.2001	0.01	0.04	Snell.'yx'=170
2	-28.240	2	38.40	1.98	0.2001	0.03	0.14	Snell.'yx'=170
7	-13.480	2	38.40	1.98	0.2001	0.01	0.07	Snell.'yx'=170
8	-16.300	2	38.40	1.98	0.2001	0.02	0.08	Snell.'yx'=170
9	-27.600	2	38.40	1.98	0.2001	0.03	0.14	Snell.'yx'=170
10	-8.255	2	38.40	1.98	0.2001	0.01	0.04	Snell.'yx'=170
11	-24.000	2	38.40	1.98	0.2001	0.02	0.12	Snell.'yx'=170
12	-25.690	2	38.40	1.98	0.2001	0.03	0.13	Snell.'yx'=170
13	-32.470	2	38.40	1.98	0.2001	0.03	0.16	Snell.'yx'=170
14	-20.870	2	38.40	1.98	0.2001	0.02	0.10	Snell.'yx'=170

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **8** Descrizione: **ARCARECCI**
Tabella: **Tabella travi** Struttura: **Nuova**
Tipo acciaio: **S 275** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Coeff. riduzione dell'area: **0.000** Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Ala** Più di una fila di bulloni

ASTA NUM. 7 NI 91 NF 139 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.070	10.458	8.459	0.000	6.683	-0.172	1	0.03	0.00	0.08	
1B	0	0.070	11.502	8.459	0.000	6.683	-0.317	1	0.03	0.00	0.08	
1C	0	0.070	10.458	-4.777	0.000	-3.787	-0.172	1	0.03	0.00	0.05	
1D	0	0.070	11.502	-4.777	0.000	-3.787	-0.317	1	0.03	0.00	0.05	
1E	0	0.134	10.458	8.459	0.000	6.683	-0.172	1	0.03	0.00	0.08	
1F	0	0.134	11.502	8.459	0.000	6.683	-0.317	1	0.03	0.00	0.08	
1G	0	0.134	10.458	-4.777	0.000	-3.787	-0.172	1	0.03	0.00	0.05	
1H	0	0.134	11.502	-4.777	0.000	-3.787	-0.317	1	0.03	0.00	0.05	
1I	0	0.003	10.654	4.201	0.000	3.313	-0.221	1	0.03	0.00	0.04	
1J	0	0.003	11.306	4.201	0.000	3.313	-0.268	1	0.03	0.00	0.04	
1K	0	0.003	10.654	-0.519	0.000	-0.417	-0.221	1	0.03	0.00	0.01	
1L	0	0.003	11.306	-0.519	0.000	-0.417	-0.268	1	0.03	0.00	0.01	
1M	0	0.202	10.654	4.201	0.000	3.313	-0.221	1	0.03	0.00	0.04	
1N	0	0.202	11.306	4.201	0.000	3.313	-0.268	1	0.03	0.00	0.04	
1O	0	0.202	10.654	-0.519	0.000	-0.417	-0.221	1	0.03	0.00	0.01	
1P	0	0.202	11.306	-0.519	0.000	-0.417	-0.268	1	0.03	0.00	0.01	
2	0	0.186	19.990	3.308	0.000	2.603	-0.443	1	0.05	0.00	0.03	
7	0	0.146	10.830	1.842	0.000	1.444	-0.263	1	0.03	0.00	0.02	
8	0	0.156	10.770	1.781	0.000	1.399	-0.255	1	0.03	0.00	0.02	
9	0	0.090	12.340	2.127	0.000	1.670	-0.262	1	0.03	0.00	0.02	
10	0	0.117	12.260	2.127	0.000	1.668	-0.278	1	0.03	0.00	0.02	
11	0	0.194	17.920	2.977	0.000	2.340	-0.410	1	0.05	0.00	0.03	
12	0	0.200	17.880	2.940	0.000	2.313	-0.406	1	0.05	0.00	0.03	
13	0	0.160	18.830	3.148	0.000	2.476	-0.410	1	0.05	0.00	0.03	
14	0	0.177	18.780	3.148	0.000	2.475	-0.420	1	0.05	0.00	0.03	
1A	56	0.070	6.970	8.459	0.000	1.924	5.317	1	0.02	0.00	0.03	
1B	56	0.070	8.014	8.459	0.000	1.924	4.586	1	0.02	0.00	0.03	
1C	56	0.070	6.970	-4.777	0.000	-1.100	5.317	1	0.02	0.00	0.03	
1D	56	0.070	8.014	-4.777	0.000	-1.100	4.586	1	0.02	0.00	0.03	
1E	56	0.134	6.970	8.459	0.000	1.924	5.317	1	0.02	0.00	0.03	
1F	56	0.134	8.014	8.459	0.000	1.924	4.586	1	0.02	0.00	0.03	
1G	56	0.134	6.970	-4.777	0.000	-1.100	5.317	1	0.02	0.00	0.03	
1H	56	0.134	8.014	-4.777	0.000	-1.100	4.586	1	0.02	0.00	0.03	
1I	56	0.003	7.166	4.201	0.000	0.949	5.159	1	0.02	0.00	0.03	
1J	56	0.003	7.818	4.201	0.000	0.949	4.744	1	0.02	0.00	0.03	
1K	56	0.003	7.166	-0.519	0.000	-0.125	5.159	1	0.02	0.00	0.03	
1L	56	0.003	7.818	-0.519	0.000	-0.125	4.744	1	0.02	0.00	0.03	
1M	56	0.202	7.166	4.201	0.000	0.949	5.159	1	0.02	0.00	0.03	
1N	56	0.202	7.818	4.201	0.000	0.949	4.744	1	0.02	0.00	0.03	
1O	56	0.202	7.166	-0.519	0.000	-0.125	5.159	1	0.02	0.00	0.03	
1P	56	0.202	7.818	-0.519	0.000	-0.125	4.744	1	0.02	0.00	0.03	
2	56	0.186	13.613	3.308	0.000	0.743	9.007	1	0.04	0.00	0.05	
7	56	0.146	7.398	1.842	0.000	0.408	4.863	1	0.02	0.00	0.03	
8	56	0.156	7.338	1.781	0.000	0.397	4.836	1	0.02	0.00	0.03	
9	56	0.090	8.439	2.127	0.000	0.474	5.582	1	0.02	0.00	0.03	
10	56	0.117	8.361	2.127	0.000	0.472	5.523	1	0.02	0.00	0.03	
11	56	0.194	12.206	2.977	0.000	0.666	8.062	1	0.03	0.00	0.05	
12	56	0.200	12.167	2.940	0.000	0.659	8.044	1	0.03	0.00	0.05	
13	56	0.160	12.832	3.148	0.000	0.706	8.491	1	0.03	0.00	0.05	
14	56	0.177	12.784	3.148	0.000	0.704	8.457	1	0.03	0.00	0.05	
1A	113	0.070	3.482	8.459	0.000	-2.836	8.844	1	0.01	0.00	0.05	
1B	113	0.070	4.526	8.459	0.000	-2.836	7.526	1	0.01	0.00	0.04	
1C	113	0.070	3.482	-4.777	0.000	1.588	8.844	1	0.01	0.00	0.05	
1D	113	0.070	4.526	-4.777	0.000	1.588	7.526	1	0.01	0.00	0.04	
1E	113	0.134	3.482	8.459	0.000	-2.836	8.844	1	0.01	0.00	0.05	
1F	113	0.134	4.526	8.459	0.000	-2.836	7.526	1	0.01	0.00	0.04	
1G	113	0.134	3.482	-4.777	0.000	1.588	8.844	1	0.01	0.00	0.05	
1H	113	0.134	4.526	-4.777	0.000	1.588	7.526	1	0.01	0.00	0.04	
1I	113	0.003	3.678	4.201	0.000	-1.414	8.576	1	0.01	0.00	0.05	
1J	113	0.003	4.330	4.201	0.000	-1.414	7.794	1	0.01	0.00	0.05	
1K	113	0.003	3.678	-0.519	0.000	0.166	8.576	1	0.01	0.00	0.05	
1L	113	0.003	4.330	-0.519	0.000	0.166	7.794	1	0.01	0.00	0.05	

1M	113	0.202	3.678	4.201	0.000	-1.414	8.576	1	0.01	0.00	0.05
1N	113	0.202	4.330	4.201	0.000	-1.414	7.794	1	0.01	0.00	0.05
1O	113	0.202	3.678	-0.519	0.000	0.166	8.576	1	0.01	0.00	0.05
1P	113	0.202	4.330	-0.519	0.000	0.166	7.794	1	0.01	0.00	0.05
2	113	0.186	7.235	3.308	0.000	-1.118	14.870	1	0.02	0.00	0.09
7	113	0.146	3.966	1.842	0.000	-0.629	8.059	1	0.01	0.00	0.05
8	113	0.156	3.905	1.781	0.000	-0.605	7.998	1	0.01	0.00	0.05
9	113	0.090	4.537	2.127	0.000	-0.723	9.231	1	0.01	0.00	0.05
10	113	0.117	4.461	2.127	0.000	-0.725	9.129	1	0.01	0.00	0.05
11	113	0.194	6.491	2.977	0.000	-1.009	13.320	1	0.02	0.00	0.08
12	113	0.200	6.455	2.940	0.000	-0.995	13.280	1	0.02	0.00	0.08
13	113	0.160	6.834	3.148	0.000	-1.065	14.020	1	0.02	0.00	0.08
14	113	0.177	6.788	3.148	0.000	-1.067	13.960	1	0.02	0.00	0.08

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											

ASTA NUM. 8 NI 76 NF 232 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.027	8.486	5.789	0.000	3.321	-6.281	1	0.02	0.00	0.04	
1B	0	-0.027	10.506	5.789	0.000	3.321	-7.901	1	0.03	0.00	0.05	
1C	0	-0.027	8.486	-0.297	0.000	-0.213	-6.281	1	0.02	0.00	0.04	
1D	0	-0.027	10.506	-0.297	0.000	-0.213	-7.901	1	0.03	0.00	0.05	
1E	0	0.055	8.486	5.789	0.000	3.321	-6.281	1	0.02	0.00	0.04	
1F	0	0.055	10.506	5.789	0.000	3.321	-7.901	1	0.03	0.00	0.05	
1G	0	0.055	8.486	-0.297	0.000	-0.213	-6.281	1	0.02	0.00	0.04	
1H	0	0.055	10.506	-0.297	0.000	-0.213	-7.901	1	0.03	0.00	0.05	
1I	0	-0.053	9.149	3.688	0.000	2.103	-6.799	1	0.02	0.00	0.04	
1J	0	-0.053	9.843	3.688	0.000	2.103	-7.383	1	0.03	0.00	0.04	
1K	0	-0.053	9.149	1.804	0.000	1.005	-6.799	1	0.02	0.00	0.04	
1L	0	-0.053	9.843	1.804	0.000	1.005	-7.383	1	0.03	0.00	0.04	
1M	0	0.081	9.149	3.688	0.000	2.103	-6.799	1	0.02	0.00	0.04	
1N	0	0.081	9.843	3.688	0.000	2.103	-7.383	1	0.03	0.00	0.04	
1O	0	0.081	9.149	1.804	0.000	1.005	-6.799	1	0.02	0.00	0.04	
1P	0	0.081	9.843	1.804	0.000	1.005	-7.383	1	0.03	0.00	0.04	
2	0	0.023	17.280	4.935	0.000	2.791	-12.880	1	0.05	0.00	0.08	
7	0	0.010	9.426	2.746	0.000	1.555	-7.017	1	0.03	0.00	0.04	
8	0	0.021	9.272	2.647	0.000	1.496	-6.913	1	0.02	0.00	0.04	
9	0	0.023	10.600	3.165	0.000	1.791	-7.954	1	0.03	0.00	0.05	
10	0	0.010	10.650	3.155	0.000	1.787	-7.979	1	0.03	0.00	0.05	
11	0	0.019	15.520	4.440	0.000	2.512	-11.560	1	0.04	0.00	0.07	
12	0	0.025	15.430	4.381	0.000	2.477	-11.500	1	0.04	0.00	0.07	
13	0	0.027	16.230	4.692	0.000	2.654	-12.120	1	0.04	0.00	0.07	
14	0	0.019	16.260	4.686	0.000	2.651	-12.140	1	0.04	0.00	0.07	
1A	47	-0.027	5.592	5.789	0.000	0.619	-2.999	1	0.01	0.00	0.02	
1B	47	-0.027	7.612	5.789	0.000	0.619	-3.671	1	0.02	0.00	0.02	
1C	47	-0.027	5.592	-0.297	0.000	-0.074	-2.999	1	0.01	0.00	0.02	
1D	47	-0.027	7.612	-0.297	0.000	-0.074	-3.671	1	0.02	0.00	0.02	
1E	47	0.055	5.592	5.789	0.000	0.619	-2.999	1	0.01	0.00	0.02	
1F	47	0.055	7.612	5.789	0.000	0.619	-3.671	1	0.02	0.00	0.02	
1G	47	0.055	5.592	-0.297	0.000	-0.074	-2.999	1	0.01	0.00	0.02	
1H	47	0.055	7.612	-0.297	0.000	-0.074	-3.671	1	0.02	0.00	0.02	
1I	47	-0.053	6.255	3.688	0.000	0.381	-3.214	1	0.02	0.00	0.02	
1J	47	-0.053	6.949	3.688	0.000	0.381	-3.456	1	0.02	0.00	0.02	
1K	47	-0.053	6.255	1.804	0.000	0.164	-3.214	1	0.02	0.00	0.02	
1L	47	-0.053	6.949	1.804	0.000	0.164	-3.456	1	0.02	0.00	0.02	
1M	47	0.081	6.255	3.688	0.000	0.381	-3.214	1	0.02	0.00	0.02	
1N	47	0.081	6.949	3.688	0.000	0.381	-3.456	1	0.02	0.00	0.02	
1O	47	0.081	6.255	1.804	0.000	0.164	-3.214	1	0.02	0.00	0.02	
1P	47	0.081	6.949	1.804	0.000	0.164	-3.456	1	0.02	0.00	0.02	
2	47	0.023	11.988	4.935	0.000	0.488	-6.052	1	0.03	0.00	0.04	
7	47	0.010	6.579	2.746	0.000	0.273	-3.283	1	0.02	0.00	0.02	
8	47	0.021	6.425	2.647	0.000	0.261	-3.251	1	0.02	0.00	0.02	
9	47	0.023	7.364	3.165	0.000	0.314	-3.762	1	0.02	0.00	0.02	
10	47	0.010	7.414	3.155	0.000	0.315	-3.764	1	0.02	0.00	0.02	
11	47	0.019	10.781	4.440	0.000	0.440	-5.421	1	0.03	0.00	0.03	
12	47	0.025	10.690	4.381	0.000	0.433	-5.403	1	0.03	0.00	0.03	
13	47	0.027	11.255	4.692	0.000	0.464	-5.708	1	0.03	0.00	0.03	
14	47	0.019	11.285	4.686	0.000	0.465	-5.711	1	0.03	0.00	0.03	
1A	93	-0.027	2.698	5.789	0.000	-2.083	-1.068	1	0.01	0.00	0.03	
1B	93	-0.027	4.718	5.789	0.000	-2.083	-0.792	1	0.01	0.00	0.03	
1C	93	-0.027	2.698	-0.297	0.000	0.065	-1.068	1	0.01	0.00	0.01	
1D	93	-0.027	4.718	-0.297	0.000	0.065	-0.792	1	0.01	0.00	0.00	
1E	93	0.055	2.698	5.789	0.000	-2.083	-1.068	1	0.01	0.00	0.03	
1F	93	0.055	4.718	5.789	0.000	-2.083	-0.792	1	0.01	0.00	0.03	
1G	93	0.055	2.698	-0.297	0.000	0.065	-1.068	1	0.01	0.00	0.01	
1H	93	0.055	4.718	-0.297	0.000	0.065	-0.792	1	0.01	0.00	0.00	
1I	93	-0.053	3.361	3.688	0.000	-1.340	-0.980	1	0.01	0.00	0.02	
1J	93	-0.053	4.055	3.688	0.000	-1.340	-0.879	1	0.01	0.00	0.02	

1K	93	-0.053	3.361	1.804	0.000	-0.678	-0.980	1	0.01	0.00	0.01
1L	93	-0.053	4.055	1.804	0.000	-0.678	-0.879	1	0.01	0.00	0.01
1M	93	0.081	3.361	3.688	0.000	-1.340	-0.980	1	0.01	0.00	0.02
1N	93	0.081	4.055	3.688	0.000	-1.340	-0.879	1	0.01	0.00	0.02
1O	93	0.081	3.361	1.804	0.000	-0.678	-0.980	1	0.01	0.00	0.01
1P	93	0.081	4.055	1.804	0.000	-0.678	-0.879	1	0.01	0.00	0.01
2	93	0.023	6.695	4.935	0.000	-1.814	-1.693	1	0.02	0.00	0.02
7	93	0.010	3.732	2.746	0.000	-1.008	-0.877	1	0.01	0.00	0.01
8	93	0.021	3.578	2.647	0.000	-0.975	-0.917	1	0.01	0.00	0.01
9	93	0.023	4.128	3.165	0.000	-1.163	-1.081	1	0.01	0.00	0.01
10	93	0.010	4.178	3.155	0.000	-1.158	-1.059	1	0.01	0.00	0.01
11	93	0.019	6.042	4.440	0.000	-1.632	-1.494	1	0.02	0.00	0.02
12	93	0.025	5.950	4.381	0.000	-1.612	-1.518	1	0.02	0.00	0.02
13	93	0.027	6.280	4.692	0.000	-1.725	-1.617	1	0.02	0.00	0.02
14	93	0.019	6.310	4.686	0.000	-1.722	-1.603	1	0.02	0.00	0.02

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.027	3.321	-6.281	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18
1B	-0.027	3.321	-7.901	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 18
1C	-0.027	-0.213	-6.281	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1D	-0.027	-0.213	-7.901	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
1I	-0.053	2.103	-6.799	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1J	-0.053	2.103	-7.383	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1K	-0.053	1.005	-6.799	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
1L	-0.053	1.005	-7.383	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 18

ASTA NUM. 9 NI 61 NF 218 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.068	7.654	5.272	0.000	3.056	-4.215	1	0.02	0.00	0.04	
1B	0	-0.068	9.292	5.272	0.000	3.056	-5.253	1	0.02	0.00	0.04	
1C	0	-0.068	7.654	-0.758	0.000	-0.450	-4.215	1	0.02	0.00	0.03	
1D	0	-0.068	9.292	-0.758	0.000	-0.450	-5.253	1	0.02	0.00	0.03	
1E	0	-0.008	7.654	5.272	0.000	3.056	-4.215	1	0.02	0.00	0.04	
1F	0	-0.008	9.292	5.272	0.000	3.056	-5.253	1	0.02	0.00	0.04	
1G	0	-0.008	7.654	-0.758	0.000	-0.450	-4.215	1	0.02	0.00	0.03	
1H	0	-0.008	9.292	-0.758	0.000	-0.450	-5.253	1	0.02	0.00	0.03	
1I	0	-0.099	8.166	3.170	0.000	1.832	-4.482	1	0.02	0.00	0.03	
1J	0	-0.099	8.780	3.170	0.000	1.832	-4.986	1	0.02	0.00	0.03	
1K	0	-0.099	8.166	1.344	0.000	0.774	-4.482	1	0.02	0.00	0.03	
1L	0	-0.099	8.780	1.344	0.000	0.774	-4.986	1	0.02	0.00	0.03	
1M	0	0.022	8.166	3.170	0.000	1.832	-4.482	1	0.02	0.00	0.03	
1N	0	0.022	8.780	3.170	0.000	1.832	-4.986	1	0.02	0.00	0.03	
1O	0	0.022	8.166	1.344	0.000	0.774	-4.482	1	0.02	0.00	0.03	
1P	0	0.022	8.780	1.344	0.000	0.774	-4.986	1	0.02	0.00	0.03	
2	0	-0.068	15.420	4.045	0.000	2.334	-8.610	1	0.04	0.00	0.05	
7	0	-0.043	8.412	2.260	0.000	1.305	-4.695	1	0.02	0.00	0.03	
8	0	-0.040	8.289	2.162	0.000	1.247	-4.639	1	0.02	0.00	0.03	
9	0	-0.032	9.519	2.620	0.000	1.511	-5.356	1	0.03	0.00	0.03	
10	0	-0.056	9.413	2.612	0.000	1.509	-5.200	1	0.03	0.00	0.03	
11	0	-0.064	13.860	3.641	0.000	2.101	-7.734	1	0.04	0.00	0.05	
12	0	-0.062	13.790	3.582	0.000	2.067	-7.700	1	0.04	0.00	0.05	
13	0	-0.057	14.530	3.857	0.000	2.225	-8.131	1	0.04	0.00	0.05	
14	0	-0.072	14.460	3.852	0.000	2.224	-8.037	1	0.04	0.00	0.05	
1A	47	-0.068	4.760	5.272	0.000	0.595	-1.332	1	0.01	0.00	0.01	
1B	47	-0.068	6.398	5.272	0.000	0.595	-1.579	1	0.02	0.00	0.01	
1C	47	-0.068	4.760	-0.758	0.000	-0.096	-1.332	1	0.01	0.00	0.01	
1D	47	-0.068	6.398	-0.758	0.000	-0.096	-1.579	1	0.02	0.00	0.01	
1E	47	-0.008	4.760	5.272	0.000	0.595	-1.332	1	0.01	0.00	0.01	
1F	47	-0.008	6.398	5.272	0.000	0.595	-1.579	1	0.02	0.00	0.01	
1G	47	-0.008	4.760	-0.758	0.000	-0.096	-1.332	1	0.01	0.00	0.01	
1H	47	-0.008	6.398	-0.758	0.000	-0.096	-1.579	1	0.02	0.00	0.01	
1I	47	-0.099	5.272	3.170	0.000	0.352	-1.390	1	0.01	0.00	0.01	
1J	47	-0.099	5.886	3.170	0.000	0.352	-1.521	1	0.02	0.00	0.01	
1K	47	-0.099	5.272	1.344	0.000	0.147	-1.390	1	0.01	0.00	0.01	
1L	47	-0.099	5.886	1.344	0.000	0.147	-1.521	1	0.02	0.00	0.01	
1M	47	0.022	5.272	3.170	0.000	0.352	-1.390	1	0.01	0.00	0.01	
1N	47	0.022	5.886	3.170	0.000	0.352	-1.521	1	0.02	0.00	0.01	
1O	47	0.022	5.272	1.344	0.000	0.147	-1.390	1	0.01	0.00	0.01	
1P	47	0.022	5.886	1.344	0.000	0.147	-1.521	1	0.02	0.00	0.01	
2	47	-0.068	10.132	4.045	0.000	0.447	-2.647	1	0.03	0.00	0.02	
7	47	-0.043	5.566	2.260	0.000	0.250	-1.434	1	0.01	0.00	0.01	
8	47	-0.040	5.443	2.162	0.000	0.238	-1.435	1	0.01	0.00	0.01	
9	47	-0.032	6.283	2.620	0.000	0.289	-1.669	1	0.02	0.00	0.01	
10	47	-0.056	6.177	2.612	0.000	0.290	-1.562	1	0.02	0.00	0.01	
11	47	-0.064	9.120	3.641	0.000	0.403	-2.372	1	0.02	0.00	0.01	
12	47	-0.062	9.048	3.582	0.000	0.396	-2.372	1	0.02	0.00	0.01	
13	47	-0.057	9.553	3.857	0.000	0.426	-2.513	1	0.03	0.00	0.01	
14	47	-0.072	9.487	3.852	0.000	0.427	-2.449	1	0.03	0.00	0.01	

1A	93	-0.068	1.866	5.272	0.000	-1.866	0.201	1	0.01	0.00	0.02
1B	93	-0.068	3.504	5.272	0.000	-1.866	0.744	1	0.01	0.00	0.02
1C	93	-0.068	1.866	-0.758	0.000	0.258	0.201	1	0.00	0.00	0.00
1D	93	-0.068	3.504	-0.758	0.000	0.258	0.744	1	0.01	0.00	0.00
1E	93	-0.008	1.866	5.272	0.000	-1.866	0.201	1	0.01	0.00	0.02
1F	93	-0.008	3.504	5.272	0.000	-1.866	0.744	1	0.01	0.00	0.02
1G	93	-0.008	1.866	-0.758	0.000	0.258	0.201	1	0.00	0.00	0.00
1H	93	-0.008	3.504	-0.758	0.000	0.258	0.744	1	0.01	0.00	0.00
1I	93	-0.099	2.378	3.170	0.000	-1.127	0.352	1	0.01	0.00	0.01
1J	93	-0.099	2.992	3.170	0.000	-1.127	0.593	1	0.01	0.00	0.01
1K	93	-0.099	2.378	1.344	0.000	-0.480	0.352	1	0.01	0.00	0.01
1L	93	-0.099	2.992	1.344	0.000	-0.480	0.593	1	0.01	0.00	0.01
1M	93	0.022	2.378	3.170	0.000	-1.127	0.352	1	0.01	0.00	0.01
1N	93	0.022	2.992	3.170	0.000	-1.127	0.593	1	0.01	0.00	0.01
1O	93	0.022	2.378	1.344	0.000	-0.480	0.352	1	0.01	0.00	0.01
1P	93	0.022	2.992	1.344	0.000	-0.480	0.593	1	0.01	0.00	0.01
2	93	-0.068	4.843	4.045	0.000	-1.441	0.848	1	0.01	0.00	0.02
7	93	-0.043	2.719	2.260	0.000	-0.804	0.499	1	0.01	0.00	0.01
8	93	-0.040	2.596	2.162	0.000	-0.771	0.440	1	0.01	0.00	0.01
9	93	-0.032	3.046	2.620	0.000	-0.934	0.508	1	0.01	0.00	0.01
10	93	-0.056	2.940	2.612	0.000	-0.929	0.565	1	0.01	0.00	0.01
11	93	-0.064	4.380	3.641	0.000	-1.296	0.779	1	0.01	0.00	0.02
12	93	-0.062	4.306	3.582	0.000	-1.276	0.743	1	0.01	0.00	0.02
13	93	-0.057	4.576	3.857	0.000	-1.374	0.784	1	0.01	0.00	0.02
14	93	-0.072	4.513	3.852	0.000	-1.371	0.818	1	0.01	0.00	0.02

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.068	3.056	-4.215	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 18
1B	-0.068	3.056	-5.253	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1C	-0.068	-0.450	-4.215	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.03	Snell. 'zx'= 18
1D	-0.068	-0.450	-5.253	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1E	-0.008	3.056	-4.215	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 18
1F	-0.008	3.056	-5.253	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1G	-0.008	-0.450	-4.215	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.03	Snell. 'zx'= 18
1H	-0.008	-0.450	-5.253	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1I	-0.099	1.832	-4.482	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
1J	-0.099	1.832	-4.986	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
1K	-0.099	0.774	-4.482	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1L	-0.099	0.774	-4.986	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
2	-0.068	2.334	-8.610	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18
7	-0.043	1.305	-4.695	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
8	-0.040	1.247	-4.639	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
9	-0.032	1.511	-5.356	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
10	-0.056	1.509	-5.200	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
11	-0.064	2.101	-7.734	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
12	-0.062	2.067	-7.700	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
13	-0.057	2.225	-8.131	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18
14	-0.072	2.224	-8.037	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18

ASTA NUM. 10 NI 34 NF 204 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.014	7.625	5.826	0.000	3.608	-4.249	1	0.02	0.00	0.05	
1B	0	0.014	9.187	5.826	0.000	3.608	-5.335	1	0.02	0.00	0.05	
1C	0	0.014	7.625	-0.970	0.000	-0.600	-4.249	1	0.02	0.00	0.03	
1D	0	0.014	9.187	-0.970	0.000	-0.600	-5.335	1	0.02	0.00	0.03	
1E	0	0.097	7.625	5.826	0.000	3.608	-4.249	1	0.02	0.00	0.05	
1F	0	0.097	9.187	5.826	0.000	3.608	-5.335	1	0.02	0.00	0.05	
1G	0	0.097	7.625	-0.970	0.000	-0.600	-4.249	1	0.02	0.00	0.03	
1H	0	0.097	9.187	-0.970	0.000	-0.600	-5.335	1	0.02	0.00	0.03	
1I	0	-0.016	8.126	3.512	0.000	2.174	-4.573	1	0.02	0.00	0.03	
1J	0	-0.016	8.686	3.512	0.000	2.174	-5.011	1	0.02	0.00	0.03	
1K	0	-0.016	8.126	1.344	0.000	0.834	-4.573	1	0.02	0.00	0.03	
1L	0	-0.016	8.686	1.344	0.000	0.834	-5.011	1	0.02	0.00	0.03	
1M	0	0.127	8.126	3.512	0.000	2.174	-4.573	1	0.02	0.00	0.03	
1N	0	0.127	8.686	3.512	0.000	2.174	-5.011	1	0.02	0.00	0.03	
1O	0	0.127	8.126	1.344	0.000	0.834	-4.573	1	0.02	0.00	0.03	
1P	0	0.127	8.686	1.344	0.000	0.834	-5.011	1	0.02	0.00	0.03	
2	0	0.099	15.310	4.362	0.000	2.702	-8.713	1	0.04	0.00	0.05	
7	0	0.052	8.374	2.427	0.000	1.503	-4.800	1	0.02	0.00	0.03	
8	0	0.060	8.232	2.338	0.000	1.448	-4.693	1	0.02	0.00	0.03	
9	0	0.070	9.340	2.801	0.000	1.734	-5.273	1	0.02	0.00	0.03	
10	0	0.056	9.412	2.796	0.000	1.732	-5.413	1	0.03	0.00	0.03	
11	0	0.087	13.770	3.924	0.000	2.431	-7.856	1	0.04	0.00	0.05	
12	0	0.092	13.690	3.871	0.000	2.397	-7.791	1	0.04	0.00	0.05	
13	0	0.098	14.350	4.148	0.000	2.569	-8.139	1	0.04	0.00	0.05	
14	0	0.089	14.400	4.146	0.000	2.568	-8.224	1	0.04	0.00	0.05	
1A	50	0.014	4.524	5.826	0.000	0.694	-1.215	1	0.01	0.00	0.01	
1B	50	0.014	6.086	5.826	0.000	0.694	-1.514	1	0.02	0.00	0.01	
1C	50	0.014	4.524	-0.970	0.000	-0.115	-1.215	1	0.01	0.00	0.01	

1D	50	0.014	6.086	-0.970	0.000	-0.115	-1.514	1	0.02	0.00	0.01
1E	50	0.097	4.524	5.826	0.000	0.694	-1.215	1	0.01	0.00	0.01
1F	50	0.097	6.086	5.826	0.000	0.694	-1.514	1	0.02	0.00	0.01
1G	50	0.097	4.524	-0.970	0.000	-0.115	-1.215	1	0.01	0.00	0.01
1H	50	0.097	6.086	-0.970	0.000	-0.115	-1.514	1	0.02	0.00	0.01
1I	50	-0.016	5.025	3.512	0.000	0.418	-1.297	1	0.01	0.00	0.01
1J	50	-0.016	5.585	3.512	0.000	0.418	-1.432	1	0.01	0.00	0.01
1K	50	-0.016	5.025	1.344	0.000	0.162	-1.297	1	0.01	0.00	0.01
1L	50	-0.016	5.585	1.344	0.000	0.162	-1.432	1	0.01	0.00	0.01
1M	50	0.127	5.025	3.512	0.000	0.418	-1.297	1	0.01	0.00	0.01
1N	50	0.127	5.585	3.512	0.000	0.418	-1.432	1	0.01	0.00	0.01
1O	50	0.127	5.025	1.344	0.000	0.162	-1.297	1	0.01	0.00	0.01
1P	50	0.127	5.585	1.344	0.000	0.162	-1.432	1	0.01	0.00	0.01
2	50	0.099	9.641	4.362	0.000	0.521	-2.477	1	0.03	0.00	0.01
7	50	0.052	5.324	2.427	0.000	0.290	-1.376	1	0.01	0.00	0.01
8	50	0.060	5.182	2.338	0.000	0.279	-1.339	1	0.01	0.00	0.01
9	50	0.070	5.872	2.801	0.000	0.333	-1.470	1	0.02	0.00	0.01
10	50	0.056	5.945	2.796	0.000	0.334	-1.574	1	0.02	0.00	0.01
11	50	0.087	8.693	3.924	0.000	0.469	-2.239	1	0.02	0.00	0.01
12	50	0.092	8.611	3.871	0.000	0.462	-2.216	1	0.02	0.00	0.01
13	50	0.098	9.022	4.148	0.000	0.495	-2.295	1	0.02	0.00	0.01
14	50	0.089	9.069	4.146	0.000	0.495	-2.358	1	0.02	0.00	0.01
1A	100	0.014	1.423	5.826	0.000	-2.219	0.269	1	0.01	0.00	0.03
1B	100	0.014	2.985	5.826	0.000	-2.219	0.757	1	0.01	0.00	0.03
1C	100	0.014	1.423	-0.970	0.000	0.370	0.269	1	0.00	0.00	0.00
1D	100	0.014	2.985	-0.970	0.000	0.370	0.757	1	0.01	0.00	0.00
1E	100	0.097	1.423	5.826	0.000	-2.219	0.269	1	0.01	0.00	0.03
1F	100	0.097	2.985	5.826	0.000	-2.219	0.757	1	0.01	0.00	0.03
1G	100	0.097	1.423	-0.970	0.000	0.370	0.269	1	0.00	0.00	0.00
1H	100	0.097	2.985	-0.970	0.000	0.370	0.757	1	0.01	0.00	0.00
1I	100	-0.016	1.924	3.512	0.000	-1.338	0.430	1	0.01	0.00	0.02
1J	100	-0.016	2.484	3.512	0.000	-1.338	0.597	1	0.01	0.00	0.02
1K	100	-0.016	1.924	1.344	0.000	-0.511	0.430	1	0.01	0.00	0.01
1L	100	-0.016	2.484	1.344	0.000	-0.511	0.597	1	0.01	0.00	0.01
1M	100	0.127	1.924	3.512	0.000	-1.338	0.430	1	0.01	0.00	0.02
1N	100	0.127	2.484	3.512	0.000	-1.338	0.597	1	0.01	0.00	0.02
1O	100	0.127	1.924	1.344	0.000	-0.511	0.430	1	0.01	0.00	0.01
1P	100	0.127	2.484	1.344	0.000	-0.511	0.597	1	0.01	0.00	0.01
2	100	0.099	3.971	4.362	0.000	-1.660	0.925	1	0.01	0.00	0.02
7	100	0.052	2.274	2.427	0.000	-0.924	0.523	1	0.01	0.00	0.01
8	100	0.060	2.132	2.338	0.000	-0.891	0.490	1	0.01	0.00	0.01
9	100	0.070	2.404	2.801	0.000	-1.067	0.599	1	0.01	0.00	0.01
10	100	0.056	2.477	2.796	0.000	-1.064	0.531	1	0.01	0.00	0.01
11	100	0.087	3.616	3.924	0.000	-1.493	0.839	1	0.01	0.00	0.02
12	100	0.092	3.531	3.871	0.000	-1.474	0.819	1	0.01	0.00	0.02
13	100	0.098	3.694	4.148	0.000	-1.579	0.885	1	0.01	0.00	0.02
14	100	0.089	3.737	4.146	0.000	-1.578	0.844	1	0.01	0.00	0.02

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	--	----------											
	kN	kN*m											
1I	-0.016	2.174	-4.573	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 20
1J	-0.016	2.174	-5.011	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 20
1K	-0.016	0.834	-4.573	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 20
1L	-0.016	0.834	-5.011	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 20

ASTA NUM. 11 NI 16 NF 169 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	--	----------			----------			------	----------			
	cm	kN			kN*m							
1A	0	-0.044	13.547	8.917	0.000	6.952	-6.746	1	0.04	0.00	0.09	
1B	0	-0.044	15.153	8.917	0.000	6.952	-8.102	1	0.04	0.00	0.09	
1C	0	-0.044	13.547	-4.341	0.000	-3.578	-6.746	1	0.04	0.00	0.05	
1D	0	-0.044	15.153	-4.341	0.000	-3.578	-8.102	1	0.04	0.00	0.05	
1E	0	0.068	13.547	8.917	0.000	6.952	-6.746	1	0.04	0.00	0.09	
1F	0	0.068	15.153	8.917	0.000	6.952	-8.102	1	0.04	0.00	0.09	
1G	0	0.068	13.547	-4.341	0.000	-3.578	-6.746	1	0.04	0.00	0.05	
1H	0	0.068	15.153	-4.341	0.000	-3.578	-8.102	1	0.04	0.00	0.05	
1I	0	-0.103	13.965	4.633	0.000	3.553	-7.197	1	0.04	0.00	0.05	
1J	0	-0.103	14.735	4.633	0.000	3.553	-7.651	1	0.04	0.00	0.05	
1K	0	-0.103	13.965	-0.057	0.000	-0.179	-7.197	1	0.04	0.00	0.04	
1L	0	-0.103	14.735	-0.057	0.000	-0.179	-7.651	1	0.04	0.00	0.05	
1M	0	0.127	13.965	4.633	0.000	3.553	-7.197	1	0.04	0.00	0.05	
1N	0	0.127	14.735	4.633	0.000	3.553	-7.651	1	0.04	0.00	0.05	
1O	0	0.127	13.965	-0.057	0.000	-0.179	-7.197	1	0.04	0.00	0.04	
1P	0	0.127	14.735	-0.057	0.000	-0.179	-7.651	1	0.04	0.00	0.05	
2	0	0.020	26.110	4.122	0.000	3.040	-13.490	1	0.07	0.00	0.08	
7	0	-0.023	14.190	2.279	0.000	1.681	-7.339	1	0.04	0.00	0.04	
8	0	-0.019	14.090	2.213	0.000	1.634	-7.260	1	0.04	0.00	0.04	
9	0	0.013	16.060	2.620	0.000	1.932	-8.363	1	0.04	0.00	0.05	
10	0	0.027	16.090	2.623	0.000	1.934	-8.313	1	0.04	0.00	0.05	
11	0	-0.003	23.430	3.705	0.000	2.732	-12.100	1	0.06	0.00	0.07	
12	0	-0.001	23.370	3.666	0.000	2.704	-12.050	1	0.06	0.00	0.07	

13	0	0.019	24.550	3.909	0.000	2.882	-12.710	1	0.07	0.00	0.08	
14	0	0.027	24.570	3.911	0.000	2.884	-12.680	1	0.07	0.00	0.08	
1A	56	-0.044	10.059	8.917	0.000	1.936	-0.107	1	0.03	0.00	0.02	
1B	56	-0.044	11.666	8.917	0.000	1.936	-0.558	1	0.03	0.00	0.02	
1C	56	-0.044	10.059	-4.341	0.000	-1.136	-0.107	1	0.03	0.00	0.01	
1D	56	-0.044	11.666	-4.341	0.000	-1.136	-0.558	1	0.03	0.00	0.01	
1E	56	0.068	10.059	8.917	0.000	1.936	-0.107	1	0.03	0.00	0.02	
1F	56	0.068	11.666	8.917	0.000	1.936	-0.558	1	0.03	0.00	0.02	
1G	56	0.068	10.059	-4.341	0.000	-1.136	-0.107	1	0.03	0.00	0.01	
1H	56	0.068	11.666	-4.341	0.000	-1.136	-0.558	1	0.03	0.00	0.01	
1I	56	-0.103	10.478	4.633	0.000	0.947	-0.321	1	0.03	0.00	0.01	
1J	56	-0.103	11.247	4.633	0.000	0.947	-0.343	1	0.03	0.00	0.01	
1K	56	-0.103	10.478	-0.057	0.000	-0.147	-0.321	1	0.03	0.00	0.00	
1L	56	-0.103	11.247	-0.057	0.000	-0.147	-0.343	1	0.03	0.00	0.00	
1M	56	0.127	10.478	4.633	0.000	0.947	-0.321	1	0.03	0.00	0.01	
1N	56	0.127	11.247	4.633	0.000	0.947	-0.343	1	0.03	0.00	0.01	
1O	56	0.127	10.478	-0.057	0.000	-0.147	-0.321	1	0.03	0.00	0.00	
1P	56	0.127	11.247	-0.057	0.000	-0.147	-0.343	1	0.03	0.00	0.00	
2	56	0.020	19.735	4.122	0.000	0.721	-0.594	1	0.05	0.00	0.01	
7	56	-0.023	10.761	2.279	0.000	0.399	-0.320	1	0.03	0.00	0.00	
8	56	-0.019	10.661	2.213	0.000	0.389	-0.297	1	0.03	0.00	0.00	
9	56	0.013	12.160	2.620	0.000	0.459	-0.425	1	0.03	0.00	0.01	
10	56	0.027	12.188	2.623	0.000	0.459	-0.360	1	0.03	0.00	0.01	
11	56	-0.003	17.715	3.705	0.000	0.648	-0.525	1	0.05	0.00	0.01	
12	56	-0.001	17.655	3.666	0.000	0.642	-0.510	1	0.05	0.00	0.01	
13	56	0.019	18.555	3.909	0.000	0.684	-0.586	1	0.05	0.00	0.01	
14	56	0.027	18.575	3.911	0.000	0.684	-0.547	1	0.05	0.00	0.01	
1A	113	-0.044	6.572	8.917	0.000	-3.080	4.571	1	0.02	0.00	0.04	
1B	113	-0.044	8.178	8.917	0.000	-3.080	5.023	1	0.02	0.00	0.04	
1C	113	-0.044	6.572	-4.341	0.000	1.305	4.571	1	0.02	0.00	0.03	
1D	113	-0.044	8.178	-4.341	0.000	1.305	5.023	1	0.02	0.00	0.03	
1E	113	0.068	6.572	8.917	0.000	-3.080	4.571	1	0.02	0.00	0.04	
1F	113	0.068	8.178	8.917	0.000	-3.080	5.023	1	0.02	0.00	0.04	
1G	113	0.068	6.572	-4.341	0.000	1.305	4.571	1	0.02	0.00	0.03	
1H	113	0.068	8.178	-4.341	0.000	1.305	5.023	1	0.02	0.00	0.03	
1I	113	-0.103	6.990	4.633	0.000	-1.659	4.592	1	0.02	0.00	0.03	
1J	113	-0.103	7.760	4.633	0.000	-1.659	5.002	1	0.02	0.00	0.03	
1K	113	-0.103	6.990	-0.057	0.000	-0.115	4.592	1	0.02	0.00	0.03	
1L	113	-0.103	7.760	-0.057	0.000	-0.115	5.002	1	0.02	0.00	0.03	
1M	113	0.127	6.990	4.633	0.000	-1.659	4.592	1	0.02	0.00	0.03	
1N	113	0.127	7.760	4.633	0.000	-1.659	5.002	1	0.02	0.00	0.03	
1O	113	0.127	6.990	-0.057	0.000	-0.115	4.592	1	0.02	0.00	0.03	
1P	113	0.127	7.760	-0.057	0.000	-0.115	5.002	1	0.02	0.00	0.03	
2	113	0.020	13.360	4.122	0.000	-1.598	8.716	1	0.04	0.00	0.05	
7	113	-0.023	7.331	2.279	0.000	-0.883	4.769	1	0.02	0.00	0.03	
8	113	-0.019	7.231	2.213	0.000	-0.856	4.736	1	0.02	0.00	0.03	
9	113	0.013	8.261	2.620	0.000	-1.015	5.319	1	0.02	0.00	0.03	
10	113	0.027	8.287	2.623	0.000	-1.016	5.399	1	0.02	0.00	0.03	
11	113	-0.003	12.000	3.705	0.000	-1.436	7.836	1	0.03	0.00	0.05	
12	113	-0.001	11.940	3.666	0.000	-1.420	7.816	1	0.03	0.00	0.05	
13	113	0.019	12.560	3.909	0.000	-1.515	8.166	1	0.03	0.00	0.05	
14	113	0.027	12.580	3.911	0.000	-1.516	8.214	1	0.03	0.00	0.05	

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.044	6.952	-6.746	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.13	Snell. 'zx'= 22
1B	-0.044	6.952	-8.102	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.13	Snell. 'zx'= 22
1C	-0.044	-3.578	-6.746	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1D	-0.044	-3.578	-8.102	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1I	-0.103	3.553	-7.197	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1J	-0.103	3.553	-7.651	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1K	-0.103	-0.179	-7.197	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 22
1L	-0.103	-0.179	-7.651	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 22
7	-0.023	1.681	-7.339	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
8	-0.019	1.634	-7.260	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
11	-0.003	2.732	-12.100	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22
12	-0.001	2.704	-12.050	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22

ASTA NUM. 36 NI 139 NF 177 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.168	4.907	2.652	0.000	0.203	8.742	1	0.01	0.00	0.05	
1B	0	-0.168	5.003	2.652	0.000	0.203	7.372	1	0.01	0.00	0.04	
1C	0	-0.168	4.907	-1.893	0.000	-0.284	8.742	1	0.01	0.00	0.05	
1D	0	-0.168	5.003	-1.893	0.000	-0.284	7.372	1	0.01	0.00	0.04	
1E	0	-0.129	4.907	2.652	0.000	0.203	8.742	1	0.01	0.00	0.05	
1F	0	-0.129	5.003	2.652	0.000	0.203	7.372	1	0.01	0.00	0.04	
1G	0	-0.129	4.907	-1.893	0.000	-0.284	8.742	1	0.01	0.00	0.05	
1H	0	-0.129	5.003	-1.893	0.000	-0.284	7.372	1	0.01	0.00	0.04	
1I	0	-0.189	4.879	1.179	0.000	0.056	8.457	1	0.01	0.00	0.05	

1J	0	-0.189	5.031	1.179	0.000	0.056	7.657	1	0.01	0.00	0.05
1K	0	-0.189	4.879	-0.419	0.000	-0.138	8.457	1	0.01	0.00	0.05
1L	0	-0.189	5.031	-0.419	0.000	-0.138	7.657	1	0.01	0.00	0.05
1M	0	-0.108	4.879	1.179	0.000	0.056	8.457	1	0.01	0.00	0.05
1N	0	-0.108	5.031	1.179	0.000	0.056	7.657	1	0.01	0.00	0.05
1O	0	-0.108	4.879	-0.419	0.000	-0.138	8.457	1	0.01	0.00	0.05
1P	0	-0.108	5.031	-0.419	0.000	-0.138	7.657	1	0.01	0.00	0.05
2	0	-0.267	9.037	0.689	0.000	-0.068	14.640	1	0.02	0.00	0.09
7	0	-0.135	4.894	0.394	0.000	-0.032	7.928	1	0.01	0.00	0.05
8	0	-0.140	4.905	0.404	0.000	-0.016	7.871	1	0.01	0.00	0.05
9	0	-0.174	5.544	0.414	0.000	-0.063	9.091	1	0.01	0.00	0.05
10	0	-0.168	5.534	0.429	0.000	-0.055	8.984	1	0.01	0.00	0.05
11	0	-0.232	8.109	0.629	0.000	-0.056	13.110	1	0.02	0.00	0.08
12	0	-0.235	8.115	0.635	0.000	-0.046	13.070	1	0.02	0.00	0.08
13	0	-0.255	8.499	0.641	0.000	-0.075	13.810	1	0.02	0.00	0.08
14	0	-0.252	8.493	0.650	0.000	-0.070	13.740	1	0.02	0.00	0.08
1A	56	-0.168	1.418	2.652	0.000	1.267	10.544	1	0.00	0.00	0.06
1B	56	-0.168	1.514	2.652	0.000	1.267	9.182	1	0.00	0.00	0.05
1C	56	-0.168	1.418	-1.893	0.000	-1.776	10.544	1	0.00	0.00	0.06
1D	56	-0.168	1.514	-1.893	0.000	-1.776	9.182	1	0.00	0.00	0.05
1E	56	-0.129	1.418	2.652	0.000	1.267	10.544	1	0.00	0.00	0.06
1F	56	-0.129	1.514	2.652	0.000	1.267	9.182	1	0.00	0.00	0.05
1G	56	-0.129	1.418	-1.893	0.000	-1.776	10.544	1	0.00	0.00	0.06
1H	56	-0.129	1.514	-1.893	0.000	-1.776	9.182	1	0.00	0.00	0.05
1I	56	-0.189	1.390	1.179	0.000	0.292	10.297	1	0.00	0.00	0.06
1J	56	-0.189	1.542	1.179	0.000	0.292	9.429	1	0.00	0.00	0.06
1K	56	-0.189	1.390	-0.419	0.000	-0.800	10.297	1	0.00	0.00	0.06
1L	56	-0.189	1.542	-0.419	0.000	-0.800	9.429	1	0.00	0.00	0.06
1M	56	-0.108	1.390	1.179	0.000	0.292	10.297	1	0.00	0.00	0.06
1N	56	-0.108	1.542	1.179	0.000	0.292	9.429	1	0.00	0.00	0.06
1O	56	-0.108	1.390	-0.419	0.000	-0.800	10.297	1	0.00	0.00	0.06
1P	56	-0.108	1.542	-0.419	0.000	-0.800	9.429	1	0.00	0.00	0.06
2	56	-0.267	2.660	0.689	0.000	-0.456	17.928	1	0.01	0.00	0.11
7	56	-0.135	1.463	0.394	0.000	-0.254	9.716	1	0.00	0.00	0.06
8	56	-0.140	1.474	0.404	0.000	-0.244	9.665	1	0.00	0.00	0.06
9	56	-0.174	1.643	0.414	0.000	-0.296	11.113	1	0.00	0.00	0.07
10	56	-0.168	1.632	0.429	0.000	-0.297	10.999	1	0.00	0.00	0.07
11	56	-0.232	2.395	0.629	0.000	-0.410	16.062	1	0.01	0.00	0.10
12	56	-0.235	2.401	0.635	0.000	-0.404	16.027	1	0.01	0.00	0.10
13	56	-0.255	2.503	0.641	0.000	-0.435	16.901	1	0.01	0.00	0.10
14	56	-0.252	2.497	0.650	0.000	-0.436	16.831	1	0.01	0.00	0.10
1A	113	-0.168	-2.071	2.652	0.000	2.332	10.383	1	0.01	0.00	0.06
1B	113	-0.168	-1.975	2.652	0.000	2.332	9.029	1	0.01	0.00	0.05
1C	113	-0.168	-2.071	-1.893	0.000	-3.268	10.383	1	0.01	0.00	0.06
1D	113	-0.168	-1.975	-1.893	0.000	-3.268	9.029	1	0.01	0.00	0.05
1E	113	-0.129	-2.071	2.652	0.000	2.332	10.383	1	0.01	0.00	0.06
1F	113	-0.129	-1.975	2.652	0.000	2.332	9.029	1	0.01	0.00	0.05
1G	113	-0.129	-2.071	-1.893	0.000	-3.268	10.383	1	0.01	0.00	0.06
1H	113	-0.129	-1.975	-1.893	0.000	-3.268	9.029	1	0.01	0.00	0.05
1I	113	-0.189	-2.099	1.179	0.000	0.527	10.174	1	0.01	0.00	0.06
1J	113	-0.189	-1.947	1.179	0.000	0.527	9.238	1	0.01	0.00	0.05
1K	113	-0.189	-2.099	-0.419	0.000	-1.463	10.174	1	0.01	0.00	0.06
1L	113	-0.189	-1.947	-0.419	0.000	-1.463	9.238	1	0.01	0.00	0.05
1M	113	-0.108	-2.099	1.179	0.000	0.527	10.174	1	0.01	0.00	0.06
1N	113	-0.108	-1.947	1.179	0.000	0.527	9.238	1	0.01	0.00	0.05
1O	113	-0.108	-2.099	-0.419	0.000	-1.463	10.174	1	0.01	0.00	0.06
1P	113	-0.108	-1.947	-0.419	0.000	-1.463	9.238	1	0.01	0.00	0.05
2	113	-0.267	-3.716	0.689	0.000	-0.844	17.630	1	0.01	0.00	0.10
7	113	-0.135	-1.968	0.394	0.000	-0.475	9.574	1	0.01	0.00	0.06
8	113	-0.140	-1.958	0.404	0.000	-0.471	9.528	1	0.01	0.00	0.06
9	113	-0.174	-2.258	0.414	0.000	-0.529	10.940	1	0.01	0.00	0.07
10	113	-0.168	-2.269	0.429	0.000	-0.538	10.820	1	0.01	0.00	0.06
11	113	-0.232	-3.319	0.629	0.000	-0.764	15.800	1	0.01	0.00	0.09
12	113	-0.235	-3.313	0.635	0.000	-0.761	15.770	1	0.01	0.00	0.09
13	113	-0.255	-3.493	0.641	0.000	-0.796	16.620	1	0.01	0.00	0.10
14	113	-0.252	-3.499	0.650	0.000	-0.801	16.550	1	0.01	0.00	0.10

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.168	2.332	10.544	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1B	-0.168	2.332	9.182	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1C	-0.168	-3.268	10.544	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1D	-0.168	-3.268	9.182	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1E	-0.129	2.332	10.544	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1F	-0.129	2.332	9.182	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1G	-0.129	-3.268	10.544	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1H	-0.129	-3.268	9.182	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1I	-0.189	0.527	10.297	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
1J	-0.189	0.527	9.429	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
1K	-0.189	-1.463	10.297	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1L	-0.189	-1.463	9.429	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
1M	-0.108	0.527	10.297	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
1N	-0.108	0.527	9.429	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
1O	-0.108	-1.463	10.297	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1P	-0.108	-1.463	9.429	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
2	-0.267	-0.844	17.928	1	0.9703	0.9999	1.0000	--	--	0.00	--	0.12	Snell. 'zx'= 22
7	-0.135	-0.475	9.716	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
8	-0.140	-0.471	9.665	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22

9	-0.174	-0.529	11.113	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
10	-0.168	-0.538	10.999	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
11	-0.232	-0.764	16.062	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22
12	-0.235	-0.761	16.027	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
13	-0.255	-0.796	16.901	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22
14	-0.252	-0.801	16.831	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22

ASTA NUM. 37 NI 177 NF 184 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.109	-1.248	2.166	0.000	2.370	10.404	1	0.00	0.00	0.06	
1B	0	-0.109	-0.623	2.166	0.000	2.370	9.042	1	0.00	0.00	0.05	
1C	0	-0.109	-1.248	-2.417	0.000	-3.240	10.404	1	0.00	0.00	0.06	
1D	0	-0.109	-0.623	-2.417	0.000	-3.240	9.042	1	0.00	0.00	0.05	
1E	0	-0.084	-1.248	2.166	0.000	2.370	10.404	1	0.00	0.00	0.06	
1F	0	-0.084	-0.623	2.166	0.000	2.370	9.042	1	0.00	0.00	0.05	
1G	0	-0.084	-1.248	-2.417	0.000	-3.240	10.404	1	0.00	0.00	0.06	
1H	0	-0.084	-0.623	-2.417	0.000	-3.240	9.042	1	0.00	0.00	0.05	
1I	0	-0.128	-1.098	0.708	0.000	0.570	10.192	1	0.00	0.00	0.06	
1J	0	-0.128	-0.774	0.708	0.000	0.570	9.254	1	0.00	0.00	0.05	
1K	0	-0.128	-1.098	-0.960	0.000	-1.440	10.192	1	0.00	0.00	0.06	
1L	0	-0.128	-0.774	-0.960	0.000	-1.440	9.254	1	0.00	0.00	0.05	
1M	0	-0.065	-1.098	0.708	0.000	0.570	10.192	1	0.00	0.00	0.06	
1N	0	-0.065	-0.774	0.708	0.000	0.570	9.254	1	0.00	0.00	0.05	
1O	0	-0.065	-1.098	-0.960	0.000	-1.440	10.192	1	0.00	0.00	0.06	
1P	0	-0.065	-0.774	-0.960	0.000	-1.440	9.254	1	0.00	0.00	0.05	
2	0	-0.175	-1.657	-0.225	0.000	-0.783	17.660	1	0.00	0.00	0.10	
7	0	-0.112	-0.931	-0.114	0.000	-0.428	9.592	1	0.00	0.00	0.06	
8	0	-0.119	-0.902	-0.123	0.000	-0.423	9.546	1	0.00	0.00	0.06	
9	0	-0.101	-1.078	-0.148	0.000	-0.501	10.960	1	0.00	0.00	0.07	
10	0	-0.112	-1.066	-0.148	0.000	-0.502	10.840	1	0.00	0.00	0.06	
11	0	-0.166	-1.486	-0.195	0.000	-0.700	15.830	1	0.00	0.00	0.09	
12	0	-0.171	-1.468	-0.200	0.000	-0.697	15.800	1	0.00	0.00	0.09	
13	0	-0.160	-1.574	-0.216	0.000	-0.744	16.650	1	0.00	0.00	0.10	
14	0	-0.166	-1.566	-0.216	0.000	-0.745	16.580	1	0.00	0.00	0.10	
1A	56	-0.109	-4.737	2.166	0.000	1.152	8.721	1	0.01	0.00	0.05	
1B	56	-0.109	-4.112	2.166	0.000	1.152	7.710	1	0.01	0.00	0.05	
1C	56	-0.109	-4.737	-2.417	0.000	-1.881	8.721	1	0.01	0.00	0.05	
1D	56	-0.109	-4.112	-2.417	0.000	-1.881	7.710	1	0.01	0.00	0.05	
1E	56	-0.084	-4.737	2.166	0.000	1.152	8.721	1	0.01	0.00	0.05	
1F	56	-0.084	-4.112	2.166	0.000	1.152	7.710	1	0.01	0.00	0.05	
1G	56	-0.084	-4.737	-2.417	0.000	-1.881	8.721	1	0.01	0.00	0.05	
1H	56	-0.084	-4.112	-2.417	0.000	-1.881	7.710	1	0.01	0.00	0.05	
1I	56	-0.128	-4.586	0.708	0.000	0.173	8.594	1	0.01	0.00	0.05	
1J	56	-0.128	-4.262	0.708	0.000	0.173	7.838	1	0.01	0.00	0.05	
1K	56	-0.128	-4.586	-0.960	0.000	-0.902	8.594	1	0.01	0.00	0.05	
1L	56	-0.128	-4.262	-0.960	0.000	-0.902	7.838	1	0.01	0.00	0.05	
1M	56	-0.065	-4.586	0.708	0.000	0.173	8.594	1	0.01	0.00	0.05	
1N	56	-0.065	-4.262	0.708	0.000	0.173	7.838	1	0.01	0.00	0.05	
1O	56	-0.065	-4.586	-0.960	0.000	-0.902	8.594	1	0.01	0.00	0.05	
1P	56	-0.065	-4.262	-0.960	0.000	-0.902	7.838	1	0.01	0.00	0.05	
2	56	-0.175	-8.034	-0.225	0.000	-0.657	14.934	1	0.02	0.00	0.09	
7	56	-0.112	-4.363	-0.114	0.000	-0.364	8.103	1	0.01	0.00	0.05	
8	56	-0.119	-4.334	-0.123	0.000	-0.354	8.073	1	0.01	0.00	0.05	
9	56	-0.101	-4.979	-0.148	0.000	-0.418	9.255	1	0.01	0.00	0.06	
10	56	-0.112	-4.967	-0.148	0.000	-0.418	9.143	1	0.01	0.00	0.05	
11	56	-0.166	-7.198	-0.195	0.000	-0.591	13.388	1	0.02	0.00	0.08	
12	56	-0.171	-7.184	-0.200	0.000	-0.584	13.369	1	0.02	0.00	0.08	
13	56	-0.160	-7.572	-0.216	0.000	-0.623	14.078	1	0.02	0.00	0.08	
14	56	-0.166	-7.563	-0.216	0.000	-0.623	14.012	1	0.02	0.00	0.08	
1A	113	-0.109	-8.225	2.166	0.000	-0.065	5.076	1	0.02	0.00	0.03	
1B	113	-0.109	-7.601	2.166	0.000	-0.065	4.416	1	0.02	0.00	0.03	
1C	113	-0.109	-8.225	-2.417	0.000	-0.522	5.076	1	0.02	0.00	0.03	
1D	113	-0.109	-7.601	-2.417	0.000	-0.522	4.416	1	0.02	0.00	0.03	
1E	113	-0.084	-8.225	2.166	0.000	-0.065	5.076	1	0.02	0.00	0.03	
1F	113	-0.084	-7.601	2.166	0.000	-0.065	4.416	1	0.02	0.00	0.03	
1G	113	-0.084	-8.225	-2.417	0.000	-0.522	5.076	1	0.02	0.00	0.03	
1H	113	-0.084	-7.601	-2.417	0.000	-0.522	4.416	1	0.02	0.00	0.03	
1I	113	-0.128	-8.075	0.708	0.000	-0.223	5.033	1	0.02	0.00	0.03	
1J	113	-0.128	-7.751	0.708	0.000	-0.223	4.459	1	0.02	0.00	0.03	
1K	113	-0.128	-8.075	-0.960	0.000	-0.364	5.033	1	0.02	0.00	0.03	
1L	113	-0.128	-7.751	-0.960	0.000	-0.364	4.459	1	0.02	0.00	0.03	
1M	113	-0.065	-8.075	0.708	0.000	-0.223	5.033	1	0.02	0.00	0.03	
1N	113	-0.065	-7.751	0.708	0.000	-0.223	4.459	1	0.02	0.00	0.03	
1O	113	-0.065	-8.075	-0.960	0.000	-0.364	5.033	1	0.02	0.00	0.03	
1P	113	-0.065	-7.751	-0.960	0.000	-0.364	4.459	1	0.02	0.00	0.03	
2	113	-0.175	-14.410	-0.225	0.000	-0.530	8.622	1	0.04	0.00	0.05	
7	113	-0.112	-7.794	-0.114	0.000	-0.300	4.684	1	0.02	0.00	0.03	
8	113	-0.119	-7.765	-0.123	0.000	-0.285	4.670	1	0.02	0.00	0.03	
9	113	-0.101	-8.880	-0.148	0.000	-0.335	5.356	1	0.02	0.00	0.03	
10	113	-0.112	-8.868	-0.148	0.000	-0.335	5.252	1	0.02	0.00	0.03	
11	113	-0.166	-12.910	-0.195	0.000	-0.481	7.731	1	0.03	0.00	0.05	
12	113	-0.171	-12.900	-0.200	0.000	-0.472	7.723	1	0.03	0.00	0.05	
13	113	-0.160	-13.570	-0.216	0.000	-0.502	8.134	1	0.04	0.00	0.05	
14	113	-0.166	-13.560	-0.216	0.000	-0.502	8.072	1	0.04	0.00	0.05	

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.109	2.370	10.404	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1B	-0.109	2.370	9.042	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1C	-0.109	-3.240	10.404	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1D	-0.109	-3.240	9.042	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1E	-0.084	2.370	10.404	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1F	-0.084	2.370	9.042	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1G	-0.084	-3.240	10.404	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1H	-0.084	-3.240	9.042	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1I	-0.128	0.570	10.192	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
1J	-0.128	0.570	9.254	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
1K	-0.128	-1.440	10.192	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1L	-0.128	-1.440	9.254	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
1M	-0.065	0.570	10.192	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
1N	-0.065	0.570	9.254	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
1O	-0.065	-1.440	10.192	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1P	-0.065	-1.440	9.254	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
2	-0.175	-0.783	17.660	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22
7	-0.112	-0.428	9.592	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
8	-0.119	-0.423	9.546	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
9	-0.101	-0.501	10.960	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
10	-0.112	-0.502	10.840	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
11	-0.166	-0.700	15.830	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
12	-0.171	-0.697	15.800	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
13	-0.160	-0.744	16.650	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22
14	-0.166	-0.744	16.580	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22

ASTA NUM. 38 NI 184 NF 76 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.098	-8.153	4.314	0.000	1.295	5.173	1	0.02	0.00	0.03	
1B	0	0.098	-6.303	4.314	0.000	1.295	4.563	1	0.02	0.00	0.03	
1C	0	0.098	-8.153	-8.894	0.000	-3.104	5.173	1	0.02	0.00	0.04	
1D	0	0.098	-6.303	-8.894	0.000	-3.104	4.563	1	0.02	0.00	0.04	
1E	0	0.189	-8.153	4.314	0.000	1.295	5.173	1	0.02	0.00	0.03	
1F	0	0.189	-6.303	4.314	0.000	1.295	4.563	1	0.02	0.00	0.03	
1G	0	0.189	-8.153	-8.894	0.000	-3.104	5.173	1	0.02	0.00	0.04	
1H	0	0.189	-6.303	-8.894	0.000	-3.104	4.563	1	0.02	0.00	0.04	
1I	0	0.033	-7.702	0.029	0.000	-0.137	5.146	1	0.02	0.00	0.03	
1J	0	0.033	-6.754	0.029	0.000	-0.137	4.590	1	0.02	0.00	0.03	
1K	0	0.033	-7.702	-4.609	0.000	-1.673	5.146	1	0.02	0.00	0.03	
1L	0	0.033	-6.754	-4.609	0.000	-1.673	4.590	1	0.02	0.00	0.03	
1M	0	0.254	-7.702	0.029	0.000	-0.137	5.146	1	0.02	0.00	0.03	
1N	0	0.254	-6.754	0.029	0.000	-0.137	4.590	1	0.02	0.00	0.03	
1O	0	0.254	-7.702	-4.609	0.000	-1.673	5.146	1	0.02	0.00	0.03	
1P	0	0.254	-6.754	-4.609	0.000	-1.673	4.590	1	0.02	0.00	0.03	
2	0	0.255	-13.090	-4.123	0.000	-1.629	8.846	1	0.03	0.00	0.05	
7	0	0.100	-7.164	-2.272	0.000	-0.895	4.809	1	0.02	0.00	0.03	
8	0	0.103	-7.055	-2.208	0.000	-0.869	4.791	1	0.02	0.00	0.03	
9	0	0.185	-8.145	-2.632	0.000	-1.041	5.491	1	0.02	0.00	0.03	
10	0	0.162	-8.081	-2.620	0.000	-1.035	5.390	1	0.02	0.00	0.03	
11	0	0.204	-11.750	-3.700	0.000	-1.460	7.934	1	0.03	0.00	0.05	
12	0	0.205	-11.690	-3.662	0.000	-1.444	7.924	1	0.03	0.00	0.05	
13	0	0.254	-12.340	-3.916	0.000	-1.548	8.343	1	0.03	0.00	0.05	
14	0	0.241	-12.300	-3.909	0.000	-1.544	8.282	1	0.03	0.00	0.05	
1A	56	0.098	-11.644	4.314	0.000	-1.132	-0.395	1	0.03	0.00	0.01	
1B	56	0.098	-9.794	4.314	0.000	-1.132	0.037	1	0.03	0.00	0.01	
1C	56	0.098	-11.644	-8.894	0.000	1.899	-0.395	1	0.03	0.00	0.02	
1D	56	0.098	-9.794	-8.894	0.000	1.899	0.037	1	0.03	0.00	0.02	
1E	56	0.189	-11.644	4.314	0.000	-1.132	-0.395	1	0.03	0.00	0.01	
1F	56	0.189	-9.794	4.314	0.000	-1.132	0.037	1	0.03	0.00	0.01	
1G	56	0.189	-11.644	-8.894	0.000	1.899	-0.395	1	0.03	0.00	0.02	
1H	56	0.189	-9.794	-8.894	0.000	1.899	0.037	1	0.03	0.00	0.02	
1I	56	0.033	-11.193	0.029	0.000	-0.153	-0.168	1	0.03	0.00	0.00	
1J	56	0.033	-10.245	0.029	0.000	-0.153	-0.190	1	0.03	0.00	0.00	
1K	56	0.033	-11.193	-4.609	0.000	0.920	-0.168	1	0.03	0.00	0.01	
1L	56	0.033	-10.245	-4.609	0.000	0.920	-0.190	1	0.03	0.00	0.01	
1M	56	0.254	-11.193	0.029	0.000	-0.153	-0.168	1	0.03	0.00	0.00	
1N	56	0.254	-10.245	0.029	0.000	-0.153	-0.190	1	0.03	0.00	0.00	
1O	56	0.254	-11.193	-4.609	0.000	0.920	-0.168	1	0.03	0.00	0.01	
1P	56	0.254	-10.245	-4.609	0.000	0.920	-0.190	1	0.03	0.00	0.01	
2	56	0.255	-19.465	-4.123	0.000	0.691	-0.309	1	0.05	0.00	0.01	
7	56	0.100	-10.597	-2.272	0.000	0.383	-0.185	1	0.03	0.00	0.00	
8	56	0.103	-10.488	-2.208	0.000	0.373	-0.142	1	0.03	0.00	0.00	
9	56	0.185	-12.048	-2.632	0.000	0.440	-0.188	1	0.03	0.00	0.01	
10	56	0.162	-11.981	-2.620	0.000	0.439	-0.253	1	0.03	0.00	0.01	
11	56	0.204	-17.465	-3.700	0.000	0.622	-0.281	1	0.05	0.00	0.01	
12	56	0.205	-17.400	-3.662	0.000	0.616	-0.256	1	0.05	0.00	0.01	
13	56	0.254	-18.335	-3.916	0.000	0.655	-0.282	1	0.05	0.00	0.01	
14	56	0.241	-18.295	-3.909	0.000	0.655	-0.323	1	0.05	0.00	0.01	
1A	113	0.098	-15.135	4.314	0.000	-3.560	-7.925	1	0.04	0.00	0.05	

1B	113	0.098	-13.285	4.314	0.000	-3.560	-6.451	1	0.04	0.00	0.05	
1C	113	0.098	-15.135	-8.894	0.000	6.902	-7.925	1	0.04	0.00	0.09	
1D	113	0.098	-13.285	-8.894	0.000	6.902	-6.451	1	0.04	0.00	0.09	
1E	113	0.189	-15.135	4.314	0.000	-3.560	-7.925	1	0.04	0.00	0.05	
1F	113	0.189	-13.285	4.314	0.000	-3.560	-6.451	1	0.04	0.00	0.05	
1G	113	0.189	-15.135	-8.894	0.000	6.902	-7.925	1	0.04	0.00	0.09	
1H	113	0.189	-13.285	-8.894	0.000	6.902	-6.451	1	0.04	0.00	0.09	
1I	113	0.033	-14.684	0.029	0.000	-0.170	-7.444	1	0.04	0.00	0.04	
1J	113	0.033	-13.736	0.029	0.000	-0.170	-6.932	1	0.04	0.00	0.04	
1K	113	0.033	-14.684	-4.609	0.000	3.512	-7.444	1	0.04	0.00	0.05	
1L	113	0.033	-13.736	-4.609	0.000	3.512	-6.932	1	0.04	0.00	0.05	
1M	113	0.254	-14.684	0.029	0.000	-0.170	-7.444	1	0.04	0.00	0.04	
1N	113	0.254	-13.736	0.029	0.000	-0.170	-6.932	1	0.04	0.00	0.04	
1O	113	0.254	-14.684	-4.609	0.000	3.512	-7.444	1	0.04	0.00	0.05	
1P	113	0.254	-13.736	-4.609	0.000	3.512	-6.932	1	0.04	0.00	0.05	
2	113	0.255	-25.840	-4.123	0.000	3.010	-13.050	1	0.07	0.00	0.08	
7	113	0.100	-14.030	-2.272	0.000	1.661	-7.110	1	0.04	0.00	0.04	
8	113	0.103	-13.920	-2.208	0.000	1.615	-7.005	1	0.04	0.00	0.04	
9	113	0.185	-15.950	-2.632	0.000	1.920	-8.061	1	0.04	0.00	0.05	
10	113	0.162	-15.880	-2.620	0.000	1.913	-8.090	1	0.04	0.00	0.05	
11	113	0.204	-23.180	-3.700	0.000	2.703	-11.710	1	0.06	0.00	0.07	
12	113	0.205	-23.110	-3.662	0.000	2.675	-11.650	1	0.06	0.00	0.07	
13	113	0.254	-24.330	-3.916	0.000	2.858	-12.280	1	0.06	0.00	0.07	
14	113	0.241	-24.290	-3.909	0.000	2.854	-12.300	1	0.06	0.00	0.07	

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	--	----------											
	kN	kN*m											

ASTA NUM. 39 NI 232 NF 225 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	--	----------			----------			------	----------			
	cm	kN			kN*m							
1A	0	0.008	3.719	-0.099	0.000	0.029	-0.790	1	0.01	0.00	0.00	
1B	0	0.008	3.845	-0.099	0.000	0.029	-1.071	1	0.01	0.00	0.01	
1C	0	0.008	3.719	-0.111	0.000	-1.354	-0.790	1	0.01	0.00	0.02	
1D	0	0.008	3.845	-0.111	0.000	-1.354	-1.071	1	0.01	0.00	0.02	
1E	0	0.036	3.719	-0.099	0.000	0.029	-0.790	1	0.01	0.00	0.00	
1F	0	0.036	3.845	-0.099	0.000	0.029	-1.071	1	0.01	0.00	0.01	
1G	0	0.036	3.719	-0.111	0.000	-1.354	-0.790	1	0.01	0.00	0.02	
1H	0	0.036	3.845	-0.111	0.000	-1.354	-1.071	1	0.01	0.00	0.02	
1I	0	0.018	3.744	-0.097	0.000	-0.449	-0.880	1	0.01	0.00	0.01	
1J	0	0.018	3.820	-0.097	0.000	-0.449	-0.981	1	0.01	0.00	0.01	
1K	0	0.018	3.744	-0.113	0.000	-0.876	-0.880	1	0.01	0.00	0.01	
1L	0	0.018	3.820	-0.113	0.000	-0.876	-0.981	1	0.01	0.00	0.01	
1M	0	0.026	3.744	-0.097	0.000	-0.449	-0.880	1	0.01	0.00	0.01	
1N	0	0.026	3.820	-0.097	0.000	-0.449	-0.981	1	0.01	0.00	0.01	
1O	0	0.026	3.744	-0.113	0.000	-0.876	-0.880	1	0.01	0.00	0.01	
1P	0	0.026	3.820	-0.113	0.000	-0.876	-0.981	1	0.01	0.00	0.01	
2	0	0.040	6.898	-0.192	0.000	-1.192	-1.695	1	0.02	0.00	0.01	
7	0	0.023	3.720	-0.105	0.000	-0.663	-0.879	1	0.01	0.00	0.01	
8	0	0.018	3.709	-0.100	0.000	-0.637	-0.917	1	0.01	0.00	0.01	
9	0	0.023	4.223	-0.112	0.000	-0.759	-1.081	1	0.01	0.00	0.01	
10	0	0.026	4.279	-0.119	0.000	-0.762	-1.060	1	0.01	0.00	0.01	
11	0	0.037	6.180	-0.173	0.000	-1.073	-1.497	1	0.02	0.00	0.01	
12	0	0.034	6.173	-0.170	0.000	-1.057	-1.520	1	0.02	0.00	0.01	
13	0	0.037	6.482	-0.177	0.000	-1.131	-1.618	1	0.02	0.00	0.01	
14	0	0.038	6.515	-0.181	0.000	-1.133	-1.606	1	0.02	0.00	0.01	
1A	47	0.008	0.825	-0.099	0.000	0.077	0.329	1	0.00	0.00	0.00	
1B	47	0.008	0.951	-0.099	0.000	0.077	-0.010	1	0.00	0.00	0.00	
1C	47	0.008	0.825	-0.111	0.000	-1.305	0.329	1	0.00	0.00	0.02	
1D	47	0.008	0.951	-0.111	0.000	-1.305	-0.010	1	0.00	0.00	0.02	
1E	47	0.036	0.825	-0.099	0.000	0.077	0.329	1	0.00	0.00	0.00	
1F	47	0.036	0.951	-0.099	0.000	0.077	-0.010	1	0.00	0.00	0.00	
1G	47	0.036	0.825	-0.111	0.000	-1.305	0.329	1	0.00	0.00	0.02	
1H	47	0.036	0.951	-0.111	0.000	-1.305	-0.010	1	0.00	0.00	0.02	
1I	47	0.018	0.850	-0.097	0.000	-0.398	0.227	1	0.00	0.00	0.00	
1J	47	0.018	0.926	-0.097	0.000	-0.398	0.092	1	0.00	0.00	0.00	
1K	47	0.018	0.850	-0.113	0.000	-0.830	0.227	1	0.00	0.00	0.01	
1L	47	0.018	0.926	-0.113	0.000	-0.830	0.092	1	0.00	0.00	0.01	
1M	47	0.026	0.850	-0.097	0.000	-0.398	0.227	1	0.00	0.00	0.00	
1N	47	0.026	0.926	-0.097	0.000	-0.398	0.092	1	0.00	0.00	0.00	
1O	47	0.026	0.850	-0.113	0.000	-0.830	0.227	1	0.00	0.00	0.01	
1P	47	0.026	0.926	-0.113	0.000	-0.830	0.092	1	0.00	0.00	0.01	
2	47	0.040	1.608	-0.192	0.000	-1.103	0.290	1	0.00	0.00	0.01	
7	47	0.023	0.873	-0.105	0.000	-0.614	0.193	1	0.00	0.00	0.01	
8	47	0.018	0.862	-0.100	0.000	-0.590	0.150	1	0.00	0.00	0.01	
9	47	0.023	0.987	-0.112	0.000	-0.707	0.135	1	0.00	0.00	0.01	
10	47	0.026	1.042	-0.119	0.000	-0.707	0.181	1	0.00	0.00	0.01	
11	47	0.037	1.439	-0.173	0.000	-0.992	0.281	1	0.00	0.00	0.01	
12	47	0.034	1.432	-0.170	0.000	-0.978	0.255	1	0.00	0.00	0.01	
13	47	0.037	1.507	-0.177	0.000	-1.048	0.246	1	0.00	0.00	0.01	
14	47	0.038	1.540	-0.181	0.000	-1.048	0.274	1	0.00	0.00	0.01	

1A	93	0.008	-2.069	-0.099	0.000	0.125	0.097	1	0.01	0.00	0.00
1B	93	0.008	-1.943	-0.099	0.000	0.125	-0.301	1	0.01	0.00	0.00
1C	93	0.008	-2.069	-0.111	0.000	-1.255	0.097	1	0.01	0.00	0.02
1D	93	0.008	-1.943	-0.111	0.000	-1.255	-0.301	1	0.01	0.00	0.02
1E	93	0.036	-2.069	-0.099	0.000	0.125	0.097	1	0.01	0.00	0.00
1F	93	0.036	-1.943	-0.099	0.000	0.125	-0.301	1	0.01	0.00	0.00
1G	93	0.036	-2.069	-0.111	0.000	-1.255	0.097	1	0.01	0.00	0.02
1H	93	0.036	-1.943	-0.111	0.000	-1.255	-0.301	1	0.01	0.00	0.02
1I	93	0.018	-2.044	-0.097	0.000	-0.347	-0.017	1	0.01	0.00	0.00
1J	93	0.018	-1.968	-0.097	0.000	-0.347	-0.187	1	0.01	0.00	0.00
1K	93	0.018	-2.044	-0.113	0.000	-0.783	-0.017	1	0.01	0.00	0.01
1L	93	0.018	-1.968	-0.113	0.000	-0.783	-0.187	1	0.01	0.00	0.01
1M	93	0.026	-2.044	-0.097	0.000	-0.347	-0.017	1	0.01	0.00	0.00
1N	93	0.026	-1.968	-0.097	0.000	-0.347	-0.187	1	0.01	0.00	0.00
1O	93	0.026	-2.044	-0.113	0.000	-0.783	-0.017	1	0.01	0.00	0.01
1P	93	0.026	-1.968	-0.113	0.000	-0.783	-0.187	1	0.01	0.00	0.01
2	93	0.040	-3.682	-0.192	0.000	-1.013	-0.195	1	0.01	0.00	0.01
7	93	0.023	-1.973	-0.105	0.000	-0.565	-0.063	1	0.01	0.00	0.01
8	93	0.018	-1.984	-0.100	0.000	-0.543	-0.112	1	0.01	0.00	0.01
9	93	0.023	-2.250	-0.112	0.000	-0.655	-0.160	1	0.01	0.00	0.01
10	93	0.026	-2.194	-0.119	0.000	-0.651	-0.087	1	0.01	0.00	0.01
11	93	0.037	-3.301	-0.173	0.000	-0.912	-0.154	1	0.01	0.00	0.01
12	93	0.034	-3.308	-0.170	0.000	-0.899	-0.183	1	0.01	0.00	0.01
13	93	0.037	-3.467	-0.177	0.000	-0.965	-0.211	1	0.01	0.00	0.01
14	93	0.038	-3.434	-0.181	0.000	-0.963	-0.168	1	0.01	0.00	0.01

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	--	----------											
	kN	kN*m											

ASTA NUM. 40 NI 225 NF 61 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	--	----------	----------	----------	----------	----------	----------	------	----------	----------	----------	
	cm	kN			kN*m							
1A	0	-0.063	-2.785	0.455	0.000	0.162	0.101	1	0.01	0.00	0.00	
1B	0	-0.063	-1.293	0.455	0.000	0.162	-0.291	1	0.00	0.00	0.00	
1C	0	-0.063	-2.785	-5.577	0.000	-1.959	0.101	1	0.01	0.00	0.02	
1D	0	-0.063	-1.293	-5.577	0.000	-1.959	-0.291	1	0.01	0.00	0.02	
1E	0	-0.009	-2.785	0.455	0.000	0.162	0.101	1	0.01	0.00	0.00	
1F	0	-0.009	-1.293	0.455	0.000	0.162	-0.291	1	0.00	0.00	0.00	
1G	0	-0.009	-2.785	-5.577	0.000	-1.959	0.101	1	0.01	0.00	0.02	
1H	0	-0.009	-1.293	-5.577	0.000	-1.959	-0.291	1	0.01	0.00	0.02	
1I	0	-0.099	-2.327	-1.611	0.000	-0.564	-0.011	1	0.01	0.00	0.01	
1J	0	-0.099	-1.751	-1.611	0.000	-0.564	-0.180	1	0.00	0.00	0.01	
1K	0	-0.099	-2.327	-3.511	0.000	-1.234	-0.011	1	0.01	0.00	0.02	
1L	0	-0.099	-1.751	-3.511	0.000	-1.234	-0.180	1	0.00	0.00	0.02	
1M	0	0.027	-2.327	-1.611	0.000	-0.564	-0.011	1	0.01	0.00	0.01	
1N	0	0.027	-1.751	-1.611	0.000	-0.564	-0.180	1	0.00	0.00	0.01	
1O	0	0.027	-2.327	-3.511	0.000	-1.234	-0.011	1	0.01	0.00	0.02	
1P	0	0.027	-1.751	-3.511	0.000	-1.234	-0.180	1	0.00	0.00	0.02	
2	0	-0.063	-3.671	-4.598	0.000	-1.614	-0.183	1	0.01	0.00	0.02	
7	0	-0.033	-2.090	-2.565	0.000	-0.900	-0.057	1	0.01	0.00	0.01	
8	0	-0.039	-1.974	-2.461	0.000	-0.864	-0.106	1	0.01	0.00	0.01	
9	0	-0.047	-2.289	-2.954	0.000	-1.037	-0.154	1	0.01	0.00	0.01	
10	0	-0.036	-2.214	-2.955	0.000	-1.037	-0.081	1	0.01	0.00	0.01	
11	0	-0.055	-3.335	-4.139	0.000	-1.453	-0.143	1	0.01	0.00	0.02	
12	0	-0.059	-3.265	-4.077	0.000	-1.431	-0.173	1	0.01	0.00	0.02	
13	0	-0.063	-3.454	-4.373	0.000	-1.535	-0.201	1	0.01	0.00	0.02	
14	0	-0.057	-3.410	-4.373	0.000	-1.535	-0.157	1	0.01	0.00	0.02	
1A	47	-0.063	-5.680	0.455	0.000	-0.051	-1.883	1	0.02	0.00	0.01	
1B	47	-0.063	-4.187	0.455	0.000	-0.051	-1.562	1	0.01	0.00	0.01	
1C	47	-0.063	-5.680	-5.577	0.000	0.643	-1.883	1	0.02	0.00	0.01	
1D	47	-0.063	-4.187	-5.577	0.000	0.643	-1.562	1	0.01	0.00	0.01	
1E	47	-0.009	-5.680	0.455	0.000	-0.051	-1.883	1	0.02	0.00	0.01	
1F	47	-0.009	-4.187	0.455	0.000	-0.051	-1.562	1	0.01	0.00	0.01	
1G	47	-0.009	-5.680	-5.577	0.000	0.643	-1.883	1	0.02	0.00	0.01	
1H	47	-0.009	-4.187	-5.577	0.000	0.643	-1.562	1	0.01	0.00	0.01	
1I	47	-0.099	-5.222	-1.611	0.000	0.188	-1.800	1	0.01	0.00	0.01	
1J	47	-0.099	-4.645	-1.611	0.000	0.188	-1.644	1	0.01	0.00	0.01	
1K	47	-0.099	-5.222	-3.511	0.000	0.404	-1.800	1	0.01	0.00	0.01	
1L	47	-0.099	-4.645	-3.511	0.000	0.404	-1.644	1	0.01	0.00	0.01	
1M	47	0.027	-5.222	-1.611	0.000	0.188	-1.800	1	0.01	0.00	0.01	
1N	47	0.027	-4.645	-1.611	0.000	0.188	-1.644	1	0.01	0.00	0.01	
1O	47	0.027	-5.222	-3.511	0.000	0.404	-1.800	1	0.01	0.00	0.01	
1P	47	0.027	-4.645	-3.511	0.000	0.404	-1.644	1	0.01	0.00	0.01	
2	47	-0.063	-8.961	-4.598	0.000	0.532	-3.131	1	0.02	0.00	0.02	
7	47	-0.033	-4.937	-2.565	0.000	0.296	-1.697	1	0.01	0.00	0.01	
8	47	-0.039	-4.821	-2.461	0.000	0.285	-1.691	1	0.01	0.00	0.01	
9	47	-0.047	-5.526	-2.954	0.000	0.341	-1.977	1	0.01	0.00	0.01	
10	47	-0.036	-5.451	-2.955	0.000	0.342	-1.869	1	0.01	0.00	0.01	
11	47	-0.055	-8.078	-4.139	0.000	0.479	-2.805	1	0.02	0.00	0.02	
12	47	-0.059	-8.008	-4.077	0.000	0.472	-2.802	1	0.02	0.00	0.02	

13	47	-0.063	-8.427	-4.373	0.000	0.506	-2.974	1	0.02	0.00	0.02
14	47	-0.057	-8.385	-4.373	0.000	0.506	-2.909	1	0.02	0.00	0.02
1A	93	-0.063	-8.574	0.455	0.000	-0.263	-5.217	1	0.02	0.00	0.03
1B	93	-0.063	-7.082	0.455	0.000	-0.263	-4.183	1	0.02	0.00	0.02
1C	93	-0.063	-8.574	-5.577	0.000	3.245	-5.217	1	0.02	0.00	0.04
1D	93	-0.063	-7.082	-5.577	0.000	3.245	-4.183	1	0.02	0.00	0.04
1E	93	-0.009	-8.574	0.455	0.000	-0.263	-5.217	1	0.02	0.00	0.03
1F	93	-0.009	-7.082	0.455	0.000	-0.263	-4.183	1	0.02	0.00	0.02
1G	93	-0.009	-8.574	-5.577	0.000	3.245	-5.217	1	0.02	0.00	0.04
1H	93	-0.009	-7.082	-5.577	0.000	3.245	-4.183	1	0.02	0.00	0.04
1I	93	-0.099	-8.116	-1.611	0.000	0.939	-4.940	1	0.02	0.00	0.03
1J	93	-0.099	-7.540	-1.611	0.000	0.939	-4.460	1	0.02	0.00	0.03
1K	93	-0.099	-8.116	-3.511	0.000	2.043	-4.940	1	0.02	0.00	0.03
1L	93	-0.099	-7.540	-3.511	0.000	2.043	-4.460	1	0.02	0.00	0.03
1M	93	0.027	-8.116	-1.611	0.000	0.939	-4.940	1	0.02	0.00	0.03
1N	93	0.027	-7.540	-1.611	0.000	0.939	-4.460	1	0.02	0.00	0.03
1O	93	0.027	-8.116	-3.511	0.000	2.043	-4.940	1	0.02	0.00	0.03
1P	93	0.027	-7.540	-3.511	0.000	2.043	-4.460	1	0.02	0.00	0.03
2	93	-0.063	-14.250	-4.598	0.000	2.677	-8.547	1	0.04	0.00	0.05
7	93	-0.033	-7.784	-2.565	0.000	1.493	-4.665	1	0.02	0.00	0.03
8	93	-0.039	-7.667	-2.461	0.000	1.433	-4.605	1	0.02	0.00	0.03
9	93	-0.047	-8.762	-2.954	0.000	1.719	-5.311	1	0.02	0.00	0.03
10	93	-0.036	-8.687	-2.955	0.000	1.720	-5.168	1	0.02	0.00	0.03
11	93	-0.055	-12.820	-4.139	0.000	2.410	-7.680	1	0.03	0.00	0.05
12	93	-0.059	-12.750	-4.077	0.000	2.374	-7.644	1	0.03	0.00	0.05
13	93	-0.063	-13.400	-4.373	0.000	2.546	-8.068	1	0.04	0.00	0.05
14	93	-0.057	-13.360	-4.373	0.000	2.546	-7.982	1	0.04	0.00	0.05

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	--	----------											
	kN	kN*m											
1A	-0.063	-0.263	-5.217	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.03	Snell. 'zx'= 18
1B	-0.063	-0.263	-4.183	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.03	Snell. 'zx'= 18
1C	-0.063	3.245	-5.217	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1D	-0.063	3.245	-4.183	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1E	-0.009	-0.263	-5.217	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.03	Snell. 'zx'= 18
1F	-0.009	-0.263	-4.183	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.03	Snell. 'zx'= 18
1G	-0.009	3.245	-5.217	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1H	-0.009	3.245	-4.183	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1I	-0.099	0.939	-4.940	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1J	-0.099	0.939	-4.460	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1K	-0.099	2.043	-4.940	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
1L	-0.099	2.043	-4.460	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
2	-0.063	2.677	-8.547	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18
7	-0.033	1.493	-4.665	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
8	-0.039	1.433	-4.605	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
9	-0.047	1.719	-5.311	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
10	-0.036	1.720	-5.168	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
11	-0.055	2.410	-7.680	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18
12	-0.059	2.374	-7.644	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18
13	-0.063	2.546	-8.068	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18
14	-0.057	2.546	-7.982	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 18

ASTA NUM. 41 NI 218 NF 211 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	--	----------			----------			------	----------			
	cm	kN			kN*m							
1A	0	-0.007	2.762	-0.011	0.000	0.169	0.723	1	0.01	0.00	0.00	
1B	0	-0.007	2.866	-0.011	0.000	0.169	0.178	1	0.01	0.00	0.00	
1C	0	-0.007	2.762	-0.015	0.000	-1.213	0.723	1	0.01	0.00	0.02	
1D	0	-0.007	2.866	-0.015	0.000	-1.213	0.178	1	0.01	0.00	0.02	
1E	0	0.021	2.762	-0.011	0.000	0.169	0.723	1	0.01	0.00	0.00	
1F	0	0.021	2.866	-0.011	0.000	0.169	0.178	1	0.01	0.00	0.00	
1G	0	0.021	2.762	-0.015	0.000	-1.213	0.723	1	0.01	0.00	0.02	
1H	0	0.021	2.866	-0.015	0.000	-1.213	0.178	1	0.01	0.00	0.02	
1I	0	0.002	2.742	-0.009	0.000	-0.312	0.572	1	0.01	0.00	0.00	
1J	0	0.002	2.886	-0.009	0.000	-0.312	0.330	1	0.01	0.00	0.00	
1K	0	0.002	2.742	-0.018	0.000	-0.731	0.572	1	0.01	0.00	0.01	
1L	0	0.002	2.886	-0.018	0.000	-0.731	0.330	1	0.01	0.00	0.01	
1M	0	0.013	2.742	-0.009	0.000	-0.312	0.572	1	0.01	0.00	0.00	
1N	0	0.013	2.886	-0.009	0.000	-0.312	0.330	1	0.01	0.00	0.00	
1O	0	0.013	2.742	-0.018	0.000	-0.731	0.572	1	0.01	0.00	0.01	
1P	0	0.013	2.886	-0.018	0.000	-0.731	0.330	1	0.01	0.00	0.01	
2	0	0.013	5.146	-0.023	0.000	-0.935	0.808	1	0.01	0.00	0.01	
7	0	0.007	2.749	-0.016	0.000	-0.524	0.476	1	0.01	0.00	0.01	
8	0	0.004	2.764	-0.017	0.000	-0.501	0.420	1	0.01	0.00	0.01	
9	0	0.012	3.203	-0.009	0.000	-0.603	0.484	1	0.01	0.00	0.01	
10	0	0.006	3.086	-0.022	0.000	-0.607	0.541	1	0.01	0.00	0.01	
11	0	0.012	4.601	-0.022	0.000	-0.842	0.742	1	0.01	0.00	0.01	
12	0	0.010	4.610	-0.022	0.000	-0.828	0.708	1	0.01	0.00	0.01	
13	0	0.015	4.873	-0.018	0.000	-0.889	0.747	1	0.01	0.00	0.01	
14	0	0.011	4.803	-0.026	0.000	-0.892	0.781	1	0.01	0.00	0.01	

1A	47	-0.007	-0.133	-0.011	0.000	0.176	1.373	1	0.00	0.00	0.01
1B	47	-0.007	-0.028	-0.011	0.000	0.176	0.804	1	0.00	0.00	0.00
1C	47	-0.007	-0.133	-0.015	0.000	-1.207	1.373	1	0.00	0.00	0.02
1D	47	-0.007	-0.028	-0.015	0.000	-1.207	0.804	1	0.00	0.00	0.02
1E	47	0.021	-0.133	-0.011	0.000	0.176	1.373	1	0.00	0.00	0.01
1F	47	0.021	-0.028	-0.011	0.000	0.176	0.804	1	0.00	0.00	0.00
1G	47	0.021	-0.133	-0.015	0.000	-1.207	1.373	1	0.00	0.00	0.02
1H	47	0.021	-0.028	-0.015	0.000	-1.207	0.804	1	0.00	0.00	0.02
1I	47	0.002	-0.152	-0.009	0.000	-0.306	1.200	1	0.00	0.00	0.01
1J	47	0.002	-0.009	-0.009	0.000	-0.306	0.977	1	0.00	0.00	0.01
1K	47	0.002	-0.152	-0.018	0.000	-0.725	1.200	1	0.00	0.00	0.01
1L	47	0.002	-0.009	-0.018	0.000	-0.725	0.977	1	0.00	0.00	0.01
1M	47	0.013	-0.152	-0.009	0.000	-0.306	1.200	1	0.00	0.00	0.01
1N	47	0.013	-0.009	-0.009	0.000	-0.306	0.977	1	0.00	0.00	0.01
1O	47	0.013	-0.152	-0.018	0.000	-0.725	1.200	1	0.00	0.00	0.01
1P	47	0.013	-0.009	-0.018	0.000	-0.725	0.977	1	0.00	0.00	0.01
2	47	0.013	-0.144	-0.023	0.000	-0.924	1.975	1	0.00	0.00	0.01
7	47	0.007	-0.098	-0.016	0.000	-0.516	1.095	1	0.00	0.00	0.01
8	47	0.004	-0.083	-0.017	0.000	-0.493	1.045	1	0.00	0.00	0.01
9	47	0.012	-0.033	-0.009	0.000	-0.598	1.223	1	0.00	0.00	0.01
10	47	0.006	-0.151	-0.022	0.000	-0.596	1.226	1	0.00	0.00	0.01
11	47	0.012	-0.140	-0.022	0.000	-0.832	1.783	1	0.00	0.00	0.01
12	47	0.010	-0.131	-0.022	0.000	-0.818	1.753	1	0.00	0.00	0.01
13	47	0.015	-0.102	-0.018	0.000	-0.881	1.860	1	0.00	0.00	0.01
14	47	0.011	-0.172	-0.026	0.000	-0.880	1.862	1	0.00	0.00	0.01
1A	93	-0.007	-3.027	-0.011	0.000	0.182	0.671	1	0.01	0.00	0.00
1B	93	-0.007	-2.923	-0.011	0.000	0.182	0.079	1	0.01	0.00	0.00
1C	93	-0.007	-3.027	-0.015	0.000	-1.201	0.671	1	0.01	0.00	0.02
1D	93	-0.007	-2.923	-0.015	0.000	-1.201	0.079	1	0.01	0.00	0.01
1E	93	0.021	-3.027	-0.011	0.000	0.182	0.671	1	0.01	0.00	0.00
1F	93	0.021	-2.923	-0.011	0.000	0.182	0.079	1	0.01	0.00	0.00
1G	93	0.021	-3.027	-0.015	0.000	-1.201	0.671	1	0.01	0.00	0.02
1H	93	0.021	-2.923	-0.015	0.000	-1.201	0.079	1	0.01	0.00	0.01
1I	93	0.002	-3.047	-0.009	0.000	-0.301	0.478	1	0.01	0.00	0.00
1J	93	0.002	-2.903	-0.009	0.000	-0.301	0.273	1	0.01	0.00	0.00
1K	93	0.002	-3.047	-0.018	0.000	-0.718	0.478	1	0.01	0.00	0.01
1L	93	0.002	-2.903	-0.018	0.000	-0.718	0.273	1	0.01	0.00	0.01
1M	93	0.013	-3.047	-0.009	0.000	-0.301	0.478	1	0.01	0.00	0.00
1N	93	0.013	-2.903	-0.009	0.000	-0.301	0.273	1	0.01	0.00	0.00
1O	93	0.013	-3.047	-0.018	0.000	-0.718	0.478	1	0.01	0.00	0.01
1P	93	0.013	-2.903	-0.018	0.000	-0.718	0.273	1	0.01	0.00	0.01
2	93	0.013	-5.434	-0.023	0.000	-0.914	0.674	1	0.01	0.00	0.01
7	93	0.007	-2.944	-0.016	0.000	-0.509	0.385	1	0.01	0.00	0.01
8	93	0.004	-2.930	-0.017	0.000	-0.485	0.342	1	0.01	0.00	0.01
9	93	0.012	-3.270	-0.009	0.000	-0.594	0.452	1	0.01	0.00	0.01
10	93	0.006	-3.387	-0.022	0.000	-0.586	0.401	1	0.01	0.00	0.01
11	93	0.012	-4.880	-0.022	0.000	-0.822	0.612	1	0.01	0.00	0.01
12	93	0.010	-4.872	-0.022	0.000	-0.807	0.586	1	0.01	0.00	0.01
13	93	0.015	-5.076	-0.018	0.000	-0.873	0.652	1	0.01	0.00	0.01
14	93	0.011	-5.146	-0.026	0.000	-0.868	0.621	1	0.01	0.00	0.01

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.007	0.182	1.373	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 18
1B	-0.007	0.182	0.804	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 18
1C	-0.007	-1.213	1.373	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 18
1D	-0.007	-1.213	0.804	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 18

ASTA NUM. 42 NI 211 NF 34 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.012	-3.595	0.754	0.000	0.253	0.689	1	0.01	0.00	0.00	
1B	0	-0.012	-1.793	0.754	0.000	0.253	0.100	1	0.00	0.00	0.00	
1C	0	-0.012	-3.595	-5.320	0.000	-1.894	0.689	1	0.01	0.00	0.02	
1D	0	-0.012	-1.793	-5.320	0.000	-1.894	0.100	1	0.01	0.00	0.02	
1E	0	0.074	-3.595	0.754	0.000	0.253	0.689	1	0.01	0.00	0.00	
1F	0	0.074	-1.793	0.754	0.000	0.253	0.100	1	0.00	0.00	0.00	
1G	0	0.074	-3.595	-5.320	0.000	-1.894	0.689	1	0.01	0.00	0.02	
1H	0	0.074	-1.793	-5.320	0.000	-1.894	0.100	1	0.01	0.00	0.02	
1I	0	-0.032	-3.020	-1.362	0.000	-0.493	0.498	1	0.01	0.00	0.01	
1J	0	-0.032	-2.368	-1.362	0.000	-0.493	0.292	1	0.01	0.00	0.01	
1K	0	-0.032	-3.020	-3.204	0.000	-1.148	0.498	1	0.01	0.00	0.01	
1L	0	-0.032	-2.368	-3.204	0.000	-1.148	0.292	1	0.01	0.00	0.01	
1M	0	0.094	-3.020	-1.362	0.000	-0.493	0.498	1	0.01	0.00	0.01	
1N	0	0.094	-2.368	-1.362	0.000	-0.493	0.292	1	0.01	0.00	0.01	
1O	0	0.094	-3.020	-3.204	0.000	-1.148	0.498	1	0.01	0.00	0.01	
1P	0	0.094	-2.368	-3.204	0.000	-1.148	0.292	1	0.01	0.00	0.01	
2	0	0.055	-4.861	-4.092	0.000	-1.471	0.709	1	0.01	0.00	0.02	
7	0	0.036	-2.762	-2.290	0.000	-0.824	0.404	1	0.01	0.00	0.01	
8	0	0.037	-2.598	-2.187	0.000	-0.787	0.360	1	0.01	0.00	0.01	
9	0	0.021	-2.949	-2.640	0.000	-0.946	0.475	1	0.01	0.00	0.01	

10	0	0.050	-3.056	-2.652	0.000	-0.955	0.421	1	0.01	0.00	0.01
11	0	0.052	-4.417	-3.686	0.000	-1.325	0.643	1	0.01	0.00	0.02
12	0	0.052	-4.319	-3.623	0.000	-1.303	0.617	1	0.01	0.00	0.02
13	0	0.043	-4.530	-3.895	0.000	-1.398	0.686	1	0.01	0.00	0.02
14	0	0.061	-4.594	-3.903	0.000	-1.404	0.654	1	0.01	0.00	0.02
1A	47	-0.012	-6.490	0.754	0.000	-0.098	-1.669	1	0.02	0.00	0.01
1B	47	-0.012	-4.687	0.754	0.000	-0.098	-1.407	1	0.01	0.00	0.01
1C	47	-0.012	-6.490	-5.320	0.000	0.589	-1.669	1	0.02	0.00	0.01
1D	47	-0.012	-4.687	-5.320	0.000	0.589	-1.407	1	0.01	0.00	0.01
1E	47	0.074	-6.490	0.754	0.000	-0.098	-1.669	1	0.02	0.00	0.01
1F	47	0.074	-4.687	0.754	0.000	-0.098	-1.407	1	0.01	0.00	0.01
1G	47	0.074	-6.490	-5.320	0.000	0.589	-1.669	1	0.02	0.00	0.01
1H	47	0.074	-4.687	-5.320	0.000	0.589	-1.407	1	0.01	0.00	0.01
1I	47	-0.032	-5.914	-1.362	0.000	0.143	-1.603	1	0.02	0.00	0.01
1J	47	-0.032	-5.263	-1.362	0.000	0.143	-1.473	1	0.01	0.00	0.01
1K	47	-0.032	-5.914	-3.204	0.000	0.347	-1.603	1	0.02	0.00	0.01
1L	47	-0.032	-5.263	-3.204	0.000	0.347	-1.473	1	0.01	0.00	0.01
1M	47	0.094	-5.914	-1.362	0.000	0.143	-1.603	1	0.02	0.00	0.01
1N	47	0.094	-5.263	-1.362	0.000	0.143	-1.473	1	0.01	0.00	0.01
1O	47	0.094	-5.914	-3.204	0.000	0.347	-1.603	1	0.02	0.00	0.01
1P	47	0.094	-5.263	-3.204	0.000	0.347	-1.473	1	0.01	0.00	0.01
2	47	0.055	-10.151	-4.092	0.000	0.439	-2.794	1	0.03	0.00	0.02
7	47	0.036	-5.609	-2.290	0.000	0.245	-1.549	1	0.01	0.00	0.01
8	47	0.037	-5.444	-2.187	0.000	0.234	-1.516	1	0.01	0.00	0.01
9	47	0.021	-6.185	-2.640	0.000	0.286	-1.657	1	0.02	0.00	0.01
10	47	0.050	-6.293	-2.652	0.000	0.283	-1.761	1	0.02	0.00	0.01
11	47	0.052	-9.159	-3.686	0.000	0.395	-2.524	1	0.02	0.00	0.02
12	47	0.052	-9.060	-3.623	0.000	0.388	-2.504	1	0.02	0.00	0.01
13	47	0.043	-9.505	-3.895	0.000	0.420	-2.588	1	0.03	0.00	0.02
14	47	0.061	-9.567	-3.903	0.000	0.418	-2.651	1	0.03	0.00	0.02
1A	93	-0.012	-9.384	0.754	0.000	-0.450	-5.377	1	0.02	0.00	0.03
1B	93	-0.012	-7.582	0.754	0.000	-0.450	-4.265	1	0.02	0.00	0.03
1C	93	-0.012	-9.384	-5.320	0.000	3.072	-5.377	1	0.02	0.00	0.04
1D	93	-0.012	-7.582	-5.320	0.000	3.072	-4.265	1	0.02	0.00	0.04
1E	93	0.074	-9.384	0.754	0.000	-0.450	-5.377	1	0.02	0.00	0.03
1F	93	0.074	-7.582	0.754	0.000	-0.450	-4.265	1	0.02	0.00	0.03
1G	93	0.074	-9.384	-5.320	0.000	3.072	-5.377	1	0.02	0.00	0.04
1H	93	0.074	-7.582	-5.320	0.000	3.072	-4.265	1	0.02	0.00	0.04
1I	93	-0.032	-8.809	-1.362	0.000	0.780	-5.054	1	0.02	0.00	0.03
1J	93	-0.032	-8.157	-1.362	0.000	0.780	-4.588	1	0.02	0.00	0.03
1K	93	-0.032	-8.809	-3.204	0.000	1.842	-5.054	1	0.02	0.00	0.03
1L	93	-0.032	-8.157	-3.204	0.000	1.842	-4.588	1	0.02	0.00	0.03
1M	93	0.094	-8.809	-1.362	0.000	0.780	-5.054	1	0.02	0.00	0.03
1N	93	0.094	-8.157	-1.362	0.000	0.780	-4.588	1	0.02	0.00	0.03
1O	93	0.094	-8.809	-3.204	0.000	1.842	-5.054	1	0.02	0.00	0.03
1P	93	0.094	-8.157	-3.204	0.000	1.842	-4.588	1	0.02	0.00	0.03
2	93	0.055	-15.440	-4.092	0.000	2.349	-8.766	1	0.04	0.00	0.05
7	93	0.036	-8.455	-2.290	0.000	1.314	-4.830	1	0.02	0.00	0.03
8	93	0.037	-8.291	-2.187	0.000	1.254	-4.721	1	0.02	0.00	0.03
9	93	0.021	-9.422	-2.640	0.000	1.518	-5.299	1	0.03	0.00	0.03
10	93	0.050	-9.529	-2.652	0.000	1.521	-5.453	1	0.03	0.00	0.03
11	93	0.052	-13.900	-3.686	0.000	2.115	-7.904	1	0.04	0.00	0.05
12	93	0.052	-13.800	-3.623	0.000	2.079	-7.838	1	0.04	0.00	0.05
13	93	0.043	-14.480	-3.895	0.000	2.238	-8.184	1	0.04	0.00	0.05
14	93	0.061	-14.540	-3.903	0.000	2.239	-8.277	1	0.04	0.00	0.05

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.012	-0.450	-5.377	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1B	-0.012	-0.450	-4.265	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.03	Snell. 'zx'= 18
1C	-0.012	3.072	-5.377	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 18
1D	-0.012	3.072	-4.265	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 18
1I	-0.032	0.780	-5.054	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1J	-0.032	0.780	-4.588	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.04	Snell. 'zx'= 18
1K	-0.032	1.842	-5.054	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18
1L	-0.032	1.842	-4.588	1	0.9927	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 18

ASTA NUM. 43 NI 204 NF 197 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.018	2.189	0.153	0.000	0.290	0.754	1	0.01	0.00	0.00	
1B	0	-0.018	2.427	0.153	0.000	0.290	0.256	1	0.01	0.00	0.00	
1C	0	-0.018	2.189	0.131	0.000	-1.343	0.754	1	0.01	0.00	0.02	
1D	0	-0.018	2.427	0.131	0.000	-1.343	0.256	1	0.01	0.00	0.02	
1E	0	0.005	2.189	0.153	0.000	0.290	0.754	1	0.01	0.00	0.00	
1F	0	0.005	2.427	0.153	0.000	0.290	0.256	1	0.01	0.00	0.00	
1G	0	0.005	2.189	0.131	0.000	-1.343	0.754	1	0.01	0.00	0.02	
1H	0	0.005	2.427	0.131	0.000	-1.343	0.256	1	0.01	0.00	0.02	
1I	0	-0.010	2.261	0.150	0.000	-0.266	0.590	1	0.01	0.00	0.00	
1J	0	-0.010	2.355	0.150	0.000	-0.266	0.420	1	0.01	0.00	0.00	

1K	0	-0.010	2.261	0.134	0.000	-0.787	0.590	1	0.01	0.00	0.01
1L	0	-0.010	2.355	0.134	0.000	-0.787	0.420	1	0.01	0.00	0.01
1M	0	-0.002	2.261	0.150	0.000	-0.266	0.590	1	0.01	0.00	0.00
1N	0	-0.002	2.355	0.150	0.000	-0.266	0.420	1	0.01	0.00	0.00
1O	0	-0.002	2.261	0.134	0.000	-0.787	0.590	1	0.01	0.00	0.01
1P	0	-0.002	2.355	0.134	0.000	-0.787	0.420	1	0.01	0.00	0.01
2	0	-0.011	4.228	0.258	0.000	-0.945	0.910	1	0.01	0.00	0.01
7	0	-0.005	2.285	0.139	0.000	-0.528	0.515	1	0.01	0.00	0.01
8	0	-0.010	2.280	0.143	0.000	-0.503	0.482	1	0.01	0.00	0.01
9	0	-0.008	2.535	0.162	0.000	-0.606	0.591	1	0.01	0.00	0.01
10	0	-0.005	2.591	0.155	0.000	-0.611	0.522	1	0.01	0.00	0.01
11	0	-0.009	3.800	0.230	0.000	-0.851	0.825	1	0.01	0.00	0.01
12	0	-0.012	3.797	0.233	0.000	-0.837	0.806	1	0.01	0.00	0.01
13	0	-0.011	3.950	0.244	0.000	-0.898	0.871	1	0.01	0.00	0.01
14	0	-0.009	3.983	0.240	0.000	-0.901	0.829	1	0.01	0.00	0.01
1A	50	-0.018	-0.913	0.153	0.000	0.214	1.074	1	0.00	0.00	0.01
1B	50	-0.018	-0.674	0.153	0.000	0.214	0.693	1	0.00	0.00	0.00
1C	50	-0.018	-0.913	0.131	0.000	-1.409	1.074	1	0.00	0.00	0.02
1D	50	-0.018	-0.674	0.131	0.000	-1.409	0.693	1	0.00	0.00	0.02
1E	50	0.005	-0.913	0.153	0.000	0.214	1.074	1	0.00	0.00	0.01
1F	50	0.005	-0.674	0.153	0.000	0.214	0.693	1	0.00	0.00	0.00
1G	50	0.005	-0.913	0.131	0.000	-1.409	1.074	1	0.00	0.00	0.02
1H	50	0.005	-0.674	0.131	0.000	-1.409	0.693	1	0.00	0.00	0.02
1I	50	-0.010	-0.840	0.150	0.000	-0.340	0.947	1	0.00	0.00	0.01
1J	50	-0.010	-0.747	0.150	0.000	-0.340	0.819	1	0.00	0.00	0.00
1K	50	-0.010	-0.840	0.134	0.000	-0.855	0.947	1	0.00	0.00	0.01
1L	50	-0.010	-0.747	0.134	0.000	-0.855	0.819	1	0.00	0.00	0.01
1M	50	-0.002	-0.840	0.150	0.000	-0.340	0.947	1	0.00	0.00	0.01
1N	50	-0.002	-0.747	0.150	0.000	-0.340	0.819	1	0.00	0.00	0.00
1O	50	-0.002	-0.840	0.134	0.000	-0.855	0.947	1	0.00	0.00	0.01
1P	50	-0.002	-0.747	0.134	0.000	-0.855	0.819	1	0.00	0.00	0.01
2	50	-0.011	-1.440	0.258	0.000	-1.074	1.607	1	0.00	0.00	0.01
7	50	-0.005	-0.765	0.139	0.000	-0.597	0.895	1	0.00	0.00	0.01
8	50	-0.010	-0.770	0.143	0.000	-0.575	0.860	1	0.00	0.00	0.01
9	50	-0.008	-0.933	0.162	0.000	-0.687	0.992	1	0.00	0.00	0.01
10	50	-0.005	-0.876	0.155	0.000	-0.688	0.951	1	0.00	0.00	0.01
11	50	-0.009	-1.280	0.230	0.000	-0.966	1.455	1	0.00	0.00	0.01
12	50	-0.012	-1.282	0.233	0.000	-0.953	1.434	1	0.00	0.00	0.01
13	50	-0.011	-1.380	0.244	0.000	-1.020	1.513	1	0.00	0.00	0.01
14	50	-0.009	-1.347	0.240	0.000	-1.021	1.489	1	0.00	0.00	0.01
1A	100	-0.018	-4.014	0.153	0.000	0.138	-0.157	1	0.01	0.00	0.00
1B	100	-0.018	-3.776	0.153	0.000	0.138	-0.420	1	0.01	0.00	0.00
1C	100	-0.018	-4.014	0.131	0.000	-1.474	-0.157	1	0.01	0.00	0.02
1D	100	-0.018	-3.776	0.131	0.000	-1.474	-0.420	1	0.01	0.00	0.02
1E	100	0.005	-4.014	0.153	0.000	0.138	-0.157	1	0.01	0.00	0.00
1F	100	0.005	-3.776	0.153	0.000	0.138	-0.420	1	0.01	0.00	0.00
1G	100	0.005	-4.014	0.131	0.000	-1.474	-0.157	1	0.01	0.00	0.02
1H	100	0.005	-3.776	0.131	0.000	-1.474	-0.420	1	0.01	0.00	0.02
1I	100	-0.010	-3.942	0.150	0.000	-0.415	-0.246	1	0.01	0.00	0.01
1J	100	-0.010	-3.848	0.150	0.000	-0.415	-0.331	1	0.01	0.00	0.01
1K	100	-0.010	-3.942	0.134	0.000	-0.922	-0.246	1	0.01	0.00	0.01
1L	100	-0.010	-3.848	0.134	0.000	-0.922	-0.331	1	0.01	0.00	0.01
1M	100	-0.002	-3.942	0.150	0.000	-0.415	-0.246	1	0.01	0.00	0.01
1N	100	-0.002	-3.848	0.150	0.000	-0.415	-0.331	1	0.01	0.00	0.01
1O	100	-0.002	-3.942	0.134	0.000	-0.922	-0.246	1	0.01	0.00	0.01
1P	100	-0.002	-3.848	0.134	0.000	-0.922	-0.331	1	0.01	0.00	0.01
2	100	-0.011	-7.108	0.258	0.000	-1.203	-0.530	1	0.02	0.00	0.02
7	100	-0.005	-3.815	0.139	0.000	-0.667	-0.250	1	0.01	0.00	0.01
8	100	-0.010	-3.820	0.143	0.000	-0.646	-0.287	1	0.01	0.00	0.01
9	100	-0.008	-4.400	0.162	0.000	-0.768	-0.342	1	0.01	0.00	0.01
10	100	-0.005	-4.344	0.155	0.000	-0.766	-0.354	1	0.01	0.00	0.01
11	100	-0.009	-6.359	0.230	0.000	-1.081	-0.455	1	0.02	0.00	0.01
12	100	-0.012	-6.362	0.233	0.000	-1.069	-0.477	1	0.02	0.00	0.01
13	100	-0.011	-6.710	0.244	0.000	-1.142	-0.510	1	0.02	0.00	0.01
14	100	-0.009	-6.676	0.240	0.000	-1.141	-0.517	1	0.02	0.00	0.01

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.018	0.290	1.074	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 20
1B	-0.018	0.290	0.693	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 20
1C	-0.018	-1.474	1.074	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
1D	-0.018	-1.474	0.693	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
1I	-0.010	-0.415	0.947	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 20
1J	-0.010	-0.415	0.819	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 20
1K	-0.010	-0.922	0.947	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
1L	-0.010	-0.922	0.819	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
1M	-0.002	-0.415	0.947	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 20
1N	-0.002	-0.415	0.819	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 20
1O	-0.002	-0.922	0.947	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
1P	-0.002	-0.922	0.819	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
2	-0.011	-1.203	1.607	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
7	-0.005	-0.667	0.895	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 20
8	-0.010	-0.646	0.860	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.01	Snell. 'zx'= 20
9	-0.008	-0.768	0.992	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
10	-0.005	-0.766	0.951	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
11	-0.009	-1.081	1.455	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
12	-0.012	-1.069	1.434	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20
13	-0.011	-1.142	1.513	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02	Snell. 'zx'= 20

14	-0.009	-1.141	1.489	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.02 Snell. 'zx'= 20

ASTA NUM. 44 NI 197 NF 16 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.079	-4.822	0.788	0.000	0.258	-0.153	1	0.01	0.00	0.00	
1B	0	-0.079	-3.070	0.788	0.000	0.258	-0.407	1	0.01	0.00	0.00	
1C	0	-0.079	-4.822	-5.930	0.000	-2.284	-0.153	1	0.01	0.00	0.03	
1D	0	-0.079	-3.070	-5.930	0.000	-2.284	-0.407	1	0.01	0.00	0.03	
1E	0	-0.020	-4.822	0.788	0.000	0.258	-0.153	1	0.01	0.00	0.00	
1F	0	-0.020	-3.070	0.788	0.000	0.258	-0.407	1	0.01	0.00	0.00	
1G	0	-0.020	-4.822	-5.930	0.000	-2.284	-0.153	1	0.01	0.00	0.03	
1H	0	-0.020	-3.070	-5.930	0.000	-2.284	-0.407	1	0.01	0.00	0.03	
1I	0	-0.118	-4.247	-1.511	0.000	-0.613	-0.239	1	0.01	0.00	0.01	
1J	0	-0.118	-3.645	-1.511	0.000	-0.613	-0.321	1	0.01	0.00	0.01	
1K	0	-0.118	-4.247	-3.631	0.000	-1.413	-0.239	1	0.01	0.00	0.02	
1L	0	-0.118	-3.645	-3.631	0.000	-1.413	-0.321	1	0.01	0.00	0.02	
1M	0	0.019	-4.247	-1.511	0.000	-0.613	-0.239	1	0.01	0.00	0.01	
1N	0	0.019	-3.645	-1.511	0.000	-0.613	-0.321	1	0.01	0.00	0.01	
1O	0	0.019	-4.247	-3.631	0.000	-1.413	-0.239	1	0.01	0.00	0.02	
1P	0	0.019	-3.645	-3.631	0.000	-1.413	-0.321	1	0.01	0.00	0.02	
2	0	-0.088	-7.128	-4.623	0.000	-1.822	-0.514	1	0.02	0.00	0.02	
7	0	-0.047	-3.954	-2.569	0.000	-1.012	-0.241	1	0.01	0.00	0.01	
8	0	-0.051	-3.835	-2.480	0.000	-0.978	-0.280	1	0.01	0.00	0.01	
9	0	-0.062	-4.450	-2.951	0.000	-1.161	-0.332	1	0.01	0.00	0.01	
10	0	-0.051	-4.393	-2.958	0.000	-1.164	-0.345	1	0.01	0.00	0.01	
11	0	-0.078	-6.422	-4.159	0.000	-1.639	-0.440	1	0.02	0.00	0.02	
12	0	-0.080	-6.351	-4.106	0.000	-1.619	-0.463	1	0.02	0.00	0.02	
13	0	-0.087	-6.720	-4.388	0.000	-1.729	-0.495	1	0.02	0.00	0.02	
14	0	-0.080	-6.686	-4.392	0.000	-1.730	-0.503	1	0.02	0.00	0.02	
1A	50	-0.079	-7.924	0.788	0.000	-0.136	-3.339	1	0.02	0.00	0.02	
1B	50	-0.079	-6.172	0.788	0.000	-0.136	-2.717	1	0.02	0.00	0.02	
1C	50	-0.079	-7.924	-5.930	0.000	0.681	-3.339	1	0.02	0.00	0.02	
1D	50	-0.079	-6.172	-5.930	0.000	0.681	-2.717	1	0.02	0.00	0.02	
1E	50	-0.020	-7.924	0.788	0.000	-0.136	-3.339	1	0.02	0.00	0.02	
1F	50	-0.020	-6.172	0.788	0.000	-0.136	-2.717	1	0.02	0.00	0.02	
1G	50	-0.020	-7.924	-5.930	0.000	0.681	-3.339	1	0.02	0.00	0.02	
1H	50	-0.020	-6.172	-5.930	0.000	0.681	-2.717	1	0.02	0.00	0.02	
1I	50	-0.118	-7.349	-1.511	0.000	0.142	-3.138	1	0.02	0.00	0.02	
1J	50	-0.118	-6.747	-1.511	0.000	0.142	-2.918	1	0.02	0.00	0.02	
1K	50	-0.118	-7.349	-3.631	0.000	0.403	-3.138	1	0.02	0.00	0.02	
1L	50	-0.118	-6.747	-3.631	0.000	0.403	-2.918	1	0.02	0.00	0.02	
1M	50	0.019	-7.349	-1.511	0.000	0.142	-3.138	1	0.02	0.00	0.02	
1N	50	0.019	-6.747	-1.511	0.000	0.142	-2.918	1	0.02	0.00	0.02	
1O	50	0.019	-7.349	-3.631	0.000	0.403	-3.138	1	0.02	0.00	0.02	
1P	50	0.019	-6.747	-3.631	0.000	0.403	-2.918	1	0.02	0.00	0.02	
2	50	-0.088	-12.794	-4.623	0.000	0.490	-5.495	1	0.03	0.00	0.03	
7	50	-0.047	-7.002	-2.569	0.000	0.273	-2.981	1	0.02	0.00	0.02	
8	50	-0.051	-6.885	-2.480	0.000	0.262	-2.960	1	0.02	0.00	0.02	
9	50	-0.062	-7.920	-2.951	0.000	0.314	-3.424	1	0.02	0.00	0.02	
10	50	-0.051	-7.862	-2.958	0.000	0.315	-3.409	1	0.02	0.00	0.02	
11	50	-0.078	-11.501	-4.159	0.000	0.441	-4.920	1	0.03	0.00	0.03	
12	50	-0.080	-11.431	-4.106	0.000	0.434	-4.907	1	0.03	0.00	0.03	
13	50	-0.087	-12.050	-4.388	0.000	0.466	-5.185	1	0.03	0.00	0.03	
14	50	-0.080	-12.018	-4.392	0.000	0.466	-5.179	1	0.03	0.00	0.03	
1A	100	-0.079	-11.026	0.788	0.000	-0.531	-8.077	1	0.03	0.00	0.05	
1B	100	-0.079	-9.274	0.788	0.000	-0.531	-6.577	1	0.02	0.00	0.04	
1C	100	-0.079	-11.026	-5.930	0.000	3.647	-8.077	1	0.03	0.00	0.05	
1D	100	-0.079	-9.274	-5.930	0.000	3.647	-6.577	1	0.02	0.00	0.05	
1E	100	-0.020	-11.026	0.788	0.000	-0.531	-8.077	1	0.03	0.00	0.05	
1F	100	-0.020	-9.274	0.788	0.000	-0.531	-6.577	1	0.02	0.00	0.04	
1G	100	-0.020	-11.026	-5.930	0.000	3.647	-8.077	1	0.03	0.00	0.05	
1H	100	-0.020	-9.274	-5.930	0.000	3.647	-6.577	1	0.02	0.00	0.05	
1I	100	-0.118	-10.451	-1.511	0.000	0.898	-7.589	1	0.03	0.00	0.05	
1J	100	-0.118	-9.849	-1.511	0.000	0.898	-7.065	1	0.03	0.00	0.04	
1K	100	-0.118	-10.451	-3.631	0.000	2.218	-7.589	1	0.03	0.00	0.05	
1L	100	-0.118	-9.849	-3.631	0.000	2.218	-7.065	1	0.03	0.00	0.04	
1M	100	0.019	-10.451	-1.511	0.000	0.898	-7.589	1	0.03	0.00	0.05	
1N	100	0.019	-9.849	-1.511	0.000	0.898	-7.065	1	0.03	0.00	0.04	
1O	100	0.019	-10.451	-3.631	0.000	2.218	-7.589	1	0.03	0.00	0.05	
1P	100	0.019	-9.849	-3.631	0.000	2.218	-7.065	1	0.03	0.00	0.04	
2	100	-0.088	-18.460	-4.623	0.000	2.801	-13.310	1	0.05	0.00	0.08	
7	100	-0.047	-10.050	-2.569	0.000	1.558	-7.245	1	0.03	0.00	0.04	
8	100	-0.051	-9.935	-2.480	0.000	1.502	-7.165	1	0.03	0.00	0.04	
9	100	-0.062	-11.390	-2.951	0.000	1.790	-8.250	1	0.03	0.00	0.05	
10	100	-0.051	-11.330	-2.958	0.000	1.793	-8.206	1	0.03	0.00	0.05	
11	100	-0.078	-16.580	-4.159	0.000	2.520	-11.940	1	0.04	0.00	0.07	
12	100	-0.080	-16.510	-4.106	0.000	2.487	-11.890	1	0.04	0.00	0.07	
13	100	-0.087	-17.380	-4.388	0.000	2.660	-12.540	1	0.05	0.00	0.07	
14	100	-0.080	-17.350	-4.392	0.000	2.662	-12.520	1	0.05	0.00	0.07	

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	--	----------											

	kN		kN*m										
1A	-0.079	-0.531	-8.077	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 20
1B	-0.079	-0.531	-6.577	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 20
1C	-0.079	3.647	-8.077	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 20
1D	-0.079	3.647	-6.577	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 20
1E	-0.020	-0.531	-8.077	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 20
1F	-0.020	-0.531	-6.577	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 20
1G	-0.020	3.647	-8.077	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 20
1H	-0.020	3.647	-6.577	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 20
1I	-0.118	0.898	-7.589	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 20
1J	-0.118	0.898	-7.065	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 20
1K	-0.118	2.218	-7.589	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 20
1L	-0.118	2.218	-7.065	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 20
2	-0.088	2.801	-13.310	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 20
7	-0.047	1.558	-7.245	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 20
8	-0.051	1.502	-7.165	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 20
9	-0.062	1.790	-8.250	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 20
10	-0.051	1.793	-8.206	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 20
11	-0.078	2.520	-11.940	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 20
12	-0.080	2.487	-11.890	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 20
13	-0.087	2.660	-12.540	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 20
14	-0.080	2.662	-12.520	1	0.9849	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 20

ASTA NUM. 45 NI 169 NF 162 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.022	7.553	2.397	0.000	-0.140	4.921	1	0.02	0.00	0.03	
1B	0	-0.022	8.367	2.397	0.000	-0.140	4.419	1	0.02	0.00	0.03	
1C	0	-0.022	7.553	-2.301	0.000	-0.573	4.921	1	0.02	0.00	0.03	
1D	0	-0.022	8.367	-2.301	0.000	-0.573	4.419	1	0.02	0.00	0.03	
1E	0	0.043	7.553	2.397	0.000	-0.140	4.921	1	0.02	0.00	0.03	
1F	0	0.043	8.367	2.397	0.000	-0.140	4.419	1	0.02	0.00	0.03	
1G	0	0.043	7.553	-2.301	0.000	-0.573	4.921	1	0.02	0.00	0.03	
1H	0	0.043	8.367	-2.301	0.000	-0.573	4.419	1	0.02	0.00	0.03	
1I	0	-0.029	7.781	0.904	0.000	-0.290	4.884	1	0.02	0.00	0.03	
1J	0	-0.029	8.139	0.904	0.000	-0.290	4.456	1	0.02	0.00	0.03	
1K	0	-0.029	7.781	-0.808	0.000	-0.424	4.884	1	0.02	0.00	0.03	
1L	0	-0.029	8.139	-0.808	0.000	-0.424	4.456	1	0.02	0.00	0.03	
1M	0	0.050	7.781	0.904	0.000	-0.290	4.884	1	0.02	0.00	0.03	
1N	0	0.050	8.139	0.904	0.000	-0.290	4.456	1	0.02	0.00	0.03	
1O	0	0.050	7.781	-0.808	0.000	-0.424	4.884	1	0.02	0.00	0.03	
1P	0	0.050	8.139	-0.808	0.000	-0.424	4.456	1	0.02	0.00	0.03	
2	0	0.018	14.500	0.085	0.000	-0.643	8.485	1	0.04	0.00	0.05	
7	0	-0.007	7.826	0.031	0.000	-0.364	4.640	1	0.02	0.00	0.03	
8	0	-0.005	7.805	0.039	0.000	-0.349	4.610	1	0.02	0.00	0.03	
9	0	0.012	8.914	0.058	0.000	-0.408	5.176	1	0.02	0.00	0.03	
10	0	0.019	8.939	0.066	0.000	-0.404	5.260	1	0.02	0.00	0.03	
11	0	0.006	12.980	0.066	0.000	-0.584	7.626	1	0.03	0.00	0.05	
12	0	0.007	12.970	0.071	0.000	-0.575	7.608	1	0.03	0.00	0.05	
13	0	0.017	13.640	0.082	0.000	-0.610	7.948	1	0.04	0.00	0.05	
14	0	0.021	13.650	0.087	0.000	-0.608	7.998	1	0.04	0.00	0.05	
1A	56	-0.022	4.065	2.397	0.000	1.153	8.647	1	0.01	0.00	0.05	
1B	56	-0.022	4.878	2.397	0.000	1.153	7.687	1	0.01	0.00	0.05	
1C	56	-0.022	4.065	-2.301	0.000	-1.921	8.647	1	0.01	0.00	0.05	
1D	56	-0.022	4.878	-2.301	0.000	-1.921	7.687	1	0.01	0.00	0.05	
1E	56	0.043	4.065	2.397	0.000	1.153	8.647	1	0.01	0.00	0.05	
1F	56	0.043	4.878	2.397	0.000	1.153	7.687	1	0.01	0.00	0.05	
1G	56	0.043	4.065	-2.301	0.000	-1.921	8.647	1	0.01	0.00	0.05	
1H	56	0.043	4.878	-2.301	0.000	-1.921	7.687	1	0.01	0.00	0.05	
1I	56	-0.029	4.292	0.904	0.000	0.163	8.482	1	0.01	0.00	0.05	
1J	56	-0.029	4.650	0.904	0.000	0.163	7.852	1	0.01	0.00	0.05	
1K	56	-0.029	4.292	-0.808	0.000	-0.932	8.482	1	0.01	0.00	0.05	
1L	56	-0.029	4.650	-0.808	0.000	-0.932	7.852	1	0.01	0.00	0.05	
1M	56	0.050	4.292	0.904	0.000	0.163	8.482	1	0.01	0.00	0.05	
1N	56	0.050	4.650	0.904	0.000	0.163	7.852	1	0.01	0.00	0.05	
1O	56	0.050	4.292	-0.808	0.000	-0.932	8.482	1	0.01	0.00	0.05	
1P	56	0.050	4.650	-0.808	0.000	-0.932	7.852	1	0.01	0.00	0.05	
2	56	0.018	8.123	0.085	0.000	-0.691	14.846	1	0.02	0.00	0.09	
7	56	-0.007	4.395	0.031	0.000	-0.381	8.077	1	0.01	0.00	0.05	
8	56	-0.005	4.374	0.039	0.000	-0.371	8.036	1	0.01	0.00	0.05	
9	56	0.012	5.013	0.058	0.000	-0.440	9.095	1	0.01	0.00	0.05	
10	56	0.019	5.038	0.066	0.000	-0.441	9.192	1	0.01	0.00	0.05	
11	56	0.006	7.268	0.066	0.000	-0.621	13.325	1	0.02	0.00	0.08	
12	56	0.007	7.257	0.071	0.000	-0.615	13.296	1	0.02	0.00	0.08	
13	56	0.017	7.642	0.082	0.000	-0.656	13.930	1	0.02	0.00	0.08	
14	56	0.021	7.655	0.087	0.000	-0.656	13.990	1	0.02	0.00	0.08	
1A	113	-0.022	0.576	2.397	0.000	2.447	10.410	1	0.00	0.00	0.06	
1B	113	-0.022	1.390	2.397	0.000	2.447	8.992	1	0.00	0.00	0.05	
1C	113	-0.022	0.576	-2.301	0.000	-3.269	10.410	1	0.00	0.00	0.06	
1D	113	-0.022	1.390	-2.301	0.000	-3.269	8.992	1	0.00	0.00	0.05	
1E	113	0.043	0.576	2.397	0.000	2.447	10.410	1	0.00	0.00	0.06	
1F	113	0.043	1.390	2.397	0.000	2.447	8.992	1	0.00	0.00	0.05	
1G	113	0.043	0.576	-2.301	0.000	-3.269	10.410	1	0.00	0.00	0.06	
1H	113	0.043	1.390	-2.301	0.000	-3.269	8.992	1	0.00	0.00	0.05	
1I	113	-0.029	0.804	0.904	0.000	0.617	10.117	1	0.00	0.00	0.06	
1J	113	-0.029	1.162	0.904	0.000	0.617	9.285	1	0.00	0.00	0.06	

1K	113	-0.029	0.804	-0.808	0.000	-1.439	10.117	1	0.00	0.00	0.06
1L	113	-0.029	1.162	-0.808	0.000	-1.439	9.285	1	0.00	0.00	0.06
1M	113	0.050	0.804	0.904	0.000	0.617	10.117	1	0.00	0.00	0.06
1N	113	0.050	1.162	0.904	0.000	0.617	9.285	1	0.00	0.00	0.06
1O	113	0.050	0.804	-0.808	0.000	-1.439	10.117	1	0.00	0.00	0.06
1P	113	0.050	1.162	-0.808	0.000	-1.439	9.285	1	0.00	0.00	0.06
2	113	0.018	1.745	0.085	0.000	-0.739	17.620	1	0.00	0.00	0.10
7	113	-0.007	0.964	0.031	0.000	-0.399	9.584	1	0.00	0.00	0.06
8	113	-0.005	0.943	0.039	0.000	-0.394	9.531	1	0.00	0.00	0.06
9	113	0.012	1.112	0.058	0.000	-0.473	10.820	1	0.00	0.00	0.06
10	113	0.019	1.137	0.066	0.000	-0.478	10.930	1	0.00	0.00	0.06
11	113	0.006	1.556	0.066	0.000	-0.658	15.810	1	0.00	0.00	0.09
12	113	0.007	1.544	0.071	0.000	-0.655	15.770	1	0.00	0.00	0.09
13	113	0.017	1.645	0.082	0.000	-0.702	16.540	1	0.00	0.00	0.10
14	113	0.021	1.660	0.087	0.000	-0.705	16.610	1	0.00	0.00	0.10

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.022	2.447	10.410	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1B	-0.022	2.447	8.992	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1C	-0.022	-3.269	10.410	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1D	-0.022	-3.269	8.992	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1I	-0.029	0.617	10.117	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
1J	-0.029	0.617	9.285	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
1K	-0.029	-1.439	10.117	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1L	-0.029	-1.439	9.285	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
7	-0.007	-0.399	9.584	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
8	-0.005	-0.394	9.531	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22

ASTA NUM. 46 NI 162 NF 155 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.029	1.971	1.993	0.000	2.390	10.389	1	0.01	0.00	0.06	
1B	0	-0.029	2.197	1.993	0.000	2.390	8.979	1	0.01	0.00	0.05	
1C	0	-0.029	1.971	-2.673	0.000	-3.316	10.389	1	0.01	0.00	0.06	
1D	0	-0.029	2.197	-2.673	0.000	-3.316	8.979	1	0.01	0.00	0.05	
1E	0	0.036	1.971	1.993	0.000	2.390	10.389	1	0.01	0.00	0.06	
1F	0	0.036	2.197	1.993	0.000	2.390	8.979	1	0.01	0.00	0.05	
1G	0	0.036	1.971	-2.673	0.000	-3.316	10.389	1	0.01	0.00	0.06	
1H	0	0.036	2.197	-2.673	0.000	-3.316	8.979	1	0.01	0.00	0.05	
1I	0	-0.038	1.995	0.484	0.000	0.555	10.098	1	0.01	0.00	0.06	
1J	0	-0.038	2.173	0.484	0.000	0.555	9.270	1	0.01	0.00	0.06	
1K	0	-0.038	1.995	-1.164	0.000	-1.481	10.098	1	0.01	0.00	0.06	
1L	0	-0.038	2.173	-1.164	0.000	-1.481	9.270	1	0.01	0.00	0.06	
1M	0	0.045	1.995	0.484	0.000	0.555	10.098	1	0.01	0.00	0.06	
1N	0	0.045	2.173	0.484	0.000	0.555	9.270	1	0.01	0.00	0.06	
1O	0	0.045	1.995	-1.164	0.000	-1.481	10.098	1	0.01	0.00	0.06	
1P	0	0.045	2.173	-1.164	0.000	-1.481	9.270	1	0.01	0.00	0.06	
2	0	0.007	3.826	-0.617	0.000	-0.835	17.590	1	0.01	0.00	0.10	
7	0	0.021	2.035	-0.347	0.000	-0.468	9.565	1	0.01	0.00	0.06	
8	0	0.019	2.032	-0.351	0.000	-0.461	9.513	1	0.01	0.00	0.06	
9	0	0.004	2.346	-0.379	0.000	-0.530	10.800	1	0.01	0.00	0.06	
10	0	-0.003	2.314	-0.378	0.000	-0.528	10.910	1	0.01	0.00	0.06	
11	0	0.017	3.422	-0.560	0.000	-0.754	15.780	1	0.01	0.00	0.09	
12	0	0.016	3.420	-0.563	0.000	-0.750	15.750	1	0.01	0.00	0.09	
13	0	0.007	3.608	-0.579	0.000	-0.791	16.520	1	0.01	0.00	0.10	
14	0	0.002	3.589	-0.579	0.000	-0.790	16.580	1	0.01	0.00	0.10	
1A	56	-0.029	-1.518	1.993	0.000	1.269	10.516	1	0.00	0.00	0.06	
1B	56	-0.029	-1.292	1.993	0.000	1.269	9.234	1	0.00	0.00	0.05	
1C	56	-0.029	-1.518	-2.673	0.000	-1.813	10.516	1	0.00	0.00	0.06	
1D	56	-0.029	-1.292	-2.673	0.000	-1.813	9.234	1	0.00	0.00	0.05	
1E	56	0.036	-1.518	1.993	0.000	1.269	10.516	1	0.00	0.00	0.06	
1F	56	0.036	-1.292	1.993	0.000	1.269	9.234	1	0.00	0.00	0.05	
1G	56	0.036	-1.518	-2.673	0.000	-1.813	10.516	1	0.00	0.00	0.06	
1H	56	0.036	-1.292	-2.673	0.000	-1.813	9.234	1	0.00	0.00	0.05	
1I	56	-0.038	-1.494	0.484	0.000	0.282	10.239	1	0.00	0.00	0.06	
1J	56	-0.038	-1.316	0.484	0.000	0.282	9.511	1	0.00	0.00	0.06	
1K	56	-0.038	-1.494	-1.164	0.000	-0.826	10.239	1	0.00	0.00	0.06	
1L	56	-0.038	-1.316	-1.164	0.000	-0.826	9.511	1	0.00	0.00	0.06	
1M	56	0.045	-1.494	0.484	0.000	0.282	10.239	1	0.00	0.00	0.06	
1N	56	0.045	-1.316	0.484	0.000	0.282	9.511	1	0.00	0.00	0.06	
1O	56	0.045	-1.494	-1.164	0.000	-0.826	10.239	1	0.00	0.00	0.06	
1P	56	0.045	-1.316	-1.164	0.000	-0.826	9.511	1	0.00	0.00	0.06	
2	56	0.007	-2.551	-0.617	0.000	-0.488	17.948	1	0.01	0.00	0.11	
7	56	0.021	-1.396	-0.347	0.000	-0.273	9.745	1	0.00	0.00	0.06	
8	56	0.019	-1.400	-0.351	0.000	-0.263	9.691	1	0.00	0.00	0.06	
9	56	0.004	-1.555	-0.379	0.000	-0.317	11.021	1	0.00	0.00	0.07	
10	56	-0.003	-1.587	-0.378	0.000	-0.316	11.115	1	0.00	0.00	0.07	
11	56	0.017	-2.292	-0.560	0.000	-0.439	16.097	1	0.01	0.00	0.10	
12	56	0.016	-2.294	-0.563	0.000	-0.433	16.062	1	0.01	0.00	0.10	
13	56	0.007	-2.388	-0.579	0.000	-0.466	16.861	1	0.01	0.00	0.10	

14	56	0.002	-2.407	-0.579	0.000	-0.465	16.916	1	0.01	0.00	0.10
1A	113	-0.029	-5.007	1.993	0.000	0.148	8.680	1	0.01	0.00	0.05
1B	113	-0.029	-4.781	1.993	0.000	0.148	7.526	1	0.01	0.00	0.04
1C	113	-0.029	-5.007	-2.673	0.000	-0.310	8.680	1	0.01	0.00	0.05
1D	113	-0.029	-4.781	-2.673	0.000	-0.310	7.526	1	0.01	0.00	0.04
1E	113	0.036	-5.007	1.993	0.000	0.148	8.680	1	0.01	0.00	0.05
1F	113	0.036	-4.781	1.993	0.000	0.148	7.526	1	0.01	0.00	0.04
1G	113	0.036	-5.007	-2.673	0.000	-0.310	8.680	1	0.01	0.00	0.05
1H	113	0.036	-4.781	-2.673	0.000	-0.310	7.526	1	0.01	0.00	0.04
1I	113	-0.038	-4.983	0.484	0.000	0.010	8.417	1	0.01	0.00	0.05
1J	113	-0.038	-4.805	0.484	0.000	0.010	7.789	1	0.01	0.00	0.05
1K	113	-0.038	-4.983	-1.164	0.000	-0.172	8.417	1	0.01	0.00	0.05
1L	113	-0.038	-4.805	-1.164	0.000	-0.172	7.789	1	0.01	0.00	0.05
1M	113	0.045	-4.983	0.484	0.000	0.010	8.417	1	0.01	0.00	0.05
1N	113	0.045	-4.805	0.484	0.000	0.010	7.789	1	0.01	0.00	0.05
1O	113	0.045	-4.983	-1.164	0.000	-0.172	8.417	1	0.01	0.00	0.05
1P	113	0.045	-4.805	-1.164	0.000	-0.172	7.789	1	0.01	0.00	0.05
2	113	0.007	-8.927	-0.617	0.000	-0.141	14.720	1	0.02	0.00	0.09
7	113	0.021	-4.827	-0.347	0.000	-0.077	7.995	1	0.01	0.00	0.05
8	113	0.019	-4.831	-0.351	0.000	-0.066	7.938	1	0.01	0.00	0.05
9	113	0.004	-5.456	-0.379	0.000	-0.103	9.048	1	0.01	0.00	0.05
10	113	-0.003	-5.488	-0.378	0.000	-0.103	9.125	1	0.01	0.00	0.05
11	113	0.017	-8.007	-0.560	0.000	-0.124	13.200	1	0.02	0.00	0.08
12	113	0.016	-8.009	-0.563	0.000	-0.117	13.160	1	0.02	0.00	0.08
13	113	0.007	-8.384	-0.579	0.000	-0.140	13.830	1	0.02	0.00	0.08
14	113	0.002	-8.403	-0.579	0.000	-0.140	13.880	1	0.02	0.00	0.08

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.029	2.390	10.516	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1B	-0.029	2.390	9.234	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1C	-0.029	-3.316	10.516	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1D	-0.029	-3.316	9.234	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1I	-0.038	0.555	10.239	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22
1J	-0.038	0.555	9.511	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
1K	-0.038	-1.481	10.239	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
1L	-0.038	-1.481	9.511	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
10	-0.003	-0.528	11.115	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.07	Snell. 'zx'= 22

ASTA NUM. 47 NI 155 NF 45 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.079	-4.480	4.849	0.000	1.626	8.786	1	0.01	0.00	0.05	
1B	0	-0.079	-3.632	4.849	0.000	1.626	7.682	1	0.01	0.00	0.05	
1C	0	-0.079	-4.480	-8.431	0.000	-2.780	8.786	1	0.01	0.00	0.05	
1D	0	-0.079	-3.632	-8.431	0.000	-2.780	7.682	1	0.01	0.00	0.05	
1E	0	0.027	-4.480	4.849	0.000	1.626	8.786	1	0.01	0.00	0.05	
1F	0	0.027	-3.632	4.849	0.000	1.626	7.682	1	0.01	0.00	0.05	
1G	0	0.027	-4.480	-8.431	0.000	-2.780	8.786	1	0.01	0.00	0.05	
1H	0	0.027	-3.632	-8.431	0.000	-2.780	7.682	1	0.01	0.00	0.05	
1I	0	-0.137	-4.306	0.594	0.000	0.217	8.539	1	0.01	0.00	0.05	
1J	0	-0.137	-3.806	0.594	0.000	0.217	7.929	1	0.01	0.00	0.05	
1K	0	-0.137	-4.306	-4.176	0.000	-1.371	8.539	1	0.01	0.00	0.05	
1L	0	-0.137	-3.806	-4.176	0.000	-1.371	7.929	1	0.01	0.00	0.05	
1M	0	0.086	-4.306	0.594	0.000	0.217	8.539	1	0.01	0.00	0.05	
1N	0	0.086	-3.806	0.594	0.000	0.217	7.929	1	0.01	0.00	0.05	
1O	0	0.086	-4.306	-4.176	0.000	-1.371	8.539	1	0.01	0.00	0.05	
1P	0	0.086	-3.806	-4.176	0.000	-1.371	7.929	1	0.01	0.00	0.05	
2	0	-0.045	-7.330	-3.218	0.000	-1.034	14.960	1	0.02	0.00	0.09	
7	0	0.009	-4.040	-1.790	0.000	-0.580	8.130	1	0.01	0.00	0.05	
8	0	0.005	-3.980	-1.727	0.000	-0.554	8.071	1	0.01	0.00	0.05	
9	0	-0.029	-4.531	-2.072	0.000	-0.673	9.196	1	0.01	0.00	0.05	
10	0	-0.043	-4.577	-2.069	0.000	-0.670	9.266	1	0.01	0.00	0.06	
11	0	-0.020	-6.590	-2.895	0.000	-0.932	13.420	1	0.02	0.00	0.08	
12	0	-0.022	-6.554	-2.857	0.000	-0.916	13.380	1	0.02	0.00	0.08	
13	0	-0.042	-6.885	-3.064	0.000	-0.987	14.050	1	0.02	0.00	0.08	
14	0	-0.051	-6.912	-3.062	0.000	-0.986	14.100	1	0.02	0.00	0.08	
1A	56	-0.079	-7.967	4.849	0.000	-1.102	5.285	1	0.02	0.00	0.03	
1B	56	-0.079	-7.119	4.849	0.000	-1.102	4.658	1	0.02	0.00	0.03	
1C	56	-0.079	-7.967	-8.431	0.000	1.963	5.285	1	0.02	0.00	0.03	
1D	56	-0.079	-7.119	-8.431	0.000	1.963	4.658	1	0.02	0.00	0.03	
1E	56	0.027	-7.967	4.849	0.000	-1.102	5.285	1	0.02	0.00	0.03	
1F	56	0.027	-7.119	4.849	0.000	-1.102	4.658	1	0.02	0.00	0.03	
1G	56	0.027	-7.967	-8.431	0.000	1.963	5.285	1	0.02	0.00	0.03	
1H	56	0.027	-7.119	-8.431	0.000	1.963	4.658	1	0.02	0.00	0.03	
1I	56	-0.137	-7.793	0.594	0.000	-0.117	5.136	1	0.02	0.00	0.03	
1J	56	-0.137	-7.293	0.594	0.000	-0.117	4.807	1	0.02	0.00	0.03	
1K	56	-0.137	-7.793	-4.176	0.000	0.978	5.136	1	0.02	0.00	0.03	
1L	56	-0.137	-7.293	-4.176	0.000	0.978	4.807	1	0.02	0.00	0.03	
1M	56	0.086	-7.793	0.594	0.000	-0.117	5.136	1	0.02	0.00	0.03	

1N	56	0.086	-7.293	0.594	0.000	-0.117	4.807	1	0.02	0.00	0.03
1O	56	0.086	-7.793	-4.176	0.000	0.978	5.136	1	0.02	0.00	0.03
1P	56	0.086	-7.293	-4.176	0.000	0.978	4.807	1	0.02	0.00	0.03
2	56	-0.045	-13.705	-3.218	0.000	0.776	9.043	1	0.04	0.00	0.05
7	56	0.009	-7.470	-1.790	0.000	0.427	4.892	1	0.02	0.00	0.03
8	56	0.005	-7.410	-1.727	0.000	0.417	4.867	1	0.02	0.00	0.03
9	56	-0.029	-8.431	-2.072	0.000	0.493	5.550	1	0.02	0.00	0.03
10	56	-0.043	-8.479	-2.069	0.000	0.494	5.595	1	0.02	0.00	0.03
11	56	-0.020	-12.305	-2.895	0.000	0.697	8.103	1	0.03	0.00	0.05
12	56	-0.022	-12.267	-2.857	0.000	0.691	8.086	1	0.03	0.00	0.05
13	56	-0.042	-12.883	-3.064	0.000	0.736	8.493	1	0.03	0.00	0.05
14	56	-0.051	-12.906	-3.062	0.000	0.737	8.524	1	0.03	0.00	0.05
1A	113	-0.079	-11.454	4.849	0.000	-3.830	-0.179	1	0.03	0.00	0.05
1B	113	-0.079	-10.606	4.849	0.000	-3.830	-0.328	1	0.03	0.00	0.05
1C	113	-0.079	-11.454	-8.431	0.000	6.706	-0.179	1	0.03	0.00	0.08
1D	113	-0.079	-10.606	-8.431	0.000	6.706	-0.328	1	0.03	0.00	0.08
1E	113	0.027	-11.454	4.849	0.000	-3.830	-0.179	1	0.03	0.00	0.05
1F	113	0.027	-10.606	4.849	0.000	-3.830	-0.328	1	0.03	0.00	0.05
1G	113	0.027	-11.454	-8.431	0.000	6.706	-0.179	1	0.03	0.00	0.08
1H	113	0.027	-10.606	-8.431	0.000	6.706	-0.328	1	0.03	0.00	0.08
1I	113	-0.137	-11.280	0.594	0.000	-0.451	-0.230	1	0.03	0.00	0.01
1J	113	-0.137	-10.780	0.594	0.000	-0.451	-0.277	1	0.03	0.00	0.01
1K	113	-0.137	-11.280	-4.176	0.000	3.327	-0.230	1	0.03	0.00	0.04
1L	113	-0.137	-10.780	-4.176	0.000	3.327	-0.277	1	0.03	0.00	0.04
1M	113	0.086	-11.280	0.594	0.000	-0.451	-0.230	1	0.03	0.00	0.01
1N	113	0.086	-10.780	0.594	0.000	-0.451	-0.277	1	0.03	0.00	0.01
1O	113	0.086	-11.280	-4.176	0.000	3.327	-0.230	1	0.03	0.00	0.04
1P	113	0.086	-10.780	-4.176	0.000	3.327	-0.277	1	0.03	0.00	0.04
2	113	-0.045	-20.080	-3.218	0.000	2.586	-0.460	1	0.05	0.00	0.03
7	113	0.009	-10.900	-1.790	0.000	1.434	-0.275	1	0.03	0.00	0.02
8	113	0.005	-10.840	-1.727	0.000	1.389	-0.267	1	0.03	0.00	0.02
9	113	-0.029	-12.330	-2.072	0.000	1.659	-0.290	1	0.03	0.00	0.02
10	113	-0.043	-12.380	-2.069	0.000	1.658	-0.271	1	0.03	0.00	0.02
11	113	-0.020	-18.020	-2.895	0.000	2.325	-0.427	1	0.05	0.00	0.03
12	113	-0.022	-17.980	-2.857	0.000	2.298	-0.422	1	0.05	0.00	0.03
13	113	-0.042	-18.880	-3.064	0.000	2.460	-0.436	1	0.05	0.00	0.03
14	113	-0.051	-18.900	-3.062	0.000	2.459	-0.425	1	0.05	0.00	0.03

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	--	----------											
	kN	kN*m											
1A	-0.079	-3.830	8.786	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.10	Snell. 'zx'= 22
1B	-0.079	-3.830	7.682	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1C	-0.079	6.706	8.786	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.14	Snell. 'zx'= 22
1D	-0.079	6.706	7.682	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.13	Snell. 'zx'= 22
1I	-0.137	-0.451	8.539	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.06	Snell. 'zx'= 22
1J	-0.137	-0.451	7.929	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.05	Snell. 'zx'= 22
1K	-0.137	3.327	8.539	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
1L	-0.137	3.327	7.929	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.09	Snell. 'zx'= 22
2	-0.045	2.586	14.960	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.12	Snell. 'zx'= 22
9	-0.029	1.659	9.196	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
10	-0.043	1.658	9.266	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.08	Snell. 'zx'= 22
11	-0.020	2.325	13.420	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22
12	-0.022	2.298	13.380	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22
13	-0.042	2.460	14.050	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22
14	-0.051	2.459	14.100	1	0.9703	1.0000	1.0000	--	--	0.00	--	0.11	Snell. 'zx'= 22

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **8** Descrizione: **ARCARECCI**
Tabella: **Tabella travi** Struttura: **Nuova**
Tipo acciaio: **S 275** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Coeff. riduzione dell'area: **0.000** Tipologia sismica: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **bullonato** Connessione su un solo lato Connessione sul lato corto (solo 'L')
Attacco: **Ala** Più di una fila di bulloni

ASTA NUM. 1 NI 96 NF 176 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.070	10.482	5.937	0.000	4.638	-0.159	1	0.03	0.00	0.06	
1B	0	0.070	11.358	5.937	0.000	4.638	-0.320	1	0.03	0.00	0.06	
1C	0	0.070	10.482	-8.571	0.000	-6.780	-0.159	1	0.03	0.00	0.08	
1D	0	0.070	11.358	-8.571	0.000	-6.780	-0.320	1	0.03	0.00	0.08	
1E	0	0.125	10.482	5.937	0.000	4.638	-0.159	1	0.03	0.00	0.06	
1F	0	0.125	11.358	5.937	0.000	4.638	-0.320	1	0.03	0.00	0.06	
1G	0	0.125	10.482	-8.571	0.000	-6.780	-0.159	1	0.03	0.00	0.08	
1H	0	0.125	11.358	-8.571	0.000	-6.780	-0.320	1	0.03	0.00	0.08	
1I	0	0.019	10.694	1.338	0.000	1.017	-0.214	1	0.03	0.00	0.01	
1J	0	0.019	11.146	1.338	0.000	1.017	-0.265	1	0.03	0.00	0.01	
1K	0	0.019	10.694	-3.972	0.000	-3.159	-0.214	1	0.03	0.00	0.04	
1L	0	0.019	11.146	-3.972	0.000	-3.159	-0.265	1	0.03	0.00	0.04	
1M	0	0.176	10.694	1.338	0.000	1.017	-0.214	1	0.03	0.00	0.01	
1N	0	0.176	11.146	1.338	0.000	1.017	-0.265	1	0.03	0.00	0.01	
1O	0	0.176	10.694	-3.972	0.000	-3.159	-0.214	1	0.03	0.00	0.04	
1P	0	0.176	11.146	-3.972	0.000	-3.159	-0.265	1	0.03	0.00	0.04	
2	0	0.178	19.870	-2.366	0.000	-1.926	-0.435	1	0.05	0.00	0.02	
7	0	0.148	10.740	-1.313	0.000	-1.064	-0.256	1	0.03	0.00	0.01	
8	0	0.143	10.790	-1.294	0.000	-1.049	-0.262	1	0.03	0.00	0.01	
9	0	0.085	12.260	-1.520	0.000	-1.234	-0.257	1	0.03	0.00	0.02	
10	0	0.112	12.190	-1.520	0.000	-1.232	-0.273	1	0.03	0.00	0.02	
11	0	0.191	17.800	-2.127	0.000	-1.729	-0.402	1	0.05	0.00	0.02	
12	0	0.188	17.830	-2.116	0.000	-1.720	-0.406	1	0.05	0.00	0.02	
13	0	0.153	18.710	-2.251	0.000	-1.832	-0.402	1	0.05	0.00	0.02	
14	0	0.169	18.670	-2.251	0.000	-1.831	-0.412	1	0.05	0.00	0.02	
1A	56	0.070	6.991	5.937	0.000	1.298	5.245	1	0.02	0.00	0.03	
1B	56	0.070	7.867	5.937	0.000	1.298	4.592	1	0.02	0.00	0.03	
1C	56	0.070	6.991	-8.571	0.000	-1.959	5.245	1	0.02	0.00	0.03	
1D	56	0.070	7.867	-8.571	0.000	-1.959	4.592	1	0.02	0.00	0.03	
1E	56	0.125	6.991	5.937	0.000	1.298	5.245	1	0.02	0.00	0.03	
1F	56	0.125	7.867	5.937	0.000	1.298	4.592	1	0.02	0.00	0.03	
1G	56	0.125	6.991	-8.571	0.000	-1.959	5.245	1	0.02	0.00	0.03	
1H	56	0.125	7.867	-8.571	0.000	-1.959	4.592	1	0.02	0.00	0.03	
1I	56	0.019	7.203	1.338	0.000	0.264	5.070	1	0.02	0.00	0.03	
1J	56	0.019	7.655	1.338	0.000	0.264	4.768	1	0.02	0.00	0.03	
1K	56	0.019	7.203	-3.972	0.000	-0.925	5.070	1	0.02	0.00	0.03	
1L	56	0.019	7.655	-3.972	0.000	-0.925	4.768	1	0.02	0.00	0.03	
1M	56	0.176	7.203	1.338	0.000	0.264	5.070	1	0.02	0.00	0.03	
1N	56	0.176	7.655	1.338	0.000	0.264	4.768	1	0.02	0.00	0.03	
1O	56	0.176	7.203	-3.972	0.000	-0.925	5.070	1	0.02	0.00	0.03	
1P	56	0.176	7.655	-3.972	0.000	-0.925	4.768	1	0.02	0.00	0.03	
2	56	0.178	13.493	-2.366	0.000	-0.595	8.946	1	0.04	0.00	0.05	
7	56	0.148	7.308	-1.313	0.000	-0.325	4.819	1	0.02	0.00	0.03	
8	56	0.143	7.358	-1.294	0.000	-0.321	4.841	1	0.02	0.00	0.03	
9	56	0.085	8.361	-1.520	0.000	-0.379	5.545	1	0.02	0.00	0.03	
10	56	0.112	8.288	-1.520	0.000	-0.377	5.486	1	0.02	0.00	0.03	
11	56	0.191	12.085	-2.127	0.000	-0.533	8.001	1	0.03	0.00	0.05	
12	56	0.188	12.115	-2.116	0.000	-0.530	8.014	1	0.03	0.00	0.05	
13	56	0.153	12.716	-2.251	0.000	-0.566	8.435	1	0.03	0.00	0.05	
14	56	0.169	12.673	-2.251	0.000	-0.565	8.400	1	0.03	0.00	0.05	
1A	113	0.070	3.500	5.937	0.000	-2.041	8.688	1	0.01	0.00	0.05	
1B	113	0.070	4.376	5.937	0.000	-2.041	7.543	1	0.01	0.00	0.04	
1C	113	0.070	3.500	-8.571	0.000	2.862	8.688	1	0.01	0.00	0.05	
1D	113	0.070	4.376	-8.571	0.000	2.862	7.543	1	0.01	0.00	0.04	
1E	113	0.125	3.500	5.937	0.000	-2.041	8.688	1	0.01	0.00	0.05	
1F	113	0.125	4.376	5.937	0.000	-2.041	7.543	1	0.01	0.00	0.04	
1G	113	0.125	3.500	-8.571	0.000	2.862	8.688	1	0.01	0.00	0.05	
1H	113	0.125	4.376	-8.571	0.000	2.862	7.543	1	0.01	0.00	0.04	
1I	113	0.019	3.712	1.338	0.000	-0.488	8.391	1	0.01	0.00	0.05	
1J	113	0.019	4.164	1.338	0.000	-0.488	7.839	1	0.01	0.00	0.05	
1K	113	0.019	3.712	-3.972	0.000	1.309	8.391	1	0.01	0.00	0.05	
1L	113	0.019	4.164	-3.972	0.000	1.309	7.839	1	0.01	0.00	0.05	

1M	113	0.176	3.712	1.338	0.000	-0.488	8.391	1	0.01	0.00	0.05
1N	113	0.176	4.164	1.338	0.000	-0.488	7.839	1	0.01	0.00	0.05
1O	113	0.176	3.712	-3.972	0.000	1.309	8.391	1	0.01	0.00	0.05
1P	113	0.176	4.164	-3.972	0.000	1.309	7.839	1	0.01	0.00	0.05
2	113	0.178	7.115	-2.366	0.000	0.736	14.740	1	0.02	0.00	0.09
7	113	0.148	3.875	-1.313	0.000	0.414	7.964	1	0.01	0.00	0.05
8	113	0.143	3.925	-1.294	0.000	0.407	8.014	1	0.01	0.00	0.05
9	113	0.085	4.462	-1.520	0.000	0.475	9.152	1	0.01	0.00	0.05
10	113	0.112	4.386	-1.520	0.000	0.477	9.050	1	0.01	0.00	0.05
11	113	0.191	6.369	-2.127	0.000	0.664	13.190	1	0.02	0.00	0.08
12	113	0.188	6.399	-2.116	0.000	0.660	13.220	1	0.02	0.00	0.08
13	113	0.153	6.721	-2.251	0.000	0.701	13.900	1	0.02	0.00	0.08
14	113	0.169	6.675	-2.251	0.000	0.702	13.840	1	0.02	0.00	0.08

ASTA NUM. 108 NI 176 NF 183 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.163	4.871	1.869	0.000	0.266	8.586	1	0.01	0.00	0.05	
1B	0	-0.163	4.989	1.869	0.000	0.266	7.388	1	0.01	0.00	0.04	
1C	0	-0.163	4.871	-2.766	0.000	-0.398	8.586	1	0.01	0.00	0.05	
1D	0	-0.163	4.989	-2.766	0.000	-0.398	7.388	1	0.01	0.00	0.04	
1E	0	-0.136	4.871	1.869	0.000	0.266	8.586	1	0.01	0.00	0.05	
1F	0	-0.136	4.989	1.869	0.000	0.266	7.388	1	0.01	0.00	0.04	
1G	0	-0.136	4.871	-2.766	0.000	-0.398	8.586	1	0.01	0.00	0.05	
1H	0	-0.136	4.989	-2.766	0.000	-0.398	7.388	1	0.01	0.00	0.04	
1I	0	-0.175	4.875	0.386	0.000	0.062	8.268	1	0.01	0.00	0.05	
1J	0	-0.175	4.985	0.386	0.000	0.062	7.706	1	0.01	0.00	0.05	
1K	0	-0.175	4.875	-1.283	0.000	-0.195	8.268	1	0.01	0.00	0.05	
1L	0	-0.175	4.985	-1.283	0.000	-0.195	7.706	1	0.01	0.00	0.05	
1M	0	-0.124	4.875	0.386	0.000	0.062	8.268	1	0.01	0.00	0.05	
1N	0	-0.124	4.985	0.386	0.000	0.062	7.706	1	0.01	0.00	0.05	
1O	0	-0.124	4.875	-1.283	0.000	-0.195	8.268	1	0.01	0.00	0.05	
1P	0	-0.124	4.985	-1.283	0.000	-0.195	7.706	1	0.01	0.00	0.05	
2	0	-0.268	8.992	-0.811	0.000	-0.123	14.510	1	0.02	0.00	0.09	
7	0	-0.137	4.877	-0.469	0.000	-0.079	7.836	1	0.01	0.00	0.05	
8	0	-0.131	4.865	-0.455	0.000	-0.076	7.883	1	0.01	0.00	0.05	
9	0	-0.174	5.516	-0.496	0.000	-0.062	9.012	1	0.01	0.00	0.05	
10	0	-0.169	5.505	-0.511	0.000	-0.070	8.906	1	0.01	0.00	0.05	
11	0	-0.234	8.073	-0.743	0.000	-0.119	12.980	1	0.02	0.00	0.08	
12	0	-0.230	8.066	-0.734	0.000	-0.117	13.010	1	0.02	0.00	0.08	
13	0	-0.256	8.456	-0.759	0.000	-0.108	13.690	1	0.02	0.00	0.08	
14	0	-0.253	8.450	-0.768	0.000	-0.113	13.620	1	0.02	0.00	0.08	
1A	56	-0.163	1.382	1.869	0.000	1.822	10.359	1	0.00	0.00	0.06	
1B	56	-0.163	1.500	1.869	0.000	1.822	9.199	1	0.00	0.00	0.05	
1C	56	-0.163	1.382	-2.766	0.000	-1.450	10.359	1	0.00	0.00	0.06	
1D	56	-0.163	1.500	-2.766	0.000	-1.450	9.199	1	0.00	0.00	0.05	
1E	56	-0.136	1.382	1.869	0.000	1.822	10.359	1	0.00	0.00	0.06	
1F	56	-0.136	1.500	1.869	0.000	1.822	9.199	1	0.00	0.00	0.05	
1G	56	-0.136	1.382	-2.766	0.000	-1.450	10.359	1	0.00	0.00	0.06	
1H	56	-0.136	1.500	-2.766	0.000	-1.450	9.199	1	0.00	0.00	0.05	
1I	56	-0.175	1.386	0.386	0.000	0.784	10.075	1	0.00	0.00	0.06	
1J	56	-0.175	1.496	0.386	0.000	0.784	9.482	1	0.00	0.00	0.06	
1K	56	-0.175	1.386	-1.283	0.000	-0.412	10.075	1	0.00	0.00	0.06	
1L	56	-0.175	1.496	-1.283	0.000	-0.412	9.482	1	0.00	0.00	0.06	
1M	56	-0.124	1.386	0.386	0.000	0.784	10.075	1	0.00	0.00	0.06	
1N	56	-0.124	1.496	0.386	0.000	0.784	9.482	1	0.00	0.00	0.06	
1O	56	-0.124	1.386	-1.283	0.000	-0.412	10.075	1	0.00	0.00	0.06	
1P	56	-0.124	1.496	-1.283	0.000	-0.412	9.482	1	0.00	0.00	0.06	
2	56	-0.268	2.615	-0.811	0.000	0.334	17.773	1	0.01	0.00	0.11	
7	56	-0.137	1.446	-0.469	0.000	0.185	9.614	1	0.00	0.00	0.06	
8	56	-0.131	1.433	-0.455	0.000	0.180	9.655	1	0.00	0.00	0.06	
9	56	-0.174	1.615	-0.496	0.000	0.217	11.018	1	0.00	0.00	0.07	
10	56	-0.169	1.604	-0.511	0.000	0.218	10.905	1	0.00	0.00	0.06	
11	56	-0.234	2.359	-0.743	0.000	0.299	15.912	1	0.01	0.00	0.09	
12	56	-0.230	2.352	-0.734	0.000	0.297	15.937	1	0.01	0.00	0.09	
13	56	-0.256	2.460	-0.759	0.000	0.319	16.756	1	0.01	0.00	0.10	
14	56	-0.253	2.454	-0.768	0.000	0.319	16.686	1	0.01	0.00	0.10	
1A	113	-0.163	-2.107	1.869	0.000	3.379	10.169	1	0.01	0.00	0.06	
1B	113	-0.163	-1.989	1.869	0.000	3.379	9.047	1	0.01	0.00	0.05	
1C	113	-0.163	-2.107	-2.766	0.000	-2.501	10.169	1	0.01	0.00	0.06	
1D	113	-0.163	-1.989	-2.766	0.000	-2.501	9.047	1	0.01	0.00	0.05	
1E	113	-0.136	-2.107	1.869	0.000	3.379	10.169	1	0.01	0.00	0.06	
1F	113	-0.136	-1.989	1.869	0.000	3.379	9.047	1	0.01	0.00	0.05	
1G	113	-0.136	-2.107	-2.766	0.000	-2.501	10.169	1	0.01	0.00	0.06	
1H	113	-0.136	-1.989	-2.766	0.000	-2.501	9.047	1	0.01	0.00	0.05	
1I	113	-0.175	-2.103	0.386	0.000	1.506	9.920	1	0.01	0.00	0.06	
1J	113	-0.175	-1.993	0.386	0.000	1.506	9.296	1	0.01	0.00	0.06	
1K	113	-0.175	-2.103	-1.283	0.000	-0.629	9.920	1	0.01	0.00	0.06	
1L	113	-0.175	-1.993	-1.283	0.000	-0.629	9.296	1	0.01	0.00	0.06	
1M	113	-0.124	-2.103	0.386	0.000	1.506	9.920	1	0.01	0.00	0.06	
1N	113	-0.124	-1.993	0.386	0.000	1.506	9.296	1	0.01	0.00	0.06	
1O	113	-0.124	-2.103	-1.283	0.000	-0.629	9.920	1	0.01	0.00	0.06	
1P	113	-0.124	-1.993	-1.283	0.000	-0.629	9.296	1	0.01	0.00	0.06	
2	113	-0.268	-3.761	-0.811	0.000	0.790	17.450	1	0.01	0.00	0.10	
7	113	-0.137	-1.985	-0.469	0.000	0.449	9.462	1	0.01	0.00	0.06	
8	113	-0.131	-1.998	-0.455	0.000	0.436	9.496	1	0.01	0.00	0.06	
9	113	-0.174	-2.286	-0.496	0.000	0.496	10.830	1	0.01	0.00	0.06	
10	113	-0.169	-2.297	-0.511	0.000	0.505	10.710	1	0.01	0.00	0.06	

11	113	-0.234	-3.355	-0.743	0.000	0.717	15.630	1	0.01	0.00	0.09
12	113	-0.230	-3.362	-0.734	0.000	0.710	15.650	1	0.01	0.00	0.09
13	113	-0.256	-3.536	-0.759	0.000	0.746	16.450	1	0.01	0.00	0.10
14	113	-0.253	-3.542	-0.768	0.000	0.751	16.380	1	0.01	0.00	0.10

ASTA NUM. 109 NI 183 NF 190 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.110	-1.208	2.611	0.000	3.367	10.190	1	0.00	0.00	0.06	
1B	0	-0.110	-0.662	2.611	0.000	3.367	9.060	1	0.00	0.00	0.05	
1C	0	-0.110	-1.208	-2.054	0.000	-2.522	10.190	1	0.00	0.00	0.06	
1D	0	-0.110	-0.662	-2.054	0.000	-2.522	9.060	1	0.00	0.00	0.05	
1E	0	-0.093	-1.208	2.611	0.000	3.367	10.190	1	0.00	0.00	0.06	
1F	0	-0.093	-0.662	2.611	0.000	3.367	9.060	1	0.00	0.00	0.05	
1G	0	-0.093	-1.208	-2.054	0.000	-2.522	10.190	1	0.00	0.00	0.06	
1H	0	-0.093	-0.662	-2.054	0.000	-2.522	9.060	1	0.00	0.00	0.05	
1I	0	-0.127	-1.059	1.141	0.000	1.498	9.938	1	0.00	0.00	0.06	
1J	0	-0.127	-0.810	1.141	0.000	1.498	9.312	1	0.00	0.00	0.06	
1K	0	-0.127	-1.059	-0.583	0.000	-0.653	9.938	1	0.00	0.00	0.06	
1L	0	-0.127	-0.810	-0.583	0.000	-0.653	9.312	1	0.00	0.00	0.06	
1M	0	-0.076	-1.059	1.141	0.000	1.498	9.938	1	0.00	0.00	0.06	
1N	0	-0.076	-0.810	1.141	0.000	1.498	9.312	1	0.00	0.00	0.06	
1O	0	-0.076	-1.059	-0.583	0.000	-0.653	9.938	1	0.00	0.00	0.06	
1P	0	-0.076	-0.810	-0.583	0.000	-0.653	9.312	1	0.00	0.00	0.06	
2	0	-0.183	-1.655	0.501	0.000	0.759	17.480	1	0.00	0.00	0.10	
7	0	-0.120	-0.915	0.269	0.000	0.416	9.479	1	0.00	0.00	0.06	
8	0	-0.116	-0.941	0.257	0.000	0.404	9.514	1	0.00	0.00	0.06	
9	0	-0.106	-1.076	0.323	0.000	0.486	10.850	1	0.00	0.00	0.06	
10	0	-0.117	-1.063	0.323	0.000	0.487	10.730	1	0.00	0.00	0.06	
11	0	-0.176	-1.476	0.445	0.000	0.680	15.660	1	0.00	0.00	0.09	
12	0	-0.173	-1.491	0.437	0.000	0.672	15.680	1	0.00	0.00	0.09	
13	0	-0.168	-1.572	0.477	0.000	0.722	16.480	1	0.00	0.00	0.10	
14	0	-0.174	-1.564	0.477	0.000	0.722	16.410	1	0.00	0.00	0.10	
1A	56	-0.110	-4.696	2.611	0.000	1.898	8.530	1	0.01	0.00	0.05	
1B	56	-0.110	-4.150	2.611	0.000	1.898	7.706	1	0.01	0.00	0.05	
1C	56	-0.110	-4.696	-2.054	0.000	-1.367	8.530	1	0.01	0.00	0.05	
1D	56	-0.110	-4.150	-2.054	0.000	-1.367	7.706	1	0.01	0.00	0.05	
1E	56	-0.093	-4.696	2.611	0.000	1.898	8.530	1	0.01	0.00	0.05	
1F	56	-0.093	-4.150	2.611	0.000	1.898	7.706	1	0.01	0.00	0.05	
1G	56	-0.093	-4.696	-2.054	0.000	-1.367	8.530	1	0.01	0.00	0.05	
1H	56	-0.093	-4.150	-2.054	0.000	-1.367	7.706	1	0.01	0.00	0.05	
1I	56	-0.127	-4.548	1.141	0.000	0.856	8.362	1	0.01	0.00	0.05	
1J	56	-0.127	-4.299	1.141	0.000	0.856	7.875	1	0.01	0.00	0.05	
1K	56	-0.127	-4.548	-0.583	0.000	-0.325	8.362	1	0.01	0.00	0.05	
1L	56	-0.127	-4.299	-0.583	0.000	-0.325	7.875	1	0.01	0.00	0.05	
1M	56	-0.076	-4.548	1.141	0.000	0.856	8.362	1	0.01	0.00	0.05	
1N	56	-0.076	-4.299	1.141	0.000	0.856	7.875	1	0.01	0.00	0.05	
1O	56	-0.076	-4.548	-0.583	0.000	-0.325	8.362	1	0.01	0.00	0.05	
1P	56	-0.076	-4.299	-0.583	0.000	-0.325	7.875	1	0.01	0.00	0.05	
2	56	-0.183	-8.033	0.501	0.000	0.478	14.757	1	0.02	0.00	0.09	
7	56	-0.120	-4.347	0.269	0.000	0.265	8.000	1	0.01	0.00	0.05	
8	56	-0.116	-4.372	0.257	0.000	0.259	8.020	1	0.01	0.00	0.05	
9	56	-0.106	-4.977	0.323	0.000	0.304	9.146	1	0.01	0.00	0.05	
10	56	-0.117	-4.965	0.323	0.000	0.305	9.034	1	0.01	0.00	0.05	
11	56	-0.176	-7.188	0.445	0.000	0.430	13.224	1	0.02	0.00	0.08	
12	56	-0.173	-7.206	0.437	0.000	0.426	13.236	1	0.02	0.00	0.08	
13	56	-0.168	-7.566	0.477	0.000	0.453	13.911	1	0.02	0.00	0.08	
14	56	-0.174	-7.562	0.477	0.000	0.454	13.845	1	0.02	0.00	0.08	
1A	113	-0.110	-8.185	2.611	0.000	0.429	4.908	1	0.02	0.00	0.03	
1B	113	-0.110	-7.639	2.611	0.000	0.429	4.390	1	0.02	0.00	0.03	
1C	113	-0.110	-8.185	-2.054	0.000	-0.212	4.908	1	0.02	0.00	0.03	
1D	113	-0.110	-7.639	-2.054	0.000	-0.212	4.390	1	0.02	0.00	0.03	
1E	113	-0.093	-8.185	2.611	0.000	0.429	4.908	1	0.02	0.00	0.03	
1F	113	-0.093	-7.639	2.611	0.000	0.429	4.390	1	0.02	0.00	0.03	
1G	113	-0.093	-8.185	-2.054	0.000	-0.212	4.908	1	0.02	0.00	0.03	
1H	113	-0.093	-7.639	-2.054	0.000	-0.212	4.390	1	0.02	0.00	0.03	
1I	113	-0.127	-8.036	1.141	0.000	0.214	4.823	1	0.02	0.00	0.03	
1J	113	-0.127	-7.788	1.141	0.000	0.214	4.475	1	0.02	0.00	0.03	
1K	113	-0.127	-8.036	-0.583	0.000	0.003	4.823	1	0.02	0.00	0.03	
1L	113	-0.127	-7.788	-0.583	0.000	0.003	4.475	1	0.02	0.00	0.03	
1M	113	-0.076	-8.036	1.141	0.000	0.214	4.823	1	0.02	0.00	0.03	
1N	113	-0.076	-7.788	1.141	0.000	0.214	4.475	1	0.02	0.00	0.03	
1O	113	-0.076	-8.036	-0.583	0.000	0.003	4.823	1	0.02	0.00	0.03	
1P	113	-0.076	-7.788	-0.583	0.000	0.003	4.475	1	0.02	0.00	0.03	
2	113	-0.183	-14.410	0.501	0.000	0.196	8.447	1	0.04	0.00	0.05	
7	113	-0.120	-7.778	0.269	0.000	0.113	4.590	1	0.02	0.00	0.03	
8	113	-0.116	-7.803	0.257	0.000	0.115	4.595	1	0.02	0.00	0.03	
9	113	-0.106	-8.878	0.323	0.000	0.123	5.248	1	0.02	0.00	0.03	
10	113	-0.117	-8.866	0.323	0.000	0.123	5.144	1	0.02	0.00	0.03	
11	113	-0.176	-12.900	0.445	0.000	0.179	7.574	1	0.03	0.00	0.05	
12	113	-0.173	-12.920	0.437	0.000	0.180	7.577	1	0.03	0.00	0.05	
13	113	-0.168	-13.560	0.477	0.000	0.185	7.969	1	0.04	0.00	0.05	
14	113	-0.174	-13.560	0.477	0.000	0.185	7.907	1	0.04	0.00	0.05	

ASTA NUM. 110 NI 190 NF 81 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.107	-8.074	8.852	0.000	3.051	5.003	1	0.02	0.00	0.04	
1B	0	0.107	-6.406	8.852	0.000	3.051	4.539	1	0.02	0.00	0.04	
1C	0	0.107	-8.074	-5.640	0.000	-1.835	5.003	1	0.02	0.00	0.03	
1D	0	0.107	-6.406	-5.640	0.000	-1.835	4.539	1	0.02	0.00	0.03	
1E	0	0.175	-8.074	8.852	0.000	3.051	5.003	1	0.02	0.00	0.04	
1F	0	0.175	-6.406	8.852	0.000	3.051	4.539	1	0.02	0.00	0.04	
1G	0	0.175	-8.074	-5.640	0.000	-1.835	5.003	1	0.02	0.00	0.03	
1H	0	0.175	-6.406	-5.640	0.000	-1.835	4.539	1	0.02	0.00	0.03	
1I	0	0.062	-7.603	4.229	0.000	1.489	4.939	1	0.02	0.00	0.03	
1J	0	0.062	-6.877	4.229	0.000	1.489	4.603	1	0.02	0.00	0.03	
1K	0	0.062	-7.603	-1.017	0.000	-0.273	4.939	1	0.02	0.00	0.03	
1L	0	0.062	-6.877	-1.017	0.000	-0.273	4.603	1	0.02	0.00	0.03	
1M	0	0.220	-7.603	4.229	0.000	1.489	4.939	1	0.02	0.00	0.03	
1N	0	0.220	-6.877	4.229	0.000	1.489	4.603	1	0.02	0.00	0.03	
1O	0	0.220	-7.603	-1.017	0.000	-0.273	4.939	1	0.02	0.00	0.03	
1P	0	0.220	-6.877	-1.017	0.000	-0.273	4.603	1	0.02	0.00	0.03	
2	0	0.251	-13.110	2.891	0.000	1.094	8.669	1	0.03	0.00	0.05	
7	0	0.097	-7.128	1.585	0.000	0.596	4.712	1	0.02	0.00	0.03	
8	0	0.091	-7.217	1.561	0.000	0.588	4.720	1	0.02	0.00	0.03	
9	0	0.182	-8.158	1.848	0.000	0.701	5.382	1	0.02	0.00	0.03	
10	0	0.160	-8.094	1.837	0.000	0.695	5.281	1	0.02	0.00	0.03	
11	0	0.199	-11.740	2.590	0.000	0.978	7.775	1	0.03	0.00	0.05	
12	0	0.196	-11.800	2.575	0.000	0.973	7.780	1	0.03	0.00	0.05	
13	0	0.250	-12.360	2.747	0.000	1.040	8.177	1	0.03	0.00	0.05	
14	0	0.237	-12.320	2.741	0.000	1.037	8.116	1	0.03	0.00	0.05	
1A	56	0.107	-11.564	8.852	0.000	-1.928	-0.520	1	0.03	0.00	0.02	
1B	56	0.107	-9.896	8.852	0.000	-1.928	-0.046	1	0.03	0.00	0.02	
1C	56	0.107	-11.564	-5.640	0.000	1.337	-0.520	1	0.03	0.00	0.02	
1D	56	0.107	-9.896	-5.640	0.000	1.337	-0.046	1	0.03	0.00	0.02	
1E	56	0.175	-11.564	8.852	0.000	-1.928	-0.520	1	0.03	0.00	0.02	
1F	56	0.175	-9.896	8.852	0.000	-1.928	-0.046	1	0.03	0.00	0.02	
1G	56	0.175	-11.564	-5.640	0.000	1.337	-0.520	1	0.03	0.00	0.02	
1H	56	0.175	-9.896	-5.640	0.000	1.337	-0.046	1	0.03	0.00	0.02	
1I	56	0.062	-11.093	4.229	0.000	-0.890	-0.319	1	0.03	0.00	0.01	
1J	56	0.062	-10.367	4.229	0.000	-0.890	-0.247	1	0.03	0.00	0.01	
1K	56	0.062	-11.093	-1.017	0.000	0.299	-0.319	1	0.03	0.00	0.00	
1L	56	0.062	-10.367	-1.017	0.000	0.299	-0.247	1	0.03	0.00	0.00	
1M	56	0.220	-11.093	4.229	0.000	-0.890	-0.319	1	0.03	0.00	0.01	
1N	56	0.220	-10.367	4.229	0.000	-0.890	-0.247	1	0.03	0.00	0.01	
1O	56	0.220	-11.093	-1.017	0.000	0.299	-0.319	1	0.03	0.00	0.00	
1P	56	0.220	-10.367	-1.017	0.000	0.299	-0.247	1	0.03	0.00	0.00	
2	56	0.251	-19.490	2.891	0.000	-0.532	-0.502	1	0.05	0.00	0.01	
7	56	0.097	-10.559	1.585	0.000	-0.295	-0.262	1	0.03	0.00	0.00	
8	56	0.091	-10.649	1.561	0.000	-0.290	-0.304	1	0.03	0.00	0.00	
9	56	0.182	-12.059	1.848	0.000	-0.338	-0.304	1	0.03	0.00	0.00	
10	56	0.160	-11.997	1.837	0.000	-0.338	-0.369	1	0.03	0.00	0.00	
11	56	0.199	-17.455	2.590	0.000	-0.479	-0.435	1	0.05	0.00	0.01	
12	56	0.196	-17.510	2.575	0.000	-0.476	-0.463	1	0.05	0.00	0.01	
13	56	0.250	-18.355	2.747	0.000	-0.505	-0.460	1	0.05	0.00	0.01	
14	56	0.237	-18.315	2.741	0.000	-0.504	-0.501	1	0.05	0.00	0.01	
1A	113	0.107	-15.054	8.852	0.000	-6.908	-8.005	1	0.04	0.00	0.09	
1B	113	0.107	-13.386	8.852	0.000	-6.908	-6.593	1	0.04	0.00	0.09	
1C	113	0.107	-15.054	-5.640	0.000	4.510	-8.005	1	0.04	0.00	0.06	
1D	113	0.107	-13.386	-5.640	0.000	4.510	-6.593	1	0.04	0.00	0.06	
1E	113	0.175	-15.054	8.852	0.000	-6.908	-8.005	1	0.04	0.00	0.09	
1F	113	0.175	-13.386	8.852	0.000	-6.908	-6.593	1	0.04	0.00	0.09	
1G	113	0.175	-15.054	-5.640	0.000	4.510	-8.005	1	0.04	0.00	0.06	
1H	113	0.175	-13.386	-5.640	0.000	4.510	-6.593	1	0.04	0.00	0.06	
1I	113	0.062	-14.583	4.229	0.000	-3.269	-7.540	1	0.04	0.00	0.04	
1J	113	0.062	-13.857	4.229	0.000	-3.269	-7.058	1	0.04	0.00	0.04	
1K	113	0.062	-14.583	-1.017	0.000	0.871	-7.540	1	0.04	0.00	0.04	
1L	113	0.062	-13.857	-1.017	0.000	0.871	-7.058	1	0.04	0.00	0.04	
1M	113	0.220	-14.583	4.229	0.000	-3.269	-7.540	1	0.04	0.00	0.04	
1N	113	0.220	-13.857	4.229	0.000	-3.269	-7.058	1	0.04	0.00	0.04	
1O	113	0.220	-14.583	-1.017	0.000	0.871	-7.540	1	0.04	0.00	0.04	
1P	113	0.220	-13.857	-1.017	0.000	0.871	-7.058	1	0.04	0.00	0.04	
2	113	0.251	-25.870	2.891	0.000	-2.158	-13.260	1	0.07	0.00	0.08	
7	113	0.097	-13.990	1.585	0.000	-1.187	-7.167	1	0.04	0.00	0.04	
8	113	0.091	-14.080	1.561	0.000	-1.168	-7.259	1	0.04	0.00	0.04	
9	113	0.182	-15.960	1.848	0.000	-1.378	-8.185	1	0.04	0.00	0.05	
10	113	0.160	-15.900	1.837	0.000	-1.371	-8.213	1	0.04	0.00	0.05	
11	113	0.199	-23.170	2.590	0.000	-1.936	-11.860	1	0.06	0.00	0.07	
12	113	0.196	-23.220	2.575	0.000	-1.924	-11.920	1	0.06	0.00	0.07	
13	113	0.250	-24.350	2.747	0.000	-2.050	-12.470	1	0.06	0.00	0.07	
14	113	0.237	-24.310	2.741	0.000	-2.046	-12.490	1	0.06	0.00	0.07	

ASTA NUM. 32 NI 81 NF 226 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.005	8.613	2.158	0.000	1.287	-6.430	1	0.02	0.00	0.04	
1B	0	-0.005	10.619	2.158	0.000	1.287	-7.976	1	0.03	0.00	0.05	

1C	0	-0.005	8.613	-5.766	0.000	-3.313	-6.430	1	0.02	0.00	0.04
1D	0	-0.005	10.619	-5.766	0.000	-3.313	-7.976	1	0.03	0.00	0.05
1E	0	0.052	8.613	2.158	0.000	1.287	-6.430	1	0.02	0.00	0.04
1F	0	0.052	10.619	2.158	0.000	1.287	-7.976	1	0.03	0.00	0.05
1G	0	0.052	8.613	-5.766	0.000	-3.313	-6.430	1	0.02	0.00	0.04
1H	0	0.052	10.619	-5.766	0.000	-3.313	-7.976	1	0.03	0.00	0.05
1I	0	-0.024	9.271	-0.489	0.000	-0.250	-6.949	1	0.02	0.00	0.04
1J	0	-0.024	9.961	-0.489	0.000	-0.250	-7.457	1	0.03	0.00	0.04
1K	0	-0.024	9.271	-3.119	0.000	-1.776	-6.949	1	0.02	0.00	0.04
1L	0	-0.024	9.961	-3.119	0.000	-1.776	-7.457	1	0.03	0.00	0.04
1M	0	0.071	9.271	-0.489	0.000	-0.250	-6.949	1	0.02	0.00	0.04
1N	0	0.071	9.961	-0.489	0.000	-0.250	-7.457	1	0.03	0.00	0.04
1O	0	0.071	9.271	-3.119	0.000	-1.776	-6.949	1	0.02	0.00	0.04
1P	0	0.071	9.961	-3.119	0.000	-1.776	-7.457	1	0.03	0.00	0.04
2	0	0.041	17.490	-3.241	0.000	-1.820	-13.080	1	0.05	0.00	0.08
7	0	0.026	9.472	-1.796	0.000	-1.009	-7.074	1	0.03	0.00	0.04
8	0	0.023	9.596	-1.766	0.000	-0.992	-7.166	1	0.03	0.00	0.04
9	0	0.034	10.740	-2.081	0.000	-1.169	-8.078	1	0.03	0.00	0.05
10	0	0.021	10.790	-2.072	0.000	-1.166	-8.102	1	0.03	0.00	0.05
11	0	0.038	15.670	-2.911	0.000	-1.635	-11.710	1	0.04	0.00	0.07
12	0	0.036	15.750	-2.893	0.000	-1.625	-11.760	1	0.04	0.00	0.07
13	0	0.043	16.430	-3.082	0.000	-1.731	-12.310	1	0.04	0.00	0.07
14	0	0.035	16.460	-3.077	0.000	-1.729	-12.330	1	0.04	0.00	0.07
1A	47	-0.005	5.719	2.158	0.000	0.280	-3.086	1	0.02	0.00	0.02
1B	47	-0.005	7.725	2.158	0.000	0.280	-3.696	1	0.02	0.00	0.02
1C	47	-0.005	5.719	-5.766	0.000	-0.622	-3.086	1	0.02	0.00	0.02
1D	47	-0.005	7.725	-5.766	0.000	-0.622	-3.696	1	0.02	0.00	0.02
1E	47	0.052	5.719	2.158	0.000	0.280	-3.086	1	0.02	0.00	0.02
1F	47	0.052	7.725	2.158	0.000	0.280	-3.696	1	0.02	0.00	0.02
1G	47	0.052	5.719	-5.766	0.000	-0.622	-3.086	1	0.02	0.00	0.02
1H	47	0.052	7.725	-5.766	0.000	-0.622	-3.696	1	0.02	0.00	0.02
1I	47	-0.024	6.377	-0.489	0.000	-0.022	-3.297	1	0.02	0.00	0.02
1J	47	-0.024	7.067	-0.489	0.000	-0.022	-3.484	1	0.02	0.00	0.02
1K	47	-0.024	6.377	-3.119	0.000	-0.321	-3.297	1	0.02	0.00	0.02
1L	47	-0.024	7.067	-3.119	0.000	-0.321	-3.484	1	0.02	0.00	0.02
1M	47	0.071	6.377	-0.489	0.000	-0.022	-3.297	1	0.02	0.00	0.02
1N	47	0.071	7.067	-0.489	0.000	-0.022	-3.484	1	0.02	0.00	0.02
1O	47	0.071	6.377	-3.119	0.000	-0.321	-3.297	1	0.02	0.00	0.02
1P	47	0.071	7.067	-3.119	0.000	-0.321	-3.484	1	0.02	0.00	0.02
2	47	0.041	12.201	-3.241	0.000	-0.308	-6.153	1	0.03	0.00	0.04
7	47	0.026	6.625	-1.796	0.000	-0.171	-3.318	1	0.02	0.00	0.02
8	47	0.023	6.750	-1.766	0.000	-0.168	-3.352	1	0.02	0.00	0.02
9	47	0.034	7.501	-2.081	0.000	-0.198	-3.823	1	0.02	0.00	0.02
10	47	0.021	7.552	-2.072	0.000	-0.199	-3.824	1	0.02	0.00	0.02
11	47	0.038	10.932	-2.911	0.000	-0.276	-5.501	1	0.03	0.00	0.03
12	47	0.036	11.009	-2.893	0.000	-0.274	-5.518	1	0.03	0.00	0.03
13	47	0.043	11.458	-3.082	0.000	-0.293	-5.802	1	0.03	0.00	0.03
14	47	0.035	11.488	-3.077	0.000	-0.293	-5.806	1	0.03	0.00	0.03
1A	93	-0.005	2.825	2.158	0.000	-0.727	-1.092	1	0.01	0.00	0.01
1B	93	-0.005	4.831	2.158	0.000	-0.727	-0.766	1	0.01	0.00	0.01
1C	93	-0.005	2.825	-5.766	0.000	2.068	-1.092	1	0.01	0.00	0.03
1D	93	-0.005	4.831	-5.766	0.000	2.068	-0.766	1	0.01	0.00	0.03
1E	93	0.052	2.825	2.158	0.000	-0.727	-1.092	1	0.01	0.00	0.01
1F	93	0.052	4.831	2.158	0.000	-0.727	-0.766	1	0.01	0.00	0.01
1G	93	0.052	2.825	-5.766	0.000	2.068	-1.092	1	0.01	0.00	0.03
1H	93	0.052	4.831	-5.766	0.000	2.068	-0.766	1	0.01	0.00	0.03
1I	93	-0.024	3.483	-0.489	0.000	0.206	-0.997	1	0.01	0.00	0.01
1J	93	-0.024	4.173	-0.489	0.000	0.206	-0.862	1	0.01	0.00	0.01
1K	93	-0.024	3.483	-3.119	0.000	1.135	-0.997	1	0.01	0.00	0.01
1L	93	-0.024	4.173	-3.119	0.000	1.135	-0.862	1	0.01	0.00	0.01
1M	93	0.071	3.483	-0.489	0.000	0.206	-0.997	1	0.01	0.00	0.01
1N	93	0.071	4.173	-0.489	0.000	0.206	-0.862	1	0.01	0.00	0.01
1O	93	0.071	3.483	-3.119	0.000	1.135	-0.997	1	0.01	0.00	0.01
1P	93	0.071	4.173	-3.119	0.000	1.135	-0.862	1	0.01	0.00	0.01
2	93	0.041	6.912	-3.241	0.000	1.205	-1.694	1	0.02	0.00	0.02
7	93	0.026	3.778	-1.796	0.000	0.667	-0.891	1	0.01	0.00	0.01
8	93	0.023	3.903	-1.766	0.000	0.656	-0.867	1	0.01	0.00	0.01
9	93	0.034	4.263	-2.081	0.000	0.774	-1.079	1	0.01	0.00	0.01
10	93	0.021	4.313	-2.072	0.000	0.768	-1.056	1	0.01	0.00	0.01
11	93	0.038	6.194	-2.911	0.000	1.082	-1.504	1	0.02	0.00	0.01
12	93	0.036	6.268	-2.893	0.000	1.076	-1.489	1	0.02	0.00	0.01
13	93	0.043	6.485	-3.082	0.000	1.146	-1.616	1	0.02	0.00	0.01
14	93	0.035	6.515	-3.077	0.000	1.143	-1.603	1	0.02	0.00	0.01

ASTA NUM. 111 NI 226 NF 219 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.011	3.781	0.053	0.000	1.335	-0.762	1	0.01	0.00	0.02	
1B	0	0.011	3.873	0.053	0.000	1.335	-1.097	1	0.01	0.00	0.02	
1C	0	0.011	3.781	0.037	0.000	-0.474	-0.762	1	0.01	0.00	0.01	
1D	0	0.011	3.873	0.037	0.000	-0.474	-1.097	1	0.01	0.00	0.01	
1E	0	0.017	3.781	0.053	0.000	1.335	-0.762	1	0.01	0.00	0.02	
1F	0	0.017	3.873	0.053	0.000	1.335	-1.097	1	0.01	0.00	0.02	
1G	0	0.017	3.781	0.037	0.000	-0.474	-0.762	1	0.01	0.00	0.01	
1H	0	0.017	3.873	0.037	0.000	-0.474	-1.097	1	0.01	0.00	0.01	
1I	0	0.011	3.805	0.056	0.000	0.734	-0.862	1	0.01	0.00	0.01	
1J	0	0.011	3.849	0.056	0.000	0.734	-0.997	1	0.01	0.00	0.01	
1K	0	0.011	3.805	0.034	0.000	0.127	-0.862	1	0.01	0.00	0.01	

1L	0	0.011	3.849	0.034	0.000	0.127	-0.997	1	0.01	0.00	0.01
1M	0	0.016	3.805	0.056	0.000	0.734	-0.862	1	0.01	0.00	0.01
1N	0	0.016	3.849	0.056	0.000	0.734	-0.997	1	0.01	0.00	0.01
1O	0	0.016	3.805	0.034	0.000	0.127	-0.862	1	0.01	0.00	0.01
1P	0	0.016	3.849	0.034	0.000	0.127	-0.997	1	0.01	0.00	0.01
2	0	0.025	6.980	0.083	0.000	0.774	-1.695	1	0.02	0.00	0.01
7	0	0.013	3.754	0.043	0.000	0.427	-0.891	1	0.01	0.00	0.01
8	0	0.015	3.759	0.044	0.000	0.422	-0.868	1	0.01	0.00	0.01
9	0	0.014	4.272	0.045	0.000	0.493	-1.078	1	0.01	0.00	0.01
10	0	0.017	4.328	0.052	0.000	0.496	-1.057	1	0.01	0.00	0.01
11	0	0.022	6.247	0.074	0.000	0.695	-1.504	1	0.02	0.00	0.01
12	0	0.023	6.250	0.075	0.000	0.692	-1.490	1	0.02	0.00	0.01
13	0	0.023	6.558	0.075	0.000	0.734	-1.616	1	0.02	0.00	0.01
14	0	0.024	6.591	0.079	0.000	0.736	-1.604	1	0.02	0.00	0.01
1A	47	0.011	0.887	0.053	0.000	1.310	0.370	1	0.00	0.00	0.02
1B	47	0.011	0.979	0.053	0.000	1.310	-0.008	1	0.00	0.00	0.02
1C	47	0.011	0.887	0.037	0.000	-0.491	0.370	1	0.00	0.00	0.01
1D	47	0.011	0.979	0.037	0.000	-0.491	-0.008	1	0.00	0.00	0.01
1E	47	0.017	0.887	0.053	0.000	1.310	0.370	1	0.00	0.00	0.02
1F	47	0.017	0.979	0.053	0.000	1.310	-0.008	1	0.00	0.00	0.02
1G	47	0.017	0.887	0.037	0.000	-0.491	0.370	1	0.00	0.00	0.01
1H	47	0.017	0.979	0.037	0.000	-0.491	-0.008	1	0.00	0.00	0.01
1I	47	0.011	0.911	0.056	0.000	0.708	0.259	1	0.00	0.00	0.01
1J	47	0.011	0.955	0.056	0.000	0.708	0.103	1	0.00	0.00	0.01
1K	47	0.011	0.911	0.034	0.000	0.111	0.259	1	0.00	0.00	0.00
1L	47	0.011	0.955	0.034	0.000	0.111	0.103	1	0.00	0.00	0.00
1M	47	0.016	0.911	0.056	0.000	0.708	0.259	1	0.00	0.00	0.01
1N	47	0.016	0.955	0.056	0.000	0.708	0.103	1	0.00	0.00	0.01
1O	47	0.016	0.911	0.034	0.000	0.111	0.259	1	0.00	0.00	0.00
1P	47	0.016	0.955	0.034	0.000	0.111	0.103	1	0.00	0.00	0.00
2	47	0.025	1.690	0.083	0.000	0.736	0.328	1	0.00	0.00	0.01
7	47	0.013	0.907	0.043	0.000	0.407	0.197	1	0.00	0.00	0.01
8	47	0.015	0.912	0.044	0.000	0.401	0.223	1	0.00	0.00	0.01
9	47	0.014	1.036	0.045	0.000	0.471	0.161	1	0.00	0.00	0.01
10	47	0.017	1.092	0.052	0.000	0.471	0.208	1	0.00	0.00	0.01
11	47	0.022	1.507	0.074	0.000	0.661	0.305	1	0.00	0.00	0.01
12	47	0.023	1.510	0.075	0.000	0.657	0.321	1	0.00	0.00	0.01
13	47	0.023	1.583	0.075	0.000	0.699	0.284	1	0.00	0.00	0.01
14	47	0.024	1.616	0.079	0.000	0.699	0.311	1	0.00	0.00	0.01
1A	93	0.011	-2.007	0.053	0.000	1.285	0.152	1	0.01	0.00	0.02
1B	93	0.011	-1.915	0.053	0.000	1.285	-0.269	1	0.01	0.00	0.02
1C	93	0.011	-2.007	0.037	0.000	-0.509	0.152	1	0.01	0.00	0.01
1D	93	0.011	-1.915	0.037	0.000	-0.509	-0.269	1	0.01	0.00	0.01
1E	93	0.017	-2.007	0.053	0.000	1.285	0.152	1	0.01	0.00	0.02
1F	93	0.017	-1.915	0.053	0.000	1.285	-0.269	1	0.01	0.00	0.02
1G	93	0.017	-2.007	0.037	0.000	-0.509	0.152	1	0.01	0.00	0.01
1H	93	0.017	-1.915	0.037	0.000	-0.509	-0.269	1	0.01	0.00	0.01
1I	93	0.011	-1.983	0.056	0.000	0.682	0.030	1	0.01	0.00	0.01
1J	93	0.011	-1.939	0.056	0.000	0.682	-0.147	1	0.01	0.00	0.01
1K	93	0.011	-1.983	0.034	0.000	0.095	0.030	1	0.01	0.00	0.00
1L	93	0.011	-1.939	0.034	0.000	0.095	-0.147	1	0.01	0.00	0.00
1M	93	0.016	-1.983	0.056	0.000	0.682	0.030	1	0.01	0.00	0.01
1N	93	0.016	-1.939	0.056	0.000	0.682	-0.147	1	0.01	0.00	0.01
1O	93	0.016	-1.983	0.034	0.000	0.095	0.030	1	0.01	0.00	0.00
1P	93	0.016	-1.939	0.034	0.000	0.095	-0.147	1	0.01	0.00	0.00
2	93	0.025	-3.600	0.083	0.000	0.697	-0.117	1	0.01	0.00	0.01
7	93	0.013	-1.939	0.043	0.000	0.387	-0.044	1	0.01	0.00	0.00
8	93	0.015	-1.934	0.044	0.000	0.380	-0.016	1	0.01	0.00	0.00
9	93	0.014	-2.201	0.045	0.000	0.450	-0.111	1	0.01	0.00	0.01
10	93	0.017	-2.145	0.052	0.000	0.447	-0.038	1	0.01	0.00	0.01
11	93	0.022	-3.234	0.074	0.000	0.626	-0.098	1	0.01	0.00	0.01
12	93	0.023	-3.231	0.075	0.000	0.622	-0.081	1	0.01	0.00	0.01
13	93	0.023	-3.391	0.075	0.000	0.664	-0.138	1	0.01	0.00	0.01
14	93	0.024	-3.358	0.079	0.000	0.662	-0.095	1	0.01	0.00	0.01

ASTA NUM. 112 NI 219 NF 66 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.055	-2.786	5.646	0.000	1.990	0.153	1	0.01	0.00	0.02	
1B	0	-0.055	-1.332	5.646	0.000	1.990	-0.259	1	0.01	0.00	0.02	
1C	0	-0.055	-2.786	-2.208	0.000	-0.770	0.153	1	0.01	0.00	0.01	
1D	0	-0.055	-1.332	-2.208	0.000	-0.770	-0.259	1	0.00	0.00	0.01	
1E	0	-0.003	-2.786	5.646	0.000	1.990	0.153	1	0.01	0.00	0.02	
1F	0	-0.003	-1.332	5.646	0.000	1.990	-0.259	1	0.01	0.00	0.02	
1G	0	-0.003	-2.786	-2.208	0.000	-0.770	0.153	1	0.01	0.00	0.01	
1H	0	-0.003	-1.332	-2.208	0.000	-0.770	-0.259	1	0.00	0.00	0.01	
1I	0	-0.078	-2.297	3.015	0.000	1.065	0.035	1	0.01	0.00	0.01	
1J	0	-0.078	-1.821	3.015	0.000	1.065	-0.141	1	0.00	0.00	0.01	
1K	0	-0.078	-2.297	0.423	0.000	0.155	0.035	1	0.01	0.00	0.00	
1L	0	-0.078	-1.821	0.423	0.000	0.155	-0.141	1	0.00	0.00	0.00	
1M	0	0.020	-2.297	3.015	0.000	1.065	0.035	1	0.01	0.00	0.01	
1N	0	0.020	-1.821	3.015	0.000	1.065	-0.141	1	0.00	0.00	0.01	
1O	0	0.020	-2.297	0.423	0.000	0.155	0.035	1	0.01	0.00	0.00	
1P	0	0.020	-1.821	0.423	0.000	0.155	-0.141	1	0.00	0.00	0.00	
2	0	-0.051	-3.706	3.088	0.000	1.096	-0.107	1	0.01	0.00	0.01	
7	0	-0.031	-2.066	1.711	0.000	0.607	-0.038	1	0.01	0.00	0.01	
8	0	-0.029	-2.167	1.681	0.000	0.596	-0.009	1	0.01	0.00	0.01	
9	0	-0.039	-2.315	1.983	0.000	0.703	-0.105	1	0.01	0.00	0.01	

10	0	-0.028	-2.241	1.985	0.000	0.704	-0.032	1	0.01	0.00	0.01
11	0	-0.047	-3.339	2.773	0.000	0.984	-0.089	1	0.01	0.00	0.01
12	0	-0.046	-3.400	2.755	0.000	0.978	-0.071	1	0.01	0.00	0.01
13	0	-0.051	-3.489	2.936	0.000	1.042	-0.129	1	0.01	0.00	0.01
14	0	-0.045	-3.444	2.937	0.000	1.042	-0.085	1	0.01	0.00	0.01
1A	47	-0.055	-5.680	5.646	0.000	-0.644	-1.824	1	0.02	0.00	0.01
1B	47	-0.055	-4.227	5.646	0.000	-0.644	-1.554	1	0.01	0.00	0.01
1C	47	-0.055	-5.680	-2.208	0.000	0.259	-1.824	1	0.02	0.00	0.01
1D	47	-0.055	-4.227	-2.208	0.000	0.259	-1.554	1	0.01	0.00	0.01
1E	47	-0.003	-5.680	5.646	0.000	-0.644	-1.824	1	0.02	0.00	0.01
1F	47	-0.003	-4.227	5.646	0.000	-0.644	-1.554	1	0.01	0.00	0.01
1G	47	-0.003	-5.680	-2.208	0.000	0.259	-1.824	1	0.02	0.00	0.01
1H	47	-0.003	-4.227	-2.208	0.000	0.259	-1.554	1	0.01	0.00	0.01
1I	47	-0.078	-5.192	3.015	0.000	-0.342	-1.721	1	0.01	0.00	0.01
1J	47	-0.078	-4.715	3.015	0.000	-0.342	-1.658	1	0.01	0.00	0.01
1K	47	-0.078	-5.192	0.423	0.000	-0.042	-1.721	1	0.01	0.00	0.01
1L	47	-0.078	-4.715	0.423	0.000	-0.042	-1.658	1	0.01	0.00	0.01
1M	47	0.020	-5.192	3.015	0.000	-0.342	-1.721	1	0.01	0.00	0.01
1N	47	0.020	-4.715	3.015	0.000	-0.342	-1.658	1	0.01	0.00	0.01
1O	47	0.020	-5.192	0.423	0.000	-0.042	-1.721	1	0.01	0.00	0.01
1P	47	0.020	-4.715	0.423	0.000	-0.042	-1.658	1	0.01	0.00	0.01
2	47	-0.051	-8.998	3.088	0.000	-0.345	-3.071	1	0.02	0.00	0.02
7	47	-0.031	-4.913	1.711	0.000	-0.191	-1.667	1	0.01	0.00	0.01
8	47	-0.029	-5.014	1.681	0.000	-0.188	-1.685	1	0.01	0.00	0.01
9	47	-0.039	-5.552	1.983	0.000	-0.222	-1.940	1	0.01	0.00	0.01
10	47	-0.028	-5.477	1.985	0.000	-0.222	-1.833	1	0.01	0.00	0.01
11	47	-0.047	-8.080	2.773	0.000	-0.310	-2.753	1	0.02	0.00	0.02
12	47	-0.046	-8.140	2.755	0.000	-0.308	-2.764	1	0.02	0.00	0.02
13	47	-0.051	-8.465	2.936	0.000	-0.328	-2.917	1	0.02	0.00	0.02
14	47	-0.045	-8.417	2.937	0.000	-0.328	-2.853	1	0.02	0.00	0.02
1A	93	-0.055	-8.575	5.646	0.000	-3.279	-5.153	1	0.02	0.00	0.04
1B	93	-0.055	-7.121	5.646	0.000	-3.279	-4.199	1	0.02	0.00	0.04
1C	93	-0.055	-8.575	-2.208	0.000	1.289	-5.153	1	0.02	0.00	0.03
1D	93	-0.055	-7.121	-2.208	0.000	1.289	-4.199	1	0.02	0.00	0.02
1E	93	-0.003	-8.575	5.646	0.000	-3.279	-5.153	1	0.02	0.00	0.04
1F	93	-0.003	-7.121	5.646	0.000	-3.279	-4.199	1	0.02	0.00	0.04
1G	93	-0.003	-8.575	-2.208	0.000	1.289	-5.153	1	0.02	0.00	0.03
1H	93	-0.003	-7.121	-2.208	0.000	1.289	-4.199	1	0.02	0.00	0.02
1I	93	-0.078	-8.086	3.015	0.000	-1.749	-4.827	1	0.02	0.00	0.03
1J	93	-0.078	-7.610	3.015	0.000	-1.749	-4.525	1	0.02	0.00	0.03
1K	93	-0.078	-8.086	0.423	0.000	-0.240	-4.827	1	0.02	0.00	0.03
1L	93	-0.078	-7.610	0.423	0.000	-0.240	-4.525	1	0.02	0.00	0.03
1M	93	0.020	-8.086	3.015	0.000	-1.749	-4.827	1	0.02	0.00	0.03
1N	93	0.020	-7.610	3.015	0.000	-1.749	-4.525	1	0.02	0.00	0.03
1O	93	0.020	-8.086	0.423	0.000	-0.240	-4.827	1	0.02	0.00	0.03
1P	93	0.020	-7.610	0.423	0.000	-0.240	-4.525	1	0.02	0.00	0.03
2	93	-0.051	-14.290	3.088	0.000	-1.786	-8.503	1	0.04	0.00	0.05
7	93	-0.031	-7.759	1.711	0.000	-0.990	-4.623	1	0.02	0.00	0.03
8	93	-0.029	-7.861	1.681	0.000	-0.973	-4.689	1	0.02	0.00	0.03
9	93	-0.039	-8.788	1.983	0.000	-1.147	-5.286	1	0.02	0.00	0.03
10	93	-0.028	-8.714	1.985	0.000	-1.148	-5.144	1	0.02	0.00	0.03
11	93	-0.047	-12.820	2.773	0.000	-1.604	-7.630	1	0.03	0.00	0.05
12	93	-0.046	-12.880	2.755	0.000	-1.594	-7.669	1	0.03	0.00	0.05
13	93	-0.051	-13.440	2.936	0.000	-1.698	-8.027	1	0.04	0.00	0.05
14	93	-0.045	-13.390	2.937	0.000	-1.699	-7.942	1	0.04	0.00	0.05

ASTA NUM. 33 NI 66 NF 212 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.065	7.732	2.400	0.000	1.406	-4.232	1	0.02	0.00	0.03	
1B	0	-0.065	9.318	2.400	0.000	1.406	-5.186	1	0.02	0.00	0.03	
1C	0	-0.065	7.732	-5.396	0.000	-3.127	-4.232	1	0.02	0.00	0.04	
1D	0	-0.065	9.318	-5.396	0.000	-3.127	-5.186	1	0.02	0.00	0.04	
1E	0	-0.006	7.732	2.400	0.000	1.406	-4.232	1	0.02	0.00	0.03	
1F	0	-0.006	9.318	2.400	0.000	1.406	-5.186	1	0.02	0.00	0.03	
1G	0	-0.006	7.732	-5.396	0.000	-3.127	-4.232	1	0.02	0.00	0.04	
1H	0	-0.006	9.318	-5.396	0.000	-3.127	-5.186	1	0.02	0.00	0.04	
1I	0	-0.082	8.276	-0.320	0.000	-0.176	-4.555	1	0.02	0.00	0.03	
1J	0	-0.082	8.774	-0.320	0.000	-0.176	-4.863	1	0.02	0.00	0.03	
1K	0	-0.082	8.276	-2.676	0.000	-1.545	-4.555	1	0.02	0.00	0.03	
1L	0	-0.082	8.774	-2.676	0.000	-1.545	-4.863	1	0.02	0.00	0.03	
1M	0	0.011	8.276	-0.320	0.000	-0.176	-4.555	1	0.02	0.00	0.03	
1N	0	0.011	8.774	-0.320	0.000	-0.176	-4.863	1	0.02	0.00	0.03	
1O	0	0.011	8.276	-2.676	0.000	-1.545	-4.555	1	0.02	0.00	0.03	
1P	0	0.011	8.774	-2.676	0.000	-1.545	-4.863	1	0.02	0.00	0.03	
2	0	-0.063	15.520	-2.684	0.000	-1.543	-8.562	1	0.04	0.00	0.05	
7	0	-0.037	8.410	-1.491	0.000	-0.857	-4.655	1	0.02	0.00	0.03	
8	0	-0.034	8.525	-1.462	0.000	-0.841	-4.721	1	0.02	0.00	0.03	
9	0	-0.029	9.579	-1.740	0.000	-1.000	-5.330	1	0.03	0.00	0.03	
10	0	-0.053	9.474	-1.733	0.000	-0.998	-5.173	1	0.03	0.00	0.03	
11	0	-0.057	13.910	-2.410	0.000	-1.385	-7.682	1	0.04	0.00	0.05	
12	0	-0.055	13.980	-2.393	0.000	-1.376	-7.722	1	0.04	0.00	0.05	
13	0	-0.052	14.610	-2.560	0.000	-1.471	-8.087	1	0.04	0.00	0.05	
14	0	-0.067	14.550	-2.556	0.000	-1.470	-7.993	1	0.04	0.00	0.05	
1A	47	-0.065	4.838	2.400	0.000	0.285	-1.299	1	0.01	0.00	0.01	
1B	47	-0.065	6.424	2.400	0.000	0.285	-1.513	1	0.02	0.00	0.01	
1C	47	-0.065	4.838	-5.396	0.000	-0.609	-1.299	1	0.01	0.00	0.01	

1D	47	-0.065	6.424	-5.396	0.000	-0.609	-1.513	1	0.02	0.00	0.01
1E	47	-0.006	4.838	2.400	0.000	0.285	-1.299	1	0.01	0.00	0.01
1F	47	-0.006	6.424	2.400	0.000	0.285	-1.513	1	0.02	0.00	0.01
1G	47	-0.006	4.838	-5.396	0.000	-0.609	-1.299	1	0.01	0.00	0.01
1H	47	-0.006	6.424	-5.396	0.000	-0.609	-1.513	1	0.02	0.00	0.01
1I	47	-0.082	5.382	-0.320	0.000	-0.027	-1.369	1	0.01	0.00	0.01
1J	47	-0.082	5.880	-0.320	0.000	-0.027	-1.443	1	0.02	0.00	0.01
1K	47	-0.082	5.382	-2.676	0.000	-0.297	-1.369	1	0.01	0.00	0.01
1L	47	-0.082	5.880	-2.676	0.000	-0.297	-1.443	1	0.02	0.00	0.01
1M	47	0.011	5.382	-0.320	0.000	-0.027	-1.369	1	0.01	0.00	0.01
1N	47	0.011	5.880	-0.320	0.000	-0.027	-1.443	1	0.02	0.00	0.01
1O	47	0.011	5.382	-2.676	0.000	-0.297	-1.369	1	0.01	0.00	0.01
1P	47	0.011	5.880	-2.676	0.000	-0.297	-1.443	1	0.02	0.00	0.01
2	47	-0.063	10.228	-2.684	0.000	-0.290	-2.555	1	0.03	0.00	0.02
7	47	-0.037	5.564	-1.491	0.000	-0.161	-1.395	1	0.01	0.00	0.01
8	47	-0.034	5.678	-1.462	0.000	-0.158	-1.407	1	0.02	0.00	0.01
9	47	-0.029	6.343	-1.740	0.000	-0.187	-1.615	1	0.02	0.00	0.01
10	47	-0.053	6.238	-1.733	0.000	-0.189	-1.507	1	0.02	0.00	0.01
11	47	-0.057	9.171	-2.410	0.000	-0.260	-2.296	1	0.02	0.00	0.01
12	47	-0.055	9.240	-2.393	0.000	-0.259	-2.303	1	0.02	0.00	0.01
13	47	-0.052	9.638	-2.560	0.000	-0.276	-2.428	1	0.03	0.00	0.01
14	47	-0.067	9.576	-2.556	0.000	-0.277	-2.363	1	0.03	0.00	0.01
1A	93	-0.065	1.944	2.400	0.000	-0.835	0.283	1	0.01	0.00	0.01
1B	93	-0.065	3.530	2.400	0.000	-0.835	0.810	1	0.01	0.00	0.01
1C	93	-0.065	1.944	-5.396	0.000	1.909	0.283	1	0.01	0.00	0.02
1D	93	-0.065	3.530	-5.396	0.000	1.909	0.810	1	0.01	0.00	0.02
1E	93	-0.006	1.944	2.400	0.000	-0.835	0.283	1	0.01	0.00	0.01
1F	93	-0.006	3.530	2.400	0.000	-0.835	0.810	1	0.01	0.00	0.01
1G	93	-0.006	1.944	-5.396	0.000	1.909	0.283	1	0.01	0.00	0.02
1H	93	-0.006	3.530	-5.396	0.000	1.909	0.810	1	0.01	0.00	0.02
1I	93	-0.082	2.488	-0.320	0.000	0.122	0.467	1	0.01	0.00	0.00
1J	93	-0.082	2.986	-0.320	0.000	0.122	0.627	1	0.01	0.00	0.00
1K	93	-0.082	2.488	-2.676	0.000	0.952	0.467	1	0.01	0.00	0.01
1L	93	-0.082	2.986	-2.676	0.000	0.952	0.627	1	0.01	0.00	0.01
1M	93	0.011	2.488	-0.320	0.000	0.122	0.467	1	0.01	0.00	0.00
1N	93	0.011	2.986	-0.320	0.000	0.122	0.627	1	0.01	0.00	0.00
1O	93	0.011	2.488	-2.676	0.000	0.952	0.467	1	0.01	0.00	0.01
1P	93	0.011	2.986	-2.676	0.000	0.952	0.627	1	0.01	0.00	0.01
2	93	-0.063	4.936	-2.684	0.000	0.962	0.982	1	0.01	0.00	0.01
7	93	-0.037	2.717	-1.491	0.000	0.534	0.537	1	0.01	0.00	0.01
8	93	-0.034	2.831	-1.462	0.000	0.524	0.579	1	0.01	0.00	0.01
9	93	-0.029	3.106	-1.740	0.000	0.625	0.590	1	0.01	0.00	0.01
10	93	-0.053	3.001	-1.733	0.000	0.620	0.648	1	0.01	0.00	0.01
11	93	-0.057	4.431	-2.410	0.000	0.864	0.878	1	0.01	0.00	0.01
12	93	-0.055	4.500	-2.393	0.000	0.858	0.903	1	0.01	0.00	0.01
13	93	-0.052	4.665	-2.560	0.000	0.919	0.910	1	0.01	0.00	0.01
14	93	-0.067	4.602	-2.556	0.000	0.915	0.945	1	0.01	0.00	0.01

ASTA NUM. 113 NI 212 NF 205 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.005	2.765	0.028	0.000	1.243	0.792	1	0.01	0.00	0.02	
1B	0	-0.005	2.859	0.028	0.000	1.243	0.258	1	0.01	0.00	0.02	
1C	0	-0.005	2.765	0.016	0.000	-0.543	0.792	1	0.01	0.00	0.01	
1D	0	-0.005	2.859	0.016	0.000	-0.543	0.258	1	0.01	0.00	0.01	
1E	0	0.001	2.765	0.028	0.000	1.243	0.792	1	0.01	0.00	0.02	
1F	0	0.001	2.859	0.028	0.000	1.243	0.258	1	0.01	0.00	0.02	
1G	0	0.001	2.765	0.016	0.000	-0.543	0.792	1	0.01	0.00	0.01	
1H	0	0.001	2.859	0.016	0.000	-0.543	0.258	1	0.01	0.00	0.01	
1I	0	-0.004	2.776	0.033	0.000	0.623	0.606	1	0.01	0.00	0.01	
1J	0	-0.004	2.848	0.033	0.000	0.623	0.444	1	0.01	0.00	0.01	
1K	0	-0.004	2.776	0.011	0.000	0.077	0.606	1	0.01	0.00	0.00	
1L	0	-0.004	2.848	0.011	0.000	0.077	0.444	1	0.01	0.00	0.00	
1M	0	0.001	2.776	0.033	0.000	0.623	0.606	1	0.01	0.00	0.01	
1N	0	0.001	2.848	0.033	0.000	0.623	0.444	1	0.01	0.00	0.01	
1O	0	0.001	2.776	0.011	0.000	0.077	0.606	1	0.01	0.00	0.00	
1P	0	0.001	2.848	0.011	0.000	0.077	0.444	1	0.01	0.00	0.00	
2	0	-0.003	5.142	0.038	0.000	0.627	0.944	1	0.01	0.00	0.01	
7	0	-0.003	2.760	0.023	0.000	0.349	0.516	1	0.01	0.00	0.00	
8	0	-0.000	2.768	0.020	0.000	0.341	0.557	1	0.01	0.00	0.00	
9	0	0.001	3.201	0.018	0.000	0.403	0.567	1	0.01	0.00	0.01	
10	0	-0.005	3.084	0.032	0.000	0.408	0.624	1	0.01	0.00	0.01	
11	0	-0.003	4.605	0.035	0.000	0.563	0.844	1	0.01	0.00	0.01	
12	0	-0.002	4.610	0.033	0.000	0.559	0.868	1	0.01	0.00	0.01	
13	0	-0.001	4.870	0.032	0.000	0.596	0.874	1	0.01	0.00	0.01	
14	0	-0.005	4.800	0.040	0.000	0.598	0.909	1	0.01	0.00	0.01	
1A	47	-0.005	-0.130	0.028	0.000	1.234	1.451	1	0.00	0.00	0.02	
1B	47	-0.005	-0.035	0.028	0.000	1.234	0.873	1	0.00	0.00	0.02	
1C	47	-0.005	-0.130	0.016	0.000	-0.555	1.451	1	0.00	0.00	0.01	
1D	47	-0.005	-0.035	0.016	0.000	-0.555	0.873	1	0.00	0.00	0.01	
1E	47	0.001	-0.130	0.028	0.000	1.234	1.451	1	0.00	0.00	0.02	
1F	47	0.001	-0.035	0.028	0.000	1.234	0.873	1	0.00	0.00	0.02	
1G	47	0.001	-0.130	0.016	0.000	-0.555	1.451	1	0.00	0.00	0.01	
1H	47	0.001	-0.035	0.016	0.000	-0.555	0.873	1	0.00	0.00	0.01	
1I	47	-0.004	-0.118	0.033	0.000	0.612	1.259	1	0.00	0.00	0.01	
1J	47	-0.004	-0.047	0.033	0.000	0.612	1.065	1	0.00	0.00	0.01	
1K	47	-0.004	-0.118	0.011	0.000	0.067	1.259	1	0.00	0.00	0.01	
1L	47	-0.004	-0.047	0.011	0.000	0.067	1.065	1	0.00	0.00	0.01	

1M	47	0.001	-0.118	0.033	0.000	0.612	1.259	1	0.00	0.00	0.01	
1N	47	0.001	-0.047	0.033	0.000	0.612	1.065	1	0.00	0.00	0.01	
1O	47	0.001	-0.118	0.011	0.000	0.067	1.259	1	0.00	0.00	0.01	
1P	47	0.001	-0.047	0.011	0.000	0.067	1.065	1	0.00	0.00	0.01	
2	47	-0.003	-0.148	0.038	0.000	0.609	2.109	1	0.00	0.00	0.01	
7	47	-0.003	-0.087	0.023	0.000	0.338	1.140	1	0.00	0.00	0.01	
8	47	-0.000	-0.079	0.020	0.000	0.332	1.184	1	0.00	0.00	0.01	
9	47	0.001	-0.036	0.018	0.000	0.395	1.305	1	0.00	0.00	0.01	
10	47	-0.005	-0.153	0.032	0.000	0.393	1.308	1	0.00	0.00	0.01	
11	47	-0.003	-0.136	0.035	0.000	0.547	1.887	1	0.00	0.00	0.01	
12	47	-0.002	-0.130	0.033	0.000	0.543	1.913	1	0.00	0.00	0.01	
13	47	-0.001	-0.105	0.032	0.000	0.581	1.986	1	0.00	0.00	0.01	
14	47	-0.005	-0.175	0.040	0.000	0.580	1.988	1	0.00	0.00	0.01	
1A	93	-0.005	-3.024	0.028	0.000	1.225	0.759	1	0.01	0.00	0.02	
1B	93	-0.005	-2.930	0.028	0.000	1.225	0.138	1	0.01	0.00	0.02	
1C	93	-0.005	-3.024	0.016	0.000	-0.566	0.759	1	0.01	0.00	0.01	
1D	93	-0.005	-2.930	0.016	0.000	-0.566	0.138	1	0.01	0.00	0.01	
1E	93	0.001	-3.024	0.028	0.000	1.225	0.759	1	0.01	0.00	0.02	
1F	93	0.001	-2.930	0.028	0.000	1.225	0.138	1	0.01	0.00	0.02	
1G	93	0.001	-3.024	0.016	0.000	-0.566	0.759	1	0.01	0.00	0.01	
1H	93	0.001	-2.930	0.016	0.000	-0.566	0.138	1	0.01	0.00	0.01	
1I	93	-0.004	-3.013	0.033	0.000	0.602	0.561	1	0.01	0.00	0.01	
1J	93	-0.004	-2.941	0.033	0.000	0.602	0.335	1	0.01	0.00	0.01	
1K	93	-0.004	-3.013	0.011	0.000	0.057	0.561	1	0.01	0.00	0.00	
1L	93	-0.004	-2.941	0.011	0.000	0.057	0.335	1	0.01	0.00	0.00	
1M	93	0.001	-3.013	0.033	0.000	0.602	0.561	1	0.01	0.00	0.01	
1N	93	0.001	-2.941	0.033	0.000	0.602	0.335	1	0.01	0.00	0.01	
1O	93	0.001	-3.013	0.011	0.000	0.057	0.561	1	0.01	0.00	0.00	
1P	93	0.001	-2.941	0.011	0.000	0.057	0.335	1	0.01	0.00	0.00	
2	93	-0.003	-5.438	0.038	0.000	0.591	0.806	1	0.01	0.00	0.01	
7	93	-0.003	-2.933	0.023	0.000	0.327	0.435	1	0.01	0.00	0.00	
8	93	-0.000	-2.925	0.020	0.000	0.323	0.483	1	0.01	0.00	0.00	
9	93	0.001	-3.272	0.018	0.000	0.386	0.533	1	0.01	0.00	0.00	
10	93	-0.005	-3.389	0.032	0.000	0.378	0.482	1	0.01	0.00	0.00	
11	93	-0.003	-4.876	0.035	0.000	0.531	0.717	1	0.01	0.00	0.01	
12	93	-0.002	-4.871	0.033	0.000	0.528	0.746	1	0.01	0.00	0.01	
13	93	-0.001	-5.079	0.032	0.000	0.566	0.776	1	0.01	0.00	0.01	
14	93	-0.005	-5.149	0.040	0.000	0.561	0.745	1	0.01	0.00	0.01	

ASTA NUM. 114 NI 205 NF 39 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.006	-3.639	5.431	0.000	1.931	0.773	1	0.01	0.00	0.02	
1B	0	0.006	-1.861	5.431	0.000	1.931	0.160	1	0.01	0.00	0.02	
1C	0	0.006	-3.639	-2.411	0.000	-0.837	0.773	1	0.01	0.00	0.01	
1D	0	0.006	-1.861	-2.411	0.000	-0.837	0.160	1	0.00	0.00	0.01	
1E	0	0.068	-3.639	5.431	0.000	1.931	0.773	1	0.01	0.00	0.02	
1F	0	0.068	-1.861	5.431	0.000	1.931	0.160	1	0.01	0.00	0.02	
1G	0	0.068	-3.639	-2.411	0.000	-0.837	0.773	1	0.01	0.00	0.01	
1H	0	0.068	-1.861	-2.411	0.000	-0.837	0.160	1	0.00	0.00	0.01	
1I	0	-0.008	-3.035	2.691	0.000	0.964	0.579	1	0.01	0.00	0.01	
1J	0	-0.008	-2.465	2.691	0.000	0.964	0.354	1	0.01	0.00	0.01	
1K	0	-0.008	-3.035	0.329	0.000	0.129	0.579	1	0.01	0.00	0.00	
1L	0	-0.008	-2.465	0.329	0.000	0.129	0.354	1	0.01	0.00	0.00	
1M	0	0.081	-3.035	2.691	0.000	0.964	0.579	1	0.01	0.00	0.01	
1N	0	0.081	-2.465	2.691	0.000	0.964	0.354	1	0.01	0.00	0.01	
1O	0	0.081	-3.035	0.329	0.000	0.129	0.579	1	0.01	0.00	0.00	
1P	0	0.081	-2.465	0.329	0.000	0.129	0.354	1	0.01	0.00	0.00	
2	0	0.065	-4.961	2.707	0.000	0.980	0.839	1	0.01	0.00	0.01	
7	0	0.039	-2.732	1.504	0.000	0.545	0.453	1	0.01	0.00	0.01	
8	0	0.034	-2.848	1.475	0.000	0.534	0.502	1	0.01	0.00	0.01	
9	0	0.027	-3.013	1.745	0.000	0.629	0.555	1	0.01	0.00	0.01	
10	0	0.057	-3.121	1.757	0.000	0.638	0.501	1	0.01	0.00	0.01	
11	0	0.060	-4.456	2.431	0.000	0.881	0.747	1	0.01	0.00	0.01	
12	0	0.056	-4.525	2.414	0.000	0.874	0.777	1	0.01	0.00	0.01	
13	0	0.052	-4.624	2.576	0.000	0.931	0.808	1	0.01	0.00	0.01	
14	0	0.070	-4.689	2.583	0.000	0.937	0.776	1	0.01	0.00	0.01	
1A	47	0.006	-6.533	5.431	0.000	-0.603	-1.607	1	0.02	0.00	0.01	
1B	47	0.006	-4.755	5.431	0.000	-0.603	-1.377	1	0.01	0.00	0.01	
1C	47	0.006	-6.533	-2.411	0.000	0.288	-1.607	1	0.02	0.00	0.01	
1D	47	0.006	-4.755	-2.411	0.000	0.288	-1.377	1	0.01	0.00	0.01	
1E	47	0.068	-6.533	5.431	0.000	-0.603	-1.607	1	0.02	0.00	0.01	
1F	47	0.068	-4.755	5.431	0.000	-0.603	-1.377	1	0.01	0.00	0.01	
1G	47	0.068	-6.533	-2.411	0.000	0.288	-1.607	1	0.02	0.00	0.01	
1H	47	0.068	-4.755	-2.411	0.000	0.288	-1.377	1	0.01	0.00	0.01	
1I	47	-0.008	-5.929	2.691	0.000	-0.291	-1.535	1	0.02	0.00	0.01	
1J	47	-0.008	-5.359	2.691	0.000	-0.291	-1.449	1	0.01	0.00	0.01	
1K	47	-0.008	-5.929	0.329	0.000	-0.024	-1.535	1	0.02	0.00	0.01	
1L	47	-0.008	-5.359	0.329	0.000	-0.024	-1.449	1	0.01	0.00	0.01	
1M	47	0.081	-5.929	2.691	0.000	-0.291	-1.535	1	0.02	0.00	0.01	
1N	47	0.081	-5.359	2.691	0.000	-0.291	-1.449	1	0.01	0.00	0.01	
1O	47	0.081	-5.929	0.329	0.000	-0.024	-1.535	1	0.02	0.00	0.01	
1P	47	0.081	-5.359	0.329	0.000	-0.024	-1.449	1	0.01	0.00	0.01	
2	47	0.065	-10.250	2.707	0.000	-0.283	-2.710	1	0.03	0.00	0.02	
7	47	0.039	-5.579	1.504	0.000	-0.157	-1.486	1	0.01	0.00	0.01	
8	47	0.034	-5.694	1.475	0.000	-0.154	-1.491	1	0.02	0.00	0.01	
9	47	0.027	-6.250	1.745	0.000	-0.185	-1.606	1	0.02	0.00	0.01	
10	47	0.057	-6.357	1.757	0.000	-0.182	-1.710	1	0.02	0.00	0.01	

11	47	0.060	-9.198	2.431	0.000	-0.254	-2.438	1	0.02	0.00	0.01
12	47	0.056	-9.268	2.414	0.000	-0.252	-2.441	1	0.02	0.00	0.01
13	47	0.052	-9.597	2.576	0.000	-0.271	-2.510	1	0.03	0.00	0.01
14	47	0.070	-9.665	2.583	0.000	-0.269	-2.573	1	0.03	0.00	0.02
1A	93	0.006	-9.427	5.431	0.000	-3.137	-5.337	1	0.03	0.00	0.04
1B	93	0.006	-7.649	5.431	0.000	-3.137	-4.265	1	0.02	0.00	0.04
1C	93	0.006	-9.427	-2.411	0.000	1.412	-5.337	1	0.03	0.00	0.03
1D	93	0.006	-7.649	-2.411	0.000	1.412	-4.265	1	0.02	0.00	0.03
1E	93	0.068	-9.427	5.431	0.000	-3.137	-5.337	1	0.03	0.00	0.04
1F	93	0.068	-7.649	5.431	0.000	-3.137	-4.265	1	0.02	0.00	0.04
1G	93	0.068	-9.427	-2.411	0.000	1.412	-5.337	1	0.03	0.00	0.03
1H	93	0.068	-7.649	-2.411	0.000	1.412	-4.265	1	0.02	0.00	0.03
1I	93	-0.008	-8.823	2.691	0.000	-1.547	-4.999	1	0.02	0.00	0.03
1J	93	-0.008	-8.253	2.691	0.000	-1.547	-4.603	1	0.02	0.00	0.03
1K	93	-0.008	-8.823	0.329	0.000	-0.178	-4.999	1	0.02	0.00	0.03
1L	93	-0.008	-8.253	0.329	0.000	-0.178	-4.603	1	0.02	0.00	0.03
1M	93	0.081	-8.823	2.691	0.000	-1.547	-4.999	1	0.02	0.00	0.03
1N	93	0.081	-8.253	2.691	0.000	-1.547	-4.603	1	0.02	0.00	0.03
1O	93	0.081	-8.823	0.329	0.000	-0.178	-4.999	1	0.02	0.00	0.03
1P	93	0.081	-8.253	0.329	0.000	-0.178	-4.603	1	0.02	0.00	0.03
2	93	0.065	-15.540	2.707	0.000	-1.546	-8.728	1	0.04	0.00	0.05
7	93	0.039	-8.426	1.504	0.000	-0.859	-4.754	1	0.02	0.00	0.03
8	93	0.034	-8.541	1.475	0.000	-0.843	-4.813	1	0.02	0.00	0.03
9	93	0.027	-9.486	1.745	0.000	-1.000	-5.278	1	0.03	0.00	0.03
10	93	0.057	-9.593	1.757	0.000	-1.002	-5.432	1	0.03	0.00	0.03
11	93	0.060	-13.940	2.431	0.000	-1.388	-7.836	1	0.04	0.00	0.05
12	93	0.056	-14.010	2.414	0.000	-1.379	-7.871	1	0.04	0.00	0.05
13	93	0.052	-14.570	2.576	0.000	-1.473	-8.150	1	0.04	0.00	0.05
14	93	0.070	-14.640	2.583	0.000	-1.474	-8.243	1	0.04	0.00	0.05

ASTA NUM. 34 NI 39 NF 198 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.029	7.653	2.546	0.000	1.585	-4.248	1	0.02	0.00	0.03	
1B	0	0.029	9.197	2.546	0.000	1.585	-5.302	1	0.02	0.00	0.03	
1C	0	0.029	7.653	-5.900	0.000	-3.647	-4.248	1	0.02	0.00	0.05	
1D	0	0.029	9.197	-5.900	0.000	-3.647	-5.302	1	0.02	0.00	0.05	
1E	0	0.088	7.653	2.546	0.000	1.585	-4.248	1	0.02	0.00	0.03	
1F	0	0.088	9.197	2.546	0.000	1.585	-5.302	1	0.02	0.00	0.03	
1G	0	0.088	7.653	-5.900	0.000	-3.647	-4.248	1	0.02	0.00	0.05	
1H	0	0.088	9.197	-5.900	0.000	-3.647	-5.302	1	0.02	0.00	0.05	
1I	0	0.008	8.181	-0.298	0.000	-0.176	-4.584	1	0.02	0.00	0.03	
1J	0	0.008	8.669	-0.298	0.000	-0.176	-4.966	1	0.02	0.00	0.03	
1K	0	0.008	8.181	-3.056	0.000	-1.886	-4.584	1	0.02	0.00	0.03	
1L	0	0.008	8.669	-3.056	0.000	-1.886	-4.966	1	0.02	0.00	0.03	
1M	0	0.110	8.181	-0.298	0.000	-0.176	-4.584	1	0.02	0.00	0.03	
1N	0	0.110	8.669	-0.298	0.000	-0.176	-4.966	1	0.02	0.00	0.03	
1O	0	0.110	8.181	-3.056	0.000	-1.886	-4.584	1	0.02	0.00	0.03	
1P	0	0.110	8.669	-3.056	0.000	-1.886	-4.966	1	0.02	0.00	0.03	
2	0	0.105	15.340	-3.012	0.000	-1.853	-8.682	1	0.04	0.00	0.05	
7	0	0.059	8.324	-1.666	0.000	-1.025	-4.728	1	0.02	0.00	0.03	
8	0	0.054	8.421	-1.639	0.000	-1.009	-4.787	1	0.02	0.00	0.03	
9	0	0.074	9.363	-1.934	0.000	-1.189	-5.256	1	0.02	0.00	0.03	
10	0	0.059	9.435	-1.929	0.000	-1.187	-5.396	1	0.03	0.00	0.03	
11	0	0.094	13.760	-2.704	0.000	-1.663	-7.794	1	0.04	0.00	0.05	
12	0	0.092	13.820	-2.688	0.000	-1.653	-7.829	1	0.04	0.00	0.05	
13	0	0.103	14.390	-2.865	0.000	-1.762	-8.110	1	0.04	0.00	0.05	
14	0	0.094	14.430	-2.862	0.000	-1.761	-8.195	1	0.04	0.00	0.05	
1A	50	0.029	4.551	2.546	0.000	0.312	-1.207	1	0.01	0.00	0.01	
1B	50	0.029	6.096	2.546	0.000	0.312	-1.469	1	0.02	0.00	0.01	
1C	50	0.029	4.551	-5.900	0.000	-0.697	-1.207	1	0.01	0.00	0.01	
1D	50	0.029	6.096	-5.900	0.000	-0.697	-1.469	1	0.02	0.00	0.01	
1E	50	0.088	4.551	2.546	0.000	0.312	-1.207	1	0.01	0.00	0.01	
1F	50	0.088	6.096	2.546	0.000	0.312	-1.469	1	0.02	0.00	0.01	
1G	50	0.088	4.551	-5.900	0.000	-0.697	-1.207	1	0.01	0.00	0.01	
1H	50	0.088	6.096	-5.900	0.000	-0.697	-1.469	1	0.02	0.00	0.01	
1I	50	0.008	5.079	-0.298	0.000	-0.027	-1.301	1	0.01	0.00	0.01	
1J	50	0.008	5.568	-0.298	0.000	-0.027	-1.375	1	0.01	0.00	0.01	
1K	50	0.008	5.079	-3.056	0.000	-0.358	-1.301	1	0.01	0.00	0.01	
1L	50	0.008	5.568	-3.056	0.000	-0.358	-1.375	1	0.01	0.00	0.01	
1M	50	0.110	5.079	-0.298	0.000	-0.027	-1.301	1	0.01	0.00	0.01	
1N	50	0.110	5.568	-0.298	0.000	-0.027	-1.375	1	0.01	0.00	0.01	
1O	50	0.110	5.079	-3.056	0.000	-0.358	-1.301	1	0.01	0.00	0.01	
1P	50	0.110	5.568	-3.056	0.000	-0.358	-1.375	1	0.01	0.00	0.01	
2	50	0.105	9.671	-3.012	0.000	-0.347	-2.430	1	0.03	0.00	0.01	
7	50	0.059	5.274	-1.666	0.000	-0.192	-1.328	1	0.01	0.00	0.01	
8	50	0.054	5.371	-1.639	0.000	-0.189	-1.339	1	0.01	0.00	0.01	
9	50	0.074	5.896	-1.934	0.000	-0.222	-1.441	1	0.02	0.00	0.01	
10	50	0.059	5.968	-1.929	0.000	-0.223	-1.545	1	0.02	0.00	0.01	
11	50	0.094	8.682	-2.704	0.000	-0.311	-2.183	1	0.02	0.00	0.01	
12	50	0.092	8.741	-2.688	0.000	-0.309	-2.189	1	0.02	0.00	0.01	
13	50	0.103	9.058	-2.865	0.000	-0.329	-2.250	1	0.02	0.00	0.01	
14	50	0.094	9.099	-2.862	0.000	-0.330	-2.313	1	0.02	0.00	0.01	
1A	100	0.029	1.450	2.546	0.000	-0.962	0.284	1	0.00	0.00	0.01	
1B	100	0.029	2.994	2.546	0.000	-0.962	0.813	1	0.01	0.00	0.01	
1C	100	0.029	1.450	-5.900	0.000	2.252	0.284	1	0.01	0.00	0.03	
1D	100	0.029	2.994	-5.900	0.000	2.252	0.813	1	0.01	0.00	0.03	

1E	100	0.088	1.450	2.546	0.000	-0.962	0.284	1	0.00	0.00	0.01
1F	100	0.088	2.994	2.546	0.000	-0.962	0.813	1	0.01	0.00	0.01
1G	100	0.088	1.450	-5.900	0.000	2.252	0.284	1	0.01	0.00	0.03
1H	100	0.088	2.994	-5.900	0.000	2.252	0.813	1	0.01	0.00	0.03
1I	100	0.008	1.978	-0.298	0.000	0.121	0.431	1	0.01	0.00	0.00
1J	100	0.008	2.466	-0.298	0.000	0.121	0.665	1	0.01	0.00	0.00
1K	100	0.008	1.978	-3.056	0.000	1.169	0.431	1	0.01	0.00	0.01
1L	100	0.008	2.466	-3.056	0.000	1.169	0.665	1	0.01	0.00	0.01
1M	100	0.110	1.978	-0.298	0.000	0.121	0.431	1	0.01	0.00	0.00
1N	100	0.110	2.466	-0.298	0.000	0.121	0.665	1	0.01	0.00	0.00
1O	100	0.110	1.978	-3.056	0.000	1.169	0.431	1	0.01	0.00	0.01
1P	100	0.110	2.466	-3.056	0.000	1.169	0.665	1	0.01	0.00	0.01
2	100	0.105	4.002	-3.012	0.000	1.159	0.989	1	0.01	0.00	0.01
7	100	0.059	2.224	-1.666	0.000	0.641	0.546	1	0.01	0.00	0.01
8	100	0.054	2.321	-1.639	0.000	0.631	0.584	1	0.01	0.00	0.01
9	100	0.074	2.428	-1.934	0.000	0.745	0.640	1	0.01	0.00	0.01
10	100	0.059	2.500	-1.929	0.000	0.742	0.571	1	0.01	0.00	0.01
11	100	0.094	3.603	-2.704	0.000	1.041	0.889	1	0.01	0.00	0.01
12	100	0.092	3.661	-2.688	0.000	1.034	0.911	1	0.01	0.00	0.01
13	100	0.103	3.725	-2.865	0.000	1.103	0.945	1	0.01	0.00	0.01
14	100	0.094	3.769	-2.862	0.000	1.101	0.904	1	0.01	0.00	0.01

ASTA NUM. 115 NI 198 NF 191 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.019	2.151	-0.082	0.000	1.374	0.811	1	0.01	0.00	0.02	
1B	0	-0.019	2.387	-0.082	0.000	1.374	0.269	1	0.01	0.00	0.02	
1C	0	-0.019	2.151	-0.107	0.000	-0.655	0.811	1	0.01	0.00	0.01	
1D	0	-0.019	2.387	-0.107	0.000	-0.655	0.269	1	0.01	0.00	0.01	
1E	0	-0.016	2.151	-0.082	0.000	1.374	0.811	1	0.01	0.00	0.02	
1F	0	-0.016	2.387	-0.082	0.000	1.374	0.269	1	0.01	0.00	0.02	
1G	0	-0.016	2.151	-0.107	0.000	-0.655	0.811	1	0.01	0.00	0.01	
1H	0	-0.016	2.387	-0.107	0.000	-0.655	0.269	1	0.01	0.00	0.01	
1I	0	-0.019	2.222	-0.082	0.000	0.687	0.659	1	0.01	0.00	0.01	
1J	0	-0.019	2.316	-0.082	0.000	0.687	0.421	1	0.01	0.00	0.01	
1K	0	-0.019	2.222	-0.106	0.000	0.032	0.659	1	0.01	0.00	0.00	
1L	0	-0.019	2.316	-0.106	0.000	0.032	0.421	1	0.01	0.00	0.00	
1M	0	-0.016	2.222	-0.082	0.000	0.687	0.659	1	0.01	0.00	0.01	
1N	0	-0.016	2.316	-0.082	0.000	0.687	0.421	1	0.01	0.00	0.01	
1O	0	-0.016	2.222	-0.106	0.000	0.032	0.659	1	0.01	0.00	0.00	
1P	0	-0.016	2.316	-0.106	0.000	0.032	0.421	1	0.01	0.00	0.00	
2	0	-0.031	4.159	-0.171	0.000	0.645	0.973	1	0.01	0.00	0.01	
7	0	-0.018	2.244	-0.095	0.000	0.356	0.538	1	0.01	0.00	0.00	
8	0	-0.015	2.229	-0.092	0.000	0.352	0.575	1	0.01	0.00	0.00	
9	0	-0.021	2.493	-0.109	0.000	0.412	0.632	1	0.01	0.00	0.01	
10	0	-0.018	2.550	-0.102	0.000	0.418	0.562	1	0.01	0.00	0.01	
11	0	-0.029	3.735	-0.154	0.000	0.579	0.875	1	0.01	0.00	0.01	
12	0	-0.027	3.726	-0.152	0.000	0.576	0.897	1	0.01	0.00	0.01	
13	0	-0.030	3.884	-0.162	0.000	0.613	0.931	1	0.01	0.00	0.01	
14	0	-0.028	3.918	-0.158	0.000	0.616	0.889	1	0.01	0.00	0.01	
1A	50	-0.019	-0.950	-0.082	0.000	1.417	1.111	1	0.00	0.00	0.02	
1B	50	-0.019	-0.714	-0.082	0.000	1.417	0.688	1	0.00	0.00	0.02	
1C	50	-0.019	-0.950	-0.107	0.000	-0.605	1.111	1	0.00	0.00	0.01	
1D	50	-0.019	-0.714	-0.107	0.000	-0.605	0.688	1	0.00	0.00	0.01	
1E	50	-0.016	-0.950	-0.082	0.000	1.417	1.111	1	0.00	0.00	0.02	
1F	50	-0.016	-0.714	-0.082	0.000	1.417	0.688	1	0.00	0.00	0.02	
1G	50	-0.016	-0.950	-0.107	0.000	-0.605	1.111	1	0.00	0.00	0.01	
1H	50	-0.016	-0.714	-0.107	0.000	-0.605	0.688	1	0.00	0.00	0.01	
1I	50	-0.019	-0.879	-0.082	0.000	0.737	0.994	1	0.00	0.00	0.01	
1J	50	-0.019	-0.785	-0.082	0.000	0.737	0.804	1	0.00	0.00	0.01	
1K	50	-0.019	-0.879	-0.106	0.000	0.076	0.994	1	0.00	0.00	0.01	
1L	50	-0.019	-0.785	-0.106	0.000	0.076	0.804	1	0.00	0.00	0.00	
1M	50	-0.016	-0.879	-0.082	0.000	0.737	0.994	1	0.00	0.00	0.01	
1N	50	-0.016	-0.785	-0.082	0.000	0.737	0.804	1	0.00	0.00	0.01	
1O	50	-0.016	-0.879	-0.106	0.000	0.076	0.994	1	0.00	0.00	0.01	
1P	50	-0.016	-0.785	-0.106	0.000	0.076	0.804	1	0.00	0.00	0.00	
2	50	-0.031	-1.509	-0.171	0.000	0.731	1.635	1	0.00	0.00	0.01	
7	50	-0.018	-0.806	-0.095	0.000	0.404	0.898	1	0.00	0.00	0.01	
8	50	-0.015	-0.821	-0.092	0.000	0.398	0.927	1	0.00	0.00	0.01	
9	50	-0.021	-0.975	-0.109	0.000	0.467	1.011	1	0.00	0.00	0.01	
10	50	-0.018	-0.918	-0.102	0.000	0.469	0.970	1	0.00	0.00	0.01	
11	50	-0.029	-1.345	-0.154	0.000	0.656	1.473	1	0.00	0.00	0.01	
12	50	-0.027	-1.354	-0.152	0.000	0.652	1.490	1	0.00	0.00	0.01	
13	50	-0.030	-1.446	-0.162	0.000	0.694	1.541	1	0.00	0.00	0.01	
14	50	-0.028	-1.411	-0.158	0.000	0.695	1.516	1	0.00	0.00	0.01	
1A	100	-0.019	-4.051	-0.082	0.000	1.461	-0.139	1	0.01	0.00	0.02	
1B	100	-0.019	-3.815	-0.082	0.000	1.461	-0.444	1	0.01	0.00	0.02	
1C	100	-0.019	-4.051	-0.107	0.000	-0.554	-0.139	1	0.01	0.00	0.01	
1D	100	-0.019	-3.815	-0.107	0.000	-0.554	-0.444	1	0.01	0.00	0.01	
1E	100	-0.016	-4.051	-0.082	0.000	1.461	-0.139	1	0.01	0.00	0.02	
1F	100	-0.016	-3.815	-0.082	0.000	1.461	-0.444	1	0.01	0.00	0.02	
1G	100	-0.016	-4.051	-0.107	0.000	-0.554	-0.139	1	0.01	0.00	0.01	
1H	100	-0.016	-3.815	-0.107	0.000	-0.554	-0.444	1	0.01	0.00	0.01	
1I	100	-0.019	-3.980	-0.082	0.000	0.787	-0.220	1	0.01	0.00	0.01	
1J	100	-0.019	-3.886	-0.082	0.000	0.787	-0.363	1	0.01	0.00	0.01	
1K	100	-0.019	-3.980	-0.106	0.000	0.120	-0.220	1	0.01	0.00	0.00	
1L	100	-0.019	-3.886	-0.106	0.000	0.120	-0.363	1	0.01	0.00	0.00	
1M	100	-0.016	-3.980	-0.082	0.000	0.787	-0.220	1	0.01	0.00	0.01	

1N	100	-0.016	-3.886	-0.082	0.000	0.787	-0.363	1	0.01	0.00	0.01	
1O	100	-0.016	-3.980	-0.106	0.000	0.120	-0.220	1	0.01	0.00	0.00	
1P	100	-0.016	-3.886	-0.106	0.000	0.120	-0.363	1	0.01	0.00	0.00	
2	100	-0.031	-7.178	-0.171	0.000	0.816	-0.536	1	0.02	0.00	0.01	
7	100	-0.018	-3.856	-0.095	0.000	0.451	-0.268	1	0.01	0.00	0.01	
8	100	-0.015	-3.871	-0.092	0.000	0.444	-0.246	1	0.01	0.00	0.01	
9	100	-0.021	-4.442	-0.109	0.000	0.521	-0.343	1	0.01	0.00	0.01	
10	100	-0.018	-4.385	-0.102	0.000	0.520	-0.355	1	0.01	0.00	0.01	
11	100	-0.029	-6.424	-0.154	0.000	0.733	-0.470	1	0.02	0.00	0.01	
12	100	-0.027	-6.433	-0.152	0.000	0.728	-0.456	1	0.02	0.00	0.01	
13	100	-0.030	-6.775	-0.162	0.000	0.775	-0.515	1	0.02	0.00	0.01	
14	100	-0.028	-6.741	-0.158	0.000	0.774	-0.522	1	0.02	0.00	0.01	

ASTA NUM. 116 NI 191 NF 21 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.078	-4.918	5.926	0.000	2.276	-0.137	1	0.01	0.00	0.03	
1B	0	-0.078	-3.198	5.926	0.000	2.276	-0.431	1	0.01	0.00	0.03	
1C	0	-0.078	-4.918	-2.456	0.000	-0.898	-0.137	1	0.01	0.00	0.01	
1D	0	-0.078	-3.198	-2.456	0.000	-0.898	-0.431	1	0.01	0.00	0.01	
1E	0	-0.021	-4.918	5.926	0.000	2.276	-0.137	1	0.01	0.00	0.03	
1F	0	-0.021	-3.198	5.926	0.000	2.276	-0.431	1	0.01	0.00	0.03	
1G	0	-0.021	-4.918	-2.456	0.000	-0.898	-0.137	1	0.01	0.00	0.01	
1H	0	-0.021	-3.198	-2.456	0.000	-0.898	-0.431	1	0.01	0.00	0.01	
1I	0	-0.101	-4.357	3.112	0.000	1.211	-0.214	1	0.01	0.00	0.02	
1J	0	-0.101	-3.759	3.112	0.000	1.211	-0.354	1	0.01	0.00	0.02	
1K	0	-0.101	-4.357	0.358	0.000	0.167	-0.214	1	0.01	0.00	0.00	
1L	0	-0.101	-3.759	0.358	0.000	0.167	-0.354	1	0.01	0.00	0.00	
1M	0	0.002	-4.357	3.112	0.000	1.211	-0.214	1	0.01	0.00	0.02	
1N	0	0.002	-3.759	3.112	0.000	1.211	-0.354	1	0.01	0.00	0.02	
1O	0	0.002	-4.357	0.358	0.000	0.167	-0.214	1	0.01	0.00	0.00	
1P	0	0.002	-3.759	0.358	0.000	0.167	-0.354	1	0.01	0.00	0.00	
2	0	-0.088	-7.330	3.119	0.000	1.240	-0.522	1	0.02	0.00	0.02	
7	0	-0.049	-4.012	1.726	0.000	0.686	-0.260	1	0.01	0.00	0.01	
8	0	-0.047	-4.125	1.697	0.000	0.674	-0.237	1	0.01	0.00	0.01	
9	0	-0.062	-4.576	1.992	0.000	0.790	-0.334	1	0.01	0.00	0.01	
10	0	-0.051	-4.519	1.997	0.000	0.793	-0.348	1	0.01	0.00	0.01	
11	0	-0.079	-6.573	2.802	0.000	1.114	-0.457	1	0.02	0.00	0.01	
12	0	-0.078	-6.640	2.784	0.000	1.107	-0.443	1	0.02	0.00	0.01	
13	0	-0.087	-6.911	2.961	0.000	1.176	-0.501	1	0.02	0.00	0.01	
14	0	-0.080	-6.877	2.964	0.000	1.178	-0.510	1	0.02	0.00	0.01	
1A	50	-0.078	-8.019	5.926	0.000	-0.687	-3.371	1	0.02	0.00	0.02	
1B	50	-0.078	-6.299	5.926	0.000	-0.687	-2.806	1	0.02	0.00	0.02	
1C	50	-0.078	-8.019	-2.456	0.000	0.330	-3.371	1	0.02	0.00	0.02	
1D	50	-0.078	-6.299	-2.456	0.000	0.330	-2.806	1	0.02	0.00	0.02	
1E	50	-0.021	-8.019	5.926	0.000	-0.687	-3.371	1	0.02	0.00	0.02	
1F	50	-0.021	-6.299	5.926	0.000	-0.687	-2.806	1	0.02	0.00	0.02	
1G	50	-0.021	-8.019	-2.456	0.000	0.330	-3.371	1	0.02	0.00	0.02	
1H	50	-0.021	-6.299	-2.456	0.000	0.330	-2.806	1	0.02	0.00	0.02	
1I	50	-0.101	-7.458	3.112	0.000	-0.345	-3.168	1	0.02	0.00	0.02	
1J	50	-0.101	-6.860	3.112	0.000	-0.345	-3.008	1	0.02	0.00	0.02	
1K	50	-0.101	-7.458	0.358	0.000	-0.012	-3.168	1	0.02	0.00	0.02	
1L	50	-0.101	-6.860	0.358	0.000	-0.012	-3.008	1	0.02	0.00	0.02	
1M	50	0.002	-7.458	3.112	0.000	-0.345	-3.168	1	0.02	0.00	0.02	
1N	50	0.002	-6.860	3.112	0.000	-0.345	-3.008	1	0.02	0.00	0.02	
1O	50	0.002	-7.458	0.358	0.000	-0.012	-3.168	1	0.02	0.00	0.02	
1P	50	0.002	-6.860	0.358	0.000	-0.012	-3.008	1	0.02	0.00	0.02	
2	50	-0.088	-13.000	3.119	0.000	-0.320	-5.604	1	0.03	0.00	0.03	
7	50	-0.049	-7.061	1.726	0.000	-0.178	-3.029	1	0.02	0.00	0.02	
8	50	-0.047	-7.173	1.697	0.000	-0.174	-3.062	1	0.02	0.00	0.02	
9	50	-0.062	-8.043	1.992	0.000	-0.205	-3.489	1	0.02	0.00	0.02	
10	50	-0.051	-7.984	1.997	0.000	-0.206	-3.474	1	0.02	0.00	0.02	
11	50	-0.079	-11.651	2.802	0.000	-0.287	-5.014	1	0.03	0.00	0.03	
12	50	-0.078	-11.720	2.784	0.000	-0.285	-5.032	1	0.03	0.00	0.03	
13	50	-0.087	-12.241	2.961	0.000	-0.305	-5.288	1	0.03	0.00	0.03	
14	50	-0.080	-12.209	2.964	0.000	-0.304	-5.282	1	0.03	0.00	0.03	
1A	100	-0.078	-11.120	5.926	0.000	-3.650	-8.156	1	0.03	0.00	0.05	
1B	100	-0.078	-9.400	5.926	0.000	-3.650	-6.730	1	0.03	0.00	0.05	
1C	100	-0.078	-11.120	-2.456	0.000	1.558	-8.156	1	0.03	0.00	0.05	
1D	100	-0.078	-9.400	-2.456	0.000	1.558	-6.730	1	0.03	0.00	0.04	
1E	100	-0.021	-11.120	5.926	0.000	-3.650	-8.156	1	0.03	0.00	0.05	
1F	100	-0.021	-9.400	5.926	0.000	-3.650	-6.730	1	0.03	0.00	0.05	
1G	100	-0.021	-11.120	-2.456	0.000	1.558	-8.156	1	0.03	0.00	0.05	
1H	100	-0.021	-9.400	-2.456	0.000	1.558	-6.730	1	0.03	0.00	0.04	
1I	100	-0.101	-10.559	3.112	0.000	-1.901	-7.673	1	0.03	0.00	0.05	
1J	100	-0.101	-9.961	3.112	0.000	-1.901	-7.213	1	0.03	0.00	0.04	
1K	100	-0.101	-10.559	0.358	0.000	-0.191	-7.673	1	0.03	0.00	0.05	
1L	100	-0.101	-9.961	0.358	0.000	-0.191	-7.213	1	0.03	0.00	0.04	
1M	100	0.002	-10.559	3.112	0.000	-1.901	-7.673	1	0.03	0.00	0.05	
1N	100	0.002	-9.961	3.112	0.000	-1.901	-7.213	1	0.03	0.00	0.04	
1O	100	0.002	-10.559	0.358	0.000	-0.191	-7.673	1	0.03	0.00	0.05	
1P	100	0.002	-9.961	0.358	0.000	-0.191	-7.213	1	0.03	0.00	0.04	
2	100	-0.088	-18.670	3.119	0.000	-1.879	-13.520	1	0.05	0.00	0.08	
7	100	-0.049	-10.110	1.726	0.000	-1.041	-7.323	1	0.03	0.00	0.04	
8	100	-0.047	-10.220	1.697	0.000	-1.023	-7.412	1	0.03	0.00	0.04	
9	100	-0.062	-11.510	1.992	0.000	-1.201	-8.378	1	0.03	0.00	0.05	
10	100	-0.051	-11.450	1.997	0.000	-1.204	-8.335	1	0.03	0.00	0.05	
11	100	-0.079	-16.730	2.802	0.000	-1.688	-12.110	1	0.04	0.00	0.07	

12	100	-0.078	-16.800	2.784	0.000	-1.677	-12.160	1	0.04	0.00	0.07	
13	100	-0.087	-17.570	2.961	0.000	-1.785	-12.740	1	0.05	0.00	0.08	
14	100	-0.080	-17.540	2.964	0.000	-1.786	-12.720	1	0.05	0.00	0.08	

ASTA NUM. 35 NI 21 NF 166 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.034	13.656	5.672	0.000	4.532	-6.890	1	0.04	0.00	0.06	
1B	0	-0.034	15.084	5.672	0.000	4.532	-8.188	1	0.04	0.00	0.06	
1C	0	-0.034	13.656	-8.854	0.000	-6.942	-6.890	1	0.04	0.00	0.09	
1D	0	-0.034	15.084	-8.854	0.000	-6.942	-8.188	1	0.04	0.00	0.09	
1E	0	0.065	13.656	5.672	0.000	4.532	-6.890	1	0.04	0.00	0.06	
1F	0	0.065	15.084	5.672	0.000	4.532	-8.188	1	0.04	0.00	0.06	
1G	0	0.065	13.656	-8.854	0.000	-6.942	-6.890	1	0.04	0.00	0.09	
1H	0	0.065	15.084	-8.854	0.000	-6.942	-8.188	1	0.04	0.00	0.09	
1I	0	-0.073	14.078	1.020	0.000	0.861	-7.322	1	0.04	0.00	0.04	
1J	0	-0.073	14.662	1.020	0.000	0.861	-7.757	1	0.04	0.00	0.05	
1K	0	-0.073	14.078	-4.202	0.000	-3.271	-7.322	1	0.04	0.00	0.04	
1L	0	-0.073	14.662	-4.202	0.000	-3.271	-7.757	1	0.04	0.00	0.05	
1M	0	0.103	14.078	1.020	0.000	0.861	-7.322	1	0.04	0.00	0.04	
1N	0	0.103	14.662	1.020	0.000	0.861	-7.757	1	0.04	0.00	0.05	
1O	0	0.103	14.078	-4.202	0.000	-3.271	-7.322	1	0.04	0.00	0.04	
1P	0	0.103	14.662	-4.202	0.000	-3.271	-7.757	1	0.04	0.00	0.05	
2	0	0.026	26.140	-2.866	0.000	-2.170	-13.690	1	0.07	0.00	0.08	
7	0	-0.016	14.160	-1.576	0.000	-1.195	-7.415	1	0.04	0.00	0.04	
8	0	-0.016	14.240	-1.555	0.000	-1.178	-7.505	1	0.04	0.00	0.04	
9	0	0.017	16.080	-1.821	0.000	-1.379	-8.490	1	0.04	0.00	0.05	
10	0	0.031	16.100	-1.823	0.000	-1.381	-8.440	1	0.04	0.00	0.05	
11	0	0.004	23.430	-2.571	0.000	-1.948	-12.260	1	0.06	0.00	0.07	
12	0	0.004	23.480	-2.558	0.000	-1.937	-12.320	1	0.06	0.00	0.07	
13	0	0.024	24.580	-2.718	0.000	-2.058	-12.910	1	0.07	0.00	0.08	
14	0	0.033	24.590	-2.719	0.000	-2.059	-12.880	1	0.07	0.00	0.08	
1A	56	-0.034	10.165	5.672	0.000	1.341	-0.192	1	0.03	0.00	0.02	
1B	56	-0.034	11.593	5.672	0.000	1.341	-0.686	1	0.03	0.00	0.02	
1C	56	-0.034	10.165	-8.854	0.000	-1.962	-0.192	1	0.03	0.00	0.02	
1D	56	-0.034	11.593	-8.854	0.000	-1.962	-0.686	1	0.03	0.00	0.02	
1E	56	0.065	10.165	5.672	0.000	1.341	-0.192	1	0.03	0.00	0.02	
1F	56	0.065	11.593	5.672	0.000	1.341	-0.686	1	0.03	0.00	0.02	
1G	56	0.065	10.165	-8.854	0.000	-1.962	-0.192	1	0.03	0.00	0.02	
1H	56	0.065	11.593	-8.854	0.000	-1.962	-0.686	1	0.03	0.00	0.02	
1I	56	-0.073	10.587	1.020	0.000	0.287	-0.386	1	0.03	0.00	0.00	
1J	56	-0.073	11.171	1.020	0.000	0.287	-0.492	1	0.03	0.00	0.00	
1K	56	-0.073	10.587	-4.202	0.000	-0.907	-0.386	1	0.03	0.00	0.01	
1L	56	-0.073	11.171	-4.202	0.000	-0.907	-0.492	1	0.03	0.00	0.01	
1M	56	0.103	10.587	1.020	0.000	0.287	-0.386	1	0.03	0.00	0.00	
1N	56	0.103	11.171	1.020	0.000	0.287	-0.492	1	0.03	0.00	0.00	
1O	56	0.103	10.587	-4.202	0.000	-0.907	-0.386	1	0.03	0.00	0.01	
1P	56	0.103	11.171	-4.202	0.000	-0.907	-0.492	1	0.03	0.00	0.01	
2	56	0.026	19.760	-2.866	0.000	-0.559	-0.784	1	0.05	0.00	0.01	
7	56	-0.016	10.729	-1.576	0.000	-0.308	-0.414	1	0.03	0.00	0.00	
8	56	-0.016	10.811	-1.555	0.000	-0.303	-0.458	1	0.03	0.00	0.00	
9	56	0.017	12.177	-1.821	0.000	-0.355	-0.544	1	0.03	0.00	0.00	
10	56	0.031	12.200	-1.823	0.000	-0.356	-0.479	1	0.03	0.00	0.00	
11	56	0.004	17.715	-2.571	0.000	-0.502	-0.690	1	0.05	0.00	0.01	
12	56	0.004	17.765	-2.558	0.000	-0.498	-0.719	1	0.05	0.00	0.01	
13	56	0.024	18.585	-2.718	0.000	-0.529	-0.771	1	0.05	0.00	0.01	
14	56	0.033	18.595	-2.719	0.000	-0.530	-0.732	1	0.05	0.00	0.01	
1A	113	-0.034	6.674	5.672	0.000	-1.849	4.543	1	0.02	0.00	0.03	
1B	113	-0.034	8.102	5.672	0.000	-1.849	4.853	1	0.02	0.00	0.03	
1C	113	-0.034	6.674	-8.854	0.000	3.018	4.543	1	0.02	0.00	0.04	
1D	113	-0.034	8.102	-8.854	0.000	3.018	4.853	1	0.02	0.00	0.04	
1E	113	0.065	6.674	5.672	0.000	-1.849	4.543	1	0.02	0.00	0.03	
1F	113	0.065	8.102	5.672	0.000	-1.849	4.853	1	0.02	0.00	0.03	
1G	113	0.065	6.674	-8.854	0.000	3.018	4.543	1	0.02	0.00	0.04	
1H	113	0.065	8.102	-8.854	0.000	3.018	4.853	1	0.02	0.00	0.04	
1I	113	-0.073	7.096	1.020	0.000	-0.287	4.586	1	0.02	0.00	0.03	
1J	113	-0.073	7.680	1.020	0.000	-0.287	4.810	1	0.02	0.00	0.03	
1K	113	-0.073	7.096	-4.202	0.000	1.456	4.586	1	0.02	0.00	0.03	
1L	113	-0.073	7.680	-4.202	0.000	1.456	4.810	1	0.02	0.00	0.03	
1M	113	0.103	7.096	1.020	0.000	-0.287	4.586	1	0.02	0.00	0.03	
1N	113	0.103	7.680	1.020	0.000	-0.287	4.810	1	0.02	0.00	0.03	
1O	113	0.103	7.096	-4.202	0.000	1.456	4.586	1	0.02	0.00	0.03	
1P	113	0.103	7.680	-4.202	0.000	1.456	4.810	1	0.02	0.00	0.03	
2	113	0.026	13.380	-2.866	0.000	1.053	8.536	1	0.04	0.00	0.05	
7	113	-0.016	7.299	-1.576	0.000	0.578	4.656	1	0.02	0.00	0.03	
8	113	-0.016	7.382	-1.555	0.000	0.571	4.659	1	0.02	0.00	0.03	
9	113	0.017	8.275	-1.821	0.000	0.670	5.208	1	0.02	0.00	0.03	
10	113	0.031	8.301	-1.823	0.000	0.670	5.287	1	0.02	0.00	0.03	
11	113	0.004	12.000	-2.571	0.000	0.944	7.665	1	0.03	0.00	0.05	
12	113	0.004	12.050	-2.558	0.000	0.940	7.667	1	0.03	0.00	0.05	
13	113	0.024	12.590	-2.718	0.000	0.999	7.996	1	0.03	0.00	0.05	
14	113	0.033	12.600	-2.719	0.000	0.999	8.044	1	0.03	0.00	0.05	

ASTA NUM. 117 NI 166 NF 159 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.019	7.583	2.189	0.000	0.477	4.752	1	0.02	0.00	0.03	
1B	0	-0.019	8.327	2.189	0.000	0.477	4.390	1	0.02	0.00	0.03	
1C	0	-0.019	7.583	-2.589	0.000	-0.139	4.752	1	0.02	0.00	0.03	
1D	0	-0.019	8.327	-2.589	0.000	-0.139	4.390	1	0.02	0.00	0.03	
1E	0	0.044	7.583	2.189	0.000	0.477	4.752	1	0.02	0.00	0.03	
1F	0	0.044	8.327	2.189	0.000	0.477	4.390	1	0.02	0.00	0.03	
1G	0	0.044	7.583	-2.589	0.000	-0.139	4.752	1	0.02	0.00	0.03	
1H	0	0.044	8.327	-2.589	0.000	-0.139	4.390	1	0.02	0.00	0.03	
1I	0	-0.019	7.823	0.677	0.000	0.270	4.688	1	0.02	0.00	0.03	
1J	0	-0.019	8.087	0.677	0.000	0.270	4.454	1	0.02	0.00	0.03	
1K	0	-0.019	7.823	-1.077	0.000	0.068	4.688	1	0.02	0.00	0.03	
1L	0	-0.019	8.087	-1.077	0.000	0.068	4.454	1	0.02	0.00	0.03	
1M	0	0.043	7.823	0.677	0.000	0.270	4.688	1	0.02	0.00	0.03	
1N	0	0.043	8.087	0.677	0.000	0.270	4.454	1	0.02	0.00	0.03	
1O	0	0.043	7.823	-1.077	0.000	0.068	4.688	1	0.02	0.00	0.03	
1P	0	0.043	8.087	-1.077	0.000	0.068	4.454	1	0.02	0.00	0.03	
2	0	0.021	14.490	-0.359	0.000	0.305	8.304	1	0.04	0.00	0.05	
7	0	-0.004	7.811	-0.187	0.000	0.174	4.529	1	0.02	0.00	0.03	
8	0	-0.003	7.836	-0.177	0.000	0.174	4.529	1	0.02	0.00	0.03	
9	0	0.014	8.907	-0.231	0.000	0.194	5.065	1	0.02	0.00	0.03	
10	0	0.021	8.932	-0.239	0.000	0.190	5.148	1	0.02	0.00	0.03	
11	0	0.010	12.970	-0.315	0.000	0.277	7.456	1	0.03	0.00	0.04	
12	0	0.010	12.990	-0.309	0.000	0.277	7.457	1	0.03	0.00	0.04	
13	0	0.020	13.630	-0.341	0.000	0.289	7.778	1	0.04	0.00	0.05	
14	0	0.025	13.640	-0.346	0.000	0.287	7.828	1	0.04	0.00	0.05	
1A	56	-0.019	4.094	2.189	0.000	1.933	8.455	1	0.01	0.00	0.05	
1B	56	-0.019	4.839	2.189	0.000	1.933	7.674	1	0.01	0.00	0.05	
1C	56	-0.019	4.094	-2.589	0.000	-1.370	8.455	1	0.01	0.00	0.05	
1D	56	-0.019	4.839	-2.589	0.000	-1.370	7.674	1	0.01	0.00	0.05	
1E	56	0.044	4.094	2.189	0.000	1.933	8.455	1	0.01	0.00	0.05	
1F	56	0.044	4.839	2.189	0.000	1.933	7.674	1	0.01	0.00	0.05	
1G	56	0.044	4.094	-2.589	0.000	-1.370	8.455	1	0.01	0.00	0.05	
1H	56	0.044	4.839	-2.589	0.000	-1.370	7.674	1	0.01	0.00	0.05	
1I	56	-0.019	4.334	0.677	0.000	0.876	8.255	1	0.01	0.00	0.05	
1J	56	-0.019	4.598	0.677	0.000	0.876	7.873	1	0.01	0.00	0.05	
1K	56	-0.019	4.334	-1.077	0.000	-0.313	8.255	1	0.01	0.00	0.05	
1L	56	-0.019	4.598	-1.077	0.000	-0.313	7.873	1	0.01	0.00	0.05	
1M	56	0.043	4.334	0.677	0.000	0.876	8.255	1	0.01	0.00	0.05	
1N	56	0.043	4.598	0.677	0.000	0.876	7.873	1	0.01	0.00	0.05	
1O	56	0.043	4.334	-1.077	0.000	-0.313	8.255	1	0.01	0.00	0.05	
1P	56	0.043	4.598	-1.077	0.000	-0.313	7.873	1	0.01	0.00	0.05	
2	56	0.021	8.113	-0.359	0.000	0.507	14.660	1	0.02	0.00	0.09	
7	56	-0.004	4.380	-0.186	0.000	0.279	7.958	1	0.01	0.00	0.05	
8	56	-0.003	4.405	-0.177	0.000	0.273	7.972	1	0.01	0.00	0.05	
9	56	0.014	5.006	-0.230	0.000	0.323	8.980	1	0.01	0.00	0.05	
10	56	0.021	5.031	-0.239	0.000	0.324	9.076	1	0.01	0.00	0.05	
11	56	0.010	7.257	-0.315	0.000	0.454	13.145	1	0.02	0.00	0.08	
12	56	0.010	7.274	-0.309	0.000	0.451	13.156	1	0.02	0.00	0.08	
13	56	0.020	7.633	-0.341	0.000	0.481	13.755	1	0.02	0.00	0.08	
14	56	0.025	7.646	-0.346	0.000	0.481	13.815	1	0.02	0.00	0.08	
1A	113	-0.019	0.605	2.189	0.000	3.389	10.195	1	0.00	0.00	0.06	
1B	113	-0.019	1.350	2.189	0.000	3.389	8.995	1	0.00	0.00	0.05	
1C	113	-0.019	0.605	-2.589	0.000	-2.601	10.195	1	0.00	0.00	0.06	
1D	113	-0.019	1.350	-2.589	0.000	-2.601	8.995	1	0.00	0.00	0.05	
1E	113	0.044	0.605	2.189	0.000	3.389	10.195	1	0.00	0.00	0.06	
1F	113	0.044	1.350	2.189	0.000	3.389	8.995	1	0.00	0.00	0.05	
1G	113	0.044	0.605	-2.589	0.000	-2.601	10.195	1	0.00	0.00	0.06	
1H	113	0.044	1.350	-2.589	0.000	-2.601	8.995	1	0.00	0.00	0.05	
1I	113	-0.019	0.846	0.677	0.000	1.481	9.860	1	0.00	0.00	0.06	
1J	113	-0.019	1.110	0.677	0.000	1.481	9.330	1	0.00	0.00	0.06	
1K	113	-0.019	0.846	-1.077	0.000	-0.693	9.860	1	0.00	0.00	0.06	
1L	113	-0.019	1.110	-1.077	0.000	-0.693	9.330	1	0.00	0.00	0.06	
1M	113	0.043	0.846	0.677	0.000	1.481	9.860	1	0.00	0.00	0.06	
1N	113	0.043	1.110	0.677	0.000	1.481	9.330	1	0.00	0.00	0.06	
1O	113	0.043	0.846	-1.077	0.000	-0.693	9.860	1	0.00	0.00	0.06	
1P	113	0.043	1.110	-1.077	0.000	-0.693	9.330	1	0.00	0.00	0.06	
2	113	0.021	1.736	-0.359	0.000	0.708	17.430	1	0.00	0.00	0.10	
7	113	-0.004	0.949	-0.187	0.000	0.384	9.456	1	0.00	0.00	0.06	
8	113	-0.003	0.973	-0.177	0.000	0.373	9.484	1	0.00	0.00	0.06	
9	113	0.014	1.105	-0.231	0.000	0.453	10.700	1	0.00	0.00	0.06	
10	113	0.021	1.130	-0.239	0.000	0.458	10.810	1	0.00	0.00	0.06	
11	113	0.010	1.543	-0.315	0.000	0.631	15.620	1	0.00	0.00	0.09	
12	113	0.010	1.557	-0.309	0.000	0.625	15.640	1	0.00	0.00	0.09	
13	113	0.020	1.637	-0.341	0.000	0.673	16.360	1	0.00	0.00	0.10	
14	113	0.025	1.652	-0.346	0.000	0.676	16.430	1	0.00	0.00	0.10	

ASTA NUM. 118 NI 159 NF 152 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.025	2.025	2.773	0.000	3.418	10.174	1	0.01	0.00	0.06	
1B	0	-0.025	2.203	2.773	0.000	3.418	8.984	1	0.01	0.00	0.05	
1C	0	-0.025	2.025	-1.975	0.000	-2.564	10.174	1	0.01	0.00	0.06	

1D	0	-0.025	2.203	-1.975	0.000	-2.564	8.984	1	0.01	0.00	0.05
1E	0	0.040	2.025	2.773	0.000	3.418	10.174	1	0.01	0.00	0.06
1F	0	0.040	2.203	2.773	0.000	3.418	8.984	1	0.01	0.00	0.05
1G	0	0.040	2.025	-1.975	0.000	-2.564	10.174	1	0.01	0.00	0.06
1H	0	0.040	2.203	-1.975	0.000	-2.564	8.984	1	0.01	0.00	0.05
1I	0	-0.027	2.071	1.249	0.000	1.507	9.844	1	0.01	0.00	0.06
1J	0	-0.027	2.157	1.249	0.000	1.507	9.314	1	0.01	0.00	0.06
1K	0	-0.027	2.071	-0.451	0.000	-0.652	9.844	1	0.01	0.00	0.06
1L	0	-0.027	2.157	-0.451	0.000	-0.652	9.314	1	0.01	0.00	0.06
1M	0	0.041	2.071	1.249	0.000	1.507	9.844	1	0.01	0.00	0.06
1N	0	0.041	2.157	1.249	0.000	1.507	9.314	1	0.01	0.00	0.06
1O	0	0.041	2.071	-0.451	0.000	-0.652	9.844	1	0.01	0.00	0.06
1P	0	0.041	2.157	-0.451	0.000	-0.652	9.314	1	0.01	0.00	0.06
2	0	0.014	3.881	0.723	0.000	0.770	17.400	1	0.01	0.00	0.10
7	0	0.023	2.064	0.408	0.000	0.433	9.437	1	0.01	0.00	0.06
8	0	0.022	2.076	0.397	0.000	0.421	9.465	1	0.01	0.00	0.06
9	0	0.008	2.380	0.450	0.000	0.489	10.680	1	0.01	0.00	0.06
10	0	0.001	2.349	0.449	0.000	0.488	10.790	1	0.01	0.00	0.06
11	0	0.022	3.470	0.656	0.000	0.696	15.590	1	0.01	0.00	0.09
12	0	0.022	3.477	0.650	0.000	0.689	15.610	1	0.01	0.00	0.09
13	0	0.013	3.660	0.681	0.000	0.730	16.340	1	0.01	0.00	0.10
14	0	0.009	3.641	0.680	0.000	0.729	16.400	1	0.01	0.00	0.10
1A	56	-0.025	-1.464	2.773	0.000	1.858	10.333	1	0.00	0.00	0.06
1B	56	-0.025	-1.285	2.773	0.000	1.858	9.242	1	0.00	0.00	0.05
1C	56	-0.025	-1.464	-1.975	0.000	-1.452	10.333	1	0.00	0.00	0.06
1D	56	-0.025	-1.285	-1.975	0.000	-1.452	9.242	1	0.00	0.00	0.05
1E	56	0.040	-1.464	2.773	0.000	1.858	10.333	1	0.00	0.00	0.06
1F	56	0.040	-1.285	2.773	0.000	1.858	9.242	1	0.00	0.00	0.05
1G	56	0.040	-1.464	-1.975	0.000	-1.452	10.333	1	0.00	0.00	0.06
1H	56	0.040	-1.285	-1.975	0.000	-1.452	9.242	1	0.00	0.00	0.05
1I	56	-0.027	-1.417	1.249	0.000	0.804	10.028	1	0.00	0.00	0.06
1J	56	-0.027	-1.332	1.249	0.000	0.804	9.546	1	0.00	0.00	0.06
1K	56	-0.027	-1.417	-0.451	0.000	-0.399	10.028	1	0.00	0.00	0.06
1L	56	-0.027	-1.332	-0.451	0.000	-0.399	9.546	1	0.00	0.00	0.06
1M	56	0.041	-1.417	1.249	0.000	0.804	10.028	1	0.00	0.00	0.06
1N	56	0.041	-1.332	1.249	0.000	0.804	9.546	1	0.00	0.00	0.06
1O	56	0.041	-1.417	-0.451	0.000	-0.399	10.028	1	0.00	0.00	0.06
1P	56	0.041	-1.332	-0.451	0.000	-0.399	9.546	1	0.00	0.00	0.06
2	56	0.014	-2.495	0.723	0.000	0.363	17.788	1	0.01	0.00	0.11
7	56	0.023	-1.367	0.408	0.000	0.203	9.633	1	0.00	0.00	0.06
8	56	0.022	-1.356	0.397	0.000	0.198	9.668	1	0.00	0.00	0.06
9	56	0.008	-1.521	0.450	0.000	0.236	10.921	1	0.00	0.00	0.06
10	56	0.001	-1.552	0.449	0.000	0.235	11.015	1	0.00	0.00	0.07
11	56	0.022	-2.244	0.656	0.000	0.327	15.937	1	0.01	0.00	0.09
12	56	0.022	-2.237	0.650	0.000	0.324	15.957	1	0.01	0.00	0.09
13	56	0.013	-2.336	0.681	0.000	0.347	16.711	1	0.01	0.00	0.10
14	56	0.009	-2.355	0.680	0.000	0.346	16.761	1	0.01	0.00	0.10
1A	113	-0.025	-4.952	2.773	0.000	0.297	8.528	1	0.01	0.00	0.05
1B	113	-0.025	-4.774	2.773	0.000	0.297	7.538	1	0.01	0.00	0.04
1C	113	-0.025	-4.952	-1.975	0.000	-0.341	8.528	1	0.01	0.00	0.05
1D	113	-0.025	-4.774	-1.975	0.000	-0.341	7.538	1	0.01	0.00	0.04
1E	113	0.040	-4.952	2.773	0.000	0.297	8.528	1	0.01	0.00	0.05
1F	113	0.040	-4.774	2.773	0.000	0.297	7.538	1	0.01	0.00	0.04
1G	113	0.040	-4.952	-1.975	0.000	-0.341	8.528	1	0.01	0.00	0.05
1H	113	0.040	-4.774	-1.975	0.000	-0.341	7.538	1	0.01	0.00	0.04
1I	113	-0.027	-4.906	1.249	0.000	0.101	8.250	1	0.01	0.00	0.05
1J	113	-0.027	-4.820	1.249	0.000	0.101	7.816	1	0.01	0.00	0.05
1K	113	-0.027	-4.906	-0.451	0.000	-0.145	8.250	1	0.01	0.00	0.05
1L	113	-0.027	-4.820	-0.451	0.000	-0.145	7.816	1	0.01	0.00	0.05
1M	113	0.041	-4.906	1.249	0.000	0.101	8.250	1	0.01	0.00	0.05
1N	113	0.041	-4.820	1.249	0.000	0.101	7.816	1	0.01	0.00	0.05
1O	113	0.041	-4.906	-0.451	0.000	-0.145	8.250	1	0.01	0.00	0.05
1P	113	0.041	-4.820	-0.451	0.000	-0.145	7.816	1	0.01	0.00	0.05
2	113	0.014	-8.872	0.723	0.000	-0.043	14.590	1	0.02	0.00	0.09
7	113	0.023	-4.798	0.408	0.000	-0.026	7.899	1	0.01	0.00	0.05
8	113	0.022	-4.787	0.397	0.000	-0.025	7.940	1	0.01	0.00	0.05
9	113	0.008	-5.422	0.450	0.000	-0.017	8.968	1	0.01	0.00	0.05
10	113	0.001	-5.453	0.449	0.000	-0.017	9.045	1	0.01	0.00	0.05
11	113	0.022	-7.958	0.656	0.000	-0.042	13.070	1	0.02	0.00	0.08
12	113	0.022	-7.951	0.650	0.000	-0.041	13.090	1	0.02	0.00	0.08
13	113	0.013	-8.332	0.681	0.000	-0.036	13.710	1	0.02	0.00	0.08
14	113	0.009	-8.351	0.680	0.000	-0.036	13.750	1	0.02	0.00	0.08

ASTA NUM. 119 NI 152 NF 52 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.069	-4.330	8.539	0.000	2.808	8.632	1	0.01	0.00	0.05	
1B	0	-0.069	-3.646	8.539	0.000	2.808	7.694	1	0.01	0.00	0.05	
1C	0	-0.069	-4.330	-6.003	0.000	-2.076	8.632	1	0.01	0.00	0.05	
1D	0	-0.069	-3.646	-6.003	0.000	-2.076	7.694	1	0.01	0.00	0.05	
1E	0	0.026	-4.330	8.539	0.000	2.808	8.632	1	0.01	0.00	0.05	
1F	0	0.026	-3.646	8.539	0.000	2.808	7.694	1	0.01	0.00	0.05	
1G	0	0.026	-4.330	-6.003	0.000	-2.076	8.632	1	0.01	0.00	0.05	
1H	0	0.026	-3.646	-6.003	0.000	-2.076	7.694	1	0.01	0.00	0.05	
1I	0	-0.106	-4.155	3.913	0.000	1.257	8.374	1	0.01	0.00	0.05	
1J	0	-0.106	-3.821	3.913	0.000	1.257	7.952	1	0.01	0.00	0.05	
1K	0	-0.106	-4.155	-1.377	0.000	-0.524	8.374	1	0.01	0.00	0.05	
1L	0	-0.106	-3.821	-1.377	0.000	-0.524	7.952	1	0.01	0.00	0.05	

1M	0	0.063	-4.155	3.913	0.000	1.257	8.374	1	0.01	0.00	0.05
1N	0	0.063	-3.821	3.913	0.000	1.257	7.952	1	0.01	0.00	0.05
1O	0	0.063	-4.155	-1.377	0.000	-0.524	8.374	1	0.01	0.00	0.05
1P	0	0.063	-3.821	-1.377	0.000	-0.524	7.952	1	0.01	0.00	0.05
2	0	-0.037	-7.208	2.278	0.000	0.656	14.830	1	0.02	0.00	0.09
7	0	0.010	-3.946	1.262	0.000	0.367	8.032	1	0.01	0.00	0.05
8	0	0.010	-3.990	1.244	0.000	0.362	8.076	1	0.01	0.00	0.05
9	0	-0.024	-4.454	1.466	0.000	0.428	9.115	1	0.01	0.00	0.05
10	0	-0.038	-4.500	1.463	0.000	0.426	9.185	1	0.01	0.00	0.05
11	0	-0.014	-6.464	2.047	0.000	0.591	13.280	1	0.02	0.00	0.08
12	0	-0.014	-6.490	2.036	0.000	0.588	13.310	1	0.02	0.00	0.08
13	0	-0.035	-6.769	2.169	0.000	0.628	13.930	1	0.02	0.00	0.08
14	0	-0.043	-6.797	2.167	0.000	0.626	13.970	1	0.02	0.00	0.08
1A	56	-0.069	-7.821	8.539	0.000	-1.995	5.215	1	0.02	0.00	0.03
1B	56	-0.069	-7.137	8.539	0.000	-1.995	4.661	1	0.02	0.00	0.03
1C	56	-0.069	-7.821	-6.003	0.000	1.301	5.215	1	0.02	0.00	0.03
1D	56	-0.069	-7.137	-6.003	0.000	1.301	4.661	1	0.02	0.00	0.03
1E	56	0.026	-7.821	8.539	0.000	-1.995	5.215	1	0.02	0.00	0.03
1F	56	0.026	-7.137	8.539	0.000	-1.995	4.661	1	0.02	0.00	0.03
1G	56	0.026	-7.821	-6.003	0.000	1.301	5.215	1	0.02	0.00	0.03
1H	56	0.026	-7.137	-6.003	0.000	1.301	4.661	1	0.02	0.00	0.03
1I	56	-0.106	-7.646	3.913	0.000	-0.944	5.058	1	0.02	0.00	0.03
1J	56	-0.106	-7.312	3.913	0.000	-0.944	4.818	1	0.02	0.00	0.03
1K	56	-0.106	-7.646	-1.377	0.000	0.251	5.058	1	0.02	0.00	0.03
1L	56	-0.106	-7.312	-1.377	0.000	0.251	4.818	1	0.02	0.00	0.03
1M	56	0.063	-7.646	3.913	0.000	-0.944	5.058	1	0.02	0.00	0.03
1N	56	0.063	-7.312	3.913	0.000	-0.944	4.818	1	0.02	0.00	0.03
1O	56	0.063	-7.646	-1.377	0.000	0.251	5.058	1	0.02	0.00	0.03
1P	56	0.063	-7.312	-1.377	0.000	0.251	4.818	1	0.02	0.00	0.03
2	56	-0.037	-13.584	2.278	0.000	-0.625	8.982	1	0.04	0.00	0.05
7	56	0.010	-7.378	1.262	0.000	-0.343	4.847	1	0.02	0.00	0.03
8	56	0.010	-7.420	1.244	0.000	-0.338	4.867	1	0.02	0.00	0.03
9	56	-0.024	-8.357	1.466	0.000	-0.396	5.512	1	0.02	0.00	0.03
10	56	-0.038	-8.400	1.463	0.000	-0.398	5.557	1	0.02	0.00	0.03
11	56	-0.014	-12.177	2.047	0.000	-0.561	8.038	1	0.03	0.00	0.05
12	56	-0.014	-12.205	2.036	0.000	-0.558	8.051	1	0.03	0.00	0.05
13	56	-0.035	-12.765	2.169	0.000	-0.592	8.437	1	0.03	0.00	0.05
14	56	-0.043	-12.794	2.167	0.000	-0.593	8.463	1	0.03	0.00	0.05
1A	113	-0.069	-11.312	8.539	0.000	-6.798	-0.164	1	0.03	0.00	0.08
1B	113	-0.069	-10.628	8.539	0.000	-6.798	-0.334	1	0.03	0.00	0.08
1C	113	-0.069	-11.312	-6.003	0.000	4.678	-0.164	1	0.03	0.00	0.06
1D	113	-0.069	-10.628	-6.003	0.000	4.678	-0.334	1	0.03	0.00	0.06
1E	113	0.026	-11.312	8.539	0.000	-6.798	-0.164	1	0.03	0.00	0.08
1F	113	0.026	-10.628	8.539	0.000	-6.798	-0.334	1	0.03	0.00	0.08
1G	113	0.026	-11.312	-6.003	0.000	4.678	-0.164	1	0.03	0.00	0.06
1H	113	0.026	-10.628	-6.003	0.000	4.678	-0.334	1	0.03	0.00	0.06
1I	113	-0.106	-11.137	3.913	0.000	-3.146	-0.221	1	0.03	0.00	0.04
1J	113	-0.106	-10.803	3.913	0.000	-3.146	-0.277	1	0.03	0.00	0.04
1K	113	-0.106	-11.137	-1.377	0.000	1.026	-0.221	1	0.03	0.00	0.01
1L	113	-0.106	-10.803	-1.377	0.000	1.026	-0.277	1	0.03	0.00	0.01
1M	113	0.063	-11.137	3.913	0.000	-3.146	-0.221	1	0.03	0.00	0.04
1N	113	0.063	-10.803	3.913	0.000	-3.146	-0.277	1	0.03	0.00	0.04
1O	113	0.063	-11.137	-1.377	0.000	1.026	-0.221	1	0.03	0.00	0.01
1P	113	0.063	-10.803	-1.377	0.000	1.026	-0.277	1	0.03	0.00	0.01
2	113	-0.037	-19.960	2.278	0.000	-1.906	-0.452	1	0.05	0.00	0.02
7	113	0.010	-10.810	1.262	0.000	-1.053	-0.267	1	0.03	0.00	0.01
8	113	0.010	-10.850	1.244	0.000	-1.038	-0.273	1	0.03	0.00	0.01
9	113	-0.024	-12.260	1.466	0.000	-1.221	-0.284	1	0.03	0.00	0.02
10	113	-0.038	-12.300	1.463	0.000	-1.221	-0.266	1	0.03	0.00	0.02
11	113	-0.014	-17.890	2.047	0.000	-1.712	-0.418	1	0.05	0.00	0.02
12	113	-0.014	-17.920	2.036	0.000	-1.703	-0.421	1	0.05	0.00	0.02
13	113	-0.035	-18.760	2.169	0.000	-1.812	-0.428	1	0.05	0.00	0.02
14	113	-0.043	-18.790	2.167	0.000	-1.812	-0.417	1	0.05	0.00	0.02

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.163	-6.908	10.359	1	0.0546	1.0058	1.0016	--	--	0.00	--	0.15	Snell. 'zx'= 348
1B	-0.163	-6.908	9.242	1	0.0546	1.0058	1.0016	--	--	0.00	--	0.14	Snell. 'zx'= 348
1C	-0.163	-6.942	10.359	1	0.0546	1.0058	1.0016	--	--	0.00	--	0.15	Snell. 'zx'= 348
1D	-0.163	-6.942	9.242	1	0.0546	1.0058	1.0016	--	--	0.00	--	0.14	Snell. 'zx'= 348
1E	-0.136	-6.908	10.359	1	0.0546	1.0049	1.0014	--	--	0.00	--	0.15	Snell. 'zx'= 348
1F	-0.136	-6.908	9.242	1	0.0546	1.0049	1.0013	--	--	0.00	--	0.14	Snell. 'zx'= 348
1G	-0.136	-6.942	10.359	1	0.0546	1.0048	1.0014	--	--	0.00	--	0.15	Snell. 'zx'= 348
1H	-0.136	-6.942	9.242	1	0.0546	1.0048	1.0013	--	--	0.00	--	0.14	Snell. 'zx'= 348
1I	-0.175	-3.268	10.075	1	0.0546	1.0176	1.0017	--	--	0.00	--	0.10	Snell. 'zx'= 348
1J	-0.175	-3.268	9.546	1	0.0546	1.0176	1.0017	--	--	0.00	--	0.10	Snell. 'zx'= 348
1K	-0.175	-3.271	10.075	1	0.0546	1.0178	1.0017	--	--	0.00	--	0.10	Snell. 'zx'= 348
1L	-0.175	-3.271	9.546	1	0.0546	1.0178	1.0017	--	--	0.00	--	0.10	Snell. 'zx'= 348
1M	-0.124	-3.268	10.075	1	0.0546	1.0124	1.0012	--	--	0.00	--	0.10	Snell. 'zx'= 348
1N	-0.124	-3.268	9.546	1	0.0546	1.0124	1.0012	--	--	0.00	--	0.10	Snell. 'zx'= 348
1O	-0.124	-3.271	10.075	1	0.0546	1.0126	1.0012	--	--	0.00	--	0.10	Snell. 'zx'= 348
1P	-0.124	-3.271	9.546	1	0.0546	1.0126	1.0012	--	--	0.00	--	0.10	Snell. 'zx'= 348
2	-0.268	-2.170	17.788	1	0.0546	1.0047	1.0030	--	--	0.00	--	0.14	Snell. 'zx'= 348
7	-0.137	-1.195	9.633	1	0.0546	0.9989	1.0013	--	--	0.00	--	0.07	Snell. 'zx'= 348
8	-0.131	-1.178	9.668	1	0.0546	0.9990	1.0013	--	--	0.00	--	0.07	Snell. 'zx'= 348
9	-0.174	-1.379	11.018	1	0.0546	0.9991	1.0018	--	--	0.00	--	0.08	Snell. 'zx'= 348
10	-0.169	-1.381	11.015	1	0.0546	0.9991	1.0017	--	--	0.00	--	0.08	Snell. 'zx'= 348
11	-0.234	-1.948	15.937	1	0.0546	1.0030	1.0025	--	--	0.00	--	0.12	Snell. 'zx'= 348

12	-0.230	-1.937	15.957	1	0.0546	1.0029	1.0025	--	--	0.00	--	0.12 Snell. 'zx'= 348
13	-0.256	-2.058	16.756	1	0.0546	1.0039	1.0028	--	--	0.00	--	0.13 Snell. 'zx'= 348
14	-0.253	-2.059	16.761	1	0.0546	1.0039	1.0028	--	--	0.00	--	0.13 Snell. 'zx'= 348

ASTA NUM. 2 NI 95 NF 175 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.025	12.391	5.826	0.000	4.551	0.006	1	0.03	0.00	0.06	
1B	0	-0.025	12.929	5.826	0.000	4.551	-0.325	1	0.03	0.00	0.06	
1C	0	-0.025	12.391	-8.674	0.000	-6.867	0.006	1	0.03	0.00	0.09	
1D	0	-0.025	12.929	-8.674	0.000	-6.867	-0.325	1	0.03	0.00	0.09	
1E	0	-0.006	12.391	5.826	0.000	4.551	0.006	1	0.03	0.00	0.06	
1F	0	-0.006	12.929	5.826	0.000	4.551	-0.325	1	0.03	0.00	0.06	
1G	0	-0.006	12.391	-8.674	0.000	-6.867	0.006	1	0.03	0.00	0.09	
1H	0	-0.006	12.929	-8.674	0.000	-6.867	-0.325	1	0.03	0.00	0.09	
1I	0	-0.042	12.370	1.231	0.000	0.931	-0.102	1	0.03	0.00	0.01	
1J	0	-0.042	12.950	1.231	0.000	0.931	-0.217	1	0.03	0.00	0.01	
1K	0	-0.042	12.370	-4.079	0.000	-3.247	-0.102	1	0.03	0.00	0.04	
1L	0	-0.042	12.950	-4.079	0.000	-3.247	-0.217	1	0.03	0.00	0.04	
1M	0	0.010	12.370	1.231	0.000	0.931	-0.102	1	0.03	0.00	0.01	
1N	0	0.010	12.950	1.231	0.000	0.931	-0.217	1	0.03	0.00	0.01	
1O	0	0.010	12.370	-4.079	0.000	-3.247	-0.102	1	0.03	0.00	0.04	
1P	0	0.010	12.950	-4.079	0.000	-3.247	-0.217	1	0.03	0.00	0.04	
2	0	-0.028	23.070	-2.558	0.000	-2.082	-0.292	1	0.06	0.00	0.03	
7	0	-0.017	12.520	-1.411	0.000	-1.148	-0.164	1	0.03	0.00	0.01	
8	0	-0.017	12.460	-1.387	0.000	-1.129	-0.155	1	0.03	0.00	0.01	
9	0	-0.017	14.190	-1.649	0.000	-1.336	-0.176	1	0.04	0.00	0.02	
10	0	-0.018	14.190	-1.645	0.000	-1.334	-0.183	1	0.04	0.00	0.02	
11	0	-0.026	20.710	-2.294	0.000	-1.868	-0.266	1	0.06	0.00	0.02	
12	0	-0.026	20.670	-2.280	0.000	-1.857	-0.260	1	0.06	0.00	0.02	
13	0	-0.026	21.710	-2.437	0.000	-1.981	-0.273	1	0.06	0.00	0.02	
14	0	-0.027	21.710	-2.434	0.000	-1.979	-0.277	1	0.06	0.00	0.02	
1A	56	-0.025	8.903	5.826	0.000	1.274	5.995	1	0.02	0.00	0.04	
1B	56	-0.025	9.441	5.826	0.000	1.274	5.968	1	0.03	0.00	0.04	
1C	56	-0.025	8.903	-8.674	0.000	-1.988	5.995	1	0.02	0.00	0.04	
1D	56	-0.025	9.441	-8.674	0.000	-1.988	5.968	1	0.03	0.00	0.04	
1E	56	-0.006	8.903	5.826	0.000	1.274	5.995	1	0.02	0.00	0.04	
1F	56	-0.006	9.441	5.826	0.000	1.274	5.968	1	0.03	0.00	0.04	
1G	56	-0.006	8.903	-8.674	0.000	-1.988	5.995	1	0.02	0.00	0.04	
1H	56	-0.006	9.441	-8.674	0.000	-1.988	5.968	1	0.03	0.00	0.04	
1I	56	-0.042	8.882	1.231	0.000	0.239	5.876	1	0.02	0.00	0.03	
1J	56	-0.042	9.462	1.231	0.000	0.239	6.087	1	0.03	0.00	0.04	
1K	56	-0.042	8.882	-4.079	0.000	-0.952	5.876	1	0.02	0.00	0.03	
1L	56	-0.042	9.462	-4.079	0.000	-0.952	6.087	1	0.03	0.00	0.04	
1M	56	0.010	8.882	1.231	0.000	0.239	5.876	1	0.02	0.00	0.03	
1N	56	0.010	9.462	1.231	0.000	0.239	6.087	1	0.03	0.00	0.04	
1O	56	0.010	8.882	-4.079	0.000	-0.952	5.876	1	0.02	0.00	0.03	
1P	56	0.010	9.462	-4.079	0.000	-0.952	6.087	1	0.03	0.00	0.04	
2	56	-0.028	16.695	-2.558	0.000	-0.643	10.893	1	0.04	0.00	0.06	
7	56	-0.017	9.088	-1.411	0.000	-0.354	5.913	1	0.02	0.00	0.04	
8	56	-0.017	9.028	-1.387	0.000	-0.349	5.888	1	0.02	0.00	0.03	
9	56	-0.017	10.287	-1.649	0.000	-0.408	6.704	1	0.03	0.00	0.04	
10	56	-0.018	10.290	-1.645	0.000	-0.408	6.701	1	0.03	0.00	0.04	
11	56	-0.026	14.994	-2.294	0.000	-0.578	9.774	1	0.04	0.00	0.06	
12	56	-0.026	14.957	-2.280	0.000	-0.575	9.762	1	0.04	0.00	0.06	
13	56	-0.026	15.713	-2.437	0.000	-0.610	10.250	1	0.04	0.00	0.06	
14	56	-0.027	15.715	-2.434	0.000	-0.610	10.248	1	0.04	0.00	0.06	
1A	113	-0.025	5.415	5.826	0.000	-2.003	10.021	1	0.01	0.00	0.06	
1B	113	-0.025	5.953	5.826	0.000	-2.003	10.299	1	0.02	0.00	0.06	
1C	113	-0.025	5.415	-8.674	0.000	2.891	10.021	1	0.01	0.00	0.06	
1D	113	-0.025	5.953	-8.674	0.000	2.891	10.299	1	0.02	0.00	0.06	
1E	113	-0.006	5.415	5.826	0.000	-2.003	10.021	1	0.01	0.00	0.06	
1F	113	-0.006	5.953	5.826	0.000	-2.003	10.299	1	0.02	0.00	0.06	
1G	113	-0.006	5.415	-8.674	0.000	2.891	10.021	1	0.01	0.00	0.06	
1H	113	-0.006	5.953	-8.674	0.000	2.891	10.299	1	0.02	0.00	0.06	
1I	113	-0.042	5.394	1.231	0.000	-0.453	9.891	1	0.01	0.00	0.06	
1J	113	-0.042	5.974	1.231	0.000	-0.453	10.429	1	0.02	0.00	0.06	
1K	113	-0.042	5.394	-4.079	0.000	1.342	9.891	1	0.01	0.00	0.06	
1L	113	-0.042	5.974	-4.079	0.000	1.342	10.429	1	0.02	0.00	0.06	
1M	113	0.010	5.394	1.231	0.000	-0.453	9.891	1	0.01	0.00	0.06	
1N	113	0.010	5.974	1.231	0.000	-0.453	10.429	1	0.02	0.00	0.06	
1O	113	0.010	5.394	-4.079	0.000	1.342	9.891	1	0.01	0.00	0.06	
1P	113	0.010	5.974	-4.079	0.000	1.342	10.429	1	0.02	0.00	0.06	
2	113	-0.028	10.320	-2.558	0.000	0.796	18.490	1	0.03	0.00	0.11	
7	113	-0.017	5.655	-1.411	0.000	0.440	10.060	1	0.02	0.00	0.06	
8	113	-0.017	5.596	-1.387	0.000	0.432	10.000	1	0.01	0.00	0.06	
9	113	-0.017	6.384	-1.649	0.000	0.520	11.390	1	0.02	0.00	0.07	
10	113	-0.018	6.389	-1.645	0.000	0.518	11.390	1	0.02	0.00	0.07	
11	113	-0.026	9.278	-2.294	0.000	0.713	16.600	1	0.02	0.00	0.10	
12	113	-0.026	9.243	-2.280	0.000	0.708	16.570	1	0.02	0.00	0.10	
13	113	-0.026	9.715	-2.437	0.000	0.761	17.400	1	0.03	0.00	0.10	
14	113	-0.027	9.719	-2.434	0.000	0.759	17.400	1	0.03	0.00	0.10	

ASTA NUM. 96 NI 175 NF 182 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.004	5.578	2.077	0.000	0.372	10.179	1	0.01	0.00	0.06	
1B	0	-0.004	5.644	2.077	0.000	0.372	10.001	1	0.02	0.00	0.06	
1C	0	-0.004	5.578	-2.560	0.000	-0.283	10.179	1	0.01	0.00	0.06	
1D	0	-0.004	5.644	-2.560	0.000	-0.283	10.001	1	0.02	0.00	0.06	
1E	0	0.001	5.578	2.077	0.000	0.372	10.179	1	0.01	0.00	0.06	
1F	0	0.001	5.644	2.077	0.000	0.372	10.001	1	0.02	0.00	0.06	
1G	0	0.001	5.578	-2.560	0.000	-0.283	10.179	1	0.01	0.00	0.06	
1H	0	0.001	5.644	-2.560	0.000	-0.283	10.001	1	0.02	0.00	0.06	
1I	0	-0.010	5.524	0.595	0.000	0.170	10.340	1	0.01	0.00	0.06	
1J	0	-0.010	5.698	0.595	0.000	0.170	9.840	1	0.02	0.00	0.06	
1K	0	-0.010	5.524	-1.077	0.000	-0.080	10.340	1	0.01	0.00	0.06	
1L	0	-0.010	5.698	-1.077	0.000	-0.080	9.840	1	0.02	0.00	0.06	
1M	0	0.007	5.524	0.595	0.000	0.170	10.340	1	0.01	0.00	0.06	
1N	0	0.007	5.698	0.595	0.000	0.170	9.840	1	0.02	0.00	0.06	
1O	0	0.007	5.524	-1.077	0.000	-0.080	10.340	1	0.01	0.00	0.06	
1P	0	0.007	5.698	-1.077	0.000	-0.080	9.840	1	0.02	0.00	0.06	
2	0	-0.003	10.240	-0.438	0.000	0.076	18.360	1	0.03	0.00	0.11	
7	0	-0.002	5.531	-0.243	0.000	0.043	9.986	1	0.01	0.00	0.06	
8	0	-0.002	5.525	-0.238	0.000	0.042	9.933	1	0.01	0.00	0.06	
9	0	-0.001	6.279	-0.268	0.000	0.061	11.310	1	0.02	0.00	0.07	
10	0	-0.001	6.264	-0.271	0.000	0.059	11.310	1	0.02	0.00	0.07	
11	0	-0.003	9.181	-0.396	0.000	0.067	16.480	1	0.02	0.00	0.10	
12	0	-0.003	9.178	-0.393	0.000	0.066	16.450	1	0.02	0.00	0.10	
13	0	-0.003	9.631	-0.411	0.000	0.078	17.280	1	0.03	0.00	0.10	
14	0	-0.003	9.621	-0.413	0.000	0.077	17.280	1	0.03	0.00	0.10	
1A	56	-0.004	2.090	2.077	0.000	1.812	12.372	1	0.01	0.00	0.07	
1B	56	-0.004	2.155	2.077	0.000	1.812	12.160	1	0.01	0.00	0.07	
1C	56	-0.004	2.090	-2.560	0.000	-1.451	12.372	1	0.01	0.00	0.07	
1D	56	-0.004	2.155	-2.560	0.000	-1.451	12.160	1	0.01	0.00	0.07	
1E	56	0.001	2.090	2.077	0.000	1.812	12.372	1	0.01	0.00	0.07	
1F	56	0.001	2.155	2.077	0.000	1.812	12.160	1	0.01	0.00	0.07	
1G	56	0.001	2.090	-2.560	0.000	-1.451	12.372	1	0.01	0.00	0.07	
1H	56	0.001	2.155	-2.560	0.000	-1.451	12.160	1	0.01	0.00	0.07	
1I	56	-0.010	2.036	0.595	0.000	0.776	12.564	1	0.01	0.00	0.07	
1J	56	-0.010	2.209	0.595	0.000	0.776	11.968	1	0.01	0.00	0.07	
1K	56	-0.010	2.036	-1.077	0.000	-0.414	12.564	1	0.01	0.00	0.07	
1L	56	-0.010	2.209	-1.077	0.000	-0.414	11.968	1	0.01	0.00	0.07	
1M	56	0.007	2.036	0.595	0.000	0.776	12.564	1	0.01	0.00	0.07	
1N	56	0.007	2.209	0.595	0.000	0.776	11.968	1	0.01	0.00	0.07	
1O	56	0.007	2.036	-1.077	0.000	-0.414	12.564	1	0.01	0.00	0.07	
1P	56	0.007	2.209	-1.077	0.000	-0.414	11.968	1	0.01	0.00	0.07	
2	56	-0.003	3.863	-0.438	0.000	0.323	22.323	1	0.01	0.00	0.13	
7	56	-0.002	2.100	-0.243	0.000	0.180	12.133	1	0.01	0.00	0.07	
8	56	-0.002	2.094	-0.238	0.000	0.176	12.077	1	0.01	0.00	0.07	
9	56	-0.001	2.378	-0.268	0.000	0.211	13.747	1	0.01	0.00	0.08	
10	56	-0.001	2.363	-0.271	0.000	0.211	13.737	1	0.01	0.00	0.08	
11	56	-0.003	3.467	-0.396	0.000	0.290	20.037	1	0.01	0.00	0.12	
12	56	-0.003	3.464	-0.393	0.000	0.287	20.007	1	0.01	0.00	0.12	
13	56	-0.003	3.634	-0.411	0.000	0.309	21.011	1	0.01	0.00	0.12	
14	56	-0.003	3.625	-0.413	0.000	0.309	21.001	1	0.01	0.00	0.12	
1A	113	-0.004	-1.399	2.077	0.000	3.252	12.603	1	0.00	0.00	0.07	
1B	113	-0.004	-1.333	2.077	0.000	3.252	12.357	1	0.00	0.00	0.07	
1C	113	-0.004	-1.399	-2.560	0.000	-2.619	12.603	1	0.00	0.00	0.07	
1D	113	-0.004	-1.333	-2.560	0.000	-2.619	12.357	1	0.00	0.00	0.07	
1E	113	0.001	-1.399	2.077	0.000	3.252	12.603	1	0.00	0.00	0.07	
1F	113	0.001	-1.333	2.077	0.000	3.252	12.357	1	0.00	0.00	0.07	
1G	113	0.001	-1.399	-2.560	0.000	-2.619	12.603	1	0.00	0.00	0.07	
1H	113	0.001	-1.333	-2.560	0.000	-2.619	12.357	1	0.00	0.00	0.07	
1I	113	-0.010	-1.453	0.595	0.000	1.382	12.827	1	0.00	0.00	0.08	
1J	113	-0.010	-1.279	0.595	0.000	1.382	12.133	1	0.00	0.00	0.07	
1K	113	-0.010	-1.453	-1.077	0.000	-0.749	12.827	1	0.00	0.00	0.08	
1L	113	-0.010	-1.279	-1.077	0.000	-0.749	12.133	1	0.00	0.00	0.07	
1M	113	0.007	-1.453	0.595	0.000	1.382	12.827	1	0.00	0.00	0.08	
1N	113	0.007	-1.279	0.595	0.000	1.382	12.133	1	0.00	0.00	0.07	
1O	113	0.007	-1.453	-1.077	0.000	-0.749	12.827	1	0.00	0.00	0.08	
1P	113	0.007	-1.279	-1.077	0.000	-0.749	12.133	1	0.00	0.00	0.07	
2	113	-0.003	-2.514	-0.438	0.000	0.570	22.700	1	0.01	0.00	0.13	
7	113	-0.002	-1.332	-0.243	0.000	0.316	12.350	1	0.00	0.00	0.07	
8	113	-0.002	-1.338	-0.238	0.000	0.310	12.290	1	0.00	0.00	0.07	
9	113	-0.001	-1.523	-0.268	0.000	0.362	13.990	1	0.00	0.00	0.08	
10	113	-0.001	-1.538	-0.271	0.000	0.364	13.970	1	0.00	0.00	0.08	
11	113	-0.003	-2.247	-0.396	0.000	0.512	20.380	1	0.01	0.00	0.12	
12	113	-0.003	-2.251	-0.393	0.000	0.508	20.350	1	0.01	0.00	0.12	
13	113	-0.003	-2.362	-0.411	0.000	0.540	21.370	1	0.01	0.00	0.13	
14	113	-0.003	-2.371	-0.413	0.000	0.541	21.350	1	0.01	0.00	0.13	

ASTA NUM. 97 NI 182 NF 189 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.003	-1.482	2.336	0.000	3.211	12.573	1	0.00	0.00	0.07	
1B	0	0.003	-1.370	2.336	0.000	3.211	12.327	1	0.00	0.00	0.07	
1C	0	0.003	-1.482	-2.315	0.000	-2.662	12.573	1	0.00	0.00	0.07	

1D	0	0.003	-1.370	-2.315	0.000	-2.662	12.327	1	0.00	0.00	0.07
1E	0	0.010	-1.482	2.336	0.000	3.211	12.573	1	0.00	0.00	0.07
1F	0	0.010	-1.370	2.336	0.000	3.211	12.327	1	0.00	0.00	0.07
1G	0	0.010	-1.482	-2.315	0.000	-2.662	12.573	1	0.00	0.00	0.07
1H	0	0.010	-1.370	-2.315	0.000	-2.662	12.327	1	0.00	0.00	0.07
1I	0	-0.002	-1.524	0.863	0.000	1.343	12.796	1	0.00	0.00	0.08
1J	0	-0.002	-1.328	0.863	0.000	1.343	12.104	1	0.00	0.00	0.07
1K	0	-0.002	-1.524	-0.842	0.000	-0.794	12.796	1	0.00	0.00	0.08
1L	0	-0.002	-1.328	-0.842	0.000	-0.794	12.104	1	0.00	0.00	0.07
1M	0	0.015	-1.524	0.863	0.000	1.343	12.796	1	0.00	0.00	0.08
1N	0	0.015	-1.328	0.863	0.000	1.343	12.104	1	0.00	0.00	0.07
1O	0	0.015	-1.524	-0.842	0.000	-0.794	12.796	1	0.00	0.00	0.08
1P	0	0.015	-1.328	-0.842	0.000	-0.794	12.104	1	0.00	0.00	0.07
2	0	0.012	-2.570	0.018	0.000	0.493	22.650	1	0.01	0.00	0.13
7	0	0.007	-1.423	0.012	0.000	0.274	12.320	1	0.00	0.00	0.07
8	0	0.007	-1.405	0.010	0.000	0.268	12.260	1	0.00	0.00	0.07
9	0	0.007	-1.621	0.012	0.000	0.315	13.960	1	0.00	0.00	0.08
10	0	0.007	-1.636	0.016	0.000	0.317	13.940	1	0.00	0.00	0.08
11	0	0.011	-2.312	0.018	0.000	0.444	20.330	1	0.01	0.00	0.12
12	0	0.011	-2.301	0.017	0.000	0.440	20.300	1	0.01	0.00	0.12
13	0	0.011	-2.430	0.017	0.000	0.468	21.320	1	0.01	0.00	0.13
14	0	0.011	-2.439	0.020	0.000	0.469	21.300	1	0.01	0.00	0.13
1A	56	0.003	-4.971	2.336	0.000	1.898	10.776	1	0.01	0.00	0.06
1B	56	0.003	-4.859	2.336	0.000	1.898	10.552	1	0.01	0.00	0.06
1C	56	0.003	-4.971	-2.315	0.000	-1.361	10.776	1	0.01	0.00	0.06
1D	56	0.003	-4.859	-2.315	0.000	-1.361	10.552	1	0.01	0.00	0.06
1E	56	0.010	-4.971	2.336	0.000	1.898	10.776	1	0.01	0.00	0.06
1F	56	0.010	-4.859	2.336	0.000	1.898	10.552	1	0.01	0.00	0.06
1G	56	0.010	-4.971	-2.315	0.000	-1.361	10.776	1	0.01	0.00	0.06
1H	56	0.010	-4.859	-2.315	0.000	-1.361	10.552	1	0.01	0.00	0.06
1I	56	-0.002	-5.013	0.863	0.000	0.857	10.962	1	0.01	0.00	0.07
1J	56	-0.002	-4.817	0.863	0.000	0.857	10.367	1	0.01	0.00	0.06
1K	56	-0.002	-5.013	-0.842	0.000	-0.321	10.962	1	0.01	0.00	0.07
1L	56	-0.002	-4.817	-0.842	0.000	-0.321	10.367	1	0.01	0.00	0.06
1M	56	0.015	-5.013	0.863	0.000	0.857	10.962	1	0.01	0.00	0.07
1N	56	0.015	-4.817	0.863	0.000	0.857	10.367	1	0.01	0.00	0.06
1O	56	0.015	-5.013	-0.842	0.000	-0.321	10.962	1	0.01	0.00	0.07
1P	56	0.015	-4.817	-0.842	0.000	-0.321	10.367	1	0.01	0.00	0.06
2	56	0.012	-8.945	0.018	0.000	0.483	19.408	1	0.02	0.00	0.12
7	56	0.007	-4.855	0.012	0.000	0.267	10.554	1	0.01	0.00	0.06
8	56	0.007	-4.836	0.010	0.000	0.262	10.504	1	0.01	0.00	0.06
9	56	0.007	-5.523	0.012	0.000	0.309	11.950	1	0.01	0.00	0.07
10	56	0.007	-5.537	0.016	0.000	0.308	11.921	1	0.01	0.00	0.07
11	56	0.011	-8.026	0.018	0.000	0.434	17.422	1	0.02	0.00	0.10
12	56	0.011	-8.016	0.017	0.000	0.430	17.397	1	0.02	0.00	0.10
13	56	0.011	-8.425	0.017	0.000	0.458	18.266	1	0.02	0.00	0.11
14	56	0.011	-8.434	0.020	0.000	0.458	18.241	1	0.02	0.00	0.11
1A	113	0.003	-8.460	2.336	0.000	0.584	7.017	1	0.02	0.00	0.04
1B	113	0.003	-8.348	2.336	0.000	0.584	6.815	1	0.02	0.00	0.04
1C	113	0.003	-8.460	-2.315	0.000	-0.059	7.017	1	0.02	0.00	0.04
1D	113	0.003	-8.348	-2.315	0.000	-0.059	6.815	1	0.02	0.00	0.04
1E	113	0.010	-8.460	2.336	0.000	0.584	7.017	1	0.02	0.00	0.04
1F	113	0.010	-8.348	2.336	0.000	0.584	6.815	1	0.02	0.00	0.04
1G	113	0.010	-8.460	-2.315	0.000	-0.059	7.017	1	0.02	0.00	0.04
1H	113	0.010	-8.348	-2.315	0.000	-0.059	6.815	1	0.02	0.00	0.04
1I	113	-0.002	-8.502	0.863	0.000	0.372	7.164	1	0.02	0.00	0.04
1J	113	-0.002	-8.306	0.863	0.000	0.372	6.668	1	0.02	0.00	0.04
1K	113	-0.002	-8.502	-0.842	0.000	0.153	7.164	1	0.02	0.00	0.04
1L	113	-0.002	-8.306	-0.842	0.000	0.153	6.668	1	0.02	0.00	0.04
1M	113	0.015	-8.502	0.863	0.000	0.372	7.164	1	0.02	0.00	0.04
1N	113	0.015	-8.306	0.863	0.000	0.372	6.668	1	0.02	0.00	0.04
1O	113	0.015	-8.502	-0.842	0.000	0.153	7.164	1	0.02	0.00	0.04
1P	113	0.015	-8.306	-0.842	0.000	0.153	6.668	1	0.02	0.00	0.04
2	113	0.012	-15.320	0.018	0.000	0.472	12.580	1	0.04	0.00	0.07
7	113	0.007	-8.286	0.012	0.000	0.260	6.857	1	0.02	0.00	0.04
8	113	0.007	-8.267	0.010	0.000	0.256	6.818	1	0.02	0.00	0.04
9	113	0.007	-9.424	0.012	0.000	0.302	7.745	1	0.03	0.00	0.05
10	113	0.007	-9.438	0.016	0.000	0.300	7.708	1	0.03	0.00	0.05
11	113	0.011	-13.740	0.018	0.000	0.424	11.300	1	0.04	0.00	0.07
12	113	0.011	-13.730	0.017	0.000	0.421	11.280	1	0.04	0.00	0.07
13	113	0.011	-14.420	0.017	0.000	0.449	11.840	1	0.04	0.00	0.07
14	113	0.011	-14.430	0.020	0.000	0.447	11.810	1	0.04	0.00	0.07

ASTA NUM. 98 NI 189 NF 80 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.021	-8.417	9.028	0.000	3.118	7.047	1	0.02	0.00	0.04	
1B	0	-0.021	-7.625	9.028	0.000	3.118	6.811	1	0.02	0.00	0.04	
1C	0	-0.021	-8.417	-5.444	0.000	-1.762	7.047	1	0.02	0.00	0.04	
1D	0	-0.021	-7.625	-5.444	0.000	-1.762	6.811	1	0.02	0.00	0.04	
1E	0	-0.003	-8.417	9.028	0.000	3.118	7.047	1	0.02	0.00	0.04	
1F	0	-0.003	-7.625	9.028	0.000	3.118	6.811	1	0.02	0.00	0.04	
1G	0	-0.003	-8.417	-5.444	0.000	-1.762	7.047	1	0.02	0.00	0.04	
1H	0	-0.003	-7.625	-5.444	0.000	-1.762	6.811	1	0.02	0.00	0.04	
1I	0	-0.038	-8.371	4.414	0.000	1.558	7.186	1	0.02	0.00	0.04	
1J	0	-0.038	-7.671	4.414	0.000	1.558	6.672	1	0.02	0.00	0.04	
1K	0	-0.038	-8.371	-0.830	0.000	-0.203	7.186	1	0.02	0.00	0.04	
1L	0	-0.038	-7.671	-0.830	0.000	-0.203	6.672	1	0.02	0.00	0.04	

1M	0	0.014	-8.371	4.414	0.000	1.558	7.186	1	0.02	0.00	0.04
1N	0	0.014	-7.671	4.414	0.000	1.558	6.672	1	0.02	0.00	0.04
1O	0	0.014	-8.371	-0.830	0.000	-0.203	7.186	1	0.02	0.00	0.04
1P	0	0.014	-7.671	-0.830	0.000	-0.203	6.672	1	0.02	0.00	0.04
2	0	-0.021	-14.580	3.227	0.000	1.220	12.610	1	0.04	0.00	0.07
7	0	-0.011	-7.940	1.780	0.000	0.673	6.870	1	0.02	0.00	0.04
8	0	-0.010	-7.865	1.752	0.000	0.662	6.827	1	0.02	0.00	0.04
9	0	-0.014	-9.037	2.055	0.000	0.778	7.760	1	0.02	0.00	0.05
10	0	-0.013	-9.067	2.049	0.000	0.775	7.725	1	0.02	0.00	0.05
11	0	-0.018	-13.080	2.897	0.000	1.095	11.330	1	0.03	0.00	0.07
12	0	-0.018	-13.040	2.880	0.000	1.089	11.300	1	0.03	0.00	0.07
13	0	-0.020	-13.740	3.062	0.000	1.158	11.860	1	0.04	0.00	0.07
14	0	-0.020	-13.760	3.059	0.000	1.157	11.840	1	0.04	0.00	0.07
1A	56	-0.021	-11.907	9.028	0.000	-1.960	1.330	1	0.03	0.00	0.02
1B	56	-0.021	-11.114	9.028	0.000	-1.960	1.542	1	0.03	0.00	0.02
1C	56	-0.021	-11.907	-5.444	0.000	1.300	1.330	1	0.03	0.00	0.02
1D	56	-0.021	-11.114	-5.444	0.000	1.300	1.542	1	0.03	0.00	0.02
1E	56	-0.003	-11.907	9.028	0.000	-1.960	1.330	1	0.03	0.00	0.02
1F	56	-0.003	-11.114	9.028	0.000	-1.960	1.542	1	0.03	0.00	0.02
1G	56	-0.003	-11.907	-5.444	0.000	1.300	1.330	1	0.03	0.00	0.02
1H	56	-0.003	-11.114	-5.444	0.000	1.300	1.542	1	0.03	0.00	0.02
1I	56	-0.038	-11.860	4.414	0.000	-0.925	1.496	1	0.03	0.00	0.01
1J	56	-0.038	-11.161	4.414	0.000	-0.925	1.377	1	0.03	0.00	0.01
1K	56	-0.038	-11.860	-0.830	0.000	0.264	1.496	1	0.03	0.00	0.01
1L	56	-0.038	-11.161	-0.830	0.000	0.264	1.377	1	0.03	0.00	0.01
1M	56	0.014	-11.860	4.414	0.000	-0.925	1.496	1	0.03	0.00	0.01
1N	56	0.014	-11.161	4.414	0.000	-0.925	1.377	1	0.03	0.00	0.01
1O	56	0.014	-11.860	-0.830	0.000	0.264	1.496	1	0.03	0.00	0.01
1P	56	0.014	-11.161	-0.830	0.000	0.264	1.377	1	0.03	0.00	0.01
2	56	-0.021	-20.955	3.227	0.000	-0.595	2.618	1	0.06	0.00	0.02
7	56	-0.011	-11.370	1.780	0.000	-0.328	1.439	1	0.03	0.00	0.01
8	56	-0.010	-11.298	1.752	0.000	-0.323	1.438	1	0.03	0.00	0.01
9	56	-0.014	-12.939	2.055	0.000	-0.378	1.579	1	0.03	0.00	0.01
10	56	-0.013	-12.969	2.049	0.000	-0.377	1.527	1	0.03	0.00	0.01
11	56	-0.018	-18.795	2.897	0.000	-0.535	2.361	1	0.05	0.00	0.01
12	56	-0.018	-18.755	2.880	0.000	-0.531	2.359	1	0.05	0.00	0.01
13	56	-0.020	-19.735	3.062	0.000	-0.565	2.441	1	0.05	0.00	0.01
14	56	-0.020	-19.755	3.059	0.000	-0.563	2.411	1	0.05	0.00	0.01
1A	113	-0.021	-15.396	9.028	0.000	-7.038	-6.349	1	0.04	0.00	0.09
1B	113	-0.021	-14.604	9.028	0.000	-7.038	-5.689	1	0.04	0.00	0.09
1C	113	-0.021	-15.396	-5.444	0.000	4.362	-6.349	1	0.04	0.00	0.06
1D	113	-0.021	-14.604	-5.444	0.000	4.362	-5.689	1	0.04	0.00	0.06
1E	113	-0.003	-15.396	9.028	0.000	-7.038	-6.349	1	0.04	0.00	0.09
1F	113	-0.003	-14.604	9.028	0.000	-7.038	-5.689	1	0.04	0.00	0.09
1G	113	-0.003	-15.396	-5.444	0.000	4.362	-6.349	1	0.04	0.00	0.06
1H	113	-0.003	-14.604	-5.444	0.000	4.362	-5.689	1	0.04	0.00	0.06
1I	113	-0.038	-15.350	4.414	0.000	-3.407	-6.157	1	0.04	0.00	0.04
1J	113	-0.038	-14.650	4.414	0.000	-3.407	-5.881	1	0.04	0.00	0.04
1K	113	-0.038	-15.350	-0.830	0.000	0.731	-6.157	1	0.04	0.00	0.04
1L	113	-0.038	-14.650	-0.830	0.000	0.731	-5.881	1	0.04	0.00	0.03
1M	113	0.014	-15.350	4.414	0.000	-3.407	-6.157	1	0.04	0.00	0.04
1N	113	0.014	-14.650	4.414	0.000	-3.407	-5.881	1	0.04	0.00	0.04
1O	113	0.014	-15.350	-0.830	0.000	0.731	-6.157	1	0.04	0.00	0.04
1P	113	0.014	-14.650	-0.830	0.000	0.731	-5.881	1	0.04	0.00	0.03
2	113	-0.021	-27.330	3.227	0.000	-2.410	-10.960	1	0.07	0.00	0.07
7	113	-0.011	-14.800	1.780	0.000	-1.329	-5.923	1	0.04	0.00	0.04
8	113	-0.010	-14.730	1.752	0.000	-1.308	-5.881	1	0.04	0.00	0.03
9	113	-0.014	-16.840	2.055	0.000	-1.534	-6.796	1	0.04	0.00	0.04
10	113	-0.013	-16.870	2.049	0.000	-1.530	-6.865	1	0.04	0.00	0.04
11	113	-0.018	-24.510	2.897	0.000	-2.164	-9.822	1	0.07	0.00	0.06
12	113	-0.018	-24.470	2.880	0.000	-2.151	-9.797	1	0.07	0.00	0.06
13	113	-0.020	-25.730	3.062	0.000	-2.287	-10.350	1	0.07	0.00	0.06
14	113	-0.020	-25.750	3.059	0.000	-2.284	-10.390	1	0.07	0.00	0.06

ASTA NUM. 28 NI 80 NF 227 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.021	7.544	1.800	0.000	1.079	-5.706	1	0.02	0.00	0.03	
1B	0	-0.021	8.628	1.800	0.000	1.079	-6.204	1	0.02	0.00	0.04	
1C	0	-0.021	7.544	-6.208	0.000	-3.575	-5.706	1	0.02	0.00	0.05	
1D	0	-0.021	8.628	-6.208	0.000	-3.575	-6.204	1	0.02	0.00	0.05	
1E	0	-0.003	7.544	1.800	0.000	1.079	-5.706	1	0.02	0.00	0.03	
1F	0	-0.003	8.628	1.800	0.000	1.079	-6.204	1	0.02	0.00	0.04	
1G	0	-0.003	7.544	-6.208	0.000	-3.575	-5.706	1	0.02	0.00	0.05	
1H	0	-0.003	8.628	-6.208	0.000	-3.575	-6.204	1	0.02	0.00	0.05	
1I	0	-0.028	7.860	-0.868	0.000	-0.473	-5.849	1	0.02	0.00	0.03	
1J	0	-0.028	8.312	-0.868	0.000	-0.473	-6.061	1	0.02	0.00	0.04	
1K	0	-0.028	7.860	-3.540	0.000	-2.023	-5.849	1	0.02	0.00	0.03	
1L	0	-0.028	8.312	-3.540	0.000	-2.023	-6.061	1	0.02	0.00	0.04	
1M	0	0.003	7.860	-0.868	0.000	-0.473	-5.849	1	0.02	0.00	0.03	
1N	0	0.003	8.312	-0.868	0.000	-0.473	-6.061	1	0.02	0.00	0.04	
1O	0	0.003	7.860	-3.540	0.000	-2.023	-5.849	1	0.02	0.00	0.03	
1P	0	0.003	8.312	-3.540	0.000	-2.023	-6.061	1	0.02	0.00	0.04	
2	0	-0.022	14.740	-3.962	0.000	-2.242	-10.850	1	0.04	0.00	0.06	
7	0	-0.012	7.965	-2.195	0.000	-1.243	-5.859	1	0.02	0.00	0.03	
8	0	-0.012	7.883	-2.156	0.000	-1.220	-5.818	1	0.02	0.00	0.03	
9	0	-0.015	9.105	-2.536	0.000	-1.436	-6.726	1	0.02	0.00	0.04	
10	0	-0.014	9.161	-2.533	0.000	-1.434	-6.791	1	0.02	0.00	0.04	

11	0	-0.020	13.210	-3.559	0.000	-2.014	-9.716	1	0.04	0.00	0.06
12	0	-0.019	13.160	-3.536	0.000	-2.000	-9.692	1	0.04	0.00	0.06
13	0	-0.021	13.900	-3.764	0.000	-2.130	-10.240	1	0.04	0.00	0.06
14	0	-0.021	13.930	-3.762	0.000	-2.129	-10.280	1	0.04	0.00	0.06
1A	47	-0.021	4.649	1.800	0.000	0.239	-2.861	1	0.01	0.00	0.02
1B	47	-0.021	5.734	1.800	0.000	0.239	-2.853	1	0.02	0.00	0.02
1C	47	-0.021	4.649	-6.208	0.000	-0.677	-2.861	1	0.01	0.00	0.02
1D	47	-0.021	5.734	-6.208	0.000	-0.677	-2.853	1	0.02	0.00	0.02
1E	47	-0.003	4.649	1.800	0.000	0.239	-2.861	1	0.01	0.00	0.02
1F	47	-0.003	5.734	1.800	0.000	0.239	-2.853	1	0.02	0.00	0.02
1G	47	-0.003	4.649	-6.208	0.000	-0.677	-2.861	1	0.01	0.00	0.02
1H	47	-0.003	5.734	-6.208	0.000	-0.677	-2.853	1	0.02	0.00	0.02
1I	47	-0.028	4.965	-0.868	0.000	-0.067	-2.856	1	0.01	0.00	0.02
1J	47	-0.028	5.418	-0.868	0.000	-0.067	-2.858	1	0.01	0.00	0.02
1K	47	-0.028	4.965	-3.540	0.000	-0.371	-2.856	1	0.01	0.00	0.02
1L	47	-0.028	5.418	-3.540	0.000	-0.371	-2.858	1	0.01	0.00	0.02
1M	47	0.003	4.965	-0.868	0.000	-0.067	-2.856	1	0.01	0.00	0.02
1N	47	0.003	5.418	-0.868	0.000	-0.067	-2.858	1	0.01	0.00	0.02
1O	47	0.003	4.965	-3.540	0.000	-0.371	-2.856	1	0.01	0.00	0.02
1P	47	0.003	5.418	-3.540	0.000	-0.371	-2.858	1	0.01	0.00	0.02
2	47	-0.022	9.451	-3.962	0.000	-0.393	-5.204	1	0.03	0.00	0.03
7	47	-0.012	5.119	-2.195	0.000	-0.219	-2.806	1	0.01	0.00	0.02
8	47	-0.012	5.036	-2.156	0.000	-0.214	-2.804	1	0.01	0.00	0.02
9	47	-0.015	5.868	-2.536	0.000	-0.253	-3.232	1	0.02	0.00	0.02
10	47	-0.014	5.925	-2.533	0.000	-0.252	-3.271	1	0.02	0.00	0.02
11	47	-0.020	8.471	-3.559	0.000	-0.353	-4.656	1	0.02	0.00	0.03
12	47	-0.019	8.421	-3.536	0.000	-0.350	-4.655	1	0.02	0.00	0.03
13	47	-0.021	8.924	-3.764	0.000	-0.374	-4.914	1	0.02	0.00	0.03
14	47	-0.021	8.956	-3.762	0.000	-0.374	-4.938	1	0.02	0.00	0.03
1A	93	-0.021	1.755	1.800	0.000	-0.601	-1.367	1	0.00	0.00	0.01
1B	93	-0.021	2.839	1.800	0.000	-0.601	-0.853	1	0.01	0.00	0.01
1C	93	-0.021	1.755	-6.208	0.000	2.221	-1.367	1	0.01	0.00	0.03
1D	93	-0.021	2.839	-6.208	0.000	2.221	-0.853	1	0.01	0.00	0.03
1E	93	-0.003	1.755	1.800	0.000	-0.601	-1.367	1	0.00	0.00	0.01
1F	93	-0.003	2.839	1.800	0.000	-0.601	-0.853	1	0.01	0.00	0.01
1G	93	-0.003	1.755	-6.208	0.000	2.221	-1.367	1	0.01	0.00	0.03
1H	93	-0.003	2.839	-6.208	0.000	2.221	-0.853	1	0.01	0.00	0.03
1I	93	-0.028	2.071	-0.868	0.000	0.338	-1.215	1	0.01	0.00	0.01
1J	93	-0.028	2.523	-0.868	0.000	0.338	-1.006	1	0.01	0.00	0.01
1K	93	-0.028	2.071	-3.540	0.000	1.281	-1.215	1	0.01	0.00	0.02
1L	93	-0.028	2.523	-3.540	0.000	1.281	-1.006	1	0.01	0.00	0.02
1M	93	0.003	2.071	-0.868	0.000	0.338	-1.215	1	0.01	0.00	0.01
1N	93	0.003	2.523	-0.868	0.000	0.338	-1.006	1	0.01	0.00	0.01
1O	93	0.003	2.071	-3.540	0.000	1.281	-1.215	1	0.01	0.00	0.02
1P	93	0.003	2.523	-3.540	0.000	1.281	-1.006	1	0.01	0.00	0.02
2	93	-0.022	4.161	-3.962	0.000	1.456	-2.026	1	0.01	0.00	0.02
7	93	-0.012	2.272	-2.195	0.000	0.806	-1.082	1	0.01	0.00	0.01
8	93	-0.012	2.189	-2.156	0.000	0.792	-1.118	1	0.01	0.00	0.01
9	93	-0.015	2.632	-2.536	0.000	0.931	-1.248	1	0.01	0.00	0.01
10	93	-0.014	2.689	-2.533	0.000	0.930	-1.261	1	0.01	0.00	0.01
11	93	-0.020	3.732	-3.559	0.000	1.308	-1.809	1	0.01	0.00	0.02
12	93	-0.019	3.682	-3.536	0.000	1.300	-1.830	1	0.01	0.00	0.02
13	93	-0.021	3.948	-3.764	0.000	1.383	-1.909	1	0.01	0.00	0.02
14	93	-0.021	3.982	-3.762	0.000	1.382	-1.917	1	0.01	0.00	0.02

ASTA NUM. 99 NI 227 NF 220 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.034	2.973	0.101	0.000	1.459	-0.837	1	0.01	0.00	0.02	
1B	0	0.034	3.075	0.101	0.000	1.459	-1.313	1	0.01	0.00	0.02	
1C	0	0.034	2.973	0.083	0.000	-0.376	-0.837	1	0.01	0.00	0.00	
1D	0	0.034	3.075	0.083	0.000	-0.376	-1.313	1	0.01	0.00	0.01	
1E	0	0.049	2.973	0.101	0.000	1.459	-0.837	1	0.01	0.00	0.02	
1F	0	0.049	3.075	0.101	0.000	1.459	-1.313	1	0.01	0.00	0.02	
1G	0	0.049	2.973	0.083	0.000	-0.376	-0.837	1	0.01	0.00	0.00	
1H	0	0.049	3.075	0.083	0.000	-0.376	-1.313	1	0.01	0.00	0.01	
1I	0	0.039	2.998	0.101	0.000	0.849	-0.975	1	0.01	0.00	0.01	
1J	0	0.039	3.050	0.101	0.000	0.849	-1.175	1	0.01	0.00	0.01	
1K	0	0.039	2.998	0.083	0.000	0.234	-0.975	1	0.01	0.00	0.01	
1L	0	0.039	3.050	0.083	0.000	0.234	-1.175	1	0.01	0.00	0.01	
1M	0	0.045	2.998	0.101	0.000	0.849	-0.975	1	0.01	0.00	0.01	
1N	0	0.045	3.050	0.101	0.000	0.849	-1.175	1	0.01	0.00	0.01	
1O	0	0.045	2.998	0.083	0.000	0.234	-0.975	1	0.01	0.00	0.01	
1P	0	0.045	3.050	0.083	0.000	0.234	-1.175	1	0.01	0.00	0.01	
2	0	0.075	5.527	0.167	0.000	0.974	-1.962	1	0.01	0.00	0.01	
7	0	0.042	2.964	0.090	0.000	0.539	-1.047	1	0.01	0.00	0.01	
8	0	0.040	2.973	0.091	0.000	0.530	-1.082	1	0.01	0.00	0.01	
9	0	0.048	3.383	0.102	0.000	0.622	-1.211	1	0.01	0.00	0.01	
10	0	0.048	3.434	0.102	0.000	0.621	-1.223	1	0.01	0.00	0.01	
11	0	0.067	4.947	0.150	0.000	0.875	-1.752	1	0.01	0.00	0.01	
12	0	0.067	4.952	0.150	0.000	0.870	-1.773	1	0.01	0.00	0.01	
13	0	0.071	5.198	0.157	0.000	0.925	-1.850	1	0.01	0.00	0.01	
14	0	0.071	5.229	0.157	0.000	0.925	-1.858	1	0.01	0.00	0.01	
1A	47	0.034	0.078	0.101	0.000	1.412	-0.125	1	0.00	0.00	0.02	
1B	47	0.034	0.181	0.101	0.000	1.412	-0.554	1	0.00	0.00	0.02	
1C	47	0.034	0.078	0.083	0.000	-0.415	-0.125	1	0.00	0.00	0.01	
1D	47	0.034	0.181	0.083	0.000	-0.415	-0.554	1	0.00	0.00	0.01	

1E	47	0.049	0.078	0.101	0.000	1.412	-0.125	1	0.00	0.00	0.02
1F	47	0.049	0.181	0.101	0.000	1.412	-0.554	1	0.00	0.00	0.02
1G	47	0.049	0.078	0.083	0.000	-0.415	-0.125	1	0.00	0.00	0.01
1H	47	0.049	0.181	0.083	0.000	-0.415	-0.554	1	0.00	0.00	0.01
1I	47	0.039	0.103	0.101	0.000	0.802	-0.252	1	0.00	0.00	0.01
1J	47	0.039	0.156	0.101	0.000	0.802	-0.427	1	0.00	0.00	0.01
1K	47	0.039	0.103	0.083	0.000	0.195	-0.252	1	0.00	0.00	0.00
1L	47	0.039	0.156	0.083	0.000	0.195	-0.427	1	0.00	0.00	0.00
1M	47	0.045	0.103	0.101	0.000	0.802	-0.252	1	0.00	0.00	0.01
1N	47	0.045	0.156	0.101	0.000	0.802	-0.427	1	0.00	0.00	0.01
1O	47	0.045	0.103	0.083	0.000	0.195	-0.252	1	0.00	0.00	0.00
1P	47	0.045	0.156	0.083	0.000	0.195	-0.427	1	0.00	0.00	0.00
2	47	0.075	0.237	0.167	0.000	0.896	-0.618	1	0.00	0.00	0.01
7	47	0.042	0.117	0.090	0.000	0.497	-0.328	1	0.00	0.00	0.01
8	47	0.040	0.126	0.091	0.000	0.488	-0.359	1	0.00	0.00	0.01
9	47	0.048	0.146	0.102	0.000	0.574	-0.388	1	0.00	0.00	0.01
10	47	0.048	0.198	0.102	0.000	0.574	-0.375	1	0.00	0.00	0.01
11	47	0.067	0.207	0.150	0.000	0.805	-0.549	1	0.00	0.00	0.01
12	47	0.067	0.211	0.150	0.000	0.800	-0.568	1	0.00	0.00	0.01
13	47	0.071	0.223	0.157	0.000	0.852	-0.585	1	0.00	0.00	0.01
14	47	0.071	0.254	0.157	0.000	0.852	-0.578	1	0.00	0.00	0.01
1A	93	0.034	-2.816	0.101	0.000	1.365	-0.764	1	0.01	0.00	0.02
1B	93	0.034	-2.714	0.101	0.000	1.365	-1.145	1	0.01	0.00	0.02
1C	93	0.034	-2.816	0.083	0.000	-0.453	-0.764	1	0.01	0.00	0.01
1D	93	0.034	-2.714	0.083	0.000	-0.453	-1.145	1	0.01	0.00	0.01
1E	93	0.049	-2.816	0.101	0.000	1.365	-0.764	1	0.01	0.00	0.02
1F	93	0.049	-2.714	0.101	0.000	1.365	-1.145	1	0.01	0.00	0.02
1G	93	0.049	-2.816	0.083	0.000	-0.453	-0.764	1	0.01	0.00	0.01
1H	93	0.049	-2.714	0.083	0.000	-0.453	-1.145	1	0.01	0.00	0.01
1I	93	0.039	-2.791	0.101	0.000	0.755	-0.879	1	0.01	0.00	0.01
1J	93	0.039	-2.739	0.101	0.000	0.755	-1.030	1	0.01	0.00	0.01
1K	93	0.039	-2.791	0.083	0.000	0.157	-0.879	1	0.01	0.00	0.01
1L	93	0.039	-2.739	0.083	0.000	0.157	-1.030	1	0.01	0.00	0.01
1M	93	0.045	-2.791	0.101	0.000	0.755	-0.879	1	0.01	0.00	0.01
1N	93	0.045	-2.739	0.101	0.000	0.755	-1.030	1	0.01	0.00	0.01
1O	93	0.045	-2.791	0.083	0.000	0.157	-0.879	1	0.01	0.00	0.01
1P	93	0.045	-2.739	0.083	0.000	0.157	-1.030	1	0.01	0.00	0.01
2	93	0.075	-5.054	0.167	0.000	0.818	-1.742	1	0.01	0.00	0.01
7	93	0.042	-2.729	0.090	0.000	0.455	-0.937	1	0.01	0.00	0.01
8	93	0.040	-2.720	0.091	0.000	0.445	-0.964	1	0.01	0.00	0.01
9	93	0.048	-3.090	0.102	0.000	0.527	-1.075	1	0.01	0.00	0.01
10	93	0.048	-3.038	0.102	0.000	0.526	-1.038	1	0.01	0.00	0.01
11	93	0.067	-4.534	0.150	0.000	0.735	-1.559	1	0.01	0.00	0.01
12	93	0.067	-4.529	0.150	0.000	0.730	-1.575	1	0.01	0.00	0.01
13	93	0.071	-4.751	0.157	0.000	0.779	-1.642	1	0.01	0.00	0.01
14	93	0.071	-4.720	0.157	0.000	0.778	-1.620	1	0.01	0.00	0.01

ASTA NUM. 100 NI 220 NF 65 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.021	-2.728	6.038	0.000	2.134	-0.725	1	0.01	0.00	0.03	
1B	0	-0.021	-1.550	6.038	0.000	2.134	-1.141	1	0.01	0.00	0.03	
1C	0	-0.021	-2.728	-1.938	0.000	-0.674	-0.725	1	0.01	0.00	0.01	
1D	0	-0.021	-1.550	-1.938	0.000	-0.674	-1.141	1	0.00	0.00	0.01	
1E	0	-0.008	-2.728	6.038	0.000	2.134	-0.725	1	0.01	0.00	0.03	
1F	0	-0.008	-1.550	6.038	0.000	2.134	-1.141	1	0.01	0.00	0.03	
1G	0	-0.008	-2.728	-1.938	0.000	-0.674	-0.725	1	0.01	0.00	0.01	
1H	0	-0.008	-1.550	-1.938	0.000	-0.674	-1.141	1	0.00	0.00	0.01	
1I	0	-0.029	-2.382	3.370	0.000	1.194	-0.850	1	0.01	0.00	0.01	
1J	0	-0.029	-1.896	3.370	0.000	1.194	-1.015	1	0.01	0.00	0.01	
1K	0	-0.029	-2.382	0.730	0.000	0.266	-0.850	1	0.01	0.00	0.01	
1L	0	-0.029	-1.896	0.730	0.000	0.266	-1.015	1	0.01	0.00	0.01	
1M	0	0.001	-2.382	3.370	0.000	1.194	-0.850	1	0.01	0.00	0.01	
1N	0	0.001	-1.896	3.370	0.000	1.194	-1.015	1	0.01	0.00	0.01	
1O	0	0.001	-2.382	0.730	0.000	0.266	-0.850	1	0.01	0.00	0.01	
1P	0	0.001	-1.896	0.730	0.000	0.266	-1.015	1	0.01	0.00	0.01	
2	0	-0.025	-3.872	3.681	0.000	1.310	-1.702	1	0.01	0.00	0.02	
7	0	-0.014	-2.136	2.043	0.000	0.727	-0.915	1	0.01	0.00	0.01	
8	0	-0.014	-2.036	2.003	0.000	0.713	-0.944	1	0.01	0.00	0.01	
9	0	-0.016	-2.445	2.365	0.000	0.842	-1.050	1	0.01	0.00	0.01	
10	0	-0.017	-2.406	2.364	0.000	0.841	-1.013	1	0.01	0.00	0.01	
11	0	-0.023	-3.484	3.307	0.000	1.177	-1.523	1	0.01	0.00	0.01	
12	0	-0.023	-3.425	3.283	0.000	1.169	-1.540	1	0.01	0.00	0.01	
13	0	-0.024	-3.670	3.500	0.000	1.246	-1.604	1	0.01	0.00	0.02	
14	0	-0.024	-3.646	3.500	0.000	1.246	-1.582	1	0.01	0.00	0.02	
1A	47	-0.021	-5.623	6.038	0.000	-0.684	-2.673	1	0.01	0.00	0.02	
1B	47	-0.021	-4.444	6.038	0.000	-0.684	-2.540	1	0.01	0.00	0.02	
1C	47	-0.021	-5.623	-1.938	0.000	0.230	-2.673	1	0.01	0.00	0.02	
1D	47	-0.021	-4.444	-1.938	0.000	0.230	-2.540	1	0.01	0.00	0.02	
1E	47	-0.008	-5.623	6.038	0.000	-0.684	-2.673	1	0.01	0.00	0.02	
1F	47	-0.008	-4.444	6.038	0.000	-0.684	-2.540	1	0.01	0.00	0.02	
1G	47	-0.008	-5.623	-1.938	0.000	0.230	-2.673	1	0.01	0.00	0.02	
1H	47	-0.008	-4.444	-1.938	0.000	0.230	-2.540	1	0.01	0.00	0.02	
1I	47	-0.029	-5.276	3.370	0.000	-0.379	-2.637	1	0.01	0.00	0.02	
1J	47	-0.029	-4.791	3.370	0.000	-0.379	-2.576	1	0.01	0.00	0.02	
1K	47	-0.029	-5.276	0.730	0.000	-0.075	-2.637	1	0.01	0.00	0.02	
1L	47	-0.029	-4.791	0.730	0.000	-0.075	-2.576	1	0.01	0.00	0.02	
1M	47	0.001	-5.276	3.370	0.000	-0.379	-2.637	1	0.01	0.00	0.02	

1N	47	0.001	-4.791	3.370	0.000	-0.379	-2.576	1	0.01	0.00	0.02
1O	47	0.001	-5.276	0.730	0.000	-0.075	-2.637	1	0.01	0.00	0.02
1P	47	0.001	-4.791	0.730	0.000	-0.075	-2.576	1	0.01	0.00	0.02
2	47	-0.025	-9.161	3.681	0.000	-0.407	-4.742	1	0.02	0.00	0.03
7	47	-0.014	-4.983	2.043	0.000	-0.226	-2.576	1	0.01	0.00	0.02
8	47	-0.014	-4.883	2.003	0.000	-0.222	-2.558	1	0.01	0.00	0.02
9	47	-0.016	-5.681	2.365	0.000	-0.262	-2.946	1	0.02	0.00	0.02
10	47	-0.017	-5.642	2.364	0.000	-0.262	-2.891	1	0.02	0.00	0.02
11	47	-0.023	-8.227	3.307	0.000	-0.366	-4.255	1	0.02	0.00	0.03
12	47	-0.023	-8.168	3.283	0.000	-0.363	-4.244	1	0.02	0.00	0.03
13	47	-0.024	-8.645	3.500	0.000	-0.387	-4.477	1	0.02	0.00	0.03
14	47	-0.024	-8.623	3.500	0.000	-0.387	-4.444	1	0.02	0.00	0.03
1A	93	-0.021	-8.517	6.038	0.000	-3.502	-5.973	1	0.02	0.00	0.04
1B	93	-0.021	-7.339	6.038	0.000	-3.502	-5.289	1	0.02	0.00	0.04
1C	93	-0.021	-8.517	-1.938	0.000	1.134	-5.973	1	0.02	0.00	0.04
1D	93	-0.021	-7.339	-1.938	0.000	1.134	-5.289	1	0.02	0.00	0.03
1E	93	-0.008	-8.517	6.038	0.000	-3.502	-5.973	1	0.02	0.00	0.04
1F	93	-0.008	-7.339	6.038	0.000	-3.502	-5.289	1	0.02	0.00	0.04
1G	93	-0.008	-8.517	-1.938	0.000	1.134	-5.973	1	0.02	0.00	0.04
1H	93	-0.008	-7.339	-1.938	0.000	1.134	-5.289	1	0.02	0.00	0.03
1I	93	-0.029	-8.171	3.370	0.000	-1.952	-5.775	1	0.02	0.00	0.03
1J	93	-0.029	-7.685	3.370	0.000	-1.952	-5.487	1	0.02	0.00	0.03
1K	93	-0.029	-8.171	0.730	0.000	-0.416	-5.775	1	0.02	0.00	0.03
1L	93	-0.029	-7.685	0.730	0.000	-0.416	-5.487	1	0.02	0.00	0.03
1M	93	0.001	-8.171	3.370	0.000	-1.952	-5.775	1	0.02	0.00	0.03
1N	93	0.001	-7.685	3.370	0.000	-1.952	-5.487	1	0.02	0.00	0.03
1O	93	0.001	-8.171	0.730	0.000	-0.416	-5.775	1	0.02	0.00	0.03
1P	93	0.001	-7.685	0.730	0.000	-0.416	-5.487	1	0.02	0.00	0.03
2	93	-0.025	-14.450	3.681	0.000	-2.125	-10.250	1	0.04	0.00	0.06
7	93	-0.014	-7.829	2.043	0.000	-1.179	-5.566	1	0.02	0.00	0.03
8	93	-0.014	-7.730	2.003	0.000	-1.156	-5.501	1	0.02	0.00	0.03
9	93	-0.016	-8.917	2.365	0.000	-1.365	-6.352	1	0.02	0.00	0.04
10	93	-0.017	-8.879	2.364	0.000	-1.365	-6.279	1	0.02	0.00	0.04
11	93	-0.023	-12.970	3.307	0.000	-1.909	-9.200	1	0.03	0.00	0.05
12	93	-0.023	-12.910	3.283	0.000	-1.895	-9.161	1	0.03	0.00	0.05
13	93	-0.024	-13.620	3.500	0.000	-2.021	-9.672	1	0.04	0.00	0.06
14	93	-0.024	-13.600	3.500	0.000	-2.020	-9.628	1	0.04	0.00	0.06

ASTA NUM. 29 NI 65 NF 213 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.024	7.740	2.147	0.000	1.264	-5.284	1	0.02	0.00	0.03	
1B	0	-0.024	8.778	2.147	0.000	1.264	-5.968	1	0.02	0.00	0.04	
1C	0	-0.024	7.740	-5.767	0.000	-3.334	-5.284	1	0.02	0.00	0.04	
1D	0	-0.024	8.778	-5.767	0.000	-3.334	-5.968	1	0.02	0.00	0.04	
1E	0	-0.007	7.740	2.147	0.000	1.264	-5.284	1	0.02	0.00	0.03	
1F	0	-0.007	8.778	2.147	0.000	1.264	-5.968	1	0.02	0.00	0.04	
1G	0	-0.007	7.740	-5.767	0.000	-3.334	-5.284	1	0.02	0.00	0.04	
1H	0	-0.007	8.778	-5.767	0.000	-3.334	-5.968	1	0.02	0.00	0.04	
1I	0	-0.032	8.086	-0.614	0.000	-0.341	-5.485	1	0.02	0.00	0.03	
1J	0	-0.032	8.432	-0.614	0.000	-0.341	-5.767	1	0.02	0.00	0.03	
1K	0	-0.032	8.086	-3.006	0.000	-1.729	-5.485	1	0.02	0.00	0.03	
1L	0	-0.032	8.432	-3.006	0.000	-1.729	-5.767	1	0.02	0.00	0.03	
1M	0	-0.000	8.086	-0.614	0.000	-0.341	-5.485	1	0.02	0.00	0.03	
1N	0	-0.000	8.432	-0.614	0.000	-0.341	-5.767	1	0.02	0.00	0.03	
1O	0	-0.000	8.086	-3.006	0.000	-1.729	-5.485	1	0.02	0.00	0.03	
1P	0	-0.000	8.432	-3.006	0.000	-1.729	-5.767	1	0.02	0.00	0.03	
2	0	-0.028	15.050	-3.244	0.000	-1.854	-10.240	1	0.04	0.00	0.06	
7	0	-0.016	8.143	-1.804	0.000	-1.031	-5.560	1	0.02	0.00	0.03	
8	0	-0.015	8.055	-1.765	0.000	-1.009	-5.496	1	0.02	0.00	0.03	
9	0	-0.019	9.321	-2.098	0.000	-1.200	-6.347	1	0.02	0.00	0.04	
10	0	-0.018	9.268	-2.096	0.000	-1.199	-6.273	1	0.02	0.00	0.04	
11	0	-0.025	13.500	-2.914	0.000	-1.665	-9.191	1	0.04	0.00	0.05	
12	0	-0.025	13.440	-2.891	0.000	-1.652	-9.153	1	0.04	0.00	0.05	
13	0	-0.027	14.200	-3.091	0.000	-1.766	-9.663	1	0.04	0.00	0.06	
14	0	-0.027	14.170	-3.090	0.000	-1.766	-9.619	1	0.04	0.00	0.06	
1A	47	-0.024	4.846	2.147	0.000	0.263	-2.354	1	0.01	0.00	0.01	
1B	47	-0.024	5.883	2.147	0.000	0.263	-2.540	1	0.02	0.00	0.02	
1C	47	-0.024	4.846	-5.767	0.000	-0.643	-2.354	1	0.01	0.00	0.01	
1D	47	-0.024	5.883	-5.767	0.000	-0.643	-2.540	1	0.02	0.00	0.02	
1E	47	-0.007	4.846	2.147	0.000	0.263	-2.354	1	0.01	0.00	0.01	
1F	47	-0.007	5.883	2.147	0.000	0.263	-2.540	1	0.02	0.00	0.02	
1G	47	-0.007	4.846	-5.767	0.000	-0.643	-2.354	1	0.01	0.00	0.01	
1H	47	-0.007	5.883	-5.767	0.000	-0.643	-2.540	1	0.02	0.00	0.02	
1I	47	-0.032	5.191	-0.614	0.000	-0.054	-2.411	1	0.01	0.00	0.01	
1J	47	-0.032	5.538	-0.614	0.000	-0.054	-2.482	1	0.01	0.00	0.01	
1K	47	-0.032	5.191	-3.006	0.000	-0.326	-2.411	1	0.01	0.00	0.01	
1L	47	-0.032	5.538	-3.006	0.000	-0.326	-2.482	1	0.01	0.00	0.01	
1M	47	-0.000	5.191	-0.614	0.000	-0.054	-2.411	1	0.01	0.00	0.01	
1N	47	-0.000	5.538	-0.614	0.000	-0.054	-2.482	1	0.01	0.00	0.01	
1O	47	-0.000	5.191	-3.006	0.000	-0.326	-2.411	1	0.01	0.00	0.01	
1P	47	-0.000	5.538	-3.006	0.000	-0.326	-2.482	1	0.01	0.00	0.01	
2	47	-0.028	9.762	-3.244	0.000	-0.340	-4.451	1	0.03	0.00	0.03	
7	47	-0.016	5.297	-1.804	0.000	-0.189	-2.424	1	0.01	0.00	0.01	
8	47	-0.015	5.208	-1.765	0.000	-0.185	-2.402	1	0.01	0.00	0.01	
9	47	-0.019	6.085	-2.098	0.000	-0.221	-2.752	1	0.02	0.00	0.02	
10	47	-0.018	6.032	-2.096	0.000	-0.221	-2.703	1	0.02	0.00	0.02	
11	47	-0.025	8.758	-2.914	0.000	-0.305	-3.998	1	0.02	0.00	0.02	

12	47	-0.025	8.702	-2.891	0.000	-0.302	-3.985	1	0.02	0.00	0.02
13	47	-0.027	9.227	-3.091	0.000	-0.324	-4.195	1	0.02	0.00	0.02
14	47	-0.027	9.197	-3.090	0.000	-0.324	-4.166	1	0.02	0.00	0.02
1A	93	-0.024	1.951	2.147	0.000	-0.739	-0.775	1	0.01	0.00	0.01
1B	93	-0.024	2.989	2.147	0.000	-0.739	-0.462	1	0.01	0.00	0.01
1C	93	-0.024	1.951	-5.767	0.000	2.049	-0.775	1	0.01	0.00	0.03
1D	93	-0.024	2.989	-5.767	0.000	2.049	-0.462	1	0.01	0.00	0.03
1E	93	-0.007	1.951	2.147	0.000	-0.739	-0.775	1	0.01	0.00	0.01
1F	93	-0.007	2.989	2.147	0.000	-0.739	-0.462	1	0.01	0.00	0.01
1G	93	-0.007	1.951	-5.767	0.000	2.049	-0.775	1	0.01	0.00	0.03
1H	93	-0.007	2.989	-5.767	0.000	2.049	-0.462	1	0.01	0.00	0.03
1I	93	-0.032	2.297	-0.614	0.000	0.233	-0.689	1	0.01	0.00	0.00
1J	93	-0.032	2.643	-0.614	0.000	0.233	-0.548	1	0.01	0.00	0.00
1K	93	-0.032	2.297	-3.006	0.000	1.077	-0.689	1	0.01	0.00	0.01
1L	93	-0.032	2.643	-3.006	0.000	1.077	-0.548	1	0.01	0.00	0.01
1M	93	-0.000	2.297	-0.614	0.000	0.233	-0.689	1	0.01	0.00	0.00
1N	93	-0.000	2.643	-0.614	0.000	0.233	-0.548	1	0.01	0.00	0.00
1O	93	-0.000	2.297	-3.006	0.000	1.077	-0.689	1	0.01	0.00	0.01
1P	93	-0.000	2.643	-3.006	0.000	1.077	-0.548	1	0.01	0.00	0.01
2	93	-0.028	4.473	-3.244	0.000	1.174	-1.131	1	0.01	0.00	0.01
7	93	-0.016	2.450	-1.804	0.000	0.653	-0.617	1	0.01	0.00	0.01
8	93	-0.015	2.361	-1.765	0.000	0.639	-0.636	1	0.01	0.00	0.01
9	93	-0.019	2.848	-2.098	0.000	0.759	-0.668	1	0.01	0.00	0.01
10	93	-0.018	2.795	-2.096	0.000	0.757	-0.644	1	0.01	0.00	0.01
11	93	-0.025	4.016	-2.914	0.000	1.055	-1.018	1	0.01	0.00	0.01
12	93	-0.025	3.963	-2.891	0.000	1.047	-1.030	1	0.01	0.00	0.01
13	93	-0.027	4.255	-3.091	0.000	1.119	-1.049	1	0.01	0.00	0.01
14	93	-0.027	4.223	-3.090	0.000	1.118	-1.034	1	0.01	0.00	0.01

ASTA NUM. 101 NI 213 NF 206 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.024	2.934	0.003	0.000	1.327	-0.480	1	0.01	0.00	0.02	
1B	0	0.024	2.966	0.003	0.000	1.327	-0.755	1	0.01	0.00	0.02	
1C	0	0.024	2.934	-0.008	0.000	-0.481	-0.480	1	0.01	0.00	0.01	
1D	0	0.024	2.966	-0.008	0.000	-0.481	-0.755	1	0.01	0.00	0.01	
1E	0	0.039	2.934	0.003	0.000	1.327	-0.480	1	0.01	0.00	0.02	
1F	0	0.039	2.966	0.003	0.000	1.327	-0.755	1	0.01	0.00	0.02	
1G	0	0.039	2.934	-0.008	0.000	-0.481	-0.480	1	0.01	0.00	0.01	
1H	0	0.039	2.966	-0.008	0.000	-0.481	-0.755	1	0.01	0.00	0.01	
1I	0	0.029	2.938	0.003	0.000	0.698	-0.554	1	0.01	0.00	0.01	
1J	0	0.029	2.962	0.003	0.000	0.698	-0.681	1	0.01	0.00	0.01	
1K	0	0.029	2.938	-0.009	0.000	0.148	-0.554	1	0.01	0.00	0.00	
1L	0	0.029	2.962	-0.009	0.000	0.148	-0.681	1	0.01	0.00	0.00	
1M	0	0.034	2.938	0.003	0.000	0.698	-0.554	1	0.01	0.00	0.01	
1N	0	0.034	2.962	0.003	0.000	0.698	-0.681	1	0.01	0.00	0.01	
1O	0	0.034	2.938	-0.009	0.000	0.148	-0.554	1	0.01	0.00	0.00	
1P	0	0.034	2.962	-0.009	0.000	0.148	-0.681	1	0.01	0.00	0.00	
2	0	0.057	5.392	-0.005	0.000	0.758	-1.129	1	0.01	0.00	0.01	
7	0	0.032	2.899	-0.003	0.000	0.421	-0.616	1	0.01	0.00	0.01	
8	0	0.030	2.901	-0.003	0.000	0.412	-0.633	1	0.01	0.00	0.01	
9	0	0.036	3.325	-0.002	0.000	0.490	-0.667	1	0.01	0.00	0.01	
10	0	0.037	3.275	-0.004	0.000	0.489	-0.644	1	0.01	0.00	0.01	
11	0	0.051	4.830	-0.005	0.000	0.681	-1.017	1	0.01	0.00	0.01	
12	0	0.050	4.831	-0.005	0.000	0.676	-1.027	1	0.01	0.00	0.01	
13	0	0.054	5.085	-0.004	0.000	0.722	-1.048	1	0.01	0.00	0.01	
14	0	0.054	5.055	-0.006	0.000	0.722	-1.033	1	0.01	0.00	0.01	
1A	47	0.024	0.040	0.003	0.000	1.330	0.227	1	0.00	0.00	0.02	
1B	47	0.024	0.072	0.003	0.000	1.330	-0.059	1	0.00	0.00	0.02	
1C	47	0.024	0.040	-0.008	0.000	-0.481	0.227	1	0.00	0.00	0.01	
1D	47	0.024	0.072	-0.008	0.000	-0.481	-0.059	1	0.00	0.00	0.01	
1E	47	0.039	0.040	0.003	0.000	1.330	0.227	1	0.00	0.00	0.02	
1F	47	0.039	0.072	0.003	0.000	1.330	-0.059	1	0.00	0.00	0.02	
1G	47	0.039	0.040	-0.008	0.000	-0.481	0.227	1	0.00	0.00	0.01	
1H	47	0.039	0.072	-0.008	0.000	-0.481	-0.059	1	0.00	0.00	0.01	
1I	47	0.029	0.044	0.003	0.000	0.698	0.148	1	0.00	0.00	0.01	
1J	47	0.029	0.068	0.003	0.000	0.698	0.020	1	0.00	0.00	0.01	
1K	47	0.029	0.044	-0.009	0.000	0.150	0.148	1	0.00	0.00	0.00	
1L	47	0.029	0.068	-0.009	0.000	0.150	0.020	1	0.00	0.00	0.00	
1M	47	0.034	0.044	0.003	0.000	0.698	0.148	1	0.00	0.00	0.01	
1N	47	0.034	0.068	0.003	0.000	0.698	0.020	1	0.00	0.00	0.01	
1O	47	0.034	0.044	-0.009	0.000	0.150	0.148	1	0.00	0.00	0.00	
1P	47	0.034	0.068	-0.009	0.000	0.150	0.020	1	0.00	0.00	0.00	
2	47	0.057	0.102	-0.005	0.000	0.761	0.153	1	0.00	0.00	0.01	
7	47	0.032	0.052	-0.003	0.000	0.423	0.073	1	0.00	0.00	0.01	
8	47	0.030	0.054	-0.003	0.000	0.414	0.056	1	0.00	0.00	0.01	
9	47	0.036	0.088	-0.002	0.000	0.491	0.129	1	0.00	0.00	0.01	
10	47	0.037	0.039	-0.004	0.000	0.491	0.129	1	0.00	0.00	0.01	
11	47	0.051	0.089	-0.005	0.000	0.683	0.131	1	0.00	0.00	0.01	
12	47	0.050	0.090	-0.005	0.000	0.678	0.121	1	0.00	0.00	0.01	
13	47	0.054	0.110	-0.004	0.000	0.724	0.165	1	0.00	0.00	0.01	
14	47	0.054	0.080	-0.006	0.000	0.724	0.165	1	0.00	0.00	0.01	
1A	93	0.024	-2.854	0.003	0.000	1.333	-0.416	1	0.01	0.00	0.02	
1B	93	0.024	-2.822	0.003	0.000	1.333	-0.714	1	0.01	0.00	0.02	
1C	93	0.024	-2.854	-0.008	0.000	-0.482	-0.416	1	0.01	0.00	0.01	
1D	93	0.024	-2.822	-0.008	0.000	-0.482	-0.714	1	0.01	0.00	0.01	
1E	93	0.039	-2.854	0.003	0.000	1.333	-0.416	1	0.01	0.00	0.02	

1F	93	0.039	-2.822	0.003	0.000	1.333	-0.714	1	0.01	0.00	0.02
1G	93	0.039	-2.854	-0.008	0.000	-0.482	-0.416	1	0.01	0.00	0.01
1H	93	0.039	-2.822	-0.008	0.000	-0.482	-0.714	1	0.01	0.00	0.01
1I	93	0.029	-2.850	0.003	0.000	0.699	-0.501	1	0.01	0.00	0.01
1J	93	0.029	-2.826	0.003	0.000	0.699	-0.629	1	0.01	0.00	0.01
1K	93	0.029	-2.850	-0.009	0.000	0.152	-0.501	1	0.01	0.00	0.00
1L	93	0.029	-2.826	-0.009	0.000	0.152	-0.629	1	0.01	0.00	0.00
1M	93	0.034	-2.850	0.003	0.000	0.699	-0.501	1	0.01	0.00	0.01
1N	93	0.034	-2.826	0.003	0.000	0.699	-0.629	1	0.01	0.00	0.01
1O	93	0.034	-2.850	-0.009	0.000	0.152	-0.501	1	0.01	0.00	0.00
1P	93	0.034	-2.826	-0.009	0.000	0.152	-0.629	1	0.01	0.00	0.00
2	93	0.057	-5.189	-0.005	0.000	0.763	-1.034	1	0.01	0.00	0.01
7	93	0.032	-2.795	-0.003	0.000	0.424	-0.567	1	0.01	0.00	0.01
8	93	0.030	-2.792	-0.003	0.000	0.416	-0.582	1	0.01	0.00	0.01
9	93	0.036	-3.148	-0.002	0.000	0.492	-0.585	1	0.01	0.00	0.01
10	93	0.037	-3.198	-0.004	0.000	0.493	-0.608	1	0.01	0.00	0.01
11	93	0.051	-4.652	-0.005	0.000	0.686	-0.934	1	0.01	0.00	0.01
12	93	0.050	-4.650	-0.005	0.000	0.681	-0.943	1	0.01	0.00	0.01
13	93	0.054	-4.864	-0.004	0.000	0.726	-0.944	1	0.01	0.00	0.01
14	93	0.054	-4.894	-0.006	0.000	0.727	-0.958	1	0.01	0.00	0.01

ASTA NUM. 102 NI 206 NF 41 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.024	-2.920	5.777	0.000	2.053	-0.403	1	0.01	0.00	0.03	
1B	0	-0.024	-1.858	5.777	0.000	2.053	-0.738	1	0.01	0.00	0.03	
1C	0	-0.024	-2.920	-2.145	0.000	-0.739	-0.403	1	0.01	0.00	0.01	
1D	0	-0.024	-1.858	-2.145	0.000	-0.739	-0.738	1	0.00	0.00	0.01	
1E	0	-0.010	-2.920	5.777	0.000	2.053	-0.403	1	0.01	0.00	0.03	
1F	0	-0.010	-1.858	5.777	0.000	2.053	-0.738	1	0.01	0.00	0.03	
1G	0	-0.010	-2.920	-2.145	0.000	-0.739	-0.403	1	0.01	0.00	0.01	
1H	0	-0.010	-1.858	-2.145	0.000	-0.739	-0.738	1	0.00	0.00	0.01	
1I	0	-0.032	-2.561	3.007	0.000	1.077	-0.502	1	0.01	0.00	0.01	
1J	0	-0.032	-2.217	3.007	0.000	1.077	-0.640	1	0.01	0.00	0.01	
1K	0	-0.032	-2.561	0.625	0.000	0.237	-0.502	1	0.01	0.00	0.00	
1L	0	-0.032	-2.217	0.625	0.000	0.237	-0.640	1	0.01	0.00	0.00	
1M	0	-0.002	-2.561	3.007	0.000	1.077	-0.502	1	0.01	0.00	0.01	
1N	0	-0.002	-2.217	3.007	0.000	1.077	-0.640	1	0.01	0.00	0.01	
1O	0	-0.002	-2.561	0.625	0.000	0.237	-0.502	1	0.01	0.00	0.00	
1P	0	-0.002	-2.217	0.625	0.000	0.237	-0.640	1	0.01	0.00	0.00	
2	0	-0.030	-4.323	3.255	0.000	1.178	-1.044	1	0.01	0.00	0.01	
7	0	-0.017	-2.378	1.809	0.000	0.655	-0.573	1	0.01	0.00	0.01	
8	0	-0.016	-2.281	1.772	0.000	0.641	-0.589	1	0.01	0.00	0.01	
9	0	-0.019	-2.705	2.104	0.000	0.760	-0.590	1	0.01	0.00	0.01	
10	0	-0.020	-2.757	2.103	0.000	0.760	-0.614	1	0.01	0.00	0.01	
11	0	-0.027	-3.887	2.924	0.000	1.058	-0.943	1	0.01	0.00	0.01	
12	0	-0.027	-3.828	2.901	0.000	1.050	-0.952	1	0.01	0.00	0.01	
13	0	-0.029	-4.083	3.100	0.000	1.122	-0.953	1	0.01	0.00	0.01	
14	0	-0.029	-4.114	3.100	0.000	1.122	-0.967	1	0.01	0.00	0.01	
1A	47	-0.024	-5.814	5.777	0.000	-0.643	-2.446	1	0.02	0.00	0.01	
1B	47	-0.024	-4.752	5.777	0.000	-0.643	-2.276	1	0.01	0.00	0.01	
1C	47	-0.024	-5.814	-2.145	0.000	0.262	-2.446	1	0.02	0.00	0.01	
1D	47	-0.024	-4.752	-2.145	0.000	0.262	-2.276	1	0.01	0.00	0.01	
1E	47	-0.010	-5.814	5.777	0.000	-0.643	-2.446	1	0.02	0.00	0.01	
1F	47	-0.010	-4.752	5.777	0.000	-0.643	-2.276	1	0.01	0.00	0.01	
1G	47	-0.010	-5.814	-2.145	0.000	0.262	-2.446	1	0.02	0.00	0.01	
1H	47	-0.010	-4.752	-2.145	0.000	0.262	-2.276	1	0.01	0.00	0.01	
1I	47	-0.032	-5.455	3.007	0.000	-0.327	-2.386	1	0.01	0.00	0.01	
1J	47	-0.032	-5.111	3.007	0.000	-0.327	-2.336	1	0.01	0.00	0.01	
1K	47	-0.032	-5.455	0.625	0.000	-0.054	-2.386	1	0.01	0.00	0.01	
1L	47	-0.032	-5.111	0.625	0.000	-0.054	-2.336	1	0.01	0.00	0.01	
1M	47	-0.002	-5.455	3.007	0.000	-0.327	-2.386	1	0.01	0.00	0.01	
1N	47	-0.002	-5.111	3.007	0.000	-0.327	-2.336	1	0.01	0.00	0.01	
1O	47	-0.002	-5.455	0.625	0.000	-0.054	-2.386	1	0.01	0.00	0.01	
1P	47	-0.002	-5.111	0.625	0.000	-0.054	-2.336	1	0.01	0.00	0.01	
2	47	-0.030	-9.611	3.255	0.000	-0.341	-4.298	1	0.03	0.00	0.03	
7	47	-0.017	-5.224	1.809	0.000	-0.190	-2.347	1	0.01	0.00	0.01	
8	47	-0.016	-5.127	1.772	0.000	-0.185	-2.318	1	0.01	0.00	0.01	
9	47	-0.019	-5.942	2.104	0.000	-0.221	-2.607	1	0.02	0.00	0.02	
10	47	-0.020	-5.993	2.103	0.000	-0.221	-2.655	1	0.02	0.00	0.02	
11	47	-0.027	-8.628	2.924	0.000	-0.306	-3.863	1	0.02	0.00	0.02	
12	47	-0.027	-8.569	2.901	0.000	-0.304	-3.845	1	0.02	0.00	0.02	
13	47	-0.029	-9.056	3.100	0.000	-0.325	-4.019	1	0.02	0.00	0.02	
14	47	-0.029	-9.087	3.100	0.000	-0.325	-4.048	1	0.02	0.00	0.02	
1A	93	-0.024	-8.708	5.777	0.000	-3.339	-5.839	1	0.02	0.00	0.04	
1B	93	-0.024	-7.646	5.777	0.000	-3.339	-5.165	1	0.02	0.00	0.04	
1C	93	-0.024	-8.708	-2.145	0.000	1.263	-5.839	1	0.02	0.00	0.03	
1D	93	-0.024	-7.646	-2.145	0.000	1.263	-5.165	1	0.02	0.00	0.03	
1E	93	-0.010	-8.708	5.777	0.000	-3.339	-5.839	1	0.02	0.00	0.04	
1F	93	-0.010	-7.646	5.777	0.000	-3.339	-5.165	1	0.02	0.00	0.04	
1G	93	-0.010	-8.708	-2.145	0.000	1.263	-5.839	1	0.02	0.00	0.03	
1H	93	-0.010	-7.646	-2.145	0.000	1.263	-5.165	1	0.02	0.00	0.03	
1I	93	-0.032	-8.349	3.007	0.000	-1.730	-5.622	1	0.02	0.00	0.03	
1J	93	-0.032	-8.005	3.007	0.000	-1.730	-5.382	1	0.02	0.00	0.03	
1K	93	-0.032	-8.349	0.625	0.000	-0.346	-5.622	1	0.02	0.00	0.03	
1L	93	-0.032	-8.005	0.625	0.000	-0.346	-5.382	1	0.02	0.00	0.03	
1M	93	-0.002	-8.349	3.007	0.000	-1.730	-5.622	1	0.02	0.00	0.03	
1N	93	-0.002	-8.005	3.007	0.000	-1.730	-5.382	1	0.02	0.00	0.03	

1O	93	-0.002	-8.349	0.625	0.000	-0.346	-5.622	1	0.02	0.00	0.03
1P	93	-0.002	-8.005	0.625	0.000	-0.346	-5.382	1	0.02	0.00	0.03
2	93	-0.030	-14.900	3.255	0.000	-1.859	-10.020	1	0.04	0.00	0.06
7	93	-0.017	-8.071	1.809	0.000	-1.034	-5.449	1	0.02	0.00	0.03
8	93	-0.016	-7.974	1.772	0.000	-1.012	-5.375	1	0.02	0.00	0.03
9	93	-0.019	-9.178	2.104	0.000	-1.203	-6.135	1	0.02	0.00	0.04
10	93	-0.020	-9.229	2.103	0.000	-1.202	-6.207	1	0.02	0.00	0.04
11	93	-0.027	-13.370	2.924	0.000	-1.670	-8.995	1	0.04	0.00	0.05
12	93	-0.027	-13.310	2.901	0.000	-1.657	-8.950	1	0.04	0.00	0.05
13	93	-0.029	-14.030	3.100	0.000	-1.772	-9.406	1	0.04	0.00	0.06
14	93	-0.029	-14.060	3.100	0.000	-1.771	-9.450	1	0.04	0.00	0.06

ASTA NUM. 30 NI 41 NF 199 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.033	7.927	2.343	0.000	1.454	-5.166	1	0.02	0.00	0.03	
1B	0	-0.033	9.049	2.343	0.000	1.454	-5.852	1	0.02	0.00	0.03	
1C	0	-0.033	7.927	-6.150	0.000	-3.814	-5.166	1	0.02	0.00	0.05	
1D	0	-0.033	9.049	-6.150	0.000	-3.814	-5.852	1	0.02	0.00	0.05	
1E	0	-0.015	7.927	2.343	0.000	1.454	-5.166	1	0.02	0.00	0.03	
1F	0	-0.015	9.049	2.343	0.000	1.454	-5.852	1	0.02	0.00	0.03	
1G	0	-0.015	7.927	-6.150	0.000	-3.814	-5.166	1	0.02	0.00	0.05	
1H	0	-0.015	9.049	-6.150	0.000	-3.814	-5.852	1	0.02	0.00	0.05	
1I	0	-0.041	8.276	-0.515	0.000	-0.318	-5.388	1	0.02	0.00	0.03	
1J	0	-0.041	8.700	-0.515	0.000	-0.318	-5.630	1	0.02	0.00	0.03	
1K	0	-0.041	8.276	-3.291	0.000	-2.042	-5.388	1	0.02	0.00	0.03	
1L	0	-0.041	8.700	-3.291	0.000	-2.042	-5.630	1	0.02	0.00	0.03	
1M	0	-0.007	8.276	-0.515	0.000	-0.318	-5.388	1	0.02	0.00	0.03	
1N	0	-0.007	8.700	-0.515	0.000	-0.318	-5.630	1	0.02	0.00	0.03	
1O	0	-0.007	8.276	-3.291	0.000	-2.042	-5.388	1	0.02	0.00	0.03	
1P	0	-0.007	8.700	-3.291	0.000	-2.042	-5.630	1	0.02	0.00	0.03	
2	0	-0.044	15.480	-3.419	0.000	-2.119	-10.030	1	0.04	0.00	0.06	
7	0	-0.024	8.385	-1.893	0.000	-1.174	-5.456	1	0.02	0.00	0.03	
8	0	-0.024	8.284	-1.860	0.000	-1.153	-5.381	1	0.02	0.00	0.03	
9	0	-0.028	9.506	-2.192	0.000	-1.359	-6.143	1	0.03	0.00	0.04	
10	0	-0.027	9.542	-2.194	0.000	-1.359	-6.214	1	0.03	0.00	0.04	
11	0	-0.039	13.890	-3.070	0.000	-1.903	-9.007	1	0.04	0.00	0.05	
12	0	-0.039	13.830	-3.050	0.000	-1.891	-8.962	1	0.04	0.00	0.05	
13	0	-0.042	14.560	-3.249	0.000	-2.014	-9.419	1	0.04	0.00	0.06	
14	0	-0.041	14.580	-3.250	0.000	-2.015	-9.461	1	0.04	0.00	0.06	
1A	50	-0.033	4.826	2.343	0.000	0.282	-1.981	1	0.01	0.00	0.01	
1B	50	-0.033	5.948	2.343	0.000	0.282	-2.100	1	0.02	0.00	0.01	
1C	50	-0.033	4.826	-6.150	0.000	-0.739	-1.981	1	0.01	0.00	0.01	
1D	50	-0.033	5.948	-6.150	0.000	-0.739	-2.100	1	0.02	0.00	0.01	
1E	50	-0.015	4.826	2.343	0.000	0.282	-1.981	1	0.01	0.00	0.01	
1F	50	-0.015	5.948	2.343	0.000	0.282	-2.100	1	0.02	0.00	0.01	
1G	50	-0.015	4.826	-6.150	0.000	-0.739	-1.981	1	0.01	0.00	0.01	
1H	50	-0.015	5.948	-6.150	0.000	-0.739	-2.100	1	0.02	0.00	0.01	
1I	50	-0.041	5.175	-0.515	0.000	-0.060	-2.036	1	0.01	0.00	0.01	
1J	50	-0.041	5.599	-0.515	0.000	-0.060	-2.044	1	0.01	0.00	0.01	
1K	50	-0.041	5.175	-3.291	0.000	-0.396	-2.036	1	0.01	0.00	0.01	
1L	50	-0.041	5.599	-3.291	0.000	-0.396	-2.044	1	0.01	0.00	0.01	
1M	50	-0.007	5.175	-0.515	0.000	-0.060	-2.036	1	0.01	0.00	0.01	
1N	50	-0.007	5.599	-0.515	0.000	-0.060	-2.044	1	0.01	0.00	0.01	
1O	50	-0.007	5.175	-3.291	0.000	-0.396	-2.036	1	0.01	0.00	0.01	
1P	50	-0.007	5.599	-3.291	0.000	-0.396	-2.044	1	0.01	0.00	0.01	
2	50	-0.044	9.809	-3.419	0.000	-0.410	-3.709	1	0.03	0.00	0.02	
7	50	-0.024	5.335	-1.893	0.000	-0.227	-2.026	1	0.01	0.00	0.01	
8	50	-0.024	5.234	-1.860	0.000	-0.223	-2.002	1	0.01	0.00	0.01	
9	50	-0.028	6.039	-2.192	0.000	-0.263	-2.257	1	0.02	0.00	0.01	
10	50	-0.027	6.074	-2.194	0.000	-0.262	-2.310	1	0.02	0.00	0.01	
11	50	-0.039	8.809	-3.070	0.000	-0.368	-3.334	1	0.02	0.00	0.02	
12	50	-0.039	8.749	-3.050	0.000	-0.366	-3.319	1	0.02	0.00	0.02	
13	50	-0.042	9.229	-3.249	0.000	-0.390	-3.472	1	0.02	0.00	0.02	
14	50	-0.041	9.250	-3.250	0.000	-0.390	-3.504	1	0.02	0.00	0.02	
1A	100	-0.033	1.725	2.343	0.000	-0.889	-0.346	1	0.00	0.00	0.01	
1B	100	-0.033	2.847	2.343	0.000	-0.889	0.102	1	0.01	0.00	0.01	
1C	100	-0.033	1.725	-6.150	0.000	2.336	-0.346	1	0.01	0.00	0.03	
1D	100	-0.033	2.847	-6.150	0.000	2.336	0.102	1	0.01	0.00	0.03	
1E	100	-0.015	1.725	2.343	0.000	-0.889	-0.346	1	0.00	0.00	0.01	
1F	100	-0.015	2.847	2.343	0.000	-0.889	0.102	1	0.01	0.00	0.01	
1G	100	-0.015	1.725	-6.150	0.000	2.336	-0.346	1	0.01	0.00	0.03	
1H	100	-0.015	2.847	-6.150	0.000	2.336	0.102	1	0.01	0.00	0.03	
1I	100	-0.041	2.074	-0.515	0.000	0.197	-0.235	1	0.01	0.00	0.00	
1J	100	-0.041	2.498	-0.515	0.000	0.197	-0.009	1	0.01	0.00	0.00	
1K	100	-0.041	2.074	-3.291	0.000	1.250	-0.235	1	0.01	0.00	0.02	
1L	100	-0.041	2.498	-3.291	0.000	1.250	-0.009	1	0.01	0.00	0.02	
1M	100	-0.007	2.074	-0.515	0.000	0.197	-0.235	1	0.01	0.00	0.00	
1N	100	-0.007	2.498	-0.515	0.000	0.197	-0.009	1	0.01	0.00	0.00	
1O	100	-0.007	2.074	-3.291	0.000	1.250	-0.235	1	0.01	0.00	0.02	
1P	100	-0.007	2.498	-3.291	0.000	1.250	-0.009	1	0.01	0.00	0.02	
2	100	-0.044	4.139	-3.419	0.000	1.300	-0.222	1	0.01	0.00	0.02	
7	100	-0.024	2.285	-1.893	0.000	0.720	-0.122	1	0.01	0.00	0.01	
8	100	-0.024	2.184	-1.860	0.000	0.707	-0.147	1	0.01	0.00	0.01	
9	100	-0.028	2.571	-2.192	0.000	0.833	-0.104	1	0.01	0.00	0.01	
10	100	-0.027	2.606	-2.194	0.000	0.834	-0.140	1	0.01	0.00	0.01	
11	100	-0.039	3.727	-3.070	0.000	1.167	-0.200	1	0.01	0.00	0.01	
12	100	-0.039	3.667	-3.050	0.000	1.160	-0.215	1	0.01	0.00	0.01	

13	100	-0.042	3.899	-3.249	0.000	1.235	-0.190	1	0.01	0.00	0.02	
14	100	-0.041	3.920	-3.250	0.000	1.236	-0.211	1	0.01	0.00	0.02	

ASTA NUM. 103 NI 199 NF 192 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.022	2.847	-0.087	0.000	1.459	0.061	1	0.01	0.00	0.02	
1B	0	0.022	2.897	-0.087	0.000	1.459	-0.346	1	0.01	0.00	0.02	
1C	0	0.022	2.847	-0.110	0.000	-0.588	0.061	1	0.01	0.00	0.01	
1D	0	0.022	2.897	-0.110	0.000	-0.588	-0.346	1	0.01	0.00	0.01	
1E	0	0.034	2.847	-0.087	0.000	1.459	0.061	1	0.01	0.00	0.02	
1F	0	0.034	2.897	-0.087	0.000	1.459	-0.346	1	0.01	0.00	0.02	
1G	0	0.034	2.847	-0.110	0.000	-0.588	0.061	1	0.01	0.00	0.01	
1H	0	0.034	2.897	-0.110	0.000	-0.588	-0.346	1	0.01	0.00	0.01	
1I	0	0.026	2.859	-0.090	0.000	0.768	-0.037	1	0.01	0.00	0.01	
1J	0	0.026	2.885	-0.090	0.000	0.768	-0.248	1	0.01	0.00	0.01	
1K	0	0.026	2.859	-0.107	0.000	0.103	-0.037	1	0.01	0.00	0.00	
1L	0	0.026	2.885	-0.107	0.000	0.103	-0.248	1	0.01	0.00	0.00	
1M	0	0.030	2.859	-0.090	0.000	0.768	-0.037	1	0.01	0.00	0.01	
1N	0	0.030	2.885	-0.090	0.000	0.768	-0.248	1	0.01	0.00	0.01	
1O	0	0.030	2.859	-0.107	0.000	0.103	-0.037	1	0.01	0.00	0.00	
1P	0	0.030	2.885	-0.107	0.000	0.103	-0.248	1	0.01	0.00	0.00	
2	0	0.050	5.251	-0.179	0.000	0.782	-0.260	1	0.01	0.00	0.01	
7	0	0.028	2.837	-0.099	0.000	0.433	-0.142	1	0.01	0.00	0.01	
8	0	0.027	2.827	-0.097	0.000	0.426	-0.166	1	0.01	0.00	0.01	
9	0	0.033	3.162	-0.109	0.000	0.503	-0.128	1	0.01	0.00	0.01	
10	0	0.032	3.208	-0.110	0.000	0.503	-0.164	1	0.01	0.00	0.01	
11	0	0.045	4.713	-0.162	0.000	0.702	-0.235	1	0.01	0.00	0.01	
12	0	0.045	4.707	-0.161	0.000	0.698	-0.249	1	0.01	0.00	0.01	
13	0	0.048	4.908	-0.168	0.000	0.744	-0.226	1	0.01	0.00	0.01	
14	0	0.048	4.935	-0.168	0.000	0.744	-0.247	1	0.01	0.00	0.01	
1A	50	0.022	-0.254	-0.087	0.000	1.505	0.733	1	0.00	0.00	0.02	
1B	50	0.022	-0.204	-0.087	0.000	1.505	0.303	1	0.00	0.00	0.02	
1C	50	0.022	-0.254	-0.110	0.000	-0.535	0.733	1	0.00	0.00	0.01	
1D	50	0.022	-0.204	-0.110	0.000	-0.535	0.303	1	0.00	0.00	0.01	
1E	50	0.034	-0.254	-0.087	0.000	1.505	0.733	1	0.00	0.00	0.02	
1F	50	0.034	-0.204	-0.087	0.000	1.505	0.303	1	0.00	0.00	0.02	
1G	50	0.034	-0.254	-0.110	0.000	-0.535	0.733	1	0.00	0.00	0.01	
1H	50	0.034	-0.204	-0.110	0.000	-0.535	0.303	1	0.00	0.00	0.01	
1I	50	0.026	-0.242	-0.090	0.000	0.819	0.626	1	0.00	0.00	0.01	
1J	50	0.026	-0.216	-0.090	0.000	0.819	0.411	1	0.00	0.00	0.01	
1K	50	0.026	-0.242	-0.107	0.000	0.151	0.626	1	0.00	0.00	0.00	
1L	50	0.026	-0.216	-0.107	0.000	0.151	0.411	1	0.00	0.00	0.00	
1M	50	0.030	-0.242	-0.090	0.000	0.819	0.626	1	0.00	0.00	0.01	
1N	50	0.030	-0.216	-0.090	0.000	0.819	0.411	1	0.00	0.00	0.01	
1O	50	0.030	-0.242	-0.107	0.000	0.151	0.626	1	0.00	0.00	0.00	
1P	50	0.030	-0.216	-0.107	0.000	0.151	0.411	1	0.00	0.00	0.00	
2	50	0.050	-0.417	-0.179	0.000	0.872	0.948	1	0.00	0.00	0.01	
7	50	0.028	-0.213	-0.099	0.000	0.482	0.514	1	0.00	0.00	0.01	
8	50	0.027	-0.223	-0.097	0.000	0.474	0.485	1	0.00	0.00	0.01	
9	50	0.033	-0.306	-0.109	0.000	0.557	0.586	1	0.00	0.00	0.01	
10	50	0.032	-0.260	-0.110	0.000	0.558	0.574	1	0.00	0.00	0.01	
11	50	0.045	-0.367	-0.162	0.000	0.783	0.852	1	0.00	0.00	0.01	
12	50	0.045	-0.373	-0.161	0.000	0.778	0.835	1	0.00	0.00	0.01	
13	50	0.048	-0.422	-0.168	0.000	0.828	0.895	1	0.00	0.00	0.01	
14	50	0.048	-0.395	-0.168	0.000	0.828	0.888	1	0.00	0.00	0.01	
1A	100	0.022	-3.355	-0.087	0.000	1.550	-0.145	1	0.01	0.00	0.02	
1B	100	0.022	-3.305	-0.087	0.000	1.550	-0.598	1	0.01	0.00	0.02	
1C	100	0.022	-3.355	-0.110	0.000	-0.482	-0.145	1	0.01	0.00	0.01	
1D	100	0.022	-3.305	-0.110	0.000	-0.482	-0.598	1	0.01	0.00	0.01	
1E	100	0.034	-3.355	-0.087	0.000	1.550	-0.145	1	0.01	0.00	0.02	
1F	100	0.034	-3.305	-0.087	0.000	1.550	-0.598	1	0.01	0.00	0.02	
1G	100	0.034	-3.355	-0.110	0.000	-0.482	-0.145	1	0.01	0.00	0.01	
1H	100	0.034	-3.305	-0.110	0.000	-0.482	-0.598	1	0.01	0.00	0.01	
1I	100	0.026	-3.343	-0.090	0.000	0.870	-0.262	1	0.01	0.00	0.01	
1J	100	0.026	-3.317	-0.090	0.000	0.870	-0.481	1	0.01	0.00	0.01	
1K	100	0.026	-3.343	-0.107	0.000	0.198	-0.262	1	0.01	0.00	0.00	
1L	100	0.026	-3.317	-0.107	0.000	0.198	-0.481	1	0.01	0.00	0.00	
1M	100	0.030	-3.343	-0.090	0.000	0.870	-0.262	1	0.01	0.00	0.01	
1N	100	0.030	-3.317	-0.090	0.000	0.870	-0.481	1	0.01	0.00	0.01	
1O	100	0.030	-3.343	-0.107	0.000	0.198	-0.262	1	0.01	0.00	0.00	
1P	100	0.030	-3.317	-0.107	0.000	0.198	-0.481	1	0.01	0.00	0.00	
2	100	0.050	-6.085	-0.179	0.000	0.961	-0.678	1	0.02	0.00	0.01	
7	100	0.028	-3.263	-0.099	0.000	0.532	-0.355	1	0.01	0.00	0.01	
8	100	0.027	-3.273	-0.097	0.000	0.523	-0.389	1	0.01	0.00	0.01	
9	100	0.033	-3.773	-0.109	0.000	0.612	-0.434	1	0.01	0.00	0.01	
10	100	0.032	-3.727	-0.110	0.000	0.613	-0.423	1	0.01	0.00	0.01	
11	100	0.045	-5.446	-0.162	0.000	0.864	-0.601	1	0.01	0.00	0.01	
12	100	0.045	-5.452	-0.161	0.000	0.858	-0.621	1	0.01	0.00	0.01	
13	100	0.048	-5.752	-0.168	0.000	0.912	-0.648	1	0.02	0.00	0.01	
14	100	0.048	-5.724	-0.168	0.000	0.912	-0.642	1	0.02	0.00	0.01	

ASTA NUM. 104 NI 192 NF 20 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.025	-3.064	6.301	0.000	2.422	-0.157	1	0.01	0.00	0.03	
1B	0	-0.025	-2.074	6.301	0.000	2.422	-0.654	1	0.01	0.00	0.03	
1C	0	-0.025	-3.064	-2.167	0.000	-0.791	-0.157	1	0.01	0.00	0.01	
1D	0	-0.025	-2.074	-2.167	0.000	-0.791	-0.654	1	0.01	0.00	0.01	
1E	0	-0.013	-3.064	6.301	0.000	2.422	-0.157	1	0.01	0.00	0.03	
1F	0	-0.013	-2.074	6.301	0.000	2.422	-0.654	1	0.01	0.00	0.03	
1G	0	-0.013	-3.064	-2.167	0.000	-0.791	-0.157	1	0.01	0.00	0.01	
1H	0	-0.013	-2.074	-2.167	0.000	-0.791	-0.654	1	0.01	0.00	0.01	
1I	0	-0.034	-2.777	3.460	0.000	1.345	-0.290	1	0.01	0.00	0.02	
1J	0	-0.034	-2.361	3.460	0.000	1.345	-0.522	1	0.01	0.00	0.02	
1K	0	-0.034	-2.777	0.674	0.000	0.287	-0.290	1	0.01	0.00	0.00	
1L	0	-0.034	-2.361	0.674	0.000	0.287	-0.522	1	0.01	0.00	0.00	
1M	0	-0.004	-2.777	3.460	0.000	1.345	-0.290	1	0.01	0.00	0.02	
1N	0	-0.004	-2.361	3.460	0.000	1.345	-0.522	1	0.01	0.00	0.02	
1O	0	-0.004	-2.777	0.674	0.000	0.287	-0.290	1	0.01	0.00	0.00	
1P	0	-0.004	-2.361	0.674	0.000	0.287	-0.522	1	0.01	0.00	0.00	
2	0	-0.034	-4.657	3.716	0.000	1.467	-0.740	1	0.01	0.00	0.02	
7	0	-0.019	-2.534	2.057	0.000	0.812	-0.389	1	0.01	0.00	0.01	
8	0	-0.018	-2.458	2.021	0.000	0.798	-0.424	1	0.01	0.00	0.01	
9	0	-0.021	-2.984	2.372	0.000	0.936	-0.471	1	0.01	0.00	0.01	
10	0	-0.022	-2.937	2.376	0.000	0.937	-0.460	1	0.01	0.00	0.01	
11	0	-0.031	-4.174	3.339	0.000	1.318	-0.657	1	0.01	0.00	0.02	
12	0	-0.030	-4.129	3.317	0.000	1.310	-0.677	1	0.01	0.00	0.02	
13	0	-0.032	-4.444	3.527	0.000	1.392	-0.706	1	0.01	0.00	0.02	
14	0	-0.032	-4.416	3.530	0.000	1.393	-0.699	1	0.01	0.00	0.02	
1A	50	-0.025	-6.165	6.301	0.000	-0.728	-2.464	1	0.02	0.00	0.01	
1B	50	-0.025	-5.175	6.301	0.000	-0.728	-2.466	1	0.01	0.00	0.01	
1C	50	-0.025	-6.165	-2.167	0.000	0.293	-2.464	1	0.02	0.00	0.01	
1D	50	-0.025	-5.175	-2.167	0.000	0.293	-2.466	1	0.01	0.00	0.01	
1E	50	-0.013	-6.165	6.301	0.000	-0.728	-2.464	1	0.02	0.00	0.01	
1F	50	-0.013	-5.175	6.301	0.000	-0.728	-2.466	1	0.01	0.00	0.01	
1G	50	-0.013	-6.165	-2.167	0.000	0.293	-2.464	1	0.02	0.00	0.01	
1H	50	-0.013	-5.175	-2.167	0.000	0.293	-2.466	1	0.01	0.00	0.01	
1I	50	-0.034	-5.878	3.460	0.000	-0.385	-2.454	1	0.02	0.00	0.01	
1J	50	-0.034	-5.462	3.460	0.000	-0.385	-2.476	1	0.01	0.00	0.01	
1K	50	-0.034	-5.878	0.674	0.000	-0.050	-2.454	1	0.02	0.00	0.01	
1L	50	-0.034	-5.462	0.674	0.000	-0.050	-2.476	1	0.01	0.00	0.01	
1M	50	-0.004	-5.878	3.460	0.000	-0.385	-2.454	1	0.02	0.00	0.01	
1N	50	-0.004	-5.462	3.460	0.000	-0.385	-2.476	1	0.01	0.00	0.01	
1O	50	-0.004	-5.878	0.674	0.000	-0.050	-2.454	1	0.02	0.00	0.01	
1P	50	-0.004	-5.462	0.674	0.000	-0.050	-2.476	1	0.01	0.00	0.01	
2	50	-0.034	-10.323	3.716	0.000	-0.391	-4.488	1	0.03	0.00	0.03	
7	50	-0.019	-5.584	2.057	0.000	-0.217	-2.419	1	0.01	0.00	0.01	
8	50	-0.018	-5.508	2.021	0.000	-0.213	-2.415	1	0.01	0.00	0.01	
9	50	-0.021	-6.452	2.372	0.000	-0.250	-2.830	1	0.02	0.00	0.02	
10	50	-0.022	-6.405	2.376	0.000	-0.251	-2.795	1	0.02	0.00	0.02	
11	50	-0.031	-9.252	3.339	0.000	-0.351	-4.014	1	0.02	0.00	0.02	
12	50	-0.030	-9.210	3.317	0.000	-0.348	-4.011	1	0.02	0.00	0.02	
13	50	-0.032	-9.772	3.527	0.000	-0.372	-4.261	1	0.03	0.00	0.03	
14	50	-0.032	-9.748	3.530	0.000	-0.372	-4.237	1	0.03	0.00	0.03	
1A	100	-0.025	-9.266	6.301	0.000	-3.879	-6.321	1	0.02	0.00	0.05	
1B	100	-0.025	-8.276	6.301	0.000	-3.879	-5.829	1	0.02	0.00	0.05	
1C	100	-0.025	-9.266	-2.167	0.000	1.377	-6.321	1	0.02	0.00	0.04	
1D	100	-0.025	-8.276	-2.167	0.000	1.377	-5.829	1	0.02	0.00	0.03	
1E	100	-0.013	-9.266	6.301	0.000	-3.879	-6.321	1	0.02	0.00	0.05	
1F	100	-0.013	-8.276	6.301	0.000	-3.879	-5.829	1	0.02	0.00	0.05	
1G	100	-0.013	-9.266	-2.167	0.000	1.377	-6.321	1	0.02	0.00	0.04	
1H	100	-0.013	-8.276	-2.167	0.000	1.377	-5.829	1	0.02	0.00	0.03	
1I	100	-0.034	-8.979	3.460	0.000	-2.115	-6.168	1	0.02	0.00	0.04	
1J	100	-0.034	-8.563	3.460	0.000	-2.115	-5.982	1	0.02	0.00	0.04	
1K	100	-0.034	-8.979	0.674	0.000	-0.387	-6.168	1	0.02	0.00	0.04	
1L	100	-0.034	-8.563	0.674	0.000	-0.387	-5.982	1	0.02	0.00	0.04	
1M	100	-0.004	-8.979	3.460	0.000	-2.115	-6.168	1	0.02	0.00	0.04	
1N	100	-0.004	-8.563	3.460	0.000	-2.115	-5.982	1	0.02	0.00	0.04	
1O	100	-0.004	-8.979	0.674	0.000	-0.387	-6.168	1	0.02	0.00	0.04	
1P	100	-0.004	-8.563	0.674	0.000	-0.387	-5.982	1	0.02	0.00	0.04	
2	100	-0.034	-15.990	3.716	0.000	-2.249	-11.070	1	0.04	0.00	0.07	
7	100	-0.019	-8.634	2.057	0.000	-1.246	-5.973	1	0.02	0.00	0.04	
8	100	-0.018	-8.558	2.021	0.000	-1.223	-5.932	1	0.02	0.00	0.04	
9	100	-0.021	-9.919	2.372	0.000	-1.436	-6.923	1	0.03	0.00	0.04	
10	100	-0.022	-9.872	2.376	0.000	-1.439	-6.864	1	0.03	0.00	0.04	
11	100	-0.031	-14.330	3.339	0.000	-2.021	-9.910	1	0.04	0.00	0.06	
12	100	-0.030	-14.290	3.317	0.000	-2.007	-9.885	1	0.04	0.00	0.06	
13	100	-0.032	-15.100	3.527	0.000	-2.135	-10.480	1	0.04	0.00	0.06	
14	100	-0.032	-15.080	3.530	0.000	-2.136	-10.440	1	0.04	0.00	0.06	

ASTA NUM. 31 NI 20 NF 165 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria:	p.p. y	Permanente	Neve	Vento	qy tot.
qy medio:	0.60	5.60	2.18	-4.12	4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.005	14.653	5.442	0.000	4.372	-5.818	1	0.04	0.00	0.06	
1B	0	-0.005	15.367	5.442	0.000	4.372	-6.458	1	0.04	0.00	0.06	
1C	0	-0.005	14.653	-9.116	0.000	-7.106	-5.818	1	0.04	0.00	0.09	
1D	0	-0.005	15.367	-9.116	0.000	-7.106	-6.458	1	0.04	0.00	0.09	

1E	0	0.012	14.653	5.442	0.000	4.372	-5.818	1	0.04	0.00	0.06	
1F	0	0.012	15.367	5.442	0.000	4.372	-6.458	1	0.04	0.00	0.06	
1G	0	0.012	14.653	-9.116	0.000	-7.106	-5.818	1	0.04	0.00	0.09	
1H	0	0.012	15.367	-9.116	0.000	-7.106	-6.458	1	0.04	0.00	0.09	
1I	0	-0.022	14.751	0.782	0.000	0.702	-6.016	1	0.04	0.00	0.04	
1J	0	-0.022	15.269	0.782	0.000	0.702	-6.260	1	0.04	0.00	0.04	
1K	0	-0.022	14.751	-4.456	0.000	-3.436	-6.016	1	0.04	0.00	0.04	
1L	0	-0.022	15.269	-4.456	0.000	-3.436	-6.260	1	0.04	0.00	0.04	
1M	0	0.029	14.751	0.782	0.000	0.702	-6.016	1	0.04	0.00	0.04	
1N	0	0.029	15.269	0.782	0.000	0.702	-6.260	1	0.04	0.00	0.04	
1O	0	0.029	14.751	-4.456	0.000	-3.436	-6.016	1	0.04	0.00	0.04	
1P	0	0.029	15.269	-4.456	0.000	-3.436	-6.260	1	0.04	0.00	0.04	
2	0	0.007	27.340	-3.310	0.000	-2.463	-11.180	1	0.07	0.00	0.07	
7	0	0.005	14.800	-1.826	0.000	-1.358	-6.035	1	0.04	0.00	0.04	
8	0	0.004	14.730	-1.798	0.000	-1.338	-5.993	1	0.04	0.00	0.04	
9	0	0.004	16.870	-2.102	0.000	-1.564	-6.995	1	0.04	0.00	0.04	
10	0	0.004	16.860	-2.104	0.000	-1.566	-6.933	1	0.04	0.00	0.04	
11	0	0.007	24.520	-2.972	0.000	-2.212	-10.010	1	0.07	0.00	0.06	
12	0	0.007	24.470	-2.956	0.000	-2.200	-9.988	1	0.07	0.00	0.06	
13	0	0.006	25.760	-3.138	0.000	-2.335	-10.590	1	0.07	0.00	0.06	
14	0	0.006	25.750	-3.139	0.000	-2.336	-10.550	1	0.07	0.00	0.06	
1A	56	-0.005	11.162	5.442	0.000	1.312	1.439	1	0.03	0.00	0.02	
1B	56	-0.005	11.876	5.442	0.000	1.312	1.205	1	0.03	0.00	0.02	
1C	56	-0.005	11.162	-9.116	0.000	-1.979	1.439	1	0.03	0.00	0.02	
1D	56	-0.005	11.876	-9.116	0.000	-1.979	1.205	1	0.03	0.00	0.02	
1E	56	0.012	11.162	5.442	0.000	1.312	1.439	1	0.03	0.00	0.02	
1F	56	0.012	11.876	5.442	0.000	1.312	1.205	1	0.03	0.00	0.02	
1G	56	0.012	11.162	-9.116	0.000	-1.979	1.439	1	0.03	0.00	0.02	
1H	56	0.012	11.876	-9.116	0.000	-1.979	1.205	1	0.03	0.00	0.02	
1I	56	-0.022	11.260	0.782	0.000	0.262	1.297	1	0.03	0.00	0.01	
1J	56	-0.022	11.778	0.782	0.000	0.262	1.347	1	0.03	0.00	0.01	
1K	56	-0.022	11.260	-4.456	0.000	-0.929	1.297	1	0.03	0.00	0.01	
1L	56	-0.022	11.778	-4.456	0.000	-0.929	1.347	1	0.03	0.00	0.01	
1M	56	0.029	11.260	0.782	0.000	0.262	1.297	1	0.03	0.00	0.01	
1N	56	0.029	11.778	0.782	0.000	0.262	1.347	1	0.03	0.00	0.01	
1O	56	0.029	11.260	-4.456	0.000	-0.929	1.297	1	0.03	0.00	0.01	
1P	56	0.029	11.778	-4.456	0.000	-0.929	1.347	1	0.03	0.00	0.01	
2	56	0.007	20.965	-3.310	0.000	-0.601	2.408	1	0.06	0.00	0.01	
7	56	0.005	11.370	-1.826	0.000	-0.331	1.327	1	0.03	0.00	0.01	
8	56	0.004	11.297	-1.798	0.000	-0.326	1.326	1	0.03	0.00	0.01	
9	56	0.004	12.970	-2.102	0.000	-0.381	1.399	1	0.03	0.00	0.01	
10	56	0.004	12.957	-2.104	0.000	-0.382	1.451	1	0.03	0.00	0.01	
11	56	0.007	18.805	-2.972	0.000	-0.540	2.172	1	0.05	0.00	0.01	
12	56	0.007	18.760	-2.956	0.000	-0.537	2.173	1	0.05	0.00	0.01	
13	56	0.006	19.765	-3.138	0.000	-0.570	2.216	1	0.05	0.00	0.01	
14	56	0.006	19.755	-3.139	0.000	-0.570	2.246	1	0.05	0.00	0.01	
1A	113	-0.005	7.671	5.442	0.000	-1.749	6.733	1	0.02	0.00	0.04	
1B	113	-0.005	8.385	5.442	0.000	-1.749	6.905	1	0.02	0.00	0.04	
1C	113	-0.005	7.671	-9.116	0.000	3.149	6.733	1	0.02	0.00	0.04	
1D	113	-0.005	8.385	-9.116	0.000	3.149	6.905	1	0.02	0.00	0.04	
1E	113	0.012	7.671	5.442	0.000	-1.749	6.733	1	0.02	0.00	0.04	
1F	113	0.012	8.385	5.442	0.000	-1.749	6.905	1	0.02	0.00	0.04	
1G	113	0.012	7.671	-9.116	0.000	3.149	6.733	1	0.02	0.00	0.04	
1H	113	0.012	8.385	-9.116	0.000	3.149	6.905	1	0.02	0.00	0.04	
1I	113	-0.022	7.769	0.782	0.000	-0.178	6.648	1	0.02	0.00	0.04	
1J	113	-0.022	8.287	0.782	0.000	-0.178	6.990	1	0.02	0.00	0.04	
1K	113	-0.022	7.769	-4.456	0.000	1.578	6.648	1	0.02	0.00	0.04	
1L	113	-0.022	8.287	-4.456	0.000	1.578	6.990	1	0.02	0.00	0.04	
1M	113	0.029	7.769	0.782	0.000	-0.178	6.648	1	0.02	0.00	0.04	
1N	113	0.029	8.287	0.782	0.000	-0.178	6.990	1	0.02	0.00	0.04	
1O	113	0.029	7.769	-4.456	0.000	1.578	6.648	1	0.02	0.00	0.04	
1P	113	0.029	8.287	-4.456	0.000	1.578	6.990	1	0.02	0.00	0.04	
2	113	0.007	14.590	-3.310	0.000	1.261	12.410	1	0.04	0.00	0.07	
7	113	0.005	7.941	-1.826	0.000	0.696	6.758	1	0.02	0.00	0.04	
8	113	0.004	7.864	-1.798	0.000	0.685	6.714	1	0.02	0.00	0.04	
9	113	0.004	9.071	-2.102	0.000	0.801	7.599	1	0.02	0.00	0.05	
10	113	0.004	9.054	-2.104	0.000	0.801	7.641	1	0.02	0.00	0.05	
11	113	0.007	13.090	-2.972	0.000	1.132	11.140	1	0.03	0.00	0.07	
12	113	0.007	13.050	-2.956	0.000	1.126	11.120	1	0.03	0.00	0.07	
13	113	0.006	13.770	-3.138	0.000	1.195	11.650	1	0.04	0.00	0.07	
14	113	0.006	13.760	-3.139	0.000	1.196	11.670	1	0.04	0.00	0.07	

ASTA NUM. 105 NI 165 NF 158 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.012	8.367	2.374	0.000	0.587	6.897	1	0.02	0.00	0.04	
1B	0	0.012	8.519	2.374	0.000	0.587	6.721	1	0.02	0.00	0.04	
1C	0	0.012	8.367	-2.372	0.000	-0.033	6.897	1	0.02	0.00	0.04	
1D	0	0.012	8.519	-2.372	0.000	-0.033	6.721	1	0.02	0.00	0.04	
1E	0	0.020	8.367	2.374	0.000	0.587	6.897	1	0.02	0.00	0.04	
1F	0	0.020	8.519	2.374	0.000	0.587	6.721	1	0.02	0.00	0.04	
1G	0	0.020	8.367	-2.372	0.000	-0.033	6.897	1	0.02	0.00	0.04	
1H	0	0.020	8.519	-2.372	0.000	-0.033	6.721	1	0.02	0.00	0.04	
1I	0	0.007	8.366	0.868	0.000	0.381	6.978	1	0.02	0.00	0.04	
1J	0	0.007	8.520	0.868	0.000	0.381	6.640	1	0.02	0.00	0.04	
1K	0	0.007	8.366	-0.866	0.000	0.173	6.978	1	0.02	0.00	0.04	
1L	0	0.007	8.520	-0.866	0.000	0.173	6.640	1	0.02	0.00	0.04	
1M	0	0.024	8.366	0.868	0.000	0.381	6.978	1	0.02	0.00	0.04	

1N	0	0.024	8.520	0.868	0.000	0.381	6.640	1	0.02	0.00	0.04
1O	0	0.024	8.366	-0.866	0.000	0.173	6.978	1	0.02	0.00	0.04
1P	0	0.024	8.520	-0.866	0.000	0.173	6.640	1	0.02	0.00	0.04
2	0	0.029	15.390	0.003	0.000	0.498	12.390	1	0.04	0.00	0.07
7	0	0.016	8.330	0.002	0.000	0.275	6.749	1	0.02	0.00	0.04
8	0	0.016	8.311	0.004	0.000	0.272	6.708	1	0.02	0.00	0.04
9	0	0.017	9.486	-0.000	0.000	0.317	7.586	1	0.03	0.00	0.05
10	0	0.017	9.463	-0.002	0.000	0.316	7.630	1	0.03	0.00	0.05
11	0	0.026	13.810	0.003	0.000	0.448	11.130	1	0.04	0.00	0.07
12	0	0.026	13.800	0.005	0.000	0.445	11.100	1	0.04	0.00	0.07
13	0	0.027	14.500	0.002	0.000	0.472	11.630	1	0.04	0.00	0.07
14	0	0.027	14.490	0.001	0.000	0.472	11.660	1	0.04	0.00	0.07
1A	56	0.012	4.878	2.374	0.000	1.921	10.674	1	0.01	0.00	0.06
1B	56	0.012	5.031	2.374	0.000	1.921	10.478	1	0.01	0.00	0.06
1C	56	0.012	4.878	-2.372	0.000	-1.369	10.674	1	0.01	0.00	0.06
1D	56	0.012	5.031	-2.372	0.000	-1.369	10.478	1	0.01	0.00	0.06
1E	56	0.020	4.878	2.374	0.000	1.921	10.674	1	0.01	0.00	0.06
1F	56	0.020	5.031	2.374	0.000	1.921	10.478	1	0.01	0.00	0.06
1G	56	0.020	4.878	-2.372	0.000	-1.369	10.674	1	0.01	0.00	0.06
1H	56	0.020	5.031	-2.372	0.000	-1.369	10.478	1	0.01	0.00	0.06
1I	56	0.007	4.878	0.868	0.000	0.868	10.779	1	0.01	0.00	0.06
1J	56	0.007	5.031	0.868	0.000	0.868	10.373	1	0.01	0.00	0.06
1K	56	0.007	4.878	-0.866	0.000	-0.316	10.779	1	0.01	0.00	0.06
1L	56	0.007	5.031	-0.866	0.000	-0.316	10.373	1	0.01	0.00	0.06
1M	56	0.024	4.878	0.868	0.000	0.868	10.779	1	0.01	0.00	0.06
1N	56	0.024	5.031	0.868	0.000	0.868	10.373	1	0.01	0.00	0.06
1O	56	0.024	4.878	-0.866	0.000	-0.316	10.779	1	0.01	0.00	0.06
1P	56	0.024	5.031	-0.866	0.000	-0.316	10.373	1	0.01	0.00	0.06
2	56	0.029	9.015	0.003	0.000	0.496	19.253	1	0.02	0.00	0.11
7	56	0.016	4.899	0.002	0.000	0.274	10.470	1	0.01	0.00	0.06
8	56	0.016	4.880	0.004	0.000	0.269	10.419	1	0.01	0.00	0.06
9	56	0.017	5.585	-0.000	0.000	0.317	11.825	1	0.01	0.00	0.07
10	56	0.017	5.562	-0.002	0.000	0.317	11.857	1	0.01	0.00	0.07
11	56	0.026	8.094	0.003	0.000	0.446	17.287	1	0.02	0.00	0.10
12	56	0.026	8.084	0.005	0.000	0.443	17.252	1	0.02	0.00	0.10
13	56	0.027	8.504	0.002	0.000	0.471	18.101	1	0.02	0.00	0.11
14	56	0.027	8.492	0.001	0.000	0.472	18.121	1	0.02	0.00	0.11
1A	113	0.012	1.390	2.374	0.000	3.255	12.488	1	0.00	0.00	0.07
1B	113	0.012	1.542	2.374	0.000	3.255	12.272	1	0.00	0.00	0.07
1C	113	0.012	1.390	-2.372	0.000	-2.705	12.488	1	0.00	0.00	0.07
1D	113	0.012	1.542	-2.372	0.000	-2.705	12.272	1	0.00	0.00	0.07
1E	113	0.020	1.390	2.374	0.000	3.255	12.488	1	0.00	0.00	0.07
1F	113	0.020	1.542	2.374	0.000	3.255	12.272	1	0.00	0.00	0.07
1G	113	0.020	1.390	-2.372	0.000	-2.705	12.488	1	0.00	0.00	0.07
1H	113	0.020	1.542	-2.372	0.000	-2.705	12.272	1	0.00	0.00	0.07
1I	113	0.007	1.389	0.868	0.000	1.354	12.616	1	0.00	0.00	0.07
1J	113	0.007	1.543	0.868	0.000	1.354	12.144	1	0.00	0.00	0.07
1K	113	0.007	1.389	-0.866	0.000	-0.804	12.616	1	0.00	0.00	0.07
1L	113	0.007	1.543	-0.866	0.000	-0.804	12.144	1	0.00	0.00	0.07
1M	113	0.024	1.389	0.868	0.000	1.354	12.616	1	0.00	0.00	0.07
1N	113	0.024	1.543	0.868	0.000	1.354	12.144	1	0.00	0.00	0.07
1O	113	0.024	1.389	-0.866	0.000	-0.804	12.616	1	0.00	0.00	0.07
1P	113	0.024	1.543	-0.866	0.000	-0.804	12.144	1	0.00	0.00	0.07
2	113	0.029	2.641	0.003	0.000	0.495	22.530	1	0.01	0.00	0.13
7	113	0.016	1.468	0.002	0.000	0.273	12.260	1	0.00	0.00	0.07
8	113	0.016	1.448	0.004	0.000	0.267	12.200	1	0.00	0.00	0.07
9	113	0.017	1.684	-0.000	0.000	0.317	13.870	1	0.00	0.00	0.08
10	113	0.017	1.661	-0.002	0.000	0.318	13.890	1	0.00	0.00	0.08
11	113	0.026	2.378	0.003	0.000	0.444	20.230	1	0.01	0.00	0.12
12	113	0.026	2.367	0.005	0.000	0.440	20.190	1	0.01	0.00	0.12
13	113	0.027	2.508	0.002	0.000	0.470	21.200	1	0.01	0.00	0.13
14	113	0.027	2.494	0.001	0.000	0.471	21.210	1	0.01	0.00	0.13

ASTA NUM. 106 NI 158 NF 151 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.003	1.336	2.614	0.000	3.299	12.525	1	0.00	0.00	0.07	
1B	0	0.003	1.444	2.614	0.000	3.299	12.315	1	0.00	0.00	0.07	
1C	0	0.003	1.336	-2.122	0.000	-2.659	12.525	1	0.00	0.00	0.07	
1D	0	0.003	1.444	-2.122	0.000	-2.659	12.315	1	0.00	0.00	0.07	
1E	0	0.009	1.336	2.614	0.000	3.299	12.525	1	0.00	0.00	0.07	
1F	0	0.009	1.444	2.614	0.000	3.299	12.315	1	0.00	0.00	0.07	
1G	0	0.009	1.336	-2.122	0.000	-2.659	12.525	1	0.00	0.00	0.07	
1H	0	0.009	1.444	-2.122	0.000	-2.659	12.315	1	0.00	0.00	0.07	
1I	0	-0.003	1.320	1.097	0.000	1.396	12.656	1	0.00	0.00	0.08	
1J	0	-0.003	1.460	1.097	0.000	1.396	12.184	1	0.00	0.00	0.07	
1K	0	-0.003	1.320	-0.604	0.000	-0.756	12.656	1	0.00	0.00	0.08	
1L	0	-0.003	1.460	-0.604	0.000	-0.756	12.184	1	0.00	0.00	0.07	
1M	0	0.014	1.320	1.097	0.000	1.396	12.656	1	0.00	0.00	0.08	
1N	0	0.014	1.460	1.097	0.000	1.396	12.184	1	0.00	0.00	0.07	
1O	0	0.014	1.320	-0.604	0.000	-0.756	12.656	1	0.00	0.00	0.08	
1P	0	0.014	1.460	-0.604	0.000	-0.756	12.184	1	0.00	0.00	0.07	
2	0	0.011	2.558	0.447	0.000	0.576	22.590	1	0.01	0.00	0.13	
7	0	0.005	1.348	0.243	0.000	0.318	12.290	1	0.00	0.00	0.07	
8	0	0.005	1.355	0.240	0.000	0.311	12.230	1	0.00	0.00	0.07	
9	0	0.007	1.560	0.274	0.000	0.367	13.900	1	0.00	0.00	0.08	
10	0	0.007	1.555	0.277	0.000	0.368	13.920	1	0.00	0.00	0.08	
11	0	0.009	2.282	0.401	0.000	0.517	20.280	1	0.01	0.00	0.12	

12	0	0.009	2.287	0.399	0.000	0.513	20.250	1	0.01	0.00	0.12
13	0	0.010	2.410	0.419	0.000	0.547	21.250	1	0.01	0.00	0.13
14	0	0.010	2.407	0.421	0.000	0.548	21.260	1	0.01	0.00	0.13
1A	56	0.003	-2.153	2.614	0.000	1.829	12.305	1	0.01	0.00	0.07
1B	56	0.003	-2.045	2.614	0.000	1.829	12.127	1	0.01	0.00	0.07
1C	56	0.003	-2.153	-2.122	0.000	-1.465	12.305	1	0.01	0.00	0.07
1D	56	0.003	-2.045	-2.122	0.000	-1.465	12.127	1	0.01	0.00	0.07
1E	56	0.009	-2.153	2.614	0.000	1.829	12.305	1	0.01	0.00	0.07
1F	56	0.009	-2.045	2.614	0.000	1.829	12.127	1	0.01	0.00	0.07
1G	56	0.009	-2.153	-2.122	0.000	-1.465	12.305	1	0.01	0.00	0.07
1H	56	0.009	-2.045	-2.122	0.000	-1.465	12.127	1	0.01	0.00	0.07
1I	56	-0.003	-2.169	1.097	0.000	0.780	12.417	1	0.01	0.00	0.07
1J	56	-0.003	-2.029	1.097	0.000	0.780	12.015	1	0.01	0.00	0.07
1K	56	-0.003	-2.169	-0.604	0.000	-0.416	12.417	1	0.01	0.00	0.07
1L	56	-0.003	-2.029	-0.604	0.000	-0.416	12.015	1	0.01	0.00	0.07
1M	56	0.014	-2.169	1.097	0.000	0.780	12.417	1	0.01	0.00	0.07
1N	56	0.014	-2.029	1.097	0.000	0.780	12.015	1	0.01	0.00	0.07
1O	56	0.014	-2.169	-0.604	0.000	-0.416	12.417	1	0.01	0.00	0.07
1P	56	0.014	-2.029	-0.604	0.000	-0.416	12.015	1	0.01	0.00	0.07
2	56	0.011	-3.821	0.447	0.000	0.325	22.238	1	0.01	0.00	0.13
7	56	0.005	-2.083	0.243	0.000	0.181	12.084	1	0.01	0.00	0.07
8	56	0.005	-2.076	0.240	0.000	0.176	12.027	1	0.01	0.00	0.07
9	56	0.007	-2.341	0.274	0.000	0.213	13.682	1	0.01	0.00	0.08
10	56	0.007	-2.346	0.277	0.000	0.213	13.697	1	0.01	0.00	0.08
11	56	0.009	-3.432	0.401	0.000	0.292	19.957	1	0.01	0.00	0.12
12	56	0.009	-3.428	0.399	0.000	0.289	19.927	1	0.01	0.00	0.12
13	56	0.010	-3.586	0.419	0.000	0.311	20.921	1	0.01	0.00	0.12
14	56	0.010	-3.590	0.421	0.000	0.311	20.926	1	0.01	0.00	0.12
1A	113	0.003	-5.642	2.614	0.000	0.358	10.123	1	0.02	0.00	0.06
1B	113	0.003	-5.534	2.614	0.000	0.358	9.977	1	0.01	0.00	0.06
1C	113	0.003	-5.642	-2.122	0.000	-0.272	10.123	1	0.02	0.00	0.06
1D	113	0.003	-5.534	-2.122	0.000	-0.272	9.977	1	0.01	0.00	0.06
1E	113	0.009	-5.642	2.614	0.000	0.358	10.123	1	0.02	0.00	0.06
1F	113	0.009	-5.534	2.614	0.000	0.358	9.977	1	0.01	0.00	0.06
1G	113	0.009	-5.642	-2.122	0.000	-0.272	10.123	1	0.02	0.00	0.06
1H	113	0.009	-5.534	-2.122	0.000	-0.272	9.977	1	0.01	0.00	0.06
1I	113	-0.003	-5.658	1.097	0.000	0.163	10.216	1	0.02	0.00	0.06
1J	113	-0.003	-5.518	1.097	0.000	0.163	9.884	1	0.01	0.00	0.06
1K	113	-0.003	-5.658	-0.604	0.000	-0.076	10.216	1	0.02	0.00	0.06
1L	113	-0.003	-5.518	-0.604	0.000	-0.076	9.884	1	0.01	0.00	0.06
1M	113	0.014	-5.658	1.097	0.000	0.163	10.216	1	0.02	0.00	0.06
1N	113	0.014	-5.518	1.097	0.000	0.163	9.884	1	0.01	0.00	0.06
1O	113	0.014	-5.658	-0.604	0.000	-0.076	10.216	1	0.02	0.00	0.06
1P	113	0.014	-5.518	-0.604	0.000	-0.076	9.884	1	0.01	0.00	0.06
2	113	0.011	-10.200	0.447	0.000	0.073	18.300	1	0.03	0.00	0.11
7	113	0.005	-5.514	0.243	0.000	0.044	9.948	1	0.01	0.00	0.06
8	113	0.005	-5.507	0.240	0.000	0.042	9.893	1	0.01	0.00	0.06
9	113	0.007	-6.242	0.274	0.000	0.059	11.270	1	0.02	0.00	0.07
10	113	0.007	-6.247	0.277	0.000	0.057	11.280	1	0.02	0.00	0.07
11	113	0.009	-9.146	0.401	0.000	0.066	16.420	1	0.02	0.00	0.10
12	113	0.009	-9.142	0.399	0.000	0.065	16.390	1	0.02	0.00	0.10
13	113	0.010	-9.582	0.419	0.000	0.075	17.220	1	0.03	0.00	0.10
14	113	0.010	-9.586	0.421	0.000	0.074	17.220	1	0.03	0.00	0.10

ASTA NUM. 107 NI 151 NF 53 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.011	-5.892	8.730	0.000	2.905	10.234	1	0.02	0.00	0.06	
1B	0	-0.011	-5.420	8.730	0.000	2.905	10.026	1	0.01	0.00	0.06	
1C	0	-0.011	-5.892	-5.852	0.000	-2.006	10.234	1	0.02	0.00	0.06	
1D	0	-0.011	-5.420	-5.852	0.000	-2.006	10.026	1	0.01	0.00	0.06	
1E	0	0.009	-5.892	8.730	0.000	2.905	10.234	1	0.02	0.00	0.06	
1F	0	0.009	-5.420	8.730	0.000	2.905	10.026	1	0.01	0.00	0.06	
1G	0	0.009	-5.892	-5.852	0.000	-2.006	10.234	1	0.02	0.00	0.06	
1H	0	0.009	-5.420	-5.852	0.000	-2.006	10.026	1	0.01	0.00	0.06	
1I	0	-0.027	-5.864	4.091	0.000	1.345	10.309	1	0.02	0.00	0.06	
1J	0	-0.027	-5.448	4.091	0.000	1.345	9.951	1	0.01	0.00	0.06	
1K	0	-0.027	-5.864	-1.213	0.000	-0.446	10.309	1	0.02	0.00	0.06	
1L	0	-0.027	-5.448	-1.213	0.000	-0.446	9.951	1	0.01	0.00	0.06	
1M	0	0.025	-5.864	4.091	0.000	1.345	10.309	1	0.02	0.00	0.06	
1N	0	0.025	-5.448	4.091	0.000	1.345	9.951	1	0.01	0.00	0.06	
1O	0	0.025	-5.864	-1.213	0.000	-0.446	10.309	1	0.02	0.00	0.06	
1P	0	0.025	-5.448	-1.213	0.000	-0.446	9.951	1	0.01	0.00	0.06	
2	0	-0.002	-10.270	2.585	0.000	0.805	18.430	1	0.03	0.00	0.11	
7	0	-0.002	-5.623	1.429	0.000	0.447	10.020	1	0.01	0.00	0.06	
8	0	-0.002	-5.562	1.405	0.000	0.438	9.963	1	0.01	0.00	0.06	
9	0	-0.001	-6.354	1.664	0.000	0.524	11.350	1	0.02	0.00	0.07	
10	0	-0.001	-6.359	1.663	0.000	0.524	11.360	1	0.02	0.00	0.07	
11	0	-0.002	-9.229	2.320	0.000	0.723	16.540	1	0.02	0.00	0.10	
12	0	-0.002	-9.193	2.305	0.000	0.717	16.510	1	0.02	0.00	0.10	
13	0	-0.002	-9.668	2.460	0.000	0.769	17.340	1	0.03	0.00	0.10	
14	0	-0.002	-9.671	2.460	0.000	0.768	17.350	1	0.03	0.00	0.10	
1A	56	-0.011	-9.379	8.730	0.000	-2.006	5.936	1	0.02	0.00	0.04	
1B	56	-0.011	-8.907	8.730	0.000	-2.006	5.996	1	0.02	0.00	0.04	
1C	56	-0.011	-9.379	-5.852	0.000	1.286	5.936	1	0.02	0.00	0.04	
1D	56	-0.011	-8.907	-5.852	0.000	1.286	5.996	1	0.02	0.00	0.04	
1E	56	0.009	-9.379	8.730	0.000	-2.006	5.936	1	0.02	0.00	0.04	

1F	56	0.009	-8.907	8.730	0.000	-2.006	5.996	1	0.02	0.00	0.04
1G	56	0.009	-9.379	-5.852	0.000	1.286	5.936	1	0.02	0.00	0.04
1H	56	0.009	-8.907	-5.852	0.000	1.286	5.996	1	0.02	0.00	0.04
1I	56	-0.027	-9.351	4.091	0.000	-0.957	6.027	1	0.02	0.00	0.04
1J	56	-0.027	-8.935	4.091	0.000	-0.957	5.905	1	0.02	0.00	0.04
1K	56	-0.027	-9.351	-1.213	0.000	0.237	6.027	1	0.02	0.00	0.04
1L	56	-0.027	-8.935	-1.213	0.000	0.237	5.905	1	0.02	0.00	0.04
1M	56	0.025	-9.351	4.091	0.000	-0.957	6.027	1	0.02	0.00	0.04
1N	56	0.025	-8.935	4.091	0.000	-0.957	5.905	1	0.02	0.00	0.04
1O	56	0.025	-9.351	-1.213	0.000	0.237	6.027	1	0.02	0.00	0.04
1P	56	0.025	-8.935	-1.213	0.000	0.237	5.905	1	0.02	0.00	0.04
2	56	-0.002	-16.645	2.585	0.000	-0.649	10.862	1	0.04	0.00	0.06
7	56	-0.002	-9.057	1.429	0.000	-0.357	5.893	1	0.02	0.00	0.04
8	56	-0.002	-8.991	1.405	0.000	-0.352	5.869	1	0.02	0.00	0.03
9	56	-0.001	-10.257	1.664	0.000	-0.411	6.680	1	0.03	0.00	0.04
10	56	-0.001	-10.260	1.663	0.000	-0.412	6.688	1	0.03	0.00	0.04
11	56	-0.002	-14.944	2.320	0.000	-0.582	9.744	1	0.04	0.00	0.06
12	56	-0.002	-14.907	2.305	0.000	-0.579	9.732	1	0.04	0.00	0.06
13	56	-0.002	-15.664	2.460	0.000	-0.615	10.217	1	0.04	0.00	0.06
14	56	-0.002	-15.666	2.460	0.000	-0.615	10.224	1	0.04	0.00	0.06
1A	113	-0.011	-12.866	8.730	0.000	-6.916	-0.325	1	0.03	0.00	0.09
1B	113	-0.011	-12.394	8.730	0.000	-6.916	0.004	1	0.03	0.00	0.09
1C	113	-0.011	-12.866	-5.852	0.000	4.578	-0.325	1	0.03	0.00	0.06
1D	113	-0.011	-12.394	-5.852	0.000	4.578	0.004	1	0.03	0.00	0.06
1E	113	0.009	-12.866	8.730	0.000	-6.916	-0.325	1	0.03	0.00	0.09
1F	113	0.009	-12.394	8.730	0.000	-6.916	0.004	1	0.03	0.00	0.09
1G	113	0.009	-12.866	-5.852	0.000	4.578	-0.325	1	0.03	0.00	0.06
1H	113	0.009	-12.394	-5.852	0.000	4.578	0.004	1	0.03	0.00	0.06
1I	113	-0.027	-12.838	4.091	0.000	-3.258	-0.217	1	0.03	0.00	0.04
1J	113	-0.027	-12.422	4.091	0.000	-3.258	-0.103	1	0.03	0.00	0.04
1K	113	-0.027	-12.838	-1.213	0.000	0.920	-0.217	1	0.03	0.00	0.01
1L	113	-0.027	-12.422	-1.213	0.000	0.920	-0.103	1	0.03	0.00	0.01
1M	113	0.025	-12.838	4.091	0.000	-3.258	-0.217	1	0.03	0.00	0.04
1N	113	0.025	-12.422	4.091	0.000	-3.258	-0.103	1	0.03	0.00	0.04
1O	113	0.025	-12.838	-1.213	0.000	0.920	-0.217	1	0.03	0.00	0.01
1P	113	0.025	-12.422	-1.213	0.000	0.920	-0.103	1	0.03	0.00	0.01
2	113	-0.002	-23.020	2.585	0.000	-2.103	-0.293	1	0.06	0.00	0.03
7	113	-0.002	-12.490	1.429	0.000	-1.161	-0.164	1	0.03	0.00	0.01
8	113	-0.002	-12.420	1.405	0.000	-1.142	-0.155	1	0.03	0.00	0.01
9	113	-0.001	-14.160	1.664	0.000	-1.347	-0.184	1	0.04	0.00	0.02
10	113	-0.001	-14.160	1.663	0.000	-1.347	-0.178	1	0.04	0.00	0.02
11	113	-0.002	-20.660	2.320	0.000	-1.887	-0.266	1	0.05	0.00	0.02
12	113	-0.002	-20.620	2.305	0.000	-1.876	-0.261	1	0.05	0.00	0.02
13	113	-0.002	-21.660	2.460	0.000	-1.999	-0.278	1	0.06	0.00	0.02
14	113	-0.002	-21.660	2.460	0.000	-1.999	-0.275	1	0.06	0.00	0.02

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	--	--	--										
	kN	kN*m											
1A	-0.033	-7.038	12.603	1	0.0546	1.0012	1.0004	--	--	0.00	--	0.16	Snell. 'zx'= 348
1B	-0.033	-7.038	12.357	1	0.0546	1.0012	1.0004	--	--	0.00	--	0.16	Snell. 'zx'= 348
1C	-0.033	-7.106	12.603	1	0.0546	1.0012	1.0004	--	--	0.00	--	0.16	Snell. 'zx'= 348
1D	-0.033	-7.106	12.357	1	0.0546	1.0012	1.0004	--	--	0.00	--	0.16	Snell. 'zx'= 348
1E	-0.015	-7.038	12.603	1	0.0546	1.0005	1.0002	--	--	0.00	--	0.16	Snell. 'zx'= 348
1F	-0.015	-7.038	12.357	1	0.0546	1.0005	1.0002	--	--	0.00	--	0.16	Snell. 'zx'= 348
1G	-0.015	-7.106	12.603	1	0.0546	1.0005	1.0002	--	--	0.00	--	0.16	Snell. 'zx'= 348
1H	-0.015	-7.106	12.357	1	0.0546	1.0005	1.0002	--	--	0.00	--	0.16	Snell. 'zx'= 348
1I	-0.042	-3.407	12.827	1	0.0546	1.0039	1.0004	--	--	0.00	--	0.12	Snell. 'zx'= 348
1J	-0.042	-3.407	12.184	1	0.0546	1.0039	1.0004	--	--	0.00	--	0.12	Snell. 'zx'= 348
1K	-0.042	-3.436	12.827	1	0.0546	1.0039	1.0004	--	--	0.00	--	0.12	Snell. 'zx'= 348
1L	-0.042	-3.436	12.184	1	0.0546	1.0039	1.0004	--	--	0.00	--	0.12	Snell. 'zx'= 348
1M	-0.007	-3.407	12.827	1	0.0546	1.0007	1.0001	--	--	0.00	--	0.12	Snell. 'zx'= 348
1N	-0.007	-3.407	12.184	1	0.0546	1.0007	1.0001	--	--	0.00	--	0.12	Snell. 'zx'= 348
1O	-0.007	-3.436	12.827	1	0.0546	1.0007	1.0001	--	--	0.00	--	0.12	Snell. 'zx'= 348
1P	-0.007	-3.436	12.184	1	0.0546	1.0007	1.0001	--	--	0.00	--	0.12	Snell. 'zx'= 348
2	-0.044	-2.463	22.700	1	0.0546	1.0010	1.0005	--	--	0.00	--	0.17	Snell. 'zx'= 348
7	-0.024	-1.358	12.350	1	0.0546	0.9999	1.0002	--	--	0.00	--	0.09	Snell. 'zx'= 348
8	-0.024	-1.338	12.290	1	0.0546	0.9999	1.0002	--	--	0.00	--	0.09	Snell. 'zx'= 348
9	-0.028	-1.564	13.990	1	0.0546	1.0001	1.0003	--	--	0.00	--	0.10	Snell. 'zx'= 348
10	-0.027	-1.566	13.970	1	0.0546	1.0001	1.0003	--	--	0.00	--	0.10	Snell. 'zx'= 348
11	-0.039	-2.212	20.380	1	0.0546	1.0007	1.0004	--	--	0.00	--	0.15	Snell. 'zx'= 348
12	-0.039	-2.200	20.350	1	0.0546	1.0007	1.0004	--	--	0.00	--	0.15	Snell. 'zx'= 348
13	-0.042	-2.335	21.370	1	0.0546	1.0009	1.0004	--	--	0.00	--	0.16	Snell. 'zx'= 348
14	-0.041	-2.336	21.350	1	0.0546	1.0009	1.0004	--	--	0.00	--	0.16	Snell. 'zx'= 348

ASTA NUM. 3 NI 94 NF 174 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	--	--	--	--	--	--	--		--	--	--	
	cm	kN			kN*m							
1A	0	-0.047	13.189	5.574	0.000	4.399	-0.050	1	0.04	0.00	0.05	
1B	0	-0.047	13.791	5.574	0.000	4.399	-0.251	1	0.04	0.00	0.05	
1C	0	-0.047	13.189	-9.036	0.000	-7.079	-0.050	1	0.04	0.00	0.09	
1D	0	-0.047	13.791	-9.036	0.000	-7.079	-0.251	1	0.04	0.00	0.09	

1E	0	-0.010	13.189	5.574	0.000	4.399	-0.050	1	0.04	0.00	0.05	
1F	0	-0.010	13.791	5.574	0.000	4.399	-0.251	1	0.04	0.00	0.05	
1G	0	-0.010	13.189	-9.036	0.000	-7.079	-0.050	1	0.04	0.00	0.09	
1H	0	-0.010	13.791	-9.036	0.000	-7.079	-0.251	1	0.04	0.00	0.09	
1I	0	-0.080	13.100	0.946	0.000	0.761	-0.103	1	0.03	0.00	0.01	
1J	0	-0.080	13.880	0.946	0.000	0.761	-0.198	1	0.04	0.00	0.01	
1K	0	-0.080	13.100	-4.408	0.000	-3.441	-0.103	1	0.03	0.00	0.04	
1L	0	-0.080	13.880	-4.408	0.000	-3.441	-0.198	1	0.04	0.00	0.04	
1M	0	0.023	13.100	0.946	0.000	0.761	-0.103	1	0.03	0.00	0.01	
1N	0	0.023	13.880	0.946	0.000	0.761	-0.198	1	0.04	0.00	0.01	
1O	0	0.023	13.100	-4.408	0.000	-3.441	-0.103	1	0.03	0.00	0.04	
1P	0	0.023	13.880	-4.408	0.000	-3.441	-0.198	1	0.04	0.00	0.04	
2	0	-0.052	24.550	-3.108	0.000	-2.410	-0.272	1	0.07	0.00	0.03	
7	0	-0.029	13.340	-1.718	0.000	-1.331	-0.151	1	0.04	0.00	0.02	
8	0	-0.028	13.350	-1.684	0.000	-1.306	-0.152	1	0.04	0.00	0.02	
9	0	-0.032	15.080	-2.004	0.000	-1.547	-0.167	1	0.04	0.00	0.02	
10	0	-0.032	15.080	-2.003	0.000	-1.546	-0.167	1	0.04	0.00	0.02	
11	0	-0.047	22.030	-2.789	0.000	-2.163	-0.245	1	0.06	0.00	0.03	
12	0	-0.046	22.040	-2.769	0.000	-2.148	-0.246	1	0.06	0.00	0.03	
13	0	-0.049	23.080	-2.961	0.000	-2.293	-0.254	1	0.06	0.00	0.03	
14	0	-0.049	23.080	-2.960	0.000	-2.292	-0.255	1	0.06	0.00	0.03	
1A	56	-0.047	9.698	5.574	0.000	1.264	6.720	1	0.03	0.00	0.04	
1B	56	-0.047	10.300	5.574	0.000	1.264	6.192	1	0.03	0.00	0.04	
1C	56	-0.047	9.698	-9.036	0.000	-1.997	6.720	1	0.03	0.00	0.04	
1D	56	-0.047	10.300	-9.036	0.000	-1.997	6.192	1	0.03	0.00	0.04	
1E	56	-0.010	9.698	5.574	0.000	1.264	6.720	1	0.03	0.00	0.04	
1F	56	-0.010	10.300	5.574	0.000	1.264	6.192	1	0.03	0.00	0.04	
1G	56	-0.010	9.698	-9.036	0.000	-1.997	6.720	1	0.03	0.00	0.04	
1H	56	-0.010	10.300	-9.036	0.000	-1.997	6.192	1	0.03	0.00	0.04	
1I	56	-0.080	9.609	0.946	0.000	0.229	6.704	1	0.03	0.00	0.04	
1J	56	-0.080	10.389	0.946	0.000	0.229	6.208	1	0.03	0.00	0.04	
1K	56	-0.080	9.609	-4.408	0.000	-0.962	6.704	1	0.03	0.00	0.04	
1L	56	-0.080	10.389	-4.408	0.000	-0.962	6.208	1	0.03	0.00	0.04	
1M	56	0.023	9.609	0.946	0.000	0.229	6.704	1	0.03	0.00	0.04	
1N	56	0.023	10.389	0.946	0.000	0.229	6.208	1	0.03	0.00	0.04	
1O	56	0.023	9.609	-4.408	0.000	-0.962	6.704	1	0.03	0.00	0.04	
1P	56	0.023	10.389	-4.408	0.000	-0.962	6.208	1	0.03	0.00	0.04	
2	56	-0.052	18.175	-3.108	0.000	-0.662	11.743	1	0.05	0.00	0.07	
7	56	-0.029	9.907	-1.718	0.000	-0.364	6.385	1	0.03	0.00	0.04	
8	56	-0.028	9.919	-1.684	0.000	-0.359	6.394	1	0.03	0.00	0.04	
9	56	-0.032	11.181	-2.004	0.000	-0.420	7.219	1	0.03	0.00	0.04	
10	56	-0.032	11.179	-2.003	0.000	-0.419	7.219	1	0.03	0.00	0.04	
11	56	-0.047	16.315	-2.789	0.000	-0.594	10.540	1	0.04	0.00	0.06	
12	56	-0.046	16.325	-2.769	0.000	-0.591	10.544	1	0.04	0.00	0.06	
13	56	-0.049	17.085	-2.961	0.000	-0.628	11.044	1	0.05	0.00	0.07	
14	56	-0.049	17.085	-2.960	0.000	-0.627	11.039	1	0.05	0.00	0.07	
1A	113	-0.047	6.207	5.574	0.000	-1.871	11.528	1	0.02	0.00	0.07	
1B	113	-0.047	6.809	5.574	0.000	-1.871	10.672	1	0.02	0.00	0.06	
1C	113	-0.047	6.207	-9.036	0.000	3.085	11.528	1	0.02	0.00	0.07	
1D	113	-0.047	6.809	-9.036	0.000	3.085	10.672	1	0.02	0.00	0.06	
1E	113	-0.010	6.207	5.574	0.000	-1.871	11.528	1	0.02	0.00	0.07	
1F	113	-0.010	6.809	5.574	0.000	-1.871	10.672	1	0.02	0.00	0.06	
1G	113	-0.010	6.207	-9.036	0.000	3.085	11.528	1	0.02	0.00	0.07	
1H	113	-0.010	6.809	-9.036	0.000	3.085	10.672	1	0.02	0.00	0.06	
1I	113	-0.080	6.118	0.946	0.000	-0.303	11.548	1	0.02	0.00	0.07	
1J	113	-0.080	6.898	0.946	0.000	-0.303	10.652	1	0.02	0.00	0.06	
1K	113	-0.080	6.118	-4.408	0.000	1.517	11.548	1	0.02	0.00	0.07	
1L	113	-0.080	6.898	-4.408	0.000	1.517	10.652	1	0.02	0.00	0.06	
1M	113	0.023	6.118	0.946	0.000	-0.303	11.548	1	0.02	0.00	0.07	
1N	113	0.023	6.898	0.946	0.000	-0.303	10.652	1	0.02	0.00	0.06	
1O	113	0.023	6.118	-4.408	0.000	1.517	11.548	1	0.02	0.00	0.07	
1P	113	0.023	6.898	-4.408	0.000	1.517	10.652	1	0.02	0.00	0.06	
2	113	-0.052	11.800	-3.108	0.000	1.087	20.170	1	0.03	0.00	0.12	
7	113	-0.029	6.474	-1.718	0.000	0.603	10.990	1	0.02	0.00	0.07	
8	113	-0.028	6.488	-1.684	0.000	0.588	11.010	1	0.02	0.00	0.07	
9	113	-0.032	7.282	-2.004	0.000	0.708	12.410	1	0.02	0.00	0.07	
10	113	-0.032	7.278	-2.003	0.000	0.707	12.410	1	0.02	0.00	0.07	
11	113	-0.047	10.600	-2.789	0.000	0.975	18.110	1	0.03	0.00	0.11	
12	113	-0.046	10.610	-2.769	0.000	0.967	18.120	1	0.03	0.00	0.11	
13	113	-0.049	11.090	-2.961	0.000	1.038	18.970	1	0.03	0.00	0.11	
14	113	-0.049	11.090	-2.960	0.000	1.038	18.960	1	0.03	0.00	0.11	

ASTA NUM. 84 NI 174 NF 181 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.010	5.909	2.313	0.000	0.548	11.488	1	0.02	0.00	0.07	
1B	0	-0.010	6.024	2.313	0.000	0.548	10.572	1	0.02	0.00	0.06	
1C	0	-0.010	5.909	-2.229	0.000	-0.166	11.488	1	0.02	0.00	0.07	
1D	0	-0.010	6.024	-2.229	0.000	-0.166	10.572	1	0.02	0.00	0.06	
1E	0	0.003	5.909	2.313	0.000	0.548	11.488	1	0.02	0.00	0.07	
1F	0	0.003	6.024	2.313	0.000	0.548	10.572	1	0.02	0.00	0.06	
1G	0	0.003	5.909	-2.229	0.000	-0.166	11.488	1	0.02	0.00	0.07	
1H	0	0.003	6.024	-2.229	0.000	-0.166	10.572	1	0.02	0.00	0.06	
1I	0	-0.020	5.832	0.860	0.000	0.325	11.482	1	0.02	0.00	0.07	
1J	0	-0.020	6.100	0.860	0.000	0.325	10.578	1	0.02	0.00	0.06	
1K	0	-0.020	5.832	-0.776	0.000	0.057	11.482	1	0.02	0.00	0.07	
1L	0	-0.020	6.100	-0.776	0.000	0.057	10.578	1	0.02	0.00	0.06	
1M	0	0.013	5.832	0.860	0.000	0.325	11.482	1	0.02	0.00	0.07	

1N	0	0.013	6.100	0.860	0.000	0.325	10.578	1	0.02	0.00	0.06
1O	0	0.013	5.832	-0.776	0.000	0.057	11.482	1	0.02	0.00	0.07
1P	0	0.013	6.100	-0.776	0.000	0.057	10.578	1	0.02	0.00	0.06
2	0	-0.007	10.880	0.069	0.000	0.338	20.060	1	0.03	0.00	0.12
7	0	-0.004	5.891	0.041	0.000	0.189	10.930	1	0.02	0.00	0.06
8	0	-0.004	5.883	0.036	0.000	0.182	10.940	1	0.02	0.00	0.07
9	0	-0.004	6.667	0.059	0.000	0.231	12.340	1	0.02	0.00	0.07
10	0	-0.004	6.662	0.058	0.000	0.230	12.340	1	0.02	0.00	0.07
11	0	-0.006	9.764	0.061	0.000	0.303	18.010	1	0.03	0.00	0.11
12	0	-0.006	9.760	0.058	0.000	0.299	18.020	1	0.03	0.00	0.11
13	0	-0.006	10.230	0.072	0.000	0.328	18.860	1	0.03	0.00	0.11
14	0	-0.006	10.230	0.072	0.000	0.328	18.860	1	0.03	0.00	0.11
1A	56	-0.010	2.420	2.313	0.000	1.802	13.876	1	0.01	0.00	0.08
1B	56	-0.010	2.535	2.313	0.000	1.802	12.936	1	0.01	0.00	0.08
1C	56	-0.010	2.420	-2.229	0.000	-1.467	13.876	1	0.01	0.00	0.08
1D	56	-0.010	2.535	-2.229	0.000	-1.467	12.936	1	0.01	0.00	0.08
1E	56	0.003	2.420	2.313	0.000	1.802	13.876	1	0.01	0.00	0.08
1F	56	0.003	2.535	2.313	0.000	1.802	12.936	1	0.01	0.00	0.08
1G	56	0.003	2.420	-2.229	0.000	-1.467	13.876	1	0.01	0.00	0.08
1H	56	0.003	2.535	-2.229	0.000	-1.467	12.936	1	0.01	0.00	0.08
1I	56	-0.020	2.343	0.860	0.000	0.762	13.928	1	0.01	0.00	0.08
1J	56	-0.020	2.612	0.860	0.000	0.762	12.885	1	0.01	0.00	0.08
1K	56	-0.020	2.343	-0.776	0.000	-0.426	13.928	1	0.01	0.00	0.08
1L	56	-0.020	2.612	-0.776	0.000	-0.426	12.885	1	0.01	0.00	0.08
1M	56	0.013	2.343	0.860	0.000	0.762	13.928	1	0.01	0.00	0.08
1N	56	0.013	2.612	0.860	0.000	0.762	12.885	1	0.01	0.00	0.08
1O	56	0.013	2.343	-0.776	0.000	-0.426	13.928	1	0.01	0.00	0.08
1P	56	0.013	2.612	-0.776	0.000	-0.426	12.885	1	0.01	0.00	0.08
2	56	-0.007	4.505	0.069	0.000	0.299	24.388	1	0.01	0.00	0.14
7	56	-0.004	2.460	0.041	0.000	0.167	13.280	1	0.01	0.00	0.08
8	56	-0.004	2.452	0.036	0.000	0.162	13.285	1	0.01	0.00	0.08
9	56	-0.004	2.766	0.059	0.000	0.197	14.997	1	0.01	0.00	0.09
10	56	-0.004	2.761	0.058	0.000	0.198	14.992	1	0.01	0.00	0.09
11	56	-0.006	4.050	0.061	0.000	0.269	21.897	1	0.01	0.00	0.13
12	56	-0.006	4.046	0.058	0.000	0.266	21.902	1	0.01	0.00	0.13
13	56	-0.006	4.234	0.072	0.000	0.287	22.926	1	0.01	0.00	0.14
14	56	-0.006	4.233	0.072	0.000	0.287	22.926	1	0.01	0.00	0.14
1A	113	-0.010	-1.069	2.313	0.000	3.057	14.302	1	0.00	0.00	0.08
1B	113	-0.010	-0.953	2.313	0.000	3.057	13.338	1	0.00	0.00	0.08
1C	113	-0.010	-1.069	-2.229	0.000	-2.768	14.302	1	0.00	0.00	0.08
1D	113	-0.010	-0.953	-2.229	0.000	-2.768	13.338	1	0.00	0.00	0.08
1E	113	0.003	-1.069	2.313	0.000	3.057	14.302	1	0.00	0.00	0.08
1F	113	0.003	-0.953	2.313	0.000	3.057	13.338	1	0.00	0.00	0.08
1G	113	0.003	-1.069	-2.229	0.000	-2.768	14.302	1	0.00	0.00	0.08
1H	113	0.003	-0.953	-2.229	0.000	-2.768	13.338	1	0.00	0.00	0.08
1I	113	-0.020	-1.145	0.860	0.000	1.199	14.411	1	0.00	0.00	0.09
1J	113	-0.020	-0.877	0.860	0.000	1.199	13.229	1	0.00	0.00	0.08
1K	113	-0.020	-1.145	-0.776	0.000	-0.910	14.411	1	0.00	0.00	0.09
1L	113	-0.020	-0.877	-0.776	0.000	-0.910	13.229	1	0.00	0.00	0.08
1M	113	0.013	-1.145	0.860	0.000	1.199	14.411	1	0.00	0.00	0.09
1N	113	0.013	-0.877	0.860	0.000	1.199	13.229	1	0.00	0.00	0.08
1O	113	0.013	-1.145	-0.776	0.000	-0.910	14.411	1	0.00	0.00	0.09
1P	113	0.013	-0.877	-0.776	0.000	-0.910	13.229	1	0.00	0.00	0.08
2	113	-0.007	-1.870	0.069	0.000	0.260	25.130	1	0.00	0.00	0.15
7	113	-0.004	-0.972	0.041	0.000	0.144	13.700	1	0.00	0.00	0.08
8	113	-0.004	-0.979	0.036	0.000	0.142	13.700	1	0.00	0.00	0.08
9	113	-0.004	-1.135	0.059	0.000	0.164	15.460	1	0.00	0.00	0.09
10	113	-0.004	-1.140	0.058	0.000	0.165	15.450	1	0.00	0.00	0.09
11	113	-0.006	-1.664	0.061	0.000	0.234	22.570	1	0.00	0.00	0.13
12	113	-0.006	-1.669	0.058	0.000	0.233	22.570	1	0.00	0.00	0.13
13	113	-0.006	-1.762	0.072	0.000	0.246	23.620	1	0.00	0.00	0.14
14	113	-0.006	-1.765	0.072	0.000	0.247	23.620	1	0.00	0.00	0.14

ASTA NUM. 85 NI 181 NF 188 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.011	-1.724	1.939	0.000	3.000	14.295	1	0.00	0.00	0.08	
1B	0	0.011	-1.314	1.939	0.000	3.000	13.325	1	0.00	0.00	0.08	
1C	0	0.011	-1.724	-2.615	0.000	-2.825	14.295	1	0.00	0.00	0.08	
1D	0	0.011	-1.314	-2.615	0.000	-2.825	13.325	1	0.00	0.00	0.08	
1E	0	0.021	-1.724	1.939	0.000	3.000	14.295	1	0.00	0.00	0.08	
1F	0	0.021	-1.314	1.939	0.000	3.000	13.325	1	0.00	0.00	0.08	
1G	0	0.021	-1.724	-2.615	0.000	-2.825	14.295	1	0.00	0.00	0.08	
1H	0	0.021	-1.314	-2.615	0.000	-2.825	13.325	1	0.00	0.00	0.08	
1I	0	-0.000	-1.699	0.488	0.000	1.142	14.402	1	0.00	0.00	0.09	
1J	0	-0.000	-1.339	0.488	0.000	1.142	13.218	1	0.00	0.00	0.08	
1K	0	-0.000	-1.699	-1.164	0.000	-0.967	14.402	1	0.00	0.00	0.09	
1L	0	-0.000	-1.339	-1.164	0.000	-0.967	13.218	1	0.00	0.00	0.08	
1M	0	0.033	-1.699	0.488	0.000	1.142	14.402	1	0.00	0.00	0.09	
1N	0	0.033	-1.339	0.488	0.000	1.142	13.218	1	0.00	0.00	0.08	
1O	0	0.033	-1.699	-1.164	0.000	-0.967	14.402	1	0.00	0.00	0.09	
1P	0	0.033	-1.339	-1.164	0.000	-0.967	13.218	1	0.00	0.00	0.08	
2	0	0.029	-2.726	-0.608	0.000	0.157	25.120	1	0.01	0.00	0.15	
7	0	0.016	-1.523	-0.337	0.000	0.087	13.690	1	0.00	0.00	0.08	
8	0	0.016	-1.539	-0.329	0.000	0.086	13.690	1	0.00	0.00	0.08	
9	0	0.018	-1.712	-0.387	0.000	0.101	15.450	1	0.00	0.00	0.09	
10	0	0.018	-1.725	-0.385	0.000	0.102	15.440	1	0.00	0.00	0.09	
11	0	0.027	-2.455	-0.547	0.000	0.141	22.560	1	0.01	0.00	0.13	

12	0	0.026	-2.465	-0.542	0.000	0.140	22.560	1	0.01	0.00	0.13
13	0	0.028	-2.568	-0.577	0.000	0.150	23.610	1	0.01	0.00	0.14
14	0	0.028	-2.576	-0.576	0.000	0.150	23.600	1	0.01	0.00	0.14
1A	56	0.011	-5.213	1.939	0.000	1.909	12.346	1	0.01	0.00	0.07
1B	56	0.011	-4.803	1.939	0.000	1.909	11.607	1	0.01	0.00	0.07
1C	56	0.011	-5.213	-2.615	0.000	-1.354	12.346	1	0.01	0.00	0.07
1D	56	0.011	-4.803	-2.615	0.000	-1.354	11.607	1	0.01	0.00	0.07
1E	56	0.021	-5.213	1.939	0.000	1.909	12.346	1	0.01	0.00	0.07
1F	56	0.021	-4.803	1.939	0.000	1.909	11.607	1	0.01	0.00	0.07
1G	56	0.021	-5.213	-2.615	0.000	-1.354	12.346	1	0.01	0.00	0.07
1H	56	0.021	-4.803	-2.615	0.000	-1.354	11.607	1	0.01	0.00	0.07
1I	56	-0.000	-5.188	0.488	0.000	0.867	12.467	1	0.01	0.00	0.07
1J	56	-0.000	-4.828	0.488	0.000	0.867	11.485	1	0.01	0.00	0.07
1K	56	-0.000	-5.188	-1.164	0.000	-0.312	12.467	1	0.01	0.00	0.07
1L	56	-0.000	-4.828	-1.164	0.000	-0.312	11.485	1	0.01	0.00	0.07
1M	56	0.033	-5.188	0.488	0.000	0.867	12.467	1	0.01	0.00	0.07
1N	56	0.033	-4.828	0.488	0.000	0.867	11.485	1	0.01	0.00	0.07
1O	56	0.033	-5.188	-1.164	0.000	-0.312	12.467	1	0.01	0.00	0.07
1P	56	0.033	-4.828	-1.164	0.000	-0.312	11.485	1	0.01	0.00	0.07
2	56	0.029	-9.103	-0.608	0.000	0.499	21.793	1	0.02	0.00	0.13
7	56	0.016	-4.955	-0.337	0.000	0.276	11.868	1	0.01	0.00	0.07
8	56	0.016	-4.970	-0.329	0.000	0.271	11.861	1	0.01	0.00	0.07
9	56	0.018	-5.613	-0.387	0.000	0.319	13.389	1	0.01	0.00	0.08
10	56	0.018	-5.627	-0.385	0.000	0.319	13.371	1	0.01	0.00	0.08
11	56	0.027	-8.168	-0.547	0.000	0.449	19.572	1	0.02	0.00	0.12
12	56	0.026	-8.177	-0.542	0.000	0.445	19.567	1	0.02	0.00	0.12
13	56	0.028	-8.564	-0.577	0.000	0.474	20.481	1	0.02	0.00	0.12
14	56	0.028	-8.573	-0.576	0.000	0.474	20.466	1	0.02	0.00	0.12
1A	113	0.011	-8.702	1.939	0.000	0.819	8.434	1	0.02	0.00	0.05
1B	113	0.011	-8.292	1.939	0.000	0.819	7.926	1	0.02	0.00	0.05
1C	113	0.011	-8.702	-2.615	0.000	0.116	8.434	1	0.02	0.00	0.05
1D	113	0.011	-8.292	-2.615	0.000	0.116	7.926	1	0.02	0.00	0.05
1E	113	0.021	-8.702	1.939	0.000	0.819	8.434	1	0.02	0.00	0.05
1F	113	0.021	-8.292	1.939	0.000	0.819	7.926	1	0.02	0.00	0.05
1G	113	0.021	-8.702	-2.615	0.000	0.116	8.434	1	0.02	0.00	0.05
1H	113	0.021	-8.292	-2.615	0.000	0.116	7.926	1	0.02	0.00	0.05
1I	113	-0.000	-8.677	0.488	0.000	0.593	8.570	1	0.02	0.00	0.05
1J	113	-0.000	-8.317	0.488	0.000	0.593	7.790	1	0.02	0.00	0.05
1K	113	-0.000	-8.677	-1.164	0.000	0.342	8.570	1	0.02	0.00	0.05
1L	113	-0.000	-8.317	-1.164	0.000	0.342	7.790	1	0.02	0.00	0.05
1M	113	0.033	-8.677	0.488	0.000	0.593	8.570	1	0.02	0.00	0.05
1N	113	0.033	-8.317	0.488	0.000	0.593	7.790	1	0.02	0.00	0.05
1O	113	0.033	-8.677	-1.164	0.000	0.342	8.570	1	0.02	0.00	0.05
1P	113	0.033	-8.317	-1.164	0.000	0.342	7.790	1	0.02	0.00	0.05
2	113	0.029	-15.480	-0.608	0.000	0.841	14.880	1	0.04	0.00	0.09
7	113	0.016	-8.386	-0.337	0.000	0.466	8.116	1	0.02	0.00	0.05
8	113	0.016	-8.402	-0.329	0.000	0.456	8.102	1	0.02	0.00	0.05
9	113	0.018	-9.514	-0.387	0.000	0.537	9.134	1	0.03	0.00	0.05
10	113	0.018	-9.528	-0.385	0.000	0.535	9.108	1	0.03	0.00	0.05
11	113	0.027	-13.880	-0.547	0.000	0.756	13.370	1	0.04	0.00	0.08
12	113	0.026	-13.890	-0.542	0.000	0.750	13.360	1	0.04	0.00	0.08
13	113	0.028	-14.560	-0.577	0.000	0.799	13.980	1	0.04	0.00	0.08
14	113	0.028	-14.570	-0.576	0.000	0.798	13.960	1	0.04	0.00	0.08

ASTA NUM. 86 NI 188 NF 79 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.032	-10.082	9.513	0.000	3.374	8.452	1	0.03	0.00	0.05	
1B	0	-0.032	-8.950	9.513	0.000	3.374	8.002	1	0.02	0.00	0.05	
1C	0	-0.032	-10.082	-5.081	0.000	-1.569	8.452	1	0.03	0.00	0.05	
1D	0	-0.032	-8.950	-5.081	0.000	-1.569	8.002	1	0.02	0.00	0.05	
1E	0	0.008	-10.082	9.513	0.000	3.374	8.452	1	0.03	0.00	0.05	
1F	0	0.008	-8.950	9.513	0.000	3.374	8.002	1	0.02	0.00	0.05	
1G	0	0.008	-10.082	-5.081	0.000	-1.569	8.452	1	0.03	0.00	0.05	
1H	0	0.008	-8.950	-5.081	0.000	-1.569	8.002	1	0.02	0.00	0.05	
1I	0	-0.063	-10.046	4.867	0.000	1.797	8.612	1	0.03	0.00	0.05	
1J	0	-0.063	-8.986	4.867	0.000	1.797	7.842	1	0.02	0.00	0.05	
1K	0	-0.063	-10.046	-0.435	0.000	0.007	8.612	1	0.03	0.00	0.05	
1L	0	-0.063	-8.986	-0.435	0.000	0.007	7.842	1	0.02	0.00	0.05	
1M	0	0.039	-10.046	4.867	0.000	1.797	8.612	1	0.03	0.00	0.05	
1N	0	0.039	-8.986	4.867	0.000	1.797	7.842	1	0.02	0.00	0.05	
1O	0	0.039	-10.046	-0.435	0.000	0.007	8.612	1	0.03	0.00	0.05	
1P	0	0.039	-8.986	-0.435	0.000	0.007	7.842	1	0.02	0.00	0.05	
2	0	-0.021	-17.260	3.991	0.000	1.625	14.960	1	0.05	0.00	0.09	
7	0	-0.011	-9.454	2.204	0.000	0.898	8.164	1	0.03	0.00	0.05	
8	0	-0.012	-9.491	2.163	0.000	0.881	8.152	1	0.03	0.00	0.05	
9	0	-0.013	-10.650	2.541	0.000	1.035	9.186	1	0.03	0.00	0.05	
10	0	-0.013	-10.660	2.536	0.000	1.033	9.160	1	0.03	0.00	0.05	
11	0	-0.019	-15.510	3.585	0.000	1.460	13.440	1	0.04	0.00	0.08	
12	0	-0.019	-15.530	3.561	0.000	1.449	13.440	1	0.04	0.00	0.08	
13	0	-0.020	-16.220	3.787	0.000	1.542	14.060	1	0.04	0.00	0.08	
14	0	-0.020	-16.230	3.785	0.000	1.541	14.040	1	0.04	0.00	0.08	
1A	56	-0.032	-13.569	9.513	0.000	-1.977	1.799	1	0.04	0.00	0.02	
1B	56	-0.032	-12.437	9.513	0.000	-1.977	1.987	1	0.03	0.00	0.02	
1C	56	-0.032	-13.569	-5.081	0.000	1.289	1.799	1	0.04	0.00	0.02	
1D	56	-0.032	-12.437	-5.081	0.000	1.289	1.987	1	0.03	0.00	0.02	
1E	56	0.008	-13.569	9.513	0.000	-1.977	1.799	1	0.04	0.00	0.02	

1F	56	0.008	-12.437	9.513	0.000	-1.977	1.987	1	0.03	0.00	0.02
1G	56	0.008	-13.569	-5.081	0.000	1.289	1.799	1	0.04	0.00	0.02
1H	56	0.008	-12.437	-5.081	0.000	1.289	1.987	1	0.03	0.00	0.02
1I	56	-0.063	-13.533	4.867	0.000	-0.940	1.981	1	0.04	0.00	0.01
1J	56	-0.063	-12.473	4.867	0.000	-0.940	1.806	1	0.03	0.00	0.01
1K	56	-0.063	-13.533	-0.435	0.000	0.252	1.981	1	0.04	0.00	0.01
1L	56	-0.063	-12.473	-0.435	0.000	0.252	1.806	1	0.03	0.00	0.01
1M	56	0.039	-13.533	4.867	0.000	-0.940	1.981	1	0.04	0.00	0.01
1N	56	0.039	-12.473	4.867	0.000	-0.940	1.806	1	0.03	0.00	0.01
1O	56	0.039	-13.533	-0.435	0.000	0.252	1.981	1	0.04	0.00	0.01
1P	56	0.039	-12.473	-0.435	0.000	0.252	1.806	1	0.03	0.00	0.01
2	56	-0.021	-23.635	3.991	0.000	-0.620	3.458	1	0.06	0.00	0.02
7	56	-0.011	-12.887	2.204	0.000	-0.342	1.881	1	0.03	0.00	0.01
8	56	-0.012	-12.921	2.163	0.000	-0.336	1.848	1	0.03	0.00	0.01
9	56	-0.013	-14.550	2.541	0.000	-0.394	2.100	1	0.04	0.00	0.01
10	56	-0.013	-14.565	2.536	0.000	-0.394	2.065	1	0.04	0.00	0.01
11	56	-0.019	-21.220	3.585	0.000	-0.557	3.112	1	0.06	0.00	0.02
12	56	-0.019	-21.245	3.561	0.000	-0.554	3.097	1	0.06	0.00	0.02
13	56	-0.020	-22.215	3.787	0.000	-0.589	3.246	1	0.06	0.00	0.02
14	56	-0.020	-22.225	3.785	0.000	-0.588	3.221	1	0.06	0.00	0.02
1A	113	-0.032	-17.056	9.513	0.000	-7.328	-6.816	1	0.05	0.00	0.09
1B	113	-0.032	-15.924	9.513	0.000	-7.328	-5.990	1	0.04	0.00	0.09
1C	113	-0.032	-17.056	-5.081	0.000	4.148	-6.816	1	0.05	0.00	0.05
1D	113	-0.032	-15.924	-5.081	0.000	4.148	-5.990	1	0.04	0.00	0.05
1E	113	0.008	-17.056	9.513	0.000	-7.328	-6.816	1	0.05	0.00	0.09
1F	113	0.008	-15.924	9.513	0.000	-7.328	-5.990	1	0.04	0.00	0.09
1G	113	0.008	-17.056	-5.081	0.000	4.148	-6.816	1	0.05	0.00	0.05
1H	113	0.008	-15.924	-5.081	0.000	4.148	-5.990	1	0.04	0.00	0.05
1I	113	-0.063	-17.020	4.867	0.000	-3.677	-6.614	1	0.05	0.00	0.05
1J	113	-0.063	-15.960	4.867	0.000	-3.677	-6.192	1	0.04	0.00	0.05
1K	113	-0.063	-17.020	-0.435	0.000	0.497	-6.614	1	0.05	0.00	0.04
1L	113	-0.063	-15.960	-0.435	0.000	0.497	-6.192	1	0.04	0.00	0.04
1M	113	0.039	-17.020	4.867	0.000	-3.677	-6.614	1	0.05	0.00	0.05
1N	113	0.039	-15.960	4.867	0.000	-3.677	-6.192	1	0.04	0.00	0.05
1O	113	0.039	-17.020	-0.435	0.000	0.497	-6.614	1	0.05	0.00	0.04
1P	113	0.039	-15.960	-0.435	0.000	0.497	-6.192	1	0.04	0.00	0.04
2	113	-0.021	-30.010	3.991	0.000	-2.865	-11.630	1	0.08	0.00	0.07
7	113	-0.011	-16.320	2.204	0.000	-1.582	-6.332	1	0.04	0.00	0.04
8	113	-0.012	-16.350	2.163	0.000	-1.553	-6.386	1	0.04	0.00	0.04
9	113	-0.013	-18.450	2.541	0.000	-1.823	-7.181	1	0.05	0.00	0.04
10	113	-0.013	-18.470	2.536	0.000	-1.820	-7.225	1	0.05	0.00	0.04
11	113	-0.019	-26.930	3.585	0.000	-2.574	-10.430	1	0.07	0.00	0.06
12	113	-0.019	-26.960	3.561	0.000	-2.557	-10.460	1	0.07	0.00	0.06
13	113	-0.020	-28.210	3.787	0.000	-2.719	-10.940	1	0.08	0.00	0.07
14	113	-0.020	-28.220	3.785	0.000	-2.717	-10.970	1	0.08	0.00	0.07

ASTA NUM. 24 NI 79 NF 228 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.034	9.032	1.270	0.000	0.780	-5.899	1	0.02	0.00	0.04	
1B	0	-0.034	10.094	1.270	0.000	0.780	-6.857	1	0.03	0.00	0.04	
1C	0	-0.034	9.032	-7.000	0.000	-4.026	-5.899	1	0.02	0.00	0.05	
1D	0	-0.034	10.094	-7.000	0.000	-4.026	-6.857	1	0.03	0.00	0.05	
1E	0	-0.009	9.032	1.270	0.000	0.780	-5.899	1	0.02	0.00	0.04	
1F	0	-0.009	10.094	1.270	0.000	0.780	-6.857	1	0.03	0.00	0.04	
1G	0	-0.009	9.032	-7.000	0.000	-4.026	-5.899	1	0.02	0.00	0.05	
1H	0	-0.009	10.094	-7.000	0.000	-4.026	-6.857	1	0.03	0.00	0.05	
1I	0	-0.052	9.283	-1.478	0.000	-0.819	-6.150	1	0.02	0.00	0.04	
1J	0	-0.052	9.843	-1.478	0.000	-0.819	-6.606	1	0.03	0.00	0.04	
1K	0	-0.052	9.283	-4.252	0.000	-2.427	-6.150	1	0.02	0.00	0.04	
1L	0	-0.052	9.843	-4.252	0.000	-2.427	-6.606	1	0.03	0.00	0.04	
1M	0	0.009	9.283	-1.478	0.000	-0.819	-6.150	1	0.02	0.00	0.04	
1N	0	0.009	9.843	-1.478	0.000	-0.819	-6.606	1	0.03	0.00	0.04	
1O	0	0.009	9.283	-4.252	0.000	-2.427	-6.150	1	0.02	0.00	0.04	
1P	0	0.009	9.843	-4.252	0.000	-2.427	-6.606	1	0.03	0.00	0.04	
2	0	-0.038	17.380	-5.150	0.000	-2.916	-11.580	1	0.05	0.00	0.07	
7	0	-0.022	9.472	-2.854	0.000	-1.617	-6.307	1	0.03	0.00	0.04	
8	0	-0.020	9.523	-2.794	0.000	-1.582	-6.361	1	0.03	0.00	0.04	
9	0	-0.025	10.680	-3.296	0.000	-1.868	-7.154	1	0.03	0.00	0.04	
10	0	-0.025	10.710	-3.293	0.000	-1.866	-7.198	1	0.03	0.00	0.04	
11	0	-0.035	15.610	-4.628	0.000	-2.620	-10.390	1	0.04	0.00	0.06	
12	0	-0.034	15.640	-4.592	0.000	-2.600	-10.420	1	0.04	0.00	0.06	
13	0	-0.036	16.330	-4.893	0.000	-2.771	-10.900	1	0.04	0.00	0.06	
14	0	-0.036	16.350	-4.891	0.000	-2.770	-10.920	1	0.04	0.00	0.06	
1A	47	-0.034	6.138	1.270	0.000	0.187	-2.359	1	0.02	0.00	0.01	
1B	47	-0.034	7.199	1.270	0.000	0.187	-2.822	1	0.02	0.00	0.02	
1C	47	-0.034	6.138	-7.000	0.000	-0.759	-2.359	1	0.02	0.00	0.01	
1D	47	-0.034	7.199	-7.000	0.000	-0.759	-2.822	1	0.02	0.00	0.02	
1E	47	-0.009	6.138	1.270	0.000	0.187	-2.359	1	0.02	0.00	0.01	
1F	47	-0.009	7.199	1.270	0.000	0.187	-2.822	1	0.02	0.00	0.02	
1G	47	-0.009	6.138	-7.000	0.000	-0.759	-2.359	1	0.02	0.00	0.01	
1H	47	-0.009	7.199	-7.000	0.000	-0.759	-2.822	1	0.02	0.00	0.02	
1I	47	-0.052	6.388	-1.478	0.000	-0.129	-2.494	1	0.02	0.00	0.01	
1J	47	-0.052	6.949	-1.478	0.000	-0.129	-2.688	1	0.02	0.00	0.02	
1K	47	-0.052	6.388	-4.252	0.000	-0.443	-2.494	1	0.02	0.00	0.01	
1L	47	-0.052	6.949	-4.252	0.000	-0.443	-2.688	1	0.02	0.00	0.02	
1M	47	0.009	6.388	-1.478	0.000	-0.129	-2.494	1	0.02	0.00	0.01	
1N	47	0.009	6.949	-1.478	0.000	-0.129	-2.688	1	0.02	0.00	0.02	

1O	47	0.009	6.388	-4.252	0.000	-0.443	-2.494	1	0.02	0.00	0.01
1P	47	0.009	6.949	-4.252	0.000	-0.443	-2.688	1	0.02	0.00	0.02
2	47	-0.038	12.091	-5.150	0.000	-0.513	-4.703	1	0.03	0.00	0.03
7	47	-0.022	6.626	-2.854	0.000	-0.285	-2.551	1	0.02	0.00	0.02
8	47	-0.020	6.676	-2.794	0.000	-0.278	-2.581	1	0.02	0.00	0.02
9	47	-0.025	7.446	-3.296	0.000	-0.330	-2.923	1	0.02	0.00	0.02
10	47	-0.025	7.476	-3.293	0.000	-0.330	-2.953	1	0.02	0.00	0.02
11	47	-0.035	10.868	-4.628	0.000	-0.461	-4.213	1	0.03	0.00	0.03
12	47	-0.034	10.898	-4.592	0.000	-0.457	-4.230	1	0.03	0.00	0.03
13	47	-0.036	11.357	-4.893	0.000	-0.487	-4.437	1	0.03	0.00	0.03
14	47	-0.036	11.377	-4.891	0.000	-0.488	-4.452	1	0.03	0.00	0.03
1A	93	-0.034	3.243	1.270	0.000	-0.406	-0.171	1	0.01	0.00	0.01
1B	93	-0.034	4.305	1.270	0.000	-0.406	-0.138	1	0.01	0.00	0.01
1C	93	-0.034	3.243	-7.000	0.000	2.508	-0.171	1	0.01	0.00	0.03
1D	93	-0.034	4.305	-7.000	0.000	2.508	-0.138	1	0.01	0.00	0.03
1E	93	-0.009	3.243	1.270	0.000	-0.406	-0.171	1	0.01	0.00	0.01
1F	93	-0.009	4.305	1.270	0.000	-0.406	-0.138	1	0.01	0.00	0.01
1G	93	-0.009	3.243	-7.000	0.000	2.508	-0.171	1	0.01	0.00	0.03
1H	93	-0.009	4.305	-7.000	0.000	2.508	-0.138	1	0.01	0.00	0.03
1I	93	-0.052	3.494	-1.478	0.000	0.561	-0.188	1	0.01	0.00	0.01
1J	93	-0.052	4.054	-1.478	0.000	0.561	-0.120	1	0.01	0.00	0.01
1K	93	-0.052	3.494	-4.252	0.000	1.541	-0.188	1	0.01	0.00	0.02
1L	93	-0.052	4.054	-4.252	0.000	1.541	-0.120	1	0.01	0.00	0.02
1M	93	0.009	3.494	-1.478	0.000	0.561	-0.188	1	0.01	0.00	0.01
1N	93	0.009	4.054	-1.478	0.000	0.561	-0.120	1	0.01	0.00	0.01
1O	93	0.009	3.494	-4.252	0.000	1.541	-0.188	1	0.01	0.00	0.02
1P	93	0.009	4.054	-4.252	0.000	1.541	-0.120	1	0.01	0.00	0.02
2	93	-0.038	6.802	-5.150	0.000	1.890	-0.295	1	0.02	0.00	0.02
7	93	-0.022	3.779	-2.854	0.000	1.047	-0.124	1	0.01	0.00	0.01
8	93	-0.020	3.830	-2.794	0.000	1.026	-0.130	1	0.01	0.00	0.01
9	93	-0.025	4.212	-3.296	0.000	1.208	-0.203	1	0.01	0.00	0.02
10	93	-0.025	4.241	-3.293	0.000	1.207	-0.219	1	0.01	0.00	0.02
11	93	-0.035	6.126	-4.628	0.000	1.698	-0.249	1	0.02	0.00	0.02
12	93	-0.034	6.156	-4.592	0.000	1.686	-0.252	1	0.02	0.00	0.02
13	93	-0.036	6.385	-4.893	0.000	1.796	-0.296	1	0.02	0.00	0.02
14	93	-0.036	6.403	-4.891	0.000	1.795	-0.306	1	0.02	0.00	0.02

ASTA NUM. 87 NI 228 NF 221 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.060	2.431	0.181	0.000	1.655	-0.142	1	0.01	0.00	0.02	
1B	0	0.060	2.605	0.181	0.000	1.655	-0.191	1	0.01	0.00	0.02	
1C	0	0.060	2.431	0.166	0.000	-0.239	-0.142	1	0.01	0.00	0.00	
1D	0	0.060	2.605	0.166	0.000	-0.239	-0.191	1	0.01	0.00	0.00	
1E	0	0.087	2.431	0.181	0.000	1.655	-0.142	1	0.01	0.00	0.02	
1F	0	0.087	2.605	0.181	0.000	1.655	-0.191	1	0.01	0.00	0.02	
1G	0	0.087	2.431	0.166	0.000	-0.239	-0.142	1	0.01	0.00	0.00	
1H	0	0.087	2.605	0.166	0.000	-0.239	-0.191	1	0.01	0.00	0.00	
1I	0	0.068	2.481	0.179	0.000	1.025	-0.130	1	0.01	0.00	0.01	
1J	0	0.068	2.555	0.179	0.000	1.025	-0.203	1	0.01	0.00	0.01	
1K	0	0.068	2.481	0.168	0.000	0.391	-0.130	1	0.01	0.00	0.00	
1L	0	0.068	2.555	0.168	0.000	0.391	-0.203	1	0.01	0.00	0.00	
1M	0	0.079	2.481	0.179	0.000	1.025	-0.130	1	0.01	0.00	0.01	
1N	0	0.079	2.555	0.179	0.000	1.025	-0.203	1	0.01	0.00	0.01	
1O	0	0.079	2.481	0.168	0.000	0.391	-0.130	1	0.01	0.00	0.00	
1P	0	0.079	2.555	0.168	0.000	0.391	-0.203	1	0.01	0.00	0.00	
2	0	0.132	4.602	0.316	0.000	1.274	-0.317	1	0.01	0.00	0.02	
7	0	0.073	2.468	0.170	0.000	0.704	-0.136	1	0.01	0.00	0.01	
8	0	0.071	2.480	0.172	0.000	0.691	-0.142	1	0.01	0.00	0.01	
9	0	0.084	2.827	0.194	0.000	0.813	-0.217	1	0.01	0.00	0.01	
10	0	0.084	2.856	0.193	0.000	0.812	-0.233	1	0.01	0.00	0.01	
11	0	0.119	4.118	0.283	0.000	1.144	-0.269	1	0.01	0.00	0.01	
12	0	0.117	4.126	0.283	0.000	1.137	-0.272	1	0.01	0.00	0.01	
13	0	0.125	4.334	0.297	0.000	1.210	-0.317	1	0.01	0.00	0.02	
14	0	0.125	4.352	0.296	0.000	1.209	-0.326	1	0.01	0.00	0.02	
1A	47	0.060	-0.464	0.181	0.000	1.570	0.395	1	0.00	0.00	0.02	
1B	47	0.060	-0.289	0.181	0.000	1.570	0.271	1	0.00	0.00	0.02	
1C	47	0.060	-0.464	0.166	0.000	-0.316	0.395	1	0.00	0.00	0.00	
1D	47	0.060	-0.289	0.166	0.000	-0.316	0.271	1	0.00	0.00	0.00	
1E	47	0.087	-0.464	0.181	0.000	1.570	0.395	1	0.00	0.00	0.02	
1F	47	0.087	-0.289	0.181	0.000	1.570	0.271	1	0.00	0.00	0.02	
1G	47	0.087	-0.464	0.166	0.000	-0.316	0.395	1	0.00	0.00	0.00	
1H	47	0.087	-0.289	0.166	0.000	-0.316	0.271	1	0.00	0.00	0.00	
1I	47	0.068	-0.413	0.179	0.000	0.942	0.376	1	0.00	0.00	0.01	
1J	47	0.068	-0.340	0.179	0.000	0.942	0.290	1	0.00	0.00	0.01	
1K	47	0.068	-0.413	0.168	0.000	0.312	0.376	1	0.00	0.00	0.00	
1L	47	0.068	-0.340	0.168	0.000	0.312	0.290	1	0.00	0.00	0.00	
1M	47	0.079	-0.413	0.179	0.000	0.942	0.376	1	0.00	0.00	0.01	
1N	47	0.079	-0.340	0.179	0.000	0.942	0.290	1	0.00	0.00	0.01	
1O	47	0.079	-0.413	0.168	0.000	0.312	0.376	1	0.00	0.00	0.00	
1P	47	0.079	-0.340	0.168	0.000	0.312	0.290	1	0.00	0.00	0.00	
2	47	0.132	-0.688	0.316	0.000	1.127	0.596	1	0.00	0.00	0.01	
7	47	0.073	-0.379	0.170	0.000	0.625	0.351	1	0.00	0.00	0.01	
8	47	0.071	-0.367	0.172	0.000	0.611	0.351	1	0.00	0.00	0.01	
9	47	0.084	-0.410	0.194	0.000	0.723	0.347	1	0.00	0.00	0.01	
10	47	0.084	-0.381	0.193	0.000	0.722	0.345	1	0.00	0.00	0.01	
11	47	0.119	-0.623	0.283	0.000	1.012	0.547	1	0.00	0.00	0.01	
12	47	0.117	-0.615	0.283	0.000	1.005	0.547	1	0.00	0.00	0.01	

13	47	0.125	-0.641	0.297	0.000	1.071	0.545	1	0.00	0.00	0.01
14	47	0.125	-0.623	0.296	0.000	1.071	0.544	1	0.00	0.00	0.01
1A	93	0.060	-3.358	0.181	0.000	1.486	-0.418	1	0.01	0.00	0.02
1B	93	0.060	-3.184	0.181	0.000	1.486	-0.618	1	0.01	0.00	0.02
1C	93	0.060	-3.358	0.166	0.000	-0.394	-0.418	1	0.01	0.00	0.00
1D	93	0.060	-3.184	0.166	0.000	-0.394	-0.618	1	0.01	0.00	0.00
1E	93	0.087	-3.358	0.181	0.000	1.486	-0.418	1	0.01	0.00	0.02
1F	93	0.087	-3.184	0.181	0.000	1.486	-0.618	1	0.01	0.00	0.02
1G	93	0.087	-3.358	0.166	0.000	-0.394	-0.418	1	0.01	0.00	0.00
1H	93	0.087	-3.184	0.166	0.000	-0.394	-0.618	1	0.01	0.00	0.00
1I	93	0.068	-3.308	0.179	0.000	0.859	-0.468	1	0.01	0.00	0.01
1J	93	0.068	-3.234	0.179	0.000	0.859	-0.568	1	0.01	0.00	0.01
1K	93	0.068	-3.308	0.168	0.000	0.234	-0.468	1	0.01	0.00	0.00
1L	93	0.068	-3.234	0.168	0.000	0.234	-0.568	1	0.01	0.00	0.00
1M	93	0.079	-3.308	0.179	0.000	0.859	-0.468	1	0.01	0.00	0.01
1N	93	0.079	-3.234	0.179	0.000	0.859	-0.568	1	0.01	0.00	0.01
1O	93	0.079	-3.308	0.168	0.000	0.234	-0.468	1	0.01	0.00	0.00
1P	93	0.079	-3.234	0.168	0.000	0.234	-0.568	1	0.01	0.00	0.00
2	93	0.132	-5.979	0.316	0.000	0.979	-0.959	1	0.02	0.00	0.01
7	93	0.073	-3.226	0.170	0.000	0.545	-0.490	1	0.01	0.00	0.01
8	93	0.071	-3.214	0.172	0.000	0.531	-0.485	1	0.01	0.00	0.01
9	93	0.084	-3.646	0.194	0.000	0.632	-0.599	1	0.01	0.00	0.01
10	93	0.084	-3.617	0.193	0.000	0.632	-0.588	1	0.01	0.00	0.01
11	93	0.119	-5.363	0.283	0.000	0.881	-0.849	1	0.01	0.00	0.01
12	93	0.117	-5.356	0.283	0.000	0.872	-0.846	1	0.01	0.00	0.01
13	93	0.125	-5.615	0.297	0.000	0.933	-0.915	1	0.01	0.00	0.01
14	93	0.125	-5.597	0.296	0.000	0.933	-0.908	1	0.01	0.00	0.01

ASTA NUM. 88 NI 221 NF 64 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.051	-4.717	6.677	0.000	2.353	-0.399	1	0.01	0.00	0.03	
1B	0	-0.051	-4.027	6.677	0.000	2.353	-0.582	1	0.01	0.00	0.03	
1C	0	-0.051	-4.717	-1.561	0.000	-0.547	-0.399	1	0.01	0.00	0.01	
1D	0	-0.051	-4.027	-1.561	0.000	-0.547	-0.582	1	0.01	0.00	0.01	
1E	0	-0.016	-4.717	6.677	0.000	2.353	-0.399	1	0.01	0.00	0.03	
1F	0	-0.016	-4.027	6.677	0.000	2.353	-0.582	1	0.01	0.00	0.03	
1G	0	-0.016	-4.717	-1.561	0.000	-0.547	-0.399	1	0.01	0.00	0.01	
1H	0	-0.016	-4.027	-1.561	0.000	-0.547	-0.582	1	0.01	0.00	0.01	
1I	0	-0.065	-4.580	3.927	0.000	1.384	-0.442	1	0.01	0.00	0.02	
1J	0	-0.065	-4.164	3.927	0.000	1.384	-0.539	1	0.01	0.00	0.02	
1K	0	-0.065	-4.580	1.189	0.000	0.422	-0.442	1	0.01	0.00	0.01	
1L	0	-0.065	-4.164	1.189	0.000	0.422	-0.539	1	0.01	0.00	0.01	
1M	0	-0.002	-4.580	3.927	0.000	1.384	-0.442	1	0.01	0.00	0.02	
1N	0	-0.002	-4.164	3.927	0.000	1.384	-0.539	1	0.01	0.00	0.02	
1O	0	-0.002	-4.580	1.189	0.000	0.422	-0.442	1	0.01	0.00	0.01	
1P	0	-0.002	-4.164	1.189	0.000	0.422	-0.539	1	0.01	0.00	0.01	
2	0	-0.060	-7.896	4.592	0.000	1.620	-0.909	1	0.02	0.00	0.02	
7	0	-0.033	-4.382	2.551	0.000	0.900	-0.462	1	0.01	0.00	0.01	
8	0	-0.033	-4.409	2.491	0.000	0.879	-0.457	1	0.01	0.00	0.01	
9	0	-0.039	-4.863	2.954	0.000	1.043	-0.568	1	0.01	0.00	0.01	
10	0	-0.039	-4.828	2.953	0.000	1.042	-0.557	1	0.01	0.00	0.01	
11	0	-0.054	-7.115	4.127	0.000	1.456	-0.804	1	0.02	0.00	0.02	
12	0	-0.054	-7.131	4.091	0.000	1.443	-0.801	1	0.02	0.00	0.02	
13	0	-0.057	-7.404	4.369	0.000	1.542	-0.868	1	0.02	0.00	0.02	
14	0	-0.057	-7.383	4.368	0.000	1.541	-0.861	1	0.02	0.00	0.02	
1A	47	-0.051	-7.611	6.677	0.000	-0.763	-3.275	1	0.02	0.00	0.02	
1B	47	-0.051	-6.921	6.677	0.000	-0.763	-3.136	1	0.02	0.00	0.02	
1C	47	-0.051	-7.611	-1.561	0.000	0.181	-3.275	1	0.02	0.00	0.02	
1D	47	-0.051	-6.921	-1.561	0.000	0.181	-3.136	1	0.02	0.00	0.02	
1E	47	-0.016	-7.611	6.677	0.000	-0.763	-3.275	1	0.02	0.00	0.02	
1F	47	-0.016	-6.921	6.677	0.000	-0.763	-3.136	1	0.02	0.00	0.02	
1G	47	-0.016	-7.611	-1.561	0.000	0.181	-3.275	1	0.02	0.00	0.02	
1H	47	-0.016	-6.921	-1.561	0.000	0.181	-3.136	1	0.02	0.00	0.02	
1I	47	-0.065	-7.474	3.927	0.000	-0.449	-3.255	1	0.02	0.00	0.02	
1J	47	-0.065	-7.058	3.927	0.000	-0.449	-3.157	1	0.02	0.00	0.02	
1K	47	-0.065	-7.474	1.189	0.000	-0.133	-3.255	1	0.02	0.00	0.02	
1L	47	-0.065	-7.058	1.189	0.000	-0.133	-3.157	1	0.02	0.00	0.02	
1M	47	-0.002	-7.474	3.927	0.000	-0.449	-3.255	1	0.02	0.00	0.02	
1N	47	-0.002	-7.058	3.927	0.000	-0.449	-3.157	1	0.02	0.00	0.02	
1O	47	-0.002	-7.474	1.189	0.000	-0.133	-3.255	1	0.02	0.00	0.02	
1P	47	-0.002	-7.058	1.189	0.000	-0.133	-3.157	1	0.02	0.00	0.02	
2	47	-0.060	-13.188	4.592	0.000	-0.522	-5.830	1	0.04	0.00	0.03	
7	47	-0.033	-7.231	2.551	0.000	-0.290	-3.171	1	0.02	0.00	0.02	
8	47	-0.033	-7.255	2.491	0.000	-0.284	-3.179	1	0.02	0.00	0.02	
9	47	-0.039	-8.102	2.954	0.000	-0.336	-3.592	1	0.02	0.00	0.02	
10	47	-0.039	-8.064	2.953	0.000	-0.336	-3.565	1	0.02	0.00	0.02	
11	47	-0.054	-11.858	4.127	0.000	-0.470	-5.231	1	0.03	0.00	0.03	
12	47	-0.054	-11.871	4.091	0.000	-0.466	-5.234	1	0.03	0.00	0.03	
13	47	-0.057	-12.377	4.369	0.000	-0.497	-5.483	1	0.03	0.00	0.03	
14	47	-0.057	-12.357	4.368	0.000	-0.497	-5.465	1	0.03	0.00	0.03	
1A	93	-0.051	-10.505	6.677	0.000	-3.879	-7.503	1	0.03	0.00	0.05	
1B	93	-0.051	-9.815	6.677	0.000	-3.879	-7.041	1	0.03	0.00	0.05	
1C	93	-0.051	-10.505	-1.561	0.000	0.909	-7.503	1	0.03	0.00	0.04	
1D	93	-0.051	-9.815	-1.561	0.000	0.909	-7.041	1	0.03	0.00	0.04	
1E	93	-0.016	-10.505	6.677	0.000	-3.879	-7.503	1	0.03	0.00	0.05	
1F	93	-0.016	-9.815	6.677	0.000	-3.879	-7.041	1	0.03	0.00	0.05	

1G	93	-0.016	-10.505	-1.561	0.000	0.909	-7.503	1	0.03	0.00	0.04
1H	93	-0.016	-9.815	-1.561	0.000	0.909	-7.041	1	0.03	0.00	0.04
1I	93	-0.065	-10.368	3.927	0.000	-2.282	-7.419	1	0.03	0.00	0.04
1J	93	-0.065	-9.952	3.927	0.000	-2.282	-7.125	1	0.03	0.00	0.04
1K	93	-0.065	-10.368	1.189	0.000	-0.688	-7.419	1	0.03	0.00	0.04
1L	93	-0.065	-9.952	1.189	0.000	-0.688	-7.125	1	0.03	0.00	0.04
1M	93	-0.002	-10.368	3.927	0.000	-2.282	-7.419	1	0.03	0.00	0.04
1N	93	-0.002	-9.952	3.927	0.000	-2.282	-7.125	1	0.03	0.00	0.04
1O	93	-0.002	-10.368	1.189	0.000	-0.688	-7.419	1	0.03	0.00	0.04
1P	93	-0.002	-9.952	1.189	0.000	-0.688	-7.125	1	0.03	0.00	0.04
2	93	-0.060	-18.480	4.592	0.000	-2.665	-13.220	1	0.05	0.00	0.08
7	93	-0.033	-10.080	2.551	0.000	-1.481	-7.209	1	0.03	0.00	0.04
8	93	-0.033	-10.100	2.491	0.000	-1.446	-7.229	1	0.03	0.00	0.04
9	93	-0.039	-11.340	2.954	0.000	-1.715	-8.127	1	0.03	0.00	0.05
10	93	-0.039	-11.300	2.953	0.000	-1.714	-8.083	1	0.03	0.00	0.05
11	93	-0.054	-16.600	4.127	0.000	-2.396	-11.870	1	0.04	0.00	0.07
12	93	-0.054	-16.610	4.091	0.000	-2.375	-11.880	1	0.04	0.00	0.07
13	93	-0.057	-17.350	4.369	0.000	-2.536	-12.420	1	0.05	0.00	0.07
14	93	-0.057	-17.330	4.368	0.000	-2.535	-12.390	1	0.05	0.00	0.07

ASTA NUM. 25 NI 64 NF 214 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.042	9.341	1.776	0.000	1.055	-7.015	1	0.02	0.00	0.04	
1B	0	-0.042	10.133	1.776	0.000	1.055	-7.483	1	0.03	0.00	0.04	
1C	0	-0.042	9.341	-6.394	0.000	-3.691	-7.015	1	0.02	0.00	0.05	
1D	0	-0.042	10.133	-6.394	0.000	-3.691	-7.483	1	0.03	0.00	0.05	
1E	0	-0.017	9.341	1.776	0.000	1.055	-7.015	1	0.02	0.00	0.04	
1F	0	-0.017	10.133	1.776	0.000	1.055	-7.483	1	0.03	0.00	0.04	
1G	0	-0.017	9.341	-6.394	0.000	-3.691	-7.015	1	0.02	0.00	0.05	
1H	0	-0.017	10.133	-6.394	0.000	-3.691	-7.483	1	0.03	0.00	0.05	
1I	0	-0.060	9.572	-1.074	0.000	-0.602	-7.099	1	0.03	0.00	0.04	
1J	0	-0.060	9.902	-1.074	0.000	-0.602	-7.399	1	0.03	0.00	0.04	
1K	0	-0.060	9.572	-3.544	0.000	-2.034	-7.099	1	0.03	0.00	0.04	
1L	0	-0.060	9.902	-3.544	0.000	-2.034	-7.399	1	0.03	0.00	0.04	
1M	0	0.000	9.572	-1.074	0.000	-0.602	-7.099	1	0.03	0.00	0.04	
1N	0	0.000	9.902	-1.074	0.000	-0.602	-7.399	1	0.03	0.00	0.04	
1O	0	0.000	9.572	-3.544	0.000	-2.034	-7.099	1	0.03	0.00	0.04	
1P	0	0.000	9.902	-3.544	0.000	-2.034	-7.399	1	0.03	0.00	0.04	
2	0	-0.053	17.700	-4.139	0.000	-2.361	-13.170	1	0.05	0.00	0.08	
7	0	-0.030	9.642	-2.303	0.000	-1.314	-7.186	1	0.03	0.00	0.04	
8	0	-0.029	9.686	-2.244	0.000	-1.281	-7.206	1	0.03	0.00	0.04	
9	0	-0.034	10.890	-2.677	0.000	-1.529	-8.101	1	0.03	0.00	0.05	
10	0	-0.034	10.860	-2.676	0.000	-1.529	-8.058	1	0.03	0.00	0.05	
11	0	-0.048	15.890	-3.719	0.000	-2.122	-11.830	1	0.04	0.00	0.07	
12	0	-0.048	15.920	-3.684	0.000	-2.102	-11.840	1	0.04	0.00	0.07	
13	0	-0.051	16.640	-3.944	0.000	-2.251	-12.380	1	0.04	0.00	0.07	
14	0	-0.051	16.620	-3.943	0.000	-2.250	-12.350	1	0.04	0.00	0.07	
1A	47	-0.042	6.447	1.776	0.000	0.227	-3.344	1	0.02	0.00	0.02	
1B	47	-0.042	7.238	1.776	0.000	0.227	-3.417	1	0.02	0.00	0.02	
1C	47	-0.042	6.447	-6.394	0.000	-0.707	-3.344	1	0.02	0.00	0.02	
1D	47	-0.042	7.238	-6.394	0.000	-0.707	-3.417	1	0.02	0.00	0.02	
1E	47	-0.017	6.447	1.776	0.000	0.227	-3.344	1	0.02	0.00	0.02	
1F	47	-0.017	7.238	1.776	0.000	0.227	-3.417	1	0.02	0.00	0.02	
1G	47	-0.017	6.447	-6.394	0.000	-0.707	-3.344	1	0.02	0.00	0.02	
1H	47	-0.017	7.238	-6.394	0.000	-0.707	-3.417	1	0.02	0.00	0.02	
1I	47	-0.060	6.677	-1.074	0.000	-0.100	-3.348	1	0.02	0.00	0.02	
1J	47	-0.060	7.008	-1.074	0.000	-0.100	-3.413	1	0.02	0.00	0.02	
1K	47	-0.060	6.677	-3.544	0.000	-0.380	-3.348	1	0.02	0.00	0.02	
1L	47	-0.060	7.008	-3.544	0.000	-0.380	-3.413	1	0.02	0.00	0.02	
1M	47	0.000	6.677	-1.074	0.000	-0.100	-3.348	1	0.02	0.00	0.02	
1N	47	0.000	7.008	-1.074	0.000	-0.100	-3.413	1	0.02	0.00	0.02	
1O	47	0.000	6.677	-3.544	0.000	-0.380	-3.348	1	0.02	0.00	0.02	
1P	47	0.000	7.008	-3.544	0.000	-0.380	-3.413	1	0.02	0.00	0.02	
2	47	-0.053	12.412	-4.139	0.000	-0.430	-6.145	1	0.03	0.00	0.04	
7	47	-0.030	6.795	-2.303	0.000	-0.240	-3.351	1	0.02	0.00	0.02	
8	47	-0.029	6.839	-2.244	0.000	-0.233	-3.350	1	0.02	0.00	0.02	
9	47	-0.034	7.654	-2.677	0.000	-0.280	-3.774	1	0.02	0.00	0.02	
10	47	-0.034	7.623	-2.676	0.000	-0.280	-3.746	1	0.02	0.00	0.02	
11	47	-0.048	11.152	-3.719	0.000	-0.386	-5.520	1	0.03	0.00	0.03	
12	47	-0.048	11.180	-3.684	0.000	-0.383	-5.518	1	0.03	0.00	0.03	
13	47	-0.051	11.667	-3.944	0.000	-0.410	-5.774	1	0.03	0.00	0.03	
14	47	-0.051	11.648	-3.943	0.000	-0.410	-5.755	1	0.03	0.00	0.03	
1A	93	-0.042	3.552	1.776	0.000	-0.602	-1.023	1	0.01	0.00	0.01	
1B	93	-0.042	4.344	1.776	0.000	-0.602	-0.702	1	0.01	0.00	0.01	
1C	93	-0.042	3.552	-6.394	0.000	2.277	-1.023	1	0.01	0.00	0.03	
1D	93	-0.042	4.344	-6.394	0.000	2.277	-0.702	1	0.01	0.00	0.03	
1E	93	-0.017	3.552	1.776	0.000	-0.602	-1.023	1	0.01	0.00	0.01	
1F	93	-0.017	4.344	1.776	0.000	-0.602	-0.702	1	0.01	0.00	0.01	
1G	93	-0.017	3.552	-6.394	0.000	2.277	-1.023	1	0.01	0.00	0.03	
1H	93	-0.017	4.344	-6.394	0.000	2.277	-0.702	1	0.01	0.00	0.03	
1I	93	-0.060	3.783	-1.074	0.000	0.401	-0.948	1	0.01	0.00	0.01	
1J	93	-0.060	4.113	-1.074	0.000	0.401	-0.777	1	0.01	0.00	0.01	
1K	93	-0.060	3.783	-3.544	0.000	1.274	-0.948	1	0.01	0.00	0.02	
1L	93	-0.060	4.113	-3.544	0.000	1.274	-0.777	1	0.01	0.00	0.02	
1M	93	0.000	3.783	-1.074	0.000	0.401	-0.948	1	0.01	0.00	0.01	
1N	93	0.000	4.113	-1.074	0.000	0.401	-0.777	1	0.01	0.00	0.01	
1O	93	0.000	3.783	-3.544	0.000	1.274	-0.948	1	0.01	0.00	0.02	

1P	93	0.000	4.113	-3.544	0.000	1.274	-0.777	1	0.01	0.00	0.02
2	93	-0.053	7.123	-4.139	0.000	1.502	-1.588	1	0.02	0.00	0.02
7	93	-0.030	3.948	-2.303	0.000	0.835	-0.844	1	0.01	0.00	0.01
8	93	-0.029	3.992	-2.244	0.000	0.814	-0.823	1	0.01	0.00	0.01
9	93	-0.034	4.417	-2.677	0.000	0.970	-0.958	1	0.01	0.00	0.01
10	93	-0.034	4.385	-2.676	0.000	0.969	-0.944	1	0.01	0.00	0.01
11	93	-0.048	6.413	-3.719	0.000	1.349	-1.422	1	0.02	0.00	0.02
12	93	-0.048	6.439	-3.684	0.000	1.337	-1.409	1	0.02	0.00	0.02
13	93	-0.051	6.694	-3.944	0.000	1.430	-1.490	1	0.02	0.00	0.02
14	93	-0.051	6.675	-3.943	0.000	1.430	-1.482	1	0.02	0.00	0.02

ASTA NUM. 89 NI 214 NF 207 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.044	2.943	-0.009	0.000	1.471	-0.711	1	0.01	0.00	0.02	
1B	0	0.044	2.967	-0.009	0.000	1.471	-1.045	1	0.01	0.00	0.02	
1C	0	0.044	2.943	-0.012	0.000	-0.397	-0.711	1	0.01	0.00	0.00	
1D	0	0.044	2.967	-0.012	0.000	-0.397	-1.045	1	0.01	0.00	0.01	
1E	0	0.070	2.943	-0.009	0.000	1.471	-0.711	1	0.01	0.00	0.02	
1F	0	0.070	2.967	-0.009	0.000	1.471	-1.045	1	0.01	0.00	0.02	
1G	0	0.070	2.943	-0.012	0.000	-0.397	-0.711	1	0.01	0.00	0.00	
1H	0	0.070	2.967	-0.012	0.000	-0.397	-1.045	1	0.01	0.00	0.01	
1I	0	0.053	2.925	-0.008	0.000	0.819	-0.791	1	0.01	0.00	0.01	
1J	0	0.053	2.985	-0.008	0.000	0.819	-0.965	1	0.01	0.00	0.01	
1K	0	0.053	2.925	-0.014	0.000	0.255	-0.791	1	0.01	0.00	0.00	
1L	0	0.053	2.985	-0.014	0.000	0.255	-0.965	1	0.01	0.00	0.01	
1M	0	0.062	2.925	-0.008	0.000	0.819	-0.791	1	0.01	0.00	0.01	
1N	0	0.062	2.985	-0.008	0.000	0.819	-0.965	1	0.01	0.00	0.01	
1O	0	0.062	2.925	-0.014	0.000	0.255	-0.791	1	0.01	0.00	0.00	
1P	0	0.062	2.985	-0.014	0.000	0.255	-0.965	1	0.01	0.00	0.01	
2	0	0.103	5.401	-0.020	0.000	0.963	-1.616	1	0.01	0.00	0.01	
7	0	0.057	2.901	-0.011	0.000	0.535	-0.860	1	0.01	0.00	0.01	
8	0	0.055	2.905	-0.011	0.000	0.522	-0.839	1	0.01	0.00	0.01	
9	0	0.066	3.319	-0.012	0.000	0.622	-0.975	1	0.01	0.00	0.01	
10	0	0.066	3.290	-0.013	0.000	0.622	-0.961	1	0.01	0.00	0.01	
11	0	0.092	4.837	-0.018	0.000	0.865	-1.447	1	0.01	0.00	0.01	
12	0	0.091	4.839	-0.018	0.000	0.857	-1.434	1	0.01	0.00	0.01	
13	0	0.098	5.088	-0.018	0.000	0.917	-1.516	1	0.01	0.00	0.01	
14	0	0.098	5.070	-0.019	0.000	0.917	-1.507	1	0.01	0.00	0.01	
1A	47	0.044	0.048	-0.009	0.000	1.477	-0.012	1	0.00	0.00	0.02	
1B	47	0.044	0.073	-0.009	0.000	1.477	-0.337	1	0.00	0.00	0.02	
1C	47	0.044	0.048	-0.012	0.000	-0.393	-0.012	1	0.00	0.00	0.00	
1D	47	0.044	0.073	-0.012	0.000	-0.393	-0.337	1	0.00	0.00	0.00	
1E	47	0.070	0.048	-0.009	0.000	1.477	-0.012	1	0.00	0.00	0.02	
1F	47	0.070	0.073	-0.009	0.000	1.477	-0.337	1	0.00	0.00	0.02	
1G	47	0.070	0.048	-0.012	0.000	-0.393	-0.012	1	0.00	0.00	0.00	
1H	47	0.070	0.073	-0.012	0.000	-0.393	-0.337	1	0.00	0.00	0.00	
1I	47	0.053	0.030	-0.008	0.000	0.824	-0.099	1	0.00	0.00	0.01	
1J	47	0.053	0.091	-0.008	0.000	0.824	-0.250	1	0.00	0.00	0.01	
1K	47	0.053	0.030	-0.014	0.000	0.260	-0.099	1	0.00	0.00	0.00	
1L	47	0.053	0.091	-0.014	0.000	0.260	-0.250	1	0.00	0.00	0.00	
1M	47	0.062	0.030	-0.008	0.000	0.824	-0.099	1	0.00	0.00	0.01	
1N	47	0.062	0.091	-0.008	0.000	0.824	-0.250	1	0.00	0.00	0.01	
1O	47	0.062	0.030	-0.014	0.000	0.260	-0.099	1	0.00	0.00	0.00	
1P	47	0.062	0.091	-0.014	0.000	0.260	-0.250	1	0.00	0.00	0.00	
2	47	0.103	0.110	-0.020	0.000	0.972	-0.330	1	0.00	0.00	0.01	
7	47	0.057	0.054	-0.011	0.000	0.540	-0.171	1	0.00	0.00	0.01	
8	47	0.055	0.058	-0.011	0.000	0.527	-0.147	1	0.00	0.00	0.01	
9	47	0.066	0.083	-0.012	0.000	0.628	-0.181	1	0.00	0.00	0.01	
10	47	0.066	0.053	-0.013	0.000	0.627	-0.181	1	0.00	0.00	0.01	
11	47	0.092	0.096	-0.018	0.000	0.873	-0.296	1	0.00	0.00	0.01	
12	47	0.091	0.098	-0.018	0.000	0.865	-0.282	1	0.00	0.00	0.01	
13	47	0.098	0.113	-0.018	0.000	0.926	-0.302	1	0.00	0.00	0.01	
14	47	0.098	0.095	-0.019	0.000	0.926	-0.302	1	0.00	0.00	0.01	
1A	93	0.044	-2.846	-0.009	0.000	1.482	-0.663	1	0.01	0.00	0.02	
1B	93	0.044	-2.822	-0.009	0.000	1.482	-0.980	1	0.01	0.00	0.02	
1C	93	0.044	-2.846	-0.012	0.000	-0.388	-0.663	1	0.01	0.00	0.00	
1D	93	0.044	-2.822	-0.012	0.000	-0.388	-0.980	1	0.01	0.00	0.01	
1E	93	0.070	-2.846	-0.009	0.000	1.482	-0.663	1	0.01	0.00	0.02	
1F	93	0.070	-2.822	-0.009	0.000	1.482	-0.980	1	0.01	0.00	0.02	
1G	93	0.070	-2.846	-0.012	0.000	-0.388	-0.663	1	0.01	0.00	0.00	
1H	93	0.070	-2.822	-0.012	0.000	-0.388	-0.980	1	0.01	0.00	0.01	
1I	93	0.053	-2.864	-0.008	0.000	0.830	-0.758	1	0.01	0.00	0.01	
1J	93	0.053	-2.804	-0.008	0.000	0.830	-0.885	1	0.01	0.00	0.01	
1K	93	0.053	-2.864	-0.014	0.000	0.264	-0.758	1	0.01	0.00	0.00	
1L	93	0.053	-2.804	-0.014	0.000	0.264	-0.885	1	0.01	0.00	0.01	
1M	93	0.062	-2.864	-0.008	0.000	0.830	-0.758	1	0.01	0.00	0.01	
1N	93	0.062	-2.804	-0.008	0.000	0.830	-0.885	1	0.01	0.00	0.01	
1O	93	0.062	-2.864	-0.014	0.000	0.264	-0.758	1	0.01	0.00	0.00	
1P	93	0.062	-2.804	-0.014	0.000	0.264	-0.885	1	0.01	0.00	0.01	
2	93	0.103	-5.180	-0.020	0.000	0.981	-1.512	1	0.01	0.00	0.01	
7	93	0.057	-2.793	-0.011	0.000	0.546	-0.810	1	0.01	0.00	0.01	
8	93	0.055	-2.788	-0.011	0.000	0.532	-0.784	1	0.01	0.00	0.01	
9	93	0.066	-3.153	-0.012	0.000	0.633	-0.897	1	0.01	0.00	0.01	
10	93	0.066	-3.183	-0.013	0.000	0.633	-0.911	1	0.01	0.00	0.01	
11	93	0.092	-4.645	-0.018	0.000	0.882	-1.357	1	0.01	0.00	0.01	
12	93	0.091	-4.642	-0.018	0.000	0.874	-1.342	1	0.01	0.00	0.01	
13	93	0.098	-4.861	-0.018	0.000	0.934	-1.410	1	0.01	0.00	0.01	

14	93	0.098	-4.879	-0.019	0.000	0.934	-1.418	1	0.01	0.00	0.01

ASTA NUM. 90 NI 207 NF 49 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.046	-4.235	6.415	0.000	2.286	-0.656	1	0.01	0.00	0.03	
1B	0	-0.046	-3.425	6.415	0.000	2.286	-0.958	1	0.01	0.00	0.03	
1C	0	-0.046	-4.235	-1.755	0.000	-0.593	-0.656	1	0.01	0.00	0.01	
1D	0	-0.046	-3.425	-1.755	0.000	-0.593	-0.958	1	0.01	0.00	0.01	
1E	0	-0.011	-4.235	6.415	0.000	2.286	-0.656	1	0.01	0.00	0.03	
1F	0	-0.011	-3.425	6.415	0.000	2.286	-0.958	1	0.01	0.00	0.03	
1G	0	-0.011	-4.235	-1.755	0.000	-0.593	-0.656	1	0.01	0.00	0.01	
1H	0	-0.011	-3.425	-1.755	0.000	-0.593	-0.958	1	0.01	0.00	0.01	
1I	0	-0.061	-3.986	3.560	0.000	1.280	-0.746	1	0.01	0.00	0.02	
1J	0	-0.061	-3.674	3.560	0.000	1.280	-0.868	1	0.01	0.00	0.02	
1K	0	-0.061	-3.986	1.100	0.000	0.413	-0.746	1	0.01	0.00	0.01	
1L	0	-0.061	-3.674	1.100	0.000	0.413	-0.868	1	0.01	0.00	0.01	
1M	0	0.003	-3.986	3.560	0.000	1.280	-0.746	1	0.01	0.00	0.02	
1N	0	0.003	-3.674	3.560	0.000	1.280	-0.868	1	0.01	0.00	0.02	
1O	0	0.003	-3.986	1.100	0.000	0.413	-0.746	1	0.01	0.00	0.01	
1P	0	0.003	-3.674	1.100	0.000	0.413	-0.868	1	0.01	0.00	0.01	
2	0	-0.052	-6.908	4.176	0.000	1.518	-1.486	1	0.02	0.00	0.02	
7	0	-0.028	-3.844	2.323	0.000	0.844	-0.795	1	0.01	0.00	0.01	
8	0	-0.028	-3.879	2.265	0.000	0.824	-0.769	1	0.01	0.00	0.01	
9	0	-0.033	-4.252	2.700	0.000	0.980	-0.881	1	0.01	0.00	0.01	
10	0	-0.033	-4.284	2.699	0.000	0.980	-0.896	1	0.01	0.00	0.01	
11	0	-0.046	-6.227	3.753	0.000	1.365	-1.334	1	0.02	0.00	0.02	
12	0	-0.046	-6.248	3.718	0.000	1.352	-1.318	1	0.02	0.00	0.02	
13	0	-0.049	-6.472	3.979	0.000	1.446	-1.386	1	0.02	0.00	0.02	
14	0	-0.049	-6.491	3.978	0.000	1.446	-1.394	1	0.02	0.00	0.02	
1A	47	-0.046	-7.129	6.415	0.000	-0.708	-3.310	1	0.02	0.00	0.02	
1B	47	-0.046	-6.320	6.415	0.000	-0.708	-3.230	1	0.02	0.00	0.02	
1C	47	-0.046	-7.129	-1.755	0.000	0.227	-3.310	1	0.02	0.00	0.02	
1D	47	-0.046	-6.320	-1.755	0.000	0.227	-3.230	1	0.02	0.00	0.02	
1E	47	-0.011	-7.129	6.415	0.000	-0.708	-3.310	1	0.02	0.00	0.02	
1F	47	-0.011	-6.320	6.415	0.000	-0.708	-3.230	1	0.02	0.00	0.02	
1G	47	-0.011	-7.129	-1.755	0.000	0.227	-3.310	1	0.02	0.00	0.02	
1H	47	-0.011	-6.320	-1.755	0.000	0.227	-3.230	1	0.02	0.00	0.02	
1I	47	-0.061	-6.880	3.560	0.000	-0.381	-3.288	1	0.02	0.00	0.02	
1J	47	-0.061	-6.569	3.560	0.000	-0.381	-3.251	1	0.02	0.00	0.02	
1K	47	-0.061	-6.880	1.100	0.000	-0.100	-3.288	1	0.02	0.00	0.02	
1L	47	-0.061	-6.569	1.100	0.000	-0.100	-3.251	1	0.02	0.00	0.02	
1M	47	0.003	-6.880	3.560	0.000	-0.381	-3.288	1	0.02	0.00	0.02	
1N	47	0.003	-6.569	3.560	0.000	-0.381	-3.251	1	0.02	0.00	0.02	
1O	47	0.003	-6.880	1.100	0.000	-0.100	-3.288	1	0.02	0.00	0.02	
1P	47	0.003	-6.569	1.100	0.000	-0.100	-3.251	1	0.02	0.00	0.02	
2	47	-0.052	-12.199	4.176	0.000	-0.430	-5.944	1	0.03	0.00	0.04	
7	47	-0.028	-6.691	2.323	0.000	-0.240	-3.253	1	0.02	0.00	0.02	
8	47	-0.028	-6.725	2.265	0.000	-0.233	-3.243	1	0.02	0.00	0.02	
9	47	-0.033	-7.491	2.700	0.000	-0.280	-3.621	1	0.02	0.00	0.02	
10	47	-0.033	-7.522	2.699	0.000	-0.279	-3.650	1	0.02	0.00	0.02	
11	47	-0.046	-10.969	3.753	0.000	-0.387	-5.346	1	0.03	0.00	0.03	
12	47	-0.046	-10.989	3.718	0.000	-0.383	-5.338	1	0.03	0.00	0.03	
13	47	-0.049	-11.446	3.979	0.000	-0.411	-5.567	1	0.03	0.00	0.03	
14	47	-0.049	-11.466	3.978	0.000	-0.411	-5.581	1	0.03	0.00	0.03	
1A	93	-0.046	-10.024	6.415	0.000	-3.702	-7.314	1	0.03	0.00	0.05	
1B	93	-0.046	-9.214	6.415	0.000	-3.702	-6.852	1	0.02	0.00	0.05	
1C	93	-0.046	-10.024	-1.755	0.000	1.046	-7.314	1	0.03	0.00	0.04	
1D	93	-0.046	-9.214	-1.755	0.000	1.046	-6.852	1	0.02	0.00	0.04	
1E	93	-0.011	-10.024	6.415	0.000	-3.702	-7.314	1	0.03	0.00	0.05	
1F	93	-0.011	-9.214	6.415	0.000	-3.702	-6.852	1	0.02	0.00	0.05	
1G	93	-0.011	-10.024	-1.755	0.000	1.046	-7.314	1	0.03	0.00	0.04	
1H	93	-0.011	-9.214	-1.755	0.000	1.046	-6.852	1	0.02	0.00	0.04	
1I	93	-0.061	-9.775	3.560	0.000	-2.043	-7.181	1	0.03	0.00	0.04	
1J	93	-0.061	-9.463	3.560	0.000	-2.043	-6.985	1	0.03	0.00	0.04	
1K	93	-0.061	-9.775	1.100	0.000	-0.613	-7.181	1	0.03	0.00	0.04	
1L	93	-0.061	-9.463	1.100	0.000	-0.613	-6.985	1	0.03	0.00	0.04	
1M	93	0.003	-9.775	3.560	0.000	-2.043	-7.181	1	0.03	0.00	0.04	
1N	93	0.003	-9.463	3.560	0.000	-2.043	-6.985	1	0.03	0.00	0.04	
1O	93	0.003	-9.775	1.100	0.000	-0.613	-7.181	1	0.03	0.00	0.04	
1P	93	0.003	-9.463	1.100	0.000	-0.613	-6.985	1	0.03	0.00	0.04	
2	93	-0.052	-17.490	4.176	0.000	-2.379	-12.870	1	0.05	0.00	0.08	
7	93	-0.028	-9.537	2.323	0.000	-1.324	-7.039	1	0.03	0.00	0.04	
8	93	-0.028	-9.572	2.265	0.000	-1.290	-7.046	1	0.03	0.00	0.04	
9	93	-0.033	-10.730	2.700	0.000	-1.540	-7.871	1	0.03	0.00	0.05	
10	93	-0.033	-10.760	2.699	0.000	-1.539	-7.914	1	0.03	0.00	0.05	
11	93	-0.046	-15.710	3.753	0.000	-2.138	-11.570	1	0.04	0.00	0.07	
12	93	-0.046	-15.730	3.718	0.000	-2.118	-11.570	1	0.04	0.00	0.07	
13	93	-0.049	-16.420	3.979	0.000	-2.267	-12.070	1	0.04	0.00	0.07	
14	93	-0.049	-16.440	3.978	0.000	-2.267	-12.090	1	0.04	0.00	0.07	

ASTA NUM. 26 NI 49 NF 200 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota

	cm	kN			kN*m						
1A	0	-0.055	10.304	2.051	0.000	1.267	-6.884	1	0.03	0.00	0.04
1B	0	-0.055	10.976	2.051	0.000	1.267	-7.332	1	0.03	0.00	0.04
1C	0	-0.055	10.304	-6.633	0.000	-4.119	-6.884	1	0.03	0.00	0.05
1D	0	-0.055	10.976	-6.633	0.000	-4.119	-7.332	1	0.03	0.00	0.05
1E	0	-0.030	10.304	2.051	0.000	1.267	-6.884	1	0.03	0.00	0.04
1F	0	-0.030	10.976	2.051	0.000	1.267	-7.332	1	0.03	0.00	0.04
1G	0	-0.030	10.304	-6.633	0.000	-4.119	-6.884	1	0.03	0.00	0.05
1H	0	-0.030	10.976	-6.633	0.000	-4.119	-7.332	1	0.03	0.00	0.05
1I	0	-0.074	10.467	-0.868	0.000	-0.543	-7.013	1	0.03	0.00	0.04
1J	0	-0.074	10.813	-0.868	0.000	-0.543	-7.203	1	0.03	0.00	0.04
1K	0	-0.074	10.467	-3.714	0.000	-2.309	-7.013	1	0.03	0.00	0.04
1L	0	-0.074	10.813	-3.714	0.000	-2.309	-7.203	1	0.03	0.00	0.04
1M	0	-0.011	10.467	-0.868	0.000	-0.543	-7.013	1	0.03	0.00	0.04
1N	0	-0.011	10.813	-0.868	0.000	-0.543	-7.203	1	0.03	0.00	0.04
1O	0	-0.011	10.467	-3.714	0.000	-2.309	-7.013	1	0.03	0.00	0.04
1P	0	-0.011	10.813	-3.714	0.000	-2.309	-7.203	1	0.03	0.00	0.04
2	0	-0.077	19.350	-4.114	0.000	-2.561	-12.920	1	0.05	0.00	0.08
7	0	-0.043	10.550	-2.281	0.000	-1.420	-7.064	1	0.03	0.00	0.04
8	0	-0.041	10.570	-2.232	0.000	-1.390	-7.070	1	0.03	0.00	0.04
9	0	-0.048	11.840	-2.642	0.000	-1.644	-7.898	1	0.03	0.00	0.05
10	0	-0.048	11.870	-2.643	0.000	-1.645	-7.942	1	0.03	0.00	0.05
11	0	-0.069	17.380	-3.695	0.000	-2.301	-11.610	1	0.05	0.00	0.07
12	0	-0.068	17.400	-3.666	0.000	-2.283	-11.610	1	0.05	0.00	0.07
13	0	-0.072	18.160	-3.912	0.000	-2.436	-12.110	1	0.05	0.00	0.07
14	0	-0.072	18.180	-3.913	0.000	-2.436	-12.140	1	0.05	0.00	0.07
1A	50	-0.055	7.202	2.051	0.000	0.241	-2.510	1	0.02	0.00	0.01
1B	50	-0.055	7.874	2.051	0.000	0.241	-2.619	1	0.02	0.00	0.02
1C	50	-0.055	7.202	-6.633	0.000	-0.802	-2.510	1	0.02	0.00	0.01
1D	50	-0.055	7.874	-6.633	0.000	-0.802	-2.619	1	0.02	0.00	0.02
1E	50	-0.030	7.202	2.051	0.000	0.241	-2.510	1	0.02	0.00	0.01
1F	50	-0.030	7.874	2.051	0.000	0.241	-2.619	1	0.02	0.00	0.02
1G	50	-0.030	7.202	-6.633	0.000	-0.802	-2.510	1	0.02	0.00	0.01
1H	50	-0.030	7.874	-6.633	0.000	-0.802	-2.619	1	0.02	0.00	0.02
1I	50	-0.074	7.365	-0.868	0.000	-0.109	-2.560	1	0.02	0.00	0.02
1J	50	-0.074	7.711	-0.868	0.000	-0.109	-2.569	1	0.02	0.00	0.02
1K	50	-0.074	7.365	-3.714	0.000	-0.453	-2.560	1	0.02	0.00	0.02
1L	50	-0.074	7.711	-3.714	0.000	-0.453	-2.569	1	0.02	0.00	0.02
1M	50	-0.011	7.365	-0.868	0.000	-0.109	-2.560	1	0.02	0.00	0.02
1N	50	-0.011	7.711	-0.868	0.000	-0.109	-2.569	1	0.02	0.00	0.02
1O	50	-0.011	7.365	-3.714	0.000	-0.453	-2.560	1	0.02	0.00	0.02
1P	50	-0.011	7.711	-3.714	0.000	-0.453	-2.569	1	0.02	0.00	0.02
2	50	-0.077	13.682	-4.114	0.000	-0.504	-4.660	1	0.04	0.00	0.03
7	50	-0.043	7.499	-2.281	0.000	-0.280	-2.552	1	0.02	0.00	0.02
8	50	-0.041	7.520	-2.232	0.000	-0.274	-2.547	1	0.02	0.00	0.02
9	50	-0.048	8.372	-2.642	0.000	-0.323	-2.845	1	0.02	0.00	0.02
10	50	-0.048	8.403	-2.643	0.000	-0.324	-2.874	1	0.02	0.00	0.02
11	50	-0.069	12.302	-3.695	0.000	-0.453	-4.189	1	0.03	0.00	0.02
12	50	-0.068	12.319	-3.666	0.000	-0.450	-4.184	1	0.03	0.00	0.02
13	50	-0.072	12.828	-3.912	0.000	-0.480	-4.365	1	0.03	0.00	0.03
14	50	-0.072	12.848	-3.913	0.000	-0.480	-4.383	1	0.03	0.00	0.03
1A	100	-0.055	4.100	2.051	0.000	-0.785	0.314	1	0.01	0.00	0.01
1B	100	-0.055	4.772	2.051	0.000	-0.785	0.543	1	0.01	0.00	0.01
1C	100	-0.055	4.100	-6.633	0.000	2.514	0.314	1	0.01	0.00	0.03
1D	100	-0.055	4.772	-6.633	0.000	2.514	0.543	1	0.01	0.00	0.03
1E	100	-0.030	4.100	2.051	0.000	-0.785	0.314	1	0.01	0.00	0.01
1F	100	-0.030	4.772	2.051	0.000	-0.785	0.543	1	0.01	0.00	0.01
1G	100	-0.030	4.100	-6.633	0.000	2.514	0.314	1	0.01	0.00	0.03
1H	100	-0.030	4.772	-6.633	0.000	2.514	0.543	1	0.01	0.00	0.03
1I	100	-0.074	4.263	-0.868	0.000	0.325	0.343	1	0.01	0.00	0.00
1J	100	-0.074	4.609	-0.868	0.000	0.325	0.515	1	0.01	0.00	0.00
1K	100	-0.074	4.263	-3.714	0.000	1.404	0.343	1	0.01	0.00	0.02
1L	100	-0.074	4.609	-3.714	0.000	1.404	0.515	1	0.01	0.00	0.02
1M	100	-0.011	4.263	-0.868	0.000	0.325	0.343	1	0.01	0.00	0.00
1N	100	-0.011	4.609	-0.868	0.000	0.325	0.515	1	0.01	0.00	0.00
1O	100	-0.011	4.263	-3.714	0.000	1.404	0.343	1	0.01	0.00	0.02
1P	100	-0.011	4.609	-3.714	0.000	1.404	0.515	1	0.01	0.00	0.02
2	100	-0.077	8.014	-4.114	0.000	1.553	0.766	1	0.02	0.00	0.02
7	100	-0.043	4.449	-2.281	0.000	0.861	0.435	1	0.01	0.00	0.01
8	100	-0.041	4.470	-2.232	0.000	0.842	0.450	1	0.01	0.00	0.01
9	100	-0.048	4.903	-2.642	0.000	0.998	0.473	1	0.01	0.00	0.01
10	100	-0.048	4.936	-2.643	0.000	0.998	0.461	1	0.01	0.00	0.01
11	100	-0.069	7.224	-3.695	0.000	1.395	0.692	1	0.02	0.00	0.02
12	100	-0.068	7.237	-3.666	0.000	1.384	0.702	1	0.02	0.00	0.02
13	100	-0.072	7.496	-3.912	0.000	1.477	0.716	1	0.02	0.00	0.02
14	100	-0.072	7.516	-3.913	0.000	1.477	0.708	1	0.02	0.00	0.02

ASTA NUM. 91 NI 200 NF 193 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.043	3.274	-0.163	0.000	1.549	0.523	1	0.01	0.00	0.02	
1B	0	0.043	3.436	-0.163	0.000	1.549	0.274	1	0.01	0.00	0.02	
1C	0	0.043	3.274	-0.180	0.000	-0.544	0.523	1	0.01	0.00	0.01	
1D	0	0.043	3.436	-0.180	0.000	-0.544	0.274	1	0.01	0.00	0.01	
1E	0	0.065	3.274	-0.163	0.000	1.549	0.523	1	0.01	0.00	0.02	

1F	0	0.065	3.436	-0.163	0.000	1.549	0.274	1	0.01	0.00	0.02
1G	0	0.065	3.274	-0.180	0.000	-0.544	0.523	1	0.01	0.00	0.01
1H	0	0.065	3.436	-0.180	0.000	-0.544	0.274	1	0.01	0.00	0.01
1I	0	0.050	3.326	-0.167	0.000	0.846	0.487	1	0.01	0.00	0.01
1J	0	0.050	3.384	-0.167	0.000	0.846	0.310	1	0.01	0.00	0.01
1K	0	0.050	3.326	-0.177	0.000	0.159	0.487	1	0.01	0.00	0.00
1L	0	0.050	3.384	-0.177	0.000	0.159	0.310	1	0.01	0.00	0.00
1M	0	0.058	3.326	-0.167	0.000	0.846	0.487	1	0.01	0.00	0.01
1N	0	0.058	3.384	-0.167	0.000	0.846	0.310	1	0.01	0.00	0.01
1O	0	0.058	3.326	-0.177	0.000	0.159	0.487	1	0.01	0.00	0.00
1P	0	0.058	3.384	-0.177	0.000	0.159	0.310	1	0.01	0.00	0.00
2	0	0.097	6.132	-0.313	0.000	0.901	0.712	1	0.02	0.00	0.01
7	0	0.054	3.315	-0.172	0.000	0.500	0.405	1	0.01	0.00	0.01
8	0	0.052	3.297	-0.170	0.000	0.489	0.420	1	0.01	0.00	0.01
9	0	0.063	3.712	-0.191	0.000	0.581	0.440	1	0.01	0.00	0.01
10	0	0.063	3.740	-0.192	0.000	0.581	0.428	1	0.01	0.00	0.01
11	0	0.088	5.504	-0.282	0.000	0.809	0.644	1	0.01	0.00	0.01
12	0	0.087	5.493	-0.281	0.000	0.802	0.653	1	0.01	0.00	0.01
13	0	0.093	5.743	-0.294	0.000	0.858	0.665	1	0.02	0.00	0.01
14	0	0.093	5.759	-0.294	0.000	0.858	0.657	1	0.02	0.00	0.01
1A	50	0.043	0.173	-0.163	0.000	1.631	1.385	1	0.00	0.00	0.02
1B	50	0.043	0.335	-0.163	0.000	1.631	1.216	1	0.00	0.00	0.02
1C	50	0.043	0.173	-0.180	0.000	-0.455	1.385	1	0.00	0.00	0.01
1D	50	0.043	0.335	-0.180	0.000	-0.455	1.216	1	0.00	0.00	0.01
1E	50	0.065	0.173	-0.163	0.000	1.631	1.385	1	0.00	0.00	0.02
1F	50	0.065	0.335	-0.163	0.000	1.631	1.216	1	0.00	0.00	0.02
1G	50	0.065	0.173	-0.180	0.000	-0.455	1.385	1	0.00	0.00	0.01
1H	50	0.065	0.335	-0.180	0.000	-0.455	1.216	1	0.00	0.00	0.01
1I	50	0.050	0.225	-0.167	0.000	0.931	1.375	1	0.00	0.00	0.01
1J	50	0.050	0.283	-0.167	0.000	0.931	1.226	1	0.00	0.00	0.01
1K	50	0.050	0.225	-0.177	0.000	0.246	1.375	1	0.00	0.00	0.01
1L	50	0.050	0.283	-0.177	0.000	0.246	1.226	1	0.00	0.00	0.01
1M	50	0.058	0.225	-0.167	0.000	0.931	1.375	1	0.00	0.00	0.01
1N	50	0.058	0.283	-0.167	0.000	0.931	1.226	1	0.00	0.00	0.01
1O	50	0.058	0.225	-0.177	0.000	0.246	1.375	1	0.00	0.00	0.01
1P	50	0.058	0.283	-0.177	0.000	0.246	1.226	1	0.00	0.00	0.01
2	50	0.097	0.464	-0.313	0.000	1.057	2.360	1	0.00	0.00	0.01
7	50	0.054	0.265	-0.172	0.000	0.585	1.300	1	0.00	0.00	0.01
8	50	0.052	0.247	-0.170	0.000	0.574	1.306	1	0.00	0.00	0.01
9	50	0.063	0.245	-0.191	0.000	0.677	1.429	1	0.00	0.00	0.01
10	50	0.063	0.273	-0.192	0.000	0.677	1.431	1	0.00	0.00	0.01
11	50	0.088	0.425	-0.282	0.000	0.950	2.126	1	0.00	0.00	0.01
12	50	0.087	0.414	-0.281	0.000	0.943	2.130	1	0.00	0.00	0.01
13	50	0.093	0.413	-0.294	0.000	1.004	2.204	1	0.00	0.00	0.01
14	50	0.093	0.429	-0.294	0.000	1.005	2.205	1	0.00	0.00	0.01
1A	100	0.043	-2.928	-0.163	0.000	1.714	0.696	1	0.01	0.00	0.02
1B	100	0.043	-2.766	-0.163	0.000	1.714	0.608	1	0.01	0.00	0.02
1C	100	0.043	-2.928	-0.180	0.000	-0.366	0.696	1	0.01	0.00	0.00
1D	100	0.043	-2.766	-0.180	0.000	-0.366	0.608	1	0.01	0.00	0.00
1E	100	0.065	-2.928	-0.163	0.000	1.714	0.696	1	0.01	0.00	0.02
1F	100	0.065	-2.766	-0.163	0.000	1.714	0.608	1	0.01	0.00	0.02
1G	100	0.065	-2.928	-0.180	0.000	-0.366	0.696	1	0.01	0.00	0.00
1H	100	0.065	-2.766	-0.180	0.000	-0.366	0.608	1	0.01	0.00	0.00
1I	100	0.050	-2.876	-0.167	0.000	1.016	0.713	1	0.01	0.00	0.01
1J	100	0.050	-2.818	-0.167	0.000	1.016	0.591	1	0.01	0.00	0.01
1K	100	0.050	-2.876	-0.177	0.000	0.332	0.713	1	0.01	0.00	0.00
1L	100	0.050	-2.818	-0.177	0.000	0.332	0.591	1	0.01	0.00	0.00
1M	100	0.058	-2.876	-0.167	0.000	1.016	0.713	1	0.01	0.00	0.01
1N	100	0.058	-2.818	-0.167	0.000	1.016	0.591	1	0.01	0.00	0.01
1O	100	0.058	-2.876	-0.177	0.000	0.332	0.713	1	0.01	0.00	0.00
1P	100	0.058	-2.818	-0.177	0.000	0.332	0.591	1	0.01	0.00	0.00
2	100	0.097	-5.204	-0.313	0.000	1.214	1.175	1	0.01	0.00	0.02
7	100	0.054	-2.785	-0.172	0.000	0.671	0.669	1	0.01	0.00	0.01
8	100	0.052	-2.803	-0.170	0.000	0.658	0.666	1	0.01	0.00	0.01
9	100	0.063	-3.223	-0.191	0.000	0.772	0.684	1	0.01	0.00	0.01
10	100	0.063	-3.195	-0.192	0.000	0.773	0.700	1	0.01	0.00	0.01
11	100	0.088	-4.654	-0.282	0.000	1.091	1.068	1	0.01	0.00	0.01
12	100	0.087	-4.665	-0.281	0.000	1.083	1.067	1	0.01	0.00	0.01
13	100	0.093	-4.917	-0.294	0.000	1.151	1.078	1	0.01	0.00	0.01
14	100	0.093	-4.900	-0.294	0.000	1.152	1.087	1	0.01	0.00	0.01

ASTA NUM. 92 NI 193 NF 19 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.047	-4.615	6.926	0.000	2.667	0.701	1	0.01	0.00	0.03	
1B	0	-0.047	-3.601	6.926	0.000	2.667	0.632	1	0.01	0.00	0.03	
1C	0	-0.047	-4.615	-1.748	0.000	-0.623	0.701	1	0.01	0.00	0.01	
1D	0	-0.047	-3.601	-1.748	0.000	-0.623	0.632	1	0.01	0.00	0.01	
1E	0	-0.013	-4.615	6.926	0.000	2.667	0.701	1	0.01	0.00	0.03	
1F	0	-0.013	-3.601	6.926	0.000	2.667	0.632	1	0.01	0.00	0.03	
1G	0	-0.013	-4.615	-1.748	0.000	-0.623	0.701	1	0.01	0.00	0.01	
1H	0	-0.013	-3.601	-1.748	0.000	-0.623	0.632	1	0.01	0.00	0.01	
1I	0	-0.064	-4.363	4.019	0.000	1.565	0.725	1	0.01	0.00	0.02	
1J	0	-0.064	-3.853	4.019	0.000	1.565	0.608	1	0.01	0.00	0.02	
1K	0	-0.064	-4.363	1.159	0.000	0.479	0.725	1	0.01	0.00	0.01	
1L	0	-0.064	-3.853	1.159	0.000	0.479	0.608	1	0.01	0.00	0.01	
1M	0	0.004	-4.363	4.019	0.000	1.565	0.725	1	0.01	0.00	0.02	
1N	0	0.004	-3.853	4.019	0.000	1.565	0.608	1	0.01	0.00	0.02	

1O	0	0.004	-4.363	1.159	0.000	0.479	0.725	1	0.01	0.00	0.01
1P	0	0.004	-3.853	1.159	0.000	0.479	0.608	1	0.01	0.00	0.01
2	0	-0.054	-7.412	4.657	0.000	1.838	1.202	1	0.02	0.00	0.02
7	0	-0.029	-4.100	2.578	0.000	1.017	0.684	1	0.01	0.00	0.01
8	0	-0.029	-4.155	2.526	0.000	0.997	0.682	1	0.01	0.00	0.01
9	0	-0.035	-4.614	2.972	0.000	1.172	0.701	1	0.01	0.00	0.01
10	0	-0.035	-4.586	2.976	0.000	1.173	0.716	1	0.01	0.00	0.01
11	0	-0.048	-6.668	4.184	0.000	1.652	1.092	1	0.02	0.00	0.02
12	0	-0.048	-6.701	4.153	0.000	1.640	1.091	1	0.02	0.00	0.02
13	0	-0.051	-6.976	4.421	0.000	1.744	1.102	1	0.02	0.00	0.02
14	0	-0.051	-6.960	4.423	0.000	1.745	1.111	1	0.02	0.00	0.02
1A	50	-0.047	-7.716	6.926	0.000	-0.796	-2.382	1	0.02	0.00	0.01
1B	50	-0.047	-6.702	6.926	0.000	-0.796	-1.943	1	0.02	0.00	0.01
1C	50	-0.047	-7.716	-1.748	0.000	0.251	-2.382	1	0.02	0.00	0.01
1D	50	-0.047	-6.702	-1.748	0.000	0.251	-1.943	1	0.02	0.00	0.01
1E	50	-0.013	-7.716	6.926	0.000	-0.796	-2.382	1	0.02	0.00	0.01
1F	50	-0.013	-6.702	6.926	0.000	-0.796	-1.943	1	0.02	0.00	0.01
1G	50	-0.013	-7.716	-1.748	0.000	0.251	-2.382	1	0.02	0.00	0.01
1H	50	-0.013	-6.702	-1.748	0.000	0.251	-1.943	1	0.02	0.00	0.01
1I	50	-0.064	-7.464	4.019	0.000	-0.444	-2.232	1	0.02	0.00	0.01
1J	50	-0.064	-6.954	4.019	0.000	-0.444	-2.093	1	0.02	0.00	0.01
1K	50	-0.064	-7.464	1.159	0.000	-0.101	-2.232	1	0.02	0.00	0.01
1L	50	-0.064	-6.954	1.159	0.000	-0.101	-2.093	1	0.02	0.00	0.01
1M	50	0.004	-7.464	4.019	0.000	-0.444	-2.232	1	0.02	0.00	0.01
1N	50	0.004	-6.954	4.019	0.000	-0.444	-2.093	1	0.02	0.00	0.01
1O	50	0.004	-7.464	1.159	0.000	-0.101	-2.232	1	0.02	0.00	0.01
1P	50	0.004	-6.954	1.159	0.000	-0.101	-2.093	1	0.02	0.00	0.01
2	50	-0.054	-13.081	4.657	0.000	-0.490	-3.922	1	0.03	0.00	0.02
7	50	-0.029	-7.150	2.578	0.000	-0.272	-2.128	1	0.02	0.00	0.01
8	50	-0.029	-7.203	2.526	0.000	-0.266	-2.158	1	0.02	0.00	0.01
9	50	-0.035	-8.082	2.972	0.000	-0.314	-2.473	1	0.02	0.00	0.01
10	50	-0.035	-8.053	2.976	0.000	-0.315	-2.443	1	0.02	0.00	0.01
11	50	-0.048	-11.749	4.184	0.000	-0.440	-3.509	1	0.03	0.00	0.02
12	50	-0.048	-11.781	4.153	0.000	-0.437	-3.530	1	0.03	0.00	0.02
13	50	-0.051	-12.308	4.421	0.000	-0.466	-3.717	1	0.03	0.00	0.02
14	50	-0.051	-12.290	4.423	0.000	-0.466	-3.702	1	0.03	0.00	0.02
1A	100	-0.047	-10.817	6.926	0.000	-4.259	-7.015	1	0.03	0.00	0.05
1B	100	-0.047	-9.803	6.926	0.000	-4.259	-6.069	1	0.03	0.00	0.05
1C	100	-0.047	-10.817	-1.748	0.000	1.125	-7.015	1	0.03	0.00	0.04
1D	100	-0.047	-9.803	-1.748	0.000	1.125	-6.069	1	0.03	0.00	0.04
1E	100	-0.013	-10.817	6.926	0.000	-4.259	-7.015	1	0.03	0.00	0.05
1F	100	-0.013	-9.803	6.926	0.000	-4.259	-6.069	1	0.03	0.00	0.05
1G	100	-0.013	-10.817	-1.748	0.000	1.125	-7.015	1	0.03	0.00	0.04
1H	100	-0.013	-9.803	-1.748	0.000	1.125	-6.069	1	0.03	0.00	0.04
1I	100	-0.064	-10.565	4.019	0.000	-2.453	-6.740	1	0.03	0.00	0.04
1J	100	-0.064	-10.055	4.019	0.000	-2.453	-6.344	1	0.03	0.00	0.04
1K	100	-0.064	-10.565	1.159	0.000	-0.681	-6.740	1	0.03	0.00	0.04
1L	100	-0.064	-10.055	1.159	0.000	-0.681	-6.344	1	0.03	0.00	0.04
1M	100	0.004	-10.565	4.019	0.000	-2.453	-6.740	1	0.03	0.00	0.04
1N	100	0.004	-10.055	4.019	0.000	-2.453	-6.344	1	0.03	0.00	0.04
1O	100	0.004	-10.565	1.159	0.000	-0.681	-6.740	1	0.03	0.00	0.04
1P	100	0.004	-10.055	1.159	0.000	-0.681	-6.344	1	0.03	0.00	0.04
2	100	-0.054	-18.750	4.657	0.000	-2.819	-11.880	1	0.05	0.00	0.07
7	100	-0.029	-10.200	2.578	0.000	-1.561	-6.465	1	0.03	0.00	0.04
8	100	-0.029	-10.250	2.526	0.000	-1.529	-6.523	1	0.03	0.00	0.04
9	100	-0.035	-11.550	2.972	0.000	-1.800	-7.381	1	0.03	0.00	0.04
10	100	-0.035	-11.520	2.976	0.000	-1.803	-7.337	1	0.03	0.00	0.04
11	100	-0.048	-16.830	4.184	0.000	-2.533	-10.650	1	0.04	0.00	0.06
12	100	-0.048	-16.860	4.153	0.000	-2.513	-10.690	1	0.04	0.00	0.06
13	100	-0.051	-17.640	4.421	0.000	-2.676	-11.200	1	0.05	0.00	0.07
14	100	-0.051	-17.620	4.423	0.000	-2.677	-11.180	1	0.05	0.00	0.07

ASTA NUM. 27 NI 19 NF 164 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.015	16.017	5.076	0.000	4.156	-6.152	1	0.04	0.00	0.05	
1B	0	-0.015	17.083	5.076	0.000	4.156	-6.980	1	0.05	0.00	0.05	
1C	0	-0.015	16.017	-9.614	0.000	-7.404	-6.152	1	0.04	0.00	0.09	
1D	0	-0.015	17.083	-9.614	0.000	-7.404	-6.980	1	0.05	0.00	0.09	
1E	0	0.021	16.017	5.076	0.000	4.156	-6.152	1	0.04	0.00	0.05	
1F	0	0.021	17.083	5.076	0.000	4.156	-6.980	1	0.05	0.00	0.05	
1G	0	0.021	16.017	-9.614	0.000	-7.404	-6.152	1	0.04	0.00	0.09	
1H	0	0.021	17.083	-9.614	0.000	-7.404	-6.980	1	0.05	0.00	0.09	
1I	0	-0.048	16.147	0.377	0.000	0.462	-6.384	1	0.04	0.00	0.04	
1J	0	-0.048	16.953	0.377	0.000	0.462	-6.748	1	0.05	0.00	0.04	
1K	0	-0.048	16.147	-4.915	0.000	-3.710	-6.384	1	0.04	0.00	0.05	
1L	0	-0.048	16.953	-4.915	0.000	-3.710	-6.748	1	0.05	0.00	0.05	
1M	0	0.054	16.147	0.377	0.000	0.462	-6.384	1	0.04	0.00	0.04	
1N	0	0.054	16.953	0.377	0.000	0.462	-6.748	1	0.05	0.00	0.04	
1O	0	0.054	16.147	-4.915	0.000	-3.710	-6.384	1	0.04	0.00	0.05	
1P	0	0.054	16.953	-4.915	0.000	-3.710	-6.748	1	0.05	0.00	0.05	
2	0	0.006	30.120	-4.088	0.000	-2.926	-11.920	1	0.08	0.00	0.07	
7	0	0.002	16.370	-2.255	0.000	-1.614	-6.490	1	0.04	0.00	0.04	
8	0	0.003	16.410	-2.216	0.000	-1.586	-6.548	1	0.04	0.00	0.04	
9	0	0.003	18.530	-2.596	0.000	-1.858	-7.407	1	0.05	0.00	0.04	
10	0	0.003	18.520	-2.599	0.000	-1.860	-7.363	1	0.05	0.00	0.04	
11	0	0.005	27.030	-3.671	0.000	-2.628	-10.690	1	0.07	0.00	0.06	
12	0	0.005	27.050	-3.648	0.000	-2.612	-10.730	1	0.07	0.00	0.06	

13	0	0.005	28.320	-3.876	0.000	-2.774	-11.240	1	0.08	0.00	0.07
14	0	0.005	28.310	-3.877	0.000	-2.776	-11.220	1	0.08	0.00	0.07
1A	56	-0.015	12.529	5.076	0.000	1.301	1.877	1	0.03	0.00	0.02
1B	56	-0.015	13.595	5.076	0.000	1.301	1.650	1	0.04	0.00	0.02
1C	56	-0.015	12.529	-9.614	0.000	-1.996	1.877	1	0.03	0.00	0.03
1D	56	-0.015	13.595	-9.614	0.000	-1.996	1.650	1	0.04	0.00	0.03
1E	56	0.021	12.529	5.076	0.000	1.301	1.877	1	0.03	0.00	0.02
1F	56	0.021	13.595	5.076	0.000	1.301	1.650	1	0.04	0.00	0.02
1G	56	0.021	12.529	-9.614	0.000	-1.996	1.877	1	0.03	0.00	0.03
1H	56	0.021	13.595	-9.614	0.000	-1.996	1.650	1	0.04	0.00	0.03
1I	56	-0.048	12.659	0.377	0.000	0.249	1.718	1	0.03	0.00	0.01
1J	56	-0.048	13.465	0.377	0.000	0.249	1.809	1	0.04	0.00	0.01
1K	56	-0.048	12.659	-4.915	0.000	-0.945	1.718	1	0.03	0.00	0.01
1L	56	-0.048	13.465	-4.915	0.000	-0.945	1.809	1	0.04	0.00	0.01
1M	56	0.054	12.659	0.377	0.000	0.249	1.718	1	0.03	0.00	0.01
1N	56	0.054	13.465	0.377	0.000	0.249	1.809	1	0.04	0.00	0.01
1O	56	0.054	12.659	-4.915	0.000	-0.945	1.718	1	0.03	0.00	0.01
1P	56	0.054	13.465	-4.915	0.000	-0.945	1.809	1	0.04	0.00	0.01
2	56	0.006	23.740	-4.088	0.000	-0.627	3.223	1	0.06	0.00	0.02
7	56	0.002	12.940	-2.255	0.000	-0.345	1.755	1	0.03	0.00	0.01
8	56	0.003	12.979	-2.216	0.000	-0.340	1.719	1	0.03	0.00	0.01
9	56	0.003	14.630	-2.596	0.000	-0.398	1.920	1	0.04	0.00	0.01
10	56	0.003	14.615	-2.599	0.000	-0.398	1.955	1	0.04	0.00	0.01
11	56	0.005	21.315	-3.671	0.000	-0.563	2.907	1	0.06	0.00	0.02
12	56	0.005	21.335	-3.648	0.000	-0.560	2.882	1	0.06	0.00	0.02
13	56	0.005	22.325	-3.876	0.000	-0.594	3.001	1	0.06	0.00	0.02
14	56	0.005	22.315	-3.877	0.000	-0.595	3.021	1	0.06	0.00	0.02
1A	113	-0.015	9.041	5.076	0.000	-1.555	7.942	1	0.02	0.00	0.05
1B	113	-0.015	10.107	5.076	0.000	-1.555	8.318	1	0.03	0.00	0.05
1C	113	-0.015	9.041	-9.614	0.000	3.412	7.942	1	0.02	0.00	0.05
1D	113	-0.015	10.107	-9.614	0.000	3.412	8.318	1	0.03	0.00	0.05
1E	113	0.021	9.041	5.076	0.000	-1.555	7.942	1	0.02	0.00	0.05
1F	113	0.021	10.107	5.076	0.000	-1.555	8.318	1	0.03	0.00	0.05
1G	113	0.021	9.041	-9.614	0.000	3.412	7.942	1	0.02	0.00	0.05
1H	113	0.021	10.107	-9.614	0.000	3.412	8.318	1	0.03	0.00	0.05
1I	113	-0.048	9.171	0.377	0.000	0.037	7.858	1	0.02	0.00	0.05
1J	113	-0.048	9.977	0.377	0.000	0.037	8.402	1	0.03	0.00	0.05
1K	113	-0.048	9.171	-4.915	0.000	1.820	7.858	1	0.02	0.00	0.05
1L	113	-0.048	9.977	-4.915	0.000	1.820	8.402	1	0.03	0.00	0.05
1M	113	0.054	9.171	0.377	0.000	0.037	7.858	1	0.02	0.00	0.05
1N	113	0.054	9.977	0.377	0.000	0.037	8.402	1	0.03	0.00	0.05
1O	113	0.054	9.171	-4.915	0.000	1.820	7.858	1	0.02	0.00	0.05
1P	113	0.054	9.977	-4.915	0.000	1.820	8.402	1	0.03	0.00	0.05
2	113	0.006	17.360	-4.088	0.000	1.672	14.780	1	0.05	0.00	0.09
7	113	0.002	9.510	-2.255	0.000	0.923	8.070	1	0.03	0.00	0.05
8	113	0.003	9.549	-2.216	0.000	0.907	8.056	1	0.03	0.00	0.05
9	113	0.003	10.730	-2.596	0.000	1.063	9.052	1	0.03	0.00	0.05
10	113	0.003	10.710	-2.599	0.000	1.064	9.078	1	0.03	0.00	0.05
11	113	0.005	15.600	-3.671	0.000	1.502	13.290	1	0.04	0.00	0.08
12	113	0.005	15.620	-3.648	0.000	1.492	13.280	1	0.04	0.00	0.08
13	113	0.005	16.330	-3.876	0.000	1.586	13.870	1	0.04	0.00	0.08
14	113	0.005	16.320	-3.877	0.000	1.586	13.890	1	0.04	0.00	0.08

ASTA NUM. 93 NI 164 NF 157 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.025	8.323	2.674	0.000	0.832	8.301	1	0.02	0.00	0.05	
1B	0	0.025	8.729	2.674	0.000	0.832	7.865	1	0.02	0.00	0.05	
1C	0	0.025	8.323	-1.959	0.000	0.143	8.301	1	0.02	0.00	0.05	
1D	0	0.025	8.729	-1.959	0.000	0.143	7.865	1	0.02	0.00	0.05	
1E	0	0.038	8.323	2.674	0.000	0.832	8.301	1	0.02	0.00	0.05	
1F	0	0.038	8.729	2.674	0.000	0.832	7.865	1	0.02	0.00	0.05	
1G	0	0.038	8.323	-1.959	0.000	0.143	8.301	1	0.02	0.00	0.05	
1H	0	0.038	8.729	-1.959	0.000	0.143	7.865	1	0.02	0.00	0.05	
1I	0	0.015	8.390	1.198	0.000	0.608	8.361	1	0.02	0.00	0.05	
1J	0	0.015	8.662	1.198	0.000	0.608	7.805	1	0.02	0.00	0.05	
1K	0	0.015	8.390	-0.483	0.000	0.367	8.361	1	0.02	0.00	0.05	
1L	0	0.015	8.662	-0.483	0.000	0.367	7.805	1	0.02	0.00	0.05	
1M	0	0.048	8.390	1.198	0.000	0.608	8.361	1	0.02	0.00	0.05	
1N	0	0.048	8.662	1.198	0.000	0.608	7.805	1	0.02	0.00	0.05	
1O	0	0.048	8.390	-0.483	0.000	0.367	8.361	1	0.02	0.00	0.05	
1P	0	0.048	8.662	-0.483	0.000	0.367	7.805	1	0.02	0.00	0.05	
2	0	0.057	15.530	0.644	0.000	0.877	14.700	1	0.04	0.00	0.09	
7	0	0.031	8.412	0.356	0.000	0.485	8.022	1	0.02	0.00	0.05	
8	0	0.031	8.429	0.349	0.000	0.475	8.006	1	0.02	0.00	0.05	
9	0	0.035	9.559	0.408	0.000	0.558	9.000	1	0.03	0.00	0.05	
10	0	0.035	9.549	0.408	0.000	0.558	9.026	1	0.03	0.00	0.05	
11	0	0.051	13.930	0.579	0.000	0.788	13.210	1	0.04	0.00	0.08	
12	0	0.051	13.940	0.575	0.000	0.783	13.200	1	0.04	0.00	0.08	
13	0	0.054	14.620	0.610	0.000	0.832	13.800	1	0.04	0.00	0.08	
14	0	0.054	14.610	0.610	0.000	0.832	13.810	1	0.04	0.00	0.08	
1A	56	0.025	4.834	2.674	0.000	1.934	12.229	1	0.01	0.00	0.07	
1B	56	0.025	5.240	2.674	0.000	1.934	11.566	1	0.01	0.00	0.07	
1C	56	0.025	4.834	-1.959	0.000	-1.361	12.229	1	0.01	0.00	0.07	
1D	56	0.025	5.240	-1.959	0.000	-1.361	11.566	1	0.01	0.00	0.07	
1E	56	0.038	4.834	2.674	0.000	1.934	12.229	1	0.01	0.00	0.07	
1F	56	0.038	5.240	2.674	0.000	1.934	11.566	1	0.01	0.00	0.07	

1G	56	0.038	4.834	-1.959	0.000	-1.361	12.229	1	0.01	0.00	0.07
1H	56	0.038	5.240	-1.959	0.000	-1.361	11.566	1	0.01	0.00	0.07
1I	56	0.015	4.901	1.198	0.000	0.879	12.252	1	0.01	0.00	0.07
1J	56	0.015	5.173	1.198	0.000	0.879	11.544	1	0.01	0.00	0.07
1K	56	0.015	4.901	-0.483	0.000	-0.307	12.252	1	0.01	0.00	0.07
1L	56	0.015	5.173	-0.483	0.000	-0.307	11.544	1	0.01	0.00	0.07
1M	56	0.048	4.901	1.198	0.000	0.879	12.252	1	0.01	0.00	0.07
1N	56	0.048	5.173	1.198	0.000	0.879	11.544	1	0.01	0.00	0.07
1O	56	0.048	4.901	-0.483	0.000	-0.307	12.252	1	0.01	0.00	0.07
1P	56	0.048	5.173	-0.483	0.000	-0.307	11.544	1	0.01	0.00	0.07
2	56	0.057	9.154	0.644	0.000	0.515	21.643	1	0.02	0.00	0.13
7	56	0.031	4.981	0.356	0.000	0.284	11.791	1	0.01	0.00	0.07
8	56	0.031	4.998	0.349	0.000	0.279	11.783	1	0.01	0.00	0.07
9	56	0.035	5.658	0.408	0.000	0.328	13.277	1	0.02	0.00	0.08
10	56	0.035	5.648	0.408	0.000	0.329	13.300	1	0.02	0.00	0.08
11	56	0.051	8.215	0.579	0.000	0.462	19.437	1	0.02	0.00	0.12
12	56	0.051	8.225	0.575	0.000	0.459	19.432	1	0.02	0.00	0.12
13	56	0.054	8.623	0.610	0.000	0.489	20.331	1	0.02	0.00	0.12
14	56	0.054	8.615	0.610	0.000	0.489	20.341	1	0.02	0.00	0.12
1A	113	0.025	1.345	2.674	0.000	3.036	14.195	1	0.00	0.00	0.08
1B	113	0.025	1.751	2.674	0.000	3.036	13.305	1	0.00	0.00	0.08
1C	113	0.025	1.345	-1.959	0.000	-2.865	14.195	1	0.00	0.00	0.08
1D	113	0.025	1.751	-1.959	0.000	-2.865	13.305	1	0.00	0.00	0.08
1E	113	0.038	1.345	2.674	0.000	3.036	14.195	1	0.00	0.00	0.08
1F	113	0.038	1.751	2.674	0.000	3.036	13.305	1	0.00	0.00	0.08
1G	113	0.038	1.345	-1.959	0.000	-2.865	14.195	1	0.00	0.00	0.08
1H	113	0.038	1.751	-1.959	0.000	-2.865	13.305	1	0.00	0.00	0.08
1I	113	0.015	1.412	1.198	0.000	1.150	14.181	1	0.00	0.00	0.08
1J	113	0.015	1.684	1.198	0.000	1.150	13.319	1	0.00	0.00	0.08
1K	113	0.015	1.412	-0.483	0.000	-0.980	14.181	1	0.00	0.00	0.08
1L	113	0.015	1.684	-0.483	0.000	-0.980	13.319	1	0.00	0.00	0.08
1M	113	0.048	1.412	1.198	0.000	1.150	14.181	1	0.00	0.00	0.08
1N	113	0.048	1.684	1.198	0.000	1.150	13.319	1	0.00	0.00	0.08
1O	113	0.048	1.412	-0.483	0.000	-0.980	14.181	1	0.00	0.00	0.08
1P	113	0.048	1.684	-0.483	0.000	-0.980	13.319	1	0.00	0.00	0.08
2	113	0.057	2.779	0.644	0.000	0.153	25.000	1	0.01	0.00	0.15
7	113	0.031	1.550	0.356	0.000	0.084	13.630	1	0.00	0.00	0.08
8	113	0.031	1.566	0.349	0.000	0.083	13.630	1	0.00	0.00	0.08
9	113	0.035	1.757	0.408	0.000	0.099	15.360	1	0.00	0.00	0.09
10	113	0.035	1.747	0.408	0.000	0.100	15.380	1	0.00	0.00	0.09
11	113	0.051	2.501	0.579	0.000	0.137	22.450	1	0.01	0.00	0.13
12	113	0.051	2.511	0.575	0.000	0.136	22.450	1	0.01	0.00	0.13
13	113	0.054	2.625	0.610	0.000	0.146	23.490	1	0.01	0.00	0.14
14	113	0.054	2.619	0.610	0.000	0.146	23.500	1	0.01	0.00	0.14

ASTA NUM. 94 NI 157 NF 150 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.005	0.993	2.274	0.000	3.097	14.202	1	0.00	0.00	0.08	
1B	0	0.005	1.083	2.274	0.000	3.097	13.318	1	0.00	0.00	0.08	
1C	0	0.005	0.993	-2.353	0.000	-2.805	14.202	1	0.00	0.00	0.08	
1D	0	0.005	1.083	-2.353	0.000	-2.805	13.318	1	0.00	0.00	0.08	
1E	0	0.015	0.993	2.274	0.000	3.097	14.202	1	0.00	0.00	0.08	
1F	0	0.015	1.083	2.274	0.000	3.097	13.318	1	0.00	0.00	0.08	
1G	0	0.015	0.993	-2.353	0.000	-2.805	14.202	1	0.00	0.00	0.08	
1H	0	0.015	1.083	-2.353	0.000	-2.805	13.318	1	0.00	0.00	0.08	
1I	0	-0.005	0.944	0.792	0.000	1.211	14.190	1	0.00	0.00	0.08	
1J	0	-0.005	1.132	0.792	0.000	1.211	13.330	1	0.00	0.00	0.08	
1K	0	-0.005	0.944	-0.872	0.000	-0.919	14.190	1	0.00	0.00	0.08	
1L	0	-0.005	1.132	-0.872	0.000	-0.919	13.330	1	0.00	0.00	0.08	
1M	0	0.026	0.944	0.792	0.000	1.211	14.190	1	0.00	0.00	0.08	
1N	0	0.026	1.132	0.792	0.000	1.211	13.330	1	0.00	0.00	0.08	
1O	0	0.026	0.944	-0.872	0.000	-0.919	14.190	1	0.00	0.00	0.08	
1P	0	0.026	1.132	-0.872	0.000	-0.919	13.330	1	0.00	0.00	0.08	
2	0	0.018	1.919	-0.066	0.000	0.264	25.010	1	0.01	0.00	0.15	
7	0	0.010	1.000	-0.041	0.000	0.144	13.630	1	0.00	0.00	0.08	
8	0	0.010	1.008	-0.035	0.000	0.143	13.640	1	0.00	0.00	0.08	
9	0	0.012	1.172	-0.057	0.000	0.166	15.370	1	0.00	0.00	0.09	
10	0	0.012	1.164	-0.055	0.000	0.167	15.390	1	0.00	0.00	0.09	
11	0	0.017	1.709	-0.059	0.000	0.236	22.460	1	0.00	0.00	0.13	
12	0	0.017	1.714	-0.056	0.000	0.236	22.460	1	0.00	0.00	0.13	
13	0	0.018	1.812	-0.069	0.000	0.250	23.510	1	0.00	0.00	0.14	
14	0	0.017	1.807	-0.068	0.000	0.250	23.520	1	0.00	0.00	0.14	
1A	56	0.005	-2.495	2.274	0.000	1.818	13.796	1	0.01	0.00	0.08	
1B	56	0.005	-2.406	2.274	0.000	1.818	12.926	1	0.01	0.00	0.08	
1C	56	0.005	-2.495	-2.353	0.000	-1.481	13.796	1	0.01	0.00	0.08	
1D	56	0.005	-2.406	-2.353	0.000	-1.481	12.926	1	0.01	0.00	0.08	
1E	56	0.015	-2.495	2.274	0.000	1.818	13.796	1	0.01	0.00	0.08	
1F	56	0.015	-2.406	2.274	0.000	1.818	12.926	1	0.01	0.00	0.08	
1G	56	0.015	-2.495	-2.353	0.000	-1.481	13.796	1	0.01	0.00	0.08	
1H	56	0.015	-2.406	-2.353	0.000	-1.481	12.926	1	0.01	0.00	0.08	
1I	56	-0.005	-2.545	0.792	0.000	0.766	13.743	1	0.01	0.00	0.08	
1J	56	-0.005	-2.356	0.792	0.000	0.766	12.979	1	0.01	0.00	0.08	
1K	56	-0.005	-2.545	-0.872	0.000	-0.429	13.743	1	0.01	0.00	0.08	
1L	56	-0.005	-2.356	-0.872	0.000	-0.429	12.979	1	0.01	0.00	0.08	
1M	56	0.026	-2.545	0.792	0.000	0.766	13.743	1	0.01	0.00	0.08	
1N	56	0.026	-2.356	0.792	0.000	0.766	12.979	1	0.01	0.00	0.08	
1O	56	0.026	-2.545	-0.872	0.000	-0.429	13.743	1	0.01	0.00	0.08	

1P	56	0.026	-2.356	-0.872	0.000	-0.429	12.979	1	0.01	0.00	0.08
2	56	0.018	-4.456	-0.066	0.000	0.301	24.298	1	0.01	0.00	0.14
7	56	0.010	-2.431	-0.041	0.000	0.168	13.230	1	0.01	0.00	0.08
8	56	0.010	-2.424	-0.035	0.000	0.163	13.240	1	0.01	0.00	0.08
9	56	0.012	-2.729	-0.057	0.000	0.198	14.932	1	0.01	0.00	0.09
10	56	0.012	-2.738	-0.055	0.000	0.198	14.947	1	0.01	0.00	0.09
11	56	0.017	-4.005	-0.059	0.000	0.270	21.817	1	0.01	0.00	0.13
12	56	0.017	-4.001	-0.056	0.000	0.267	21.817	1	0.01	0.00	0.13
13	56	0.018	-4.184	-0.069	0.000	0.288	22.841	1	0.01	0.00	0.14
14	56	0.017	-4.187	-0.068	0.000	0.288	22.846	1	0.01	0.00	0.14
1A	113	0.005	-5.984	2.274	0.000	0.539	11.428	1	0.02	0.00	0.07
1B	113	0.005	-5.894	2.274	0.000	0.539	10.572	1	0.02	0.00	0.06
1C	113	0.005	-5.984	-2.353	0.000	-0.157	11.428	1	0.02	0.00	0.07
1D	113	0.005	-5.894	-2.353	0.000	-0.157	10.572	1	0.02	0.00	0.06
1E	113	0.015	-5.984	2.274	0.000	0.539	11.428	1	0.02	0.00	0.07
1F	113	0.015	-5.894	2.274	0.000	0.539	10.572	1	0.02	0.00	0.06
1G	113	0.015	-5.984	-2.353	0.000	-0.157	11.428	1	0.02	0.00	0.07
1H	113	0.015	-5.894	-2.353	0.000	-0.157	10.572	1	0.02	0.00	0.06
1I	113	-0.005	-6.033	0.792	0.000	0.320	11.334	1	0.02	0.00	0.07
1J	113	-0.005	-5.845	0.792	0.000	0.320	10.666	1	0.02	0.00	0.06
1K	113	-0.005	-6.033	-0.872	0.000	0.062	11.334	1	0.02	0.00	0.07
1L	113	-0.005	-5.845	-0.872	0.000	0.062	10.666	1	0.02	0.00	0.06
1M	113	0.026	-6.033	0.792	0.000	0.320	11.334	1	0.02	0.00	0.07
1N	113	0.026	-5.845	0.792	0.000	0.320	10.666	1	0.02	0.00	0.06
1O	113	0.026	-6.033	-0.872	0.000	0.062	11.334	1	0.02	0.00	0.07
1P	113	0.026	-5.845	-0.872	0.000	0.062	10.666	1	0.02	0.00	0.06
2	113	0.018	-10.830	-0.066	0.000	0.338	20.000	1	0.03	0.00	0.12
7	113	0.010	-5.862	-0.041	0.000	0.191	10.900	1	0.02	0.00	0.06
8	113	0.010	-5.855	-0.035	0.000	0.182	10.910	1	0.02	0.00	0.06
9	113	0.012	-6.630	-0.057	0.000	0.230	12.300	1	0.02	0.00	0.07
10	113	0.012	-6.639	-0.055	0.000	0.230	12.310	1	0.02	0.00	0.07
11	113	0.017	-9.719	-0.059	0.000	0.303	17.960	1	0.03	0.00	0.11
12	113	0.017	-9.715	-0.056	0.000	0.298	17.960	1	0.03	0.00	0.11
13	113	0.018	-10.180	-0.069	0.000	0.327	18.800	1	0.03	0.00	0.11
14	113	0.017	-10.180	-0.068	0.000	0.327	18.800	1	0.03	0.00	0.11

ASTA NUM. 95 NI 150 NF 54 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.035	-6.752	9.095	0.000	3.101	11.457	1	0.02	0.00	0.07	
1B	0	-0.035	-6.210	9.095	0.000	3.101	10.663	1	0.02	0.00	0.06	
1C	0	-0.035	-6.752	-5.607	0.000	-1.879	11.457	1	0.02	0.00	0.07	
1D	0	-0.035	-6.210	-5.607	0.000	-1.879	10.663	1	0.02	0.00	0.06	
1E	0	0.005	-6.752	9.095	0.000	3.101	11.457	1	0.02	0.00	0.07	
1F	0	0.005	-6.210	9.095	0.000	3.101	10.663	1	0.02	0.00	0.06	
1G	0	0.005	-6.752	-5.607	0.000	-1.879	11.457	1	0.02	0.00	0.07	
1H	0	0.005	-6.210	-5.607	0.000	-1.879	10.663	1	0.02	0.00	0.06	
1I	0	-0.067	-6.762	4.418	0.000	1.519	11.389	1	0.02	0.00	0.07	
1J	0	-0.067	-6.200	4.418	0.000	1.519	10.731	1	0.02	0.00	0.06	
1K	0	-0.067	-6.762	-0.930	0.000	-0.297	11.389	1	0.02	0.00	0.07	
1L	0	-0.067	-6.200	-0.930	0.000	-0.297	10.731	1	0.02	0.00	0.06	
1M	0	0.037	-6.762	4.418	0.000	1.519	11.389	1	0.02	0.00	0.07	
1N	0	0.037	-6.200	4.418	0.000	1.519	10.731	1	0.02	0.00	0.06	
1O	0	0.037	-6.762	-0.930	0.000	-0.297	11.389	1	0.02	0.00	0.07	
1P	0	0.037	-6.200	-0.930	0.000	-0.297	10.731	1	0.02	0.00	0.06	
2	0	-0.027	-11.750	3.133	0.000	1.095	20.110	1	0.03	0.00	0.12	
7	0	-0.014	-6.448	1.734	0.000	0.608	10.960	1	0.02	0.00	0.07	
8	0	-0.015	-6.461	1.698	0.000	0.593	10.970	1	0.02	0.00	0.07	
9	0	-0.017	-7.248	2.018	0.000	0.712	12.370	1	0.02	0.00	0.07	
10	0	-0.017	-7.253	2.018	0.000	0.712	12.380	1	0.02	0.00	0.07	
11	0	-0.024	-10.560	2.813	0.000	0.983	18.060	1	0.03	0.00	0.11	
12	0	-0.024	-10.570	2.791	0.000	0.974	18.070	1	0.03	0.00	0.11	
13	0	-0.026	-11.040	2.983	0.000	1.045	18.910	1	0.03	0.00	0.11	
14	0	-0.026	-11.040	2.983	0.000	1.045	18.910	1	0.03	0.00	0.11	
1A	56	-0.035	-10.242	9.095	0.000	-2.015	6.685	1	0.03	0.00	0.04	
1B	56	-0.035	-9.699	9.095	0.000	-2.015	6.185	1	0.03	0.00	0.04	
1C	56	-0.035	-10.242	-5.607	0.000	1.275	6.685	1	0.03	0.00	0.04	
1D	56	-0.035	-9.699	-5.607	0.000	1.275	6.185	1	0.03	0.00	0.04	
1E	56	0.005	-10.242	9.095	0.000	-2.015	6.685	1	0.03	0.00	0.04	
1F	56	0.005	-9.699	9.095	0.000	-2.015	6.185	1	0.03	0.00	0.04	
1G	56	0.005	-10.242	-5.607	0.000	1.275	6.685	1	0.03	0.00	0.04	
1H	56	0.005	-9.699	-5.607	0.000	1.275	6.185	1	0.03	0.00	0.04	
1I	56	-0.067	-10.251	4.418	0.000	-0.966	6.623	1	0.03	0.00	0.04	
1J	56	-0.067	-9.690	4.418	0.000	-0.966	6.247	1	0.03	0.00	0.04	
1K	56	-0.067	-10.251	-0.930	0.000	0.226	6.623	1	0.03	0.00	0.04	
1L	56	-0.067	-9.690	-0.930	0.000	0.226	6.247	1	0.03	0.00	0.04	
1M	56	0.037	-10.251	4.418	0.000	-0.966	6.623	1	0.03	0.00	0.04	
1N	56	0.037	-9.690	4.418	0.000	-0.966	6.247	1	0.03	0.00	0.04	
1O	56	0.037	-10.251	-0.930	0.000	0.226	6.623	1	0.03	0.00	0.04	
1P	56	0.037	-9.690	-0.930	0.000	0.226	6.247	1	0.03	0.00	0.04	
2	56	-0.027	-18.125	3.133	0.000	-0.667	11.711	1	0.05	0.00	0.07	
7	56	-0.014	-9.879	1.734	0.000	-0.368	6.369	1	0.03	0.00	0.04	
8	56	-0.015	-9.891	1.698	0.000	-0.362	6.373	1	0.03	0.00	0.04	
9	56	-0.017	-11.149	2.018	0.000	-0.423	7.198	1	0.03	0.00	0.04	
10	56	-0.017	-11.152	2.018	0.000	-0.424	7.203	1	0.03	0.00	0.04	
11	56	-0.024	-16.275	2.813	0.000	-0.599	10.514	1	0.04	0.00	0.06	
12	56	-0.024	-16.285	2.791	0.000	-0.596	10.518	1	0.04	0.00	0.06	
13	56	-0.026	-17.035	2.983	0.000	-0.633	11.013	1	0.05	0.00	0.07	

14	56	-0.026	-17.035	2.983	0.000	-0.633	11.013	1	0.05	0.00	0.07
1A	113	-0.035	-13.731	9.095	0.000	-7.131	-0.050	1	0.04	0.00	0.09
1B	113	-0.035	-13.189	9.095	0.000	-7.131	-0.255	1	0.04	0.00	0.09
1C	113	-0.035	-13.731	-5.607	0.000	4.429	-0.050	1	0.04	0.00	0.06
1D	113	-0.035	-13.189	-5.607	0.000	4.429	-0.255	1	0.04	0.00	0.06
1E	113	0.005	-13.731	9.095	0.000	-7.131	-0.050	1	0.04	0.00	0.09
1F	113	0.005	-13.189	9.095	0.000	-7.131	-0.255	1	0.04	0.00	0.09
1G	113	0.005	-13.731	-5.607	0.000	4.429	-0.050	1	0.04	0.00	0.06
1H	113	0.005	-13.189	-5.607	0.000	4.429	-0.255	1	0.04	0.00	0.06
1I	113	-0.067	-13.741	4.418	0.000	-3.452	-0.106	1	0.04	0.00	0.04
1J	113	-0.067	-13.179	4.418	0.000	-3.452	-0.198	1	0.04	0.00	0.04
1K	113	-0.067	-13.741	-0.930	0.000	0.750	-0.106	1	0.04	0.00	0.01
1L	113	-0.067	-13.179	-0.930	0.000	0.750	-0.198	1	0.04	0.00	0.01
1M	113	0.037	-13.741	4.418	0.000	-3.452	-0.106	1	0.04	0.00	0.04
1N	113	0.037	-13.179	4.418	0.000	-3.452	-0.198	1	0.04	0.00	0.04
1O	113	0.037	-13.741	-0.930	0.000	0.750	-0.106	1	0.04	0.00	0.01
1P	113	0.037	-13.179	-0.930	0.000	0.750	-0.198	1	0.04	0.00	0.01
2	113	-0.027	-24.500	3.133	0.000	-2.430	-0.275	1	0.07	0.00	0.03
7	113	-0.014	-13.310	1.734	0.000	-1.343	-0.152	1	0.04	0.00	0.02
8	113	-0.015	-13.320	1.698	0.000	-1.317	-0.154	1	0.04	0.00	0.02
9	113	-0.017	-15.050	2.018	0.000	-1.559	-0.169	1	0.04	0.00	0.02
10	113	-0.017	-15.050	2.018	0.000	-1.559	-0.169	1	0.04	0.00	0.02
11	113	-0.024	-21.990	2.813	0.000	-2.181	-0.247	1	0.06	0.00	0.03
12	113	-0.024	-22.000	2.791	0.000	-2.166	-0.249	1	0.06	0.00	0.03
13	113	-0.026	-23.030	2.983	0.000	-2.311	-0.258	1	0.06	0.00	0.03
14	113	-0.026	-23.030	2.983	0.000	-2.311	-0.258	1	0.06	0.00	0.03

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.055	-7.328	14.302	1	0.0546	1.0019	1.0005	--	--	0.00	--	0.18	Snell. 'zx'= 348
1B	-0.055	-7.328	13.338	1	0.0546	1.0019	1.0005	--	--	0.00	--	0.17	Snell. 'zx'= 348
1C	-0.055	-7.404	14.302	1	0.0546	1.0019	1.0005	--	--	0.00	--	0.18	Snell. 'zx'= 348
1D	-0.055	-7.404	13.338	1	0.0546	1.0019	1.0005	--	--	0.00	--	0.17	Snell. 'zx'= 348
1E	-0.030	-7.328	14.302	1	0.0546	1.0011	1.0003	--	--	0.00	--	0.18	Snell. 'zx'= 348
1F	-0.030	-7.328	13.338	1	0.0546	1.0011	1.0003	--	--	0.00	--	0.17	Snell. 'zx'= 348
1G	-0.030	-7.404	14.302	1	0.0546	1.0011	1.0003	--	--	0.00	--	0.18	Snell. 'zx'= 348
1H	-0.030	-7.404	13.338	1	0.0546	1.0011	1.0003	--	--	0.00	--	0.17	Snell. 'zx'= 348
1I	-0.080	-3.677	14.411	1	0.0546	1.0066	1.0008	--	--	0.00	--	0.13	Snell. 'zx'= 348
1J	-0.080	-3.677	13.330	1	0.0546	1.0066	1.0007	--	--	0.00	--	0.13	Snell. 'zx'= 348
1K	-0.080	-3.710	14.411	1	0.0546	1.0065	1.0008	--	--	0.00	--	0.13	Snell. 'zx'= 348
1L	-0.080	-3.710	13.330	1	0.0546	1.0065	1.0007	--	--	0.00	--	0.13	Snell. 'zx'= 348
1M	-0.011	-3.677	14.411	1	0.0546	1.0009	1.0001	--	--	0.00	--	0.13	Snell. 'zx'= 348
1N	-0.011	-3.677	13.330	1	0.0546	1.0009	1.0001	--	--	0.00	--	0.13	Snell. 'zx'= 348
1O	-0.011	-3.710	14.411	1	0.0546	1.0009	1.0001	--	--	0.00	--	0.13	Snell. 'zx'= 348
1P	-0.011	-3.710	13.330	1	0.0546	1.0009	1.0001	--	--	0.00	--	0.13	Snell. 'zx'= 348
2	-0.077	-2.926	25.130	1	0.0546	1.0022	1.0008	--	--	0.00	--	0.19	Snell. 'zx'= 348
7	-0.043	-1.617	13.700	1	0.0546	1.0003	1.0004	--	--	0.00	--	0.10	Snell. 'zx'= 348
8	-0.041	-1.586	13.700	1	0.0546	1.0002	1.0004	--	--	0.00	--	0.10	Snell. 'zx'= 348
9	-0.048	-1.868	15.460	1	0.0546	1.0006	1.0005	--	--	0.00	--	0.12	Snell. 'zx'= 348
10	-0.048	-1.866	15.450	1	0.0546	1.0006	1.0005	--	--	0.00	--	0.12	Snell. 'zx'= 348
11	-0.069	-2.628	22.570	1	0.0546	1.0018	1.0007	--	--	0.00	--	0.17	Snell. 'zx'= 348
12	-0.068	-2.612	22.570	1	0.0546	1.0017	1.0007	--	--	0.00	--	0.17	Snell. 'zx'= 348
13	-0.072	-2.774	23.620	1	0.0546	1.0020	1.0008	--	--	0.00	--	0.18	Snell. 'zx'= 348
14	-0.072	-2.776	23.620	1	0.0546	1.0020	1.0008	--	--	0.00	--	0.18	Snell. 'zx'= 348

ASTA NUM. 4 NI 97 NF 173 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.210	12.511	5.276	0.000	4.205	-0.034	1	0.03	0.00	0.05	
1B	0	0.210	13.009	5.276	0.000	4.205	-0.324	1	0.03	0.00	0.05	
1C	0	0.210	12.511	-9.490	0.000	-7.375	-0.034	1	0.03	0.00	0.09	
1D	0	0.210	13.009	-9.490	0.000	-7.375	-0.324	1	0.03	0.00	0.09	
1E	0	0.572	12.511	5.276	0.000	4.205	-0.034	1	0.03	0.00	0.05	
1F	0	0.572	13.009	5.276	0.000	4.205	-0.324	1	0.03	0.00	0.05	
1G	0	0.572	12.511	-9.490	0.000	-7.375	-0.034	1	0.03	0.00	0.09	
1H	0	0.572	13.009	-9.490	0.000	-7.375	-0.324	1	0.03	0.00	0.09	
1I	0	-0.058	12.291	0.510	0.000	0.503	-0.023	1	0.03	0.00	0.01	
1J	0	-0.058	13.229	0.510	0.000	0.503	-0.335	1	0.04	0.00	0.01	
1K	0	-0.058	12.291	-4.724	0.000	-3.673	-0.023	1	0.03	0.00	0.05	
1L	0	-0.058	13.229	-4.724	0.000	-3.673	-0.335	1	0.04	0.00	0.05	
1M	0	0.840	12.291	0.510	0.000	0.503	-0.023	1	0.03	0.00	0.01	
1N	0	0.840	13.229	0.510	0.000	0.503	-0.335	1	0.04	0.00	0.01	
1O	0	0.840	12.291	-4.724	0.000	-3.673	-0.023	1	0.03	0.00	0.05	
1P	0	0.840	13.229	-4.724	0.000	-3.673	-0.335	1	0.04	0.00	0.05	
2	0	0.707	23.250	-3.780	0.000	-2.848	-0.326	1	0.06	0.00	0.04	
7	0	0.427	12.590	-2.087	0.000	-1.573	-0.182	1	0.03	0.00	0.02	
8	0	0.384	12.590	-2.047	0.000	-1.543	-0.173	1	0.03	0.00	0.02	
9	0	0.443	14.300	-2.443	0.000	-1.832	-0.204	1	0.04	0.00	0.02	
10	0	0.442	14.300	-2.443	0.000	-1.832	-0.202	1	0.04	0.00	0.02	
11	0	0.658	20.860	-3.389	0.000	-2.555	-0.295	1	0.06	0.00	0.03	
12	0	0.632	20.860	-3.365	0.000	-2.538	-0.290	1	0.06	0.00	0.03	

13	0	0.668	21.880	-3.602	0.000	-2.711	-0.308	1	0.06	0.00	0.03
14	0	0.668	21.880	-3.603	0.000	-2.711	-0.308	1	0.06	0.00	0.03
1A	56	0.210	9.024	5.276	0.000	1.237	6.019	1	0.02	0.00	0.04
1B	56	0.210	9.521	5.276	0.000	1.237	6.015	1	0.03	0.00	0.04
1C	56	0.210	9.024	-9.490	0.000	-2.037	6.019	1	0.02	0.00	0.04
1D	56	0.210	9.521	-9.490	0.000	-2.037	6.015	1	0.03	0.00	0.04
1E	56	0.572	9.024	5.276	0.000	1.237	6.019	1	0.02	0.00	0.04
1F	56	0.572	9.521	5.276	0.000	1.237	6.015	1	0.03	0.00	0.04
1G	56	0.572	9.024	-9.490	0.000	-2.037	6.019	1	0.02	0.00	0.04
1H	56	0.572	9.521	-9.490	0.000	-2.037	6.015	1	0.03	0.00	0.04
1I	56	-0.058	8.803	0.510	0.000	0.216	5.908	1	0.02	0.00	0.04
1J	56	-0.058	9.742	0.510	0.000	0.216	6.126	1	0.03	0.00	0.04
1K	56	-0.058	8.803	-4.724	0.000	-1.016	5.908	1	0.02	0.00	0.04
1L	56	-0.058	9.742	-4.724	0.000	-1.016	6.126	1	0.03	0.00	0.04
1M	56	0.840	8.803	0.510	0.000	0.216	5.908	1	0.02	0.00	0.04
1N	56	0.840	9.742	0.510	0.000	0.216	6.126	1	0.03	0.00	0.04
1O	56	0.840	8.803	-4.724	0.000	-1.016	5.908	1	0.02	0.00	0.04
1P	56	0.840	9.742	-4.724	0.000	-1.016	6.126	1	0.03	0.00	0.04
2	56	0.707	16.875	-3.780	0.000	-0.722	10.961	1	0.04	0.00	0.07
7	56	0.427	9.162	-2.087	0.000	-0.399	5.939	1	0.02	0.00	0.04
8	56	0.384	9.161	-2.047	0.000	-0.392	5.944	1	0.02	0.00	0.04
9	56	0.443	10.402	-2.443	0.000	-0.458	6.745	1	0.03	0.00	0.04
10	56	0.442	10.398	-2.443	0.000	-0.458	6.741	1	0.03	0.00	0.04
11	56	0.658	15.144	-3.389	0.000	-0.649	9.830	1	0.04	0.00	0.06
12	56	0.632	15.144	-3.365	0.000	-0.645	9.832	1	0.04	0.00	0.06
13	56	0.668	15.885	-3.602	0.000	-0.684	10.312	1	0.04	0.00	0.06
14	56	0.668	15.883	-3.603	0.000	-0.684	10.313	1	0.04	0.00	0.06
1A	113	0.210	5.536	5.276	0.000	-1.731	10.108	1	0.01	0.00	0.06
1B	113	0.210	6.034	5.276	0.000	-1.731	10.392	1	0.02	0.00	0.06
1C	113	0.210	5.536	-9.490	0.000	3.300	10.108	1	0.01	0.00	0.06
1D	113	0.210	6.034	-9.490	0.000	3.300	10.392	1	0.02	0.00	0.06
1E	113	0.572	5.536	5.276	0.000	-1.731	10.108	1	0.01	0.00	0.06
1F	113	0.572	6.034	5.276	0.000	-1.731	10.392	1	0.02	0.00	0.06
1G	113	0.572	5.536	-9.490	0.000	3.300	10.108	1	0.01	0.00	0.06
1H	113	0.572	6.034	-9.490	0.000	3.300	10.392	1	0.02	0.00	0.06
1I	113	-0.058	5.316	0.510	0.000	-0.071	9.875	1	0.01	0.00	0.06
1J	113	-0.058	6.254	0.510	0.000	-0.071	10.625	1	0.02	0.00	0.06
1K	113	-0.058	5.316	-4.724	0.000	1.641	9.875	1	0.01	0.00	0.06
1L	113	-0.058	6.254	-4.724	0.000	1.641	10.625	1	0.02	0.00	0.06
1M	113	0.840	5.316	0.510	0.000	-0.071	9.875	1	0.01	0.00	0.06
1N	113	0.840	6.254	0.510	0.000	-0.071	10.625	1	0.02	0.00	0.06
1O	113	0.840	5.316	-4.724	0.000	1.641	9.875	1	0.01	0.00	0.06
1P	113	0.840	6.254	-4.724	0.000	1.641	10.625	1	0.02	0.00	0.06
2	113	0.707	10.500	-3.780	0.000	1.404	18.660	1	0.03	0.00	0.11
7	113	0.427	5.733	-2.087	0.000	0.775	10.130	1	0.02	0.00	0.06
8	113	0.384	5.731	-2.047	0.000	0.760	10.130	1	0.02	0.00	0.06
9	113	0.443	6.503	-2.443	0.000	0.916	11.500	1	0.02	0.00	0.07
10	113	0.442	6.495	-2.443	0.000	0.917	11.490	1	0.02	0.00	0.07
11	113	0.658	9.428	-3.389	0.000	1.257	16.740	1	0.03	0.00	0.10
12	113	0.632	9.427	-3.365	0.000	1.248	16.740	1	0.03	0.00	0.10
13	113	0.668	9.890	-3.602	0.000	1.342	17.560	1	0.03	0.00	0.10
14	113	0.668	9.886	-3.603	0.000	1.342	17.560	1	0.03	0.00	0.10

ASTA NUM. 72 NI 173 NF 180 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.329	5.977	2.927	0.000	1.067	10.379	1	0.02	0.00	0.06	
1B	0	-0.329	6.209	2.927	0.000	1.067	10.101	1	0.02	0.00	0.06	
1C	0	-0.329	5.977	-1.365	0.000	0.185	10.379	1	0.02	0.00	0.06	
1D	0	-0.329	6.209	-1.365	0.000	0.185	10.101	1	0.02	0.00	0.06	
1E	0	-0.123	5.977	2.927	0.000	1.067	10.379	1	0.02	0.00	0.06	
1F	0	-0.123	6.209	2.927	0.000	1.067	10.101	1	0.02	0.00	0.06	
1G	0	-0.123	5.977	-1.365	0.000	0.185	10.379	1	0.02	0.00	0.06	
1H	0	-0.123	6.209	-1.365	0.000	0.185	10.101	1	0.02	0.00	0.06	
1I	0	-0.377	5.892	1.462	0.000	0.887	10.608	1	0.02	0.00	0.06	
1J	0	-0.377	6.294	1.462	0.000	0.887	9.872	1	0.02	0.00	0.06	
1K	0	-0.377	5.892	0.101	0.000	0.365	10.608	1	0.02	0.00	0.06	
1L	0	-0.377	6.294	0.101	0.000	0.365	9.872	1	0.02	0.00	0.06	
1M	0	-0.075	5.892	1.462	0.000	0.887	10.608	1	0.02	0.00	0.06	
1N	0	-0.075	6.294	1.462	0.000	0.887	9.872	1	0.02	0.00	0.06	
1O	0	-0.075	5.892	0.101	0.000	0.365	10.608	1	0.02	0.00	0.06	
1P	0	-0.075	6.294	0.101	0.000	0.365	9.872	1	0.02	0.00	0.06	
2	0	-0.407	11.110	1.399	0.000	1.121	18.630	1	0.03	0.00	0.11	
7	0	-0.212	6.015	0.790	0.000	0.630	10.110	1	0.02	0.00	0.06	
8	0	-0.220	6.006	0.755	0.000	0.605	10.120	1	0.02	0.00	0.06	
9	0	-0.260	6.816	0.909	0.000	0.730	11.480	1	0.02	0.00	0.07	
10	0	-0.260	6.808	0.909	0.000	0.731	11.470	1	0.02	0.00	0.07	
11	0	-0.358	9.969	1.264	0.000	1.011	16.710	1	0.03	0.00	0.10	
12	0	-0.363	9.963	1.243	0.000	0.996	16.720	1	0.03	0.00	0.10	
13	0	-0.387	10.450	1.335	0.000	1.071	17.530	1	0.03	0.00	0.10	
14	0	-0.387	10.440	1.335	0.000	1.071	17.530	1	0.03	0.00	0.10	
1A	56	-0.329	2.488	2.927	0.000	1.821	12.888	1	0.01	0.00	0.08	
1B	56	-0.329	2.720	2.927	0.000	1.821	12.484	1	0.01	0.00	0.07	
1C	56	-0.329	2.488	-1.365	0.000	-1.448	12.888	1	0.01	0.00	0.08	
1D	56	-0.329	2.720	-1.365	0.000	-1.448	12.484	1	0.01	0.00	0.07	
1E	56	-0.123	2.488	2.927	0.000	1.821	12.888	1	0.01	0.00	0.08	
1F	56	-0.123	2.720	2.927	0.000	1.821	12.484	1	0.01	0.00	0.07	

1G	56	-0.123	2.488	-1.365	0.000	-1.448	12.888	1	0.01	0.00	0.08
1H	56	-0.123	2.720	-1.365	0.000	-1.448	12.484	1	0.01	0.00	0.07
1I	56	-0.377	2.403	1.462	0.000	0.785	13.167	1	0.01	0.00	0.08
1J	56	-0.377	2.806	1.462	0.000	0.785	12.206	1	0.01	0.00	0.07
1K	56	-0.377	2.403	0.101	0.000	-0.412	13.167	1	0.01	0.00	0.08
1L	56	-0.377	2.806	0.101	0.000	-0.412	12.206	1	0.01	0.00	0.07
1M	56	-0.075	2.403	1.462	0.000	0.785	13.167	1	0.01	0.00	0.08
1N	56	-0.075	2.806	1.462	0.000	0.785	12.206	1	0.01	0.00	0.07
1O	56	-0.075	2.403	0.101	0.000	-0.412	13.167	1	0.01	0.00	0.08
1P	56	-0.075	2.806	0.101	0.000	-0.412	12.206	1	0.01	0.00	0.07
2	56	-0.407	4.734	1.399	0.000	0.334	23.088	1	0.01	0.00	0.14
7	56	-0.212	2.584	0.790	0.000	0.186	12.530	1	0.01	0.00	0.07
8	56	-0.220	2.575	0.755	0.000	0.181	12.535	1	0.01	0.00	0.07
9	56	-0.260	2.915	0.909	0.000	0.219	14.217	1	0.01	0.00	0.08
10	56	-0.260	2.907	0.909	0.000	0.220	14.202	1	0.01	0.00	0.08
11	56	-0.358	4.254	1.264	0.000	0.300	20.712	1	0.01	0.00	0.12
12	56	-0.363	4.249	1.243	0.000	0.296	20.717	1	0.01	0.00	0.12
13	56	-0.387	4.454	1.335	0.000	0.320	21.721	1	0.01	0.00	0.13
14	56	-0.387	4.446	1.335	0.000	0.320	21.716	1	0.01	0.00	0.13
1A	113	-0.329	-1.000	2.927	0.000	2.575	13.435	1	0.00	0.00	0.08
1B	113	-0.329	-0.768	2.927	0.000	2.575	12.905	1	0.00	0.00	0.08
1C	113	-0.329	-1.000	-1.365	0.000	-3.080	13.435	1	0.00	0.00	0.08
1D	113	-0.329	-0.768	-1.365	0.000	-3.080	12.905	1	0.00	0.00	0.08
1E	113	-0.123	-1.000	2.927	0.000	2.575	13.435	1	0.00	0.00	0.08
1F	113	-0.123	-0.768	2.927	0.000	2.575	12.905	1	0.00	0.00	0.08
1G	113	-0.123	-1.000	-1.365	0.000	-3.080	13.435	1	0.00	0.00	0.08
1H	113	-0.123	-0.768	-1.365	0.000	-3.080	12.905	1	0.00	0.00	0.08
1I	113	-0.377	-1.085	1.462	0.000	0.683	13.763	1	0.00	0.00	0.08
1J	113	-0.377	-0.683	1.462	0.000	0.683	12.577	1	0.00	0.00	0.07
1K	113	-0.377	-1.085	0.101	0.000	-1.188	13.763	1	0.00	0.00	0.08
1L	113	-0.377	-0.683	0.101	0.000	-1.188	12.577	1	0.00	0.00	0.07
1M	113	-0.075	-1.085	1.462	0.000	0.683	13.763	1	0.00	0.00	0.08
1N	113	-0.075	-0.683	1.462	0.000	0.683	12.577	1	0.00	0.00	0.07
1O	113	-0.075	-1.085	0.101	0.000	-1.188	13.763	1	0.00	0.00	0.08
1P	113	-0.075	-0.683	0.101	0.000	-1.188	12.577	1	0.00	0.00	0.07
2	113	-0.407	-1.641	1.399	0.000	-0.454	23.960	1	0.00	0.00	0.14
7	113	-0.212	-0.847	0.790	0.000	-0.259	13.020	1	0.00	0.00	0.08
8	113	-0.220	-0.857	0.755	0.000	-0.244	13.020	1	0.00	0.00	0.08
9	113	-0.260	-0.987	0.909	0.000	-0.292	14.760	1	0.00	0.00	0.09
10	113	-0.260	-0.994	0.909	0.000	-0.292	14.740	1	0.00	0.00	0.09
11	113	-0.358	-1.460	1.264	0.000	-0.412	21.500	1	0.00	0.00	0.13
12	113	-0.363	-1.465	1.243	0.000	-0.403	21.500	1	0.00	0.00	0.13
13	113	-0.387	-1.543	1.335	0.000	-0.432	22.540	1	0.00	0.00	0.13
14	113	-0.387	-1.548	1.335	0.000	-0.432	22.530	1	0.00	0.00	0.13

ASTA NUM. 73 NI 180 NF 187 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.405	-0.994	1.100	0.000	2.593	13.394	1	0.00	0.00	0.08	
1B	0	-0.405	-0.821	1.100	0.000	2.593	12.866	1	0.00	0.00	0.08	
1C	0	-0.405	-0.994	-3.236	0.000	-3.111	13.394	1	0.00	0.00	0.08	
1D	0	-0.405	-0.821	-3.236	0.000	-3.111	12.866	1	0.00	0.00	0.08	
1E	0	-0.300	-0.994	1.100	0.000	2.593	13.394	1	0.00	0.00	0.08	
1F	0	-0.300	-0.821	1.100	0.000	2.593	12.866	1	0.00	0.00	0.08	
1G	0	-0.300	-0.994	-3.236	0.000	-3.111	13.394	1	0.00	0.00	0.08	
1H	0	-0.300	-0.821	-3.236	0.000	-3.111	12.866	1	0.00	0.00	0.08	
1I	0	-0.507	-1.048	-0.145	0.000	0.847	13.717	1	0.00	0.00	0.08	
1J	0	-0.507	-0.768	-0.145	0.000	0.847	12.543	1	0.00	0.00	0.07	
1K	0	-0.507	-1.048	-1.991	0.000	-1.366	13.717	1	0.00	0.00	0.08	
1L	0	-0.507	-0.768	-1.991	0.000	-1.366	12.543	1	0.00	0.00	0.07	
1M	0	-0.198	-1.048	-0.145	0.000	0.847	13.717	1	0.00	0.00	0.08	
1N	0	-0.198	-0.768	-0.145	0.000	0.847	12.543	1	0.00	0.00	0.07	
1O	0	-0.198	-1.048	-1.991	0.000	-1.366	13.717	1	0.00	0.00	0.08	
1P	0	-0.198	-0.768	-1.991	0.000	-1.366	12.543	1	0.00	0.00	0.07	
2	0	-0.638	-1.621	-1.921	0.000	-0.466	23.880	1	0.00	0.00	0.14	
7	0	-0.363	-0.900	-1.052	0.000	-0.252	12.980	1	0.00	0.00	0.08	
8	0	-0.346	-0.909	-1.039	0.000	-0.250	12.970	1	0.00	0.00	0.08	
9	0	-0.400	-1.051	-1.226	0.000	-0.299	14.710	1	0.00	0.00	0.09	
10	0	-0.400	-1.056	-1.225	0.000	-0.299	14.700	1	0.00	0.00	0.09	
11	0	-0.581	-1.453	-1.720	0.000	-0.415	21.430	1	0.00	0.00	0.13	
12	0	-0.570	-1.458	-1.711	0.000	-0.414	21.430	1	0.00	0.00	0.13	
13	0	-0.603	-1.544	-1.824	0.000	-0.443	22.470	1	0.00	0.00	0.13	
14	0	-0.603	-1.547	-1.823	0.000	-0.443	22.460	1	0.00	0.00	0.13	
1A	56	-0.405	-4.483	1.100	0.000	1.992	11.852	1	0.01	0.00	0.07	
1B	56	-0.405	-4.309	1.100	0.000	1.992	11.421	1	0.01	0.00	0.07	
1C	56	-0.405	-4.483	-3.236	0.000	-1.309	11.852	1	0.01	0.00	0.07	
1D	56	-0.405	-4.309	-3.236	0.000	-1.309	11.421	1	0.01	0.00	0.07	
1E	56	-0.300	-4.483	1.100	0.000	1.992	11.852	1	0.01	0.00	0.07	
1F	56	-0.300	-4.309	1.100	0.000	1.992	11.421	1	0.01	0.00	0.07	
1G	56	-0.300	-4.483	-3.236	0.000	-1.309	11.852	1	0.01	0.00	0.07	
1H	56	-0.300	-4.309	-3.236	0.000	-1.309	11.421	1	0.01	0.00	0.07	
1I	56	-0.507	-4.536	-0.145	0.000	0.990	12.145	1	0.01	0.00	0.07	
1J	56	-0.507	-4.256	-0.145	0.000	0.990	11.128	1	0.01	0.00	0.07	
1K	56	-0.507	-4.536	-1.991	0.000	-0.307	12.145	1	0.01	0.00	0.07	
1L	56	-0.507	-4.256	-1.991	0.000	-0.307	11.128	1	0.01	0.00	0.07	
1M	56	-0.198	-4.536	-0.145	0.000	0.990	12.145	1	0.01	0.00	0.07	
1N	56	-0.198	-4.256	-0.145	0.000	0.990	11.128	1	0.01	0.00	0.07	
1O	56	-0.198	-4.536	-1.991	0.000	-0.307	12.145	1	0.01	0.00	0.07	

1P	56	-0.198	-4.256	-1.991	0.000	-0.307	11.128	1	0.01	0.00	0.07
2	56	-0.638	-7.996	-1.921	0.000	0.615	21.178	1	0.02	0.00	0.13
7	56	-0.363	-4.332	-1.052	0.000	0.340	11.507	1	0.01	0.00	0.07
8	56	-0.346	-4.340	-1.039	0.000	0.334	11.496	1	0.01	0.00	0.07
9	56	-0.400	-4.952	-1.226	0.000	0.391	13.024	1	0.01	0.00	0.08
10	56	-0.400	-4.957	-1.225	0.000	0.390	13.008	1	0.01	0.00	0.08
11	56	-0.581	-7.167	-1.720	0.000	0.553	19.007	1	0.02	0.00	0.11
12	56	-0.570	-7.174	-1.711	0.000	0.549	19.002	1	0.02	0.00	0.11
13	56	-0.603	-7.542	-1.824	0.000	0.583	19.916	1	0.02	0.00	0.12
14	56	-0.603	-7.543	-1.823	0.000	0.583	19.906	1	0.02	0.00	0.12
1A	113	-0.405	-7.972	1.100	0.000	1.392	8.349	1	0.02	0.00	0.05
1B	113	-0.405	-7.798	1.100	0.000	1.392	8.013	1	0.02	0.00	0.05
1C	113	-0.405	-7.972	-3.236	0.000	0.492	8.349	1	0.02	0.00	0.05
1D	113	-0.405	-7.798	-3.236	0.000	0.492	8.013	1	0.02	0.00	0.05
1E	113	-0.300	-7.972	1.100	0.000	1.392	8.349	1	0.02	0.00	0.05
1F	113	-0.300	-7.798	1.100	0.000	1.392	8.013	1	0.02	0.00	0.05
1G	113	-0.300	-7.972	-3.236	0.000	0.492	8.349	1	0.02	0.00	0.05
1H	113	-0.300	-7.798	-3.236	0.000	0.492	8.013	1	0.02	0.00	0.05
1I	113	-0.507	-8.025	-0.145	0.000	1.133	8.611	1	0.02	0.00	0.05
1J	113	-0.507	-7.745	-0.145	0.000	1.133	7.751	1	0.02	0.00	0.05
1K	113	-0.507	-8.025	-1.991	0.000	0.751	8.611	1	0.02	0.00	0.05
1L	113	-0.507	-7.745	-1.991	0.000	0.751	7.751	1	0.02	0.00	0.05
1M	113	-0.198	-8.025	-0.145	0.000	1.133	8.611	1	0.02	0.00	0.05
1N	113	-0.198	-7.745	-0.145	0.000	1.133	7.751	1	0.02	0.00	0.05
1O	113	-0.198	-8.025	-1.991	0.000	0.751	8.611	1	0.02	0.00	0.05
1P	113	-0.198	-7.745	-1.991	0.000	0.751	7.751	1	0.02	0.00	0.05
2	113	-0.638	-14.370	-1.921	0.000	1.696	14.890	1	0.04	0.00	0.09
7	113	-0.363	-7.763	-1.052	0.000	0.932	8.104	1	0.02	0.00	0.05
8	113	-0.346	-7.771	-1.039	0.000	0.918	8.092	1	0.02	0.00	0.05
9	113	-0.400	-8.853	-1.226	0.000	1.081	9.143	1	0.02	0.00	0.05
10	113	-0.400	-8.858	-1.225	0.000	1.079	9.121	1	0.02	0.00	0.05
11	113	-0.581	-12.880	-1.720	0.000	1.520	13.370	1	0.03	0.00	0.08
12	113	-0.570	-12.890	-1.711	0.000	1.512	13.360	1	0.03	0.00	0.08
13	113	-0.603	-13.540	-1.824	0.000	1.609	13.990	1	0.04	0.00	0.08
14	113	-0.603	-13.540	-1.823	0.000	1.608	13.980	1	0.04	0.00	0.08

ASTA NUM. 74 NI 187 NF 82 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.088	-7.298	10.249	0.000	3.741	8.300	1	0.02	0.00	0.05	
1B	0	-0.088	-6.844	10.249	0.000	3.741	7.962	1	0.02	0.00	0.05	
1C	0	-0.088	-7.298	-4.553	0.000	-1.319	8.300	1	0.02	0.00	0.05	
1D	0	-0.088	-6.844	-4.553	0.000	-1.319	7.962	1	0.02	0.00	0.05	
1E	0	0.401	-7.298	10.249	0.000	3.741	8.300	1	0.02	0.00	0.05	
1F	0	0.401	-6.844	10.249	0.000	3.741	7.962	1	0.02	0.00	0.05	
1G	0	0.401	-7.298	-4.553	0.000	-1.319	8.300	1	0.02	0.00	0.05	
1H	0	0.401	-6.844	-4.553	0.000	-1.319	7.962	1	0.02	0.00	0.05	
1I	0	-0.294	-7.488	5.638	0.000	2.201	8.557	1	0.02	0.00	0.05	
1J	0	-0.294	-6.654	5.638	0.000	2.201	7.705	1	0.02	0.00	0.05	
1K	0	-0.294	-7.488	0.058	0.000	0.221	8.557	1	0.02	0.00	0.05	
1L	0	-0.294	-6.654	0.058	0.000	0.221	7.705	1	0.02	0.00	0.05	
1M	0	0.607	-7.488	5.638	0.000	2.201	8.557	1	0.02	0.00	0.05	
1N	0	0.607	-6.654	5.638	0.000	2.201	7.705	1	0.02	0.00	0.05	
1O	0	0.607	-7.488	0.058	0.000	0.221	8.557	1	0.02	0.00	0.05	
1P	0	0.607	-6.654	0.058	0.000	0.221	7.705	1	0.02	0.00	0.05	
2	0	0.281	-12.850	5.130	0.000	2.179	14.800	1	0.03	0.00	0.09	
7	0	0.117	-6.965	2.844	0.000	1.212	8.053	1	0.02	0.00	0.05	
8	0	0.151	-6.990	2.782	0.000	1.181	8.041	1	0.02	0.00	0.05	
9	0	0.183	-7.992	3.263	0.000	1.388	9.090	1	0.02	0.00	0.05	
10	0	0.183	-7.994	3.260	0.000	1.387	9.068	1	0.02	0.00	0.05	
11	0	0.229	-11.510	4.614	0.000	1.962	13.290	1	0.03	0.00	0.08	
12	0	0.249	-11.520	4.577	0.000	1.944	13.280	1	0.03	0.00	0.08	
13	0	0.269	-12.130	4.866	0.000	2.068	13.910	1	0.03	0.00	0.08	
14	0	0.269	-12.130	4.864	0.000	2.067	13.890	1	0.03	0.00	0.08	
1A	56	-0.088	-10.788	10.249	0.000	-2.025	3.211	1	0.03	0.00	0.03	
1B	56	-0.088	-10.333	10.249	0.000	-2.025	3.133	1	0.03	0.00	0.03	
1C	56	-0.088	-10.788	-4.553	0.000	1.242	3.211	1	0.03	0.00	0.02	
1D	56	-0.088	-10.333	-4.553	0.000	1.242	3.133	1	0.03	0.00	0.02	
1E	56	0.401	-10.788	10.249	0.000	-2.025	3.211	1	0.03	0.00	0.03	
1F	56	0.401	-10.333	10.249	0.000	-2.025	3.133	1	0.03	0.00	0.03	
1G	56	0.401	-10.788	-4.553	0.000	1.242	3.211	1	0.03	0.00	0.02	
1H	56	0.401	-10.333	-4.553	0.000	1.242	3.133	1	0.03	0.00	0.02	
1I	56	-0.294	-10.977	5.638	0.000	-0.971	3.363	1	0.03	0.00	0.02	
1J	56	-0.294	-10.144	5.638	0.000	-0.971	2.982	1	0.03	0.00	0.02	
1K	56	-0.294	-10.977	0.058	0.000	0.188	3.363	1	0.03	0.00	0.02	
1L	56	-0.294	-10.144	0.058	0.000	0.188	2.982	1	0.03	0.00	0.02	
1M	56	0.607	-10.977	5.638	0.000	-0.971	3.363	1	0.03	0.00	0.02	
1N	56	0.607	-10.144	5.638	0.000	-0.971	2.982	1	0.03	0.00	0.02	
1O	56	0.607	-10.977	0.058	0.000	0.188	3.363	1	0.03	0.00	0.02	
1P	56	0.607	-10.144	0.058	0.000	0.188	2.982	1	0.03	0.00	0.02	
2	56	0.281	-19.225	5.130	0.000	-0.707	5.779	1	0.05	0.00	0.03	
7	56	0.117	-10.398	2.844	0.000	-0.388	3.170	1	0.03	0.00	0.02	
8	56	0.151	-10.420	2.782	0.000	-0.383	3.145	1	0.03	0.00	0.02	
9	56	0.183	-11.891	3.263	0.000	-0.448	3.498	1	0.03	0.00	0.02	
10	56	0.183	-11.897	3.260	0.000	-0.446	3.474	1	0.03	0.00	0.02	
11	56	0.229	-17.225	4.614	0.000	-0.634	5.207	1	0.05	0.00	0.03	
12	56	0.249	-17.235	4.577	0.000	-0.631	5.190	1	0.05	0.00	0.03	
13	56	0.269	-18.125	4.866	0.000	-0.669	5.402	1	0.05	0.00	0.03	

14	56	0.269	-18.125	4.864	0.000	-0.669	5.384	1	0.05	0.00	0.03
1A	113	-0.088	-14.277	10.249	0.000	-7.790	-3.840	1	0.04	0.00	0.10
1B	113	-0.088	-13.823	10.249	0.000	-7.790	-3.658	1	0.04	0.00	0.10
1C	113	-0.088	-14.277	-4.553	0.000	3.802	-3.840	1	0.04	0.00	0.05
1D	113	-0.088	-13.823	-4.553	0.000	3.802	-3.658	1	0.04	0.00	0.05
1E	113	0.401	-14.277	10.249	0.000	-7.790	-3.840	1	0.04	0.00	0.10
1F	113	0.401	-13.823	10.249	0.000	-7.790	-3.658	1	0.04	0.00	0.10
1G	113	0.401	-14.277	-4.553	0.000	3.802	-3.840	1	0.04	0.00	0.05
1H	113	0.401	-13.823	-4.553	0.000	3.802	-3.658	1	0.04	0.00	0.05
1I	113	-0.294	-14.467	5.638	0.000	-4.143	-3.794	1	0.04	0.00	0.05
1J	113	-0.294	-13.633	5.638	0.000	-4.143	-3.704	1	0.04	0.00	0.05
1K	113	-0.294	-14.467	0.058	0.000	0.155	-3.794	1	0.04	0.00	0.02
1L	113	-0.294	-13.633	0.058	0.000	0.155	-3.704	1	0.04	0.00	0.02
1M	113	0.607	-14.467	5.638	0.000	-4.143	-3.794	1	0.04	0.00	0.05
1N	113	0.607	-13.633	5.638	0.000	-4.143	-3.704	1	0.04	0.00	0.05
1O	113	0.607	-14.467	0.058	0.000	0.155	-3.794	1	0.04	0.00	0.02
1P	113	0.607	-13.633	0.058	0.000	0.155	-3.704	1	0.04	0.00	0.02
2	113	0.281	-25.600	5.130	0.000	-3.592	-6.829	1	0.07	0.00	0.05
7	113	0.117	-13.830	2.844	0.000	-1.987	-3.643	1	0.04	0.00	0.03
8	113	0.151	-13.850	2.782	0.000	-1.948	-3.682	1	0.04	0.00	0.02
9	113	0.183	-15.790	3.263	0.000	-2.283	-4.289	1	0.04	0.00	0.03
10	113	0.183	-15.800	3.260	0.000	-2.280	-4.315	1	0.04	0.00	0.03
11	113	0.229	-22.940	4.614	0.000	-3.229	-6.090	1	0.06	0.00	0.04
12	113	0.249	-22.950	4.577	0.000	-3.206	-6.114	1	0.06	0.00	0.04
13	113	0.269	-24.120	4.866	0.000	-3.406	-6.478	1	0.06	0.00	0.04
14	113	0.269	-24.120	4.864	0.000	-3.405	-6.494	1	0.06	0.00	0.04

ASTA NUM. 20 NI 82 NF 229 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.048	6.452	0.431	0.000	0.279	-3.677	1	0.02	0.00	0.02	
1B	0	-0.048	6.560	0.431	0.000	0.279	-3.761	1	0.02	0.00	0.02	
1C	0	-0.048	6.452	-8.095	0.000	-4.697	-3.677	1	0.02	0.00	0.06	
1D	0	-0.048	6.560	-8.095	0.000	-4.697	-3.761	1	0.02	0.00	0.06	
1E	0	0.193	6.452	0.431	0.000	0.279	-3.677	1	0.02	0.00	0.02	
1F	0	0.193	6.560	0.431	0.000	0.279	-3.761	1	0.02	0.00	0.02	
1G	0	0.193	6.452	-8.095	0.000	-4.697	-3.677	1	0.02	0.00	0.06	
1H	0	0.193	6.560	-8.095	0.000	-4.697	-3.761	1	0.02	0.00	0.06	
1I	0	-0.230	6.373	-2.494	0.000	-1.400	-3.602	1	0.02	0.00	0.02	
1J	0	-0.230	6.639	-2.494	0.000	-1.400	-3.836	1	0.02	0.00	0.02	
1K	0	-0.230	6.373	-5.170	0.000	-3.018	-3.602	1	0.02	0.00	0.04	
1L	0	-0.230	6.639	-5.170	0.000	-3.018	-3.836	1	0.02	0.00	0.04	
1M	0	0.375	6.373	-2.494	0.000	-1.400	-3.602	1	0.02	0.00	0.02	
1N	0	0.375	6.639	-2.494	0.000	-1.400	-3.836	1	0.02	0.00	0.02	
1O	0	0.375	6.373	-5.170	0.000	-3.018	-3.602	1	0.02	0.00	0.04	
1P	0	0.375	6.639	-5.170	0.000	-3.018	-3.836	1	0.02	0.00	0.04	
2	0	0.129	11.870	-6.892	0.000	-3.971	-6.775	1	0.03	0.00	0.05	
7	0	0.098	6.369	-3.809	0.000	-2.199	-3.623	1	0.02	0.00	0.03	
8	0	0.069	6.395	-3.738	0.000	-2.154	-3.653	1	0.02	0.00	0.03	
9	0	0.085	7.363	-4.401	0.000	-2.539	-4.256	1	0.02	0.00	0.03	
10	0	0.086	7.377	-4.396	0.000	-2.536	-4.281	1	0.02	0.00	0.03	
11	0	0.131	10.610	-6.188	0.000	-3.567	-6.047	1	0.03	0.00	0.05	
12	0	0.114	10.630	-6.146	0.000	-3.540	-6.066	1	0.03	0.00	0.05	
13	0	0.123	11.210	-6.544	0.000	-3.771	-6.427	1	0.03	0.00	0.05	
14	0	0.124	11.220	-6.541	0.000	-3.770	-6.443	1	0.03	0.00	0.05	
1A	47	-0.048	3.557	0.431	0.000	0.075	-1.349	1	0.01	0.00	0.01	
1B	47	-0.048	3.666	0.431	0.000	0.075	-1.368	1	0.01	0.00	0.01	
1C	47	-0.048	3.557	-8.095	0.000	-0.916	-1.349	1	0.01	0.00	0.01	
1D	47	-0.048	3.666	-8.095	0.000	-0.916	-1.368	1	0.01	0.00	0.01	
1E	47	0.193	3.557	0.431	0.000	0.075	-1.349	1	0.01	0.00	0.01	
1F	47	0.193	3.666	0.431	0.000	0.075	-1.368	1	0.01	0.00	0.01	
1G	47	0.193	3.557	-8.095	0.000	-0.916	-1.349	1	0.01	0.00	0.01	
1H	47	0.193	3.666	-8.095	0.000	-0.916	-1.368	1	0.01	0.00	0.01	
1I	47	-0.230	3.478	-2.494	0.000	-0.245	-1.308	1	0.01	0.00	0.01	
1J	47	-0.230	3.744	-2.494	0.000	-0.245	-1.410	1	0.01	0.00	0.01	
1K	47	-0.230	3.478	-5.170	0.000	-0.596	-1.308	1	0.01	0.00	0.01	
1L	47	-0.230	3.744	-5.170	0.000	-0.596	-1.410	1	0.01	0.00	0.01	
1M	47	0.375	3.478	-2.494	0.000	-0.245	-1.308	1	0.01	0.00	0.01	
1N	47	0.375	3.744	-2.494	0.000	-0.245	-1.410	1	0.01	0.00	0.01	
1O	47	0.375	3.478	-5.170	0.000	-0.596	-1.308	1	0.01	0.00	0.01	
1P	47	0.375	3.744	-5.170	0.000	-0.596	-1.410	1	0.01	0.00	0.01	
2	47	0.129	6.578	-6.892	0.000	-0.755	-2.471	1	0.02	0.00	0.01	
7	47	0.098	3.522	-3.809	0.000	-0.421	-1.315	1	0.01	0.00	0.01	
8	47	0.069	3.548	-3.738	0.000	-0.410	-1.333	1	0.01	0.00	0.01	
9	47	0.085	4.126	-4.401	0.000	-0.485	-1.575	1	0.01	0.00	0.01	
10	47	0.086	4.141	-4.396	0.000	-0.484	-1.594	1	0.01	0.00	0.01	
11	47	0.131	5.871	-6.188	0.000	-0.680	-2.200	1	0.02	0.00	0.01	
12	47	0.114	5.889	-6.146	0.000	-0.672	-2.211	1	0.02	0.00	0.01	
13	47	0.123	6.236	-6.544	0.000	-0.718	-2.356	1	0.02	0.00	0.01	
14	47	0.124	6.245	-6.541	0.000	-0.718	-2.368	1	0.02	0.00	0.01	
1A	93	-0.048	0.663	0.431	0.000	-0.128	-0.373	1	0.00	0.00	0.00	
1B	93	-0.048	0.771	0.431	0.000	-0.128	-0.325	1	0.00	0.00	0.00	
1C	93	-0.048	0.663	-8.095	0.000	2.864	-0.373	1	0.01	0.00	0.04	
1D	93	-0.048	0.771	-8.095	0.000	2.864	-0.325	1	0.01	0.00	0.04	
1E	93	0.193	0.663	0.431	0.000	-0.128	-0.373	1	0.00	0.00	0.00	
1F	93	0.193	0.771	0.431	0.000	-0.128	-0.325	1	0.00	0.00	0.00	
1G	93	0.193	0.663	-8.095	0.000	2.864	-0.373	1	0.01	0.00	0.04	

1H	93	0.193	0.771	-8.095	0.000	2.864	-0.325	1	0.01	0.00	0.04
1I	93	-0.230	0.584	-2.494	0.000	0.909	-0.364	1	0.00	0.00	0.01
1J	93	-0.230	0.850	-2.494	0.000	0.909	-0.334	1	0.00	0.00	0.01
1K	93	-0.230	0.584	-5.170	0.000	1.827	-0.364	1	0.01	0.00	0.02
1L	93	-0.230	0.850	-5.170	0.000	1.827	-0.334	1	0.01	0.00	0.02
1M	93	0.375	0.584	-2.494	0.000	0.909	-0.364	1	0.00	0.00	0.01
1N	93	0.375	0.850	-2.494	0.000	0.909	-0.334	1	0.00	0.00	0.01
1O	93	0.375	0.584	-5.170	0.000	1.827	-0.364	1	0.01	0.00	0.02
1P	93	0.375	0.850	-5.170	0.000	1.827	-0.334	1	0.01	0.00	0.02
2	93	0.129	1.287	-6.892	0.000	2.461	-0.636	1	0.01	0.00	0.03
7	93	0.098	0.676	-3.809	0.000	1.356	-0.335	1	0.00	0.00	0.02
8	93	0.069	0.702	-3.738	0.000	1.335	-0.341	1	0.00	0.00	0.02
9	93	0.085	0.890	-4.401	0.000	1.569	-0.405	1	0.00	0.00	0.02
10	93	0.086	0.905	-4.396	0.000	1.567	-0.417	1	0.00	0.00	0.02
11	93	0.131	1.133	-6.188	0.000	2.208	-0.565	1	0.01	0.00	0.03
12	93	0.114	1.149	-6.146	0.000	2.196	-0.569	1	0.01	0.00	0.03
13	93	0.123	1.262	-6.544	0.000	2.336	-0.607	1	0.01	0.00	0.03
14	93	0.124	1.270	-6.541	0.000	2.335	-0.614	1	0.01	0.00	0.03

ASTA NUM. 75 NI 229 NF 222 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.315	1.868	0.382	0.000	2.046	-0.292	1	0.00	0.00	0.03	
1B	0	-0.315	1.920	0.382	0.000	2.046	-0.338	1	0.01	0.00	0.03	
1C	0	-0.315	1.868	0.189	0.000	0.022	-0.292	1	0.00	0.00	0.00	
1D	0	-0.315	1.920	0.189	0.000	0.022	-0.338	1	0.01	0.00	0.00	
1E	0	-0.209	1.868	0.382	0.000	2.046	-0.292	1	0.00	0.00	0.03	
1F	0	-0.209	1.920	0.382	0.000	2.046	-0.338	1	0.01	0.00	0.03	
1G	0	-0.209	1.868	0.189	0.000	0.022	-0.292	1	0.00	0.00	0.00	
1H	0	-0.209	1.920	0.189	0.000	0.022	-0.338	1	0.01	0.00	0.00	
1I	0	-0.282	1.875	0.517	0.000	1.469	-0.301	1	0.00	0.00	0.02	
1J	0	-0.282	1.913	0.517	0.000	1.469	-0.330	1	0.01	0.00	0.02	
1K	0	-0.282	1.875	0.054	0.000	0.599	-0.301	1	0.00	0.00	0.01	
1L	0	-0.282	1.913	0.054	0.000	0.599	-0.330	1	0.01	0.00	0.01	
1M	0	-0.241	1.875	0.517	0.000	1.469	-0.301	1	0.00	0.00	0.02	
1N	0	-0.241	1.913	0.517	0.000	1.469	-0.330	1	0.01	0.00	0.02	
1O	0	-0.241	1.875	0.054	0.000	0.599	-0.301	1	0.00	0.00	0.01	
1P	0	-0.241	1.913	0.054	0.000	0.599	-0.330	1	0.01	0.00	0.01	
2	0	-0.470	3.468	0.520	0.000	1.861	-0.575	1	0.01	0.00	0.02	
7	0	-0.261	1.850	0.297	0.000	1.037	-0.301	1	0.00	0.00	0.01	
8	0	-0.254	1.853	0.283	0.000	1.009	-0.307	1	0.00	0.00	0.01	
9	0	-0.302	2.143	0.319	0.000	1.186	-0.368	1	0.01	0.00	0.01	
10	0	-0.302	2.159	0.318	0.000	1.185	-0.379	1	0.01	0.00	0.01	
11	0	-0.423	3.101	0.475	0.000	1.677	-0.510	1	0.01	0.00	0.02	
12	0	-0.418	3.103	0.467	0.000	1.660	-0.513	1	0.01	0.00	0.02	
13	0	-0.447	3.277	0.488	0.000	1.766	-0.550	1	0.01	0.00	0.02	
14	0	-0.447	3.286	0.488	0.000	1.765	-0.556	1	0.01	0.00	0.02	
1A	47	-0.315	-1.027	0.382	0.000	1.914	-0.098	1	0.00	0.00	0.02	
1B	47	-0.315	-0.974	0.382	0.000	1.914	-0.115	1	0.00	0.00	0.02	
1C	47	-0.315	-1.027	0.189	0.000	-0.112	-0.098	1	0.00	0.00	0.00	
1D	47	-0.315	-0.974	0.189	0.000	-0.112	-0.115	1	0.00	0.00	0.00	
1E	47	-0.209	-1.027	0.382	0.000	1.914	-0.098	1	0.00	0.00	0.02	
1F	47	-0.209	-0.974	0.382	0.000	1.914	-0.115	1	0.00	0.00	0.02	
1G	47	-0.209	-1.027	0.189	0.000	-0.112	-0.098	1	0.00	0.00	0.00	
1H	47	-0.209	-0.974	0.189	0.000	-0.112	-0.115	1	0.00	0.00	0.00	
1I	47	-0.282	-1.019	0.517	0.000	1.299	-0.107	1	0.00	0.00	0.02	
1J	47	-0.282	-0.982	0.517	0.000	1.299	-0.106	1	0.00	0.00	0.02	
1K	47	-0.282	-1.019	0.054	0.000	0.502	-0.107	1	0.00	0.00	0.01	
1L	47	-0.282	-0.982	0.054	0.000	0.502	-0.106	1	0.00	0.00	0.01	
1M	47	-0.241	-1.019	0.517	0.000	1.299	-0.107	1	0.00	0.00	0.02	
1N	47	-0.241	-0.982	0.517	0.000	1.299	-0.106	1	0.00	0.00	0.02	
1O	47	-0.241	-1.019	0.054	0.000	0.502	-0.107	1	0.00	0.00	0.01	
1P	47	-0.241	-0.982	0.054	0.000	0.502	-0.106	1	0.00	0.00	0.01	
2	47	-0.470	-1.822	0.520	0.000	1.619	-0.190	1	0.00	0.00	0.02	
7	47	-0.261	-0.996	0.297	0.000	0.898	-0.102	1	0.00	0.00	0.01	
8	47	-0.254	-0.993	0.283	0.000	0.877	-0.107	1	0.00	0.00	0.01	
9	47	-0.302	-1.094	0.319	0.000	1.037	-0.123	1	0.00	0.00	0.01	
10	47	-0.302	-1.078	0.318	0.000	1.037	-0.127	1	0.00	0.00	0.01	
11	47	-0.423	-1.640	0.475	0.000	1.455	-0.169	1	0.00	0.00	0.02	
12	47	-0.418	-1.638	0.467	0.000	1.442	-0.172	1	0.00	0.00	0.02	
13	47	-0.447	-1.698	0.488	0.000	1.538	-0.181	1	0.00	0.00	0.02	
14	47	-0.447	-1.689	0.488	0.000	1.538	-0.183	1	0.00	0.00	0.02	
1A	93	-0.315	-3.921	0.382	0.000	1.782	-1.255	1	0.01	0.00	0.02	
1B	93	-0.315	-3.869	0.382	0.000	1.782	-1.243	1	0.01	0.00	0.02	
1C	93	-0.315	-3.921	0.189	0.000	-0.247	-1.255	1	0.01	0.00	0.01	
1D	93	-0.315	-3.869	0.189	0.000	-0.247	-1.243	1	0.01	0.00	0.01	
1E	93	-0.209	-3.921	0.382	0.000	1.782	-1.255	1	0.01	0.00	0.02	
1F	93	-0.209	-3.869	0.382	0.000	1.782	-1.243	1	0.01	0.00	0.02	
1G	93	-0.209	-3.921	0.189	0.000	-0.247	-1.255	1	0.01	0.00	0.01	
1H	93	-0.209	-3.869	0.189	0.000	-0.247	-1.243	1	0.01	0.00	0.01	
1I	93	-0.282	-3.914	0.517	0.000	1.129	-1.264	1	0.01	0.00	0.01	
1J	93	-0.282	-3.876	0.517	0.000	1.129	-1.234	1	0.01	0.00	0.01	
1K	93	-0.282	-3.914	0.054	0.000	0.406	-1.264	1	0.01	0.00	0.01	
1L	93	-0.282	-3.876	0.054	0.000	0.406	-1.234	1	0.01	0.00	0.01	
1M	93	-0.241	-3.914	0.517	0.000	1.129	-1.264	1	0.01	0.00	0.01	
1N	93	-0.241	-3.876	0.517	0.000	1.129	-1.234	1	0.01	0.00	0.01	
1O	93	-0.241	-3.914	0.054	0.000	0.406	-1.264	1	0.01	0.00	0.01	
1P	93	-0.241	-3.876	0.054	0.000	0.406	-1.234	1	0.01	0.00	0.01	

2	93	-0.470	-7.112	0.520	0.000	1.376	-2.275	1	0.02	0.00	0.02
7	93	-0.261	-3.843	0.297	0.000	0.760	-1.231	1	0.01	0.00	0.01
8	93	-0.254	-3.840	0.283	0.000	0.746	-1.235	1	0.01	0.00	0.01
9	93	-0.302	-4.330	0.319	0.000	0.889	-1.389	1	0.01	0.00	0.01
10	93	-0.302	-4.314	0.318	0.000	0.888	-1.385	1	0.01	0.00	0.01
11	93	-0.423	-6.380	0.475	0.000	1.233	-2.040	1	0.02	0.00	0.02
12	93	-0.418	-6.378	0.467	0.000	1.225	-2.042	1	0.02	0.00	0.02
13	93	-0.447	-6.672	0.488	0.000	1.310	-2.134	1	0.02	0.00	0.02
14	93	-0.447	-6.663	0.488	0.000	1.310	-2.132	1	0.02	0.00	0.02

ASTA NUM. 76 NI 222 NF 67 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.040	-3.003	7.415	0.000	2.528	-1.218	1	0.01	0.00	0.03	
1B	0	0.040	-2.837	7.415	0.000	2.528	-1.230	1	0.01	0.00	0.03	
1C	0	0.040	-3.003	-1.125	0.000	-0.466	-1.218	1	0.01	0.00	0.01	
1D	0	0.040	-2.837	-1.125	0.000	-0.466	-1.230	1	0.01	0.00	0.01	
1E	0	0.380	-3.003	7.415	0.000	2.528	-1.218	1	0.01	0.00	0.03	
1F	0	0.380	-2.837	7.415	0.000	2.528	-1.230	1	0.01	0.00	0.03	
1G	0	0.380	-3.003	-1.125	0.000	-0.466	-1.218	1	0.01	0.00	0.01	
1H	0	0.380	-2.837	-1.125	0.000	-0.466	-1.230	1	0.01	0.00	0.01	
1I	0	-0.101	-3.007	4.677	0.000	1.596	-1.211	1	0.01	0.00	0.02	
1J	0	-0.101	-2.833	4.677	0.000	1.596	-1.237	1	0.01	0.00	0.02	
1K	0	-0.101	-3.007	1.613	0.000	0.466	-1.211	1	0.01	0.00	0.01	
1L	0	-0.101	-2.833	1.613	0.000	0.466	-1.237	1	0.01	0.00	0.01	
1M	0	0.521	-3.007	4.677	0.000	1.596	-1.211	1	0.01	0.00	0.02	
1N	0	0.521	-2.833	4.677	0.000	1.596	-1.237	1	0.01	0.00	0.02	
1O	0	0.521	-3.007	1.613	0.000	0.466	-1.211	1	0.01	0.00	0.01	
1P	0	0.521	-2.833	1.613	0.000	0.466	-1.237	1	0.01	0.00	0.01	
2	0	0.379	-5.300	5.642	0.000	1.849	-2.230	1	0.01	0.00	0.02	
7	0	0.184	-2.871	3.149	0.000	1.036	-1.207	1	0.01	0.00	0.01	
8	0	0.205	-2.890	3.059	0.000	1.003	-1.210	1	0.01	0.00	0.01	
9	0	0.239	-3.298	3.635	0.000	1.194	-1.361	1	0.01	0.00	0.01	
10	0	0.239	-3.286	3.634	0.000	1.193	-1.356	1	0.01	0.00	0.01	
11	0	0.325	-4.744	5.078	0.000	1.666	-2.000	1	0.01	0.00	0.02	
12	0	0.338	-4.756	5.024	0.000	1.646	-2.002	1	0.01	0.00	0.02	
13	0	0.359	-5.001	5.369	0.000	1.761	-2.092	1	0.01	0.00	0.02	
14	0	0.359	-4.994	5.368	0.000	1.761	-2.089	1	0.01	0.00	0.02	
1A	47	0.040	-5.897	7.415	0.000	-0.932	-3.295	1	0.02	0.00	0.02	
1B	47	0.040	-5.732	7.415	0.000	-0.932	-3.229	1	0.02	0.00	0.02	
1C	47	0.040	-5.897	-1.125	0.000	0.059	-3.295	1	0.02	0.00	0.02	
1D	47	0.040	-5.732	-1.125	0.000	0.059	-3.229	1	0.02	0.00	0.02	
1E	47	0.380	-5.897	7.415	0.000	-0.932	-3.295	1	0.02	0.00	0.02	
1F	47	0.380	-5.732	7.415	0.000	-0.932	-3.229	1	0.02	0.00	0.02	
1G	47	0.380	-5.897	-1.125	0.000	0.059	-3.295	1	0.02	0.00	0.02	
1H	47	0.380	-5.732	-1.125	0.000	0.059	-3.229	1	0.02	0.00	0.02	
1I	47	-0.101	-5.902	4.677	0.000	-0.586	-3.290	1	0.02	0.00	0.02	
1J	47	-0.101	-5.727	4.677	0.000	-0.586	-3.234	1	0.02	0.00	0.02	
1K	47	-0.101	-5.902	1.613	0.000	-0.287	-3.290	1	0.02	0.00	0.02	
1L	47	-0.101	-5.727	1.613	0.000	-0.287	-3.234	1	0.02	0.00	0.02	
1M	47	0.521	-5.902	4.677	0.000	-0.586	-3.290	1	0.02	0.00	0.02	
1N	47	0.521	-5.727	4.677	0.000	-0.586	-3.234	1	0.02	0.00	0.02	
1O	47	0.521	-5.902	1.613	0.000	-0.287	-3.290	1	0.02	0.00	0.02	
1P	47	0.521	-5.727	1.613	0.000	-0.287	-3.234	1	0.02	0.00	0.02	
2	47	0.379	-10.590	5.642	0.000	-0.784	-5.936	1	0.03	0.00	0.04	
7	47	0.184	-5.718	3.149	0.000	-0.434	-3.211	1	0.02	0.00	0.02	
8	47	0.205	-5.737	3.059	0.000	-0.425	-3.223	1	0.02	0.00	0.02	
9	47	0.239	-6.535	3.635	0.000	-0.502	-3.655	1	0.02	0.00	0.02	
10	47	0.239	-6.523	3.634	0.000	-0.503	-3.645	1	0.02	0.00	0.02	
11	47	0.325	-9.487	5.078	0.000	-0.704	-5.319	1	0.03	0.00	0.03	
12	47	0.338	-9.498	5.024	0.000	-0.698	-5.325	1	0.03	0.00	0.03	
13	47	0.359	-9.976	5.369	0.000	-0.744	-5.585	1	0.03	0.00	0.03	
14	47	0.359	-9.967	5.368	0.000	-0.744	-5.579	1	0.03	0.00	0.03	
1A	93	0.040	-8.792	7.415	0.000	-4.392	-6.722	1	0.02	0.00	0.06	
1B	93	0.040	-8.626	7.415	0.000	-4.392	-6.578	1	0.02	0.00	0.06	
1C	93	0.040	-8.792	-1.125	0.000	0.584	-6.722	1	0.02	0.00	0.04	
1D	93	0.040	-8.626	-1.125	0.000	0.584	-6.578	1	0.02	0.00	0.04	
1E	93	0.380	-8.792	7.415	0.000	-4.392	-6.722	1	0.02	0.00	0.06	
1F	93	0.380	-8.626	7.415	0.000	-4.392	-6.578	1	0.02	0.00	0.06	
1G	93	0.380	-8.792	-1.125	0.000	0.584	-6.722	1	0.02	0.00	0.04	
1H	93	0.380	-8.626	-1.125	0.000	0.584	-6.578	1	0.02	0.00	0.04	
1I	93	-0.101	-8.796	4.677	0.000	-2.768	-6.720	1	0.02	0.00	0.04	
1J	93	-0.101	-8.622	4.677	0.000	-2.768	-6.580	1	0.02	0.00	0.04	
1K	93	-0.101	-8.796	1.613	0.000	-1.040	-6.720	1	0.02	0.00	0.04	
1L	93	-0.101	-8.622	1.613	0.000	-1.040	-6.580	1	0.02	0.00	0.04	
1M	93	0.521	-8.796	4.677	0.000	-2.768	-6.720	1	0.02	0.00	0.04	
1N	93	0.521	-8.622	4.677	0.000	-2.768	-6.580	1	0.02	0.00	0.04	
1O	93	0.521	-8.796	1.613	0.000	-1.040	-6.720	1	0.02	0.00	0.04	
1P	93	0.521	-8.622	1.613	0.000	-1.040	-6.580	1	0.02	0.00	0.04	
2	93	0.379	-15.880	5.642	0.000	-3.416	-12.110	1	0.04	0.00	0.07	
7	93	0.184	-8.564	3.149	0.000	-1.903	-6.543	1	0.02	0.00	0.04	
8	93	0.205	-8.583	3.059	0.000	-1.852	-6.565	1	0.02	0.00	0.04	
9	93	0.239	-9.771	3.635	0.000	-2.199	-7.459	1	0.03	0.00	0.04	
10	93	0.239	-9.759	3.634	0.000	-2.198	-7.444	1	0.03	0.00	0.04	
11	93	0.325	-14.230	5.078	0.000	-3.073	-10.850	1	0.04	0.00	0.06	
12	93	0.338	-14.240	5.024	0.000	-3.042	-10.860	1	0.04	0.00	0.06	
13	93	0.359	-14.950	5.369	0.000	-3.250	-11.400	1	0.04	0.00	0.07	
14	93	0.359	-14.940	5.368	0.000	-3.250	-11.390	1	0.04	0.00	0.07	

ASTA NUM. 21 NI 67 NF 215 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.002	7.850	1.304	0.000	0.736	-6.497	1	0.02	0.00	0.04	
1B	0	-0.002	7.974	1.304	0.000	0.736	-6.663	1	0.02	0.00	0.04	
1C	0	-0.002	7.850	-7.236	0.000	-4.214	-6.497	1	0.02	0.00	0.05	
1D	0	-0.002	7.974	-7.236	0.000	-4.214	-6.663	1	0.02	0.00	0.05	
1E	0	0.238	7.850	1.304	0.000	0.736	-6.497	1	0.02	0.00	0.04	
1F	0	0.238	7.974	1.304	0.000	0.736	-6.663	1	0.02	0.00	0.04	
1G	0	0.238	7.850	-7.236	0.000	-4.214	-6.497	1	0.02	0.00	0.05	
1H	0	0.238	7.974	-7.236	0.000	-4.214	-6.663	1	0.02	0.00	0.05	
1I	0	-0.183	7.805	-1.589	0.000	-0.969	-6.414	1	0.02	0.00	0.04	
1J	0	-0.183	8.019	-1.589	0.000	-0.969	-6.746	1	0.02	0.00	0.04	
1K	0	-0.183	7.805	-4.343	0.000	-2.509	-6.414	1	0.02	0.00	0.04	
1L	0	-0.183	8.019	-4.343	0.000	-2.509	-6.746	1	0.02	0.00	0.04	
1M	0	0.419	7.805	-1.589	0.000	-0.969	-6.414	1	0.02	0.00	0.04	
1N	0	0.419	8.019	-1.589	0.000	-0.969	-6.746	1	0.02	0.00	0.04	
1O	0	0.419	7.805	-4.343	0.000	-2.509	-6.414	1	0.02	0.00	0.04	
1P	0	0.419	8.019	-4.343	0.000	-2.509	-6.746	1	0.02	0.00	0.04	
2	0	0.212	14.430	-5.315	0.000	-3.116	-11.980	1	0.04	0.00	0.07	
7	0	0.143	7.766	-2.951	0.000	-1.733	-6.481	1	0.02	0.00	0.04	
8	0	0.115	7.792	-2.881	0.000	-1.689	-6.495	1	0.02	0.00	0.04	
9	0	0.137	8.908	-3.436	0.000	-2.016	-7.380	1	0.02	0.00	0.04	
10	0	0.137	8.899	-3.435	0.000	-2.015	-7.366	1	0.02	0.00	0.04	
11	0	0.206	12.920	-4.772	0.000	-2.800	-10.740	1	0.03	0.00	0.06	
12	0	0.189	12.930	-4.730	0.000	-2.773	-10.750	1	0.03	0.00	0.06	
13	0	0.202	13.600	-5.063	0.000	-2.969	-11.280	1	0.04	0.00	0.07	
14	0	0.202	13.600	-5.063	0.000	-2.969	-11.270	1	0.04	0.00	0.07	
1A	47	-0.002	4.956	1.304	0.000	0.127	-3.509	1	0.01	0.00	0.02	
1B	47	-0.002	5.079	1.304	0.000	0.127	-3.618	1	0.01	0.00	0.02	
1C	47	-0.002	4.956	-7.236	0.000	-0.837	-3.509	1	0.01	0.00	0.02	
1D	47	-0.002	5.079	-7.236	0.000	-0.837	-3.618	1	0.01	0.00	0.02	
1E	47	0.238	4.956	1.304	0.000	0.127	-3.509	1	0.01	0.00	0.02	
1F	47	0.238	5.079	1.304	0.000	0.127	-3.618	1	0.01	0.00	0.02	
1G	47	0.238	4.956	-7.236	0.000	-0.837	-3.509	1	0.01	0.00	0.02	
1H	47	0.238	5.079	-7.236	0.000	-0.837	-3.618	1	0.01	0.00	0.02	
1I	47	-0.183	4.911	-1.589	0.000	-0.228	-3.447	1	0.01	0.00	0.02	
1J	47	-0.183	5.124	-1.589	0.000	-0.228	-3.679	1	0.01	0.00	0.02	
1K	47	-0.183	4.911	-4.343	0.000	-0.482	-3.447	1	0.01	0.00	0.02	
1L	47	-0.183	5.124	-4.343	0.000	-0.482	-3.679	1	0.01	0.00	0.02	
1M	47	0.419	4.911	-1.589	0.000	-0.228	-3.447	1	0.01	0.00	0.02	
1N	47	0.419	5.124	-1.589	0.000	-0.228	-3.679	1	0.01	0.00	0.02	
1O	47	0.419	4.911	-4.343	0.000	-0.482	-3.447	1	0.01	0.00	0.02	
1P	47	0.419	5.124	-4.343	0.000	-0.482	-3.679	1	0.01	0.00	0.02	
2	47	0.212	9.139	-5.315	0.000	-0.636	-6.484	1	0.02	0.00	0.04	
7	47	0.143	4.920	-2.951	0.000	-0.356	-3.521	1	0.01	0.00	0.02	
8	47	0.115	4.945	-2.881	0.000	-0.345	-3.523	1	0.01	0.00	0.02	
9	47	0.137	5.672	-3.436	0.000	-0.413	-3.978	1	0.02	0.00	0.02	
10	47	0.137	5.663	-3.435	0.000	-0.413	-3.968	1	0.02	0.00	0.02	
11	47	0.206	8.177	-4.772	0.000	-0.573	-5.819	1	0.02	0.00	0.03	
12	47	0.189	8.190	-4.730	0.000	-0.566	-5.821	1	0.02	0.00	0.03	
13	47	0.202	8.627	-5.063	0.000	-0.606	-6.093	1	0.02	0.00	0.04	
14	47	0.202	8.624	-5.063	0.000	-0.607	-6.087	1	0.02	0.00	0.04	
1A	93	-0.002	2.061	1.304	0.000	-0.482	-1.871	1	0.01	0.00	0.01	
1B	93	-0.002	2.185	1.304	0.000	-0.482	-1.923	1	0.01	0.00	0.01	
1C	93	-0.002	2.061	-7.236	0.000	2.540	-1.871	1	0.01	0.00	0.03	
1D	93	-0.002	2.185	-7.236	0.000	2.540	-1.923	1	0.01	0.00	0.03	
1E	93	0.238	2.061	1.304	0.000	-0.482	-1.871	1	0.01	0.00	0.01	
1F	93	0.238	2.185	1.304	0.000	-0.482	-1.923	1	0.01	0.00	0.01	
1G	93	0.238	2.061	-7.236	0.000	2.540	-1.871	1	0.01	0.00	0.03	
1H	93	0.238	2.185	-7.236	0.000	2.540	-1.923	1	0.01	0.00	0.03	
1I	93	-0.183	2.016	-1.589	0.000	0.513	-1.830	1	0.01	0.00	0.01	
1J	93	-0.183	2.230	-1.589	0.000	0.513	-1.964	1	0.01	0.00	0.01	
1K	93	-0.183	2.016	-4.343	0.000	1.545	-1.830	1	0.01	0.00	0.02	
1L	93	-0.183	2.230	-4.343	0.000	1.545	-1.964	1	0.01	0.00	0.02	
1M	93	0.419	2.016	-1.589	0.000	0.513	-1.830	1	0.01	0.00	0.01	
1N	93	0.419	2.230	-1.589	0.000	0.513	-1.964	1	0.01	0.00	0.01	
1O	93	0.419	2.016	-4.343	0.000	1.545	-1.830	1	0.01	0.00	0.02	
1P	93	0.419	2.230	-4.343	0.000	1.545	-1.964	1	0.01	0.00	0.02	
2	93	0.212	3.848	-5.315	0.000	1.845	-3.456	1	0.01	0.00	0.02	
7	93	0.143	2.073	-2.951	0.000	1.021	-1.890	1	0.01	0.00	0.01	
8	93	0.115	2.099	-2.881	0.000	1.000	-1.879	1	0.01	0.00	0.01	
9	93	0.137	2.436	-3.436	0.000	1.191	-2.086	1	0.01	0.00	0.02	
10	93	0.137	2.426	-3.435	0.000	1.190	-2.081	1	0.01	0.00	0.02	
11	93	0.206	3.435	-4.772	0.000	1.655	-3.111	1	0.01	0.00	0.02	
12	93	0.189	3.451	-4.730	0.000	1.642	-3.104	1	0.01	0.00	0.02	
13	93	0.202	3.653	-5.063	0.000	1.757	-3.228	1	0.01	0.00	0.02	
14	93	0.202	3.648	-5.063	0.000	1.756	-3.225	1	0.01	0.00	0.02	

ASTA NUM. 77 NI 215 NF 208 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota

	cm	kN			kN*m						
1A	0	-0.279	2.961	0.081	0.000	1.769	-1.859	1	0.01	0.00	0.02
1B	0	-0.279	3.021	0.081	0.000	1.769	-1.913	1	0.01	0.00	0.02
1C	0	-0.279	2.961	-0.122	0.000	-0.224	-1.859	1	0.01	0.00	0.01
1D	0	-0.279	3.021	-0.122	0.000	-0.224	-1.913	1	0.01	0.00	0.01
1E	0	-0.177	2.961	0.081	0.000	1.769	-1.859	1	0.01	0.00	0.02
1F	0	-0.177	3.021	0.081	0.000	1.769	-1.913	1	0.01	0.00	0.02
1G	0	-0.177	2.961	-0.122	0.000	-0.224	-1.859	1	0.01	0.00	0.01
1H	0	-0.177	3.021	-0.122	0.000	-0.224	-1.913	1	0.01	0.00	0.01
1I	0	-0.244	2.912	0.208	0.000	1.165	-1.816	1	0.01	0.00	0.01
1J	0	-0.244	3.070	0.208	0.000	1.165	-1.956	1	0.01	0.00	0.01
1K	0	-0.244	2.912	-0.248	0.000	0.379	-1.816	1	0.01	0.00	0.01
1L	0	-0.244	3.070	-0.248	0.000	0.379	-1.956	1	0.01	0.00	0.01
1M	0	-0.212	2.912	0.208	0.000	1.165	-1.816	1	0.01	0.00	0.01
1N	0	-0.212	3.070	0.208	0.000	1.165	-1.956	1	0.01	0.00	0.01
1O	0	-0.212	2.912	-0.248	0.000	0.379	-1.816	1	0.01	0.00	0.01
1P	0	-0.212	3.070	-0.248	0.000	0.379	-1.956	1	0.01	0.00	0.01
2	0	-0.409	5.466	-0.037	0.000	1.384	-3.436	1	0.01	0.00	0.02
7	0	-0.228	2.937	-0.005	0.000	0.777	-1.879	1	0.01	0.00	0.01
8	0	-0.220	2.942	-0.020	0.000	0.750	-1.867	1	0.01	0.00	0.01
9	0	-0.264	3.350	-0.022	0.000	0.894	-2.074	1	0.01	0.00	0.01
10	0	-0.264	3.339	-0.023	0.000	0.893	-2.069	1	0.01	0.00	0.01
11	0	-0.368	4.896	-0.024	0.000	1.248	-3.092	1	0.01	0.00	0.02
12	0	-0.363	4.898	-0.033	0.000	1.232	-3.085	1	0.01	0.00	0.02
13	0	-0.389	5.144	-0.035	0.000	1.318	-3.209	1	0.01	0.00	0.02
14	0	-0.389	5.137	-0.035	0.000	1.318	-3.206	1	0.01	0.00	0.02
1A	47	-0.279	0.067	0.081	0.000	1.794	-1.160	1	0.00	0.00	0.02
1B	47	-0.279	0.126	0.081	0.000	1.794	-1.171	1	0.00	0.00	0.02
1C	47	-0.279	0.067	-0.122	0.000	-0.231	-1.160	1	0.00	0.00	0.01
1D	47	-0.279	0.126	-0.122	0.000	-0.231	-1.171	1	0.00	0.00	0.01
1E	47	-0.177	0.067	0.081	0.000	1.794	-1.160	1	0.00	0.00	0.02
1F	47	-0.177	0.126	0.081	0.000	1.794	-1.171	1	0.00	0.00	0.02
1G	47	-0.177	0.067	-0.122	0.000	-0.231	-1.160	1	0.00	0.00	0.01
1H	47	-0.177	0.126	-0.122	0.000	-0.231	-1.171	1	0.00	0.00	0.01
1I	47	-0.244	0.018	0.208	0.000	1.178	-1.139	1	0.00	0.00	0.01
1J	47	-0.244	0.175	0.208	0.000	1.178	-1.192	1	0.00	0.00	0.01
1K	47	-0.244	0.018	-0.248	0.000	0.385	-1.139	1	0.00	0.00	0.01
1L	47	-0.244	0.175	-0.248	0.000	0.385	-1.192	1	0.00	0.00	0.01
1M	47	-0.212	0.018	0.208	0.000	1.178	-1.139	1	0.00	0.00	0.01
1N	47	-0.212	0.175	0.208	0.000	1.178	-1.192	1	0.00	0.00	0.01
1O	47	-0.212	0.018	-0.248	0.000	0.385	-1.139	1	0.00	0.00	0.01
1P	47	-0.212	0.175	-0.248	0.000	0.385	-1.192	1	0.00	0.00	0.01
2	47	-0.409	0.176	-0.037	0.000	1.401	-2.119	1	0.00	0.00	0.02
7	47	-0.228	0.090	-0.005	0.000	0.780	-1.172	1	0.00	0.00	0.01
8	47	-0.220	0.095	-0.020	0.000	0.759	-1.158	1	0.00	0.00	0.01
9	47	-0.264	0.113	-0.022	0.000	0.904	-1.266	1	0.00	0.00	0.01
10	47	-0.264	0.102	-0.023	0.000	0.904	-1.266	1	0.00	0.00	0.01
11	47	-0.368	0.155	-0.024	0.000	1.260	-1.913	1	0.00	0.00	0.02
12	47	-0.363	0.157	-0.033	0.000	1.248	-1.905	1	0.00	0.00	0.02
13	47	-0.389	0.170	-0.035	0.000	1.334	-1.969	1	0.00	0.00	0.02
14	47	-0.389	0.163	-0.035	0.000	1.334	-1.970	1	0.00	0.00	0.02
1A	93	-0.279	-2.828	0.081	0.000	1.820	-1.812	1	0.01	0.00	0.02
1B	93	-0.279	-2.768	0.081	0.000	1.820	-1.780	1	0.01	0.00	0.02
1C	93	-0.279	-2.828	-0.122	0.000	-0.238	-1.812	1	0.01	0.00	0.01
1D	93	-0.279	-2.768	-0.122	0.000	-0.238	-1.780	1	0.01	0.00	0.01
1E	93	-0.177	-2.828	0.081	0.000	1.820	-1.812	1	0.01	0.00	0.02
1F	93	-0.177	-2.768	0.081	0.000	1.820	-1.780	1	0.01	0.00	0.02
1G	93	-0.177	-2.828	-0.122	0.000	-0.238	-1.812	1	0.01	0.00	0.01
1H	93	-0.177	-2.768	-0.122	0.000	-0.238	-1.780	1	0.01	0.00	0.01
1I	93	-0.244	-2.877	0.208	0.000	1.190	-1.812	1	0.01	0.00	0.01
1J	93	-0.244	-2.719	0.208	0.000	1.190	-1.780	1	0.01	0.00	0.01
1K	93	-0.244	-2.877	-0.248	0.000	0.392	-1.812	1	0.01	0.00	0.01
1L	93	-0.244	-2.719	-0.248	0.000	0.392	-1.780	1	0.01	0.00	0.01
1M	93	-0.212	-2.877	0.208	0.000	1.190	-1.812	1	0.01	0.00	0.01
1N	93	-0.212	-2.719	0.208	0.000	1.190	-1.780	1	0.01	0.00	0.01
1O	93	-0.212	-2.877	-0.248	0.000	0.392	-1.812	1	0.01	0.00	0.01
1P	93	-0.212	-2.719	-0.248	0.000	0.392	-1.780	1	0.01	0.00	0.01
2	93	-0.409	-5.114	-0.037	0.000	1.418	-3.271	1	0.01	0.00	0.02
7	93	-0.228	-2.756	-0.005	0.000	0.782	-1.794	1	0.01	0.00	0.01
8	93	-0.220	-2.752	-0.020	0.000	0.769	-1.778	1	0.01	0.00	0.01
9	93	-0.264	-3.123	-0.022	0.000	0.915	-1.968	1	0.01	0.00	0.01
10	93	-0.264	-3.134	-0.023	0.000	0.915	-1.974	1	0.01	0.00	0.01
11	93	-0.368	-4.586	-0.024	0.000	1.271	-2.947	1	0.01	0.00	0.02
12	93	-0.363	-4.583	-0.033	0.000	1.263	-2.938	1	0.01	0.00	0.02
13	93	-0.389	-4.805	-0.035	0.000	1.350	-3.051	1	0.01	0.00	0.02
14	93	-0.389	-4.812	-0.035	0.000	1.350	-3.055	1	0.01	0.00	0.02

ASTA NUM. 78 NI 208 NF 38 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.062	-1.990	7.248	0.000	2.539	-1.796	1	0.01	0.00	0.03	
1B	0	-0.062	-1.846	7.248	0.000	2.539	-1.826	1	0.01	0.00	0.03	
1C	0	-0.062	-1.990	-1.216	0.000	-0.433	-1.796	1	0.01	0.00	0.01	
1D	0	-0.062	-1.846	-1.216	0.000	-0.433	-1.826	1	0.00	0.00	0.01	
1E	0	0.279	-1.990	7.248	0.000	2.539	-1.796	1	0.01	0.00	0.03	
1F	0	0.279	-1.846	7.248	0.000	2.539	-1.826	1	0.01	0.00	0.03	

1G	0	0.279	-1.990	-1.216	0.000	-0.433	-1.796	1	0.01	0.00	0.01
1H	0	0.279	-1.846	-1.216	0.000	-0.433	-1.826	1	0.00	0.00	0.01
1I	0	-0.207	-2.017	4.396	0.000	1.567	-1.795	1	0.01	0.00	0.02
1J	0	-0.207	-1.819	4.396	0.000	1.567	-1.827	1	0.00	0.00	0.02
1K	0	-0.207	-2.017	1.636	0.000	0.539	-1.795	1	0.01	0.00	0.01
1L	0	-0.207	-1.819	1.636	0.000	0.539	-1.827	1	0.00	0.00	0.01
1M	0	0.423	-2.017	4.396	0.000	1.567	-1.795	1	0.01	0.00	0.02
1N	0	0.423	-1.819	4.396	0.000	1.567	-1.827	1	0.00	0.00	0.02
1O	0	0.423	-2.017	1.636	0.000	0.539	-1.795	1	0.01	0.00	0.01
1P	0	0.423	-1.819	1.636	0.000	0.539	-1.827	1	0.00	0.00	0.01
2	0	0.194	-3.474	5.406	0.000	1.888	-3.299	1	0.01	0.00	0.02
7	0	0.083	-1.881	3.018	0.000	1.056	-1.811	1	0.01	0.00	0.01
8	0	0.104	-1.898	2.931	0.000	1.024	-1.794	1	0.01	0.00	0.01
9	0	0.126	-2.197	3.491	0.000	1.217	-1.984	1	0.01	0.00	0.02
10	0	0.126	-2.207	3.491	0.000	1.218	-1.991	1	0.01	0.00	0.02
11	0	0.159	-3.106	4.864	0.000	1.701	-2.973	1	0.01	0.00	0.02
12	0	0.172	-3.116	4.812	0.000	1.681	-2.963	1	0.01	0.00	0.02
13	0	0.185	-3.296	5.148	0.000	1.797	-3.077	1	0.01	0.00	0.02
14	0	0.185	-3.302	5.148	0.000	1.798	-3.081	1	0.01	0.00	0.02
1A	47	-0.062	-4.884	7.248	0.000	-0.844	-3.335	1	0.01	0.00	0.02
1B	47	-0.062	-4.741	7.248	0.000	-0.844	-3.428	1	0.01	0.00	0.02
1C	47	-0.062	-4.884	-1.216	0.000	0.135	-3.335	1	0.01	0.00	0.02
1D	47	-0.062	-4.741	-1.216	0.000	0.135	-3.428	1	0.01	0.00	0.02
1E	47	0.279	-4.884	7.248	0.000	-0.844	-3.335	1	0.01	0.00	0.02
1F	47	0.279	-4.741	7.248	0.000	-0.844	-3.428	1	0.01	0.00	0.02
1G	47	0.279	-4.884	-1.216	0.000	0.135	-3.335	1	0.01	0.00	0.02
1H	47	0.279	-4.741	-1.216	0.000	0.135	-3.428	1	0.01	0.00	0.02
1I	47	-0.207	-4.911	4.396	0.000	-0.485	-3.324	1	0.01	0.00	0.02
1J	47	-0.207	-4.714	4.396	0.000	-0.485	-3.439	1	0.01	0.00	0.02
1K	47	-0.207	-4.911	1.636	0.000	-0.224	-3.324	1	0.01	0.00	0.02
1L	47	-0.207	-4.714	1.636	0.000	-0.224	-3.439	1	0.01	0.00	0.02
1M	47	0.423	-4.911	4.396	0.000	-0.485	-3.324	1	0.01	0.00	0.02
1N	47	0.423	-4.714	4.396	0.000	-0.485	-3.439	1	0.01	0.00	0.02
1O	47	0.423	-4.911	1.636	0.000	-0.224	-3.324	1	0.01	0.00	0.02
1P	47	0.423	-4.714	1.636	0.000	-0.224	-3.439	1	0.01	0.00	0.02
2	47	0.194	-8.762	5.406	0.000	-0.635	-6.155	1	0.02	0.00	0.04
7	47	0.083	-4.727	3.018	0.000	-0.353	-3.353	1	0.01	0.00	0.02
8	47	0.104	-4.744	2.931	0.000	-0.344	-3.344	1	0.01	0.00	0.02
9	47	0.126	-5.434	3.491	0.000	-0.412	-3.764	1	0.01	0.00	0.02
10	47	0.126	-5.444	3.491	0.000	-0.411	-3.776	1	0.01	0.00	0.02
11	47	0.159	-7.848	4.864	0.000	-0.569	-5.530	1	0.02	0.00	0.03
12	47	0.172	-7.858	4.812	0.000	-0.564	-5.525	1	0.02	0.00	0.03
13	47	0.185	-8.273	5.148	0.000	-0.605	-5.778	1	0.02	0.00	0.03
14	47	0.185	-8.276	5.148	0.000	-0.605	-5.785	1	0.02	0.00	0.03
1A	93	-0.062	-7.779	7.248	0.000	-4.226	-6.224	1	0.02	0.00	0.05
1B	93	-0.062	-7.635	7.248	0.000	-4.226	-6.382	1	0.02	0.00	0.05
1C	93	-0.062	-7.779	-1.216	0.000	0.702	-6.224	1	0.02	0.00	0.04
1D	93	-0.062	-7.635	-1.216	0.000	0.702	-6.382	1	0.02	0.00	0.04
1E	93	0.279	-7.779	7.248	0.000	-4.226	-6.224	1	0.02	0.00	0.05
1F	93	0.279	-7.635	7.248	0.000	-4.226	-6.382	1	0.02	0.00	0.05
1G	93	0.279	-7.779	-1.216	0.000	0.702	-6.224	1	0.02	0.00	0.04
1H	93	0.279	-7.635	-1.216	0.000	0.702	-6.382	1	0.02	0.00	0.04
1I	93	-0.207	-7.806	4.396	0.000	-2.536	-6.204	1	0.02	0.00	0.04
1J	93	-0.207	-7.608	4.396	0.000	-2.536	-6.402	1	0.02	0.00	0.04
1K	93	-0.207	-7.806	1.636	0.000	-0.988	-6.204	1	0.02	0.00	0.04
1L	93	-0.207	-7.608	1.636	0.000	-0.988	-6.402	1	0.02	0.00	0.04
1M	93	0.423	-7.806	4.396	0.000	-2.536	-6.204	1	0.02	0.00	0.04
1N	93	0.423	-7.608	4.396	0.000	-2.536	-6.402	1	0.02	0.00	0.04
1O	93	0.423	-7.806	1.636	0.000	-0.988	-6.204	1	0.02	0.00	0.04
1P	93	0.423	-7.608	1.636	0.000	-0.988	-6.402	1	0.02	0.00	0.04
2	93	0.194	-14.050	5.406	0.000	-3.157	-11.480	1	0.04	0.00	0.07
7	93	0.083	-7.574	3.018	0.000	-1.761	-6.223	1	0.02	0.00	0.04
8	93	0.104	-7.591	2.931	0.000	-1.711	-6.222	1	0.02	0.00	0.04
9	93	0.126	-8.670	3.491	0.000	-2.041	-7.055	1	0.02	0.00	0.04
10	93	0.126	-8.680	3.491	0.000	-2.041	-7.071	1	0.02	0.00	0.04
11	93	0.159	-12.590	4.864	0.000	-2.840	-10.300	1	0.03	0.00	0.06
12	93	0.172	-12.600	4.812	0.000	-2.810	-10.300	1	0.03	0.00	0.06
13	93	0.185	-13.250	5.148	0.000	-3.008	-10.800	1	0.04	0.00	0.06
14	93	0.185	-13.250	5.148	0.000	-3.008	-10.810	1	0.04	0.00	0.06

ASTA NUM. 22 NI 38 NF 201 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.081	9.107	1.786	0.000	1.021	-6.325	1	0.02	0.00	0.04	
1B	0	0.081	9.247	1.786	0.000	1.021	-6.431	1	0.02	0.00	0.04	
1C	0	0.081	9.107	-7.194	0.000	-4.535	-6.325	1	0.02	0.00	0.06	
1D	0	0.081	9.247	-7.194	0.000	-4.535	-6.431	1	0.02	0.00	0.06	
1E	0	0.316	9.107	1.786	0.000	1.021	-6.325	1	0.02	0.00	0.04	
1F	0	0.316	9.247	1.786	0.000	1.021	-6.431	1	0.02	0.00	0.04	
1G	0	0.316	9.107	-7.194	0.000	-4.535	-6.325	1	0.02	0.00	0.06	
1H	0	0.316	9.247	-7.194	0.000	-4.535	-6.431	1	0.02	0.00	0.06	
1I	0	-0.096	9.118	-1.131	0.000	-0.811	-6.329	1	0.02	0.00	0.04	
1J	0	-0.096	9.236	-1.131	0.000	-0.811	-6.427	1	0.02	0.00	0.04	
1K	0	-0.096	9.118	-4.277	0.000	-2.703	-6.329	1	0.02	0.00	0.04	
1L	0	-0.096	9.236	-4.277	0.000	-2.703	-6.427	1	0.02	0.00	0.04	
1M	0	0.493	9.118	-1.131	0.000	-0.811	-6.329	1	0.02	0.00	0.04	
1N	0	0.493	9.236	-1.131	0.000	-0.811	-6.427	1	0.02	0.00	0.04	
1O	0	0.493	9.118	-4.277	0.000	-2.703	-6.329	1	0.02	0.00	0.04	

1P	0	0.493	9.236	-4.277	0.000	-2.703	-6.427	1	0.02	0.00	0.04
2	0	0.359	16.730	-4.853	0.000	-3.154	-11.620	1	0.04	0.00	0.07
7	0	0.223	9.041	-2.686	0.000	-1.748	-6.305	1	0.02	0.00	0.04
8	0	0.194	9.043	-2.632	0.000	-1.710	-6.296	1	0.02	0.00	0.04
9	0	0.226	10.280	-3.122	0.000	-2.026	-7.138	1	0.03	0.00	0.04
10	0	0.227	10.300	-3.123	0.000	-2.027	-7.155	1	0.03	0.00	0.04
11	0	0.338	15.000	-4.355	0.000	-2.832	-10.420	1	0.04	0.00	0.06
12	0	0.320	15.000	-4.323	0.000	-2.810	-10.420	1	0.04	0.00	0.06
13	0	0.339	15.750	-4.617	0.000	-3.000	-10.920	1	0.04	0.00	0.06
14	0	0.340	15.750	-4.617	0.000	-3.000	-10.930	1	0.04	0.00	0.06
1A	50	0.081	6.006	1.786	0.000	0.128	-2.554	1	0.02	0.00	0.02
1B	50	0.081	6.146	1.786	0.000	0.128	-2.576	1	0.02	0.00	0.02
1C	50	0.081	6.006	-7.194	0.000	-0.938	-2.554	1	0.02	0.00	0.02
1D	50	0.081	6.146	-7.194	0.000	-0.938	-2.576	1	0.02	0.00	0.02
1E	50	0.316	6.006	1.786	0.000	0.128	-2.554	1	0.02	0.00	0.02
1F	50	0.316	6.146	1.786	0.000	0.128	-2.576	1	0.02	0.00	0.02
1G	50	0.316	6.006	-7.194	0.000	-0.938	-2.554	1	0.02	0.00	0.02
1H	50	0.316	6.146	-7.194	0.000	-0.938	-2.576	1	0.02	0.00	0.02
1I	50	-0.096	6.017	-1.131	0.000	-0.246	-2.569	1	0.02	0.00	0.02
1J	50	-0.096	6.135	-1.131	0.000	-0.246	-2.560	1	0.02	0.00	0.02
1K	50	-0.096	6.017	-4.277	0.000	-0.564	-2.569	1	0.02	0.00	0.02
1L	50	-0.096	6.135	-4.277	0.000	-0.564	-2.560	1	0.02	0.00	0.02
1M	50	0.493	6.017	-1.131	0.000	-0.246	-2.569	1	0.02	0.00	0.02
1N	50	0.493	6.135	-1.131	0.000	-0.246	-2.560	1	0.02	0.00	0.02
1O	50	0.493	6.017	-4.277	0.000	-0.564	-2.569	1	0.02	0.00	0.02
1P	50	0.493	6.135	-4.277	0.000	-0.564	-2.560	1	0.02	0.00	0.02
2	50	0.359	11.064	-4.853	0.000	-0.728	-4.668	1	0.03	0.00	0.03
7	50	0.223	5.991	-2.686	0.000	-0.405	-2.547	1	0.02	0.00	0.02
8	50	0.194	5.993	-2.632	0.000	-0.394	-2.537	1	0.02	0.00	0.02
9	50	0.226	6.814	-3.122	0.000	-0.466	-2.863	1	0.02	0.00	0.02
10	50	0.227	6.831	-3.123	0.000	-0.466	-2.874	1	0.02	0.00	0.02
11	50	0.338	9.922	-4.355	0.000	-0.655	-4.191	1	0.03	0.00	0.02
12	50	0.320	9.922	-4.323	0.000	-0.648	-4.188	1	0.03	0.00	0.02
13	50	0.339	10.419	-4.617	0.000	-0.692	-4.381	1	0.03	0.00	0.03
14	50	0.340	10.422	-4.617	0.000	-0.692	-4.387	1	0.03	0.00	0.03
1A	100	0.081	2.905	1.786	0.000	-0.765	-0.333	1	0.01	0.00	0.01
1B	100	0.081	3.045	1.786	0.000	-0.765	-0.271	1	0.01	0.00	0.01
1C	100	0.081	2.905	-7.194	0.000	2.659	-0.333	1	0.01	0.00	0.03
1D	100	0.081	3.045	-7.194	0.000	2.659	-0.271	1	0.01	0.00	0.03
1E	100	0.316	2.905	1.786	0.000	-0.765	-0.333	1	0.01	0.00	0.01
1F	100	0.316	3.045	1.786	0.000	-0.765	-0.271	1	0.01	0.00	0.01
1G	100	0.316	2.905	-7.194	0.000	2.659	-0.333	1	0.01	0.00	0.03
1H	100	0.316	3.045	-7.194	0.000	2.659	-0.271	1	0.01	0.00	0.03
1I	100	-0.096	2.916	-1.131	0.000	0.320	-0.361	1	0.01	0.00	0.00
1J	100	-0.096	3.034	-1.131	0.000	0.320	-0.244	1	0.01	0.00	0.00
1K	100	-0.096	2.916	-4.277	0.000	1.574	-0.361	1	0.01	0.00	0.02
1L	100	-0.096	3.034	-4.277	0.000	1.574	-0.244	1	0.01	0.00	0.02
1M	100	0.493	2.916	-1.131	0.000	0.320	-0.361	1	0.01	0.00	0.00
1N	100	0.493	3.034	-1.131	0.000	0.320	-0.244	1	0.01	0.00	0.00
1O	100	0.493	2.916	-4.277	0.000	1.574	-0.361	1	0.01	0.00	0.02
1P	100	0.493	3.034	-4.277	0.000	1.574	-0.244	1	0.01	0.00	0.02
2	100	0.359	5.398	-4.853	0.000	1.699	-0.550	1	0.01	0.00	0.02
7	100	0.223	2.941	-2.686	0.000	0.938	-0.314	1	0.01	0.00	0.01
8	100	0.194	2.943	-2.632	0.000	0.921	-0.303	1	0.01	0.00	0.01
9	100	0.226	3.348	-3.122	0.000	1.095	-0.322	1	0.01	0.00	0.01
10	100	0.227	3.361	-3.123	0.000	1.095	-0.326	1	0.01	0.00	0.01
11	100	0.338	4.843	-4.355	0.000	1.523	-0.502	1	0.01	0.00	0.02
12	100	0.320	4.844	-4.323	0.000	1.513	-0.496	1	0.01	0.00	0.02
13	100	0.339	5.087	-4.617	0.000	1.617	-0.507	1	0.01	0.00	0.02
14	100	0.340	5.094	-4.617	0.000	1.617	-0.510	1	0.01	0.00	0.02

ASTA NUM. 79 NI 201 NF 194 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.331	3.883	-0.172	0.000	1.768	-0.295	1	0.01	0.00	0.02	
1B	0	-0.331	3.917	-0.172	0.000	1.768	-0.358	1	0.01	0.00	0.02	
1C	0	-0.331	3.883	-0.353	0.000	-0.390	-0.295	1	0.01	0.00	0.00	
1D	0	-0.331	3.917	-0.353	0.000	-0.390	-0.358	1	0.01	0.00	0.00	
1E	0	-0.228	3.883	-0.172	0.000	1.768	-0.295	1	0.01	0.00	0.02	
1F	0	-0.228	3.917	-0.172	0.000	1.768	-0.358	1	0.01	0.00	0.02	
1G	0	-0.228	3.883	-0.353	0.000	-0.390	-0.295	1	0.01	0.00	0.00	
1H	0	-0.228	3.917	-0.353	0.000	-0.390	-0.358	1	0.01	0.00	0.00	
1I	0	-0.299	3.867	-0.050	0.000	1.073	-0.266	1	0.01	0.00	0.01	
1J	0	-0.299	3.933	-0.050	0.000	1.073	-0.388	1	0.01	0.00	0.01	
1K	0	-0.299	3.867	-0.475	0.000	0.306	-0.266	1	0.01	0.00	0.00	
1L	0	-0.299	3.933	-0.475	0.000	0.306	-0.388	1	0.01	0.00	0.00	
1M	0	-0.260	3.867	-0.050	0.000	1.073	-0.266	1	0.01	0.00	0.01	
1N	0	-0.260	3.933	-0.050	0.000	1.073	-0.388	1	0.01	0.00	0.01	
1O	0	-0.260	3.867	-0.475	0.000	0.306	-0.266	1	0.01	0.00	0.00	
1P	0	-0.260	3.933	-0.475	0.000	0.306	-0.388	1	0.01	0.00	0.00	
2	0	-0.502	7.124	-0.478	0.000	1.236	-0.595	1	0.02	0.00	0.02	
7	0	-0.278	3.862	-0.247	0.000	0.694	-0.338	1	0.01	0.00	0.01	
8	0	-0.271	3.845	-0.259	0.000	0.670	-0.327	1	0.01	0.00	0.01	
9	0	-0.321	4.322	-0.292	0.000	0.797	-0.350	1	0.01	0.00	0.01	
10	0	-0.321	4.338	-0.294	0.000	0.797	-0.354	1	0.01	0.00	0.01	
11	0	-0.452	6.399	-0.422	0.000	1.115	-0.542	1	0.02	0.00	0.01	
12	0	-0.447	6.388	-0.429	0.000	1.100	-0.536	1	0.02	0.00	0.01	
13	0	-0.477	6.675	-0.449	0.000	1.177	-0.550	1	0.02	0.00	0.01	

14	0	-0.477	6.684	-0.449	0.000	1.177	-0.552	1	0.02	0.00	0.01
1A	50	-0.331	0.782	-0.172	0.000	1.925	0.879	1	0.00	0.00	0.02
1B	50	-0.331	0.816	-0.172	0.000	1.925	0.817	1	0.00	0.00	0.02
1C	50	-0.331	0.782	-0.353	0.000	-0.283	0.879	1	0.00	0.00	0.01
1D	50	-0.331	0.816	-0.353	0.000	-0.283	0.817	1	0.00	0.00	0.00
1E	50	-0.228	0.782	-0.172	0.000	1.925	0.879	1	0.00	0.00	0.02
1F	50	-0.228	0.816	-0.172	0.000	1.925	0.817	1	0.00	0.00	0.02
1G	50	-0.228	0.782	-0.353	0.000	-0.283	0.879	1	0.00	0.00	0.01
1H	50	-0.228	0.816	-0.353	0.000	-0.283	0.817	1	0.00	0.00	0.00
1I	50	-0.299	0.766	-0.050	0.000	1.244	0.896	1	0.00	0.00	0.02
1J	50	-0.299	0.832	-0.050	0.000	1.244	0.800	1	0.00	0.00	0.02
1K	50	-0.299	0.766	-0.475	0.000	0.397	0.896	1	0.00	0.00	0.01
1L	50	-0.299	0.832	-0.475	0.000	0.397	0.800	1	0.00	0.00	0.00
1M	50	-0.260	0.766	-0.050	0.000	1.244	0.896	1	0.00	0.00	0.02
1N	50	-0.260	0.832	-0.050	0.000	1.244	0.800	1	0.00	0.00	0.02
1O	50	-0.260	0.766	-0.475	0.000	0.397	0.896	1	0.00	0.00	0.01
1P	50	-0.260	0.832	-0.475	0.000	0.397	0.800	1	0.00	0.00	0.00
2	50	-0.502	1.456	-0.478	0.000	1.475	1.550	1	0.00	0.00	0.02
7	50	-0.278	0.812	-0.247	0.000	0.818	0.830	1	0.00	0.00	0.01
8	50	-0.271	0.795	-0.259	0.000	0.800	0.833	1	0.00	0.00	0.01
9	50	-0.321	0.854	-0.292	0.000	0.944	0.944	1	0.00	0.00	0.01
10	50	-0.321	0.870	-0.294	0.000	0.944	0.948	1	0.00	0.00	0.01
11	50	-0.452	1.320	-0.422	0.000	1.326	1.387	1	0.00	0.00	0.02
12	50	-0.447	1.309	-0.429	0.000	1.314	1.388	1	0.00	0.00	0.02
13	50	-0.477	1.345	-0.449	0.000	1.401	1.455	1	0.00	0.00	0.02
14	50	-0.477	1.355	-0.449	0.000	1.402	1.458	1	0.00	0.00	0.02
1A	100	-0.331	-2.319	-0.172	0.000	2.081	0.503	1	0.01	0.00	0.03
1B	100	-0.331	-2.285	-0.172	0.000	2.081	0.442	1	0.01	0.00	0.03
1C	100	-0.331	-2.319	-0.353	0.000	-0.177	0.503	1	0.01	0.00	0.00
1D	100	-0.331	-2.285	-0.353	0.000	-0.177	0.442	1	0.01	0.00	0.00
1E	100	-0.228	-2.319	-0.172	0.000	2.081	0.503	1	0.01	0.00	0.03
1F	100	-0.228	-2.285	-0.172	0.000	2.081	0.442	1	0.01	0.00	0.03
1G	100	-0.228	-2.319	-0.353	0.000	-0.177	0.503	1	0.01	0.00	0.00
1H	100	-0.228	-2.285	-0.353	0.000	-0.177	0.442	1	0.01	0.00	0.00
1I	100	-0.299	-2.335	-0.050	0.000	1.416	0.507	1	0.01	0.00	0.02
1J	100	-0.299	-2.269	-0.050	0.000	1.416	0.438	1	0.01	0.00	0.02
1K	100	-0.299	-2.335	-0.475	0.000	0.488	0.507	1	0.01	0.00	0.01
1L	100	-0.299	-2.269	-0.475	0.000	0.488	0.438	1	0.01	0.00	0.01
1M	100	-0.260	-2.335	-0.050	0.000	1.416	0.507	1	0.01	0.00	0.02
1N	100	-0.260	-2.269	-0.050	0.000	1.416	0.438	1	0.01	0.00	0.02
1O	100	-0.260	-2.335	-0.475	0.000	0.488	0.507	1	0.01	0.00	0.01
1P	100	-0.260	-2.269	-0.475	0.000	0.488	0.438	1	0.01	0.00	0.01
2	100	-0.502	-4.213	-0.478	0.000	1.714	0.861	1	0.01	0.00	0.02
7	100	-0.278	-2.238	-0.247	0.000	0.941	0.474	1	0.01	0.00	0.01
8	100	-0.271	-2.255	-0.259	0.000	0.929	0.468	1	0.01	0.00	0.01
9	100	-0.321	-2.613	-0.292	0.000	1.090	0.504	1	0.01	0.00	0.01
10	100	-0.321	-2.597	-0.294	0.000	1.091	0.517	1	0.01	0.00	0.01
11	100	-0.452	-3.760	-0.422	0.000	1.536	0.777	1	0.01	0.00	0.02
12	100	-0.447	-3.770	-0.429	0.000	1.529	0.773	1	0.01	0.00	0.02
13	100	-0.477	-3.985	-0.449	0.000	1.625	0.795	1	0.01	0.00	0.02
14	100	-0.477	-3.975	-0.449	0.000	1.626	0.802	1	0.01	0.00	0.02

ASTA NUM. 80 NI 194 NF 22 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.109	-1.240	7.716	0.000	2.928	0.470	1	0.01	0.00	0.04	
1B	0	-0.109	-1.080	7.716	0.000	2.928	0.404	1	0.01	0.00	0.04	
1C	0	-0.109	-1.240	-1.052	0.000	-0.372	0.470	1	0.00	0.00	0.00	
1D	0	-0.109	-1.080	-1.052	0.000	-0.372	0.404	1	0.00	0.00	0.00	
1E	0	0.229	-1.240	7.716	0.000	2.928	0.470	1	0.01	0.00	0.04	
1F	0	0.229	-1.080	7.716	0.000	2.928	0.404	1	0.01	0.00	0.04	
1G	0	0.229	-1.240	-1.052	0.000	-0.372	0.470	1	0.00	0.00	0.00	
1H	0	0.229	-1.080	-1.052	0.000	-0.372	0.404	1	0.00	0.00	0.00	
1I	0	-0.253	-1.296	4.688	0.000	1.790	0.475	1	0.00	0.00	0.02	
1J	0	-0.253	-1.024	4.688	0.000	1.790	0.399	1	0.00	0.00	0.02	
1K	0	-0.253	-1.296	1.976	0.000	0.766	0.475	1	0.00	0.00	0.01	
1L	0	-0.253	-1.024	1.976	0.000	0.766	0.399	1	0.00	0.00	0.01	
1M	0	0.373	-1.296	4.688	0.000	1.790	0.475	1	0.00	0.00	0.02	
1N	0	0.373	-1.024	4.688	0.000	1.790	0.399	1	0.00	0.00	0.02	
1O	0	0.373	-1.296	1.976	0.000	0.766	0.475	1	0.00	0.00	0.01	
1P	0	0.373	-1.024	1.976	0.000	0.766	0.399	1	0.00	0.00	0.01	
2	0	0.107	-2.094	5.995	0.000	2.301	0.797	1	0.01	0.00	0.03	
7	0	0.035	-1.101	3.327	0.000	1.278	0.438	1	0.00	0.00	0.02	
8	0	0.057	-1.139	3.252	0.000	1.248	0.432	1	0.00	0.00	0.02	
9	0	0.072	-1.398	3.818	0.000	1.463	0.465	1	0.00	0.00	0.02	
10	0	0.072	-1.384	3.823	0.000	1.465	0.478	1	0.00	0.00	0.02	
11	0	0.081	-1.850	5.392	0.000	2.071	0.719	1	0.01	0.00	0.03	
12	0	0.094	-1.873	5.348	0.000	2.053	0.715	1	0.01	0.00	0.03	
13	0	0.103	-2.028	5.687	0.000	2.182	0.735	1	0.01	0.00	0.03	
14	0	0.103	-2.019	5.690	0.000	2.183	0.743	1	0.01	0.00	0.03	
1A	50	-0.109	-4.341	7.716	0.000	-0.934	-0.925	1	0.01	0.00	0.01	
1B	50	-0.109	-4.181	7.716	0.000	-0.934	-0.912	1	0.01	0.00	0.01	
1C	50	-0.109	-4.341	-1.052	0.000	0.158	-0.925	1	0.01	0.00	0.01	
1D	50	-0.109	-4.181	-1.052	0.000	0.158	-0.912	1	0.01	0.00	0.01	
1E	50	0.229	-4.341	7.716	0.000	-0.934	-0.925	1	0.01	0.00	0.01	
1F	50	0.229	-4.181	7.716	0.000	-0.934	-0.912	1	0.01	0.00	0.01	
1G	50	0.229	-4.341	-1.052	0.000	0.158	-0.925	1	0.01	0.00	0.01	

1H	50	0.229	-4.181	-1.052	0.000	0.158	-0.912	1	0.01	0.00	0.01
1I	50	-0.253	-4.397	4.688	0.000	-0.570	-0.948	1	0.01	0.00	0.01
1J	50	-0.253	-4.125	4.688	0.000	-0.570	-0.888	1	0.01	0.00	0.01
1K	50	-0.253	-4.397	1.976	0.000	-0.206	-0.948	1	0.01	0.00	0.01
1L	50	-0.253	-4.125	1.976	0.000	-0.206	-0.888	1	0.01	0.00	0.01
1M	50	0.373	-4.397	4.688	0.000	-0.570	-0.948	1	0.01	0.00	0.01
1N	50	0.373	-4.125	4.688	0.000	-0.570	-0.888	1	0.01	0.00	0.01
1O	50	0.373	-4.397	1.976	0.000	-0.206	-0.948	1	0.01	0.00	0.01
1P	50	0.373	-4.125	1.976	0.000	-0.206	-0.888	1	0.01	0.00	0.01
2	50	0.107	-7.762	5.995	0.000	-0.696	-1.667	1	0.02	0.00	0.01
7	50	0.035	-4.151	3.327	0.000	-0.386	-0.875	1	0.01	0.00	0.01
8	50	0.057	-4.189	3.252	0.000	-0.378	-0.900	1	0.01	0.00	0.01
9	50	0.072	-4.866	3.818	0.000	-0.446	-1.100	1	0.01	0.00	0.01
10	50	0.072	-4.852	3.823	0.000	-0.446	-1.080	1	0.01	0.00	0.01
11	50	0.081	-6.930	5.392	0.000	-0.625	-1.476	1	0.02	0.00	0.01
12	50	0.094	-6.951	5.348	0.000	-0.620	-1.491	1	0.02	0.00	0.01
13	50	0.103	-7.359	5.687	0.000	-0.662	-1.611	1	0.02	0.00	0.01
14	50	0.103	-7.350	5.690	0.000	-0.662	-1.599	1	0.02	0.00	0.01
1A	100	-0.109	-7.442	7.716	0.000	-4.797	-3.870	1	0.02	0.00	0.06
1B	100	-0.109	-7.282	7.716	0.000	-4.797	-3.778	1	0.02	0.00	0.06
1C	100	-0.109	-7.442	-1.052	0.000	0.689	-3.870	1	0.02	0.00	0.02
1D	100	-0.109	-7.282	-1.052	0.000	0.689	-3.778	1	0.02	0.00	0.02
1E	100	0.229	-7.442	7.716	0.000	-4.797	-3.870	1	0.02	0.00	0.06
1F	100	0.229	-7.282	7.716	0.000	-4.797	-3.778	1	0.02	0.00	0.06
1G	100	0.229	-7.442	-1.052	0.000	0.689	-3.870	1	0.02	0.00	0.02
1H	100	0.229	-7.282	-1.052	0.000	0.689	-3.778	1	0.02	0.00	0.02
1I	100	-0.253	-7.498	4.688	0.000	-2.930	-3.922	1	0.02	0.00	0.04
1J	100	-0.253	-7.226	4.688	0.000	-2.930	-3.726	1	0.02	0.00	0.04
1K	100	-0.253	-7.498	1.976	0.000	-1.178	-3.922	1	0.02	0.00	0.02
1L	100	-0.253	-7.226	1.976	0.000	-1.178	-3.726	1	0.02	0.00	0.02
1M	100	0.373	-7.498	4.688	0.000	-2.930	-3.922	1	0.02	0.00	0.04
1N	100	0.373	-7.226	4.688	0.000	-2.930	-3.726	1	0.02	0.00	0.04
1O	100	0.373	-7.498	1.976	0.000	-1.178	-3.922	1	0.02	0.00	0.02
1P	100	0.373	-7.226	1.976	0.000	-1.178	-3.726	1	0.02	0.00	0.02
2	100	0.107	-13.430	5.995	0.000	-3.694	-6.965	1	0.04	0.00	0.05
7	100	0.035	-7.201	3.327	0.000	-2.049	-3.713	1	0.02	0.00	0.03
8	100	0.057	-7.239	3.252	0.000	-2.004	-3.757	1	0.02	0.00	0.03
9	100	0.072	-8.333	3.818	0.000	-2.355	-4.400	1	0.02	0.00	0.03
10	100	0.072	-8.319	3.823	0.000	-2.358	-4.373	1	0.02	0.00	0.03
11	100	0.081	-12.010	5.392	0.000	-3.321	-6.210	1	0.03	0.00	0.04
12	100	0.094	-12.030	5.348	0.000	-3.294	-6.237	1	0.03	0.00	0.04
13	100	0.103	-12.690	5.687	0.000	-3.505	-6.623	1	0.03	0.00	0.05
14	100	0.103	-12.680	5.690	0.000	-3.507	-6.606	1	0.03	0.00	0.05

ASTA NUM. 23 NI 22 NF 170 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.009	13.860	4.566	0.000	3.813	-3.777	1	0.04	0.00	0.05	
1B	0	-0.009	14.220	4.566	0.000	3.813	-3.923	1	0.04	0.00	0.05	
1C	0	-0.009	13.860	-10.404	0.000	-7.889	-3.777	1	0.04	0.00	0.10	
1D	0	-0.009	14.220	-10.404	0.000	-7.889	-3.923	1	0.04	0.00	0.10	
1E	0	0.343	13.860	4.566	0.000	3.813	-3.777	1	0.04	0.00	0.05	
1F	0	0.343	14.220	4.566	0.000	3.813	-3.923	1	0.04	0.00	0.05	
1G	0	0.343	13.860	-10.404	0.000	-7.889	-3.777	1	0.04	0.00	0.10	
1H	0	0.343	14.220	-10.404	0.000	-7.889	-3.923	1	0.04	0.00	0.10	
1I	0	-0.265	13.753	-0.127	0.000	0.111	-3.808	1	0.04	0.00	0.02	
1J	0	-0.265	14.327	-0.127	0.000	0.111	-3.892	1	0.04	0.00	0.02	
1K	0	-0.265	13.753	-5.711	0.000	-4.187	-3.808	1	0.04	0.00	0.05	
1L	0	-0.265	14.327	-5.711	0.000	-4.187	-3.892	1	0.04	0.00	0.05	
1M	0	0.599	13.753	-0.127	0.000	0.111	-3.808	1	0.04	0.00	0.02	
1N	0	0.599	14.327	-0.127	0.000	0.111	-3.892	1	0.04	0.00	0.02	
1O	0	0.599	13.753	-5.711	0.000	-4.187	-3.808	1	0.04	0.00	0.05	
1P	0	0.599	14.327	-5.711	0.000	-4.187	-3.892	1	0.04	0.00	0.05	
2	0	0.300	25.590	-5.259	0.000	-3.672	-7.012	1	0.07	0.00	0.05	
7	0	0.203	13.830	-2.897	0.000	-2.024	-3.745	1	0.04	0.00	0.03	
8	0	0.162	13.850	-2.851	0.000	-1.991	-3.782	1	0.04	0.00	0.03	
9	0	0.195	15.790	-3.339	0.000	-2.330	-4.429	1	0.04	0.00	0.03	
10	0	0.195	15.790	-3.343	0.000	-2.332	-4.402	1	0.04	0.00	0.03	
11	0	0.291	22.930	-4.720	0.000	-3.297	-6.256	1	0.06	0.00	0.04	
12	0	0.266	22.940	-4.693	0.000	-3.277	-6.278	1	0.06	0.00	0.04	
13	0	0.286	24.110	-4.986	0.000	-3.480	-6.667	1	0.06	0.00	0.05	
14	0	0.286	24.110	-4.988	0.000	-3.482	-6.650	1	0.06	0.00	0.05	
1A	56	-0.009	10.372	4.566	0.000	1.244	3.034	1	0.03	0.00	0.02	
1B	56	-0.009	10.733	4.566	0.000	1.244	3.102	1	0.03	0.00	0.02	
1C	56	-0.009	10.372	-10.404	0.000	-2.036	3.034	1	0.03	0.00	0.03	
1D	56	-0.009	10.733	-10.404	0.000	-2.036	3.102	1	0.03	0.00	0.03	
1E	56	0.343	10.372	4.566	0.000	1.244	3.034	1	0.03	0.00	0.02	
1F	56	0.343	10.733	4.566	0.000	1.244	3.102	1	0.03	0.00	0.02	
1G	56	0.343	10.372	-10.404	0.000	-2.036	3.034	1	0.03	0.00	0.03	
1H	56	0.343	10.733	-10.404	0.000	-2.036	3.102	1	0.03	0.00	0.03	
1I	56	-0.265	10.266	-0.127	0.000	0.182	2.936	1	0.03	0.00	0.02	
1J	56	-0.265	10.839	-0.127	0.000	0.182	3.200	1	0.03	0.00	0.02	
1K	56	-0.265	10.266	-5.711	0.000	-0.974	2.936	1	0.03	0.00	0.02	
1L	56	-0.265	10.839	-5.711	0.000	-0.974	3.200	1	0.03	0.00	0.02	
1M	56	0.599	10.266	-0.127	0.000	0.182	2.936	1	0.03	0.00	0.02	
1N	56	0.599	10.839	-0.127	0.000	0.182	3.200	1	0.03	0.00	0.02	
1O	56	0.599	10.266	-5.711	0.000	-0.974	2.936	1	0.03	0.00	0.02	
1P	56	0.599	10.839	-5.711	0.000	-0.974	3.200	1	0.03	0.00	0.02	

2	56	0.300	19.210	-5.259	0.000	-0.714	5.587	1	0.05	0.00	0.03
7	56	0.203	10.397	-2.897	0.000	-0.395	3.067	1	0.03	0.00	0.02
8	56	0.162	10.417	-2.851	0.000	-0.388	3.042	1	0.03	0.00	0.02
9	56	0.195	11.889	-3.339	0.000	-0.451	3.356	1	0.03	0.00	0.02
10	56	0.195	11.888	-3.343	0.000	-0.452	3.381	1	0.03	0.00	0.02
11	56	0.291	17.215	-4.720	0.000	-0.642	5.034	1	0.05	0.00	0.03
12	56	0.266	17.225	-4.693	0.000	-0.637	5.018	1	0.05	0.00	0.03
13	56	0.286	18.115	-4.986	0.000	-0.676	5.208	1	0.05	0.00	0.03
14	56	0.286	18.110	-4.988	0.000	-0.677	5.221	1	0.05	0.00	0.03
1A	113	-0.009	6.885	4.566	0.000	-1.324	7.884	1	0.02	0.00	0.05
1B	113	-0.009	7.245	4.566	0.000	-1.324	8.164	1	0.02	0.00	0.05
1C	113	-0.009	6.885	-10.404	0.000	3.816	7.884	1	0.02	0.00	0.05
1D	113	-0.009	7.245	-10.404	0.000	3.816	8.164	1	0.02	0.00	0.05
1E	113	0.343	6.885	4.566	0.000	-1.324	7.884	1	0.02	0.00	0.05
1F	113	0.343	7.245	4.566	0.000	-1.324	8.164	1	0.02	0.00	0.05
1G	113	0.343	6.885	-10.404	0.000	3.816	7.884	1	0.02	0.00	0.05
1H	113	0.343	7.245	-10.404	0.000	3.816	8.164	1	0.02	0.00	0.05
1I	113	-0.265	6.778	-0.127	0.000	0.253	7.719	1	0.02	0.00	0.05
1J	113	-0.265	7.352	-0.127	0.000	0.253	8.329	1	0.02	0.00	0.05
1K	113	-0.265	6.778	-5.711	0.000	2.239	7.719	1	0.02	0.00	0.05
1L	113	-0.265	7.352	-5.711	0.000	2.239	8.329	1	0.02	0.00	0.05
1M	113	0.599	6.778	-0.127	0.000	0.253	7.719	1	0.02	0.00	0.05
1N	113	0.599	7.352	-0.127	0.000	0.253	8.329	1	0.02	0.00	0.05
1O	113	0.599	6.778	-5.711	0.000	2.239	7.719	1	0.02	0.00	0.05
1P	113	0.599	7.352	-5.711	0.000	2.239	8.329	1	0.02	0.00	0.05
2	113	0.300	12.830	-5.259	0.000	2.244	14.600	1	0.03	0.00	0.09
7	113	0.203	6.963	-2.897	0.000	1.235	7.948	1	0.02	0.00	0.05
8	113	0.162	6.984	-2.851	0.000	1.216	7.935	1	0.02	0.00	0.05
9	113	0.195	7.988	-3.339	0.000	1.427	8.946	1	0.02	0.00	0.05
10	113	0.195	7.985	-3.343	0.000	1.428	8.970	1	0.02	0.00	0.05
11	113	0.291	11.500	-4.720	0.000	2.013	13.110	1	0.03	0.00	0.08
12	113	0.266	11.510	-4.693	0.000	2.002	13.100	1	0.03	0.00	0.08
13	113	0.286	12.120	-4.986	0.000	2.128	13.710	1	0.03	0.00	0.08
14	113	0.286	12.110	-4.988	0.000	2.129	13.720	1	0.03	0.00	0.08

ASTA NUM. 81 NI 170 NF 163 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.453	7.846	3.362	0.000	1.384	8.217	1	0.02	0.00	0.05	
1B	0	-0.453	7.974	3.362	0.000	1.384	7.935	1	0.02	0.00	0.05	
1C	0	-0.453	7.846	-1.166	0.000	0.555	8.217	1	0.02	0.00	0.05	
1D	0	-0.453	7.974	-1.166	0.000	0.555	7.935	1	0.02	0.00	0.05	
1E	0	-0.236	7.846	3.362	0.000	1.384	8.217	1	0.02	0.00	0.05	
1F	0	-0.236	7.974	3.362	0.000	1.384	7.935	1	0.02	0.00	0.05	
1G	0	-0.236	7.846	-1.166	0.000	0.555	8.217	1	0.02	0.00	0.05	
1H	0	-0.236	7.974	-1.166	0.000	0.555	7.935	1	0.02	0.00	0.05	
1I	0	-0.512	7.820	2.059	0.000	1.158	8.386	1	0.02	0.00	0.05	
1J	0	-0.512	8.000	2.059	0.000	1.158	7.766	1	0.02	0.00	0.05	
1K	0	-0.512	7.820	0.137	0.000	0.782	8.386	1	0.02	0.00	0.05	
1L	0	-0.512	8.000	0.137	0.000	0.782	7.766	1	0.02	0.00	0.05	
1M	0	-0.177	7.820	2.059	0.000	1.158	8.386	1	0.02	0.00	0.05	
1N	0	-0.177	8.000	2.059	0.000	1.158	7.766	1	0.02	0.00	0.05	
1O	0	-0.177	7.820	0.137	0.000	0.782	8.386	1	0.02	0.00	0.05	
1P	0	-0.177	8.000	0.137	0.000	0.782	7.766	1	0.02	0.00	0.05	
2	0	-0.622	14.420	1.976	0.000	1.746	14.700	1	0.04	0.00	0.09	
7	0	-0.329	7.791	1.105	0.000	0.972	8.001	1	0.02	0.00	0.05	
8	0	-0.337	7.797	1.068	0.000	0.945	7.988	1	0.02	0.00	0.05	
9	0	-0.390	8.887	1.259	0.000	1.110	9.003	1	0.02	0.00	0.05	
10	0	-0.391	8.880	1.260	0.000	1.112	9.027	1	0.02	0.00	0.05	
11	0	-0.552	12.920	1.783	0.000	1.573	13.200	1	0.03	0.00	0.08	
12	0	-0.556	12.930	1.761	0.000	1.557	13.190	1	0.03	0.00	0.08	
13	0	-0.588	13.580	1.875	0.000	1.656	13.800	1	0.04	0.00	0.08	
14	0	-0.589	13.580	1.876	0.000	1.657	13.810	1	0.04	0.00	0.08	
1A	56	-0.453	4.358	3.362	0.000	2.019	11.720	1	0.01	0.00	0.07	
1B	56	-0.453	4.485	3.362	0.000	2.019	11.368	1	0.01	0.00	0.07	
1C	56	-0.453	4.358	-1.166	0.000	-1.315	11.720	1	0.01	0.00	0.07	
1D	56	-0.453	4.485	-1.166	0.000	-1.315	11.368	1	0.01	0.00	0.07	
1E	56	-0.236	4.358	3.362	0.000	2.019	11.720	1	0.01	0.00	0.07	
1F	56	-0.236	4.485	3.362	0.000	2.019	11.368	1	0.01	0.00	0.07	
1G	56	-0.236	4.358	-1.166	0.000	-1.315	11.720	1	0.01	0.00	0.07	
1H	56	-0.236	4.485	-1.166	0.000	-1.315	11.368	1	0.01	0.00	0.07	
1I	56	-0.512	4.331	2.059	0.000	1.011	11.904	1	0.01	0.00	0.07	
1J	56	-0.512	4.512	2.059	0.000	1.011	11.184	1	0.01	0.00	0.07	
1K	56	-0.512	4.331	0.137	0.000	-0.307	11.904	1	0.01	0.00	0.07	
1L	56	-0.512	4.512	0.137	0.000	-0.307	11.184	1	0.01	0.00	0.07	
1M	56	-0.177	4.331	2.059	0.000	1.011	11.904	1	0.01	0.00	0.07	
1N	56	-0.177	4.512	2.059	0.000	1.011	11.184	1	0.01	0.00	0.07	
1O	56	-0.177	4.331	0.137	0.000	-0.307	11.904	1	0.01	0.00	0.07	
1P	56	-0.177	4.512	0.137	0.000	-0.307	11.184	1	0.01	0.00	0.07	
2	56	-0.622	8.043	1.976	0.000	0.634	21.013	1	0.02	0.00	0.12	
7	56	-0.329	4.360	1.105	0.000	0.351	11.421	1	0.01	0.00	0.07	
8	56	-0.337	4.366	1.068	0.000	0.344	11.409	1	0.01	0.00	0.07	
9	56	-0.390	4.986	1.259	0.000	0.402	12.904	1	0.01	0.00	0.08	
10	56	-0.391	4.979	1.260	0.000	0.403	12.926	1	0.01	0.00	0.08	
11	56	-0.552	7.208	1.783	0.000	0.570	18.862	1	0.02	0.00	0.11	
12	56	-0.556	7.215	1.761	0.000	0.567	18.852	1	0.02	0.00	0.11	
13	56	-0.588	7.585	1.875	0.000	0.601	19.751	1	0.02	0.00	0.12	
14	56	-0.589	7.583	1.876	0.000	0.602	19.761	1	0.02	0.00	0.12	

1A	113	-0.453	0.869	3.362	0.000	2.654	13.261	1	0.00	0.00	0.08
1B	113	-0.453	0.996	3.362	0.000	2.654	12.839	1	0.00	0.00	0.08
1C	113	-0.453	0.869	-1.166	0.000	-3.185	13.261	1	0.00	0.00	0.08
1D	113	-0.453	0.996	-1.166	0.000	-3.185	12.839	1	0.00	0.00	0.08
1E	113	-0.236	0.869	3.362	0.000	2.654	13.261	1	0.00	0.00	0.08
1F	113	-0.236	0.996	3.362	0.000	2.654	12.839	1	0.00	0.00	0.08
1G	113	-0.236	0.869	-1.166	0.000	-3.185	13.261	1	0.00	0.00	0.08
1H	113	-0.236	0.996	-1.166	0.000	-3.185	12.839	1	0.00	0.00	0.08
1I	113	-0.512	0.842	2.059	0.000	0.864	13.460	1	0.00	0.00	0.08
1J	113	-0.512	1.023	2.059	0.000	0.864	12.640	1	0.00	0.00	0.08
1K	113	-0.512	0.842	0.137	0.000	-1.395	13.460	1	0.00	0.00	0.08
1L	113	-0.512	1.023	0.137	0.000	-1.395	12.640	1	0.00	0.00	0.08
1M	113	-0.177	0.842	2.059	0.000	0.864	13.460	1	0.00	0.00	0.08
1N	113	-0.177	1.023	2.059	0.000	0.864	12.640	1	0.00	0.00	0.08
1O	113	-0.177	0.842	0.137	0.000	-1.395	13.460	1	0.00	0.00	0.08
1P	113	-0.177	1.023	0.137	0.000	-1.395	12.640	1	0.00	0.00	0.08
2	113	-0.622	1.666	1.976	0.000	-0.477	23.740	1	0.00	0.00	0.14
7	113	-0.329	0.928	1.105	0.000	-0.271	12.910	1	0.00	0.00	0.08
8	113	-0.337	0.934	1.068	0.000	-0.257	12.900	1	0.00	0.00	0.08
9	113	-0.390	1.085	1.259	0.000	-0.306	14.610	1	0.00	0.00	0.09
10	113	-0.391	1.078	1.260	0.000	-0.306	14.630	1	0.00	0.00	0.09
11	113	-0.552	1.496	1.783	0.000	-0.433	21.310	1	0.00	0.00	0.13
12	113	-0.556	1.499	1.761	0.000	-0.424	21.300	1	0.00	0.00	0.13
13	113	-0.588	1.590	1.875	0.000	-0.454	22.330	1	0.00	0.00	0.13
14	113	-0.589	1.586	1.876	0.000	-0.454	22.340	1	0.00	0.00	0.13

ASTA NUM. 82 NI 163 NF 156 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.255	0.797	1.333	0.000	2.576	13.304	1	0.00	0.00	0.08	
1B	0	-0.255	1.029	1.333	0.000	2.576	12.876	1	0.00	0.00	0.08	
1C	0	-0.255	0.797	-2.914	0.000	-3.093	13.304	1	0.00	0.00	0.08	
1D	0	-0.255	1.029	-2.914	0.000	-3.093	12.876	1	0.00	0.00	0.08	
1E	0	-0.161	0.797	1.333	0.000	2.576	13.304	1	0.00	0.00	0.08	
1F	0	-0.161	1.029	1.333	0.000	2.576	12.876	1	0.00	0.00	0.08	
1G	0	-0.161	0.797	-2.914	0.000	-3.093	13.304	1	0.00	0.00	0.08	
1H	0	-0.161	1.029	-2.914	0.000	-3.093	12.876	1	0.00	0.00	0.08	
1I	0	-0.345	0.753	-0.124	0.000	0.682	13.506	1	0.00	0.00	0.08	
1J	0	-0.345	1.073	-0.124	0.000	0.682	12.674	1	0.00	0.00	0.08	
1K	0	-0.345	0.753	-1.457	0.000	-1.199	13.506	1	0.00	0.00	0.08	
1L	0	-0.345	1.073	-1.457	0.000	-1.199	12.674	1	0.00	0.00	0.08	
1M	0	-0.070	0.753	-0.124	0.000	0.682	13.506	1	0.00	0.00	0.08	
1N	0	-0.070	1.073	-0.124	0.000	0.682	12.674	1	0.00	0.00	0.08	
1O	0	-0.070	0.753	-1.457	0.000	-1.199	13.506	1	0.00	0.00	0.08	
1P	0	-0.070	1.073	-1.457	0.000	-1.199	12.674	1	0.00	0.00	0.08	
2	0	-0.374	1.693	-1.416	0.000	-0.465	23.820	1	0.00	0.00	0.14	
7	0	-0.219	0.880	-0.776	0.000	-0.252	12.950	1	0.00	0.00	0.08	
8	0	-0.202	0.885	-0.764	0.000	-0.250	12.940	1	0.00	0.00	0.08	
9	0	-0.240	1.026	-0.919	0.000	-0.298	14.660	1	0.00	0.00	0.09	
10	0	-0.240	1.019	-0.919	0.000	-0.299	14.680	1	0.00	0.00	0.09	
11	0	-0.343	1.509	-1.265	0.000	-0.414	21.380	1	0.00	0.00	0.13	
12	0	-0.333	1.512	-1.258	0.000	-0.413	21.380	1	0.00	0.00	0.13	
13	0	-0.356	1.597	-1.351	0.000	-0.442	22.410	1	0.00	0.00	0.13	
14	0	-0.356	1.592	-1.351	0.000	-0.442	22.420	1	0.00	0.00	0.13	
1A	56	-0.255	-2.692	1.333	0.000	1.837	12.784	1	0.01	0.00	0.08	
1B	56	-0.255	-2.460	1.333	0.000	1.837	12.469	1	0.01	0.00	0.07	
1C	56	-0.255	-2.692	-2.914	0.000	-1.465	12.784	1	0.01	0.00	0.08	
1D	56	-0.255	-2.460	-2.914	0.000	-1.465	12.469	1	0.01	0.00	0.07	
1E	56	-0.161	-2.692	1.333	0.000	1.837	12.784	1	0.01	0.00	0.08	
1F	56	-0.161	-2.460	1.333	0.000	1.837	12.469	1	0.01	0.00	0.07	
1G	56	-0.161	-2.692	-2.914	0.000	-1.465	12.784	1	0.01	0.00	0.08	
1H	56	-0.161	-2.460	-2.914	0.000	-1.465	12.469	1	0.01	0.00	0.07	
1I	56	-0.345	-2.736	-0.124	0.000	0.788	12.956	1	0.01	0.00	0.08	
1J	56	-0.345	-2.416	-0.124	0.000	0.788	12.297	1	0.01	0.00	0.07	
1K	56	-0.345	-2.736	-1.457	0.000	-0.416	12.956	1	0.01	0.00	0.08	
1L	56	-0.345	-2.416	-1.457	0.000	-0.416	12.297	1	0.01	0.00	0.07	
1M	56	-0.070	-2.736	-0.124	0.000	0.788	12.956	1	0.01	0.00	0.08	
1N	56	-0.070	-2.416	-0.124	0.000	0.788	12.297	1	0.01	0.00	0.07	
1O	56	-0.070	-2.736	-1.457	0.000	-0.416	12.956	1	0.01	0.00	0.08	
1P	56	-0.070	-2.416	-1.457	0.000	-0.416	12.297	1	0.01	0.00	0.07	
2	56	-0.374	-4.683	-1.416	0.000	0.332	22.978	1	0.01	0.00	0.14	
7	56	-0.219	-2.552	-0.776	0.000	0.185	12.480	1	0.01	0.00	0.07	
8	56	-0.202	-2.547	-0.764	0.000	0.180	12.475	1	0.01	0.00	0.07	
9	56	-0.240	-2.875	-0.919	0.000	0.219	14.142	1	0.01	0.00	0.08	
10	56	-0.240	-2.882	-0.919	0.000	0.218	14.152	1	0.01	0.00	0.08	
11	56	-0.343	-4.206	-1.265	0.000	0.298	20.622	1	0.01	0.00	0.12	
12	56	-0.333	-4.202	-1.258	0.000	0.295	20.622	1	0.01	0.00	0.12	
13	56	-0.356	-4.402	-1.351	0.000	0.318	21.621	1	0.01	0.00	0.13	
14	56	-0.356	-4.404	-1.351	0.000	0.318	21.626	1	0.01	0.00	0.13	
1A	113	-0.255	-6.181	1.333	0.000	1.097	10.300	1	0.02	0.00	0.06	
1B	113	-0.255	-5.949	1.333	0.000	1.097	10.100	1	0.02	0.00	0.06	
1C	113	-0.255	-6.181	-2.914	0.000	0.164	10.300	1	0.02	0.00	0.06	
1D	113	-0.255	-5.949	-2.914	0.000	0.164	10.100	1	0.02	0.00	0.06	
1E	113	-0.161	-6.181	1.333	0.000	1.097	10.300	1	0.02	0.00	0.06	
1F	113	-0.161	-5.949	1.333	0.000	1.097	10.100	1	0.02	0.00	0.06	
1G	113	-0.161	-6.181	-2.914	0.000	0.164	10.300	1	0.02	0.00	0.06	
1H	113	-0.161	-5.949	-2.914	0.000	0.164	10.100	1	0.02	0.00	0.06	

1I	113	-0.345	-6.225	-0.124	0.000	0.893	10.443	1	0.02	0.00	0.06
1J	113	-0.345	-5.905	-0.124	0.000	0.893	9.957	1	0.02	0.00	0.06
1K	113	-0.345	-6.225	-1.457	0.000	0.368	10.443	1	0.02	0.00	0.06
1L	113	-0.345	-5.905	-1.457	0.000	0.368	9.957	1	0.02	0.00	0.06
1M	113	-0.070	-6.225	-0.124	0.000	0.893	10.443	1	0.02	0.00	0.06
1N	113	-0.070	-5.905	-0.124	0.000	0.893	9.957	1	0.02	0.00	0.06
1O	113	-0.070	-6.225	-1.457	0.000	0.368	10.443	1	0.02	0.00	0.06
1P	113	-0.070	-5.905	-1.457	0.000	0.368	9.957	1	0.02	0.00	0.06
2	113	-0.374	-11.060	-1.416	0.000	1.129	18.550	1	0.03	0.00	0.11
7	113	-0.219	-5.983	-0.776	0.000	0.621	10.080	1	0.02	0.00	0.06
8	113	-0.202	-5.978	-0.764	0.000	0.610	10.080	1	0.02	0.00	0.06
9	113	-0.240	-6.776	-0.919	0.000	0.736	11.430	1	0.02	0.00	0.07
10	113	-0.240	-6.783	-0.919	0.000	0.736	11.430	1	0.02	0.00	0.07
11	113	-0.343	-9.920	-1.265	0.000	1.010	16.650	1	0.03	0.00	0.10
12	113	-0.333	-9.917	-1.258	0.000	1.003	16.650	1	0.03	0.00	0.10
13	113	-0.356	-10.400	-1.351	0.000	1.078	17.460	1	0.03	0.00	0.10
14	113	-0.356	-10.400	-1.351	0.000	1.078	17.460	1	0.03	0.00	0.10

ASTA NUM. 83 NI 156 NF 40 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.169	-5.990	9.515	0.000	3.290	10.323	1	0.02	0.00	0.06	
1B	0	0.169	-5.522	9.515	0.000	3.290	10.117	1	0.01	0.00	0.06	
1C	0	0.169	-5.990	-5.273	0.000	-1.712	10.323	1	0.02	0.00	0.06	
1D	0	0.169	-5.522	-5.273	0.000	-1.712	10.117	1	0.01	0.00	0.06	
1E	0	0.669	-5.990	9.515	0.000	3.290	10.323	1	0.02	0.00	0.06	
1F	0	0.669	-5.522	9.515	0.000	3.290	10.117	1	0.01	0.00	0.06	
1G	0	0.669	-5.990	-5.273	0.000	-1.712	10.323	1	0.02	0.00	0.06	
1H	0	0.669	-5.522	-5.273	0.000	-1.712	10.117	1	0.01	0.00	0.06	
1I	0	-0.048	-6.111	4.722	0.000	1.633	10.468	1	0.02	0.00	0.06	
1J	0	-0.048	-5.401	4.722	0.000	1.633	9.972	1	0.01	0.00	0.06	
1K	0	-0.048	-6.111	-0.480	0.000	-0.055	10.468	1	0.02	0.00	0.06	
1L	0	-0.048	-5.401	-0.480	0.000	-0.055	9.972	1	0.01	0.00	0.06	
1M	0	0.885	-6.111	4.722	0.000	1.633	10.468	1	0.02	0.00	0.06	
1N	0	0.885	-5.401	4.722	0.000	1.633	9.972	1	0.01	0.00	0.06	
1O	0	0.885	-6.111	-0.480	0.000	-0.055	10.468	1	0.02	0.00	0.06	
1P	0	0.885	-5.401	-0.480	0.000	-0.055	9.972	1	0.01	0.00	0.06	
2	0	0.758	-10.450	3.805	0.000	1.412	18.590	1	0.03	0.00	0.11	
7	0	0.378	-5.696	2.116	0.000	0.791	10.100	1	0.02	0.00	0.06	
8	0	0.410	-5.702	2.060	0.000	0.764	10.100	1	0.02	0.00	0.06	
9	0	0.473	-6.462	2.459	0.000	0.922	11.450	1	0.02	0.00	0.07	
10	0	0.474	-6.470	2.458	0.000	0.921	11.460	1	0.02	0.00	0.07	
11	0	0.658	-9.376	3.421	0.000	1.271	16.680	1	0.02	0.00	0.10	
12	0	0.677	-9.379	3.387	0.000	1.255	16.680	1	0.02	0.00	0.10	
13	0	0.715	-9.835	3.626	0.000	1.349	17.490	1	0.03	0.00	0.10	
14	0	0.715	-9.840	3.626	0.000	1.349	17.500	1	0.03	0.00	0.10	
1A	56	0.169	-9.477	9.515	0.000	-2.062	5.959	1	0.03	0.00	0.04	
1B	56	0.169	-9.009	9.515	0.000	-2.062	6.038	1	0.02	0.00	0.04	
1C	56	0.169	-9.477	-5.273	0.000	1.254	5.959	1	0.03	0.00	0.04	
1D	56	0.169	-9.009	-5.273	0.000	1.254	6.038	1	0.02	0.00	0.04	
1E	56	0.669	-9.477	9.515	0.000	-2.062	5.959	1	0.03	0.00	0.04	
1F	56	0.669	-9.009	9.515	0.000	-2.062	6.038	1	0.02	0.00	0.04	
1G	56	0.669	-9.477	-5.273	0.000	1.254	5.959	1	0.03	0.00	0.04	
1H	56	0.669	-9.009	-5.273	0.000	1.254	6.038	1	0.02	0.00	0.04	
1I	56	-0.048	-9.598	4.722	0.000	-1.023	6.041	1	0.03	0.00	0.04	
1J	56	-0.048	-8.888	4.722	0.000	-1.023	5.957	1	0.02	0.00	0.04	
1K	56	-0.048	-9.598	-0.480	0.000	0.215	6.041	1	0.03	0.00	0.04	
1L	56	-0.048	-8.888	-0.480	0.000	0.215	5.957	1	0.02	0.00	0.04	
1M	56	0.885	-9.598	4.722	0.000	-1.023	6.041	1	0.03	0.00	0.04	
1N	56	0.885	-8.888	4.722	0.000	-1.023	5.957	1	0.02	0.00	0.04	
1O	56	0.885	-9.598	-0.480	0.000	0.215	6.041	1	0.03	0.00	0.04	
1P	56	0.885	-8.888	-0.480	0.000	0.215	5.957	1	0.02	0.00	0.04	
2	56	0.758	-16.825	3.805	0.000	-0.729	10.920	1	0.04	0.00	0.06	
7	56	0.378	-9.128	2.116	0.000	-0.399	5.929	1	0.02	0.00	0.04	
8	56	0.410	-9.131	2.060	0.000	-0.395	5.925	1	0.02	0.00	0.04	
9	56	0.473	-10.361	2.459	0.000	-0.462	6.717	1	0.03	0.00	0.04	
10	56	0.474	-10.370	2.458	0.000	-0.462	6.722	1	0.03	0.00	0.04	
11	56	0.658	-15.088	3.421	0.000	-0.653	9.799	1	0.04	0.00	0.06	
12	56	0.677	-15.094	3.387	0.000	-0.651	9.797	1	0.04	0.00	0.06	
13	56	0.715	-15.833	3.626	0.000	-0.691	10.272	1	0.04	0.00	0.06	
14	56	0.715	-15.835	3.626	0.000	-0.691	10.277	1	0.04	0.00	0.06	
1A	113	0.169	-12.964	9.515	0.000	-7.414	-0.367	1	0.03	0.00	0.09	
1B	113	0.169	-12.496	9.515	0.000	-7.414	-0.003	1	0.03	0.00	0.09	
1C	113	0.169	-12.964	-5.273	0.000	4.220	-0.367	1	0.03	0.00	0.05	
1D	113	0.169	-12.496	-5.273	0.000	4.220	-0.003	1	0.03	0.00	0.05	
1E	113	0.669	-12.964	9.515	0.000	-7.414	-0.367	1	0.03	0.00	0.09	
1F	113	0.669	-12.496	9.515	0.000	-7.414	-0.003	1	0.03	0.00	0.09	
1G	113	0.669	-12.964	-5.273	0.000	4.220	-0.367	1	0.03	0.00	0.05	
1H	113	0.669	-12.496	-5.273	0.000	4.220	-0.003	1	0.03	0.00	0.05	
1I	113	-0.048	-13.085	4.722	0.000	-3.679	-0.349	1	0.03	0.00	0.05	
1J	113	-0.048	-12.375	4.722	0.000	-3.679	-0.021	1	0.03	0.00	0.05	
1K	113	-0.048	-13.085	-0.480	0.000	0.485	-0.349	1	0.03	0.00	0.01	
1L	113	-0.048	-12.375	-0.480	0.000	0.485	-0.021	1	0.03	0.00	0.01	
1M	113	0.885	-13.085	4.722	0.000	-3.679	-0.349	1	0.03	0.00	0.05	
1N	113	0.885	-12.375	4.722	0.000	-3.679	-0.021	1	0.03	0.00	0.05	
1O	113	0.885	-13.085	-0.480	0.000	0.485	-0.349	1	0.03	0.00	0.01	
1P	113	0.885	-12.375	-0.480	0.000	0.485	-0.021	1	0.03	0.00	0.01	
2	113	0.758	-23.200	3.805	0.000	-2.869	-0.338	1	0.06	0.00	0.04	

7	113	0.378	-12.560	2.116	0.000	-1.590	-0.172	1	0.03	0.00	0.02
8	113	0.410	-12.560	2.060	0.000	-1.554	-0.179	1	0.03	0.00	0.02
9	113	0.473	-14.260	2.459	0.000	-1.845	-0.210	1	0.04	0.00	0.02
10	113	0.474	-14.270	2.458	0.000	-1.845	-0.211	1	0.04	0.00	0.02
11	113	0.658	-20.800	3.421	0.000	-2.578	-0.296	1	0.06	0.00	0.03
12	113	0.677	-20.810	3.387	0.000	-2.556	-0.301	1	0.06	0.00	0.03
13	113	0.715	-21.830	3.626	0.000	-2.730	-0.319	1	0.06	0.00	0.03
14	113	0.715	-21.830	3.626	0.000	-2.730	-0.319	1	0.06	0.00	0.03

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.453	-7.790	13.435	1	0.0546	1.0153	1.0051	--	--	0.00	--	0.18	Snell. 'zx'= 348
1B	-0.453	-7.790	12.905	1	0.0546	1.0153	1.0053	--	--	0.00	--	0.18	Snell. 'zx'= 348
1C	-0.453	-7.889	13.435	1	0.0546	1.0151	1.0051	--	--	0.00	--	0.18	Snell. 'zx'= 348
1D	-0.453	-7.889	12.905	1	0.0546	1.0151	1.0053	--	--	0.00	--	0.18	Snell. 'zx'= 348
1E	-0.300	-7.790	13.435	1	0.0546	1.0102	1.0034	--	--	0.00	--	0.18	Snell. 'zx'= 348
1F	-0.300	-7.790	12.905	1	0.0546	1.0102	1.0035	--	--	0.00	--	0.18	Snell. 'zx'= 348
1G	-0.300	-7.889	13.435	1	0.0546	1.0100	1.0034	--	--	0.00	--	0.18	Snell. 'zx'= 348
1H	-0.300	-7.889	12.905	1	0.0546	1.0100	1.0035	--	--	0.00	--	0.18	Snell. 'zx'= 348
1I	-0.512	-4.143	13.763	1	0.0546	1.0348	1.0057	--	--	0.00	--	0.14	Snell. 'zx'= 348
1J	-0.512	-4.143	12.674	1	0.0546	1.0348	1.0060	--	--	0.00	--	0.13	Snell. 'zx'= 348
1K	-0.512	-4.187	13.763	1	0.0546	1.0343	1.0057	--	--	0.00	--	0.14	Snell. 'zx'= 348
1L	-0.512	-4.187	12.674	1	0.0546	1.0343	1.0060	--	--	0.00	--	0.13	Snell. 'zx'= 348
1M	-0.260	-4.143	13.763	1	0.0546	1.0176	1.0029	--	--	0.00	--	0.14	Snell. 'zx'= 348
1N	-0.260	-4.143	12.674	1	0.0546	1.0176	1.0030	--	--	0.00	--	0.13	Snell. 'zx'= 348
1O	-0.260	-4.187	13.763	1	0.0546	1.0174	1.0029	--	--	0.00	--	0.14	Snell. 'zx'= 348
1P	-0.260	-4.187	12.674	1	0.0546	1.0174	1.0030	--	--	0.00	--	0.13	Snell. 'zx'= 348
2	-0.638	-3.971	23.960	1	0.0546	1.0231	1.0069	--	--	0.01	--	0.20	Snell. 'zx'= 348
7	-0.363	-2.199	13.020	1	0.0546	1.0071	1.0034	--	--	0.00	--	0.11	Snell. 'zx'= 348
8	-0.346	-2.154	13.020	1	0.0546	1.0064	1.0032	--	--	0.00	--	0.11	Snell. 'zx'= 348
9	-0.400	-2.539	14.760	1	0.0546	1.0097	1.0039	--	--	0.00	--	0.12	Snell. 'zx'= 348
10	-0.400	-2.536	14.740	1	0.0546	1.0097	1.0039	--	--	0.00	--	0.12	Snell. 'zx'= 348
11	-0.581	-3.567	21.500	1	0.0546	1.0196	1.0062	--	--	0.01	--	0.18	Snell. 'zx'= 348
12	-0.570	-3.540	21.500	1	0.0546	1.0192	1.0060	--	--	0.01	--	0.18	Snell. 'zx'= 348
13	-0.603	-3.771	22.540	1	0.0546	1.0211	1.0065	--	--	0.01	--	0.19	Snell. 'zx'= 348
14	-0.603	-3.770	22.530	1	0.0546	1.0211	1.0064	--	--	0.01	--	0.19	Snell. 'zx'= 348

ASTA NUM. 5 NI 93 NF 172 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.179	12.860	8.920	0.000	6.979	-0.025	1	0.03	0.00	0.09	
1B	0	-0.179	13.600	8.920	0.000	6.979	-0.213	1	0.04	0.00	0.09	
1C	0	-0.179	12.860	-3.898	0.000	-3.253	-0.025	1	0.03	0.00	0.04	
1D	0	-0.179	13.600	-3.898	0.000	-3.253	-0.213	1	0.04	0.00	0.04	
1E	0	0.371	12.860	8.920	0.000	6.979	-0.025	1	0.03	0.00	0.09	
1F	0	0.371	13.600	8.920	0.000	6.979	-0.213	1	0.04	0.00	0.09	
1G	0	0.371	12.860	-3.898	0.000	-3.253	-0.025	1	0.03	0.00	0.04	
1H	0	0.371	13.600	-3.898	0.000	-3.253	-0.213	1	0.04	0.00	0.04	
1I	0	-0.448	12.799	4.695	0.000	3.644	-0.024	1	0.03	0.00	0.05	
1J	0	-0.448	13.661	4.695	0.000	3.644	-0.213	1	0.04	0.00	0.05	
1K	0	-0.448	12.799	0.327	0.000	0.082	-0.024	1	0.03	0.00	0.00	
1L	0	-0.448	13.661	0.327	0.000	0.082	-0.213	1	0.04	0.00	0.00	
1M	0	0.641	12.799	4.695	0.000	3.644	-0.024	1	0.03	0.00	0.05	
1N	0	0.641	13.661	4.695	0.000	3.644	-0.213	1	0.04	0.00	0.05	
1O	0	0.641	12.799	0.327	0.000	0.082	-0.024	1	0.03	0.00	0.00	
1P	0	0.641	13.661	0.327	0.000	0.082	-0.213	1	0.04	0.00	0.00	
2	0	0.171	24.090	4.509	0.000	3.348	-0.215	1	0.06	0.00	0.04	
7	0	0.058	13.090	2.509	0.000	1.858	-0.116	1	0.03	0.00	0.02	
8	0	0.091	13.060	2.424	0.000	1.801	-0.116	1	0.03	0.00	0.02	
9	0	0.115	14.780	2.908	0.000	2.152	-0.130	1	0.04	0.00	0.03	
10	0	0.115	14.780	2.906	0.000	2.151	-0.130	1	0.04	0.00	0.03	
11	0	0.131	21.620	4.056	0.000	3.010	-0.192	1	0.06	0.00	0.04	
12	0	0.151	21.610	4.005	0.000	2.975	-0.192	1	0.06	0.00	0.04	
13	0	0.165	22.640	4.295	0.000	3.186	-0.200	1	0.06	0.00	0.04	
14	0	0.165	22.640	4.294	0.000	3.185	-0.200	1	0.06	0.00	0.04	
1A	56	-0.179	9.370	8.920	0.000	1.961	6.643	1	0.02	0.00	0.04	
1B	56	-0.179	10.109	8.920	0.000	1.961	6.040	1	0.03	0.00	0.04	
1C	56	-0.179	9.370	-3.898	0.000	-1.060	6.643	1	0.02	0.00	0.04	
1D	56	-0.179	10.109	-3.898	0.000	-1.060	6.040	1	0.03	0.00	0.04	
1E	56	0.371	9.370	8.920	0.000	1.961	6.643	1	0.02	0.00	0.04	
1F	56	0.371	10.109	8.920	0.000	1.961	6.040	1	0.03	0.00	0.04	
1G	56	0.371	9.370	-3.898	0.000	-1.060	6.643	1	0.02	0.00	0.04	
1H	56	0.371	10.109	-3.898	0.000	-1.060	6.040	1	0.03	0.00	0.04	
1I	56	-0.448	9.308	4.695	0.000	1.003	6.678	1	0.02	0.00	0.04	
1J	56	-0.448	10.171	4.695	0.000	1.003	6.005	1	0.03	0.00	0.04	
1K	56	-0.448	9.308	0.327	0.000	-0.102	6.678	1	0.02	0.00	0.04	
1L	56	-0.448	10.171	0.327	0.000	-0.102	6.005	1	0.03	0.00	0.04	
1M	56	0.641	9.308	4.695	0.000	1.003	6.678	1	0.02	0.00	0.04	
1N	56	0.641	10.171	4.695	0.000	1.003	6.005	1	0.03	0.00	0.04	
1O	56	0.641	9.308	0.327	0.000	-0.102	6.678	1	0.02	0.00	0.04	
1P	56	0.641	10.171	0.327	0.000	-0.102	6.005	1	0.03	0.00	0.04	

2	56	0.171	17.710	4.509	0.000	0.811	11.541	1	0.05	0.00	0.07
7	56	0.058	9.658	2.509	0.000	0.447	6.282	1	0.03	0.00	0.04
8	56	0.091	9.630	2.424	0.000	0.438	6.267	1	0.03	0.00	0.04
9	56	0.115	10.878	2.908	0.000	0.516	7.087	1	0.03	0.00	0.04
10	56	0.115	10.877	2.906	0.000	0.516	7.082	1	0.03	0.00	0.04
11	56	0.131	15.905	4.056	0.000	0.729	10.366	1	0.04	0.00	0.06
12	56	0.151	15.895	4.005	0.000	0.722	10.356	1	0.04	0.00	0.06
13	56	0.165	16.645	4.295	0.000	0.770	10.846	1	0.04	0.00	0.06
14	56	0.165	16.640	4.294	0.000	0.769	10.846	1	0.04	0.00	0.06
1A	113	-0.179	5.879	8.920	0.000	-3.057	11.349	1	0.02	0.00	0.07
1B	113	-0.179	6.619	8.920	0.000	-3.057	10.331	1	0.02	0.00	0.06
1C	113	-0.179	5.879	-3.898	0.000	1.132	11.349	1	0.02	0.00	0.07
1D	113	-0.179	6.619	-3.898	0.000	1.132	10.331	1	0.02	0.00	0.06
1E	113	0.371	5.879	8.920	0.000	-3.057	11.349	1	0.02	0.00	0.07
1F	113	0.371	6.619	8.920	0.000	-3.057	10.331	1	0.02	0.00	0.06
1G	113	0.371	5.879	-3.898	0.000	1.132	11.349	1	0.02	0.00	0.07
1H	113	0.371	6.619	-3.898	0.000	1.132	10.331	1	0.02	0.00	0.06
1I	113	-0.448	5.818	4.695	0.000	-1.639	11.419	1	0.02	0.00	0.07
1J	113	-0.448	6.680	4.695	0.000	-1.639	10.261	1	0.02	0.00	0.06
1K	113	-0.448	5.818	0.327	0.000	-0.286	11.419	1	0.02	0.00	0.07
1L	113	-0.448	6.680	0.327	0.000	-0.286	10.261	1	0.02	0.00	0.06
1M	113	0.641	5.818	4.695	0.000	-1.639	11.419	1	0.02	0.00	0.07
1N	113	0.641	6.680	4.695	0.000	-1.639	10.261	1	0.02	0.00	0.06
1O	113	0.641	5.818	0.327	0.000	-0.286	11.419	1	0.02	0.00	0.07
1P	113	0.641	6.680	0.327	0.000	-0.286	10.261	1	0.02	0.00	0.06
2	113	0.171	11.330	4.509	0.000	-1.725	19.710	1	0.03	0.00	0.12
7	113	0.058	6.225	2.509	0.000	-0.965	10.750	1	0.02	0.00	0.06
8	113	0.091	6.199	2.424	0.000	-0.926	10.720	1	0.02	0.00	0.06
9	113	0.115	6.977	2.908	0.000	-1.120	12.110	1	0.02	0.00	0.07
10	113	0.115	6.973	2.906	0.000	-1.119	12.100	1	0.02	0.00	0.07
11	113	0.131	10.190	4.056	0.000	-1.553	17.710	1	0.03	0.00	0.11
12	113	0.151	10.180	4.005	0.000	-1.530	17.690	1	0.03	0.00	0.11
13	113	0.165	10.650	4.295	0.000	-1.646	18.520	1	0.03	0.00	0.11
14	113	0.165	10.640	4.294	0.000	-1.646	18.520	1	0.03	0.00	0.11

ASTA NUM. 60 NI 172 NF 179 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.226	5.922	1.926	0.000	-0.412	11.311	1	0.02	0.00	0.07	
1B	0	-0.226	6.014	1.926	0.000	-0.412	10.229	1	0.02	0.00	0.06	
1C	0	-0.226	5.922	-3.021	0.000	-0.666	11.311	1	0.02	0.00	0.07	
1D	0	-0.226	6.014	-3.021	0.000	-0.666	10.229	1	0.02	0.00	0.06	
1E	0	-0.110	5.922	1.926	0.000	-0.412	11.311	1	0.02	0.00	0.07	
1F	0	-0.110	6.014	1.926	0.000	-0.412	10.229	1	0.02	0.00	0.06	
1G	0	-0.110	5.922	-3.021	0.000	-0.666	11.311	1	0.02	0.00	0.07	
1H	0	-0.110	6.014	-3.021	0.000	-0.666	10.229	1	0.02	0.00	0.06	
1I	0	-0.346	5.847	0.198	0.000	-0.408	11.354	1	0.02	0.00	0.07	
1J	0	-0.346	6.089	0.198	0.000	-0.408	10.186	1	0.02	0.00	0.06	
1K	0	-0.346	5.847	-1.293	0.000	-0.670	11.354	1	0.02	0.00	0.07	
1L	0	-0.346	6.089	-1.293	0.000	-0.670	10.186	1	0.02	0.00	0.06	
1M	0	0.010	5.847	0.198	0.000	-0.408	11.354	1	0.02	0.00	0.07	
1N	0	0.010	6.089	0.198	0.000	-0.408	10.186	1	0.02	0.00	0.06	
1O	0	0.010	5.847	-1.293	0.000	-0.670	11.354	1	0.02	0.00	0.07	
1P	0	0.010	6.089	-1.293	0.000	-0.670	10.186	1	0.02	0.00	0.06	
2	0	-0.301	10.890	-0.976	0.000	-0.961	19.600	1	0.03	0.00	0.12	
7	0	-0.180	5.888	-0.534	0.000	-0.530	10.680	1	0.02	0.00	0.06	
8	0	-0.163	5.889	-0.523	0.000	-0.514	10.660	1	0.02	0.00	0.06	
9	0	-0.194	6.666	-0.646	0.000	-0.635	12.040	1	0.02	0.00	0.07	
10	0	-0.194	6.661	-0.645	0.000	-0.635	12.040	1	0.02	0.00	0.07	
11	0	-0.278	9.766	-0.869	0.000	-0.859	17.600	1	0.03	0.00	0.10	
12	0	-0.268	9.766	-0.863	0.000	-0.850	17.590	1	0.03	0.00	0.10	
13	0	-0.287	10.230	-0.937	0.000	-0.922	18.420	1	0.03	0.00	0.11	
14	0	-0.287	10.230	-0.936	0.000	-0.922	18.410	1	0.03	0.00	0.11	
1A	56	-0.226	2.433	1.926	0.000	1.287	13.712	1	0.01	0.00	0.08	
1B	56	-0.226	2.525	1.926	0.000	1.287	12.580	1	0.01	0.00	0.07	
1C	56	-0.226	2.433	-3.021	0.000	-1.749	13.712	1	0.01	0.00	0.08	
1D	56	-0.226	2.525	-3.021	0.000	-1.749	12.580	1	0.01	0.00	0.07	
1E	56	-0.110	2.433	1.926	0.000	1.287	13.712	1	0.01	0.00	0.08	
1F	56	-0.110	2.525	1.926	0.000	1.287	12.580	1	0.01	0.00	0.07	
1G	56	-0.110	2.433	-3.021	0.000	-1.749	13.712	1	0.01	0.00	0.08	
1H	56	-0.110	2.525	-3.021	0.000	-1.749	12.580	1	0.01	0.00	0.07	
1I	56	-0.346	2.358	0.198	0.000	0.319	13.798	1	0.01	0.00	0.08	
1J	56	-0.346	2.600	0.198	0.000	0.319	12.495	1	0.01	0.00	0.07	
1K	56	-0.346	2.358	-1.293	0.000	-0.781	13.798	1	0.01	0.00	0.08	
1L	56	-0.346	2.600	-1.293	0.000	-0.781	12.495	1	0.01	0.00	0.07	
1M	56	0.010	2.358	0.198	0.000	0.319	13.798	1	0.01	0.00	0.08	
1N	56	0.010	2.600	0.198	0.000	0.319	12.495	1	0.01	0.00	0.07	
1O	56	0.010	2.358	-1.293	0.000	-0.781	13.798	1	0.01	0.00	0.08	
1P	56	0.010	2.600	-1.293	0.000	-0.781	12.495	1	0.01	0.00	0.07	
2	56	-0.301	4.512	-0.976	0.000	-0.412	23.928	1	0.01	0.00	0.14	
7	56	-0.180	2.457	-0.534	0.000	-0.230	13.030	1	0.01	0.00	0.08	
8	56	-0.163	2.458	-0.523	0.000	-0.220	13.005	1	0.01	0.00	0.08	
9	56	-0.194	2.765	-0.646	0.000	-0.271	14.692	1	0.01	0.00	0.09	
10	56	-0.194	2.760	-0.645	0.000	-0.272	14.687	1	0.01	0.00	0.09	
11	56	-0.278	4.052	-0.869	0.000	-0.370	21.487	1	0.01	0.00	0.13	
12	56	-0.268	4.052	-0.863	0.000	-0.364	21.477	1	0.01	0.00	0.13	
13	56	-0.287	4.235	-0.937	0.000	-0.395	22.486	1	0.01	0.00	0.13	
14	56	-0.287	4.234	-0.936	0.000	-0.395	22.481	1	0.01	0.00	0.13	

1A	113	-0.226	-1.056	1.926	0.000	2.986	14.151	1	0.00	0.00	0.08
1B	113	-0.226	-0.964	1.926	0.000	2.986	12.969	1	0.00	0.00	0.08
1C	113	-0.226	-1.056	-3.021	0.000	-2.832	14.151	1	0.00	0.00	0.08
1D	113	-0.226	-0.964	-3.021	0.000	-2.832	12.969	1	0.00	0.00	0.08
1E	113	-0.110	-1.056	1.926	0.000	2.986	14.151	1	0.00	0.00	0.08
1F	113	-0.110	-0.964	1.926	0.000	2.986	12.969	1	0.00	0.00	0.08
1G	113	-0.110	-1.056	-3.021	0.000	-2.832	14.151	1	0.00	0.00	0.08
1H	113	-0.110	-0.964	-3.021	0.000	-2.832	12.969	1	0.00	0.00	0.08
1I	113	-0.346	-1.131	0.198	0.000	1.046	14.279	1	0.00	0.00	0.08
1J	113	-0.346	-0.889	0.198	0.000	1.046	12.841	1	0.00	0.00	0.08
1K	113	-0.346	-1.131	-1.293	0.000	-0.892	14.279	1	0.00	0.00	0.08
1L	113	-0.346	-0.889	-1.293	0.000	-0.892	12.841	1	0.00	0.00	0.08
1M	113	0.010	-1.131	0.198	0.000	1.046	14.279	1	0.00	0.00	0.08
1N	113	0.010	-0.889	0.198	0.000	1.046	12.841	1	0.00	0.00	0.08
1O	113	0.010	-1.131	-1.293	0.000	-0.892	14.279	1	0.00	0.00	0.08
1P	113	0.010	-0.889	-1.293	0.000	-0.892	12.841	1	0.00	0.00	0.08
2	113	-0.301	-1.866	-0.976	0.000	0.137	24.670	1	0.00	0.00	0.15
7	113	-0.180	-0.974	-0.534	0.000	0.070	13.450	1	0.00	0.00	0.08
8	113	-0.163	-0.974	-0.523	0.000	0.074	13.420	1	0.00	0.00	0.08
9	113	-0.194	-1.136	-0.646	0.000	0.092	15.150	1	0.00	0.00	0.09
10	113	-0.194	-1.141	-0.645	0.000	0.091	15.140	1	0.00	0.00	0.09
11	113	-0.278	-1.663	-0.869	0.000	0.119	22.160	1	0.00	0.00	0.13
12	113	-0.268	-1.662	-0.863	0.000	0.121	22.150	1	0.00	0.00	0.13
13	113	-0.287	-1.760	-0.937	0.000	0.132	23.180	1	0.00	0.00	0.14
14	113	-0.287	-1.763	-0.936	0.000	0.131	23.180	1	0.00	0.00	0.14

ASTA NUM. 61 NI 179 NF 186 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.287	-1.403	3.514	0.000	3.085	14.133	1	0.00	0.00	0.08	
1B	0	-0.287	-0.945	3.514	0.000	3.085	12.947	1	0.00	0.00	0.08	
1C	0	-0.287	-1.403	-1.541	0.000	-2.781	14.133	1	0.00	0.00	0.08	
1D	0	-0.287	-0.945	-1.541	0.000	-2.781	12.947	1	0.00	0.00	0.08	
1E	0	-0.060	-1.403	3.514	0.000	3.085	14.133	1	0.00	0.00	0.08	
1F	0	-0.060	-0.945	3.514	0.000	3.085	12.947	1	0.00	0.00	0.08	
1G	0	-0.060	-1.403	-1.541	0.000	-2.781	14.133	1	0.00	0.00	0.08	
1H	0	-0.060	-0.945	-1.541	0.000	-2.781	12.947	1	0.00	0.00	0.08	
1I	0	-0.358	-1.404	2.071	0.000	1.294	14.256	1	0.00	0.00	0.08	
1J	0	-0.358	-0.944	2.071	0.000	1.294	12.824	1	0.00	0.00	0.08	
1K	0	-0.358	-1.404	-0.098	0.000	-0.990	14.256	1	0.00	0.00	0.08	
1L	0	-0.358	-0.944	-0.098	0.000	-0.990	12.824	1	0.00	0.00	0.08	
1M	0	0.011	-1.404	2.071	0.000	1.294	14.256	1	0.00	0.00	0.08	
1N	0	0.011	-0.944	2.071	0.000	1.294	12.824	1	0.00	0.00	0.08	
1O	0	0.011	-1.404	-0.098	0.000	-0.990	14.256	1	0.00	0.00	0.08	
1P	0	0.011	-0.944	-0.098	0.000	-0.990	12.824	1	0.00	0.00	0.08	
2	0	-0.312	-2.105	1.775	0.000	0.273	24.620	1	0.01	0.00	0.15	
7	0	-0.160	-1.190	0.995	0.000	0.158	13.420	1	0.00	0.00	0.08	
8	0	-0.168	-1.181	0.958	0.000	0.148	13.400	1	0.00	0.00	0.08	
9	0	-0.201	-1.318	1.132	0.000	0.175	15.120	1	0.00	0.00	0.09	
10	0	-0.200	-1.331	1.129	0.000	0.174	15.110	1	0.00	0.00	0.09	
11	0	-0.273	-1.903	1.602	0.000	0.249	22.120	1	0.01	0.00	0.13	
12	0	-0.277	-1.897	1.580	0.000	0.243	22.100	1	0.01	0.00	0.13	
13	0	-0.297	-1.980	1.685	0.000	0.259	23.140	1	0.01	0.00	0.14	
14	0	-0.297	-1.988	1.683	0.000	0.259	23.130	1	0.01	0.00	0.14	
1A	56	-0.287	-4.892	3.514	0.000	1.143	12.360	1	0.01	0.00	0.07	
1B	56	-0.287	-4.434	3.514	0.000	1.143	11.432	1	0.01	0.00	0.07	
1C	56	-0.287	-4.892	-1.541	0.000	-1.949	12.360	1	0.01	0.00	0.07	
1D	56	-0.287	-4.434	-1.541	0.000	-1.949	11.432	1	0.01	0.00	0.07	
1E	56	-0.060	-4.892	3.514	0.000	1.143	12.360	1	0.01	0.00	0.07	
1F	56	-0.060	-4.434	3.514	0.000	1.143	11.432	1	0.01	0.00	0.07	
1G	56	-0.060	-4.892	-1.541	0.000	-1.949	12.360	1	0.01	0.00	0.07	
1H	56	-0.060	-4.434	-1.541	0.000	-1.949	11.432	1	0.01	0.00	0.07	
1I	56	-0.358	-4.893	2.071	0.000	0.091	12.483	1	0.01	0.00	0.07	
1J	56	-0.358	-4.433	2.071	0.000	0.091	11.309	1	0.01	0.00	0.07	
1K	56	-0.358	-4.893	-0.098	0.000	-0.897	12.483	1	0.01	0.00	0.07	
1L	56	-0.358	-4.433	-0.098	0.000	-0.897	11.309	1	0.01	0.00	0.07	
1M	56	0.011	-4.893	2.071	0.000	0.091	12.483	1	0.01	0.00	0.07	
1N	56	0.011	-4.433	2.071	0.000	0.091	11.309	1	0.01	0.00	0.07	
1O	56	0.011	-4.893	-0.098	0.000	-0.897	12.483	1	0.01	0.00	0.07	
1P	56	0.011	-4.433	-0.098	0.000	-0.897	11.309	1	0.01	0.00	0.07	
2	56	-0.312	-8.483	1.775	0.000	-0.726	21.643	1	0.02	0.00	0.13	
7	56	-0.160	-4.621	0.995	0.000	-0.402	11.787	1	0.01	0.00	0.07	
8	56	-0.168	-4.612	0.958	0.000	-0.391	11.769	1	0.01	0.00	0.07	
9	56	-0.201	-5.219	1.132	0.000	-0.462	13.283	1	0.01	0.00	0.08	
10	56	-0.200	-5.233	1.129	0.000	-0.462	13.264	1	0.01	0.00	0.08	
11	56	-0.273	-7.617	1.602	0.000	-0.652	19.442	1	0.02	0.00	0.12	
12	56	-0.277	-7.614	1.580	0.000	-0.645	19.427	1	0.02	0.00	0.12	
13	56	-0.297	-7.975	1.685	0.000	-0.688	20.341	1	0.02	0.00	0.12	
14	56	-0.297	-7.984	1.683	0.000	-0.688	20.326	1	0.02	0.00	0.12	
1A	113	-0.287	-8.381	3.514	0.000	-0.798	8.625	1	0.02	0.00	0.05	
1B	113	-0.287	-7.923	3.514	0.000	-0.798	7.955	1	0.02	0.00	0.05	
1C	113	-0.287	-8.381	-1.541	0.000	-1.117	8.625	1	0.02	0.00	0.05	
1D	113	-0.287	-7.923	-1.541	0.000	-1.117	7.955	1	0.02	0.00	0.05	
1E	113	-0.060	-8.381	3.514	0.000	-0.798	8.625	1	0.02	0.00	0.05	
1F	113	-0.060	-7.923	3.514	0.000	-0.798	7.955	1	0.02	0.00	0.05	
1G	113	-0.060	-8.381	-1.541	0.000	-1.117	8.625	1	0.02	0.00	0.05	
1H	113	-0.060	-7.923	-1.541	0.000	-1.117	7.955	1	0.02	0.00	0.05	

1I	113	-0.358	-8.382	2.071	0.000	-1.111	8.748	1	0.02	0.00	0.05
1J	113	-0.358	-7.922	2.071	0.000	-1.111	7.832	1	0.02	0.00	0.05
1K	113	-0.358	-8.382	-0.098	0.000	-0.804	8.748	1	0.02	0.00	0.05
1L	113	-0.358	-7.922	-0.098	0.000	-0.804	7.832	1	0.02	0.00	0.05
1M	113	0.011	-8.382	2.071	0.000	-1.111	8.748	1	0.02	0.00	0.05
1N	113	0.011	-7.922	2.071	0.000	-1.111	7.832	1	0.02	0.00	0.05
1O	113	0.011	-8.382	-0.098	0.000	-0.804	8.748	1	0.02	0.00	0.05
1P	113	0.011	-7.922	-0.098	0.000	-0.804	7.832	1	0.02	0.00	0.05
2	113	-0.312	-14.860	1.775	0.000	-1.724	15.080	1	0.04	0.00	0.09
7	113	-0.160	-8.052	0.995	0.000	-0.962	8.223	1	0.02	0.00	0.05
8	113	-0.168	-8.043	0.958	0.000	-0.930	8.208	1	0.02	0.00	0.05
9	113	-0.201	-9.120	1.132	0.000	-1.099	9.251	1	0.02	0.00	0.05
10	113	-0.200	-9.134	1.129	0.000	-1.097	9.224	1	0.02	0.00	0.05
11	113	-0.273	-13.330	1.602	0.000	-1.554	13.550	1	0.04	0.00	0.08
12	113	-0.277	-13.330	1.580	0.000	-1.534	13.540	1	0.04	0.00	0.08
13	113	-0.297	-13.970	1.685	0.000	-1.636	14.170	1	0.04	0.00	0.08
14	113	-0.297	-13.980	1.683	0.000	-1.635	14.150	1	0.04	0.00	0.08

ASTA NUM. 62 NI 186 NF 78 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.035	-9.326	3.193	0.000	0.737	8.607	1	0.02	0.00	0.05	
1B	0	0.035	-8.070	3.193	0.000	0.737	8.003	1	0.02	0.00	0.05	
1C	0	0.035	-9.326	-9.637	0.000	-3.463	8.607	1	0.02	0.00	0.05	
1D	0	0.035	-8.070	-9.637	0.000	-3.463	8.003	1	0.02	0.00	0.05	
1E	0	0.455	-9.326	3.193	0.000	0.737	8.607	1	0.02	0.00	0.05	
1F	0	0.455	-8.070	3.193	0.000	0.737	8.003	1	0.02	0.00	0.05	
1G	0	0.455	-9.326	-9.637	0.000	-3.463	8.607	1	0.02	0.00	0.05	
1H	0	0.455	-8.070	-9.637	0.000	-3.463	8.003	1	0.02	0.00	0.05	
1I	0	-0.290	-9.321	-0.897	0.000	-0.571	8.750	1	0.02	0.00	0.05	
1J	0	-0.290	-8.075	-0.897	0.000	-0.571	7.860	1	0.02	0.00	0.05	
1K	0	-0.290	-9.321	-5.547	0.000	-2.155	8.750	1	0.02	0.00	0.05	
1L	0	-0.290	-8.075	-5.547	0.000	-2.155	7.860	1	0.02	0.00	0.05	
1M	0	0.780	-9.321	-0.897	0.000	-0.571	8.750	1	0.02	0.00	0.05	
1N	0	0.780	-8.075	-0.897	0.000	-0.571	7.860	1	0.02	0.00	0.05	
1O	0	0.780	-9.321	-5.547	0.000	-2.155	8.750	1	0.02	0.00	0.05	
1P	0	0.780	-8.075	-5.547	0.000	-2.155	7.860	1	0.02	0.00	0.05	
2	0	0.442	-15.780	-5.803	0.000	-2.455	15.110	1	0.04	0.00	0.09	
7	0	0.282	-8.667	-3.202	0.000	-1.353	8.239	1	0.02	0.00	0.05	
8	0	0.239	-8.617	-3.129	0.000	-1.323	8.222	1	0.02	0.00	0.05	
9	0	0.280	-9.711	-3.695	0.000	-1.564	9.266	1	0.03	0.00	0.06	
10	0	0.279	-9.728	-3.689	0.000	-1.561	9.239	1	0.03	0.00	0.05	
11	0	0.420	-14.200	-5.211	0.000	-2.203	13.570	1	0.04	0.00	0.08	
12	0	0.394	-14.170	-5.167	0.000	-2.185	13.560	1	0.04	0.00	0.08	
13	0	0.418	-14.830	-5.507	0.000	-2.329	14.190	1	0.04	0.00	0.08	
14	0	0.418	-14.840	-5.504	0.000	-2.328	14.170	1	0.04	0.00	0.08	
1A	56	0.035	-12.817	3.193	0.000	-1.059	2.380	1	0.03	0.00	0.01	
1B	56	0.035	-11.561	3.193	0.000	-1.059	2.483	1	0.03	0.00	0.01	
1C	56	0.035	-12.817	-9.637	0.000	1.958	2.380	1	0.03	0.00	0.02	
1D	56	0.035	-11.561	-9.637	0.000	1.958	2.483	1	0.03	0.00	0.02	
1E	56	0.455	-12.817	3.193	0.000	-1.059	2.380	1	0.03	0.00	0.01	
1F	56	0.455	-11.561	3.193	0.000	-1.059	2.483	1	0.03	0.00	0.01	
1G	56	0.455	-12.817	-9.637	0.000	1.958	2.380	1	0.03	0.00	0.02	
1H	56	0.455	-11.561	-9.637	0.000	1.958	2.483	1	0.03	0.00	0.02	
1I	56	-0.290	-12.812	-0.897	0.000	-0.066	2.525	1	0.03	0.00	0.02	
1J	56	-0.290	-11.566	-0.897	0.000	-0.066	2.337	1	0.03	0.00	0.01	
1K	56	-0.290	-12.812	-5.547	0.000	0.965	2.525	1	0.03	0.00	0.02	
1L	56	-0.290	-11.566	-5.547	0.000	0.965	2.337	1	0.03	0.00	0.01	
1M	56	0.780	-12.812	-0.897	0.000	-0.066	2.525	1	0.03	0.00	0.02	
1N	56	0.780	-11.566	-0.897	0.000	-0.066	2.337	1	0.03	0.00	0.01	
1O	56	0.780	-12.812	-5.547	0.000	0.965	2.525	1	0.03	0.00	0.02	
1P	56	0.780	-11.566	-5.547	0.000	0.965	2.337	1	0.03	0.00	0.01	
2	56	0.442	-22.160	-5.803	0.000	0.809	4.437	1	0.06	0.00	0.03	
7	56	0.282	-12.099	-3.202	0.000	0.449	2.399	1	0.03	0.00	0.01	
8	56	0.239	-12.049	-3.129	0.000	0.437	2.410	1	0.03	0.00	0.01	
9	56	0.280	-13.611	-3.695	0.000	0.514	2.707	1	0.04	0.00	0.02	
10	56	0.279	-13.629	-3.689	0.000	0.514	2.670	1	0.04	0.00	0.02	
11	56	0.420	-19.915	-5.211	0.000	0.729	3.978	1	0.05	0.00	0.02	
12	56	0.394	-19.885	-5.167	0.000	0.722	3.984	1	0.05	0.00	0.02	
13	56	0.418	-20.825	-5.507	0.000	0.768	4.164	1	0.06	0.00	0.02	
14	56	0.418	-20.835	-5.504	0.000	0.767	4.140	1	0.06	0.00	0.02	
1A	113	0.035	-16.308	3.193	0.000	-2.855	-5.810	1	0.04	0.00	0.04	
1B	113	0.035	-15.052	3.193	0.000	-2.855	-5.000	1	0.04	0.00	0.04	
1C	113	0.035	-16.308	-9.637	0.000	7.379	-5.810	1	0.04	0.00	0.09	
1D	113	0.035	-15.052	-9.637	0.000	7.379	-5.000	1	0.04	0.00	0.09	
1E	113	0.455	-16.308	3.193	0.000	-2.855	-5.810	1	0.04	0.00	0.04	
1F	113	0.455	-15.052	3.193	0.000	-2.855	-5.000	1	0.04	0.00	0.04	
1G	113	0.455	-16.308	-9.637	0.000	7.379	-5.810	1	0.04	0.00	0.09	
1H	113	0.455	-15.052	-9.637	0.000	7.379	-5.000	1	0.04	0.00	0.09	
1I	113	-0.290	-16.303	-0.897	0.000	0.438	-5.661	1	0.04	0.00	0.03	
1J	113	-0.290	-15.057	-0.897	0.000	0.438	-5.149	1	0.04	0.00	0.03	
1K	113	-0.290	-16.303	-5.547	0.000	4.086	-5.661	1	0.04	0.00	0.05	
1L	113	-0.290	-15.057	-5.547	0.000	4.086	-5.149	1	0.04	0.00	0.05	
1M	113	0.780	-16.303	-0.897	0.000	0.438	-5.661	1	0.04	0.00	0.03	
1N	113	0.780	-15.057	-0.897	0.000	0.438	-5.149	1	0.04	0.00	0.03	
1O	113	0.780	-16.303	-5.547	0.000	4.086	-5.661	1	0.04	0.00	0.05	
1P	113	0.780	-15.057	-5.547	0.000	4.086	-5.149	1	0.04	0.00	0.05	
2	113	0.442	-28.540	-5.803	0.000	4.074	-9.822	1	0.08	0.00	0.06	

7	113	0.282	-15.530	-3.202	0.000	2.250	-5.371	1	0.04	0.00	0.03
8	113	0.239	-15.480	-3.129	0.000	2.197	-5.333	1	0.04	0.00	0.03
9	113	0.280	-17.510	-3.695	0.000	2.593	-6.047	1	0.05	0.00	0.04
10	113	0.279	-17.530	-3.689	0.000	2.589	-6.093	1	0.05	0.00	0.04
11	113	0.420	-25.630	-5.211	0.000	3.660	-8.829	1	0.07	0.00	0.05
12	113	0.394	-25.600	-5.167	0.000	3.628	-8.806	1	0.07	0.00	0.05
13	113	0.418	-26.820	-5.507	0.000	3.866	-9.235	1	0.07	0.00	0.05
14	113	0.418	-26.830	-5.504	0.000	3.863	-9.263	1	0.07	0.00	0.06

ASTA NUM. 16 NI 78 NF 230 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.000	8.131	7.031	0.000	4.050	-4.936	1	0.02	0.00	0.05	
1B	0	-0.000	9.115	7.031	0.000	4.050	-5.868	1	0.02	0.00	0.05	
1C	0	-0.000	8.131	1.285	0.000	0.762	-4.936	1	0.02	0.00	0.03	
1D	0	-0.000	9.115	1.285	0.000	0.762	-5.868	1	0.02	0.00	0.03	
1E	0	0.375	8.131	7.031	0.000	4.050	-4.936	1	0.02	0.00	0.05	
1F	0	0.375	9.115	7.031	0.000	4.050	-5.868	1	0.02	0.00	0.05	
1G	0	0.375	8.131	1.285	0.000	0.762	-4.936	1	0.02	0.00	0.03	
1H	0	0.375	9.115	1.285	0.000	0.762	-5.868	1	0.02	0.00	0.03	
1I	0	-0.176	8.374	5.146	0.000	2.938	-5.192	1	0.02	0.00	0.04	
1J	0	-0.176	8.872	5.146	0.000	2.938	-5.612	1	0.02	0.00	0.04	
1K	0	-0.176	8.374	3.170	0.000	1.874	-5.192	1	0.02	0.00	0.03	
1L	0	-0.176	8.872	3.170	0.000	1.874	-5.612	1	0.02	0.00	0.03	
1M	0	0.551	8.374	5.146	0.000	2.938	-5.192	1	0.02	0.00	0.04	
1N	0	0.551	8.872	5.146	0.000	2.938	-5.612	1	0.02	0.00	0.04	
1O	0	0.551	8.374	3.170	0.000	1.874	-5.192	1	0.02	0.00	0.03	
1P	0	0.551	8.872	3.170	0.000	1.874	-5.612	1	0.02	0.00	0.03	
2	0	0.338	15.690	7.475	0.000	4.324	-9.817	1	0.04	0.00	0.06	
7	0	0.161	8.572	4.163	0.000	2.406	-5.362	1	0.02	0.00	0.03	
8	0	0.183	8.505	4.025	0.000	2.328	-5.329	1	0.02	0.00	0.03	
9	0	0.214	9.613	4.780	0.000	2.768	-6.046	1	0.03	0.00	0.04	
10	0	0.214	9.643	4.775	0.000	2.764	-6.091	1	0.03	0.00	0.04	
11	0	0.288	14.100	6.730	0.000	3.892	-8.821	1	0.04	0.00	0.05	
12	0	0.301	14.060	6.648	0.000	3.845	-8.801	1	0.04	0.00	0.05	
13	0	0.320	14.730	7.101	0.000	4.108	-9.231	1	0.04	0.00	0.05	
14	0	0.320	14.750	7.097	0.000	4.106	-9.258	1	0.04	0.00	0.06	
1A	47	-0.000	5.236	7.031	0.000	0.769	-1.809	1	0.01	0.00	0.01	
1B	47	-0.000	6.221	7.031	0.000	0.769	-2.298	1	0.02	0.00	0.01	
1C	47	-0.000	5.236	1.285	0.000	0.162	-1.809	1	0.01	0.00	0.01	
1D	47	-0.000	6.221	1.285	0.000	0.162	-2.298	1	0.02	0.00	0.01	
1E	47	0.375	5.236	7.031	0.000	0.769	-1.809	1	0.01	0.00	0.01	
1F	47	0.375	6.221	7.031	0.000	0.769	-2.298	1	0.02	0.00	0.01	
1G	47	0.375	5.236	1.285	0.000	0.162	-1.809	1	0.01	0.00	0.01	
1H	47	0.375	6.221	1.285	0.000	0.162	-2.298	1	0.02	0.00	0.01	
1I	47	-0.176	5.480	5.146	0.000	0.537	-1.964	1	0.01	0.00	0.01	
1J	47	-0.176	5.977	5.146	0.000	0.537	-2.143	1	0.02	0.00	0.01	
1K	47	-0.176	5.480	3.170	0.000	0.394	-1.964	1	0.01	0.00	0.01	
1L	47	-0.176	5.977	3.170	0.000	0.394	-2.143	1	0.02	0.00	0.01	
1M	47	0.551	5.480	5.146	0.000	0.537	-1.964	1	0.01	0.00	0.01	
1N	47	0.551	5.977	5.146	0.000	0.537	-2.143	1	0.02	0.00	0.01	
1O	47	0.551	5.480	3.170	0.000	0.394	-1.964	1	0.01	0.00	0.01	
1P	47	0.551	5.977	3.170	0.000	0.394	-2.143	1	0.02	0.00	0.01	
2	47	0.338	10.399	7.475	0.000	0.835	-3.731	1	0.03	0.00	0.02	
7	47	0.161	5.726	4.163	0.000	0.464	-2.026	1	0.02	0.00	0.01	
8	47	0.183	5.658	4.025	0.000	0.449	-2.025	1	0.02	0.00	0.01	
9	47	0.214	6.377	4.780	0.000	0.537	-2.315	1	0.02	0.00	0.01	
10	47	0.214	6.406	4.775	0.000	0.536	-2.346	1	0.02	0.00	0.01	
11	47	0.288	9.362	6.730	0.000	0.751	-3.345	1	0.02	0.00	0.02	
12	47	0.301	9.322	6.648	0.000	0.743	-3.344	1	0.02	0.00	0.02	
13	47	0.320	9.755	7.101	0.000	0.794	-3.518	1	0.03	0.00	0.02	
14	47	0.320	9.774	7.097	0.000	0.794	-3.537	1	0.03	0.00	0.02	
1A	93	-0.000	2.342	7.031	0.000	-2.512	-0.032	1	0.01	0.00	0.03	
1B	93	-0.000	3.326	7.031	0.000	-2.512	-0.078	1	0.01	0.00	0.03	
1C	93	-0.000	2.342	1.285	0.000	-0.438	-0.032	1	0.01	0.00	0.01	
1D	93	-0.000	3.326	1.285	0.000	-0.438	-0.078	1	0.01	0.00	0.01	
1E	93	0.375	2.342	7.031	0.000	-2.512	-0.032	1	0.01	0.00	0.03	
1F	93	0.375	3.326	7.031	0.000	-2.512	-0.078	1	0.01	0.00	0.03	
1G	93	0.375	2.342	1.285	0.000	-0.438	-0.032	1	0.01	0.00	0.01	
1H	93	0.375	3.326	1.285	0.000	-0.438	-0.078	1	0.01	0.00	0.01	
1I	93	-0.176	2.585	5.146	0.000	-1.865	-0.087	1	0.01	0.00	0.02	
1J	93	-0.176	3.083	5.146	0.000	-1.865	-0.024	1	0.01	0.00	0.02	
1K	93	-0.176	2.585	3.170	0.000	-1.085	-0.087	1	0.01	0.00	0.01	
1L	93	-0.176	3.083	3.170	0.000	-1.085	-0.024	1	0.01	0.00	0.01	
1M	93	0.551	2.585	5.146	0.000	-1.865	-0.087	1	0.01	0.00	0.02	
1N	93	0.551	3.083	5.146	0.000	-1.865	-0.024	1	0.01	0.00	0.02	
1O	93	0.551	2.585	3.170	0.000	-1.085	-0.087	1	0.01	0.00	0.01	
1P	93	0.551	3.083	3.170	0.000	-1.085	-0.024	1	0.01	0.00	0.01	
2	93	0.338	5.107	7.475	0.000	-2.653	-0.113	1	0.01	0.00	0.03	
7	93	0.161	2.879	4.163	0.000	-1.478	-0.018	1	0.01	0.00	0.02	
8	93	0.183	2.811	4.025	0.000	-1.429	-0.049	1	0.01	0.00	0.02	
9	93	0.214	3.140	4.780	0.000	-1.694	-0.095	1	0.01	0.00	0.02	
10	93	0.214	3.170	4.775	0.000	-1.692	-0.112	1	0.01	0.00	0.02	
11	93	0.288	4.623	6.730	0.000	-2.390	-0.081	1	0.01	0.00	0.03	
12	93	0.301	4.583	6.648	0.000	-2.360	-0.099	1	0.01	0.00	0.03	
13	93	0.320	4.780	7.101	0.000	-2.519	-0.127	1	0.01	0.00	0.03	
14	93	0.320	4.798	7.097	0.000	-2.518	-0.137	1	0.01	0.00	0.03	

ASTA NUM. 63 NI 230 NF 223 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.326	2.093	-0.278	0.000	-0.521	-0.034	1	0.01	0.00	0.01	
1B	0	-0.326	2.269	-0.278	0.000	-0.521	-0.065	1	0.01	0.00	0.01	
1C	0	-0.326	2.093	-0.447	0.000	-1.789	-0.034	1	0.01	0.00	0.02	
1D	0	-0.326	2.269	-0.447	0.000	-1.789	-0.065	1	0.01	0.00	0.02	
1E	0	-0.219	2.093	-0.278	0.000	-0.521	-0.034	1	0.01	0.00	0.01	
1F	0	-0.219	2.269	-0.278	0.000	-0.521	-0.065	1	0.01	0.00	0.01	
1G	0	-0.219	2.093	-0.447	0.000	-1.789	-0.034	1	0.01	0.00	0.02	
1H	0	-0.219	2.269	-0.447	0.000	-1.789	-0.065	1	0.01	0.00	0.02	
1I	0	-0.294	2.116	-0.180	0.000	-0.890	-0.022	1	0.01	0.00	0.01	
1J	0	-0.294	2.246	-0.180	0.000	-0.890	-0.077	1	0.01	0.00	0.01	
1K	0	-0.294	2.116	-0.545	0.000	-1.420	-0.022	1	0.01	0.00	0.02	
1L	0	-0.294	2.246	-0.545	0.000	-1.420	-0.077	1	0.01	0.00	0.02	
1M	0	-0.251	2.116	-0.180	0.000	-0.890	-0.022	1	0.01	0.00	0.01	
1N	0	-0.251	2.246	-0.180	0.000	-0.890	-0.077	1	0.01	0.00	0.01	
1O	0	-0.251	2.116	-0.545	0.000	-1.420	-0.022	1	0.01	0.00	0.02	
1P	0	-0.251	2.246	-0.545	0.000	-1.420	-0.077	1	0.01	0.00	0.02	
2	0	-0.490	3.992	-0.660	0.000	-2.079	-0.102	1	0.01	0.00	0.03	
7	0	-0.272	2.140	-0.344	0.000	-1.146	-0.013	1	0.01	0.00	0.01	
8	0	-0.264	2.138	-0.358	0.000	-1.121	-0.042	1	0.01	0.00	0.01	
9	0	-0.314	2.448	-0.405	0.000	-1.324	-0.088	1	0.01	0.00	0.02	
10	0	-0.314	2.479	-0.403	0.000	-1.323	-0.104	1	0.01	0.00	0.02	
11	0	-0.440	3.574	-0.584	0.000	-1.865	-0.072	1	0.01	0.00	0.02	
12	0	-0.436	3.573	-0.592	0.000	-1.850	-0.089	1	0.01	0.00	0.02	
13	0	-0.465	3.759	-0.620	0.000	-1.973	-0.116	1	0.01	0.00	0.02	
14	0	-0.465	3.777	-0.619	0.000	-1.972	-0.126	1	0.01	0.00	0.02	
1A	47	-0.326	-0.801	-0.278	0.000	-0.337	0.267	1	0.00	0.00	0.00	
1B	47	-0.326	-0.625	-0.278	0.000	-0.337	0.320	1	0.00	0.00	0.00	
1C	47	-0.326	-0.801	-0.447	0.000	-1.634	0.267	1	0.00	0.00	0.02	
1D	47	-0.326	-0.625	-0.447	0.000	-1.634	0.320	1	0.00	0.00	0.02	
1E	47	-0.219	-0.801	-0.278	0.000	-0.337	0.267	1	0.00	0.00	0.00	
1F	47	-0.219	-0.625	-0.278	0.000	-0.337	0.320	1	0.00	0.00	0.00	
1G	47	-0.219	-0.801	-0.447	0.000	-1.634	0.267	1	0.00	0.00	0.02	
1H	47	-0.219	-0.625	-0.447	0.000	-1.634	0.320	1	0.00	0.00	0.02	
1I	47	-0.294	-0.778	-0.180	0.000	-0.718	0.288	1	0.00	0.00	0.01	
1J	47	-0.294	-0.648	-0.180	0.000	-0.718	0.298	1	0.00	0.00	0.01	
1K	47	-0.294	-0.778	-0.545	0.000	-1.254	0.288	1	0.00	0.00	0.02	
1L	47	-0.294	-0.648	-0.545	0.000	-1.254	0.298	1	0.00	0.00	0.02	
1M	47	-0.251	-0.778	-0.180	0.000	-0.718	0.288	1	0.00	0.00	0.01	
1N	47	-0.251	-0.648	-0.180	0.000	-0.718	0.298	1	0.00	0.00	0.01	
1O	47	-0.251	-0.778	-0.545	0.000	-1.254	0.288	1	0.00	0.00	0.02	
1P	47	-0.251	-0.648	-0.545	0.000	-1.254	0.298	1	0.00	0.00	0.02	
2	47	-0.490	-1.299	-0.660	0.000	-1.771	0.526	1	0.00	0.00	0.02	
7	47	-0.272	-0.706	-0.344	0.000	-0.985	0.321	1	0.00	0.00	0.01	
8	47	-0.264	-0.709	-0.358	0.000	-0.954	0.291	1	0.00	0.00	0.01	
9	47	-0.314	-0.788	-0.405	0.000	-1.135	0.300	1	0.00	0.00	0.01	
10	47	-0.314	-0.758	-0.403	0.000	-1.135	0.297	1	0.00	0.00	0.01	
11	47	-0.440	-1.167	-0.584	0.000	-1.593	0.490	1	0.00	0.00	0.02	
12	47	-0.436	-1.168	-0.592	0.000	-1.574	0.472	1	0.00	0.00	0.02	
13	47	-0.465	-1.215	-0.620	0.000	-1.684	0.477	1	0.00	0.00	0.02	
14	47	-0.465	-1.198	-0.619	0.000	-1.683	0.476	1	0.00	0.00	0.02	
1A	93	-0.326	-3.695	-0.278	0.000	-0.153	-0.783	1	0.01	0.00	0.00	
1B	93	-0.326	-3.519	-0.278	0.000	-0.153	-0.646	1	0.01	0.00	0.00	
1C	93	-0.326	-3.695	-0.447	0.000	-1.480	-0.783	1	0.01	0.00	0.02	
1D	93	-0.326	-3.519	-0.447	0.000	-1.480	-0.646	1	0.01	0.00	0.02	
1E	93	-0.219	-3.695	-0.278	0.000	-0.153	-0.783	1	0.01	0.00	0.00	
1F	93	-0.219	-3.519	-0.278	0.000	-0.153	-0.646	1	0.01	0.00	0.00	
1G	93	-0.219	-3.695	-0.447	0.000	-1.480	-0.783	1	0.01	0.00	0.02	
1H	93	-0.219	-3.519	-0.447	0.000	-1.480	-0.646	1	0.01	0.00	0.02	
1I	93	-0.294	-3.672	-0.180	0.000	-0.545	-0.752	1	0.01	0.00	0.01	
1J	93	-0.294	-3.542	-0.180	0.000	-0.545	-0.678	1	0.01	0.00	0.01	
1K	93	-0.294	-3.672	-0.545	0.000	-1.088	-0.752	1	0.01	0.00	0.01	
1L	93	-0.294	-3.542	-0.545	0.000	-1.088	-0.678	1	0.01	0.00	0.01	
1M	93	-0.251	-3.672	-0.180	0.000	-0.545	-0.752	1	0.01	0.00	0.01	
1N	93	-0.251	-3.542	-0.180	0.000	-0.545	-0.678	1	0.01	0.00	0.01	
1O	93	-0.251	-3.672	-0.545	0.000	-1.088	-0.752	1	0.01	0.00	0.01	
1P	93	-0.251	-3.542	-0.545	0.000	-1.088	-0.678	1	0.01	0.00	0.01	
2	93	-0.490	-6.589	-0.660	0.000	-1.463	-1.314	1	0.02	0.00	0.02	
7	93	-0.272	-3.553	-0.344	0.000	-0.824	-0.673	1	0.01	0.00	0.01	
8	93	-0.264	-3.555	-0.358	0.000	-0.786	-0.704	1	0.01	0.00	0.01	
9	93	-0.314	-4.025	-0.405	0.000	-0.947	-0.823	1	0.01	0.00	0.01	
10	93	-0.314	-3.994	-0.403	0.000	-0.947	-0.812	1	0.01	0.00	0.01	
11	93	-0.440	-5.907	-0.584	0.000	-1.321	-1.161	1	0.02	0.00	0.02	
12	93	-0.436	-5.908	-0.592	0.000	-1.298	-1.179	1	0.02	0.00	0.02	
13	93	-0.465	-6.190	-0.620	0.000	-1.394	-1.251	1	0.02	0.00	0.02	
14	93	-0.465	-6.172	-0.619	0.000	-1.394	-1.244	1	0.02	0.00	0.02	

ASTA NUM. 64 NI 223 NF 63 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						

1A	0	-0.052	-4.504	-0.730	0.000	-0.178	-0.614	1	0.01	0.00	0.00
1B	0	-0.052	-3.828	-0.730	0.000	-0.178	-0.740	1	0.01	0.00	0.00
1C	0	-0.052	-4.504	-6.390	0.000	-2.198	-0.614	1	0.01	0.00	0.03
1D	0	-0.052	-3.828	-6.390	0.000	-2.198	-0.740	1	0.01	0.00	0.03
1E	0	0.222	-4.504	-0.730	0.000	-0.178	-0.614	1	0.01	0.00	0.00
1F	0	0.222	-3.828	-0.730	0.000	-0.178	-0.740	1	0.01	0.00	0.00
1G	0	0.222	-4.504	-6.390	0.000	-2.198	-0.614	1	0.01	0.00	0.03
1H	0	0.222	-3.828	-6.390	0.000	-2.198	-0.740	1	0.01	0.00	0.03
1I	0	-0.268	-4.406	-2.558	0.000	-0.795	-0.639	1	0.01	0.00	0.01
1J	0	-0.268	-3.926	-2.558	0.000	-0.795	-0.715	1	0.01	0.00	0.01
1K	0	-0.268	-4.406	-4.562	0.000	-1.581	-0.639	1	0.01	0.00	0.02
1L	0	-0.268	-3.926	-4.562	0.000	-1.581	-0.715	1	0.01	0.00	0.02
1M	0	0.439	-4.406	-2.558	0.000	-0.795	-0.639	1	0.01	0.00	0.01
1N	0	0.439	-3.926	-2.558	0.000	-0.795	-0.715	1	0.01	0.00	0.01
1O	0	0.439	-4.406	-4.562	0.000	-1.581	-0.639	1	0.01	0.00	0.02
1P	0	0.439	-3.926	-4.562	0.000	-1.581	-0.715	1	0.01	0.00	0.02
2	0	0.152	-7.533	-6.388	0.000	-2.131	-1.246	1	0.02	0.00	0.03
7	0	0.111	-4.199	-3.552	0.000	-1.182	-0.635	1	0.01	0.00	0.01
8	0	0.082	-4.135	-3.434	0.000	-1.145	-0.667	1	0.01	0.00	0.01
9	0	0.100	-4.617	-4.114	0.000	-1.374	-0.782	1	0.01	0.00	0.02
10	0	0.100	-4.582	-4.112	0.000	-1.373	-0.770	1	0.01	0.00	0.02
11	0	0.152	-6.803	-5.742	0.000	-1.914	-1.099	1	0.02	0.00	0.02
12	0	0.135	-6.765	-5.672	0.000	-1.891	-1.118	1	0.02	0.00	0.02
13	0	0.146	-7.054	-6.079	0.000	-2.029	-1.187	1	0.02	0.00	0.03
14	0	0.146	-7.032	-6.078	0.000	-2.028	-1.180	1	0.02	0.00	0.03
1A	47	-0.052	-7.398	-0.730	0.000	0.163	-3.397	1	0.02	0.00	0.02
1B	47	-0.052	-6.723	-0.730	0.000	0.163	-3.197	1	0.02	0.00	0.02
1C	47	-0.052	-7.398	-6.390	0.000	0.784	-3.397	1	0.02	0.00	0.02
1D	47	-0.052	-6.723	-6.390	0.000	0.784	-3.197	1	0.02	0.00	0.02
1E	47	0.222	-7.398	-0.730	0.000	0.163	-3.397	1	0.02	0.00	0.02
1F	47	0.222	-6.723	-0.730	0.000	0.163	-3.197	1	0.02	0.00	0.02
1G	47	0.222	-7.398	-6.390	0.000	0.784	-3.397	1	0.02	0.00	0.02
1H	47	0.222	-6.723	-6.390	0.000	0.784	-3.197	1	0.02	0.00	0.02
1I	47	-0.268	-7.300	-2.558	0.000	0.398	-3.166	1	0.02	0.00	0.02
1J	47	-0.268	-6.821	-2.558	0.000	0.398	-3.428	1	0.02	0.00	0.02
1K	47	-0.268	-7.300	-4.562	0.000	0.549	-3.166	1	0.02	0.00	0.02
1L	47	-0.268	-6.821	-4.562	0.000	0.549	-3.428	1	0.02	0.00	0.02
1M	47	0.439	-7.300	-2.558	0.000	0.398	-3.166	1	0.02	0.00	0.02
1N	47	0.439	-6.821	-2.558	0.000	0.398	-3.428	1	0.02	0.00	0.02
1O	47	0.439	-7.300	-4.562	0.000	0.549	-3.166	1	0.02	0.00	0.02
1P	47	0.439	-6.821	-4.562	0.000	0.549	-3.428	1	0.02	0.00	0.02
2	47	0.152	-12.822	-6.388	0.000	0.850	-5.994	1	0.03	0.00	0.04
7	47	0.111	-7.046	-3.552	0.000	0.475	-3.259	1	0.02	0.00	0.02
8	47	0.082	-6.982	-3.434	0.000	0.457	-3.261	1	0.02	0.00	0.02
9	47	0.100	-7.854	-4.114	0.000	0.546	-3.691	1	0.02	0.00	0.02
10	47	0.100	-7.816	-4.112	0.000	0.545	-3.663	1	0.02	0.00	0.02
11	47	0.152	-11.542	-5.742	0.000	0.766	-5.378	1	0.03	0.00	0.03
12	47	0.135	-11.508	-5.672	0.000	0.756	-5.383	1	0.03	0.00	0.03
13	47	0.146	-12.027	-6.079	0.000	0.808	-5.638	1	0.03	0.00	0.03
14	47	0.146	-12.006	-6.078	0.000	0.808	-5.624	1	0.03	0.00	0.03
1A	93	-0.052	-10.293	-0.730	0.000	0.504	-7.530	1	0.03	0.00	0.04
1B	93	-0.052	-9.617	-0.730	0.000	0.504	-7.004	1	0.03	0.00	0.04
1C	93	-0.052	-10.293	-6.390	0.000	3.766	-7.530	1	0.03	0.00	0.05
1D	93	-0.052	-9.617	-6.390	0.000	3.766	-7.004	1	0.03	0.00	0.05
1E	93	0.222	-10.293	-0.730	0.000	0.504	-7.530	1	0.03	0.00	0.04
1F	93	0.222	-9.617	-0.730	0.000	0.504	-7.004	1	0.03	0.00	0.04
1G	93	0.222	-10.293	-6.390	0.000	3.766	-7.530	1	0.03	0.00	0.05
1H	93	0.222	-9.617	-6.390	0.000	3.766	-7.004	1	0.03	0.00	0.05
1I	93	-0.268	-10.195	-2.558	0.000	1.592	-7.043	1	0.03	0.00	0.04
1J	93	-0.268	-9.715	-2.558	0.000	1.592	-7.491	1	0.03	0.00	0.04
1K	93	-0.268	-10.195	-4.562	0.000	2.678	-7.043	1	0.03	0.00	0.04
1L	93	-0.268	-9.715	-4.562	0.000	2.678	-7.491	1	0.03	0.00	0.04
1M	93	0.439	-10.195	-2.558	0.000	1.592	-7.043	1	0.03	0.00	0.04
1N	93	0.439	-9.715	-2.558	0.000	1.592	-7.491	1	0.03	0.00	0.04
1O	93	0.439	-10.195	-4.562	0.000	2.678	-7.043	1	0.03	0.00	0.04
1P	93	0.439	-9.715	-4.562	0.000	2.678	-7.491	1	0.03	0.00	0.04
2	93	0.152	-18.110	-6.388	0.000	3.831	-13.210	1	0.05	0.00	0.08
7	93	0.111	-9.893	-3.552	0.000	2.132	-7.211	1	0.03	0.00	0.04
8	93	0.082	-9.829	-3.434	0.000	2.060	-7.183	1	0.03	0.00	0.04
9	93	0.100	-11.090	-4.114	0.000	2.466	-8.111	1	0.03	0.00	0.05
10	93	0.100	-11.050	-4.112	0.000	2.464	-8.066	1	0.03	0.00	0.05
11	93	0.152	-16.280	-5.742	0.000	3.445	-11.870	1	0.04	0.00	0.07
12	93	0.135	-16.250	-5.672	0.000	3.402	-11.860	1	0.04	0.00	0.07
13	93	0.146	-17.000	-6.079	0.000	3.645	-12.410	1	0.05	0.00	0.07
14	93	0.146	-16.980	-6.078	0.000	3.645	-12.390	1	0.05	0.00	0.07

ASTA NUM. 17 NI 63 NF 216 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.074	8.935	6.159	0.000	3.570	-6.976	1	0.02	0.00	0.05	
1B	0	-0.074	9.675	6.159	0.000	3.570	-7.484	1	0.03	0.00	0.05	
1C	0	-0.074	8.935	0.403	0.000	0.278	-6.976	1	0.02	0.00	0.04	
1D	0	-0.074	9.675	0.403	0.000	0.278	-7.484	1	0.03	0.00	0.04	
1E	0	0.303	8.935	6.159	0.000	3.570	-6.976	1	0.02	0.00	0.05	
1F	0	0.303	9.675	6.159	0.000	3.570	-7.484	1	0.03	0.00	0.05	
1G	0	0.303	8.935	0.403	0.000	0.278	-6.976	1	0.02	0.00	0.04	

1H	0	0.303	9.675	0.403	0.000	0.278	-7.484	1	0.03	0.00	0.04
1I	0	-0.253	9.151	4.280	0.000	2.462	-7.078	1	0.02	0.00	0.04
1J	0	-0.253	9.459	4.280	0.000	2.462	-7.382	1	0.03	0.00	0.04
1K	0	-0.253	9.151	2.282	0.000	1.386	-7.078	1	0.02	0.00	0.04
1L	0	-0.253	9.459	2.282	0.000	1.386	-7.382	1	0.03	0.00	0.04
1M	0	0.482	9.151	4.280	0.000	2.462	-7.078	1	0.02	0.00	0.04
1N	0	0.482	9.459	4.280	0.000	2.462	-7.382	1	0.03	0.00	0.04
1O	0	0.482	9.151	2.282	0.000	1.386	-7.078	1	0.02	0.00	0.04
1P	0	0.482	9.459	2.282	0.000	1.386	-7.382	1	0.03	0.00	0.04
2	0	0.205	16.930	5.880	0.000	3.448	-13.150	1	0.05	0.00	0.08
7	0	0.089	9.233	3.293	0.000	1.929	-7.170	1	0.02	0.00	0.04
8	0	0.111	9.182	3.158	0.000	1.852	-7.147	1	0.02	0.00	0.04
9	0	0.133	10.390	3.803	0.000	2.231	-8.069	1	0.03	0.00	0.05
10	0	0.133	10.360	3.802	0.000	2.231	-8.026	1	0.03	0.00	0.05
11	0	0.169	15.210	5.297	0.000	3.104	-11.810	1	0.04	0.00	0.07
12	0	0.182	15.180	5.216	0.000	3.058	-11.800	1	0.04	0.00	0.07
13	0	0.196	15.910	5.603	0.000	3.286	-12.350	1	0.04	0.00	0.07
14	0	0.196	15.890	5.602	0.000	3.285	-12.320	1	0.04	0.00	0.07
1A	47	-0.074	6.040	6.159	0.000	0.697	-3.494	1	0.02	0.00	0.02
1B	47	-0.074	6.781	6.159	0.000	0.697	-3.633	1	0.02	0.00	0.02
1C	47	-0.074	6.040	0.403	0.000	0.089	-3.494	1	0.02	0.00	0.02
1D	47	-0.074	6.781	0.403	0.000	0.089	-3.633	1	0.02	0.00	0.02
1E	47	0.303	6.040	6.159	0.000	0.697	-3.494	1	0.02	0.00	0.02
1F	47	0.303	6.781	6.159	0.000	0.697	-3.633	1	0.02	0.00	0.02
1G	47	0.303	6.040	0.403	0.000	0.089	-3.494	1	0.02	0.00	0.02
1H	47	0.303	6.781	0.403	0.000	0.089	-3.633	1	0.02	0.00	0.02
1I	47	-0.253	6.256	4.280	0.000	0.465	-3.452	1	0.02	0.00	0.02
1J	47	-0.253	6.565	4.280	0.000	0.465	-3.674	1	0.02	0.00	0.02
1K	47	-0.253	6.256	2.282	0.000	0.321	-3.452	1	0.02	0.00	0.02
1L	47	-0.253	6.565	2.282	0.000	0.321	-3.674	1	0.02	0.00	0.02
1M	47	0.482	6.256	4.280	0.000	0.465	-3.452	1	0.02	0.00	0.02
1N	47	0.482	6.565	4.280	0.000	0.465	-3.674	1	0.02	0.00	0.02
1O	47	0.482	6.256	2.282	0.000	0.321	-3.452	1	0.02	0.00	0.02
1P	47	0.482	6.565	2.282	0.000	0.321	-3.674	1	0.02	0.00	0.02
2	47	0.205	11.640	5.880	0.000	0.704	-6.482	1	0.03	0.00	0.04
7	47	0.089	6.386	3.293	0.000	0.392	-3.526	1	0.02	0.00	0.02
8	47	0.111	6.335	3.158	0.000	0.378	-3.526	1	0.02	0.00	0.02
9	47	0.133	7.153	3.803	0.000	0.457	-3.976	1	0.02	0.00	0.02
10	47	0.133	7.122	3.802	0.000	0.457	-3.947	1	0.02	0.00	0.02
11	47	0.169	10.470	5.297	0.000	0.633	-5.817	1	0.03	0.00	0.03
12	47	0.182	10.440	5.216	0.000	0.624	-5.819	1	0.03	0.00	0.03
13	47	0.196	10.934	5.603	0.000	0.671	-6.088	1	0.03	0.00	0.04
14	47	0.196	10.914	5.602	0.000	0.671	-6.068	1	0.03	0.00	0.04
1A	93	-0.074	3.146	6.159	0.000	-2.177	-1.362	1	0.01	0.00	0.03
1B	93	-0.074	3.886	6.159	0.000	-2.177	-1.132	1	0.01	0.00	0.03
1C	93	-0.074	3.146	0.403	0.000	-0.099	-1.362	1	0.01	0.00	0.01
1D	93	-0.074	3.886	0.403	0.000	-0.099	-1.132	1	0.01	0.00	0.01
1E	93	0.303	3.146	6.159	0.000	-2.177	-1.362	1	0.01	0.00	0.03
1F	93	0.303	3.886	6.159	0.000	-2.177	-1.132	1	0.01	0.00	0.03
1G	93	0.303	3.146	0.403	0.000	-0.099	-1.362	1	0.01	0.00	0.01
1H	93	0.303	3.886	0.403	0.000	-0.099	-1.132	1	0.01	0.00	0.01
1I	93	-0.253	3.362	4.280	0.000	-1.532	-1.176	1	0.01	0.00	0.02
1J	93	-0.253	3.670	4.280	0.000	-1.532	-1.318	1	0.01	0.00	0.02
1K	93	-0.253	3.362	2.282	0.000	-0.744	-1.176	1	0.01	0.00	0.01
1L	93	-0.253	3.670	2.282	0.000	-0.744	-1.318	1	0.01	0.00	0.01
1M	93	0.482	3.362	4.280	0.000	-1.532	-1.176	1	0.01	0.00	0.02
1N	93	0.482	3.670	4.280	0.000	-1.532	-1.318	1	0.01	0.00	0.02
1O	93	0.482	3.362	2.282	0.000	-0.744	-1.176	1	0.01	0.00	0.01
1P	93	0.482	3.670	2.282	0.000	-0.744	-1.318	1	0.01	0.00	0.01
2	93	0.205	6.350	5.880	0.000	-2.040	-2.283	1	0.02	0.00	0.03
7	93	0.089	3.539	3.293	0.000	-1.145	-1.210	1	0.01	0.00	0.01
8	93	0.111	3.488	3.158	0.000	-1.096	-1.234	1	0.01	0.00	0.01
9	93	0.133	3.916	3.803	0.000	-1.318	-1.393	1	0.01	0.00	0.02
10	93	0.133	3.884	3.802	0.000	-1.318	-1.379	1	0.01	0.00	0.02
11	93	0.169	5.731	5.297	0.000	-1.839	-2.036	1	0.02	0.00	0.02
12	93	0.182	5.700	5.216	0.000	-1.810	-2.051	1	0.02	0.00	0.02
13	93	0.196	5.957	5.603	0.000	-1.944	-2.147	1	0.02	0.00	0.02
14	93	0.196	5.938	5.602	0.000	-1.943	-2.138	1	0.02	0.00	0.02

ASTA NUM. 65 NI 216 NF 209 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.289	2.962	0.115	0.000	-0.206	-1.132	1	0.01	0.00	0.01	
1B	0	-0.289	2.984	0.115	0.000	-0.206	-1.376	1	0.01	0.00	0.01	
1C	0	-0.289	2.962	-0.064	0.000	-1.476	-1.132	1	0.01	0.00	0.02	
1D	0	-0.289	2.984	-0.064	0.000	-1.476	-1.376	1	0.01	0.00	0.02	
1E	0	-0.185	2.962	0.115	0.000	-0.206	-1.132	1	0.01	0.00	0.01	
1F	0	-0.185	2.984	0.115	0.000	-0.206	-1.376	1	0.01	0.00	0.01	
1G	0	-0.185	2.962	-0.064	0.000	-1.476	-1.132	1	0.01	0.00	0.02	
1H	0	-0.185	2.984	-0.064	0.000	-1.476	-1.376	1	0.01	0.00	0.02	
1I	0	-0.253	2.946	0.216	0.000	-0.575	-1.179	1	0.01	0.00	0.01	
1J	0	-0.253	3.000	0.216	0.000	-0.575	-1.329	1	0.01	0.00	0.01	
1K	0	-0.253	2.946	-0.164	0.000	-1.107	-1.179	1	0.01	0.00	0.01	
1L	0	-0.253	3.000	-0.164	0.000	-1.107	-1.329	1	0.01	0.00	0.01	
1M	0	-0.221	2.946	0.216	0.000	-0.575	-1.179	1	0.01	0.00	0.01	
1N	0	-0.221	3.000	0.216	0.000	-0.575	-1.329	1	0.01	0.00	0.01	
1O	0	-0.221	2.946	-0.164	0.000	-1.107	-1.179	1	0.01	0.00	0.01	
1P	0	-0.221	3.000	-0.164	0.000	-1.107	-1.329	1	0.01	0.00	0.01	

2	0	-0.424	5.434	0.047	0.000	-1.508	-2.296	1	0.01	0.00	0.02
7	0	-0.236	2.911	0.039	0.000	-0.835	-1.218	1	0.01	0.00	0.01
8	0	-0.229	2.924	0.025	0.000	-0.810	-1.241	1	0.01	0.00	0.01
9	0	-0.274	3.341	0.028	0.000	-0.974	-1.401	1	0.01	0.00	0.01
10	0	-0.274	3.310	0.029	0.000	-0.973	-1.388	1	0.01	0.00	0.01
11	0	-0.382	4.862	0.050	0.000	-1.352	-2.049	1	0.01	0.00	0.02
12	0	-0.377	4.870	0.042	0.000	-1.338	-2.063	1	0.01	0.00	0.02
13	0	-0.404	5.120	0.044	0.000	-1.436	-2.159	1	0.01	0.00	0.02
14	0	-0.404	5.102	0.045	0.000	-1.436	-2.151	1	0.01	0.00	0.02
1A	47	-0.289	0.067	0.115	0.000	-0.201	-0.422	1	0.00	0.00	0.00
1B	47	-0.289	0.090	0.115	0.000	-0.201	-0.662	1	0.00	0.00	0.00
1C	47	-0.289	0.067	-0.064	0.000	-1.505	-0.422	1	0.00	0.00	0.02
1D	47	-0.289	0.090	-0.064	0.000	-1.505	-0.662	1	0.00	0.00	0.02
1E	47	-0.185	0.067	0.115	0.000	-0.201	-0.422	1	0.00	0.00	0.00
1F	47	-0.185	0.090	0.115	0.000	-0.201	-0.662	1	0.00	0.00	0.00
1G	47	-0.185	0.067	-0.064	0.000	-1.505	-0.422	1	0.00	0.00	0.02
1H	47	-0.185	0.090	-0.064	0.000	-1.505	-0.662	1	0.00	0.00	0.02
1I	47	-0.253	0.051	0.216	0.000	-0.581	-0.477	1	0.00	0.00	0.01
1J	47	-0.253	0.106	0.216	0.000	-0.581	-0.607	1	0.00	0.00	0.01
1K	47	-0.253	0.051	-0.164	0.000	-1.125	-0.477	1	0.00	0.00	0.01
1L	47	-0.253	0.106	-0.164	0.000	-1.125	-0.607	1	0.00	0.00	0.01
1M	47	-0.221	0.051	0.216	0.000	-0.581	-0.477	1	0.00	0.00	0.01
1N	47	-0.221	0.106	0.216	0.000	-0.581	-0.607	1	0.00	0.00	0.01
1O	47	-0.221	0.051	-0.164	0.000	-1.125	-0.477	1	0.00	0.00	0.01
1P	47	-0.221	0.106	-0.164	0.000	-1.125	-0.607	1	0.00	0.00	0.01
2	47	-0.424	0.144	0.047	0.000	-1.529	-0.995	1	0.00	0.00	0.02
7	47	-0.236	0.064	0.039	0.000	-0.853	-0.524	1	0.00	0.00	0.01
8	47	-0.229	0.077	0.025	0.000	-0.822	-0.541	1	0.00	0.00	0.01
9	47	-0.274	0.104	0.028	0.000	-0.988	-0.597	1	0.00	0.00	0.01
10	47	-0.274	0.073	0.029	0.000	-0.987	-0.598	1	0.00	0.00	0.01
11	47	-0.382	0.121	0.050	0.000	-1.376	-0.886	1	0.00	0.00	0.02
12	47	-0.377	0.129	0.042	0.000	-1.357	-0.896	1	0.00	0.00	0.02
13	47	-0.404	0.145	0.044	0.000	-1.457	-0.930	1	0.00	0.00	0.02
14	47	-0.404	0.127	0.045	0.000	-1.456	-0.931	1	0.00	0.00	0.02
1A	93	-0.289	-2.827	0.115	0.000	-0.196	-1.063	1	0.01	0.00	0.01
1B	93	-0.289	-2.805	0.115	0.000	-0.196	-1.299	1	0.01	0.00	0.01
1C	93	-0.289	-2.827	-0.064	0.000	-1.534	-1.063	1	0.01	0.00	0.02
1D	93	-0.289	-2.805	-0.064	0.000	-1.534	-1.299	1	0.01	0.00	0.02
1E	93	-0.185	-2.827	0.115	0.000	-0.196	-1.063	1	0.01	0.00	0.01
1F	93	-0.185	-2.805	0.115	0.000	-0.196	-1.299	1	0.01	0.00	0.01
1G	93	-0.185	-2.827	-0.064	0.000	-1.534	-1.063	1	0.01	0.00	0.02
1H	93	-0.185	-2.805	-0.064	0.000	-1.534	-1.299	1	0.01	0.00	0.02
1I	93	-0.253	-2.843	0.216	0.000	-0.588	-1.125	1	0.01	0.00	0.01
1J	93	-0.253	-2.789	0.216	0.000	-0.588	-1.237	1	0.01	0.00	0.01
1K	93	-0.253	-2.843	-0.164	0.000	-1.142	-1.125	1	0.01	0.00	0.01
1L	93	-0.253	-2.789	-0.164	0.000	-1.142	-1.237	1	0.01	0.00	0.01
1M	93	-0.221	-2.843	0.216	0.000	-0.588	-1.125	1	0.01	0.00	0.01
1N	93	-0.221	-2.789	0.216	0.000	-0.588	-1.237	1	0.01	0.00	0.01
1O	93	-0.221	-2.843	-0.164	0.000	-1.142	-1.125	1	0.01	0.00	0.01
1P	93	-0.221	-2.789	-0.164	0.000	-1.142	-1.237	1	0.01	0.00	0.01
2	93	-0.424	-5.146	0.047	0.000	-1.551	-2.162	1	0.01	0.00	0.02
7	93	-0.236	-2.782	0.039	0.000	-0.871	-1.158	1	0.01	0.00	0.01
8	93	-0.229	-2.770	0.025	0.000	-0.834	-1.169	1	0.01	0.00	0.01
9	93	-0.274	-3.132	0.028	0.000	-1.001	-1.304	1	0.01	0.00	0.01
10	93	-0.274	-3.163	0.029	0.000	-1.001	-1.319	1	0.01	0.00	0.01
11	93	-0.382	-4.619	0.050	0.000	-1.399	-1.935	1	0.01	0.00	0.02
12	93	-0.377	-4.612	0.042	0.000	-1.377	-1.942	1	0.01	0.00	0.02
13	93	-0.404	-4.829	0.044	0.000	-1.477	-2.023	1	0.01	0.00	0.02
14	93	-0.404	-4.847	0.045	0.000	-1.477	-2.032	1	0.01	0.00	0.02

ASTA NUM. 66 NI 209 NF 43 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.014	-3.726	-0.490	0.000	-0.146	-1.062	1	0.01	0.00	0.01	
1B	0	-0.014	-2.990	-0.490	0.000	-0.146	-1.290	1	0.01	0.00	0.01	
1C	0	-0.014	-3.726	-6.158	0.000	-2.170	-1.062	1	0.01	0.00	0.03	
1D	0	-0.014	-2.990	-6.158	0.000	-2.170	-1.290	1	0.01	0.00	0.03	
1E	0	0.258	-3.726	-0.490	0.000	-0.146	-1.062	1	0.01	0.00	0.01	
1F	0	0.258	-2.990	-0.490	0.000	-0.146	-1.290	1	0.01	0.00	0.01	
1G	0	0.258	-3.726	-6.158	0.000	-2.170	-1.062	1	0.01	0.00	0.03	
1H	0	0.258	-2.990	-6.158	0.000	-2.170	-1.290	1	0.01	0.00	0.03	
1I	0	-0.230	-3.499	-2.342	0.000	-0.773	-1.120	1	0.01	0.00	0.01	
1J	0	-0.230	-3.217	-2.342	0.000	-0.773	-1.232	1	0.01	0.00	0.01	
1K	0	-0.230	-3.499	-4.306	0.000	-1.543	-1.120	1	0.01	0.00	0.02	
1L	0	-0.230	-3.217	-4.306	0.000	-1.543	-1.232	1	0.01	0.00	0.02	
1M	0	0.474	-3.499	-2.342	0.000	-0.773	-1.120	1	0.01	0.00	0.01	
1N	0	0.474	-3.217	-2.342	0.000	-0.773	-1.232	1	0.01	0.00	0.01	
1O	0	0.474	-3.499	-4.306	0.000	-1.543	-1.120	1	0.01	0.00	0.02	
1P	0	0.474	-3.217	-4.306	0.000	-1.543	-1.232	1	0.01	0.00	0.02	
2	0	0.219	-6.060	-5.959	0.000	-2.077	-2.154	1	0.02	0.00	0.03	
7	0	0.147	-3.409	-3.315	0.000	-1.152	-1.153	1	0.01	0.00	0.01	
8	0	0.118	-3.332	-3.200	0.000	-1.115	-1.165	1	0.01	0.00	0.01	
9	0	0.141	-3.705	-3.851	0.000	-1.341	-1.299	1	0.01	0.00	0.02	
10	0	0.141	-3.737	-3.851	0.000	-1.341	-1.314	1	0.01	0.00	0.02	
11	0	0.212	-5.487	-5.355	0.000	-1.865	-1.928	1	0.01	0.00	0.02	
12	0	0.195	-5.441	-5.286	0.000	-1.843	-1.935	1	0.01	0.00	0.02	
13	0	0.209	-5.665	-5.677	0.000	-1.978	-2.016	1	0.02	0.00	0.02	
14	0	0.209	-5.684	-5.677	0.000	-1.978	-2.025	1	0.02	0.00	0.02	

1A	47	-0.014	-6.620	-0.490	0.000	0.082	-3.479	1	0.02	0.00	0.02
1B	47	-0.014	-5.884	-0.490	0.000	0.082	-3.357	1	0.02	0.00	0.02
1C	47	-0.014	-6.620	-6.158	0.000	0.704	-3.479	1	0.02	0.00	0.02
1D	47	-0.014	-5.884	-6.158	0.000	0.704	-3.357	1	0.02	0.00	0.02
1E	47	0.258	-6.620	-0.490	0.000	0.082	-3.479	1	0.02	0.00	0.02
1F	47	0.258	-5.884	-0.490	0.000	0.082	-3.357	1	0.02	0.00	0.02
1G	47	0.258	-6.620	-6.158	0.000	0.704	-3.479	1	0.02	0.00	0.02
1H	47	0.258	-5.884	-6.158	0.000	0.704	-3.357	1	0.02	0.00	0.02
1I	47	-0.230	-6.393	-2.342	0.000	0.319	-3.438	1	0.02	0.00	0.02
1J	47	-0.230	-6.111	-2.342	0.000	0.319	-3.398	1	0.02	0.00	0.02
1K	47	-0.230	-6.393	-4.306	0.000	0.467	-3.438	1	0.02	0.00	0.02
1L	47	-0.230	-6.111	-4.306	0.000	0.467	-3.398	1	0.02	0.00	0.02
1M	47	0.474	-6.393	-2.342	0.000	0.319	-3.438	1	0.02	0.00	0.02
1N	47	0.474	-6.111	-2.342	0.000	0.319	-3.398	1	0.02	0.00	0.02
1O	47	0.474	-6.393	-4.306	0.000	0.467	-3.438	1	0.02	0.00	0.02
1P	47	0.474	-6.111	-4.306	0.000	0.467	-3.398	1	0.02	0.00	0.02
2	47	0.219	-11.350	-5.959	0.000	0.704	-6.218	1	0.03	0.00	0.04
7	47	0.147	-6.256	-3.315	0.000	0.395	-3.408	1	0.02	0.00	0.02
8	47	0.118	-6.179	-3.200	0.000	0.378	-3.384	1	0.02	0.00	0.02
9	47	0.141	-6.943	-3.851	0.000	0.456	-3.783	1	0.02	0.00	0.02
10	47	0.141	-6.974	-3.851	0.000	0.456	-3.813	1	0.02	0.00	0.02
11	47	0.212	-10.229	-5.355	0.000	0.634	-5.593	1	0.03	0.00	0.03
12	47	0.195	-10.181	-5.286	0.000	0.624	-5.581	1	0.03	0.00	0.03
13	47	0.209	-10.638	-5.677	0.000	0.671	-5.822	1	0.03	0.00	0.03
14	47	0.209	-10.657	-5.677	0.000	0.671	-5.837	1	0.03	0.00	0.03
1A	93	-0.014	-9.514	-0.490	0.000	0.311	-7.247	1	0.03	0.00	0.04
1B	93	-0.014	-8.778	-0.490	0.000	0.311	-6.775	1	0.02	0.00	0.04
1C	93	-0.014	-9.514	-6.158	0.000	3.577	-7.247	1	0.03	0.00	0.05
1D	93	-0.014	-8.778	-6.158	0.000	3.577	-6.775	1	0.02	0.00	0.05
1E	93	0.258	-9.514	-0.490	0.000	0.311	-7.247	1	0.03	0.00	0.04
1F	93	0.258	-8.778	-0.490	0.000	0.311	-6.775	1	0.02	0.00	0.04
1G	93	0.258	-9.514	-6.158	0.000	3.577	-7.247	1	0.03	0.00	0.05
1H	93	0.258	-8.778	-6.158	0.000	3.577	-6.775	1	0.02	0.00	0.05
1I	93	-0.230	-9.287	-2.342	0.000	1.412	-7.107	1	0.02	0.00	0.04
1J	93	-0.230	-9.005	-2.342	0.000	1.412	-6.915	1	0.02	0.00	0.04
1K	93	-0.230	-9.287	-4.306	0.000	2.476	-7.107	1	0.02	0.00	0.04
1L	93	-0.230	-9.005	-4.306	0.000	2.476	-6.915	1	0.02	0.00	0.04
1M	93	0.474	-9.287	-2.342	0.000	1.412	-7.107	1	0.02	0.00	0.04
1N	93	0.474	-9.005	-2.342	0.000	1.412	-6.915	1	0.02	0.00	0.04
1O	93	0.474	-9.287	-4.306	0.000	2.476	-7.107	1	0.02	0.00	0.04
1P	93	0.474	-9.005	-4.306	0.000	2.476	-6.915	1	0.02	0.00	0.04
2	93	0.219	-16.640	-5.959	0.000	3.484	-12.750	1	0.04	0.00	0.08
7	93	0.147	-9.103	-3.315	0.000	1.942	-6.991	1	0.02	0.00	0.04
8	93	0.118	-9.026	-3.200	0.000	1.871	-6.932	1	0.02	0.00	0.04
9	93	0.141	-10.180	-3.851	0.000	2.254	-7.778	1	0.03	0.00	0.05
10	93	0.141	-10.210	-3.851	0.000	2.253	-7.822	1	0.03	0.00	0.05
11	93	0.212	-14.970	-5.355	0.000	3.133	-11.470	1	0.04	0.00	0.07
12	93	0.195	-14.920	-5.286	0.000	3.091	-11.440	1	0.04	0.00	0.07
13	93	0.209	-15.610	-5.677	0.000	3.320	-11.950	1	0.04	0.00	0.07
14	93	0.209	-15.630	-5.677	0.000	3.320	-11.970	1	0.04	0.00	0.07

ASTA NUM. 18 NI 43 NF 202 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.102	10.050	6.404	0.000	4.015	-6.791	1	0.03	0.00	0.05	
1B	0	-0.102	10.730	6.404	0.000	4.015	-7.305	1	0.03	0.00	0.05	
1C	0	-0.102	10.050	-0.160	0.000	-0.005	-6.791	1	0.03	0.00	0.04	
1D	0	-0.102	10.730	-0.160	0.000	-0.005	-7.305	1	0.03	0.00	0.04	
1E	0	0.273	10.050	6.404	0.000	4.015	-6.791	1	0.03	0.00	0.05	
1F	0	0.273	10.730	6.404	0.000	4.015	-7.305	1	0.03	0.00	0.05	
1G	0	0.273	10.050	-0.160	0.000	-0.005	-6.791	1	0.03	0.00	0.04	
1H	0	0.273	10.730	-0.160	0.000	-0.005	-7.305	1	0.03	0.00	0.04	
1I	0	-0.283	10.190	4.273	0.000	2.678	-6.892	1	0.03	0.00	0.04	
1J	0	-0.283	10.590	4.273	0.000	2.678	-7.204	1	0.03	0.00	0.04	
1K	0	-0.283	10.190	1.971	0.000	1.332	-6.892	1	0.03	0.00	0.04	
1L	0	-0.283	10.590	1.971	0.000	1.332	-7.204	1	0.03	0.00	0.04	
1M	0	0.454	10.190	4.273	0.000	2.678	-6.892	1	0.03	0.00	0.04	
1N	0	0.454	10.590	4.273	0.000	2.678	-7.204	1	0.03	0.00	0.04	
1O	0	0.454	10.190	1.971	0.000	1.332	-6.892	1	0.03	0.00	0.04	
1P	0	0.454	10.590	1.971	0.000	1.332	-7.204	1	0.03	0.00	0.04	
2	0	0.153	18.910	5.605	0.000	3.600	-12.810	1	0.05	0.00	0.08	
7	0	0.060	10.330	3.129	0.000	2.006	-7.022	1	0.03	0.00	0.04	
8	0	0.082	10.250	3.012	0.000	1.935	-6.968	1	0.03	0.00	0.04	
9	0	0.100	11.540	3.602	0.000	2.312	-7.818	1	0.03	0.00	0.05	
10	0	0.100	11.570	3.604	0.000	2.313	-7.863	1	0.03	0.00	0.05	
11	0	0.122	17.000	5.047	0.000	3.240	-11.530	1	0.05	0.00	0.07	
12	0	0.135	16.960	4.977	0.000	3.197	-11.500	1	0.05	0.00	0.07	
13	0	0.146	17.730	5.331	0.000	3.423	-12.010	1	0.05	0.00	0.07	
14	0	0.146	17.750	5.332	0.000	3.424	-12.030	1	0.05	0.00	0.07	
1A	50	-0.102	6.948	6.404	0.000	0.813	-2.542	1	0.02	0.00	0.02	
1B	50	-0.102	7.627	6.404	0.000	0.813	-2.717	1	0.02	0.00	0.02	
1C	50	-0.102	6.948	-0.160	0.000	0.075	-2.542	1	0.02	0.00	0.02	
1D	50	-0.102	7.627	-0.160	0.000	0.075	-2.717	1	0.02	0.00	0.02	
1E	50	0.273	6.948	6.404	0.000	0.813	-2.542	1	0.02	0.00	0.02	
1F	50	0.273	7.627	6.404	0.000	0.813	-2.717	1	0.02	0.00	0.02	
1G	50	0.273	6.948	-0.160	0.000	0.075	-2.542	1	0.02	0.00	0.02	
1H	50	0.273	7.627	-0.160	0.000	0.075	-2.717	1	0.02	0.00	0.02	

1I	50	-0.283	7.087	4.273	0.000	0.541	-2.574	1	0.02	0.00	0.02
1J	50	-0.283	7.488	4.273	0.000	0.541	-2.685	1	0.02	0.00	0.02
1K	50	-0.283	7.087	1.971	0.000	0.347	-2.574	1	0.02	0.00	0.02
1L	50	-0.283	7.488	1.971	0.000	0.347	-2.685	1	0.02	0.00	0.02
1M	50	0.454	7.087	4.273	0.000	0.541	-2.574	1	0.02	0.00	0.02
1N	50	0.454	7.488	4.273	0.000	0.541	-2.685	1	0.02	0.00	0.02
1O	50	0.454	7.087	1.971	0.000	0.347	-2.574	1	0.02	0.00	0.02
1P	50	0.454	7.488	1.971	0.000	0.347	-2.685	1	0.02	0.00	0.02
2	50	0.153	13.240	5.605	0.000	0.797	-4.776	1	0.04	0.00	0.03
7	50	0.060	7.277	3.129	0.000	0.441	-2.622	1	0.02	0.00	0.02
8	50	0.082	7.202	3.012	0.000	0.429	-2.603	1	0.02	0.00	0.02
9	50	0.100	8.073	3.602	0.000	0.511	-2.914	1	0.02	0.00	0.02
10	50	0.100	8.104	3.604	0.000	0.511	-2.943	1	0.02	0.00	0.02
11	50	0.122	11.920	5.047	0.000	0.717	-4.300	1	0.03	0.00	0.03
12	50	0.135	11.878	4.977	0.000	0.708	-4.290	1	0.03	0.00	0.03
13	50	0.146	12.399	5.331	0.000	0.757	-4.477	1	0.03	0.00	0.03
14	50	0.146	12.419	5.332	0.000	0.758	-4.491	1	0.03	0.00	0.03
1A	100	-0.102	3.845	6.404	0.000	-2.389	0.156	1	0.01	0.00	0.03
1B	100	-0.102	4.525	6.404	0.000	-2.389	0.321	1	0.01	0.00	0.03
1C	100	-0.102	3.845	-0.160	0.000	0.155	0.156	1	0.01	0.00	0.00
1D	100	-0.102	4.525	-0.160	0.000	0.155	0.321	1	0.01	0.00	0.00
1E	100	0.273	3.845	6.404	0.000	-2.389	0.156	1	0.01	0.00	0.03
1F	100	0.273	4.525	6.404	0.000	-2.389	0.321	1	0.01	0.00	0.03
1G	100	0.273	3.845	-0.160	0.000	0.155	0.156	1	0.01	0.00	0.00
1H	100	0.273	4.525	-0.160	0.000	0.155	0.321	1	0.01	0.00	0.00
1I	100	-0.283	3.985	4.273	0.000	-1.595	0.194	1	0.01	0.00	0.02
1J	100	-0.283	4.385	4.273	0.000	-1.595	0.283	1	0.01	0.00	0.02
1K	100	-0.283	3.985	1.971	0.000	-0.639	0.194	1	0.01	0.00	0.01
1L	100	-0.283	4.385	1.971	0.000	-0.639	0.283	1	0.01	0.00	0.01
1M	100	0.454	3.985	4.273	0.000	-1.595	0.194	1	0.01	0.00	0.02
1N	100	0.454	4.385	4.273	0.000	-1.595	0.283	1	0.01	0.00	0.02
1O	100	0.454	3.985	1.971	0.000	-0.639	0.194	1	0.01	0.00	0.01
1P	100	0.454	4.385	1.971	0.000	-0.639	0.283	1	0.01	0.00	0.01
2	100	0.153	7.569	5.605	0.000	-2.005	0.424	1	0.02	0.00	0.03
7	100	0.060	4.225	3.129	0.000	-1.123	0.253	1	0.01	0.00	0.01
8	100	0.082	4.154	3.012	0.000	-1.077	0.236	1	0.01	0.00	0.01
9	100	0.100	4.606	3.602	0.000	-1.290	0.256	1	0.01	0.00	0.02
10	100	0.100	4.639	3.604	0.000	-1.291	0.243	1	0.01	0.00	0.02
11	100	0.122	6.840	5.047	0.000	-1.807	0.390	1	0.02	0.00	0.02
12	100	0.135	6.797	4.977	0.000	-1.780	0.380	1	0.02	0.00	0.02
13	100	0.146	7.069	5.331	0.000	-1.908	0.391	1	0.02	0.00	0.02
14	100	0.146	7.088	5.332	0.000	-1.908	0.384	1	0.02	0.00	0.02

ASTA NUM. 67 NI 202 NF 195 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.323	3.584	0.408	0.000	0.022	0.291	1	0.01	0.00	0.00	
1B	0	-0.323	3.728	0.408	0.000	0.022	0.107	1	0.01	0.00	0.00	
1C	0	-0.323	3.584	0.258	0.000	-1.507	0.291	1	0.01	0.00	0.02	
1D	0	-0.323	3.728	0.258	0.000	-1.507	0.107	1	0.01	0.00	0.02	
1E	0	-0.220	3.584	0.408	0.000	0.022	0.291	1	0.01	0.00	0.00	
1F	0	-0.220	3.728	0.408	0.000	0.022	0.107	1	0.01	0.00	0.00	
1G	0	-0.220	3.584	0.258	0.000	-1.507	0.291	1	0.01	0.00	0.02	
1H	0	-0.220	3.728	0.258	0.000	-1.507	0.107	1	0.01	0.00	0.02	
1I	0	-0.291	3.615	0.512	0.000	-0.445	0.249	1	0.01	0.00	0.01	
1J	0	-0.291	3.697	0.512	0.000	-0.445	0.149	1	0.01	0.00	0.01	
1K	0	-0.291	3.615	0.154	0.000	-1.040	0.249	1	0.01	0.00	0.01	
1L	0	-0.291	3.697	0.154	0.000	-1.040	0.149	1	0.01	0.00	0.01	
1M	0	-0.252	3.615	0.512	0.000	-0.445	0.249	1	0.01	0.00	0.01	
1N	0	-0.252	3.697	0.512	0.000	-0.445	0.149	1	0.01	0.00	0.01	
1O	0	-0.252	3.615	0.154	0.000	-1.040	0.249	1	0.01	0.00	0.01	
1P	0	-0.252	3.697	0.154	0.000	-1.040	0.149	1	0.01	0.00	0.01	
2	0	-0.488	6.679	0.606	0.000	-1.331	0.352	1	0.02	0.00	0.02	
7	0	-0.271	3.612	0.343	0.000	-0.736	0.213	1	0.01	0.00	0.01	
8	0	-0.263	3.603	0.330	0.000	-0.715	0.197	1	0.01	0.00	0.01	
9	0	-0.312	4.051	0.370	0.000	-0.861	0.212	1	0.01	0.00	0.01	
10	0	-0.312	4.079	0.372	0.000	-0.861	0.199	1	0.01	0.00	0.01	
11	0	-0.439	5.994	0.552	0.000	-1.193	0.325	1	0.02	0.00	0.01	
12	0	-0.434	5.989	0.544	0.000	-1.180	0.315	1	0.02	0.00	0.01	
13	0	-0.463	6.257	0.569	0.000	-1.268	0.324	1	0.02	0.00	0.02	
14	0	-0.463	6.274	0.569	0.000	-1.268	0.317	1	0.02	0.00	0.02	
1A	50	-0.323	0.483	0.408	0.000	-0.130	1.314	1	0.00	0.00	0.01	
1B	50	-0.323	0.627	0.408	0.000	-0.130	1.190	1	0.00	0.00	0.01	
1C	50	-0.323	0.483	0.258	0.000	-1.689	1.314	1	0.00	0.00	0.02	
1D	50	-0.323	0.627	0.258	0.000	-1.689	1.190	1	0.00	0.00	0.02	
1E	50	-0.220	0.483	0.408	0.000	-0.130	1.314	1	0.00	0.00	0.01	
1F	50	-0.220	0.627	0.408	0.000	-0.130	1.190	1	0.00	0.00	0.01	
1G	50	-0.220	0.483	0.258	0.000	-1.689	1.314	1	0.00	0.00	0.02	
1H	50	-0.220	0.627	0.258	0.000	-1.689	1.190	1	0.00	0.00	0.02	
1I	50	-0.291	0.514	0.512	0.000	-0.597	1.302	1	0.00	0.00	0.01	
1J	50	-0.291	0.596	0.512	0.000	-0.597	1.201	1	0.00	0.00	0.01	
1K	50	-0.291	0.514	0.154	0.000	-1.222	1.302	1	0.00	0.00	0.02	
1L	50	-0.291	0.596	0.154	0.000	-1.222	1.201	1	0.00	0.00	0.02	
1M	50	-0.252	0.514	0.512	0.000	-0.597	1.302	1	0.00	0.00	0.01	
1N	50	-0.252	0.596	0.512	0.000	-0.597	1.201	1	0.00	0.00	0.01	
1O	50	-0.252	0.514	0.154	0.000	-1.222	1.302	1	0.00	0.00	0.02	
1P	50	-0.252	0.596	0.154	0.000	-1.222	1.201	1	0.00	0.00	0.02	
2	50	-0.488	1.010	0.606	0.000	-1.634	2.275	1	0.00	0.00	0.02	

7	50	-0.271	0.562	0.343	0.000	-0.908	1.257	1	0.00	0.00	0.01
8	50	-0.263	0.553	0.330	0.000	-0.879	1.236	1	0.00	0.00	0.01
9	50	-0.312	0.583	0.370	0.000	-1.046	1.370	1	0.00	0.00	0.01
10	50	-0.312	0.612	0.372	0.000	-1.046	1.372	1	0.00	0.00	0.01
11	50	-0.439	0.915	0.552	0.000	-1.470	2.052	1	0.00	0.00	0.02
12	50	-0.434	0.909	0.544	0.000	-1.453	2.040	1	0.00	0.00	0.02
13	50	-0.463	0.928	0.569	0.000	-1.553	2.120	1	0.00	0.00	0.02
14	50	-0.463	0.944	0.569	0.000	-1.553	2.121	1	0.00	0.00	0.02
1A	100	-0.323	-2.618	0.408	0.000	-0.281	0.787	1	0.01	0.00	0.00
1B	100	-0.323	-2.474	0.408	0.000	-0.281	0.721	1	0.01	0.00	0.00
1C	100	-0.323	-2.618	0.258	0.000	-1.871	0.787	1	0.01	0.00	0.02
1D	100	-0.323	-2.474	0.258	0.000	-1.871	0.721	1	0.01	0.00	0.02
1E	100	-0.220	-2.618	0.408	0.000	-0.281	0.787	1	0.01	0.00	0.00
1F	100	-0.220	-2.474	0.408	0.000	-0.281	0.721	1	0.01	0.00	0.00
1G	100	-0.220	-2.618	0.258	0.000	-1.871	0.787	1	0.01	0.00	0.02
1H	100	-0.220	-2.474	0.258	0.000	-1.871	0.721	1	0.01	0.00	0.02
1I	100	-0.291	-2.587	0.512	0.000	-0.749	0.806	1	0.01	0.00	0.01
1J	100	-0.291	-2.505	0.512	0.000	-0.749	0.702	1	0.01	0.00	0.01
1K	100	-0.291	-2.587	0.154	0.000	-1.403	0.806	1	0.01	0.00	0.02
1L	100	-0.291	-2.505	0.154	0.000	-1.403	0.702	1	0.01	0.00	0.02
1M	100	-0.252	-2.587	0.512	0.000	-0.749	0.806	1	0.01	0.00	0.01
1N	100	-0.252	-2.505	0.512	0.000	-0.749	0.702	1	0.01	0.00	0.01
1O	100	-0.252	-2.587	0.154	0.000	-1.403	0.806	1	0.01	0.00	0.02
1P	100	-0.252	-2.505	0.154	0.000	-1.403	0.702	1	0.01	0.00	0.02
2	100	-0.488	-4.658	0.606	0.000	-1.937	1.363	1	0.01	0.00	0.02
7	100	-0.271	-2.488	0.343	0.000	-1.079	0.775	1	0.01	0.00	0.01
8	100	-0.263	-2.497	0.330	0.000	-1.044	0.750	1	0.01	0.00	0.01
9	100	-0.312	-2.885	0.370	0.000	-1.231	0.795	1	0.01	0.00	0.02
10	100	-0.312	-2.856	0.372	0.000	-1.232	0.811	1	0.01	0.00	0.02
11	100	-0.439	-4.164	0.552	0.000	-1.746	1.239	1	0.01	0.00	0.02
12	100	-0.434	-4.170	0.544	0.000	-1.725	1.225	1	0.01	0.00	0.02
13	100	-0.463	-4.402	0.569	0.000	-1.837	1.251	1	0.01	0.00	0.02
14	100	-0.463	-4.385	0.569	0.000	-1.838	1.261	1	0.01	0.00	0.02

ASTA NUM. 68 NI 195 NF 18 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.050	-3.655	-0.466	0.000	-0.174	0.775	1	0.01	0.00	0.00	
1B	0	0.050	-2.713	-0.466	0.000	-0.174	0.724	1	0.01	0.00	0.00	
1C	0	0.050	-3.655	-6.864	0.000	-2.622	0.775	1	0.01	0.00	0.03	
1D	0	0.050	-2.713	-6.864	0.000	-2.622	0.724	1	0.01	0.00	0.03	
1E	0	0.322	-3.655	-0.466	0.000	-0.174	0.775	1	0.01	0.00	0.00	
1F	0	0.322	-2.713	-0.466	0.000	-0.174	0.724	1	0.01	0.00	0.00	
1G	0	0.322	-3.655	-6.864	0.000	-2.622	0.775	1	0.01	0.00	0.03	
1H	0	0.322	-2.713	-6.864	0.000	-2.622	0.724	1	0.01	0.00	0.03	
1I	0	-0.163	-3.414	-2.626	0.000	-0.969	0.801	1	0.01	0.00	0.01	
1J	0	-0.163	-2.954	-2.626	0.000	-0.969	0.698	1	0.01	0.00	0.01	
1K	0	-0.163	-3.414	-4.704	0.000	-1.827	0.801	1	0.01	0.00	0.02	
1L	0	-0.163	-2.954	-4.704	0.000	-1.827	0.698	1	0.01	0.00	0.02	
1M	0	0.535	-3.414	-2.626	0.000	-0.969	0.801	1	0.01	0.00	0.01	
1N	0	0.535	-2.954	-2.626	0.000	-0.969	0.698	1	0.01	0.00	0.01	
1O	0	0.535	-3.414	-4.704	0.000	-1.827	0.801	1	0.01	0.00	0.02	
1P	0	0.535	-2.954	-4.704	0.000	-1.827	0.698	1	0.01	0.00	0.02	
2	0	0.335	-5.746	-6.594	0.000	-2.517	1.354	1	0.02	0.00	0.03	
7	0	0.211	-3.211	-3.649	0.000	-1.389	0.771	1	0.01	0.00	0.02	
8	0	0.181	-3.157	-3.550	0.000	-1.355	0.745	1	0.01	0.00	0.02	
9	0	0.212	-3.561	-4.205	0.000	-1.603	0.789	1	0.01	0.00	0.02	
10	0	0.212	-3.532	-4.210	0.000	-1.605	0.805	1	0.01	0.00	0.02	
11	0	0.317	-5.189	-5.924	0.000	-2.259	1.232	1	0.01	0.00	0.03	
12	0	0.299	-5.156	-5.865	0.000	-2.239	1.217	1	0.01	0.00	0.03	
13	0	0.317	-5.399	-6.258	0.000	-2.388	1.243	1	0.01	0.00	0.03	
14	0	0.318	-5.381	-6.261	0.000	-2.389	1.253	1	0.01	0.00	0.03	
1A	50	0.050	-6.756	-0.466	0.000	0.059	-1.828	1	0.02	0.00	0.01	
1B	50	0.050	-5.814	-0.466	0.000	0.059	-1.407	1	0.02	0.00	0.01	
1C	50	0.050	-6.756	-6.864	0.000	0.810	-1.828	1	0.02	0.00	0.01	
1D	50	0.050	-5.814	-6.864	0.000	0.810	-1.407	1	0.02	0.00	0.01	
1E	50	0.322	-6.756	-0.466	0.000	0.059	-1.828	1	0.02	0.00	0.01	
1F	50	0.322	-5.814	-0.466	0.000	0.059	-1.407	1	0.02	0.00	0.01	
1G	50	0.322	-6.756	-6.864	0.000	0.810	-1.828	1	0.02	0.00	0.01	
1H	50	0.322	-5.814	-6.864	0.000	0.810	-1.407	1	0.02	0.00	0.01	
1I	50	-0.163	-6.515	-2.626	0.000	0.343	-1.682	1	0.02	0.00	0.01	
1J	50	-0.163	-6.055	-2.626	0.000	0.343	-1.553	1	0.02	0.00	0.01	
1K	50	-0.163	-6.515	-4.704	0.000	0.526	-1.682	1	0.02	0.00	0.01	
1L	50	-0.163	-6.055	-4.704	0.000	0.526	-1.553	1	0.02	0.00	0.01	
1M	50	0.535	-6.515	-2.626	0.000	0.343	-1.682	1	0.02	0.00	0.01	
1N	50	0.535	-6.055	-2.626	0.000	0.343	-1.553	1	0.02	0.00	0.01	
1O	50	0.535	-6.515	-4.704	0.000	0.526	-1.682	1	0.02	0.00	0.01	
1P	50	0.535	-6.055	-4.704	0.000	0.526	-1.553	1	0.02	0.00	0.01	
2	50	0.335	-11.413	-6.594	0.000	0.780	-2.936	1	0.03	0.00	0.02	
7	50	0.211	-6.261	-3.649	0.000	0.436	-1.597	1	0.02	0.00	0.01	
8	50	0.181	-6.207	-3.550	0.000	0.420	-1.595	1	0.02	0.00	0.01	
9	50	0.212	-7.031	-4.205	0.000	0.500	-1.859	1	0.02	0.00	0.01	
10	50	0.212	-7.001	-4.210	0.000	0.500	-1.827	1	0.02	0.00	0.01	
11	50	0.317	-10.270	-5.924	0.000	0.703	-2.632	1	0.03	0.00	0.02	
12	50	0.299	-10.233	-5.865	0.000	0.693	-2.631	1	0.03	0.00	0.02	
13	50	0.317	-10.729	-6.258	0.000	0.742	-2.789	1	0.03	0.00	0.02	
14	50	0.318	-10.711	-6.261	0.000	0.742	-2.771	1	0.03	0.00	0.02	

1A	100	0.050	-9.857	-0.466	0.000	0.292	-5.981	1	0.03	0.00	0.04
1B	100	0.050	-8.915	-0.466	0.000	0.292	-5.089	1	0.02	0.00	0.03
1C	100	0.050	-9.857	-6.864	0.000	4.242	-5.981	1	0.03	0.00	0.05
1D	100	0.050	-8.915	-6.864	0.000	4.242	-5.089	1	0.02	0.00	0.05
1E	100	0.322	-9.857	-0.466	0.000	0.292	-5.981	1	0.03	0.00	0.04
1F	100	0.322	-8.915	-0.466	0.000	0.292	-5.089	1	0.02	0.00	0.03
1G	100	0.322	-9.857	-6.864	0.000	4.242	-5.981	1	0.03	0.00	0.05
1H	100	0.322	-8.915	-6.864	0.000	4.242	-5.089	1	0.02	0.00	0.05
1I	100	-0.163	-9.616	-2.626	0.000	1.655	-5.715	1	0.03	0.00	0.03
1J	100	-0.163	-9.156	-2.626	0.000	1.655	-5.355	1	0.02	0.00	0.03
1K	100	-0.163	-9.616	-4.704	0.000	2.879	-5.715	1	0.03	0.00	0.04
1L	100	-0.163	-9.156	-4.704	0.000	2.879	-5.355	1	0.02	0.00	0.04
1M	100	0.535	-9.616	-2.626	0.000	1.655	-5.715	1	0.03	0.00	0.03
1N	100	0.535	-9.156	-2.626	0.000	1.655	-5.355	1	0.02	0.00	0.03
1O	100	0.535	-9.616	-4.704	0.000	2.879	-5.715	1	0.03	0.00	0.04
1P	100	0.535	-9.156	-4.704	0.000	2.879	-5.355	1	0.02	0.00	0.04
2	100	0.335	-17.080	-6.594	0.000	4.077	-10.060	1	0.05	0.00	0.06
7	100	0.211	-9.311	-3.649	0.000	2.260	-5.490	1	0.02	0.00	0.03
8	100	0.181	-9.257	-3.550	0.000	2.195	-5.461	1	0.02	0.00	0.03
9	100	0.212	-10.500	-4.205	0.000	2.602	-6.240	1	0.03	0.00	0.04
10	100	0.212	-10.470	-4.210	0.000	2.606	-6.194	1	0.03	0.00	0.04
11	100	0.317	-15.350	-5.924	0.000	3.665	-9.036	1	0.04	0.00	0.05
12	100	0.299	-15.310	-5.865	0.000	3.626	-9.019	1	0.04	0.00	0.05
13	100	0.317	-16.060	-6.258	0.000	3.871	-9.486	1	0.04	0.00	0.06
14	100	0.318	-16.040	-6.261	0.000	3.872	-9.459	1	0.04	0.00	0.06

ASTA NUM. 19 NI 18 NF 168 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.024	15.113	9.806	0.000	7.491	-5.123	1	0.04	0.00	0.09	
1B	0	-0.024	16.307	9.806	0.000	7.491	-5.955	1	0.04	0.00	0.09	
1C	0	-0.024	15.113	-3.208	0.000	-2.867	-5.123	1	0.04	0.00	0.04	
1D	0	-0.024	16.307	-3.208	0.000	-2.867	-5.955	1	0.04	0.00	0.04	
1E	0	0.532	15.113	9.806	0.000	7.491	-5.123	1	0.04	0.00	0.09	
1F	0	0.532	16.307	9.806	0.000	7.491	-5.955	1	0.04	0.00	0.09	
1G	0	0.532	15.113	-3.208	0.000	-2.867	-5.123	1	0.04	0.00	0.04	
1H	0	0.532	16.307	-3.208	0.000	-2.867	-5.955	1	0.04	0.00	0.04	
1I	0	-0.299	15.219	5.679	0.000	4.174	-5.307	1	0.04	0.00	0.05	
1J	0	-0.299	16.201	5.679	0.000	4.174	-5.771	1	0.04	0.00	0.05	
1K	0	-0.299	15.219	0.919	0.000	0.450	-5.307	1	0.04	0.00	0.03	
1L	0	-0.299	16.201	0.919	0.000	0.450	-5.771	1	0.04	0.00	0.03	
1M	0	0.807	15.219	5.679	0.000	4.174	-5.307	1	0.04	0.00	0.05	
1N	0	0.807	16.201	5.679	0.000	4.174	-5.771	1	0.04	0.00	0.05	
1O	0	0.807	15.219	0.919	0.000	0.450	-5.307	1	0.04	0.00	0.03	
1P	0	0.807	16.201	0.919	0.000	0.450	-5.771	1	0.04	0.00	0.03	
2	0	0.458	28.600	5.944	0.000	4.165	-10.070	1	0.08	0.00	0.06	
7	0	0.215	15.560	3.295	0.000	2.306	-5.489	1	0.04	0.00	0.03	
8	0	0.248	15.510	3.206	0.000	2.246	-5.466	1	0.04	0.00	0.03	
9	0	0.289	17.570	3.776	0.000	2.645	-6.244	1	0.05	0.00	0.04	
10	0	0.290	17.550	3.780	0.000	2.648	-6.197	1	0.05	0.00	0.04	
11	0	0.389	25.680	5.347	0.000	3.745	-9.040	1	0.07	0.00	0.05	
12	0	0.409	25.650	5.294	0.000	3.710	-9.026	1	0.07	0.00	0.05	
13	0	0.434	26.890	5.636	0.000	3.949	-9.493	1	0.07	0.00	0.06	
14	0	0.434	26.880	5.638	0.000	3.951	-9.465	1	0.07	0.00	0.06	
1A	56	-0.024	11.624	9.806	0.000	1.974	2.396	1	0.03	0.00	0.02	
1B	56	-0.024	12.818	9.806	0.000	1.974	2.236	1	0.03	0.00	0.02	
1C	56	-0.024	11.624	-3.208	0.000	-1.062	2.396	1	0.03	0.00	0.01	
1D	56	-0.024	12.818	-3.208	0.000	-1.062	2.236	1	0.03	0.00	0.01	
1E	56	0.532	11.624	9.806	0.000	1.974	2.396	1	0.03	0.00	0.02	
1F	56	0.532	12.818	9.806	0.000	1.974	2.236	1	0.03	0.00	0.02	
1G	56	0.532	11.624	-3.208	0.000	-1.062	2.396	1	0.03	0.00	0.01	
1H	56	0.532	12.818	-3.208	0.000	-1.062	2.236	1	0.03	0.00	0.01	
1I	56	-0.299	11.730	5.679	0.000	0.979	2.271	1	0.03	0.00	0.01	
1J	56	-0.299	12.712	5.679	0.000	0.979	2.361	1	0.03	0.00	0.01	
1K	56	-0.299	11.730	0.919	0.000	-0.067	2.271	1	0.03	0.00	0.01	
1L	56	-0.299	12.712	0.919	0.000	-0.067	2.361	1	0.03	0.00	0.01	
1M	56	0.807	11.730	5.679	0.000	0.979	2.271	1	0.03	0.00	0.01	
1N	56	0.807	12.712	5.679	0.000	0.979	2.361	1	0.03	0.00	0.01	
1O	56	0.807	11.730	0.919	0.000	-0.067	2.271	1	0.03	0.00	0.01	
1P	56	0.807	12.712	0.919	0.000	-0.067	2.361	1	0.03	0.00	0.01	
2	56	0.458	22.225	5.944	0.000	0.822	4.223	1	0.06	0.00	0.03	
7	56	0.215	12.128	3.295	0.000	0.452	2.298	1	0.03	0.00	0.01	
8	56	0.248	12.081	3.206	0.000	0.443	2.296	1	0.03	0.00	0.01	
9	56	0.289	13.668	3.776	0.000	0.521	2.541	1	0.04	0.00	0.02	
10	56	0.290	13.649	3.780	0.000	0.522	2.578	1	0.04	0.00	0.02	
11	56	0.389	19.965	5.347	0.000	0.737	3.797	1	0.05	0.00	0.02	
12	56	0.409	19.940	5.294	0.000	0.732	3.799	1	0.05	0.00	0.02	
13	56	0.434	20.890	5.636	0.000	0.779	3.945	1	0.06	0.00	0.02	
14	56	0.434	20.880	5.638	0.000	0.780	3.969	1	0.06	0.00	0.02	
1A	113	-0.024	8.135	9.806	0.000	-3.542	7.953	1	0.02	0.00	0.05	
1B	113	-0.024	9.329	9.806	0.000	-3.542	8.465	1	0.02	0.00	0.05	
1C	113	-0.024	8.135	-3.208	0.000	0.742	7.953	1	0.02	0.00	0.05	
1D	113	-0.024	9.329	-3.208	0.000	0.742	8.465	1	0.02	0.00	0.05	
1E	113	0.532	8.135	9.806	0.000	-3.542	7.953	1	0.02	0.00	0.05	
1F	113	0.532	9.329	9.806	0.000	-3.542	8.465	1	0.02	0.00	0.05	
1G	113	0.532	8.135	-3.208	0.000	0.742	7.953	1	0.02	0.00	0.05	
1H	113	0.532	9.329	-3.208	0.000	0.742	8.465	1	0.02	0.00	0.05	
1I	113	-0.299	8.241	5.679	0.000	-2.215	7.887	1	0.02	0.00	0.05	

1J	113	-0.299	9.223	5.679	0.000	-2.215	8.531	1	0.02	0.00	0.05
1K	113	-0.299	8.241	0.919	0.000	-0.585	7.887	1	0.02	0.00	0.05
1L	113	-0.299	9.223	0.919	0.000	-0.585	8.531	1	0.02	0.00	0.05
1M	113	0.807	8.241	5.679	0.000	-2.215	7.887	1	0.02	0.00	0.05
1N	113	0.807	9.223	5.679	0.000	-2.215	8.531	1	0.02	0.00	0.05
1O	113	0.807	8.241	0.919	0.000	-0.585	7.887	1	0.02	0.00	0.05
1P	113	0.807	9.223	0.919	0.000	-0.585	8.531	1	0.02	0.00	0.05
2	113	0.458	15.850	5.944	0.000	-2.521	14.930	1	0.04	0.00	0.09
7	113	0.215	8.697	3.295	0.000	-1.401	8.155	1	0.02	0.00	0.05
8	113	0.248	8.651	3.206	0.000	-1.360	8.127	1	0.02	0.00	0.05
9	113	0.289	9.766	3.776	0.000	-1.603	9.132	1	0.03	0.00	0.05
10	113	0.290	9.749	3.780	0.000	-1.604	9.159	1	0.03	0.00	0.05
11	113	0.389	14.250	5.347	0.000	-2.270	13.420	1	0.04	0.00	0.08
12	113	0.409	14.230	5.294	0.000	-2.246	13.410	1	0.04	0.00	0.08
13	113	0.434	14.890	5.636	0.000	-2.391	14.010	1	0.04	0.00	0.08
14	113	0.434	14.880	5.638	0.000	-2.392	14.030	1	0.04	0.00	0.08

ASTA NUM. 69 NI 168 NF 161 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.232	7.946	1.605	0.000	-0.873	8.487	1	0.02	0.00	0.05	
1B	0	-0.232	8.400	1.605	0.000	-0.873	7.905	1	0.02	0.00	0.05	
1C	0	-0.232	7.946	-3.643	0.000	-1.105	8.487	1	0.02	0.00	0.05	
1D	0	-0.232	8.400	-3.643	0.000	-1.105	7.905	1	0.02	0.00	0.05	
1E	0	-0.122	7.946	1.605	0.000	-0.873	8.487	1	0.02	0.00	0.05	
1F	0	-0.122	8.400	1.605	0.000	-0.873	7.905	1	0.02	0.00	0.05	
1G	0	-0.122	7.946	-3.643	0.000	-1.105	8.487	1	0.02	0.00	0.05	
1H	0	-0.122	8.400	-3.643	0.000	-1.105	7.905	1	0.02	0.00	0.05	
1I	0	-0.346	7.988	0.089	0.000	-0.855	8.532	1	0.02	0.00	0.05	
1J	0	-0.346	8.358	0.089	0.000	-0.855	7.860	1	0.02	0.00	0.05	
1K	0	-0.346	7.988	-2.127	0.000	-1.123	8.532	1	0.02	0.00	0.05	
1L	0	-0.346	8.358	-2.127	0.000	-1.123	7.860	1	0.02	0.00	0.05	
1M	0	-0.009	7.988	0.089	0.000	-0.855	8.532	1	0.02	0.00	0.05	
1N	0	-0.009	8.358	0.089	0.000	-0.855	7.860	1	0.02	0.00	0.05	
1O	0	-0.009	7.988	-2.127	0.000	-1.123	8.532	1	0.02	0.00	0.05	
1P	0	-0.009	8.358	-2.127	0.000	-1.123	7.860	1	0.02	0.00	0.05	
2	0	-0.318	14.900	-1.835	0.000	-1.782	14.910	1	0.04	0.00	0.09	
7	0	-0.189	8.067	-1.005	0.000	-0.980	8.140	1	0.02	0.00	0.05	
8	0	-0.172	8.061	-0.991	0.000	-0.962	8.114	1	0.02	0.00	0.05	
9	0	-0.205	9.156	-1.167	0.000	-1.133	9.119	1	0.02	0.00	0.05	
10	0	-0.205	9.145	-1.167	0.000	-1.134	9.146	1	0.02	0.00	0.05	
11	0	-0.294	13.360	-1.643	0.000	-1.598	13.400	1	0.04	0.00	0.08	
12	0	-0.283	13.360	-1.635	0.000	-1.587	13.390	1	0.04	0.00	0.08	
13	0	-0.303	14.010	-1.740	0.000	-1.689	13.990	1	0.04	0.00	0.08	
14	0	-0.303	14.010	-1.740	0.000	-1.690	14.000	1	0.04	0.00	0.08	
1A	56	-0.232	4.457	1.605	0.000	1.143	12.232	1	0.01	0.00	0.07	
1B	56	-0.232	4.911	1.605	0.000	1.143	11.396	1	0.01	0.00	0.07	
1C	56	-0.232	4.457	-3.643	0.000	-1.975	12.232	1	0.01	0.00	0.07	
1D	56	-0.232	4.911	-3.643	0.000	-1.975	11.396	1	0.01	0.00	0.07	
1E	56	-0.122	4.457	1.605	0.000	1.143	12.232	1	0.01	0.00	0.07	
1F	56	-0.122	4.911	1.605	0.000	1.143	11.396	1	0.01	0.00	0.07	
1G	56	-0.122	4.457	-3.643	0.000	-1.975	12.232	1	0.01	0.00	0.07	
1H	56	-0.122	4.911	-3.643	0.000	-1.975	11.396	1	0.01	0.00	0.07	
1I	56	-0.346	4.499	0.089	0.000	-0.930	12.254	1	0.01	0.00	0.07	
1J	56	-0.346	4.869	0.089	0.000	-0.930	11.374	1	0.01	0.00	0.07	
1K	56	-0.346	4.499	-2.127	0.000	0.098	12.254	1	0.01	0.00	0.07	
1L	56	-0.346	4.869	-2.127	0.000	0.098	11.374	1	0.01	0.00	0.07	
1M	56	-0.009	4.499	0.089	0.000	-0.930	12.254	1	0.01	0.00	0.07	
1N	56	-0.009	4.869	0.089	0.000	-0.930	11.374	1	0.01	0.00	0.07	
1O	56	-0.009	4.499	-2.127	0.000	0.098	12.254	1	0.01	0.00	0.07	
1P	56	-0.009	4.869	-2.127	0.000	0.098	11.374	1	0.01	0.00	0.07	
2	56	-0.318	8.522	-1.835	0.000	-0.750	21.493	1	0.02	0.00	0.13	
7	56	-0.189	4.636	-1.005	0.000	-0.415	11.715	1	0.01	0.00	0.07	
8	56	-0.172	4.630	-0.991	0.000	-0.404	11.682	1	0.01	0.00	0.07	
9	56	-0.205	5.255	-1.167	0.000	-0.477	13.172	1	0.01	0.00	0.08	
10	56	-0.205	5.244	-1.167	0.000	-0.477	13.195	1	0.01	0.00	0.08	
11	56	-0.294	7.647	-1.643	0.000	-0.674	19.307	1	0.02	0.00	0.11	
12	56	-0.283	7.645	-1.635	0.000	-0.667	19.297	1	0.02	0.00	0.11	
13	56	-0.303	8.017	-1.740	0.000	-0.711	20.186	1	0.02	0.00	0.12	
14	56	-0.303	8.013	-1.740	0.000	-0.711	20.196	1	0.02	0.00	0.12	
1A	113	-0.232	0.968	1.605	0.000	3.159	14.016	1	0.00	0.00	0.08	
1B	113	-0.232	1.422	1.605	0.000	3.159	12.924	1	0.00	0.00	0.08	
1C	113	-0.232	0.968	-3.643	0.000	-2.845	14.016	1	0.00	0.00	0.08	
1D	113	-0.232	1.422	-3.643	0.000	-2.845	12.924	1	0.00	0.00	0.08	
1E	113	-0.122	0.968	1.605	0.000	3.159	14.016	1	0.00	0.00	0.08	
1F	113	-0.122	1.422	1.605	0.000	3.159	12.924	1	0.00	0.00	0.08	
1G	113	-0.122	0.968	-3.643	0.000	-2.845	14.016	1	0.00	0.00	0.08	
1H	113	-0.122	1.422	-3.643	0.000	-2.845	12.924	1	0.00	0.00	0.08	
1I	113	-0.346	1.010	0.089	0.000	-1.005	14.014	1	0.00	0.00	0.08	
1J	113	-0.346	1.380	0.089	0.000	-1.005	12.926	1	0.00	0.00	0.08	
1K	113	-0.346	1.010	-2.127	0.000	1.319	14.014	1	0.00	0.00	0.08	
1L	113	-0.346	1.380	-2.127	0.000	1.319	12.926	1	0.00	0.00	0.08	
1M	113	-0.009	1.010	0.089	0.000	-1.005	14.014	1	0.00	0.00	0.08	
1N	113	-0.009	1.380	0.089	0.000	-1.005	12.926	1	0.00	0.00	0.08	
1O	113	-0.009	1.010	-2.127	0.000	1.319	14.014	1	0.00	0.00	0.08	
1P	113	-0.009	1.380	-2.127	0.000	1.319	12.926	1	0.00	0.00	0.08	
2	113	-0.318	2.143	-1.835	0.000	0.283	24.490	1	0.01	0.00	0.15	
7	113	-0.189	1.205	-1.005	0.000	0.151	13.360	1	0.00	0.00	0.08	

8	113	-0.172	1.199	-0.991	0.000	0.154	13.320	1	0.00	0.00	0.08
9	113	-0.205	1.353	-1.167	0.000	0.180	15.030	1	0.00	0.00	0.09
10	113	-0.205	1.343	-1.167	0.000	0.180	15.050	1	0.00	0.00	0.09
11	113	-0.294	1.934	-1.643	0.000	0.250	22.000	1	0.01	0.00	0.13
12	113	-0.283	1.930	-1.635	0.000	0.252	21.990	1	0.01	0.00	0.13
13	113	-0.303	2.023	-1.740	0.000	0.268	23.010	1	0.01	0.00	0.14
14	113	-0.303	2.016	-1.740	0.000	0.268	23.020	1	0.01	0.00	0.14

ASTA NUM. 70 NI 161 NF 154 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.287	1.002	3.006	0.000	2.993	14.035	1	0.00	0.00	0.08	
1B	0	-0.287	1.072	3.006	0.000	2.993	12.945	1	0.00	0.00	0.08	
1C	0	-0.287	1.002	-1.912	0.000	-2.841	14.035	1	0.00	0.00	0.08	
1D	0	-0.287	1.072	-1.912	0.000	-2.841	12.945	1	0.00	0.00	0.08	
1E	0	-0.055	1.002	3.006	0.000	2.993	14.035	1	0.00	0.00	0.08	
1F	0	-0.055	1.072	3.006	0.000	2.993	12.945	1	0.00	0.00	0.08	
1G	0	-0.055	1.002	-1.912	0.000	-2.841	14.035	1	0.00	0.00	0.08	
1H	0	-0.055	1.072	-1.912	0.000	-2.841	12.945	1	0.00	0.00	0.08	
1I	0	-0.365	0.956	1.288	0.000	1.048	14.036	1	0.00	0.00	0.08	
1J	0	-0.365	1.118	1.288	0.000	1.048	12.944	1	0.00	0.00	0.08	
1K	0	-0.365	0.956	-0.194	0.000	-0.896	14.036	1	0.00	0.00	0.08	
1L	0	-0.365	1.118	-0.194	0.000	-0.896	12.944	1	0.00	0.00	0.08	
1M	0	0.023	0.956	1.288	0.000	1.048	14.036	1	0.00	0.00	0.08	
1N	0	0.023	1.118	1.288	0.000	1.048	12.944	1	0.00	0.00	0.08	
1O	0	0.023	0.956	-0.194	0.000	-0.896	14.036	1	0.00	0.00	0.08	
1P	0	0.023	1.118	-0.194	0.000	-0.896	12.944	1	0.00	0.00	0.08	
2	0	-0.307	1.915	0.975	0.000	0.136	24.550	1	0.01	0.00	0.15	
7	0	-0.158	0.998	0.557	0.000	0.083	13.380	1	0.00	0.00	0.08	
8	0	-0.165	1.002	0.524	0.000	0.074	13.350	1	0.00	0.00	0.08	
9	0	-0.198	1.173	0.645	0.000	0.091	15.060	1	0.00	0.00	0.09	
10	0	-0.198	1.164	0.644	0.000	0.090	15.080	1	0.00	0.00	0.09	
11	0	-0.268	1.705	0.883	0.000	0.126	22.050	1	0.00	0.00	0.13	
12	0	-0.273	1.708	0.863	0.000	0.120	22.030	1	0.00	0.00	0.13	
13	0	-0.292	1.810	0.936	0.000	0.131	23.060	1	0.00	0.00	0.14	
14	0	-0.292	1.805	0.935	0.000	0.130	23.070	1	0.00	0.00	0.14	
1A	56	-0.287	-2.487	3.006	0.000	1.303	13.624	1	0.01	0.00	0.08	
1B	56	-0.287	-2.417	3.006	0.000	1.303	12.568	1	0.01	0.00	0.07	
1C	56	-0.287	-2.487	-1.912	0.000	-1.766	13.624	1	0.01	0.00	0.08	
1D	56	-0.287	-2.417	-1.912	0.000	-1.766	12.568	1	0.01	0.00	0.07	
1E	56	-0.055	-2.487	3.006	0.000	1.303	13.624	1	0.01	0.00	0.08	
1F	56	-0.055	-2.417	3.006	0.000	1.303	12.568	1	0.01	0.00	0.07	
1G	56	-0.055	-2.487	-1.912	0.000	-1.766	13.624	1	0.01	0.00	0.08	
1H	56	-0.055	-2.417	-1.912	0.000	-1.766	12.568	1	0.01	0.00	0.07	
1I	56	-0.365	-2.533	1.288	0.000	0.326	13.598	1	0.01	0.00	0.08	
1J	56	-0.365	-2.371	1.288	0.000	0.326	12.594	1	0.01	0.00	0.07	
1K	56	-0.365	-2.533	-0.194	0.000	-0.789	13.598	1	0.01	0.00	0.08	
1L	56	-0.365	-2.371	-0.194	0.000	-0.789	12.594	1	0.01	0.00	0.07	
1M	56	0.023	-2.533	1.288	0.000	0.326	13.598	1	0.01	0.00	0.08	
1N	56	0.023	-2.371	1.288	0.000	0.326	12.594	1	0.01	0.00	0.07	
1O	56	0.023	-2.533	-0.194	0.000	-0.789	13.598	1	0.01	0.00	0.08	
1P	56	0.023	-2.371	-0.194	0.000	-0.789	12.594	1	0.01	0.00	0.07	
2	56	-0.307	-4.463	0.975	0.000	-0.413	23.833	1	0.01	0.00	0.14	
7	56	-0.158	-2.434	0.557	0.000	-0.231	12.975	1	0.01	0.00	0.08	
8	56	-0.165	-2.429	0.524	0.000	-0.221	12.950	1	0.01	0.00	0.08	
9	56	-0.198	-2.728	0.645	0.000	-0.272	14.622	1	0.01	0.00	0.09	
10	56	-0.198	-2.737	0.644	0.000	-0.272	14.637	1	0.01	0.00	0.09	
11	56	-0.268	-4.009	0.883	0.000	-0.371	21.402	1	0.01	0.00	0.13	
12	56	-0.273	-4.007	0.863	0.000	-0.365	21.382	1	0.01	0.00	0.13	
13	56	-0.292	-4.185	0.936	0.000	-0.396	22.391	1	0.01	0.00	0.13	
14	56	-0.292	-4.193	0.935	0.000	-0.396	22.396	1	0.01	0.00	0.13	
1A	113	-0.287	-5.976	3.006	0.000	-0.387	11.251	1	0.02	0.00	0.07	
1B	113	-0.287	-5.906	3.006	0.000	-0.387	10.229	1	0.02	0.00	0.06	
1C	113	-0.287	-5.976	-1.912	0.000	-0.691	11.251	1	0.02	0.00	0.07	
1D	113	-0.287	-5.906	-1.912	0.000	-0.691	10.229	1	0.02	0.00	0.06	
1E	113	-0.055	-5.976	3.006	0.000	-0.387	11.251	1	0.02	0.00	0.07	
1F	113	-0.055	-5.906	3.006	0.000	-0.387	10.229	1	0.02	0.00	0.06	
1G	113	-0.055	-5.976	-1.912	0.000	-0.691	11.251	1	0.02	0.00	0.07	
1H	113	-0.055	-5.906	-1.912	0.000	-0.691	10.229	1	0.02	0.00	0.06	
1I	113	-0.365	-6.022	1.288	0.000	-0.396	11.197	1	0.02	0.00	0.07	
1J	113	-0.365	-5.860	1.288	0.000	-0.396	10.283	1	0.02	0.00	0.06	
1K	113	-0.365	-6.022	-0.194	0.000	-0.682	11.197	1	0.02	0.00	0.07	
1L	113	-0.365	-5.860	-0.194	0.000	-0.682	10.283	1	0.02	0.00	0.06	
1M	113	0.023	-6.022	1.288	0.000	-0.396	11.197	1	0.02	0.00	0.07	
1N	113	0.023	-5.860	1.288	0.000	-0.396	10.283	1	0.02	0.00	0.06	
1O	113	0.023	-6.022	-0.194	0.000	-0.682	11.197	1	0.02	0.00	0.07	
1P	113	0.023	-5.860	-0.194	0.000	-0.682	10.283	1	0.02	0.00	0.06	
2	113	-0.307	-10.840	0.975	0.000	-0.961	19.530	1	0.03	0.00	0.12	
7	113	-0.158	-5.865	0.557	0.000	-0.544	10.640	1	0.02	0.00	0.06	
8	113	-0.165	-5.860	0.524	0.000	-0.515	10.620	1	0.02	0.00	0.06	
9	113	-0.198	-6.629	0.645	0.000	-0.635	11.990	1	0.02	0.00	0.07	
10	113	-0.198	-6.638	0.644	0.000	-0.634	12.000	1	0.02	0.00	0.07	
11	113	-0.268	-9.723	0.883	0.000	-0.868	17.540	1	0.03	0.00	0.10	
12	113	-0.273	-9.721	0.863	0.000	-0.850	17.520	1	0.03	0.00	0.10	
13	113	-0.292	-10.180	0.936	0.000	-0.922	18.350	1	0.03	0.00	0.11	
14	113	-0.292	-10.190	0.935	0.000	-0.921	18.350	1	0.03	0.00	0.11	

ASTA NUM. 71 NI 154 NF 48 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.113	-6.542	3.895	0.000	1.112	11.280	1	0.02	0.00	0.07	
1B	0	-0.113	-5.896	3.895	0.000	1.112	10.320	1	0.02	0.00	0.06	
1C	0	-0.113	-6.542	-8.957	0.000	-3.049	11.280	1	0.02	0.00	0.07	
1D	0	-0.113	-5.896	-8.957	0.000	-3.049	10.320	1	0.02	0.00	0.06	
1E	0	0.302	-6.542	3.895	0.000	1.112	11.280	1	0.02	0.00	0.07	
1F	0	0.302	-5.896	3.895	0.000	1.112	10.320	1	0.02	0.00	0.06	
1G	0	0.302	-6.542	-8.957	0.000	-3.049	11.280	1	0.02	0.00	0.07	
1H	0	0.302	-5.896	-8.957	0.000	-3.049	10.320	1	0.02	0.00	0.06	
1I	0	-0.431	-6.532	-0.319	0.000	-0.288	11.251	1	0.02	0.00	0.07	
1J	0	-0.431	-5.906	-0.319	0.000	-0.288	10.349	1	0.02	0.00	0.06	
1K	0	-0.431	-6.532	-4.743	0.000	-1.649	11.251	1	0.02	0.00	0.07	
1L	0	-0.431	-5.906	-4.743	0.000	-1.649	10.349	1	0.02	0.00	0.06	
1M	0	0.620	-6.532	-0.319	0.000	-0.288	11.251	1	0.02	0.00	0.07	
1N	0	0.620	-5.906	-0.319	0.000	-0.288	10.349	1	0.02	0.00	0.06	
1O	0	0.620	-6.532	-4.743	0.000	-1.649	11.251	1	0.02	0.00	0.07	
1P	0	0.620	-5.906	-4.743	0.000	-1.649	10.349	1	0.02	0.00	0.06	
2	0	0.167	-11.280	-4.545	0.000	-1.736	19.640	1	0.03	0.00	0.12	
7	0	0.132	-6.203	-2.513	0.000	-0.959	10.710	1	0.02	0.00	0.06	
8	0	0.090	-6.169	-2.444	0.000	-0.933	10.680	1	0.02	0.00	0.06	
9	0	0.113	-6.939	-2.929	0.000	-1.126	12.060	1	0.02	0.00	0.07	
10	0	0.113	-6.944	-2.929	0.000	-1.126	12.070	1	0.02	0.00	0.07	
11	0	0.173	-10.150	-4.078	0.000	-1.556	17.640	1	0.03	0.00	0.10	
12	0	0.148	-10.130	-4.037	0.000	-1.540	17.630	1	0.03	0.00	0.10	
13	0	0.161	-10.590	-4.328	0.000	-1.656	18.460	1	0.03	0.00	0.11	
14	0	0.161	-10.590	-4.328	0.000	-1.656	18.460	1	0.03	0.00	0.11	
1A	56	-0.113	-10.032	3.895	0.000	-1.078	6.620	1	0.03	0.00	0.04	
1B	56	-0.113	-9.387	3.895	0.000	-1.078	6.021	1	0.02	0.00	0.04	
1C	56	-0.113	-10.032	-8.957	0.000	1.989	6.620	1	0.03	0.00	0.04	
1D	56	-0.113	-9.387	-8.957	0.000	1.989	6.021	1	0.02	0.00	0.04	
1E	56	0.302	-10.032	3.895	0.000	-1.078	6.620	1	0.03	0.00	0.04	
1F	56	0.302	-9.387	3.895	0.000	-1.078	6.021	1	0.02	0.00	0.04	
1G	56	0.302	-10.032	-8.957	0.000	1.989	6.620	1	0.03	0.00	0.04	
1H	56	0.302	-9.387	-8.957	0.000	1.989	6.021	1	0.02	0.00	0.04	
1I	56	-0.431	-10.023	-0.319	0.000	-0.108	6.598	1	0.03	0.00	0.04	
1J	56	-0.431	-9.396	-0.319	0.000	-0.108	6.043	1	0.03	0.00	0.04	
1K	56	-0.431	-10.023	-4.743	0.000	1.019	6.598	1	0.03	0.00	0.04	
1L	56	-0.431	-9.396	-4.743	0.000	1.019	6.043	1	0.03	0.00	0.04	
1M	56	0.620	-10.023	-0.319	0.000	-0.108	6.598	1	0.03	0.00	0.04	
1N	56	0.620	-9.396	-0.319	0.000	-0.108	6.043	1	0.03	0.00	0.04	
1O	56	0.620	-10.023	-4.743	0.000	1.019	6.598	1	0.03	0.00	0.04	
1P	56	0.620	-9.396	-4.743	0.000	1.019	6.043	1	0.03	0.00	0.04	
2	56	0.167	-17.655	-4.545	0.000	0.821	11.504	1	0.05	0.00	0.07	
7	56	0.132	-9.637	-2.513	0.000	0.454	6.256	1	0.03	0.00	0.04	
8	56	0.090	-9.600	-2.444	0.000	0.442	6.246	1	0.03	0.00	0.04	
9	56	0.113	-10.839	-2.929	0.000	0.521	7.061	1	0.03	0.00	0.04	
10	56	0.113	-10.847	-2.929	0.000	0.521	7.066	1	0.03	0.00	0.04	
11	56	0.173	-15.865	-4.078	0.000	0.738	10.326	1	0.04	0.00	0.06	
12	56	0.148	-15.845	-4.037	0.000	0.731	10.324	1	0.04	0.00	0.06	
13	56	0.161	-16.585	-4.328	0.000	0.779	10.814	1	0.04	0.00	0.06	
14	56	0.161	-16.590	-4.328	0.000	0.779	10.814	1	0.04	0.00	0.06	
1A	113	-0.113	-13.523	3.895	0.000	-3.269	-0.002	1	0.04	0.00	0.04	
1B	113	-0.113	-12.877	3.895	0.000	-3.269	-0.241	1	0.03	0.00	0.04	
1C	113	-0.113	-13.523	-8.957	0.000	7.027	-0.002	1	0.04	0.00	0.09	
1D	113	-0.113	-12.877	-8.957	0.000	7.027	-0.241	1	0.03	0.00	0.09	
1E	113	0.302	-13.523	3.895	0.000	-3.269	-0.002	1	0.04	0.00	0.04	
1F	113	0.302	-12.877	3.895	0.000	-3.269	-0.241	1	0.03	0.00	0.04	
1G	113	0.302	-13.523	-8.957	0.000	7.027	-0.002	1	0.04	0.00	0.09	
1H	113	0.302	-12.877	-8.957	0.000	7.027	-0.241	1	0.03	0.00	0.09	
1I	113	-0.431	-13.513	-0.319	0.000	0.071	-0.017	1	0.04	0.00	0.00	
1J	113	-0.431	-12.887	-0.319	0.000	0.071	-0.225	1	0.03	0.00	0.00	
1K	113	-0.431	-13.513	-4.743	0.000	3.687	-0.017	1	0.04	0.00	0.05	
1L	113	-0.431	-12.887	-4.743	0.000	3.687	-0.225	1	0.03	0.00	0.05	
1M	113	0.620	-13.513	-0.319	0.000	0.071	-0.017	1	0.04	0.00	0.00	
1N	113	0.620	-12.887	-0.319	0.000	0.071	-0.225	1	0.03	0.00	0.00	
1O	113	0.620	-13.513	-4.743	0.000	3.687	-0.017	1	0.04	0.00	0.05	
1P	113	0.620	-12.887	-4.743	0.000	3.687	-0.225	1	0.03	0.00	0.05	
2	113	0.167	-24.030	-4.545	0.000	3.377	-0.220	1	0.06	0.00	0.04	
7	113	0.132	-13.070	-2.513	0.000	1.868	-0.129	1	0.03	0.00	0.02	
8	113	0.090	-13.030	-2.444	0.000	1.817	-0.118	1	0.03	0.00	0.02	
9	113	0.113	-14.740	-2.929	0.000	2.169	-0.133	1	0.04	0.00	0.03	
10	113	0.113	-14.750	-2.929	0.000	2.169	-0.133	1	0.04	0.00	0.03	
11	113	0.173	-21.580	-4.078	0.000	3.032	-0.202	1	0.06	0.00	0.04	
12	113	0.148	-21.560	-4.037	0.000	3.002	-0.196	1	0.06	0.00	0.04	
13	113	0.161	-22.580	-4.328	0.000	3.213	-0.205	1	0.06	0.00	0.04	
14	113	0.161	-22.590	-4.328	0.000	3.213	-0.205	1	0.06	0.00	0.04	

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											

1A	-0.326	7.491	14.151	1	0.0546	1.0123	1.0036	--	--	0.00	--	0.18	Snell. 'zx'= 348
1B	-0.326	7.491	12.969	1	0.0546	1.0123	1.0031	--	--	0.00	--	0.17	Snell. 'zx'= 348
1C	-0.326	7.379	14.151	1	0.0546	1.0126	1.0036	--	--	0.00	--	0.18	Snell. 'zx'= 348
1D	-0.326	7.379	12.969	1	0.0546	1.0126	1.0031	--	--	0.00	--	0.17	Snell. 'zx'= 348
1E	-0.220	7.491	14.151	1	0.0546	1.0083	1.0024	--	--	0.00	--	0.18	Snell. 'zx'= 348
1F	-0.220	7.491	12.969	1	0.0546	1.0083	1.0021	--	--	0.00	--	0.17	Snell. 'zx'= 348
1G	-0.220	7.379	14.151	1	0.0546	1.0085	1.0024	--	--	0.00	--	0.18	Snell. 'zx'= 348
1H	-0.220	7.379	12.969	1	0.0546	1.0085	1.0021	--	--	0.00	--	0.17	Snell. 'zx'= 348
1I	-0.448	4.174	14.279	1	0.0546	1.0278	1.0045	--	--	0.00	--	0.14	Snell. 'zx'= 348
1J	-0.448	4.174	12.944	1	0.0546	1.0278	1.0042	--	--	0.00	--	0.13	Snell. 'zx'= 348
1K	-0.448	4.086	14.279	1	0.0546	1.0283	1.0045	--	--	0.00	--	0.14	Snell. 'zx'= 348
1L	-0.448	4.086	12.944	1	0.0546	1.0283	1.0042	--	--	0.00	--	0.13	Snell. 'zx'= 348
1M	-0.252	4.174	14.279	1	0.0546	1.0156	1.0025	--	--	0.00	--	0.14	Snell. 'zx'= 348
1N	-0.252	4.174	12.944	1	0.0546	1.0156	1.0024	--	--	0.00	--	0.13	Snell. 'zx'= 348
1O	-0.252	4.086	14.279	1	0.0546	1.0159	1.0025	--	--	0.00	--	0.14	Snell. 'zx'= 348
1P	-0.252	4.086	12.944	1	0.0546	1.0159	1.0024	--	--	0.00	--	0.13	Snell. 'zx'= 348
2	-0.490	4.324	24.670	1	0.0546	1.0187	1.0053	--	--	0.00	--	0.21	Snell. 'zx'= 348
7	-0.272	2.406	13.450	1	0.0546	1.0062	1.0026	--	--	0.00	--	0.11	Snell. 'zx'= 348
8	-0.264	2.328	13.420	1	0.0546	1.0058	1.0025	--	--	0.00	--	0.11	Snell. 'zx'= 348
9	-0.314	2.768	15.150	1	0.0546	1.0086	1.0031	--	--	0.00	--	0.13	Snell. 'zx'= 348
10	-0.314	2.764	15.140	1	0.0546	1.0086	1.0031	--	--	0.00	--	0.13	Snell. 'zx'= 348
11	-0.440	3.892	22.160	1	0.0546	1.0159	1.0047	--	--	0.00	--	0.19	Snell. 'zx'= 348
12	-0.436	3.845	22.150	1	0.0546	1.0156	1.0047	--	--	0.00	--	0.18	Snell. 'zx'= 348
13	-0.465	4.108	23.180	1	0.0546	1.0173	1.0050	--	--	0.00	--	0.19	Snell. 'zx'= 348
14	-0.465	4.106	23.180	1	0.0546	1.0173	1.0050	--	--	0.00	--	0.19	Snell. 'zx'= 348

ASTA NUM. 6 NI 92 NF 171 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.027	12.738	8.574	0.000	6.772	-0.045	1	0.03	0.00	0.08	
1B	0	-0.027	13.002	8.574	0.000	6.772	-0.330	1	0.03	0.00	0.08	
1C	0	-0.027	12.738	-4.484	0.000	-3.598	-0.045	1	0.03	0.00	0.04	
1D	0	-0.027	13.002	-4.484	0.000	-3.598	-0.330	1	0.03	0.00	0.04	
1E	0	0.002	12.738	8.574	0.000	6.772	-0.045	1	0.03	0.00	0.08	
1F	0	0.002	13.002	8.574	0.000	6.772	-0.330	1	0.03	0.00	0.08	
1G	0	0.002	12.738	-4.484	0.000	-3.598	-0.045	1	0.03	0.00	0.04	
1H	0	0.002	13.002	-4.484	0.000	-3.598	-0.330	1	0.03	0.00	0.04	
1I	0	-0.054	12.550	4.372	0.000	3.432	-0.128	1	0.03	0.00	0.04	
1J	0	-0.054	13.190	4.372	0.000	3.432	-0.247	1	0.04	0.00	0.04	
1K	0	-0.054	12.550	-0.282	0.000	-0.258	-0.128	1	0.03	0.00	0.00	
1L	0	-0.054	13.190	-0.282	0.000	-0.258	-0.247	1	0.04	0.00	0.00	
1M	0	0.029	12.550	4.372	0.000	3.432	-0.128	1	0.03	0.00	0.04	
1N	0	0.029	13.190	4.372	0.000	3.432	-0.247	1	0.04	0.00	0.04	
1O	0	0.029	12.550	-0.282	0.000	-0.258	-0.128	1	0.03	0.00	0.00	
1P	0	0.029	13.190	-0.282	0.000	-0.258	-0.247	1	0.04	0.00	0.00	
2	0	-0.023	23.450	3.673	0.000	2.853	-0.342	1	0.06	0.00	0.04	
7	0	-0.013	12.690	2.038	0.000	1.581	-0.186	1	0.03	0.00	0.02	
8	0	-0.014	12.760	1.969	0.000	1.532	-0.195	1	0.03	0.00	0.02	
9	0	-0.014	14.430	2.369	0.000	1.833	-0.209	1	0.04	0.00	0.02	
10	0	-0.014	14.430	2.366	0.000	1.831	-0.216	1	0.04	0.00	0.02	
11	0	-0.021	21.030	3.300	0.000	2.563	-0.308	1	0.06	0.00	0.03	
12	0	-0.021	21.060	3.259	0.000	2.534	-0.313	1	0.06	0.00	0.03	
13	0	-0.021	22.070	3.499	0.000	2.715	-0.321	1	0.06	0.00	0.03	
14	0	-0.022	22.070	3.497	0.000	2.713	-0.325	1	0.06	0.00	0.03	
1A	56	-0.027	9.249	8.574	0.000	1.949	6.248	1	0.02	0.00	0.04	
1B	56	-0.027	9.514	8.574	0.000	1.949	5.897	1	0.03	0.00	0.04	
1C	56	-0.027	9.249	-4.484	0.000	-1.076	6.248	1	0.02	0.00	0.04	
1D	56	-0.027	9.514	-4.484	0.000	-1.076	5.897	1	0.03	0.00	0.04	
1E	56	0.002	9.249	8.574	0.000	1.949	6.248	1	0.02	0.00	0.04	
1F	56	0.002	9.514	8.574	0.000	1.949	5.897	1	0.03	0.00	0.04	
1G	56	0.002	9.249	-4.484	0.000	-1.076	6.248	1	0.02	0.00	0.04	
1H	56	0.002	9.514	-4.484	0.000	-1.076	5.897	1	0.03	0.00	0.04	
1I	56	-0.054	9.061	4.372	0.000	0.972	6.300	1	0.02	0.00	0.04	
1J	56	-0.054	9.702	4.372	0.000	0.972	5.845	1	0.03	0.00	0.03	
1K	56	-0.054	9.061	-0.282	0.000	-0.099	6.300	1	0.02	0.00	0.04	
1L	56	-0.054	9.702	-0.282	0.000	-0.099	5.845	1	0.03	0.00	0.03	
1M	56	0.029	9.061	4.372	0.000	0.972	6.300	1	0.02	0.00	0.04	
1N	56	0.029	9.702	4.372	0.000	0.972	5.845	1	0.03	0.00	0.03	
1O	56	0.029	9.061	-0.282	0.000	-0.099	6.300	1	0.02	0.00	0.04	
1P	56	0.029	9.702	-0.282	0.000	-0.099	5.845	1	0.03	0.00	0.03	
2	56	-0.023	17.070	3.673	0.000	0.787	11.052	1	0.05	0.00	0.07	
7	56	-0.013	9.261	2.038	0.000	0.435	5.987	1	0.02	0.00	0.04	
8	56	-0.014	9.327	1.969	0.000	0.425	6.017	1	0.02	0.00	0.04	
9	56	-0.014	10.528	2.369	0.000	0.500	6.808	1	0.03	0.00	0.04	
10	56	-0.014	10.530	2.366	0.000	0.500	6.804	1	0.03	0.00	0.04	
11	56	-0.021	15.313	3.300	0.000	0.707	9.913	1	0.04	0.00	0.06	
12	56	-0.021	15.347	3.259	0.000	0.701	9.926	1	0.04	0.00	0.06	
13	56	-0.021	16.070	3.499	0.000	0.747	10.406	1	0.04	0.00	0.06	
14	56	-0.022	16.075	3.497	0.000	0.746	10.404	1	0.04	0.00	0.06	
1A	113	-0.027	5.761	8.574	0.000	-2.874	10.577	1	0.02	0.00	0.06	
1B	113	-0.027	6.025	8.574	0.000	-2.874	10.163	1	0.02	0.00	0.06	
1C	113	-0.027	5.761	-4.484	0.000	1.446	10.577	1	0.02	0.00	0.06	
1D	113	-0.027	6.025	-4.484	0.000	1.446	10.163	1	0.02	0.00	0.06	
1E	113	0.002	5.761	8.574	0.000	-2.874	10.577	1	0.02	0.00	0.06	
1F	113	0.002	6.025	8.574	0.000	-2.874	10.163	1	0.02	0.00	0.06	
1G	113	0.002	5.761	-4.484	0.000	1.446	10.577	1	0.02	0.00	0.06	
1H	113	0.002	6.025	-4.484	0.000	1.446	10.163	1	0.02	0.00	0.06	
1I	113	-0.054	5.573	4.372	0.000	-1.487	10.765	1	0.01	0.00	0.06	

1J	113	-0.054	6.213	4.372	0.000	-1.487	9.975	1	0.02	0.00	0.06
1K	113	-0.054	5.573	-0.282	0.000	0.059	10.765	1	0.01	0.00	0.06
1L	113	-0.054	6.213	-0.282	0.000	0.059	9.975	1	0.02	0.00	0.06
1M	113	0.029	5.573	4.372	0.000	-1.487	10.765	1	0.01	0.00	0.06
1N	113	0.029	6.213	4.372	0.000	-1.487	9.975	1	0.02	0.00	0.06
1O	113	0.029	5.573	-0.282	0.000	0.059	10.765	1	0.01	0.00	0.06
1P	113	0.029	6.213	-0.282	0.000	0.059	9.975	1	0.02	0.00	0.06
2	113	-0.023	10.690	3.673	0.000	-1.279	18.860	1	0.03	0.00	0.11
7	113	-0.013	5.832	2.038	0.000	-0.712	10.230	1	0.02	0.00	0.06
8	113	-0.014	5.894	1.969	0.000	-0.683	10.300	1	0.02	0.00	0.06
9	113	-0.014	6.625	2.369	0.000	-0.833	11.630	1	0.02	0.00	0.07
10	113	-0.014	6.630	2.366	0.000	-0.831	11.630	1	0.02	0.00	0.07
11	113	-0.021	9.597	3.300	0.000	-1.149	16.920	1	0.03	0.00	0.10
12	113	-0.021	9.634	3.259	0.000	-1.132	16.950	1	0.03	0.00	0.10
13	113	-0.021	10.070	3.499	0.000	-1.222	17.760	1	0.03	0.00	0.11
14	113	-0.022	10.080	3.497	0.000	-1.221	17.760	1	0.03	0.00	0.11

ASTA NUM. 48 NI 171 NF 178 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.002	5.639	2.412	0.000	-0.017	10.545	1	0.02	0.00	0.06	
1B	0	-0.002	5.741	2.412	0.000	-0.017	10.015	1	0.02	0.00	0.06	
1C	0	-0.002	5.639	-2.298	0.000	-0.404	10.545	1	0.02	0.00	0.06	
1D	0	-0.002	5.741	-2.298	0.000	-0.404	10.015	1	0.02	0.00	0.06	
1E	0	0.008	5.639	2.412	0.000	-0.017	10.545	1	0.02	0.00	0.06	
1F	0	0.008	5.741	2.412	0.000	-0.017	10.015	1	0.02	0.00	0.06	
1G	0	0.008	5.639	-2.298	0.000	-0.404	10.545	1	0.02	0.00	0.06	
1H	0	0.008	5.741	-2.298	0.000	-0.404	10.015	1	0.02	0.00	0.06	
1I	0	-0.012	5.579	0.900	0.000	-0.139	10.693	1	0.01	0.00	0.06	
1J	0	-0.012	5.801	0.900	0.000	-0.139	9.867	1	0.02	0.00	0.06	
1K	0	-0.012	5.579	-0.785	0.000	-0.282	10.693	1	0.01	0.00	0.06	
1L	0	-0.012	5.801	-0.785	0.000	-0.282	9.867	1	0.02	0.00	0.06	
1M	0	0.018	5.579	0.900	0.000	-0.139	10.693	1	0.01	0.00	0.06	
1N	0	0.018	5.801	0.900	0.000	-0.139	9.867	1	0.02	0.00	0.06	
1O	0	0.018	5.579	-0.785	0.000	-0.282	10.693	1	0.01	0.00	0.06	
1P	0	0.018	5.801	-0.785	0.000	-0.282	9.867	1	0.02	0.00	0.06	
2	0	0.005	10.380	0.109	0.000	-0.373	18.700	1	0.03	0.00	0.11	
7	0	0.003	5.605	0.057	0.000	-0.211	10.150	1	0.01	0.00	0.06	
8	0	0.003	5.607	0.066	0.000	-0.195	10.200	1	0.01	0.00	0.06	
9	0	0.004	6.367	0.053	0.000	-0.254	11.530	1	0.02	0.00	0.07	
10	0	0.004	6.351	0.055	0.000	-0.252	11.530	1	0.02	0.00	0.07	
11	0	0.005	9.308	0.099	0.000	-0.335	16.770	1	0.02	0.00	0.10	
12	0	0.005	9.309	0.104	0.000	-0.326	16.810	1	0.02	0.00	0.10	
13	0	0.005	9.765	0.096	0.000	-0.361	17.600	1	0.03	0.00	0.10	
14	0	0.005	9.756	0.098	0.000	-0.360	17.600	1	0.03	0.00	0.10	
1A	56	-0.002	2.150	2.412	0.000	1.275	12.790	1	0.01	0.00	0.08	
1B	56	-0.002	2.253	2.412	0.000	1.275	12.202	1	0.01	0.00	0.07	
1C	56	-0.002	2.150	-2.298	0.000	-1.761	12.790	1	0.01	0.00	0.08	
1D	56	-0.002	2.253	-2.298	0.000	-1.761	12.202	1	0.01	0.00	0.07	
1E	56	0.008	2.150	2.412	0.000	1.275	12.790	1	0.01	0.00	0.08	
1F	56	0.008	2.253	2.412	0.000	1.275	12.202	1	0.01	0.00	0.07	
1G	56	0.008	2.150	-2.298	0.000	-1.761	12.790	1	0.01	0.00	0.08	
1H	56	0.008	2.253	-2.298	0.000	-1.761	12.202	1	0.01	0.00	0.07	
1I	56	-0.012	2.091	0.900	0.000	0.303	12.971	1	0.01	0.00	0.08	
1J	56	-0.012	2.312	0.900	0.000	0.303	12.022	1	0.01	0.00	0.07	
1K	56	-0.012	2.091	-0.785	0.000	-0.788	12.971	1	0.01	0.00	0.08	
1L	56	-0.012	2.312	-0.785	0.000	-0.788	12.022	1	0.01	0.00	0.07	
1M	56	0.018	2.091	0.900	0.000	0.303	12.971	1	0.01	0.00	0.08	
1N	56	0.018	2.312	0.900	0.000	0.303	12.022	1	0.01	0.00	0.07	
1O	56	0.018	2.091	-0.785	0.000	-0.788	12.971	1	0.01	0.00	0.08	
1P	56	0.018	2.312	-0.785	0.000	-0.788	12.022	1	0.01	0.00	0.07	
2	56	0.005	4.005	0.109	0.000	-0.434	22.748	1	0.01	0.00	0.14	
7	56	0.003	2.174	0.057	0.000	-0.243	12.335	1	0.01	0.00	0.07	
8	56	0.003	2.176	0.066	0.000	-0.232	12.390	1	0.01	0.00	0.07	
9	56	0.004	2.466	0.053	0.000	-0.284	14.017	1	0.01	0.00	0.08	
10	56	0.004	2.450	0.055	0.000	-0.284	14.007	1	0.01	0.00	0.08	
11	56	0.005	3.594	0.099	0.000	-0.391	20.402	1	0.01	0.00	0.12	
12	56	0.005	3.595	0.104	0.000	-0.384	20.437	1	0.01	0.00	0.12	
13	56	0.005	3.769	0.096	0.000	-0.415	21.406	1	0.01	0.00	0.13	
14	56	0.005	3.760	0.098	0.000	-0.415	21.401	1	0.01	0.00	0.13	
1A	113	-0.002	-1.338	2.412	0.000	2.568	13.073	1	0.00	0.00	0.08	
1B	113	-0.002	-1.236	2.412	0.000	2.568	12.427	1	0.00	0.00	0.07	
1C	113	-0.002	-1.338	-2.298	0.000	-3.118	13.073	1	0.00	0.00	0.08	
1D	113	-0.002	-1.236	-2.298	0.000	-3.118	12.427	1	0.00	0.00	0.07	
1E	113	0.008	-1.338	2.412	0.000	2.568	13.073	1	0.00	0.00	0.08	
1F	113	0.008	-1.236	2.412	0.000	2.568	12.427	1	0.00	0.00	0.07	
1G	113	0.008	-1.338	-2.298	0.000	-3.118	13.073	1	0.00	0.00	0.08	
1H	113	0.008	-1.236	-2.298	0.000	-3.118	12.427	1	0.00	0.00	0.07	
1I	113	-0.012	-1.398	0.900	0.000	0.744	13.287	1	0.00	0.00	0.08	
1J	113	-0.012	-1.176	0.900	0.000	0.744	12.213	1	0.00	0.00	0.07	
1K	113	-0.012	-1.398	-0.785	0.000	-1.294	13.287	1	0.00	0.00	0.08	
1L	113	-0.012	-1.176	-0.785	0.000	-1.294	12.213	1	0.00	0.00	0.07	
1M	113	0.018	-1.398	0.900	0.000	0.744	13.287	1	0.00	0.00	0.08	
1N	113	0.018	-1.176	0.900	0.000	0.744	12.213	1	0.00	0.00	0.07	
1O	113	0.018	-1.398	-0.785	0.000	-1.294	13.287	1	0.00	0.00	0.08	
1P	113	0.018	-1.176	-0.785	0.000	-1.294	12.213	1	0.00	0.00	0.07	
2	113	0.005	-2.370	0.109	0.000	-0.496	23.210	1	0.01	0.00	0.14	
7	113	0.003	-1.257	0.057	0.000	-0.275	12.590	1	0.00	0.00	0.07	

8	113	0.003	-1.255	0.066	0.000	-0.269	12.650	1	0.00	0.00	0.08
9	113	0.004	-1.435	0.053	0.000	-0.313	14.310	1	0.00	0.00	0.09
10	113	0.004	-1.451	0.055	0.000	-0.315	14.290	1	0.00	0.00	0.08
11	113	0.005	-2.120	0.099	0.000	-0.446	20.820	1	0.01	0.00	0.12
12	113	0.005	-2.119	0.104	0.000	-0.443	20.850	1	0.01	0.00	0.12
13	113	0.005	-2.227	0.096	0.000	-0.469	21.840	1	0.01	0.00	0.13
14	113	0.005	-2.236	0.098	0.000	-0.470	21.830	1	0.01	0.00	0.13

ASTA NUM. 49 NI 178 NF 185 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.012	-1.531	2.641	0.000	2.633	13.048	1	0.00	0.00	0.08	
1B	0	0.012	-1.355	2.641	0.000	2.633	12.412	1	0.00	0.00	0.07	
1C	0	0.012	-1.531	-2.090	0.000	-3.056	13.048	1	0.00	0.00	0.08	
1D	0	0.012	-1.355	-2.090	0.000	-3.056	12.412	1	0.00	0.00	0.07	
1E	0	0.023	-1.531	2.641	0.000	2.633	13.048	1	0.00	0.00	0.08	
1F	0	0.023	-1.355	2.641	0.000	2.633	12.412	1	0.00	0.00	0.07	
1G	0	0.023	-1.531	-2.090	0.000	-3.056	13.048	1	0.00	0.00	0.08	
1H	0	0.023	-1.355	-2.090	0.000	-3.056	12.412	1	0.00	0.00	0.07	
1I	0	0.002	-1.596	1.139	0.000	0.811	13.265	1	0.00	0.00	0.08	
1J	0	0.002	-1.290	1.139	0.000	0.811	12.195	1	0.00	0.00	0.07	
1K	0	0.002	-1.596	-0.587	0.000	-1.234	13.265	1	0.00	0.00	0.08	
1L	0	0.002	-1.290	-0.587	0.000	-1.234	12.195	1	0.00	0.00	0.07	
1M	0	0.033	-1.596	1.139	0.000	0.811	13.265	1	0.00	0.00	0.08	
1N	0	0.033	-1.290	1.139	0.000	0.811	12.195	1	0.00	0.00	0.07	
1O	0	0.033	-1.596	-0.587	0.000	-1.234	13.265	1	0.00	0.00	0.08	
1P	0	0.033	-1.290	-0.587	0.000	-1.234	12.195	1	0.00	0.00	0.07	
2	0	0.032	-2.599	0.497	0.000	-0.380	23.160	1	0.01	0.00	0.14	
7	0	0.018	-1.430	0.274	0.000	-0.212	12.560	1	0.00	0.00	0.07	
8	0	0.018	-1.461	0.264	0.000	-0.207	12.620	1	0.00	0.00	0.07	
9	0	0.020	-1.643	0.317	0.000	-0.243	14.280	1	0.00	0.00	0.08	
10	0	0.020	-1.658	0.312	0.000	-0.245	14.260	1	0.00	0.00	0.08	
11	0	0.029	-2.331	0.446	0.000	-0.342	20.770	1	0.01	0.00	0.12	
12	0	0.029	-2.349	0.440	0.000	-0.339	20.810	1	0.01	0.00	0.12	
13	0	0.030	-2.459	0.472	0.000	-0.361	21.800	1	0.01	0.00	0.13	
14	0	0.030	-2.468	0.469	0.000	-0.362	21.780	1	0.01	0.00	0.13	
1A	56	0.012	-5.020	2.641	0.000	1.148	11.204	1	0.01	0.00	0.07	
1B	56	0.012	-4.844	2.641	0.000	1.148	10.667	1	0.01	0.00	0.06	
1C	56	0.012	-5.020	-2.090	0.000	-1.882	11.204	1	0.01	0.00	0.07	
1D	56	0.012	-4.844	-2.090	0.000	-1.882	10.667	1	0.01	0.00	0.06	
1E	56	0.023	-5.020	2.641	0.000	1.148	11.204	1	0.01	0.00	0.07	
1F	56	0.023	-4.844	2.641	0.000	1.148	10.667	1	0.01	0.00	0.06	
1G	56	0.023	-5.020	-2.090	0.000	-1.882	11.204	1	0.01	0.00	0.07	
1H	56	0.023	-4.844	-2.090	0.000	-1.882	10.667	1	0.01	0.00	0.06	
1I	56	0.002	-5.085	1.139	0.000	0.174	11.385	1	0.01	0.00	0.07	
1J	56	0.002	-4.779	1.139	0.000	0.174	10.487	1	0.01	0.00	0.06	
1K	56	0.002	-5.085	-0.587	0.000	-0.908	11.385	1	0.01	0.00	0.07	
1L	56	0.002	-4.779	-0.587	0.000	-0.908	10.487	1	0.01	0.00	0.06	
1M	56	0.033	-5.085	1.139	0.000	0.174	11.385	1	0.01	0.00	0.07	
1N	56	0.033	-4.779	1.139	0.000	0.174	10.487	1	0.01	0.00	0.06	
1O	56	0.033	-5.085	-0.587	0.000	-0.908	11.385	1	0.01	0.00	0.07	
1P	56	0.033	-4.779	-0.587	0.000	-0.908	10.487	1	0.01	0.00	0.06	
2	56	0.032	-8.975	0.497	0.000	-0.660	19.903	1	0.02	0.00	0.12	
7	56	0.018	-4.861	0.274	0.000	-0.366	10.793	1	0.01	0.00	0.06	
8	56	0.018	-4.892	0.264	0.000	-0.355	10.836	1	0.01	0.00	0.06	
9	56	0.020	-5.545	0.317	0.000	-0.421	12.257	1	0.01	0.00	0.07	
10	56	0.020	-5.559	0.312	0.000	-0.421	12.228	1	0.01	0.00	0.07	
11	56	0.029	-8.046	0.446	0.000	-0.593	17.852	1	0.02	0.00	0.11	
12	56	0.029	-8.064	0.440	0.000	-0.587	17.877	1	0.02	0.00	0.11	
13	56	0.030	-8.455	0.472	0.000	-0.626	18.731	1	0.02	0.00	0.11	
14	56	0.030	-8.464	0.469	0.000	-0.626	18.706	1	0.02	0.00	0.11	
1A	113	0.012	-8.509	2.641	0.000	-0.336	7.398	1	0.02	0.00	0.04	
1B	113	0.012	-8.333	2.641	0.000	-0.336	6.960	1	0.02	0.00	0.04	
1C	113	0.012	-8.509	-2.090	0.000	-0.708	7.398	1	0.02	0.00	0.04	
1D	113	0.012	-8.333	-2.090	0.000	-0.708	6.960	1	0.02	0.00	0.04	
1E	113	0.023	-8.509	2.641	0.000	-0.336	7.398	1	0.02	0.00	0.04	
1F	113	0.023	-8.333	2.641	0.000	-0.336	6.960	1	0.02	0.00	0.04	
1G	113	0.023	-8.509	-2.090	0.000	-0.708	7.398	1	0.02	0.00	0.04	
1H	113	0.023	-8.333	-2.090	0.000	-0.708	6.960	1	0.02	0.00	0.04	
1I	113	0.002	-8.574	1.139	0.000	-0.462	7.542	1	0.02	0.00	0.04	
1J	113	0.002	-8.268	1.139	0.000	-0.462	6.816	1	0.02	0.00	0.04	
1K	113	0.002	-8.574	-0.587	0.000	-0.582	7.542	1	0.02	0.00	0.04	
1L	113	0.002	-8.268	-0.587	0.000	-0.582	6.816	1	0.02	0.00	0.04	
1M	113	0.033	-8.574	1.139	0.000	-0.462	7.542	1	0.02	0.00	0.04	
1N	113	0.033	-8.268	1.139	0.000	-0.462	6.816	1	0.02	0.00	0.04	
1O	113	0.033	-8.574	-0.587	0.000	-0.582	7.542	1	0.02	0.00	0.04	
1P	113	0.033	-8.268	-0.587	0.000	-0.582	6.816	1	0.02	0.00	0.04	
2	113	0.032	-15.350	0.497	0.000	-0.940	13.060	1	0.04	0.00	0.08	
7	113	0.018	-8.292	0.274	0.000	-0.520	7.096	1	0.02	0.00	0.04	
8	113	0.018	-8.323	0.264	0.000	-0.504	7.121	1	0.02	0.00	0.04	
9	113	0.020	-9.446	0.317	0.000	-0.599	8.040	1	0.03	0.00	0.05	
10	113	0.020	-9.460	0.312	0.000	-0.596	8.002	1	0.03	0.00	0.05	
11	113	0.029	-13.760	0.446	0.000	-0.844	11.720	1	0.04	0.00	0.07	
12	113	0.029	-13.780	0.440	0.000	-0.835	11.730	1	0.04	0.00	0.07	
13	113	0.030	-14.450	0.472	0.000	-0.892	12.290	1	0.04	0.00	0.07	
14	113	0.030	-14.460	0.469	0.000	-0.890	12.260	1	0.04	0.00	0.07	

ASTA NUM. 50 NI 185 NF 77 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.021	-8.545	3.900	0.000	1.097	7.369	1	0.02	0.00	0.04	
1B	0	-0.021	-8.143	3.900	0.000	1.097	7.051	1	0.02	0.00	0.04	
1C	0	-0.021	-8.545	-9.114	0.000	-3.199	7.369	1	0.02	0.00	0.04	
1D	0	-0.021	-8.143	-9.114	0.000	-3.199	7.051	1	0.02	0.00	0.04	
1E	0	0.005	-8.545	3.900	0.000	1.097	7.369	1	0.02	0.00	0.04	
1F	0	0.005	-8.143	3.900	0.000	1.097	7.051	1	0.02	0.00	0.04	
1G	0	0.005	-8.545	-9.114	0.000	-3.199	7.369	1	0.02	0.00	0.04	
1H	0	0.005	-8.143	-9.114	0.000	-3.199	7.051	1	0.02	0.00	0.04	
1I	0	-0.049	-8.727	-0.330	0.000	-0.306	7.554	1	0.02	0.00	0.04	
1J	0	-0.049	-7.961	-0.330	0.000	-0.306	6.866	1	0.02	0.00	0.04	
1K	0	-0.049	-8.727	-4.884	0.000	-1.796	7.554	1	0.02	0.00	0.04	
1L	0	-0.049	-7.961	-4.884	0.000	-1.796	6.866	1	0.02	0.00	0.04	
1M	0	0.032	-8.727	-0.330	0.000	-0.306	7.554	1	0.02	0.00	0.04	
1N	0	0.032	-7.961	-0.330	0.000	-0.306	6.866	1	0.02	0.00	0.04	
1O	0	0.032	-8.727	-4.884	0.000	-1.796	7.554	1	0.02	0.00	0.04	
1P	0	0.032	-7.961	-4.884	0.000	-1.796	6.866	1	0.02	0.00	0.04	
2	0	-0.015	-15.160	-4.696	0.000	-1.892	13.120	1	0.04	0.00	0.08	
7	0	-0.008	-8.219	-2.598	0.000	-1.047	7.126	1	0.02	0.00	0.04	
8	0	-0.007	-8.325	-2.526	0.000	-1.017	7.155	1	0.02	0.00	0.04	
9	0	-0.010	-9.411	-2.990	0.000	-1.205	8.076	1	0.03	0.00	0.05	
10	0	-0.009	-9.440	-2.983	0.000	-1.202	8.040	1	0.03	0.00	0.05	
11	0	-0.013	-13.580	-4.221	0.000	-1.700	11.770	1	0.04	0.00	0.07	
12	0	-0.012	-13.640	-4.178	0.000	-1.682	11.790	1	0.04	0.00	0.07	
13	0	-0.014	-14.300	-4.456	0.000	-1.795	12.340	1	0.04	0.00	0.07	
14	0	-0.014	-14.310	-4.452	0.000	-1.794	12.320	1	0.04	0.00	0.07	
1A	56	-0.021	-12.033	3.900	0.000	-1.096	1.522	1	0.03	0.00	0.01	
1B	56	-0.021	-11.631	3.900	0.000	-1.096	1.549	1	0.03	0.00	0.01	
1C	56	-0.021	-12.033	-9.114	0.000	1.928	1.522	1	0.03	0.00	0.02	
1D	56	-0.021	-11.631	-9.114	0.000	1.928	1.549	1	0.03	0.00	0.02	
1E	56	0.005	-12.033	3.900	0.000	-1.096	1.522	1	0.03	0.00	0.01	
1F	56	0.005	-11.631	3.900	0.000	-1.096	1.549	1	0.03	0.00	0.01	
1G	56	0.005	-12.033	-9.114	0.000	1.928	1.522	1	0.03	0.00	0.02	
1H	56	0.005	-11.631	-9.114	0.000	1.928	1.549	1	0.03	0.00	0.02	
1I	56	-0.049	-12.215	-0.330	0.000	-0.120	1.646	1	0.03	0.00	0.01	
1J	56	-0.049	-11.449	-0.330	0.000	-0.120	1.425	1	0.03	0.00	0.01	
1K	56	-0.049	-12.215	-4.884	0.000	0.952	1.646	1	0.03	0.00	0.01	
1L	56	-0.049	-11.449	-4.884	0.000	0.952	1.425	1	0.03	0.00	0.01	
1M	56	0.032	-12.215	-0.330	0.000	-0.120	1.646	1	0.03	0.00	0.01	
1N	56	0.032	-11.449	-0.330	0.000	-0.120	1.425	1	0.03	0.00	0.01	
1O	56	0.032	-12.215	-4.884	0.000	0.952	1.646	1	0.03	0.00	0.01	
1P	56	0.032	-11.449	-4.884	0.000	0.952	1.425	1	0.03	0.00	0.01	
2	56	-0.015	-21.535	-4.696	0.000	0.750	2.798	1	0.06	0.00	0.02	
7	56	-0.008	-11.649	-2.598	0.000	0.415	1.538	1	0.03	0.00	0.01	
8	56	-0.007	-11.757	-2.526	0.000	0.404	1.507	1	0.03	0.00	0.01	
9	56	-0.010	-13.311	-2.990	0.000	0.477	1.685	1	0.04	0.00	0.01	
10	56	-0.009	-13.340	-2.983	0.000	0.476	1.633	1	0.04	0.00	0.01	
11	56	-0.013	-19.295	-4.221	0.000	0.674	2.524	1	0.05	0.00	0.02	
12	56	-0.012	-19.355	-4.178	0.000	0.667	2.507	1	0.05	0.00	0.01	
13	56	-0.014	-20.295	-4.456	0.000	0.712	2.611	1	0.05	0.00	0.02	
14	56	-0.014	-20.305	-4.452	0.000	0.711	2.581	1	0.05	0.00	0.02	
1A	113	-0.021	-15.521	3.900	0.000	-3.289	-6.288	1	0.04	0.00	0.04	
1B	113	-0.021	-15.119	3.900	0.000	-3.289	-5.916	1	0.04	0.00	0.04	
1C	113	-0.021	-15.521	-9.114	0.000	7.055	-6.288	1	0.04	0.00	0.09	
1D	113	-0.021	-15.119	-9.114	0.000	7.055	-5.916	1	0.04	0.00	0.09	
1E	113	0.005	-15.521	3.900	0.000	-3.289	-6.288	1	0.04	0.00	0.04	
1F	113	0.005	-15.119	3.900	0.000	-3.289	-5.916	1	0.04	0.00	0.04	
1G	113	0.005	-15.521	-9.114	0.000	7.055	-6.288	1	0.04	0.00	0.09	
1H	113	0.005	-15.119	-9.114	0.000	7.055	-5.916	1	0.04	0.00	0.09	
1I	113	-0.049	-15.703	-0.330	0.000	0.066	-6.225	1	0.04	0.00	0.04	
1J	113	-0.049	-14.937	-0.330	0.000	0.066	-5.979	1	0.04	0.00	0.04	
1K	113	-0.049	-15.703	-4.884	0.000	3.700	-6.225	1	0.04	0.00	0.05	
1L	113	-0.049	-14.937	-4.884	0.000	3.700	-5.979	1	0.04	0.00	0.05	
1M	113	0.032	-15.703	-0.330	0.000	0.066	-6.225	1	0.04	0.00	0.04	
1N	113	0.032	-14.937	-0.330	0.000	0.066	-5.979	1	0.04	0.00	0.04	
1O	113	0.032	-15.703	-4.884	0.000	3.700	-6.225	1	0.04	0.00	0.05	
1P	113	0.032	-14.937	-4.884	0.000	3.700	-5.979	1	0.04	0.00	0.05	
2	113	-0.015	-27.910	-4.696	0.000	3.391	-11.110	1	0.07	0.00	0.07	
7	113	-0.008	-15.080	-2.598	0.000	1.876	-5.980	1	0.04	0.00	0.04	
8	113	-0.007	-15.190	-2.526	0.000	1.825	-6.071	1	0.04	0.00	0.04	
9	113	-0.010	-17.210	-2.990	0.000	2.159	-6.900	1	0.05	0.00	0.04	
10	113	-0.009	-17.240	-2.983	0.000	2.154	-6.969	1	0.05	0.00	0.04	
11	113	-0.013	-25.010	-4.221	0.000	3.048	-9.936	1	0.07	0.00	0.06	
12	113	-0.012	-25.070	-4.178	0.000	3.017	-9.990	1	0.07	0.00	0.06	
13	113	-0.014	-26.290	-4.456	0.000	3.218	-10.490	1	0.07	0.00	0.06	
14	113	-0.014	-26.300	-4.452	0.000	3.215	-10.530	1	0.07	0.00	0.06	

ASTA NUM. 12 NI 77 NF 231 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						

1A	0	-0.041	8.052	6.253	0.000	3.589	-5.936	1	0.02	0.00	0.05
1B	0	-0.041	8.764	6.253	0.000	3.589	-6.142	1	0.02	0.00	0.05
1C	0	-0.041	8.052	0.395	0.000	0.181	-5.936	1	0.02	0.00	0.04
1D	0	-0.041	8.764	0.395	0.000	0.181	-6.142	1	0.02	0.00	0.04
1E	0	-0.017	8.052	6.253	0.000	3.589	-5.936	1	0.02	0.00	0.05
1F	0	-0.017	8.764	6.253	0.000	3.589	-6.142	1	0.02	0.00	0.05
1G	0	-0.017	8.052	0.395	0.000	0.181	-5.936	1	0.02	0.00	0.04
1H	0	-0.017	8.764	0.395	0.000	0.181	-6.142	1	0.02	0.00	0.04
1I	0	-0.052	8.240	4.219	0.000	2.407	-5.949	1	0.02	0.00	0.04
1J	0	-0.052	8.576	4.219	0.000	2.407	-6.129	1	0.02	0.00	0.04
1K	0	-0.052	8.240	2.429	0.000	1.363	-5.949	1	0.02	0.00	0.04
1L	0	-0.052	8.576	2.429	0.000	1.363	-6.129	1	0.02	0.00	0.04
1M	0	-0.006	8.240	4.219	0.000	2.407	-5.949	1	0.02	0.00	0.04
1N	0	-0.006	8.576	4.219	0.000	2.407	-6.129	1	0.02	0.00	0.04
1O	0	-0.006	8.240	2.429	0.000	1.363	-5.949	1	0.02	0.00	0.04
1P	0	-0.006	8.576	2.429	0.000	1.363	-6.129	1	0.02	0.00	0.04
2	0	-0.052	15.320	5.975	0.000	3.388	-10.990	1	0.04	0.00	0.07
7	0	-0.028	8.244	3.325	0.000	1.886	-5.917	1	0.02	0.00	0.04
8	0	-0.028	8.360	3.210	0.000	1.819	-6.006	1	0.02	0.00	0.04
9	0	-0.034	9.481	3.824	0.000	2.170	-6.831	1	0.03	0.00	0.04
10	0	-0.033	9.537	3.819	0.000	2.167	-6.897	1	0.03	0.00	0.04
11	0	-0.046	13.710	5.377	0.000	3.049	-9.831	1	0.04	0.00	0.06
12	0	-0.046	13.780	5.308	0.000	3.009	-9.884	1	0.04	0.00	0.06
13	0	-0.050	14.450	5.676	0.000	3.219	-10.380	1	0.04	0.00	0.06
14	0	-0.049	14.480	5.674	0.000	3.217	-10.420	1	0.04	0.00	0.06
1A	47	-0.041	5.158	6.253	0.000	0.671	-2.855	1	0.01	0.00	0.02
1B	47	-0.041	5.870	6.253	0.000	0.671	-2.726	1	0.02	0.00	0.02
1C	47	-0.041	5.158	0.395	0.000	-0.003	-2.855	1	0.01	0.00	0.02
1D	47	-0.041	5.870	0.395	0.000	-0.003	-2.726	1	0.02	0.00	0.02
1E	47	-0.017	5.158	6.253	0.000	0.671	-2.855	1	0.01	0.00	0.02
1F	47	-0.017	5.870	6.253	0.000	0.671	-2.726	1	0.02	0.00	0.02
1G	47	-0.017	5.158	0.395	0.000	-0.003	-2.855	1	0.01	0.00	0.02
1H	47	-0.017	5.870	0.395	0.000	-0.003	-2.726	1	0.02	0.00	0.02
1I	47	-0.052	5.346	4.219	0.000	0.438	-2.784	1	0.01	0.00	0.02
1J	47	-0.052	5.682	4.219	0.000	0.438	-2.797	1	0.02	0.00	0.02
1K	47	-0.052	5.346	2.429	0.000	0.230	-2.784	1	0.01	0.00	0.02
1L	47	-0.052	5.682	2.429	0.000	0.230	-2.797	1	0.02	0.00	0.02
1M	47	-0.006	5.346	4.219	0.000	0.438	-2.784	1	0.01	0.00	0.02
1N	47	-0.006	5.682	4.219	0.000	0.438	-2.797	1	0.02	0.00	0.02
1O	47	-0.006	5.346	2.429	0.000	0.230	-2.784	1	0.01	0.00	0.02
1P	47	-0.006	5.682	2.429	0.000	0.230	-2.797	1	0.02	0.00	0.02
2	47	-0.052	10.029	5.975	0.000	0.600	-5.077	1	0.03	0.00	0.03
7	47	-0.028	5.398	3.325	0.000	0.335	-2.734	1	0.01	0.00	0.02
8	47	-0.028	5.513	3.210	0.000	0.321	-2.769	1	0.01	0.00	0.02
9	47	-0.034	6.245	3.824	0.000	0.386	-3.162	1	0.02	0.00	0.02
10	47	-0.033	6.300	3.819	0.000	0.385	-3.201	1	0.02	0.00	0.02
11	47	-0.046	8.967	5.377	0.000	0.540	-4.541	1	0.02	0.00	0.03
12	47	-0.046	9.037	5.308	0.000	0.532	-4.562	1	0.02	0.00	0.03
13	47	-0.050	9.474	5.676	0.000	0.570	-4.798	1	0.03	0.00	0.03
14	47	-0.049	9.506	5.674	0.000	0.570	-4.822	1	0.03	0.00	0.03
1A	93	-0.041	2.264	6.253	0.000	-2.248	-1.124	1	0.01	0.00	0.03
1B	93	-0.041	2.976	6.253	0.000	-2.248	-0.661	1	0.01	0.00	0.03
1C	93	-0.041	2.264	0.395	0.000	-0.186	-1.124	1	0.01	0.00	0.01
1D	93	-0.041	2.976	0.395	0.000	-0.186	-0.661	1	0.01	0.00	0.00
1E	93	-0.017	2.264	6.253	0.000	-2.248	-1.124	1	0.01	0.00	0.03
1F	93	-0.017	2.976	6.253	0.000	-2.248	-0.661	1	0.01	0.00	0.03
1G	93	-0.017	2.264	0.395	0.000	-0.186	-1.124	1	0.01	0.00	0.01
1H	93	-0.017	2.976	0.395	0.000	-0.186	-0.661	1	0.01	0.00	0.00
1I	93	-0.052	2.452	4.219	0.000	-1.531	-0.968	1	0.01	0.00	0.02
1J	93	-0.052	2.788	4.219	0.000	-1.531	-0.817	1	0.01	0.00	0.02
1K	93	-0.052	2.452	2.429	0.000	-0.903	-0.968	1	0.01	0.00	0.01
1L	93	-0.052	2.788	2.429	0.000	-0.903	-0.817	1	0.01	0.00	0.01
1M	93	-0.006	2.452	4.219	0.000	-1.531	-0.968	1	0.01	0.00	0.02
1N	93	-0.006	2.788	4.219	0.000	-1.531	-0.817	1	0.01	0.00	0.02
1O	93	-0.006	2.452	2.429	0.000	-0.903	-0.968	1	0.01	0.00	0.01
1P	93	-0.006	2.788	2.429	0.000	-0.903	-0.817	1	0.01	0.00	0.01
2	93	-0.052	4.738	5.975	0.000	-2.189	-1.632	1	0.01	0.00	0.03
7	93	-0.028	2.551	3.325	0.000	-1.217	-0.879	1	0.01	0.00	0.02
8	93	-0.028	2.666	3.210	0.000	-1.176	-0.861	1	0.01	0.00	0.01
9	93	-0.034	3.008	3.824	0.000	-1.399	-1.003	1	0.01	0.00	0.02
10	93	-0.033	3.064	3.819	0.000	-1.397	-1.016	1	0.01	0.00	0.02
11	93	-0.046	4.225	5.377	0.000	-1.969	-1.463	1	0.01	0.00	0.02
12	93	-0.046	4.294	5.308	0.000	-1.945	-1.452	1	0.01	0.00	0.02
13	93	-0.050	4.499	5.676	0.000	-2.079	-1.537	1	0.01	0.00	0.03
14	93	-0.049	4.533	5.674	0.000	-2.078	-1.546	1	0.01	0.00	0.03

ASTA NUM. 51 NI 231 NF 224 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.051	2.841	-0.169	0.000	-0.145	-0.650	1	0.01	0.00	0.00	
1B	0	0.051	2.975	-0.169	0.000	-0.145	-1.082	1	0.01	0.00	0.01	
1C	0	0.051	2.841	-0.199	0.000	-1.492	-0.650	1	0.01	0.00	0.02	
1D	0	0.051	2.975	-0.199	0.000	-1.492	-1.082	1	0.01	0.00	0.02	
1E	0	0.073	2.841	-0.169	0.000	-0.145	-0.650	1	0.01	0.00	0.00	
1F	0	0.073	2.975	-0.169	0.000	-0.145	-1.082	1	0.01	0.00	0.01	
1G	0	0.073	2.841	-0.199	0.000	-1.492	-0.650	1	0.01	0.00	0.02	
1H	0	0.073	2.975	-0.199	0.000	-1.492	-1.082	1	0.01	0.00	0.02	

1I	0	0.058	2.858	-0.157	0.000	-0.611	-0.796	1	0.01	0.00	0.01
1J	0	0.058	2.958	-0.157	0.000	-0.611	-0.937	1	0.01	0.00	0.01
1K	0	0.058	2.858	-0.211	0.000	-1.026	-0.796	1	0.01	0.00	0.01
1L	0	0.058	2.958	-0.211	0.000	-1.026	-0.937	1	0.01	0.00	0.01
1M	0	0.067	2.858	-0.157	0.000	-0.611	-0.796	1	0.01	0.00	0.01
1N	0	0.067	2.958	-0.157	0.000	-0.611	-0.937	1	0.01	0.00	0.01
1O	0	0.067	2.858	-0.211	0.000	-1.026	-0.796	1	0.01	0.00	0.01
1P	0	0.067	2.958	-0.211	0.000	-1.026	-0.937	1	0.01	0.00	0.01
2	0	0.112	5.315	-0.334	0.000	-1.472	-1.584	1	0.01	0.00	0.02
7	0	0.062	2.859	-0.183	0.000	-0.818	-0.853	1	0.01	0.00	0.01
8	0	0.061	2.858	-0.182	0.000	-0.791	-0.835	1	0.01	0.00	0.01
9	0	0.072	3.254	-0.205	0.000	-0.939	-0.975	1	0.01	0.00	0.01
10	0	0.071	3.307	-0.204	0.000	-0.938	-0.988	1	0.01	0.00	0.01
11	0	0.100	4.763	-0.301	0.000	-1.324	-1.420	1	0.01	0.00	0.02
12	0	0.099	4.762	-0.300	0.000	-1.309	-1.409	1	0.01	0.00	0.02
13	0	0.106	5.000	-0.314	0.000	-1.397	-1.493	1	0.01	0.00	0.02
14	0	0.106	5.031	-0.314	0.000	-1.397	-1.501	1	0.01	0.00	0.02
1A	47	0.051	-0.053	-0.169	0.000	-0.061	0.008	1	0.00	0.00	0.00
1B	47	0.051	0.080	-0.169	0.000	-0.061	-0.378	1	0.00	0.00	0.00
1C	47	0.051	-0.053	-0.199	0.000	-1.404	0.008	1	0.00	0.00	0.02
1D	47	0.051	0.080	-0.199	0.000	-1.404	-0.378	1	0.00	0.00	0.02
1E	47	0.073	-0.053	-0.169	0.000	-0.061	0.008	1	0.00	0.00	0.00
1F	47	0.073	0.080	-0.169	0.000	-0.061	-0.378	1	0.00	0.00	0.00
1G	47	0.073	-0.053	-0.199	0.000	-1.404	0.008	1	0.00	0.00	0.02
1H	47	0.073	0.080	-0.199	0.000	-1.404	-0.378	1	0.00	0.00	0.02
1I	47	0.058	-0.036	-0.157	0.000	-0.520	-0.110	1	0.00	0.00	0.01
1J	47	0.058	0.063	-0.157	0.000	-0.520	-0.260	1	0.00	0.00	0.01
1K	47	0.058	-0.036	-0.211	0.000	-0.945	-0.110	1	0.00	0.00	0.01
1L	47	0.058	0.063	-0.211	0.000	-0.945	-0.260	1	0.00	0.00	0.01
1M	47	0.067	-0.036	-0.157	0.000	-0.520	-0.110	1	0.00	0.00	0.01
1N	47	0.067	0.063	-0.157	0.000	-0.520	-0.260	1	0.00	0.00	0.01
1O	47	0.067	-0.036	-0.211	0.000	-0.945	-0.110	1	0.00	0.00	0.01
1P	47	0.067	0.063	-0.211	0.000	-0.945	-0.260	1	0.00	0.00	0.01
2	47	0.112	0.025	-0.334	0.000	-1.316	-0.338	1	0.00	0.00	0.02
7	47	0.062	0.012	-0.183	0.000	-0.733	-0.182	1	0.00	0.00	0.01
8	47	0.061	0.011	-0.182	0.000	-0.707	-0.165	1	0.00	0.00	0.01
9	47	0.072	0.018	-0.205	0.000	-0.843	-0.211	1	0.00	0.00	0.01
10	47	0.071	0.071	-0.204	0.000	-0.843	-0.200	1	0.00	0.00	0.01
11	47	0.100	0.022	-0.301	0.000	-1.184	-0.303	1	0.00	0.00	0.01
12	47	0.099	0.021	-0.300	0.000	-1.169	-0.293	1	0.00	0.00	0.01
13	47	0.106	0.025	-0.314	0.000	-1.251	-0.321	1	0.00	0.00	0.02
14	47	0.106	0.056	-0.314	0.000	-1.250	-0.314	1	0.00	0.00	0.02
1A	93	0.051	-2.948	-0.169	0.000	0.023	-0.684	1	0.01	0.00	0.00
1B	93	0.051	-2.814	-0.169	0.000	0.023	-1.024	1	0.01	0.00	0.01
1C	93	0.051	-2.948	-0.199	0.000	-1.317	-0.684	1	0.01	0.00	0.02
1D	93	0.051	-2.814	-0.199	0.000	-1.317	-1.024	1	0.01	0.00	0.02
1E	93	0.073	-2.948	-0.169	0.000	0.023	-0.684	1	0.01	0.00	0.00
1F	93	0.073	-2.814	-0.169	0.000	0.023	-1.024	1	0.01	0.00	0.01
1G	93	0.073	-2.948	-0.199	0.000	-1.317	-0.684	1	0.01	0.00	0.02
1H	93	0.073	-2.814	-0.199	0.000	-1.317	-1.024	1	0.01	0.00	0.02
1I	93	0.058	-2.931	-0.157	0.000	-0.429	-0.774	1	0.01	0.00	0.01
1J	93	0.058	-2.831	-0.157	0.000	-0.429	-0.934	1	0.01	0.00	0.01
1K	93	0.058	-2.931	-0.211	0.000	-0.864	-0.774	1	0.01	0.00	0.01
1L	93	0.058	-2.831	-0.211	0.000	-0.864	-0.934	1	0.01	0.00	0.01
1M	93	0.067	-2.931	-0.157	0.000	-0.429	-0.774	1	0.01	0.00	0.01
1N	93	0.067	-2.831	-0.157	0.000	-0.429	-0.934	1	0.01	0.00	0.01
1O	93	0.067	-2.931	-0.211	0.000	-0.864	-0.774	1	0.01	0.00	0.01
1P	93	0.067	-2.831	-0.211	0.000	-0.864	-0.934	1	0.01	0.00	0.01
2	93	0.112	-5.265	-0.334	0.000	-1.160	-1.561	1	0.01	0.00	0.01
7	93	0.062	-2.834	-0.183	0.000	-0.647	-0.841	1	0.01	0.00	0.01
8	93	0.061	-2.836	-0.182	0.000	-0.622	-0.825	1	0.01	0.00	0.01
9	93	0.072	-3.219	-0.205	0.000	-0.748	-0.958	1	0.01	0.00	0.01
10	93	0.071	-3.166	-0.204	0.000	-0.747	-0.922	1	0.01	0.00	0.01
11	93	0.100	-4.718	-0.301	0.000	-1.044	-1.399	1	0.01	0.00	0.01
12	93	0.099	-4.720	-0.300	0.000	-1.029	-1.390	1	0.01	0.00	0.01
13	93	0.106	-4.949	-0.314	0.000	-1.104	-1.470	1	0.01	0.00	0.01
14	93	0.106	-4.918	-0.314	0.000	-1.104	-1.448	1	0.01	0.00	0.01

ASTA NUM. 52 NI 224 NF 62 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.044	-3.064	-0.084	0.000	-0.029	-0.643	1	0.01	0.00	0.00	
1B	0	-0.044	-2.194	-0.084	0.000	-0.029	-1.009	1	0.01	0.00	0.01	
1C	0	-0.044	-3.064	-5.934	0.000	-2.087	-0.643	1	0.01	0.00	0.03	
1D	0	-0.044	-2.194	-5.934	0.000	-2.087	-1.009	1	0.01	0.00	0.03	
1E	0	-0.022	-3.064	-0.084	0.000	-0.029	-0.643	1	0.01	0.00	0.00	
1F	0	-0.022	-2.194	-0.084	0.000	-0.029	-1.009	1	0.01	0.00	0.01	
1G	0	-0.022	-3.064	-5.934	0.000	-2.087	-0.643	1	0.01	0.00	0.03	
1H	0	-0.022	-2.194	-5.934	0.000	-2.087	-1.009	1	0.01	0.00	0.03	
1I	0	-0.054	-2.845	-2.089	0.000	-0.733	-0.745	1	0.01	0.00	0.01	
1J	0	-0.054	-2.413	-2.089	0.000	-0.733	-0.908	1	0.01	0.00	0.01	
1K	0	-0.054	-2.845	-3.929	0.000	-1.383	-0.745	1	0.01	0.00	0.02	
1L	0	-0.054	-2.413	-3.929	0.000	-1.383	-0.908	1	0.01	0.00	0.02	
1M	0	-0.012	-2.845	-2.089	0.000	-0.733	-0.745	1	0.01	0.00	0.01	
1N	0	-0.012	-2.413	-2.089	0.000	-0.733	-0.908	1	0.01	0.00	0.01	
1O	0	-0.012	-2.845	-3.929	0.000	-1.383	-0.745	1	0.01	0.00	0.02	
1P	0	-0.012	-2.413	-3.929	0.000	-1.383	-0.908	1	0.01	0.00	0.02	
2	0	-0.059	-4.753	-5.402	0.000	-1.899	-1.510	1	0.01	0.00	0.02	

7	0	-0.034	-2.561	-3.012	0.000	-1.059	-0.814	1	0.01	0.00	0.01
8	0	-0.032	-2.676	-2.899	0.000	-1.019	-0.797	1	0.01	0.00	0.01
9	0	-0.038	-3.004	-3.472	0.000	-1.221	-0.927	1	0.01	0.00	0.02
10	0	-0.038	-2.964	-3.471	0.000	-1.220	-0.890	1	0.01	0.00	0.02
11	0	-0.054	-4.239	-4.862	0.000	-1.709	-1.354	1	0.01	0.00	0.02
12	0	-0.053	-4.309	-4.794	0.000	-1.685	-1.344	1	0.01	0.00	0.02
13	0	-0.056	-4.505	-5.138	0.000	-1.807	-1.422	1	0.01	0.00	0.02
14	0	-0.057	-4.482	-5.137	0.000	-1.806	-1.400	1	0.01	0.00	0.02
1A	47	-0.044	-5.958	-0.084	0.000	0.011	-2.757	1	0.02	0.00	0.02
1B	47	-0.044	-5.088	-0.084	0.000	0.011	-2.700	1	0.01	0.00	0.02
1C	47	-0.044	-5.958	-5.934	0.000	0.682	-2.757	1	0.02	0.00	0.02
1D	47	-0.044	-5.088	-5.934	0.000	0.682	-2.700	1	0.01	0.00	0.02
1E	47	-0.022	-5.958	-0.084	0.000	0.011	-2.757	1	0.02	0.00	0.02
1F	47	-0.022	-5.088	-0.084	0.000	0.011	-2.700	1	0.01	0.00	0.02
1G	47	-0.022	-5.958	-5.934	0.000	0.682	-2.757	1	0.02	0.00	0.02
1H	47	-0.022	-5.088	-5.934	0.000	0.682	-2.700	1	0.01	0.00	0.02
1I	47	-0.054	-5.739	-2.089	0.000	0.242	-2.776	1	0.02	0.00	0.02
1J	47	-0.054	-5.307	-2.089	0.000	0.242	-2.680	1	0.01	0.00	0.02
1K	47	-0.054	-5.739	-3.929	0.000	0.451	-2.776	1	0.02	0.00	0.02
1L	47	-0.054	-5.307	-3.929	0.000	0.451	-2.680	1	0.01	0.00	0.02
1M	47	-0.012	-5.739	-2.089	0.000	0.242	-2.776	1	0.02	0.00	0.02
1N	47	-0.012	-5.307	-2.089	0.000	0.242	-2.680	1	0.01	0.00	0.02
1O	47	-0.012	-5.739	-3.929	0.000	0.451	-2.776	1	0.02	0.00	0.02
1P	47	-0.012	-5.307	-3.929	0.000	0.451	-2.680	1	0.01	0.00	0.02
2	47	-0.059	-10.042	-5.402	0.000	0.621	-4.961	1	0.03	0.00	0.03
7	47	-0.034	-5.408	-3.012	0.000	0.346	-2.673	1	0.01	0.00	0.02
8	47	-0.032	-5.523	-2.899	0.000	0.333	-2.710	1	0.01	0.00	0.02
9	47	-0.038	-6.240	-3.472	0.000	0.400	-3.084	1	0.02	0.00	0.02
10	47	-0.038	-6.201	-3.471	0.000	0.399	-3.029	1	0.02	0.00	0.02
11	47	-0.054	-8.980	-4.862	0.000	0.560	-4.438	1	0.02	0.00	0.03
12	47	-0.053	-9.050	-4.794	0.000	0.552	-4.461	1	0.02	0.00	0.03
13	47	-0.056	-9.477	-5.138	0.000	0.591	-4.685	1	0.03	0.00	0.03
14	47	-0.057	-9.456	-5.137	0.000	0.591	-4.654	1	0.03	0.00	0.03
1A	93	-0.044	-8.852	-0.084	0.000	0.050	-6.221	1	0.02	0.00	0.04
1B	93	-0.044	-7.982	-0.084	0.000	0.050	-5.741	1	0.02	0.00	0.03
1C	93	-0.044	-8.852	-5.934	0.000	3.452	-6.221	1	0.02	0.00	0.04
1D	93	-0.044	-7.982	-5.934	0.000	3.452	-5.741	1	0.02	0.00	0.04
1E	93	-0.022	-8.852	-0.084	0.000	0.050	-6.221	1	0.02	0.00	0.04
1F	93	-0.022	-7.982	-0.084	0.000	0.050	-5.741	1	0.02	0.00	0.03
1G	93	-0.022	-8.852	-5.934	0.000	3.452	-6.221	1	0.02	0.00	0.04
1H	93	-0.022	-7.982	-5.934	0.000	3.452	-5.741	1	0.02	0.00	0.04
1I	93	-0.054	-8.633	-2.089	0.000	1.217	-6.159	1	0.02	0.00	0.04
1J	93	-0.054	-8.201	-2.089	0.000	1.217	-5.803	1	0.02	0.00	0.03
1K	93	-0.054	-8.633	-3.929	0.000	2.285	-6.159	1	0.02	0.00	0.04
1L	93	-0.054	-8.201	-3.929	0.000	2.285	-5.803	1	0.02	0.00	0.03
1M	93	-0.012	-8.633	-2.089	0.000	1.217	-6.159	1	0.02	0.00	0.04
1N	93	-0.012	-8.201	-2.089	0.000	1.217	-5.803	1	0.02	0.00	0.03
1O	93	-0.012	-8.633	-3.929	0.000	2.285	-6.159	1	0.02	0.00	0.04
1P	93	-0.012	-8.201	-3.929	0.000	2.285	-5.803	1	0.02	0.00	0.03
2	93	-0.059	-15.330	-5.402	0.000	3.142	-10.880	1	0.04	0.00	0.06
7	93	-0.034	-8.254	-3.012	0.000	1.752	-5.860	1	0.02	0.00	0.03
8	93	-0.032	-8.370	-2.899	0.000	1.686	-5.951	1	0.02	0.00	0.04
9	93	-0.038	-9.476	-3.472	0.000	2.020	-6.751	1	0.03	0.00	0.04
10	93	-0.038	-9.437	-3.471	0.000	2.019	-6.678	1	0.03	0.00	0.04
11	93	-0.054	-13.720	-4.862	0.000	2.828	-9.735	1	0.04	0.00	0.06
12	93	-0.053	-13.790	-4.794	0.000	2.789	-9.790	1	0.04	0.00	0.06
13	93	-0.056	-14.450	-5.138	0.000	2.989	-10.270	1	0.04	0.00	0.06
14	93	-0.057	-14.430	-5.137	0.000	2.988	-10.230	1	0.04	0.00	0.06

ASTA NUM. 13 NI 62 NF 217 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.039	8.217	5.623	0.000	3.248	-5.738	1	0.02	0.00	0.04	
1B	0	-0.039	8.939	5.623	0.000	3.248	-6.208	1	0.02	0.00	0.04	
1C	0	-0.039	8.217	-0.231	0.000	-0.154	-5.738	1	0.02	0.00	0.03	
1D	0	-0.039	8.939	-0.231	0.000	-0.154	-6.208	1	0.02	0.00	0.04	
1E	0	-0.014	8.217	5.623	0.000	3.248	-5.738	1	0.02	0.00	0.04	
1F	0	-0.014	8.939	5.623	0.000	3.248	-6.208	1	0.02	0.00	0.04	
1G	0	-0.014	8.217	-0.231	0.000	-0.154	-5.738	1	0.02	0.00	0.03	
1H	0	-0.014	8.939	-0.231	0.000	-0.154	-6.208	1	0.02	0.00	0.04	
1I	0	-0.049	8.415	3.588	0.000	2.063	-5.810	1	0.02	0.00	0.03	
1J	0	-0.049	8.741	3.588	0.000	2.063	-6.136	1	0.02	0.00	0.04	
1K	0	-0.049	8.415	1.804	0.000	1.031	-5.810	1	0.02	0.00	0.03	
1L	0	-0.049	8.741	1.804	0.000	1.031	-6.136	1	0.02	0.00	0.04	
1M	0	-0.004	8.415	3.588	0.000	2.063	-5.810	1	0.02	0.00	0.03	
1N	0	-0.004	8.741	3.588	0.000	2.063	-6.136	1	0.02	0.00	0.04	
1O	0	-0.004	8.415	1.804	0.000	1.031	-5.810	1	0.02	0.00	0.03	
1P	0	-0.004	8.741	1.804	0.000	1.031	-6.136	1	0.02	0.00	0.04	
2	0	-0.047	15.630	4.831	0.000	2.772	-10.870	1	0.04	0.00	0.06	
7	0	-0.026	8.393	2.701	0.000	1.550	-5.851	1	0.02	0.00	0.03	
8	0	-0.026	8.525	2.588	0.000	1.485	-5.944	1	0.02	0.00	0.04	
9	0	-0.031	9.691	3.124	0.000	1.794	-6.743	1	0.03	0.00	0.04	
10	0	-0.030	9.638	3.122	0.000	1.793	-6.669	1	0.03	0.00	0.04	
11	0	-0.042	13.970	4.349	0.000	2.496	-9.722	1	0.04	0.00	0.06	
12	0	-0.042	14.050	4.281	0.000	2.457	-9.777	1	0.04	0.00	0.06	
13	0	-0.045	14.750	4.603	0.000	2.642	-10.260	1	0.04	0.00	0.06	
14	0	-0.045	14.720	4.601	0.000	2.641	-10.210	1	0.04	0.00	0.06	

1A	47	-0.039	5.323	5.623	0.000	0.624	-2.593	1	0.01	0.00	0.02
1B	47	-0.039	6.045	5.623	0.000	0.624	-2.698	1	0.02	0.00	0.02
1C	47	-0.039	5.323	-0.231	0.000	-0.046	-2.593	1	0.01	0.00	0.02
1D	47	-0.039	6.045	-0.231	0.000	-0.046	-2.698	1	0.02	0.00	0.02
1E	47	-0.014	5.323	5.623	0.000	0.624	-2.593	1	0.01	0.00	0.02
1F	47	-0.014	6.045	5.623	0.000	0.624	-2.698	1	0.02	0.00	0.02
1G	47	-0.014	5.323	-0.231	0.000	-0.046	-2.593	1	0.01	0.00	0.02
1H	47	-0.014	6.045	-0.231	0.000	-0.046	-2.698	1	0.02	0.00	0.02
1I	47	-0.049	5.521	3.588	0.000	0.389	-2.523	1	0.01	0.00	0.01
1J	47	-0.049	5.847	3.588	0.000	0.389	-2.767	1	0.02	0.00	0.02
1K	47	-0.049	5.521	1.804	0.000	0.189	-2.523	1	0.01	0.00	0.01
1L	47	-0.049	5.847	1.804	0.000	0.189	-2.767	1	0.02	0.00	0.02
1M	47	-0.004	5.521	3.588	0.000	0.389	-2.523	1	0.01	0.00	0.01
1N	47	-0.004	5.847	3.588	0.000	0.389	-2.767	1	0.02	0.00	0.02
1O	47	-0.004	5.521	1.804	0.000	0.189	-2.523	1	0.01	0.00	0.01
1P	47	-0.004	5.847	1.804	0.000	0.189	-2.767	1	0.02	0.00	0.02
2	47	-0.047	10.338	4.831	0.000	0.518	-4.813	1	0.03	0.00	0.03
7	47	-0.026	5.546	2.701	0.000	0.290	-2.598	1	0.01	0.00	0.02
8	47	-0.026	5.679	2.588	0.000	0.277	-2.630	1	0.02	0.00	0.02
9	47	-0.031	6.455	3.124	0.000	0.336	-2.976	1	0.02	0.00	0.02
10	47	-0.030	6.402	3.122	0.000	0.336	-2.926	1	0.02	0.00	0.02
11	47	-0.042	9.230	4.349	0.000	0.467	-4.308	1	0.02	0.00	0.03
12	47	-0.042	9.309	4.281	0.000	0.459	-4.327	1	0.02	0.00	0.03
13	47	-0.045	9.775	4.603	0.000	0.494	-4.536	1	0.03	0.00	0.03
14	47	-0.045	9.744	4.601	0.000	0.494	-4.504	1	0.03	0.00	0.03
1A	93	-0.039	2.429	5.623	0.000	-2.000	-0.798	1	0.01	0.00	0.02
1B	93	-0.039	3.151	5.623	0.000	-2.000	-0.539	1	0.01	0.00	0.02
1C	93	-0.039	2.429	-0.231	0.000	0.063	-0.798	1	0.01	0.00	0.00
1D	93	-0.039	3.151	-0.231	0.000	0.063	-0.539	1	0.01	0.00	0.00
1E	93	-0.014	2.429	5.623	0.000	-2.000	-0.798	1	0.01	0.00	0.02
1F	93	-0.014	3.151	5.623	0.000	-2.000	-0.539	1	0.01	0.00	0.02
1G	93	-0.014	2.429	-0.231	0.000	0.063	-0.798	1	0.01	0.00	0.00
1H	93	-0.014	3.151	-0.231	0.000	0.063	-0.539	1	0.01	0.00	0.00
1I	93	-0.049	2.627	3.588	0.000	-1.285	-0.587	1	0.01	0.00	0.02
1J	93	-0.049	2.953	3.588	0.000	-1.285	-0.749	1	0.01	0.00	0.02
1K	93	-0.049	2.627	1.804	0.000	-0.652	-0.587	1	0.01	0.00	0.01
1L	93	-0.049	2.953	1.804	0.000	-0.652	-0.749	1	0.01	0.00	0.01
1M	93	-0.004	2.627	3.588	0.000	-1.285	-0.587	1	0.01	0.00	0.02
1N	93	-0.004	2.953	3.588	0.000	-1.285	-0.749	1	0.01	0.00	0.02
1O	93	-0.004	2.627	1.804	0.000	-0.652	-0.587	1	0.01	0.00	0.01
1P	93	-0.004	2.953	1.804	0.000	-0.652	-0.749	1	0.01	0.00	0.01
2	93	-0.047	5.045	4.831	0.000	-1.737	-1.224	1	0.01	0.00	0.02
7	93	-0.026	2.700	2.701	0.000	-0.970	-0.674	1	0.01	0.00	0.01
8	93	-0.026	2.832	2.588	0.000	-0.931	-0.644	1	0.01	0.00	0.01
9	93	-0.031	3.218	3.124	0.000	-1.122	-0.719	1	0.01	0.00	0.01
10	93	-0.030	3.165	3.122	0.000	-1.121	-0.694	1	0.01	0.00	0.01
11	93	-0.042	4.489	4.349	0.000	-1.563	-1.107	1	0.01	0.00	0.02
12	93	-0.042	4.568	4.281	0.000	-1.539	-1.089	1	0.01	0.00	0.02
13	93	-0.045	4.800	4.603	0.000	-1.654	-1.134	1	0.01	0.00	0.02
14	93	-0.045	4.768	4.601	0.000	-1.653	-1.119	1	0.01	0.00	0.02

ASTA NUM. 53 NI 217 NF 210 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	0.043	2.930	0.020	0.000	0.052	-0.559	1	0.01	0.00	0.00	
1B	0	0.043	2.976	0.020	0.000	0.052	-0.788	1	0.01	0.00	0.00	
1C	0	0.043	2.930	0.003	0.000	-1.294	-0.559	1	0.01	0.00	0.02	
1D	0	0.043	2.976	0.003	0.000	-1.294	-0.788	1	0.01	0.00	0.02	
1E	0	0.064	2.930	0.020	0.000	0.052	-0.559	1	0.01	0.00	0.00	
1F	0	0.064	2.976	0.020	0.000	0.052	-0.788	1	0.01	0.00	0.00	
1G	0	0.064	2.930	0.003	0.000	-1.294	-0.559	1	0.01	0.00	0.02	
1H	0	0.064	2.976	0.003	0.000	-1.294	-0.788	1	0.01	0.00	0.02	
1I	0	0.051	2.908	0.035	0.000	-0.409	-0.599	1	0.01	0.00	0.01	
1J	0	0.051	2.998	0.035	0.000	-0.409	-0.748	1	0.01	0.00	0.01	
1K	0	0.051	2.908	-0.012	0.000	-0.833	-0.599	1	0.01	0.00	0.01	
1L	0	0.051	2.998	-0.012	0.000	-0.833	-0.748	1	0.01	0.00	0.01	
1M	0	0.057	2.908	0.035	0.000	-0.409	-0.599	1	0.01	0.00	0.01	
1N	0	0.057	2.998	0.035	0.000	-0.409	-0.748	1	0.01	0.00	0.01	
1O	0	0.057	2.908	-0.012	0.000	-0.833	-0.599	1	0.01	0.00	0.01	
1P	0	0.057	2.998	-0.012	0.000	-0.833	-0.748	1	0.01	0.00	0.01	
2	0	0.097	5.396	0.021	0.000	-1.113	-1.233	1	0.01	0.00	0.01	
7	0	0.054	2.889	0.010	0.000	-0.623	-0.678	1	0.01	0.00	0.01	
8	0	0.053	2.905	0.010	0.000	-0.597	-0.650	1	0.01	0.00	0.01	
9	0	0.062	3.327	0.012	0.000	-0.720	-0.725	1	0.01	0.00	0.01	
10	0	0.063	3.277	0.014	0.000	-0.718	-0.702	1	0.01	0.00	0.01	
11	0	0.087	4.826	0.018	0.000	-1.002	-1.115	1	0.01	0.00	0.01	
12	0	0.086	4.836	0.018	0.000	-0.987	-1.098	1	0.01	0.00	0.01	
13	0	0.092	5.089	0.019	0.000	-1.061	-1.143	1	0.01	0.00	0.01	
14	0	0.092	5.059	0.020	0.000	-1.060	-1.129	1	0.01	0.00	0.01	
1A	47	0.043	0.035	0.020	0.000	0.047	0.143	1	0.00	0.00	0.00	
1B	47	0.043	0.082	0.020	0.000	0.047	-0.085	1	0.00	0.00	0.00	
1C	47	0.043	0.035	0.003	0.000	-1.300	0.143	1	0.00	0.00	0.02	
1D	47	0.043	0.082	0.003	0.000	-1.300	-0.085	1	0.00	0.00	0.02	
1E	47	0.064	0.035	0.020	0.000	0.047	0.143	1	0.00	0.00	0.00	
1F	47	0.064	0.082	0.020	0.000	0.047	-0.085	1	0.00	0.00	0.00	
1G	47	0.064	0.035	0.003	0.000	-1.300	0.143	1	0.00	0.00	0.02	
1H	47	0.064	0.082	0.003	0.000	-1.300	-0.085	1	0.00	0.00	0.02	
1I	47	0.051	0.013	0.035	0.000	-0.415	0.088	1	0.00	0.00	0.01	

1J	47	0.051	0.104	0.035	0.000	-0.415	-0.030	1	0.00	0.00	0.01
1K	47	0.051	0.013	-0.012	0.000	-0.838	0.088	1	0.00	0.00	0.01
1L	47	0.051	0.104	-0.012	0.000	-0.838	-0.030	1	0.00	0.00	0.01
1M	47	0.057	0.013	0.035	0.000	-0.415	0.088	1	0.00	0.00	0.01
1N	47	0.057	0.104	0.035	0.000	-0.415	-0.030	1	0.00	0.00	0.01
1O	47	0.057	0.013	-0.012	0.000	-0.838	0.088	1	0.00	0.00	0.01
1P	47	0.057	0.104	-0.012	0.000	-0.838	-0.030	1	0.00	0.00	0.01
2	47	0.097	0.106	0.021	0.000	-1.123	0.050	1	0.00	0.00	0.01
7	47	0.054	0.042	0.010	0.000	-0.627	0.006	1	0.00	0.00	0.01
8	47	0.053	0.058	0.010	0.000	-0.602	0.042	1	0.00	0.00	0.01
9	47	0.062	0.090	0.012	0.000	-0.725	0.072	1	0.00	0.00	0.01
10	47	0.063	0.041	0.014	0.000	-0.725	0.073	1	0.00	0.00	0.01
11	47	0.087	0.086	0.018	0.000	-1.011	0.031	1	0.00	0.00	0.01
12	47	0.086	0.095	0.018	0.000	-0.996	0.053	1	0.00	0.00	0.01
13	47	0.092	0.115	0.019	0.000	-1.070	0.071	1	0.00	0.00	0.01
14	47	0.092	0.085	0.020	0.000	-1.069	0.071	1	0.00	0.00	0.01
1A	93	0.043	-2.859	0.020	0.000	0.042	-0.505	1	0.01	0.00	0.00
1B	93	0.043	-2.813	0.020	0.000	0.042	-0.733	1	0.01	0.00	0.00
1C	93	0.043	-2.859	0.003	0.000	-1.306	-0.505	1	0.01	0.00	0.02
1D	93	0.043	-2.813	0.003	0.000	-1.306	-0.733	1	0.01	0.00	0.02
1E	93	0.064	-2.859	0.020	0.000	0.042	-0.505	1	0.01	0.00	0.00
1F	93	0.064	-2.813	0.020	0.000	0.042	-0.733	1	0.01	0.00	0.00
1G	93	0.064	-2.859	0.003	0.000	-1.306	-0.505	1	0.01	0.00	0.02
1H	93	0.064	-2.813	0.003	0.000	-1.306	-0.733	1	0.01	0.00	0.02
1I	93	0.051	-2.881	0.035	0.000	-0.420	-0.576	1	0.01	0.00	0.01
1J	93	0.051	-2.791	0.035	0.000	-0.420	-0.663	1	0.01	0.00	0.01
1K	93	0.051	-2.881	-0.012	0.000	-0.843	-0.576	1	0.01	0.00	0.01
1L	93	0.051	-2.791	-0.012	0.000	-0.843	-0.663	1	0.01	0.00	0.01
1M	93	0.057	-2.881	0.035	0.000	-0.420	-0.576	1	0.01	0.00	0.01
1N	93	0.057	-2.791	0.035	0.000	-0.420	-0.663	1	0.01	0.00	0.01
1O	93	0.057	-2.881	-0.012	0.000	-0.843	-0.576	1	0.01	0.00	0.01
1P	93	0.057	-2.791	-0.012	0.000	-0.843	-0.663	1	0.01	0.00	0.01
2	93	0.097	-5.185	0.021	0.000	-1.133	-1.135	1	0.01	0.00	0.01
7	93	0.054	-2.804	0.010	0.000	-0.632	-0.639	1	0.01	0.00	0.01
8	93	0.053	-2.789	0.010	0.000	-0.607	-0.595	1	0.01	0.00	0.01
9	93	0.062	-3.146	0.012	0.000	-0.730	-0.641	1	0.01	0.00	0.01
10	93	0.063	-3.196	0.014	0.000	-0.731	-0.664	1	0.01	0.00	0.01
11	93	0.087	-4.655	0.018	0.000	-1.019	-1.035	1	0.01	0.00	0.01
12	93	0.086	-4.646	0.018	0.000	-1.004	-1.009	1	0.01	0.00	0.01
13	93	0.092	-4.860	0.019	0.000	-1.078	-1.036	1	0.01	0.00	0.01
14	93	0.092	-4.890	0.020	0.000	-1.079	-1.050	1	0.01	0.00	0.01

ASTA NUM. 54 NI 210 NF 35 Lungh. 93.3 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.038	-3.081	0.214	0.000	0.054	-0.490	1	0.01	0.00	0.00	
1B	0	-0.038	-2.337	0.214	0.000	0.054	-0.747	1	0.01	0.00	0.00	
1C	0	-0.038	-3.081	-5.646	0.000	-2.010	-0.490	1	0.01	0.00	0.03	
1D	0	-0.038	-2.337	-5.646	0.000	-2.010	-0.747	1	0.01	0.00	0.03	
1E	0	-0.017	-3.081	0.214	0.000	0.054	-0.490	1	0.01	0.00	0.00	
1F	0	-0.017	-2.337	0.214	0.000	0.054	-0.747	1	0.01	0.00	0.00	
1G	0	-0.017	-3.081	-5.646	0.000	-2.010	-0.490	1	0.01	0.00	0.03	
1H	0	-0.017	-2.337	-5.646	0.000	-2.010	-0.747	1	0.01	0.00	0.03	
1I	0	-0.049	-2.866	-1.825	0.000	-0.663	-0.571	1	0.01	0.00	0.01	
1J	0	-0.049	-2.552	-1.825	0.000	-0.663	-0.666	1	0.01	0.00	0.01	
1K	0	-0.049	-2.866	-3.607	0.000	-1.294	-0.571	1	0.01	0.00	0.02	
1L	0	-0.049	-2.552	-3.607	0.000	-1.294	-0.666	1	0.01	0.00	0.02	
1M	0	-0.005	-2.866	-1.825	0.000	-0.663	-0.571	1	0.01	0.00	0.01	
1N	0	-0.005	-2.552	-1.825	0.000	-0.663	-0.666	1	0.01	0.00	0.01	
1O	0	-0.005	-2.866	-3.607	0.000	-1.294	-0.571	1	0.01	0.00	0.02	
1P	0	-0.005	-2.552	-3.607	0.000	-1.294	-0.666	1	0.01	0.00	0.02	
2	0	-0.049	-4.897	-4.869	0.000	-1.754	-1.134	1	0.01	0.00	0.02	
7	0	-0.028	-2.652	-2.720	0.000	-0.979	-0.638	1	0.01	0.00	0.01	
8	0	-0.027	-2.754	-2.607	0.000	-0.939	-0.594	1	0.01	0.00	0.01	
9	0	-0.031	-3.075	-3.146	0.000	-1.132	-0.638	1	0.01	0.00	0.01	
10	0	-0.032	-3.127	-3.145	0.000	-1.132	-0.662	1	0.01	0.00	0.01	
11	0	-0.045	-4.375	-4.382	0.000	-1.579	-1.034	1	0.01	0.00	0.02	
12	0	-0.044	-4.437	-4.314	0.000	-1.555	-1.008	1	0.01	0.00	0.02	
13	0	-0.047	-4.629	-4.638	0.000	-1.670	-1.034	1	0.01	0.00	0.02	
14	0	-0.047	-4.660	-4.637	0.000	-1.670	-1.049	1	0.01	0.00	0.02	
1A	47	-0.038	-5.975	0.214	0.000	-0.046	-2.605	1	0.02	0.00	0.02	
1B	47	-0.038	-5.231	0.214	0.000	-0.046	-2.511	1	0.01	0.00	0.01	
1C	47	-0.038	-5.975	-5.646	0.000	0.625	-2.605	1	0.02	0.00	0.02	
1D	47	-0.038	-5.231	-5.646	0.000	0.625	-2.511	1	0.01	0.00	0.01	
1E	47	-0.017	-5.975	0.214	0.000	-0.046	-2.605	1	0.02	0.00	0.02	
1F	47	-0.017	-5.231	0.214	0.000	-0.046	-2.511	1	0.01	0.00	0.01	
1G	47	-0.017	-5.975	-5.646	0.000	0.625	-2.605	1	0.02	0.00	0.02	
1H	47	-0.017	-5.231	-5.646	0.000	0.625	-2.511	1	0.01	0.00	0.01	
1I	47	-0.049	-5.760	-1.825	0.000	0.189	-2.588	1	0.02	0.00	0.02	
1J	47	-0.049	-5.446	-1.825	0.000	0.189	-2.527	1	0.01	0.00	0.02	
1K	47	-0.049	-5.760	-3.607	0.000	0.390	-2.588	1	0.02	0.00	0.02	
1L	47	-0.049	-5.446	-3.607	0.000	0.390	-2.527	1	0.01	0.00	0.02	
1M	47	-0.005	-5.760	-1.825	0.000	0.189	-2.588	1	0.02	0.00	0.02	
1N	47	-0.005	-5.446	-1.825	0.000	0.189	-2.527	1	0.01	0.00	0.02	
1O	47	-0.005	-5.760	-3.607	0.000	0.390	-2.588	1	0.02	0.00	0.02	
1P	47	-0.005	-5.446	-3.607	0.000	0.390	-2.527	1	0.01	0.00	0.02	
2	47	-0.049	-10.189	-4.869	0.000	0.518	-4.653	1	0.03	0.00	0.03	
7	47	-0.028	-5.499	-2.720	0.000	0.290	-2.540	1	0.01	0.00	0.02	

8	47	-0.027	-5.601	-2.607	0.000	0.277	-2.544	1	0.01	0.00	0.02
9	47	-0.031	-6.312	-3.146	0.000	0.336	-2.828	1	0.02	0.00	0.02
10	47	-0.032	-6.364	-3.145	0.000	0.336	-2.877	1	0.02	0.00	0.02
11	47	-0.045	-9.118	-4.382	0.000	0.466	-4.182	1	0.02	0.00	0.02
12	47	-0.044	-9.179	-4.314	0.000	0.458	-4.184	1	0.02	0.00	0.02
13	47	-0.047	-9.604	-4.638	0.000	0.494	-4.355	1	0.03	0.00	0.03
14	47	-0.047	-9.635	-4.637	0.000	0.494	-4.384	1	0.03	0.00	0.03
1A	93	-0.038	-8.869	0.214	0.000	-0.146	-6.070	1	0.02	0.00	0.04
1B	93	-0.038	-8.125	0.214	0.000	-0.146	-5.626	1	0.02	0.00	0.03
1C	93	-0.038	-8.869	-5.646	0.000	3.260	-6.070	1	0.02	0.00	0.04
1D	93	-0.038	-8.125	-5.646	0.000	3.260	-5.626	1	0.02	0.00	0.04
1E	93	-0.017	-8.869	0.214	0.000	-0.146	-6.070	1	0.02	0.00	0.04
1F	93	-0.017	-8.125	0.214	0.000	-0.146	-5.626	1	0.02	0.00	0.03
1G	93	-0.017	-8.869	-5.646	0.000	3.260	-6.070	1	0.02	0.00	0.04
1H	93	-0.017	-8.125	-5.646	0.000	3.260	-5.626	1	0.02	0.00	0.04
1I	93	-0.049	-8.654	-1.825	0.000	1.041	-5.957	1	0.02	0.00	0.04
1J	93	-0.049	-8.340	-1.825	0.000	1.041	-5.739	1	0.02	0.00	0.03
1K	93	-0.049	-8.654	-3.607	0.000	2.073	-5.957	1	0.02	0.00	0.04
1L	93	-0.049	-8.340	-3.607	0.000	2.073	-5.739	1	0.02	0.00	0.03
1M	93	-0.005	-8.654	-1.825	0.000	1.041	-5.957	1	0.02	0.00	0.04
1N	93	-0.005	-8.340	-1.825	0.000	1.041	-5.739	1	0.02	0.00	0.03
1O	93	-0.005	-8.654	-3.607	0.000	2.073	-5.957	1	0.02	0.00	0.04
1P	93	-0.005	-8.340	-3.607	0.000	2.073	-5.739	1	0.02	0.00	0.03
2	93	-0.049	-15.480	-4.869	0.000	2.790	-10.640	1	0.04	0.00	0.06
7	93	-0.028	-8.345	-2.720	0.000	1.559	-5.770	1	0.02	0.00	0.03
8	93	-0.027	-8.448	-2.607	0.000	1.494	-5.822	1	0.02	0.00	0.03
9	93	-0.031	-9.548	-3.146	0.000	1.804	-6.529	1	0.03	0.00	0.04
10	93	-0.032	-9.600	-3.145	0.000	1.804	-6.602	1	0.03	0.00	0.04
11	93	-0.045	-13.860	-4.382	0.000	2.511	-9.542	1	0.04	0.00	0.06
12	93	-0.044	-13.920	-4.314	0.000	2.472	-9.573	1	0.04	0.00	0.06
13	93	-0.047	-14.580	-4.638	0.000	2.658	-9.997	1	0.04	0.00	0.06
14	93	-0.047	-14.610	-4.637	0.000	2.658	-10.040	1	0.04	0.00	0.06

ASTA NUM. 14 NI 35 NF 203 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.043	8.563	6.045	0.000	3.756	-5.626	1	0.02	0.00	0.05	
1B	0	-0.043	9.367	6.045	0.000	3.756	-6.088	1	0.02	0.00	0.05	
1C	0	-0.043	8.563	-0.573	0.000	-0.346	-5.626	1	0.02	0.00	0.03	
1D	0	-0.043	9.367	-0.573	0.000	-0.346	-6.088	1	0.02	0.00	0.04	
1E	0	-0.020	8.563	6.045	0.000	3.756	-5.626	1	0.02	0.00	0.05	
1F	0	-0.020	9.367	6.045	0.000	3.756	-6.088	1	0.02	0.00	0.05	
1G	0	-0.020	8.563	-0.573	0.000	-0.346	-5.626	1	0.02	0.00	0.03	
1H	0	-0.020	9.367	-0.573	0.000	-0.346	-6.088	1	0.02	0.00	0.04	
1I	0	-0.055	8.786	3.792	0.000	2.358	-5.734	1	0.02	0.00	0.03	
1J	0	-0.055	9.144	3.792	0.000	2.358	-5.980	1	0.02	0.00	0.04	
1K	0	-0.055	8.786	1.681	0.000	1.052	-5.734	1	0.02	0.00	0.03	
1L	0	-0.055	9.144	1.681	0.000	1.052	-5.980	1	0.02	0.00	0.04	
1M	0	-0.008	8.786	3.792	0.000	2.358	-5.734	1	0.02	0.00	0.03	
1N	0	-0.008	9.144	3.792	0.000	2.358	-5.980	1	0.02	0.00	0.04	
1O	0	-0.008	8.786	1.681	0.000	1.052	-5.734	1	0.02	0.00	0.03	
1P	0	-0.008	9.144	1.681	0.000	1.052	-5.980	1	0.02	0.00	0.04	
2	0	-0.057	16.340	4.913	0.000	3.062	-10.660	1	0.04	0.00	0.06	
7	0	-0.031	8.812	2.736	0.000	1.705	-5.778	1	0.02	0.00	0.03	
8	0	-0.031	8.907	2.636	0.000	1.643	-5.830	1	0.02	0.00	0.03	
9	0	-0.037	10.050	3.152	0.000	1.964	-6.539	1	0.03	0.00	0.04	
10	0	-0.036	10.090	3.154	0.000	1.965	-6.611	1	0.03	0.00	0.04	
11	0	-0.051	14.630	4.421	0.000	2.755	-9.556	1	0.04	0.00	0.06	
12	0	-0.051	14.690	4.361	0.000	2.718	-9.588	1	0.04	0.00	0.06	
13	0	-0.054	15.370	4.670	0.000	2.911	-10.010	1	0.04	0.00	0.06	
14	0	-0.054	15.390	4.671	0.000	2.911	-10.060	1	0.04	0.00	0.06	
1A	50	-0.043	5.462	6.045	0.000	0.734	-2.120	1	0.01	0.00	0.01	
1B	50	-0.043	6.266	6.045	0.000	0.734	-2.179	1	0.02	0.00	0.01	
1C	50	-0.043	5.462	-0.573	0.000	-0.060	-2.120	1	0.01	0.00	0.01	
1D	50	-0.043	6.266	-0.573	0.000	-0.060	-2.179	1	0.02	0.00	0.01	
1E	50	-0.020	5.462	6.045	0.000	0.734	-2.120	1	0.01	0.00	0.01	
1F	50	-0.020	6.266	6.045	0.000	0.734	-2.179	1	0.02	0.00	0.01	
1G	50	-0.020	5.462	-0.573	0.000	-0.060	-2.120	1	0.01	0.00	0.01	
1H	50	-0.020	6.266	-0.573	0.000	-0.060	-2.179	1	0.02	0.00	0.01	
1I	50	-0.055	5.685	3.792	0.000	0.463	-2.116	1	0.02	0.00	0.01	
1J	50	-0.055	6.043	3.792	0.000	0.463	-2.183	1	0.02	0.00	0.01	
1K	50	-0.055	5.685	1.681	0.000	0.211	-2.116	1	0.02	0.00	0.01	
1L	50	-0.055	6.043	1.681	0.000	0.211	-2.183	1	0.02	0.00	0.01	
1M	50	-0.008	5.685	3.792	0.000	0.463	-2.116	1	0.02	0.00	0.01	
1N	50	-0.008	6.043	3.792	0.000	0.463	-2.183	1	0.02	0.00	0.01	
1O	50	-0.008	5.685	1.681	0.000	0.211	-2.116	1	0.02	0.00	0.01	
1P	50	-0.008	6.043	1.681	0.000	0.211	-2.183	1	0.02	0.00	0.01	
2	50	-0.057	10.670	4.913	0.000	0.606	-3.908	1	0.03	0.00	0.02	
7	50	-0.031	5.762	2.736	0.000	0.337	-2.134	1	0.02	0.00	0.01	
8	50	-0.031	5.857	2.636	0.000	0.325	-2.139	1	0.02	0.00	0.01	
9	50	-0.037	6.583	3.152	0.000	0.388	-2.380	1	0.02	0.00	0.01	
10	50	-0.036	6.621	3.154	0.000	0.388	-2.434	1	0.02	0.00	0.01	
11	50	-0.051	9.550	4.421	0.000	0.545	-3.511	1	0.03	0.00	0.02	
12	50	-0.051	9.609	4.361	0.000	0.537	-3.514	1	0.03	0.00	0.02	
13	50	-0.054	10.042	4.670	0.000	0.575	-3.657	1	0.03	0.00	0.02	
14	50	-0.054	10.063	4.671	0.000	0.575	-3.693	1	0.03	0.00	0.02	
1A	100	-0.043	2.361	6.045	0.000	-2.288	-0.165	1	0.01	0.00	0.03	

1B	100	-0.043	3.165	6.045	0.000	-2.288	0.179	1	0.01	0.00	0.03
1C	100	-0.043	2.361	-0.573	0.000	0.226	-0.165	1	0.01	0.00	0.00
1D	100	-0.043	3.165	-0.573	0.000	0.226	0.179	1	0.01	0.00	0.00
1E	100	-0.020	2.361	6.045	0.000	-2.288	-0.165	1	0.01	0.00	0.03
1F	100	-0.020	3.165	6.045	0.000	-2.288	0.179	1	0.01	0.00	0.03
1G	100	-0.020	2.361	-0.573	0.000	0.226	-0.165	1	0.01	0.00	0.00
1H	100	-0.020	3.165	-0.573	0.000	0.226	0.179	1	0.01	0.00	0.00
1I	100	-0.055	2.584	3.792	0.000	-1.433	-0.049	1	0.01	0.00	0.02
1J	100	-0.055	2.942	3.792	0.000	-1.433	0.064	1	0.01	0.00	0.02
1K	100	-0.055	2.584	1.681	0.000	-0.629	-0.049	1	0.01	0.00	0.01
1L	100	-0.055	2.942	1.681	0.000	-0.629	0.064	1	0.01	0.00	0.01
1M	100	-0.008	2.584	3.792	0.000	-1.433	-0.049	1	0.01	0.00	0.02
1N	100	-0.008	2.942	3.792	0.000	-1.433	0.064	1	0.01	0.00	0.02
1O	100	-0.008	2.584	1.681	0.000	-0.629	-0.049	1	0.01	0.00	0.01
1P	100	-0.008	2.942	1.681	0.000	-0.629	0.064	1	0.01	0.00	0.01
2	100	-0.057	4.999	4.913	0.000	-1.851	0.010	1	0.01	0.00	0.02
7	100	-0.031	2.712	2.736	0.000	-1.031	-0.015	1	0.01	0.00	0.01
8	100	-0.031	2.807	2.636	0.000	-0.993	0.027	1	0.01	0.00	0.01
9	100	-0.037	3.116	3.152	0.000	-1.188	0.044	1	0.01	0.00	0.01
10	100	-0.036	3.152	3.154	0.000	-1.189	0.009	1	0.01	0.00	0.01
11	100	-0.051	4.471	4.421	0.000	-1.666	-0.005	1	0.01	0.00	0.02
12	100	-0.051	4.528	4.361	0.000	-1.643	0.020	1	0.01	0.00	0.02
13	100	-0.054	4.714	4.670	0.000	-1.760	0.031	1	0.01	0.00	0.02
14	100	-0.054	4.735	4.671	0.000	-1.760	0.009	1	0.01	0.00	0.02

ASTA NUM. 55 NI 203 NF 196 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.046	2.943	0.196	0.000	0.194	0.136	1	0.01	0.00	0.00	
1B	0	0.046	3.019	0.196	0.000	0.194	-0.176	1	0.01	0.00	0.00	
1C	0	0.046	2.943	0.160	0.000	-1.411	0.136	1	0.01	0.00	0.02	
1D	0	0.046	3.019	0.160	0.000	-1.411	-0.176	1	0.01	0.00	0.02	
1E	0	0.065	2.943	0.196	0.000	0.194	0.136	1	0.01	0.00	0.00	
1F	0	0.065	3.019	0.196	0.000	0.194	-0.176	1	0.01	0.00	0.00	
1G	0	0.065	2.943	0.160	0.000	-1.411	0.136	1	0.01	0.00	0.02	
1H	0	0.065	3.019	0.160	0.000	-1.411	-0.176	1	0.01	0.00	0.02	
1I	0	0.052	2.955	0.201	0.000	-0.347	0.030	1	0.01	0.00	0.00	
1J	0	0.052	3.007	0.201	0.000	-0.347	-0.071	1	0.01	0.00	0.00	
1K	0	0.052	2.955	0.155	0.000	-0.871	0.030	1	0.01	0.00	0.01	
1L	0	0.052	3.007	0.155	0.000	-0.871	-0.071	1	0.01	0.00	0.01	
1M	0	0.060	2.955	0.201	0.000	-0.347	0.030	1	0.01	0.00	0.00	
1N	0	0.060	3.007	0.201	0.000	-0.347	-0.071	1	0.01	0.00	0.00	
1O	0	0.060	2.955	0.155	0.000	-0.871	0.030	1	0.01	0.00	0.01	
1P	0	0.060	3.007	0.155	0.000	-0.871	-0.071	1	0.01	0.00	0.01	
2	0	0.101	5.449	0.325	0.000	-1.092	-0.040	1	0.01	0.00	0.01	
7	0	0.056	2.952	0.175	0.000	-0.610	-0.042	1	0.01	0.00	0.01	
8	0	0.055	2.933	0.177	0.000	-0.585	-0.001	1	0.01	0.00	0.01	
9	0	0.064	3.282	0.198	0.000	-0.703	0.013	1	0.01	0.00	0.01	
10	0	0.064	3.329	0.199	0.000	-0.703	-0.023	1	0.01	0.00	0.01	
11	0	0.090	4.895	0.291	0.000	-0.983	-0.050	1	0.01	0.00	0.01	
12	0	0.090	4.884	0.292	0.000	-0.968	-0.025	1	0.01	0.00	0.01	
13	0	0.096	5.093	0.304	0.000	-1.039	-0.017	1	0.01	0.00	0.01	
14	0	0.096	5.121	0.305	0.000	-1.039	-0.038	1	0.01	0.00	0.01	
1A	50	0.046	-0.158	0.196	0.000	0.096	0.870	1	0.00	0.00	0.01	
1B	50	0.046	-0.082	0.196	0.000	0.096	0.520	1	0.00	0.00	0.00	
1C	50	0.046	-0.158	0.160	0.000	-1.492	0.870	1	0.00	0.00	0.02	
1D	50	0.046	-0.082	0.160	0.000	-1.492	0.520	1	0.00	0.00	0.02	
1E	50	0.065	-0.158	0.196	0.000	0.096	0.870	1	0.00	0.00	0.01	
1F	50	0.065	-0.082	0.196	0.000	0.096	0.520	1	0.00	0.00	0.00	
1G	50	0.065	-0.158	0.160	0.000	-1.492	0.870	1	0.00	0.00	0.02	
1H	50	0.065	-0.082	0.160	0.000	-1.492	0.520	1	0.00	0.00	0.02	
1I	50	0.052	-0.146	0.201	0.000	-0.446	0.758	1	0.00	0.00	0.01	
1J	50	0.052	-0.094	0.201	0.000	-0.446	0.632	1	0.00	0.00	0.01	
1K	50	0.052	-0.146	0.155	0.000	-0.950	0.758	1	0.00	0.00	0.01	
1L	50	0.052	-0.094	0.155	0.000	-0.950	0.632	1	0.00	0.00	0.01	
1M	50	0.060	-0.146	0.201	0.000	-0.446	0.758	1	0.00	0.00	0.01	
1N	50	0.060	-0.094	0.201	0.000	-0.446	0.632	1	0.00	0.00	0.01	
1O	50	0.060	-0.146	0.155	0.000	-0.950	0.758	1	0.00	0.00	0.01	
1P	50	0.060	-0.094	0.155	0.000	-0.950	0.632	1	0.00	0.00	0.01	
2	50	0.101	-0.219	0.325	0.000	-1.254	1.267	1	0.00	0.00	0.02	
7	50	0.056	-0.098	0.175	0.000	-0.697	0.671	1	0.00	0.00	0.01	
8	50	0.055	-0.117	0.177	0.000	-0.674	0.703	1	0.00	0.00	0.01	
9	50	0.064	-0.185	0.198	0.000	-0.802	0.787	1	0.00	0.00	0.01	
10	50	0.064	-0.139	0.199	0.000	-0.803	0.775	1	0.00	0.00	0.01	
11	50	0.090	-0.184	0.291	0.000	-1.129	1.128	1	0.00	0.00	0.01	
12	50	0.090	-0.195	0.292	0.000	-1.114	1.147	1	0.00	0.00	0.01	
13	50	0.096	-0.237	0.304	0.000	-1.191	1.197	1	0.00	0.00	0.01	
14	50	0.096	-0.209	0.305	0.000	-1.191	1.190	1	0.00	0.00	0.01	
1A	100	0.046	-3.259	0.196	0.000	-0.002	0.053	1	0.01	0.00	0.00	
1B	100	0.046	-3.183	0.196	0.000	-0.002	-0.334	1	0.01	0.00	0.00	
1C	100	0.046	-3.259	0.160	0.000	-1.572	0.053	1	0.01	0.00	0.02	
1D	100	0.046	-3.183	0.160	0.000	-1.572	-0.334	1	0.01	0.00	0.02	
1E	100	0.065	-3.259	0.196	0.000	-0.002	0.053	1	0.01	0.00	0.00	
1F	100	0.065	-3.183	0.196	0.000	-0.002	-0.334	1	0.01	0.00	0.00	
1G	100	0.065	-3.259	0.160	0.000	-1.572	0.053	1	0.01	0.00	0.02	
1H	100	0.065	-3.183	0.160	0.000	-1.572	-0.334	1	0.01	0.00	0.02	
1I	100	0.052	-3.247	0.201	0.000	-0.545	-0.065	1	0.01	0.00	0.01	
1J	100	0.052	-3.195	0.201	0.000	-0.545	-0.216	1	0.01	0.00	0.01	

1K	100	0.052	-3.247	0.155	0.000	-1.029	-0.065	1	0.01	0.00	0.01
1L	100	0.052	-3.195	0.155	0.000	-1.029	-0.216	1	0.01	0.00	0.01
1M	100	0.060	-3.247	0.201	0.000	-0.545	-0.065	1	0.01	0.00	0.01
1N	100	0.060	-3.195	0.201	0.000	-0.545	-0.216	1	0.01	0.00	0.01
1O	100	0.060	-3.247	0.155	0.000	-1.029	-0.065	1	0.01	0.00	0.01
1P	100	0.060	-3.195	0.155	0.000	-1.029	-0.216	1	0.01	0.00	0.01
2	100	0.101	-5.887	0.325	0.000	-1.416	-0.259	1	0.02	0.00	0.02
7	100	0.056	-3.148	0.175	0.000	-0.785	-0.140	1	0.01	0.00	0.01
8	100	0.055	-3.167	0.177	0.000	-0.762	-0.118	1	0.01	0.00	0.01
9	100	0.064	-3.653	0.198	0.000	-0.901	-0.173	1	0.01	0.00	0.01
10	100	0.064	-3.607	0.199	0.000	-0.902	-0.162	1	0.01	0.00	0.01
11	100	0.090	-5.263	0.291	0.000	-1.274	-0.234	1	0.01	0.00	0.02
12	100	0.090	-5.275	0.292	0.000	-1.260	-0.221	1	0.01	0.00	0.02
13	100	0.096	-5.567	0.304	0.000	-1.343	-0.254	1	0.01	0.00	0.02
14	100	0.096	-5.539	0.305	0.000	-1.344	-0.247	1	0.01	0.00	0.02

ASTA NUM. 56 NI 196 NF 17 Lungh. 100.0 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.035	-3.211	0.246	0.000	0.048	0.046	1	0.01	0.00	0.00	
1B	0	-0.035	-2.585	0.246	0.000	0.048	-0.377	1	0.01	0.00	0.00	
1C	0	-0.035	-3.211	-6.324	0.000	-2.440	0.046	1	0.01	0.00	0.03	
1D	0	-0.035	-2.585	-6.324	0.000	-2.440	-0.377	1	0.01	0.00	0.03	
1E	0	-0.013	-3.211	0.246	0.000	0.048	0.046	1	0.01	0.00	0.00	
1F	0	-0.013	-2.585	0.246	0.000	0.048	-0.377	1	0.01	0.00	0.00	
1G	0	-0.013	-3.211	-6.324	0.000	-2.440	0.046	1	0.01	0.00	0.03	
1H	0	-0.013	-2.585	-6.324	0.000	-2.440	-0.377	1	0.01	0.00	0.03	
1I	0	-0.048	-3.050	-2.009	0.000	-0.807	-0.086	1	0.01	0.00	0.01	
1J	0	-0.048	-2.746	-2.009	0.000	-0.807	-0.244	1	0.01	0.00	0.01	
1K	0	-0.048	-3.050	-4.069	0.000	-1.585	-0.086	1	0.01	0.00	0.02	
1L	0	-0.048	-2.746	-4.069	0.000	-1.585	-0.244	1	0.01	0.00	0.02	
1M	0	-0.000	-3.050	-2.009	0.000	-0.807	-0.086	1	0.01	0.00	0.01	
1N	0	-0.000	-2.746	-2.009	0.000	-0.807	-0.244	1	0.01	0.00	0.01	
1O	0	-0.000	-3.050	-4.069	0.000	-1.585	-0.086	1	0.01	0.00	0.02	
1P	0	-0.000	-2.746	-4.069	0.000	-1.585	-0.244	1	0.01	0.00	0.02	
2	0	-0.044	-5.247	-5.465	0.000	-2.153	-0.305	1	0.01	0.00	0.03	
7	0	-0.025	-2.803	-3.036	0.000	-1.195	-0.166	1	0.01	0.00	0.01	
8	0	-0.024	-2.934	-2.937	0.000	-1.157	-0.143	1	0.01	0.00	0.01	
9	0	-0.028	-3.367	-3.487	0.000	-1.372	-0.200	1	0.01	0.00	0.02	
10	0	-0.028	-3.319	-3.492	0.000	-1.374	-0.188	1	0.01	0.00	0.02	
11	0	-0.040	-4.669	-4.916	0.000	-1.936	-0.275	1	0.01	0.00	0.02	
12	0	-0.039	-4.747	-4.857	0.000	-1.914	-0.262	1	0.01	0.00	0.02	
13	0	-0.041	-5.007	-5.187	0.000	-2.043	-0.296	1	0.01	0.00	0.03	
14	0	-0.042	-4.978	-5.190	0.000	-2.044	-0.289	1	0.01	0.00	0.03	
1A	50	-0.035	-6.312	0.246	0.000	-0.076	-2.334	1	0.02	0.00	0.01	
1B	50	-0.035	-5.686	0.246	0.000	-0.076	-2.445	1	0.02	0.00	0.01	
1C	50	-0.035	-6.312	-6.324	0.000	0.722	-2.334	1	0.02	0.00	0.01	
1D	50	-0.035	-5.686	-6.324	0.000	0.722	-2.445	1	0.02	0.00	0.01	
1E	50	-0.013	-6.312	0.246	0.000	-0.076	-2.334	1	0.02	0.00	0.01	
1F	50	-0.013	-5.686	0.246	0.000	-0.076	-2.445	1	0.02	0.00	0.01	
1G	50	-0.013	-6.312	-6.324	0.000	0.722	-2.334	1	0.02	0.00	0.01	
1H	50	-0.013	-5.686	-6.324	0.000	0.722	-2.445	1	0.02	0.00	0.01	
1I	50	-0.048	-6.151	-2.009	0.000	0.197	-2.387	1	0.02	0.00	0.01	
1J	50	-0.048	-5.847	-2.009	0.000	0.197	-2.392	1	0.02	0.00	0.01	
1K	50	-0.048	-6.151	-4.069	0.000	0.449	-2.387	1	0.02	0.00	0.01	
1L	50	-0.048	-5.847	-4.069	0.000	0.449	-2.392	1	0.02	0.00	0.01	
1M	50	-0.000	-6.151	-2.009	0.000	0.197	-2.387	1	0.02	0.00	0.01	
1N	50	-0.000	-5.847	-2.009	0.000	0.197	-2.392	1	0.02	0.00	0.01	
1O	50	-0.000	-6.151	-4.069	0.000	0.449	-2.387	1	0.02	0.00	0.01	
1P	50	-0.000	-5.847	-4.069	0.000	0.449	-2.392	1	0.02	0.00	0.01	
2	50	-0.044	-10.913	-5.465	0.000	0.580	-4.345	1	0.03	0.00	0.03	
7	50	-0.025	-5.853	-3.036	0.000	0.323	-2.330	1	0.02	0.00	0.01	
8	50	-0.024	-5.984	-2.937	0.000	0.311	-2.372	1	0.02	0.00	0.01	
9	50	-0.028	-6.834	-3.487	0.000	0.372	-2.751	1	0.02	0.00	0.02	
10	50	-0.028	-6.785	-3.492	0.000	0.372	-2.715	1	0.02	0.00	0.02	
11	50	-0.040	-9.749	-4.916	0.000	0.522	-3.878	1	0.03	0.00	0.02	
12	50	-0.039	-9.829	-4.857	0.000	0.515	-3.906	1	0.03	0.00	0.02	
13	50	-0.041	-10.339	-5.187	0.000	0.551	-4.131	1	0.03	0.00	0.02	
14	50	-0.042	-10.309	-5.190	0.000	0.551	-4.112	1	0.03	0.00	0.02	
1A	100	-0.035	-9.413	0.246	0.000	-0.199	-6.265	1	0.03	0.00	0.04	
1B	100	-0.035	-8.787	0.246	0.000	-0.199	-6.063	1	0.02	0.00	0.04	
1C	100	-0.035	-9.413	-6.324	0.000	3.883	-6.265	1	0.03	0.00	0.05	
1D	100	-0.035	-8.787	-6.324	0.000	3.883	-6.063	1	0.02	0.00	0.05	
1E	100	-0.013	-9.413	0.246	0.000	-0.199	-6.265	1	0.03	0.00	0.04	
1F	100	-0.013	-8.787	0.246	0.000	-0.199	-6.063	1	0.02	0.00	0.04	
1G	100	-0.013	-9.413	-6.324	0.000	3.883	-6.265	1	0.03	0.00	0.05	
1H	100	-0.013	-8.787	-6.324	0.000	3.883	-6.063	1	0.02	0.00	0.05	
1I	100	-0.048	-9.252	-2.009	0.000	1.201	-6.238	1	0.02	0.00	0.04	
1J	100	-0.048	-8.948	-2.009	0.000	1.201	-6.090	1	0.02	0.00	0.04	
1K	100	-0.048	-9.252	-4.069	0.000	2.483	-6.238	1	0.02	0.00	0.04	
1L	100	-0.048	-8.948	-4.069	0.000	2.483	-6.090	1	0.02	0.00	0.04	
1M	100	-0.000	-9.252	-2.009	0.000	1.201	-6.238	1	0.02	0.00	0.04	
1N	100	-0.000	-8.948	-2.009	0.000	1.201	-6.090	1	0.02	0.00	0.04	
1O	100	-0.000	-9.252	-4.069	0.000	2.483	-6.238	1	0.02	0.00	0.04	
1P	100	-0.000	-8.948	-4.069	0.000	2.483	-6.090	1	0.02	0.00	0.04	
2	100	-0.044	-16.580	-5.465	0.000	3.313	-11.220	1	0.04	0.00	0.07	
7	100	-0.025	-8.903	-3.036	0.000	1.841	-6.019	1	0.02	0.00	0.04	
8	100	-0.024	-9.034	-2.937	0.000	1.780	-6.127	1	0.02	0.00	0.04	

9	100	-0.028	-10.300	-3.487	0.000	2.115	-7.035	1	0.03	0.00	0.04	
10	100	-0.028	-10.250	-3.492	0.000	2.118	-6.975	1	0.03	0.00	0.04	
11	100	-0.040	-14.830	-4.916	0.000	2.980	-10.020	1	0.04	0.00	0.06	
12	100	-0.039	-14.910	-4.857	0.000	2.943	-10.090	1	0.04	0.00	0.06	
13	100	-0.041	-15.670	-5.187	0.000	3.145	-10.630	1	0.04	0.00	0.06	
14	100	-0.042	-15.640	-5.190	0.000	3.146	-10.600	1	0.04	0.00	0.06	

ASTA NUM. 15 NI 17 NF 167 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-0.019	15.180	9.229	0.000	7.143	-6.056	1	0.04	0.00	0.09	
1B	0	-0.019	15.500	9.229	0.000	7.143	-6.400	1	0.04	0.00	0.09	
1C	0	-0.019	15.180	-3.885	0.000	-3.293	-6.056	1	0.04	0.00	0.04	
1D	0	-0.019	15.500	-3.885	0.000	-3.293	-6.400	1	0.04	0.00	0.04	
1E	0	0.011	15.180	9.229	0.000	7.143	-6.056	1	0.04	0.00	0.09	
1F	0	0.011	15.500	9.229	0.000	7.143	-6.400	1	0.04	0.00	0.09	
1G	0	0.011	15.180	-3.885	0.000	-3.293	-6.056	1	0.04	0.00	0.04	
1H	0	0.011	15.500	-3.885	0.000	-3.293	-6.400	1	0.04	0.00	0.04	
1I	0	-0.046	15.058	4.987	0.000	3.772	-6.125	1	0.04	0.00	0.05	
1J	0	-0.046	15.622	4.987	0.000	3.772	-6.331	1	0.04	0.00	0.05	
1K	0	-0.046	15.058	0.357	0.000	0.078	-6.125	1	0.04	0.00	0.04	
1L	0	-0.046	15.622	0.357	0.000	0.078	-6.331	1	0.04	0.00	0.04	
1M	0	0.037	15.058	4.987	0.000	3.772	-6.125	1	0.04	0.00	0.05	
1N	0	0.037	15.622	4.987	0.000	3.772	-6.331	1	0.04	0.00	0.05	
1O	0	0.037	15.058	0.357	0.000	0.078	-6.125	1	0.04	0.00	0.04	
1P	0	0.037	15.622	0.357	0.000	0.078	-6.331	1	0.04	0.00	0.04	
2	0	-0.008	27.950	4.814	0.000	3.468	-11.340	1	0.07	0.00	0.07	
7	0	-0.002	15.090	2.665	0.000	1.919	-6.080	1	0.04	0.00	0.04	
8	0	-0.003	15.200	2.592	0.000	1.868	-6.191	1	0.04	0.00	0.04	
9	0	-0.005	17.260	3.057	0.000	2.202	-7.107	1	0.05	0.00	0.04	
10	0	-0.005	17.240	3.060	0.000	2.205	-7.045	1	0.05	0.00	0.04	
11	0	-0.006	25.030	4.328	0.000	3.118	-10.130	1	0.07	0.00	0.06	
12	0	-0.006	25.100	4.285	0.000	3.087	-10.190	1	0.07	0.00	0.06	
13	0	-0.007	26.340	4.564	0.000	3.287	-10.740	1	0.07	0.00	0.06	
14	0	-0.008	26.320	4.566	0.000	3.289	-10.710	1	0.07	0.00	0.06	
1A	56	-0.019	11.692	9.229	0.000	1.951	1.436	1	0.03	0.00	0.02	
1B	56	-0.019	12.012	9.229	0.000	1.951	1.404	1	0.03	0.00	0.02	
1C	56	-0.019	11.692	-3.885	0.000	-1.107	1.436	1	0.03	0.00	0.01	
1D	56	-0.019	12.012	-3.885	0.000	-1.107	1.404	1	0.03	0.00	0.01	
1E	56	0.011	11.692	9.229	0.000	1.951	1.436	1	0.03	0.00	0.02	
1F	56	0.011	12.012	9.229	0.000	1.951	1.404	1	0.03	0.00	0.02	
1G	56	0.011	11.692	-3.885	0.000	-1.107	1.436	1	0.03	0.00	0.01	
1H	56	0.011	12.012	-3.885	0.000	-1.107	1.404	1	0.03	0.00	0.01	
1I	56	-0.046	11.570	4.987	0.000	0.967	1.344	1	0.03	0.00	0.01	
1J	56	-0.046	12.134	4.987	0.000	0.967	1.496	1	0.03	0.00	0.01	
1K	56	-0.046	11.570	0.357	0.000	-0.123	1.344	1	0.03	0.00	0.01	
1L	56	-0.046	12.134	0.357	0.000	-0.123	1.496	1	0.03	0.00	0.01	
1M	56	0.037	11.570	4.987	0.000	0.967	1.344	1	0.03	0.00	0.01	
1N	56	0.037	12.134	4.987	0.000	0.967	1.496	1	0.03	0.00	0.01	
1O	56	0.037	11.570	0.357	0.000	-0.123	1.344	1	0.03	0.00	0.01	
1P	56	0.037	12.134	0.357	0.000	-0.123	1.496	1	0.03	0.00	0.01	
2	56	-0.008	21.570	4.814	0.000	0.760	2.588	1	0.06	0.00	0.02	
7	56	-0.002	11.657	2.665	0.000	0.420	1.441	1	0.03	0.00	0.01	
8	56	-0.003	11.768	2.592	0.000	0.409	1.393	1	0.03	0.00	0.01	
9	56	-0.005	13.359	3.057	0.000	0.482	1.504	1	0.04	0.00	0.01	
10	56	-0.005	13.341	3.060	0.000	0.483	1.557	1	0.04	0.00	0.01	
11	56	-0.006	19.315	4.328	0.000	0.683	2.342	1	0.05	0.00	0.01	
12	56	-0.006	19.385	4.285	0.000	0.677	2.317	1	0.05	0.00	0.01	
13	56	-0.007	20.340	4.564	0.000	0.720	2.386	1	0.05	0.00	0.01	
14	56	-0.008	20.325	4.566	0.000	0.721	2.411	1	0.05	0.00	0.01	
1A	113	-0.019	8.204	9.229	0.000	-3.241	6.966	1	0.02	0.00	0.04	
1B	113	-0.019	8.524	9.229	0.000	-3.241	7.246	1	0.02	0.00	0.04	
1C	113	-0.019	8.204	-3.885	0.000	1.079	6.966	1	0.02	0.00	0.04	
1D	113	-0.019	8.524	-3.885	0.000	1.079	7.246	1	0.02	0.00	0.04	
1E	113	0.011	8.204	9.229	0.000	-3.241	6.966	1	0.02	0.00	0.04	
1F	113	0.011	8.524	9.229	0.000	-3.241	7.246	1	0.02	0.00	0.04	
1G	113	0.011	8.204	-3.885	0.000	1.079	6.966	1	0.02	0.00	0.04	
1H	113	0.011	8.524	-3.885	0.000	1.079	7.246	1	0.02	0.00	0.04	
1I	113	-0.046	8.082	4.987	0.000	-1.838	6.852	1	0.02	0.00	0.04	
1J	113	-0.046	8.646	4.987	0.000	-1.838	7.360	1	0.02	0.00	0.04	
1K	113	-0.046	8.082	0.357	0.000	-0.324	6.852	1	0.02	0.00	0.04	
1L	113	-0.046	8.646	0.357	0.000	-0.324	7.360	1	0.02	0.00	0.04	
1M	113	0.037	8.082	4.987	0.000	-1.838	6.852	1	0.02	0.00	0.04	
1N	113	0.037	8.646	4.987	0.000	-1.838	7.360	1	0.02	0.00	0.04	
1O	113	0.037	8.082	0.357	0.000	-0.324	6.852	1	0.02	0.00	0.04	
1P	113	0.037	8.646	0.357	0.000	-0.324	7.360	1	0.02	0.00	0.04	
2	113	-0.008	15.190	4.814	0.000	-1.948	12.930	1	0.04	0.00	0.08	
7	113	-0.002	8.223	2.665	0.000	-1.079	7.031	1	0.02	0.00	0.04	
8	113	-0.003	8.336	2.592	0.000	-1.049	7.047	1	0.02	0.00	0.04	
9	113	-0.005	9.458	3.057	0.000	-1.238	7.921	1	0.03	0.00	0.05	
10	113	-0.005	9.441	3.060	0.000	-1.238	7.965	1	0.03	0.00	0.05	
11	113	-0.006	13.600	4.328	0.000	-1.752	11.600	1	0.04	0.00	0.07	
12	113	-0.006	13.670	4.285	0.000	-1.734	11.610	1	0.04	0.00	0.07	
13	113	-0.007	14.340	4.564	0.000	-1.847	12.140	1	0.04	0.00	0.07	
14	113	-0.008	14.330	4.566	0.000	-1.847	12.160	1	0.04	0.00	0.07	

ASTA NUM. 57 NI 167 NF 160 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	0.009	8.407	2.122	0.000	-0.367	7.278	1	0.02	0.00	0.04	
1B	0	0.009	8.513	2.122	0.000	-0.367	6.878	1	0.02	0.00	0.04	
1C	0	0.009	8.407	-2.705	0.000	-0.716	7.278	1	0.02	0.00	0.04	
1D	0	0.009	8.513	-2.705	0.000	-0.716	6.878	1	0.02	0.00	0.04	
1E	0	0.022	8.407	2.122	0.000	-0.367	7.278	1	0.02	0.00	0.04	
1F	0	0.022	8.513	2.122	0.000	-0.367	6.878	1	0.02	0.00	0.04	
1G	0	0.022	8.407	-2.705	0.000	-0.716	7.278	1	0.02	0.00	0.04	
1H	0	0.022	8.513	-2.705	0.000	-0.716	6.878	1	0.02	0.00	0.04	
1I	0	-0.000	8.353	0.586	0.000	-0.486	7.352	1	0.02	0.00	0.04	
1J	0	-0.000	8.567	0.586	0.000	-0.486	6.804	1	0.02	0.00	0.04	
1K	0	-0.000	8.353	-1.169	0.000	-0.598	7.352	1	0.02	0.00	0.04	
1L	0	-0.000	8.567	-1.169	0.000	-0.598	6.804	1	0.02	0.00	0.04	
1M	0	0.031	8.353	0.586	0.000	-0.486	7.352	1	0.02	0.00	0.04	
1N	0	0.031	8.567	0.586	0.000	-0.486	6.804	1	0.02	0.00	0.04	
1O	0	0.031	8.353	-1.169	0.000	-0.598	7.352	1	0.02	0.00	0.04	
1P	0	0.031	8.567	-1.169	0.000	-0.598	6.804	1	0.02	0.00	0.04	
2	0	0.028	15.420	-0.526	0.000	-0.976	12.880	1	0.04	0.00	0.08	
7	0	0.016	8.331	-0.293	0.000	-0.542	7.004	1	0.02	0.00	0.04	
8	0	0.016	8.368	-0.283	0.000	-0.525	7.017	1	0.02	0.00	0.04	
9	0	0.017	9.508	-0.332	0.000	-0.620	7.886	1	0.03	0.00	0.05	
10	0	0.017	9.485	-0.331	0.000	-0.620	7.931	1	0.03	0.00	0.05	
11	0	0.026	13.820	-0.474	0.000	-0.878	11.560	1	0.04	0.00	0.07	
12	0	0.025	13.840	-0.468	0.000	-0.868	11.570	1	0.04	0.00	0.07	
13	0	0.026	14.530	-0.498	0.000	-0.925	12.090	1	0.04	0.00	0.07	
14	0	0.026	14.520	-0.497	0.000	-0.925	12.110	1	0.04	0.00	0.07	
1A	56	0.009	4.918	2.122	0.000	1.153	11.085	1	0.01	0.00	0.07	
1B	56	0.009	5.024	2.122	0.000	1.153	10.626	1	0.01	0.00	0.06	
1C	56	0.009	4.918	-2.705	0.000	-1.909	11.085	1	0.01	0.00	0.07	
1D	56	0.009	5.024	-2.705	0.000	-1.909	10.626	1	0.01	0.00	0.06	
1E	56	0.022	4.918	2.122	0.000	1.153	11.085	1	0.01	0.00	0.07	
1F	56	0.022	5.024	2.122	0.000	1.153	10.626	1	0.01	0.00	0.06	
1G	56	0.022	4.918	-2.705	0.000	-1.909	11.085	1	0.01	0.00	0.07	
1H	56	0.022	5.024	-2.705	0.000	-1.909	10.626	1	0.01	0.00	0.06	
1I	56	-0.000	4.864	0.586	0.000	0.169	11.189	1	0.01	0.00	0.07	
1J	56	-0.000	5.078	0.586	0.000	0.169	10.521	1	0.01	0.00	0.06	
1K	56	-0.000	4.864	-1.169	0.000	-0.925	11.189	1	0.01	0.00	0.07	
1L	56	-0.000	5.078	-1.169	0.000	-0.925	10.521	1	0.01	0.00	0.06	
1M	56	0.031	4.864	0.586	0.000	0.169	11.189	1	0.01	0.00	0.07	
1N	56	0.031	5.078	0.586	0.000	0.169	10.521	1	0.01	0.00	0.06	
1O	56	0.031	4.864	-1.169	0.000	-0.925	11.189	1	0.01	0.00	0.07	
1P	56	0.031	5.078	-1.169	0.000	-0.925	10.521	1	0.01	0.00	0.06	
2	56	0.028	9.045	-0.526	0.000	-0.680	19.758	1	0.02	0.00	0.12	
7	56	0.016	4.899	-0.293	0.000	-0.377	10.727	1	0.01	0.00	0.06	
8	56	0.016	4.937	-0.283	0.000	-0.366	10.759	1	0.01	0.00	0.06	
9	56	0.017	5.607	-0.332	0.000	-0.433	12.135	1	0.01	0.00	0.07	
10	56	0.017	5.584	-0.331	0.000	-0.434	12.168	1	0.01	0.00	0.07	
11	56	0.026	8.107	-0.474	0.000	-0.611	17.727	1	0.02	0.00	0.11	
12	56	0.025	8.128	-0.468	0.000	-0.605	17.747	1	0.02	0.00	0.11	
13	56	0.026	8.533	-0.498	0.000	-0.645	18.576	1	0.02	0.00	0.11	
14	56	0.026	8.521	-0.497	0.000	-0.645	18.591	1	0.02	0.00	0.11	
1A	113	0.009	1.429	2.122	0.000	2.674	12.929	1	0.00	0.00	0.08	
1B	113	0.009	1.535	2.122	0.000	2.674	12.411	1	0.00	0.00	0.07	
1C	113	0.009	1.429	-2.705	0.000	-3.102	12.929	1	0.00	0.00	0.08	
1D	113	0.009	1.535	-2.705	0.000	-3.102	12.411	1	0.00	0.00	0.07	
1E	113	0.022	1.429	2.122	0.000	2.674	12.929	1	0.00	0.00	0.08	
1F	113	0.022	1.535	2.122	0.000	2.674	12.411	1	0.00	0.00	0.07	
1G	113	0.022	1.429	-2.705	0.000	-3.102	12.929	1	0.00	0.00	0.08	
1H	113	0.022	1.535	-2.705	0.000	-3.102	12.411	1	0.00	0.00	0.07	
1I	113	-0.000	1.375	0.586	0.000	0.825	13.064	1	0.00	0.00	0.08	
1J	113	-0.000	1.589	0.586	0.000	0.825	12.276	1	0.00	0.00	0.07	
1K	113	-0.000	1.375	-1.169	0.000	-1.252	13.064	1	0.00	0.00	0.08	
1L	113	-0.000	1.589	-1.169	0.000	-1.252	12.276	1	0.00	0.00	0.07	
1M	113	0.031	1.375	0.586	0.000	0.825	13.064	1	0.00	0.00	0.08	
1N	113	0.031	1.589	0.586	0.000	0.825	12.276	1	0.00	0.00	0.07	
1O	113	0.031	1.375	-1.169	0.000	-1.252	13.064	1	0.00	0.00	0.08	
1P	113	0.031	1.589	-1.169	0.000	-1.252	12.276	1	0.00	0.00	0.07	
2	113	0.028	2.669	-0.526	0.000	-0.384	23.050	1	0.01	0.00	0.14	
7	113	0.016	1.468	-0.293	0.000	-0.212	12.520	1	0.00	0.00	0.07	
8	113	0.016	1.505	-0.283	0.000	-0.207	12.570	1	0.00	0.00	0.07	
9	113	0.017	1.706	-0.332	0.000	-0.246	14.190	1	0.00	0.00	0.08	
10	113	0.017	1.683	-0.331	0.000	-0.248	14.210	1	0.00	0.00	0.08	
11	113	0.026	2.394	-0.474	0.000	-0.345	20.680	1	0.01	0.00	0.12	
12	113	0.025	2.416	-0.468	0.000	-0.341	20.710	1	0.01	0.00	0.12	
13	113	0.026	2.537	-0.498	0.000	-0.365	21.690	1	0.01	0.00	0.13	
14	113	0.026	2.523	-0.497	0.000	-0.366	21.700	1	0.01	0.00	0.13	

ASTA NUM. 58 NI 160 NF 153 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m
Sollecitazioni di calcolo e di verifica Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							

1A	0	-0.008	1.273	2.341	0.000	2.606	12.963	1	0.00	0.00	0.08
1B	0	-0.008	1.345	2.341	0.000	2.606	12.437	1	0.00	0.00	0.07
1C	0	-0.008	1.273	-2.475	0.000	-3.170	12.963	1	0.00	0.00	0.08
1D	0	-0.008	1.345	-2.475	0.000	-3.170	12.437	1	0.00	0.00	0.07
1E	0	0.005	1.273	2.341	0.000	2.606	12.963	1	0.00	0.00	0.08
1F	0	0.005	1.345	2.341	0.000	2.606	12.437	1	0.00	0.00	0.07
1G	0	0.005	1.273	-2.475	0.000	-3.170	12.963	1	0.00	0.00	0.08
1H	0	0.005	1.345	-2.475	0.000	-3.170	12.437	1	0.00	0.00	0.07
1I	0	-0.017	1.234	0.794	0.000	0.755	13.096	1	0.00	0.00	0.08
1J	0	-0.017	1.384	0.794	0.000	0.755	12.304	1	0.00	0.00	0.07
1K	0	-0.017	1.234	-0.928	0.000	-1.319	13.096	1	0.00	0.00	0.08
1L	0	-0.017	1.384	-0.928	0.000	-1.319	12.304	1	0.00	0.00	0.07
1M	0	0.014	1.234	0.794	0.000	0.755	13.096	1	0.00	0.00	0.08
1N	0	0.014	1.384	0.794	0.000	0.755	12.304	1	0.00	0.00	0.07
1O	0	0.014	1.234	-0.928	0.000	-1.319	13.096	1	0.00	0.00	0.08
1P	0	0.014	1.384	-0.928	0.000	-1.319	12.304	1	0.00	0.00	0.07
2	0	-0.003	2.410	-0.127	0.000	-0.508	23.110	1	0.01	0.00	0.14
7	0	-0.002	1.268	-0.065	0.000	-0.280	12.550	1	0.00	0.00	0.07
8	0	-0.002	1.270	-0.072	0.000	-0.274	12.600	1	0.00	0.00	0.07
9	0	-0.001	1.471	-0.064	0.000	-0.322	14.230	1	0.00	0.00	0.08
10	0	-0.001	1.465	-0.067	0.000	-0.323	14.250	1	0.00	0.00	0.08
11	0	-0.003	2.150	-0.113	0.000	-0.456	20.730	1	0.01	0.00	0.12
12	0	-0.003	2.151	-0.117	0.000	-0.453	20.760	1	0.01	0.00	0.12
13	0	-0.003	2.272	-0.113	0.000	-0.481	21.740	1	0.01	0.00	0.13
14	0	-0.003	2.268	-0.115	0.000	-0.482	21.750	1	0.01	0.00	0.13
1A	56	-0.008	-2.215	2.341	0.000	1.290	12.714	1	0.01	0.00	0.08
1B	56	-0.008	-2.144	2.341	0.000	1.290	12.199	1	0.01	0.00	0.07
1C	56	-0.008	-2.215	-2.475	0.000	-1.778	12.714	1	0.01	0.00	0.08
1D	56	-0.008	-2.144	-2.475	0.000	-1.778	12.199	1	0.01	0.00	0.07
1E	56	0.005	-2.215	2.341	0.000	1.290	12.714	1	0.01	0.00	0.08
1F	56	0.005	-2.144	2.341	0.000	1.290	12.199	1	0.01	0.00	0.07
1G	56	0.005	-2.215	-2.475	0.000	-1.778	12.714	1	0.01	0.00	0.08
1H	56	0.005	-2.144	-2.475	0.000	-1.778	12.199	1	0.01	0.00	0.07
1I	56	-0.017	-2.255	0.794	0.000	0.309	12.814	1	0.01	0.00	0.08
1J	56	-0.017	-2.104	0.794	0.000	0.309	12.099	1	0.01	0.00	0.07
1K	56	-0.017	-2.255	-0.928	0.000	-0.797	12.814	1	0.01	0.00	0.08
1L	56	-0.017	-2.104	-0.928	0.000	-0.797	12.099	1	0.01	0.00	0.07
1M	56	0.014	-2.255	0.794	0.000	0.309	12.814	1	0.01	0.00	0.08
1N	56	0.014	-2.104	0.794	0.000	0.309	12.099	1	0.01	0.00	0.07
1O	56	0.014	-2.255	-0.928	0.000	-0.797	12.814	1	0.01	0.00	0.08
1P	56	0.014	-2.104	-0.928	0.000	-0.797	12.099	1	0.01	0.00	0.07
2	56	-0.003	-3.965	-0.127	0.000	-0.437	22.673	1	0.01	0.00	0.13
7	56	-0.002	-2.163	-0.065	0.000	-0.244	12.295	1	0.01	0.00	0.07
8	56	-0.002	-2.161	-0.072	0.000	-0.234	12.350	1	0.01	0.00	0.07
9	56	-0.001	-2.430	-0.064	0.000	-0.285	13.957	1	0.01	0.00	0.08
10	56	-0.001	-2.436	-0.067	0.000	-0.285	13.977	1	0.01	0.00	0.08
11	56	-0.003	-3.564	-0.113	0.000	-0.393	20.332	1	0.01	0.00	0.12
12	56	-0.003	-3.563	-0.117	0.000	-0.387	20.362	1	0.01	0.00	0.12
13	56	-0.003	-3.724	-0.113	0.000	-0.418	21.331	1	0.01	0.00	0.13
14	56	-0.003	-3.728	-0.115	0.000	-0.418	21.341	1	0.01	0.00	0.13
1A	113	-0.008	-5.704	2.341	0.000	-0.027	10.502	1	0.02	0.00	0.06
1B	113	-0.008	-5.632	2.341	0.000	-0.027	9.998	1	0.01	0.00	0.06
1C	113	-0.008	-5.704	-2.475	0.000	-0.386	10.502	1	0.02	0.00	0.06
1D	113	-0.008	-5.632	-2.475	0.000	-0.386	9.998	1	0.01	0.00	0.06
1E	113	0.005	-5.704	2.341	0.000	-0.027	10.502	1	0.02	0.00	0.06
1F	113	0.005	-5.632	2.341	0.000	-0.027	9.998	1	0.01	0.00	0.06
1G	113	0.005	-5.704	-2.475	0.000	-0.386	10.502	1	0.02	0.00	0.06
1H	113	0.005	-5.632	-2.475	0.000	-0.386	9.998	1	0.01	0.00	0.06
1I	113	-0.017	-5.743	0.794	0.000	-0.138	10.569	1	0.02	0.00	0.06
1J	113	-0.017	-5.593	0.794	0.000	-0.138	9.931	1	0.01	0.00	0.06
1K	113	-0.017	-5.743	-0.928	0.000	-0.275	10.569	1	0.02	0.00	0.06
1L	113	-0.017	-5.593	-0.928	0.000	-0.275	9.931	1	0.01	0.00	0.06
1M	113	0.014	-5.743	0.794	0.000	-0.138	10.569	1	0.02	0.00	0.06
1N	113	0.014	-5.593	0.794	0.000	-0.138	9.931	1	0.01	0.00	0.06
1O	113	0.014	-5.743	-0.928	0.000	-0.275	10.569	1	0.02	0.00	0.06
1P	113	0.014	-5.593	-0.928	0.000	-0.275	9.931	1	0.01	0.00	0.06
2	113	-0.003	-10.340	-0.127	0.000	-0.366	18.650	1	0.03	0.00	0.11
7	113	-0.002	-5.594	-0.065	0.000	-0.207	10.110	1	0.01	0.00	0.06
8	113	-0.002	-5.592	-0.072	0.000	-0.193	10.170	1	0.01	0.00	0.06
9	113	-0.001	-6.331	-0.064	0.000	-0.249	11.490	1	0.02	0.00	0.07
10	113	-0.001	-6.337	-0.067	0.000	-0.248	11.510	1	0.02	0.00	0.07
11	113	-0.003	-9.278	-0.113	0.000	-0.329	16.720	1	0.02	0.00	0.10
12	113	-0.003	-9.277	-0.117	0.000	-0.320	16.750	1	0.02	0.00	0.10
13	113	-0.003	-9.720	-0.113	0.000	-0.354	17.550	1	0.03	0.00	0.10
14	113	-0.003	-9.724	-0.115	0.000	-0.353	17.560	1	0.03	0.00	0.10

ASTA NUM. 59 NI 153 NF 50 Lungh. 112.5 cm SEZ. 7 Ps HEB 200

categoria: p.p. y Permanente Neve Vento qy tot.
qy medio: 0.60 5.60 2.18 -4.12 4.26 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-0.023	-5.969	4.512	0.000	1.450	10.533	1	0.02	0.00	0.06	
1B	0	-0.023	-5.769	4.512	0.000	1.450	10.147	1	0.02	0.00	0.06	
1C	0	-0.023	-5.969	-8.638	0.000	-2.889	10.533	1	0.02	0.00	0.06	
1D	0	-0.023	-5.769	-8.638	0.000	-2.889	10.147	1	0.02	0.00	0.06	
1E	0	0.005	-5.969	4.512	0.000	1.450	10.533	1	0.02	0.00	0.06	
1F	0	0.005	-5.769	4.512	0.000	1.450	10.147	1	0.02	0.00	0.06	
1G	0	0.005	-5.969	-8.638	0.000	-2.889	10.533	1	0.02	0.00	0.06	
1H	0	0.005	-5.769	-8.638	0.000	-2.889	10.147	1	0.02	0.00	0.06	
1I	0	-0.051	-6.101	0.297	0.000	0.063	10.641	1	0.02	0.00	0.06	

1J	0	-0.051	-5.637	0.297	0.000	0.063	10.039	1	0.02	0.00	0.06
1K	0	-0.051	-6.101	-4.423	0.000	-1.502	10.641	1	0.02	0.00	0.06
1L	0	-0.051	-5.637	-4.423	0.000	-1.502	10.039	1	0.02	0.00	0.06
1M	0	0.032	-6.101	0.297	0.000	0.063	10.641	1	0.02	0.00	0.06
1N	0	0.032	-5.637	0.297	0.000	0.063	10.039	1	0.02	0.00	0.06
1O	0	0.032	-6.101	-4.423	0.000	-1.502	10.641	1	0.02	0.00	0.06
1P	0	0.032	-5.637	-4.423	0.000	-1.502	10.039	1	0.02	0.00	0.06
2	0	-0.017	-10.650	-3.705	0.000	-1.289	18.810	1	0.03	0.00	0.11
7	0	-0.011	-5.805	-2.056	0.000	-0.718	10.200	1	0.02	0.00	0.06
8	0	-0.010	-5.864	-1.990	0.000	-0.690	10.260	1	0.02	0.00	0.06
9	0	-0.011	-6.600	-2.387	0.000	-0.837	11.600	1	0.02	0.00	0.07
10	0	-0.010	-6.604	-2.387	0.000	-0.837	11.610	1	0.02	0.00	0.07
11	0	-0.017	-9.555	-3.330	0.000	-1.158	16.870	1	0.03	0.00	0.10
12	0	-0.016	-9.591	-3.290	0.000	-1.142	16.900	1	0.03	0.00	0.10
13	0	-0.016	-10.030	-3.528	0.000	-1.230	17.700	1	0.03	0.00	0.11
14	0	-0.016	-10.040	-3.528	0.000	-1.230	17.710	1	0.03	0.00	0.11
1A	56	-0.023	-9.460	4.512	0.000	-1.088	6.227	1	0.03	0.00	0.04
1B	56	-0.023	-9.259	4.512	0.000	-1.088	5.887	1	0.02	0.00	0.03
1C	56	-0.023	-9.460	-8.638	0.000	1.970	6.227	1	0.03	0.00	0.04
1D	56	-0.023	-9.259	-8.638	0.000	1.970	5.887	1	0.02	0.00	0.03
1E	56	0.005	-9.460	4.512	0.000	-1.088	6.227	1	0.03	0.00	0.04
1F	56	0.005	-9.259	4.512	0.000	-1.088	5.887	1	0.02	0.00	0.03
1G	56	0.005	-9.460	-8.638	0.000	1.970	6.227	1	0.03	0.00	0.04
1H	56	0.005	-9.259	-8.638	0.000	1.970	5.887	1	0.02	0.00	0.03
1I	56	-0.051	-9.591	0.297	0.000	-0.104	6.238	1	0.03	0.00	0.04
1J	56	-0.051	-9.128	0.297	0.000	-0.104	5.876	1	0.02	0.00	0.03
1K	56	-0.051	-9.591	-4.423	0.000	0.986	6.238	1	0.03	0.00	0.04
1L	56	-0.051	-9.128	-4.423	0.000	0.986	5.876	1	0.02	0.00	0.03
1M	56	0.032	-9.591	0.297	0.000	-0.104	6.238	1	0.03	0.00	0.04
1N	56	0.032	-9.128	0.297	0.000	-0.104	5.876	1	0.02	0.00	0.03
1O	56	0.032	-9.591	-4.423	0.000	0.986	6.238	1	0.03	0.00	0.04
1P	56	0.032	-9.128	-4.423	0.000	0.986	5.876	1	0.02	0.00	0.03
2	56	-0.017	-17.025	-3.705	0.000	0.796	11.026	1	0.05	0.00	0.07
7	56	-0.011	-9.237	-2.056	0.000	0.439	5.971	1	0.02	0.00	0.04
8	56	-0.010	-9.297	-1.990	0.000	0.429	5.997	1	0.02	0.00	0.04
9	56	-0.011	-10.500	-2.387	0.000	0.505	6.789	1	0.03	0.00	0.04
10	56	-0.010	-10.507	-2.387	0.000	0.506	6.797	1	0.03	0.00	0.04
11	56	-0.017	-15.268	-3.330	0.000	0.715	9.887	1	0.04	0.00	0.06
12	56	-0.016	-15.306	-3.290	0.000	0.709	9.900	1	0.04	0.00	0.06
13	56	-0.016	-16.025	-3.528	0.000	0.755	10.373	1	0.04	0.00	0.06
14	56	-0.016	-16.035	-3.528	0.000	0.755	10.380	1	0.04	0.00	0.06
1A	113	-0.023	-12.950	4.512	0.000	-3.625	-0.042	1	0.03	0.00	0.05
1B	113	-0.023	-12.750	4.512	0.000	-3.625	-0.335	1	0.03	0.00	0.05
1C	113	-0.023	-12.950	-8.638	0.000	6.829	-0.042	1	0.03	0.00	0.09
1D	113	-0.023	-12.750	-8.638	0.000	6.829	-0.335	1	0.03	0.00	0.09
1E	113	0.005	-12.950	4.512	0.000	-3.625	-0.042	1	0.03	0.00	0.05
1F	113	0.005	-12.750	4.512	0.000	-3.625	-0.335	1	0.03	0.00	0.05
1G	113	0.005	-12.950	-8.638	0.000	6.829	-0.042	1	0.03	0.00	0.09
1H	113	0.005	-12.750	-8.638	0.000	6.829	-0.335	1	0.03	0.00	0.09
1I	113	-0.051	-13.082	0.297	0.000	-0.270	-0.128	1	0.03	0.00	0.00
1J	113	-0.051	-12.618	0.297	0.000	-0.270	-0.250	1	0.03	0.00	0.00
1K	113	-0.051	-13.082	-4.423	0.000	3.474	-0.128	1	0.03	0.00	0.04
1L	113	-0.051	-12.618	-4.423	0.000	3.474	-0.250	1	0.03	0.00	0.04
1M	113	0.032	-13.082	0.297	0.000	-0.270	-0.128	1	0.03	0.00	0.00
1N	113	0.032	-12.618	0.297	0.000	-0.270	-0.250	1	0.03	0.00	0.00
1O	113	0.032	-13.082	-4.423	0.000	3.474	-0.128	1	0.03	0.00	0.04
1P	113	0.032	-12.618	-4.423	0.000	3.474	-0.250	1	0.03	0.00	0.04
2	113	-0.017	-23.400	-3.705	0.000	2.880	-0.344	1	0.06	0.00	0.04
7	113	-0.011	-12.670	-2.056	0.000	1.596	-0.189	1	0.03	0.00	0.02
8	113	-0.010	-12.730	-1.990	0.000	1.548	-0.196	1	0.03	0.00	0.02
9	113	-0.011	-14.400	-2.387	0.000	1.848	-0.217	1	0.04	0.00	0.02
10	113	-0.010	-14.410	-2.387	0.000	1.848	-0.211	1	0.04	0.00	0.02
11	113	-0.017	-20.980	-3.330	0.000	2.588	-0.310	1	0.06	0.00	0.03
12	113	-0.016	-21.020	-3.290	0.000	2.559	-0.315	1	0.06	0.00	0.03
13	113	-0.016	-22.020	-3.528	0.000	2.739	-0.327	1	0.06	0.00	0.03
14	113	-0.016	-22.030	-3.528	0.000	2.740	-0.324	1	0.06	0.00	0.03

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-0.044	7.143	13.073	1	0.0546	1.0017	1.0004	--	--	0.00	--	0.17	Snell. 'zx'= 348
1B	-0.044	7.143	12.437	1	0.0546	1.0017	1.0004	--	--	0.00	--	0.16	Snell. 'zx'= 348
1C	-0.044	7.055	13.073	1	0.0546	1.0018	1.0004	--	--	0.00	--	0.17	Snell. 'zx'= 348
1D	-0.044	7.055	12.437	1	0.0546	1.0018	1.0004	--	--	0.00	--	0.16	Snell. 'zx'= 348
1E	-0.022	7.143	13.073	1	0.0546	1.0009	1.0002	--	--	0.00	--	0.17	Snell. 'zx'= 348
1F	-0.022	7.143	12.437	1	0.0546	1.0009	1.0002	--	--	0.00	--	0.16	Snell. 'zx'= 348
1G	-0.022	7.055	13.073	1	0.0546	1.0009	1.0002	--	--	0.00	--	0.17	Snell. 'zx'= 348
1H	-0.022	7.055	12.437	1	0.0546	1.0009	1.0002	--	--	0.00	--	0.16	Snell. 'zx'= 348
1I	-0.055	3.772	13.287	1	0.0546	1.0040	1.0005	--	--	0.00	--	0.13	Snell. 'zx'= 348
1J	-0.055	3.772	12.304	1	0.0546	1.0040	1.0005	--	--	0.00	--	0.12	Snell. 'zx'= 348
1K	-0.055	3.700	13.287	1	0.0546	1.0041	1.0005	--	--	0.00	--	0.13	Snell. 'zx'= 348
1L	-0.055	3.700	12.304	1	0.0546	1.0041	1.0005	--	--	0.00	--	0.12	Snell. 'zx'= 348
1M	-0.012	3.772	13.287	1	0.0546	1.0009	1.0001	--	--	0.00	--	0.13	Snell. 'zx'= 348
1N	-0.012	3.772	12.304	1	0.0546	1.0009	1.0001	--	--	0.00	--	0.12	Snell. 'zx'= 348
1O	-0.012	3.700	13.287	1	0.0546	1.0009	1.0001	--	--	0.00	--	0.13	Snell. 'zx'= 348
1P	-0.012	3.700	12.304	1	0.0546	1.0009	1.0001	--	--	0.00	--	0.12	Snell. 'zx'= 348
2	-0.059	3.468	23.210	1	0.0546	1.0020	1.0006	--	--	0.00	--	0.18	Snell. 'zx'= 348
7	-0.034	1.919	12.590	1	0.0546	1.0005	1.0003	--	--	0.00	--	0.10	Snell. 'zx'= 348
8	-0.032	1.868	12.650	1	0.0546	1.0004	1.0003	--	--	0.00	--	0.10	Snell. 'zx'= 348

9	-0.038	2.202	14.310	1	0.0546	1.0008	1.0004	--	--	0.00	--	0.11	Snell. 'zx'= 348
10	-0.038	2.205	14.290	1	0.0546	1.0008	1.0004	--	--	0.00	--	0.11	Snell. 'zx'= 348
11	-0.054	3.118	20.820	1	0.0546	1.0017	1.0006	--	--	0.00	--	0.16	Snell. 'zx'= 348
12	-0.053	3.087	20.850	1	0.0546	1.0016	1.0006	--	--	0.00	--	0.16	Snell. 'zx'= 348
13	-0.056	3.287	21.840	1	0.0546	1.0018	1.0006	--	--	0.00	--	0.17	Snell. 'zx'= 348
14	-0.057	3.289	21.830	1	0.0546	1.0018	1.0006	--	--	0.00	--	0.17	Snell. 'zx'= 348

AMV s.r.l.
Via San Lorenzo, 106 Tel. 0481/779903
34077 Ronchi dei Legionari (GO)

Lavoro: **STAZIONE SPERIMENTALE** Intestazione lavoro: **LABORATORIO SPERIMENTALE**
Elemento: **TRAVE** Metodo di verifica: **Eurocodice 3 - NTC 2018**
Gruppo: **7** Descrizione: **PILASTRI**
Tabella: **Tabella pilastri** Struttura: **Nuova**
Tipo acciaio: **S 275** Beta piano 'yx': **1.000** Beta piano 'zx': **1.000**
Tipologia sismica yx: **Senza prescrizioni aggiuntive**
Tipologia sismica zx: **Senza prescrizioni aggiuntive**
γM0: **1.050** γM1': **1.050** γM1'': **1.050** γM2: **1.250** γrv: **0.000** γM0 Pf: **1.000** γM1 Pf: **1.000**
Tipo collegamento: **saldato** Connessione su un solo lato Connessione sul lato corto (solo 'L')

ASTA NUM. 1 NI 1 NF 24 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 2.82 2.82 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-88.839	-62.548	-0.383	0.000	-0.534	149.710	1	0.09	0.02	0.31	
1B	0	-88.839	41.588	-0.383	0.000	-0.534	-116.670	1	0.06	0.02	0.24	
1C	0	-88.839	-62.548	-0.540	0.000	-0.894	149.710	1	0.09	0.02	0.31	
1D	0	-88.839	41.588	-0.540	0.000	-0.894	-116.670	1	0.06	0.02	0.24	
1E	0	-36.821	-62.548	-0.383	0.000	-0.534	149.710	1	0.09	0.01	0.31	
1F	0	-36.821	41.588	-0.383	0.000	-0.534	-116.670	1	0.06	0.01	0.24	
1G	0	-36.821	-62.548	-0.540	0.000	-0.894	149.710	1	0.09	0.01	0.31	
1H	0	-36.821	41.588	-0.540	0.000	-0.894	-116.670	1	0.06	0.01	0.24	
1I	0	-71.509	-27.338	-0.288	0.000	-0.314	59.479	1	0.04	0.02	0.12	
1J	0	-71.509	6.378	-0.288	0.000	-0.314	-26.439	1	0.01	0.02	0.05	
1K	0	-71.509	-27.338	-0.635	0.000	-1.114	59.479	1	0.04	0.02	0.12	
1L	0	-71.509	6.378	-0.635	0.000	-1.114	-26.439	1	0.01	0.02	0.05	
1M	0	-54.151	-27.338	-0.288	0.000	-0.314	59.479	1	0.04	0.01	0.12	
1N	0	-54.151	6.378	-0.288	0.000	-0.314	-26.439	1	0.01	0.01	0.05	
1O	0	-54.151	-27.338	-0.635	0.000	-1.114	59.479	1	0.04	0.01	0.12	
1P	0	-54.151	6.378	-0.635	0.000	-1.114	-26.439	1	0.01	0.01	0.05	
2	0	-108.300	-18.700	-0.817	0.000	-1.264	29.500	1	0.03	0.03	0.06	
7	0	-68.410	-18.670	11.000	0.000	8.025	27.950	1	0.03	0.02	0.06	
8	0	-63.540	0.230	11.010	0.000	8.051	-6.012	1	0.01	0.02	0.04	
9	0	-72.430	-5.449	4.992	0.000	3.846	13.520	1	0.01	0.02	0.03	
10	0	-71.860	-5.457	-10.510	0.000	-8.885	13.530	1	0.01	0.02	0.04	
11	0	-100.300	-21.730	6.144	0.000	4.108	33.390	1	0.03	0.03	0.07	
12	0	-97.420	-10.390	6.151	0.000	4.123	13.010	1	0.01	0.02	0.03	
13	0	-102.800	-13.800	2.538	0.000	1.601	24.730	1	0.02	0.03	0.05	
14	0	-102.400	-13.800	-6.760	0.000	-6.038	24.740	1	0.02	0.03	0.05	
1A	210	-86.429	-62.548	-0.383	0.000	0.270	18.393	1	0.09	0.02	0.04	
1B	210	-86.429	41.588	-0.383	0.000	0.270	-29.353	1	0.06	0.02	0.06	
1C	210	-86.429	-62.548	-0.540	0.000	0.239	18.393	1	0.09	0.02	0.04	
1D	210	-86.429	41.588	-0.540	0.000	0.239	-29.353	1	0.06	0.02	0.06	
1E	210	-34.411	-62.548	-0.383	0.000	0.270	18.393	1	0.09	0.01	0.04	
1F	210	-34.411	41.588	-0.383	0.000	0.270	-29.353	1	0.06	0.01	0.06	
1G	210	-34.411	-62.548	-0.540	0.000	0.239	18.393	1	0.09	0.01	0.04	
1H	210	-34.411	41.588	-0.540	0.000	0.239	-29.353	1	0.06	0.01	0.06	
1I	210	-69.099	-27.338	-0.288	0.000	0.290	2.085	1	0.04	0.02	0.00	
1J	210	-69.099	6.378	-0.288	0.000	0.290	-13.045	1	0.01	0.02	0.03	
1K	210	-69.099	-27.338	-0.635	0.000	0.219	2.085	1	0.04	0.02	0.00	
1L	210	-69.099	6.378	-0.635	0.000	0.219	-13.045	1	0.01	0.02	0.03	
1M	210	-51.741	-27.338	-0.288	0.000	0.290	2.085	1	0.04	0.01	0.00	
1N	210	-51.741	6.378	-0.288	0.000	0.290	-13.045	1	0.01	0.01	0.03	
1O	210	-51.741	-27.338	-0.635	0.000	0.219	2.085	1	0.04	0.01	0.00	
1P	210	-51.741	6.378	-0.635	0.000	0.219	-13.045	1	0.01	0.01	0.03	
2	210	-105.150	-18.700	-0.817	0.000	0.451	-9.775	1	0.03	0.03	0.02	
7	210	-65.280	-14.019	0.475	0.000	-4.029	-6.367	1	0.02	0.02	0.02	
8	210	-60.405	-2.279	0.485	0.000	-4.026	-8.162	1	0.00	0.02	0.02	
9	210	-69.295	-10.955	0.197	0.000	-1.603	-3.703	1	0.02	0.02	0.01	
10	210	-68.725	-10.964	-1.623	0.000	3.848	-3.708	1	0.02	0.02	0.02	
11	210	-97.190	-18.940	-0.170	0.000	-2.165	-9.319	1	0.03	0.02	0.02	
12	210	-94.285	-11.895	-0.164	0.000	-2.164	-10.400	1	0.02	0.02	0.02	
13	210	-99.645	-17.105	-0.339	0.000	-0.709	-7.721	1	0.02	0.03	0.02	
14	210	-99.275	-17.105	-1.429	0.000	2.561	-7.721	1	0.02	0.03	0.02	
1A	420	-84.019	-62.548	-0.383	0.000	1.074	-112.924	1	0.09	0.02	0.23	
1B	420	-84.019	41.588	-0.383	0.000	1.074	57.964	1	0.06	0.02	0.12	
1C	420	-84.019	-62.548	-0.540	0.000	1.372	-112.924	1	0.09	0.02	0.23	
1D	420	-84.019	41.588	-0.540	0.000	1.372	57.964	1	0.06	0.02	0.12	
1E	420	-32.001	-62.548	-0.383	0.000	1.074	-112.924	1	0.09	0.01	0.23	
1F	420	-32.001	41.588	-0.383	0.000	1.074	57.964	1	0.06	0.01	0.12	
1G	420	-32.001	-62.548	-0.540	0.000	1.372	-112.924	1	0.09	0.01	0.23	
1H	420	-32.001	41.588	-0.540	0.000	1.372	57.964	1	0.06	0.01	0.12	
1I	420	-66.689	-27.338	-0.288	0.000	0.894	-55.309	1	0.04	0.02	0.11	
1J	420	-66.689	6.378	-0.288	0.000	0.894	0.349	1	0.01	0.02	0.00	

1K	420	-66.689	-27.338	-0.635	0.000	1.552	-55.309	1	0.04	0.02	0.11
1L	420	-66.689	6.378	-0.635	0.000	1.552	0.349	1	0.01	0.02	0.01
1M	420	-49.331	-27.338	-0.288	0.000	0.894	-55.309	1	0.04	0.01	0.11
1N	420	-49.331	6.378	-0.288	0.000	0.894	0.349	1	0.01	0.01	0.00
1O	420	-49.331	-27.338	-0.635	0.000	1.552	-55.309	1	0.04	0.01	0.11
1P	420	-49.331	6.378	-0.635	0.000	1.552	0.349	1	0.01	0.01	0.01
2	420	-102.000	-18.700	-0.817	0.000	2.165	-49.050	1	0.03	0.03	0.10
7	420	-62.150	-9.367	-10.050	0.000	6.018	-30.920	1	0.01	0.02	0.06
8	420	-57.270	-4.788	-10.040	0.000	5.998	-15.580	1	0.01	0.01	0.03
9	420	-66.160	-16.460	-4.597	0.000	3.017	-32.490	1	0.02	0.02	0.07
10	420	-65.590	-16.470	7.265	0.000	-2.079	-32.510	1	0.02	0.02	0.07
11	420	-94.080	-16.150	-6.485	0.000	4.822	-46.170	1	0.02	0.02	0.09
12	420	-91.150	-13.400	-6.478	0.000	4.810	-36.970	1	0.02	0.02	0.08
13	420	-96.490	-20.410	-3.215	0.000	3.022	-47.110	1	0.03	0.02	0.10
14	420	-96.150	-20.410	3.902	0.000	-0.036	-47.120	1	0.03	0.02	0.10

ASTA NUM. 13 NI 24 NF 25 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 2.82 2.82 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-83.156	-114.663	1.644	0.000	1.361	57.964	1	0.16	0.02	0.12	
1B	0	-83.156	216.763	1.644	0.000	1.361	-112.884	1	0.30	0.02	0.23	
1C	0	-83.156	-114.663	1.228	0.000	1.063	57.964	1	0.16	0.02	0.12	
1D	0	-83.156	216.763	1.228	0.000	1.063	-112.884	1	0.30	0.02	0.23	
1E	0	-31.484	-114.663	1.644	0.000	1.361	57.964	1	0.16	0.01	0.12	
1F	0	-31.484	216.763	1.644	0.000	1.361	-112.884	1	0.30	0.01	0.23	
1G	0	-31.484	-114.663	1.228	0.000	1.063	57.964	1	0.16	0.01	0.12	
1H	0	-31.484	216.763	1.228	0.000	1.063	-112.884	1	0.30	0.01	0.23	
1I	0	-65.937	-2.949	2.065	0.000	1.541	0.362	1	0.00	0.02	0.01	
1J	0	-65.937	105.049	2.065	0.000	1.541	-55.282	1	0.15	0.02	0.11	
1K	0	-65.937	-2.949	0.807	0.000	0.883	0.362	1	0.00	0.02	0.00	
1L	0	-65.937	105.049	0.807	0.000	0.883	-55.282	1	0.15	0.02	0.11	
1M	0	-48.703	-2.949	2.065	0.000	1.541	0.362	1	0.00	0.01	0.01	
1N	0	-48.703	105.049	2.065	0.000	1.541	-55.282	1	0.15	0.01	0.11	
1O	0	-48.703	-2.949	0.807	0.000	0.883	0.362	1	0.00	0.01	0.00	
1P	0	-48.703	105.049	0.807	0.000	0.883	-55.282	1	0.15	0.01	0.11	
2	0	-100.900	91.150	2.518	0.000	2.146	-49.020	1	0.13	0.03	0.10	
7	0	-61.390	60.190	5.056	0.000	6.007	-30.900	1	0.08	0.02	0.06	
8	0	-56.540	26.710	5.018	0.000	5.986	-15.570	1	0.04	0.01	0.03	
9	0	-65.350	57.440	2.211	0.000	3.005	-32.480	1	0.08	0.02	0.07	
10	0	-64.780	57.470	-0.297	0.000	-2.090	-32.500	1	0.08	0.02	0.07	
11	0	-93.040	87.440	4.431	0.000	4.804	-46.140	1	0.12	0.02	0.09	
12	0	-90.130	67.360	4.408	0.000	4.792	-36.940	1	0.09	0.02	0.08	
13	0	-95.420	85.800	2.724	0.000	3.003	-47.090	1	0.12	0.02	0.10	
14	0	-95.070	85.820	1.219	0.000	-0.054	-47.100	1	0.12	0.02	0.10	
1A	25	-82.871	-114.663	1.644	0.000	0.950	29.293	1	0.16	0.02	0.06	
1B	25	-82.871	216.763	1.644	0.000	0.950	-58.692	1	0.30	0.02	0.12	
1C	25	-82.871	-114.663	1.228	0.000	0.756	29.293	1	0.16	0.02	0.06	
1D	25	-82.871	216.763	1.228	0.000	0.756	-58.692	1	0.30	0.02	0.12	
1E	25	-31.199	-114.663	1.644	0.000	0.950	29.293	1	0.16	0.01	0.06	
1F	25	-31.199	216.763	1.644	0.000	0.950	-58.692	1	0.30	0.01	0.12	
1G	25	-31.199	-114.663	1.228	0.000	0.756	29.293	1	0.16	0.01	0.06	
1H	25	-31.199	216.763	1.228	0.000	0.756	-58.692	1	0.30	0.01	0.12	
1I	25	-65.652	-2.949	2.065	0.000	1.025	-0.378	1	0.00	0.02	0.00	
1J	25	-65.652	105.049	2.065	0.000	1.025	-29.021	1	0.15	0.02	0.06	
1K	25	-65.652	-2.949	0.807	0.000	0.681	-0.378	1	0.00	0.02	0.00	
1L	25	-65.652	105.049	0.807	0.000	0.681	-29.021	1	0.15	0.02	0.06	
1M	25	-48.418	-2.949	2.065	0.000	1.025	-0.378	1	0.00	0.01	0.00	
1N	25	-48.418	105.049	2.065	0.000	1.025	-29.021	1	0.15	0.01	0.06	
1O	25	-48.418	-2.949	0.807	0.000	0.681	-0.378	1	0.00	0.01	0.00	
1P	25	-48.418	105.049	0.807	0.000	0.681	-29.021	1	0.15	0.01	0.06	
2	25	-100.550	91.150	2.518	0.000	1.516	-26.233	1	0.13	0.03	0.05	
7	25	-61.015	60.740	3.804	0.000	4.899	-15.785	1	0.08	0.02	0.03	
8	25	-56.170	26.415	3.765	0.000	4.888	-8.929	1	0.04	0.01	0.02	
9	25	-64.975	56.785	1.640	0.000	2.524	-18.201	1	0.08	0.02	0.04	
10	25	-64.405	56.815	0.761	0.000	-2.148	-18.212	1	0.08	0.02	0.04	
11	25	-92.665	87.775	3.680	0.000	3.790	-24.238	1	0.12	0.02	0.05	
12	25	-89.760	67.180	3.656	0.000	3.784	-20.123	1	0.09	0.02	0.04	
13	25	-95.045	85.405	2.382	0.000	2.365	-25.688	1	0.12	0.02	0.05	
14	25	-94.700	85.425	1.854	0.000	-0.438	-25.694	1	0.12	0.02	0.05	
1A	50	-82.586	-114.663	1.644	0.000	0.539	0.623	1	0.16	0.02	0.00	
1B	50	-82.586	216.763	1.644	0.000	0.539	-4.501	1	0.30	0.02	0.01	
1C	50	-82.586	-114.663	1.228	0.000	0.449	0.623	1	0.16	0.02	0.00	
1D	50	-82.586	216.763	1.228	0.000	0.449	-4.501	1	0.30	0.02	0.01	
1E	50	-30.914	-114.663	1.644	0.000	0.539	0.623	1	0.16	0.01	0.00	
1F	50	-30.914	216.763	1.644	0.000	0.539	-4.501	1	0.30	0.01	0.01	
1G	50	-30.914	-114.663	1.228	0.000	0.449	0.623	1	0.16	0.01	0.00	
1H	50	-30.914	216.763	1.228	0.000	0.449	-4.501	1	0.30	0.01	0.01	
1I	50	-65.367	-2.949	2.065	0.000	0.509	-1.117	1	0.00	0.02	0.00	
1J	50	-65.367	105.049	2.065	0.000	0.509	-2.761	1	0.15	0.02	0.01	
1K	50	-65.367	-2.949	0.807	0.000	0.479	-1.117	1	0.00	0.02	0.00	
1L	50	-65.367	105.049	0.807	0.000	0.479	-2.761	1	0.15	0.02	0.01	
1M	50	-48.133	-2.949	2.065	0.000	0.509	-1.117	1	0.00	0.01	0.00	
1N	50	-48.133	105.049	2.065	0.000	0.509	-2.761	1	0.15	0.01	0.01	
1O	50	-48.133	-2.949	0.807	0.000	0.479	-1.117	1	0.00	0.01	0.00	
1P	50	-48.133	105.049	0.807	0.000	0.479	-2.761	1	0.15	0.01	0.01	
2	50	-100.200	91.150	2.518	0.000	0.887	-3.446	1	0.13	0.03	0.01	
7	50	-60.640	61.290	2.551	0.000	4.105	-0.533	1	0.09	0.02	0.02	
8	50	-55.800	26.120	2.512	0.000	4.104	-2.363	1	0.04	0.01	0.02	

9	50	-64.600	56.130	1.069	0.000	2.185	-4.086	1	0.08	0.02	0.01
10	50	-64.030	56.160	1.819	0.000	-2.470	-4.088	1	0.08	0.02	0.01
11	50	-92.290	88.110	2.928	0.000	2.964	-2.252	1	0.12	0.02	0.01
12	50	-89.390	67.000	2.905	0.000	2.963	-3.351	1	0.09	0.02	0.01
13	50	-94.670	85.010	2.039	0.000	1.812	-4.385	1	0.12	0.02	0.01
14	50	-94.330	85.030	2.489	0.000	-0.981	-4.386	1	0.12	0.02	0.01

ASTA NUM. 36 NI 25 NF 141 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 2.82 2.82 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.378	-0.490	0.004	0.000	0.004	0.589	1	0.00	0.00	0.00	
1B	0	-1.378	0.490	0.004	0.000	0.004	-0.589	1	0.00	0.00	0.00	
1C	0	-1.378	-0.490	-0.004	0.000	-0.004	0.589	1	0.00	0.00	0.00	
1D	0	-1.378	0.490	-0.004	0.000	-0.004	-0.589	1	0.00	0.00	0.00	
1E	0	-1.376	-0.490	0.004	0.000	0.004	0.589	1	0.00	0.00	0.00	
1F	0	-1.376	0.490	0.004	0.000	0.004	-0.589	1	0.00	0.00	0.00	
1G	0	-1.376	-0.490	-0.004	0.000	-0.004	0.589	1	0.00	0.00	0.00	
1H	0	-1.376	0.490	-0.004	0.000	-0.004	-0.589	1	0.00	0.00	0.00	
1I	0	-1.378	-0.180	0.010	0.000	0.012	0.216	1	0.00	0.00	0.00	
1J	0	-1.378	0.180	0.010	0.000	0.012	-0.216	1	0.00	0.00	0.00	
1K	0	-1.378	-0.180	-0.010	0.000	-0.012	0.216	1	0.00	0.00	0.00	
1L	0	-1.378	0.180	-0.010	0.000	-0.012	-0.216	1	0.00	0.00	0.00	
1M	0	-1.376	-0.180	0.010	0.000	0.012	0.216	1	0.00	0.00	0.00	
1N	0	-1.376	0.180	0.010	0.000	0.012	-0.216	1	0.00	0.00	0.00	
1O	0	-1.376	-0.180	-0.010	0.000	-0.012	0.216	1	0.00	0.00	0.00	
1P	0	-1.376	0.180	-0.010	0.000	-0.012	-0.216	1	0.00	0.00	0.00	
2	0	-1.790	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	-2.657	6.014	0.000	3.608	1.594	1	0.00	0.00	0.02	
8	0	-1.790	1.434	6.014	0.000	3.608	-0.860	1	0.00	0.00	0.02	
9	0	-1.790	3.147	2.740	0.000	1.644	-1.888	1	0.00	0.00	0.01	
10	0	-1.790	3.147	-5.077	0.000	-3.046	-1.888	1	0.00	0.00	0.01	
11	0	-1.790	-1.594	3.608	0.000	2.165	0.956	1	0.00	0.00	0.01	
12	0	-1.790	0.860	3.608	0.000	2.165	-0.516	1	0.00	0.00	0.01	
13	0	-1.790	1.888	1.644	0.000	0.986	-1.133	1	0.00	0.00	0.00	
14	0	-1.790	1.888	-3.046	0.000	-1.828	-1.133	1	0.00	0.00	0.01	
1A	60	-0.690	-0.490	0.004	0.000	0.002	0.294	1	0.00	0.00	0.00	
1B	60	-0.690	0.490	0.004	0.000	0.002	-0.294	1	0.00	0.00	0.00	
1C	60	-0.690	-0.490	-0.004	0.000	-0.002	0.294	1	0.00	0.00	0.00	
1D	60	-0.690	0.490	-0.004	0.000	-0.002	-0.294	1	0.00	0.00	0.00	
1E	60	-0.687	-0.490	0.004	0.000	0.002	0.294	1	0.00	0.00	0.00	
1F	60	-0.687	0.490	0.004	0.000	0.002	-0.294	1	0.00	0.00	0.00	
1G	60	-0.687	-0.490	-0.004	0.000	-0.002	0.294	1	0.00	0.00	0.00	
1H	60	-0.687	0.490	-0.004	0.000	-0.002	-0.294	1	0.00	0.00	0.00	
1I	60	-0.689	-0.180	0.010	0.000	0.006	0.108	1	0.00	0.00	0.00	
1J	60	-0.689	0.180	0.010	0.000	0.006	-0.108	1	0.00	0.00	0.00	
1K	60	-0.689	-0.180	-0.010	0.000	-0.006	0.108	1	0.00	0.00	0.00	
1L	60	-0.689	0.180	-0.010	0.000	-0.006	-0.108	1	0.00	0.00	0.00	
1M	60	-0.688	-0.180	0.010	0.000	0.006	0.108	1	0.00	0.00	0.00	
1N	60	-0.688	0.180	0.010	0.000	0.006	-0.108	1	0.00	0.00	0.00	
1O	60	-0.688	-0.180	-0.010	0.000	-0.006	0.108	1	0.00	0.00	0.00	
1P	60	-0.688	0.180	-0.010	0.000	-0.006	-0.108	1	0.00	0.00	0.00	
2	60	-0.895	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	60	-0.895	-1.329	3.007	0.000	0.902	0.399	1	0.00	0.00	0.00	
8	60	-0.895	0.717	3.007	0.000	0.902	-0.215	1	0.00	0.00	0.00	
9	60	-0.895	1.574	1.370	0.000	0.411	-0.472	1	0.00	0.00	0.00	
10	60	-0.895	1.574	-2.539	0.000	-0.761	-0.472	1	0.00	0.00	0.00	
11	60	-0.895	-0.797	1.804	0.000	0.541	0.239	1	0.00	0.00	0.00	
12	60	-0.895	0.430	1.804	0.000	0.541	-0.129	1	0.00	0.00	0.00	
13	60	-0.895	0.944	0.822	0.000	0.247	-0.283	1	0.00	0.00	0.00	
14	60	-0.895	0.944	-1.523	0.000	-0.457	-0.283	1	0.00	0.00	0.00	
1A	120	-0.001	-0.490	0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1B	120	-0.001	0.490	0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1C	120	-0.001	-0.490	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1D	120	-0.001	0.490	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1E	120	0.001	-0.490	0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1F	120	0.001	0.490	0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1G	120	0.001	-0.490	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1H	120	0.001	0.490	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1I	120	-0.001	-0.180	0.010	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1J	120	-0.001	0.180	0.010	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1K	120	-0.001	-0.180	-0.010	0.000	0.000	0.000	1	0.00	0.00	0.00	
1L	120	-0.001	0.180	-0.010	0.000	0.000	0.000	1	0.00	0.00	0.00	
1M	120	0.001	-0.180	0.010	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1N	120	0.001	0.180	0.010	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1O	120	0.001	-0.180	-0.010	0.000	0.000	0.000	--	0.00	0.00	0.00	
1P	120	0.001	0.180	-0.010	0.000	0.000	0.000	--	0.00	0.00	0.00	
2	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
9	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
10	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
11	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
12	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
13	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
14	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-88.839	1.361	149.710	1	0.5967	1.1380	1.0099	--	--	0.04	--	0.35	Snell. 'zx'= 78
1B	-88.839	1.361	-116.670	1	0.5967	1.1380	1.0137	--	--	0.04	--	0.29	Snell. 'zx'= 78
1C	-88.839	1.372	149.710	1	0.5967	1.1144	1.0099	--	--	0.04	--	0.35	Snell. 'zx'= 78
1D	-88.839	1.372	-116.670	1	0.5967	1.1144	1.0137	--	--	0.04	--	0.29	Snell. 'zx'= 78
1E	-36.821	1.361	149.710	1	0.5967	1.0572	1.0041	--	--	0.02	--	0.33	Snell. 'zx'= 78
1F	-36.821	1.361	-116.670	1	0.5967	1.0572	1.0057	--	--	0.02	--	0.26	Snell. 'zx'= 78
1G	-36.821	1.372	149.710	1	0.5967	1.0474	1.0041	--	--	0.02	--	0.33	Snell. 'zx'= 78
1H	-36.821	1.372	-116.670	1	0.5967	1.0474	1.0057	--	--	0.02	--	0.26	Snell. 'zx'= 78
1I	-71.509	1.541	59.479	1	0.5967	1.1136	1.0157	--	--	0.03	--	0.16	Snell. 'zx'= 78
1J	-71.509	1.541	-55.282	1	0.5967	1.1136	1.0303	--	--	0.03	--	0.15	Snell. 'zx'= 78
1K	-71.509	1.552	59.479	1	0.5967	1.0776	1.0157	--	--	0.03	--	0.16	Snell. 'zx'= 78
1L	-71.509	1.552	-55.282	1	0.5967	1.0776	1.0303	--	--	0.03	--	0.15	Snell. 'zx'= 78
1M	-54.151	1.541	59.479	1	0.5967	1.0860	1.0119	--	--	0.02	--	0.15	Snell. 'zx'= 78
1N	-54.151	1.541	-55.282	1	0.5967	1.0860	1.0230	--	--	0.02	--	0.15	Snell. 'zx'= 78
1O	-54.151	1.552	59.479	1	0.5967	1.0587	1.0119	--	--	0.02	--	0.15	Snell. 'zx'= 78
1P	-54.151	1.552	-55.282	1	0.5967	1.0587	1.0230	--	--	0.02	--	0.15	Snell. 'zx'= 78
2	-108.300	2.165	-49.050	1	0.5967	1.0898	1.0334	--	--	0.05	--	0.16	Snell. 'zx'= 78
7	-68.410	8.025	-30.920	1	0.5967	1.0129	1.0275	--	--	0.03	--	0.13	Snell. 'zx'= 78
8	-63.540	8.051	-15.580	1	0.5967	1.0119	1.0917	--	--	0.03	--	0.10	Snell. 'zx'= 78
9	-72.430	3.846	-32.490	1	0.5967	1.0360	1.0367	--	--	0.03	--	0.12	Snell. 'zx'= 78
10	-71.860	-8.885	-32.510	1	0.5967	1.0126	1.0364	--	--	0.03	--	0.14	Snell. 'zx'= 78
11	-100.300	4.822	-46.170	1	0.5967	1.0374	1.0306	--	--	0.04	--	0.16	Snell. 'zx'= 78
12	-97.420	4.810	-36.970	1	0.5967	1.0364	1.0457	--	--	0.04	--	0.14	Snell. 'zx'= 78
13	-102.800	3.022	-47.110	1	0.5967	1.0778	1.0344	--	--	0.04	--	0.16	Snell. 'zx'= 78
14	-102.400	-6.038	-47.120	1	0.5967	1.0298	1.0342	--	--	0.04	--	0.17	Snell. 'zx'= 78

ASTA NUM. 2 NI 2 NF 23 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.22 -1.22 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-88.189	-41.075	-0.372	0.000	-0.509	117.219	1	0.06	0.02	0.24	
1B	0	-88.189	61.455	-0.372	0.000	-0.509	-147.219	1	0.09	0.02	0.30	
1C	0	-88.189	-41.075	-0.555	0.000	-0.926	117.219	1	0.06	0.02	0.24	
1D	0	-88.189	61.455	-0.555	0.000	-0.926	-147.219	1	0.09	0.02	0.30	
1E	0	-37.671	-41.075	-0.372	0.000	-0.509	117.219	1	0.06	0.01	0.24	
1F	0	-37.671	61.455	-0.372	0.000	-0.509	-147.219	1	0.09	0.01	0.30	
1G	0	-37.671	-41.075	-0.555	0.000	-0.926	117.219	1	0.06	0.01	0.24	
1H	0	-37.671	61.455	-0.555	0.000	-0.926	-147.219	1	0.09	0.01	0.30	
1I	0	-71.203	-6.084	-0.252	0.000	-0.234	27.150	1	0.01	0.02	0.06	
1J	0	-71.203	26.464	-0.252	0.000	-0.234	-57.150	1	0.04	0.02	0.12	
1K	0	-71.203	-6.084	-0.675	0.000	-1.202	27.150	1	0.01	0.02	0.06	
1L	0	-71.203	26.464	-0.675	0.000	-1.202	-57.150	1	0.04	0.02	0.12	
1M	0	-54.657	-6.084	-0.252	0.000	-0.234	27.150	1	0.01	0.01	0.06	
1N	0	-54.657	26.464	-0.252	0.000	-0.234	-57.150	1	0.04	0.01	0.12	
1O	0	-54.657	-6.084	-0.675	0.000	-1.202	27.150	1	0.01	0.01	0.06	
1P	0	-54.657	26.464	-0.675	0.000	-1.202	-57.150	1	0.04	0.01	0.12	
2	0	-108.500	18.180	-0.820	0.000	-1.271	-26.760	1	0.03	0.03	0.05	
7	0	-66.150	10.560	10.950	0.000	7.899	-10.660	1	0.01	0.02	0.04	
8	0	-70.760	23.500	11.010	0.000	8.048	-39.760	1	0.03	0.02	0.08	
9	0	-72.550	5.131	4.989	0.000	3.842	-11.790	1	0.01	0.02	0.02	
10	0	-71.980	5.138	-10.510	0.000	-8.889	-11.800	1	0.01	0.02	0.04	
11	0	-99.080	16.560	6.109	0.000	4.029	-21.460	1	0.02	0.03	0.04	
12	0	-101.800	24.330	6.148	0.000	4.118	-38.920	1	0.03	0.03	0.08	
13	0	-102.900	13.310	2.535	0.000	1.595	-22.130	1	0.02	0.03	0.05	
14	0	-102.600	13.310	-6.764	0.000	-6.044	-22.140	1	0.02	0.03	0.05	
1A	210	-85.779	-41.075	-0.372	0.000	0.272	30.954	1	0.06	0.02	0.06	
1B	210	-85.779	61.455	-0.372	0.000	0.272	-18.164	1	0.09	0.02	0.04	
1C	210	-85.779	-41.075	-0.555	0.000	0.239	30.954	1	0.06	0.02	0.06	
1D	210	-85.779	61.455	-0.555	0.000	0.239	-18.164	1	0.09	0.02	0.04	
1E	210	-35.261	-41.075	-0.372	0.000	0.272	30.954	1	0.06	0.01	0.06	
1F	210	-35.261	61.455	-0.372	0.000	0.272	-18.164	1	0.09	0.01	0.04	
1G	210	-35.261	-41.075	-0.555	0.000	0.239	30.954	1	0.06	0.01	0.06	
1H	210	-35.261	61.455	-0.555	0.000	0.239	-18.164	1	0.09	0.01	0.04	
1I	210	-68.793	-6.084	-0.252	0.000	0.296	14.365	1	0.01	0.02	0.03	
1J	210	-68.793	26.464	-0.252	0.000	0.296	-1.575	1	0.04	0.02	0.00	
1K	210	-68.793	-6.084	-0.675	0.000	0.216	14.365	1	0.01	0.02	0.03	
1L	210	-68.793	26.464	-0.675	0.000	0.216	-1.575	1	0.04	0.02	0.00	
1M	210	-52.247	-6.084	-0.252	0.000	0.296	14.365	1	0.01	0.01	0.03	
1N	210	-52.247	26.464	-0.252	0.000	0.296	-1.575	1	0.04	0.01	0.00	
1O	210	-52.247	-6.084	-0.675	0.000	0.216	14.365	1	0.01	0.01	0.03	
1P	210	-52.247	26.464	-0.675	0.000	0.216	-1.575	1	0.04	0.01	0.00	
2	210	-105.350	18.180	-0.820	0.000	0.452	11.410	1	0.03	0.03	0.02	
7	210	-63.020	8.049	0.425	0.000	-4.039	8.874	1	0.01	0.02	0.02	
8	210	-67.630	18.850	0.485	0.000	-4.025	4.707	1	0.03	0.02	0.02	
9	210	-69.415	10.636	0.195	0.000	-1.602	4.768	1	0.01	0.02	0.01	
10	210	-68.845	10.644	-1.623	0.000	3.849	4.773	1	0.01	0.02	0.02	
11	210	-95.950	15.055	-0.205	0.000	-2.170	11.745	1	0.02	0.02	0.02	
12	210	-98.690	21.540	-0.166	0.000	-2.162	9.244	1	0.03	0.03	0.02	
13	210	-99.775	16.615	-0.342	0.000	-0.707	9.286	1	0.02	0.03	0.02	
14	210	-99.455	16.615	-1.433	0.000	2.562	9.286	1	0.02	0.03	0.02	
1A	420	-83.369	-41.075	-0.372	0.000	1.053	-55.311	1	0.06	0.02	0.11	

1B	420	-83.369	61.455	-0.372	0.000	1.053	110.892	1	0.09	0.02	0.23	
1C	420	-83.369	-41.075	-0.555	0.000	1.405	-55.311	1	0.06	0.02	0.11	
1D	420	-83.369	61.455	-0.555	0.000	1.405	110.892	1	0.09	0.02	0.23	
1E	420	-32.851	-41.075	-0.372	0.000	1.053	-55.311	1	0.06	0.01	0.11	
1F	420	-32.851	61.455	-0.372	0.000	1.053	110.892	1	0.09	0.01	0.23	
1G	420	-32.851	-41.075	-0.555	0.000	1.405	-55.311	1	0.06	0.01	0.11	
1H	420	-32.851	61.455	-0.555	0.000	1.405	110.892	1	0.09	0.01	0.23	
1I	420	-66.383	-6.084	-0.252	0.000	0.825	1.581	1	0.01	0.02	0.00	
1J	420	-66.383	26.464	-0.252	0.000	0.825	53.999	1	0.04	0.02	0.11	
1K	420	-66.383	-6.084	-0.675	0.000	1.633	1.581	1	0.01	0.02	0.01	
1L	420	-66.383	26.464	-0.675	0.000	1.633	53.999	1	0.04	0.02	0.11	
1M	420	-49.837	-6.084	-0.252	0.000	0.825	1.581	1	0.01	0.01	0.00	
1N	420	-49.837	26.464	-0.252	0.000	0.825	53.999	1	0.04	0.01	0.11	
1O	420	-49.837	-6.084	-0.675	0.000	1.633	1.581	1	0.01	0.01	0.01	
1P	420	-49.837	26.464	-0.675	0.000	1.633	53.999	1	0.04	0.01	0.11	
2	420	-102.200	18.180	-0.820	0.000	2.175	49.580	1	0.03	0.03	0.10	
7	420	-59.890	5.538	-10.100	0.000	6.124	23.140	1	0.01	0.02	0.05	
8	420	-64.500	14.200	-10.040	0.000	6.002	39.410	1	0.02	0.02	0.08	
9	420	-66.280	16.140	-4.599	0.000	3.023	32.890	1	0.02	0.02	0.07	
10	420	-65.710	16.150	7.263	0.000	-2.073	32.910	1	0.02	0.02	0.07	
11	420	-92.820	13.550	-6.520	0.000	4.891	41.790	1	0.02	0.02	0.09	
12	420	-95.580	18.750	-6.481	0.000	4.818	51.550	1	0.03	0.02	0.11	
13	420	-96.650	19.920	-3.219	0.000	3.031	47.640	1	0.03	0.02	0.10	
14	420	-96.310	19.920	3.899	0.000	-0.027	47.650	1	0.03	0.02	0.10	

ASTA NUM. 24 NI 23 NF 26 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.22 -1.22 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-82.528	-212.879	1.720	0.000	1.393	110.862	1	0.30	0.02	0.23	
1B	0	-82.528	109.619	1.720	0.000	1.393	-55.321	1	0.15	0.02	0.11	
1C	0	-82.528	-212.879	1.180	0.000	1.041	110.862	1	0.30	0.02	0.23	
1D	0	-82.528	109.619	1.180	0.000	1.041	-55.321	1	0.15	0.02	0.11	
1E	0	-32.352	-212.879	1.720	0.000	1.393	110.862	1	0.30	0.01	0.23	
1F	0	-32.352	109.619	1.720	0.000	1.393	-55.321	1	0.15	0.01	0.11	
1G	0	-32.352	-212.879	1.180	0.000	1.041	110.862	1	0.30	0.01	0.23	
1H	0	-32.352	109.619	1.180	0.000	1.041	-55.321	1	0.15	0.01	0.11	
1I	0	-65.659	-102.579	2.231	0.000	1.621	53.976	1	0.14	0.02	0.11	
1J	0	-65.659	-0.681	2.231	0.000	1.621	1.564	1	0.00	0.02	0.01	
1K	0	-65.659	-102.579	0.669	0.000	0.813	53.976	1	0.14	0.02	0.11	
1L	0	-65.659	-0.681	0.669	0.000	0.813	1.564	1	0.00	0.02	0.00	
1M	0	-49.221	-102.579	2.231	0.000	1.621	53.976	1	0.14	0.01	0.11	
1N	0	-49.221	-0.681	2.231	0.000	1.621	1.564	1	0.00	0.01	0.01	
1O	0	-49.221	-102.579	0.669	0.000	0.813	53.976	1	0.14	0.01	0.11	
1P	0	-49.221	-0.681	0.669	0.000	0.813	1.564	1	0.00	0.01	0.00	
2	0	-101.100	-92.160	2.542	0.000	2.155	49.550	1	0.13	0.03	0.10	
7	0	-59.160	-44.010	5.264	0.000	6.112	23.120	1	0.06	0.02	0.05	
8	0	-63.740	-76.540	5.026	0.000	5.990	39.390	1	0.11	0.02	0.08	
9	0	-65.490	-58.200	2.226	0.000	3.010	32.880	1	0.08	0.02	0.07	
10	0	-64.920	-58.230	-0.282	0.000	-2.084	32.890	1	0.08	0.02	0.07	
11	0	-91.810	-78.300	4.570	0.000	4.872	41.770	1	0.11	0.02	0.09	
12	0	-94.560	-97.810	4.427	0.000	4.799	51.520	1	0.14	0.02	0.11	
13	0	-95.610	-86.810	2.746	0.000	3.011	47.620	1	0.12	0.02	0.10	
14	0	-95.270	-86.830	1.242	0.000	-0.046	47.630	1	0.12	0.02	0.10	
1A	25	-82.238	-212.879	1.720	0.000	0.963	57.643	1	0.30	0.02	0.12	
1B	25	-82.238	109.619	1.720	0.000	0.963	-27.919	1	0.15	0.02	0.06	
1C	25	-82.238	-212.879	1.180	0.000	0.747	57.643	1	0.30	0.02	0.12	
1D	25	-82.238	109.619	1.180	0.000	0.747	-27.919	1	0.15	0.02	0.06	
1E	25	-32.062	-212.879	1.720	0.000	0.963	57.643	1	0.30	0.01	0.12	
1F	25	-32.062	109.619	1.720	0.000	0.963	-27.919	1	0.15	0.01	0.06	
1G	25	-32.062	-212.879	1.180	0.000	0.747	57.643	1	0.30	0.01	0.12	
1H	25	-32.062	109.619	1.180	0.000	0.747	-27.919	1	0.15	0.01	0.06	
1I	25	-65.369	-102.579	2.231	0.000	1.063	28.343	1	0.14	0.02	0.06	
1J	25	-65.369	-0.681	2.231	0.000	1.063	1.381	1	0.00	0.02	0.00	
1K	25	-65.369	-102.579	0.669	0.000	0.646	28.343	1	0.14	0.02	0.06	
1L	25	-65.369	-0.681	0.669	0.000	0.646	1.381	1	0.00	0.02	0.00	
1M	25	-48.931	-102.579	2.231	0.000	1.063	28.343	1	0.14	0.01	0.06	
1N	25	-48.931	-0.681	2.231	0.000	1.063	1.381	1	0.00	0.01	0.00	
1O	25	-48.931	-102.579	0.669	0.000	0.646	28.343	1	0.14	0.01	0.06	
1P	25	-48.931	-0.681	0.669	0.000	0.646	1.381	1	0.00	0.01	0.00	
2	25	-100.750	-92.160	2.542	0.000	1.519	26.511	1	0.13	0.03	0.05	
7	25	-58.785	-44.310	4.011	0.000	4.952	12.081	1	0.06	0.02	0.02	
8	25	-63.370	-77.090	3.774	0.000	4.890	20.186	1	0.11	0.02	0.04	
9	25	-65.115	-57.545	1.655	0.000	2.525	18.410	1	0.08	0.02	0.04	
10	25	-64.545	-57.575	0.776	0.000	-2.146	18.417	1	0.08	0.02	0.04	
11	25	-91.440	-78.480	3.818	0.000	3.824	22.171	1	0.11	0.02	0.05	
12	25	-94.190	-98.145	3.675	0.000	3.787	27.028	1	0.14	0.02	0.06	
13	25	-95.235	-86.415	2.404	0.000	2.367	25.966	1	0.12	0.02	0.05	
14	25	-94.895	-86.435	1.877	0.000	-0.435	25.971	1	0.12	0.02	0.05	
1A	50	-81.948	-212.879	1.720	0.000	0.534	4.424	1	0.30	0.02	0.01	
1B	50	-81.948	109.619	1.720	0.000	0.534	-0.516	1	0.15	0.02	0.00	
1C	50	-81.948	-212.879	1.180	0.000	0.452	4.424	1	0.30	0.02	0.01	
1D	50	-81.948	109.619	1.180	0.000	0.452	-0.516	1	0.15	0.02	0.00	
1E	50	-31.772	-212.879	1.720	0.000	0.534	4.424	1	0.30	0.01	0.01	
1F	50	-31.772	109.619	1.720	0.000	0.534	-0.516	1	0.15	0.01	0.00	
1G	50	-31.772	-212.879	1.180	0.000	0.452	4.424	1	0.30	0.01	0.01	
1H	50	-31.772	109.619	1.180	0.000	0.452	-0.516	1	0.15	0.01	0.00	
1I	50	-65.079	-102.579	2.231	0.000	0.506	2.711	1	0.14	0.02	0.01	
1J	50	-65.079	-0.681	2.231	0.000	0.506	1.197	1	0.00	0.02	0.00	

1K	50	-65.079	-102.579	0.669	0.000	0.479	2.711	1	0.14	0.02	0.01
1L	50	-65.079	-0.681	0.669	0.000	0.479	1.197	1	0.00	0.02	0.00
1M	50	-48.641	-102.579	2.231	0.000	0.506	2.711	1	0.14	0.01	0.01
1N	50	-48.641	-0.681	2.231	0.000	0.506	1.197	1	0.00	0.01	0.00
1O	50	-48.641	-102.579	0.669	0.000	0.479	2.711	1	0.14	0.01	0.01
1P	50	-48.641	-0.681	0.669	0.000	0.479	1.197	1	0.00	0.01	0.00
2	50	-100.400	-92.160	2.542	0.000	0.884	3.471	1	0.13	0.03	0.01
7	50	-58.410	-44.610	2.759	0.000	4.106	0.967	1	0.06	0.01	0.02
8	50	-63.000	-77.640	2.521	0.000	4.103	0.843	1	0.11	0.02	0.02
9	50	-64.740	-56.890	1.084	0.000	2.183	4.104	1	0.08	0.02	0.01
10	50	-64.170	-56.920	1.834	0.000	-2.472	4.107	1	0.08	0.02	0.01
11	50	-91.070	-78.660	3.066	0.000	2.963	2.527	1	0.11	0.02	0.01
12	50	-93.820	-98.480	2.923	0.000	2.962	2.453	1	0.14	0.02	0.01
13	50	-94.860	-86.020	2.061	0.000	1.809	4.410	1	0.12	0.02	0.01
14	50	-94.520	-86.040	2.511	0.000	-0.984	4.411	1	0.12	0.02	0.01

ASTA NUM. 25 NI 26 NF 140 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.22 -1.22 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.378	-0.496	0.004	0.000	0.005	0.595	1	0.00	0.00	0.00	
1B	0	-1.378	0.496	0.004	0.000	0.005	-0.595	1	0.00	0.00	0.00	
1C	0	-1.378	-0.496	-0.004	0.000	-0.005	0.595	1	0.00	0.00	0.00	
1D	0	-1.378	0.496	-0.004	0.000	-0.005	-0.595	1	0.00	0.00	0.00	
1E	0	-1.376	-0.496	0.004	0.000	0.005	0.595	1	0.00	0.00	0.00	
1F	0	-1.376	0.496	0.004	0.000	0.005	-0.595	1	0.00	0.00	0.00	
1G	0	-1.376	-0.496	-0.004	0.000	-0.005	0.595	1	0.00	0.00	0.00	
1H	0	-1.376	0.496	-0.004	0.000	-0.005	-0.595	1	0.00	0.00	0.00	
1I	0	-1.378	-0.185	0.012	0.000	0.015	0.222	1	0.00	0.00	0.00	
1J	0	-1.378	0.185	0.012	0.000	0.015	-0.222	1	0.00	0.00	0.00	
1K	0	-1.378	-0.185	-0.012	0.000	-0.015	0.222	1	0.00	0.00	0.00	
1L	0	-1.378	0.185	-0.012	0.000	-0.015	-0.222	1	0.00	0.00	0.00	
1M	0	-1.376	-0.185	0.012	0.000	0.015	0.222	1	0.00	0.00	0.00	
1N	0	-1.376	0.185	0.012	0.000	0.015	-0.222	1	0.00	0.00	0.00	
1O	0	-1.376	-0.185	-0.012	0.000	-0.015	0.222	1	0.00	0.00	0.00	
1P	0	-1.376	0.185	-0.012	0.000	-0.015	-0.222	1	0.00	0.00	0.00	
2	0	-1.790	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	1.434	6.014	0.000	3.608	-0.860	1	0.00	0.00	0.02	
8	0	-1.790	2.657	6.014	0.000	3.608	-1.594	1	0.00	0.00	0.02	
9	0	-1.790	-3.147	2.740	0.000	1.644	1.888	1	0.00	0.00	0.01	
10	0	-1.790	-3.147	-5.077	0.000	-3.046	1.888	1	0.00	0.00	0.01	
11	0	-1.790	0.860	3.608	0.000	2.165	-0.516	1	0.00	0.00	0.01	
12	0	-1.790	1.594	3.608	0.000	2.165	-0.956	1	0.00	0.00	0.01	
13	0	-1.790	-1.888	1.644	0.000	0.986	1.133	1	0.00	0.00	0.00	
14	0	-1.790	-1.888	-3.046	0.000	-1.828	1.133	1	0.00	0.00	0.01	
1A	60	-0.690	-0.496	0.004	0.000	0.002	0.297	1	0.00	0.00	0.00	
1B	60	-0.690	0.496	0.004	0.000	0.002	-0.297	1	0.00	0.00	0.00	
1C	60	-0.690	-0.496	-0.004	0.000	-0.002	0.297	1	0.00	0.00	0.00	
1D	60	-0.690	0.496	-0.004	0.000	-0.002	-0.297	1	0.00	0.00	0.00	
1E	60	-0.687	-0.496	0.004	0.000	0.002	0.297	1	0.00	0.00	0.00	
1F	60	-0.687	0.496	0.004	0.000	0.002	-0.297	1	0.00	0.00	0.00	
1G	60	-0.687	-0.496	-0.004	0.000	-0.002	0.297	1	0.00	0.00	0.00	
1H	60	-0.687	0.496	-0.004	0.000	-0.002	-0.297	1	0.00	0.00	0.00	
1I	60	-0.689	-0.185	0.012	0.000	0.007	0.111	1	0.00	0.00	0.00	
1J	60	-0.689	0.185	0.012	0.000	0.007	-0.111	1	0.00	0.00	0.00	
1K	60	-0.689	-0.185	-0.012	0.000	-0.007	0.111	1	0.00	0.00	0.00	
1L	60	-0.689	0.185	-0.012	0.000	-0.007	-0.111	1	0.00	0.00	0.00	
1M	60	-0.688	-0.185	0.012	0.000	0.007	0.111	1	0.00	0.00	0.00	
1N	60	-0.688	0.185	0.012	0.000	0.007	-0.111	1	0.00	0.00	0.00	
1O	60	-0.688	-0.185	-0.012	0.000	-0.007	0.111	1	0.00	0.00	0.00	
1P	60	-0.688	0.185	-0.012	0.000	-0.007	-0.111	1	0.00	0.00	0.00	
2	60	-0.895	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	60	-0.895	0.717	3.007	0.000	0.902	-0.215	1	0.00	0.00	0.00	
8	60	-0.895	1.329	3.007	0.000	0.902	-0.399	1	0.00	0.00	0.00	
9	60	-0.895	-1.574	1.370	0.000	0.411	0.472	1	0.00	0.00	0.00	
10	60	-0.895	-1.574	-2.539	0.000	-0.761	0.472	1	0.00	0.00	0.00	
11	60	-0.895	0.430	1.804	0.000	0.541	-0.129	1	0.00	0.00	0.00	
12	60	-0.895	0.797	1.804	0.000	0.541	-0.239	1	0.00	0.00	0.00	
13	60	-0.895	-0.944	0.822	0.000	0.247	0.283	1	0.00	0.00	0.00	
14	60	-0.895	-0.944	-1.523	0.000	-0.457	0.283	1	0.00	0.00	0.00	
1A	120	-0.001	-0.496	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1B	120	-0.001	0.496	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1C	120	-0.001	-0.496	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1D	120	-0.001	0.496	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1E	120	0.001	-0.496	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1F	120	0.001	0.496	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1G	120	0.001	-0.496	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1H	120	0.001	0.496	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1I	120	-0.001	-0.185	0.012	0.000	0.000	0.000	1	0.00	0.00	0.00	
1J	120	-0.001	0.185	0.012	0.000	0.000	0.000	1	0.00	0.00	0.00	
1K	120	-0.001	-0.185	-0.012	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1L	120	-0.001	0.185	-0.012	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1M	120	0.001	-0.185	0.012	0.000	0.000	0.000	--	0.00	0.00	0.00	
1N	120	0.001	0.185	0.012	0.000	0.000	0.000	--	0.00	0.00	0.00	
1O	120	0.001	-0.185	-0.012	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1P	120	0.001	0.185	-0.012	0.000	-0.000	0.000	--	0.00	0.00	0.00	
2	120	-0.000	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	

9	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-88.189	1.393	117.219	1	0.5967	1.1366	1.0135	--	--	0.04	--	0.29	Snell. 'zx'= 78
1B	-88.189	1.393	-147.219	1	0.5967	1.1366	1.0098	--	--	0.04	--	0.35	Snell. 'zx'= 78
1C	-88.189	1.405	117.219	1	0.5967	1.1103	1.0135	--	--	0.04	--	0.29	Snell. 'zx'= 78
1D	-88.189	1.405	-147.219	1	0.5967	1.1103	1.0098	--	--	0.04	--	0.35	Snell. 'zx'= 78
1E	-37.671	1.393	117.219	1	0.5967	1.0583	1.0058	--	--	0.02	--	0.26	Snell. 'zx'= 78
1F	-37.671	1.393	-147.219	1	0.5967	1.0583	1.0042	--	--	0.02	--	0.32	Snell. 'zx'= 78
1G	-37.671	1.405	117.219	1	0.5967	1.0471	1.0058	--	--	0.02	--	0.26	Snell. 'zx'= 78
1H	-37.671	1.405	-147.219	1	0.5967	1.0471	1.0042	--	--	0.02	--	0.32	Snell. 'zx'= 78
1I	-71.203	1.621	53.976	1	0.5967	1.1132	1.0306	--	--	0.03	--	0.15	Snell. 'zx'= 78
1J	-71.203	1.621	-57.150	1	0.5967	1.1132	1.0159	--	--	0.03	--	0.16	Snell. 'zx'= 78
1K	-71.203	1.633	53.976	1	0.5967	1.0724	1.0306	--	--	0.03	--	0.15	Snell. 'zx'= 78
1L	-71.203	1.633	-57.150	1	0.5967	1.0724	1.0159	--	--	0.03	--	0.16	Snell. 'zx'= 78
1M	-54.657	1.621	53.976	1	0.5967	1.0869	1.0235	--	--	0.02	--	0.14	Snell. 'zx'= 78
1N	-54.657	1.621	-57.150	1	0.5967	1.0869	1.0122	--	--	0.02	--	0.15	Snell. 'zx'= 78
1O	-54.657	1.633	53.976	1	0.5967	1.0556	1.0235	--	--	0.02	--	0.14	Snell. 'zx'= 78
1P	-54.657	1.633	-57.150	1	0.5967	1.0556	1.0122	--	--	0.02	--	0.15	Snell. 'zx'= 78
2	-108.500	2.175	49.580	1	0.5967	1.0895	1.0338	--	--	0.05	--	0.16	Snell. 'zx'= 78
7	-66.150	7.899	23.140	1	0.5967	1.0126	1.0442	--	--	0.03	--	0.11	Snell. 'zx'= 78
8	-70.760	8.048	-39.760	1	0.5967	1.0133	1.0213	--	--	0.03	--	0.15	Snell. 'zx'= 78
9	-72.550	3.842	32.890	1	0.5967	1.0361	1.0372	--	--	0.03	--	0.12	Snell. 'zx'= 78
10	-71.980	-8.889	32.910	1	0.5967	1.0126	1.0369	--	--	0.03	--	0.14	Snell. 'zx'= 78
11	-99.080	4.891	41.790	1	0.5967	1.0365	1.0367	--	--	0.04	--	0.15	Snell. 'zx'= 78
12	-101.800	4.818	51.550	1	0.5967	1.0380	1.0272	--	--	0.04	--	0.17	Snell. 'zx'= 78
13	-102.900	3.031	47.640	1	0.5967	1.0777	1.0348	--	--	0.04	--	0.16	Snell. 'zx'= 78
14	-102.600	-6.044	47.650	1	0.5967	1.0298	1.0347	--	--	0.04	--	0.17	Snell. 'zx'= 78

ASTA NUM. 3 NI 4 NF 33 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 4.69 4.69 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-122.103	-70.533	-0.022	0.000	0.002	161.715	1	0.10	0.03	0.33	
1B	0	-122.103	32.953	-0.022	0.000	0.002	-103.275	1	0.05	0.03	0.21	
1C	0	-122.103	-70.533	-0.109	0.000	-0.192	161.715	1	0.10	0.03	0.33	
1D	0	-122.103	32.953	-0.109	0.000	-0.192	-103.275	1	0.05	0.03	0.21	
1E	0	-77.237	-70.533	-0.022	0.000	0.002	161.715	1	0.10	0.02	0.33	
1F	0	-77.237	32.953	-0.022	0.000	0.002	-103.275	1	0.05	0.02	0.21	
1G	0	-77.237	-70.533	-0.109	0.000	-0.192	161.715	1	0.10	0.02	0.33	
1H	0	-77.237	32.953	-0.109	0.000	-0.192	-103.275	1	0.05	0.02	0.21	
1I	0	-109.411	-35.141	0.051	0.000	0.208	70.774	1	0.05	0.03	0.14	
1J	0	-109.411	-2.439	0.051	0.000	0.208	-12.334	1	0.00	0.03	0.03	
1K	0	-109.411	-35.141	-0.182	0.000	-0.398	70.774	1	0.05	0.03	0.14	
1L	0	-109.411	-2.439	-0.182	0.000	-0.398	-12.334	1	0.00	0.03	0.03	
1M	0	-89.929	-35.141	0.051	0.000	0.208	70.774	1	0.05	0.02	0.14	
1N	0	-89.929	-2.439	0.051	0.000	0.208	-12.334	1	0.00	0.02	0.03	
1O	0	-89.929	-35.141	-0.182	0.000	-0.398	70.774	1	0.05	0.02	0.14	
1P	0	-89.929	-2.439	-0.182	0.000	-0.398	-12.334	1	0.00	0.02	0.03	
2	0	-175.000	-33.840	-0.101	0.000	-0.147	52.610	1	0.05	0.04	0.11	
7	0	-102.300	-30.370	-0.067	0.000	-0.105	43.180	1	0.04	0.03	0.09	
8	0	-98.240	-6.145	-0.055	0.000	-0.078	5.120	1	0.01	0.03	0.01	
9	0	-105.600	-10.570	0.125	0.000	0.419	24.420	1	0.01	0.03	0.05	
10	0	-123.000	-10.540	-0.291	0.000	-0.660	24.370	1	0.01	0.03	0.05	
11	0	-158.700	-37.410	-0.090	0.000	-0.137	55.730	1	0.05	0.04	0.11	
12	0	-156.200	-22.870	-0.083	0.000	-0.120	32.900	1	0.03	0.04	0.07	
13	0	-160.600	-25.530	0.025	0.000	0.178	44.480	1	0.04	0.04	0.09	
14	0	-171.100	-25.510	-0.224	0.000	-0.469	44.440	1	0.04	0.04	0.09	
1A	210	-119.693	-70.533	-0.022	0.000	0.041	13.571	1	0.10	0.03	0.03	
1B	210	-119.693	32.953	-0.022	0.000	0.041	-34.061	1	0.05	0.03	0.07	
1C	210	-119.693	-70.533	-0.109	0.000	0.043	13.571	1	0.10	0.03	0.03	
1D	210	-119.693	32.953	-0.109	0.000	0.043	-34.061	1	0.05	0.03	0.07	
1E	210	-74.827	-70.533	-0.022	0.000	0.041	13.571	1	0.10	0.02	0.03	
1F	210	-74.827	32.953	-0.022	0.000	0.041	-34.061	1	0.05	0.02	0.07	
1G	210	-74.827	-70.533	-0.109	0.000	0.043	13.571	1	0.10	0.02	0.03	
1H	210	-74.827	32.953	-0.109	0.000	0.043	-34.061	1	0.05	0.02	0.07	
1I	210	-107.001	-35.141	0.051	0.000	0.098	-3.036	1	0.05	0.03	0.01	
1J	210	-107.001	-2.439	0.051	0.000	0.098	-17.454	1	0.00	0.03	0.04	
1K	210	-107.001	-35.141	-0.182	0.000	-0.014	-3.036	1	0.05	0.03	0.01	
1L	210	-107.001	-2.439	-0.182	0.000	-0.014	-17.454	1	0.00	0.03	0.04	
1M	210	-87.519	-35.141	0.051	0.000	0.098	-3.036	1	0.05	0.02	0.01	
1N	210	-87.519	-2.439	0.051	0.000	0.098	-17.454	1	0.00	0.02	0.04	
1O	210	-87.519	-35.141	-0.182	0.000	-0.014	-3.036	1	0.05	0.02	0.01	
1P	210	-87.519	-2.439	-0.182	0.000	-0.014	-17.454	1	0.00	0.02	0.04	
2	210	-171.900	-33.840	-0.101	0.000	0.065	-18.455	1	0.05	0.04	0.04	
7	210	-99.170	-22.620	-0.067	0.000	0.036	-12.461	1	0.03	0.03	0.03	

8	210	-95.105	-10.327	-0.055	0.000	0.037	-12.175	1	0.01	0.02	0.02
9	210	-102.445	-19.750	0.125	0.000	0.156	-7.418	1	0.03	0.03	0.02
10	210	-119.900	-19.715	-0.291	0.000	-0.050	-7.398	1	0.03	0.03	0.02
11	210	-155.550	-32.760	-0.090	0.000	0.053	-17.942	1	0.05	0.04	0.04
12	210	-153.100	-25.380	-0.083	0.000	0.054	-17.766	1	0.04	0.04	0.04
13	210	-157.500	-31.035	0.025	0.000	0.125	-14.913	1	0.04	0.04	0.03
14	210	-168.000	-31.015	-0.224	0.000	0.002	-14.903	1	0.04	0.04	0.03
1A	420	-117.283	-70.533	-0.022	0.000	0.080	-134.573	1	0.10	0.03	0.27
1B	420	-117.283	32.953	-0.022	0.000	0.080	35.153	1	0.05	0.03	0.07
1C	420	-117.283	-70.533	-0.109	0.000	0.278	-134.573	1	0.10	0.03	0.27
1D	420	-117.283	32.953	-0.109	0.000	0.278	35.153	1	0.05	0.03	0.07
1E	420	-72.417	-70.533	-0.022	0.000	0.080	-134.573	1	0.10	0.02	0.27
1F	420	-72.417	32.953	-0.022	0.000	0.080	35.153	1	0.05	0.02	0.07
1G	420	-72.417	-70.533	-0.109	0.000	0.278	-134.573	1	0.10	0.02	0.27
1H	420	-72.417	32.953	-0.109	0.000	0.278	35.153	1	0.05	0.02	0.07
1I	420	-104.591	-35.141	0.051	0.000	-0.012	-76.845	1	0.05	0.03	0.16
1J	420	-104.591	-2.439	0.051	0.000	-0.012	-22.575	1	0.00	0.03	0.05
1K	420	-104.591	-35.141	-0.182	0.000	0.370	-76.845	1	0.05	0.03	0.16
1L	420	-104.591	-2.439	-0.182	0.000	0.370	-22.575	1	0.00	0.03	0.05
1M	420	-85.109	-35.141	0.051	0.000	-0.012	-76.845	1	0.05	0.02	0.16
1N	420	-85.109	-2.439	0.051	0.000	-0.012	-22.575	1	0.00	0.02	0.05
1O	420	-85.109	-35.141	-0.182	0.000	0.370	-76.845	1	0.05	0.02	0.16
1P	420	-85.109	-2.439	-0.182	0.000	0.370	-22.575	1	0.00	0.02	0.05
2	420	-168.800	-33.840	-0.101	0.000	0.276	-89.520	1	0.05	0.04	0.18
7	420	-96.040	-14.870	-0.067	0.000	0.177	-51.830	1	0.02	0.02	0.11
8	420	-91.970	-14.510	-0.055	0.000	0.153	-38.250	1	0.02	0.02	0.08
9	420	-99.290	-28.930	0.125	0.000	-0.107	-58.530	1	0.04	0.03	0.12
10	420	-116.800	-28.890	-0.291	0.000	0.561	-58.440	1	0.04	0.03	0.12
11	420	-152.400	-28.110	-0.090	0.000	0.243	-81.850	1	0.04	0.04	0.17
12	420	-150.000	-27.890	-0.083	0.000	0.228	-73.700	1	0.04	0.04	0.15
13	420	-154.400	-36.540	0.025	0.000	0.073	-85.870	1	0.05	0.04	0.18
14	420	-164.900	-36.520	-0.224	0.000	0.473	-85.810	1	0.05	0.04	0.18

ASTA NUM. 14 NI 33 NF 30 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 4.69 4.69 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-131.621	-73.026	0.206	0.000	-0.076	35.465	1	0.10	0.03	0.07	
1B	0	-131.621	258.906	0.206	0.000	-0.076	-135.645	1	0.36	0.03	0.28	
1C	0	-131.621	-73.026	-0.111	0.000	-0.285	35.465	1	0.10	0.03	0.07	
1D	0	-131.621	258.906	-0.111	0.000	-0.285	-135.645	1	0.36	0.03	0.28	
1E	0	-80.779	-73.026	0.206	0.000	-0.076	35.465	1	0.10	0.02	0.07	
1F	0	-80.779	258.906	0.206	0.000	-0.076	-135.645	1	0.36	0.02	0.28	
1G	0	-80.779	-73.026	-0.111	0.000	-0.285	35.465	1	0.10	0.02	0.07	
1H	0	-80.779	258.906	-0.111	0.000	-0.285	-135.645	1	0.36	0.02	0.28	
1I	0	-115.224	39.916	0.383	0.000	0.013	-22.740	1	0.06	0.03	0.05	
1J	0	-115.224	145.964	0.383	0.000	0.013	-77.440	1	0.20	0.03	0.16	
1K	0	-115.224	39.916	-0.288	0.000	-0.374	-22.740	1	0.06	0.03	0.05	
1L	0	-115.224	145.964	-0.288	0.000	-0.374	-77.440	1	0.20	0.03	0.16	
1M	0	-97.176	39.916	0.383	0.000	0.013	-22.740	1	0.06	0.02	0.05	
1N	0	-97.176	145.964	0.383	0.000	0.013	-77.440	1	0.20	0.02	0.16	
1O	0	-97.176	39.916	-0.288	0.000	-0.374	-22.740	1	0.06	0.02	0.05	
1P	0	-97.176	145.964	-0.288	0.000	-0.374	-77.440	1	0.20	0.02	0.16	
2	0	-189.400	167.400	0.363	0.000	-0.182	-90.210	1	0.23	0.05	0.18	
7	0	-107.100	101.400	-0.240	0.000	-0.297	-52.280	1	0.14	0.03	0.11	
8	0	-102.900	68.310	-0.284	0.000	-0.322	-38.510	1	0.10	0.03	0.08	
9	0	-120.000	104.500	-0.598	0.000	-0.581	-58.930	1	0.15	0.03	0.12	
10	0	-121.800	104.300	0.576	0.000	0.095	-58.840	1	0.15	0.03	0.12	
11	0	-170.800	155.800	0.182	0.000	-0.219	-82.500	1	0.22	0.04	0.17	
12	0	-168.200	135.900	0.156	0.000	-0.234	-74.250	1	0.19	0.04	0.15	
13	0	-178.500	157.600	-0.033	0.000	-0.390	-86.490	1	0.22	0.05	0.18	
14	0	-179.600	157.500	0.671	0.000	0.016	-86.440	1	0.22	0.05	0.18	
1A	25	-131.371	-73.026	0.206	0.000	-0.128	17.198	1	0.10	0.03	0.04	
1B	25	-131.371	258.906	0.206	0.000	-0.128	-70.905	1	0.36	0.03	0.14	
1C	25	-131.371	-73.026	-0.111	0.000	-0.257	17.198	1	0.10	0.03	0.04	
1D	25	-131.371	258.906	-0.111	0.000	-0.257	-70.905	1	0.36	0.03	0.14	
1E	25	-80.529	-73.026	0.206	0.000	-0.128	17.198	1	0.10	0.02	0.04	
1F	25	-80.529	258.906	0.206	0.000	-0.128	-70.905	1	0.36	0.02	0.14	
1G	25	-80.529	-73.026	-0.111	0.000	-0.257	17.198	1	0.10	0.02	0.04	
1H	25	-80.529	258.906	-0.111	0.000	-0.257	-70.905	1	0.36	0.02	0.14	
1I	25	-114.974	39.916	0.383	0.000	-0.083	-12.763	1	0.06	0.03	0.03	
1J	25	-114.974	145.964	0.383	0.000	-0.083	-40.944	1	0.20	0.03	0.08	
1K	25	-114.974	39.916	-0.288	0.000	-0.302	-12.763	1	0.06	0.03	0.03	
1L	25	-114.974	145.964	-0.288	0.000	-0.302	-40.944	1	0.20	0.03	0.08	
1M	25	-96.926	39.916	0.383	0.000	-0.083	-12.763	1	0.06	0.02	0.03	
1N	25	-96.926	145.964	0.383	0.000	-0.083	-40.944	1	0.20	0.02	0.08	
1O	25	-96.926	39.916	-0.288	0.000	-0.302	-12.763	1	0.06	0.02	0.03	
1P	25	-96.926	145.964	-0.288	0.000	-0.302	-40.944	1	0.20	0.02	0.08	
2	25	-189.050	167.400	0.363	0.000	-0.272	-48.355	1	0.23	0.05	0.10	
7	25	-106.700	102.300	-0.240	0.000	-0.237	-26.813	1	0.14	0.03	0.05	
8	25	-102.500	67.815	-0.284	0.000	-0.251	-21.496	1	0.09	0.03	0.04	
9	25	-119.600	103.400	-0.598	0.000	-0.431	-32.947	1	0.14	0.03	0.07	
10	25	-121.400	103.200	0.576	0.000	-0.049	-32.899	1	0.14	0.03	0.07	
11	25	-170.400	156.350	0.182	0.000	-0.265	-43.493	1	0.22	0.04	0.09	
12	25	-167.850	135.600	0.156	0.000	-0.273	-40.308	1	0.19	0.04	0.08	
13	25	-178.150	156.950	-0.033	0.000	-0.381	-47.173	1	0.22	0.05	0.10	
14	25	-179.200	156.850	0.671	0.000	-0.152	-47.146	1	0.22	0.05	0.10	
1A	50	-131.121	-73.026	0.206	0.000	-0.179	-1.070	1	0.10	0.03	0.00	

1B	50	-131.121	258.906	0.206	0.000	-0.179	-6.164	1	0.36	0.03	0.01
1C	50	-131.121	-73.026	-0.111	0.000	-0.229	-1.070	1	0.10	0.03	0.00
1D	50	-131.121	258.906	-0.111	0.000	-0.229	-6.164	1	0.36	0.03	0.01
1E	50	-80.279	-73.026	0.206	0.000	-0.179	-1.070	1	0.10	0.02	0.00
1F	50	-80.279	258.906	0.206	0.000	-0.179	-6.164	1	0.36	0.02	0.01
1G	50	-80.279	-73.026	-0.111	0.000	-0.229	-1.070	1	0.10	0.02	0.00
1H	50	-80.279	258.906	-0.111	0.000	-0.229	-6.164	1	0.36	0.02	0.01
1I	50	-114.724	39.916	0.383	0.000	-0.178	-2.786	1	0.06	0.03	0.01
1J	50	-114.724	145.964	0.383	0.000	-0.178	-4.448	1	0.20	0.03	0.01
1K	50	-114.724	39.916	-0.288	0.000	-0.230	-2.786	1	0.06	0.03	0.01
1L	50	-114.724	145.964	-0.288	0.000	-0.230	-4.448	1	0.20	0.03	0.01
1M	50	-96.676	39.916	0.383	0.000	-0.178	-2.786	1	0.06	0.02	0.01
1N	50	-96.676	145.964	0.383	0.000	-0.178	-4.448	1	0.20	0.02	0.01
1O	50	-96.676	39.916	-0.288	0.000	-0.230	-2.786	1	0.06	0.02	0.01
1P	50	-96.676	145.964	-0.288	0.000	-0.230	-4.448	1	0.20	0.02	0.01
2	50	-188.700	167.400	0.363	0.000	-0.363	-6.499	1	0.23	0.05	0.01
7	50	-106.300	103.200	-0.240	0.000	-0.177	-1.115	1	0.14	0.03	0.00
8	50	-102.100	67.320	-0.284	0.000	-0.180	-4.606	1	0.09	0.03	0.01
9	50	-119.200	102.300	-0.598	0.000	-0.282	-7.237	1	0.14	0.03	0.01
10	50	-121.000	102.100	0.576	0.000	-0.193	-7.231	1	0.14	0.03	0.01
11	50	-170.000	156.900	0.182	0.000	-0.310	-4.347	1	0.22	0.04	0.01
12	50	-167.500	135.300	0.156	0.000	-0.312	-6.441	1	0.19	0.04	0.01
13	50	-177.800	156.300	-0.033	0.000	-0.373	-8.020	1	0.22	0.05	0.02
14	50	-178.800	156.200	0.671	0.000	-0.320	-8.016	1	0.22	0.05	0.02

ASTA NUM. 35 NI 30 NF 238 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 4.69 4.69 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.378	-0.484	0.004	0.000	0.005	0.580	1	0.00	0.00	0.00	
1B	0	-1.378	0.484	0.004	0.000	0.005	-0.580	1	0.00	0.00	0.00	
1C	0	-1.378	-0.484	-0.004	0.000	-0.005	0.580	1	0.00	0.00	0.00	
1D	0	-1.378	0.484	-0.004	0.000	-0.005	-0.580	1	0.00	0.00	0.00	
1E	0	-1.376	-0.484	0.004	0.000	0.005	0.580	1	0.00	0.00	0.00	
1F	0	-1.376	0.484	0.004	0.000	0.005	-0.580	1	0.00	0.00	0.00	
1G	0	-1.376	-0.484	-0.004	0.000	-0.005	0.580	1	0.00	0.00	0.00	
1H	0	-1.376	0.484	-0.004	0.000	-0.005	-0.580	1	0.00	0.00	0.00	
1I	0	-1.378	-0.159	0.012	0.000	0.014	0.191	1	0.00	0.00	0.00	
1J	0	-1.378	0.159	0.012	0.000	0.014	-0.191	1	0.00	0.00	0.00	
1K	0	-1.378	-0.159	-0.012	0.000	-0.014	0.191	1	0.00	0.00	0.00	
1L	0	-1.378	0.159	-0.012	0.000	-0.014	-0.191	1	0.00	0.00	0.00	
1M	0	-1.376	-0.159	0.012	0.000	0.014	0.191	1	0.00	0.00	0.00	
1N	0	-1.376	0.159	0.012	0.000	0.014	-0.191	1	0.00	0.00	0.00	
1O	0	-1.376	-0.159	-0.012	0.000	-0.014	0.191	1	0.00	0.00	0.00	
1P	0	-1.376	0.159	-0.012	0.000	-0.014	-0.191	1	0.00	0.00	0.00	
2	0	-1.790	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	-4.428	-0.000	0.000	0.000	2.657	1	0.01	0.00	0.01	
8	0	-1.790	2.389	-0.000	0.000	0.000	-1.434	1	0.00	0.00	0.00	
9	0	-1.790	5.245	0.000	0.000	0.000	-3.147	1	0.01	0.00	0.01	
10	0	-1.790	5.245	-0.000	0.000	0.000	-3.147	1	0.01	0.00	0.01	
11	0	-1.790	-2.657	-0.000	0.000	0.000	1.594	1	0.00	0.00	0.00	
12	0	-1.790	1.434	-0.000	0.000	0.000	-0.860	1	0.00	0.00	0.00	
13	0	-1.790	3.147	0.000	0.000	0.000	-1.888	1	0.00	0.00	0.00	
14	0	-1.790	3.147	-0.000	0.000	0.000	-1.888	1	0.00	0.00	0.00	
1A	60	-0.690	-0.484	0.004	0.000	0.003	0.290	1	0.00	0.00	0.00	
1B	60	-0.690	0.484	0.004	0.000	0.003	-0.290	1	0.00	0.00	0.00	
1C	60	-0.690	-0.484	-0.004	0.000	-0.003	0.290	1	0.00	0.00	0.00	
1D	60	-0.690	0.484	-0.004	0.000	-0.003	-0.290	1	0.00	0.00	0.00	
1E	60	-0.687	-0.484	0.004	0.000	0.003	0.290	1	0.00	0.00	0.00	
1F	60	-0.687	0.484	0.004	0.000	0.003	-0.290	1	0.00	0.00	0.00	
1G	60	-0.687	-0.484	-0.004	0.000	-0.003	0.290	1	0.00	0.00	0.00	
1H	60	-0.687	0.484	-0.004	0.000	-0.003	-0.290	1	0.00	0.00	0.00	
1I	60	-0.689	-0.159	0.012	0.000	0.007	0.096	1	0.00	0.00	0.00	
1J	60	-0.689	0.159	0.012	0.000	0.007	-0.096	1	0.00	0.00	0.00	
1K	60	-0.689	-0.159	-0.012	0.000	-0.007	0.096	1	0.00	0.00	0.00	
1L	60	-0.689	0.159	-0.012	0.000	-0.007	-0.096	1	0.00	0.00	0.00	
1M	60	-0.688	-0.159	0.012	0.000	0.007	0.096	1	0.00	0.00	0.00	
1N	60	-0.688	0.159	0.012	0.000	0.007	-0.096	1	0.00	0.00	0.00	
1O	60	-0.688	-0.159	-0.012	0.000	-0.007	0.096	1	0.00	0.00	0.00	
1P	60	-0.688	0.159	-0.012	0.000	-0.007	-0.096	1	0.00	0.00	0.00	
2	60	-0.895	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	60	-0.895	-2.214	-0.000	0.000	0.000	0.664	1	0.00	0.00	0.00	
8	60	-0.895	1.195	-0.000	0.000	0.000	-0.359	1	0.00	0.00	0.00	
9	60	-0.895	2.623	0.000	0.000	0.000	-0.787	1	0.00	0.00	0.00	
10	60	-0.895	2.623	-0.000	0.000	0.000	-0.787	1	0.00	0.00	0.00	
11	60	-0.895	-1.329	-0.000	0.000	0.000	0.399	1	0.00	0.00	0.00	
12	60	-0.895	0.717	-0.000	0.000	0.000	-0.215	1	0.00	0.00	0.00	
13	60	-0.895	1.574	0.000	0.000	0.000	-0.472	1	0.00	0.00	0.00	
14	60	-0.895	1.574	-0.000	0.000	0.000	-0.472	1	0.00	0.00	0.00	
1A	120	-0.001	-0.484	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1B	120	-0.001	0.484	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1C	120	-0.001	-0.484	-0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1D	120	-0.001	0.484	-0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1E	120	0.001	-0.484	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1F	120	0.001	0.484	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1G	120	0.001	-0.484	-0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1H	120	0.001	0.484	-0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1I	120	-0.001	-0.159	0.012	0.000	0.000	0.000	1	0.00	0.00	0.00	
1J	120	-0.001	0.159	0.012	0.000	0.000	0.000	1	0.00	0.00	0.00	

1K	120	-0.001	-0.159	-0.012	0.000	-0.000	0.000	1	0.00	0.00	0.00
1L	120	-0.001	0.159	-0.012	0.000	-0.000	0.000	1	0.00	0.00	0.00
1M	120	0.001	-0.159	0.012	0.000	0.000	0.000	--	0.00	0.00	0.00
1N	120	0.001	0.159	0.012	0.000	0.000	0.000	--	0.00	0.00	0.00
1O	120	0.001	-0.159	-0.012	0.000	-0.000	0.000	--	0.00	0.00	0.00
1P	120	0.001	0.159	-0.012	0.000	-0.000	0.000	--	0.00	0.00	0.00
2	120	-0.000	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
8	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
9	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN		kN*m										
1A	-131.621	-0.179	161.715	1	0.5967	1.1791	1.0142	--	--	0.06	--	0.39	Snell. 'zx'= 78
1B	-131.621	-0.179	-135.645	1	0.5967	1.1791	1.0220	--	--	0.06	--	0.34	Snell. 'zx'= 78
1C	-131.621	-0.285	161.715	1	0.5967	1.0779	1.0142	--	--	0.06	--	0.39	Snell. 'zx'= 78
1D	-131.621	-0.285	-135.645	1	0.5967	1.0779	1.0220	--	--	0.06	--	0.34	Snell. 'zx'= 78
1E	-80.779	-0.179	161.715	1	0.5967	1.1099	1.0087	--	--	0.03	--	0.37	Snell. 'zx'= 78
1F	-80.779	-0.179	-135.645	1	0.5967	1.1099	1.0135	--	--	0.03	--	0.32	Snell. 'zx'= 78
1G	-80.779	-0.285	161.715	1	0.5967	1.0478	1.0087	--	--	0.03	--	0.37	Snell. 'zx'= 78
1H	-80.779	-0.285	-135.645	1	0.5967	1.0478	1.0135	--	--	0.03	--	0.32	Snell. 'zx'= 78
1I	-115.224	0.208	-76.845	1	0.5967	1.1028	1.0218	--	--	0.05	--	0.21	Snell. 'zx'= 78
1J	-115.224	0.208	-77.440	1	0.5967	1.1028	1.0386	--	--	0.05	--	0.21	Snell. 'zx'= 78
1K	-115.224	-0.398	-76.845	1	0.5967	1.0479	1.0218	--	--	0.05	--	0.21	Snell. 'zx'= 78
1L	-115.224	-0.398	-77.440	1	0.5967	1.0479	1.0386	--	--	0.05	--	0.22	Snell. 'zx'= 78
1M	-97.176	0.208	-76.845	1	0.5967	1.0867	1.0184	--	--	0.04	--	0.20	Snell. 'zx'= 78
1N	-97.176	0.208	-77.440	1	0.5967	1.0867	1.0326	--	--	0.04	--	0.21	Snell. 'zx'= 78
1O	-97.176	-0.398	-76.845	1	0.5967	1.0404	1.0184	--	--	0.04	--	0.20	Snell. 'zx'= 78
1P	-97.176	-0.398	-77.440	1	0.5967	1.0404	1.0326	--	--	0.04	--	0.21	Snell. 'zx'= 78
2	-189.400	-0.363	-90.210	1	0.5967	1.0971	1.0368	--	--	0.08	--	0.27	Snell. 'zx'= 78
7	-107.100	-0.297	-52.280	1	0.5967	1.0765	1.0297	--	--	0.05	--	0.16	Snell. 'zx'= 78
8	-102.900	-0.322	-38.510	1	0.5967	1.0733	1.0590	--	--	0.04	--	0.13	Snell. 'zx'= 78
9	-120.000	-0.581	-58.930	1	0.5967	1.0365	1.0376	--	--	0.05	--	0.18	Snell. 'zx'= 78
10	-123.000	-0.660	-58.840	1	0.5967	1.0291	1.0386	--	--	0.05	--	0.18	Snell. 'zx'= 78
11	-170.800	-0.310	-82.500	1	0.5967	1.1030	1.0342	--	--	0.07	--	0.25	Snell. 'zx'= 78
12	-168.200	-0.312	-74.250	1	0.5967	1.1040	1.0420	--	--	0.07	--	0.23	Snell. 'zx'= 78
13	-178.500	-0.390	-86.490	1	0.5967	1.1046	1.0374	--	--	0.08	--	0.26	Snell. 'zx'= 78
14	-179.600	0.473	-86.440	1	0.5967	1.0586	1.0377	--	--	0.08	--	0.26	Snell. 'zx'= 78

ASTA NUM. 4 NI 3 NF 36 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -2.04 -2.04 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-122.520	-31.724	-0.017	0.000	0.021	102.680	1	0.04	0.03	0.21	
1B	0	-122.520	69.944	-0.017	0.000	0.021	-159.920	1	0.10	0.03	0.33	
1C	0	-122.520	-31.724	-0.116	0.000	-0.216	102.680	1	0.04	0.03	0.21	
1D	0	-122.520	69.944	-0.116	0.000	-0.216	-159.920	1	0.10	0.03	0.33	
1E	0	-77.340	-31.724	-0.017	0.000	0.021	102.680	1	0.04	0.02	0.21	
1F	0	-77.340	69.944	-0.017	0.000	0.021	-159.920	1	0.10	0.02	0.33	
1G	0	-77.340	-31.724	-0.116	0.000	-0.216	102.680	1	0.04	0.02	0.21	
1H	0	-77.340	69.944	-0.116	0.000	-0.216	-159.920	1	0.10	0.02	0.33	
1I	0	-112.774	3.604	0.073	0.000	0.268	11.681	1	0.01	0.03	0.02	
1J	0	-112.774	34.616	0.073	0.000	0.268	-68.921	1	0.05	0.03	0.14	
1K	0	-112.774	3.604	-0.207	0.000	-0.463	11.681	1	0.01	0.03	0.02	
1L	0	-112.774	34.616	-0.207	0.000	-0.463	-68.921	1	0.05	0.03	0.14	
1M	0	-87.086	3.604	0.073	0.000	0.268	11.681	1	0.01	0.02	0.02	
1N	0	-87.086	34.616	0.073	0.000	0.268	-68.921	1	0.05	0.02	0.14	
1O	0	-87.086	3.604	-0.207	0.000	-0.463	11.681	1	0.01	0.02	0.02	
1P	0	-87.086	34.616	-0.207	0.000	-0.463	-68.921	1	0.05	0.02	0.14	
2	0	-175.500	34.410	-0.104	0.000	-0.152	-51.550	1	0.05	0.04	0.11	
7	0	-102.100	21.350	-0.102	0.000	-0.200	-25.780	1	0.03	0.03	0.05	
8	0	-104.200	35.800	-0.063	0.000	-0.091	-55.940	1	0.05	0.03	0.11	
9	0	-105.800	10.920	0.124	0.000	0.416	-23.710	1	0.02	0.03	0.05	
10	0	-123.300	10.890	-0.292	0.000	-0.663	-23.650	1	0.02	0.03	0.05	
11	0	-158.800	32.320	-0.113	0.000	-0.196	-44.700	1	0.05	0.04	0.09	
12	0	-160.100	40.990	-0.089	0.000	-0.131	-62.800	1	0.06	0.04	0.13	
13	0	-161.100	26.060	0.023	0.000	0.174	-43.460	1	0.04	0.04	0.09	
14	0	-171.600	26.040	-0.227	0.000	-0.474	-43.420	1	0.04	0.04	0.09	
1A	210	-120.110	-31.724	-0.017	0.000	0.048	36.027	1	0.04	0.03	0.07	
1B	210	-120.110	69.944	-0.017	0.000	0.048	-13.017	1	0.10	0.03	0.03	
1C	210	-120.110	-31.724	-0.116	0.000	0.037	36.027	1	0.04	0.03	0.07	
1D	210	-120.110	69.944	-0.116	0.000	0.037	-13.017	1	0.10	0.03	0.03	
1E	210	-74.930	-31.724	-0.017	0.000	0.048	36.027	1	0.04	0.02	0.07	
1F	210	-74.930	69.944	-0.017	0.000	0.048	-13.017	1	0.10	0.02	0.03	
1G	210	-74.930	-31.724	-0.116	0.000	0.037	36.027	1	0.04	0.02	0.07	
1H	210	-74.930	69.944	-0.116	0.000	0.037	-13.017	1	0.10	0.02	0.03	
1I	210	-110.364	3.604	0.073	0.000	0.111	19.156	1	0.01	0.03	0.04	

1J	210	-110.364	34.616	0.073	0.000	0.111	3.854	1	0.05	0.03	0.01
1K	210	-110.364	3.604	-0.207	0.000	-0.027	19.156	1	0.01	0.03	0.04
1L	210	-110.364	34.616	-0.207	0.000	-0.027	3.854	1	0.05	0.03	0.01
1M	210	-84.676	3.604	0.073	0.000	0.111	19.156	1	0.01	0.02	0.04
1N	210	-84.676	34.616	0.073	0.000	0.111	3.854	1	0.05	0.02	0.01
1O	210	-84.676	3.604	-0.207	0.000	-0.027	19.156	1	0.01	0.02	0.04
1P	210	-84.676	34.616	-0.207	0.000	-0.027	3.854	1	0.05	0.02	0.01
2	210	-172.350	34.410	-0.104	0.000	0.065	20.720	1	0.05	0.04	0.04
7	210	-98.965	17.170	-0.102	0.000	0.014	14.665	1	0.02	0.03	0.03
8	210	-101.065	28.050	-0.063	0.000	0.042	11.096	1	0.04	0.03	0.02
9	210	-102.690	20.100	0.124	0.000	0.156	8.863	1	0.03	0.03	0.02
10	210	-120.200	20.065	-0.292	0.000	-0.049	8.848	1	0.03	0.03	0.02
11	210	-155.650	29.810	-0.113	0.000	0.041	20.544	1	0.04	0.04	0.04
12	210	-156.950	36.340	-0.089	0.000	0.057	18.397	1	0.05	0.04	0.04
13	210	-157.950	31.570	0.023	0.000	0.126	17.058	1	0.04	0.04	0.03
14	210	-168.450	31.550	-0.227	0.000	0.003	17.053	1	0.04	0.04	0.03
1A	420	-117.700	-31.724	-0.017	0.000	0.075	-30.626	1	0.04	0.03	0.06
1B	420	-117.700	69.944	-0.017	0.000	0.075	133.886	1	0.10	0.03	0.27
1C	420	-117.700	-31.724	-0.116	0.000	0.290	-30.626	1	0.04	0.03	0.06
1D	420	-117.700	69.944	-0.116	0.000	0.290	133.886	1	0.10	0.03	0.27
1E	420	-72.520	-31.724	-0.017	0.000	0.075	-30.626	1	0.04	0.02	0.06
1F	420	-72.520	69.944	-0.017	0.000	0.075	133.886	1	0.10	0.02	0.27
1G	420	-72.520	-31.724	-0.116	0.000	0.290	-30.626	1	0.04	0.02	0.06
1H	420	-72.520	69.944	-0.116	0.000	0.290	133.886	1	0.10	0.02	0.27
1I	420	-107.954	3.604	0.073	0.000	-0.045	26.632	1	0.01	0.03	0.05
1J	420	-107.954	34.616	0.073	0.000	-0.045	76.628	1	0.05	0.03	0.16
1K	420	-107.954	3.604	-0.207	0.000	0.410	26.632	1	0.01	0.03	0.05
1L	420	-107.954	34.616	-0.207	0.000	0.410	76.628	1	0.05	0.03	0.16
1M	420	-82.266	3.604	0.073	0.000	-0.045	26.632	1	0.01	0.02	0.05
1N	420	-82.266	34.616	0.073	0.000	-0.045	76.628	1	0.05	0.02	0.16
1O	420	-82.266	3.604	-0.207	0.000	0.410	26.632	1	0.01	0.02	0.05
1P	420	-82.266	34.616	-0.207	0.000	0.410	76.628	1	0.05	0.02	0.16
2	420	-169.200	34.410	-0.104	0.000	0.283	92.990	1	0.05	0.04	0.19
7	420	-95.830	12.990	-0.102	0.000	0.229	46.330	1	0.02	0.02	0.09
8	420	-97.930	20.300	-0.063	0.000	0.175	61.860	1	0.03	0.03	0.13
9	420	-99.580	29.280	0.124	0.000	-0.103	60.710	1	0.04	0.03	0.12
10	420	-117.100	29.240	-0.292	0.000	0.565	60.620	1	0.04	0.03	0.12
11	420	-152.500	27.300	-0.113	0.000	0.278	80.520	1	0.04	0.04	0.16
12	420	-153.800	31.690	-0.089	0.000	0.245	89.830	1	0.04	0.04	0.18
13	420	-154.800	37.080	0.023	0.000	0.079	89.140	1	0.05	0.04	0.18
14	420	-165.300	37.060	-0.227	0.000	0.479	89.090	1	0.05	0.04	0.18

ASTA NUM. 23 NI 36 NF 31 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -2.04 -2.04 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-130.949	-257.686	0.209	0.000	-0.064	134.946	1	0.36	0.03	0.28	
1B	0	-130.949	64.326	0.209	0.000	-0.064	-30.906	1	0.09	0.03	0.06	
1C	0	-130.949	-257.686	-0.129	0.000	-0.290	134.946	1	0.36	0.03	0.28	
1D	0	-130.949	64.326	-0.129	0.000	-0.290	-30.906	1	0.09	0.03	0.06	
1E	0	-82.051	-257.686	0.209	0.000	-0.064	134.946	1	0.36	0.02	0.28	
1F	0	-82.051	64.326	0.209	0.000	-0.064	-30.906	1	0.09	0.02	0.06	
1G	0	-82.051	-257.686	-0.129	0.000	-0.290	134.946	1	0.36	0.02	0.28	
1H	0	-82.051	64.326	-0.129	0.000	-0.290	-30.906	1	0.09	0.02	0.06	
1I	0	-115.137	-145.607	0.442	0.000	0.055	77.221	1	0.20	0.03	0.16	
1J	0	-115.137	-47.753	0.442	0.000	0.055	26.819	1	0.07	0.03	0.05	
1K	0	-115.137	-145.607	-0.362	0.000	-0.409	77.221	1	0.20	0.03	0.16	
1L	0	-115.137	-47.753	-0.362	0.000	-0.409	26.819	1	0.07	0.03	0.05	
1M	0	-97.863	-145.607	0.442	0.000	0.055	77.221	1	0.20	0.03	0.16	
1N	0	-97.863	-47.753	0.442	0.000	0.055	26.819	1	0.07	0.03	0.05	
1O	0	-97.863	-145.607	-0.362	0.000	-0.409	77.221	1	0.20	0.03	0.16	
1P	0	-97.863	-47.753	-0.362	0.000	-0.409	26.819	1	0.07	0.03	0.05	
2	0	-189.900	-174.200	0.349	0.000	-0.175	93.700	1	0.24	0.05	0.19	
7	0	-105.200	-88.710	-0.172	0.000	-0.245	46.710	1	0.12	0.03	0.10	
8	0	-109.600	-120.900	-0.254	0.000	-0.299	62.390	1	0.17	0.03	0.13	
9	0	-120.300	-108.700	-0.607	0.000	-0.577	61.130	1	0.15	0.03	0.12	
10	0	-122.100	-108.600	0.567	0.000	0.099	61.040	1	0.15	0.03	0.12	
11	0	-170.000	-152.000	0.215	0.000	-0.184	81.150	1	0.21	0.04	0.17	
12	0	-172.600	-171.300	0.166	0.000	-0.217	90.550	1	0.24	0.04	0.19	
13	0	-179.000	-164.000	-0.046	0.000	-0.383	89.800	1	0.23	0.05	0.18	
14	0	-180.100	-163.900	0.659	0.000	0.022	89.750	1	0.23	0.05	0.18	
1A	25	-130.699	-257.686	0.209	0.000	-0.116	70.541	1	0.36	0.03	0.14	
1B	25	-130.699	64.326	0.209	0.000	-0.116	-14.838	1	0.09	0.03	0.03	
1C	25	-130.699	-257.686	-0.129	0.000	-0.258	70.541	1	0.36	0.03	0.14	
1D	25	-130.699	64.326	-0.129	0.000	-0.258	-14.838	1	0.09	0.03	0.03	
1E	25	-81.801	-257.686	0.209	0.000	-0.116	70.541	1	0.36	0.02	0.14	
1F	25	-81.801	64.326	0.209	0.000	-0.116	-14.838	1	0.09	0.02	0.03	
1G	25	-81.801	-257.686	-0.129	0.000	-0.258	70.541	1	0.36	0.02	0.14	
1H	25	-81.801	64.326	-0.129	0.000	-0.258	-14.838	1	0.09	0.02	0.03	
1I	25	-114.887	-145.607	0.442	0.000	-0.056	40.845	1	0.20	0.03	0.08	
1J	25	-114.887	-47.753	0.442	0.000	-0.056	14.858	1	0.07	0.03	0.03	
1K	25	-114.887	-145.607	-0.362	0.000	-0.318	40.845	1	0.20	0.03	0.08	
1L	25	-114.887	-47.753	-0.362	0.000	-0.318	14.858	1	0.07	0.03	0.03	
1M	25	-97.613	-145.607	0.442	0.000	-0.056	40.845	1	0.20	0.03	0.08	
1N	25	-97.613	-47.753	0.442	0.000	-0.056	14.858	1	0.07	0.03	0.03	
1O	25	-97.613	-145.607	-0.362	0.000	-0.318	40.845	1	0.20	0.03	0.08	
1P	25	-97.613	-47.753	-0.362	0.000	-0.318	14.858	1	0.07	0.03	0.03	
2	25	-189.550	-174.200	0.349	0.000	-0.263	50.159	1	0.24	0.05	0.10	
7	25	-104.850	-89.210	-0.172	0.000	-0.202	24.468	1	0.12	0.03	0.05	

8	25	-109.200	-121.800	-0.254	0.000	-0.236	32.048	1	0.17	0.03	0.07
9	25	-119.950	-107.600	-0.607	0.000	-0.425	34.084	1	0.15	0.03	0.07
10	25	-121.750	-107.500	0.567	0.000	-0.043	34.036	1	0.15	0.03	0.07
11	25	-169.600	-152.300	0.215	0.000	-0.238	43.116	1	0.21	0.04	0.09
12	25	-172.200	-171.850	0.166	0.000	-0.258	47.660	1	0.24	0.04	0.10
13	25	-178.650	-163.350	-0.046	0.000	-0.372	48.885	1	0.23	0.05	0.10
14	25	-179.700	-163.250	0.659	0.000	-0.143	48.858	1	0.23	0.05	0.10
1A	50	-130.449	-257.686	0.209	0.000	-0.168	6.136	1	0.36	0.03	0.01
1B	50	-130.449	64.326	0.209	0.000	-0.168	1.230	1	0.09	0.03	0.00
1C	50	-130.449	-257.686	-0.129	0.000	-0.226	6.136	1	0.36	0.03	0.01
1D	50	-130.449	64.326	-0.129	0.000	-0.226	1.230	1	0.09	0.03	0.00
1E	50	-81.551	-257.686	0.209	0.000	-0.168	6.136	1	0.36	0.02	0.01
1F	50	-81.551	64.326	0.209	0.000	-0.168	1.230	1	0.09	0.02	0.00
1G	50	-81.551	-257.686	-0.129	0.000	-0.226	6.136	1	0.36	0.02	0.01
1H	50	-81.551	64.326	-0.129	0.000	-0.226	1.230	1	0.09	0.02	0.00
1I	50	-114.637	-145.607	0.442	0.000	-0.166	4.470	1	0.20	0.03	0.01
1J	50	-114.637	-47.753	0.442	0.000	-0.166	2.896	1	0.07	0.03	0.01
1K	50	-114.637	-145.607	-0.362	0.000	-0.228	4.470	1	0.20	0.03	0.01
1L	50	-114.637	-47.753	-0.362	0.000	-0.228	2.896	1	0.07	0.03	0.01
1M	50	-97.363	-145.607	0.442	0.000	-0.166	4.470	1	0.20	0.02	0.01
1N	50	-97.363	-47.753	0.442	0.000	-0.166	2.896	1	0.07	0.02	0.01
1O	50	-97.363	-145.607	-0.362	0.000	-0.228	4.470	1	0.20	0.02	0.01
1P	50	-97.363	-47.753	-0.362	0.000	-0.228	2.896	1	0.07	0.02	0.01
2	50	-189.200	-174.200	0.349	0.000	-0.350	6.618	1	0.24	0.05	0.01
7	50	-104.500	-89.710	-0.172	0.000	-0.159	2.102	1	0.13	0.03	0.00
8	50	-108.800	-122.700	-0.254	0.000	-0.172	1.476	1	0.17	0.03	0.00
9	50	-119.600	-106.500	-0.607	0.000	-0.273	7.312	1	0.15	0.03	0.01
10	50	-121.400	-106.400	0.567	0.000	-0.185	7.306	1	0.15	0.03	0.01
11	50	-169.200	-152.600	0.215	0.000	-0.292	5.007	1	0.21	0.04	0.01
12	50	-171.800	-172.400	0.166	0.000	-0.300	4.631	1	0.24	0.04	0.01
13	50	-178.300	-162.700	-0.046	0.000	-0.360	8.133	1	0.23	0.05	0.02
14	50	-179.300	-162.600	0.659	0.000	-0.307	8.129	1	0.23	0.05	0.02

ASTA NUM. 26 NI 31 NF 239 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -2.04 -2.04 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-1.378	-0.490	0.005	0.000	0.006	0.588	1	0.00	0.00	0.00	
1B	0	-1.378	0.490	0.005	0.000	0.006	-0.588	1	0.00	0.00	0.00	
1C	0	-1.378	-0.490	-0.005	0.000	-0.006	0.588	1	0.00	0.00	0.00	
1D	0	-1.378	0.490	-0.005	0.000	-0.006	-0.588	1	0.00	0.00	0.00	
1E	0	-1.376	-0.490	0.005	0.000	0.006	0.588	1	0.00	0.00	0.00	
1F	0	-1.376	0.490	0.005	0.000	0.006	-0.588	1	0.00	0.00	0.00	
1G	0	-1.376	-0.490	-0.005	0.000	-0.006	0.588	1	0.00	0.00	0.00	
1H	0	-1.376	0.490	-0.005	0.000	-0.006	-0.588	1	0.00	0.00	0.00	
1I	0	-1.378	-0.166	0.014	0.000	0.017	0.199	1	0.00	0.00	0.00	
1J	0	-1.378	0.166	0.014	0.000	0.017	-0.199	1	0.00	0.00	0.00	
1K	0	-1.378	-0.166	-0.014	0.000	-0.017	0.199	1	0.00	0.00	0.00	
1L	0	-1.378	0.166	-0.014	0.000	-0.017	-0.199	1	0.00	0.00	0.00	
1M	0	-1.376	-0.166	0.014	0.000	0.017	0.199	1	0.00	0.00	0.00	
1N	0	-1.376	0.166	0.014	0.000	0.017	-0.199	1	0.00	0.00	0.00	
1O	0	-1.376	-0.166	-0.014	0.000	-0.017	0.199	1	0.00	0.00	0.00	
1P	0	-1.376	0.166	-0.014	0.000	-0.017	-0.199	1	0.00	0.00	0.00	
2	0	-1.790	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	2.389	-0.000	0.000	0.000	-1.434	1	0.00	0.00	0.00	
8	0	-1.790	4.428	-0.000	0.000	0.000	-2.657	1	0.01	0.00	0.01	
9	0	-1.790	-5.245	0.000	0.000	0.000	3.147	1	0.01	0.00	0.01	
10	0	-1.790	-5.245	0.000	0.000	0.000	3.147	1	0.01	0.00	0.01	
11	0	-1.790	1.434	-0.000	0.000	0.000	-0.860	1	0.00	0.00	0.00	
12	0	-1.790	2.657	-0.000	0.000	0.000	-1.594	1	0.00	0.00	0.00	
13	0	-1.790	-3.147	0.000	0.000	0.000	1.888	1	0.00	0.00	0.00	
14	0	-1.790	-3.147	0.000	0.000	0.000	1.888	1	0.00	0.00	0.00	
1A	60	-0.690	-0.490	0.005	0.000	0.003	0.294	1	0.00	0.00	0.00	
1B	60	-0.690	0.490	0.005	0.000	0.003	-0.294	1	0.00	0.00	0.00	
1C	60	-0.690	-0.490	-0.005	0.000	-0.003	0.294	1	0.00	0.00	0.00	
1D	60	-0.690	0.490	-0.005	0.000	-0.003	-0.294	1	0.00	0.00	0.00	
1E	60	-0.687	-0.490	0.005	0.000	0.003	0.294	1	0.00	0.00	0.00	
1F	60	-0.687	0.490	0.005	0.000	0.003	-0.294	1	0.00	0.00	0.00	
1G	60	-0.687	-0.490	-0.005	0.000	-0.003	0.294	1	0.00	0.00	0.00	
1H	60	-0.687	0.490	-0.005	0.000	-0.003	-0.294	1	0.00	0.00	0.00	
1I	60	-0.690	-0.166	0.014	0.000	0.008	0.100	1	0.00	0.00	0.00	
1J	60	-0.690	0.166	0.014	0.000	0.008	-0.100	1	0.00	0.00	0.00	
1K	60	-0.690	-0.166	-0.014	0.000	-0.008	0.100	1	0.00	0.00	0.00	
1L	60	-0.690	0.166	-0.014	0.000	-0.008	-0.100	1	0.00	0.00	0.00	
1M	60	-0.687	-0.166	0.014	0.000	0.008	0.100	1	0.00	0.00	0.00	
1N	60	-0.687	0.166	0.014	0.000	0.008	-0.100	1	0.00	0.00	0.00	
1O	60	-0.687	-0.166	-0.014	0.000	-0.008	0.100	1	0.00	0.00	0.00	
1P	60	-0.687	0.166	-0.014	0.000	-0.008	-0.100	1	0.00	0.00	0.00	
2	60	-0.895	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	60	-0.895	1.195	-0.000	0.000	0.000	-0.359	1	0.00	0.00	0.00	
8	60	-0.895	2.214	-0.000	0.000	0.000	-0.664	1	0.00	0.00	0.00	
9	60	-0.895	-2.623	0.000	0.000	0.000	0.787	1	0.00	0.00	0.00	
10	60	-0.895	-2.623	0.000	0.000	0.000	0.787	1	0.00	0.00	0.00	
11	60	-0.895	0.717	-0.000	0.000	0.000	-0.215	1	0.00	0.00	0.00	
12	60	-0.895	1.329	-0.000	0.000	0.000	-0.399	1	0.00	0.00	0.00	
13	60	-0.895	-1.574	0.000	0.000	0.000	0.472	1	0.00	0.00	0.00	
14	60	-0.895	-1.574	0.000	0.000	0.000	0.472	1	0.00	0.00	0.00	
1A	120	-0.001	-0.490	0.005	0.000	-0.000	0.000	1	0.00	0.00	0.00	

1B	120	-0.001	0.490	0.005	0.000	-0.000	0.000	1	0.00	0.00	0.00
1C	120	-0.001	-0.490	-0.005	0.000	0.000	0.000	1	0.00	0.00	0.00
1D	120	-0.001	0.490	-0.005	0.000	0.000	0.000	1	0.00	0.00	0.00
1E	120	0.001	-0.490	0.005	0.000	-0.000	0.000	--	0.00	0.00	0.00
1F	120	0.001	0.490	0.005	0.000	-0.000	0.000	--	0.00	0.00	0.00
1G	120	0.001	-0.490	-0.005	0.000	0.000	0.000	--	0.00	0.00	0.00
1H	120	0.001	0.490	-0.005	0.000	0.000	0.000	--	0.00	0.00	0.00
1I	120	-0.001	-0.166	0.014	0.000	-0.000	0.000	1	0.00	0.00	0.00
1J	120	-0.001	0.166	0.014	0.000	-0.000	0.000	1	0.00	0.00	0.00
1K	120	-0.001	-0.166	-0.014	0.000	0.000	0.000	1	0.00	0.00	0.00
1L	120	-0.001	0.166	-0.014	0.000	0.000	0.000	1	0.00	0.00	0.00
1M	120	0.001	-0.166	0.014	0.000	-0.000	0.000	--	0.00	0.00	0.00
1N	120	0.001	0.166	0.014	0.000	-0.000	0.000	--	0.00	0.00	0.00
1O	120	0.001	-0.166	-0.014	0.000	0.000	0.000	--	0.00	0.00	0.00
1P	120	0.001	0.166	-0.014	0.000	0.000	0.000	--	0.00	0.00	0.00
2	120	-0.000	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
8	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
9	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	--	----------											
	kN	kN*m											
1A	-130.949	-0.168	134.946	1	0.5967	1.1896	1.0223	--	--	0.06	--	0.34	Snell. 'zx'= 78
1B	-130.949	-0.168	-159.920	1	0.5967	1.1896	1.0141	--	--	0.06	--	0.39	Snell. 'zx'= 78
1C	-130.949	0.290	134.946	1	0.5967	1.0743	1.0223	--	--	0.06	--	0.34	Snell. 'zx'= 78
1D	-130.949	0.290	-159.920	1	0.5967	1.0743	1.0141	--	--	0.06	--	0.39	Snell. 'zx'= 78
1E	-82.051	-0.168	134.946	1	0.5967	1.1188	1.0139	--	--	0.04	--	0.32	Snell. 'zx'= 78
1F	-82.051	-0.168	-159.920	1	0.5967	1.1188	1.0088	--	--	0.04	--	0.37	Snell. 'zx'= 78
1G	-82.051	0.290	134.946	1	0.5967	1.0465	1.0139	--	--	0.04	--	0.32	Snell. 'zx'= 78
1H	-82.051	0.290	-159.920	1	0.5967	1.0465	1.0088	--	--	0.04	--	0.37	Snell. 'zx'= 78
1I	-115.137	0.268	77.221	1	0.5967	1.0898	1.0383	--	--	0.05	--	0.21	Snell. 'zx'= 78
1J	-115.137	0.268	76.628	1	0.5967	1.0898	1.0218	--	--	0.05	--	0.21	Snell. 'zx'= 78
1K	-115.137	-0.463	77.221	1	0.5967	1.0408	1.0383	--	--	0.05	--	0.22	Snell. 'zx'= 78
1L	-115.137	-0.463	76.628	1	0.5967	1.0408	1.0218	--	--	0.05	--	0.21	Snell. 'zx'= 78
1M	-97.863	0.268	77.221	1	0.5967	1.0763	1.0326	--	--	0.04	--	0.21	Snell. 'zx'= 78
1N	-97.863	0.268	76.628	1	0.5967	1.0763	1.0185	--	--	0.04	--	0.20	Snell. 'zx'= 78
1O	-97.863	-0.463	77.221	1	0.5967	1.0347	1.0326	--	--	0.04	--	0.21	Snell. 'zx'= 78
1P	-97.863	-0.463	76.628	1	0.5967	1.0347	1.0185	--	--	0.04	--	0.20	Snell. 'zx'= 78
2	-189.900	-0.350	93.700	1	0.5967	1.0977	1.0360	--	--	0.08	--	0.28	Snell. 'zx'= 78
7	-105.200	-0.245	46.710	1	0.5967	1.0746	1.0371	--	--	0.05	--	0.15	Snell. 'zx'= 78
8	-109.600	-0.299	62.390	1	0.5967	1.0778	1.0248	--	--	0.05	--	0.18	Snell. 'zx'= 78
9	-120.300	-0.577	61.130	1	0.5967	1.0366	1.0367	--	--	0.05	--	0.18	Snell. 'zx'= 78
10	-123.300	-0.663	61.040	1	0.5967	1.0287	1.0377	--	--	0.05	--	0.19	Snell. 'zx'= 78
11	-170.000	-0.292	81.150	1	0.5967	1.0985	1.0365	--	--	0.07	--	0.25	Snell. 'zx'= 78
12	-172.600	-0.300	90.550	1	0.5967	1.1050	1.0313	--	--	0.07	--	0.27	Snell. 'zx'= 78
13	-179.000	-0.383	89.800	1	0.5967	1.1062	1.0366	--	--	0.08	--	0.27	Snell. 'zx'= 78
14	-180.100	0.479	89.750	1	0.5967	1.0575	1.0368	--	--	0.08	--	0.27	Snell. 'zx'= 78

ASTA NUM. 5 NI 5 NF 56 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 3.76 3.76 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	--	----------			----------			------	----------			
	cm	kN			kN*m							
1A	0	-101.432	-65.736	0.213	0.000	0.388	154.149	1	0.09	0.03	0.31	
1B	0	-101.432	37.256	0.213	0.000	0.388	-109.589	1	0.05	0.03	0.22	
1C	0	-101.432	-65.736	0.052	0.000	0.020	154.149	1	0.09	0.03	0.31	
1D	0	-101.432	37.256	0.052	0.000	0.020	-109.589	1	0.05	0.03	0.22	
1E	0	-51.628	-65.736	0.213	0.000	0.388	154.149	1	0.09	0.01	0.31	
1F	0	-51.628	37.256	0.213	0.000	0.388	-109.589	1	0.05	0.01	0.22	
1G	0	-51.628	-65.736	0.052	0.000	0.020	154.149	1	0.09	0.01	0.31	
1H	0	-51.628	37.256	0.052	0.000	0.020	-109.589	1	0.05	0.01	0.22	
1I	0	-88.163	-29.918	0.276	0.000	0.558	62.352	1	0.04	0.02	0.13	
1J	0	-88.163	1.438	0.276	0.000	0.558	-17.792	1	0.00	0.02	0.04	
1K	0	-88.163	-29.918	-0.012	0.000	-0.150	62.352	1	0.04	0.02	0.13	
1L	0	-88.163	1.438	-0.012	0.000	-0.150	-17.792	1	0.00	0.02	0.04	
1M	0	-64.897	-29.918	0.276	0.000	0.558	62.352	1	0.04	0.02	0.13	
1N	0	-64.897	1.438	0.276	0.000	0.558	-17.792	1	0.00	0.02	0.04	
1O	0	-64.897	-29.918	-0.012	0.000	-0.150	62.352	1	0.04	0.02	0.13	
1P	0	-64.897	1.438	-0.012	0.000	-0.150	-17.792	1	0.00	0.02	0.04	
2	0	-133.200	-25.560	0.221	0.000	0.342	39.980	1	0.04	0.03	0.08	
7	0	-79.980	-24.100	0.135	0.000	0.198	34.880	1	0.03	0.02	0.07	
8	0	-76.160	-2.587	0.140	0.000	0.215	-1.010	1	0.00	0.02	0.00	
9	0	-94.860	-7.512	0.376	0.000	0.799	18.210	1	0.01	0.02	0.04	
10	0	-80.780	-7.572	-0.066	0.000	-0.322	18.310	1	0.01	0.02	0.04	
11	0	-121.500	-28.910	0.198	0.000	0.302	43.530	1	0.04	0.03	0.09	
12	0	-119.200	-16.000	0.202	0.000	0.312	22.000	1	0.02	0.03	0.04	
13	0	-130.400	-18.960	0.343	0.000	0.663	33.530	1	0.03	0.03	0.07	
14	0	-122.000	-19.000	0.078	0.000	-0.010	33.590	1	0.03	0.03	0.07	

1A	210	-99.022	-65.736	0.213	0.000	-0.059	16.115	1	0.09	0.03	0.03
1B	210	-99.022	37.256	0.213	0.000	-0.059	-31.385	1	0.05	0.03	0.06
1C	210	-99.022	-65.736	0.052	0.000	-0.088	16.115	1	0.09	0.03	0.03
1D	210	-99.022	37.256	0.052	0.000	-0.088	-31.385	1	0.05	0.03	0.06
1E	210	-49.218	-65.736	0.213	0.000	-0.059	16.115	1	0.09	0.01	0.03
1F	210	-49.218	37.256	0.213	0.000	-0.059	-31.385	1	0.05	0.01	0.06
1G	210	-49.218	-65.736	0.052	0.000	-0.088	16.115	1	0.09	0.01	0.03
1H	210	-49.218	37.256	0.052	0.000	-0.088	-31.385	1	0.05	0.01	0.06
1I	210	-85.753	-29.918	0.276	0.000	-0.021	-0.481	1	0.04	0.02	0.00
1J	210	-85.753	1.438	0.276	0.000	-0.021	-14.789	1	0.00	0.02	0.03
1K	210	-85.753	-29.918	-0.012	0.000	-0.125	-0.481	1	0.04	0.02	0.00
1L	210	-85.753	1.438	-0.012	0.000	-0.125	-14.789	1	0.00	0.02	0.03
1M	210	-62.487	-29.918	0.276	0.000	-0.021	-0.481	1	0.04	0.02	0.00
1N	210	-62.487	1.438	0.276	0.000	-0.021	-14.789	1	0.00	0.02	0.03
1O	210	-62.487	-29.918	-0.012	0.000	-0.125	-0.481	1	0.04	0.02	0.00
1P	210	-62.487	1.438	-0.012	0.000	-0.125	-14.789	1	0.00	0.02	0.03
2	210	-130.050	-25.560	0.221	0.000	-0.121	-13.700	1	0.04	0.03	0.03
7	210	-76.845	-17.900	0.135	0.000	-0.084	-9.224	1	0.03	0.02	0.02
8	210	-73.025	-5.932	0.140	0.000	-0.079	-9.953	1	0.01	0.02	0.02
9	210	-91.730	-14.856	0.376	0.000	0.009	-5.275	1	0.02	0.02	0.01
10	210	-77.650	-14.916	-0.066	0.000	-0.182	-5.305	1	0.02	0.02	0.01
11	210	-118.350	-25.190	0.198	0.000	-0.115	-13.280	1	0.04	0.03	0.03
12	210	-116.050	-18.010	0.202	0.000	-0.111	-13.718	1	0.03	0.03	0.03
13	210	-127.300	-23.365	0.343	0.000	-0.059	-10.909	1	0.03	0.03	0.02
14	210	-118.850	-23.405	0.078	0.000	-0.173	-10.929	1	0.03	0.03	0.02
1A	420	-96.612	-65.736	0.213	0.000	-0.506	-121.919	1	0.09	0.02	0.25
1B	420	-96.612	37.256	0.213	0.000	-0.506	46.819	1	0.05	0.02	0.10
1C	420	-96.612	-65.736	0.052	0.000	-0.196	-121.919	1	0.09	0.02	0.25
1D	420	-96.612	37.256	0.052	0.000	-0.196	46.819	1	0.05	0.02	0.10
1E	420	-46.808	-65.736	0.213	0.000	-0.506	-121.919	1	0.09	0.01	0.25
1F	420	-46.808	37.256	0.213	0.000	-0.506	46.819	1	0.05	0.01	0.10
1G	420	-46.808	-65.736	0.052	0.000	-0.196	-121.919	1	0.09	0.01	0.25
1H	420	-46.808	37.256	0.052	0.000	-0.196	46.819	1	0.05	0.01	0.10
1I	420	-83.343	-29.918	0.276	0.000	-0.600	-63.313	1	0.04	0.02	0.13
1J	420	-83.343	1.438	0.276	0.000	-0.600	-11.787	1	0.00	0.02	0.02
1K	420	-83.343	-29.918	-0.012	0.000	-0.101	-63.313	1	0.04	0.02	0.13
1L	420	-83.343	1.438	-0.012	0.000	-0.101	-11.787	1	0.00	0.02	0.02
1M	420	-60.077	-29.918	0.276	0.000	-0.600	-63.313	1	0.04	0.02	0.13
1N	420	-60.077	1.438	0.276	0.000	-0.600	-11.787	1	0.00	0.02	0.02
1O	420	-60.077	-29.918	-0.012	0.000	-0.101	-63.313	1	0.04	0.02	0.13
1P	420	-60.077	1.438	-0.012	0.000	-0.101	-11.787	1	0.00	0.02	0.02
2	420	-126.900	-25.560	0.221	0.000	-0.585	-67.380	1	0.04	0.03	0.14
7	420	-73.710	-11.700	0.135	0.000	-0.367	-40.310	1	0.02	0.02	0.08
8	420	-69.890	-9.277	0.140	0.000	-0.373	-25.920	1	0.01	0.02	0.05
9	420	-88.600	-22.200	0.376	0.000	-0.781	-44.180	1	0.03	0.02	0.09
10	420	-74.520	-22.260	-0.066	0.000	-0.043	-44.340	1	0.03	0.02	0.09
11	420	-115.200	-21.470	0.198	0.000	-0.531	-62.280	1	0.03	0.03	0.13
12	420	-112.900	-20.020	0.202	0.000	-0.535	-53.650	1	0.03	0.03	0.11
13	420	-124.200	-27.770	0.343	0.000	-0.780	-64.600	1	0.04	0.03	0.13
14	420	-115.700	-27.810	0.078	0.000	-0.337	-64.700	1	0.04	0.03	0.13

ASTA NUM. 15 NI 56 NF 51 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 3.76 3.76 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-95.300	-94.794	0.441	0.000	0.172	47.232	1	0.13	0.02	0.10	
1B	0	-95.300	235.394	0.441	0.000	0.172	-122.892	1	0.33	0.02	0.25	
1C	0	-95.300	-94.794	-0.089	0.000	-0.150	47.232	1	0.13	0.02	0.10	
1D	0	-95.300	235.394	-0.089	0.000	-0.150	-122.892	1	0.33	0.02	0.25	
1E	0	-45.780	-94.794	0.441	0.000	0.172	47.232	1	0.13	0.01	0.10	
1F	0	-45.780	235.394	0.441	0.000	0.172	-122.892	1	0.33	0.01	0.25	
1G	0	-45.780	-94.794	-0.089	0.000	-0.150	47.232	1	0.13	0.01	0.10	
1H	0	-45.780	235.394	-0.089	0.000	-0.150	-122.892	1	0.33	0.01	0.25	
1I	0	-78.363	19.882	0.615	0.000	0.265	-11.849	1	0.03	0.02	0.02	
1J	0	-78.363	120.718	0.615	0.000	0.265	-63.811	1	0.17	0.02	0.13	
1K	0	-78.363	19.882	-0.263	0.000	-0.243	-11.849	1	0.03	0.02	0.02	
1L	0	-78.363	120.718	-0.263	0.000	-0.243	-63.811	1	0.17	0.02	0.13	
1M	0	-62.717	19.882	0.615	0.000	0.265	-11.849	1	0.03	0.02	0.02	
1N	0	-62.717	120.718	0.615	0.000	0.265	-63.811	1	0.17	0.02	0.13	
1O	0	-62.717	19.882	-0.263	0.000	-0.243	-11.849	1	0.03	0.02	0.02	
1P	0	-62.717	120.718	-0.263	0.000	-0.243	-63.811	1	0.17	0.02	0.13	
2	0	-125.500	126.200	0.029	0.000	-0.122	-67.900	1	0.18	0.03	0.14	
7	0	-72.620	79.100	0.360	0.000	0.108	-40.650	1	0.11	0.02	0.08	
8	0	-68.150	45.800	0.350	0.000	0.103	-26.090	1	0.06	0.02	0.05	
9	0	-79.740	78.730	-0.309	0.000	-0.313	-44.470	1	0.11	0.02	0.09	
10	0	-80.170	79.020	0.907	0.000	0.435	-44.630	1	0.11	0.02	0.09	
11	0	-114.100	118.800	0.108	0.000	-0.066	-62.780	1	0.17	0.03	0.13	
12	0	-111.400	98.830	0.101	0.000	-0.069	-54.040	1	0.14	0.03	0.11	
13	0	-118.300	118.600	-0.294	0.000	-0.318	-65.070	1	0.17	0.03	0.13	
14	0	-118.600	118.800	0.436	0.000	0.130	-65.160	1	0.17	0.03	0.13	
1A	25	-95.015	-94.794	0.441	0.000	0.061	23.533	1	0.13	0.02	0.05	
1B	25	-95.015	235.394	0.441	0.000	0.061	-64.048	1	0.33	0.02	0.13	
1C	25	-95.015	-94.794	-0.089	0.000	-0.128	23.533	1	0.13	0.02	0.05	
1D	25	-95.015	235.394	-0.089	0.000	-0.128	-64.048	1	0.33	0.02	0.13	
1E	25	-45.495	-94.794	0.441	0.000	0.061	23.533	1	0.13	0.01	0.05	
1F	25	-45.495	235.394	0.441	0.000	0.061	-64.048	1	0.33	0.01	0.13	
1G	25	-45.495	-94.794	-0.089	0.000	-0.128	23.533	1	0.13	0.01	0.05	
1H	25	-45.495	235.394	-0.089	0.000	-0.128	-64.048	1	0.33	0.01	0.13	
1I	25	-78.078	19.882	0.615	0.000	0.111	-6.880	1	0.03	0.02	0.01	

1J	25	-78.078	120.718	0.615	0.000	0.111	-33.635	1	0.17	0.02	0.07
1K	25	-78.078	19.882	-0.263	0.000	-0.177	-6.880	1	0.03	0.02	0.01
1L	25	-78.078	120.718	-0.263	0.000	-0.177	-33.635	1	0.17	0.02	0.07
1M	25	-62.432	19.882	0.615	0.000	0.111	-6.880	1	0.03	0.02	0.01
1N	25	-62.432	120.718	0.615	0.000	0.111	-33.635	1	0.17	0.02	0.07
1O	25	-62.432	19.882	-0.263	0.000	-0.177	-6.880	1	0.03	0.02	0.01
1P	25	-62.432	120.718	-0.263	0.000	-0.177	-33.635	1	0.17	0.02	0.07
2	25	-125.150	126.200	0.029	0.000	-0.129	-36.352	1	0.18	0.03	0.07
7	25	-72.245	79.840	0.360	0.000	0.018	-20.784	1	0.11	0.02	0.04
8	25	-67.780	45.400	0.350	0.000	0.015	-14.693	1	0.06	0.02	0.03
9	25	-79.370	77.855	-0.309	0.000	-0.236	-24.897	1	0.11	0.02	0.05
10	25	-79.800	78.150	0.907	0.000	0.208	-24.984	1	0.11	0.02	0.05
11	25	-113.700	119.250	0.108	0.000	-0.093	-33.020	1	0.17	0.03	0.07
12	25	-111.000	98.590	0.101	0.000	-0.094	-29.364	1	0.14	0.03	0.06
13	25	-117.950	118.050	-0.294	0.000	-0.245	-35.487	1	0.16	0.03	0.07
14	25	-118.250	118.250	0.436	0.000	0.021	-35.536	1	0.17	0.03	0.07
1A	50	-94.730	-94.794	0.441	0.000	-0.049	-0.166	1	0.13	0.02	0.00
1B	50	-94.730	235.394	0.441	0.000	-0.049	-5.204	1	0.33	0.02	0.01
1C	50	-94.730	-94.794	-0.089	0.000	-0.106	-0.166	1	0.13	0.02	0.00
1D	50	-94.730	235.394	-0.089	0.000	-0.106	-5.204	1	0.33	0.02	0.01
1E	50	-45.210	-94.794	0.441	0.000	-0.049	-0.166	1	0.13	0.01	0.00
1F	50	-45.210	235.394	0.441	0.000	-0.049	-5.204	1	0.33	0.01	0.01
1G	50	-45.210	-94.794	-0.089	0.000	-0.106	-0.166	1	0.13	0.01	0.00
1H	50	-45.210	235.394	-0.089	0.000	-0.106	-5.204	1	0.33	0.01	0.01
1I	50	-77.793	19.882	0.615	0.000	-0.043	-1.912	1	0.03	0.02	0.00
1J	50	-77.793	120.718	0.615	0.000	-0.043	-3.458	1	0.17	0.02	0.01
1K	50	-77.793	19.882	-0.263	0.000	-0.112	-1.912	1	0.03	0.02	0.00
1L	50	-77.793	120.718	-0.263	0.000	-0.112	-3.458	1	0.17	0.02	0.01
1M	50	-62.147	19.882	0.615	0.000	-0.043	-1.912	1	0.03	0.02	0.00
1N	50	-62.147	120.718	0.615	0.000	-0.043	-3.458	1	0.17	0.02	0.01
1O	50	-62.147	19.882	-0.263	0.000	-0.112	-1.912	1	0.03	0.02	0.00
1P	50	-62.147	120.718	-0.263	0.000	-0.112	-3.458	1	0.17	0.02	0.01
2	50	-124.800	126.200	0.029	0.000	-0.137	-4.803	1	0.18	0.03	0.01
7	50	-71.870	80.580	0.360	0.000	-0.072	-0.734	1	0.11	0.02	0.00
8	50	-67.410	45.000	0.350	0.000	-0.072	-3.396	1	0.06	0.02	0.01
9	50	-79.000	76.980	-0.309	0.000	-0.159	-5.543	1	0.11	0.02	0.01
10	50	-79.430	77.280	0.907	0.000	-0.018	-5.557	1	0.11	0.02	0.01
11	50	-113.300	119.700	0.108	0.000	-0.120	-3.149	1	0.17	0.03	0.01
12	50	-110.600	98.350	0.101	0.000	-0.120	-4.747	1	0.14	0.03	0.01
13	50	-117.600	117.500	-0.294	0.000	-0.172	-6.035	1	0.16	0.03	0.01
14	50	-117.900	117.700	0.436	0.000	-0.088	-6.043	1	0.16	0.03	0.01

ASTA NUM. 34 NI 51 NF 240 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 3.76 3.76 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.379	-0.480	0.004	0.000	0.004	0.576	1	0.00	0.00	0.00	
1B	0	-1.379	0.480	0.004	0.000	0.004	-0.576	1	0.00	0.00	0.00	
1C	0	-1.379	-0.480	-0.004	0.000	-0.004	0.576	1	0.00	0.00	0.00	
1D	0	-1.379	0.480	-0.004	0.000	-0.004	-0.576	1	0.00	0.00	0.00	
1E	0	-1.375	-0.480	0.004	0.000	0.004	0.576	1	0.00	0.00	0.00	
1F	0	-1.375	0.480	0.004	0.000	0.004	-0.576	1	0.00	0.00	0.00	
1G	0	-1.375	-0.480	-0.004	0.000	-0.004	0.576	1	0.00	0.00	0.00	
1H	0	-1.375	0.480	-0.004	0.000	-0.004	-0.576	1	0.00	0.00	0.00	
1I	0	-1.378	-0.148	0.011	0.000	0.013	0.178	1	0.00	0.00	0.00	
1J	0	-1.378	0.148	0.011	0.000	0.013	-0.178	1	0.00	0.00	0.00	
1K	0	-1.378	-0.148	-0.011	0.000	-0.013	0.178	1	0.00	0.00	0.00	
1L	0	-1.378	0.148	-0.011	0.000	-0.013	-0.178	1	0.00	0.00	0.00	
1M	0	-1.376	-0.148	0.011	0.000	0.013	0.178	1	0.00	0.00	0.00	
1N	0	-1.376	0.148	0.011	0.000	0.013	-0.178	1	0.00	0.00	0.00	
1O	0	-1.376	-0.148	-0.011	0.000	-0.013	0.178	1	0.00	0.00	0.00	
1P	0	-1.376	0.148	-0.011	0.000	-0.013	-0.178	1	0.00	0.00	0.00	
2	0	-1.790	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	-3.542	-0.000	0.000	0.000	2.125	1	0.00	0.00	0.00	
8	0	-1.790	1.911	0.000	0.000	0.000	-1.147	1	0.00	0.00	0.00	
9	0	-1.790	4.196	-0.000	0.000	0.000	-2.517	1	0.01	0.00	0.01	
10	0	-1.790	4.196	-0.000	0.000	0.000	-2.517	1	0.01	0.00	0.01	
11	0	-1.790	-2.125	-0.000	0.000	0.000	1.275	1	0.00	0.00	0.00	
12	0	-1.790	1.147	-0.000	0.000	0.000	-0.688	1	0.00	0.00	0.00	
13	0	-1.790	2.517	-0.000	0.000	0.000	-1.510	1	0.00	0.00	0.00	
14	0	-1.790	2.517	-0.000	0.000	0.000	-1.510	1	0.00	0.00	0.00	
1A	60	-0.690	-0.480	0.004	0.000	0.002	0.288	1	0.00	0.00	0.00	
1B	60	-0.690	0.480	0.004	0.000	0.002	-0.288	1	0.00	0.00	0.00	
1C	60	-0.690	-0.480	-0.004	0.000	-0.002	0.288	1	0.00	0.00	0.00	
1D	60	-0.690	0.480	-0.004	0.000	-0.002	-0.288	1	0.00	0.00	0.00	
1E	60	-0.687	-0.480	0.004	0.000	0.002	0.288	1	0.00	0.00	0.00	
1F	60	-0.687	0.480	0.004	0.000	0.002	-0.288	1	0.00	0.00	0.00	
1G	60	-0.687	-0.480	-0.004	0.000	-0.002	0.288	1	0.00	0.00	0.00	
1H	60	-0.687	0.480	-0.004	0.000	-0.002	-0.288	1	0.00	0.00	0.00	
1I	60	-0.690	-0.148	0.011	0.000	0.007	0.089	1	0.00	0.00	0.00	
1J	60	-0.690	0.148	0.011	0.000	0.007	-0.089	1	0.00	0.00	0.00	
1K	60	-0.690	-0.148	-0.011	0.000	-0.007	0.089	1	0.00	0.00	0.00	
1L	60	-0.690	0.148	-0.011	0.000	-0.007	-0.089	1	0.00	0.00	0.00	
1M	60	-0.687	-0.148	0.011	0.000	0.007	0.089	1	0.00	0.00	0.00	
1N	60	-0.687	0.148	0.011	0.000	0.007	-0.089	1	0.00	0.00	0.00	
1O	60	-0.687	-0.148	-0.011	0.000	-0.007	0.089	1	0.00	0.00	0.00	
1P	60	-0.687	0.148	-0.011	0.000	-0.007	-0.089	1	0.00	0.00	0.00	
2	60	-0.895	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	60	-0.895	-1.771	-0.000	0.000	0.000	0.531	1	0.00	0.00	0.00	

8	60	-0.895	0.956	0.000	0.000	0.000	-0.287	1	0.00	0.00	0.00
9	60	-0.895	2.098	-0.000	0.000	0.000	-0.629	1	0.00	0.00	0.00
10	60	-0.895	2.098	-0.000	0.000	0.000	-0.629	1	0.00	0.00	0.00
11	60	-0.895	-1.063	-0.000	0.000	0.000	0.319	1	0.00	0.00	0.00
12	60	-0.895	0.573	-0.000	0.000	0.000	-0.172	1	0.00	0.00	0.00
13	60	-0.895	1.259	-0.000	0.000	0.000	-0.377	1	0.00	0.00	0.00
14	60	-0.895	1.259	-0.000	0.000	-0.000	-0.377	1	0.00	0.00	0.00
1A	120	-0.002	-0.480	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1B	120	-0.002	0.480	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1C	120	-0.002	-0.480	-0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00
1D	120	-0.002	0.480	-0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00
1E	120	0.002	-0.480	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1F	120	0.002	0.480	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1G	120	0.002	-0.480	-0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00
1H	120	0.002	0.480	-0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00
1I	120	-0.001	-0.148	0.011	0.000	0.000	0.000	1	0.00	0.00	0.00
1J	120	-0.001	0.148	0.011	0.000	0.000	0.000	1	0.00	0.00	0.00
1K	120	-0.001	-0.148	-0.011	0.000	-0.000	0.000	1	0.00	0.00	0.00
1L	120	-0.001	0.148	-0.011	0.000	-0.000	0.000	1	0.00	0.00	0.00
1M	120	0.001	-0.148	0.011	0.000	0.000	0.000	--	0.00	0.00	0.00
1N	120	0.001	0.148	0.011	0.000	0.000	0.000	--	0.00	0.00	0.00
1O	120	0.001	-0.148	-0.011	0.000	-0.000	0.000	--	0.00	0.00	0.00
1P	120	0.001	0.148	-0.011	0.000	-0.000	0.000	--	0.00	0.00	0.00
2	120	-0.000	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
9	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	-0.000	0.000	-0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-101.432	-0.506	154.149	1	0.5967	1.0400	1.0111	--	--	0.04	--	0.36	Snell. 'zx'= 78
1B	-101.432	-0.506	-122.892	1	0.5967	1.0400	1.0164	--	--	0.04	--	0.30	Snell. 'zx'= 78
1C	-101.432	-0.196	154.149	1	0.5967	1.1861	1.0111	--	--	0.04	--	0.36	Snell. 'zx'= 78
1D	-101.432	-0.196	-122.892	1	0.5967	1.1861	1.0164	--	--	0.04	--	0.30	Snell. 'zx'= 78
1E	-51.628	-0.506	154.149	1	0.5967	1.0204	1.0057	--	--	0.02	--	0.34	Snell. 'zx'= 78
1F	-51.628	-0.506	-122.892	1	0.5967	1.0204	1.0083	--	--	0.02	--	0.28	Snell. 'zx'= 78
1G	-51.628	-0.196	154.149	1	0.5967	1.0947	1.0057	--	--	0.02	--	0.34	Snell. 'zx'= 78
1H	-51.628	-0.196	-122.892	1	0.5967	1.0947	1.0083	--	--	0.02	--	0.28	Snell. 'zx'= 78
1I	-88.163	-0.600	-63.313	1	0.5967	1.0255	1.0184	--	--	0.04	--	0.17	Snell. 'zx'= 78
1J	-88.163	-0.600	-63.811	1	0.5967	1.0255	1.0338	--	--	0.04	--	0.18	Snell. 'zx'= 78
1K	-88.163	-0.243	-63.313	1	0.5967	1.1433	1.0184	--	--	0.04	--	0.17	Snell. 'zx'= 78
1L	-88.163	-0.243	-63.811	1	0.5967	1.1433	1.0338	--	--	0.04	--	0.17	Snell. 'zx'= 78
1M	-64.897	-0.600	-63.313	1	0.5967	1.0188	1.0135	--	--	0.03	--	0.16	Snell. 'zx'= 78
1N	-64.897	-0.600	-63.811	1	0.5967	1.0188	1.0249	--	--	0.03	--	0.16	Snell. 'zx'= 78
1O	-64.897	-0.243	-63.313	1	0.5967	1.1055	1.0135	--	--	0.03	--	0.16	Snell. 'zx'= 78
1P	-64.897	-0.243	-63.811	1	0.5967	1.1055	1.0249	--	--	0.03	--	0.16	Snell. 'zx'= 78
2	-133.200	-0.585	-67.900	1	0.5967	1.0504	1.0317	--	--	0.06	--	0.20	Snell. 'zx'= 78
7	-79.980	-0.367	-40.650	1	0.5967	1.0529	1.0263	--	--	0.03	--	0.12	Snell. 'zx'= 78
8	-76.160	-0.373	-26.090	1	0.5967	1.0483	1.0684	--	--	0.03	--	0.09	Snell. 'zx'= 78
9	-94.860	0.799	-44.470	1	0.5967	1.0184	1.0370	--	--	0.04	--	0.14	Snell. 'zx'= 78
10	-80.780	0.435	-44.630	1	0.5967	1.0386	1.0314	--	--	0.03	--	0.13	Snell. 'zx'= 78
11	-121.500	-0.531	-62.780	1	0.5967	1.0520	1.0293	--	--	0.05	--	0.19	Snell. 'zx'= 78
12	-119.200	-0.535	-54.040	1	0.5967	1.0501	1.0389	--	--	0.05	--	0.17	Snell. 'zx'= 78
13	-130.400	-0.780	-65.070	1	0.5967	1.0286	1.0336	--	--	0.06	--	0.20	Snell. 'zx'= 78
14	-122.000	-0.337	-65.160	1	0.5967	1.0995	1.0314	--	--	0.05	--	0.19	Snell. 'zx'= 78

ASTA NUM. 6 NI 6 NF 57 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.63 -1.63 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-101.188	-36.510	0.218	0.000	0.403	109.771	1	0.05	0.03	0.22	
1B	0	-101.188	65.010	0.218	0.000	0.403	-152.191	1	0.09	0.03	0.31	
1C	0	-101.188	-36.510	0.046	0.000	0.003	109.771	1	0.05	0.03	0.22	
1D	0	-101.188	65.010	0.046	0.000	0.003	-152.191	1	0.09	0.03	0.31	
1E	0	-52.572	-36.510	0.218	0.000	0.403	109.771	1	0.05	0.01	0.22	
1F	0	-52.572	65.010	0.218	0.000	0.403	-152.191	1	0.09	0.01	0.31	
1G	0	-52.572	-36.510	0.046	0.000	0.003	109.771	1	0.05	0.01	0.22	
1H	0	-52.572	65.010	0.046	0.000	0.003	-152.191	1	0.09	0.01	0.31	
1I	0	-88.382	-1.040	0.295	0.000	0.612	18.329	1	0.00	0.02	0.04	
1J	0	-88.382	29.540	0.295	0.000	0.612	-60.749	1	0.04	0.02	0.12	
1K	0	-88.382	-1.040	-0.032	0.000	-0.206	18.329	1	0.00	0.02	0.04	
1L	0	-88.382	29.540	-0.032	0.000	-0.206	-60.749	1	0.04	0.02	0.12	
1M	0	-65.378	-1.040	0.295	0.000	0.612	18.329	1	0.00	0.02	0.04	
1N	0	-65.378	29.540	0.295	0.000	0.612	-60.749	1	0.04	0.02	0.12	
1O	0	-65.378	-1.040	-0.032	0.000	-0.206	18.329	1	0.00	0.02	0.04	
1P	0	-65.378	29.540	-0.032	0.000	-0.206	-60.749	1	0.04	0.02	0.12	
2	0	-133.800	25.580	0.220	0.000	0.340	-38.070	1	0.04	0.03	0.08	

7	0	-77.210	15.650	0.097	0.000	0.100	-17.810	1	0.02	0.02	0.04
8	0	-82.580	29.260	0.145	0.000	0.222	-47.260	1	0.04	0.02	0.10
9	0	-95.260	7.519	0.376	0.000	0.798	-16.980	1	0.01	0.02	0.03
10	0	-81.180	7.580	-0.067	0.000	-0.323	-17.070	1	0.01	0.02	0.03
11	0	-120.200	23.850	0.176	0.000	0.242	-32.210	1	0.03	0.03	0.07
12	0	-123.400	32.010	0.204	0.000	0.315	-49.880	1	0.04	0.03	0.10
13	0	-131.000	18.970	0.343	0.000	0.661	-31.710	1	0.03	0.03	0.06
14	0	-122.600	19.010	0.077	0.000	-0.012	-31.770	1	0.03	0.03	0.06
1A	210	-98.778	-36.510	0.218	0.000	-0.054	33.082	1	0.05	0.03	0.07
1B	210	-98.778	65.010	0.218	0.000	-0.054	-15.642	1	0.09	0.03	0.03
1C	210	-98.778	-36.510	0.046	0.000	-0.093	33.082	1	0.05	0.03	0.07
1D	210	-98.778	65.010	0.046	0.000	-0.093	-15.642	1	0.09	0.03	0.03
1E	210	-50.162	-36.510	0.218	0.000	-0.054	33.082	1	0.05	0.01	0.07
1F	210	-50.162	65.010	0.218	0.000	-0.054	-15.642	1	0.09	0.01	0.03
1G	210	-50.162	-36.510	0.046	0.000	-0.093	33.082	1	0.05	0.01	0.07
1H	210	-50.162	65.010	0.046	0.000	-0.093	-15.642	1	0.09	0.01	0.03
1I	210	-85.972	-1.040	0.295	0.000	-0.007	16.096	1	0.00	0.02	0.03
1J	210	-85.972	29.540	0.295	0.000	-0.007	1.344	1	0.04	0.02	0.00
1K	210	-85.972	-1.040	-0.032	0.000	-0.140	16.096	1	0.00	0.02	0.03
1L	210	-85.972	29.540	-0.032	0.000	-0.140	1.344	1	0.04	0.02	0.00
1M	210	-62.968	-1.040	0.295	0.000	-0.007	16.096	1	0.00	0.02	0.03
1N	210	-62.968	29.540	0.295	0.000	-0.007	1.344	1	0.04	0.02	0.00
1O	210	-62.968	-1.040	-0.032	0.000	-0.140	16.096	1	0.00	0.02	0.03
1P	210	-62.968	29.540	-0.032	0.000	-0.140	1.344	1	0.04	0.02	0.00
2	210	-130.700	25.580	0.220	0.000	-0.121	15.640	1	0.04	0.03	0.03
7	210	-74.075	12.303	0.097	0.000	-0.104	11.532	1	0.02	0.02	0.02
8	210	-79.445	23.060	0.145	0.000	-0.082	7.669	1	0.03	0.02	0.02
9	210	-92.125	14.860	0.376	0.000	0.009	6.520	1	0.02	0.02	0.01
10	210	-78.045	14.920	-0.067	0.000	-0.182	6.555	1	0.02	0.02	0.01
11	210	-117.050	21.840	0.176	0.000	-0.127	15.762	1	0.03	0.03	0.03
12	210	-120.300	28.290	0.204	0.000	-0.113	13.445	1	0.04	0.03	0.03
13	210	-127.900	23.375	0.343	0.000	-0.059	12.754	1	0.03	0.03	0.03
14	210	-119.450	23.415	0.077	0.000	-0.173	12.774	1	0.03	0.03	0.03
1A	420	-96.368	-36.510	0.218	0.000	-0.511	-43.606	1	0.05	0.02	0.09
1B	420	-96.368	65.010	0.218	0.000	-0.511	120.906	1	0.09	0.02	0.25
1C	420	-96.368	-36.510	0.046	0.000	-0.189	-43.606	1	0.05	0.02	0.09
1D	420	-96.368	65.010	0.046	0.000	-0.189	120.906	1	0.09	0.02	0.25
1E	420	-47.752	-36.510	0.218	0.000	-0.511	-43.606	1	0.05	0.01	0.09
1F	420	-47.752	65.010	0.218	0.000	-0.511	120.906	1	0.09	0.01	0.25
1G	420	-47.752	-36.510	0.046	0.000	-0.189	-43.606	1	0.05	0.01	0.09
1H	420	-47.752	65.010	0.046	0.000	-0.189	120.906	1	0.09	0.01	0.25
1I	420	-83.562	-1.040	0.295	0.000	-0.626	13.863	1	0.00	0.02	0.03
1J	420	-83.562	29.540	0.295	0.000	-0.626	63.437	1	0.04	0.02	0.13
1K	420	-83.562	-1.040	-0.032	0.000	-0.074	13.863	1	0.00	0.02	0.03
1L	420	-83.562	29.540	-0.032	0.000	-0.074	63.437	1	0.04	0.02	0.13
1M	420	-60.558	-1.040	0.295	0.000	-0.626	13.863	1	0.00	0.02	0.03
1N	420	-60.558	29.540	0.295	0.000	-0.626	63.437	1	0.04	0.02	0.13
1O	420	-60.558	-1.040	-0.032	0.000	-0.074	13.863	1	0.00	0.02	0.03
1P	420	-60.558	29.540	-0.032	0.000	-0.074	63.437	1	0.04	0.02	0.13
2	420	-127.600	25.580	0.220	0.000	-0.583	69.350	1	0.04	0.03	0.14
7	420	-70.940	8.956	0.097	0.000	-0.309	33.850	1	0.01	0.02	0.07
8	420	-76.310	16.860	0.145	0.000	-0.385	49.580	1	0.02	0.02	0.10
9	420	-88.990	22.200	0.376	0.000	-0.780	45.440	1	0.03	0.02	0.09
10	420	-74.910	22.260	-0.067	0.000	-0.042	45.600	1	0.03	0.02	0.09
11	420	-113.900	19.830	0.176	0.000	-0.495	59.520	1	0.03	0.03	0.12
12	420	-117.200	24.570	0.204	0.000	-0.541	68.960	1	0.03	0.03	0.14
13	420	-124.800	27.780	0.343	0.000	-0.778	66.470	1	0.04	0.03	0.14
14	420	-116.300	27.820	0.077	0.000	-0.335	66.570	1	0.04	0.03	0.14

ASTA NUM. 22 NI 57 NF 55 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.63 -1.63 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-95.067	-233.385	0.452	0.000	0.179	121.866	1	0.33	0.02	0.25	
1B	0	-95.067	88.545	0.452	0.000	0.179	-43.986	1	0.12	0.02	0.09	
1C	0	-95.067	-233.385	-0.094	0.000	-0.155	121.866	1	0.33	0.02	0.25	
1D	0	-95.067	88.545	-0.094	0.000	-0.155	-43.986	1	0.12	0.02	0.09	
1E	0	-46.753	-233.385	0.452	0.000	0.179	121.866	1	0.33	0.01	0.25	
1F	0	-46.753	88.545	0.452	0.000	0.179	-43.986	1	0.12	0.01	0.09	
1G	0	-46.753	-233.385	-0.094	0.000	-0.155	121.866	1	0.33	0.01	0.25	
1H	0	-46.753	88.545	-0.094	0.000	-0.155	-43.986	1	0.12	0.01	0.09	
1I	0	-78.573	-120.907	0.661	0.000	0.293	63.927	1	0.17	0.02	0.13	
1J	0	-78.573	-23.933	0.661	0.000	0.293	13.953	1	0.03	0.02	0.03	
1K	0	-78.573	-120.907	-0.303	0.000	-0.269	63.927	1	0.17	0.02	0.13	
1L	0	-78.573	-23.933	-0.303	0.000	-0.269	13.953	1	0.03	0.02	0.03	
1M	0	-63.247	-120.907	0.661	0.000	0.293	63.927	1	0.17	0.02	0.13	
1N	0	-63.247	-23.933	0.661	0.000	0.293	13.953	1	0.03	0.02	0.03	
1O	0	-63.247	-120.907	-0.303	0.000	-0.269	63.927	1	0.17	0.02	0.13	
1P	0	-63.247	-23.933	-0.303	0.000	-0.269	13.953	1	0.03	0.02	0.03	
2	0	-126.200	-130.000	0.035	0.000	-0.120	69.880	1	0.18	0.03	0.14	
7	0	-70.820	-64.950	0.423	0.000	0.167	34.130	1	0.09	0.02	0.07	
8	0	-75.110	-97.120	0.333	0.000	0.089	50.000	1	0.14	0.02	0.10	
9	0	-80.150	-81.180	-0.306	0.000	-0.312	45.750	1	0.11	0.02	0.09	
10	0	-80.580	-81.480	0.910	0.000	0.436	45.910	1	0.11	0.02	0.09	
11	0	-113.400	-112.500	0.148	0.000	-0.029	59.980	1	0.16	0.03	0.12	
12	0	-115.900	-131.800	0.095	0.000	-0.076	69.510	1	0.18	0.03	0.14	
13	0	-119.000	-122.200	-0.288	0.000	-0.317	66.960	1	0.17	0.03	0.14	
14	0	-119.200	-122.400	0.441	0.000	0.132	67.050	1	0.17	0.03	0.14	

1A	25	-94.777	-233.385	0.452	0.000	0.066	63.518	1	0.33	0.02	0.13
1B	25	-94.777	88.545	0.452	0.000	0.066	-21.850	1	0.12	0.02	0.04
1C	25	-94.777	-233.385	-0.094	0.000	-0.132	63.518	1	0.33	0.02	0.13
1D	25	-94.777	88.545	-0.094	0.000	-0.132	-21.850	1	0.12	0.02	0.04
1E	25	-46.463	-233.385	0.452	0.000	0.066	63.518	1	0.33	0.01	0.13
1F	25	-46.463	88.545	0.452	0.000	0.066	-21.850	1	0.12	0.01	0.04
1G	25	-46.463	-233.385	-0.094	0.000	-0.132	63.518	1	0.33	0.01	0.13
1H	25	-46.463	88.545	-0.094	0.000	-0.132	-21.850	1	0.12	0.01	0.04
1I	25	-78.283	-120.907	0.661	0.000	0.128	33.703	1	0.17	0.02	0.07
1J	25	-78.283	-23.933	0.661	0.000	0.128	7.965	1	0.03	0.02	0.02
1K	25	-78.283	-120.907	-0.303	0.000	-0.194	33.703	1	0.17	0.02	0.07
1L	25	-78.283	-23.933	-0.303	0.000	-0.194	7.965	1	0.03	0.02	0.02
1M	25	-62.957	-120.907	0.661	0.000	0.128	33.703	1	0.17	0.02	0.07
1N	25	-62.957	-23.933	0.661	0.000	0.128	7.965	1	0.03	0.02	0.02
1O	25	-62.957	-120.907	-0.303	0.000	-0.194	33.703	1	0.17	0.02	0.07
1P	25	-62.957	-23.933	-0.303	0.000	-0.194	7.965	1	0.03	0.02	0.02
2	25	-125.800	-130.000	0.035	0.000	-0.129	37.381	1	0.18	0.03	0.08
7	25	-70.445	-65.345	0.423	0.000	0.061	17.843	1	0.09	0.02	0.04
8	25	-74.735	-97.855	0.333	0.000	0.006	25.628	1	0.14	0.02	0.05
9	25	-79.775	-80.310	-0.306	0.000	-0.236	25.562	1	0.11	0.02	0.05
10	25	-80.210	-80.605	0.910	0.000	0.208	25.649	1	0.11	0.02	0.05
11	25	-113.000	-112.750	0.148	0.000	-0.066	31.833	1	0.16	0.03	0.07
12	25	-115.550	-132.250	0.095	0.000	-0.100	36.508	1	0.18	0.03	0.07
13	25	-118.600	-121.700	-0.288	0.000	-0.245	36.468	1	0.17	0.03	0.07
14	25	-118.850	-121.850	0.441	0.000	0.022	36.518	1	0.17	0.03	0.07
1A	50	-94.487	-233.385	0.452	0.000	-0.047	5.171	1	0.33	0.02	0.01
1B	50	-94.487	88.545	0.452	0.000	-0.047	0.285	1	0.12	0.02	0.00
1C	50	-94.487	-233.385	-0.094	0.000	-0.108	5.171	1	0.33	0.02	0.01
1D	50	-94.487	88.545	-0.094	0.000	-0.108	0.285	1	0.12	0.02	0.00
1E	50	-46.173	-233.385	0.452	0.000	-0.047	5.171	1	0.33	0.01	0.01
1F	50	-46.173	88.545	0.452	0.000	-0.047	0.285	1	0.12	0.01	0.00
1G	50	-46.173	-233.385	-0.094	0.000	-0.108	5.171	1	0.33	0.01	0.01
1H	50	-46.173	88.545	-0.094	0.000	-0.108	0.285	1	0.12	0.01	0.00
1I	50	-77.993	-120.907	0.661	0.000	-0.037	3.479	1	0.17	0.02	0.01
1J	50	-77.993	-23.933	0.661	0.000	-0.037	1.977	1	0.03	0.02	0.00
1K	50	-77.993	-120.907	-0.303	0.000	-0.118	3.479	1	0.17	0.02	0.01
1L	50	-77.993	-23.933	-0.303	0.000	-0.118	1.977	1	0.03	0.02	0.00
1M	50	-62.667	-120.907	0.661	0.000	-0.037	3.479	1	0.17	0.02	0.01
1N	50	-62.667	-23.933	0.661	0.000	-0.037	1.977	1	0.03	0.02	0.00
1O	50	-62.667	-120.907	-0.303	0.000	-0.118	3.479	1	0.17	0.02	0.01
1P	50	-62.667	-23.933	-0.303	0.000	-0.118	1.977	1	0.03	0.02	0.00
2	50	-125.400	-130.000	0.035	0.000	-0.138	4.881	1	0.18	0.03	0.01
7	50	-70.070	-65.740	0.423	0.000	-0.044	1.456	1	0.09	0.02	0.00
8	50	-74.360	-98.590	0.333	0.000	-0.077	1.071	1	0.14	0.02	0.00
9	50	-79.400	-79.440	-0.306	0.000	-0.159	5.593	1	0.11	0.02	0.01
10	50	-79.840	-79.730	0.910	0.000	-0.019	5.607	1	0.11	0.02	0.01
11	50	-112.600	-113.000	0.148	0.000	-0.104	3.626	1	0.16	0.03	0.01
12	50	-115.200	-132.700	0.095	0.000	-0.124	3.395	1	0.19	0.03	0.01
13	50	-118.200	-121.200	-0.288	0.000	-0.173	6.108	1	0.17	0.03	0.01
14	50	-118.500	-121.300	0.441	0.000	-0.089	6.117	1	0.17	0.03	0.01

ASTA NUM. 27 NI 55 NF 241 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.63 -1.63 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.379	-0.484	0.004	0.000	0.005	0.581	1	0.00	0.00	0.00	
1B	0	-1.379	0.484	0.004	0.000	0.005	-0.581	1	0.00	0.00	0.00	
1C	0	-1.379	-0.484	-0.004	0.000	-0.005	0.581	1	0.00	0.00	0.00	
1D	0	-1.379	0.484	-0.004	0.000	-0.005	-0.581	1	0.00	0.00	0.00	
1E	0	-1.375	-0.484	0.004	0.000	0.005	0.581	1	0.00	0.00	0.00	
1F	0	-1.375	0.484	0.004	0.000	0.005	-0.581	1	0.00	0.00	0.00	
1G	0	-1.375	-0.484	-0.004	0.000	-0.005	0.581	1	0.00	0.00	0.00	
1H	0	-1.375	0.484	-0.004	0.000	-0.005	-0.581	1	0.00	0.00	0.00	
1I	0	-1.378	-0.151	0.013	0.000	0.016	0.182	1	0.00	0.00	0.00	
1J	0	-1.378	0.151	0.013	0.000	0.016	-0.182	1	0.00	0.00	0.00	
1K	0	-1.378	-0.151	-0.013	0.000	-0.016	0.182	1	0.00	0.00	0.00	
1L	0	-1.378	0.151	-0.013	0.000	-0.016	-0.182	1	0.00	0.00	0.00	
1M	0	-1.376	-0.151	0.013	0.000	0.016	0.182	1	0.00	0.00	0.00	
1N	0	-1.376	0.151	0.013	0.000	0.016	-0.182	1	0.00	0.00	0.00	
1O	0	-1.376	-0.151	-0.013	0.000	-0.016	0.182	1	0.00	0.00	0.00	
1P	0	-1.376	0.151	-0.013	0.000	-0.016	-0.182	1	0.00	0.00	0.00	
2	0	-1.790	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	1.911	0.000	0.000	0.000	-1.147	1	0.00	0.00	0.00	
8	0	-1.790	3.542	0.000	0.000	0.000	-2.125	1	0.00	0.00	0.00	
9	0	-1.790	-4.196	-0.000	0.000	0.000	2.517	1	0.01	0.00	0.01	
10	0	-1.790	-4.196	-0.000	0.000	0.000	2.517	1	0.01	0.00	0.01	
11	0	-1.790	1.147	0.000	0.000	0.000	-0.688	1	0.00	0.00	0.00	
12	0	-1.790	2.125	0.000	0.000	0.000	-1.275	1	0.00	0.00	0.00	
13	0	-1.790	-2.517	-0.000	0.000	0.000	1.510	1	0.00	0.00	0.00	
14	0	-1.790	-2.517	-0.000	0.000	0.000	1.510	1	0.00	0.00	0.00	
1A	60	-0.690	-0.484	0.004	0.000	0.003	0.291	1	0.00	0.00	0.00	
1B	60	-0.690	0.484	0.004	0.000	0.003	-0.291	1	0.00	0.00	0.00	
1C	60	-0.690	-0.484	-0.004	0.000	-0.003	0.291	1	0.00	0.00	0.00	
1D	60	-0.690	0.484	-0.004	0.000	-0.003	-0.291	1	0.00	0.00	0.00	
1E	60	-0.687	-0.484	0.004	0.000	0.003	0.291	1	0.00	0.00	0.00	
1F	60	-0.687	0.484	0.004	0.000	0.003	-0.291	1	0.00	0.00	0.00	
1G	60	-0.687	-0.484	-0.004	0.000	-0.003	0.291	1	0.00	0.00	0.00	
1H	60	-0.687	0.484	-0.004	0.000	-0.003	-0.291	1	0.00	0.00	0.00	
1I	60	-0.690	-0.151	0.013	0.000	0.008	0.091	1	0.00	0.00	0.00	

1J	60	-0.690	0.151	0.013	0.000	0.008	-0.091	1	0.00	0.00	0.00
1K	60	-0.690	-0.151	-0.013	0.000	-0.008	0.091	1	0.00	0.00	0.00
1L	60	-0.690	0.151	-0.013	0.000	-0.008	-0.091	1	0.00	0.00	0.00
1M	60	-0.687	-0.151	0.013	0.000	0.008	0.091	1	0.00	0.00	0.00
1N	60	-0.687	0.151	0.013	0.000	0.008	-0.091	1	0.00	0.00	0.00
1O	60	-0.687	-0.151	-0.013	0.000	-0.008	0.091	1	0.00	0.00	0.00
1P	60	-0.687	0.151	-0.013	0.000	-0.008	-0.091	1	0.00	0.00	0.00
2	60	-0.895	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	60	-0.895	0.956	0.000	0.000	0.000	-0.287	1	0.00	0.00	0.00
8	60	-0.895	1.771	0.000	0.000	0.000	-0.531	1	0.00	0.00	0.00
9	60	-0.895	-2.098	-0.000	0.000	0.000	0.629	1	0.00	0.00	0.00
10	60	-0.895	-2.098	-0.000	0.000	0.000	0.629	1	0.00	0.00	0.00
11	60	-0.895	0.573	0.000	0.000	0.000	-0.172	1	0.00	0.00	0.00
12	60	-0.895	1.063	0.000	0.000	0.000	-0.319	1	0.00	0.00	0.00
13	60	-0.895	-1.259	-0.000	0.000	0.000	0.377	1	0.00	0.00	0.00
14	60	-0.895	-1.259	-0.000	0.000	0.000	0.377	1	0.00	0.00	0.00
1A	120	-0.002	-0.484	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1B	120	-0.002	0.484	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1C	120	-0.002	-0.484	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1D	120	-0.002	0.484	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1E	120	0.002	-0.484	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1F	120	0.002	0.484	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1G	120	0.002	-0.484	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1H	120	0.002	0.484	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1I	120	-0.001	-0.151	0.013	0.000	0.000	0.000	1	0.00	0.00	0.00
1J	120	-0.001	0.151	0.013	0.000	0.000	0.000	1	0.00	0.00	0.00
1K	120	-0.001	-0.151	-0.013	0.000	-0.000	0.000	1	0.00	0.00	0.00
1L	120	-0.001	0.151	-0.013	0.000	-0.000	0.000	1	0.00	0.00	0.00
1M	120	0.001	-0.151	0.013	0.000	0.000	0.000	--	0.00	0.00	0.00
1N	120	0.001	0.151	0.013	0.000	0.000	0.000	--	0.00	0.00	0.00
1O	120	0.001	-0.151	-0.013	0.000	-0.000	0.000	--	0.00	0.00	0.00
1P	120	0.001	0.151	-0.013	0.000	-0.000	0.000	--	0.00	0.00	0.00
2	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
9	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-101.188	-0.511	121.866	1	0.5967	1.0388	1.0165	--	--	0.04	--	0.30	Snell. 'zx'= 78
1B	-101.188	-0.511	-152.191	1	0.5967	1.0388	1.0111	--	--	0.04	--	0.36	Snell. 'zx'= 78
1C	-101.188	-0.189	121.866	1	0.5967	1.2099	1.0165	--	--	0.04	--	0.30	Snell. 'zx'= 78
1D	-101.188	-0.189	-152.191	1	0.5967	1.2099	1.0111	--	--	0.04	--	0.36	Snell. 'zx'= 78
1E	-52.572	-0.511	121.866	1	0.5967	1.0202	1.0086	--	--	0.02	--	0.28	Snell. 'zx'= 78
1F	-52.572	-0.511	-152.191	1	0.5967	1.0202	1.0058	--	--	0.02	--	0.34	Snell. 'zx'= 78
1G	-52.572	-0.189	121.866	1	0.5967	1.1090	1.0086	--	--	0.02	--	0.27	Snell. 'zx'= 78
1H	-52.572	-0.189	-152.191	1	0.5967	1.1090	1.0058	--	--	0.02	--	0.34	Snell. 'zx'= 78
1I	-88.382	-0.626	63.927	1	0.5967	1.0235	1.0334	--	--	0.04	--	0.18	Snell. 'zx'= 78
1J	-88.382	-0.626	63.437	1	0.5967	1.0235	1.0184	--	--	0.04	--	0.17	Snell. 'zx'= 78
1K	-88.382	-0.269	63.927	1	0.5967	1.1289	1.0334	--	--	0.04	--	0.17	Snell. 'zx'= 78
1L	-88.382	-0.269	63.437	1	0.5967	1.1289	1.0184	--	--	0.04	--	0.17	Snell. 'zx'= 78
1M	-65.378	-0.626	63.927	1	0.5967	1.0174	1.0247	--	--	0.03	--	0.16	Snell. 'zx'= 78
1N	-65.378	-0.626	63.437	1	0.5967	1.0174	1.0136	--	--	0.03	--	0.16	Snell. 'zx'= 78
1O	-65.378	-0.269	63.927	1	0.5967	1.0954	1.0247	--	--	0.03	--	0.16	Snell. 'zx'= 78
1P	-65.378	-0.269	63.437	1	0.5967	1.0954	1.0136	--	--	0.03	--	0.16	Snell. 'zx'= 78
2	-133.800	-0.583	69.880	1	0.5967	1.0507	1.0315	--	--	0.06	--	0.21	Snell. 'zx'= 78
7	-77.210	-0.309	34.130	1	0.5967	1.0616	1.0355	--	--	0.03	--	0.11	Snell. 'zx'= 78
8	-82.580	-0.385	50.000	1	0.5967	1.0504	1.0213	--	--	0.04	--	0.14	Snell. 'zx'= 78
9	-95.260	0.798	45.750	1	0.5967	1.0185	1.0367	--	--	0.04	--	0.14	Snell. 'zx'= 78
10	-81.180	0.436	45.910	1	0.5967	1.0386	1.0311	--	--	0.03	--	0.13	Snell. 'zx'= 78
11	-120.200	-0.495	59.980	1	0.5967	1.0590	1.0325	--	--	0.05	--	0.18	Snell. 'zx'= 78
12	-123.400	-0.541	69.510	1	0.5967	1.0510	1.0266	--	--	0.05	--	0.20	Snell. 'zx'= 78
13	-131.000	-0.778	66.960	1	0.5967	1.0287	1.0334	--	--	0.06	--	0.20	Snell. 'zx'= 78
14	-122.600	-0.335	67.050	1	0.5967	1.0997	1.0312	--	--	0.05	--	0.20	Snell. 'zx'= 78

ASTA NUM. 7 NI 8 NF 71 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 3.76 3.76 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-96.048	-65.358	-0.083	0.000	-0.067	153.503	1	0.09	0.02	0.31	
1B	0	-96.048	37.498	-0.083	0.000	-0.067	-109.923	1	0.05	0.02	0.22	
1C	0	-96.048	-65.358	-0.161	0.000	-0.301	153.503	1	0.09	0.02	0.31	
1D	0	-96.048	37.498	-0.161	0.000	-0.301	-109.923	1	0.05	0.02	0.22	
1E	0	-49.813	-65.358	-0.083	0.000	-0.067	153.503	1	0.09	0.01	0.31	
1F	0	-49.813	37.498	-0.083	0.000	-0.067	-109.923	1	0.05	0.01	0.22	
1G	0	-49.813	-65.358	-0.161	0.000	-0.301	153.503	1	0.09	0.01	0.31	
1H	0	-49.813	37.498	-0.161	0.000	-0.301	-109.923	1	0.05	0.01	0.22	

1I	0	-84.165	-29.656	0.005	0.000	0.143	61.950	1	0.04	0.02	0.13
1J	0	-84.165	1.796	0.005	0.000	0.143	-18.370	1	0.00	0.02	0.04
1K	0	-84.165	-29.656	-0.249	0.000	-0.511	61.950	1	0.04	0.02	0.13
1L	0	-84.165	1.796	-0.249	0.000	-0.511	-18.370	1	0.00	0.02	0.04
1M	0	-61.695	-29.656	0.005	0.000	0.143	61.950	1	0.04	0.02	0.13
1N	0	-61.695	1.796	0.005	0.000	0.143	-18.370	1	0.00	0.02	0.04
1O	0	-61.695	-29.656	-0.249	0.000	-0.511	61.950	1	0.04	0.02	0.13
1P	0	-61.695	1.796	-0.249	0.000	-0.511	-18.370	1	0.00	0.02	0.04
2	0	-126.700	-24.980	-0.203	0.000	-0.307	39.100	1	0.03	0.03	0.08
7	0	-76.900	-23.760	-0.142	0.000	-0.223	34.330	1	0.03	0.02	0.07
8	0	-72.620	-2.278	-0.130	0.000	-0.196	-1.480	1	0.00	0.02	0.00
9	0	-76.810	-7.217	0.069	0.000	0.331	17.760	1	0.01	0.02	0.04
10	0	-90.720	-7.155	-0.356	0.000	-0.762	17.670	1	0.01	0.02	0.04
11	0	-116.000	-28.380	-0.193	0.000	-0.297	42.700	1	0.04	0.03	0.09
12	0	-113.400	-15.490	-0.186	0.000	-0.281	21.210	1	0.02	0.03	0.04
13	0	-115.900	-18.450	-0.067	0.000	0.035	32.760	1	0.03	0.03	0.07
14	0	-124.300	-18.410	-0.322	0.000	-0.621	32.700	1	0.03	0.03	0.07
1A	210	-93.638	-65.358	-0.083	0.000	0.088	16.267	1	0.09	0.02	0.03
1B	210	-93.638	37.498	-0.083	0.000	0.088	-31.177	1	0.05	0.02	0.06
1C	210	-93.638	-65.358	-0.161	0.000	0.057	16.267	1	0.09	0.02	0.03
1D	210	-93.638	37.498	-0.161	0.000	0.057	-31.177	1	0.05	0.02	0.06
1E	210	-47.403	-65.358	-0.083	0.000	0.088	16.267	1	0.09	0.01	0.03
1F	210	-47.403	37.498	-0.083	0.000	0.088	-31.177	1	0.05	0.01	0.06
1G	210	-47.403	-65.358	-0.161	0.000	0.057	16.267	1	0.09	0.01	0.03
1H	210	-47.403	37.498	-0.161	0.000	0.057	-31.177	1	0.05	0.01	0.06
1I	210	-81.755	-29.656	0.005	0.000	0.127	-0.318	1	0.04	0.02	0.00
1J	210	-81.755	1.796	0.005	0.000	0.127	-14.592	1	0.00	0.02	0.03
1K	210	-81.755	-29.656	-0.249	0.000	0.018	-0.318	1	0.04	0.02	0.00
1L	210	-81.755	1.796	-0.249	0.000	0.018	-14.592	1	0.00	0.02	0.03
1M	210	-59.285	-29.656	0.005	0.000	0.127	-0.318	1	0.04	0.02	0.00
1N	210	-59.285	1.796	0.005	0.000	0.127	-14.592	1	0.00	0.02	0.03
1O	210	-59.285	-29.656	-0.249	0.000	0.018	-0.318	1	0.04	0.02	0.00
1P	210	-59.285	1.796	-0.249	0.000	0.018	-14.592	1	0.00	0.02	0.03
2	210	-123.600	-24.980	-0.203	0.000	0.120	-13.365	1	0.03	0.03	0.03
7	210	-73.770	-17.560	-0.142	0.000	0.076	-9.059	1	0.02	0.02	0.02
8	210	-69.485	-5.623	-0.130	0.000	0.078	-9.778	1	0.01	0.02	0.02
9	210	-73.680	-14.559	0.069	0.000	0.186	-5.100	1	0.02	0.02	0.01
10	210	-87.590	-14.498	-0.356	0.000	-0.015	-5.065	1	0.02	0.02	0.01
11	210	-112.850	-24.660	-0.193	0.000	0.109	-12.985	1	0.03	0.03	0.03
12	210	-110.250	-17.495	-0.186	0.000	0.110	-13.418	1	0.02	0.03	0.03
13	210	-112.800	-22.855	-0.067	0.000	0.175	-10.614	1	0.03	0.03	0.02
14	210	-121.150	-22.815	-0.322	0.000	0.054	-10.594	1	0.03	0.03	0.02
1A	420	-91.228	-65.358	-0.083	0.000	0.244	-120.970	1	0.09	0.02	0.25
1B	420	-91.228	37.498	-0.083	0.000	0.244	47.570	1	0.05	0.02	0.10
1C	420	-91.228	-65.358	-0.161	0.000	0.415	-120.970	1	0.09	0.02	0.25
1D	420	-91.228	37.498	-0.161	0.000	0.415	47.570	1	0.05	0.02	0.10
1E	420	-44.993	-65.358	-0.083	0.000	0.244	-120.970	1	0.09	0.01	0.25
1F	420	-44.993	37.498	-0.083	0.000	0.244	47.570	1	0.05	0.01	0.10
1G	420	-44.993	-65.358	-0.161	0.000	0.415	-120.970	1	0.09	0.01	0.25
1H	420	-44.993	37.498	-0.161	0.000	0.415	47.570	1	0.05	0.01	0.10
1I	420	-79.345	-29.656	0.005	0.000	0.112	-62.587	1	0.04	0.02	0.13
1J	420	-79.345	1.796	0.005	0.000	0.112	-10.813	1	0.00	0.02	0.02
1K	420	-79.345	-29.656	-0.249	0.000	0.547	-62.587	1	0.04	0.02	0.13
1L	420	-79.345	1.796	-0.249	0.000	0.547	-10.813	1	0.00	0.02	0.02
1M	420	-56.875	-29.656	0.005	0.000	0.112	-62.587	1	0.04	0.01	0.13
1N	420	-56.875	1.796	0.005	0.000	0.112	-10.813	1	0.00	0.01	0.02
1O	420	-56.875	-29.656	-0.249	0.000	0.547	-62.587	1	0.04	0.01	0.13
1P	420	-56.875	1.796	-0.249	0.000	0.547	-10.813	1	0.00	0.01	0.02
2	420	-120.500	-24.980	-0.203	0.000	0.547	-65.830	1	0.03	0.03	0.13
7	420	-70.640	-11.360	-0.142	0.000	0.375	-39.430	1	0.02	0.02	0.08
8	420	-66.350	-8.968	-0.130	0.000	0.352	-25.100	1	0.01	0.02	0.05
9	420	-70.550	-21.900	0.069	0.000	0.041	-43.380	1	0.03	0.02	0.09
10	420	-84.460	-21.840	-0.356	0.000	0.733	-43.220	1	0.03	0.02	0.09
11	420	-109.700	-20.940	-0.193	0.000	0.515	-60.860	1	0.03	0.03	0.12
12	420	-107.100	-19.500	-0.186	0.000	0.501	-52.260	1	0.03	0.03	0.11
13	420	-109.700	-27.260	-0.067	0.000	0.315	-63.240	1	0.04	0.03	0.13
14	420	-118.000	-27.220	-0.322	0.000	0.730	-63.140	1	0.04	0.03	0.13

ASTA NUM. 16 NI 71 NF 69 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 3.76 3.76 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-101.940	-96.231	0.264	0.000	0.091	48.024	1	0.13	0.03	0.10	
1B	0	-101.940	233.751	0.264	0.000	0.091	-122.044	1	0.33	0.03	0.25	
1C	0	-101.940	-96.231	-0.093	0.000	-0.091	48.024	1	0.13	0.03	0.10	
1D	0	-101.940	233.751	-0.093	0.000	-0.091	-122.044	1	0.33	0.03	0.25	
1E	0	-50.820	-96.231	0.264	0.000	0.091	48.024	1	0.13	0.01	0.10	
1F	0	-50.820	233.751	0.264	0.000	0.091	-122.044	1	0.33	0.01	0.25	
1G	0	-50.820	-96.231	-0.093	0.000	-0.091	48.024	1	0.13	0.01	0.10	
1H	0	-50.820	233.751	-0.093	0.000	-0.091	-122.044	1	0.33	0.01	0.25	
1I	0	-84.230	18.078	0.471	0.000	0.222	-10.882	1	0.03	0.02	0.02	
1J	0	-84.230	119.442	0.471	0.000	0.222	-63.138	1	0.17	0.02	0.13	
1K	0	-84.230	18.078	-0.300	0.000	-0.221	-10.882	1	0.03	0.02	0.02	
1L	0	-84.230	119.442	-0.300	0.000	-0.221	-63.138	1	0.17	0.02	0.13	
1M	0	-68.530	18.078	0.471	0.000	0.222	-10.882	1	0.03	0.02	0.02	
1N	0	-68.530	119.442	0.471	0.000	0.222	-63.138	1	0.17	0.02	0.13	
1O	0	-68.530	18.078	-0.300	0.000	-0.221	-10.882	1	0.03	0.02	0.02	
1P	0	-68.530	119.442	-0.300	0.000	-0.221	-63.138	1	0.17	0.02	0.13	
2	0	-135.400	123.400	0.402	0.000	0.127	-66.400	1	0.17	0.03	0.14	

7	0	-78.690	77.520	-0.028	0.000	-0.057	-39.810	1	0.11	0.02	0.08
8	0	-74.170	44.290	-0.070	0.000	-0.081	-25.280	1	0.06	0.02	0.05
9	0	-87.910	77.300	-0.537	0.000	-0.394	-43.710	1	0.11	0.02	0.09
10	0	-85.710	77.000	0.559	0.000	0.308	-43.550	1	0.11	0.02	0.09
11	0	-123.000	116.300	0.318	0.000	0.092	-61.410	1	0.16	0.03	0.13
12	0	-120.300	96.320	0.293	0.000	0.078	-52.700	1	0.13	0.03	0.11
13	0	-128.600	116.100	0.012	0.000	-0.110	-63.750	1	0.16	0.03	0.13
14	0	-127.200	116.000	0.670	0.000	0.311	-63.660	1	0.16	0.03	0.13
1A	25	-101.655	-96.231	0.264	0.000	0.033	23.964	1	0.13	0.03	0.05
1B	25	-101.655	233.751	0.264	0.000	0.033	-63.606	1	0.33	0.03	0.13
1C	25	-101.655	-96.231	-0.093	0.000	-0.075	23.964	1	0.13	0.03	0.05
1D	25	-101.655	233.751	-0.093	0.000	-0.075	-63.606	1	0.33	0.03	0.13
1E	25	-50.535	-96.231	0.264	0.000	0.033	23.964	1	0.13	0.01	0.05
1F	25	-50.535	233.751	0.264	0.000	0.033	-63.606	1	0.33	0.01	0.13
1G	25	-50.535	-96.231	-0.093	0.000	-0.075	23.964	1	0.13	0.01	0.05
1H	25	-50.535	233.751	-0.093	0.000	-0.075	-63.606	1	0.33	0.01	0.13
1I	25	-83.945	18.078	0.471	0.000	0.107	-6.364	1	0.03	0.02	0.01
1J	25	-83.945	119.442	0.471	0.000	0.107	-33.278	1	0.17	0.02	0.07
1K	25	-83.945	18.078	-0.300	0.000	-0.149	-6.364	1	0.03	0.02	0.01
1L	25	-83.945	119.442	-0.300	0.000	-0.149	-33.278	1	0.17	0.02	0.07
1M	25	-68.245	18.078	0.471	0.000	0.107	-6.364	1	0.03	0.02	0.01
1N	25	-68.245	119.442	0.471	0.000	0.107	-33.278	1	0.17	0.02	0.07
1O	25	-68.245	18.078	-0.300	0.000	-0.149	-6.364	1	0.03	0.02	0.01
1P	25	-68.245	119.442	-0.300	0.000	-0.149	-33.278	1	0.17	0.02	0.07
2	25	-135.000	123.400	0.402	0.000	0.026	-35.553	1	0.17	0.03	0.07
7	25	-78.315	78.260	-0.028	0.000	-0.050	-20.337	1	0.11	0.02	0.04
8	25	-73.800	43.890	-0.070	0.000	-0.064	-14.261	1	0.06	0.02	0.03
9	25	-87.535	76.430	-0.537	0.000	-0.260	-24.494	1	0.11	0.02	0.05
10	25	-85.335	76.130	0.559	0.000	0.168	-24.407	1	0.11	0.02	0.05
11	25	-122.650	116.700	0.318	0.000	0.013	-32.291	1	0.16	0.03	0.07
12	25	-119.950	96.080	0.293	0.000	0.005	-28.649	1	0.13	0.03	0.06
13	25	-128.200	115.600	0.012	0.000	-0.113	-34.785	1	0.16	0.03	0.07
14	25	-126.850	115.450	0.670	0.000	0.144	-34.736	1	0.16	0.03	0.07
1A	50	-101.370	-96.231	0.264	0.000	-0.025	-0.096	1	0.13	0.03	0.00
1B	50	-101.370	233.751	0.264	0.000	-0.025	-5.168	1	0.33	0.03	0.01
1C	50	-101.370	-96.231	-0.093	0.000	-0.060	-0.096	1	0.13	0.03	0.00
1D	50	-101.370	233.751	-0.093	0.000	-0.060	-5.168	1	0.33	0.03	0.01
1E	50	-50.250	-96.231	0.264	0.000	-0.025	-0.096	1	0.13	0.01	0.00
1F	50	-50.250	233.751	0.264	0.000	-0.025	-5.168	1	0.33	0.01	0.01
1G	50	-50.250	-96.231	-0.093	0.000	-0.060	-0.096	1	0.13	0.01	0.00
1H	50	-50.250	233.751	-0.093	0.000	-0.060	-5.168	1	0.33	0.01	0.01
1I	50	-83.660	18.078	0.471	0.000	-0.009	-1.846	1	0.03	0.02	0.00
1J	50	-83.660	119.442	0.471	0.000	-0.009	-3.418	1	0.17	0.02	0.01
1K	50	-83.660	18.078	-0.300	0.000	-0.076	-1.846	1	0.03	0.02	0.00
1L	50	-83.660	119.442	-0.300	0.000	-0.076	-3.418	1	0.17	0.02	0.01
1M	50	-67.960	18.078	0.471	0.000	-0.009	-1.846	1	0.03	0.02	0.00
1N	50	-67.960	119.442	0.471	0.000	-0.009	-3.418	1	0.17	0.02	0.01
1O	50	-67.960	18.078	-0.300	0.000	-0.076	-1.846	1	0.03	0.02	0.00
1P	50	-67.960	119.442	-0.300	0.000	-0.076	-3.418	1	0.17	0.02	0.01
2	50	-134.600	123.400	0.402	0.000	-0.074	-4.705	1	0.17	0.03	0.01
7	50	-77.940	79.000	-0.028	0.000	-0.043	-0.680	1	0.11	0.02	0.00
8	50	-73.430	43.490	-0.070	0.000	-0.046	-3.342	1	0.06	0.02	0.01
9	50	-87.160	75.560	-0.537	0.000	-0.125	-5.497	1	0.11	0.02	0.01
10	50	-84.960	75.260	0.559	0.000	0.029	-5.483	1	0.11	0.02	0.01
11	50	-122.300	117.100	0.318	0.000	-0.067	-3.061	1	0.16	0.03	0.01
12	50	-119.600	95.840	0.293	0.000	-0.069	-4.658	1	0.13	0.03	0.01
13	50	-127.800	115.100	0.012	0.000	-0.116	-5.951	1	0.16	0.03	0.01
14	50	-126.500	114.900	0.670	0.000	-0.024	-5.943	1	0.16	0.03	0.01

ASTA NUM. 33 NI 69 NF 242 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 3.76 3.76 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.378	-0.479	0.004	0.000	0.005	0.575	1	0.00	0.00	0.00	
1B	0	-1.378	0.479	0.004	0.000	0.005	-0.575	1	0.00	0.00	0.00	
1C	0	-1.378	-0.479	-0.004	0.000	-0.005	0.575	1	0.00	0.00	0.00	
1D	0	-1.378	0.479	-0.004	0.000	-0.005	-0.575	1	0.00	0.00	0.00	
1E	0	-1.376	-0.479	0.004	0.000	0.005	0.575	1	0.00	0.00	0.00	
1F	0	-1.376	0.479	0.004	0.000	0.005	-0.575	1	0.00	0.00	0.00	
1G	0	-1.376	-0.479	-0.004	0.000	-0.005	0.575	1	0.00	0.00	0.00	
1H	0	-1.376	0.479	-0.004	0.000	-0.005	-0.575	1	0.00	0.00	0.00	
1I	0	-1.378	-0.149	0.011	0.000	0.013	0.178	1	0.00	0.00	0.00	
1J	0	-1.378	0.149	0.011	0.000	0.013	-0.178	1	0.00	0.00	0.00	
1K	0	-1.378	-0.149	-0.011	0.000	-0.013	0.178	1	0.00	0.00	0.00	
1L	0	-1.378	0.149	-0.011	0.000	-0.013	-0.178	1	0.00	0.00	0.00	
1M	0	-1.376	-0.149	0.011	0.000	0.013	0.178	1	0.00	0.00	0.00	
1N	0	-1.376	0.149	0.011	0.000	0.013	-0.178	1	0.00	0.00	0.00	
1O	0	-1.376	-0.149	-0.011	0.000	-0.013	0.178	1	0.00	0.00	0.00	
1P	0	-1.376	0.149	-0.011	0.000	-0.013	-0.178	1	0.00	0.00	0.00	
2	0	-1.790	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	-3.542	-0.000	0.000	0.000	2.125	1	0.00	0.00	0.00	
8	0	-1.790	1.911	0.000	0.000	0.000	-1.147	1	0.00	0.00	0.00	
9	0	-1.790	4.196	-0.000	0.000	0.000	-2.517	1	0.01	0.00	0.01	
10	0	-1.790	4.196	-0.000	0.000	0.000	-2.517	1	0.01	0.00	0.01	
11	0	-1.790	-2.125	-0.000	0.000	0.000	1.275	1	0.00	0.00	0.00	
12	0	-1.790	1.147	0.000	0.000	0.000	-0.688	1	0.00	0.00	0.00	
13	0	-1.790	2.517	-0.000	0.000	0.000	-1.510	1	0.00	0.00	0.00	
14	0	-1.790	2.517	-0.000	0.000	0.000	-1.510	1	0.00	0.00	0.00	

1A	60	-0.690	-0.479	0.004	0.000	0.002	0.288	1	0.00	0.00	0.00
1B	60	-0.690	0.479	0.004	0.000	0.002	-0.288	1	0.00	0.00	0.00
1C	60	-0.690	-0.479	-0.004	0.000	-0.002	0.288	1	0.00	0.00	0.00
1D	60	-0.690	0.479	-0.004	0.000	-0.002	-0.288	1	0.00	0.00	0.00
1E	60	-0.687	-0.479	0.004	0.000	0.002	0.288	1	0.00	0.00	0.00
1F	60	-0.687	0.479	0.004	0.000	0.002	-0.288	1	0.00	0.00	0.00
1G	60	-0.687	-0.479	-0.004	0.000	-0.002	0.288	1	0.00	0.00	0.00
1H	60	-0.687	0.479	-0.004	0.000	-0.002	-0.288	1	0.00	0.00	0.00
1I	60	-0.690	-0.149	0.011	0.000	0.007	0.089	1	0.00	0.00	0.00
1J	60	-0.690	0.149	0.011	0.000	0.007	-0.089	1	0.00	0.00	0.00
1K	60	-0.690	-0.149	-0.011	0.000	-0.007	0.089	1	0.00	0.00	0.00
1L	60	-0.690	0.149	-0.011	0.000	-0.007	-0.089	1	0.00	0.00	0.00
1M	60	-0.687	-0.149	0.011	0.000	0.007	0.089	1	0.00	0.00	0.00
1N	60	-0.687	0.149	0.011	0.000	0.007	-0.089	1	0.00	0.00	0.00
1O	60	-0.687	-0.149	-0.011	0.000	-0.007	0.089	1	0.00	0.00	0.00
1P	60	-0.687	0.149	-0.011	0.000	-0.007	-0.089	1	0.00	0.00	0.00
2	60	-0.895	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	60	-0.895	-1.771	-0.000	0.000	0.000	0.531	1	0.00	0.00	0.00
8	60	-0.895	0.956	0.000	0.000	0.000	-0.287	1	0.00	0.00	0.00
9	60	-0.895	2.098	-0.000	0.000	0.000	-0.629	1	0.00	0.00	0.00
10	60	-0.895	2.098	-0.000	0.000	0.000	-0.629	1	0.00	0.00	0.00
11	60	-0.895	-1.063	-0.000	0.000	0.000	0.319	1	0.00	0.00	0.00
12	60	-0.895	0.573	0.000	0.000	0.000	-0.172	1	0.00	0.00	0.00
13	60	-0.895	1.259	-0.000	0.000	0.000	-0.377	1	0.00	0.00	0.00
14	60	-0.895	1.259	-0.000	0.000	0.000	-0.377	1	0.00	0.00	0.00
1A	120	-0.001	-0.479	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1B	120	-0.001	0.479	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1C	120	-0.001	-0.479	-0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00
1D	120	-0.001	0.479	-0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00
1E	120	0.001	-0.479	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1F	120	0.001	0.479	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1G	120	0.001	-0.479	-0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00
1H	120	0.001	0.479	-0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00
1I	120	-0.001	-0.149	0.011	0.000	0.000	0.000	1	0.00	0.00	0.00
1J	120	-0.001	0.149	0.011	0.000	0.000	0.000	1	0.00	0.00	0.00
1K	120	-0.001	-0.149	-0.011	0.000	-0.000	0.000	1	0.00	0.00	0.00
1L	120	-0.001	0.149	-0.011	0.000	-0.000	0.000	1	0.00	0.00	0.00
1M	120	0.001	-0.149	0.011	0.000	0.000	0.000	--	0.00	0.00	0.00
1N	120	0.001	0.149	0.011	0.000	0.000	0.000	--	0.00	0.00	0.00
1O	120	0.001	-0.149	-0.011	0.000	-0.000	0.000	--	0.00	0.00	0.00
1P	120	0.001	0.149	-0.011	0.000	-0.000	0.000	--	0.00	0.00	0.00
2	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
9	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-101.940	0.244	153.503	1	0.5967	1.1232	1.0112	--	--	0.04	--	0.36	Snell. 'zx'= 78
1B	-101.940	0.244	-122.044	1	0.5967	1.1232	1.0164	--	--	0.04	--	0.30	Snell. 'zx'= 78
1C	-101.940	0.415	153.503	1	0.5967	1.0497	1.0112	--	--	0.04	--	0.36	Snell. 'zx'= 78
1D	-101.940	0.415	-122.044	1	0.5967	1.0497	1.0164	--	--	0.04	--	0.30	Snell. 'zx'= 78
1E	-50.820	0.244	153.503	1	0.5967	1.0614	1.0056	--	--	0.02	--	0.34	Snell. 'zx'= 78
1F	-50.820	0.244	-122.044	1	0.5967	1.0614	1.0082	--	--	0.02	--	0.27	Snell. 'zx'= 78
1G	-50.820	0.415	153.503	1	0.5967	1.0248	1.0056	--	--	0.02	--	0.34	Snell. 'zx'= 78
1H	-50.820	0.415	-122.044	1	0.5967	1.0248	1.0082	--	--	0.02	--	0.28	Snell. 'zx'= 78
1I	-84.230	0.222	-62.587	1	0.5967	1.1389	1.0176	--	--	0.04	--	0.17	Snell. 'zx'= 78
1J	-84.230	0.222	-63.138	1	0.5967	1.1389	1.0325	--	--	0.04	--	0.17	Snell. 'zx'= 78
1K	-84.230	0.547	-62.587	1	0.5967	1.0260	1.0176	--	--	0.04	--	0.17	Snell. 'zx'= 78
1L	-84.230	0.547	-63.138	1	0.5967	1.0260	1.0325	--	--	0.04	--	0.17	Snell. 'zx'= 78
1M	-68.530	0.222	-62.587	1	0.5967	1.1130	1.0143	--	--	0.03	--	0.16	Snell. 'zx'= 78
1N	-68.530	0.222	-63.138	1	0.5967	1.1130	1.0264	--	--	0.03	--	0.16	Snell. 'zx'= 78
1O	-68.530	0.547	-62.587	1	0.5967	1.0211	1.0143	--	--	0.03	--	0.16	Snell. 'zx'= 78
1P	-68.530	0.547	-63.138	1	0.5967	1.0211	1.0264	--	--	0.03	--	0.16	Snell. 'zx'= 78
2	-135.400	0.547	-66.400	1	0.5967	1.0539	1.0328	--	--	0.06	--	0.20	Snell. 'zx'= 78
7	-78.690	0.375	-39.810	1	0.5967	1.0470	1.0262	--	--	0.03	--	0.12	Snell. 'zx'= 78
8	-74.170	0.352	-25.280	1	0.5967	1.0488	1.0684	--	--	0.03	--	0.09	Snell. 'zx'= 78
9	-87.910	-0.394	-43.710	1	0.5967	1.0422	1.0348	--	--	0.04	--	0.13	Snell. 'zx'= 78
10	-90.720	-0.762	-43.550	1	0.5967	1.0180	1.0360	--	--	0.04	--	0.13	Snell. 'zx'= 78
11	-123.000	0.515	-61.410	1	0.5967	1.0519	1.0301	--	--	0.05	--	0.18	Snell. 'zx'= 78
12	-120.300	0.501	-52.700	1	0.5967	1.0530	1.0401	--	--	0.05	--	0.17	Snell. 'zx'= 78
13	-128.600	0.315	-63.750	1	0.5967	1.1098	1.0337	--	--	0.06	--	0.19	Snell. 'zx'= 78
14	-127.200	0.730	-63.660	1	0.5967	1.0289	1.0334	--	--	0.05	--	0.19	Snell. 'zx'= 78

ASTA NUM. 8 NI 7 NF 72 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.63 -1.63 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							

1A	0	-95.716	-36.771	-0.078	0.000	-0.051	110.078	1	0.05	0.02	0.22
1B	0	-95.716	64.591	-0.078	0.000	-0.051	-151.478	1	0.09	0.02	0.31
1C	0	-95.716	-36.771	-0.168	0.000	-0.321	110.078	1	0.05	0.02	0.22
1D	0	-95.716	64.591	-0.168	0.000	-0.321	-151.478	1	0.09	0.02	0.31
1E	0	-50.884	-36.771	-0.078	0.000	-0.051	110.078	1	0.05	0.01	0.22
1F	0	-50.884	64.591	-0.078	0.000	-0.051	-151.478	1	0.09	0.01	0.31
1G	0	-50.884	-36.771	-0.168	0.000	-0.321	110.078	1	0.05	0.01	0.22
1H	0	-50.884	64.591	-0.168	0.000	-0.321	-151.478	1	0.09	0.01	0.31
1I	0	-84.018	-1.329	0.022	0.000	0.195	18.770	1	0.00	0.02	0.04
1J	0	-84.018	29.149	0.022	0.000	0.195	-60.170	1	0.04	0.02	0.12
1K	0	-84.018	-1.329	-0.268	0.000	-0.566	18.770	1	0.00	0.02	0.04
1L	0	-84.018	29.149	-0.268	0.000	-0.566	-60.170	1	0.04	0.02	0.12
1M	0	-62.582	-1.329	0.022	0.000	0.195	18.770	1	0.00	0.02	0.04
1N	0	-62.582	29.149	0.022	0.000	0.195	-60.170	1	0.04	0.02	0.12
1O	0	-62.582	-1.329	-0.268	0.000	-0.566	18.770	1	0.00	0.02	0.04
1P	0	-62.582	29.149	-0.268	0.000	-0.566	-60.170	1	0.04	0.02	0.12
2	0	-127.400	24.960	-0.205	0.000	-0.310	-37.130	1	0.03	0.03	0.08
7	0	-76.290	15.470	-0.147	0.000	-0.267	-17.550	1	0.02	0.02	0.04
8	0	-78.940	28.920	-0.137	0.000	-0.206	-46.750	1	0.04	0.02	0.10
9	0	-77.230	7.203	0.068	0.000	0.329	-16.500	1	0.01	0.02	0.03
10	0	-91.140	7.141	-0.357	0.000	-0.765	-16.400	1	0.01	0.02	0.03
11	0	-116.000	23.390	-0.197	0.000	-0.326	-31.520	1	0.03	0.03	0.06
12	0	-117.600	31.460	-0.191	0.000	-0.289	-49.040	1	0.04	0.03	0.10
13	0	-116.500	18.430	-0.068	0.000	0.032	-30.890	1	0.03	0.03	0.06
14	0	-124.900	18.390	-0.323	0.000	-0.624	-30.830	1	0.03	0.03	0.06
1A	210	-93.306	-36.771	-0.078	0.000	0.095	32.853	1	0.05	0.02	0.07
1B	210	-93.306	64.591	-0.078	0.000	0.095	-15.813	1	0.09	0.02	0.03
1C	210	-93.306	-36.771	-0.168	0.000	0.051	32.853	1	0.05	0.02	0.07
1D	210	-93.306	64.591	-0.168	0.000	0.051	-15.813	1	0.09	0.02	0.03
1E	210	-48.474	-36.771	-0.078	0.000	0.095	32.853	1	0.05	0.01	0.07
1F	210	-48.474	64.591	-0.078	0.000	0.095	-15.813	1	0.09	0.01	0.03
1G	210	-48.474	-36.771	-0.168	0.000	0.051	32.853	1	0.05	0.01	0.07
1H	210	-48.474	64.591	-0.168	0.000	0.051	-15.813	1	0.09	0.01	0.03
1I	210	-81.608	-1.329	0.022	0.000	0.143	15.874	1	0.00	0.02	0.03
1J	210	-81.608	29.149	0.022	0.000	0.143	1.166	1	0.04	0.02	0.00
1K	210	-81.608	-1.329	-0.268	0.000	0.002	15.874	1	0.00	0.02	0.03
1L	210	-81.608	29.149	-0.268	0.000	0.002	1.166	1	0.04	0.02	0.00
1M	210	-60.172	-1.329	0.022	0.000	0.143	15.874	1	0.00	0.02	0.03
1N	210	-60.172	29.149	0.022	0.000	0.143	1.166	1	0.04	0.02	0.00
1O	210	-60.172	-1.329	-0.268	0.000	0.002	15.874	1	0.00	0.02	0.03
1P	210	-60.172	29.149	-0.268	0.000	0.002	1.166	1	0.04	0.02	0.00
2	210	-124.250	24.960	-0.205	0.000	0.120	15.285	1	0.03	0.03	0.03
7	210	-73.155	12.124	-0.147	0.000	0.041	11.417	1	0.02	0.02	0.02
8	210	-75.805	22.720	-0.137	0.000	0.081	7.474	1	0.03	0.02	0.02
9	210	-74.100	14.547	0.068	0.000	0.186	6.335	1	0.02	0.02	0.01
10	210	-88.005	14.486	-0.357	0.000	-0.015	6.305	1	0.02	0.02	0.01
11	210	-112.850	21.380	-0.197	0.000	0.088	15.487	1	0.03	0.03	0.03
12	210	-114.450	27.740	-0.191	0.000	0.112	13.120	1	0.04	0.03	0.03
13	210	-113.400	22.835	-0.068	0.000	0.175	12.439	1	0.03	0.03	0.03
14	210	-121.750	22.795	-0.323	0.000	0.055	12.419	1	0.03	0.03	0.03
1A	420	-90.896	-36.771	-0.078	0.000	0.241	-44.373	1	0.05	0.02	0.09
1B	420	-90.896	64.591	-0.078	0.000	0.241	119.853	1	0.09	0.02	0.24
1C	420	-90.896	-36.771	-0.168	0.000	0.422	-44.373	1	0.05	0.02	0.09
1D	420	-90.896	64.591	-0.168	0.000	0.422	119.853	1	0.09	0.02	0.24
1E	420	-46.064	-36.771	-0.078	0.000	0.241	-44.373	1	0.05	0.01	0.09
1F	420	-46.064	64.591	-0.078	0.000	0.241	119.853	1	0.09	0.01	0.24
1G	420	-46.064	-36.771	-0.168	0.000	0.422	-44.373	1	0.05	0.01	0.09
1H	420	-46.064	64.591	-0.168	0.000	0.422	119.853	1	0.09	0.01	0.24
1I	420	-79.198	-1.329	0.022	0.000	0.092	12.977	1	0.00	0.02	0.03
1J	420	-79.198	29.149	0.022	0.000	0.092	62.503	1	0.04	0.02	0.13
1K	420	-79.198	-1.329	-0.268	0.000	0.570	12.977	1	0.00	0.02	0.03
1L	420	-79.198	29.149	-0.268	0.000	0.570	62.503	1	0.04	0.02	0.13
1M	420	-57.762	-1.329	0.022	0.000	0.092	12.977	1	0.00	0.01	0.03
1N	420	-57.762	29.149	0.022	0.000	0.092	62.503	1	0.04	0.01	0.13
1O	420	-57.762	-1.329	-0.268	0.000	0.570	12.977	1	0.00	0.01	0.03
1P	420	-57.762	29.149	-0.268	0.000	0.570	62.503	1	0.04	0.01	0.13
2	420	-121.100	24.960	-0.205	0.000	0.551	67.700	1	0.03	0.03	0.14
7	420	-70.020	8.778	-0.147	0.000	0.350	33.360	1	0.01	0.02	0.07
8	420	-72.670	16.520	-0.137	0.000	0.368	48.680	1	0.02	0.02	0.10
9	420	-70.970	21.890	0.068	0.000	0.044	44.590	1	0.03	0.02	0.09
10	420	-84.870	21.830	-0.357	0.000	0.736	44.430	1	0.03	0.02	0.09
11	420	-109.700	19.370	-0.197	0.000	0.502	58.280	1	0.03	0.03	0.12
12	420	-111.300	24.020	-0.191	0.000	0.513	67.470	1	0.03	0.03	0.14
13	420	-110.300	27.240	-0.068	0.000	0.318	65.020	1	0.04	0.03	0.13
14	420	-118.600	27.200	-0.323	0.000	0.733	64.920	1	0.04	0.03	0.13

ASTA NUM. 21 NI 72 NF 70 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -2.69 -2.69 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-102.015	-231.556	0.256	0.000	0.098	120.931	1	0.32	0.03	0.25	
1B	0	-102.015	89.976	0.256	0.000	0.098	-44.791	1	0.13	0.03	0.09	
1C	0	-102.015	-231.556	-0.093	0.000	-0.093	120.931	1	0.32	0.03	0.25	
1D	0	-102.015	89.976	-0.093	0.000	-0.093	-44.791	1	0.13	0.03	0.09	
1E	0	-51.605	-231.556	0.256	0.000	0.098	120.931	1	0.32	0.01	0.25	
1F	0	-51.605	89.976	0.256	0.000	0.098	-44.791	1	0.13	0.01	0.09	
1G	0	-51.605	-231.556	-0.093	0.000	-0.093	120.931	1	0.32	0.01	0.25	
1H	0	-51.605	89.976	-0.093	0.000	-0.093	-44.791	1	0.13	0.01	0.09	

1I	0	-85.477	-119.221	0.492	0.000	0.246	63.052	1	0.17	0.02	0.13
1J	0	-85.477	-22.359	0.492	0.000	0.246	13.088	1	0.03	0.02	0.03
1K	0	-85.477	-119.221	-0.330	0.000	-0.241	63.052	1	0.17	0.02	0.13
1L	0	-85.477	-22.359	-0.330	0.000	-0.241	13.088	1	0.03	0.02	0.03
1M	0	-68.143	-119.221	0.492	0.000	0.246	63.052	1	0.17	0.02	0.13
1N	0	-68.143	-22.359	0.492	0.000	0.246	13.088	1	0.03	0.02	0.03
1O	0	-68.143	-119.221	-0.330	0.000	-0.241	63.052	1	0.17	0.02	0.13
1P	0	-68.143	-22.359	-0.330	0.000	-0.241	13.088	1	0.03	0.02	0.03
2	0	-136.200	-127.000	0.394	0.000	0.131	68.290	1	0.18	0.03	0.14
7	0	-76.640	-62.310	3.691	0.000	-0.084	33.670	1	0.09	0.02	0.07
8	0	-81.360	-95.510	-0.044	0.000	-0.063	49.140	1	0.13	0.02	0.10
9	0	-88.390	-79.640	-0.543	0.000	-0.392	44.930	1	0.11	0.02	0.09
10	0	-86.190	-79.340	0.554	0.000	0.310	44.770	1	0.11	0.02	0.09
11	0	-122.200	-109.200	2.545	0.000	0.078	58.800	1	0.15	0.03	0.12
12	0	-125.100	-129.100	0.304	0.000	0.091	68.080	1	0.18	0.03	0.14
13	0	-129.300	-119.600	0.004	0.000	-0.106	65.550	1	0.17	0.03	0.13
14	0	-128.000	-119.400	0.663	0.000	0.315	65.450	1	0.17	0.03	0.13
1A	25	-101.729	-231.556	0.256	0.000	0.038	63.032	1	0.32	0.03	0.13
1B	25	-101.729	89.976	0.256	0.000	0.038	-22.289	1	0.13	0.03	0.05
1C	25	-101.729	-231.556	-0.093	0.000	-0.073	63.032	1	0.32	0.03	0.13
1D	25	-101.729	89.976	-0.093	0.000	-0.073	-22.289	1	0.13	0.03	0.05
1E	25	-51.320	-231.556	0.256	0.000	0.038	63.032	1	0.32	0.01	0.13
1F	25	-51.320	89.976	0.256	0.000	0.038	-22.289	1	0.13	0.01	0.05
1G	25	-51.320	-231.556	-0.093	0.000	-0.073	63.032	1	0.32	0.01	0.13
1H	25	-51.320	89.976	-0.093	0.000	-0.073	-22.289	1	0.13	0.01	0.05
1I	25	-85.192	-119.221	0.492	0.000	0.124	33.244	1	0.17	0.02	0.07
1J	25	-85.192	-22.359	0.492	0.000	0.124	7.499	1	0.03	0.02	0.02
1K	25	-85.192	-119.221	-0.330	0.000	-0.160	33.244	1	0.17	0.02	0.07
1L	25	-85.192	-22.359	-0.330	0.000	-0.160	7.499	1	0.03	0.02	0.02
1M	25	-67.858	-119.221	0.492	0.000	0.124	33.244	1	0.17	0.02	0.07
1N	25	-67.858	-22.359	0.492	0.000	0.124	7.499	1	0.03	0.02	0.02
1O	25	-67.858	-119.221	-0.330	0.000	-0.160	33.244	1	0.17	0.02	0.07
1P	25	-67.858	-22.359	-0.330	0.000	-0.160	7.499	1	0.03	0.02	0.02
2	25	-135.800	-127.000	0.394	0.000	0.032	36.535	1	0.18	0.03	0.07
7	25	-76.265	-62.310	4.565	0.000	-1.116	18.093	1	0.09	0.02	0.04
8	25	-80.985	-96.250	-0.044	0.000	-0.052	25.172	1	0.13	0.02	0.05
9	25	-88.020	-78.770	-0.543	0.000	-0.256	25.128	1	0.11	0.02	0.05
10	25	-85.820	-78.465	0.554	0.000	0.172	25.041	1	0.11	0.02	0.05
11	25	-121.850	-109.200	3.070	0.000	-0.623	31.502	1	0.15	0.03	0.06
12	25	-124.700	-129.550	0.304	0.000	0.015	35.748	1	0.18	0.03	0.07
13	25	-128.900	-119.050	0.004	0.000	-0.107	35.720	1	0.17	0.03	0.07
14	25	-127.600	-118.900	0.663	0.000	0.149	35.666	1	0.17	0.03	0.07
1A	50	-101.445	-231.556	0.256	0.000	-0.023	5.133	1	0.32	0.03	0.01
1B	50	-101.445	89.976	0.256	0.000	-0.023	0.213	1	0.13	0.03	0.00
1C	50	-101.445	-231.556	-0.093	0.000	-0.054	5.133	1	0.32	0.03	0.01
1D	50	-101.445	89.976	-0.093	0.000	-0.054	0.213	1	0.13	0.03	0.00
1E	50	-51.035	-231.556	0.256	0.000	-0.023	5.133	1	0.32	0.01	0.01
1F	50	-51.035	89.976	0.256	0.000	-0.023	0.213	1	0.13	0.01	0.00
1G	50	-51.035	-231.556	-0.093	0.000	-0.054	5.133	1	0.32	0.01	0.01
1H	50	-51.035	89.976	-0.093	0.000	-0.054	0.213	1	0.13	0.01	0.00
1I	50	-84.907	-119.221	0.492	0.000	0.002	3.436	1	0.17	0.02	0.01
1J	50	-84.907	-22.359	0.492	0.000	0.002	1.910	1	0.03	0.02	0.00
1K	50	-84.907	-119.221	-0.330	0.000	-0.078	3.436	1	0.17	0.02	0.01
1L	50	-84.907	-22.359	-0.330	0.000	-0.078	1.910	1	0.03	0.02	0.00
1M	50	-67.573	-119.221	0.492	0.000	0.002	3.436	1	0.17	0.02	0.01
1N	50	-67.573	-22.359	0.492	0.000	0.002	1.910	1	0.03	0.02	0.00
1O	50	-67.573	-119.221	-0.330	0.000	-0.078	3.436	1	0.17	0.02	0.01
1P	50	-67.573	-22.359	-0.330	0.000	-0.078	1.910	1	0.03	0.02	0.00
2	50	-135.400	-127.000	0.394	0.000	-0.066	4.780	1	0.18	0.03	0.01
7	50	-75.890	-62.310	5.439	0.000	-2.366	2.516	1	0.09	0.02	0.01
8	50	-80.610	-96.990	-0.044	0.000	-0.041	1.019	1	0.14	0.02	0.00
9	50	-87.650	-77.900	-0.543	0.000	-0.120	5.545	1	0.11	0.02	0.01
10	50	-85.450	-77.590	0.554	0.000	0.033	5.531	1	0.11	0.02	0.01
11	50	-121.500	-109.200	3.594	0.000	-1.456	4.204	1	0.15	0.03	0.01
12	50	-124.300	-130.000	0.304	0.000	-0.061	3.306	1	0.18	0.03	0.01
13	50	-128.500	-118.500	0.004	0.000	-0.108	6.022	1	0.17	0.03	0.01
14	50	-127.200	-118.400	0.663	0.000	-0.017	6.013	1	0.17	0.03	0.01

ASTA NUM. 28 NI 70 NF 243 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -2.69 -2.69 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.378	-0.484	0.005	0.000	0.006	0.581	1	0.00	0.00	0.00	
1B	0	-1.378	0.484	0.005	0.000	0.006	-0.581	1	0.00	0.00	0.00	
1C	0	-1.378	-0.484	-0.005	0.000	-0.006	0.581	1	0.00	0.00	0.00	
1D	0	-1.378	0.484	-0.005	0.000	-0.006	-0.581	1	0.00	0.00	0.00	
1E	0	-1.376	-0.484	0.005	0.000	0.006	0.581	1	0.00	0.00	0.00	
1F	0	-1.376	0.484	0.005	0.000	0.006	-0.581	1	0.00	0.00	0.00	
1G	0	-1.376	-0.484	-0.005	0.000	-0.006	0.581	1	0.00	0.00	0.00	
1H	0	-1.376	0.484	-0.005	0.000	-0.006	-0.581	1	0.00	0.00	0.00	
1I	0	-1.378	-0.153	0.014	0.000	0.016	0.183	1	0.00	0.00	0.00	
1J	0	-1.378	0.153	0.014	0.000	0.016	-0.183	1	0.00	0.00	0.00	
1K	0	-1.378	-0.153	-0.014	0.000	-0.016	0.183	1	0.00	0.00	0.00	
1L	0	-1.378	0.153	-0.014	0.000	-0.016	-0.183	1	0.00	0.00	0.00	
1M	0	-1.376	-0.153	0.014	0.000	0.016	0.183	1	0.00	0.00	0.00	
1N	0	-1.376	0.153	0.014	0.000	0.016	-0.183	1	0.00	0.00	0.00	
1O	0	-1.376	-0.153	-0.014	0.000	-0.016	0.183	1	0.00	0.00	0.00	
1P	0	-1.376	0.153	-0.014	0.000	-0.016	-0.183	1	0.00	0.00	0.00	
2	0	-1.790	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	

7	0	-1.790	0.000	-4.196	0.000	-2.517	0.000	1	0.00	0.00	0.01
8	0	-1.790	3.542	0.000	0.000	0.000	-2.125	1	0.00	0.00	0.00
9	0	-1.790	-4.196	-0.000	0.000	0.000	2.517	1	0.01	0.00	0.01
10	0	-1.790	-4.196	0.000	0.000	0.000	2.517	1	0.01	0.00	0.01
11	0	-1.790	0.000	-2.517	0.000	-1.510	0.000	1	0.00	0.00	0.01
12	0	-1.790	2.125	0.000	0.000	0.000	-1.275	1	0.00	0.00	0.00
13	0	-1.790	-2.517	-0.000	0.000	0.000	1.510	1	0.00	0.00	0.00
14	0	-1.790	-2.517	0.000	0.000	0.000	1.510	1	0.00	0.00	0.00
1A	60	-0.690	-0.484	0.005	0.000	0.003	0.291	1	0.00	0.00	0.00
1B	60	-0.690	0.484	0.005	0.000	0.003	-0.291	1	0.00	0.00	0.00
1C	60	-0.690	-0.484	-0.005	0.000	-0.003	0.291	1	0.00	0.00	0.00
1D	60	-0.690	0.484	-0.005	0.000	-0.003	-0.291	1	0.00	0.00	0.00
1E	60	-0.687	-0.484	0.005	0.000	0.003	0.291	1	0.00	0.00	0.00
1F	60	-0.687	0.484	0.005	0.000	0.003	-0.291	1	0.00	0.00	0.00
1G	60	-0.687	-0.484	-0.005	0.000	-0.003	0.291	1	0.00	0.00	0.00
1H	60	-0.687	0.484	-0.005	0.000	-0.003	-0.291	1	0.00	0.00	0.00
1I	60	-0.690	-0.153	0.014	0.000	0.008	0.092	1	0.00	0.00	0.00
1J	60	-0.690	0.153	0.014	0.000	0.008	-0.092	1	0.00	0.00	0.00
1K	60	-0.690	-0.153	-0.014	0.000	-0.008	0.092	1	0.00	0.00	0.00
1L	60	-0.690	0.153	-0.014	0.000	-0.008	-0.092	1	0.00	0.00	0.00
1M	60	-0.687	-0.153	0.014	0.000	0.008	0.092	1	0.00	0.00	0.00
1N	60	-0.687	0.153	0.014	0.000	0.008	-0.092	1	0.00	0.00	0.00
1O	60	-0.687	-0.153	-0.014	0.000	-0.008	0.092	1	0.00	0.00	0.00
1P	60	-0.687	0.153	-0.014	0.000	-0.008	-0.092	1	0.00	0.00	0.00
2	60	-0.895	0.000	-0.000	0.000	-0.000	0.000	1	0.00	0.00	0.00
7	60	-0.895	0.000	-2.098	0.000	-0.629	0.000	1	0.00	0.00	0.00
8	60	-0.895	1.771	0.000	0.000	0.000	-0.531	1	0.00	0.00	0.00
9	60	-0.895	-2.098	-0.000	0.000	0.000	0.629	1	0.00	0.00	0.00
10	60	-0.895	-2.098	0.000	0.000	0.000	0.629	1	0.00	0.00	0.00
11	60	-0.895	0.000	-1.259	0.000	-0.377	0.000	1	0.00	0.00	0.00
12	60	-0.895	1.063	0.000	0.000	0.000	-0.319	1	0.00	0.00	0.00
13	60	-0.895	-1.259	-0.000	0.000	0.000	0.377	1	0.00	0.00	0.00
14	60	-0.895	-1.259	0.000	0.000	0.000	0.377	1	0.00	0.00	0.00
1A	120	-0.001	-0.484	0.005	0.000	-0.000	0.000	1	0.00	0.00	0.00
1B	120	-0.001	0.484	0.005	0.000	-0.000	0.000	1	0.00	0.00	0.00
1C	120	-0.001	-0.484	-0.005	0.000	0.000	0.000	1	0.00	0.00	0.00
1D	120	-0.001	0.484	-0.005	0.000	0.000	0.000	1	0.00	0.00	0.00
1E	120	0.001	-0.484	0.005	0.000	-0.000	0.000	--	0.00	0.00	0.00
1F	120	0.001	0.484	0.005	0.000	-0.000	0.000	--	0.00	0.00	0.00
1G	120	0.001	-0.484	-0.005	0.000	0.000	0.000	--	0.00	0.00	0.00
1H	120	0.001	0.484	-0.005	0.000	0.000	0.000	--	0.00	0.00	0.00
1I	120	-0.001	-0.153	0.014	0.000	-0.000	0.000	1	0.00	0.00	0.00
1J	120	-0.001	0.153	0.014	0.000	-0.000	0.000	1	0.00	0.00	0.00
1K	120	-0.001	-0.153	-0.014	0.000	0.000	0.000	1	0.00	0.00	0.00
1L	120	-0.001	0.153	-0.014	0.000	0.000	0.000	1	0.00	0.00	0.00
1M	120	0.001	-0.153	0.014	0.000	-0.000	0.000	--	0.00	0.00	0.00
1N	120	0.001	0.153	0.014	0.000	-0.000	0.000	--	0.00	0.00	0.00
1O	120	0.001	-0.153	-0.014	0.000	0.000	0.000	--	0.00	0.00	0.00
1P	120	0.001	0.153	-0.014	0.000	0.000	0.000	--	0.00	0.00	0.00
2	120	-0.000	0.000	-0.000	0.000	-0.000	0.000	1	0.00	0.00	0.00
7	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
9	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-102.015	0.241	120.931	1	0.5967	1.2992	1.0166	--	--	0.04	--	0.30	Snell. 'zx'= 78
1B	-102.015	0.241	-151.478	1	0.5967	1.2992	1.0112	--	--	0.04	--	0.36	Snell. 'zx'= 78
1C	-102.015	0.422	120.931	1	0.5967	1.1136	1.0166	--	--	0.04	--	0.30	Snell. 'zx'= 78
1D	-102.015	0.422	-151.478	1	0.5967	1.1136	1.0112	--	--	0.04	--	0.36	Snell. 'zx'= 78
1E	-51.605	0.241	120.931	1	0.5967	1.1514	1.0084	--	--	0.02	--	0.27	Snell. 'zx'= 78
1F	-51.605	0.241	-151.478	1	0.5967	1.1514	1.0057	--	--	0.02	--	0.33	Snell. 'zx'= 78
1G	-51.605	0.422	120.931	1	0.5967	1.0575	1.0084	--	--	0.02	--	0.27	Snell. 'zx'= 78
1H	-51.605	0.422	-151.478	1	0.5967	1.0575	1.0057	--	--	0.02	--	0.34	Snell. 'zx'= 78
1I	-85.477	0.246	63.052	1	0.5967	1.2985	1.0326	--	--	0.04	--	0.17	Snell. 'zx'= 78
1J	-85.477	0.246	62.503	1	0.5967	1.2985	1.0179	--	--	0.04	--	0.17	Snell. 'zx'= 78
1K	-85.477	0.570	63.052	1	0.5967	1.0602	1.0326	--	--	0.04	--	0.17	Snell. 'zx'= 78
1L	-85.477	0.570	62.503	1	0.5967	1.0602	1.0179	--	--	0.04	--	0.17	Snell. 'zx'= 78
1M	-68.143	0.246	63.052	1	0.5967	1.2380	1.0260	--	--	0.03	--	0.16	Snell. 'zx'= 78
1N	-68.143	0.246	62.503	1	0.5967	1.2380	1.0143	--	--	0.03	--	0.16	Snell. 'zx'= 78
1O	-68.143	0.570	63.052	1	0.5967	1.0480	1.0260	--	--	0.03	--	0.16	Snell. 'zx'= 78
1P	-68.143	0.570	62.503	1	0.5967	1.0480	1.0143	--	--	0.03	--	0.16	Snell. 'zx'= 78
2	-136.200	0.551	68.290	1	0.5967	1.1296	1.0326	--	--	0.06	--	0.21	Snell. 'zx'= 78
7	-76.640	-2.517	33.670	1	0.5967	1.0183	1.0355	--	--	0.03	--	0.12	Snell. 'zx'= 78
8	-81.360	0.368	49.140	1	0.5967	1.1188	1.0212	--	--	0.03	--	0.14	Snell. 'zx'= 78
9	-88.390	-0.391	44.930	1	0.5967	1.1016	1.0345	--	--	0.04	--	0.13	Snell. 'zx'= 78
10	-91.140	-0.765	44.770	1	0.5967	1.0472	1.0358	--	--	0.04	--	0.14	Snell. 'zx'= 78
11	-122.200	-1.510	58.800	1	0.5967	1.0451	1.0336	--	--	0.05	--	0.18	Snell. 'zx'= 78
12	-125.100	0.513	68.080	1	0.5967	1.1284	1.0273	--	--	0.05	--	0.20	Snell. 'zx'= 78
13	-129.300	0.318	65.550	1	0.5967	1.2569	1.0335	--	--	0.06	--	0.20	Snell. 'zx'= 78
14	-128.000	0.733	65.450	1	0.5967	1.0741	1.0332	--	--	0.05	--	0.20	Snell. 'zx'= 78

ASTA NUM. 9 NI 10 NF 86 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 4.69 4.69 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-120.587	-69.823	0.078	0.000	0.179	160.437	1	0.10	0.03	0.33	
1B	0	-120.587	33.343	0.078	0.000	0.179	-103.677	1	0.05	0.03	0.21	
1C	0	-120.587	-69.823	-0.096	0.000	-0.209	160.437	1	0.10	0.03	0.33	
1D	0	-120.587	33.343	-0.096	0.000	-0.209	-103.677	1	0.05	0.03	0.21	
1E	0	-73.093	-69.823	0.078	0.000	0.179	160.437	1	0.10	0.02	0.33	
1F	0	-73.093	33.343	0.078	0.000	0.179	-103.677	1	0.05	0.02	0.21	
1G	0	-73.093	-69.823	-0.096	0.000	-0.209	160.437	1	0.10	0.02	0.33	
1H	0	-73.093	33.343	-0.096	0.000	-0.209	-103.677	1	0.05	0.02	0.21	
1I	0	-106.533	-34.663	0.127	0.000	0.327	69.991	1	0.05	0.03	0.14	
1J	0	-106.533	-1.817	0.127	0.000	0.327	-13.231	1	0.00	0.03	0.03	
1K	0	-106.533	-34.663	-0.145	0.000	-0.357	69.991	1	0.05	0.03	0.14	
1L	0	-106.533	-1.817	-0.145	0.000	-0.357	-13.231	1	0.00	0.03	0.03	
1M	0	-87.147	-34.663	0.127	0.000	0.327	69.991	1	0.05	0.02	0.14	
1N	0	-87.147	-1.817	0.127	0.000	0.327	-13.231	1	0.00	0.02	0.03	
1O	0	-87.147	-34.663	-0.145	0.000	-0.357	69.991	1	0.05	0.02	0.14	
1P	0	-87.147	-1.817	-0.145	0.000	-0.357	-13.231	1	0.00	0.02	0.03	
2	0	-170.000	-32.840	-0.028	0.000	-0.044	51.080	1	0.05	0.04	0.10	
7	0	-98.840	-29.750	-0.026	0.000	-0.052	42.140	1	0.04	0.03	0.09	
8	0	-95.430	-5.606	-0.023	0.000	-0.038	4.298	1	0.01	0.02	0.01	
9	0	-119.900	-9.923	0.219	0.000	0.554	23.430	1	0.01	0.03	0.05	
10	0	-102.300	-9.959	-0.224	0.000	-0.566	23.490	1	0.01	0.03	0.05	
11	0	-153.700	-36.460	-0.036	0.000	-0.063	54.230	1	0.05	0.04	0.11	
12	0	-151.700	-21.970	-0.034	0.000	-0.054	31.520	1	0.03	0.04	0.06	
13	0	-166.300	-24.560	0.110	0.000	0.300	43.000	1	0.03	0.04	0.09	
14	0	-155.800	-24.580	-0.155	0.000	-0.371	43.040	1	0.03	0.04	0.09	
1A	210	-118.177	-69.823	0.078	0.000	0.014	13.791	1	0.10	0.03	0.03	
1B	210	-118.177	33.343	0.078	0.000	0.014	-33.641	1	0.05	0.03	0.07	
1C	210	-118.177	-69.823	-0.096	0.000	-0.007	13.791	1	0.10	0.03	0.03	
1D	210	-118.177	33.343	-0.096	0.000	-0.007	-33.641	1	0.05	0.03	0.07	
1E	210	-70.683	-69.823	0.078	0.000	0.014	13.791	1	0.10	0.02	0.03	
1F	210	-70.683	33.343	0.078	0.000	0.014	-33.641	1	0.05	0.02	0.07	
1G	210	-70.683	-69.823	-0.096	0.000	-0.007	13.791	1	0.10	0.02	0.03	
1H	210	-70.683	33.343	-0.096	0.000	-0.007	-33.641	1	0.05	0.02	0.07	
1I	210	-104.123	-34.663	0.127	0.000	0.060	-2.808	1	0.05	0.03	0.01	
1J	210	-104.123	-1.817	0.127	0.000	0.060	-17.041	1	0.00	0.03	0.03	
1K	210	-104.123	-34.663	-0.145	0.000	-0.052	-2.808	1	0.05	0.03	0.01	
1L	210	-104.123	-1.817	-0.145	0.000	-0.052	-17.041	1	0.00	0.03	0.03	
1M	210	-84.737	-34.663	0.127	0.000	0.060	-2.808	1	0.05	0.02	0.01	
1N	210	-84.737	-1.817	0.127	0.000	0.060	-17.041	1	0.00	0.02	0.03	
1O	210	-84.737	-34.663	-0.145	0.000	-0.052	-2.808	1	0.05	0.02	0.01	
1P	210	-84.737	-1.817	-0.145	0.000	-0.052	-17.041	1	0.00	0.02	0.03	
2	210	-166.850	-32.840	-0.028	0.000	0.014	-17.875	1	0.05	0.04	0.04	
7	210	-95.710	-22.000	-0.026	0.000	0.004	-12.191	1	0.03	0.02	0.02	
8	210	-92.300	-9.788	-0.023	0.000	0.010	-11.866	1	0.01	0.02	0.02	
9	210	-116.750	-19.102	0.219	0.000	0.095	-7.048	1	0.03	0.03	0.01	
10	210	-99.175	-19.139	-0.224	0.000	-0.096	-7.063	1	0.03	0.03	0.01	
11	210	-150.600	-31.810	-0.036	0.000	0.014	-17.447	1	0.04	0.04	0.04	
12	210	-148.550	-24.480	-0.034	0.000	0.018	-17.251	1	0.03	0.04	0.04	
13	210	-163.200	-30.070	0.110	0.000	0.068	-14.358	1	0.04	0.04	0.03	
14	210	-152.650	-30.090	-0.155	0.000	-0.046	-14.368	1	0.04	0.04	0.03	
1A	420	-115.767	-69.823	0.078	0.000	-0.150	-132.856	1	0.10	0.03	0.27	
1B	420	-115.767	33.343	0.078	0.000	-0.150	36.396	1	0.05	0.03	0.07	
1C	420	-115.767	-69.823	-0.096	0.000	0.194	-132.856	1	0.10	0.03	0.27	
1D	420	-115.767	33.343	-0.096	0.000	0.194	36.396	1	0.05	0.03	0.07	
1E	420	-68.273	-69.823	0.078	0.000	-0.150	-132.856	1	0.10	0.02	0.27	
1F	420	-68.273	33.343	0.078	0.000	-0.150	36.396	1	0.05	0.02	0.07	
1G	420	-68.273	-69.823	-0.096	0.000	0.194	-132.856	1	0.10	0.02	0.27	
1H	420	-68.273	33.343	-0.096	0.000	0.194	36.396	1	0.05	0.02	0.07	
1I	420	-101.713	-34.663	0.127	0.000	-0.208	-75.608	1	0.05	0.03	0.15	
1J	420	-101.713	-1.817	0.127	0.000	-0.208	-20.852	1	0.00	0.03	0.04	
1K	420	-101.713	-34.663	-0.145	0.000	0.252	-75.608	1	0.05	0.03	0.15	
1L	420	-101.713	-1.817	-0.145	0.000	0.252	-20.852	1	0.00	0.03	0.04	
1M	420	-82.327	-34.663	0.127	0.000	-0.208	-75.608	1	0.05	0.02	0.15	
1N	420	-82.327	-1.817	0.127	0.000	-0.208	-20.852	1	0.00	0.02	0.04	
1O	420	-82.327	-34.663	-0.145	0.000	0.252	-75.608	1	0.05	0.02	0.15	
1P	420	-82.327	-1.817	-0.145	0.000	0.252	-20.852	1	0.00	0.02	0.04	
2	420	-163.700	-32.840	-0.028	0.000	0.072	-86.830	1	0.05	0.04	0.18	
7	420	-92.580	-14.250	-0.026	0.000	0.059	-50.250	1	0.02	0.02	0.10	
8	420	-89.170	-13.970	-0.023	0.000	0.058	-36.810	1	0.02	0.02	0.08	
9	420	-113.600	-28.280	0.219	0.000	-0.364	-56.800	1	0.04	0.03	0.12	
10	420	-96.050	-28.320	-0.224	0.000	0.373	-56.890	1	0.04	0.02	0.12	
11	420	-147.500	-27.160	-0.036	0.000	0.090	-79.360	1	0.04	0.04	0.16	
12	420	-145.400	-26.990	-0.034	0.000	0.090	-71.290	1	0.04	0.04	0.15	
13	420	-160.100	-35.580	0.110	0.000	-0.163	-83.280	1	0.05	0.04	0.17	
14	420	-149.500	-35.600	-0.155	0.000	0.279	-83.340	1	0.05	0.04	0.17	

ASTA NUM. 17 NI 86 NF 84 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 4.69 4.69 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							

1A	0	-116.072	-75.482	0.407	0.000	0.534	36.749	1	0.11	0.03	0.08
1B	0	-116.072	256.042	0.407	0.000	0.534	-134.029	1	0.36	0.03	0.27
1C	0	-116.072	-75.482	-0.114	0.000	0.176	36.749	1	0.11	0.03	0.08
1D	0	-116.072	256.042	-0.114	0.000	0.176	-134.029	1	0.36	0.03	0.27
1E	0	-66.388	-75.482	0.407	0.000	0.534	36.749	1	0.11	0.02	0.08
1F	0	-66.388	256.042	0.407	0.000	0.534	-134.029	1	0.36	0.02	0.27
1G	0	-66.388	-75.482	-0.114	0.000	0.176	36.749	1	0.11	0.02	0.08
1H	0	-66.388	256.042	-0.114	0.000	0.176	-134.029	1	0.36	0.02	0.27
1I	0	-100.600	36.724	0.574	0.000	0.590	-21.023	1	0.05	0.03	0.04
1J	0	-100.600	143.836	0.574	0.000	0.590	-76.257	1	0.20	0.03	0.16
1K	0	-100.600	36.724	-0.280	0.000	0.121	-21.023	1	0.05	0.03	0.04
1L	0	-100.600	143.836	-0.280	0.000	0.121	-76.257	1	0.20	0.03	0.16
1M	0	-81.860	36.724	0.574	0.000	0.590	-21.023	1	0.05	0.02	0.04
1N	0	-81.860	143.836	0.574	0.000	0.590	-76.257	1	0.20	0.02	0.16
1O	0	-81.860	36.724	-0.280	0.000	0.121	-21.023	1	0.05	0.02	0.04
1P	0	-81.860	143.836	-0.280	0.000	0.121	-76.257	1	0.20	0.02	0.16
2	0	-163.100	162.600	-0.010	0.000	0.499	-87.560	1	0.23	0.04	0.18
7	0	-92.680	98.540	0.585	0.000	0.497	-50.730	1	0.14	0.02	0.10
8	0	-88.600	65.680	0.583	0.000	0.497	-37.080	1	0.09	0.02	0.08
9	0	-103.500	101.300	-0.562	0.000	0.065	-57.220	1	0.14	0.03	0.12
10	0	-103.400	101.500	0.978	0.000	0.814	-57.310	1	0.14	0.03	0.12
11	0	-147.600	151.300	0.227	0.000	0.520	-80.060	1	0.21	0.04	0.16
12	0	-145.100	131.500	0.226	0.000	0.520	-71.870	1	0.18	0.04	0.15
13	0	-154.100	152.900	-0.461	0.000	0.261	-83.950	1	0.21	0.04	0.17
14	0	-154.000	153.000	0.463	0.000	0.710	-84.010	1	0.21	0.04	0.17
1A	25	-115.787	-75.482	0.407	0.000	0.432	17.890	1	0.11	0.03	0.04
1B	25	-115.787	256.042	0.407	0.000	0.432	-70.027	1	0.36	0.03	0.14
1C	25	-115.787	-75.482	-0.114	0.000	0.205	17.890	1	0.11	0.03	0.04
1D	25	-115.787	256.042	-0.114	0.000	0.205	-70.027	1	0.36	0.03	0.14
1E	25	-66.103	-75.482	0.407	0.000	0.432	17.890	1	0.11	0.02	0.04
1F	25	-66.103	256.042	0.407	0.000	0.432	-70.027	1	0.36	0.02	0.14
1G	25	-66.103	-75.482	-0.114	0.000	0.205	17.890	1	0.11	0.02	0.04
1H	25	-66.103	256.042	-0.114	0.000	0.205	-70.027	1	0.36	0.02	0.14
1I	25	-100.315	36.724	0.574	0.000	0.446	-11.837	1	0.05	0.03	0.02
1J	25	-100.315	143.836	0.574	0.000	0.446	-40.300	1	0.20	0.03	0.08
1K	25	-100.315	36.724	-0.280	0.000	0.191	-11.837	1	0.05	0.03	0.02
1L	25	-100.315	143.836	-0.280	0.000	0.191	-40.300	1	0.20	0.03	0.08
1M	25	-81.575	36.724	0.574	0.000	0.446	-11.837	1	0.05	0.02	0.02
1N	25	-81.575	143.836	0.574	0.000	0.446	-40.300	1	0.20	0.02	0.08
1O	25	-81.575	36.724	-0.280	0.000	0.191	-11.837	1	0.05	0.02	0.02
1P	25	-81.575	143.836	-0.280	0.000	0.191	-40.300	1	0.20	0.02	0.08
2	25	-162.750	162.600	-0.010	0.000	0.501	-46.921	1	0.23	0.04	0.10
7	25	-92.305	99.470	0.585	0.000	0.351	-25.976	1	0.14	0.02	0.05
8	25	-88.225	65.185	0.583	0.000	0.351	-20.722	1	0.09	0.02	0.04
9	25	-103.100	100.225	-0.562	0.000	0.205	-32.022	1	0.14	0.03	0.07
10	25	-103.050	100.415	0.978	0.000	0.569	-32.070	1	0.14	0.03	0.07
11	25	-147.200	151.850	0.227	0.000	0.463	-42.173	1	0.21	0.04	0.09
12	25	-144.750	131.200	0.226	0.000	0.464	-39.021	1	0.18	0.04	0.08
13	25	-153.700	152.250	-0.461	0.000	0.376	-45.799	1	0.21	0.04	0.09
14	25	-153.650	152.350	0.463	0.000	0.594	-45.831	1	0.21	0.04	0.09
1A	50	-115.502	-75.482	0.407	0.000	0.330	-0.969	1	0.11	0.03	0.00
1B	50	-115.502	256.042	0.407	0.000	0.330	-6.025	1	0.36	0.03	0.01
1C	50	-115.502	-75.482	-0.114	0.000	0.233	-0.969	1	0.11	0.03	0.00
1D	50	-115.502	256.042	-0.114	0.000	0.233	-6.025	1	0.36	0.03	0.01
1E	50	-65.818	-75.482	0.407	0.000	0.330	-0.969	1	0.11	0.02	0.00
1F	50	-65.818	256.042	0.407	0.000	0.330	-6.025	1	0.36	0.02	0.01
1G	50	-65.818	-75.482	-0.114	0.000	0.233	-0.969	1	0.11	0.02	0.00
1H	50	-65.818	256.042	-0.114	0.000	0.233	-6.025	1	0.36	0.02	0.01
1I	50	-100.030	36.724	0.574	0.000	0.303	-2.652	1	0.05	0.03	0.01
1J	50	-100.030	143.836	0.574	0.000	0.303	-4.342	1	0.20	0.03	0.01
1K	50	-100.030	36.724	-0.280	0.000	0.261	-2.652	1	0.05	0.03	0.01
1L	50	-100.030	143.836	-0.280	0.000	0.261	-4.342	1	0.20	0.03	0.01
1M	50	-81.290	36.724	0.574	0.000	0.303	-2.652	1	0.05	0.02	0.01
1N	50	-81.290	143.836	0.574	0.000	0.303	-4.342	1	0.20	0.02	0.01
1O	50	-81.290	36.724	-0.280	0.000	0.261	-2.652	1	0.05	0.02	0.01
1P	50	-81.290	143.836	-0.280	0.000	0.261	-4.342	1	0.20	0.02	0.01
2	50	-162.400	162.600	-0.010	0.000	0.504	-6.281	1	0.23	0.04	0.01
7	50	-91.930	100.400	0.585	0.000	0.205	-0.992	1	0.14	0.02	0.00
8	50	-87.850	64.690	0.583	0.000	0.206	-4.489	1	0.09	0.02	0.01
9	50	-102.700	99.150	-0.562	0.000	0.346	-7.097	1	0.14	0.03	0.01
10	50	-102.700	99.330	0.978	0.000	0.325	-7.103	1	0.14	0.03	0.01
11	50	-146.800	152.400	0.227	0.000	0.407	-4.148	1	0.21	0.04	0.01
12	50	-144.400	130.900	0.226	0.000	0.407	-6.246	1	0.18	0.04	0.01
13	50	-153.300	151.600	-0.461	0.000	0.491	-7.811	1	0.21	0.04	0.02
14	50	-153.300	151.700	0.463	0.000	0.479	-7.815	1	0.21	0.04	0.02

ASTA NUM. 32 NI 84 NF 244 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 4.69 4.69 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.378	-0.482	0.004	0.000	0.004	0.578	1	0.00	0.00	0.00	
1B	0	-1.378	0.482	0.004	0.000	0.004	-0.578	1	0.00	0.00	0.00	
1C	0	-1.378	-0.482	-0.004	0.000	-0.004	0.578	1	0.00	0.00	0.00	
1D	0	-1.378	0.482	-0.004	0.000	-0.004	-0.578	1	0.00	0.00	0.00	
1E	0	-1.376	-0.482	0.004	0.000	0.004	0.578	1	0.00	0.00	0.00	
1F	0	-1.376	0.482	0.004	0.000	0.004	-0.578	1	0.00	0.00	0.00	
1G	0	-1.376	-0.482	-0.004	0.000	-0.004	0.578	1	0.00	0.00	0.00	
1H	0	-1.376	0.482	-0.004	0.000	-0.004	-0.578	1	0.00	0.00	0.00	

1I	0	-1.378	-0.158	0.011	0.000	0.014	0.189	1	0.00	0.00	0.00
1J	0	-1.378	0.158	0.011	0.000	0.014	-0.189	1	0.00	0.00	0.00
1K	0	-1.378	-0.158	-0.011	0.000	-0.014	0.189	1	0.00	0.00	0.00
1L	0	-1.378	0.158	-0.011	0.000	-0.014	-0.189	1	0.00	0.00	0.00
1M	0	-1.376	-0.158	0.011	0.000	0.014	0.189	1	0.00	0.00	0.00
1N	0	-1.376	0.158	0.011	0.000	0.014	-0.189	1	0.00	0.00	0.00
1O	0	-1.376	-0.158	-0.011	0.000	-0.014	0.189	1	0.00	0.00	0.00
1P	0	-1.376	0.158	-0.011	0.000	-0.014	-0.189	1	0.00	0.00	0.00
2	0	-1.790	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	0	-1.790	-4.428	-0.000	0.000	0.000	2.657	1	0.01	0.00	0.01
8	0	-1.790	2.389	-0.000	0.000	0.000	-1.434	1	0.00	0.00	0.00
9	0	-1.790	5.245	0.000	0.000	0.000	-3.147	1	0.01	0.00	0.01
10	0	-1.790	5.245	-0.000	0.000	0.000	-3.147	1	0.01	0.00	0.01
11	0	-1.790	-2.657	-0.000	0.000	0.000	1.594	1	0.00	0.00	0.00
12	0	-1.790	1.434	-0.000	0.000	0.000	-0.860	1	0.00	0.00	0.00
13	0	-1.790	3.147	0.000	0.000	0.000	-1.888	1	0.00	0.00	0.00
14	0	-1.790	3.147	-0.000	0.000	0.000	-1.888	1	0.00	0.00	0.00
1A	60	-0.690	-0.482	0.004	0.000	0.002	0.289	1	0.00	0.00	0.00
1B	60	-0.690	0.482	0.004	0.000	0.002	-0.289	1	0.00	0.00	0.00
1C	60	-0.690	-0.482	-0.004	0.000	-0.002	0.289	1	0.00	0.00	0.00
1D	60	-0.690	0.482	-0.004	0.000	-0.002	-0.289	1	0.00	0.00	0.00
1E	60	-0.687	-0.482	0.004	0.000	0.002	0.289	1	0.00	0.00	0.00
1F	60	-0.687	0.482	0.004	0.000	0.002	-0.289	1	0.00	0.00	0.00
1G	60	-0.687	-0.482	-0.004	0.000	-0.002	0.289	1	0.00	0.00	0.00
1H	60	-0.687	0.482	-0.004	0.000	-0.002	-0.289	1	0.00	0.00	0.00
1I	60	-0.689	-0.158	0.011	0.000	0.007	0.095	1	0.00	0.00	0.00
1J	60	-0.689	0.158	0.011	0.000	0.007	-0.095	1	0.00	0.00	0.00
1K	60	-0.689	-0.158	-0.011	0.000	-0.007	0.095	1	0.00	0.00	0.00
1L	60	-0.689	0.158	-0.011	0.000	-0.007	-0.095	1	0.00	0.00	0.00
1M	60	-0.688	-0.158	0.011	0.000	0.007	0.095	1	0.00	0.00	0.00
1N	60	-0.688	0.158	0.011	0.000	0.007	-0.095	1	0.00	0.00	0.00
1O	60	-0.688	-0.158	-0.011	0.000	-0.007	0.095	1	0.00	0.00	0.00
1P	60	-0.688	0.158	-0.011	0.000	-0.007	-0.095	1	0.00	0.00	0.00
2	60	-0.895	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	60	-0.895	-2.214	-0.000	0.000	0.000	0.664	1	0.00	0.00	0.00
8	60	-0.895	1.195	-0.000	0.000	0.000	-0.359	1	0.00	0.00	0.00
9	60	-0.895	2.623	0.000	0.000	0.000	-0.787	1	0.00	0.00	0.00
10	60	-0.895	2.623	-0.000	0.000	0.000	-0.787	1	0.00	0.00	0.00
11	60	-0.895	-1.329	-0.000	0.000	0.000	0.399	1	0.00	0.00	0.00
12	60	-0.895	0.717	-0.000	0.000	0.000	-0.215	1	0.00	0.00	0.00
13	60	-0.895	1.574	0.000	0.000	0.000	-0.472	1	0.00	0.00	0.00
14	60	-0.895	1.574	-0.000	0.000	0.000	-0.472	1	0.00	0.00	0.00
1A	120	-0.001	-0.482	0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00
1B	120	-0.001	0.482	0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00
1C	120	-0.001	-0.482	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1D	120	-0.001	0.482	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1E	120	0.001	-0.482	0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00
1F	120	0.001	0.482	0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00
1G	120	0.001	-0.482	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1H	120	0.001	0.482	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1I	120	-0.001	-0.158	0.011	0.000	-0.000	0.000	1	0.00	0.00	0.00
1J	120	-0.001	0.158	0.011	0.000	-0.000	0.000	1	0.00	0.00	0.00
1K	120	-0.001	-0.158	-0.011	0.000	0.000	0.000	1	0.00	0.00	0.00
1L	120	-0.001	0.158	-0.011	0.000	0.000	0.000	1	0.00	0.00	0.00
1M	120	0.001	-0.158	0.011	0.000	-0.000	0.000	--	0.00	0.00	0.00
1N	120	0.001	0.158	0.011	0.000	-0.000	0.000	--	0.00	0.00	0.00
1O	120	0.001	-0.158	-0.011	0.000	0.000	0.000	--	0.00	0.00	0.00
1P	120	0.001	0.158	-0.011	0.000	0.000	0.000	--	0.00	0.00	0.00
2	120	-0.000	-0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
8	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
9	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-120.587	0.534	160.437	1	0.5967	1.0821	1.0131	--	--	0.05	--	0.39	Snell. 'zx'= 78
1B	-120.587	0.534	-134.029	1	0.5967	1.0821	1.0201	--	--	0.05	--	0.33	Snell. 'zx'= 78
1C	-120.587	0.233	160.437	1	0.5967	1.1313	1.0131	--	--	0.05	--	0.39	Snell. 'zx'= 78
1D	-120.587	0.233	-134.029	1	0.5967	1.1313	1.0201	--	--	0.05	--	0.33	Snell. 'zx'= 78
1E	-73.093	0.534	160.437	1	0.5967	1.0498	1.0079	--	--	0.03	--	0.36	Snell. 'zx'= 78
1F	-73.093	0.534	-134.029	1	0.5967	1.0498	1.0122	--	--	0.03	--	0.31	Snell. 'zx'= 78
1G	-73.093	0.233	160.437	1	0.5967	1.0796	1.0079	--	--	0.03	--	0.36	Snell. 'zx'= 78
1H	-73.093	0.233	-134.029	1	0.5967	1.0796	1.0122	--	--	0.03	--	0.31	Snell. 'zx'= 78
1I	-106.533	0.590	-75.608	1	0.5967	1.0611	1.0202	--	--	0.05	--	0.21	Snell. 'zx'= 78
1J	-106.533	0.590	-76.257	1	0.5967	1.0611	1.0360	--	--	0.05	--	0.21	Snell. 'zx'= 78
1K	-106.533	-0.357	-75.608	1	0.5967	1.0810	1.0202	--	--	0.05	--	0.21	Snell. 'zx'= 78
1L	-106.533	-0.357	-76.257	1	0.5967	1.0810	1.0360	--	--	0.05	--	0.21	Snell. 'zx'= 78
1M	-87.147	0.590	-75.608	1	0.5967	1.0500	1.0166	--	--	0.04	--	0.20	Snell. 'zx'= 78
1N	-87.147	0.590	-76.257	1	0.5967	1.0500	1.0294	--	--	0.04	--	0.20	Snell. 'zx'= 78
1O	-87.147	-0.357	-75.608	1	0.5967	1.0662	1.0166	--	--	0.04	--	0.20	Snell. 'zx'= 78
1P	-87.147	-0.357	-76.257	1	0.5967	1.0662	1.0294	--	--	0.04	--	0.20	Snell. 'zx'= 78
2	-170.000	0.504	-87.560	1	0.5967	1.1474	1.0337	--	--	0.07	--	0.26	Snell. 'zx'= 78
7	-98.840	0.497	-50.730	1	0.5967	1.0854	1.0279	--	--	0.04	--	0.15	Snell. 'zx'= 78

8	-95.430	0.497	-37.080	1	0.5967	1.0848	1.0571	--	--	0.04	--	0.12	Snell. 'zx'= 78
9	-119.900	0.554	-57.220	1	0.5967	1.0588	1.0384	--	--	0.05	--	0.18	Snell. 'zx'= 78
10	-103.400	0.814	-57.310	1	0.5967	1.0314	1.0331	--	--	0.04	--	0.17	Snell. 'zx'= 78
11	-153.700	0.520	-80.060	1	0.5967	1.1244	1.0313	--	--	0.07	--	0.24	Snell. 'zx'= 78
12	-151.700	0.520	-71.870	1	0.5967	1.1247	1.0389	--	--	0.07	--	0.22	Snell. 'zx'= 78
13	-166.300	0.491	-83.950	1	0.5967	1.1187	1.0356	--	--	0.07	--	0.25	Snell. 'zx'= 78
14	-155.800	0.710	-84.010	1	0.5967	1.0633	1.0333	--	--	0.07	--	0.25	Snell. 'zx'= 78

ASTA NUM. 10 NI 9 NF 87 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -2.04 -2.04 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-121.304	-32.090	0.085	0.000	0.198	103.013	1	0.04	0.03	0.21	
1B	0	-121.304	69.110	0.085	0.000	0.198	-158.453	1	0.10	0.03	0.32	
1C	0	-121.304	-32.090	-0.103	0.000	-0.227	103.013	1	0.04	0.03	0.21	
1D	0	-121.304	69.110	-0.103	0.000	-0.227	-158.453	1	0.10	0.03	0.32	
1E	0	-72.756	-32.090	0.085	0.000	0.198	103.013	1	0.04	0.02	0.21	
1F	0	-72.756	69.110	0.085	0.000	0.198	-158.453	1	0.10	0.02	0.32	
1G	0	-72.756	-32.090	-0.103	0.000	-0.227	103.013	1	0.04	0.02	0.21	
1H	0	-72.756	69.110	-0.103	0.000	-0.227	-158.453	1	0.10	0.02	0.32	
1I	0	-110.876	3.208	0.152	0.000	0.391	12.208	1	0.00	0.03	0.02	
1J	0	-110.876	33.812	0.152	0.000	0.391	-67.648	1	0.05	0.03	0.14	
1K	0	-110.876	3.208	-0.169	0.000	-0.421	12.208	1	0.00	0.03	0.02	
1L	0	-110.876	33.812	-0.169	0.000	-0.421	-67.648	1	0.05	0.03	0.14	
1M	0	-83.184	3.208	0.152	0.000	0.391	12.208	1	0.00	0.02	0.02	
1N	0	-83.184	33.812	0.152	0.000	0.391	-67.648	1	0.05	0.02	0.14	
1O	0	-83.184	3.208	-0.169	0.000	-0.421	12.208	1	0.00	0.02	0.02	
1P	0	-83.184	33.812	-0.169	0.000	-0.421	-67.648	1	0.05	0.02	0.14	
2	0	-170.300	33.330	-0.027	0.000	-0.043	-49.910	1	0.05	0.04	0.10	
7	0	-95.450	20.860	-0.062	0.000	-0.147	-25.130	1	0.03	0.02	0.05	
8	0	-101.300	35.210	-0.015	0.000	-0.026	-55.050	1	0.05	0.03	0.11	
9	0	-120.100	10.230	0.219	0.000	0.554	-22.650	1	0.01	0.03	0.05	
10	0	-102.500	10.260	-0.223	0.000	-0.566	-22.700	1	0.01	0.03	0.05	
11	0	-151.900	31.410	-0.058	0.000	-0.120	-43.370	1	0.04	0.04	0.09	
12	0	-155.400	40.020	-0.030	0.000	-0.048	-61.320	1	0.06	0.04	0.13	
13	0	-166.700	25.030	0.111	0.000	0.301	-41.880	1	0.03	0.04	0.09	
14	0	-156.100	25.050	-0.154	0.000	-0.371	-41.910	1	0.03	0.04	0.09	
1A	210	-118.894	-32.090	0.085	0.000	0.018	35.549	1	0.04	0.03	0.07	
1B	210	-118.894	69.110	0.085	0.000	0.018	-13.229	1	0.10	0.03	0.03	
1C	210	-118.894	-32.090	-0.103	0.000	-0.012	35.549	1	0.04	0.03	0.07	
1D	210	-118.894	69.110	-0.103	0.000	-0.012	-13.229	1	0.10	0.03	0.03	
1E	210	-70.346	-32.090	0.085	0.000	0.018	35.549	1	0.04	0.02	0.07	
1F	210	-70.346	69.110	0.085	0.000	0.018	-13.229	1	0.10	0.02	0.03	
1G	210	-70.346	-32.090	-0.103	0.000	-0.012	35.549	1	0.04	0.02	0.07	
1H	210	-70.346	69.110	-0.103	0.000	-0.012	-13.229	1	0.10	0.02	0.03	
1I	210	-108.466	3.208	0.152	0.000	0.071	18.656	1	0.00	0.03	0.04	
1J	210	-108.466	33.812	0.152	0.000	0.071	3.664	1	0.05	0.03	0.01	
1K	210	-108.466	3.208	-0.169	0.000	-0.065	18.656	1	0.00	0.03	0.04	
1L	210	-108.466	33.812	-0.169	0.000	-0.065	3.664	1	0.05	0.03	0.01	
1M	210	-80.774	3.208	0.152	0.000	0.071	18.656	1	0.00	0.02	0.04	
1N	210	-80.774	33.812	0.152	0.000	0.071	3.664	1	0.05	0.02	0.01	
1O	210	-80.774	3.208	-0.169	0.000	-0.065	18.656	1	0.00	0.02	0.04	
1P	210	-80.774	33.812	-0.169	0.000	-0.065	3.664	1	0.05	0.02	0.01	
2	210	-167.150	33.330	-0.027	0.000	0.013	20.085	1	0.05	0.04	0.04	
7	210	-92.315	16.680	-0.062	0.000	-0.017	14.295	1	0.02	0.02	0.03	
8	210	-98.180	27.460	-0.015	0.000	0.006	10.756	1	0.04	0.03	0.02	
9	210	-116.950	19.405	0.219	0.000	0.094	8.463	1	0.03	0.03	0.02	
10	210	-99.385	19.440	-0.223	0.000	-0.097	8.483	1	0.03	0.03	0.02	
11	210	-148.750	28.900	-0.058	0.000	0.001	19.959	1	0.04	0.04	0.04	
12	210	-152.250	35.370	-0.030	0.000	0.015	17.837	1	0.05	0.04	0.04	
13	210	-163.550	30.535	0.111	0.000	0.068	16.463	1	0.04	0.04	0.03	
14	210	-153.000	30.555	-0.154	0.000	-0.047	16.473	1	0.04	0.04	0.03	
1A	420	-116.484	-32.090	0.085	0.000	-0.161	-31.915	1	0.04	0.03	0.07	
1B	420	-116.484	69.110	0.085	0.000	-0.161	131.995	1	0.10	0.03	0.27	
1C	420	-116.484	-32.090	-0.103	0.000	0.203	-31.915	1	0.04	0.03	0.07	
1D	420	-116.484	69.110	-0.103	0.000	0.203	131.995	1	0.10	0.03	0.27	
1E	420	-67.936	-32.090	0.085	0.000	-0.161	-31.915	1	0.04	0.02	0.07	
1F	420	-67.936	69.110	0.085	0.000	-0.161	131.995	1	0.10	0.02	0.27	
1G	420	-67.936	-32.090	-0.103	0.000	0.203	-31.915	1	0.04	0.02	0.07	
1H	420	-67.936	69.110	-0.103	0.000	0.203	131.995	1	0.10	0.02	0.27	
1I	420	-106.056	3.208	0.152	0.000	-0.249	25.105	1	0.00	0.03	0.05	
1J	420	-106.056	33.812	0.152	0.000	-0.249	74.975	1	0.05	0.03	0.15	
1K	420	-106.056	3.208	-0.169	0.000	0.291	25.105	1	0.00	0.03	0.05	
1L	420	-106.056	33.812	-0.169	0.000	0.291	74.975	1	0.05	0.03	0.15	
1M	420	-78.364	3.208	0.152	0.000	-0.249	25.105	1	0.00	0.02	0.05	
1N	420	-78.364	33.812	0.152	0.000	-0.249	74.975	1	0.05	0.02	0.15	
1O	420	-78.364	3.208	-0.169	0.000	0.291	25.105	1	0.00	0.02	0.05	
1P	420	-78.364	33.812	-0.169	0.000	0.291	74.975	1	0.05	0.02	0.15	
2	420	-164.000	33.330	-0.027	0.000	0.070	90.080	1	0.05	0.04	0.18	
7	420	-89.180	12.500	-0.062	0.000	0.113	44.940	1	0.02	0.02	0.09	
8	420	-95.060	19.710	-0.015	0.000	0.038	60.290	1	0.03	0.02	0.12	
9	420	-113.800	28.580	0.219	0.000	-0.365	58.850	1	0.04	0.03	0.12	
10	420	-96.270	28.620	-0.223	0.000	0.372	58.940	1	0.04	0.02	0.12	
11	420	-145.600	26.390	-0.058	0.000	0.121	78.020	1	0.04	0.04	0.16	
12	420	-149.100	30.720	-0.030	0.000	0.077	87.230	1	0.04	0.04	0.18	
13	420	-160.400	36.040	0.111	0.000	-0.165	86.370	1	0.05	0.04	0.18	
14	420	-149.900	36.060	-0.154	0.000	0.277	86.420	1	0.05	0.04	0.18	

ASTA NUM. 20 NI 87 NF 85 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -2.04 -2.04 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-115.332	-254.292	0.425	0.000	0.543	133.168	1	0.36	0.03	0.27	
1B	0	-115.332	66.692	0.425	0.000	0.543	-32.248	1	0.09	0.03	0.07	
1C	0	-115.332	-254.292	-0.134	0.000	0.165	133.168	1	0.36	0.03	0.27	
1D	0	-115.332	66.692	-0.134	0.000	0.165	-32.248	1	0.09	0.03	0.07	
1E	0	-67.508	-254.292	0.425	0.000	0.543	133.168	1	0.36	0.02	0.27	
1F	0	-67.508	66.692	0.425	0.000	0.543	-32.248	1	0.09	0.02	0.07	
1G	0	-67.508	-254.292	-0.134	0.000	0.165	133.168	1	0.36	0.02	0.27	
1H	0	-67.508	66.692	-0.134	0.000	0.165	-32.248	1	0.09	0.02	0.07	
1I	0	-100.268	-142.531	0.652	0.000	0.630	75.629	1	0.20	0.03	0.15	
1J	0	-100.268	-45.069	0.652	0.000	0.630	25.291	1	0.06	0.03	0.05	
1K	0	-100.268	-142.531	-0.361	0.000	0.078	75.629	1	0.20	0.03	0.15	
1L	0	-100.268	-45.069	-0.361	0.000	0.078	25.291	1	0.06	0.03	0.05	
1M	0	-82.572	-142.531	0.652	0.000	0.630	75.629	1	0.20	0.02	0.15	
1N	0	-82.572	-45.069	0.652	0.000	0.630	25.291	1	0.06	0.02	0.05	
1O	0	-82.572	-142.531	-0.361	0.000	0.078	75.629	1	0.20	0.02	0.15	
1P	0	-82.572	-45.069	-0.361	0.000	0.078	25.291	1	0.06	0.02	0.05	
2	0	-163.500	-168.900	-0.011	0.000	0.497	90.840	1	0.24	0.04	0.19	
7	0	-90.790	-86.210	0.650	0.000	0.552	45.340	1	0.12	0.02	0.09	
8	0	-95.020	-118.100	0.549	0.000	0.476	60.850	1	0.16	0.02	0.12	
9	0	-103.700	-105.300	-0.563	0.000	0.063	59.290	1	0.15	0.03	0.12	
10	0	-103.700	-105.500	0.977	0.000	0.812	59.380	1	0.15	0.03	0.12	
11	0	-146.600	-147.500	0.265	0.000	0.552	78.690	1	0.21	0.04	0.16	
12	0	-149.200	-166.600	0.205	0.000	0.506	88.000	1	0.23	0.04	0.18	
13	0	-154.400	-158.900	-0.463	0.000	0.259	87.060	1	0.22	0.04	0.18	
14	0	-154.400	-159.000	0.461	0.000	0.708	87.110	1	0.22	0.04	0.18	
1A	25	-115.047	-254.292	0.425	0.000	0.437	69.581	1	0.36	0.03	0.14	
1B	25	-115.047	66.692	0.425	0.000	0.437	-15.563	1	0.09	0.03	0.03	
1C	25	-115.047	-254.292	-0.134	0.000	0.198	69.581	1	0.36	0.03	0.14	
1D	25	-115.047	66.692	-0.134	0.000	0.198	-15.563	1	0.09	0.03	0.03	
1E	25	-67.223	-254.292	0.425	0.000	0.437	69.581	1	0.36	0.02	0.14	
1F	25	-67.223	66.692	0.425	0.000	0.437	-15.563	1	0.09	0.02	0.03	
1G	25	-67.223	-254.292	-0.134	0.000	0.198	69.581	1	0.36	0.02	0.14	
1H	25	-67.223	66.692	-0.134	0.000	0.198	-15.563	1	0.09	0.02	0.03	
1I	25	-99.983	-142.531	0.652	0.000	0.467	39.995	1	0.20	0.03	0.08	
1J	25	-99.983	-45.069	0.652	0.000	0.467	14.023	1	0.06	0.03	0.03	
1K	25	-99.983	-142.531	-0.361	0.000	0.168	39.995	1	0.20	0.03	0.08	
1L	25	-99.983	-45.069	-0.361	0.000	0.168	14.023	1	0.06	0.03	0.03	
1M	25	-82.287	-142.531	0.652	0.000	0.467	39.995	1	0.20	0.02	0.08	
1N	25	-82.287	-45.069	0.652	0.000	0.467	14.023	1	0.06	0.02	0.03	
1O	25	-82.287	-142.531	-0.361	0.000	0.168	39.995	1	0.20	0.02	0.08	
1P	25	-82.287	-45.069	-0.361	0.000	0.168	14.023	1	0.06	0.02	0.03	
2	25	-163.100	-168.900	-0.011	0.000	0.499	48.616	1	0.24	0.04	0.10	
7	25	-90.420	-86.705	0.650	0.000	0.389	23.726	1	0.12	0.02	0.05	
8	25	-94.650	-119.000	0.549	0.000	0.339	31.215	1	0.17	0.02	0.06	
9	25	-103.300	-104.250	-0.563	0.000	0.204	33.092	1	0.15	0.03	0.07	
10	25	-103.300	-104.400	0.977	0.000	0.568	33.140	1	0.15	0.03	0.07	
11	25	-146.250	-147.800	0.265	0.000	0.485	41.786	1	0.21	0.04	0.09	
12	25	-148.800	-167.150	0.205	0.000	0.455	46.282	1	0.23	0.04	0.09	
13	25	-154.000	-158.250	-0.463	0.000	0.374	47.406	1	0.22	0.04	0.10	
14	25	-154.000	-158.350	0.461	0.000	0.593	47.433	1	0.22	0.04	0.10	
1A	50	-114.762	-254.292	0.425	0.000	0.330	5.994	1	0.36	0.03	0.01	
1B	50	-114.762	66.692	0.425	0.000	0.330	1.122	1	0.09	0.03	0.00	
1C	50	-114.762	-254.292	-0.134	0.000	0.232	5.994	1	0.36	0.03	0.01	
1D	50	-114.762	66.692	-0.134	0.000	0.232	1.122	1	0.09	0.03	0.00	
1E	50	-66.938	-254.292	0.425	0.000	0.330	5.994	1	0.36	0.02	0.01	
1F	50	-66.938	66.692	0.425	0.000	0.330	1.122	1	0.09	0.02	0.00	
1G	50	-66.938	-254.292	-0.134	0.000	0.232	5.994	1	0.36	0.02	0.01	
1H	50	-66.938	66.692	-0.134	0.000	0.232	1.122	1	0.09	0.02	0.00	
1I	50	-99.698	-142.531	0.652	0.000	0.304	4.360	1	0.20	0.03	0.01	
1J	50	-99.698	-45.069	0.652	0.000	0.304	2.756	1	0.06	0.03	0.01	
1K	50	-99.698	-142.531	-0.361	0.000	0.259	4.360	1	0.20	0.03	0.01	
1L	50	-99.698	-45.069	-0.361	0.000	0.259	2.756	1	0.06	0.03	0.01	
1M	50	-82.002	-142.531	0.652	0.000	0.304	4.360	1	0.20	0.02	0.01	
1N	50	-82.002	-45.069	0.652	0.000	0.304	2.756	1	0.06	0.02	0.01	
1O	50	-82.002	-142.531	-0.361	0.000	0.259	4.360	1	0.20	0.02	0.01	
1P	50	-82.002	-45.069	-0.361	0.000	0.259	2.756	1	0.06	0.02	0.01	
2	50	-162.700	-168.900	-0.011	0.000	0.502	6.391	1	0.24	0.04	0.01	
7	50	-90.050	-87.200	0.650	0.000	0.227	1.987	1	0.12	0.02	0.00	
8	50	-94.280	-119.900	0.549	0.000	0.201	1.350	1	0.17	0.02	0.00	
9	50	-102.900	-103.200	-0.563	0.000	0.345	7.167	1	0.14	0.03	0.01	
10	50	-102.900	-103.300	0.977	0.000	0.324	7.173	1	0.14	0.03	0.01	
11	50	-145.900	-148.100	0.265	0.000	0.419	4.807	1	0.21	0.04	0.01	
12	50	-148.400	-167.700	0.205	0.000	0.404	4.426	1	0.23	0.04	0.01	
13	50	-153.600	-157.600	-0.463	0.000	0.490	7.916	1	0.22	0.04	0.02	
14	50	-153.600	-157.700	0.461	0.000	0.477	7.919	1	0.22	0.04	0.02	

ASTA NUM. 29 NI 85 NF 245 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -2.04 -2.04 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						

1A	0	-1.379	-0.488	0.004	0.000	0.005	0.586	1	0.00	0.00	0.00
1B	0	-1.379	0.488	0.004	0.000	0.005	-0.586	1	0.00	0.00	0.00
1C	0	-1.379	-0.488	-0.004	0.000	-0.005	0.586	1	0.00	0.00	0.00
1D	0	-1.379	0.488	-0.004	0.000	-0.005	-0.586	1	0.00	0.00	0.00
1E	0	-1.375	-0.488	0.004	0.000	0.005	0.586	1	0.00	0.00	0.00
1F	0	-1.375	0.488	0.004	0.000	0.005	-0.586	1	0.00	0.00	0.00
1G	0	-1.375	-0.488	-0.004	0.000	-0.005	0.586	1	0.00	0.00	0.00
1H	0	-1.375	0.488	-0.004	0.000	-0.005	-0.586	1	0.00	0.00	0.00
1I	0	-1.379	-0.167	0.014	0.000	0.016	0.201	1	0.00	0.00	0.00
1J	0	-1.379	0.167	0.014	0.000	0.016	-0.201	1	0.00	0.00	0.00
1K	0	-1.379	-0.167	-0.014	0.000	-0.016	0.201	1	0.00	0.00	0.00
1L	0	-1.379	0.167	-0.014	0.000	-0.016	-0.201	1	0.00	0.00	0.00
1M	0	-1.375	-0.167	0.014	0.000	0.016	0.201	1	0.00	0.00	0.00
1N	0	-1.375	0.167	0.014	0.000	0.016	-0.201	1	0.00	0.00	0.00
1O	0	-1.375	-0.167	-0.014	0.000	-0.016	0.201	1	0.00	0.00	0.00
1P	0	-1.375	0.167	-0.014	0.000	-0.016	-0.201	1	0.00	0.00	0.00
2	0	-1.790	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	0	-1.790	2.389	-0.000	0.000	0.000	-1.434	1	0.00	0.00	0.00
8	0	-1.790	4.428	0.000	0.000	0.000	-2.657	1	0.01	0.00	0.01
9	0	-1.790	-5.245	-0.000	0.000	0.000	3.147	1	0.01	0.00	0.01
10	0	-1.790	-5.245	0.000	0.000	0.000	3.147	1	0.01	0.00	0.01
11	0	-1.790	1.434	-0.000	0.000	0.000	-0.860	1	0.00	0.00	0.00
12	0	-1.790	2.657	0.000	0.000	0.000	-1.594	1	0.00	0.00	0.00
13	0	-1.790	-3.147	-0.000	0.000	0.000	1.888	1	0.00	0.00	0.00
14	0	-1.790	-3.147	0.000	0.000	0.000	1.888	1	0.00	0.00	0.00
1A	60	-0.690	-0.488	0.004	0.000	0.003	0.293	1	0.00	0.00	0.00
1B	60	-0.690	0.488	0.004	0.000	0.003	-0.293	1	0.00	0.00	0.00
1C	60	-0.690	-0.488	-0.004	0.000	-0.003	0.293	1	0.00	0.00	0.00
1D	60	-0.690	0.488	-0.004	0.000	-0.003	-0.293	1	0.00	0.00	0.00
1E	60	-0.687	-0.488	0.004	0.000	0.003	0.293	1	0.00	0.00	0.00
1F	60	-0.687	0.488	0.004	0.000	0.003	-0.293	1	0.00	0.00	0.00
1G	60	-0.687	-0.488	-0.004	0.000	-0.003	0.293	1	0.00	0.00	0.00
1H	60	-0.687	0.488	-0.004	0.000	-0.003	-0.293	1	0.00	0.00	0.00
1I	60	-0.690	-0.167	0.014	0.000	0.008	0.100	1	0.00	0.00	0.00
1J	60	-0.690	0.167	0.014	0.000	0.008	-0.100	1	0.00	0.00	0.00
1K	60	-0.690	-0.167	-0.014	0.000	-0.008	0.100	1	0.00	0.00	0.00
1L	60	-0.690	0.167	-0.014	0.000	-0.008	-0.100	1	0.00	0.00	0.00
1M	60	-0.687	-0.167	0.014	0.000	0.008	0.100	1	0.00	0.00	0.00
1N	60	-0.687	0.167	0.014	0.000	0.008	-0.100	1	0.00	0.00	0.00
1O	60	-0.687	-0.167	-0.014	0.000	-0.008	0.100	1	0.00	0.00	0.00
1P	60	-0.687	0.167	-0.014	0.000	-0.008	-0.100	1	0.00	0.00	0.00
2	60	-0.895	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	60	-0.895	1.195	-0.000	0.000	0.000	-0.359	1	0.00	0.00	0.00
8	60	-0.895	2.214	0.000	0.000	0.000	-0.664	1	0.00	0.00	0.00
9	60	-0.895	-2.623	-0.000	0.000	0.000	0.787	1	0.00	0.00	0.00
10	60	-0.895	-2.623	0.000	0.000	0.000	0.787	1	0.00	0.00	0.00
11	60	-0.895	0.717	-0.000	0.000	0.000	-0.215	1	0.00	0.00	0.00
12	60	-0.895	1.329	0.000	0.000	0.000	-0.399	1	0.00	0.00	0.00
13	60	-0.895	-1.574	-0.000	0.000	0.000	0.472	1	0.00	0.00	0.00
14	60	-0.895	-1.574	0.000	0.000	0.000	0.472	1	0.00	0.00	0.00
1A	120	-0.002	-0.488	0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00
1B	120	-0.002	0.488	0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00
1C	120	-0.002	-0.488	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1D	120	-0.002	0.488	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00
1E	120	0.002	-0.488	0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00
1F	120	0.002	0.488	0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00
1G	120	0.002	-0.488	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1H	120	0.002	0.488	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00
1I	120	-0.002	-0.167	0.014	0.000	-0.000	0.000	1	0.00	0.00	0.00
1J	120	-0.002	0.167	0.014	0.000	-0.000	0.000	1	0.00	0.00	0.00
1K	120	-0.002	-0.167	-0.014	0.000	0.000	0.000	1	0.00	0.00	0.00
1L	120	-0.002	0.167	-0.014	0.000	0.000	0.000	1	0.00	0.00	0.00
1M	120	0.002	-0.167	0.014	0.000	-0.000	0.000	--	0.00	0.00	0.00
1N	120	0.002	0.167	0.014	0.000	-0.000	0.000	--	0.00	0.00	0.00
1O	120	0.002	-0.167	-0.014	0.000	0.000	0.000	--	0.00	0.00	0.00
1P	120	0.002	0.167	-0.014	0.000	0.000	0.000	--	0.00	0.00	0.00
2	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
7	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
9	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
10	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
11	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
12	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
13	120	-0.000	0.000	-0.000	0.000	0.000	0.000	1	0.00	0.00	0.00
14	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-121.304	0.543	133.168	1	0.5967	1.0798	1.0205	--	--	0.05	--	0.33	Snell. 'zx'= 78
1B	-121.304	0.543	-158.453	1	0.5967	1.0798	1.0131	--	--	0.05	--	0.38	Snell. 'zx'= 78
1C	-121.304	0.232	133.168	1	0.5967	1.1267	1.0205	--	--	0.05	--	0.33	Snell. 'zx'= 78
1D	-121.304	0.232	-158.453	1	0.5967	1.1267	1.0131	--	--	0.05	--	0.38	Snell. 'zx'= 78
1E	-72.756	0.543	133.168	1	0.5967	1.0479	1.0123	--	--	0.03	--	0.31	Snell. 'zx'= 78
1F	-72.756	0.543	-158.453	1	0.5967	1.0479	1.0079	--	--	0.03	--	0.36	Snell. 'zx'= 78
1G	-72.756	0.232	133.168	1	0.5967	1.0760	1.0123	--	--	0.03	--	0.31	Snell. 'zx'= 78
1H	-72.756	0.232	-158.453	1	0.5967	1.0760	1.0079	--	--	0.03	--	0.36	Snell. 'zx'= 78
1I	-110.876	0.630	75.629	1	0.5967	1.0570	1.0373	--	--	0.05	--	0.21	Snell. 'zx'= 78

1J	-110.876	0.630	74.975	1	0.5967	1.0570	1.0212	--	--	0.05	--	0.21	Snell. 'zx'= 78
1K	-110.876	-0.421	75.629	1	0.5967	1.0721	1.0373	--	--	0.05	--	0.21	Snell. 'zx'= 78
1L	-110.876	-0.421	74.975	1	0.5967	1.0721	1.0212	--	--	0.05	--	0.21	Snell. 'zx'= 78
1M	-83.184	0.630	75.629	1	0.5967	1.0428	1.0280	--	--	0.04	--	0.20	Snell. 'zx'= 78
1N	-83.184	0.630	74.975	1	0.5967	1.0428	1.0159	--	--	0.04	--	0.19	Snell. 'zx'= 78
1O	-83.184	-0.421	75.629	1	0.5967	1.0541	1.0280	--	--	0.04	--	0.20	Snell. 'zx'= 78
1P	-83.184	-0.421	74.975	1	0.5967	1.0541	1.0159	--	--	0.04	--	0.19	Snell. 'zx'= 78
2	-170.300	0.502	90.840	1	0.5967	1.1479	1.0329	--	--	0.07	--	0.27	Snell. 'zx'= 78
7	-95.450	0.552	45.340	1	0.5967	1.0633	1.0342	--	--	0.04	--	0.14	Snell. 'zx'= 78
8	-101.300	0.476	60.850	1	0.5967	1.0962	1.0232	--	--	0.04	--	0.17	Snell. 'zx'= 78
9	-120.100	0.554	59.290	1	0.5967	1.0587	1.0375	--	--	0.05	--	0.18	Snell. 'zx'= 78
10	-103.700	0.812	59.380	1	0.5967	1.0315	1.0324	--	--	0.04	--	0.17	Snell. 'zx'= 78
11	-151.900	0.552	78.690	1	0.5967	1.1053	1.0332	--	--	0.07	--	0.23	Snell. 'zx'= 78
12	-155.400	0.506	88.000	1	0.5967	1.1329	1.0286	--	--	0.07	--	0.25	Snell. 'zx'= 78
13	-166.700	0.490	87.060	1	0.5967	1.1187	1.0348	--	--	0.07	--	0.26	Snell. 'zx'= 78
14	-156.100	0.708	87.110	1	0.5967	1.0635	1.0326	--	--	0.07	--	0.25	Snell. 'zx'= 78

ASTA NUM. 11 NI 11 NF 101 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 2.82 2.82 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-88.708	-62.217	0.697	0.000	1.143	148.895	1	0.09	0.02	0.30	
1B	0	-88.708	41.217	0.697	0.000	1.143	-115.775	1	0.06	0.02	0.24	
1C	0	-88.708	-62.217	0.530	0.000	0.767	148.895	1	0.09	0.02	0.30	
1D	0	-88.708	41.217	0.530	0.000	0.767	-115.775	1	0.06	0.02	0.24	
1E	0	-36.632	-62.217	0.697	0.000	1.143	148.895	1	0.09	0.01	0.30	
1F	0	-36.632	41.217	0.697	0.000	1.143	-115.775	1	0.06	0.01	0.24	
1G	0	-36.632	-62.217	0.530	0.000	0.767	148.895	1	0.09	0.01	0.30	
1H	0	-36.632	41.217	0.530	0.000	0.767	-115.775	1	0.06	0.01	0.24	
1I	0	-71.718	-27.340	0.788	0.000	1.357	59.400	1	0.04	0.02	0.12	
1J	0	-71.718	6.340	0.788	0.000	1.357	-26.280	1	0.01	0.02	0.05	
1K	0	-71.718	-27.340	0.438	0.000	0.553	59.400	1	0.04	0.02	0.12	
1L	0	-71.718	6.340	0.438	0.000	0.553	-26.280	1	0.01	0.02	0.05	
1M	0	-53.622	-27.340	0.788	0.000	1.357	59.400	1	0.04	0.01	0.12	
1N	0	-53.622	6.340	0.788	0.000	1.357	-26.280	1	0.01	0.01	0.05	
1O	0	-53.622	-27.340	0.438	0.000	0.553	59.400	1	0.04	0.01	0.12	
1P	0	-53.622	6.340	0.438	0.000	0.553	-26.280	1	0.01	0.01	0.05	
2	0	-108.000	-18.750	1.084	0.000	1.688	29.570	1	0.03	0.03	0.06	
7	0	-68.090	-18.520	-10.860	0.000	-7.823	27.550	1	0.03	0.02	0.06	
8	0	-63.350	0.202	-10.850	0.000	-7.800	-5.969	1	0.01	0.02	0.03	
9	0	-71.650	-5.486	10.680	0.000	9.154	13.580	1	0.01	0.02	0.04	
10	0	-72.270	-5.479	-4.816	0.000	-3.569	13.570	1	0.01	0.02	0.03	
11	0	-100.000	-21.670	-5.912	0.000	-3.751	33.190	1	0.03	0.03	0.07	
12	0	-97.170	-10.440	-5.907	0.000	-3.737	13.070	1	0.01	0.02	0.03	
13	0	-102.100	-13.850	7.012	0.000	6.436	24.800	1	0.02	0.03	0.05	
14	0	-102.500	-13.850	-2.284	0.000	-1.198	24.790	1	0.02	0.03	0.05	
1A	210	-86.298	-62.217	0.697	0.000	-0.321	18.222	1	0.09	0.02	0.04	
1B	210	-86.298	41.217	0.697	0.000	-0.321	-29.212	1	0.06	0.02	0.06	
1C	210	-86.298	-62.217	0.530	0.000	-0.346	18.222	1	0.09	0.02	0.04	
1D	210	-86.298	41.217	0.530	0.000	-0.346	-29.212	1	0.06	0.02	0.06	
1E	210	-34.222	-62.217	0.697	0.000	-0.321	18.222	1	0.09	0.01	0.04	
1F	210	-34.222	41.217	0.697	0.000	-0.321	-29.212	1	0.06	0.01	0.06	
1G	210	-34.222	-62.217	0.530	0.000	-0.346	18.222	1	0.09	0.01	0.04	
1H	210	-34.222	41.217	0.530	0.000	-0.346	-29.212	1	0.06	0.01	0.06	
1I	210	-69.308	-27.340	0.788	0.000	-0.298	1.977	1	0.04	0.02	0.00	
1J	210	-69.308	6.340	0.788	0.000	-0.298	-12.966	1	0.01	0.02	0.03	
1K	210	-69.308	-27.340	0.438	0.000	-0.368	1.977	1	0.04	0.02	0.00	
1L	210	-69.308	6.340	0.438	0.000	-0.368	-12.966	1	0.01	0.02	0.03	
1M	210	-51.212	-27.340	0.788	0.000	-0.298	1.977	1	0.04	0.01	0.00	
1N	210	-51.212	6.340	0.788	0.000	-0.298	-12.966	1	0.01	0.01	0.03	
1O	210	-51.212	-27.340	0.438	0.000	-0.368	1.977	1	0.04	0.01	0.00	
1P	210	-51.212	6.340	0.438	0.000	-0.368	-12.966	1	0.01	0.01	0.03	
2	210	-104.900	-18.750	1.084	0.000	-0.590	-9.805	1	0.03	0.03	0.02	
7	210	-64.955	-13.871	-0.340	0.000	3.940	-6.457	1	0.02	0.02	0.02	
8	210	-60.220	-2.307	-0.330	0.000	3.943	-8.180	1	0.00	0.02	0.02	
9	210	-68.515	-10.993	1.793	0.000	-3.936	-3.723	1	0.02	0.02	0.02	
10	210	-69.140	-10.984	-0.022	0.000	1.512	-3.718	1	0.02	0.02	0.01	
11	210	-96.875	-18.880	0.402	0.000	2.035	-9.389	1	0.03	0.02	0.02	
12	210	-94.040	-11.945	0.408	0.000	2.037	-10.425	1	0.02	0.02	0.02	
13	210	-98.990	-17.155	1.681	0.000	-2.691	-7.751	1	0.02	0.03	0.02	
14	210	-99.380	-17.150	0.593	0.000	0.577	-7.751	1	0.02	0.03	0.02	
1A	420	-83.888	-62.217	0.697	0.000	-1.784	-112.450	1	0.09	0.02	0.23	
1B	420	-83.888	41.217	0.697	0.000	-1.784	57.350	1	0.06	0.02	0.12	
1C	420	-83.888	-62.217	0.530	0.000	-1.458	-112.450	1	0.09	0.02	0.23	
1D	420	-83.888	41.217	0.530	0.000	-1.458	57.350	1	0.06	0.02	0.12	
1E	420	-31.812	-62.217	0.697	0.000	-1.784	-112.450	1	0.09	0.01	0.23	
1F	420	-31.812	41.217	0.697	0.000	-1.784	57.350	1	0.06	0.01	0.12	
1G	420	-31.812	-62.217	0.530	0.000	-1.458	-112.450	1	0.09	0.01	0.23	
1H	420	-31.812	41.217	0.530	0.000	-1.458	57.350	1	0.06	0.01	0.12	
1I	420	-66.898	-27.340	0.788	0.000	-1.954	-55.447	1	0.04	0.02	0.11	
1J	420	-66.898	6.340	0.788	0.000	-1.954	0.347	1	0.01	0.02	0.01	
1K	420	-66.898	-27.340	0.438	0.000	-1.288	-55.447	1	0.04	0.02	0.11	
1L	420	-66.898	6.340	0.438	0.000	-1.288	0.347	1	0.01	0.02	0.01	
1M	420	-48.802	-27.340	0.788	0.000	-1.954	-55.447	1	0.04	0.01	0.11	
1N	420	-48.802	6.340	0.788	0.000	-1.954	0.347	1	0.01	0.01	0.01	
1O	420	-48.802	-27.340	0.438	0.000	-1.288	-55.447	1	0.04	0.01	0.11	
1P	420	-48.802	6.340	0.438	0.000	-1.288	0.347	1	0.01	0.01	0.01	
2	420	-101.800	-18.750	1.084	0.000	-2.867	-49.180	1	0.03	0.03	0.10	
7	420	-61.820	-9.221	10.180	0.000	-6.397	-30.700	1	0.01	0.02	0.06	

8	420	-57.090	-4.815	10.190	0.000	-6.414	-15.660	1	0.01	0.01	0.03
9	420	-65.380	-16.500	-7.095	0.000	1.634	-32.590	1	0.02	0.02	0.07
10	420	-66.010	-16.490	4.772	0.000	-3.476	-32.570	1	0.02	0.02	0.07
11	420	-93.750	-16.090	6.717	0.000	-5.440	-46.110	1	0.02	0.02	0.09
12	420	-90.910	-13.450	6.723	0.000	-5.450	-37.080	1	0.02	0.02	0.08
13	420	-95.880	-20.460	-3.651	0.000	-0.622	-47.240	1	0.03	0.02	0.10
14	420	-96.260	-20.450	3.469	0.000	-3.688	-47.230	1	0.03	0.02	0.10

ASTA NUM. 18 NI 101 NF 99 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 2.82 2.82 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-76.599	-113.465	-1.773	0.000	-1.448	57.350	1	0.16	0.02	0.12	
1B	0	-76.599	215.845	-1.773	0.000	-1.448	-112.410	1	0.30	0.02	0.23	
1C	0	-76.599	-113.465	-2.653	0.000	-1.774	57.350	1	0.16	0.02	0.12	
1D	0	-76.599	215.845	-2.653	0.000	-1.774	-112.410	1	0.30	0.02	0.23	
1E	0	-24.921	-113.465	-1.773	0.000	-1.448	57.350	1	0.16	0.01	0.12	
1F	0	-24.921	215.845	-1.773	0.000	-1.448	-112.410	1	0.30	0.01	0.23	
1G	0	-24.921	-113.465	-2.653	0.000	-1.774	57.350	1	0.16	0.01	0.12	
1H	0	-24.921	215.845	-2.653	0.000	-1.774	-112.410	1	0.30	0.01	0.23	
1I	0	-59.995	-2.923	-1.525	0.000	-1.278	0.360	1	0.00	0.02	0.01	
1J	0	-59.995	105.303	-1.525	0.000	-1.278	-55.420	1	0.15	0.02	0.11	
1K	0	-59.995	-2.923	-2.901	0.000	-1.944	0.360	1	0.00	0.02	0.01	
1L	0	-59.995	105.303	-2.901	0.000	-1.944	-55.420	1	0.15	0.02	0.11	
1M	0	-41.525	-2.923	-1.525	0.000	-1.278	0.360	1	0.00	0.01	0.01	
1N	0	-41.525	105.303	-1.525	0.000	-1.278	-55.420	1	0.15	0.01	0.11	
1O	0	-41.525	-2.923	-2.901	0.000	-1.944	0.360	1	0.00	0.01	0.01	
1P	0	-41.525	105.303	-2.901	0.000	-1.944	-55.420	1	0.15	0.01	0.11	
2	0	-89.500	91.410	-3.879	0.000	-2.847	-49.140	1	0.13	0.02	0.10	
7	0	-52.920	59.780	-5.944	0.000	-6.385	-30.680	1	0.08	0.01	0.06	
8	0	-48.210	26.860	-5.973	0.000	-6.402	-15.640	1	0.04	0.01	0.03	
9	0	-57.990	57.630	-0.436	0.000	1.645	-32.570	1	0.08	0.01	0.07	
10	0	-57.670	57.600	-3.189	0.000	-3.464	-32.550	1	0.08	0.01	0.07	
11	0	-81.650	87.350	-5.720	0.000	-5.422	-46.080	1	0.12	0.02	0.09	
12	0	-78.830	67.600	-5.737	0.000	-5.432	-37.050	1	0.09	0.02	0.08	
13	0	-84.700	86.060	-2.415	0.000	-0.604	-47.210	1	0.12	0.02	0.10	
14	0	-84.510	86.040	-4.067	0.000	-3.669	-47.200	1	0.12	0.02	0.10	
1A	25	-76.314	-113.465	-1.773	0.000	-1.006	28.978	1	0.16	0.02	0.06	
1B	25	-76.314	215.845	-1.773	0.000	-1.006	-58.440	1	0.30	0.02	0.12	
1C	25	-76.314	-113.465	-2.653	0.000	-1.109	28.978	1	0.16	0.02	0.06	
1D	25	-76.314	215.845	-2.653	0.000	-1.109	-58.440	1	0.30	0.02	0.12	
1E	25	-24.636	-113.465	-1.773	0.000	-1.006	28.978	1	0.16	0.01	0.06	
1F	25	-24.636	215.845	-1.773	0.000	-1.006	-58.440	1	0.30	0.01	0.12	
1G	25	-24.636	-113.465	-2.653	0.000	-1.109	28.978	1	0.16	0.01	0.06	
1H	25	-24.636	215.845	-2.653	0.000	-1.109	-58.440	1	0.30	0.01	0.12	
1I	25	-59.710	-2.923	-1.525	0.000	-0.903	-0.371	1	0.00	0.02	0.00	
1J	25	-59.710	105.303	-1.525	0.000	-0.903	-29.091	1	0.15	0.02	0.06	
1K	25	-59.710	-2.923	-2.901	0.000	-1.212	-0.371	1	0.00	0.02	0.01	
1L	25	-59.710	105.303	-2.901	0.000	-1.212	-29.091	1	0.15	0.02	0.06	
1M	25	-41.240	-2.923	-1.525	0.000	-0.903	-0.371	1	0.00	0.01	0.00	
1N	25	-41.240	105.303	-1.525	0.000	-0.903	-29.091	1	0.15	0.01	0.06	
1O	25	-41.240	-2.923	-2.901	0.000	-1.212	-0.371	1	0.00	0.01	0.01	
1P	25	-41.240	105.303	-2.901	0.000	-1.212	-29.091	1	0.15	0.01	0.06	
2	25	-89.125	91.410	-3.879	0.000	-1.877	-26.286	1	0.13	0.02	0.05	
7	25	-52.545	60.335	-4.691	0.000	-5.056	-15.666	1	0.08	0.01	0.03	
8	25	-47.835	26.560	-4.720	0.000	-5.065	-8.961	1	0.04	0.01	0.02	
9	25	-57.615	56.975	-1.494	0.000	1.886	-18.244	1	0.08	0.01	0.04	
10	25	-57.300	56.945	-2.618	0.000	-2.738	-18.232	1	0.08	0.01	0.04	
11	25	-81.280	87.685	-4.968	0.000	-4.086	-24.199	1	0.12	0.02	0.05	
12	25	-78.455	67.420	-4.986	0.000	-4.092	-20.172	1	0.09	0.02	0.04	
13	25	-84.325	85.665	-3.050	0.000	0.079	-25.743	1	0.12	0.02	0.05	
14	25	-84.135	85.645	-3.725	0.000	-2.695	-25.737	1	0.12	0.02	0.05	
1A	50	-76.029	-113.465	-1.773	0.000	-0.565	0.606	1	0.16	0.02	0.00	
1B	50	-76.029	215.845	-1.773	0.000	-0.565	-4.470	1	0.30	0.02	0.01	
1C	50	-76.029	-113.465	-2.653	0.000	-0.444	0.606	1	0.16	0.02	0.00	
1D	50	-76.029	215.845	-2.653	0.000	-0.444	-4.470	1	0.30	0.02	0.01	
1E	50	-24.351	-113.465	-1.773	0.000	-0.565	0.606	1	0.16	0.01	0.00	
1F	50	-24.351	215.845	-1.773	0.000	-0.565	-4.470	1	0.30	0.01	0.01	
1G	50	-24.351	-113.465	-2.653	0.000	-0.444	0.606	1	0.16	0.01	0.00	
1H	50	-24.351	215.845	-2.653	0.000	-0.444	-4.470	1	0.30	0.01	0.01	
1I	50	-59.425	-2.923	-1.525	0.000	-0.528	-1.103	1	0.00	0.02	0.00	
1J	50	-59.425	105.303	-1.525	0.000	-0.528	-2.761	1	0.15	0.02	0.01	
1K	50	-59.425	-2.923	-2.901	0.000	-0.480	-1.103	1	0.00	0.02	0.00	
1L	50	-59.425	105.303	-2.901	0.000	-0.480	-2.761	1	0.15	0.02	0.01	
1M	50	-40.955	-2.923	-1.525	0.000	-0.528	-1.103	1	0.00	0.01	0.00	
1N	50	-40.955	105.303	-1.525	0.000	-0.528	-2.761	1	0.15	0.01	0.01	
1O	50	-40.955	-2.923	-2.901	0.000	-0.480	-1.103	1	0.00	0.01	0.00	
1P	50	-40.955	105.303	-2.901	0.000	-0.480	-2.761	1	0.15	0.01	0.01	
2	50	-88.750	91.410	-3.879	0.000	-0.907	-3.432	1	0.13	0.02	0.01	
7	50	-52.170	60.890	-3.438	0.000	-4.040	-0.514	1	0.09	0.01	0.02	
8	50	-47.460	26.260	-3.467	0.000	-4.042	-2.357	1	0.04	0.01	0.02	
9	50	-57.240	56.320	-2.552	0.000	2.392	-4.081	1	0.08	0.01	0.01	
10	50	-56.930	56.290	-2.047	0.000	-2.155	-4.077	1	0.08	0.01	0.01	
11	50	-80.910	88.020	-4.216	0.000	-2.938	-2.234	1	0.12	0.02	0.01	
12	50	-78.080	67.240	-4.234	0.000	-2.939	-3.339	1	0.09	0.02	0.01	
13	50	-83.950	85.270	-3.684	0.000	0.921	-4.374	1	0.12	0.02	0.01	
14	50	-83.760	85.250	-3.382	0.000	-1.807	-4.372	1	0.12	0.02	0.01	

ASTA NUM. 31 NI 99 NF 246 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 2.82 2.82 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-1.378	-0.487	0.004	0.000	0.004	0.584	1	0.00	0.00	0.00	
1B	0	-1.378	0.487	0.004	0.000	0.004	-0.584	1	0.00	0.00	0.00	
1C	0	-1.378	-0.487	-0.004	0.000	-0.004	0.584	1	0.00	0.00	0.00	
1D	0	-1.378	0.487	-0.004	0.000	-0.004	-0.584	1	0.00	0.00	0.00	
1E	0	-1.376	-0.487	0.004	0.000	0.004	0.584	1	0.00	0.00	0.00	
1F	0	-1.376	0.487	0.004	0.000	0.004	-0.584	1	0.00	0.00	0.00	
1G	0	-1.376	-0.487	-0.004	0.000	-0.004	0.584	1	0.00	0.00	0.00	
1H	0	-1.376	0.487	-0.004	0.000	-0.004	-0.584	1	0.00	0.00	0.00	
1I	0	-1.378	-0.178	0.010	0.000	0.012	0.214	1	0.00	0.00	0.00	
1J	0	-1.378	0.178	0.010	0.000	0.012	-0.214	1	0.00	0.00	0.00	
1K	0	-1.378	-0.178	-0.010	0.000	-0.012	0.214	1	0.00	0.00	0.00	
1L	0	-1.378	0.178	-0.010	0.000	-0.012	-0.214	1	0.00	0.00	0.00	
1M	0	-1.376	-0.178	0.010	0.000	0.012	0.214	1	0.00	0.00	0.00	
1N	0	-1.376	0.178	0.010	0.000	0.012	-0.214	1	0.00	0.00	0.00	
1O	0	-1.376	-0.178	-0.010	0.000	-0.012	0.214	1	0.00	0.00	0.00	
1P	0	-1.376	0.178	-0.010	0.000	-0.012	-0.214	1	0.00	0.00	0.00	
2	0	-1.790	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	-2.657	-6.014	0.000	-3.608	1.594	1	0.00	0.00	0.02	
8	0	-1.790	1.434	-6.014	0.000	-3.608	-0.860	1	0.00	0.00	0.02	
9	0	-1.790	3.147	5.077	0.000	3.046	-1.888	1	0.00	0.00	0.01	
10	0	-1.790	3.147	-2.740	0.000	-1.644	-1.888	1	0.00	0.00	0.01	
11	0	-1.790	-1.594	-3.608	0.000	-2.165	0.956	1	0.00	0.00	0.01	
12	0	-1.790	0.860	-3.608	0.000	-2.165	-0.516	1	0.00	0.00	0.01	
13	0	-1.790	1.888	3.046	0.000	1.828	-1.133	1	0.00	0.00	0.01	
14	0	-1.790	1.888	-1.644	0.000	-0.986	-1.133	1	0.00	0.00	0.00	
1A	60	-0.690	-0.487	0.004	0.000	0.002	0.292	1	0.00	0.00	0.00	
1B	60	-0.690	0.487	0.004	0.000	0.002	-0.292	1	0.00	0.00	0.00	
1C	60	-0.690	-0.487	-0.004	0.000	-0.002	0.292	1	0.00	0.00	0.00	
1D	60	-0.690	0.487	-0.004	0.000	-0.002	-0.292	1	0.00	0.00	0.00	
1E	60	-0.687	-0.487	0.004	0.000	0.002	0.292	1	0.00	0.00	0.00	
1F	60	-0.687	0.487	0.004	0.000	0.002	-0.292	1	0.00	0.00	0.00	
1G	60	-0.687	-0.487	-0.004	0.000	-0.002	0.292	1	0.00	0.00	0.00	
1H	60	-0.687	0.487	-0.004	0.000	-0.002	-0.292	1	0.00	0.00	0.00	
1I	60	-0.689	-0.178	0.010	0.000	0.006	0.107	1	0.00	0.00	0.00	
1J	60	-0.689	0.178	0.010	0.000	0.006	-0.107	1	0.00	0.00	0.00	
1K	60	-0.689	-0.178	-0.010	0.000	-0.006	0.107	1	0.00	0.00	0.00	
1L	60	-0.689	0.178	-0.010	0.000	-0.006	-0.107	1	0.00	0.00	0.00	
1M	60	-0.688	-0.178	0.010	0.000	0.006	0.107	1	0.00	0.00	0.00	
1N	60	-0.688	0.178	0.010	0.000	0.006	-0.107	1	0.00	0.00	0.00	
1O	60	-0.688	-0.178	-0.010	0.000	-0.006	0.107	1	0.00	0.00	0.00	
1P	60	-0.688	0.178	-0.010	0.000	-0.006	-0.107	1	0.00	0.00	0.00	
2	60	-0.895	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	60	-0.895	-1.329	-3.007	0.000	-0.902	0.399	1	0.00	0.00	0.00	
8	60	-0.895	0.717	-3.007	0.000	-0.902	-0.215	1	0.00	0.00	0.00	
9	60	-0.895	1.574	2.539	0.000	0.761	-0.472	1	0.00	0.00	0.00	
10	60	-0.895	1.574	-1.370	0.000	-0.411	-0.472	1	0.00	0.00	0.00	
11	60	-0.895	-0.797	-1.804	0.000	-0.541	0.239	1	0.00	0.00	0.00	
12	60	-0.895	0.430	-1.804	0.000	-0.541	-0.129	1	0.00	0.00	0.00	
13	60	-0.895	0.944	1.523	0.000	0.457	-0.283	1	0.00	0.00	0.00	
14	60	-0.895	0.944	-0.822	0.000	-0.247	-0.283	1	0.00	0.00	0.00	
1A	120	-0.001	-0.487	0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1B	120	-0.001	0.487	0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1C	120	-0.001	-0.487	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1D	120	-0.001	0.487	-0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1E	120	0.001	-0.487	0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1F	120	0.001	0.487	0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1G	120	0.001	-0.487	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1H	120	0.001	0.487	-0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1I	120	-0.001	-0.178	0.010	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1J	120	-0.001	0.178	0.010	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1K	120	-0.001	-0.178	-0.010	0.000	0.000	0.000	1	0.00	0.00	0.00	
1L	120	-0.001	0.178	-0.010	0.000	0.000	0.000	1	0.00	0.00	0.00	
1M	120	0.001	-0.178	0.010	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1N	120	0.001	0.178	0.010	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1O	120	0.001	-0.178	-0.010	0.000	0.000	0.000	--	0.00	0.00	0.00	
1P	120	0.001	0.178	-0.010	0.000	0.000	0.000	--	0.00	0.00	0.00	
2	120	-0.000	-0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
9	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
10	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
11	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
12	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
13	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
14	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											

1A	-88.708	-1.784	148.895	1	0.5967	1.0896	1.0099	--	--	0.04	--	0.35	Snell. 'zx'= 78
1B	-88.708	-1.784	-115.775	1	0.5967	1.0896	1.0137	--	--	0.04	--	0.29	Snell. 'zx'= 78
1C	-88.708	-1.774	148.895	1	0.5967	1.1042	1.0099	--	--	0.04	--	0.35	Snell. 'zx'= 78
1D	-88.708	-1.774	-115.775	1	0.5967	1.1042	1.0137	--	--	0.04	--	0.29	Snell. 'zx'= 78
1E	-36.632	-1.784	148.895	1	0.5967	1.0370	1.0041	--	--	0.02	--	0.33	Snell. 'zx'= 78
1F	-36.632	-1.784	-115.775	1	0.5967	1.0370	1.0057	--	--	0.02	--	0.26	Snell. 'zx'= 78
1G	-36.632	-1.774	148.895	1	0.5967	1.0430	1.0041	--	--	0.02	--	0.33	Snell. 'zx'= 78
1H	-36.632	-1.774	-115.775	1	0.5967	1.0430	1.0057	--	--	0.02	--	0.26	Snell. 'zx'= 78
1I	-71.718	-1.954	59.400	1	0.5967	1.0635	1.0157	--	--	0.03	--	0.16	Snell. 'zx'= 78
1J	-71.718	-1.954	-55.420	1	0.5967	1.0635	1.0302	--	--	0.03	--	0.16	Snell. 'zx'= 78
1K	-71.718	-1.944	59.400	1	0.5967	1.0858	1.0157	--	--	0.03	--	0.16	Snell. 'zx'= 78
1L	-71.718	-1.944	-55.420	1	0.5967	1.0858	1.0302	--	--	0.03	--	0.16	Snell. 'zx'= 78
1M	-53.622	-1.954	59.400	1	0.5967	1.0475	1.0117	--	--	0.02	--	0.15	Snell. 'zx'= 78
1N	-53.622	-1.954	-55.420	1	0.5967	1.0475	1.0226	--	--	0.02	--	0.15	Snell. 'zx'= 78
1O	-53.622	-1.944	59.400	1	0.5967	1.0641	1.0117	--	--	0.02	--	0.15	Snell. 'zx'= 78
1P	-53.622	-1.944	-55.420	1	0.5967	1.0641	1.0226	--	--	0.02	--	0.15	Snell. 'zx'= 78
2	-108.000	-2.867	-49.180	1	0.5967	1.0676	1.0331	--	--	0.05	--	0.16	Snell. 'zx'= 78
7	-68.090	-7.823	-30.700	1	0.5967	1.0137	1.0275	--	--	0.03	--	0.13	Snell. 'zx'= 78
8	-63.350	-7.800	-15.660	1	0.5967	1.0128	1.0904	--	--	0.03	--	0.10	Snell. 'zx'= 78
9	-71.650	9.154	-32.590	1	0.5967	1.0125	1.0360	--	--	0.03	--	0.14	Snell. 'zx'= 78
10	-72.270	-3.569	-32.570	1	0.5967	1.0400	1.0363	--	--	0.03	--	0.12	Snell. 'zx'= 78
11	-100.000	-5.440	-46.110	1	0.5967	1.0355	1.0304	--	--	0.04	--	0.16	Snell. 'zx'= 78
12	-97.170	-5.450	-37.080	1	0.5967	1.0345	1.0452	--	--	0.04	--	0.15	Snell. 'zx'= 78
13	-102.100	6.436	-47.240	1	0.5967	1.0285	1.0339	--	--	0.04	--	0.17	Snell. 'zx'= 78
14	-102.500	-3.688	-47.230	1	0.5967	1.0689	1.0340	--	--	0.04	--	0.16	Snell. 'zx'= 78

ASTA NUM. 12 NI 12 NF 102 Lungh. 420.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.22 -1.22 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-88.035	-40.645	0.709	0.000	1.169	116.124	1	0.06	0.02	0.24	
1B	0	-88.035	61.085	0.709	0.000	1.169	-146.224	1	0.09	0.02	0.30	
1C	0	-88.035	-40.645	0.520	0.000	0.743	116.124	1	0.06	0.02	0.24	
1D	0	-88.035	61.085	0.520	0.000	0.743	-146.224	1	0.09	0.02	0.30	
1E	0	-37.485	-40.645	0.709	0.000	1.169	116.124	1	0.06	0.01	0.24	
1F	0	-37.485	61.085	0.709	0.000	1.169	-146.224	1	0.09	0.01	0.30	
1G	0	-37.485	-40.645	0.520	0.000	0.743	116.124	1	0.06	0.01	0.24	
1H	0	-37.485	61.085	0.520	0.000	0.743	-146.224	1	0.09	0.01	0.30	
1I	0	-71.359	-5.843	0.828	0.000	1.444	26.650	1	0.01	0.02	0.05	
1J	0	-71.359	26.283	0.828	0.000	1.444	-56.750	1	0.04	0.02	0.12	
1K	0	-71.359	-5.843	0.400	0.000	0.468	26.650	1	0.01	0.02	0.05	
1L	0	-71.359	26.283	0.400	0.000	0.468	-56.750	1	0.04	0.02	0.12	
1M	0	-54.161	-5.843	0.828	0.000	1.444	26.650	1	0.01	0.01	0.05	
1N	0	-54.161	26.283	0.828	0.000	1.444	-56.750	1	0.04	0.01	0.12	
1O	0	-54.161	-5.843	0.400	0.000	0.468	26.650	1	0.01	0.01	0.05	
1P	0	-54.161	26.283	0.400	0.000	0.468	-56.750	1	0.04	0.01	0.12	
2	0	-108.200	18.230	1.086	0.000	1.690	-26.850	1	0.03	0.03	0.05	
7	0	-65.760	10.750	-10.920	0.000	-7.946	-11.140	1	0.02	0.02	0.04	
8	0	-70.570	23.530	-10.850	0.000	-7.794	-39.810	1	0.03	0.02	0.08	
9	0	-71.760	5.170	10.680	0.000	9.155	-11.850	1	0.01	0.02	0.04	
10	0	-72.390	5.164	-4.815	0.000	-3.568	-11.840	1	0.01	0.02	0.02	
11	0	-98.710	16.710	-5.943	0.000	-3.823	-21.800	1	0.02	0.03	0.04	
12	0	-101.600	24.380	-5.903	0.000	-3.732	-38.990	1	0.03	0.03	0.08	
13	0	-102.300	13.360	7.013	0.000	6.438	-22.220	1	0.02	0.03	0.05	
14	0	-102.700	13.360	-2.282	0.000	-1.196	-22.220	1	0.02	0.03	0.05	
1A	210	-85.625	-40.645	0.709	0.000	-0.319	30.782	1	0.06	0.02	0.06	
1B	210	-85.625	61.085	0.709	0.000	-0.319	-17.972	1	0.09	0.02	0.04	
1C	210	-85.625	-40.645	0.520	0.000	-0.349	30.782	1	0.06	0.02	0.06	
1D	210	-85.625	61.085	0.520	0.000	-0.349	-17.972	1	0.09	0.02	0.04	
1E	210	-35.075	-40.645	0.709	0.000	-0.319	30.782	1	0.06	0.01	0.06	
1F	210	-35.075	61.085	0.709	0.000	-0.319	-17.972	1	0.09	0.01	0.04	
1G	210	-35.075	-40.645	0.520	0.000	-0.349	30.782	1	0.06	0.01	0.06	
1H	210	-35.075	61.085	0.520	0.000	-0.349	-17.972	1	0.09	0.01	0.04	
1I	210	-68.949	-5.843	0.828	0.000	-0.296	14.378	1	0.01	0.02	0.03	
1J	210	-68.949	26.283	0.828	0.000	-0.296	-1.568	1	0.04	0.02	0.00	
1K	210	-68.949	-5.843	0.400	0.000	-0.373	14.378	1	0.01	0.02	0.03	
1L	210	-68.949	26.283	0.400	0.000	-0.373	-1.568	1	0.04	0.02	0.00	
1M	210	-51.751	-5.843	0.828	0.000	-0.296	14.378	1	0.01	0.01	0.03	
1N	210	-51.751	26.283	0.828	0.000	-0.296	-1.568	1	0.04	0.01	0.00	
1O	210	-51.751	-5.843	0.400	0.000	-0.373	14.378	1	0.01	0.01	0.03	
1P	210	-51.751	26.283	0.400	0.000	-0.373	-1.568	1	0.04	0.01	0.00	
2	210	-105.050	18.230	1.086	0.000	-0.591	11.435	1	0.03	0.03	0.02	
7	210	-62.630	8.243	-0.395	0.000	3.929	8.809	1	0.01	0.02	0.02	
8	210	-67.440	18.880	-0.325	0.000	3.942	4.717	1	0.03	0.02	0.02	
9	210	-68.625	10.675	1.793	0.000	-3.937	4.788	1	0.01	0.02	0.02	
10	210	-69.255	10.672	-0.020	0.000	1.510	4.788	1	0.01	0.02	0.01	
11	210	-95.575	15.205	0.372	0.000	2.027	11.720	1	0.02	0.02	0.02	
12	210	-98.465	21.590	0.411	0.000	2.035	9.269	1	0.03	0.03	0.02	
13	210	-99.170	16.665	1.682	0.000	-2.692	9.311	1	0.02	0.03	0.02	
14	210	-99.555	16.665	0.595	0.000	0.576	9.306	1	0.02	0.03	0.02	
1A	420	-83.215	-40.645	0.709	0.000	-1.807	-54.559	1	0.06	0.02	0.11	
1B	420	-83.215	61.085	0.709	0.000	-1.807	110.279	1	0.09	0.02	0.23	
1C	420	-83.215	-40.645	0.520	0.000	-1.441	-54.559	1	0.06	0.02	0.11	
1D	420	-83.215	61.085	0.520	0.000	-1.441	110.279	1	0.09	0.02	0.23	
1E	420	-32.665	-40.645	0.709	0.000	-1.807	-54.559	1	0.06	0.01	0.11	
1F	420	-32.665	61.085	0.709	0.000	-1.807	110.279	1	0.09	0.01	0.23	
1G	420	-32.665	-40.645	0.520	0.000	-1.441	-54.559	1	0.06	0.01	0.11	
1H	420	-32.665	61.085	0.520	0.000	-1.441	110.279	1	0.09	0.01	0.23	
1I	420	-66.539	-5.843	0.828	0.000	-2.035	2.106	1	0.01	0.02	0.01	

1J	420	-66.539	26.283	0.828	0.000	-2.035	53.614	1	0.04	0.02	0.11
1K	420	-66.539	-5.843	0.400	0.000	-1.213	2.106	1	0.01	0.02	0.01
1L	420	-66.539	26.283	0.400	0.000	-1.213	53.614	1	0.04	0.02	0.11
1M	420	-49.341	-5.843	0.828	0.000	-2.035	2.106	1	0.01	0.01	0.01
1N	420	-49.341	26.283	0.828	0.000	-2.035	53.614	1	0.04	0.01	0.11
1O	420	-49.341	-5.843	0.400	0.000	-1.213	2.106	1	0.01	0.01	0.01
1P	420	-49.341	26.283	0.400	0.000	-1.213	53.614	1	0.04	0.01	0.11
2	420	-101.900	18.230	1.086	0.000	-2.872	49.720	1	0.03	0.03	0.10
7	420	-59.500	5.736	10.130	0.000	-6.297	23.490	1	0.01	0.02	0.05
8	420	-64.310	14.230	10.200	0.000	-6.423	39.480	1	0.02	0.02	0.08
9	420	-65.490	16.180	-7.094	0.000	1.631	32.990	1	0.02	0.02	0.07
10	420	-66.120	16.180	4.774	0.000	-3.480	32.980	1	0.02	0.02	0.07
11	420	-92.440	13.700	6.686	0.000	-5.384	42.080	1	0.02	0.02	0.09
12	420	-95.330	18.800	6.726	0.000	-5.459	51.670	1	0.03	0.02	0.11
13	420	-96.040	19.970	-3.649	0.000	-0.627	47.780	1	0.03	0.02	0.10
14	420	-96.410	19.970	3.471	0.000	-3.693	47.770	1	0.03	0.02	0.10

ASTA NUM. 19 NI 102 NF 100 Lungh. 50.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.22 -1.22 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm	kN			kN*m							
1A	0	-75.769	-211.675	-1.754	0.000	-1.430	110.239	1	0.30	0.02	0.23	
1B	0	-75.769	108.115	-1.754	0.000	-1.430	-54.559	1	0.15	0.02	0.11	
1C	0	-75.769	-211.675	-2.698	0.000	-1.796	110.239	1	0.30	0.02	0.23	
1D	0	-75.769	108.115	-2.698	0.000	-1.796	-54.559	1	0.15	0.02	0.11	
1E	0	-25.971	-211.675	-1.754	0.000	-1.430	110.239	1	0.30	0.01	0.23	
1F	0	-25.971	108.115	-1.754	0.000	-1.430	-54.559	1	0.15	0.01	0.11	
1G	0	-25.971	-211.675	-2.698	0.000	-1.796	110.239	1	0.30	0.01	0.23	
1H	0	-25.971	108.115	-2.698	0.000	-1.796	-54.559	1	0.15	0.01	0.11	
1I	0	-59.003	-101.857	-1.383	0.000	-1.202	53.588	1	0.14	0.02	0.11	
1J	0	-59.003	-1.703	-1.383	0.000	-1.202	2.092	1	0.00	0.02	0.01	
1K	0	-59.003	-101.857	-3.069	0.000	-2.024	53.588	1	0.14	0.02	0.11	
1L	0	-59.003	-1.703	-3.069	0.000	-2.024	2.092	1	0.00	0.02	0.01	
1M	0	-42.738	-101.857	-1.383	0.000	-1.202	53.588	1	0.14	0.01	0.11	
1N	0	-42.738	-1.703	-1.383	0.000	-1.202	2.092	1	0.00	0.01	0.01	
1O	0	-42.738	-101.857	-3.069	0.000	-2.024	53.588	1	0.14	0.01	0.11	
1P	0	-42.738	-1.703	-3.069	0.000	-2.024	2.092	1	0.00	0.01	0.01	
2	0	-89.680	-92.440	-3.903	0.000	-2.852	49.680	1	0.13	0.02	0.10	
7	0	-50.740	-44.690	-5.762	0.000	-6.286	23.460	1	0.06	0.01	0.05	
8	0	-55.380	-76.690	-6.003	0.000	-6.412	39.450	1	0.11	0.01	0.08	
9	0	-58.120	-58.390	-0.451	0.000	1.642	32.970	1	0.08	0.01	0.07	
10	0	-57.800	-58.370	-3.203	0.000	-3.467	32.950	1	0.08	0.01	0.07	
11	0	-80.450	-78.860	-5.624	0.000	-5.365	42.040	1	0.11	0.02	0.09	
12	0	-83.230	-98.060	-5.768	0.000	-5.441	51.630	1	0.14	0.02	0.11	
13	0	-84.880	-87.080	-2.438	0.000	-0.609	47.740	1	0.12	0.02	0.10	
14	0	-84.690	-87.070	-4.089	0.000	-3.674	47.730	1	0.12	0.02	0.10	
1A	25	-75.484	-211.675	-1.754	0.000	-0.993	57.316	1	0.30	0.02	0.12	
1B	25	-75.484	108.115	-1.754	0.000	-0.993	-27.530	1	0.15	0.02	0.06	
1C	25	-75.484	-211.675	-2.698	0.000	-1.120	57.316	1	0.30	0.02	0.12	
1D	25	-75.484	108.115	-2.698	0.000	-1.120	-27.530	1	0.15	0.02	0.06	
1E	25	-25.686	-211.675	-1.754	0.000	-0.993	57.316	1	0.30	0.01	0.12	
1F	25	-25.686	108.115	-1.754	0.000	-0.993	-27.530	1	0.15	0.01	0.06	
1G	25	-25.686	-211.675	-2.698	0.000	-1.120	57.316	1	0.30	0.01	0.12	
1H	25	-25.686	108.115	-2.698	0.000	-1.120	-27.530	1	0.15	0.01	0.06	
1I	25	-58.717	-101.857	-1.383	0.000	-0.862	28.148	1	0.14	0.02	0.06	
1J	25	-58.717	-1.703	-1.383	0.000	-0.862	1.638	1	0.00	0.02	0.00	
1K	25	-58.717	-101.857	-3.069	0.000	-1.251	28.148	1	0.14	0.02	0.06	
1L	25	-58.717	-1.703	-3.069	0.000	-1.251	1.638	1	0.00	0.02	0.01	
1M	25	-42.452	-101.857	-1.383	0.000	-0.862	28.148	1	0.14	0.01	0.06	
1N	25	-42.452	-1.703	-1.383	0.000	-0.862	1.638	1	0.00	0.01	0.00	
1O	25	-42.452	-101.857	-3.069	0.000	-1.251	28.148	1	0.14	0.01	0.06	
1P	25	-42.452	-1.703	-3.069	0.000	-1.251	1.638	1	0.00	0.01	0.01	
2	25	-89.310	-92.440	-3.903	0.000	-1.876	26.569	1	0.13	0.02	0.05	
7	25	-50.370	-44.990	-4.509	0.000	-5.002	12.252	1	0.06	0.01	0.03	
8	25	-55.005	-77.240	-4.750	0.000	-5.068	20.211	1	0.11	0.01	0.04	
9	25	-57.745	-57.735	-1.509	0.000	1.887	18.453	1	0.08	0.01	0.04	
10	25	-57.430	-57.715	-2.633	0.000	-2.738	18.441	1	0.08	0.01	0.04	
11	25	-80.080	-79.040	-4.872	0.000	-4.053	22.303	1	0.11	0.02	0.05	
12	25	-82.860	-98.390	-5.016	0.000	-4.093	27.077	1	0.14	0.02	0.06	
13	25	-84.505	-86.690	-3.072	0.000	0.080	26.020	1	0.12	0.02	0.05	
14	25	-84.315	-86.675	-3.747	0.000	-2.695	26.014	1	0.12	0.02	0.05	
1A	50	-75.199	-211.675	-1.754	0.000	-0.557	4.393	1	0.30	0.02	0.01	
1B	50	-75.199	108.115	-1.754	0.000	-0.557	-0.501	1	0.15	0.02	0.00	
1C	50	-75.199	-211.675	-2.698	0.000	-0.444	4.393	1	0.30	0.02	0.01	
1D	50	-75.199	108.115	-2.698	0.000	-0.444	-0.501	1	0.15	0.02	0.00	
1E	50	-25.401	-211.675	-1.754	0.000	-0.557	4.393	1	0.30	0.01	0.01	
1F	50	-25.401	108.115	-1.754	0.000	-0.557	-0.501	1	0.15	0.01	0.00	
1G	50	-25.401	-211.675	-2.698	0.000	-0.444	4.393	1	0.30	0.01	0.01	
1H	50	-25.401	108.115	-2.698	0.000	-0.444	-0.501	1	0.15	0.01	0.00	
1I	50	-58.433	-101.857	-1.383	0.000	-0.523	2.708	1	0.14	0.01	0.01	
1J	50	-58.433	-1.703	-1.383	0.000	-0.523	1.184	1	0.00	0.01	0.00	
1K	50	-58.433	-101.857	-3.069	0.000	-0.478	2.708	1	0.14	0.01	0.01	
1L	50	-58.433	-1.703	-3.069	0.000	-0.478	1.184	1	0.00	0.01	0.00	
1M	50	-42.168	-101.857	-1.383	0.000	-0.523	2.708	1	0.14	0.01	0.01	
1N	50	-42.168	-1.703	-1.383	0.000	-0.523	1.184	1	0.00	0.01	0.00	
1O	50	-42.168	-101.857	-3.069	0.000	-0.478	2.708	1	0.14	0.01	0.01	
1P	50	-42.168	-1.703	-3.069	0.000	-0.478	1.184	1	0.00	0.01	0.00	
2	50	-88.940	-92.440	-3.903	0.000	-0.901	3.458	1	0.13	0.02	0.01	
7	50	-50.000	-45.290	-3.256	0.000	-4.031	0.969	1	0.06	0.01	0.02	

8	50	-54.630	-77.790	-3.497	0.000	-4.037	0.835	1	0.11	0.01	0.02
9	50	-57.370	-57.080	-2.567	0.000	2.397	4.099	1	0.08	0.01	0.01
10	50	-57.060	-57.060	-2.062	0.000	-2.151	4.096	1	0.08	0.01	0.01
11	50	-79.710	-79.220	-4.120	0.000	-2.929	2.521	1	0.11	0.02	0.01
12	50	-82.490	-98.720	-4.265	0.000	-2.932	2.440	1	0.14	0.02	0.01
13	50	-84.130	-86.300	-3.707	0.000	0.927	4.399	1	0.12	0.02	0.01
14	50	-83.940	-86.280	-3.404	0.000	-1.801	4.397	1	0.12	0.02	0.01

ASTA NUM. 30 NI 100 NF 247 Lungh. 120.0 cm SEZ. 5 Ps HEB 300

categoria: p.p. y Vento qy tot.
qy medio: 0.00 -1.22 -1.22 kN/m

Sollecitazioni di calcolo e di verifica — Indici <= 1 : VERIFICATO

NC	x	Fx	Fy	Fz	Mx	My	Mz	Classe	I.V.T.	I.R.n.	I.R.	Nota
	cm		kN			kN*m						
1A	0	-1.378	-0.492	0.004	0.000	0.005	0.591	1	0.00	0.00	0.00	
1B	0	-1.378	0.492	0.004	0.000	0.005	-0.591	1	0.00	0.00	0.00	
1C	0	-1.378	-0.492	-0.004	0.000	-0.005	0.591	1	0.00	0.00	0.00	
1D	0	-1.378	0.492	-0.004	0.000	-0.005	-0.591	1	0.00	0.00	0.00	
1E	0	-1.376	-0.492	0.004	0.000	0.005	0.591	1	0.00	0.00	0.00	
1F	0	-1.376	0.492	0.004	0.000	0.005	-0.591	1	0.00	0.00	0.00	
1G	0	-1.376	-0.492	-0.004	0.000	-0.005	0.591	1	0.00	0.00	0.00	
1H	0	-1.376	0.492	-0.004	0.000	-0.005	-0.591	1	0.00	0.00	0.00	
1I	0	-1.378	-0.185	0.012	0.000	0.015	0.222	1	0.00	0.00	0.00	
1J	0	-1.378	0.185	0.012	0.000	0.015	-0.222	1	0.00	0.00	0.00	
1K	0	-1.378	-0.185	-0.012	0.000	-0.015	0.222	1	0.00	0.00	0.00	
1L	0	-1.378	0.185	-0.012	0.000	-0.015	-0.222	1	0.00	0.00	0.00	
1M	0	-1.376	-0.185	0.012	0.000	0.015	0.222	1	0.00	0.00	0.00	
1N	0	-1.376	0.185	0.012	0.000	0.015	-0.222	1	0.00	0.00	0.00	
1O	0	-1.376	-0.185	-0.012	0.000	-0.015	0.222	1	0.00	0.00	0.00	
1P	0	-1.376	0.185	-0.012	0.000	-0.015	-0.222	1	0.00	0.00	0.00	
2	0	-1.790	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	0	-1.790	1.434	-6.014	0.000	-3.608	-0.860	1	0.00	0.00	0.02	
8	0	-1.790	2.657	-6.014	0.000	-3.608	-1.594	1	0.00	0.00	0.02	
9	0	-1.790	-3.147	5.077	0.000	3.046	1.888	1	0.00	0.00	0.01	
10	0	-1.790	-3.147	-2.740	0.000	-1.644	1.888	1	0.00	0.00	0.01	
11	0	-1.790	0.860	-3.608	0.000	-2.165	-0.516	1	0.00	0.00	0.01	
12	0	-1.790	1.594	-3.608	0.000	-2.165	-0.956	1	0.00	0.00	0.01	
13	0	-1.790	-1.888	3.046	0.000	1.828	1.133	1	0.00	0.00	0.01	
14	0	-1.790	-1.888	-1.644	0.000	-0.986	1.133	1	0.00	0.00	0.00	
1A	60	-0.690	-0.492	0.004	0.000	0.002	0.295	1	0.00	0.00	0.00	
1B	60	-0.690	0.492	0.004	0.000	0.002	-0.295	1	0.00	0.00	0.00	
1C	60	-0.690	-0.492	-0.004	0.000	-0.002	0.295	1	0.00	0.00	0.00	
1D	60	-0.690	0.492	-0.004	0.000	-0.002	-0.295	1	0.00	0.00	0.00	
1E	60	-0.687	-0.492	0.004	0.000	0.002	0.295	1	0.00	0.00	0.00	
1F	60	-0.687	0.492	0.004	0.000	0.002	-0.295	1	0.00	0.00	0.00	
1G	60	-0.687	-0.492	-0.004	0.000	-0.002	0.295	1	0.00	0.00	0.00	
1H	60	-0.687	0.492	-0.004	0.000	-0.002	-0.295	1	0.00	0.00	0.00	
1I	60	-0.689	-0.185	0.012	0.000	0.007	0.111	1	0.00	0.00	0.00	
1J	60	-0.689	0.185	0.012	0.000	0.007	-0.111	1	0.00	0.00	0.00	
1K	60	-0.689	-0.185	-0.012	0.000	-0.007	0.111	1	0.00	0.00	0.00	
1L	60	-0.689	0.185	-0.012	0.000	-0.007	-0.111	1	0.00	0.00	0.00	
1M	60	-0.688	-0.185	0.012	0.000	0.007	0.111	1	0.00	0.00	0.00	
1N	60	-0.688	0.185	0.012	0.000	0.007	-0.111	1	0.00	0.00	0.00	
1O	60	-0.688	-0.185	-0.012	0.000	-0.007	0.111	1	0.00	0.00	0.00	
1P	60	-0.688	0.185	-0.012	0.000	-0.007	-0.111	1	0.00	0.00	0.00	
2	60	-0.895	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	60	-0.895	0.717	-3.007	0.000	-0.902	-0.215	1	0.00	0.00	0.00	
8	60	-0.895	1.329	-3.007	0.000	-0.902	-0.399	1	0.00	0.00	0.00	
9	60	-0.895	-1.574	2.539	0.000	0.761	0.472	1	0.00	0.00	0.00	
10	60	-0.895	-1.574	-1.370	0.000	-0.411	0.472	1	0.00	0.00	0.00	
11	60	-0.895	0.430	-1.804	0.000	-0.541	-0.129	1	0.00	0.00	0.00	
12	60	-0.895	0.797	-1.804	0.000	-0.541	-0.239	1	0.00	0.00	0.00	
13	60	-0.895	-0.944	1.523	0.000	0.457	0.283	1	0.00	0.00	0.00	
14	60	-0.895	-0.944	-0.822	0.000	-0.247	0.283	1	0.00	0.00	0.00	
1A	120	-0.001	-0.492	0.004	0.000	0.000	-0.000	1	0.00	0.00	0.00	
1B	120	-0.001	0.492	0.004	0.000	0.000	0.000	1	0.00	0.00	0.00	
1C	120	-0.001	-0.492	-0.004	0.000	-0.000	-0.000	1	0.00	0.00	0.00	
1D	120	-0.001	0.492	-0.004	0.000	-0.000	0.000	1	0.00	0.00	0.00	
1E	120	0.001	-0.492	0.004	0.000	0.000	-0.000	--	0.00	0.00	0.00	
1F	120	0.001	0.492	0.004	0.000	0.000	0.000	--	0.00	0.00	0.00	
1G	120	0.001	-0.492	-0.004	0.000	-0.000	-0.000	--	0.00	0.00	0.00	
1H	120	0.001	0.492	-0.004	0.000	-0.000	0.000	--	0.00	0.00	0.00	
1I	120	-0.001	-0.185	0.012	0.000	0.000	0.000	1	0.00	0.00	0.00	
1J	120	-0.001	0.185	0.012	0.000	0.000	0.000	1	0.00	0.00	0.00	
1K	120	-0.001	-0.185	-0.012	0.000	0.000	0.000	1	0.00	0.00	0.00	
1L	120	-0.001	0.185	-0.012	0.000	0.000	0.000	1	0.00	0.00	0.00	
1M	120	0.001	-0.185	0.012	0.000	0.000	0.000	--	0.00	0.00	0.00	
1N	120	0.001	0.185	0.012	0.000	0.000	0.000	--	0.00	0.00	0.00	
1O	120	0.001	-0.185	-0.012	0.000	0.000	0.000	--	0.00	0.00	0.00	
1P	120	0.001	0.185	-0.012	0.000	0.000	0.000	--	0.00	0.00	0.00	
2	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
7	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
8	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
9	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
10	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
11	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
12	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
13	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	
14	120	-0.000	0.000	0.000	0.000	0.000	0.000	1	0.00	0.00	0.00	

Verifica di STABILITA' e/o STABILITA' FLESSO TORSIONALE

NC	Fx	My	Mz	Classe	χmin.	ky	kz	kLT	χLT	I.S.n.	I.S.m.	I.S.	Nota
	kN	kN*m											
1A	-88.035	-1.807	116.124	1	0.5967	1.0874	1.0135	--	--	0.04	--	0.29	Snell. 'zx'= 78
1B	-88.035	-1.807	-146.224	1	0.5967	1.0874	1.0098	--	--	0.04	--	0.35	Snell. 'zx'= 78
1C	-88.035	-1.796	116.124	1	0.5967	1.1034	1.0135	--	--	0.04	--	0.29	Snell. 'zx'= 78
1D	-88.035	-1.796	-146.224	1	0.5967	1.1034	1.0098	--	--	0.04	--	0.35	Snell. 'zx'= 78
1E	-37.485	-1.807	116.124	1	0.5967	1.0372	1.0058	--	--	0.02	--	0.26	Snell. 'zx'= 78
1F	-37.485	-1.807	-146.224	1	0.5967	1.0372	1.0042	--	--	0.02	--	0.32	Snell. 'zx'= 78
1G	-37.485	-1.796	116.124	1	0.5967	1.0440	1.0058	--	--	0.02	--	0.26	Snell. 'zx'= 78
1H	-37.485	-1.796	-146.224	1	0.5967	1.0440	1.0042	--	--	0.02	--	0.32	Snell. 'zx'= 78
1I	-71.359	-2.035	53.588	1	0.5967	1.0599	1.0306	--	--	0.03	--	0.15	Snell. 'zx'= 78
1J	-71.359	-2.035	-56.750	1	0.5967	1.0599	1.0159	--	--	0.03	--	0.16	Snell. 'zx'= 78
1K	-71.359	-2.024	53.588	1	0.5967	1.0855	1.0306	--	--	0.03	--	0.15	Snell. 'zx'= 78
1L	-71.359	-2.024	-56.750	1	0.5967	1.0855	1.0159	--	--	0.03	--	0.16	Snell. 'zx'= 78
1M	-54.161	-2.035	53.588	1	0.5967	1.0455	1.0233	--	--	0.02	--	0.14	Snell. 'zx'= 78
1N	-54.161	-2.035	-56.750	1	0.5967	1.0455	1.0121	--	--	0.02	--	0.15	Snell. 'zx'= 78
1O	-54.161	-2.024	53.588	1	0.5967	1.0649	1.0233	--	--	0.02	--	0.14	Snell. 'zx'= 78
1P	-54.161	-2.024	-56.750	1	0.5967	1.0649	1.0121	--	--	0.02	--	0.15	Snell. 'zx'= 78
2	-108.200	-2.872	49.720	1	0.5967	1.0676	1.0334	--	--	0.05	--	0.16	Snell. 'zx'= 78
7	-65.760	-7.946	23.490	1	0.5967	1.0131	1.0427	--	--	0.03	--	0.11	Snell. 'zx'= 78
8	-70.570	-7.794	-39.810	1	0.5967	1.0143	1.0211	--	--	0.03	--	0.15	Snell. 'zx'= 78
9	-71.760	9.155	32.990	1	0.5967	1.0125	1.0364	--	--	0.03	--	0.14	Snell. 'zx'= 78
10	-72.390	-3.568	32.980	1	0.5967	1.0401	1.0368	--	--	0.03	--	0.12	Snell. 'zx'= 78
11	-98.710	-5.384	42.080	1	0.5967	1.0355	1.0360	--	--	0.04	--	0.16	Snell. 'zx'= 78
12	-101.600	-5.459	51.670	1	0.5967	1.0360	1.0269	--	--	0.04	--	0.18	Snell. 'zx'= 78
13	-102.300	6.438	47.780	1	0.5967	1.0285	1.0343	--	--	0.04	--	0.17	Snell. 'zx'= 78
14	-102.700	-3.693	47.770	1	0.5967	1.0690	1.0344	--	--	0.04	--	0.16	Snell. 'zx'= 78