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**ROMA**

**PROGETTO ESECUTIVO**

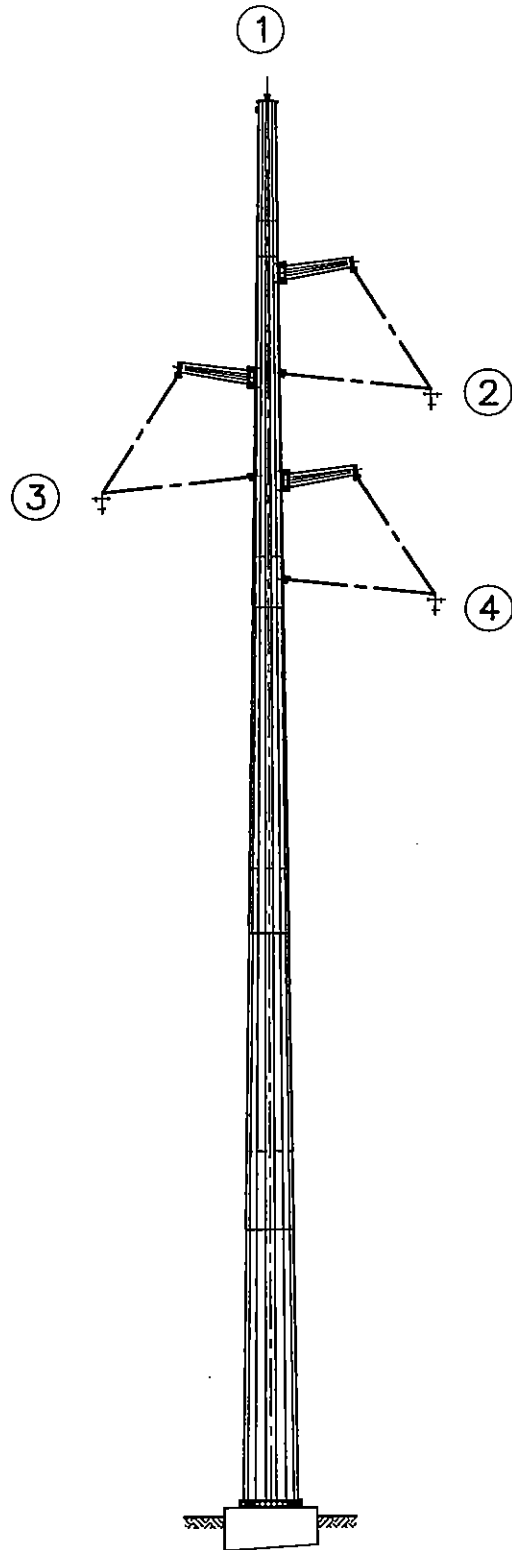
**DI PALI MONOSTELO AUTOPORTANTI**

**PER LINEE ELETTRICHE COMPATTE A 380 kV**

**SOSTEGNO TIPO MST 30**

**RELAZIONE DI CALCOLO**

F				
E				
D				
C	Revisione tipografica e geometria mensole	05/05/00	Chiussi	Franceschini
B	Revisione generale dei criteri di calcolo	11/10/99	Chiussi	Franceschini
A	Emissione	27/07/99	Chiussi	Franceschini
REV.	<b>EDIZIONI</b>	<b>DATA</b>	<b>ESEGUITO UTE</b>	<b>APPROVATO DTE</b>



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# RELAZIONE DI CALCOLO

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**PROGETTO ESECUTIVO**  
**DI PALI MOMOSTELO AUTOPORTANTI**  
**PER LINEE ELETTRICHE COMPATTE A 380 kV**

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**SOSTEGNO TIPO MST 30**  
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## TIPO DI SOSTEGNO

- Altezza fuori terra del sostegno in opera = 46.48 m
- Dispositivo di attacco alla fondazione : con piastra di base e tirafondi
- Numero dei tronchi costituenti il sostegno = 5
- Sezione poligonale a 16 lati

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## LEGENDA

- Tabella descrittiva delle sezioni

H = quota del nodo rispetto alla base del palo

Sp = spessore della sezione

Diam = diametro misurato in faccia ed in spigolo

l.FEM = lunghezza dell'elemento finito

b(0) = ampiezza della faccia calcolata secondo le CNR 10022

b = larghezza efficace della faccia

- Geometria delle masse

Sezione min = sezione minima efficace del poligono

W min = modulo d'inerzia minimo efficace del poligono

Jt = momento d'inerzia torsionale

- Tabella dei carichi

H = quota del punto di applicazione dei carichi trasmessi dal conduttore (o fune di guardia)

Eccentricità del conduttore = 1) per bracci a mensole rigide: distanza dall'asse palo. 2) per triangolo isolante: proiezione orizzontale della lunghezza del puntone isolato.

- Tabella delle azioni interne e degli sforzi in fondazione

Tx = Taglio in direzione trasversale

My = Momento in direzione trasversale

Ty = Taglio in direzione longitudinale

Mx = Momento in direzione longitudinale

Mt = Momento torcente

Sig. Amm. = Tensione ammissibile

% uso = Percentuale d'uso della sezione, data dal rapporto tra tensione di calcolo e tensione ammissibile.

Rt = Risultante dei tagli

Rm = Momento risultante

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## NORME TECNICHE DI PROGETTAZIONE

- **Generale:** Legge n. 339 del 28/06/86
- D.M. n. 28 del 21/03/88 recante: Norme tecniche per la disciplina della costruzione ed esercizio di linee elettriche aeree esterne
- Norme CEI 11 - 4
- D.M. del 09/01/1996: Norme tecniche .... e per le strutture metalliche.
- UNI EN 10025 : Prodotti laminati a caldo ..
- C.N.R.10011/88 : Costruzioni di acciaio: istruzioni per il calcolo l'esecuzione, il collaudo e la manutenzione.
- **Per la definizione delle tensioni ammesse nei tronchi pressopiegati:** C.N.R.10022 del 22/11/1984: Costruzioni di profilati di acciaio formati a freddo
- **Per i carichi esterni sulla struttura:** Specifica ENEL

### GEOMETRIA SOSTEGNO TUBOLARE MONOSTELO

Sezione trasversale : POLIGONO REGOLARE DI 16 LATI

Tronco	Diametro testa [mm]	Diametro base [mm]	Lunghezza [mm]	Innesto [mm]	Spessore [mm]
1	546.4	694.1	5125.0	1150	4.00
2	650.9	1016.8	12700.0	1680	8.00
3	950.4	1314.0	12620.0	2170	12.00
4	1225.5	1572.4	12040.0	2600	14.00
5	1467.5	1800.0	11600.0	0	14.00

N.B. I diametri sono riferiti al cerchio circoscritto

### QUALITA' DEI MATERIALI ADOTTATI

Lamiere in acciaio tipo FE 510 (S 355) UNI EN 10025,

Flange in acciaio tipo FE 510 (S 355) UNI EN 10025,

Tirafondi in acciaio per bulloni classe 8.8 UNI EN 10228.

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## **NOTE GENERALI**

Pali di tipo autoportante a stelo unico, di forma conica costante, ottenuti da lamiera piegata a freddo e saldata nel senso longitudinale. La sezione trasversale forma un poligono regolare; i lati sono uniti da raccordi circolari realizzati in fase di presso-piegatura.

L'incastro nel blocco di fondazione è realizzato mediante piastra e tirafondi o con l'infissione diretta del tronco di base.

I pali sono costituiti da vari tronchi da unire sul luogo di installazione con il metodo di "sovrapposizione ad incastro". Le forze di innesto da applicare sono indicate nel disegno di insieme della struttura.

## **PRESSOPIEGATURA**

La pressopiegatura della lamiera avviene nel rispetto dei raggi di curvatura minimi prescritti dalle norme UNI EN 10025.

## **CAMPO DI APPLICAZIONE**

La presente relazione di calcolo contempla esclusivamente i componenti strutturali espressamente analizzati, tutti gli accessori, le mensole ed i relativi attacchi ecc. non sono esaminati nel presente documento.

## **METODO DI CALCOLO**

Il calcolo delle sollecitazioni viene eseguito considerando i carichi statici specificati nei punti successivi. L'analisi viene condotta tenendo in considerazione degli effetti del II ordine. La soluzione viene ricercata adottando un modello di trave alla Eulero-Bernoulli ed un metodo solutivo alla Newton-Raphson. Le tabelle successive sono formulate in modo tale da consentire di testare manualmente la bontà dell'analisi condotta. La suddivisione dei tronchi per elementi finiti viene condotta a partire dalla testa di ogni tronco, in base al passo ottimale, fino alla sezione corrispondente alla testa del tratto di sovrapposizione. Il programma adottato è GAIA v. 04052000

## **TENSIONI**

Il valore delle sollecitazioni massime viene determinato mediante la relazione dettata dal criterio di Von Mises nel punto ove le tensioni sono massime. Le tensioni ammesse lungo il fusto vengono calcolate secondo le CNR 10022 in base al rapporto lato-spessore della sezione in esame, adottando quindi il momento di inerzia e la sezione ridotta dedotta dal calcolo.

## **RIPARTIZIONE DEI CARICHI**

Al fine di conservare una omogenea ripartizione degli elementi finiti lungo i tronchi, i carichi trasmessi da mensole, isolatori ecc.... vengono ripartiti fra i nodi dell'elemento interessato con il principio dell'equivalenza.

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## TABELLA DESCRITTIVA DELLE SEZIONI

Tronco	Nodo	H [mm]	Sp. [mm]	Diam. faccia [mm]	Diam. spigolo [mm]	l. FEM [mm]	b(0) [mm]	b [mm]
1	1	46485	4.00	535.9	546.4	795	101.03	101.03
1	2	45690	4.00	558.4	569.3	795	105.50	105.50
1	3	44895	4.00	580.8	592.2	795	109.97	109.97
1	4	44100	4.00	603.3	615.1	795	114.44	114.44
1	5	43305	4.00	625.8	638.0	795	118.90	118.90
1	6	42510	4.00	648.2	660.9	795	123.37	121.94
2	7	41662	8.00	662.4	675.4	848	120.62	120.62
2	8	40815	8.00	686.3	699.8	848	125.38	125.38
2	9	39967	8.00	710.3	724.2	848	130.15	130.15
2	10	39119	8.00	734.2	748.6	848	134.91	134.91
2	11	38272	8.00	758.2	773.0	848	139.68	139.68
2	12	37424	8.00	782.1	797.5	848	144.44	144.44
2	13	36576	8.00	806.1	821.9	848	149.20	149.20
2	14	35728	8.00	830.1	846.3	848	153.97	153.97
2	15	34881	8.00	854.0	870.7	848	158.73	158.73
2	16	34033	8.00	878.0	895.2	848	163.50	163.50
2	17	33185	8.00	901.9	919.6	848	168.26	168.26
2	18	32338	8.00	925.9	944.0	848	173.03	173.03
2	19	31490	8.00	949.8	968.4	848	177.79	177.79
3	20	30619	12.00	956.8	975.5	871	173.60	173.60
3	21	29748	12.00	981.4	1000.6	871	178.50	178.50
3	22	28878	12.00	1006.0	1025.7	871	183.39	183.39
3	23	28007	12.00	1030.6	1050.8	871	188.29	188.29
3	24	27136	12.00	1055.2	1075.9	871	193.18	193.18
3	25	26265	12.00	1079.8	1101.0	871	198.08	198.08
3	26	25394	12.00	1104.4	1126.0	871	202.97	202.97
3	27	24523	12.00	1129.0	1151.1	871	207.87	207.87
3	28	23653	12.00	1153.6	1176.2	871	212.76	212.76
3	29	22782	12.00	1178.2	1201.3	871	217.66	217.66
3	30	21911	12.00	1202.8	1226.4	871	222.55	222.55
3	31	21040	12.00	1227.4	1251.5	871	227.44	227.44
4	32	20182	14.00	1226.2	1250.2	858	224.41	224.41
4	33	19324	14.00	1250.4	1274.9	858	229.23	229.23
4	34	18465	14.00	1274.7	1299.7	858	234.06	234.06
4	35	17607	14.00	1298.9	1324.4	858	238.88	238.88
4	36	16749	14.00	1323.2	1349.1	858	243.70	243.70
4	37	15891	14.00	1347.4	1373.8	858	248.53	248.53
4	38	15033	14.00	1371.7	1398.6	858	253.35	253.35
4	39	14175	14.00	1395.9	1423.3	858	258.17	258.17
4	40	13316	14.00	1420.2	1448.0	858	263.00	263.00
4	41	12458	14.00	1444.4	1472.7	858	267.82	267.82
4	42	11600	14.00	1468.7	1497.5	858	272.64	272.64
5	43	10771	14.00	1462.6	1491.2	829	271.43	271.43
5	44	9943	14.00	1485.8	1515.0	829	276.06	276.06
5	45	9114	14.00	1509.1	1538.7	829	280.69	280.69
5	46	8286	14.00	1532.4	1562.5	829	285.33	285.33
5	47	7457	14.00	1555.7	1586.2	829	289.96	289.96
5	48	6629	14.00	1579.0	1610.0	829	294.60	294.60
5	49	5800	14.00	1602.3	1633.7	829	299.23	299.23
5	50	4971	14.00	1625.6	1657.5	829	303.86	303.86
5	51	4143	14.00	1648.9	1681.2	829	308.50	308.50
5	52	3314	14.00	1672.2	1705.0	829	313.13	313.13
5	53	2486	14.00	1695.5	1728.7	829	317.77	317.77
5	54	1657	14.00	1718.8	1752.5	829	322.40	322.40
5	55	829	14.00	1742.1	1776.2	829	327.04	327.04
5	56	0	14.00	1765.4	1800.0	829	331.67	331.67



## GEOMETRIA DELLE MASSE

Tronco	Nodo	Sezione min [mm <sup>2</sup> ]	W min [mm <sup>3</sup> ]	Jt [mm <sup>4</sup> ]
1	2	7058	965091	550122479
1	3	7344	1045175	619396189
1	4	7629	1128450	694254107
1	5	7915	1214917	774912693
1	6	8109	1276831	819826120
2	7	16661	2676266	1827529487
2	8	17271	2876970	2033909659
2	9	17881	3084931	2255269970
2	10	18491	3300150	2492135253
2	11	19101	3522626	2745030343
2	12	19710	3752361	3014480075
2	13	20320	3989354	3301009283
2	14	20930	4233605	3605142801
2	15	21540	4485113	3927405464
2	16	22150	4743880	4268322107
2	17	22760	5009904	4628417563
2	18	23370	5283186	5008216668
2	19	23979	5563726	5408244255
3	20	36082	8363850	8257365248
3	21	37022	8807930	8913826386
3	22	37961	9263500	9604188726
3	23	38901	9730558	10329305770
3	24	39841	10209106	11090031018
3	25	40781	10699143	11887217972
3	26	41720	11200670	12721720131
3	27	42660	11713686	13594390998
3	28	43600	12238192	14506084073
3	29	44540	12774186	15457652857
3	30	45479	13321670	16449950851
3	31	46419	13880644	17483831556
4	32	54011	16081443	20301778222
4	33	55091	16734936	21535036721
4	34	56172	17401447	22817253647
4	35	57252	18080975	24149381980
4	36	58332	18773521	25532374699
4	37	59413	19479085	26967184783
4	38	60493	20197666	28454765213
4	39	61574	20929265	29996068968
4	40	62654	21673881	31592049027
4	41	63735	22431515	33243658371
4	42	64815	23202167	34951849978
5	43	64542	23006233	34514881639
5	44	65580	23755732	36196145355
5	45	66618	24517246	37931138406
5	46	67656	25290776	39720705885
5	47	68694	26076322	41565692884
5	48	69732	26873883	43466944494
5	49	70770	27683460	45425305808
5	50	71808	28505052	47441621918
5	51	72846	29338660	49516737914
5	52	73885	30184283	51651498890
5	53	74923	31041923	53846749937
5	54	75961	31911577	56103336147
5	55	76999	32793248	58422102612
5	56	78037	33686934	60803894424

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## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 1 " MST - EDS - ZONA A - NORMALE - FRECCIA - 0.5 % Hft "

Pressione trasversale del vento = 0.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	5050.00	1850.00	0.00	0.00
<b>2.00</b>	37.16	47350.00	12100.00	0.00	4.75
---	---	---	Ft = 58552	Fp = -19475	---
---	---	Pa = 49376	Ta = 31470	La = 0	---
---	---	Pb = -2026	Tb = -19370	Lb = 0	---
<b>3.00</b>	33.69	47350.00	12100.00	0.00	-4.75
---	---	---	Ft = 61767	Fp = -45545	---
---	---	Pa = 52087	Ta = -33198	La = 0	---
---	---	Pb = -4737	Tb = 45298	Lb = 0	---
<b>4.00</b>	30.23	47350.00	12100.00	0.00	4.75
---	---	---	Ft = 58552	Fp = -19475	---
---	---	Pa = 49376	Ta = 31470	La = 0	---
---	---	Pb = -2026	Tb = -19370	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	5483	1855	1902954	-0	-0	0	215.80	0.01
3	5933	1855	3470741	-0	-0	0	215.80	0.02
4	6400	1856	5045763	-0	-0	-0	215.80	0.03
5	6886	1856	6628178	-0	-0	0	215.80	0.03
6	8783	1858	8239054	-0	-0	0	215.80	0.04
7	9872	1867	10142585	-0	-0	0	215.80	0.04
8	36589	204598	136027139	-0	-0	0	215.80	0.25
9	63345	33375	200018141	-0	-0	0	215.80	0.34
10	64554	33375	229285186	-0	-0	0	215.80	0.36
11	65802	33375	258523898	-0	-0	0	215.80	0.38
12	93021	-131544	190417517	-0	-0	0	215.80	0.27
13	120280	-19150	97538276	-0	-0	-0	215.80	0.15
14	121648	-19151	82883044	-0	-0	-0	215.80	0.12
15	123056	-19153	68221780	-0	-0	-0	215.80	0.10
16	147723	68879	104742082	0	-0	-0	215.80	0.14
17	172430	57643	279947701	-0	-0	-0	215.80	0.31
18	173958	57639	330877483	-0	-0	-0	215.80	0.34
19	180046	57638	381788207	-0	-0	-0	215.80	0.37
20	181456	55264	433542292	-0	-0	-0	215.80	0.40
21	182929	38259	466026227	-0	-0	-0	215.80	0.28
22	185478	38255	501239260	-0	-0	-0	215.80	0.29
23	188090	38252	536397238	-0	-0	-0	215.80	0.29
24	190766	38249	571499156	-0	-0	-0	215.80	0.29
25	193504	38245	606544163	-0	-0	-0	215.80	0.30
26	196305	38242	641531532	-0	-0	-0	215.80	0.30
27	199170	38238	676460639	-0	-0	-0	215.80	0.30
28	202097	38235	711330937	-0	-0	-0	215.80	0.30
29	205088	38231	746141942	-0	-0	-0	215.80	0.30
30	208142	38228	780893216	-0	-0	-0	215.80	0.30
31	220122	38227	815645994	-0	-0	-0	215.80	0.31
32	223696	38234	850037493	-0	-0	-0	215.80	0.31
33	227341	38220	884169270	-0	-0	-0	215.80	0.27
34	231058	38217	918247749	-0	-0	-0	215.80	0.27
35	234847	38214	952272503	-0	-0	-0	215.80	0.27
36	238707	38211	986243176	-0	-0	-0	215.80	0.27
37	242638	38208	1020159405	-0	-0	-0	215.80	0.27
38	246641	38205	1054020818	-0	-0	-0	215.80	0.27
39	250715	38202	1087827034	-0	-0	-0	215.80	0.27
40	254861	38199	1121577657	-0	-0	-0	215.80	0.27
41	259079	38196	1155272281	-0	-0	-0	215.80	0.27
42	276145	38195	1188954089	-0	-0	-0	215.80	0.27
43	280269	38191	1221398529	-0	-0	-0	215.80	0.26
44	284458	38188	1253801455	-0	-0	-0	215.80	0.27
45	288714	38185	1286143091	-0	-0	-0	215.80	0.27
46	293037	38182	1318423149	-0	-0	-0	215.80	0.27
47	297426	38179	1350641299	-0	-0	-0	215.80	0.27
48	301881	38176	1382797193	-0	-0	-0	215.80	0.27
49	306402	38173	1414890466	-0	-0	-0	215.80	0.26
50	310990	38169	1446920735	-0	-0	-0	215.80	0.26
51	315644	38166	1478887602	-0	-0	-0	215.80	0.26
52	320364	38163	1510790649	-0	-0	-0	215.80	0.26
53	325151	38160	1542629444	-0	-0	-0	215.80	0.26
54	330004	38157	1574403537	-0	-0	-0	215.80	0.26
55	334923	38154	1606112465	-0	-0	-0	215.80	0.25
56	339909	38151	1637755748	-0	-0	-0	215.80	0.25

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 2 " MST - EDS - ZONA A - NORMALE - FRECCIA - 0.5 % Hft - (-) "

Pressione trasversale del vento = 0.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	5050.00	-1850.00	0.00	0.00
2.00	37.16	47350.00	-12100.00	0.00	4.75
---	---	---	Ft = 61767	Fp = -45545	---
---	---	Pa = 52087	Ta = 33198	La = 0	---
---	---	Pb = -4737	Tb = -45298	Lb = 0	---
3.00	33.69	47350.00	-12100.00	0.00	-4.75
---	---	---	Ft = 58552	Fp = -19475	---
---	---	Pa = 49376	Ta = -31470	La = 0	---
---	---	Pb = -2026	Tb = 19370	Lb = 0	---
4.00	30.23	47350.00	-12100.00	0.00	4.75
---	---	---	Ft = 61767	Fp = -45545	---
---	---	Pa = 52087	Ta = 33198	La = 0	---
---	---	Pb = -4737	Tb = -45298	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	5483	-1851	-1815867	-0	-0	0	215.80	0.01
3	5933	-1851	-3289583	-0	-0	0	215.80	0.02
4	6400	-1851	-4763300	-0	-0	0	215.80	0.03
5	6886	-1852	-6236918	-0	-0	0	215.80	0.03
6	8783	-1852	-7710813	-0	-0	0	215.80	0.03
7	9872	-1855	-9285301	-0	-0	0	215.80	0.04
8	37945	211989	119620718	-0	-0	0	215.80	0.22
9	66057	31332	182751571	-0	-0	-0	215.80	0.31
10	67265	31332	209236179	-0	-0	-0	215.80	0.33
11	68514	31332	235675333	-0	-0	-0	215.80	0.35
12	93021	-133299	164401617	-0	-0	-0	215.80	0.24
13	117569	-45446	47757333	-0	-0	-0	215.80	0.09
14	118937	-45446	8891592	-0	-0	-0	215.80	0.04
15	120345	-45446	-29980217	-0	-0	-0	215.80	0.06
16	147723	41728	-18614756	0	-0	-0	215.80	0.05
17	175142	7110	113924138	-0	-0	-0	215.80	0.15
18	176669	7111	119408914	-0	-0	-0	215.80	0.15
19	182758	7111	124842570	-0	-0	-0	215.80	0.15
20	182812	1432	126688110	-0	-0	-0	215.80	0.14
21	182929	-38185	86259145	-0	-0	-0	215.80	0.07
22	185478	-38184	52314832	-0	-0	-0	215.80	0.05
23	188090	-38183	18353577	-0	-0	-0	215.80	0.03
24	190766	-38183	-15619476	-0	-0	-0	215.80	0.03
25	193504	-38182	-49599725	-0	-0	-0	215.80	0.05
26	196305	-38181	-83583038	-0	-0	-0	215.80	0.06
27	199170	-38180	-117565685	-0	-0	-0	215.80	0.07
28	202097	-38179	-151544294	-0	-0	-0	215.80	0.08
29	205088	-38178	-185515800	-0	-0	-0	215.80	0.09
30	208142	-38177	-219477405	-0	-0	-0	215.80	0.10
31	220122	-38178	-253457048	-0	-0	-0	215.80	0.11
32	223696	-38180	-287031712	-0	-0	-0	215.80	0.12
33	227341	-38175	-320488566	-0	-0	-0	215.80	0.11
34	231058	-38175	-353929651	-0	-0	-0	215.80	0.12
35	234847	-38174	-387353219	-0	-0	-0	215.80	0.12
36	238707	-38173	-420757651	-0	-0	-0	215.80	0.13
37	242638	-38172	-454141424	-0	-0	-0	215.80	0.13
38	246641	-38170	-487503100	-0	-0	-0	215.80	0.14
39	250715	-38169	-520841313	-0	-0	-0	215.80	0.14
40	254861	-38168	-554154765	-0	-0	-0	215.80	0.14
41	259079	-38167	-587442212	-0	-0	-0	215.80	0.14
42	276145	-38167	-620727726	-0	-0	-0	215.80	0.15
43	280269	-38166	-652825681	-0	-0	-0	215.80	0.15
44	284458	-38165	-684903453	-0	-0	-0	215.80	0.16
45	288714	-38163	-716948816	-0	-0	-0	215.80	0.16
46	293037	-38162	-748960832	-0	-0	-0	215.80	0.16
47	297426	-38161	-780938580	-0	-0	-0	215.80	0.16
48	301881	-38160	-812881166	-0	-0	-0	215.80	0.16
49	306402	-38159	-844787718	-0	-0	-0	215.80	0.17
50	310990	-38158	-876657383	-0	-0	-0	215.80	0.17
51	315644	-38156	-908489328	-0	-0	-0	215.80	0.17
52	320364	-38155	-940282732	-0	-0	-0	215.80	0.17
53	325151	-38154	-972036790	-0	-0	-0	215.80	0.17
54	330004	-38153	-1003750707	-0	-0	-0	215.80	0.17
55	334923	-38152	-1035423702	-0	-0	-0	215.80	0.17
56	339909	-38151	-1067054998	-0	-0	-0	215.80	0.17

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 3 " MST - CVS3 - ZONA A - NORMALE - FRECCIA - 1 % Hft "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	5400.00	3050.00	2200.00	0.00
<b>2.00</b>	37.16	49400.00	19050.00	0.00	4.75
---	---	---	Ft = 60233	Fp = -13396	---
---	---	Pa = 50793	Ta = 32373	La = 0	---
---	---	Pb = -1393	Tb = -13323	Lb = 0	---
<b>3.00</b>	33.69	49400.00	19050.00	0.00	-4.75
---	---	---	Ft = 65295	Fp = -54439	---
---	---	Pa = 55062	Ta = -35094	La = 0	---
---	---	Pb = -5662	Tb = 54144	Lb = 0	---
<b>4.00</b>	30.23	49400.00	19050.00	0.00	4.75
---	---	---	Ft = 60233	Fp = -13396	---
---	---	Pa = 50793	Ta = 32373	La = 0	---
---	---	Pb = -1393	Tb = -13323	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	5833	3133	3181694	2200	2166084	0	215.80	0.02
3	6283	3212	5871032	2200	3925762	0	215.80	0.04
4	6750	3294	8634930	2201	5685927	0	215.80	0.05
5	7236	3379	11476056	2201	7446479	0	215.80	0.06
6	9133	3469	14425998	2201	9209292	0	215.80	0.07
7	10222	3582	17919008	2202	11105659	0	215.80	0.08
8	37648	212241	149147504	2203	13026439	0	215.80	0.27
9	65113	36218	216967379	2205	14984603	0	215.80	0.37
10	66322	36325	249158834	2205	16940953	0	215.80	0.39
11	67570	36434	281416578	2205	18895340	0	215.80	0.41
12	96593	-135582	212375533	2207	20882843	0	215.80	0.30
13	125655	-11681	123122941	2209	22900282	-0	215.80	0.18
14	127024	-11563	115698286	2209	24912356	-0	215.80	0.17
15	128431	-11442	108369243	2208	26918995	-0	215.80	0.15
16	153345	80760	154820287	2210	28944770	-0	215.80	0.20
17	178298	75380	350743374	2211	30987115	-0	215.80	0.38
18	179825	75508	417854613	2210	33021417	-0	215.80	0.42
19	185914	75644	485068003	2210	35051731	-0	215.80	0.46
20	187640	74204	554648207	2214	37204483	-0	215.80	0.50
21	189429	62598	610228128	2209	39274760	-0	215.80	0.36
22	191978	62743	667782852	2209	41339964	-0	215.80	0.38
23	194590	62892	725397817	2209	43400102	-0	215.80	0.39
24	197266	63044	783073443	2208	45455215	-0	215.80	0.40
25	200004	63200	840810517	2208	47505345	-0	215.80	0.41
26	202805	63360	898610130	2208	49550532	-0	215.80	0.41
27	205670	63523	956473626	2207	51590816	-0	215.80	0.42
28	208597	63691	1014402554	2207	53626235	-0	215.80	0.42
29	211588	63862	1072398634	2207	55656826	-0	215.80	0.43
30	214642	64036	1130463727	2207	57682621	-0	215.80	0.43
31	226622	64220	1188694397	2206	59707936	-0	215.80	0.44
32	230196	64417	1246470796	2207	61713631	-0	215.80	0.44
33	233841	64579	1303999228	2206	63700457	-0	215.80	0.40
34	237558	64763	1361608987	2206	65683181	-0	215.80	0.40
35	241347	64950	1419302077	2205	67661813	-0	215.80	0.40
36	245207	65141	1477080648	2205	69636365	-0	215.80	0.40
37	249138	65335	1534946861	2205	71606847	-0	215.80	0.40
38	253141	65534	1592902887	2205	73573266	-0	215.80	0.40
39	257215	65736	1650950897	2204	75535626	-0	215.80	0.40
40	261361	65942	1709093059	2204	77493929	-0	215.80	0.40
41	265579	66151	1767331536	2204	79448173	-0	215.80	0.40
42	282645	66368	1825736937	2204	81401302	-0	215.80	0.40
43	286769	66575	1882185448	2203	83281714	-0	215.80	0.40
44	290958	66785	1938745489	2203	85159148	-0	215.80	0.41
45	295214	66996	1995387832	2203	87032257	-0	215.80	0.41
46	299537	67211	2052114543	2203	88901044	-0	215.80	0.41
47	303926	67429	2108927632	2202	90765506	-0	215.80	0.41
48	308381	67650	2165829087	2202	92625637	-0	215.80	0.41
49	312902	67875	2222820876	2202	94481432	-0	215.80	0.40
50	317490	68104	2279904941	2202	96332882	-0	215.80	0.40
51	322144	68336	2337083206	2201	98179977	-0	215.80	0.40
52	326864	68571	2394357569	2201	100022703	-0	215.80	0.40
53	331651	68810	2451729905	2201	101861048	-0	215.80	0.40
54	336504	69052	2509202069	2201	103694996	-0	215.80	0.40
55	341423	69298	2566775891	2200	105524529	-0	215.80	0.39
56	346409	69547	2624453179	2200	107349629	-0	215.80	0.39

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 4 " MST - CVS3 - ZONA A - NORMALE - FRECCIA - 1 % Hft - (-) "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	5400.00	-3050.00	2200.00	0.00
2.00	37.16	49400.00	-19050.00	0.00	4.75
---	---	---	Ft = 65295	Fp = -54439	---
---	---	Pa = 55062	Ta = 35094	La = 0	---
---	---	Pb = -5662	Tb = -54144	Lb = 0	---
3.00	33.69	49400.00	-19050.00	0.00	-4.75
---	---	---	Ft = 60233	Fp = -13396	---
---	---	Pa = 50793	Ta = -32373	La = 0	---
---	---	Pb = -1393	Tb = 13323	Lb = 0	---
4.00	30.23	49400.00	-19050.00	0.00	4.75
---	---	---	Ft = 65295	Fp = -54439	---
---	---	Pa = 55062	Ta = 35094	La = 0	---
---	---	Pb = -5662	Tb = -54144	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	5833	-3129	-3084438	2200	2166071	0	215.80	0.02
3	6283	-3207	-5669200	2200	3925736	0	215.80	0.04
4	6750	-3289	-8320940	2201	5685888	-0	215.80	0.05
5	7236	-3373	-11042060	2201	7446424	0	215.80	0.06
6	9133	-3462	-13842492	2201	9209219	0	215.80	0.07
7	10222	-3566	-16977898	2201	11105541	0	215.80	0.08
8	39782	222385	117625280	2203	13029403	0	215.80	0.22
9	69382	31296	182441564	2205	14993530	0	215.80	0.31
10	70590	31190	208422866	2205	16955610	0	215.80	0.33
11	71839	31080	234257538	2205	18915491	-0	215.80	0.35
12	96593	-140716	157937536	2207	20902774	-0	215.80	0.23
13	121387	-55695	28697383	2208	22914752	-0	215.80	0.07
14	122755	-55815	-19616393	2208	24921599	-0	215.80	0.06
15	124163	-55938	-68040184	2208	26923249	-0	215.80	0.11
16	153345	34652	-64458462	2209	28948693	-0	215.80	0.11
17	182567	-7808	60735133	2211	30994906	-0	215.80	0.10
18	184094	-7940	52524921	2210	33032862	-0	215.80	0.09
19	190183	-8078	44135056	2210	35066609	-0	215.80	0.09
20	189775	-15031	30551524	2214	37221530	-0	215.80	0.08
21	189429	-62506	-33254109	2209	39291465	-0	215.80	0.05
22	191978	-62654	-89425769	2209	41356333	-0	215.80	0.08
23	194590	-62806	-145736470	2208	43416145	-0	215.80	0.10
24	197266	-62962	-202182103	2208	45470941	-0	215.80	0.12
25	200004	-63121	-258759342	2208	47520763	-0	215.80	0.14
26	202805	-63284	-315465540	2207	49565653	-0	215.80	0.16
27	205670	-63451	-372298636	2207	51605651	-0	215.80	0.18
28	208597	-63622	-429257073	2207	53640795	-0	215.80	0.19
29	211588	-63796	-486339734	2207	55671120	-0	215.80	0.21
30	214642	-63974	-543545883	2206	57696662	-0	215.80	0.22
31	226622	-64158	-600936858	2206	59721725	-0	215.80	0.23
32	230196	-64349	-657826386	2207	61727149	-0	215.80	0.24
33	233841	-64523	-714622282	2206	63713748	-0	215.80	0.23
34	237558	-64709	-771540468	2205	65696255	-0	215.80	0.23
35	241347	-64899	-828581494	2205	67674680	-0	215.80	0.24
36	245207	-65093	-885746115	2205	69649035	-0	215.80	0.25
37	249138	-65290	-943035210	2205	71619330	-0	215.80	0.25
38	253141	-65491	-1000449767	2204	73585572	-0	215.80	0.26
39	257215	-65696	-1057990867	2204	75547765	-0	215.80	0.26
40	261361	-65904	-1115659677	2204	77505910	-0	215.80	0.27
41	265579	-66116	-1173457432	2204	79460007	-0	215.80	0.27
42	282645	-66333	-1231434513	2204	81412992	-0	215.80	0.28
43	286769	-66544	-1287508651	2203	83293277	-0	215.80	0.28
44	290958	-66755	-1343717463	2203	85170591	-0	215.80	0.29
45	295214	-66969	-1400039868	2203	87043592	-0	215.80	0.29
46	299537	-67186	-1456477211	2203	88912279	-0	215.80	0.30
47	303926	-67407	-1513030845	2202	90776651	-0	215.80	0.30
48	308381	-67631	-1569702153	2202	92636703	-0	215.80	0.30
49	312902	-67858	-1626492537	2202	94492429	-0	215.80	0.30
50	317490	-68089	-1683403419	2202	96343818	-0	215.80	0.30
51	322144	-68323	-1740436235	2201	98190862	-0	215.80	0.30
52	326864	-68561	-1797592433	2201	100033548	-0	215.80	0.31
53	331651	-68802	-1854873473	2201	101871861	-0	215.80	0.31
54	336504	-69047	-1912280821	2201	103705785	-0	215.80	0.31
55	341423	-69295	-1969815950	2200	105535305	-0	215.80	0.31
56	346409	-69546	-2027480336	2200	107360401	-0	215.80	0.31

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 5 " MST - MSA - ZONA A - NORMALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6840.00	6880.00	6000.00	0.00
<b>2.00</b>	37.16	52780.00	41740.00	0.00	4.75
---	---	---	Ft = 61512	Fp = 8726	---
---	---	Pa = 51872	Ta = 33061	La = 0	---
---	---	Pb = 908	Tb = 8679	Lb = 0	---
<b>3.00</b>	33.69	52780.00	41740.00	0.00	-4.75
---	---	---	Ft = 72604	Fp = -81203	---
---	---	Pa = 61226	Ta = -39022	La = 0	---
---	---	Pb = -8446	Tb = 80762	Lb = 0	---
<b>4.00</b>	30.23	52780.00	41740.00	0.00	4.75
---	---	---	Ft = 61512	Fp = 8726	---
---	---	Pa = 51872	Ta = 33061	La = 0	---
---	---	Pb = 908	Tb = 8679	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

<b>Nodo</b>	<b>Carico verticale [N]</b>	<b>Tx [N]</b>	<b>My [Nmm]</b>	<b>Ty [N]</b>	<b>Mx [Nmm]</b>	<b>Mt [Nmm]</b>	<b>Sig. amm. [N/mm<sup>2</sup>]</b>	<b>% Uso</b>
2	7273	7203	7293430	6002	5914487	0	215.80	0.05
3	7723	7518	13581259	6002	10720489	0	215.80	0.09
4	8190	7845	20146445	6002	15527654	0	215.80	0.12
5	8676	8185	26999157	6002	20335652	0	215.80	0.14
6	10573	8542	34203081	6002	25149531	0	215.80	0.17
7	11662	8968	42772702	6005	30334133	0	215.80	0.20
8	39627	222380	182347415	6009	35581665	0	215.80	0.33
9	67632	42967	257987948	6015	40933674	-0	215.80	0.44
10	68841	43393	297522665	6015	46280363	-0	215.80	0.47
11	70089	43833	337413322	6015	51621323	-0	215.80	0.50
12	103344	-139847	269976158	6022	57067624	-0	215.80	0.39
13	136639	14589	199726267	6028	62609272	-0	215.80	0.29
14	138007	15066	217586100	6027	68134555	-0	215.80	0.30
15	139415	15556	235845191	6027	73643280	-0	215.80	0.30
16	163476	115205	312740223	6030	79200495	-0	215.80	0.37
17	187577	130510	565154952	6033	84799413	-0	215.80	0.60
18	189105	131036	682712751	6032	90374894	-0	215.80	0.68
19	195193	131584	800740886	6031	95938092	-0	215.80	0.75
20	198070	133438	926227526	6044	101850150	-0	215.80	0.81
21	201009	141407	1057029070	6029	107525374	-0	215.80	0.61
22	203558	141998	1186985552	6028	113185471	-0	215.80	0.65
23	206170	142604	1317344975	6027	118830483	-0	215.80	0.69
24	208846	143225	1448111072	6026	124460548	-0	215.80	0.72
25	211584	143861	1579288708	6025	130075811	-0	215.80	0.74
26	214385	144511	1710883706	6024	135676413	-0	215.80	0.77
27	217250	145177	1842902691	6023	141262491	-0	215.80	0.79
28	220177	145858	1975352963	6022	146834180	-0	215.80	0.81
29	223168	146554	2108242390	6021	152391608	-0	215.80	0.82
30	226222	147265	2241579318	6020	157934896	-0	215.80	0.84
31	238202	148002	2375572115	6020	163475918	-0	215.80	0.85
32	241776	148771	2508783751	6022	168964466	-0	215.80	0.86
33	245421	149462	2641737065	6018	174398362	-0	215.80	0.78
34	249138	150207	2775167970	6017	179820225	-0	215.80	0.79
35	252927	150968	2909085578	6016	185230100	-0	215.80	0.80
36	256787	151743	3043499401	6016	190628043	-0	215.80	0.80
37	260718	152533	3178419042	6015	196014104	-0	215.80	0.81
38	264721	153337	3313854178	6014	201388321	-0	215.80	0.81
39	268795	154157	3449814538	6013	206750727	-0	215.80	0.81
40	272941	154991	3586309891	6012	212101346	-0	215.80	0.82
41	277159	155840	3723350029	6011	217440194	-0	215.80	0.82
42	294225	156711	3861092507	6011	222775366	-0	215.80	0.82
43	298349	157555	3994529482	6010	227911136	-0	215.80	0.82
44	302538	158401	4128531463	6010	233038307	-0	215.80	0.85
45	306794	159258	4263037289	6009	238153051	-0	215.80	0.85
46	311117	160129	4398056066	6008	243255390	-0	215.80	0.85
47	315506	161013	4533596793	6007	248345331	-0	215.80	0.85
48	319961	161911	4669668440	6006	253422877	-0	215.80	0.85
49	324482	162823	4806279946	6006	258488023	-0	215.80	0.85
50	329070	163749	4943440215	6005	263540761	-0	215.80	0.85
51	333724	164688	5081158111	6004	268581074	-0	215.80	0.85
52	338444	165641	5219442460	6003	273608942	-0	215.80	0.85
53	343231	166608	5358302047	6003	278624340	-0	215.80	0.85
54	348084	167589	5497745613	6002	283627238	-0	215.80	0.84
55	353003	168583	5637781856	6001	288617599	-0	215.80	0.84
56	357989	169591	5778419432	6000	293595386	-0	215.80	0.84

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 6 " MST - MSA - ZONA A - NORMALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	6880.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	41740.00	0.00	4.75
--	---	---	Ft = -5546	Fp = 0	--
--	---	Pa = 0	Ta = 0	La = 0	---
--	---	Pb = 0	Tb = 41740	Lb = 0	---
<b>3.00</b>	33.69	0.00	41740.00	0.00	-4.75
--	---	---	Ft = 5546	Fp = -44965	--
--	---	Pa = 4677	Ta = -2981	La = 0	--
--	---	Pb = -4677	Tb = 44721	Lb = 0	--
<b>4.00</b>	30.23	0.00	41740.00	0.00	4.75
--	---	---	Ft = -5546	Fp = 0	---
--	---	Pa = 0	Ta = 0	La = 0	---
--	---	Pb = 0	Tb = 41740	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	7181	6995246	6000	5881921	0	215.80	0.05
3	883	7495	12980995	6000	10655771	-0	215.80	0.08
4	1350	7821	19240427	6000	15431496	0	215.80	0.11
5	1836	8160	25783859	6000	20208993	-0	215.80	0.14
6	3733	8512	32663318	6000	24993403	-0	215.80	0.16
7	4822	8902	40518147	6000	30117299	-0	215.80	0.19
8	6851	9297	48618939	6000	35229247	-0	215.80	0.11
9	8920	9709	57132922	6000	40347751	0	215.80	0.12
10	10128	10135	66043747	6000	45469201	-0	215.80	0.12
11	11377	10575	75364190	6000	50593367	0	215.80	0.13
12	15904	4207	81202642	6001	55730362	-0	215.80	0.13
13	20470	50259	122736132	6001	60879006	-0	215.80	0.17
14	21838	50742	166416708	6001	66028700	-0	215.80	0.21
15	23246	51239	210552992	6001	71179199	-0	215.80	0.25
16	23255	60674	260393380	6001	76326478	-0	215.80	0.29
17	23305	96996	349614837	6001	81470688	0	215.80	0.36
18	24832	97536	433006974	6001	86615360	0	215.80	0.41
19	30921	98092	517024292	6001	91770300	0	215.80	0.47
20	33343	100448	605377693	6001	97100542	0	215.80	0.52
21	35829	141005	732606606	6001	102398585	0	215.80	0.41
22	38378	141609	856946565	6001	107698247	0	215.80	0.46
23	40990	142228	981865446	6001	112999269	0	215.80	0.50
24	43666	142862	1107372299	6001	118301395	0	215.80	0.54
25	46404	143511	1233476060	6001	123604371	0	215.80	0.57
26	49205	144175	1360185567	6001	128907944	0	215.80	0.60
27	52070	144854	1487509569	6001	134211861	0	215.80	0.62
28	54997	145549	1615456741	6001	139515872	0	215.80	0.65
29	57988	146258	1744035691	6001	144819728	0	215.80	0.67
30	61042	146983	1873254967	6001	150123181	0	215.80	0.69
31	73022	147724	2003294277	6001	155436732	0	215.80	0.71
32	76596	148470	2132277580	6001	160684185	0	215.80	0.72
33	80241	149211	2261701426	6001	165918508	0	215.80	0.66
34	83958	149968	2391771622	6001	171151787	0	215.80	0.67
35	87747	150740	2522496133	6001	176383793	0	215.80	0.68
36	91607	151527	2653882908	6001	181614297	0	215.80	0.69
37	95538	152328	2785939873	6001	186843075	0	215.80	0.70
38	99541	153144	2918674929	6001	192069901	0	215.80	0.70
39	103615	153975	3052095959	6001	197294552	0	215.80	0.71
40	107761	154820	3186210825	6001	202516805	0	215.80	0.71
41	111979	155680	3321027370	6001	207736439	0	215.80	0.72
42	129045	156557	3456683638	6001	212960674	0	215.80	0.72
43	133169	157415	3588291639	6001	217999688	0	215.80	0.73
44	137358	158270	3720573281	6001	223036304	0	215.80	0.76
45	141614	159138	3853507979	6001	228068761	0	215.80	0.76
46	145937	160020	3987102676	6001	233096877	0	215.80	0.77
47	150326	160915	4121364299	6001	238120466	0	215.80	0.77
48	154781	161825	4256299766	6001	243139345	0	215.80	0.77
49	159302	162747	4391915984	6001	248153331	0	215.80	0.77
50	163890	163683	4528219850	6001	253162240	0	215.80	0.77
51	168544	164633	4665218250	6000	258165889	0	215.80	0.77
52	173264	165597	4802918062	6000	263164095	0	215.80	0.77
53	178051	166574	4941326150	6000	268156675	0	215.80	0.77
54	182904	167564	5080449370	6000	273143448	0	215.80	0.77
55	187823	168569	5220294567	6000	278124230	0	215.80	0.77
56	192809	169587	5360868574	6000	283098840	0	215.80	0.77

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 7 " MST - MSA - ZONA B - NORMALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6540.00	6680.00	5000.00	0.00
<b>2.00</b>	37.16	51640.00	40950.00	0.00	4.75
---	---	---	Ft = 60169	Fp = 8638	---
---	---	Pa = 50739	Ta = 32339	La = 0	---
---	---	Pb = 901	Tb = 8611	Lb = 0	---
<b>3.00</b>	33.69	51640.00	40950.00	0.00	-4.75
---	---	---	Ft = 71051	Fp = -79569	---
---	---	Pa = 59916	Ta = -38187	La = 0	---
---	---	Pb = -8276	Tb = 79137	Lb = 0	---
<b>4.00</b>	30.23	51640.00	40950.00	0.00	4.75
---	---	---	Ft = 60169	Fp = 8658	---
---	---	Pa = 50739	Ta = 32339	La = 0	---
---	---	Pb = 901	Tb = 8611	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	6973	7001	7078118	5001	4927505	0	215.80	0.05
3	7423	7316	13187300	5001	8931289	0	215.80	0.08
4	7890	7643	19573524	5001	12936070	0	215.80	0.11
5	8376	7983	26246973	5002	16941583	0	215.80	0.13
6	10273	8340	33270335	5002	20952043	0	215.80	0.16
7	11362	8763	41622629	5004	25270274	0	215.80	0.18
8	38761	217521	178115060	5007	29640006	0	215.80	0.32
9	66199	42033	252054539	5012	34094864	-0	215.80	0.43
10	67408	42459	290686105	5012	38545463	-0	215.80	0.46
11	68656	42899	329675522	5012	42991467	-0	215.80	0.48
12	101253	-136809	263639397	5017	47523323	-0	215.80	0.38
13	133889	14412	194929622	5022	52132882	-0	215.80	0.28
14	135257	14889	212439176	5022	56729172	-0	215.80	0.29
15	136665	15379	230350294	5021	61312031	-0	215.80	0.29
16	160245	112889	305627369	5024	65934383	-0	215.80	0.36
17	183864	127981	552707685	5026	70590703	-0	215.80	0.58
18	185392	128507	667870826	5026	75227984	-0	215.80	0.66
19	191480	129056	783508955	5025	79855495	-0	215.80	0.73
20	194353	130891	906417955	5035	84770129	-0	215.80	0.80
21	197289	138813	1034710650	5023	89491666	-0	215.80	0.60
22	199838	139405	1162174735	5022	94200945	-0	215.80	0.64
23	202450	140012	1290048853	5022	98897995	-0	215.80	0.67
24	205126	140634	1418337001	5021	103582925	-0	215.80	0.70
25	207864	141270	1547044263	5020	108255846	-0	215.80	0.73
26	210665	141922	1676176634	5019	112916867	-0	215.80	0.75
27	213530	142588	1805740878	5019	117566096	-0	215.80	0.77
28	216457	143270	1935744403	5018	122203636	-0	215.80	0.79
29	219448	143967	2066195163	5017	126829586	-0	215.80	0.81
30	222502	144678	2197101564	5016	131444040	-0	215.80	0.82
31	234482	145416	2328668070	5016	136056862	-0	215.80	0.84
32	238056	146184	2459471809	5017	140625677	-0	215.80	0.85
33	241701	146878	2590049792	5014	145149809	-0	215.80	0.77
34	245418	147624	2721112618	5014	149664141	-0	215.80	0.78
35	249207	148385	2852669415	5013	154168706	-0	215.80	0.78
36	253067	149161	2984729689	5012	158663545	-0	215.80	0.79
37	256998	149951	3117303035	5012	163148692	-0	215.80	0.79
38	261001	150756	3250399116	5011	167624175	-0	215.80	0.79
39	265075	151576	3384027648	5011	172090015	-0	215.80	0.80
40	269221	152411	3518198383	5010	176546227	-0	215.80	0.80
41	273439	153261	3652921095	5009	180992820	-0	215.80	0.80
42	290505	154132	3788350479	5009	185436519	-0	215.80	0.80
43	294629	154977	3919563197	5008	189714341	-0	215.80	0.80
44	298818	155824	4051346050	5008	193985127	-0	215.80	0.84
45	303074	156682	4183640065	5007	198245728	-0	215.80	0.84
46	307397	157553	4316454311	5006	202496156	-0	215.80	0.84
47	311786	158438	4449797763	5006	206736415	-0	215.80	0.84
48	316241	159337	4583679366	5005	210966502	-0	215.80	0.84
49	320762	160249	4718108031	5004	215186411	-0	215.80	0.84
50	325350	161175	4853092640	5004	219396130	-0	215.80	0.83
51	330004	162115	4988642035	5003	223595641	-0	215.80	0.83
52	334724	163069	5124765021	5003	227784926	-0	215.80	0.83
53	339511	164036	5261470362	5002	231963959	-0	215.80	0.83
54	344364	165018	5398766785	5001	236132711	-0	215.80	0.83
55	349283	166012	5536662970	5001	240291150	-0	215.80	0.83
56	354269	167021	5675167558	5000	244439241	-0	215.80	0.82

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 8 " MST - MSA - ZONA B - NORMALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	6680.00	5000.00	0.00
<b>2.00</b>	37.16	0.00	40950.00	0.00	4.75
--	--	--	Ft = -5441	Fp = 0	--
--	--	Pa = 0	Ta = 0	La = 0	--
--	--	Pb = 0	Tb = 40950	Lb = 0	--
<b>3.00</b>	33.69	0.00	40950.00	0.00	-4.75
--	--	--	Ft = 5441	Fp = -44114	--
--	--	Pa = 4588	Ta = -2924	La = 0	--
--	--	Pb = -4588	Tb = 43874	Lb = 0	--
<b>4.00</b>	30.23	0.00	40950.00	0.00	4.75
--	--	--	Ft = -5441	Fp = 0	--
--	--	Pa = 0	Ta = 0	La = 0	--
--	--	Pb = 0	Tb = 40950	Lb = 0	--

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	6981	6798992	5000	4901601	0	215.80	0.04
3	883	7295	12625227	5000	8879809	-0	215.80	0.07
4	1350	7621	18724879	5000	12859580	0	215.80	0.10
5	1836	7960	25108261	5000	16840827	-0	215.80	0.13
6	3733	8312	31826633	5000	20827835	-0	215.80	0.15
7	4822	8702	39506229	5000	25097748	-0	215.80	0.17
8	6851	9097	47433443	5000	29357705	-0	215.80	0.10
9	8920	9509	55772675	5000	33623124	0	215.80	0.11
10	10128	9935	64508098	5000	37890999	0	215.80	0.12
11	11377	10374	73652477	5000	42161137	0	215.80	0.12
12	15859	4136	79386813	5000	46441848	-0	215.80	0.12
13	20382	49326	120146901	5001	50732158	-0	215.80	0.17
14	21750	49808	163021235	5001	55023354	-0	215.80	0.20
15	23157	50306	206350747	5001	59315232	-0	215.80	0.24
16	23211	59572	255285938	5001	63604533	-0	215.80	0.28
17	23305	95216	342866588	5001	67891374	0	215.80	0.35
18	24832	95756	424736960	5001	72178600	0	215.80	0.40
19	30921	96312	507229753	5001	76474383	0	215.80	0.46
20	33343	98634	593988531	5001	80916250	0	215.80	0.51
21	35829	138435	718896328	5001	85331285	0	215.80	0.41
22	38378	139039	840979866	5001	89747669	0	215.80	0.45
23	40990	139658	963641632	5001	94165187	0	215.80	0.49
24	43666	140292	1086890754	5001	98583624	0	215.80	0.52
25	46404	140941	1210736244	5001	103002770	0	215.80	0.56
26	49205	141605	1335187019	5001	107422414	0	215.80	0.59
27	52070	142284	1460251909	5001	111842344	0	215.80	0.61
28	54997	142978	1585939670	5001	116262352	0	215.80	0.64
29	57988	143688	1712258990	5001	120682231	0	215.80	0.66
30	61042	144412	1839218502	5001	125101775	0	215.80	0.68
31	73022	145154	1966994988	5001	129529734	0	215.80	0.69
32	76596	145900	2093744958	5001	133902610	0	215.80	0.71
33	80241	146640	2220938963	5001	138264545	0	215.80	0.65
34	83958	147398	2348779420	5001	142625611	0	215.80	0.66
35	87747	148170	2477274373	5001	146985614	0	215.80	0.67
36	91607	148957	2606431854	5001	151344367	0	215.80	0.68
37	95538	149758	2736259867	5001	155701682	0	215.80	0.68
38	99541	150574	2866766398	5001	160057369	0	215.80	0.69
39	103615	151405	2997959408	5001	164411245	0	215.80	0.70
40	107761	152250	3129846840	5001	168763122	0	215.80	0.70
41	111979	153110	3262436618	5001	173112816	0	215.80	0.71
42	129045	153986	3395864615	5001	177466345	0	215.80	0.71
43	133169	154844	3525322632	5001	181665522	0	215.80	0.71
44	137358	155699	3655454926	5001	185862702	0	215.80	0.75
45	141614	156568	3786241460	5001	190056416	0	215.80	0.75
46	145937	157450	3917689249	5001	194246512	0	215.80	0.75
47	150326	158345	4049805291	5001	198432836	0	215.80	0.75
48	154781	159254	4182596576	5001	202615235	0	215.80	0.75
49	159302	160177	4316070080	5000	206793557	0	215.80	0.76
50	163890	161113	4450232774	5000	210967647	0	215.80	0.76
51	168544	162063	4585091614	5000	215137354	0	215.80	0.76
52	173264	163027	4720653546	5000	219302526	0	215.80	0.76
53	178051	164004	4856925509	5000	223463009	0	215.80	0.76
54	182904	164994	4993914426	5000	227618653	0	215.80	0.76
55	187823	165999	5131627214	5000	231769304	0	215.80	0.76
56	192809	167017	5270070776	5000	235914813	0	215.80	0.76

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 9 " MST - MSB - ZONA B - NORMALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	10860.00	6030.00	8000.00	0.00
<b>2.00</b>	37.16	69900.00	29920.00	0.00	4.75
---	---	---	Ft = 84834	Fp = -15761	---
---	---	Pa = 71539	Ta = 45596	La = 0	---
---	---	Pb = -1639	Tb = -15676	Lb = 0	---
<b>3.00</b>	33.69	69900.00	29920.00	0.00	-4.75
---	---	---	Ft = 92785	Fp = -80224	---
---	---	Pa = 78244	Ta = -49869	La = 0	---
---	---	Pb = -8344	Tb = 79789	Lb = 0	---
<b>4.00</b>	30.23	69900.00	29920.00	0.00	4.75
---	---	---	Ft = 84834	Fp = -15761	---
---	---	Pa = 71539	Ta = 45596	La = 0	---
---	---	Pb = -1639	Tb = -15676	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	11293	6142	6381878	8005	7913380	0	215.80	0.06
3	11743	6221	11725095	8005	14348418	0	215.80	0.10
4	12210	6304	17147605	8005	20784402	0	215.80	0.13
5	12696	6390	22651878	8005	27220714	0	215.80	0.15
6	14593	6483	28284428	8006	33663898	0	215.80	0.18
7	15682	6632	34999116	8013	40627474	0	215.80	0.20
8	53481	300511	221846946	8022	47708782	0	215.80	0.41
9	91319	52615	319834850	8037	54984740	0	215.80	0.55
10	92528	52721	367575813	8037	62248903	0	215.80	0.58
11	93776	52830	415341010	8036	69500584	0	215.80	0.61
12	134267	-190592	320177901	8051	76927767	0	215.80	0.47
13	174797	-12261	199288416	8065	84513758	-0	215.80	0.31
14	176165	-12150	194162765	8063	92069517	-0	215.80	0.29
15	177573	-12038	189097234	8062	99594751	-0	215.80	0.27
16	211519	118515	260484846	8071	107218760	-0	215.80	0.34
17	245504	113745	545726844	8079	114928201	-0	215.80	0.60
18	247031	113857	648916796	8075	122593708	-0	215.80	0.66
19	253120	113982	752127443	8073	130230822	-0	215.80	0.72
20	254723	112406	860133561	8103	138419599	-0	215.80	0.77
21	256389	98549	950024469	8067	146180424	-0	215.80	0.57
22	258938	98681	1042123869	8064	153912473	-0	215.80	0.59
23	261550	98817	1134174987	8062	161615889	-0	215.80	0.61
24	264226	98956	1226175813	8059	169291054	-0	215.80	0.62
25	266964	99099	1318125281	8057	176938358	-0	215.80	0.63
26	269765	99245	1410023101	8054	184558191	-0	215.80	0.65
27	272630	99396	1501869632	8052	192150940	-0	215.80	0.66
28	275557	99550	1593665763	8050	199716983	-0	215.80	0.67
29	278548	99708	1685412822	8047	207256689	-0	215.80	0.67
30	281602	99870	1777112497	8045	214770415	-0	215.80	0.68
31	293582	100046	1868917752	8044	222274741	-0	215.80	0.68
32	297156	100262	1960008092	8047	229715971	-0	215.80	0.69
33	300801	100382	2050401457	8039	237063027	-0	215.80	0.62
34	304518	100554	2140774448	8038	244388363	-0	215.80	0.62
35	308307	100731	2231129221	8036	251692180	-0	215.80	0.62
36	312167	100911	2321468349	8034	258974707	-0	215.80	0.62
37	316098	101096	2411794441	8032	266236155	-0	215.80	0.62
38	320101	101284	2502110133	8030	273476720	-0	215.80	0.62
39	324175	101476	2592418067	8028	280696584	-0	215.80	0.62
40	328321	101672	2682720886	8026	287895912	-0	215.80	0.62
41	332539	101872	2773021222	8025	295074855	-0	215.80	0.62
42	349605	102083	2863430456	8024	302244679	-0	215.80	0.62
43	353729	102279	2950655129	8021	309141404	-0	215.80	0.62
44	357918	102481	3037920979	8020	316023492	-0	215.80	0.64
45	362174	102683	3125169228	8018	322884791	-0	215.80	0.64
46	366497	102888	3212402532	8017	329725441	-0	215.80	0.64
47	370886	103097	3299623410	8015	336545556	-0	215.80	0.63
48	375341	103310	3386834332	8013	343345239	-0	215.80	0.63
49	379862	103526	3474037721	8012	350124581	-0	215.80	0.63
50	384450	103746	3561235945	8010	356883662	-0	215.80	0.62
51	389104	103970	3648431326	8008	363622553	-0	215.80	0.62
52	393824	104197	3735626134	8007	370341313	-0	215.80	0.62
53	398611	104427	3822822585	8005	377039991	-0	215.80	0.61
54	403464	104662	3910022846	8004	383718629	-0	215.80	0.61
55	408383	104900	3997229035	8002	390377258	-0	215.80	0.61
56	413369	105141	4084443215	8001	397015900	-0	215.80	0.60

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 10 " MST - MSB - ZONA B - NORMALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	0.00	6030.00	8000.00	0.00
2.00	37.16	0.00	29920.00	0.00	4.75
---	---	---	Ft = -3975	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 29920	Lb = 0	---
3.00	33.69	0.00	29920.00	0.00	-4.75
---	---	---	Ft = 3975	Fp = -32231	---
---	---	Pa = 3352	Ta = -2137	La = 0	---
---	---	Pb = -3352	Tb = 32057	Lb = 0	---
4.00	30.23	0.00	29920.00	0.00	4.75
---	---	---	Ft = -3975	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 29920	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	6105	5978486	8000	7842561	0	215.80	0.05
3	883	6183	10913293	8000	14207694	-0	215.80	0.09
4	1350	6265	15922696	8000	20575326	0	215.80	0.12
5	1836	6349	21009365	8000	26945320	-0	215.80	0.14
6	3733	6437	26204664	8000	33324529	-0	215.80	0.16
7	4822	6536	31957056	8000	40156381	-0	215.80	0.19
8	6851	6634	37731169	8000	46972305	0	215.80	0.11
9	8920	6737	43636535	8000	53796968	0	215.80	0.11
10	10128	6843	49656604	8000	60625558	0	215.80	0.12
11	11377	6953	55794814	8001	67457768	0	215.80	0.13
12	15241	2176	59238323	8001	74304257	0	215.80	0.13
13	19146	34968	88064480	8001	81163706	-0	215.80	0.15
14	20514	35089	118237436	8001	88024807	-0	215.80	0.18
15	21922	35213	148539178	8001	94887233	-0	215.80	0.20
16	22593	41737	182741301	8001	101747932	-0	215.80	0.22
17	23305	67528	244978000	8001	108606862	0	215.80	0.27
18	24832	67663	302820940	8001	115466407	0	215.80	0.30
19	30921	67802	360886758	8001	122339642	0	215.80	0.34
20	33343	69218	421746665	8002	129446603	0	215.80	0.37
21	35829	98015	510247261	8001	136510642	0	215.80	0.30
22	38378	98166	596429407	8001	143576839	0	215.80	0.33
23	40990	98320	682772850	8001	150644850	0	215.80	0.35
24	43666	98478	769278003	8001	157714333	0	215.80	0.38
25	46404	98640	855945205	8001	164784950	0	215.80	0.40
26	49205	98806	942774737	8001	171856362	0	215.80	0.42
27	52070	98976	1029766826	8001	178928234	0	215.80	0.44
28	54997	99149	1116921660	8001	186000232	0	215.80	0.45
29	57988	99326	1204239387	8001	193072023	0	215.80	0.47
30	61042	99506	1291720125	8001	200143277	0	215.80	0.48
31	73022	99692	1379479792	8002	207227994	0	215.80	0.49
32	76596	99879	1466254580	8002	214224578	0	215.80	0.50
33	80241	100062	1553054354	8002	221203659	0	215.80	0.46
34	83958	100251	1640012876	8001	228181348	0	215.80	0.47
35	87747	100444	1727130155	8001	235157340	0	215.80	0.47
36	91607	100640	1814406202	8001	242131330	0	215.80	0.48
37	95538	100839	1901841016	8001	249103019	0	215.80	0.48
38	99541	101043	1989434595	8001	256072107	0	215.80	0.48
39	103615	101250	2077186928	8001	263038295	0	215.80	0.49
40	107761	101460	2165098002	8001	270001286	0	215.80	0.49
41	111979	101674	2253167800	8001	276960786	0	215.80	0.49
42	129045	101893	2341483594	8001	283926419	0	215.80	0.50
43	133169	102107	2426875698	8001	290645092	0	215.80	0.50
44	137358	102320	2512420280	8001	297360569	0	215.80	0.52
45	141614	102536	2598098860	8001	304070503	0	215.80	0.52
46	145937	102755	2683911421	8001	310774647	0	215.80	0.52
47	150326	102978	2769857946	8001	317472758	0	215.80	0.52
48	154781	103204	2855938418	8001	324164590	0	215.80	0.52
49	159302	103434	2942152821	8001	330849897	0	215.80	0.52
50	163890	103667	3028501139	8001	337528437	0	215.80	0.52
51	168544	103903	3114983358	8001	344199963	0	215.80	0.52
52	173264	104143	3201599463	8000	350864234	0	215.80	0.52
53	178051	104386	3288349440	8000	357521005	0	215.80	0.52
54	182904	104632	3375233277	8000	364170032	0	215.80	0.52
55	187823	104882	3462250960	8000	370811073	0	215.80	0.52
56	192809	105135	3549402477	8000	377443886	0	215.80	0.52

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 11 " MST - MSA - ZONA A - NORMALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	6840.00	-6880.00	6000.00	0.00
2.00	37.16	52780.00	-41740.00	0.00	4.75
---	---	---	Ft = 72604	Fp = -81203	---
---	---	Pa = 61226	Ta = 39022	La = 0	---
---	---	Pb = -8446	Tb = -80762	Lb = 0	---
3.00	33.69	52780.00	-41740.00	0.00	-4.75
---	---	---	Ft = 61512	Fp = 8726	---
---	---	Pa = 51872	Ta = -33061	La = 0	---
---	---	Pb = 908	Tb = -8679	Lb = 0	---
4.00	30.23	52780.00	-41740.00	0.00	4.75
---	---	---	Ft = 72604	Fp = -81203	---
---	---	Pa = 61226	Ta = 39022	La = 0	---
---	---	Pb = -8446	Tb = -80762	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

<b>Nodo</b>	<b>Carico verticale [N]</b>	<b>Tx [N]</b>	<b>My [Nmm]</b>	<b>Ty [N]</b>	<b>Mx [Nmm]</b>	<b>Mt [Nmm]</b>	<b>Sig. amm. [N/mm2]</b>	<b>% Uso</b>
2	7273	-7197	-7163734	6002	5914546	0	215.80	0.05
3	7723	-7511	-13314090	6002	10720610	0	215.80	0.09
4	8190	-7838	-19733748	6002	15527841	0	215.80	0.12
5	8676	-8178	-26432598	6002	20335909	0	215.80	0.14
6	10573	-8533	-33451458	6002	25149871	0	215.80	0.17
7	11662	-8949	-41584908	6005	30334671	0	215.80	0.19
8	44304	241976	102793478	6010	35601625	0	215.80	0.20
9	76985	29151	168699260	6017	40991043	-0	215.80	0.30
10	78194	28725	191146779	6017	46373749	0	215.80	0.32
11	79443	28285	213146663	6017	51749294	-0	215.80	0.33
12	103344	-155351	125367793	6022	57196276	0	215.80	0.21
13	127286	-86552	-37470016	6026	62707499	-0	215.80	0.12
14	128654	-87031	-114533378	6026	68203724	-0	215.80	0.18
15	130062	-87524	-192016788	6025	73684771	-0	215.80	0.25
16	163476	8109	-215336496	6031	79242804	-0	215.80	0.27
17	196930	-58325	-124764335	6035	84868240	-0	215.80	0.19
18	198458	-58854	-179496190	6034	90468831	-0	215.80	0.23
19	204546	-59404	-234785096	6033	96055762	-0	215.80	0.26
20	202746	-70220	-300450786	6046	101985240	-0	215.80	0.30
21	201009	-141304	-439943117	6029	107661203	-0	215.80	0.28
22	203558	-141899	-568330884	6028	113322004	-0	215.80	0.33
23	206170	-142509	-697212028	6027	118967679	-0	215.80	0.38
24	208846	-143133	-826585027	6026	124598370	-0	215.80	0.42
25	211584	-143773	-956449978	6025	130214223	-0	215.80	0.46
26	214385	-144427	-1086808360	6024	135815380	-0	215.80	0.50
27	217250	-145097	-1217662842	6023	141401982	-0	215.80	0.53
28	220177	-145781	-1349017113	6022	146974164	-0	215.80	0.56
29	223168	-146480	-1480875739	6021	152532056	-0	215.80	0.59
30	226222	-147195	-1613244042	6020	158075780	-0	215.80	0.61
31	238202	-147933	-1746292471	6020	163617228	-0	215.80	0.63
32	241776	-148697	-1878507425	6022	169106225	-0	215.80	0.65
33	245421	-149400	-2010638108	6018	174540492	-0	215.80	0.60
34	249138	-150149	-2143292952	6017	179962705	-0	215.80	0.62
35	252927	-150912	-2276479366	6017	185372910	-0	215.80	0.63
36	256787	-151690	-2410205227	6016	190771163	-0	215.80	0.64
37	260718	-152483	-2544478638	6015	196157515	-0	215.80	0.65
38	264721	-153290	-2679307886	6014	201532006	-0	215.80	0.66
39	268795	-154112	-2814701424	6013	206894668	-0	215.80	0.67
40	272941	-154949	-2950667839	6012	212245525	-0	215.80	0.68
41	277159	-155801	-3087215833	6012	217584596	-0	215.80	0.68
42	294225	-156673	-3224481224	6011	222919984	-0	215.80	0.69
43	298349	-157520	-3357501437	6010	228055941	-0	215.80	0.69
44	302538	-158369	-3491112640	6010	233183289	-0	215.80	0.73
45	306794	-159229	-3625262701	6009	238298195	-0	215.80	0.73
46	311117	-160102	-3759959880	6008	243400679	-0	215.80	0.73
47	315506	-160989	-3895212410	6007	248490750	-0	215.80	0.74
48	319961	-161890	-4031028551	6006	253568411	-0	215.80	0.74
49	324482	-162804	-4167416578	6006	258633658	-0	215.80	0.74
50	329070	-163733	-4304384781	6005	263686483	-0	215.80	0.74
51	333724	-164675	-4441941452	6004	268726869	-0	215.80	0.74
52	338444	-165630	-4580094886	6003	273754796	-0	215.80	0.75
53	343231	-166600	-4718853375	6003	278770240	-0	215.80	0.75
54	348084	-167583	-4858225201	6002	283773170	-0	215.80	0.75
55	353003	-168580	-4998218638	6001	288763551	-0	215.80	0.75
56	357989	-169590	-5138841947	6000	293741343	-0	215.80	0.75

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 12 " MST - MSA - ZONA A - NORMALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	0.00	-6880.00	6000.00	0.00
2.00	37.16	0.00	-41740.00	0.00	4.75
---	---	---	Ft = 5546	Fp = -44965	---
---	---	Pa = 4677	Ta = 2981	La = 0	---
---	---	Pb = -4677	Tb = -44721	Lb = 0	---
3.00	33.69	0.00	-41740.00	0.00	-4.75
---	---	---	Ft = -5546	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -41740	Lb = 0	---
4.00	30.23	0.00	-41740.00	0.00	4.75
---	---	---	Ft = 5546	Fp = -44965	---
---	---	Pa = 4677	Ta = 2981	La = 0	---
---	---	Pb = -4677	Tb = -44721	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	-7181	-6994995	6000	5881923	0	215.80	0.05
3	883	-7495	-12980234	6000	10655776	0	215.80	0.08
4	1350	-7821	-19238886	6000	15431505	0	215.80	0.11
5	1836	-8160	-25781260	6000	20209008	0	215.80	0.14
6	3733	-8512	-32658594	6000	24993430	0	215.80	0.16
7	4822	-8902	-40507555	6000	30117360	0	215.80	0.19
8	9189	9902	-36962821	6000	35238144	0	215.80	0.09
9	13596	-6731	-39806323	6001	40373655	0	215.80	0.09
10	14805	-7156	-46332230	6001	45511451	-0	215.80	0.10
11	16054	-7596	-53266947	6001	50651291	0	215.80	0.11
12	15904	-21780	-68884218	6001	55788328	0	215.80	0.12
13	15793	-53238	-120524875	6001	60922732	0	215.80	0.17
14	17161	-53721	-166581533	6001	66058856	0	215.80	0.21
15	18569	-54218	-213095169	6001	71196449	0	215.80	0.25
16	23255	-51019	-258065612	6001	76343774	0	215.80	0.28
17	27981	-94017	-331764449	6001	81499688	-0	215.80	0.34
18	29509	-94557	-412755797	6001	86655434	-0	215.80	0.40
19	35597	-95113	-494368266	6001	91820838	-0	215.80	0.45
20	35682	-101294	-582507141	6001	97158544	-0	215.80	0.50
21	35829	-141005	-712693104	6001	102456638	-0	215.80	0.40
22	38378	-141609	-837024347	6001	107756352	-0	215.80	0.45
23	40990	-142228	-961934581	6001	113057426	-0	215.80	0.49
24	43666	-142862	-1087432880	6001	118359604	-0	215.80	0.53
25	46404	-143511	-1213528200	6001	123662630	-0	215.80	0.56
26	49205	-144175	-1340229398	6001	128966252	-0	215.80	0.59
27	52070	-144855	-1467545240	6001	134270218	-0	215.80	0.62
28	54997	-145549	-1595484417	6001	139574277	-0	215.80	0.64
29	57988	-146258	-1724055554	6001	144878179	-0	215.80	0.66
30	61042	-146983	-1853267215	6001	150181678	-0	215.80	0.68
31	73022	-147724	-1983298100	6001	155495279	-0	215.80	0.70
32	76596	-148470	-2112272221	6001	160742787	-0	215.80	0.71
33	80241	-149211	-2241688251	6001	165977157	-0	215.80	0.65
34	83958	-149968	-2371750854	6001	171210481	-0	215.80	0.67
35	87747	-150740	-2502468004	6001	176442530	-0	215.80	0.68
36	91607	-151527	-2633847661	6001	181673077	-0	215.80	0.68
37	95538	-152329	-2765897762	6001	186901896	-0	215.80	0.69
38	99541	-153145	-2898626219	6001	192128762	-0	215.80	0.70
39	103615	-153975	-3032040922	6001	197353451	-0	215.80	0.71
40	107761	-154821	-3166149743	6001	202575740	-0	215.80	0.71
41	111979	-155681	-3300960534	6001	207795408	-0	215.80	0.72
42	129045	-156557	-3436610750	6001	213019679	-0	215.80	0.72
43	133169	-157415	-3568213371	6001	218058725	-0	215.80	0.72
44	137358	-158270	-3700489885	6001	223095371	-0	215.80	0.76
45	141614	-159138	-3833419836	6001	228127857	-0	215.80	0.76
46	145937	-160020	-3967010174	6001	233155999	-0	215.80	0.76
47	150326	-160916	-4101267830	6001	238179612	-0	215.80	0.76
48	154781	-161825	-4236199726	6001	243198513	-0	215.80	0.76
49	159302	-162747	-4371812775	6001	248212518	-0	215.80	0.77
50	163890	-163683	-4508113878	6001	253221443	-0	215.80	0.77
51	168544	-164633	-4645109928	6000	258225106	-0	215.80	0.77
52	173264	-165597	-4782807804	6000	263223323	-0	215.80	0.77
53	178051	-166574	-4921214378	6000	268215913	-0	215.80	0.77
54	182904	-167564	-5060336510	6000	273202692	-0	215.80	0.77
55	187823	-168569	-5200181049	6000	278183478	-0	215.80	0.77
56	192809	-169587	-5340754834	6000	283158089	-0	215.80	0.77

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 13 " MST - MSA - ZONA B - NORMALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6540.00	-6680.00	5000.00	0.00
<b>2.00</b>	37.16	51640.00	-40950.00	0.00	4.75
--	--	--	Ft = 71051	Fp = -79569	--
--	--	Pa = 59916	Ta = 38187	La = 0	--
--	--	Pb = -8276	Tb = -79137	Lb = 0	--
<b>3.00</b>	33.69	51640.00	-40950.00	0.00	-4.75
--	--	--	Ft = 60169	Fp = 8658	--
--	--	Pa = 50739	Ta = -32339	La = 0	--
--	--	Pb = 901	Tb = -8611	Lb = 0	--
<b>4.00</b>	30.23	51640.00	-40950.00	0.00	4.75
--	--	--	Ft = 71051	Fp = -79569	--
--	--	Pa = 59916	Ta = 38187	La = 0	--
--	--	Pb = -8276	Tb = -79137	Lb = 0	--

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	6973	-6996	-6956673	5001	4927551	0	215.80	0.05
3	7423	-7310	-12936802	5001	8931383	0	215.80	0.08
4	7890	-7637	-19186095	5002	12936217	0	215.80	0.11
5	8376	-7977	-25714461	5002	16941784	0	215.80	0.13
6	10273	-8332	-32562193	5002	20952310	0	215.80	0.15
7	11362	-8745	-40499412	5004	25270698	0	215.80	0.18
8	43349	236804	100812994	5008	29656268	0	215.80	0.19
9	75376	28526	165339675	5014	34141633	0	215.80	0.29
10	76584	28100	187330857	5014	38621603	-0	215.80	0.31
11	77833	27660	208876705	5014	43095810	-0	215.80	0.32
12	101253	-152016	123019399	5018	47628208	-0	215.80	0.20
13	124713	-84825	-36365159	5021	52212936	-0	215.80	0.11
14	126081	-85304	-111839399	5021	56785509	-0	215.80	0.17
15	127489	-85798	-187734708	5020	61345779	-0	215.80	0.24
16	160245	7757	-210634058	5024	65968783	-0	215.80	0.26
17	193041	-57359	-122176338	5028	70646715	-0	215.80	0.18
18	194568	-57889	-175908323	5027	75304459	-0	215.80	0.22
19	200656	-58440	-230197253	5027	79951310	-0	215.80	0.25
20	198941	-69045	-294628284	5037	84880132	-0	215.80	0.29
21	197289	-138717	-431457898	5024	89602259	-0	215.80	0.27
22	199838	-139312	-557418770	5023	94312099	-0	215.80	0.32
23	202450	-139922	-683876061	5022	99009678	-0	215.80	0.37
24	205126	-140548	-810828764	5021	103695107	-0	215.80	0.41
25	207864	-141188	-938277414	5020	108368499	-0	215.80	0.45
26	210665	-141843	-1066223873	5020	113029964	-0	215.80	0.49
27	213530	-142513	-1194671136	5019	117679611	-0	215.80	0.52
28	216457	-143198	-1323623174	5018	122317545	-0	215.80	0.55
29	219448	-143898	-1453084797	5017	126943866	-0	215.80	0.58
30	222502	-144613	-1583061536	5016	131558668	-0	215.80	0.60
31	234482	-145351	-1713720919	5016	136171830	-0	215.80	0.62
32	238056	-146114	-1843567081	5018	140741005	-0	215.80	0.64
33	241701	-146819	-1973354540	5015	145265433	-0	215.80	0.59
34	245418	-147568	-2103671435	5014	149780045	-0	215.80	0.60
35	249207	-148332	-2234525278	5013	154284874	-0	215.80	0.62
36	253067	-149111	-2365924021	5013	158779961	-0	215.80	0.63
37	256998	-149904	-2497875833	5012	163265342	-0	215.80	0.64
38	261001	-150712	-2630389062	5011	167741044	-0	215.80	0.65
39	265075	-151535	-2763472209	5011	172207089	-0	215.80	0.66
40	269221	-152372	-2897133906	5010	176663492	-0	215.80	0.66
41	273439	-153224	-3031382894	5009	181110263	-0	215.80	0.67
42	290505	-154096	-3166352690	5009	185554135	-0	215.80	0.68
43	294629	-154944	-3297163863	5008	189832109	-0	215.80	0.68
44	298818	-155794	-3428570144	5008	194103036	-0	215.80	0.71
45	303074	-156654	-3560521268	5007	198363766	-0	215.80	0.72
46	307397	-157528	-3693025504	5006	202614311	-0	215.80	0.72
47	311786	-158415	-3826091098	5006	206854674	-0	215.80	0.72
48	316241	-159316	-3959726319	5005	211084854	-0	215.80	0.73
49	320762	-160231	-4093939452	5005	215304844	-0	215.80	0.73
50	325350	-161160	-4228738795	5004	219514632	-0	215.80	0.73
51	330004	-162102	-4364132649	5003	223714203	-0	215.80	0.73
52	334724	-163058	-4500129316	5003	227903535	-0	215.80	0.73
53	339511	-164028	-4636737093	5002	232082604	-0	215.80	0.73
54	344364	-165012	-4773964274	5001	236251383	-0	215.80	0.73
55	349283	-166009	-4911819137	5001	240409837	-0	215.80	0.74
56	354269	-167020	-5050309950	5000	244557933	-0	215.80	0.74

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 14 " MST - MSA - ZONA B - NORMALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6680.00	5000.00	0.00
<b>2.00</b>	37.16	0.00	-40950.00	0.00	4.75
---	---	---	Ft = 5441	Fp = -44114	---
---	---	Pa = 4588	Ta = 2924	La = 0	---
---	---	Pb = -4588	Tb = -43874	Lb = 0	---
<b>3.00</b>	33.69	0.00	-40950.00	0.00	-4.75
---	---	---	Ft = -5441	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -40950	Lb = 0	---
<b>4.00</b>	30.23	0.00	-40950.00	0.00	4.75
---	---	---	Ft = 5441	Fp = -44114	---
---	---	Pa = 4588	Ta = 2924	La = 0	---
---	---	Pb = -4588	Tb = -43874	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	-6981	-6798746	5000	4901602	0	215.80	0.04
3	883	-7295	-12624480	5000	8879813	0	215.80	0.07
4	1350	-7621	-18723366	5000	12859587	0	215.80	0.10
5	1836	-7960	-25105709	5000	16840839	0	215.80	0.13
6	3733	-8312	-31821994	5000	20827857	0	215.80	0.15
7	4822	-8702	-39495828	5000	25097798	0	215.80	0.17
8	9145	9738	-35996596	5000	29364978	0	215.80	0.08
9	13508	-6587	-38770032	5000	33644302	-0	215.80	0.09
10	14717	-7012	-45163055	5000	37925540	0	215.80	0.09
11	15965	-7452	-51964262	5000	42208492	-0	215.80	0.10
12	15859	-21377	-67292346	5000	46489237	-0	215.80	0.11
13	15793	-52248	-117970880	5000	50767906	0	215.80	0.16
14	17161	-52731	-163178891	5000	55048008	0	215.80	0.20
15	18569	-53228	-208843249	5001	59329333	0	215.80	0.24
16	23211	-50099	-253000675	5001	63618673	-0	215.80	0.27
17	27893	-92294	-325350088	5001	67915082	-0	215.80	0.33
18	29420	-92834	-404862748	5001	72211361	-0	215.80	0.39
19	35509	-93389	-484993905	5001	76515699	-0	215.80	0.44
20	35638	-99464	-571540520	5001	80963668	-0	215.80	0.49
21	35829	-138435	-699349391	5001	85378745	-0	215.80	0.39
22	38378	-139039	-821424368	5001	89795172	-0	215.80	0.44
23	40990	-139658	-944077642	5001	94212732	-0	215.80	0.48
24	43666	-140292	-1067318363	5001	98631211	-0	215.80	0.52
25	46404	-140941	-1191155563	5001	103050398	-0	215.80	0.55
26	49205	-141605	-1315598177	5001	107470082	-0	215.80	0.58
27	52070	-142284	-1440655052	5001	111890052	-0	215.80	0.60
28	54997	-142979	-1566334961	5001	116310100	-0	215.80	0.63
29	57988	-143688	-1692646609	5001	120730017	-0	215.80	0.65
30	61042	-144412	-1819598641	5001	125149597	-0	215.80	0.67
31	73022	-145154	-1947366852	5001	129577597	-0	215.80	0.69
32	76596	-145900	-2074107805	5001	133950518	-0	215.80	0.70
33	80241	-146640	-2201294133	5001	138312492	-0	215.80	0.64
34	83958	-147398	-2329127132	5001	142673594	-0	215.80	0.65
35	87747	-148170	-2457614856	5001	147033634	-0	215.80	0.66
36	91607	-148957	-2586765346	5001	151392422	-0	215.80	0.67
37	95538	-149758	-2716586619	5001	155749769	-0	215.80	0.68
38	99541	-150574	-2847086667	5001	160105490	-0	215.80	0.69
39	103615	-151405	-2978273463	5001	164459396	-0	215.80	0.69
40	107761	-152250	-3110154958	5001	168811303	-0	215.80	0.70
41	111979	-153110	-3242739086	5001	173161025	-0	215.80	0.70
42	129045	-153986	-3376161139	5001	177514583	-0	215.80	0.71
43	133169	-154845	-3505613873	5001	181713787	-0	215.80	0.71
44	137358	-155700	-3635741130	5001	185910991	-0	215.80	0.74
45	141614	-156568	-3766523002	5001	190104729	-0	215.80	0.75
46	145937	-157450	-3897966509	5001	194294846	-0	215.80	0.75
47	150326	-158345	-4030078655	5001	198481189	-0	215.80	0.75
48	154781	-159254	-4162866433	5001	202663606	-0	215.80	0.75
49	159302	-160177	-4296336826	5000	206841943	-0	215.80	0.75
50	163890	-161113	-4430496806	5000	211016047	-0	215.80	0.75
51	168544	-162063	-4565353336	5000	215185765	-0	215.80	0.75
52	173264	-163027	-4700913368	5000	219350946	-0	215.80	0.75
53	178051	-164004	-4837183844	5000	223511437	-0	215.80	0.75
54	182904	-164994	-4974171692	5000	227667086	-0	215.80	0.75
55	187823	-165999	-511883834	5000	231817741	-0	215.80	0.75
56	192809	-167017	-5250327178	5000	235963250	-0	215.80	0.75

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 15 " MST - MSB - ZONA B - NORMALE - RESISTENZA - 3 x 31.5 - (-)  
"

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	10860.00	-6030.00	8000.00	0.00
<b>2.00</b>	37.16	69900.00	-29920.00	0.00	4.75
---	---	---	Ft = 92785	Fp = -80224	---
---	---	Pa = 78244	Ta = 49869	La = 0	---
---	---	Pb = -8344	Tb = -79789	Lb = 0	---
<b>3.00</b>	33.69	69900.00	-29920.00	0.00	-4.75
---	---	---	Ft = 84834	Fp = -15761	---
---	---	Pa = 71539	Ta = -45596	La = 0	---
---	---	Pb = -1639	Tb = 15676	Lb = 0	---
<b>4.00</b>	30.23	69900.00	-29920.00	0.00	4.75
---	---	---	Ft = 92785	Fp = -80224	---
---	---	Pa = 78244	Ta = 49869	La = 0	---
---	---	Pb = -8344	Tb = -79789	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	11293	-6124	-6106961	8005	7913474	0	345.28	0.04
3	11743	-6203	-11164852	8005	14348609	-0	345.28	0.06
4	12210	-6285	-16291274	8005	20784695	-0	345.28	0.08
5	12696	-6370	-21488344	8005	27221112	-0	345.28	0.09
6	14593	-6460	-26772492	8006	33664416	0	345.28	0.11
7	15682	-6584	-32687439	8013	40628265	0	345.28	0.12
8	56833	314513	157023249	8023	47728863	0	345.28	0.19
9	98024	42977	247351596	8040	55041963	0	345.28	0.27
10	99232	42870	282508992	8040	62341908	-0	345.28	0.29
11	100481	42761	317472885	8040	69627963	0	345.28	0.30
12	134267	-200271	207704054	8052	77056063	0	345.28	0.20
13	168093	-82951	20398670	8063	84612236	-0	345.28	0.09
14	169461	-83068	-52406296	8062	92139496	-0	345.28	0.10
15	170869	-83188	-125312134	8060	99637571	-0	345.28	0.13
16	211519	44915	-124891185	8071	107262684	-0	345.28	0.13
17	252209	-17999	45318493	8082	114998735	-0	345.28	0.11
18	253736	-18124	26478000	8078	122689442	-0	345.28	0.10
19	259825	-18257	7433496	8076	130350377	-0	345.28	0.10
20	258075	-28508	-20020226	8105	138556832	-0	345.28	0.10
21	256389	-98306	-120700890	8067	146318644	-0	345.28	0.09
22	258938	-98448	-210049405	8065	154051629	-0	345.28	0.11
23	261550	-98593	-299513542	8062	161755927	-0	345.28	0.13
24	264226	-98742	-389081590	8060	169431922	-0	345.28	0.15
25	266964	-98894	-478743638	8057	177080007	-0	345.28	0.16
26	269765	-99050	-568491324	8055	184700574	-0	345.28	0.18
27	272630	-99210	-658317621	8052	192294013	-0	345.28	0.20
28	275557	-99373	-748216655	8050	199860705	-0	345.28	0.21
29	278548	-99540	-838183549	8048	207401021	-0	345.28	0.22
30	281602	-99711	-928214294	8045	214915318	-0	345.28	0.23
31	293582	-99892	-1018407937	8044	222420196	-0	345.28	0.25
32	297156	-100095	-1107801561	8048	229862007	-0	345.28	0.25
33	300801	-100243	-1196798048	8040	237209542	-0	345.28	0.24
34	304518	-100423	-1285856494	8038	244535329	-0	345.28	0.24
35	308307	-100607	-1374975815	8036	251839569	-0	345.28	0.25
36	312167	-100794	-1464155437	8034	259122494	-0	345.28	0.25
37	316098	-100985	-1553395064	8032	266384315	-0	345.28	0.26
38	320101	-101180	-1642694640	8030	273625229	-0	345.28	0.26
39	324175	-101379	-1732054319	8028	280845419	-0	345.28	0.27
40	328321	-101581	-1821474430	8026	288045050	-0	345.28	0.27
41	332539	-101787	-1910955464	8025	295224274	-0	345.28	0.27
42	349605	-102001	-2000578044	8024	302394369	-0	345.28	0.28
43	353729	-102205	-2087116978	8022	309291329	-0	345.28	0.28
44	357918	-102412	-2173741161	8020	316173637	-0	345.28	0.29
45	362174	-102620	-2260406446	8019	323035137	-0	345.28	0.29
46	366497	-102831	-2347113856	8017	329875968	-0	345.28	0.30
47	370886	-103046	-2433864420	8015	336696245	-0	345.28	0.30
48	375341	-103265	-2520659220	8013	343496070	-0	345.28	0.30
49	379862	-103487	-2607499377	8012	350275537	-0	345.28	0.30
50	384450	-103712	-2694386049	8010	357034726	-0	345.28	0.30
51	389104	-103941	-2781320422	8008	363773706	-0	345.28	0.30
52	393824	-104174	-2868303706	8007	370492539	-0	345.28	0.30
53	398611	-104410	-2955337127	8005	377191273	-0	345.28	0.30
54	403464	-104649	-3042421925	8004	383869951	-0	345.28	0.30
55	408383	-104892	-3129559350	8002	390528603	-0	345.28	0.30
56	413369	-105139	-3216750657	8001	397167254	-0	345.28	0.30

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 16 " MST - MSB - ZONA B - NORMALE - RESISTENZA - 3 x 31.5 - (-)  
"

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6030.00	8000.00	0.00
<b>2.00</b>	37.16	0.00	-29920.00	0.00	4.75
---	---	---	Ft = 3975	Fp = -32231	---
---	---	Pa = 3352	Ta = 2137	La = 0	---
---	---	Pb = -3352	Tb = -32057	Lb = 0	---
<b>3.00</b>	33.69	0.00	-29920.00	0.00	-4.75
---	---	---	Ft = -3975	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -29920	Lb = 0	---
<b>4.00</b>	30.23	0.00	-29920.00	0.00	4.75
---	---	---	Ft = 3975	Fp = -32231	---
---	---	Pa = 3352	Ta = 2137	La = 0	---
---	---	Pb = -3352	Tb = -32057	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	-6105	-5978303	8000	7842562	0	345.28	0.03
3	883	-6183	-10912739	8000	14207698	0	345.28	0.05
4	1350	-6265	-15921573	8000	20575334	-0	345.28	0.07
5	1836	-6349	-21007471	8000	26945334	0	345.28	0.09
6	3733	-6438	-26201222	8000	33324555	0	345.28	0.10
7	4822	-6536	-31949337	8000	40156439	0	345.28	0.12
8	8527	7129	-29358907	8000	46980804	0	345.28	0.06
9	12272	-4601	-31166117	8001	53821714	0	345.28	0.06
10	13481	-4708	-35443319	8001	60665920	-0	345.28	0.07
11	14729	-4818	-39838236	8001	67513103	-0	345.28	0.07
12	15241	-14773	-50291483	8001	74359630	0	345.28	0.08
13	15793	-37104	-86395604	8001	81205473	0	345.28	0.09
14	17161	-37225	-118304437	8001	88053608	0	345.28	0.11
15	18569	-37349	-150342589	8001	94903700	-0	345.28	0.12
16	22593	-34816	-181053921	8001	101764443	-0	345.28	0.14
17	26657	-65392	-232132516	8001	108634554	-0	345.28	0.16
18	28185	-65527	-288223893	8001	115504678	-0	345.28	0.18
19	34273	-65667	-344535876	8001	122387910	-0	345.28	0.20
20	35020	-69824	-405219865	8002	129502002	-0	345.28	0.23
21	35829	-98015	-495840010	8001	136566090	-0	345.28	0.18
22	38378	-98166	-582015788	8001	143632337	-0	345.28	0.20
23	40990	-98320	-668352915	8001	150700397	-0	345.28	0.22
24	43666	-98479	-754851820	8001	157769929	-0	345.28	0.23
25	46404	-98640	-841512856	8001	164840594	-0	345.28	0.25
26	49205	-98806	-928336317	8001	171912054	-0	345.28	0.26
27	52070	-98976	-1015322445	8001	178983972	-0	345.28	0.27
28	54997	-99149	-1102471439	8001	186056016	-0	345.28	0.28
29	57988	-99326	-1189783459	8001	193127851	-0	345.28	0.29
30	61042	-99506	-1277258635	8001	200199149	-0	345.28	0.30
31	73022	-99692	-1365012147	8002	207283914	-0	345.28	0.30
32	76596	-99879	-1451780227	8002	214280550	-0	345.28	0.31
33	80241	-100062	-1538574292	8002	221259676	-0	345.28	0.28
34	83958	-100251	-1625527267	8002	228237408	-0	345.28	0.29
35	87747	-100444	-1712639170	8002	235213442	-0	345.28	0.29
36	91607	-100640	-1799910017	8001	242187473	-0	345.28	0.30
37	95538	-100839	-1887339818	8001	249159201	-0	345.28	0.30
38	99541	-101043	-1974928575	8001	256128326	-0	345.28	0.30
39	103615	-101250	-2062676287	8001	263094550	-0	345.28	0.30
40	107761	-101460	-2150582945	8001	270057576	-0	345.28	0.31
41	111979	-101674	-2238648540	8001	277017108	-0	345.28	0.31
42	129045	-101893	-2326959913	8001	283982776	-0	345.28	0.31
43	133169	-102107	-2412348087	8001	290701480	-0	345.28	0.31
44	137358	-102320	-2497888923	8001	297416987	-0	345.28	0.32
45	141614	-102536	-2583564035	8001	304126947	-0	345.28	0.32
46	145937	-102755	-2669373412	8001	310831117	-0	345.28	0.32
47	150326	-102978	-2755317039	8001	317529250	-0	345.28	0.32
48	154781	-103204	-2841394903	8001	3242211102	-0	345.28	0.32
49	159302	-103434	-2927606991	8001	330906428	-0	345.28	0.32
50	163890	-103667	-3013953292	8001	337584983	-0	345.28	0.32
51	168544	-103903	-3100433793	8001	344256523	-0	345.28	0.32
52	173264	-104143	-3187048484	8000	350920804	-0	345.28	0.32
53	178051	-104386	-3273797355	8000	357577584	-0	345.28	0.32
54	182904	-104632	-3360680397	8000	364226617	-0	345.28	0.32
55	187823	-104882	-3447697600	8000	370867662	-0	345.28	0.32
56	192809	-105135	-3534848955	8000	377500477	-0	345.28	0.32

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 17 " MST - MSA - ZONA A - NORMALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	7060.00	7040.00	6000.00	0.00
2.00	37.16	54320.00	38720.00	0.00	4.75
---	---	---	Ft = 63870	Fp = 4416	---
---	---	Pa = 53861	Ta = 34328	La = 0	---
---	---	Pb = 459	Tb = 4392	Lb = 0	---
3.00	33.69	54320.00	38720.00	0.00	-4.75
---	---	---	Ft = 74159	Fp = -79007	---
---	---	Pa = 62537	Ta = -39858	La = 0	---
---	---	Pb = -8217	Tb = 78578	Lb = 0	---
4.00	30.23	54320.00	38720.00	0.00	4.75
---	---	---	Ft = 63870	Fp = 4416	---
---	---	Pa = 53861	Ta = 34328	La = 0	---
---	---	Pb = 459	Tb = 4392	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	7493	7364	7450205	6002	5915609	0	215.80	0.05
3	7943	7678	13864605	6002	10722720	0	215.80	0.09
4	8410	8006	20555714	6002	15530970	0	215.80	0.12
5	8896	8346	27533658	6002	20340024	0	215.80	0.15
6	10793	8702	34860365	6003	25154925	0	215.80	0.17
7	11882	9128	43552981	6005	30341639	0	215.80	0.20
8	40841	230705	188242238	6009	35594552	0	215.80	0.34
9	69841	44398	266489160	6016	40955983	0	215.80	0.45
10	71049	44824	307227262	6016	46311770	-0	215.80	0.49
11	72298	45264	348315316	6016	51661496	-0	215.80	0.51
12	105984	-143737	278873760	6023	57118054	-0	215.80	0.40
13	139711	10896	202922956	6029	62671294	-0	215.80	0.30
14	141079	11373	217559702	6029	68207674	-0	215.80	0.30
15	142487	11862	232592159	6028	73727000	-0	215.80	0.30
16	167656	114257	307840289	6032	79297718	-0	215.80	0.36
17	192865	125903	560693564	6035	84912701	-0	215.80	0.59
18	194393	126428	674248259	6034	90503410	-0	215.80	0.67
19	200481	126976	788261303	6033	96081043	-0	215.80	0.74
20	203134	128294	909230882	6047	102012844	-0	215.80	0.80
21	205849	132510	1031530770	6031	107700328	-0	215.80	0.60
22	208398	133101	1153597910	6030	113372141	-0	215.80	0.64
23	211010	133706	1276065259	6029	119028330	-0	215.80	0.67
24	213686	134327	1398937347	6027	124669049	-0	215.80	0.69
25	216424	134962	1522219766	6026	130294453	-0	215.80	0.72
26	219225	135613	1645919004	6025	135904695	-0	215.80	0.74
27	222090	136278	1770042298	6024	141499927	-0	215.80	0.76
28	225017	136959	1894597516	6023	147080296	-0	215.80	0.78
29	228008	137654	2019593053	6022	152645942	-0	215.80	0.79
30	231062	138365	2145037744	6021	158196998	-0	215.80	0.80
31	243042	139102	2271131007	6021	163745385	-0	215.80	0.82
32	246616	139871	2396540078	6023	169241735	-0	215.80	0.83
33	250261	140562	2521713702	6019	174682085	-0	215.80	0.75
34	253978	141307	2647367633	6018	180110043	-0	215.80	0.76
35	257767	142067	2773511328	6017	185525663	-0	215.80	0.76
36	261627	142842	2900154630	6016	190929012	-0	215.80	0.77
37	265558	143632	3027307462	6015	196320147	-0	215.80	0.77
38	269561	144437	3154979809	6015	201699117	-0	215.80	0.77
39	273635	145256	3283181700	6014	207065962	-0	215.80	0.78
40	277781	146090	3411923192	6013	212420716	-0	215.80	0.78
41	281999	146939	3541214359	6012	217763402	-0	215.80	0.78
42	299065	147810	3671205803	6012	223102144	-0	215.80	0.78
43	303189	148654	3797167055	6011	228241025	-0	215.80	0.78
44	307378	149501	3923697284	6010	233371108	-0	215.80	0.81
45	311634	150357	4050737905	6009	238488496	-0	215.80	0.81
46	315957	151228	4178298249	6008	243593218	-0	215.80	0.81
47	320346	152112	4306387540	6007	248685289	-0	215.80	0.81
48	324801	153011	4435014969	6007	253764716	-0	215.80	0.81
49	329322	153923	4564189691	6006	258831503	-0	215.80	0.81
50	333910	154848	4693920824	6005	263885644	-0	215.80	0.81
51	338564	155788	4824217445	6004	268927131	-0	215.80	0.81
52	343284	156741	4955088591	6003	273955949	-0	215.80	0.81
53	348071	157708	5086543254	6003	278972078	-0	215.80	0.80
54	352924	158689	5218590384	6002	283975491	-0	215.80	0.80
55	357843	159683	5351238884	6001	288966158	-0	215.80	0.80
56	362829	160691	5484497613	6000	293944046	-0	215.80	0.80

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 18 " MST - MSA - ZONA A - NORMALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	7040.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	38720.00	0.00	4.75
---	---	---	Ft = -5145	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38720	Lb = 0	---
<b>3.00</b>	33.69	0.00	38720.00	0.00	-4.75
---	---	---	Ft = 5145	Fp = -41711	---
---	---	Pa = 4338	Ta = -2765	La = 0	---
---	---	Pb = -4338	Tb = 41485	Lb = 0	---
<b>4.00</b>	30.23	0.00	38720.00	0.00	4.75
---	---	---	Ft = -5145	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38720	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	7341	7151373	6000	5881921	0	215.80	0.05
3	883	7655	13262949	6000	10655771	0	215.80	0.08
4	1350	7981	19647481	6000	15431496	0	215.80	0.11
5	1836	8320	26315254	6000	20208992	0	215.80	0.14
6	3733	8672	33316157	6000	24993401	0	215.80	0.16
7	4822	9062	41290664	6000	30117296	0	215.80	0.19
8	6851	9457	49515619	6000	35229243	0	215.80	0.11
9	8920	9869	58150293	6000	40347744	0	215.80	0.12
10	10128	10294	67179772	6000	45469193	0	215.80	0.12
11	11377	10734	76616759	6000	50593357	0	215.80	0.13
12	15734	4860	82848960	6001	55729808	0	215.80	0.14
13	20132	47614	122219647	6001	60877415	-0	215.80	0.17
14	21500	48097	163612124	6001	66026120	-0	215.80	0.21
15	22908	48594	205458252	6001	71175679	-0	215.80	0.24
16	23086	57384	252631614	6001	76322510	-0	215.80	0.28
17	23305	91116	336373310	6001	81466717	0	215.80	0.34
18	24832	91656	414740823	6001	86611385	0	215.80	0.40
19	30921	92211	493724553	6001	91766322	0	215.80	0.45
20	33343	94439	576803407	6001	97096558	0	215.80	0.49
21	35829	132105	695975584	6001	102394598	0	215.80	0.39
22	38378	132708	812506372	6001	107694256	0	215.80	0.44
23	40990	133327	929613640	6001	112995274	0	215.80	0.47
24	43666	133961	1047306693	6001	118297397	0	215.80	0.51
25	46404	134610	1165594722	6001	123600370	0	215.80	0.54
26	49205	135274	1284486827	6001	128903939	0	215.80	0.56
27	52070	135954	1403992027	6001	134207853	0	215.80	0.59
28	54997	136648	1524119266	6001	139511861	0	215.80	0.61
29	57988	137357	1644877427	6001	144815713	0	215.80	0.63
30	61042	138082	1766275336	6001	150119163	0	215.80	0.65
31	73022	138823	1888483139	6001	155432711	0	215.80	0.67
32	76596	139569	2009737486	6001	160680160	0	215.80	0.68
33	80241	140310	2131443703	6001	165914480	0	215.80	0.62
34	83958	141067	2253796496	6001	171147756	0	215.80	0.63
35	87747	141839	2376804104	6001	176379758	0	215.80	0.64
36	91607	142626	2500474750	6001	181610260	0	215.80	0.65
37	95538	143428	2624816634	6001	186839035	0	215.80	0.66
38	99541	144244	2749837933	6001	192065858	0	215.80	0.66
39	103615	145074	2875546803	6001	197290507	0	215.80	0.67
40	107761	145920	3001951381	6001	202512757	0	215.80	0.67
41	111979	146780	3129059786	6001	207732389	0	215.80	0.68
42	129045	147656	3257002873	6001	212956621	0	215.80	0.68
43	133169	148514	3381168424	6001	217995632	0	215.80	0.69
44	137358	149369	3506009678	6001	223032246	0	215.80	0.72
45	141614	150237	3631507874	6001	228064702	0	215.80	0.72
46	145937	151119	3757670201	6001	233092816	0	215.80	0.72
47	150326	152015	3884503829	6001	238116404	0	215.80	0.72
48	154781	152924	4012015922	6001	243135281	0	215.80	0.72
49	159302	153847	4140213628	6001	248149266	0	215.80	0.73
50	163890	154783	4269104090	6001	253158174	0	215.80	0.73
51	168544	155733	4398694436	6000	258161822	0	215.80	0.73
52	173264	156696	4528991785	6000	263160027	0	215.80	0.73
53	178051	157674	4660003245	6000	268152607	0	215.80	0.73
54	182904	158664	4791735911	6000	273139379	0	215.80	0.73
55	187823	159669	4924196870	6000	278120160	0	215.80	0.73
56	192809	160687	5057393195	6000	283094770	0	215.80	0.73

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 19 " MST - MSA - ZONA B - NORMALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6940.00	6950.00	6000.00	0.00
<b>2.00</b>	37.16	53420.00	38100.00	0.00	4.75
---	---	---	Ft = 62809	Fp = 4366	---
---	---	Pa = 52966	Ta = 33758	La = 0	---
---	---	Pb = 454	Tb = 4342	Lb = 0	---
<b>3.00</b>	33.69	53420.00	38100.00	0.00	-4.75
---	---	---	Ft = 72933	Fp = -77721	---
---	---	Pa = 61504	Ta = -39199	La = 0	---
---	---	Pb = -8084	Tb = 77299	Lb = 0	---
<b>4.00</b>	30.23	53420.00	38100.00	0.00	4.75
---	---	---	Ft = 62809	Fp = 4366	---
---	---	Pa = 52966	Ta = 33758	La = 0	---
---	---	Pb = 454	Tb = 4342	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	7373	7273	7352111	6002	5914996	0	215.80	0.05
3	7823	7587	13684807	6002	10721500	0	215.80	0.09
4	8290	7915	20293955	6002	15529157	0	215.80	0.12
5	8776	8254	27189684	6002	20337633	0	215.80	0.14
6	10673	8611	34433147	6002	25151974	0	215.80	0.17
7	11762	9035	43023139	6005	30337532	-0	215.80	0.20
8	40274	226936	185342611	6009	35587889	0	215.80	0.34
9	68826	43728	262311940	6015	40944912	-0	215.80	0.45
10	70034	44154	302402553	6015	46296440	-0	215.80	0.48
11	71283	44594	342844511	6015	51642059	-0	215.80	0.50
12	104450	-141270	274576259	6022	57092669	-0	215.80	0.39
13	137657	10828	199913360	6028	62638291	-0	215.80	0.29
14	139025	11305	214345428	6028	68167381	-0	215.80	0.29
15	140433	11795	229174777	6027	73679744	-0	215.80	0.29
16	165222	112501	303217735	6031	79242615	-0	215.80	0.36
17	190051	123982	551934800	6034	84848983	-0	215.80	0.59
18	191578	124508	663674219	6033	90431526	-0	215.80	0.66
19	197667	125056	775875448	6032	96001417	-0	215.80	0.72
20	200316	126360	894892581	6045	101922199	-0	215.80	0.79
21	203029	130542	1015292455	6030	107602554	-0	215.80	0.59
22	205578	131133	1135471708	6029	113267555	-0	215.80	0.63
23	208190	131740	1256056456	6028	118917244	-0	215.80	0.66
24	210866	132361	1377051428	6027	124551768	-0	215.80	0.68
25	213604	132997	1498462376	6026	130171274	-0	215.80	0.71
26	216405	133648	1620295919	6025	135775909	-0	215.80	0.73
27	219270	134314	1742559398	6024	141365818	-0	215.80	0.75
28	222197	134995	1865260760	6023	146941139	-0	215.80	0.76
29	225188	135692	1988408463	6022	152502005	-0	215.80	0.78
30	228242	136403	2112011391	6021	158048543	-0	215.80	0.79
31	240222	137140	2236266042	6020	163592648	-0	215.80	0.80
32	243796	137908	2359850625	6022	169084460	-0	215.80	0.81
33	247441	138601	2483224060	6018	174521057	-0	215.80	0.74
34	251158	139347	2607083209	6018	179945471	-0	215.80	0.74
35	254947	140108	2731437540	6017	185357750	-0	215.80	0.75
36	258807	140883	2856296894	6016	190757955	-0	215.80	0.75
37	262738	141674	2981671186	6015	196146139	-0	215.80	0.76
38	266741	142479	3107570394	6014	201522345	-0	215.80	0.76
39	270815	143298	3234004534	6013	206886609	-0	215.80	0.76
40	274961	144133	3360983653	6013	212238958	-0	215.80	0.77
41	279179	144982	3488517813	6012	217579413	-0	215.80	0.77
42	296245	145853	3616755473	6011	222916079	-0	215.80	0.77
43	300369	146698	3741030189	6010	228053151	-0	215.80	0.77
44	304558	147545	3865877709	6010	233181541	-0	215.80	0.80
45	308814	148402	3991241081	6009	238297392	-0	215.80	0.80
46	313137	149274	4117129612	6008	243400729	-0	215.80	0.80
47	317526	150158	4243552507	6007	248491561	-0	215.80	0.80
48	321981	151057	4370518936	6006	253569895	-0	215.80	0.80
49	326502	151969	4498038038	6006	258635728	-0	215.80	0.80
50	331090	152896	4626118915	6005	263689053	-0	215.80	0.80
51	335744	153835	4754770626	6004	268729858	-0	215.80	0.80
52	340464	154789	4884002194	6003	273758124	-0	215.80	0.79
53	345251	155756	5013822598	6003	278773828	-0	215.80	0.79
54	350104	156738	5144240774	6002	283776941	-0	215.80	0.79
55	355023	157733	5275265615	6001	288767431	-0	215.80	0.79
56	360009	158741	5406905969	6000	293745259	-0	215.80	0.79

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 20 " MST - MSA - ZONA B - NORMALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	0.00	6950.00	6000.00	0.00
2.00	37.16	0.00	38100.00	0.00	4.75
---	---	---	Ft = -5062	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38100	Lb = 0	---
3.00	33.69	0.00	38100.00	0.00	-4.75
---	---	---	Ft = 5062	Fp = -41043	---
---	---	Pa = 4269	Ta = -2721	La = 0	---
---	---	Pb = -4269	Tb = 40821	Lb = 0	---
4.00	30.23	0.00	38100.00	0.00	4.75
---	---	---	Ft = -5062	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38100	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

<b>Nodo</b>	<b>Carico verticale [N]</b>	<b>Tx [N]</b>	<b>My [Nmm]</b>	<b>Ty [N]</b>	<b>Mx [Nmm]</b>	<b>Mt [Nmm]</b>	<b>Sig. amm. [N/mm2]</b>	<b>% Uso</b>
2	433	7251	7062995	6000	5881921	0	215.80	0.05
3	883	7565	13102661	6000	10655771	0	215.80	0.08
4	1350	7891	19415095	6000	15431496	0	215.80	0.11
5	1836	8230	26010578	6000	20208992	0	215.80	0.14
6	3733	8582	32938453	6000	24993401	0	215.80	0.16
7	4822	8972	40832620	6000	30117295	0	215.80	0.19
8	6851	9367	48978401	6000	35229242	0	215.80	0.11
9	8920	9779	57533054	6000	40347743	0	215.80	0.12
10	10128	10204	66482032	6000	45469191	0	215.80	0.12
11	11377	10644	75838031	6000	50593355	0	215.80	0.13
12	15700	4871	82045973	6001	55729694	-0	215.80	0.13
13	20062	46949	120867392	6001	60877088	-0	215.80	0.17
14	21430	47431	161684854	6001	66025591	-0	215.80	0.21
15	22838	47928	202955527	6001	71174956	-0	215.80	0.24
16	23052	56585	249476046	6001	76321695	-0	215.80	0.27
17	23305	89785	331987434	6001	81465901	0	215.80	0.34
18	24832	90325	409218066	6001	86610569	0	215.80	0.39
19	30921	90881	487062865	6001	91765505	0	215.80	0.44
20	33343	93083	568949732	6001	97095740	0	215.80	0.49
21	35829	130154	686359403	6001	102393779	0	215.80	0.39
22	38378	130758	801178475	6001	107693437	0	215.80	0.43
23	40990	131377	916573499	6001	112994454	0	215.80	0.47
24	43666	132011	1032553835	6001	118296576	0	215.80	0.50
25	46404	132660	1149128734	6001	123599548	0	215.80	0.53
26	49205	133324	1266307355	6001	128903117	0	215.80	0.56
27	52070	134003	1384098775	6001	134207030	0	215.80	0.58
28	54997	134698	1502512000	6001	139511037	0	215.80	0.60
29	57988	135407	1621555974	6001	144814889	0	215.80	0.62
30	61042	136132	1741239587	6001	150118338	0	215.80	0.64
31	73022	136873	1861730805	6001	155431885	0	215.80	0.66
32	76596	137619	1981290974	6001	160679333	0	215.80	0.67
33	80241	138359	2101305607	6001	165913653	0	215.80	0.61
34	83958	139117	2221966884	6001	171146928	0	215.80	0.62
35	87747	139889	2343283104	6001	176378930	0	215.80	0.63
36	91607	140676	2465262552	6001	181609431	0	215.80	0.64
37	95538	141477	2587913488	6001	186838205	0	215.80	0.65
38	99541	142293	2711244151	6001	192065028	0	215.80	0.65
39	103615	143124	2835262757	6001	197289676	0	215.80	0.66
40	107761	143969	2959977506	6001	202511926	0	215.80	0.67
41	111979	144829	3085396575	6001	207731557	0	215.80	0.67
42	129045	145705	3211649198	6001	212955789	0	215.80	0.67
43	133169	146564	3334183657	6001	217994800	0	215.80	0.68
44	137358	147419	3457394292	6001	223031414	0	215.80	0.71
45	141614	148287	3581262752	6001	228063869	0	215.80	0.71
46	145937	149169	3705796279	6001	233091982	0	215.80	0.71
47	150326	150065	3831002099	6001	238115570	0	215.80	0.71
48	154781	150974	3956887428	6001	243134447	0	215.80	0.71
49	159302	151897	4083459470	6001	248148431	0	215.80	0.72
50	163890	152833	4210725420	6001	253157339	0	215.80	0.72
51	168544	153783	4338692459	6000	258160987	0	215.80	0.72
52	173264	154746	4467367761	6000	263159192	0	215.80	0.72
53	178051	155723	4596758486	6000	268151771	0	215.80	0.72
54	182904	156714	4726871785	6000	273138543	0	215.80	0.72
55	187823	157719	4857714795	6000	278119325	0	215.80	0.72
56	192809	158737	4989294644	6000	283093935	0	215.80	0.72

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 21 " MST - MSB - ZONA B - NORMALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	11320.00	6350.00	8000.00	0.00
<b>2.00</b>	37.16	69540.00	28220.00	0.00	4.75
---	---	---	Ft = 84603	Fp = -17345	---
---	---	Pa = 71344	Ta = 45471	La = 0	---
---	---	Pb = -1804	Tb = -17251	Lb = 0	---
<b>3.00</b>	33.69	69540.00	28220.00	0.00	-4.75
---	---	---	Ft = 92102	Fp = -78145	---
---	---	Pa = 77668	Ta = -49502	La = 0	---
---	---	Pb = -8128	Tb = 77722	Lb = 0	---
<b>4.00</b>	30.23	69540.00	28220.00	0.00	4.75
---	---	---	Ft = 84603	Fp = -17345	---
---	---	Pa = 71344	Ta = 45471	La = 0	---
---	---	Pb = -1804	Tb = -17251	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

<b>Nodo</b>	<b>Carico verticale [N]</b>	<b>Tx [N]</b>	<b>My [Nmm]</b>	<b>Ty [N]</b>	<b>Mx [Nmm]</b>	<b>Mt [Nmm]</b>	<b>Sig. amm. [N/mm2]</b>	<b>% Uso</b>
2	11753	6462	6702400	8005	7916395	0	215.80	0.06
3	12203	6542	12306461	8005	14354396	0	215.80	0.10
4	12670	6624	17989266	8005	20793268	0	215.80	0.13
5	13156	6710	23753223	8006	27232367	0	215.80	0.16
6	15053	6803	29643542	8006	33678197	0	215.80	0.18
7	16142	6952	36634081	8013	40647156	0	215.80	0.21
8	53843	300026	223226800	8022	47730557	0	215.80	0.41
9	91584	52803	321166050	8037	55008037	-0	215.80	0.55
10	92792	52908	368993814	8037	62273655	-0	215.80	0.59
11	94041	53017	416844043	8037	69526723	-0	215.80	0.62
12	134161	-189135	322462899	8051	76953464	-0	215.80	0.47
13	174321	-13292	201156002	8065	84537326	-0	215.80	0.31
14	175689	-13181	194987417	8063	92091035	-0	215.80	0.29
15	177097	-13068	188877968	8061	99614301	-0	215.80	0.27
16	211053	116758	258766058	8071	107236470	-0	215.80	0.33
17	245049	110519	540286651	8078	114944193	-0	215.80	0.59
18	246576	110632	640514987	8075	122608059	-0	215.80	0.65
19	252665	110757	740762773	8073	130243612	-0	215.80	0.71
20	254185	108975	845491637	8102	138429761	-0	215.80	0.76
21	255769	93750	930744202	8067	146188626	-0	215.80	0.55
22	258318	93882	1018435011	8064	153918798	-0	215.80	0.57
23	260930	94018	1106081672	8062	161620420	-0	215.80	0.59
24	263606	94158	1193682758	8059	169293873	-0	215.80	0.61
25	266344	94302	1281237705	8057	176939545	-0	215.80	0.62
26	269145	94449	1368746663	8054	184557825	-0	215.80	0.63
27	272010	94600	1456210368	8052	192149097	-0	215.80	0.64
28	274937	94754	1543630040	8049	199713739	-0	215.80	0.65
29	277928	94913	1631007299	8047	207252118	-0	215.80	0.65
30	280982	95076	1718344084	8045	214764589	-0	215.80	0.66
31	292962	95253	1805787883	8044	222267728	-0	215.80	0.66
32	296536	95467	1892560795	8047	229707700	-0	215.80	0.67
33	300181	95589	1978670161	8039	237053716	-0	215.80	0.60
34	303898	95763	2064765819	8037	244378069	-0	215.80	0.60
35	307687	95940	2150850066	8035	251680960	-0	215.80	0.60
36	311547	96121	2236925588	8034	258962616	-0	215.80	0.60
37	315478	96306	2322995103	8032	266223246	-0	215.80	0.60
38	319481	96495	2409061340	8030	273463046	-0	215.80	0.60
39	323555	96687	2495127033	8028	280682195	-0	215.80	0.60
40	327701	96884	2581194909	8026	287880858	-0	215.80	0.60
41	331919	97084	2667267675	8024	295059183	-0	215.80	0.60
42	348985	97296	2753452505	8024	302228435	-0	215.80	0.60
43	353109	97492	2836608296	8021	309124662	-0	215.80	0.60
44	357298	97695	2919810666	8020	316006284	-0	215.80	0.62
45	361554	97897	3003003402	8018	322867161	-0	215.80	0.61
46	365877	98103	3086189208	8017	329707430	-0	215.80	0.61
47	370266	98313	3169370649	8015	336527204	-0	215.80	0.61
48	374721	98526	3252550240	8013	343326587	-0	215.80	0.61
49	379242	98743	3335730448	8012	350105667	-0	215.80	0.60
50	383830	98963	3418913688	8010	356864525	-0	215.80	0.60
51	388484	99187	3502102327	8008	363603228	-0	215.80	0.60
52	393204	99415	3585298677	8007	370321837	-0	215.80	0.59
53	397991	99646	3668505002	8005	377020399	-0	215.80	0.59
54	402844	99881	3751723514	8004	383698955	-0	215.80	0.59
55	407763	100119	3834956375	8002	390357535	-0	215.80	0.58
56	412749	100361	3918205698	8001	396996162	-0	215.80	0.58

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 22 " MST - MSB - ZONA B - NORMALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	0.00	6350.00	8000.00	0.00
2.00	37.16	0.00	28220.00	0.00	4.75
---	---	---	Ft = -3749	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 28220	Lb = 0	---
3.00	33.69	0.00	28220.00	0.00	-4.75
---	---	---	Ft = 3749	Fp = -30400	---
---	---	Pa = 3162	Ta = -2015	La = 0	---
---	---	Pb = -3162	Tb = 30235	Lb = 0	---
4.00	30.23	0.00	28220.00	0.00	4.75
---	---	---	Ft = -3749	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 28220	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	6425	6291781	8000	7842561	0	215.80	0.05
3	883	6503	11480364	8000	14207694	-0	215.80	0.09
4	1350	6585	16743204	8000	20575325	0	215.80	0.12
5	1836	6669	22082952	8000	26945319	-0	215.80	0.14
6	3733	6757	27529965	8000	33324528	-0	215.80	0.17
7	4822	6856	33546089	8000	40156379	-0	215.80	0.19
8	6851	6954	39586001	8000	46972302	0	215.80	0.11
9	8920	7057	45755464	8000	53796963	0	215.80	0.12
10	10128	7163	52038596	8000	60625552	0	215.80	0.12
11	11377	7273	58438786	8001	67457760	0	215.80	0.13
12	15146	2774	62302220	8001	74303841	0	215.80	0.13
13	18955	33709	90111036	8001	81162512	-0	215.80	0.15
14	20323	33830	119196150	8001	88022872	-0	215.80	0.18
15	21731	33954	148408904	8001	94884592	-0	215.80	0.20
16	22498	40115	181308367	8001	101744955	-0	215.80	0.22
17	23305	64448	240657580	8001	108603882	0	215.80	0.26
18	24832	64583	295869253	8001	115463425	0	215.80	0.30
19	30921	64722	351299154	8001	122336657	0	215.80	0.33
20	33343	66065	409394228	8002	129443614	0	215.80	0.36
21	35829	93235	493562619	8001	136507650	0	215.80	0.29
22	38378	93385	575551978	8001	143573845	0	215.80	0.32
23	40990	93540	657701314	8001	150641853	0	215.80	0.34
24	43666	93698	740011170	8001	157711334	0	215.80	0.37
25	46404	93860	822482020	8001	164781948	0	215.80	0.39
26	49205	94026	905114282	8001	171853358	0	215.80	0.40
27	52070	94195	987908326	8001	178925227	0	215.80	0.42
28	54997	94368	1070864482	8001	185997222	0	215.80	0.44
29	57988	94545	1153983043	8001	193069011	0	215.80	0.45
30	61042	94726	1237264275	8001	200140263	0	215.80	0.46
31	73022	94911	1320819115	8002	207224977	0	215.80	0.47
32	76596	95098	1403444271	8002	214221558	0	215.80	0.48
33	80241	95282	1486100285	8002	221200637	0	215.80	0.44
34	83958	95471	1568915133	8001	228178324	0	215.80	0.45
35	87747	95663	1651888972	8001	235154313	0	215.80	0.45
36	91607	95859	1735021955	8001	242128301	0	215.80	0.46
37	95538	96039	1818314230	8001	249099988	0	215.80	0.46
38	99541	96262	1901765939	8001	256069074	0	215.80	0.46
39	103615	96469	1985377218	8001	263035260	0	215.80	0.47
40	107761	96680	2069148200	8001	269998249	0	215.80	0.47
41	111979	96894	2153079013	8001	276957747	0	215.80	0.47
42	129045	97113	2237253162	8001	283923379	0	215.80	0.48
43	133169	97326	2318648920	8001	290642050	0	215.80	0.48
44	137358	97539	2400198226	8001	297357526	0	215.80	0.50
45	141614	97755	2481883556	8001	304067458	0	215.80	0.50
46	145937	97975	2563705026	8001	310771601	0	215.80	0.50
47	150326	98198	2645662750	8001	317469710	0	215.80	0.50
48	154781	98424	2727756841	8001	324161541	0	215.80	0.50
49	159302	98654	2809987412	8001	330846847	0	215.80	0.50
50	163890	98886	2892354578	8001	337525386	0	215.80	0.50
51	168544	99123	2974858453	8001	344196912	0	215.80	0.50
52	173264	99363	3057499154	8000	350861182	0	215.80	0.50
53	178051	99606	3140276795	8000	357517952	0	215.80	0.50
54	182904	99852	3223191492	8000	364166979	0	215.80	0.50
55	187823	100102	3306243361	8000	370808020	0	215.80	0.49
56	192809	100355	3389432517	8000	377440833	0	215.80	0.49

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 23 " MST - MSA - ZONA A - NORMALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	7060.00	-7040.00	6000.00	0.00
<b>2.00</b>	37.16	54320.00	-38720.00	0.00	4.75
---	---	---	Ft = 74159	Fp = -79007	---
---	---	Pa = 62537	Ta = 39858	La = 0	---
---	---	Pb = -8217	Tb = -78578	Lb = 0	---
<b>3.00</b>	33.69	54320.00	-38720.00	0.00	-4.75
---	---	---	Ft = 63870	Fp = 4416	---
---	---	Pa = 53861	Ta = -34328	La = 0	---
---	---	Pb = 459	Tb = -4392	Lb = 0	---
<b>4.00</b>	30.23	54320.00	-38720.00	0.00	4.75
---	---	---	Ft = 74159	Fp = -79007	---
---	---	Pa = 62537	Ta = 39858	La = 0	---
---	---	Pb = -8217	Tb = -78578	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

<b>Nodo</b>	<b>Carico verticale [N]</b>	<b>Tx [N]</b>	<b>My [Nmm]</b>	<b>Ty [N]</b>	<b>Mx [Nmm]</b>	<b>Mt [Nmm]</b>	<b>Sig. amm. [N/mm2]</b>	<b>% Uso</b>
2	7493	-7357	-7312301	6002	5915666	0	215.80	0.05
3	7943	-7671	-13580779	6002	10722836	0	215.80	0.09
4	8410	-7998	-20117662	6002	15531150	-0	215.80	0.12
5	8896	-8338	-26932789	6002	20340270	-0	215.80	0.14
6	10793	-8692	-34064533	6003	25155250	-0	215.80	0.17
7	11882	-9107	-42298531	6006	30342152	-0	215.80	0.20
8	45180	247204	105296627	6011	35613139	-0	215.80	0.21
9	78517	29831	172811356	6018	41009378	-0	215.80	0.31
10	79726	29405	195946289	6018	46398682	-0	215.80	0.32
11	80974	28965	218633727	6018	51780594	-0	215.80	0.34
12	105984	-160069	128371370	6023	57237803	-0	215.80	0.21
13	131034	-84955	-35563586	6028	62762762	-0	215.80	0.12
14	132402	-85434	-111129643	6027	68272129	-0	215.80	0.18
15	133810	-85927	-187113389	6027	73765723	-0	215.80	0.25
16	167656	12662	-207166501	6032	79337226	-0	215.80	0.27
17	201542	-51600	-106916474	6037	84976907	-0	215.80	0.18
18	203070	-52130	-155708187	6036	90591004	-0	215.80	0.21
19	209158	-52680	-205052615	6035	96190742	-0	215.80	0.24
20	207472	-63220	-264347637	6048	102138784	-0	215.80	0.28
21	205849	-132397	-395544185	6031	107826975	-0	215.80	0.25
22	208398	-132992	-515952247	6030	113499461	-0	215.80	0.30
23	211010	-133602	-636856535	6029	119156285	-0	215.80	0.35
24	213686	-134227	-758255983	6028	124797602	-0	215.80	0.39
25	216424	-134866	-880151105	6027	130423570	-0	215.80	0.43
26	219225	-135521	-1002543763	6026	136034343	-0	215.80	0.46
27	222090	-136190	-1125436977	6025	141630076	-0	215.80	0.49
28	225017	-136875	-1248834766	6024	147210917	-0	215.80	0.52
29	228008	-137575	-1372742002	6022	152777006	-0	215.80	0.55
30	231062	-138289	-1497164298	6021	158328478	-0	215.80	0.57
31	243042	-139027	-1622261788	6021	163877271	-0	215.80	0.59
32	246616	-139790	-1746620202	6023	169374050	-0	215.80	0.61
33	250261	-140495	-1870926882	6019	174814753	-0	215.80	0.56
34	253978	-141243	-1995763163	6018	180243045	-0	215.80	0.58
35	257767	-142007	-2121136684	6017	185658979	-0	215.80	0.59
36	261627	-142785	-2247055541	6016	191062624	-0	215.80	0.60
37	265558	-143578	-2373528051	6016	196454037	-0	215.80	0.61
38	269561	-144386	-2500562714	6015	201833267	-0	215.80	0.62
39	273635	-145208	-2628168189	6014	207200356	-0	215.80	0.63
40	277781	-146045	-2756353270	6013	212555336	-0	215.80	0.63
41	281999	-146897	-2885126864	6012	217898234	-0	215.80	0.64
42	299065	-147769	-3014617064	6012	223237181	-0	215.80	0.65
43	303189	-148617	-3140140546	6011	228376242	-0	215.80	0.65
44	307378	-149466	-3266260385	6010	233506492	-0	215.80	0.68
45	311634	-150326	-3392927465	6009	238624033	-0	215.80	0.69
46	315957	-151199	-3520150215	6008	243728893	-0	215.80	0.69
47	320346	-152087	-3647937036	6008	248821087	-0	215.80	0.69
48	324801	-152988	-3776296359	6007	253900624	-0	215.80	0.69
49	329322	-153902	-3905236630	6006	258967507	-0	215.80	0.70
50	333910	-154831	-4034766308	6005	264021731	-0	215.80	0.70
51	338564	-155773	-4164893857	6004	269063287	-0	215.80	0.70
52	343284	-156729	-4295627742	6003	274092161	-0	215.80	0.70
53	348071	-157699	-4426976428	6003	279108333	-0	215.80	0.70
54	352924	-158682	-4558948370	6002	284111776	-0	215.80	0.70
55	357843	-159679	-4691552015	6001	289102462	-0	215.80	0.70
56	362829	-160690	-4824795797	6000	294080356	-0	215.80	0.70

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 24 " MST - MSA - ZONA A - NORMALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-7040.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	-38720.00	0.00	4.75
---	---	---	Ft = 5145	Fp = -41711	---
---	---	Pa = 4338	Ta = 2765	La = 0	---
---	---	Pb = -4338	Tb = -41485	Lb = 0	---
<b>3.00</b>	33.69	0.00	-38720.00	0.00	-4.75
---	---	---	Ft = -5145	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -38720	Lb = 0	---
<b>4.00</b>	30.23	0.00	-38720.00	0.00	4.75
---	---	---	Ft = 5145	Fp = -41711	---
---	---	Pa = 4338	Ta = 2765	La = 0	---
---	---	Pb = -4338	Tb = -41485	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

<b>Nodo</b>	<b>Carico verticale [N]</b>	<b>Tx [N]</b>	<b>My [Nmm]</b>	<b>Ty [N]</b>	<b>Mx [Nmm]</b>	<b>Mt [Nmm]</b>	<b>Sig. amm. [N/mm2]</b>	<b>% Uso</b>
2	433	-7341	-7151140	6000	5881922	0	215.80	0.05
3	883	-7655	-13262241	6000	10655775	0	215.80	0.08
4	1350	-7981	-19646048	6000	15431504	0	215.80	0.11
5	1836	-8320	-26312837	6000	20209006	-0	215.80	0.14
6	3733	-8672	-33311763	6000	24993426	0	215.80	0.16
7	4822	-9062	-41280811	6000	30117352	0	215.80	0.19
8	9020	8353	-38699277	6000	35237495	-0	215.80	0.09
9	13258	-7106	-42066637	6000	40371772	-0	215.80	0.10
10	14467	-7531	-48876620	6001	45508381	-0	215.80	0.10
11	15715	-7971	-56093338	6001	50647083	-0	215.80	0.11
12	15734	-21162	-71396876	6001	55783573	-0	215.80	0.12
13	15793	-50378	-120150724	6001	60917971	-0	215.80	0.17
14	17161	-50861	-163754627	6001	66054090	-0	215.80	0.21
15	18569	-51358	-207813325	6001	71191676	-0	215.80	0.24
16	23086	-48427	-250469131	6001	76338549	-0	215.80	0.28
17	27643	-88352	-319804273	6001	81493612	-0	215.80	0.33
18	29171	-88892	-395937752	6001	86648552	-0	215.80	0.38
19	35259	-89448	-472683797	6001	91813195	-0	215.80	0.43
20	35513	-95224	-555558581	6001	97150354	-0	215.80	0.48
21	35829	-132105	-677473832	6001	102448442	-0	215.80	0.38
22	38378	-132708	-793996507	6001	107748148	-0	215.80	0.43
23	40990	-133327	-911095730	6001	113049215	-0	215.80	0.46
24	43666	-133961	-1028780821	6001	118351385	-0	215.80	0.50
25	46404	-134610	-1147060995	6001	123654404	-0	215.80	0.53
26	49205	-135274	-1265945367	6001	128958019	-0	215.80	0.56
27	52070	-135954	-1385442972	6001	134261978	-0	215.80	0.58
28	54997	-136648	-1505562771	6001	139566030	-0	215.80	0.60
29	57988	-137357	-1626313662	6001	144869926	-0	215.80	0.62
30	61042	-138082	-1747704484	6001	150173418	-0	215.80	0.64
31	73022	-138823	-1869904445	6001	155487013	-0	215.80	0.66
32	76596	-139569	-1991150248	6001	160734512	-0	215.80	0.67
33	80241	-140310	-2112849191	6001	165968876	-0	215.80	0.62
34	83958	-141067	-2235194918	6001	171202194	-0	215.80	0.63
35	87747	-141839	-2358195675	6001	176434237	-0	215.80	0.64
36	91607	-142626	-2481859698	6001	181664778	-0	215.80	0.65
37	95538	-143428	-2606195194	6001	186893591	-0	215.80	0.65
38	99541	-144244	-2731210350	6001	192120451	-0	215.80	0.66
39	103615	-145074	-2856913332	6001	197345134	-0	215.80	0.66
40	107761	-145920	-2983312285	6001	202567419	-0	215.80	0.67
41	111979	-146780	-3110415336	6001	207787082	-0	215.80	0.67
42	129045	-147656	-3238352790	6001	213011348	-0	215.80	0.68
43	133169	-148514	-3362513335	6001	218050389	-0	215.80	0.68
44	137358	-149369	-3487349816	6001	223087031	-0	215.80	0.71
45	141614	-150237	-3612843595	6001	228119513	-0	215.80	0.72
46	145937	-151119	-3739001865	6001	233147651	-0	215.80	0.72
47	150326	-152015	-3865831801	6001	238171261	-0	215.80	0.72
48	154781	-152924	-3993340571	6001	243190159	-0	215.80	0.72
49	159302	-153847	-4121535328	6001	248204161	-0	215.80	0.72
50	163890	-154783	-4250423219	6001	253213084	-0	215.80	0.72
51	168544	-155733	-4380011377	6000	258216745	-0	215.80	0.72
52	173264	-156696	-4510306925	6000	263214961	-0	215.80	0.72
53	178051	-157674	-4641316975	6000	268207549	-0	215.80	0.72
54	182904	-158664	-4773048629	6000	273194327	-0	215.80	0.72
55	187823	-159669	-4905508976	6000	278175112	-0	215.80	0.72
56	192809	-160687	-5038705095	6000	283149723	-0	215.80	0.72

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 25 " MST - MSA - ZONA B - NORMALE - RESISTENZA - 2 x 40.5 - (-)  
"

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6940.00	-6950.00	6000.00	0.00
<b>2.00</b>	37.16	53420.00	-38100.00	0.00	4.75
---	---	---	Ft = 72933	Fp = -77721	---
---	---	Pa = 61504	Ta = 39199	La = 0	---
---	---	Pb = -8084	Tb = -77299	Lb = 0	---
<b>3.00</b>	33.69	53420.00	-38100.00	0.00	-4.75
---	---	---	Ft = 62809	Fp = 4366	---
---	---	Pa = 52966	Ta = -33758	La = 0	---
---	---	Pb = 454	Tb = -4342	Lb = 0	---
<b>4.00</b>	30.23	53420.00	-38100.00	0.00	4.75
---	---	---	Ft = 72933	Fp = -77721	---
---	---	Pa = 61504	Ta = 39199	La = 0	---
---	---	Pb = -8084	Tb = -77299	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Usa
2	7373	-7266	-7218826	6002	5915050	0	215.80	0.05
3	7823	-7580	-13410357	6002	10721612	0	215.80	0.09
4	8290	-7907	-19870178	6002	15529330	0	215.80	0.12
5	8776	-8247	-26608136	6002	20337871	0	215.80	0.14
6	10673	-8602	-33662223	6002	25152289	0	215.80	0.17
7	11762	-9015	-41806276	6005	30338030	0	215.80	0.19
8	44543	243054	103305629	6010	35606138	0	215.80	0.20
9	77363	29269	169665921	6018	40997351	0	215.80	0.30
10	78572	28843	192374683	6018	46381799	0	215.80	0.32
11	79820	28403	214637828	6018	51759029	0	215.80	0.33
12	104450	-157505	125825412	6023	57210269	0	215.80	0.21
13	129119	-83663	-35454568	6027	62728096	-0	215.80	0.12
14	130487	-84143	-109837186	6027	68230638	-0	215.80	0.18
15	131895	-84636	-184638071	6026	73717714	-0	215.80	0.25
16	165222	12312	-204432095	6031	79281341	-0	215.80	0.26
17	198588	-50914	-105928375	6036	84911957	-0	215.80	0.17
18	200116	-51444	-154007724	6035	90517458	-0	215.80	0.21
19	206204	-51995	-202639405	6034	96109048	-0	215.80	0.24
20	204585	-62369	-261043966	6047	102045765	-0	215.80	0.27
21	203029	-130434	-390219715	6030	107726804	-0	215.80	0.25
22	205578	-131030	-508792248	6029	113392455	-0	215.80	0.30
23	208190	-131640	-627863056	6028	119042758	-0	215.80	0.35
24	210866	-132265	-747431469	6027	124677860	-0	215.80	0.39
25	213604	-132905	-867498341	6026	130297911	-0	215.80	0.42
26	216405	-133560	-988065829	6025	135903061	-0	215.80	0.46
27	219270	-134230	-1109137208	6024	141493454	-0	215.80	0.49
28	222197	-134915	-1230716715	6023	147069230	-0	215.80	0.51
29	225188	-135615	-1352809414	6022	152630525	-0	215.80	0.54
30	228242	-136330	-1475421080	6021	158177466	-0	215.80	0.56
31	240222	-137068	-1598709711	6021	163721964	-0	215.80	0.58
32	243796	-137831	-1721274873	6022	169214191	-0	215.80	0.60
33	247441	-138537	-1843807008	6019	174651130	-0	215.80	0.55
34	251158	-139286	-1966872570	6018	180075867	-0	215.80	0.57
35	254947	-140050	-2090479279	6017	185488451	-0	215.80	0.58
36	258807	-140828	-2214635293	6016	190888943	-0	215.80	0.59
37	262738	-141622	-2339348982	6015	196277396	-0	215.80	0.60
38	266741	-142430	-2464628895	6014	201653854	-0	215.80	0.61
39	270815	-143252	-2590483734	6013	207018354	-0	215.80	0.62
40	274961	-144090	-2716922327	6013	212370923	-0	215.80	0.62
41	279179	-144942	-2843953616	6012	217711583	-0	215.80	0.63
42	296245	-145814	-2971703992	6012	223048448	-0	215.80	0.64
43	300369	-146662	-3095553078	6010	228185694	-0	215.80	0.64
44	304558	-147512	-3220001541	6010	233314247	-0	215.80	0.67
45	308814	-148372	-3345001641	6009	238430246	-0	215.80	0.68
46	313137	-149246	-3470561819	6008	243533717	-0	215.80	0.68
47	317526	-150134	-3596690488	6007	248624669	-0	215.80	0.68
48	321981	-151035	-3723396089	6007	253703109	-0	215.80	0.68
49	326502	-151950	-3850687077	6006	258769035	-0	215.80	0.69
50	331090	-152879	-3978571920	6005	263822440	-0	215.80	0.69
51	335744	-153821	-4107059090	6004	268863312	-0	215.80	0.69
52	340464	-154778	-4236157061	6003	273891633	-0	215.80	0.69
53	345251	-155748	-4365874304	6003	278907379	-0	215.80	0.69
54	350104	-156731	-4496219283	6002	283910522	-0	215.80	0.69
55	355023	-157729	-4627200452	6001	288901030	-0	215.80	0.69
56	360009	-158740	-4758826251	6000	293878864	-0	215.80	0.70

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 26 " MST - MSA - ZONA B - NORMALE - RESISTENZA - 2 x 40.5 - (-)  
"

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6950.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	-38100.00	0.00	4.75
---	---	---	Ft = 5062	Fp = -41043	---
---	---	Pa = 4269	Ta = 2721	La = 0	---
---	---	Pb = -4269	Tb = -40821	Lb = 0	---
<b>3.00</b>	33.69	0.00	-38100.00	0.00	-4.75
---	---	---	Ft = -5062	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -38100	Lb = 0	---
<b>4.00</b>	30.23	0.00	-38100.00	0.00	4.75
---	---	---	Ft = 5062	Fp = -41043	---
---	---	Pa = 4269	Ta = 2721	La = 0	---
---	---	Pb = -4269	Tb = -40821	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	-7251	-7062766	6000	5881922	0	215.80	0.05
3	883	-7565	-13101964	6000	10655775	0	215.80	0.08
4	1350	-7891	-19413683	6000	15431504	0	215.80	0.11
5	1836	-8230	-26008197	6000	20209006	0	215.80	0.14
6	3733	-8582	-32934127	6000	24993425	0	215.80	0.16
7	4822	-8972	-40822919	6000	30117350	0	215.80	0.19
8	8985	8158	-38334366	6000	35237361	0	215.80	0.09
9	13189	-7060	-41704294	6000	40371385	0	215.80	0.10
10	14397	-7486	-48467571	6001	45507751	0	215.80	0.10
11	15646	-7925	-55637113	6001	50646219	0	215.80	0.11
12	15700	-20912	-70771147	6001	55782596	0	215.80	0.12
13	15793	-49668	-118827214	6001	60916994	0	215.80	0.17
14	17161	-50151	-161822412	6001	66053111	0	215.80	0.21
15	18569	-50648	-205271927	6001	71190696	0	215.80	0.24
16	23052	-47772	-247347234	6001	76337477	0	215.80	0.27
17	27574	-87066	-315681111	6001	81492365	-0	215.80	0.32
18	29101	-87606	-390711871	6001	86647139	-0	215.80	0.38
19	35190	-88162	-466353241	6001	91811626	-0	215.80	0.42
20	35478	-93855	-548038142	6001	97148673	-0	215.80	0.47
21	35829	-130155	-668146956	6001	102446759	-0	215.80	0.38
22	38378	-130758	-782958040	6001	107746464	-0	215.80	0.42
23	40990	-131377	-898345141	6001	113047529	-0	215.80	0.46
24	43666	-132011	-1014317638	6001	118349698	-0	215.80	0.49
25	46404	-132660	-1130884801	6001	123652716	-0	215.80	0.52
26	49205	-133324	-1248055806	6001	128956329	-0	215.80	0.55
27	52070	-134004	-1365839747	6001	134260287	-0	215.80	0.57
28	54997	-134698	-1484245646	6001	139564338	-0	215.80	0.60
29	57988	-135407	-1603282461	6001	144868232	-0	215.80	0.62
30	61042	-136132	-1722959095	6001	150171723	-0	215.80	0.63
31	73022	-136873	-1843442590	6001	155485316	-0	215.80	0.65
32	76596	-137619	-1962994346	6001	160732814	-0	215.80	0.67
33	80241	-138360	-2083001815	6001	165967176	-0	215.80	0.61
34	83958	-139117	-2203656133	6001	171200493	-0	215.80	0.62
35	87747	-139889	-2324965607	6001	176432535	-0	215.80	0.63
36	91607	-140676	-2446938532	6001	181663074	-0	215.80	0.64
37	95538	-141477	-2569583178	6001	186891886	-0	215.80	0.64
38	99541	-142293	-2692907793	6001	192118745	-0	215.80	0.65
39	103615	-143124	-2816920601	6001	197343427	-0	215.80	0.66
40	107761	-143970	-2941629810	6001	202565711	-0	215.80	0.66
41	111979	-144830	-3067043606	6001	207785373	-0	215.80	0.67
42	129045	-145706	-3193290682	6001	213009638	-0	215.80	0.67
43	133169	-146564	-3315820212	6001	218048678	-0	215.80	0.67
44	137358	-147419	-3439026146	6001	223085319	-0	215.80	0.70
45	141614	-148287	-3562890256	6001	228117800	-0	215.80	0.71
46	145937	-149169	-3687419789	6001	233145938	-0	215.80	0.71
47	150326	-150065	-3812621973	6001	238169547	-0	215.80	0.71
48	154781	-150974	-3938504030	6001	243188444	-0	215.80	0.71
49	159302	-151897	-4065073168	6001	248202445	-0	215.80	0.71
50	163890	-152833	-4192336585	6001	253211368	-0	215.80	0.71
51	168544	-153783	-4320301470	6000	258215028	-0	215.80	0.71
52	173264	-154746	-4448974999	6000	263213244	-0	215.80	0.71
53	178051	-155724	-4578364336	6000	268205832	-0	215.80	0.72
54	182904	-156714	-4708476637	6000	273192610	-0	215.80	0.72
55	187823	-157719	-4839319044	6000	278173395	-0	215.80	0.72
56	192809	-158737	-4970898690	6000	283148006	-0	215.80	0.72

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 27 " MST - MSB - ZONA B - NORMALE - RESISTENZA - 2 x 40.5 - (-)  
"

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	11320.00	-6350.00	8000.00	0.00
<b>2.00</b>	37.16	69540.00	-28220.00	0.00	4.75
---	---	---	Ft = 92102	Fp = -78145	---
---	---	Pa = 77668	Ta = 49502	La = 0	---
---	---	Pb = -8128	Tb = -77722	Lb = 0	---
<b>3.00</b>	33.69	69540.00	-28220.00	0.00	-4.75
---	---	---	Ft = 84603	Fp = -17345	---
---	---	Pa = 71344	Ta = -45471	La = 0	---
---	---	Pb = -1804	Tb = 17251	Lb = 0	---
<b>4.00</b>	30.23	69540.00	-28220.00	0.00	4.75
---	---	---	Ft = 92102	Fp = -78145	---
---	---	Pa = 77668	Ta = 49502	La = 0	---
---	---	Pb = -8128	Tb = -77722	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	11753	-6443	-6417621	8005	7916487	0	215.80	0.06
3	12203	-6522	-11726568	8005	14354585	0	215.80	0.10
4	12670	-6604	-17103578	8005	20793556	-0	215.80	0.13
5	13156	-6689	-22550707	8006	27232758	0	215.80	0.15
6	15053	-6779	-28083355	8006	33678703	0	215.80	0.18
7	16142	-6902	-34254650	8013	40647929	0	215.80	0.20
8	57005	311833	153786127	8024	47749527	0	215.80	0.29
9	97908	42299	243209883	8040	55062045	0	215.80	0.43
10	99116	42193	277869934	8040	62361416	-0	215.80	0.45
11	100365	42083	312338883	8040	69646909	-0	215.80	0.47
12	134161	-199715	202842250	8052	77074514	-0	215.80	0.32
13	167997	-81432	17523332	8063	84630249	-0	215.80	0.15
14	169365	-81549	-53855422	8061	92157077	-0	215.80	0.16
15	170773	-81669	-125333717	8060	99654725	-0	215.80	0.21
16	211053	45831	-123789888	8071	107277935	-0	215.80	0.21
17	251372	-15265	47799823	8081	115010752	-0	215.80	0.17
18	252900	-15390	31491183	8078	122698383	-0	215.80	0.17
19	258988	-15524	14981074	8076	130356398	-0	215.80	0.17
20	257347	-25509	-9611575	8105	138559216	-0	215.80	0.17
21	255769	-93508	-105605058	8067	146319009	-0	215.80	0.13
22	258318	-93650	-190565433	8065	154050062	-0	215.80	0.16
23	260930	-93796	-275644302	8062	161752514	-0	215.80	0.19
24	263606	-93946	-360830613	8060	169426748	-0	215.80	0.22
25	266344	-94098	-446115027	8057	177073155	-0	215.80	0.25
26	269145	-94255	-531489682	8055	184692126	-0	215.80	0.27
27	272010	-94415	-616947991	8052	192284048	-0	215.80	0.30
28	274937	-94579	-702484463	8050	199849300	-0	215.80	0.32
29	277928	-94747	-788094562	8047	207388253	-0	215.80	0.34
30	280982	-94918	-873774575	8045	214901261	-0	215.80	0.36
31	292962	-95099	-959618366	8044	222404919	-0	215.80	0.37
32	296536	-95302	-1044706740	8048	229845439	-0	215.80	0.39
33	300181	-95452	-1129429224	8040	237191905	-0	215.80	0.36
34	303898	-95632	-1214219714	8038	244516683	-0	215.80	0.37
35	307687	-95816	-1299077293	8036	251819973	-0	215.80	0.38
36	311547	-96004	-1384001529	8034	259102003	-0	215.80	0.39
37	315478	-96196	-1468992254	8032	266362984	-0	215.80	0.39
38	319481	-96391	-1554049533	8030	273603112	-0	215.80	0.40
39	323555	-96591	-1639173627	8028	280822568	-0	215.80	0.41
40	327701	-96793	-1724364972	8026	288021516	-0	215.80	0.41
41	331919	-97000	-1809624152	8025	295200106	-0	215.80	0.42
42	348985	-97214	-1895027744	8024	302369613	-0	215.80	0.42
43	353109	-97418	-1977502505	8022	309266061	-0	215.80	0.42
44	357298	-97626	-2060067601	8020	316147891	-0	215.80	0.45
45	361554	-97834	-2142681354	8018	323008956	-0	215.80	0.45
46	365877	-98046	-2225344846	8017	329849396	-0	215.80	0.45
47	370266	-98262	-2308059166	8015	336669323	-0	215.80	0.45
48	374721	-98481	-2390825451	8013	343468840	-0	215.80	0.45
49	379242	-98703	-2473644880	8012	350248038	-0	215.80	0.46
50	383830	-98929	-2556518666	8010	357006996	-0	215.80	0.46
51	388484	-99159	-2639448048	8008	363745784	-0	215.80	0.46
52	393204	-99391	-2722434291	8007	370464461	-0	215.80	0.46
53	397991	-99628	-2805478674	8005	377163076	-0	215.80	0.46
54	402844	-99868	-2888582492	8004	383841669	-0	215.80	0.46
55	407763	-100111	-2971747046	8002	390500272	-0	215.80	0.46
56	412749	-100358	-3054973647	8001	397138906	-0	215.80	0.46

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 28 " MST - MSB - ZONA B - NORMALE - RESISTENZA - 2 x 40.5 - (-)  
"

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: normale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6350.00	8000.00	0.00
<b>2.00</b>	37.16	0.00	-28220.00	0.00	4.75
---	---	---	Ft = 3749	Fp = -30400	---
---	---	Pa = 3162	Ta = 2015	La = 0	---
---	---	Pb = -3162	Tb = -30235	Lb = 0	---
<b>3.00</b>	33.69	0.00	-28220.00	0.00	-4.75
---	---	---	Ft = -3749	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -28220	Lb = 0	---
<b>4.00</b>	30.23	0.00	-28220.00	0.00	4.75
---	---	---	Ft = 3749	Fp = -30400	---
---	---	Pa = 3162	Ta = 2015	La = 0	---
---	---	Pb = -3162	Tb = -30235	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-6425	-6291608	8000	7842562	0	215.80	0.05
3	883	-6503	-11479840	8000	14207698	0	215.80	0.09
4	1350	-6585	-16742144	8000	20575333	0	215.80	0.12
5	1836	-6669	-22081164	8000	26945332	0	215.80	0.14
6	3733	-6757	-27526715	8000	33324552	0	215.80	0.17
7	4822	-6856	-33538800	8000	40156433	0	215.80	0.19
8	8432	6027	-31688202	8000	46980318	0	215.80	0.10
9	12082	-5043	-33989887	8001	53820302	-0	215.80	0.11
10	13290	-5149	-38626679	8001	60663618	0	215.80	0.11
11	14539	-5259	-43380100	8001	67509947	-0	215.80	0.12
12	15146	-14655	-53855010	8001	74356064	-0	215.80	0.12
13	15793	-35724	-88530883	8001	81201903	0	215.80	0.15
14	17161	-35844	-119255870	8001	88050034	0	215.80	0.18
15	18569	-35969	-150109003	8001	94900121	-0	215.80	0.20
16	22498	-33587	-179716032	8001	101760525	0	215.80	0.22
17	26467	-62433	-228538543	8001	108629997	-0	215.80	0.25
18	27994	-62568	-282095612	8001	115499518	-0	215.80	0.29
19	34083	-62707	-335868798	8001	122382178	-0	215.80	0.32
20	34924	-66637	-393796065	8002	129495860	-0	215.80	0.35
21	35829	-93235	-479963566	8001	136559943	-0	215.80	0.28
22	38378	-93385	-561946910	8001	143626184	-0	215.80	0.31
23	40990	-93540	-644090280	8001	150694239	-0	215.80	0.34
24	43666	-93698	-726394233	8001	157763766	-0	215.80	0.36
25	46404	-93860	-808859258	8001	164834425	-0	215.80	0.38
26	49205	-94026	-891485786	8001	171905880	-0	215.80	0.40
27	52070	-94195	-974274199	8001	178977793	-0	215.80	0.42
28	54997	-94368	-1057224839	8001	186049832	-0	215.80	0.43
29	57988	-94545	-1140338009	8001	193121662	-0	215.80	0.44
30	61042	-94726	-1223613986	8001	200192955	-0	215.80	0.46
31	73022	-94911	-1307163011	8002	207277715	-0	215.80	0.47
32	76596	-95098	-1389781832	8002	214274345	-0	215.80	0.48
33	80241	-95282	-1472432452	8002	221253466	-0	215.80	0.44
34	83958	-95471	-1555242061	8002	228231194	-0	215.80	0.44
35	87747	-95663	-1638210820	8002	235207222	-0	215.80	0.45
36	91607	-95859	-1721338892	8001	242181249	-0	215.80	0.45
37	95538	-96059	-1804626431	8001	249152973	-0	215.80	0.46
38	99541	-96262	-1888073585	8001	256122094	-0	215.80	0.46
39	103615	-96469	-1971680498	8001	263088314	-0	215.80	0.46
40	107761	-96680	-2055447309	8001	270051336	-0	215.80	0.47
41	111979	-96894	-2139374152	8001	277010865	-0	215.80	0.47
42	129045	-97113	-2223544125	8001	283976529	-0	215.80	0.47
43	133169	-97326	-2304936171	8001	290695229	-0	215.80	0.47
44	137358	-97539	-2386481937	8001	297410732	-0	215.80	0.49
45	141614	-97755	-2468163992	8001	304120690	-0	215.80	0.50
46	145937	-97975	-2549982454	8001	310824857	-0	215.80	0.50
47	150326	-98198	-2631937441	8001	317522987	-0	215.80	0.50
48	154781	-98424	-2714029067	8001	324214837	-0	215.80	0.50
49	159302	-98654	-2796257452	8001	330900161	-0	215.80	0.50
50	163890	-98886	-2878622711	8001	337578714	-0	215.80	0.50
51	168544	-99123	-2961124965	8001	344250253	-0	215.80	0.50
52	173264	-99363	-3043764330	8000	350914533	-0	215.80	0.49
53	178051	-99606	-3126540926	8000	357571311	-0	215.80	0.49
54	182904	-99852	-3209454872	8000	364220344	-0	215.80	0.49
55	187823	-100102	-3292506287	8000	370861389	-0	215.80	0.49
56	192809	-100355	-3375695290	8000	377494203	-0	215.80	0.49

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 29 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	3420.00	3440.00	29500.00	0.00
2.00	37.16	52780.00	41740.00	0.00	4.75
---	---	---	Ft = 61512	Fp = 8726	---
---	---	Pa = 51872	Ta = 33061	La = 0	---
---	---	Pb = 908	Tb = 8679	Lb = 0	---
3.00	33.69	52780.00	41740.00	0.00	-4.75
---	---	---	Ft = 72604	Fp = -81203	---
---	---	Pa = 61226	Ta = -39022	La = 0	---
---	---	Pb = -8446	Tb = 80762	Lb = 0	---
4.00	30.23	45820.00	35550.00	54500.00	4.75
---	---	---	Ft = 67020	Fp = 18139	---
---	---	Pa = 46527	Ta = 21325	La = 43268	---
---	---	Pb = -707	Tb = 14225	Lb = 11232	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	3853	3751	3756386	29507	29038531	0	345.28	0.10
3	4303	4065	7142119	29508	52632815	0	345.28	0.16
4	4770	4393	10804048	29509	76239532	0	345.28	0.22
5	5256	4732	14752599	29510	99857797	0	345.28	0.26
6	7153	5088	19047224	29513	123526943	0	345.28	0.30
7	8242	5500	24321381	29530	149050168	0	345.28	0.35
8	36207	218913	160660002	29566	175168213	0	345.28	0.26
9	64212	39488	232942150	29616	202100011	0	345.28	0.32
10	65421	39914	269122618	29617	229019782	0	345.28	0.34
11	66669	40354	305663488	29617	255925775	0	345.28	0.36
12	99924	-143339	234744456	29672	283702779	0	345.28	0.32
13	133219	11085	160886333	29725	312300089	0	345.28	0.29
14	134587	11563	175147989	29722	340829801	0	345.28	0.30
15	135995	12054	189819091	29717	369290829	0	345.28	0.30
16	157383	103009	257953728	30423	398562786	0	345.28	0.33
17	178811	115248	483302823	73035	466845526	122405428	345.28	0.43
18	180339	115776	587029343	73026	532682773	122405428	345.28	0.48
19	186427	116327	691243749	73023	598499149	122405428	345.28	0.52
20	188497	117103	801468217	73602	668189379	122405428	345.28	0.57
21	190629	131699	922444717	84236	746275804	128901598	345.28	0.43
22	193178	132293	1043083066	84229	823346213	128901598	345.28	0.45
23	195790	132902	1164153246	84221	900325486	128901598	345.28	0.48
24	198466	133525	1285659453	84214	977209217	128901598	345.28	0.50
25	201204	134164	1407606902	84207	1053993578	128901598	345.28	0.51
26	204005	134817	1530001666	84199	1130675216	128901598	345.28	0.53
27	206870	135486	1652850542	84191	1207251180	128901598	345.28	0.54
28	209797	136169	1776160938	84184	1283718852	128901598	345.28	0.56
29	212788	136867	1899940777	84176	1360075894	128901598	345.28	0.57
30	215842	137581	2024198415	84168	1436320198	128901598	345.28	0.58
31	227822	138319	2149124822	84167	1512570481	128901598	345.28	0.59
32	231396	139084	2273341575	84182	1588011193	128901598	345.28	0.59
33	235041	139785	2397418003	84152	1662930053	128901598	345.28	0.54
34	238758	140533	2521998467	84146	1737745091	128901598	345.28	0.54
35	242547	141295	2647092046	84139	1812454757	128901598	345.28	0.55
36	246407	142072	2772708159	84132	1887057712	128901598	345.28	0.55
37	250338	142865	2898856315	84125	1961552656	128901598	345.28	0.55
38	254341	143671	3025546098	84119	2035938319	128901598	345.28	0.55
39	258415	144493	3152787144	84112	2110213448	128901598	345.28	0.56
40	262561	145329	3280589131	84105	2184376807	128901598	345.28	0.56
41	266779	146180	3408961763	84099	2258427163	128901598	345.28	0.56
42	283845	147052	3538050370	84096	2332450461	128901598	345.28	0.56
43	287969	147899	3663164727	84088	2403766689	128901598	345.28	0.56
44	292158	148747	3788862631	84083	2474998959	128901598	345.28	0.58
45	296414	149606	3915090840	84076	2546106358	128901598	345.28	0.58
46	300737	150479	4041858338	84069	2617088010	128901598	345.28	0.58
47	305126	151365	4169174024	84062	2687942973	128901598	345.28	0.58
48	309581	152265	4297046779	84055	2758670289	128901598	345.28	0.58
49	314102	153179	4425485456	84048	2829268978	128901598	345.28	0.58
50	318690	154107	4554498882	84042	2899738039	128901598	345.28	0.58
51	323344	155048	4684095856	84035	2970076450	128901598	345.28	0.58
52	328064	156003	4814285140	84029	3040283167	128901598	345.28	0.58
53	332851	156972	4945075468	84022	3110357123	128901598	345.28	0.57
54	337704	157954	5076475535	84016	3180297228	128901598	345.28	0.57
55	342623	158951	5208494002	84009	3250102370	128901598	345.28	0.57
56	347609	159961	5341139493	84003	3319771415	128901598	345.28	0.57

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 30 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	3440.00	29500.00	0.00
<b>2.00</b>	37.16	0.00	41740.00	0.00	4.75
---	---	---	Ft = -5546	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 41740	Lb = 0	---
<b>3.00</b>	33.69	0.00	41740.00	0.00	-4.75
---	---	---	Ft = 5546	Fp = -44965	---
---	---	Pa = 4677	Ta = -2981	La = 0	---
---	---	Pb = -4677	Tb = 44721	Lb = 0	---
<b>4.00</b>	30.23	0.00	35550.00	54500.00	4.75
---	---	---	Ft = 14933	Fp = 54719	---
---	---	Pa = 8543	Ta = 2068	La = 12073	---
---	---	Pb = -8543	Tb = 33482	Lb = 42427	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	3741	3622833	29500	28922734	0	345.28	0.10
3	883	4055	6871347	29500	52400864	-0	345.28	0.16
4	1350	4381	10392350	29500	75891743	0	345.28	0.21
5	1836	4720	14196214	29501	99394991	0	345.28	0.26
6	3733	5072	18331666	29501	122946227	-0	345.28	0.30
7	4822	5462	23246186	29503	148215739	-0	345.28	0.34
8	6851	5857	28414256	29502	173404684	-0	345.28	0.19
9	8920	6269	33991199	29503	198642424	0	345.28	0.20
10	10128	6695	39962969	29503	223904264	0	345.28	0.22
11	11377	7134	46342463	29503	249189364	0	345.28	0.22
12	15904	767	49231388	29505	274573688	0	345.28	0.23
13	20470	46819	87807439	29506	300051661	-0	345.28	0.24
14	21838	47302	128529610	29506	325545515	-0	345.28	0.26
15	23246	47799	169706655	29507	351054334	0	345.28	0.27
16	27527	70847	224556657	29697	376744984	0	345.28	0.29
17	31847	95627	333013688	41581	413280191	34152869	345.28	0.33
18	33375	96167	415433397	41581	449172146	34152869	345.28	0.36
19	39463	96723	498463250	41582	485155612	34152869	345.28	0.39
20	37615	91972	581437082	43381	523451666	34152869	345.28	0.41
21	35829	131375	694569669	84008	600762501	58692252	345.28	0.32
22	38378	131979	810461089	84008	674582361	58692252	345.28	0.35
23	40990	132598	926928782	84009	748424308	58692252	345.28	0.38
24	43666	133232	1043982066	84009	822285694	58692252	345.28	0.40
25	46404	133881	1161630154	84009	896163824	58692252	345.28	0.42
26	49205	134545	1279882163	84009	970055967	58692252	345.28	0.44
27	52070	135224	1398747132	84009	1043959364	58692252	345.28	0.45
28	54997	135918	1518234025	84010	1117871230	58692252	345.28	0.47
29	57988	136628	1638351746	84010	1191788761	58692252	345.28	0.48
30	61042	137352	1759109141	84010	1265709141	58692252	345.28	0.50
31	73022	138094	1880675707	84011	1339735966	58692252	345.28	0.51
32	76596	138839	2001297330	84012	1412804871	58692252	345.28	0.52
33	80241	139580	2122371567	84011	1485748807	58692252	345.28	0.47
34	83958	140338	2244092372	84011	1558687676	58692252	345.28	0.48
35	87747	141110	2366468000	84011	1631618744	58692252	345.28	0.48
36	91607	141896	2489506698	84010	1704539287	58692252	345.28	0.49
37	95538	142698	2613216685	84010	1777446578	58692252	345.28	0.49
38	99541	143514	2737606162	84010	1850337897	58692252	345.28	0.50
39	103615	144345	2862683304	84010	1923210524	58692252	345.28	0.50
40	107761	145190	2988456270	84009	1996061741	58692252	345.28	0.50
41	111979	146050	3114933201	84009	2068888837	58692252	345.28	0.50
42	129045	146926	3242244440	84010	2141767463	58692252	345.28	0.51
43	133169	147784	3365800259	84009	2212081977	58692252	345.28	0.51
44	137358	148639	3490031917	84009	2282373713	58692252	345.28	0.53
45	141614	149508	3614920785	84008	2352623707	58692252	345.28	0.53
46	145937	150389	3740474071	84008	2422829590	58692252	345.28	0.53
47	150326	151285	3866698965	84007	2492988987	58692252	345.28	0.53
48	154781	152194	3993602649	84006	2563099531	58692252	345.28	0.53
49	159302	153117	4121192293	84006	2633158859	58692252	345.28	0.53
50	163890	154053	4249475057	84005	2703164611	58692252	345.28	0.53
51	168544	155003	4378458090	84004	2773114433	58692252	345.28	0.53
52	173264	155967	4508148528	84003	2843005974	58692252	345.28	0.53
53	178051	156944	4638553499	84003	2912836885	58692252	345.28	0.53
54	182904	157934	4769680119	84002	2982604825	58692252	345.28	0.53
55	187823	158939	4901535492	84001	3052307455	58692252	345.28	0.53
56	192809	159957	5034126711	84000	3121942438	58692252	345.28	0.53

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 31 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	6840.00	6880.00	6000.00	0.00
2.00	37.16	45820.00	35550.00	54500.00	4.75
---	---	---	Ft = 67020	Fp = 18139	---
---	---	Pa = 46527	Ta = 21325	La = 43268	---
---	---	Pb = -707	Tb = 14225	Lb = 11232	---
3.00	33.69	52780.00	41740.00	0.00	-4.75
---	---	---	Ft = 72604	Fp = -81203	---
---	---	Pa = 61226	Ta = -39022	La = 0	---
---	---	Pb = -8446	Tb = 80762	Lb = 0	---
4.00	30.23	45820.00	35550.00	54500.00	4.75
---	---	---	Ft = 67020	Fp = 18139	---
---	---	Pa = 46527	Ta = 21325	La = 43268	---
---	---	Pb = -707	Tb = 14225	Lb = 11232	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	7273	7199	7249267	6018	6137877	0	345.28	0.03
3	7723	7514	13490284	6019	11180663	-0	345.28	0.06
4	8190	7841	20005916	6020	16238486	-0	345.28	0.07
5	8676	8180	26806238	6021	21311496	-0	345.28	0.09
6	10573	8536	33947147	6025	26444125	-0	345.28	0.11
7	11662	8955	42368252	6054	32379976	-0	345.28	0.13
8	36954	199163	167460819	12531	42635650	-0	345.28	0.19
9	62286	31180	227784538	49412	91771944	118259860	345.28	0.26
10	63495	31606	256747728	49413	135817373	118259860	345.28	0.28
11	64743	32046	286073322	49414	179876529	118259860	345.28	0.31
12	97191	-152646	207227290	51488	226226012	118259860	345.28	0.27
13	129679	8312	131181805	60780	283319705	123775396	345.28	0.26
14	131047	8791	142788503	60776	338996254	123775396	345.28	0.29
15	132455	9282	154813442	60771	394615606	123775396	345.28	0.31
16	153843	100235	220283270	61484	451195209	123775396	345.28	0.34
17	175271	112473	442952482	104102	546924576	246180824	345.28	0.45
18	176799	113002	544012441	104092	640196154	246180824	345.28	0.51
19	182887	113553	645568643	104088	733459791	246180824	345.28	0.56
20	184957	114319	752926306	104695	831875910	246180824	345.28	0.61
21	187089	128927	871198525	115297	938117155	252676994	345.28	0.46
22	189638	129522	989142326	115288	1043326446	252676994	345.28	0.49
23	192250	130131	1107527850	115279	1148425982	252676994	345.28	0.51
24	194926	130755	1226359359	115270	1253409145	252676994	345.28	0.54
25	197664	131395	1345642103	115261	1358270139	252676994	345.28	0.56
26	200465	132049	1465382168	115251	1463003860	252676994	345.28	0.57
27	203330	132718	1585586346	115242	1567605786	252676994	345.28	0.59
28	206257	133402	1706262027	115232	1672071881	252676994	345.28	0.60
29	209248	134101	1827417103	115223	1776398519	252676994	345.28	0.62
30	212302	134816	1949059890	115213	1880582413	252676994	345.28	0.63
31	224282	135554	2071375656	115212	1984780742	252676994	345.28	0.64
32	227856	136318	2193000858	115231	2087859254	252676994	345.28	0.65
33	231501	137021	2314523330	115193	2190258276	252676994	345.28	0.59
34	235218	137770	2436558384	115185	2292524257	252676994	345.28	0.59
35	239007	138533	2559115061	115176	2394654827	252676994	345.28	0.60
36	242867	139311	2682202730	115168	2496647905	252676994	345.28	0.60
37	246798	140103	2805830851	115159	2598501475	252676994	345.28	0.60
38	250801	140911	2930008957	115151	2700213576	252676994	345.28	0.60
39	254875	141733	3054746638	115142	2801782288	252676994	345.28	0.61
40	259021	142570	3180053527	115134	2903205717	252676994	345.28	0.61
41	263239	143421	3305939285	115126	3004481994	252676994	345.28	0.61
42	280305	144294	3432545326	115123	3105725653	252676994	345.28	0.61
43	284429	145141	3555273115	115112	3203275507	252676994	345.28	0.61
44	288618	145990	3678590342	115106	3300715704	252676994	345.28	0.64
45	292874	146850	3802446244	115097	3397992095	252676994	345.28	0.63
46	297197	147723	3926849753	115088	3495103320	252676994	345.28	0.63
47	301586	148610	4051809730	115079	3592047951	252676994	345.28	0.63
48	306041	149511	4177335013	115070	3688824536	252676994	345.28	0.63
49	310562	150425	4303434422	115062	3785431606	252676994	345.28	0.63
50	315150	151353	4430116751	115053	3881867669	252676994	345.28	0.63
51	319804	152295	4557390766	115045	3978131211	252676994	345.28	0.63
52	324524	153251	4685265205	115037	4074220689	252676994	345.28	0.63
53	329311	154220	4813748774	115028	4170134541	252676994	345.28	0.62
54	334164	155203	4942850149	115020	4265871175	252676994	345.28	0.62
55	339083	156200	5072577971	115012	4361428974	252676994	345.28	0.62
56	344069	157210	5202940848	115004	4456806295	252676994	345.28	0.62

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 32 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	6880.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	35550.00	54500.00	4.75
---	---	---	Ft = 14933	Fp = 54719	---
---	---	Pa = 8543	Ta = 2068	La = 12073	---
---	---	Pb = -8543	Tb = 33482	Lb = 42427	---
<b>3.00</b>	33.69	0.00	41740.00	0.00	-4.75
---	---	---	Ft = 5546	Fp = -44965	---
---	---	Pa = 4677	Ta = -2981	La = 0	---
---	---	Pb = -4677	Tb = 44721	Lb = 0	---
<b>4.00</b>	30.23	0.00	35550.00	54500.00	4.75
---	---	---	Ft = 14933	Fp = 54719	---
---	---	Pa = 8543	Ta = 2068	La = 12073	---
---	---	Pb = -8543	Tb = 33482	Lb = 42427	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	7181	6994926	6000	5891894	0	345.28	0.03
3	883	7495	12980022	6000	10686062	-0	345.28	0.05
4	1350	7821	19238458	6001	15492820	0	345.28	0.07
5	1836	8160	25780538	6001	20312438	0	345.28	0.08
6	3733	8512	32657282	6002	25181430	-0	345.28	0.10
7	4822	8903	40504614	6004	30538917	-0	345.28	0.12
8	11122	43870	69837684	7803	37004268	-0	345.28	0.09
9	17463	11781	85968839	18080	54239436	32996196	345.28	0.11
10	18671	12207	96887502	18080	70078298	32996196	345.28	0.12
11	19920	12647	108210621	18081	85946874	32996196	345.28	0.12
12	20175	-5694	108555886	25655	106331868	32996196	345.28	0.13
13	20470	44070	142753374	60508	163340365	53831219	345.28	0.17
14	21838	44553	181159183	60508	215205456	53831219	345.28	0.21
15	23246	45050	220018181	60509	267096746	53831219	345.28	0.24
16	27527	68098	272549815	60700	319193306	53831219	345.28	0.27
17	31847	92878	378687708	72584	382157481	87984088	345.28	0.33
18	33375	93418	458786308	72584	444487123	87984088	345.28	0.37
19	39463	93974	539494245	72585	506937385	87984088	345.28	0.41
20	37615	89223	620083195	74385	572497823	87984088	345.28	0.44
21	35829	128626	730825749	115011	676976850	112523471	345.28	0.35
22	38378	129229	844326194	115011	777974375	112523471	345.28	0.38
23	40990	129848	958401979	115011	879002670	112523471	345.28	0.41
24	43666	130482	1073062446	115012	980058269	112523471	345.28	0.44
25	46404	131131	1188316835	115012	1081137635	112523471	345.28	0.46
26	49205	131795	1304174300	115012	1182237173	112523471	345.28	0.48
27	52070	132475	1420643914	115012	1283353238	112523471	345.28	0.50
28	54997	133169	1537734685	115012	1384482143	112523471	345.28	0.52
29	57988	133878	1655455561	115013	1485620170	112523471	345.28	0.53
30	61042	134603	1773815436	115013	1586763574	112523471	345.28	0.54
31	73022	135344	1892983392	115014	1688046623	112523471	345.28	0.56
32	76596	136090	2011239997	115016	1788012569	112523471	345.28	0.57
33	80241	136831	2129949273	115014	1887817671	112523471	345.28	0.52
34	83958	137588	2249304625	115014	1987617501	112523471	345.28	0.52
35	87747	138360	2369314370	115014	2087408399	112523471	345.28	0.53
36	91607	139147	2489986809	115014	2187186713	112523471	345.28	0.54
37	95538	139948	2611330223	115013	2286948788	112523471	345.28	0.54
38	99541	140764	2733352870	115013	2386690971	112523471	345.28	0.54
39	103615	141595	2856062989	115013	2486409612	112523471	345.28	0.55
40	107761	142440	2979468799	115012	2586101061	112523471	345.28	0.55
41	111979	143300	3103578502	115012	2685761671	112523471	345.28	0.55
42	129045	144176	3228521710	115013	2785490586	112523471	345.28	0.56
43	133169	145035	3349791454	115012	2881714157	112523471	345.28	0.56
44	137358	145890	3471737044	115011	2977908422	112523471	345.28	0.58
45	141614	146758	3594340079	115011	3074048411	112523471	345.28	0.58
46	145937	147640	3717607833	115010	3170130912	112523471	345.28	0.58
47	150326	148535	3841547559	115009	3266152713	112523471	345.28	0.58
48	154781	149444	3966166503	115008	3362110607	112523471	345.28	0.58
49	159302	150367	4091471898	115007	3458001396	112523471	345.28	0.58
50	163890	151303	4217470966	115006	3553821885	112523471	345.28	0.58
51	168544	152253	4344170919	115006	3649568887	112523471	345.28	0.58
52	173264	153217	4471578957	115005	3745239220	112523471	345.28	0.58
53	178051	154194	4599702270	115004	3840829706	112523471	345.28	0.58
54	182904	155184	4728548035	115003	3936337175	112523471	345.28	0.58
55	187823	156189	4858123419	115002	4031758461	112523471	345.28	0.58
56	192809	157207	4988435577	115001	4127090406	112523471	345.28	0.58



## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 33 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	3270.00	3340.00	27500.00	0.00
<b>2.00</b>	37.16	51640.00	40950.00	0.00	4.75
---	---	---	Ft = 60169	Fp = 8658	---
---	---	Pa = 50739	Ta = 32339	La = 0	---
---	---	Pb = 901	Tb = 8611	Lb = 0	---
<b>3.00</b>	33.69	51640.00	40950.00	0.00	-4.75
---	---	---	Ft = 71051	Fp = -79569	---
---	---	Pa = 59916	Ta = -38187	La = 0	---
---	---	Pb = -8276	Tb = 79137	Lb = 0	---
<b>4.00</b>	30.23	44870.00	34890.00	52000.00	4.75
---	---	---	Ft = 65031	Fp = 17354	---
---	---	Pa = 45465	Ta = 21160	La = 41403	---
---	---	Pb = -595	Tb = 13730	Lb = 10597	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	3703	3650	3649889	27506	27065792	0	345.28	0.09
3	4153	3965	6947311	27507	49056572	0	345.28	0.15
4	4620	4292	10520612	27508	71059110	0	345.28	0.20
5	5106	4631	14380215	27509	93072606	-0	345.28	0.24
6	7003	4987	18584652	27512	115134024	-0	345.28	0.28
7	8092	5397	23749592	27527	138921058	-0	345.28	0.32
8	35491	214156	157109257	27559	163254445	0	345.28	0.25
9	62929	38656	227800102	27605	188336131	0	345.28	0.31
10	64138	39083	263186798	27605	213407727	0	345.28	0.33
11	65386	39523	298935416	27606	238467634	0	345.28	0.35
12	97983	-140197	229533274	27656	264329479	0	345.28	0.30
13	130619	11012	157337676	27703	290947004	-0	345.28	0.27
14	131987	11490	171370780	27700	317503743	-0	345.28	0.28
15	133395	11982	185814944	27697	343998710	-0	345.28	0.29
16	154337	100919	252529505	28371	371254937	0	345.28	0.31
17	175319	113383	473347991	69144	435827131	117129009	345.28	0.42
18	176847	113912	575285461	69136	498064896	117129009	345.28	0.46
19	182935	114462	677714170	69134	560286856	117129009	345.28	0.50
20	185061	115298	786050714	69677	626134661	117129009	345.28	0.55
21	187249	129341	904801260	79714	699946871	123257981	345.28	0.41
22	189798	129935	1023194589	79707	772803543	123257981	345.28	0.44
23	192410	130545	1142025139	79701	845577295	123257981	345.28	0.46
24	195086	131169	1261297371	79694	918263948	123257981	345.28	0.48
25	197824	131808	1381016717	79688	990859857	123257981	345.28	0.50
26	200625	132462	1501189430	79681	1063361822	123257981	345.28	0.51
27	203490	133131	1621822454	79674	1135767015	123257981	345.28	0.53
28	206417	133815	1742923319	79667	1208072919	123257981	345.28	0.54
29	209408	134514	1864500045	79660	1280277276	123257981	345.28	0.55
30	212462	135229	1986561068	79653	1352378046	123257981	345.28	0.56
31	224442	135967	2109294014	79652	1424487027	123257981	345.28	0.57
32	228016	136731	2231335016	79666	1495826184	123257981	345.28	0.57
33	231661	137434	2353262496	79639	1566681612	123257981	345.28	0.52
34	235378	138182	2475699876	79633	1637441364	123257981	345.28	0.53
35	239167	138945	2598656264	79626	1708103931	123257981	345.28	0.53
36	243027	139723	2722141092	79620	1778667996	123257981	345.28	0.53
37	246958	140516	2846163878	79614	1849132281	123257981	345.28	0.54
38	250961	141323	2970734210	79608	1919495535	123257981	345.28	0.54
39	255035	142145	3095861728	79602	1989756528	123257981	345.28	0.54
40	259181	142982	3221556109	79596	2059914041	123257981	345.28	0.54
41	263399	143833	3347827057	79590	2129966862	123257981	345.28	0.54
42	280465	144705	3474817427	79588	2199995977	123257981	345.28	0.54
43	284589	145553	3597913438	79580	2267466649	123257981	345.28	0.54
44	288778	146401	3721597236	79576	2334859413	123257981	345.28	0.57
45	293034	147261	3845817421	79569	2402136094	123257981	345.28	0.57
46	297357	148134	3970582958	79563	2469295818	123257981	345.28	0.57
47	301746	149021	4095902737	79557	2536337656	123257981	345.28	0.56
48	306201	149922	4221785624	79550	2603260660	123257981	345.28	0.56
49	310722	150836	4348240463	79544	2670063864	123257981	345.28	0.56
50	315310	151764	4475276071	79538	2736746284	123257981	345.28	0.56
51	319964	152706	4602901234	79532	2803306917	123257981	345.28	0.56
52	324684	153661	4731124710	79526	2869744739	123257981	345.28	0.56
53	329471	154630	4859955223	79520	2936058705	123257981	345.28	0.56
54	334324	155613	4989401462	79514	3002247751	123257981	345.28	0.56
55	339243	156610	5119472082	79509	3068310792	123257981	345.28	0.55
56	344229	157620	5250175705	79503	3134246723	123257981	345.28	0.55

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 34 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	3340.00	27500.00	0.00
<b>2.00</b>	37.16	0.00	40950.00	0.00	4.75
---	---	---	Ft = -5441	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 40950	Lb = 0	---
<b>3.00</b>	33.69	0.00	40950.00	0.00	-4.75
---	---	---	Ft = 5441	Fp = -44114	---
---	---	Pa = 4588	Ta = -2924	La = 0	---
---	---	Pb = -4588	Tb = 43874	Lb = 0	---
<b>4.00</b>	30.23	0.00	34890.00	52000.00	4.75
---	---	---	Ft = 13867	Fp = 53044	---
---	---	Pa = 8007	Ta = 2030	La = 11138	---
---	---	Pb = -8007	Tb = 32860	Lb = 40862	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	3641	3524606	27500	26961933	0	345.28	0.09
3	883	3955	6693159	27500	48848453	-0	345.28	0.15
4	1350	4281	10133961	27500	70746927	-0	345.28	0.20
5	1836	4620	13857376	27501	92656999	-0	345.28	0.24
6	3733	4972	17911435	27501	114612074	-0	345.28	0.28
7	4822	5362	22735992	27503	138169870	-0	345.28	0.32
8	6851	5757	27815593	27502	161652144	-0	345.28	0.18
9	8920	6169	33302974	27503	185180223	0	345.28	0.19
10	10128	6595	39184564	27503	208730950	0	345.28	0.20
11	11377	7034	45473246	27503	232303549	0	345.28	0.21
12	15859	796	48343551	27504	255968351	0	345.28	0.22
13	20382	45985	86231914	27506	279720221	0	345.28	0.23
14	21750	46468	126233571	27506	303487159	-0	345.28	0.24
15	23157	46965	166689520	27506	327268317	0	345.28	0.25
16	27215	68993	220219404	27682	351214253	0	345.28	0.27
17	31312	93909	325809115	38646	385162421	31508723	345.28	0.31
18	32840	94449	406742007	38646	418517792	31508723	345.28	0.34
19	38928	95004	488282949	38647	451959749	31508723	345.28	0.37
20	37347	90651	569963396	40379	487592997	31508723	345.28	0.39
21	35829	129035	681301482	79508	560817267	55142741	345.28	0.31
22	38378	129639	795138029	79508	630678967	55142741	345.28	0.34
23	40990	130257	909550220	79508	700561600	55142741	345.28	0.36
24	43666	130891	1024547445	79508	770462667	55142741	345.28	0.38
25	46404	131540	1140138987	79509	840379626	55142741	345.28	0.41
26	49205	132204	1256334037	79509	910309902	55142741	345.28	0.42
27	52070	132884	1373141707	79509	980250888	55142741	345.28	0.44
28	54997	133578	1490571036	79509	1050199957	55142741	345.28	0.45
29	57988	134287	1608631003	79509	1120154462	55142741	345.28	0.47
30	61042	135012	1727330530	79509	1190111742	55142741	345.28	0.48
31	73022	135753	1846836405	79510	1260169437	55142741	345.28	0.49
32	76596	136499	1965424156	79512	1329320224	55142741	345.28	0.50
33	80241	137240	2084467762	79510	1398353288	55142741	345.28	0.46
34	83958	137997	2204158036	79510	1467381647	55142741	345.28	0.46
35	87747	138769	2324503311	79510	1536402718	55142741	345.28	0.47
36	91607	139556	2445511905	79510	1605413924	55142741	345.28	0.47
37	95538	140358	2567192114	79510	1674412693	55142741	345.28	0.48
38	99541	141174	2689552210	79509	1743396451	55142741	345.28	0.48
39	103615	142004	2812600445	79509	1812362628	55142741	345.28	0.48
40	107761	142850	2936345050	79509	1881308657	55142741	345.28	0.49
41	111979	143710	3060794240	79509	1950231975	55142741	345.28	0.49
42	129045	144586	3186076355	79509	2019203942	55142741	345.28	0.49
43	133169	145444	3307674361	79509	2085749431	55142741	345.28	0.49
44	137358	146299	3429948797	79508	2152273464	55142741	345.28	0.52
45	141614	147167	3552881538	79508	2218758147	55142741	345.28	0.52
46	145937	148049	3676479856	79507	2285201237	55142741	345.28	0.52
47	150326	148945	3800751010	79507	2351600491	55142741	345.28	0.52
48	154781	149854	3925702244	79506	2417953670	55142741	345.28	0.52
49	159302	150777	4051340794	79505	2484258538	55142741	345.28	0.52
50	163890	151713	4177673885	79505	2550512865	55142741	345.28	0.52
51	168544	152663	4304708729	79504	2616714424	55142741	345.28	0.52
52	173264	153626	4432452530	79503	2682860993	55142741	345.28	0.52
53	178051	154604	4560912479	79503	2748950350	55142741	345.28	0.52
54	182904	155594	4690095755	79502	2814980282	55142741	345.28	0.52
55	187823	156599	4820009528	79501	2880948576	55142741	345.28	0.52
56	192809	157617	4950660955	79500	2946853024	55142741	345.28	0.52

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## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 35 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6540.00	6680.00	5000.00	0.00
<b>2.00</b>	37.16	44870.00	34890.00	52000.00	4.75
---	---	---	Ft = 65031	Fp = 17354	---
---	---	Pa = 45465	Ta = 21160	La = 41403	---
---	---	Pb = -595	Tb = 13730	Lb = 10597	---
<b>3.00</b>	33.69	51640.00	40950.00	0.00	-4.75
---	---	---	Ft = 71051	Fp = -79569	---
---	---	Pa = 59916	Ta = -38187	La = 0	---
---	---	Pb = -8276	Tb = 79137	Lb = 0	---
<b>4.00</b>	30.23	44870.00	34890.00	52000.00	4.75
---	---	---	Ft = 65031	Fp = 17354	---
---	---	Pa = 45465	Ta = 21160	La = 41403	---
---	---	Pb = -595	Tb = 13730	Lb = 10597	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	6973	6998	7037153	5015	5131518	0	345.28	0.03
3	7423	7312	13102803	5016	9352093	0	345.28	0.05
4	7890	7639	19442838	5017	13586900	0	345.28	0.07
5	8376	7979	26067349	5018	17836131	0	345.28	0.08
6	10273	8334	33031469	5022	22141621	0	345.28	0.10
7	11362	8751	41243758	5049	27157112	0	345.28	0.12
8	36123	194673	163493538	11245	36289802	0	345.28	0.19
9	60924	30807	222728524	46533	82593942	113162140	345.28	0.25
10	62133	31233	251290260	46534	124027600	113162140	345.28	0.27
11	63381	31673	280215879	46535	165475525	113162140	345.28	0.30
12	95230	-148975	203328970	48489	209062914	113162140	345.28	0.25
13	127119	8270	128947960	57253	262767356	118365909	345.28	0.24
14	128487	8749	140364889	57250	315137883	118365909	345.28	0.27
15	129895	9241	152201128	57245	367457687	118365909	345.28	0.29
16	150837	98177	216289950	57926	420677511	118365909	345.28	0.33
17	171819	110639	434468278	98706	511342481	235494918	345.28	0.43
18	173347	111169	533778200	98696	599661949	235494918	345.28	0.49
19	179435	111720	633587148	98693	687978548	235494918	345.28	0.53
20	181561	112546	739101474	99261	781127065	235494918	345.28	0.58
21	183749	126600	855185780	109269	881708883	241623890	345.28	0.44
22	186298	127195	970922116	109262	981320667	241623890	345.28	0.47
23	188910	127805	1087105090	109254	1080832519	241623890	345.28	0.49
24	191586	128430	1203739232	109245	1180238178	241623890	345.28	0.52
25	194324	129070	1320830021	109237	1279532145	241623890	345.28	0.54
26	197125	129724	1438383729	109229	1378709567	241623890	345.28	0.55
27	199990	130394	1556407307	109220	1477766129	241623890	345.28	0.57
28	202917	131079	1674908273	109212	1576697971	241623890	345.28	0.58
29	205908	131779	1793894625	109203	1675501612	241623890	345.28	0.59
30	208962	132494	1913374767	109194	1774173891	241623890	345.28	0.61
31	220942	133233	2033530765	109193	1872863110	241623890	345.28	0.62
32	224516	133995	2153014017	109211	1970486219	241623890	345.28	0.62
33	228161	134701	2272419983	109176	2067478340	241623890	345.28	0.57
34	231878	135450	2392344053	109169	2164347658	241623890	345.28	0.57
35	235667	136213	2512795305	109161	2261091875	241623890	345.28	0.57
36	239527	136992	2633783126	109153	2357708963	241623890	345.28	0.58
37	243458	137785	2755316992	109145	2454196953	241623890	345.28	0.58
38	247461	138593	2877406448	109138	2550553929	241623890	345.28	0.58
39	251535	139416	3000061091	109130	2646778015	241623890	345.28	0.59
40	255681	140253	3123290561	109122	2742867360	241623890	345.28	0.59
41	259899	141105	3247104525	109115	2838820136	241623890	345.28	0.59
42	276965	141977	3371642009	109113	2934744468	241623890	345.28	0.59
43	281089	142825	3492379757	109103	3027172368	241623890	345.28	0.59
44	285278	143675	3613710975	109097	3119498330	241623890	345.28	0.61
45	289534	144535	3735586665	109089	3211671739	241623890	345.28	0.61
46	293857	145408	3858015749	109081	3303691254	241623890	345.28	0.61
47	298246	146296	3981007079	109073	3395555469	241623890	345.28	0.61
48	302701	147197	4104569487	109065	3487262959	241623890	345.28	0.61
49	307222	148112	4228711785	109057	3578812284	241623890	345.28	0.61
50	311810	149041	4353442760	109049	3670201982	241623890	345.28	0.61
51	316464	149983	4478771174	109041	3761430570	241623890	345.28	0.61
52	321184	150939	4604705760	109034	3852496546	241623890	345.28	0.61
53	325971	151909	4731255220	109026	3943398381	241623890	345.28	0.60
54	330824	152892	4858428227	109018	4034134526	241623890	345.28	0.60
55	335743	153889	4986233419	109011	4124703407	241623890	345.28	0.60
56	340729	154900	5114679404	109004	4215103426	241623890	345.28	0.60

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 36 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	6680.00	5000.00	0.00
<b>2.00</b>	37.16	0.00	34890.00	52000.00	4.75
---	---	---	Ft = 13867	Fp = 53044	---
---	---	Pa = 8007	Ta = 2030	La = 11138	---
---	---	Pb = -8007	Tb = 32860	Lb = 40862	---
<b>3.00</b>	33.69	0.00	40950.00	0.00	-4.75
---	---	---	Ft = 5441	Fp = -44114	---
---	---	Pa = 4588	Ta = -2924	La = 0	---
---	---	Pb = -4588	Tb = 43874	Lb = 0	---
<b>4.00</b>	30.23	0.00	34890.00	52000.00	4.75
---	---	---	Ft = 13867	Fp = 53044	---
---	---	Pa = 8007	Ta = 2030	La = 11138	---
---	---	Pb = -8007	Tb = 32860	Lb = 40862	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	6981	6798655	5000	4911087	0	345.28	0.03
3	883	7295	12624202	5000	8908621	0	345.28	0.05
4	1350	7621	18722803	5001	12917909	0	345.28	0.06
5	1836	7960	25104760	5001	16939221	0	345.28	0.08
6	3733	8312	31820269	5001	21006680	-0	345.28	0.09
7	4822	8703	39491960	5004	25498778	-0	345.28	0.11
8	10855	41517	67325833	6663	31006628	-0	345.28	0.08
9	16927	11543	82887691	16144	46446008	30441600	345.28	0.10
10	18136	11969	93577067	16145	60597961	30441600	345.28	0.11
11	19384	12408	104670531	16145	74778166	30441600	345.28	0.12
12	19863	-5115	105292693	23441	93314284	30441600	345.28	0.12
13	20382	43266	138913463	57007	147128727	50507928	345.28	0.16
14	21750	43749	176623060	57008	195989171	50507928	345.28	0.19
15	23157	44246	214785319	57008	244874544	50507928	345.28	0.23
16	27215	66273	266021039	57184	293945910	50507928	345.28	0.26
17	31312	91189	369315726	68148	353040351	82016651	345.28	0.32
18	32840	91729	447951729	68148	411550336	82016651	345.28	0.36
19	38928	92285	527194946	68150	470174501	82016651	345.28	0.39
20	37347	87932	606515132	69883	531749098	82016651	345.28	0.42
21	35829	126315	715488465	109010	630825791	105650669	345.28	0.33
22	38378	126919	826959329	109010	726548933	105650669	345.28	0.36
23	40990	127538	939004922	109011	822301280	105650669	345.28	0.39
24	43666	128172	1051634658	109011	918079560	105650669	345.28	0.42
25	46404	128821	1164857851	109011	1013880430	105650669	345.28	0.44
26	49205	129485	1278683726	109011	1109700494	105650669	345.28	0.46
27	52070	130164	1393121433	109012	1205536307	105650669	345.28	0.48
28	54997	130859	1508180055	109012	1301384385	105650669	345.28	0.50
29	57988	131568	1623868616	109012	1397241212	105650669	345.28	0.51
30	61042	132292	1740196087	109012	1493103248	105650669	345.28	0.52
31	73022	133034	1857328756	109013	1589097182	105650669	345.28	0.54
32	76596	133780	1973576457	109015	1683842303	105650669	345.28	0.55
33	80241	134520	2090280192	109013	1778435748	105650669	345.28	0.50
34	83958	135278	2207630132	109013	1873024322	105650669	345.28	0.51
35	87747	136050	2325634665	109013	1967604561	105650669	345.28	0.51
36	91607	136837	2444302170	109013	2062173011	105650669	345.28	0.52
37	95538	137638	2563641001	109013	2156726213	105650669	345.28	0.52
38	99541	138454	2683659489	109012	2251260711	105650669	345.28	0.53
39	103615	139285	2804365949	109012	2345773050	105650669	345.28	0.53
40	107761	140130	2925768673	109012	2440259776	105650669	345.28	0.53
41	111979	140990	3047875938	109011	2534717437	105650669	345.28	0.53
42	129045	141866	3170815308	109012	2629239670	105650669	345.28	0.54
43	133169	142724	3290151690	109011	2720439828	105650669	345.28	0.54
44	137358	143579	3410164531	109011	2811612351	105650669	345.28	0.56
45	141614	144448	3530835946	109010	2902733648	105650669	345.28	0.56
46	145937	145330	3652173271	109009	2993800675	105650669	345.28	0.56
47	150326	146225	3774183826	109009	3084810391	105650669	345.28	0.56
48	154781	147134	3896874921	109008	3175759761	105650669	345.28	0.56
49	159302	148057	4020253853	109007	3266645754	105650669	345.28	0.56
50	163890	148993	4144327911	109006	3357465346	105650669	345.28	0.56
51	168544	149943	4269104369	109005	3448215518	105650669	345.28	0.56
52	173264	150907	4394590494	109004	3538893256	105650669	345.28	0.56
53	178051	151884	4520793537	109003	3629495553	105650669	345.28	0.56
54	182904	152874	4647720742	109002	3720019407	105650669	345.28	0.56
55	187823	153879	4775379338	109001	3810461818	105650669	345.28	0.56
56	192809	154897	4903776546	109000	3900819796	105650669	345.28	0.56

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 37 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	5430.00	3020.00	36000.00	0.00
<b>2.00</b>	37.16	69900.00	29920.00	0.00	4.75
---	---	---	Ft = 84834	Fp = -15761	---
---	---	Pa = 71539	Ta = 45596	La = 0	---
---	---	Pb = -1639	Tb = -15676	Lb = 0	---
<b>3.00</b>	33.69	69900.00	29920.00	0.00	-4.75
---	---	---	Ft = 92785	Fp = -80224	---
---	---	Pa = 78244	Ta = -49869	La = 0	---
---	---	Pb = -8344	Tb = 79789	Lb = 0	---
<b>4.00</b>	30.23	60080.00	25130.00	63000.00	4.75
---	---	---	Ft = 90389	Fp = 354	---
---	---	Pa = 60104	Ta = 24867	La = 62764	---
---	---	Pb = -24	Tb = 263	Lb = 236	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Usa
2	5863	3110	3200884	36018	35525771	0	345.28	0.12
3	6313	3189	5918547	36019	64407226	-0	345.28	0.20
4	6780	3272	8714487	36020	93302845	0	345.28	0.26
5	7266	3357	11591500	36022	122211157	0	345.28	0.32
6	9163	3449	14591783	36027	151180553	-0	345.28	0.37
7	10252	3574	18236595	36060	182506689	-0	345.28	0.42
8	48051	297453	202071953	36142	214882984	-0	345.28	0.33
9	85889	49533	296857560	36251	248648023	0	345.28	0.40
10	87098	49639	341404447	36252	282378975	0	345.28	0.43
11	88346	49748	385984275	36252	316072912	0	345.28	0.45
12	128837	-193696	287450226	36360	351099959	0	345.28	0.39
13	169367	-15387	163010192	36463	387381893	0	345.28	0.35
14	170735	-15273	154347856	36455	423543258	-0	345.28	0.35
15	172143	-15157	145759456	36445	459582170	0	345.28	0.35
16	200371	96866	202675223	37486	496894937	-0	345.28	0.37
17	228638	89847	438268851	99314	590884454	177558756	345.28	0.48
18	230166	89965	519876092	99294	681290731	177558756	345.28	0.52
19	236254	90095	601547453	99283	771608207	177558756	345.28	0.57
20	238665	90414	688046564	99505	867238018	177558756	345.28	0.61
21	241139	90617	772120860	99479	959830696	177695106	345.28	0.45
22	243688	90754	856191490	99463	1052242238	177695106	345.28	0.47
23	246300	90894	940261617	99447	1144484534	177695106	345.28	0.48
24	248976	91038	1024328710	99430	1236552485	177695106	345.28	0.50
25	251714	91186	1108391123	99414	1328441876	177695106	345.28	0.51
26	254515	91338	1192447953	99397	1420149224	177695106	345.28	0.52
27	257380	91493	1276498913	99381	1511671649	177695106	345.28	0.53
28	260307	91652	1360544238	99364	1603006775	177695106	345.28	0.54
29	263298	91815	1444584589	99348	1694152637	177695106	345.28	0.54
30	266352	91981	1528620990	99331	1785107609	177695106	345.28	0.55
31	278332	92161	1612787045	99325	1876020044	177695106	345.28	0.56
32	281906	92370	1696279291	99353	1966045082	177695106	345.28	0.56
33	285551	92505	1779224616	99294	2055266465	177695106	345.28	0.50
34	289268	92682	1862185651	99280	2144317319	177695106	345.28	0.51
35	293057	92862	1945164092	99266	2233196618	177695106	345.28	0.51
36	296917	93046	2028161986	99252	2321903711	177695106	345.28	0.51
37	300848	93235	2111181436	99238	2410437984	177695106	345.28	0.51
38	304851	93427	2194224592	99225	2498798853	177695106	345.28	0.51
39	308925	93622	2277293635	99212	2586985743	177695106	345.28	0.51
40	313071	93822	2360390763	99198	2674998081	177695106	345.28	0.51
41	317289	94025	2443518185	99185	2762835290	177695106	345.28	0.51
42	334355	94238	2526774281	99180	2850604155	177695106	345.28	0.51
43	338479	94438	2607132599	99163	2935116008	177695106	345.28	0.51
44	342668	94643	2687555214	99153	3019500181	177695106	345.28	0.52
45	346924	94848	2767992437	99140	3103698436	177695106	345.28	0.52
46	351247	95057	2848446535	99127	3187710564	177695106	345.28	0.52
47	355636	95269	2928919676	99114	3271536232	177695106	345.28	0.52
48	360091	95485	3009413996	99101	3355175064	177695106	345.28	0.52
49	364612	95705	3089931603	99089	3438626642	177695106	345.28	0.51
50	369200	95928	3170474572	99076	3521890504	177695106	345.28	0.51
51	373854	96154	3251044942	99064	3604966144	177695106	345.28	0.51
52	378574	96384	3331644719	99052	3687853009	177695106	345.28	0.51
53	383361	96618	3412275872	99040	3770550503	177695106	345.28	0.50
54	388214	96855	3492940334	99028	3853057986	177695106	345.28	0.50
55	393133	97096	3573640004	99017	3935374772	177695106	345.28	0.50
56	398119	97340	3654376741	99006	4017500131	177695106	345.28	0.49

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 38 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	3020.00	36000.00	0.00
<b>2.00</b>	37.16	0.00	29920.00	0.00	4.75
---	---	---	Ft = -3975	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 29920	Lb = 0	---
<b>3.00</b>	33.69	0.00	29920.00	0.00	-4.75
---	---	---	Ft = 3975	Fp = -32231	---
---	---	Pa = 3352	Ta = -2137	La = 0	---
---	---	Pb = -3352	Tb = 32057	Lb = 0	---
<b>4.00</b>	30.23	0.00	25130.00	63000.00	4.75
---	---	---	Ft = 24194	Fp = 50074	---
---	---	Pa = 11823	Ta = 382	La = 21105	---
---	---	Pb = -11823	Tb = 24748	Lb = 41895	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	3095	3027716	36000	35295488	0	345.28	0.12
3	883	3173	5567629	36000	63946661	0	345.28	0.19
4	1350	3255	8181190	36001	92613337	0	345.28	0.26
5	1836	3339	10871123	36001	121295049	0	345.28	0.31
6	3733	3427	13666191	36001	150035106	-0	345.28	0.36
7	4822	3526	16847949	36004	180871275	-0	345.28	0.41
8	6851	3624	20057464	36003	211609464	-0	345.28	0.23
9	8920	3727	23394913	36003	242406942	0	345.28	0.25
10	10128	3833	26845568	36004	273233680	0	345.28	0.26
11	11377	3943	30412983	36004	304088647	0	345.28	0.27
12	15241	-834	31280265	36006	335045046	0	345.28	0.28
13	19146	31958	57525259	36007	366097229	0	345.28	0.29
14	20514	32079	85116410	36007	397169785	-0	345.28	0.30
15	21922	32203	112835826	36008	428261584	0	345.28	0.31
16	28505	57528	155406365	36341	459691629	0	345.28	0.32
17	35128	64903	243432281	57117	510099184	59706182	345.28	0.35
18	36655	65038	299233505	57117	559374798	59706182	345.28	0.37
19	42744	65177	355244368	57118	608757793	59706182	345.28	0.39
20	39255	57022	408156283	58895	660837677	59706182	345.28	0.41
21	35829	90215	482515695	99010	751301774	83937461	345.28	0.31
22	38378	90366	561856237	99010	838323346	83937461	345.28	0.33
23	40990	90520	641355920	99011	925370791	83937461	345.28	0.36
24	43666	90678	721015368	99011	1012440938	83937461	345.28	0.37
25	46404	90840	800835142	99011	1099530566	83937461	345.28	0.39
26	49205	91006	880815746	99011	1186636414	83937461	345.28	0.40
27	52070	91175	960957639	99011	1273755190	83937461	345.28	0.42
28	54997	91348	1041261239	99012	1360883573	83937461	345.28	0.43
29	57988	91525	1121726934	99012	1448018226	83937461	345.28	0.44
30	61042	91706	1202355079	99012	1535155791	83937461	345.28	0.45
31	73022	91892	1283253489	99013	1622420633	83937461	345.28	0.45
32	76596	92078	1363257103	99015	1708558197	83937461	345.28	0.46
33	80241	92262	1443295254	99013	1794545403	83937461	345.28	0.42
34	83958	92451	1523492292	99013	1880526141	83937461	345.28	0.42
35	87747	92643	1603848461	99013	1966497160	83937461	345.28	0.43
36	91607	92839	1684364008	99013	2052455227	83937461	345.28	0.43
37	95538	93039	1765039173	99012	2138397107	83937461	345.28	0.43
38	99541	93242	1845874190	99012	2224319569	83937461	345.28	0.43
39	103615	93449	1926869286	99012	2310219387	83937461	345.28	0.44
40	107761	93660	2008024686	99011	2396093338	83937461	345.28	0.44
41	111979	93874	2089340613	99011	2481938205	83937461	345.28	0.44
42	129045	94093	2170898200	99012	2567844477	83937461	345.28	0.44
43	133169	94306	2249769182	99011	2650727247	83937461	345.28	0.44
44	137358	94519	2328794382	99011	2733582607	83937461	345.28	0.46
45	141614	94735	2407956879	99010	2816387914	83937461	345.28	0.46
46	145937	94955	2487256873	99009	2899140359	83937461	345.28	0.46
47	150326	95178	2566694558	99008	2981837138	83937461	345.28	0.46
48	154781	95404	2646270130	99008	3064475448	83937461	345.28	0.46
49	159302	95634	2725983785	99007	3147052493	83937461	345.28	0.46
50	163890	95866	2805835720	99006	3229565483	83937461	345.28	0.45
51	168544	96103	2885826131	99005	3312011630	83937461	345.28	0.45
52	173264	96343	2965955215	99004	3394388153	83937461	345.28	0.45
53	178051	96586	3046223168	99003	3476692274	83937461	345.28	0.45
54	182904	96832	3126630189	99002	3558921221	83937461	345.28	0.45
55	187823	97082	3207176473	99001	3641072227	83937461	345.28	0.45
56	192809	97335	3287862218	99000	3723142528	83937461	345.28	0.45

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 39 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	10860.00	6030.00	8000.00	0.00
<b>2.00</b>	37.16	60080.00	25130.00	63000.00	4.75
---	---	---	Ft = 90389	Fp = 354	---
---	---	Pa = 60104	Ta = 24867	La = 62764	---
---	---	Pb = -24	Tb = 263	Lb = 236	---
<b>3.00</b>	33.69	69900.00	29920.00	0.00	-4.75
---	---	---	Ft = 92785	Fp = -80224	---
---	---	Pa = 78244	Ta = -49869	La = 0	---
---	---	Pb = -8344	Tb = 79789	Lb = 0	---
<b>4.00</b>	30.23	60080.00	25130.00	63000.00	4.75
---	---	---	Ft = 90389	Fp = 354	---
---	---	Pa = 60104	Ta = 24867	La = 62764	---
---	---	Pb = -24	Tb = 263	Lb = 236	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	11293	6132	6286886	8044	8353942	0	345.28	0.04
3	11743	6211	11531514	8046	15246221	0	345.28	0.06
4	12210	6293	16851717	8048	22156689	0	345.28	0.08
5	12696	6378	22249845	8049	29085294	0	345.28	0.10
6	14593	6470	27762015	8055	36086788	0	345.28	0.11
7	15682	6605	34200384	8118	44331928	-0	345.28	0.13
8	47763	251500	190575522	17530	58887892	-0	345.28	0.22
9	79884	31782	260249903	71063	129997929	171545281	345.28	0.31
10	81092	31888	289321874	71064	193707139	171545281	345.28	0.34
11	82341	31998	318442710	71063	257417048	171545281	345.28	0.37
12	123639	-206623	207292283	71247	322919320	171545281	345.28	0.33
13	164977	-17211	82903385	71576	390309398	171661049	345.28	0.33
14	166345	-17097	72179341	71565	457562397	171661049	345.28	0.36
15	167753	-16980	61557448	71553	524694436	171661049	345.28	0.38
16	195981	95039	116405876	72610	593338432	171661049	345.28	0.42
17	224248	88016	349906622	134452	718878831	349219804	345.28	0.52
18	225776	88137	429455505	134428	840801186	349219804	345.28	0.57
19	231864	88268	509093747	134415	962630990	349219804	345.28	0.63
20	234275	88568	593300872	134691	1091452153	349219804	345.28	0.67
21	236749	88794	675346714	134601	1216331754	349356155	345.28	0.50
22	239298	88932	757410339	134582	1340994815	349356155	345.28	0.53
23	241910	89074	839494342	134561	1465449825	349356155	345.28	0.55
24	244586	89220	921595517	134541	1589689071	349356155	345.28	0.57
25	247324	89370	1003711578	134520	1713706083	349356155	345.28	0.58
26	250125	89523	1085841018	134500	1837495423	349356155	345.28	0.60
27	252990	89680	1167982980	134479	1961052513	349356155	345.28	0.61
28	255917	89840	1250137157	134458	2084373495	349356155	345.28	0.62
29	258908	90005	1332303704	134438	2207455101	349356155	345.28	0.63
30	261962	90173	1414483161	134418	2330294559	349356155	345.28	0.64
31	273942	90353	1496801153	134411	2453086931	349356155	345.28	0.64
32	277516	90560	1578448956	134445	2574662969	349356155	345.28	0.65
33	281161	90700	1659603431	134371	2695199002	349356155	345.28	0.59
34	284878	90878	1740787068	134354	2815516868	349356155	345.28	0.59
35	288667	91060	1822001271	134336	2935614819	349356155	345.28	0.59
36	292527	91245	1903247780	134319	3055491600	349356155	345.28	0.59
37	296458	91435	1984528415	134302	3175146035	349356155	345.28	0.59
38	300461	91628	2065845057	134285	3294576998	349356155	345.28	0.59
39	304535	91825	2147199634	134268	3413783400	349356155	345.28	0.59
40	308681	92025	2228594109	134251	3532764171	349356155	345.28	0.59
41	312899	92230	2310030467	134235	3651518245	349356155	345.28	0.59
42	329965	92443	2391602081	134228	3770186803	349356155	345.28	0.59
43	334089	92645	2470347989	134207	3884463370	349356155	345.28	0.59
44	338278	92851	2549166344	134194	3998574271	349356155	345.28	0.61
45	342534	93057	2628010508	134178	4112443120	349356155	345.28	0.61
46	346857	93267	2706882562	134161	4226069402	349356155	345.28	0.61
47	351246	93480	2785784503	134145	4339452448	349356155	345.28	0.61
48	355701	93697	2864718310	134128	4452591546	349356155	345.28	0.60
49	360222	93917	2943685941	134112	4565485936	349356155	345.28	0.60
50	364810	94141	3022689327	134097	4678134805	349356155	345.28	0.60
51	369464	94369	3101730378	134081	4790537291	349356155	345.28	0.59
52	374184	94600	3180810973	134066	4902692478	349356155	345.28	0.59
53	378971	94834	3259932967	134051	5014599399	349356155	345.28	0.59
54	383824	95073	3339098183	134036	5126257033	349356155	345.28	0.59
55	388743	95314	3418308416	134022	5237664306	349356155	345.28	0.58
56	393729	95559	3497565431	134007	5348820093	349356155	345.28	0.58

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## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 40 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	6030.00	8000.00	0.00
<b>2.00</b>	37.16	0.00	25130.00	63000.00	4.75
---	---	---	Ft = 24194	Fp = 50074	---
---	---	Pa = 11823	Ta = 382	La = 21105	---
---	---	Pb = -11823	Tb = 24748	Lb = 41895	---
<b>3.00</b>	33.69	0.00	29920.00	0.00	-4.75
---	---	---	Ft = 3975	Fp = -32231	---
---	---	Pa = 3352	Ta = -2137	La = 0	---
---	---	Pb = -3352	Tb = 32057	Lb = 0	---
<b>4.00</b>	30.23	0.00	25130.00	63000.00	4.75
---	---	---	Ft = 24194	Fp = 50074	---
---	---	Pa = 11823	Ta = 382	La = 21105	---
---	---	Pb = -11823	Tb = 24748	Lb = 41895	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	6105	5978482	8000	7854604	0	345.28	0.03
3	883	6183	10913283	8000	14244269	0	345.28	0.05
4	1350	6265	15922676	8001	20649373	0	345.28	0.07
5	1836	6349	21009331	8001	27070228	0	345.28	0.09
6	3733	6438	26204603	8002	33551570	0	345.28	0.10
7	4822	6536	31956919	8005	40665482	0	345.28	0.12
8	12762	54111	66848840	11151	49750421	0	345.28	0.09
9	20743	7123	80799939	29116	77626655	57684082	345.28	0.12
10	21951	7230	87397260	29117	103044529	57684082	345.28	0.13
11	23200	7339	94107581	29117	128496459	57684082	345.28	0.14
12	21153	-12890	88475798	36595	158329352	57684082	345.28	0.15
13	19146	30179	111137363	71009	224249006	78257511	345.28	0.20
14	20514	30300	137237663	71010	285095629	78257511	345.28	0.23
15	21922	30424	163464999	71010	345973674	78257511	345.28	0.26
16	28505	55748	204545652	71344	407229397	78257511	345.28	0.30
17	35128	63124	291082964	92120	487501966	137963693	345.28	0.35
18	36655	63259	345393543	92121	566652179	137963693	345.28	0.39
19	42744	63398	399913748	92122	645943111	137963693	345.28	0.42
20	39255	55243	451297004	93900	728829106	137963693	345.28	0.45
21	35829	88436	524117804	134013	849972960	162194972	345.28	0.35
22	38378	88586	601919078	134014	967684955	162194972	345.28	0.38
23	40990	88741	679878822	134014	1085432576	162194972	345.28	0.40
24	43666	88899	757997655	134014	1203211718	162194972	345.28	0.43
25	46404	89061	836276136	134015	1321018193	162194972	345.28	0.45
26	49205	89227	914714773	134015	1438847751	162194972	345.28	0.47
27	52070	89396	993314032	134015	1556696087	162194972	345.28	0.48
28	54997	89569	1072074343	134015	1674558854	162194972	345.28	0.50
29	57988	89746	1150996105	134015	1792431666	162194972	345.28	0.51
30	61042	89927	1230079692	134015	1910310113	162194972	345.28	0.52
31	73022	90112	1309433615	134017	2028353875	162194972	345.28	0.53
32	76596	90299	1387915209	134020	2144865345	162194972	345.28	0.54
33	80241	90483	1466430068	134017	2261185020	162194972	345.28	0.49
34	83958	90672	1545103284	134017	2377497843	162194972	345.28	0.50
35	87747	90864	1623935129	134017	2493799511	162194972	345.28	0.50
36	91607	91060	1702925877	134017	2610085736	162194972	345.28	0.50
37	95538	91260	1782075795	134016	2726352226	162194972	345.28	0.51
38	99541	91463	1861385147	134016	2842594695	162194972	345.28	0.51
39	103615	91670	1940854192	134016	2958808857	162194972	345.28	0.51
40	107761	91880	2020483184	134015	3074990429	162194972	345.28	0.51
41	111979	92094	2100272377	134015	3191135136	162194972	345.28	0.52
42	129045	92313	2180302998	134015	3307360389	162194972	345.28	0.52
43	133169	92527	2257699417	134014	3419498999	162194972	345.28	0.52
44	137358	92740	2335249817	134014	3531602659	162194972	345.28	0.54
45	141614	92956	2412937302	134013	3643641850	162194972	345.28	0.54
46	145937	93175	2490762107	134012	3755612814	162194972	345.28	0.54
47	150326	93398	2568724464	134011	3867511794	162194972	345.28	0.54
48	154781	93624	2646824605	134010	3979335039	162194972	345.28	0.54
49	159302	93854	2725062762	134009	4091078804	162194972	345.28	0.54
50	163890	94087	2803439168	134008	4202739354	162194972	345.28	0.54
51	168544	94323	2881954055	134007	4314312957	162194972	345.28	0.53
52	173264	94563	2960607657	134006	4425795891	162194972	345.28	0.53
53	178051	94806	3039400205	134004	4537184439	162194972	345.28	0.53
54	182904	95052	3118331932	134003	4648474889	162194972	345.28	0.53
55	187823	95302	3197403071	134002	4759663538	162194972	345.28	0.53
56	192809	95555	3276613854	134001	4870746688	162194972	345.28	0.53

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 41 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	3420.00	-3440.00	29500.00	0.00
<b>2.00</b>	37.16	52780.00	-41740.00	0.00	4.75
---	---	---	Ft = 72604	Fp = -81203	---
---	---	Pa = 61226	Ta = 39022	La = 0	---
---	---	Pb = -8446	Tb = -80762	Lb = 0	---
<b>3.00</b>	33.69	52780.00	-41740.00	0.00	-4.75
---	---	---	Ft = 61512	Fp = 8726	---
---	---	Pa = 51872	Ta = -33061	La = 0	---
---	---	Pb = 908	Tb = -8679	Lb = 0	---
<b>4.00</b>	30.23	45820.00	-35550.00	54500.00	4.75
---	---	---	Ft = 98151	Fp = -40337	---
---	---	Pa = 28705	Ta = -26781	La = 89958	---
---	---	Pb = 17115	Tb = -8769	Lb = -35458	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	3853	-3749	-3712579	29508	29048468	0	345.28	0.10
3	4303	-4064	-7049472	29509	52653832	0	345.28	0.16
4	4770	-4391	-10657344	29510	76272811	0	345.28	0.22
5	5256	-4730	-14546439	29510	99904563	-0	345.28	0.26
6	7153	-5085	-18761180	29514	123591830	-0	345.28	0.30
7	8242	-5493	-23838597	29532	149159683	-0	345.28	0.35
8	40884	245426	123454646	29580	175532871	-0	345.28	0.24
9	73565	32602	192200458	29643	202945436	-0	345.28	0.29
10	74774	32176	217481201	29644	230341690	0	345.28	0.31
11	76023	31736	242307212	29644	257719645	0	345.28	0.32
12	99924	-151899	157291389	29686	285765515	0	345.28	0.28
13	123866	-83100	-2851436	29725	314442410	-0	345.28	0.26
14	125234	-83579	-77233452	29721	343061069	-0	345.28	0.27
15	126642	-84072	-152049793	29717	371620558	-0	345.28	0.29
16	143796	-41133	-202719417	31151	401357785	-0	345.28	0.31
17	160990	-120615	-244535127	119714	511733294	254489354	345.28	0.37
18	162518	-121147	-351611518	119706	617151455	254489354	345.28	0.43
19	168606	-121700	-459229391	119704	722557540	254489354	345.28	0.49
20	179586	-109256	-564894392	118323	832052305	254489354	345.28	0.55
21	190629	-131650	-675239490	84252	906672095	233980999	345.28	0.41
22	193178	-132246	-795273988	84245	984121649	233980999	345.28	0.43
23	195790	-132857	-915774798	84237	1061458403	233980999	345.28	0.45
24	198466	-133482	-1036744129	84229	1138679203	233980999	345.28	0.47
25	201204	-134123	-1158185393	84221	1215781352	233980999	345.28	0.49
26	204005	-134778	-1280103020	84213	1292762531	233980999	345.28	0.51
27	206870	-135448	-1402502315	84205	1369620729	233980999	345.28	0.52
28	209797	-136133	-1525389323	84197	1446354185	233980999	345.28	0.53
29	212788	-136834	-1648770721	84189	1522961343	233980999	345.28	0.55
30	215842	-137549	-1772653726	84180	1599440811	233980999	345.28	0.56
31	227822	-138288	-1897214017	84179	1675920906	233980999	345.28	0.56
32	231396	-139050	-2021044129	84195	1751604304	233980999	345.28	0.57
33	235041	-139756	-2144801245	84163	1826723599	233980999	345.28	0.52
34	238758	-140506	-2269080280	84156	1901727834	233980999	345.28	0.52
35	242547	-141270	-2393889681	84149	1976615866	233980999	345.28	0.53
36	246407	-142048	-2519238255	84141	2051386742	233980999	345.28	0.53
37	250338	-142842	-2645134948	84134	2126039514	233980999	345.28	0.54
38	254341	-143650	-2771588825	84127	2200573239	233980999	345.28	0.54
39	258415	-144473	-2898609043	84120	2274986966	233980999	345.28	0.54
40	262561	-145310	-3026204840	84113	2349279733	233980999	345.28	0.54
41	266779	-146162	-3154385513	84106	2423450565	233980999	345.28	0.54
42	283845	-147035	-3283287617	84103	2497590912	233980999	345.28	0.55
43	287969	-147883	-3408238974	84094	2569009440	233980999	345.28	0.55
44	292158	-148732	-3533783966	84089	2640337676	233980999	345.28	0.57
45	296414	-149593	-3659872896	84081	2711532486	233980999	345.28	0.57
46	300737	-150467	-3786514432	84074	2782593190	233980999	345.28	0.57
47	305126	-151354	-3913717185	84066	2853519029	233980999	345.28	0.57
48	309581	-152256	-4041489770	84059	2924309209	233980999	345.28	0.57
49	314102	-153171	-4169840794	84052	2994962908	233980999	345.28	0.57
50	318690	-154099	-4298778853	84045	3065479268	233980999	345.28	0.57
51	323344	-155042	-4428312533	84038	3135857401	233980999	345.28	0.56
52	328064	-155998	-4558450401	84031	3206096386	233980999	345.28	0.56
53	332851	-156968	-4689201004	84024	3276195272	233980999	345.28	0.56
54	337704	-157952	-4820572871	84017	3346153075	233980999	345.28	0.56
55	342623	-158949	-4952574504	84010	3415968782	233980999	345.28	0.56
56	347609	-159960	-5085214382	84003	3485641349	233980999	345.28	0.56

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 42 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-3440.00	29500.00	0.00
<b>2.00</b>	37.16	0.00	-41740.00	0.00	4.75
---	---	---	Ft = 5546	Fp = -44965	---
---	---	Pa = 4677	Ta = 2981	La = 0	---
---	---	Pb = -4677	Tb = -44721	Lb = 0	---
<b>3.00</b>	33.69	0.00	-41740.00	0.00	-4.75
---	---	---	Ft = -5546	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -41740	Lb = 0	---
<b>4.00</b>	30.23	0.00	-35550.00	54500.00	4.75
---	---	---	Ft = 59918	Fp = 7816	---
---	---	Pa = 4896	Ta = -34925	La = 48439	---
---	---	Pb = -4896	Tb = -625	Lb = 6061	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-3741	-3623186	29500	28923541	0	345.28	0.10
3	883	-4055	-6872420	29500	52403314	-0	345.28	0.16
4	1350	-4381	-10394522	29500	75896704	-0	345.28	0.21
5	1836	-4720	-14199877	29501	99403358	-0	345.28	0.26
6	3733	-5072	-18338324	29501	122961436	-0	345.28	0.30
7	4822	-5462	-23261115	29503	148249842	-0	345.28	0.34
8	9189	13342	-16791567	29503	173519075	0	345.28	0.19
9	13596	-3291	-16707113	29505	198904660	0	345.28	0.20
10	14805	-3716	-20305185	29505	224313355	0	345.28	0.21
11	16054	-4156	-24312373	29505	249744338	-0	345.28	0.22
12	15904	-18340	-37003514	29505	275159821	0	345.28	0.23
13	15793	-49798	-85719391	29505	300561043	-0	345.28	0.24
14	17161	-50281	-128851897	29505	325984093	-0	345.28	0.26
15	18569	-50778	-172442195	29506	351428093	0	345.28	0.27
16	23365	-47825	-214632260	30268	377404323	0	345.28	0.28
17	28201	-128483	-319074634	77947	446709485	137034180	345.28	0.34
18	29728	-129023	-429281862	77948	513414006	137034180	345.28	0.39
19	35817	-129579	-540107846	77949	580220497	137034180	345.28	0.44
20	35792	-134067	-657244981	78209	649311460	137034180	345.28	0.49
21	35829	-131375	-775504288	84009	723664383	140539505	345.28	0.37
22	38378	-131979	-891431973	84009	797539512	140539505	345.28	0.40
23	40990	-132598	-1007935635	84009	871436281	140539505	345.28	0.42
24	43666	-133232	-1125024505	84009	945351901	140539505	345.28	0.44
25	46404	-133881	-1242707710	84010	1019283552	140539505	345.28	0.46
26	49205	-134545	-1360994290	84010	1093228383	140539505	345.28	0.48
27	52070	-135224	-1479893208	84010	1167183521	140539505	345.28	0.49
28	54997	-135918	-1599413359	84010	1241146075	140539505	345.28	0.50
29	57988	-136628	-1719563581	84010	1315113141	140539505	345.28	0.52
30	61042	-137352	-1840352657	84010	1389081804	140539505	345.28	0.53
31	73022	-138094	-1961954278	84012	1463162056	140539505	345.28	0.54
32	76596	-138840	-2082614099	84013	1536289178	140539505	345.28	0.54
33	80241	-139580	-2203720852	84011	1609282669	140539505	345.28	0.50
34	83958	-140338	-2325473248	84011	1682269686	140539505	345.28	0.50
35	87747	-141110	-2447879499	84011	1755247425	140539505	345.28	0.51
36	91607	-141897	-2570947807	84011	1828213095	140539505	345.28	0.51
37	95538	-142698	-2694686349	84011	1901163906	140539505	345.28	0.51
38	99541	-143514	-2819103283	84011	1974097073	140539505	345.28	0.52
39	103615	-144345	-2944206748	84010	2047009816	140539505	345.28	0.52
40	107761	-145190	-3070004862	84010	2119899361	140539505	345.28	0.52
41	111979	-146050	-3196505728	84010	2192762936	140539505	345.28	0.52
42	129045	-146926	-3323842146	84010	2265679938	140539505	345.28	0.53
43	133169	-147784	-3447420345	84010	2336028560	140539505	345.28	0.53
44	137358	-148639	-3571673341	84009	2406352816	140539505	345.28	0.55
45	141614	-149508	-3696581955	84009	2476632905	140539505	345.28	0.55
46	145937	-150390	-3822153376	84008	2546866426	140539505	345.28	0.55
47	150326	-151285	-3948394775	84007	2617050977	140539505	345.28	0.55
48	154781	-152194	-4075313313	84007	2687184160	140539505	345.28	0.55
49	159302	-153117	-4202916140	84006	2757263580	140539505	345.28	0.55
50	163890	-154053	-4331210397	84005	2827286849	140539505	345.28	0.55
51	168544	-155003	-4460203211	84004	2897251579	140539505	345.28	0.55
52	173264	-155967	-4589901701	84004	2967155389	140539505	345.28	0.55
53	178051	-156944	-4720312972	84003	3036995902	140539505	345.28	0.55
54	182904	-157934	-4851444119	84002	3106770743	140539505	345.28	0.54
55	187823	-158939	-4983302228	84001	3176477542	140539505	345.28	0.54
56	192809	-159957	-5115894371	84000	3246113932	140539505	345.28	0.54

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 43 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6840.00	-6880.00	6000.00	0.00
<b>2.00</b>	37.16	45820.00	-35550.00	54500.00	4.75
---	---	---	Ft = 98151	Fp = -40337	---
---	---	Pa = 28705	Ta = -26781	La = 89958	---
---	---	Pb = 17115	Tb = -8769	Lb = -35458	---
<b>3.00</b>	33.69	52780.00	-41740.00	0.00	-4.75
---	---	---	Ft = 61512	Fp = 8726	---
---	---	Pa = 51872	Ta = -33061	La = 0	---
---	---	Pb = 908	Tb = -8679	Lb = 0	---
<b>4.00</b>	30.23	45820.00	-35550.00	54500.00	4.75
---	---	---	Ft = 98151	Fp = -40337	---
---	---	Pa = 28705	Ta = -26781	La = 89958	---
---	---	Pb = 17115	Tb = -8769	Lb = -35458	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	7273	-7199	-7259970	6019	6193462	0	345.28	0.03
3	7723	-7513	-13512331	6020	11295167	0	345.28	0.06
4	8190	-7840	-20039973	6021	16415361	0	345.28	0.08
5	8676	-8180	-26852992	6022	21554314	0	345.28	0.09
6	10573	-8535	-34009174	6026	26766258	-0	345.28	0.11
7	11662	-8953	-42466275	6058	32889049	0	345.28	0.13
8	28044	101777	16485319	19470	47166594	0	345.28	0.06
9	44465	-36591	-1340878	96067	141106294	245870431	345.28	0.15
10	45674	-37018	-34419623	96069	224448372	245870431	345.28	0.22
11	46922	-37459	-67911794	96070	307809492	245870431	345.28	0.28
12	83604	-176869	-184854117	89825	388897818	245870431	345.28	0.37
13	120326	-80370	-331610929	60778	440800333	228457929	345.28	0.44
14	121694	-80849	-404464149	60775	496947934	228457929	345.28	0.48
15	123102	-81342	-477677163	60770	553013193	228457929	345.28	0.52
16	140256	-38406	-526771516	62212	610392672	228457929	345.28	0.54
17	157450	-117891	-567027022	150781	748531530	482947283	345.28	0.59
18	158978	-118422	-672468404	150772	881667542	482947283	345.28	0.66
19	165066	-118974	-778402867	150770	1014785132	482947283	345.28	0.72
20	176046	-106543	-882606685	149423	1153480263	482947283	345.28	0.78
21	187089	-128926	-991171405	115322	1256629847	462438929	345.28	0.57
22	189638	-129521	-1109382518	115313	1362571900	462438929	345.28	0.59
23	192250	-130131	-1228020120	115303	1468362465	462438929	345.28	0.61
24	194926	-130755	-1347089352	115293	1573997327	462438929	345.28	0.63
25	197664	-131395	-1466596259	115284	1679472871	462438929	345.28	0.65
26	200465	-132049	-1586547653	115274	1784785975	462438929	345.28	0.66
27	203330	-132719	-1706950985	115263	1889933920	462438929	345.28	0.67
28	206257	-133403	-1827814245	115253	1994914317	462438929	345.28	0.68
29	209248	-134102	-1949145875	115243	2099725040	462438929	345.28	0.69
30	212302	-134817	-2070954693	115232	2204364179	462438929	345.28	0.70
31	224282	-135555	-2193432842	115231	2309007766	462438929	345.28	0.71
32	227856	-136319	-2315229555	115251	2412556582	462438929	345.28	0.71
33	231501	-137022	-2436893719	115211	2515344119	462438929	345.28	0.64
34	235218	-137771	-2559062539	115201	2617976910	462438929	345.28	0.65
35	239007	-138534	-2681745351	115192	2720453366	462438929	345.28	0.65
36	242867	-139312	-2804951790	115183	2822772143	462438929	345.28	0.65
37	246798	-140105	-2928691566	115173	2924931903	462438929	345.28	0.65
38	250801	-140912	-3052974438	115164	3026931310	462438929	345.28	0.65
39	254875	-141734	-3177810208	115155	3128769016	462438929	345.28	0.65
40	259021	-142571	-3303208701	115146	3230443659	462438929	345.28	0.65
41	263239	-143422	-3429179756	115137	3331953856	462438929	345.28	0.65
42	280305	-144295	-3555868732	115134	3433424964	462438929	345.28	0.65
43	284429	-145142	-3678669022	115122	3531173644	462438929	345.28	0.65
44	288618	-145991	-3802054268	115115	3628800384	462438929	345.28	0.67
45	292874	-146850	-3925972135	115105	3726246717	462438929	345.28	0.67
46	297197	-147724	-4050431695	115096	3823511662	462438929	345.28	0.67
47	301586	-148611	-4175441932	115086	3920594133	462438929	345.28	0.67
48	306041	-149511	-4301011803	115077	4017493000	462438929	345.28	0.67
49	310562	-150426	-4427150234	115067	4114207091	462438929	345.28	0.66
50	315150	-151354	-4553866120	115058	4210735188	462438929	345.28	0.66
51	319804	-152296	-4681168321	115049	4307076031	462438929	345.28	0.66
52	324524	-153251	-4809065661	115040	4403228317	462438929	345.28	0.66
53	329311	-154220	-4937566926	115031	4499190700	462438929	345.28	0.65
54	334164	-155203	-5066680865	115022	4594961792	462438929	345.28	0.65
55	339083	-156200	-5196416189	115013	4690540165	462438929	345.28	0.65
56	344069	-157210	-5326781567	115004	4785924347	462438929	345.28	0.65

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 44 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6880.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	-35550.00	54500.00	4.75
---	---	---	Ft = 59918	Fp = 7816	---
---	---	Pa = 4896	Ta = -34925	La = 48439	---
---	---	Pb = -4896	Tb = -625	Lb = 6061	---
<b>3.00</b>	33.69	0.00	-41740.00	0.00	-4.75
---	---	---	Ft = -5546	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -41740	Lb = 0	---
<b>4.00</b>	30.23	0.00	-35550.00	54500.00	4.75
---	---	---	Ft = 59918	Fp = 7816	---
---	---	Pa = 4896	Ta = -34925	La = 48439	---
---	---	Pb = -4896	Tb = -625	Lb = 6061	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-7181	-6996582	6000	5894394	0	345.28	0.03
3	883	-7495	-12985052	6000	10693654	-0	345.28	0.05
4	1350	-7821	-19248641	6001	15508189	-0	345.28	0.07
5	1836	-8160	-25797715	6001	20338364	-0	345.28	0.09
6	3733	-8512	-32688503	6002	25228554	-0	345.28	0.10
7	4822	-8903	-40574622	6004	30644586	-0	345.28	0.12
8	9299	5136	-39877403	13220	40325280	-0	345.28	0.06
9	13816	-44637	-79253073	54446	92666040	132393172	345.28	0.13
10	15025	-45062	-117973948	54446	139320833	132393172	345.28	0.17
11	16273	-45502	-157104592	54446	186010128	132393172	345.28	0.22
12	16013	-52083	-200382883	55528	233326812	132393172	345.28	0.26
13	15793	-47049	-241474211	60506	285857645	135369349	345.28	0.29
14	17161	-47531	-282328220	60507	337681792	135369349	345.28	0.32
15	18569	-48029	-323638293	60507	389536366	135369349	345.28	0.35
16	23365	-45076	-363554427	61270	441955424	135369349	345.28	0.37
17	28201	-125734	-465727226	108950	537734037	272403528	345.28	0.44
18	29728	-126274	-573661064	108950	630917991	272403528	345.28	0.50
19	35817	-126830	-682217669	108952	724238557	272403528	345.28	0.55
20	35792	-131318	-797042217	109213	820669050	272403528	345.28	0.60
21	35829	-128626	-912956966	115011	922245254	275908854	345.28	0.45
22	38378	-129230	-1026538902	115012	1023352837	275908854	345.28	0.48
23	40990	-129849	-1140695516	115012	1124490297	275908854	345.28	0.50
24	43666	-130483	-1255435949	115012	1225653895	275908854	345.28	0.53
25	46404	-131132	-1370769252	115013	1326839840	275908854	345.28	0.54
26	49205	-131796	-1486704402	115013	1428044296	275908854	345.28	0.56
27	52070	-132475	-1603250305	115013	1529263393	275908854	345.28	0.58
28	54997	-133169	-1720415812	115013	1630493234	275908854	345.28	0.59
29	57988	-133879	-1838209722	115013	1731729898	275908854	345.28	0.60
30	61042	-134603	-1956640788	115013	1832969451	275908854	345.28	0.61
31	73022	-135345	-2075887519	115015	1934358889	275908854	345.28	0.62
32	76596	-136091	-2194229961	115017	2034440764	275908854	345.28	0.63
33	80241	-136831	-2313012302	115015	2134344546	275908854	345.28	0.57
34	83958	-137589	-2432438646	115015	2234240254	275908854	345.28	0.58
35	87747	-138361	-2552517204	115015	2334124089	275908854	345.28	0.58
36	91607	-139147	-2673256181	115015	2433992265	275908854	345.28	0.58
37	95538	-139949	-2794663761	115014	2533841000	275908854	345.28	0.59
38	99541	-140765	-2916748111	115014	2633666517	275908854	345.28	0.59
39	103615	-141596	-3039517380	115014	2733465043	275908854	345.28	0.59
40	107761	-142441	-3162979700	115013	2833232813	275908854	345.28	0.59
41	111979	-143301	-3287143189	115013	2932960665	275908854	345.28	0.59
42	129045	-144177	-3412142979	115014	3032771398	275908854	345.28	0.60
43	133169	-145035	-3533463014	115013	3129062889	275908854	345.28	0.60
44	137358	-145890	-3655456553	115012	3225321912	275908854	345.28	0.62
45	141614	-146758	-3778103961	115011	3321521829	275908854	345.28	0.62
46	145937	-147640	-3901412466	115011	3417659368	275908854	345.28	0.62
47	150326	-148536	-4025389281	115010	3513731258	275908854	345.28	0.62
48	154781	-149445	-4150041604	115009	3609734233	275908854	345.28	0.62
49	159302	-150367	-4275376623	115008	3705665032	275908854	345.28	0.62
50	163890	-151304	-4401401517	115007	3801520401	275908854	345.28	0.62
51	168544	-152253	-4528123451	115006	3897297090	275908854	345.28	0.61
52	173264	-153217	-4655549581	115005	3992991856	275908854	345.28	0.61
53	178051	-154194	-4783687050	115004	4088601461	275908854	345.28	0.61
54	182904	-155184	-4912542990	115003	4184122672	275908854	345.28	0.61
55	187823	-156189	-5042124521	115002	4279552261	275908854	345.28	0.61
56	192809	-157207	-5172438754	115001	4374887007	275908854	345.28	0.61

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 45 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	3270.00	-3340.00	27500.00	0.00
<b>2.00</b>	37.16	51640.00	-40950.00	0.00	4.75
---	---	---	Ft = 71051	Fp = -79569	---
---	---	Pa = 59916	Ta = 38187	La = 0	---
---	---	Pb = -8276	Tb = -79137	Lb = 0	---
<b>3.00</b>	33.69	51640.00	-40950.00	0.00	-4.75
---	---	---	Ft = 60169	Fp = 8658	---
---	---	Pa = 50739	Ta = -32339	La = 0	---
---	---	Pb = 901	Tb = -8611	Lb = 0	---
<b>4.00</b>	30.23	44870.00	-34890.00	52000.00	4.75
---	---	---	Ft = 95342	Fp = -40239	---
---	---	Pa = 27738	Ta = -26229	La = 87365	---
---	---	Pb = 17132	Tb = -8661	Lb = -35365	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	3703	-3649	-3608760	27507	27075176	0	345.28	0.09
3	4153	-3963	-6860132	27508	49076464	0	345.28	0.15
4	4620	-4290	-10382284	27509	71090673	0	345.28	0.20
5	5106	-4629	-14185459	27509	93117045	0	345.28	0.24
6	7003	-4984	-18313490	27513	115195897	-0	345.28	0.28
7	8092	-5391	-23289723	27529	139025989	0	345.28	0.32
8	40079	240153	120849258	27573	163599016	0	345.28	0.23
9	72106	31876	188129485	27630	189131847	0	345.28	0.28
10	73314	31449	212867610	27631	214650882	0	345.28	0.30
11	74563	31009	237153511	27631	240154312	0	345.28	0.31
12	97983	-148666	153974920	27669	266275359	0	345.28	0.27
13	121443	-81474	-2796977	27704	292980382	0	345.28	0.24
14	122811	-81953	-75671636	27701	319633394	0	345.28	0.26
15	124219	-82446	-148981055	27697	346233543	0	345.28	0.28
16	140886	-41021	-198996021	29088	373957972	0	345.28	0.29
17	157592	-118367	-240973530	115097	479978697	247154098	345.28	0.35
18	159120	-118899	-345977392	115090	581191738	247154098	345.28	0.41
19	165208	-119452	-451523377	115088	682397222	247154098	345.28	0.47
20	176197	-106983	-554961432	113701	787431307	247154098	345.28	0.52
21	187249	-129295	-663063424	79729	857823582	226699475	345.28	0.39
22	189798	-129891	-780877504	79723	931046652	226699475	345.28	0.41
23	192410	-130502	-899161774	79716	1004165935	226699475	345.28	0.44
24	195086	-131128	-1017918799	79709	1077178453	226699475	345.28	0.46
25	197824	-131769	-1137152292	79702	1150081651	226699475	345.28	0.47
26	200625	-132425	-1256866941	79694	1222873320	226699475	345.28	0.49
27	203490	-133096	-1377068267	79687	1295551533	226699475	345.28	0.50
28	206417	-133782	-1497762502	79680	1368114598	226699475	345.28	0.52
29	209408	-134482	-1618956479	79672	1440561007	226699475	345.28	0.53
30	212462	-135198	-1740657549	79665	1512889406	226699475	345.28	0.54
31	224442	-135937	-1863038437	79664	1585221015	226699475	345.28	0.55
32	228016	-136699	-1984707568	79678	1656795324	226699475	345.28	0.55
33	231661	-137407	-2106327866	79649	1727845006	226699475	345.28	0.50
34	235378	-138156	-2228475208	79642	1798788160	226699475	345.28	0.51
35	239167	-138921	-2351158099	79636	1869623665	226699475	345.28	0.51
36	243027	-139700	-2474385390	79629	1940350575	226699475	345.28	0.52
37	246958	-140494	-2598166063	79623	2010967950	226699475	345.28	0.52
38	250961	-141302	-2722509215	79616	2081474851	226699475	345.28	0.52
39	255035	-142126	-2847424030	79610	2151870334	226699475	345.28	0.52
40	259181	-142964	-2972919768	79603	2222153446	226699475	345.28	0.53
41	263399	-143816	-3099005745	79597	2292323221	226699475	345.28	0.53
42	280465	-144689	-3225816265	79595	2362466050	226699475	345.28	0.53
43	284589	-145538	-3348735065	79586	2430036123	226699475	345.28	0.53
44	288778	-146387	-3472291357	79581	2497522149	226699475	345.28	0.55
45	293034	-147248	-3596377164	79574	2564883791	226699475	345.28	0.55
46	297357	-148122	-3721021153	79568	2632120366	226699475	345.28	0.55
47	301746	-149011	-3846231938	79561	2699231115	226699475	345.28	0.55
48	306201	-149912	-3972018135	79554	2766215251	226699475	345.28	0.55
49	310722	-150828	-4098388352	79548	2833071958	226699475	345.28	0.55
50	315310	-151757	-4225351188	79541	2899800389	226699475	345.28	0.55
51	319964	-152700	-4352915228	79535	2966399667	226699475	345.28	0.55
52	324684	-153656	-4481089043	79528	3032868887	226699475	345.28	0.55
53	329471	-154627	-4609881182	79522	3099207114	226699475	345.28	0.55
54	334324	-155611	-4739300175	79515	3165413387	226699475	345.28	0.54
55	339243	-156608	-4869354529	79509	3231486712	226699475	345.28	0.54
56	344229	-157620	-5000052727	79503	3297426073	226699475	345.28	0.54

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 46 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	0.00	-3340.00	27500.00	0.00
2.00	37.16	0.00	-40950.00	0.00	4.75
---	---	---	Ft = 5441	Fp = -44114	---
---	---	Pa = 4588	Ta = 2924	La = 0	---
---	---	Pb = -4588	Tb = -43874	Lb = 0	---
3.00	33.69	0.00	-40950.00	0.00	-4.75
---	---	---	Ft = -5441	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -40950	Lb = 0	---
4.00	30.23	0.00	-34890.00	52000.00	4.75
---	---	---	Ft = 58016	Fp = 7012	---
---	---	Pa = 4429	Ta = -34276	La = 46598	---
---	---	Pb = -4429	Tb = -614	Lb = 5402	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	-3641	-3524968	27500	26962720	0	345.28	0.09
3	883	-3955	-6694258	27500	48850842	-0	345.28	0.15
4	1350	-4281	-10136185	27500	70751762	-0	345.28	0.20
5	1836	-4620	-13861128	27501	92665156	-0	345.28	0.24
6	3733	-4972	-17918255	27501	114626901	-0	345.28	0.28
7	4822	-5362	-22751284	27503	138203117	-0	345.28	0.32
8	9145	13079	-16412592	27503	161760183	-0	345.28	0.18
9	13508	-3247	-16343688	27504	185425628	0	345.28	0.19
10	14717	-3672	-19894521	27505	209112958	0	345.28	0.20
11	15965	-4112	-23853866	27505	232821416	0	345.28	0.21
12	15859	-18036	-36341408	27505	256516515	0	345.28	0.22
13	15793	-48908	-84180682	27505	280199360	-0	345.28	0.23
14	17161	-49391	-126550082	27505	303902871	-0	345.28	0.24
15	18569	-49888	-169376665	27505	327626241	-0	345.28	0.25
16	23131	-47597	-211174952	28238	351854828	-0	345.28	0.27
17	27733	-126154	-314598464	74106	417759173	131825709	345.28	0.32
18	29261	-126694	-422804177	74106	481161994	131825709	345.28	0.37
19	35349	-127249	-531626405	74107	544661492	131825709	345.28	0.42
20	35558	-131367	-646478877	74339	610324116	131825709	345.28	0.47
21	35829	-129035	-762411305	79508	680664209	134949945	345.28	0.36
22	38378	-129639	-876284202	79508	750579808	134949945	345.28	0.38
23	40990	-130258	-990732448	79509	820515902	134949945	345.28	0.41
24	43666	-130892	-1105765342	79509	890469860	134949945	345.28	0.43
25	46404	-131541	-1221392085	79509	960439014	134949945	345.28	0.44
26	49205	-132205	-1337621787	79509	1030420671	134949945	345.28	0.46
27	52070	-132884	-1454463487	79509	1100412116	134949945	345.28	0.48
28	54997	-133578	-1571926153	79510	1170410616	134949945	345.28	0.49
29	57988	-134288	-1690018697	79510	1240413427	134949945	345.28	0.50
30	61042	-135012	-1808749980	79510	1310417794	134949945	345.28	0.51
31	73022	-135753	-1928290994	79511	1380527591	134949945	345.28	0.52
32	76596	-136499	-2046917033	79512	1449735152	134949945	345.28	0.53
33	80241	-137240	-2165993231	79511	1518816543	134949945	345.28	0.48
34	83958	-137997	-2285715172	79511	1587891857	134949945	345.28	0.49
35	87747	-138770	-2406091141	79511	1656958441	134949945	345.28	0.49
36	91607	-139556	-2527129416	79510	1726013657	134949945	345.28	0.49
37	95538	-140358	-2648838247	79510	1795054865	134949945	345.28	0.50
38	99541	-141174	-2771225866	79510	1864079434	134949945	345.28	0.50
39	103615	-142005	-2894300485	79510	1933084734	134949945	345.28	0.50
40	107761	-142850	-3018070297	79509	2002068140	134949945	345.28	0.51
41	111979	-143710	-3142543479	79509	2071027033	134949945	345.28	0.51
42	129045	-144586	-3267850834	79510	2140036424	134949945	345.28	0.51
43	133169	-145444	-3389471272	79509	2206615176	134949945	345.28	0.51
44	137358	-146299	-3511767096	79509	2273170923	134949945	345.28	0.53
45	141614	-147168	-3634719630	79508	2339684955	134949945	345.28	0.53
46	145937	-148049	-3758336126	79508	2406154999	134949945	345.28	0.53
47	150326	-148945	-3882623823	79507	2472578783	134949945	345.28	0.53
48	154781	-149854	-4007589946	79506	2538954039	134949945	345.28	0.53
49	159302	-150777	-4133241711	79506	2605278501	134949945	345.28	0.53
50	163890	-151713	-4259586322	79505	2671549910	134949945	345.28	0.53
51	168544	-152663	-4386630971	79504	2737766008	134949945	345.28	0.53
52	173264	-153627	-4514382842	79503	2803924542	134949945	345.28	0.53
53	178051	-154604	-4642849105	79503	2870023263	134949945	345.28	0.53
54	182904	-155594	-4772036920	79502	2936059925	134949945	345.28	0.53
55	187823	-156599	-4901953435	79501	3002032285	134949945	345.28	0.53
56	192809	-157617	-5032605787	79500	3067938105	134949945	345.28	0.53

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 47 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6540.00	-6680.00	5000.00	0.00
<b>2.00</b>	37.16	44870.00	-34890.00	52000.00	4.75
---	---	---	Ft = 95342	Fp = -40239	---
---	---	Pa = 27738	Ta = -26229	La = 87365	---
---	---	Pb = 17132	Tb = -8661	Lb = -35365	---
<b>3.00</b>	33.69	51640.00	-40950.00	0.00	-4.75
---	---	---	Ft = 60169	Fp = 8658	---
---	---	Pa = 50739	Ta = -32339	La = 0	---
---	---	Pb = 901	Tb = -8611	Lb = 0	---
<b>4.00</b>	30.23	44870.00	-34890.00	52000.00	4.75
---	---	---	Ft = 95342	Fp = -40239	---
---	---	Pa = 27738	Ta = -26229	La = 87365	---
---	---	Pb = 17132	Tb = -8661	Lb = -35365	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	6973	-6997	-7047250	5017	5184005	0	345.28	0.03
3	7423	-7312	-13123631	5018	9460353	-0	345.28	0.05
4	7890	-7639	-19475051	5019	13754339	0	345.28	0.07
5	8376	-7978	-26111625	5020	18066273	0	345.28	0.08
6	10273	-8334	-33090349	5024	22447667	-0	345.28	0.10
7	11362	-8750	-41337152	5052	27642549	0	345.28	0.12
8	27260	98182	15514303	18077	40744661	0	345.28	0.05
9	43197	-35832	-2134048	92464	131176258	238783602	345.28	0.14
10	44406	-36259	-34492058	92465	211316109	238783602	345.28	0.21
11	45655	-36700	-67262839	92467	291475166	238783602	345.28	0.27
12	81779	-172607	-181364024	86230	369272501	238783602	345.28	0.35
13	117943	-78772	-324941105	57253	417870751	221416721	345.28	0.43
14	119311	-79252	-396277899	57250	470709373	221416721	345.28	0.46
15	120719	-79745	-467978062	57246	523472738	221416721	345.28	0.50
16	137386	-38323	-516409607	58644	577486478	221416721	345.28	0.52
17	154092	-115670	-556817258	144659	709908206	468570819	345.28	0.57
18	155620	-116202	-660179778	144650	837479135	468570819	345.28	0.64
19	161708	-116755	-764038605	144649	965037044	468570819	345.28	0.69
20	172697	-104297	-866000715	143292	1097832588	468570819	345.28	0.75
21	183749	-126599	-972322241	109294	1195357395	448116195	345.28	0.55
22	186298	-127194	-1088314703	109285	1295677901	448116195	345.28	0.57
23	188910	-127805	-1204739256	109277	1395858250	448116195	345.28	0.59
24	191586	-128430	-1321601268	109268	1495894490	448116195	345.28	0.61
25	194324	-129070	-1438906973	109259	1595783218	448116195	345.28	0.62
26	197125	-129725	-1556663336	109250	1695521484	448116195	345.28	0.64
27	199990	-130395	-1674877934	109241	1795106707	448116195	345.28	0.65
28	202917	-131080	-1793558855	109231	1894536605	448116195	345.28	0.66
29	205908	-131780	-1912714622	109222	1993809141	448116195	345.28	0.67
30	208962	-132495	-2032354115	109213	2092922471	448116195	345.28	0.68
31	220942	-133233	-2152666092	109212	2192043428	448116195	345.28	0.68
32	224516	-133997	-2272314128	109230	2290122659	448116195	345.28	0.69
33	228161	-134702	-2391856258	109193	2387491663	448116195	345.28	0.62
34	231878	-135451	-2511908904	109185	2484716884	448116195	345.28	0.62
35	235667	-136214	-2632481422	109176	2581796777	448116195	345.28	0.63
36	239527	-136993	-2753583453	109168	2678730015	448116195	345.28	0.63
37	243458	-137786	-2875224710	109159	2775515282	448116195	345.28	0.63
38	247461	-138594	-2997414953	109151	2872151259	448116195	345.28	0.63
39	251535	-139417	-3120163978	109142	2968636618	448116195	345.28	0.63
40	255681	-140254	-3243481609	109134	3064970015	448116195	345.28	0.63
41	259899	-141106	-3367377679	109126	3161150089	448116195	345.28	0.63
42	276965	-141978	-3491995060	109123	3257295603	448116195	345.28	0.63
43	281089	-142826	-3612802662	109112	3349916882	448116195	345.28	0.63
44	285278	-143675	-3734199428	109106	3442424308	448116195	345.28	0.65
45	289534	-144535	-3856134843	109097	3534763060	448116195	345.28	0.65
46	293857	-145409	-3978617959	109088	3626932158	448116195	345.28	0.65
47	298246	-146297	-4101657747	109079	3718930526	448116195	345.28	0.65
48	302701	-147198	-4225263151	109071	3810757046	448116195	345.28	0.64
49	307222	-148113	-4349443084	109062	3902410562	448116195	345.28	0.64
50	311810	-149041	-4474206429	109054	3993889874	448116195	345.28	0.64
51	316464	-149983	-4599562036	109045	4085193744	448116195	345.28	0.64
52	321184	-150939	-4725518718	109037	4176320894	448116195	345.28	0.64
53	325971	-151909	-4852085256	109028	4267270007	448116195	345.28	0.63
54	330824	-152892	-4979270389	109020	4358039724	448116195	345.28	0.63
55	335743	-153889	-5107082823	109012	4448628652	448116195	345.28	0.63
56	340729	-154900	-5235531224	109004	4539035359	448116195	345.28	0.62

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 48 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6680.00	5000.00	0.00
<b>2.00</b>	37.16	0.00	-34890.00	52000.00	4.75
---	---	---	Ft = 58016	Fp = 7012	---
---	---	Pa = 4429	Ta = -34276	La = 46598	---
---	---	Pb = -4429	Tb = -614	Lb = 5402	---
<b>3.00</b>	33.69	0.00	-40950.00	0.00	-4.75
---	---	---	Ft = -5441	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -40950	Lb = 0	---
<b>4.00</b>	30.23	0.00	-34890.00	52000.00	4.75
---	---	---	Ft = 58016	Fp = 7012	---
---	---	Pa = 4429	Ta = -34276	La = 46598	---
---	---	Pb = -4429	Tb = -614	Lb = 5402	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-6981	-6800326	5000	4913526	0	345.28	0.03
3	883	-7295	-12629279	5000	8916026	0	345.28	0.05
4	1350	-7621	-18733083	5001	12932902	0	345.28	0.06
5	1836	-7960	-25122100	5001	16964511	0	345.28	0.08
6	3733	-8312	-31851788	5002	21052650	0	345.28	0.09
7	4822	-8703	-39562634	5004	25601857	-0	345.28	0.11
8	9065	3557	-39770085	11945	34246466	-0	345.28	0.06
9	13348	-43787	-78618418	51604	83919465	127361100	345.28	0.12
10	14557	-44213	-116594657	51604	128122261	127361100	345.28	0.16
11	15805	-44653	-154980200	51605	172357974	127361100	345.28	0.21
12	15779	-50658	-197165918	52569	217159554	127361100	345.28	0.24
13	15793	-46188	-237460028	57006	266614861	130013714	345.28	0.28
14	17161	-46671	-277575444	57006	315442136	130013714	345.28	0.31
15	18569	-47168	-318146339	57007	364298286	130013714	345.28	0.33
16	23131	-44877	-357694550	57740	413688798	130013714	345.28	0.36
17	27733	-123434	-458871814	103608	504782712	261839424	345.28	0.42
18	29261	-123974	-564827636	103608	593380854	261839424	345.28	0.48
19	35349	-124530	-671404002	103610	682108736	261839424	345.28	0.53
20	35558	-128648	-783967976	103843	773786112	261839424	345.28	0.58
21	35829	-126316	-897581042	109011	870032382	264963660	345.28	0.44
22	38378	-126919	-1009133400	109011	965862886	264963660	345.28	0.46
23	40990	-127538	-1121259826	109011	1061721723	264963660	345.28	0.49
24	43666	-128172	-1233969530	109012	1157605355	264963660	345.28	0.51
25	46404	-128821	-1347271639	109012	1253510192	264963660	345.28	0.53
26	49205	-129485	-1461175201	109012	1349432603	264963660	345.28	0.54
27	52070	-130165	-1575689199	109012	1445368923	264963660	345.28	0.56
28	54997	-130859	-1690822560	109013	1541315463	264963660	345.28	0.57
29	57988	-131568	-1806584157	109013	1637268511	264963660	345.28	0.58
30	61042	-132293	-1922982822	109013	1733224339	264963660	345.28	0.59
31	73022	-133034	-2040194268	109014	1829322056	264963660	345.28	0.60
32	76596	-133780	-2156527809	109016	1924180264	264963660	345.28	0.61
33	80241	-134521	-2273304612	109014	2018869970	264963660	345.28	0.55
34	83958	-135278	-2390725545	109014	2113552073	264963660	345.28	0.56
35	87747	-136050	-2508798894	109014	2208222971	264963660	345.28	0.56
36	91607	-136837	-2627532939	109014	2302879081	264963660	345.28	0.56
37	95538	-137639	-2746935937	109014	2397516821	264963660	345.28	0.57
38	99541	-138455	-2867016131	109013	2492132610	264963660	345.28	0.57
39	103615	-139285	-2987781742	109013	2586722877	264963660	345.28	0.57
40	107761	-140131	-3109240979	109013	2681284053	264963660	345.28	0.57
41	111979	-140990	-3231402032	109012	2775812576	264963660	345.28	0.57
42	129045	-141867	-3354397985	109013	2870409354	264963660	345.28	0.58
43	133169	-142725	-3473784660	109012	2961675768	264963660	345.28	0.58
44	137358	-143580	-3593845452	109012	3052911462	264963660	345.28	0.60
45	141614	-144448	-3714561240	109011	3144091218	264963660	345.28	0.60
46	145937	-145330	-3835939318	109010	3235211935	264963660	345.28	0.60
47	150326	-146225	-3957986962	109009	3326270513	264963660	345.28	0.60
48	154781	-147134	-4080711437	109008	3417263858	264963660	345.28	0.60
49	159302	-148057	-4204119995	109007	3508188881	264963660	345.28	0.60
50	163890	-148993	-4328219880	109007	3599042498	264963660	345.28	0.60
51	168544	-149943	-4453018320	109006	3689821629	264963660	345.28	0.59
52	173264	-150907	-4578522537	109005	3780523203	264963660	345.28	0.59
53	178051	-151884	-4704739737	109004	3871144150	264963660	345.28	0.59
54	182904	-152874	-4831677117	109003	3961681408	264963660	345.28	0.59
55	187823	-153879	-4959341861	109002	4052131919	264963660	345.28	0.59
56	192809	-154897	-5087741144	109001	4142492630	264963660	345.28	0.59

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 49 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	5430.00	-3020.00	36000.00	0.00
<b>2.00</b>	37.16	69900.00	-29920.00	0.00	4.75
---	---	---	Ft = 92785	Fp = -80224	---
---	---	Pa = 78244	Ta = 49869	La = 0	---
---	---	Pb = -8344	Tb = -79789	Lb = 0	---
<b>3.00</b>	33.69	69900.00	-29920.00	0.00	-4.75
---	---	---	Ft = 84834	Fp = -15761	---
---	---	Pa = 71539	Ta = -45596	La = 0	---
---	---	Pb = -1639	Tb = 15676	Lb = 0	---
<b>4.00</b>	30.23	60080.00	-25130.00	63000.00	4.75
---	---	---	Ft = 110696	Fp = -42402	---
---	---	Pa = 47731	Ta = -7612	La = 99586	---
---	---	Pb = 12349	Tb = -17518	Lb = -36586	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Usa
2	5863	-3105	-3100596	36019	35538099	0	345.28	0.12
3	6313	-3184	-5710463	36020	64432805	0	345.28	0.20
4	6780	-3266	-8390828	36022	93342630	0	345.28	0.26
5	7266	-3351	-11144217	36023	122266138	-0	345.28	0.32
6	9163	-3442	-13990612	36029	151254451	-0	345.28	0.37
7	10252	-3557	-17267477	36064	182625816	0	345.28	0.42
8	51403	317530	174943436	36160	215246161	0	345.28	0.31
9	92594	45991	267675565	36286	249470158	-0	345.28	0.38
10	93802	45884	305232054	36286	283655825	0	345.28	0.41
11	95051	45775	342590201	36285	317799932	0	345.28	0.42
12	128837	-197259	235128406	36379	353108802	0	345.28	0.37
13	162663	-79941	50035994	36468	389516315	0	345.28	0.33
14	164031	-80058	-20570017	36459	425810821	-0	345.28	0.33
15	165439	-80177	-91291768	36448	461990577	0	345.28	0.35
16	190832	-1457	-117016531	38064	499746311	0	345.28	0.36
17	216266	-72429	-67895078	136131	627021104	281727774	345.28	0.41
18	217793	-72555	-132930428	136112	748729368	281727774	345.28	0.47
19	223882	-72689	-198131649	136102	870351563	281727774	345.28	0.52
20	232479	-63943	-261752306	134784	997505878	281727774	345.28	0.56
21	241139	-90495	-338653049	99502	1087459446	260566795	345.28	0.41
22	243688	-90637	-421370488	99485	1180258628	260566795	345.28	0.43
23	246300	-90782	-504167477	99468	1272865616	260566795	345.28	0.45
24	248976	-90931	-587036760	99451	1365276669	260566795	345.28	0.46
25	251714	-91084	-669972391	99434	1457488806	260566795	345.28	0.47
26	254515	-91240	-752969541	99416	1549499668	260566795	345.28	0.48
27	257380	-91400	-836024341	99399	1641307406	260566795	345.28	0.49
28	260307	-91564	-919133742	99382	1732910585	260566795	345.28	0.50
29	263298	-91731	-1002295400	99364	1824308102	260566795	345.28	0.51
30	266352	-91902	-1085507576	99347	1915499123	260566795	345.28	0.52
31	278332	-92084	-1168875926	99341	2006640005	260566795	345.28	0.52
32	281906	-92287	-1251527861	99370	2096905684	260566795	345.28	0.53
33	285551	-92436	-1333780972	99308	2186325304	260566795	345.28	0.48
34	289268	-92616	-1416090209	99293	2275562810	260566795	345.28	0.48
35	293057	-92800	-1498455708	99279	2364617632	260566795	345.28	0.48
36	296917	-92988	-1580877999	99264	2453489552	260566795	345.28	0.48
37	300848	-93179	-1663357787	99250	2542178359	260566795	345.28	0.48
38	304851	-93375	-1745895929	99236	2630683838	260566795	345.28	0.48
39	308925	-93574	-1828493406	99222	2719005758	260566795	345.28	0.48
40	313071	-93776	-1911151307	99208	2807143866	260566795	345.28	0.48
41	317289	-93983	-1993870815	99194	2895097877	260566795	345.28	0.48
42	334355	-94197	-2076734343	99188	2982979147	260566795	345.28	0.48
43	338479	-94401	-2156750281	99171	3067589037	260566795	345.28	0.48
44	342668	-94608	-2236852359	99161	3152064990	260566795	345.28	0.50
45	346924	-94817	-2316998224	99147	3236346670	260566795	345.28	0.50
46	351247	-95028	-2397189355	99133	3320434093	260566795	345.28	0.50
47	355636	-95244	-2477427203	99119	3404327131	260566795	345.28	0.50
48	360091	-95462	-2557713240	99106	3488025600	260566795	345.28	0.50
49	364612	-95685	-2638048948	99093	3571529261	260566795	345.28	0.49
50	369200	-95910	-2718435821	99080	3654837817	260566795	345.28	0.49
51	373854	-96140	-2798875357	99067	3737950918	260566795	345.28	0.49
52	378574	-96372	-2879369052	99054	3820868157	260566795	345.28	0.49
53	383361	-96609	-2959918405	99042	3903589073	260566795	345.28	0.49
54	388214	-96848	-3040524906	99030	3986113151	260566795	345.28	0.48
55	393133	-97092	-3121190041	99018	4068439825	260566795	345.28	0.48
56	398119	-97339	-3201915285	99006	4150568476	260566795	345.28	0.48

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 50 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-3020.00	36000.00	0.00
<b>2.00</b>	37.16	0.00	-29920.00	0.00	4.75
---	---	---	Ft = 3975	Fp = -32231	---
---	---	Pa = 3352	Ta = 2137	La = 0	---
---	---	Pb = -3352	Tb = -32057	Lb = 0	---
<b>3.00</b>	33.69	0.00	-29920.00	0.00	-4.75
---	---	---	Ft = -3975	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -29920	Lb = 0	---
<b>4.00</b>	30.23	0.00	-25130.00	63000.00	4.75
---	---	---	Ft = 55993	Fp = 16919	---
---	---	Pa = 9245	Ta = -25768	La = 48844	---
---	---	Pb = -9245	Tb = 638	Lb = 14156	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-3095	-3027780	36000	35296104	0	345.28	0.12
3	883	-3173	-5567824	36000	63948530	0	345.28	0.19
4	1350	-3255	-8181585	36001	92617123	0	345.28	0.26
5	1836	-3339	-10871789	36001	121301435	-0	345.28	0.31
6	3733	-3427	-13667401	36002	150046712	-0	345.28	0.36
7	4822	-3526	-16850663	36004	180897300	-0	345.28	0.41
8	8527	10139	-11697599	36003	211702485	-0	345.28	0.23
9	12272	-1591	-10938152	36005	242623882	-0	345.28	0.25
10	13481	-1698	-12648157	36005	273573417	0	345.28	0.26
11	14729	-1807	-14475479	36006	304550068	-0	345.28	0.27
12	15241	-11763	-22361668	36006	335529246	0	345.28	0.28
13	15793	-34094	-55899299	36006	366511252	-0	345.28	0.29
14	17161	-34215	-85241568	36006	397518538	-0	345.28	0.30
15	18569	-34339	-114713229	36007	428549999	-0	345.28	0.31
16	25540	-22878	-137765372	36776	460192180	-0	345.28	0.31
17	32550	-90288	-197689666	84855	535594655	138179764	345.28	0.35
18	34077	-90423	-274978652	84855	608372263	138179764	345.28	0.39
19	40166	-90562	-352482767	84857	681265202	138179764	345.28	0.43
20	37966	-97996	-436874803	85460	756833625	138179764	345.28	0.46
21	35829	-90215	-521396331	99010	845041546	146367139	345.28	0.35
22	38378	-90366	-600754278	99011	932105272	146367139	345.28	0.37
23	40990	-90520	-680271224	99011	1019194528	146367139	345.28	0.39
24	43666	-90678	-759947752	99011	1106306039	146367139	345.28	0.40
25	46404	-90840	-839784380	99012	1193436486	146367139	345.28	0.42
26	49205	-91006	-919781576	99012	1280582518	146367139	345.28	0.43
27	52070	-91175	-999939762	99012	1367740756	146367139	345.28	0.44
28	54997	-91349	-1080259326	99012	1454907798	146367139	345.28	0.45
29	57988	-91525	-1160740619	99012	1542080229	146367139	345.28	0.46
30	61042	-91706	-1241383969	99012	1629254619	146367139	345.28	0.47
31	73022	-91892	-1322299203	99014	1716560209	146367139	345.28	0.48
32	76596	-92079	-1402321151	99016	1802742175	146367139	345.28	0.48
33	80241	-92262	-1482374908	99014	1888767176	146367139	345.28	0.44
34	83958	-92451	-1562587107	99013	1974784635	146367139	345.28	0.44
35	87747	-92643	-1642957973	99013	2060791250	146367139	345.28	0.44
36	91607	-92839	-1723487732	99013	2146783734	146367139	345.28	0.45
37	95538	-93039	-1804176602	99013	2232758805	146367139	345.28	0.45
38	99541	-93242	-1885024797	99013	2318713184	146367139	345.28	0.45
39	103615	-93449	-1966032526	99012	2404643599	146367139	345.28	0.45
40	107761	-93660	-2047199997	99012	2490546781	146367139	345.28	0.45
41	111979	-93874	-2128527410	99011	2576419470	146367139	345.28	0.45
42	129045	-94093	-2210097083	99012	2662355011	146367139	345.28	0.45
43	133169	-94306	-2288978806	99011	2745263794	146367139	345.28	0.45
44	137358	-94519	-2368014246	99011	2828143957	146367139	345.28	0.47
45	141614	-94735	-2447186221	99010	2910972216	146367139	345.28	0.47
46	145937	-94955	-2526494918	99009	2993745742	146367139	345.28	0.47
47	150326	-95178	-2605940525	99009	3076461705	146367139	345.28	0.47
48	154781	-95404	-2685523226	99008	3159117281	146367139	345.28	0.47
49	159302	-95634	-2765243208	99007	3241709650	146367139	345.28	0.47
50	163890	-95867	-2845100659	99006	3324235999	146367139	345.28	0.46
51	168544	-96103	-2925095765	99005	3406693516	146367139	345.28	0.46
52	173264	-96343	-3005228713	99004	3489079397	146367139	345.28	0.46
53	178051	-96586	-3085499690	99003	3571390841	146367139	345.28	0.46
54	182904	-96832	-3165908884	99002	3653625051	146367139	345.28	0.46
55	187823	-97082	-3246456481	99001	3735779237	146367139	345.28	0.46
56	192809	-97335	-3327142669	99001	3817850611	146367139	345.28	0.45

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 51 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	10860.00	-6030.00	8000.00	0.00
<b>2.00</b>	37.16	60080.00	-25130.00	63000.00	4.75
--	--	--	Ft = 110696	Fp = -42402	--
--	--	Pa = 47731	Ta = -7612	La = 99586	--
--	--	Pb = 12349	Tb = -17518	Lb = -36586	--
<b>3.00</b>	33.69	69900.00	-29920.00	0.00	-4.75
--	--	--	Ft = 84834	Fp = -15761	--
--	--	Pa = 71539	Ta = -45596	La = 0	--
--	--	Pb = -1639	Tb = 15676	Lb = 0	--
<b>4.00</b>	30.23	60080.00	-25130.00	63000.00	4.75
--	--	--	Ft = 110696	Fp = -42402	--
--	--	Pa = 47731	Ta = -7612	La = 99586	--
--	--	Pb = 12349	Tb = -17518	Lb = -36586	--

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	11293	-6130	-6251063	8047	8423631	0	345.28	0.04
3	11743	-6209	-11458513	8049	15388238	-0	345.28	0.06
4	12210	-6291	-16740135	8050	22373762	0	345.28	0.08
5	12696	-6376	-22098233	8052	29380242	0	345.28	0.10
6	14593	-6467	-27565005	8058	36470056	0	345.28	0.11
7	15682	-6600	-33899164	8125	44917931	0	345.28	0.13
8	41577	183578	75638524	23000	62705307	-0	345.28	0.11
9	67511	-14489	90799132	107853	169240731	272186353	345.28	0.20
10	68719	-14596	76771078	107854	264030508	272186353	345.28	0.27
11	69968	-14706	62604900	107855	358821852	272186353	345.28	0.33
12	114100	-221231	-74547283	101484	451859746	272186353	345.28	0.39
13	158273	-78218	-249149904	71584	515340936	254219745	345.28	0.47
14	159641	-78333	-319315397	71574	583140550	254219745	345.28	0.51
15	161049	-78451	-389503245	71562	650790151	254219745	345.28	0.54
16	186442	263	-414751018	73194	720255141	254219745	345.28	0.56
17	211876	-70716	-365189594	171275	879453505	535947519	345.28	0.61
18	213403	-70838	-429687069	171252	1033013819	535947519	345.28	0.67
19	219492	-70971	-494279961	171240	1186459590	535947519	345.28	0.73
20	228089	-62251	-557619150	169986	1347321267	535947519	345.28	0.79
21	236749	-88774	-633786823	134639	1469946943	514786541	345.28	0.57
22	239298	-88914	-715716181	134618	1595360081	514786541	345.28	0.59
23	241910	-89057	-797673832	134597	1720520858	514786541	345.28	0.61
24	244586	-89203	-879656104	134575	1845424180	514786541	345.28	0.63
25	247324	-89354	-961660288	134554	1970065956	514786541	345.28	0.64
26	250125	-89507	-1043684491	134532	2094442919	514786541	345.28	0.65
27	252990	-89665	-1125727502	134510	2218552476	514786541	345.28	0.66
28	255917	-89826	-1207788691	134488	2342392581	514786541	345.28	0.67
29	258908	-89992	-1289867918	134466	2465961631	514786541	345.28	0.68
30	261962	-90161	-1371965450	134444	2589258376	514786541	345.28	0.68
31	273942	-90341	-1454204093	134437	2712493612	514786541	345.28	0.69
32	277516	-90547	-1535768290	134474	2834536231	514786541	345.28	0.69
33	281161	-90689	-1616853884	134395	2955456701	514786541	345.28	0.62
34	284878	-90868	-1697972644	134376	3076136598	514786541	345.28	0.62
35	288667	-91050	-1779125824	134358	3196575053	514786541	345.28	0.62
36	292527	-91236	-1860315016	134339	3316771646	514786541	345.28	0.62
37	296458	-91426	-1941541901	134321	3436725973	514786541	345.28	0.62
38	300461	-91620	-2022808234	134303	3556437622	514786541	345.28	0.62
39	304535	-91817	-2104115825	134285	3675906162	514786541	345.28	0.62
40	308681	-92018	-2185466527	134267	3795131134	514786541	345.28	0.62
41	312899	-92223	-2266862225	134250	3914112039	514786541	345.28	0.62
42	329965	-92437	-2348394678	134242	4032999044	514786541	345.28	0.62
43	334089	-92639	-2427106430	134220	4147466164	514786541	345.28	0.61
44	338278	-92845	-2505892798	134207	4261755479	514786541	345.28	0.64
45	342534	-93052	-2584707885	134189	4375786528	514786541	345.28	0.63
46	346857	-93262	-2663553690	134171	4489559225	514786541	345.28	0.63
47	351246	-93476	-2742432141	134154	4603073296	514786541	345.28	0.63
48	355701	-93694	-2821345151	134137	4716328397	514786541	345.28	0.63
49	360222	-93914	-2900294616	134120	4829324109	514786541	345.28	0.62
50	364810	-94139	-2979282412	134103	4942059940	514786541	345.28	0.62
51	369464	-94367	-3058310392	134086	5054535325	514786541	345.28	0.62
52	374184	-94598	-3137380390	134070	5166749628	514786541	345.28	0.61
53	378971	-94833	-3216494209	134054	5278702141	514786541	345.28	0.61
54	383824	-95072	-3295653632	134038	5390392084	514786541	345.28	0.60
55	388743	-95314	-3374860414	134023	5501818611	514786541	345.28	0.60
56	393729	-95559	-3454116280	134008	5612980807	514786541	345.28	0.60

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 52 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 3 x 31.5 - (-) "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6030.00	8000.00	0.00
<b>2.00</b>	37.16	0.00	-25130.00	63000.00	4.75
---	---	---	Ft = 55993	Fp = 16919	---
---	---	Pa = 9245	Ta = -25768	La = 48844	---
---	---	Pb = -9245	Tb = 638	Lb = 14156	---
<b>3.00</b>	33.69	0.00	-29920.00	0.00	-4.75
---	---	---	Ft = -3975	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -29920	Lb = 0	---
<b>4.00</b>	30.23	0.00	-25130.00	63000.00	4.75
---	---	---	Ft = 55993	Fp = 16919	---
---	---	Pa = 9245	Ta = -25768	La = 48844	---
---	---	Pb = -9245	Tb = 638	Lb = 14156	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-6105	-5979101	8000	7856511	0	345.28	0.03
3	883	-6183	-10915161	8000	14250061	-0	345.28	0.05
4	1350	-6265	-15926477	8001	20661098	-0	345.28	0.07
5	1836	-6349	-21015743	8001	27090007	-0	345.28	0.09
6	3733	-6438	-26216258	8002	33587521	-0	345.28	0.10
7	4822	-6536	-31983052	8005	40746094	-0	345.28	0.12
8	11474	26605	-17511154	15282	52288450	-0	345.28	0.06
9	18165	-32509	-42734884	56854	106951519	133499958	345.28	0.12
10	19374	-32615	-70830767	56855	155883979	133499958	345.28	0.16
11	20622	-32725	-99043690	56855	204853656	133499958	345.28	0.20
12	18188	-44083	-134233916	59381	255226058	133499958	345.28	0.24
13	15793	-32315	-163044887	71008	317716689	140451402	345.28	0.28
14	17161	-32435	-190915175	71008	378518843	140451402	345.28	0.31
15	18569	-32559	-218913699	71009	439356056	140451402	345.28	0.34
16	25540	-21099	-240500932	71779	500854493	140451402	345.28	0.36
17	32550	-88509	-298966397	119859	606161956	278631166	345.28	0.42
18	34077	-88644	-374793214	119859	708851440	278631166	345.28	0.47
19	40166	-88783	-450837412	119861	811693259	278631166	345.28	0.51
20	37966	-96217	-533741138	120466	918128406	278631166	345.28	0.56
21	35829	-88436	-616748237	134014	1037058112	286818541	345.28	0.42
22	38378	-88586	-694590968	134014	1154854059	286818541	345.28	0.45
23	40990	-88741	-772591832	134015	1272684952	286818541	345.28	0.47
24	43666	-88899	-850751346	134015	1390546474	286818541	345.28	0.49
25	46404	-89061	-929069972	134015	1508434247	286818541	345.28	0.51
26	49205	-89227	-1007548129	134016	1626343835	286818541	345.28	0.52
27	52070	-89396	-1086186198	134016	1744270765	286818541	345.28	0.53
28	54997	-89569	-1164984529	134016	1862210525	286818541	345.28	0.55
29	57988	-89746	-1243943445	134016	1980158577	286818541	345.28	0.56
30	61042	-89927	-1323063249	134016	2098110366	286818541	345.28	0.57
31	73022	-90113	-1402457246	134018	2216235281	286818541	345.28	0.57
32	76596	-90299	-1480982508	134021	2332835181	286818541	345.28	0.58
33	80241	-90483	-1559534538	134018	2449230129	286818541	345.28	0.53
34	83958	-90672	-1638243869	134018	2565616087	286818541	345.28	0.53
35	87747	-90864	-1717110720	134018	2681988647	286818541	345.28	0.53
36	91607	-91060	-1796135317	134017	2798343418	286818541	345.28	0.54
37	95538	-91260	-1875317879	134017	2914676013	286818541	345.28	0.54
38	99541	-91463	-1954658621	134017	3030982049	286818541	345.28	0.54
39	103615	-91670	-2034157756	134016	3147257147	286818541	345.28	0.54
40	107761	-91881	-2113815497	134016	3263496936	286818541	345.28	0.54
41	111979	-92095	-2193632052	134015	3379697053	286818541	345.28	0.54
42	129045	-92313	-2273691458	134016	3495980598	286818541	345.28	0.54
43	133169	-92527	-2351113461	134015	3608171017	286818541	345.28	0.54
44	137358	-92740	-2428688254	134014	3720324074	286818541	345.28	0.57
45	141614	-92956	-2506398312	134014	3832408978	286818541	345.28	0.56
46	145937	-93175	-2584243849	134013	3944421926	286818541	345.28	0.56
47	150326	-93398	-2662225073	134012	4056359113	286818541	345.28	0.56
48	154781	-93624	-2740342195	134010	4168216745	286818541	345.28	0.56
49	159302	-93854	-2818595423	134009	4279991030	286818541	345.28	0.56
50	163890	-94087	-2896984967	134008	4391678185	286818541	345.28	0.56
51	168544	-94323	-2975511037	134007	4503274434	286818541	345.28	0.56
52	173264	-94563	-3054173842	134006	4614776006	286818541	345.28	0.55
53	178051	-94806	-3132973591	134005	4726179137	286818541	345.28	0.55
54	182904	-95052	-3211910495	134003	4837480070	286818541	345.28	0.55
55	187823	-95302	-3290984762	134002	4948675052	286818541	345.28	0.55
56	192809	-95555	-3370196600	134001	5059760339	286818541	345.28	0.54

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 53 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	3530.00	3520.00	31000.00	0.00
<b>2.00</b>	37.16	54320.00	38720.00	0.00	4.75
---	---	---	Ft = 63870	Fp = 4416	---
---	---	Pa = 53861	Ta = 34328	La = 0	---
---	---	Pb = 459	Tb = 4392	Lb = 0	---
<b>3.00</b>	33.69	54320.00	38720.00	0.00	-4.75
---	---	---	Ft = 74159	Fp = -79007	---
---	---	Pa = 62537	Ta = -39858	La = 0	---
---	---	Pb = -8217	Tb = 78578	Lb = 0	---
<b>4.00</b>	30.23	54320.00	38720.00	0.00	4.75
---	---	---	Ft = 63870	Fp = 4416	---
---	---	Pa = 53861	Ta = 34328	La = 0	---
---	---	Pb = 459	Tb = 4392	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	3963	3832	3841606	31005	30476771	0	345.28	0.10
3	4413	4146	7298037	31005	55227716	0	345.28	0.17
4	4880	4474	11030947	31006	79986773	0	345.28	0.23
5	5366	4813	15050765	31006	104752825	0	345.28	0.27
6	7263	5169	19417763	31008	129553104	0	345.28	0.31
7	8352	5583	24779909	31019	156194846	0	345.28	0.36
8	37311	227164	166236818	31042	183256353	0	345.28	0.27
9	66311	40850	241184320	31074	210878277	0	345.28	0.33
10	67519	41276	278629858	31074	238473947	-0	345.28	0.36
11	68768	41717	316432587	31074	266041261	-0	345.28	0.37
12	102454	-147291	243640904	31108	294160646	-0	345.28	0.33
13	136181	7335	164280675	31141	322780021	-0	345.28	0.30
14	137549	7813	175520570	31138	351315627	-0	345.28	0.30
15	138957	8304	187168836	31135	379766432	-0	345.28	0.31
16	164126	110695	259001805	31154	408484408	-0	345.28	0.33
17	189335	122338	508414318	31171	437432897	-0	345.28	0.43
18	190863	122865	618547181	31164	466259389	-0	345.28	0.47
19	196951	123414	729150549	31161	495021414	-0	345.28	0.51
20	199604	124716	846440872	31227	525589960	-0	345.28	0.54
21	202319	128952	965273223	31149	554924278	-0	345.28	0.40
22	204868	129544	1083886223	31144	584179942	-0	345.28	0.42
23	207480	130151	1202912975	31139	613357168	-0	345.28	0.44
24	210156	130773	1322357987	31134	642456687	-0	345.28	0.45
25	212894	131410	1442226806	31129	671479239	-0	345.28	0.47
26	215695	132062	1562525852	31124	700425562	-0	345.28	0.48
27	218560	132729	1683262285	31119	729296376	-0	345.28	0.49
28	221487	133411	1804443882	31114	758092381	-0	345.28	0.50
29	224478	134108	1926078937	31109	786814245	-0	345.28	0.51
30	227532	134820	2048176184	31104	815462603	-0	345.28	0.51
31	239512	135557	2170927494	31103	844098764	-0	345.28	0.52
32	243086	136324	2293019299	31111	872464264	-0	345.28	0.53
33	246731	137019	2414924007	31093	900546022	-0	345.28	0.48
34	250448	137766	2537320117	31089	928565239	-0	345.28	0.48
35	254237	138527	2660217020	31084	956522160	-0	345.28	0.48
36	258097	139303	2783624466	31080	984417086	-0	345.28	0.49
37	262028	140094	2907552292	31076	1012250274	-0	345.28	0.49
38	266031	140900	3032010401	31072	1040021940	-0	345.28	0.49
39	270105	141720	3157008742	31067	1067732257	-0	345.28	0.49
40	274251	142555	3282557298	31063	1095381359	-0	345.28	0.49
41	278469	143405	3408666074	31059	1122969341	-0	345.28	0.49
42	295535	144276	3535480529	31058	1150537995	-0	345.28	0.49
43	299659	145122	3658387638	31052	1177075941	-0	345.28	0.49
44	303848	145969	3781871267	31049	1203569255	-0	345.28	0.51
45	308104	146827	3905875986	31045	1229998095	-0	345.28	0.51
46	312427	147699	4030411053	31041	1256362573	-0	345.28	0.51
47	316816	148584	4155485629	31037	1282662739	-0	345.28	0.51
48	321271	149483	4281108847	31033	1308898611	-0	345.28	0.51
49	325792	150396	4407289811	31029	1335070175	-0	345.28	0.51
50	330380	151323	4534037590	31025	1361177388	-0	345.28	0.51
51	335034	152263	4661361217	31021	1387220178	-0	345.28	0.51
52	339754	153217	4789269690	31017	1413198444	-0	345.28	0.51
53	344541	154185	4917771965	31013	1439112061	-0	345.28	0.51
54	349394	155167	5046876961	31009	1464960876	-0	345.28	0.50
55	354313	156162	5176593552	31006	1490744715	-0	345.28	0.50
56	359299	157171	5306930574	31002	1516463376	-0	345.28	0.50

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 54 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	3520.00	31000.00	0.00
<b>2.00</b>	37.16	0.00	38720.00	0.00	4.75
---	---	---	Ft = -5145	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38720	Lb = 0	---
<b>3.00</b>	33.69	0.00	38720.00	0.00	-4.75
---	---	---	Ft = 5145	Fp = -41711	---
---	---	Pa = 4338	Ta = -2765	La = 0	---
---	---	Pb = -4338	Tb = 41485	Lb = 0	---
<b>4.00</b>	30.23	0.00	38720.00	0.00	4.75
---	---	---	Ft = -5145	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38720	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Usa
2	433	3821	3700646	31000	30389925	0	345.28	0.10
3	883	4135	7011563	31000	55054818	0	345.28	0.17
4	1350	4461	10594337	31000	79729395	0	345.28	0.22
5	1836	4800	14459312	31000	104413126	0	345.28	0.27
6	3733	5152	18653361	31001	129132572	0	345.28	0.31
7	4822	5542	23621850	31002	155606028	0	345.28	0.36
8	6851	5937	28847797	31001	182017753	0	345.28	0.20
9	8920	6349	34479616	31002	208463346	0	345.28	0.21
10	10128	6774	40504512	31002	234924163	0	345.28	0.23
11	11377	7214	46935323	31002	261399010	0	345.28	0.23
12	15734	1340	50154139	31003	287937340	0	345.28	0.24
13	20132	44094	86504897	31003	314533309	-0	345.28	0.25
14	21500	44577	124876800	31004	341134955	-0	345.28	0.27
15	22908	45074	163701853	31004	367741008	-0	345.28	0.28
16	23086	53863	207855742	31004	394332968	-0	345.28	0.29
17	23305	87595	288579503	31004	420911370	0	345.28	0.31
18	24832	88135	363928810	31004	447492155	0	345.28	0.34
19	30921	88691	439888311	31004	474125995	0	345.28	0.36
20	33343	90919	519840093	31007	501665550	0	345.28	0.38
21	35829	128584	635904087	31005	529038754	0	345.28	0.29
22	38378	129188	749325741	31005	556420322	0	345.28	0.31
23	40990	129807	863323079	31005	583808918	0	345.28	0.33
24	43666	130441	977905553	31005	611203219	0	345.28	0.35
25	46404	131090	1093082505	31005	638601911	0	345.28	0.36
26	49205	131754	1208863183	31005	666003685	0	345.28	0.38
27	52070	132433	1325256753	31005	693407239	0	345.28	0.39
28	54997	133127	1442272307	31005	720811280	0	345.28	0.40
29	57988	133837	1559918875	31005	748214518	0	345.28	0.41
30	61042	134561	1678205427	31005	775615675	0	345.28	0.42
31	73022	135302	1797295948	31006	803069006	0	345.28	0.43
32	76596	136048	1915471793	31007	830180825	0	345.28	0.44
33	80241	136789	2034107208	31006	857224813	0	345.28	0.40
34	83958	137546	2153389813	31006	884263405	0	345.28	0.41
35	87747	138319	2273327979	31006	911295417	0	345.28	0.41
36	91607	139105	2393930064	31006	938319675	0	345.28	0.42
37	95538	139907	2515204400	31006	965335012	0	345.28	0.42
38	99541	140723	2637159296	31005	992340267	0	345.28	0.42
39	103615	141554	2759803039	31005	1019334284	0	345.28	0.43
40	107761	142399	2883143897	31005	1046315913	0	345.28	0.43
41	111979	143259	3007190118	31005	1073284009	0	345.28	0.43
42	129045	144135	3132068322	31005	1100275876	0	345.28	0.43
43	133169	144993	3253277653	31005	1126310768	0	345.28	0.44
44	137358	145848	3375164094	31005	1152333273	0	345.28	0.46
45	141614	146717	3497709916	31004	1178334294	0	345.28	0.46
46	145937	147599	3620922415	31004	1204312882	0	345.28	0.46
47	150326	148494	3744808873	31004	1230268085	0	345.28	0.46
48	154781	149404	3869376556	31003	1256198954	0	345.28	0.46
49	159302	150326	3994632726	31003	1282104541	0	345.28	0.46
50	163890	151263	4120584628	31003	1307983898	0	345.28	0.46
51	168544	152213	4247239501	31002	1333836079	0	345.28	0.46
52	173264	153176	4374604570	31002	1359660139	0	345.28	0.46
53	178051	154153	4502687049	31001	1385455135	0	345.28	0.46
54	182904	155144	4631494142	31001	1411220123	0	345.28	0.46
55	187823	156149	4761033043	31001	1436954162	0	345.28	0.46
56	192809	157167	4891310930	31000	1462656314	0	345.28	0.46

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 55 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	7060.00	7040.00	6000.00	0.00
<b>2.00</b>	37.16	43490.00	30190.00	81000.00	4.75
---	---	---	Ft = 78723	Fp = 25620	---
---	---	Pa = 46906	Ta = 13654	La = 61731	---
---	---	Pb = -3416	Tb = 16536	Lb = 19269	---
<b>3.00</b>	33.69	54320.00	38720.00	0.00	-4.75
---	---	---	Ft = 74159	Fp = -79007	---
---	---	Pa = 62537	Ta = -39858	La = 0	---
---	---	Pb = -8217	Tb = 78578	Lb = 0	---
<b>4.00</b>	30.23	54320.00	38720.00	0.00	4.75
---	---	---	Ft = 63870	Fp = 4416	---
---	---	Pa = 53861	Ta = 34328	La = 0	---
---	---	Pb = 459	Tb = 4392	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	7493	7360	7404187	6017	6142440	0	345.28	0.03
3	7943	7674	13769894	6018	11189570	-0	345.28	0.06
4	8410	8001	20409539	6019	16251498	-0	345.28	0.08
5	8896	8341	27333153	6020	21328360	-0	345.28	0.09
6	10793	8696	34594803	6024	26463941	-0	345.28	0.11
7	11882	9115	43134386	6053	32405000	-0	345.28	0.13
8	37364	199701	168575923	15279	44288015	-0	345.28	0.20
9	62886	23669	221796630	67869	111247649	168721692	345.28	0.26
10	64094	24095	244324168	67870	170930587	168721692	345.28	0.29
11	65343	24536	267214450	67871	230619331	168721692	345.28	0.32
12	97092	-167078	177692313	71375	293394820	168721692	345.28	0.30
13	128881	2273	94385240	87265	373781027	178184104	345.28	0.32
14	130249	2751	100698230	87260	451742951	178184104	345.28	0.35
15	131657	3243	107440082	87255	529615892	178184104	345.28	0.39
16	156826	105630	174318321	87294	608105769	178184104	345.28	0.43
17	182035	117269	418736823	87329	687148203	178184104	345.28	0.52
18	183563	117798	523906689	87318	766015507	178184104	345.28	0.56
19	189651	118348	629567539	87313	844819684	178184104	345.28	0.60
20	192304	119627	741492458	87443	927941512	178184104	345.28	0.64
21	195019	123890	855305289	87291	1008569722	178184104	345.28	0.47
22	197568	124484	968920934	87283	1089070948	178184104	345.28	0.49
23	200180	125093	1082972669	87273	1169441064	178184104	345.28	0.51
24	202856	125717	1197464963	87264	1249677373	178184104	345.28	0.53
25	205594	126356	1312403278	87255	1329777615	178184104	345.28	0.54
26	208395	127009	1427793923	87245	1409739888	178184104	345.28	0.56
27	211260	127678	1543643914	87235	1489562574	178184104	345.28	0.57
28	214187	128362	1659960866	87226	1569244291	178184104	345.28	0.58
29	217178	129060	1776752904	87216	1648783838	178184104	345.28	0.59
30	220232	129774	1894028573	87207	1728180161	178184104	345.28	0.60
31	232212	130512	2011968166	87205	1807570825	178184104	345.28	0.60
32	235786	131277	2129279723	87223	1886146929	178184104	345.28	0.61
33	239431	131978	2246482821	87186	1964106081	178184104	345.28	0.55
34	243148	132726	2364195548	87178	2041937494	178184104	345.28	0.55
35	246937	133489	2482427156	87169	2119640223	178184104	345.28	0.56
36	250797	134267	2601187231	87161	2197213523	178184104	345.28	0.56
37	254728	135059	2720485449	87153	2274656641	178184104	345.28	0.56
38	258731	135866	2840331556	87144	2351968817	178184104	345.28	0.56
39	262805	136688	2960735354	87136	2429149268	178184104	345.28	0.56
40	266951	137524	3081706687	87128	2506197190	178184104	345.28	0.56
41	271169	138376	3203255426	87120	2583111754	178184104	345.28	0.56
42	288235	139248	3325519190	87117	2659990403	178184104	345.28	0.56
43	292359	140095	3444054032	87107	2734038600	178184104	345.28	0.56
44	296548	140943	3563177650	87100	2807988358	178184104	345.28	0.58
45	300804	141802	3682839657	87092	2881793285	178184104	345.28	0.58
46	305127	142675	3803049175	87083	2955452828	178184104	345.28	0.58
47	309516	143562	3923815245	87075	3028966341	178184104	345.28	0.58
48	313971	144463	4045146888	87067	3102333135	178184104	345.28	0.58
49	318492	145377	4167053101	87059	3175552481	178184104	345.28	0.58
50	323080	146305	4289542857	87051	3248623612	178184104	345.28	0.58
51	327734	147246	4412625099	87043	3321545720	178184104	345.28	0.57
52	332454	148202	4536308739	87035	3394317959	178184104	345.28	0.57
53	337241	149171	4660602656	87027	3466939444	178184104	345.28	0.57
54	342094	150154	4785515698	87019	3539409255	178184104	345.28	0.57
55	347013	151150	4911056676	87011	3611726433	178184104	345.28	0.57
56	351999	152160	5037234367	87004	3683889986	178184104	345.28	0.56

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 56 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	7040.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	30190.00	81000.00	4.75
---	---	---	Ft = 32126	Fp = 62713	---
---	---	Pa = 15388	Ta = 50	La = 28201	---
---	---	Pb = -15388	Tb = 30140	Lb = 52799	---
<b>3.00</b>	33.69	0.00	38720.00	0.00	-4.75
---	---	---	Ft = 5145	Fp = -41711	---
---	---	Pa = 4338	Ta = -2765	La = 0	---
---	---	Pb = -4338	Tb = 41485	Lb = 0	---
<b>4.00</b>	30.23	0.00	38720.00	0.00	4.75
---	---	---	Ft = -5145	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38720	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	7341	7151113	6000	5892347	0	345.28	0.03
3	883	7655	13262159	6000	10687438	-0	345.28	0.05
4	1350	7981	19645881	6001	15495605	-0	345.28	0.07
5	1836	8320	26312555	6001	20317137	-0	345.28	0.09
6	3733	8672	33311251	6002	25189970	-0	345.28	0.10
7	4822	9063	41279663	6004	30558068	-0	345.28	0.12
8	14545	71186	87420564	10207	38559577	-0	345.28	0.11
9	24308	9927	106210079	34211	71589776	77076883	345.28	0.13
10	25517	10352	115724095	34211	101316835	77076883	345.28	0.15
11	26765	10792	125636657	34211	131070556	77076883	345.28	0.16
12	23429	-15525	119528744	43636	166338482	77076883	345.28	0.17
13	20132	39085	148691431	87008	247078943	103005295	345.28	0.23
14	21500	39568	182823317	87008	321408626	103005295	345.28	0.27
15	22908	40065	217405923	87008	395760170	103005295	345.28	0.31
16	23086	48854	257314927	87008	470098183	103005295	345.28	0.35
17	23305	82586	333791710	87008	544421804	103005295	345.28	0.39
18	24832	83126	404892137	87008	618760488	103005295	345.28	0.43
19	30921	83682	476600299	87009	693214307	103005295	345.28	0.46
20	33343	85910	552179344	87014	770072114	103005295	345.28	0.50
21	35829	123575	663871788	87010	846604864	103005295	345.28	0.38
22	38378	124179	772920264	87010	923162651	103005295	345.28	0.40
23	40990	124797	882542865	87011	999742489	103005295	345.28	0.42
24	43666	125431	992749129	87011	1076341385	103005295	345.28	0.44
25	46404	126080	1103548489	87011	1152956312	103005295	345.28	0.46
26	49205	126745	1214950293	87011	1229584222	103005295	345.28	0.47
27	52070	127424	1326963809	87011	1306222049	103005295	345.28	0.49
28	54997	128118	1439598240	87012	1382866713	103005295	345.28	0.50
29	57988	128827	1552862726	87012	1459515126	103005295	345.28	0.51
30	61042	129552	1666766357	87012	1536164192	103005295	345.28	0.52
31	73022	130293	1781470368	87013	1612932952	103005295	345.28	0.53
32	76596	131039	1895319405	87015	1688718378	103005295	345.28	0.53
33	80241	131780	2009630818	87013	1764358461	103005295	345.28	0.49
34	83958	132537	2124588969	87013	1839990715	103005295	345.28	0.49
35	87747	133309	2240202355	87013	1915612176	103005295	345.28	0.50
36	91607	134096	2356479458	87013	1991219900	103005295	345.28	0.50
37	95538	134897	2473428740	87012	2066810947	103005295	345.28	0.50
38	99541	135714	2591058639	87012	2142382382	103005295	345.28	0.50
39	103615	136544	2709377571	87012	2217931278	103005295	345.28	0.51
40	107761	137390	2828393934	87011	2293454712	103005295	345.28	0.51
41	111979	138250	2948116108	87011	2368949770	103005295	345.28	0.51
42	129045	139126	3068668209	87012	2444501681	103005295	345.28	0.51
43	133169	139984	3185702079	87011	2517390068	103005295	345.28	0.51
44	137358	140839	3303413565	87010	2590251947	103005295	345.28	0.53
45	141614	141707	3421785621	87010	2663066139	103005295	345.28	0.53
46	145937	142589	3540825668	87009	2735830134	103005295	345.28	0.53
47	150326	143485	3660541112	87008	2808541419	103005295	345.28	0.53
48	154781	144394	3780939346	87007	2881197487	103005295	345.28	0.53
49	159302	145317	3902027756	87007	2953795833	103005295	345.28	0.53
50	163890	146253	4023813711	87006	3026333959	103005295	345.28	0.53
51	168544	147203	4146304574	87005	3098809368	103005295	345.28	0.53
52	173264	148166	4269507694	87004	3171219569	103005295	345.28	0.53
53	178051	149143	4393430408	87003	3243562074	103005295	345.28	0.53
54	182904	150134	4518080044	87002	3315834400	103005295	345.28	0.53
55	187823	151139	4643463917	87001	3388034066	103005295	345.28	0.53
56	192809	152157	4769589330	87000	3460158598	103005295	345.28	0.53

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 57 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	3470.00	3480.00	30200.00	0.00
<b>2.00</b>	37.16	53420.00	38100.00	0.00	4.75
---	---	---	Ft = 62809	Fp = 4366	---
---	---	Pa = 52966	Ta = 33758	La = 0	---
---	---	Pb = 454	Tb = 4342	Lb = 0	---
<b>3.00</b>	33.69	53420.00	38100.00	0.00	-4.75
---	---	---	Ft = 72933	Fp = -77721	---
---	---	Pa = 61504	Ta = -39199	La = 0	---
---	---	Pb = -8084	Tb = 77299	Lb = 0	---
<b>4.00</b>	30.23	53420.00	38100.00	0.00	4.75
---	---	---	Ft = 62809	Fp = 4366	---
---	---	Pa = 52966	Ta = 33758	La = 0	---
---	---	Pb = 454	Tb = 4342	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	3903	3791	3797700	30204	29688742	0	345.28	0.10
3	4353	4106	7217364	30205	53799432	0	345.28	0.16
4	4820	4433	10913239	30205	77918051	0	345.28	0.22
5	5306	4773	14895747	30206	102043520	0	345.28	0.27
6	7203	5129	19224386	30208	126202354	0	345.28	0.31
7	8292	5541	24537259	30218	152153563	-0	345.28	0.35
8	36804	223446	163674698	30240	178505308	0	345.28	0.27
9	65356	40232	237397107	30270	205393753	-0	345.28	0.33
10	66564	40658	274247398	30270	232257309	-0	345.28	0.35
11	67813	41099	311456003	30270	259093949	-0	345.28	0.37
12	100980	-144773	239891715	30303	286459198	-0	345.28	0.32
13	134187	7319	161875423	30333	314303159	-0	345.28	0.29
14	135555	7797	172966233	30331	342067090	-0	345.28	0.30
15	136963	8288	184466544	30328	369749996	-0	345.28	0.30
16	161752	108991	255150504	30345	397688704	-0	345.28	0.33
17	186581	120469	500483801	30361	425848111	-0	345.28	0.43
18	188108	120997	608857741	30355	453890845	-0	345.28	0.46
19	194197	121546	717705119	30353	481872840	-0	345.28	0.50
20	196846	122835	833105834	30415	511598743	-0	345.28	0.53
21	199559	127036	950094295	30341	540141249	-0	345.28	0.39
22	202108	127628	1066875063	30337	568608671	-0	345.28	0.41
23	204720	128236	1184074395	30332	597001202	-0	345.28	0.43
24	207396	128859	1301697001	30327	625319519	-0	345.28	0.45
25	210134	129496	1419748594	30322	653564307	-0	345.28	0.46
26	212935	130149	1538235732	30317	681736248	-0	345.28	0.47
27	215800	130816	1657165681	30313	709836010	-0	345.28	0.48
28	218727	131498	1776546306	30308	737864238	-0	345.28	0.49
29	221718	132196	1896385972	30303	765821550	-0	345.28	0.50
30	224772	132909	2016693465	30298	793708527	-0	345.28	0.51
31	236752	133646	2137657874	30297	821584770	-0	345.28	0.51
32	240326	134413	2257976810	30306	849196095	-0	345.28	0.52
33	243971	135110	2378131491	30288	876534829	-0	345.28	0.47
34	247688	135857	2498782621	30284	903813654	-0	345.28	0.47
35	251477	136619	2619939607	30280	931032783	-0	345.28	0.48
36	255337	137395	2741612204	30276	958192482	-0	345.28	0.48
37	259268	138186	2863810248	30272	985292976	-0	345.28	0.48
38	263271	138992	2986543636	30268	1012334450	-0	345.28	0.48
39	267345	139813	3109822316	30264	1039317048	-0	345.28	0.48
40	271491	140649	3233656262	30260	1066240877	-0	345.28	0.48
41	275709	141499	3358055473	30256	1093106007	-0	345.28	0.48
42	292775	142371	3483163357	30255	1119953070	-0	345.28	0.49
43	296899	143216	3604429132	30250	1145797324	-0	345.28	0.49
44	301088	144064	3726275031	30247	1171598669	-0	345.28	0.51
45	305344	144923	3848647173	30243	1197337964	-0	345.28	0.50
46	309667	145795	3971554796	30239	1223015297	-0	345.28	0.50
47	314056	146680	4095007046	30235	1248630699	-0	345.28	0.50
48	318511	147580	4219013043	30231	1274184170	-0	345.28	0.50
49	323032	148493	4343581876	30227	1299675679	-0	345.28	0.50
50	327620	149420	4468722600	30224	1325105168	-0	345.28	0.50
51	332274	150361	4594444238	30220	1350472550	-0	345.28	0.50
52	336994	151315	4720755775	30216	1375777712	-0	345.28	0.50
53	341781	152284	4847666158	30212	1401020517	-0	345.28	0.50
54	346634	153266	4975184295	30209	1426200801	-0	345.28	0.50
55	351553	154261	5103319054	30205	1451318380	-0	345.28	0.49
56	356539	155271	5232079263	30202	1476373046	-0	345.28	0.49

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 58 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	3480.00	30200.00	0.00
<b>2.00</b>	37.16	0.00	38100.00	0.00	4.75
---	---	---	Ft = -5062	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38100	Lb = 0	---
<b>3.00</b>	33.69	0.00	38100.00	0.00	-4.75
---	---	---	Ft = 5062	Fp = -41043	---
---	---	Pa = 4269	Ta = -2721	La = 0	---
---	---	Pb = -4269	Tb = 40821	Lb = 0	---
<b>4.00</b>	30.23	0.00	38100.00	0.00	4.75
---	---	---	Ft = -5062	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38100	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	433	3781	3661284	30200	29605669	0	345.28	0.10
3	883	4095	6940074	30200	53634048	0	345.28	0.16
4	1350	4421	10490546	30200	77671862	0	345.28	0.22
5	1836	4760	14323044	30200	101718593	0	345.28	0.26
6	3733	5112	18483936	30201	125800117	0	345.28	0.30
7	4822	5502	23414785	30202	151590385	0	345.28	0.35
8	6851	5897	28604157	30201	177320516	0	345.28	0.20
9	8920	6309	34198609	30202	203083640	0	345.28	0.21
10	10128	6734	40185683	30202	228861595	0	345.28	0.22
11	11377	7174	46578207	30202	254653219	0	345.28	0.23
12	15700	1401	49815634	30203	280506127	-0	345.28	0.24
13	20062	43478	85660143	30203	306414676	-0	345.28	0.25
14	21430	43961	123500054	30203	332328807	-0	345.28	0.26
15	22838	44458	161792677	30204	358247281	-0	345.28	0.27
16	23052	53115	205336666	30204	384152533	-0	345.28	0.28
17	23305	86315	284872987	30203	410045037	0	345.28	0.31
18	24832	86855	359128287	30204	435939863	0	345.28	0.33
19	30921	87411	433991815	30204	461886374	0	345.28	0.35
20	33343	89612	512796029	30206	488715226	0	345.28	0.37
21	35829	126684	627141667	30204	515382021	0	345.28	0.28
22	38378	127288	738895770	30205	542056964	0	345.28	0.30
23	40990	127906	851225040	30205	568738754	0	345.28	0.32
24	43666	128540	964138982	30205	595426101	0	345.28	0.34
25	46404	129189	1077646996	30205	622117727	0	345.28	0.36
26	49205	129854	1191758386	30205	648812355	0	345.28	0.37
27	52070	130533	1306482376	30205	675508717	0	345.28	0.38
28	54997	131227	1421828117	30205	702205553	0	345.28	0.40
29	57988	131936	1537804697	30205	728901608	0	345.28	0.41
30	61042	132661	1654421148	30205	755595635	0	345.28	0.42
31	73022	133402	1771839364	30206	782340489	0	345.28	0.43
32	76596	134148	1888364760	30207	808752645	0	345.28	0.43
33	80241	134889	2005352211	30206	835098720	0	345.28	0.40
34	83958	135646	2122986910	30206	861439539	0	345.28	0.40
35	87747	136418	2241277289	30206	887773947	0	345.28	0.41
36	91607	137205	2360231764	30206	914100802	0	345.28	0.41
37	95538	138007	2479858726	30205	940418966	0	345.28	0.41
38	99541	138823	2600166543	30205	966727308	0	345.28	0.42
39	103615	139654	2721163561	30205	993024703	0	345.28	0.42
40	107761	140499	2842858108	30205	1019310029	0	345.28	0.42
41	111979	141359	2965258491	30205	1045582172	0	345.28	0.43
42	129045	142235	3088489766	30205	1071877472	0	345.28	0.43
43	133169	143093	3208109998	30205	1097240494	0	345.28	0.43
44	137358	143948	3328407791	30205	1122591448	0	345.28	0.45
45	141614	144817	3449365815	30204	1147921473	0	345.28	0.45
46	145937	145699	3570991416	30204	1173229644	0	345.28	0.45
47	150326	146594	3693291928	30204	1198515034	0	345.28	0.45
48	154781	147503	3816274673	30203	1223776718	0	345.28	0.45
49	159302	148426	3939946961	30203	1249013772	0	345.28	0.45
50	163890	149363	4064316092	30203	1274225273	0	345.28	0.45
51	168544	150313	4189389355	30202	1299410300	0	345.28	0.45
52	173264	151276	4315174029	30202	1324567932	0	345.28	0.45
53	178051	152253	4441677379	30201	1349697250	0	345.28	0.45
54	182904	153244	4568906660	30201	1374797334	0	345.28	0.45
55	187823	154248	4696869118	30201	1399867269	0	345.28	0.45
56	192809	155267	4825571984	30200	1424906139	0	345.28	0.45

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 59 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6940.00	6950.00	6000.00	0.00
<b>2.00</b>	37.16	42820.00	29730.00	78000.00	4.75
---	---	---	Ft = 76607	Fp = 24477	---
---	---	Pa = 45981	Ta = 13780	La = 59704	---
---	---	Pb = -3161	Tb = 15950	Lb = 18296	---
<b>3.00</b>	33.69	53420.00	38100.00	0.00	-4.75
---	---	---	Ft = 72933	Fp = -77721	---
---	---	Pa = 61504	Ta = -39199	La = 0	---
---	---	Pb = -8084	Tb = 77299	Lb = 0	---
<b>4.00</b>	30.23	53420.00	38100.00	0.00	4.75
---	---	---	Ft = 62809	Fp = 4366	---
---	---	Pa = 52966	Ta = 33758	La = 0	---
---	---	Pb = 454	Tb = 4342	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Usa
2	7373	7269	7307923	6016	6129790	0	345.28	0.03
3	7823	7583	13593818	6017	11163787	-0	345.28	0.06
4	8290	7910	20153460	6018	16212089	0	345.28	0.07
5	8776	8250	26996883	6019	21274817	0	345.28	0.09
6	10673	8605	34177563	6023	26394341	-0	345.28	0.11
7	11762	9023	42619718	6050	32298535	-0	345.28	0.13
8	36781	195915	165689749	14971	43937094	-0	345.28	0.19
9	61840	23699	218306575	65833	108826689	163180456	345.28	0.26
10	63049	24125	240796876	65834	166678740	163180456	345.28	0.29
11	64297	24565	263650925	65835	224536723	163180456	345.28	0.31
12	95657	-163687	176064552	69161	285330329	163180456	345.28	0.29
13	127057	2369	94190447	84248	362849968	172165252	345.28	0.31
14	128425	2848	100475605	84244	438067638	172165252	345.28	0.34
15	129833	3340	107189785	84240	513200778	172165252	345.28	0.38
16	154622	104039	173041390	84276	588920086	172165252	345.28	0.42
17	179451	115513	413504748	84308	665164299	172165252	345.28	0.50
18	180978	116042	517038357	84298	741242067	172165252	345.28	0.55
19	187067	116593	621064786	84294	817261653	172165252	345.28	0.59
20	189716	117860	731236506	84416	897420208	172165252	345.28	0.63
21	192429	122086	843327712	84274	975204639	172165252	345.28	0.46
22	194978	122681	955232389	84265	1052868759	172165252	345.28	0.48
23	197590	123290	1067576965	84257	1130408629	172165252	345.28	0.50
24	200266	123915	1180366123	84248	1207821656	172165252	345.28	0.52
25	203004	124554	1293605505	84239	1285105656	172165252	345.28	0.53
26	205805	125208	1407301565	84230	1362258785	172165252	345.28	0.54
27	208670	125877	1521461444	84221	1439279466	172165252	345.28	0.56
28	211597	126561	1636092860	84212	1516166342	172165252	345.28	0.57
29	214588	127261	1751204018	84203	1592918230	172165252	345.28	0.57
30	217642	127975	1866803536	84194	1669534081	172165252	345.28	0.58
31	229622	128713	1983069250	84193	1746146632	172165252	345.28	0.59
32	233196	129477	2098720716	84210	1821970129	172165252	345.28	0.59
33	236841	130180	2214283494	84175	1897205259	172165252	345.28	0.54
34	240558	130928	2330360196	84168	1972318931	172165252	345.28	0.54
35	244347	131692	2446960102	84160	2047310203	172165252	345.28	0.54
36	248207	132470	2564092812	84152	2122178319	172165252	345.28	0.55
37	252138	133262	2681768013	84144	2196922519	172165252	345.28	0.55
38	256141	134070	2799995461	84136	2271542030	172165252	345.28	0.55
39	260215	134892	2918784965	84128	2346036063	172165252	345.28	0.55
40	264361	135729	3038146370	84121	2420403806	172165252	345.28	0.55
41	268579	136580	3158089553	84113	2494644424	172165252	345.28	0.55
42	285645	137453	3278750300	84111	2568851921	172165252	345.28	0.55
43	289769	138300	3395742980	84101	2640329126	172165252	345.28	0.55
44	293958	139149	3513327570	84095	2711712395	172165252	345.28	0.57
45	298214	140009	3631455051	84087	2782957318	172165252	345.28	0.57
46	302537	140882	3750134536	84079	2854063327	172165252	345.28	0.57
47	306926	141769	3869375059	84071	2925029768	172165252	345.28	0.57
48	311381	142670	3989185635	84063	2995855944	172165252	345.28	0.57
49	315902	143584	4109575257	84055	3066541124	172165252	345.28	0.57
50	320490	144513	4230552891	84048	3137084535	172165252	345.28	0.56
51	325144	145455	4352127474	84040	3207485370	172165252	345.28	0.56
52	329864	146410	4474307915	84033	3277742784	172165252	345.28	0.56
53	334651	147380	4597103091	84025	3347855896	172165252	345.28	0.56
54	339504	148363	4720521845	84018	3417823790	172165252	345.28	0.56
55	344423	149360	4844572987	84011	3487645515	172165252	345.28	0.55
56	349409	150370	4969265293	84004	3557320086	172165252	345.28	0.55

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 60 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	6950.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	29730.00	78000.00	4.75
---	---	---	Ft = 30618	Fp = 60907	---
---	---	Pa = 14762	Ta = 189	La = 26823	---
---	---	Pb = -14762	Tb = 29541	Lb = 51177	---
<b>3.00</b>	33.69	0.00	38100.00	0.00	-4.75
---	---	---	Ft = 5062	Fp = -41043	---
---	---	Pa = 4269	Ta = -2721	La = 0	---
---	---	Pb = -4269	Tb = 40821	Lb = 0	---
<b>4.00</b>	30.23	0.00	38100.00	0.00	4.75
---	---	---	Ft = -5062	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 38100	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	7251	7062731	6000	5891944	0	345.28	0.03
3	883	7565	13101858	6000	10686211	0	345.28	0.05
4	1350	7891	19413468	6001	15493122	0	345.28	0.07
5	1836	8230	26007833	6001	20312947	-0	345.28	0.09
6	3733	8582	32933465	6002	25182356	-0	345.28	0.10
7	4822	8972	40821435	6004	30540994	-0	345.28	0.12
8	14232	68604	85348507	10002	38397677	-0	345.28	0.10
9	23682	9975	103774091	32833	70056072	73312529	345.28	0.13
10	24890	10401	113300840	32833	98573163	73312529	345.28	0.15
11	26139	10840	123226078	32833	127116168	73312529	345.28	0.16
12	23081	-14602	117677324	41969	161012023	73312529	345.28	0.17
13	20062	38579	146506875	84007	238990793	98444069	345.28	0.22
14	21430	39062	180199825	84008	310755754	98444069	345.28	0.26
15	22838	39559	214343118	84008	382541864	98444069	345.28	0.30
16	23052	48216	253735405	84008	454315804	98444069	345.28	0.34
17	23305	81416	329117981	84007	526076689	98444069	345.28	0.38
18	24832	81956	399217676	84008	597852114	98444069	345.28	0.42
19	30921	82512	469923193	84009	669738722	98444069	345.28	0.45
20	33343	84713	544450655	84014	743946499	98444069	345.28	0.48
21	35829	121785	654520710	84010	817840350	98444069	345.28	0.37
22	38378	122388	761997638	84010	891758372	98444069	345.28	0.39
23	40990	123007	870048208	84010	965697684	98444069	345.28	0.41
24	43666	123641	978682010	84011	1039655395	98444069	345.28	0.43
25	46404	124290	1087908532	84011	1113628582	98444069	345.28	0.45
26	49205	124954	1197737176	84011	1187614303	98444069	345.28	0.46
27	52070	125633	1308177267	84011	1261609595	98444069	345.28	0.47
28	54997	126328	1419238063	84011	1335611486	98444069	345.28	0.49
29	57988	127037	1530928763	84011	1409616993	98444069	345.28	0.50
30	61042	127762	1643258512	84011	1483623128	98444069	345.28	0.51
31	73022	128503	1756386514	84013	1557744843	98444069	345.28	0.52
32	76596	129249	1868680086	84014	1630917146	98444069	345.28	0.52
33	80241	129989	1981438459	84012	1703949094	98444069	345.28	0.47
34	83958	130747	2094843639	84012	1776973477	98444069	345.28	0.48
35	87747	131519	2208904180	84012	1849987437	98444069	345.28	0.48
36	91607	132306	2323628621	84012	1922988128	98444069	345.28	0.49
37	95538	133107	2439025478	84012	1995972713	98444069	345.28	0.49
38	99541	133923	2555103247	84012	2068938357	98444069	345.28	0.49
39	103615	134754	2671870399	84011	2141882234	98444069	345.28	0.50
40	107761	135599	2789335390	84011	2214801522	98444069	345.28	0.50
41	111979	136459	2907506655	84010	2287693407	98444069	345.28	0.50
42	129045	137335	3026506802	84011	2360640192	98444069	345.28	0.50
43	133169	138194	3142043239	84010	2431015284	98444069	345.28	0.50
44	137358	139049	3258257735	84010	2501364778	98444069	345.28	0.52
45	141614	139917	3375133623	84009	2571668223	98444069	345.28	0.52
46	145937	140799	3492678375	84009	2641923194	98444069	345.28	0.52
47	150326	141695	3610899446	84008	2712127266	98444069	345.28	0.52
48	154781	142604	3729804281	84007	2782278017	98444069	345.28	0.52
49	159302	143526	3849400311	84006	2852373031	98444069	345.28	0.52
50	163890	144463	3969694958	84006	2922409892	98444069	345.28	0.52
51	168544	145413	4090695633	84005	2992386193	98444069	345.28	0.52
52	173264	146376	4212409734	84004	3062299525	98444069	345.28	0.52
53	178051	147353	4334844649	84003	3132147489	98444069	345.28	0.52
54	182904	148344	4458007753	84002	3201927686	98444069	345.28	0.52
55	187823	149349	4581906410	84001	3271637720	98444069	345.28	0.52
56	192809	150367	4706547974	84000	3341275203	98444069	345.28	0.52

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 61 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	5660.00	3180.00	39000.00	0.00
<b>2.00</b>	37.16	69540.00	28220.00	0.00	4.75
---	---	---	Ft = 84603	Fp = -17345	---
---	---	Pa = 71344	Ta = 45471	La = 0	---
---	---	Pb = -1804	Tb = -17251	Lb = 0	---
<b>3.00</b>	33.69	69540.00	28220.00	0.00	-4.75
---	---	---	Ft = 92102	Fp = -78145	---
---	---	Pa = 77668	Ta = -49502	La = 0	---
---	---	Pb = -8128	Tb = 77722	Lb = 0	---
<b>4.00</b>	30.23	69540.00	28220.00	0.00	4.75
---	---	---	Ft = 84603	Fp = -17345	---
---	---	Pa = 71344	Ta = 45471	La = 0	---
---	---	Pb = -1804	Tb = -17251	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Usa
2	6093	3272	3375776	39012	38411319	0	345.28	0.13
3	6543	3351	6239485	39012	69618358	0	345.28	0.21
4	7010	3434	9182237	39013	100834182	0	345.28	0.28
5	7496	3519	12206842	39014	132056923	0	345.28	0.34
6	9393	3612	15357716	39017	163320698	0	345.28	0.39
7	10482	3740	19192038	39039	196968797	0	345.28	0.45
8	48183	296821	202768577	39089	231334328	0	345.28	0.34
9	85924	49586	297608858	39157	266643285	-0	345.28	0.42
10	87132	49693	342349292	39157	301900588	-0	345.28	0.44
11	88381	49802	387124349	39157	337103009	-0	345.28	0.46
12	128501	-192360	289596779	39223	373150978	-0	345.28	0.41
13	168661	-16527	165077515	39286	409964704	-0	345.28	0.37
14	170029	-16414	155713030	39280	446638717	-0	345.28	0.37
15	171437	-16299	146423967	39273	483171552	-0	345.28	0.37
16	205393	113520	213090713	39315	520188802	-0	345.28	0.39
17	239389	107276	491355699	39352	557625952	-0	345.28	0.49
18	240916	107392	588353481	39339	594856927	-0	345.28	0.51
19	247005	107520	685389286	39331	631956800	-0	345.28	0.54
20	248525	105712	786606356	39462	671689425	-0	345.28	0.57
21	250109	90520	868609768	39301	709401336	-0	345.28	0.41
22	252658	90655	953069232	39290	746978511	-0	345.28	0.42
23	255270	90793	1037502448	39279	784421603	-0	345.28	0.43
24	257946	90935	1121907833	39268	821732332	-0	345.28	0.43
25	260684	91081	1206284637	39257	858912450	-0	345.28	0.44
26	263485	91231	1290632808	39246	895963713	-0	345.28	0.44
27	266350	91384	1374952867	39235	932887862	-0	345.28	0.45
28	269277	91541	1459245809	39225	969686605	-0	345.28	0.45
29	272268	91702	1543513023	39214	1006361600	-0	345.28	0.45
30	275322	91867	1627756217	39203	1042914454	-0	345.28	0.46
31	287302	92045	1712115509	39199	1079425349	-0	345.28	0.46
32	290876	92257	1795821839	39216	1115624404	-0	345.28	0.46
33	294521	92385	1878921955	39179	1151377711	-0	345.28	0.41
34	298238	92561	1962022074	39171	1187028695	-0	345.28	0.41
35	302027	92740	2045124337	39162	1222578249	-0	345.28	0.41
36	305887	92922	2128231241	39153	1258027386	-0	345.28	0.41
37	309818	93109	2211345319	39145	1293377043	-0	345.28	0.41
38	313821	93299	2294469129	39136	1328628084	-0	345.28	0.41
39	317895	93494	2377605235	39128	1363781301	-0	345.28	0.41
40	322041	93692	2460756203	39120	1398837414	-0	345.28	0.41
41	326259	93894	2543924590	39112	1433797078	-0	345.28	0.41
42	343325	94106	2627212575	39108	1468714819	-0	345.28	0.40
43	347449	94304	2707586784	39098	1502305721	-0	345.28	0.40
44	351638	94508	2788016412	39092	1535827251	-0	345.28	0.42
45	355894	94712	2868448748	39084	1569250078	-0	345.28	0.41
46	360217	94919	2948886353	39076	1602574805	-0	345.28	0.41
47	364606	95130	3029331662	39068	1635801926	-0	345.28	0.41
48	369061	95345	3109787070	39061	1668931879	-0	345.28	0.41
49	373582	95563	3190254930	39053	1701965049	-0	345.28	0.41
50	378170	95785	3270737550	39046	1734901769	-0	345.28	0.40
51	382824	96010	3351237193	39038	1767742323	-0	345.28	0.40
52	387544	96239	3431756077	39031	1800486946	-0	345.28	0.40
53	392331	96472	3512296376	39024	1833135831	-0	345.28	0.40
54	397184	96708	3592860216	39017	1865689125	-0	345.28	0.39
55	402103	96947	3673449682	39010	1898146932	-0	345.28	0.39
56	407089	97190	3754066813	39003	1930509319	-0	345.28	0.39

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 62 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
1.00	46.67	0.00	3180.00	39000.00	0.00
2.00	37.16	0.00	28220.00	0.00	4.75
---	---	---	Ft = -3749	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 28220	Lb = 0	---
3.00	33.69	0.00	28220.00	0.00	-4.75
---	---	---	Ft = 3749	Fp = -30400	---
---	---	Pa = 3162	Ta = -2015	La = 0	---
---	---	Pb = -3162	Tb = 30235	Lb = 0	---
4.00	30.23	0.00	28220.00	0.00	4.75
---	---	---	Ft = -3749	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 28220	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	3255	3184166	39000	38232485	0	345.28	0.13
3	883	3333	5850565	39000	69262507	-0	345.28	0.21
4	1350	3415	8590231	39000	100304712	0	345.28	0.28
5	1836	3499	11405870	39000	131358430	-0	345.28	0.34
6	3733	3587	14325121	39001	162457073	-0	345.28	0.39
7	4822	3686	17634124	39002	195762347	-0	345.28	0.45
8	6851	3784	20973227	39002	228989972	0	345.28	0.25
9	8920	3887	24438418	39002	262260195	0	345.28	0.27
10	10128	3993	28015721	39002	295549565	0	345.28	0.28
11	11377	4103	31708649	39003	328856582	0	345.28	0.29
12	15146	-396	32859323	39003	362231225	0	345.28	0.30
13	18955	30539	57950391	39004	395667246	-0	345.28	0.31
14	20323	30660	84317087	39004	429111501	-0	345.28	0.32
15	21731	30784	110810885	39004	462562385	-0	345.28	0.33
16	22498	36945	140991929	39004	496006657	-0	345.28	0.34
17	23305	61277	197623292	39004	529443926	0	345.28	0.35
18	24832	61412	250116871	39004	562884196	0	345.28	0.36
19	30921	61551	302823254	39005	596391203	0	345.28	0.37
20	33343	62895	358102196	39008	631037619	0	345.28	0.38
21	35829	90064	439471463	39006	665474794	0	345.28	0.28
22	38378	90215	518660842	39006	699922493	0	345.28	0.29
23	40990	90369	598009480	39006	734379033	0	345.28	0.30
24	43666	90528	677518054	39006	768842752	0	345.28	0.31
25	46404	90689	757187173	39006	803311995	0	345.28	0.32
26	49205	90855	837017389	39006	837785118	0	345.28	0.32
27	52070	91025	917009205	39007	872260482	0	345.28	0.33
28	54997	91198	997163082	39007	906736459	0	345.28	0.34
29	57988	91375	1077479447	39007	941211429	0	345.28	0.34
30	61042	91555	1157958696	39007	975683781	0	345.28	0.35
31	73022	91741	1238706217	39007	1010221765	0	345.28	0.35
32	76596	91928	1318558979	39008	1044330097	0	345.28	0.36
33	80241	92111	1398449532	39007	1078353106	0	345.28	0.32
34	83958	92300	1478499472	39007	1112369329	0	345.28	0.32
35	87747	92493	1558709075	39007	1146377276	0	345.28	0.33
36	91607	92689	1639078615	39007	1180375470	0	345.28	0.33
37	95538	92888	1719608360	39007	1214362443	0	345.28	0.33
38	99541	93092	1800298569	39007	1248336735	0	345.28	0.33
39	103615	93299	1881149496	39007	1282296891	0	345.28	0.33
40	107761	93509	1962161393	39006	1316241465	0	345.28	0.33
41	111979	93723	2043334506	39006	1350169017	0	345.28	0.33
42	129045	93942	2124748523	39007	1384126471	0	345.28	0.33
43	133169	94156	2203482008	39006	1416879995	0	345.28	0.33
44	137358	94369	2282370306	39006	1449617937	0	345.28	0.35
45	141614	94585	2361396825	39005	1482328856	0	345.28	0.35
46	145937	94804	2440561779	39005	1515011554	0	345.28	0.35
47	150326	95027	2519865377	39005	1547664838	0	345.28	0.35
48	154781	95254	2599307830	39004	1580287511	0	345.28	0.34
49	159302	95483	2678889348	39004	1612878381	0	345.28	0.34
50	163890	95716	2758610143	39003	1645436257	0	345.28	0.34
51	168544	95953	2838470427	39003	1677959946	0	345.28	0.34
52	173264	96192	2918470411	39002	1710448262	0	345.28	0.34
53	178051	96436	2998610306	39002	1742900016	0	345.28	0.34
54	182904	96682	3078890326	39001	1775314024	0	345.28	0.34
55	187823	96932	3159310683	39001	1807689100	0	345.28	0.34
56	192809	97185	3239871587	39000	1840024062	0	345.28	0.34



## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 63 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	11320.00	6350.00	8000.00	0.00
<b>2.00</b>	37.16	54910.00	21450.00	96000.00	4.75
---	---	---	Ft = 102570	Fp = 15195	---
---	---	Pa = 57456	Ta = 12407	La = 84057	---
---	---	Pb = -2546	Tb = 9043	Lb = 11943	---
<b>3.00</b>	33.69	69540.00	28220.00	0.00	-4.75
---	---	---	Ft = 92102	Fp = -78145	---
---	---	Pa = 77668	Ta = -49502	La = 0	---
---	---	Pb = -8128	Tb = 77722	Lb = 0	---
<b>4.00</b>	30.23	69540.00	28220.00	0.00	4.75
---	---	---	Ft = 84603	Fp = -17345	---
---	---	Pa = 71344	Ta = 45471	La = 0	---
---	---	Pb = -1804	Tb = -17251	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	11753	6453	6606460	8043	8366350	0	345.28	0.04
3	12203	6532	12111100	8045	15270637	-0	345.28	0.06
4	12670	6614	17690886	8046	22192668	-0	345.28	0.08
5	13156	6700	23348107	8048	29132355	-0	345.28	0.10
6	15053	6791	29117934	8054	36143300	-0	345.28	0.12
7	16142	6927	35832489	8114	44406647	-0	345.28	0.14
8	46899	239342	184837937	20687	60765192	-0	345.28	0.22
9	77696	19637	240976224	92328	152276397	229740673	345.28	0.30
10	78904	19743	259651857	92329	233866100	229740673	345.28	0.34
11	80153	19853	278385063	92328	315447285	229740673	345.28	0.38
12	119902	-218544	156866330	94588	399941537	229740673	345.28	0.37
13	159691	-20215	31363369	104520	496288692	235605792	345.28	0.41
14	161059	-20101	17951076	104510	591036919	235605792	345.28	0.45
15	162467	-19983	4660679	104499	685623212	235605792	345.28	0.49
16	196423	109826	67240593	104582	781271469	235605792	345.28	0.53
17	230419	103574	341351476	104657	877870765	235605792	345.28	0.61
18	231946	103694	434257616	104634	974166755	235605792	345.28	0.65
19	238035	103825	527248213	104620	1070299308	235605792	345.28	0.68
20	239555	101979	623925461	104869	1172372920	235605792	345.28	0.72
21	241139	86833	701889268	104567	1270482877	235605792	345.28	0.52
22	243688	86971	782348726	104548	1368372231	235605792	345.28	0.54
23	246300	87113	862820636	104529	1466035830	235605792	345.28	0.55
24	248976	87259	943302274	104509	1563471148	235605792	345.28	0.56
25	251714	87408	1023791805	104489	1660676335	235605792	345.28	0.57
26	254515	87561	1104288134	104469	1757650083	235605792	345.28	0.58
27	257380	87717	1184790795	104449	1854391518	235605792	345.28	0.59
28	260307	87877	1265299841	104430	1950900108	235605792	345.28	0.59
29	263298	88041	1345815765	104410	2047175592	235605792	345.28	0.60
30	266352	88209	1426339426	104390	2143217917	235605792	345.28	0.60
31	278332	88389	1506996519	104383	2239199666	235605792	345.28	0.60
32	281906	88597	1587009925	104415	2334274714	235605792	345.28	0.61
33	285551	88735	1666518981	104346	2428416823	235605792	345.28	0.55
34	289268	88913	1746053510	104329	2522355576	235605792	345.28	0.55
35	293057	89095	1825615124	104313	2616090836	235605792	345.28	0.55
36	296917	89280	1905205769	104296	2709622826	235605792	345.28	0.55
37	300848	89469	1984827459	104280	2802951741	235605792	345.28	0.54
38	304851	89662	2064482259	104264	2896077742	235605792	345.28	0.54
39	308925	89858	2144172275	104249	2989000943	235605792	345.28	0.54
40	313071	90059	2223899635	104233	3081721407	235605792	345.28	0.54
41	317289	90263	2303666486	104218	3174239143	235605792	345.28	0.54
42	334355	90477	2383565856	104211	3266675890	235605792	345.28	0.54
43	338479	90678	2460694930	104191	3355661074	235605792	345.28	0.53
44	342668	90883	2537894925	104180	3444499045	235605792	345.28	0.55
45	346924	91089	2615118960	104164	3533124233	235605792	345.28	0.55
46	351247	91299	2692369245	104149	3621536889	235605792	345.28	0.55
47	355636	91512	2769647901	104134	3709737093	235605792	345.28	0.55
48	360091	91729	2846957027	104119	3797724850	235605792	345.28	0.54
49	364612	91949	2924298693	104104	3885500093	235605792	345.28	0.54
50	369200	92173	3001674944	104089	3973062687	235605792	345.28	0.54
51	373854	92400	3079087795	104075	4060412423	235605792	345.28	0.53
52	378574	92631	3156539230	104061	4147549025	235605792	345.28	0.53
53	383361	92865	3234031203	104047	4234472151	235605792	345.28	0.53
54	388214	93103	3311565635	104033	4321181391	235605792	345.28	0.52
55	393133	93344	3389144416	104020	4407676273	235605792	345.28	0.52
56	398119	93589	3466769404	104007	4493956261	235605792	345.28	0.52

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 64 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 "

Pressione trasversale del vento = 176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	6350.00	8000.00	0.00
<b>2.00</b>	37.16	0.00	21450.00	96000.00	4.75
---	---	---	Ft = 45431	Fp = 63444	---
---	---	Pa = 19114	Ta = -3824	La = 41036	---
---	---	Pb = -19114	Tb = 25274	Lb = 54964	---
<b>3.00</b>	33.69	0.00	28220.00	0.00	-4.75
---	---	---	Ft = 3749	Fp = -30400	---
---	---	Pa = 3162	Ta = -2015	La = 0	---
---	---	Pb = -3162	Tb = 30235	Lb = 0	---
<b>4.00</b>	30.23	0.00	28220.00	0.00	4.75
---	---	---	Ft = -3749	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = 28220	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	6425	6291682	8000	7855293	0	345.28	0.03
3	883	6503	11480062	8000	14246363	-0	345.28	0.06
4	1350	6585	16742594	8001	20653611	0	345.28	0.07
5	1836	6669	22081923	8001	27077378	-0	345.28	0.09
6	3733	6758	27528095	8002	33564565	0	345.28	0.10
7	4822	6856	33541894	8005	40694620	-0	345.28	0.12
8	16408	83046	86252432	14122	51692282	0	345.28	0.11
9	28034	3240	101116947	49051	99114932	112159323	345.28	0.15
10	29242	3346	104544192	49052	141722441	112159323	345.28	0.17
11	30491	3456	108079218	49052	184359647	112159323	345.28	0.19
12	24703	-25058	94068170	58861	232628971	112159323	345.28	0.21
13	18955	26940	113394467	104009	328130252	139150510	345.28	0.27
14	20323	27061	136719544	104009	416962288	139150510	345.28	0.32
15	21731	27185	160169945	104010	505821030	139150510	345.28	0.37
16	22498	33346	187305671	104010	594681743	139150510	345.28	0.41
17	23305	57678	240889965	104010	683542337	139150510	345.28	0.45
18	24832	57813	290334964	104010	772420499	139150510	345.28	0.48
19	30921	57952	339991589	104012	861438058	139150510	345.28	0.51
20	33343	59296	392135939	104018	953336550	139150510	345.28	0.54
21	35829	86465	470368996	104012	1044839060	139150510	345.28	0.40
22	38378	86616	546420971	104013	1136371419	139150510	345.28	0.42
23	40990	86770	622631044	104013	1227930016	139150510	345.28	0.43
24	43666	86928	698999941	104013	1319511236	139150510	345.28	0.45
25	46404	87090	775528326	104014	1411111425	139150510	345.28	0.46
26	49205	87256	852216811	104014	1502726909	139150510	345.28	0.47
27	52070	87425	929065963	104014	1594353990	139150510	345.28	0.48
28	54997	87598	1006076312	104014	1685988958	139150510	345.28	0.49
29	57988	87775	1083248357	104014	1777628095	139150510	345.28	0.50
30	61042	87956	1160582568	104014	1869267673	139150510	345.28	0.50
31	73022	88142	1238182938	104016	1961051729	139150510	345.28	0.51
32	76596	88328	1314931882	104018	2051661606	139150510	345.28	0.51
33	80241	88512	1391719850	104016	2142095389	139150510	345.28	0.46
34	83958	88701	1468666753	104016	2232519429	139150510	345.28	0.47
35	87747	88893	1545772950	104016	2322930168	139150510	345.28	0.47
36	91607	89089	1623038800	104015	2413324066	139150510	345.28	0.47
37	95538	89289	1700464658	104015	2503697592	139150510	345.28	0.47
38	99541	89492	1778050869	104015	2594047220	139150510	345.28	0.47
39	103615	89699	1855797777	104014	2684369434	139150510	345.28	0.47
40	107761	89910	1933705719	104014	2774660726	139150510	345.28	0.47
41	111979	90124	2011775031	104013	2864917595	139150510	345.28	0.47
42	129045	90343	2090083943	104014	2955242942	139150510	345.28	0.47
43	133169	90556	2165820180	104013	3042383147	139150510	345.28	0.47
44	137358	90769	2241711453	104013	3129491233	139150510	345.28	0.49
45	141614	90985	2317741581	104012	3216541655	139150510	345.28	0.49
46	145937	91205	2393910865	104011	3303531405	139150510	345.28	0.49
47	150326	91428	2470219603	104010	3390457471	139150510	345.28	0.49
48	154781	91654	2546668092	104009	3477316848	139150510	345.28	0.49
49	159302	91883	2623256630	104008	3564106533	139150510	345.28	0.48
50	163890	92116	2699985514	104007	3650823530	139150510	345.28	0.48
51	168544	92353	2776855043	104006	3737464848	139150510	345.28	0.48
52	173264	92593	2853865515	104005	3824027500	139150510	345.28	0.48
53	178051	92836	2931017226	104004	3910508503	139150510	345.28	0.48
54	182904	93082	3008310476	104003	3996904881	139150510	345.28	0.47
55	187823	93332	3085745561	104002	4083213660	139150510	345.28	0.47
56	192809	93585	3163322778	104001	4169431872	139150510	345.28	0.47

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 65 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	3530.00	-3520.00	31000.00	0.00
<b>2.00</b>	37.16	54320.00	-38720.00	0.00	4.75
---	---	---	Ft = 74159	Fp = -79007	---
---	---	Pa = 62537	Ta = 39858	La = 0	---
---	---	Pb = -8217	Tb = -78578	Lb = 0	---
<b>3.00</b>	33.69	54320.00	-38720.00	0.00	-4.75
---	---	---	Ft = 63870	Fp = 4416	---
---	---	Pa = 53861	Ta = -34328	La = 0	---
---	---	Pb = 459	Tb = -4392	Lb = 0	---
<b>4.00</b>	30.23	54320.00	-38720.00	0.00	4.75
---	---	---	Ft = 74159	Fp = -79007	---
---	---	Pa = 62537	Ta = 39858	La = 0	---
---	---	Pb = -8217	Tb = -78578	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	3963	-3828	-3769076	31005	30476924	0	345.28	0.10
3	4413	-4143	-7144879	31005	55228037	0	345.28	0.17
4	4880	-4469	-10788767	31006	79987281	-0	345.28	0.23
5	5366	-4809	-14710875	31006	104753538	-0	345.28	0.27
6	7263	-5164	-18947308	31008	129554091	-0	345.28	0.31
7	8352	-5569	-23988545	31019	156196506	-0	345.28	0.36
8	41650	250740	126778332	31048	183350749	-0	345.28	0.25
9	74987	33374	197543686	31085	211151437	-0	345.28	0.30
10	76196	32948	223927166	31085	238919250	-0	345.28	0.32
11	77444	32508	249860838	31085	266651882	-0	345.28	0.33
12	102454	-156522	162893539	31110	294774484	-0	345.28	0.29
13	127504	-81403	2296525	31134	323248318	-0	345.28	0.27
14	128872	-81884	-69941429	31132	351644903	-0	345.28	0.28
15	130280	-82377	-142607568	31129	379963272	-0	345.28	0.30
16	164126	16216	-159296111	31156	408685163	-0	345.28	0.31
17	198012	-48042	-55640255	31181	437760566	-0	345.28	0.30
18	199540	-48573	-101042562	31175	466707237	-0	345.28	0.30
19	205628	-49125	-147007291	31171	495582861	-0	345.28	0.31
20	203942	-59651	-202673452	31236	526234810	-0	345.28	0.32
21	202319	-128845	-330440034	31151	555572678	-0	345.28	0.24
22	204868	-129442	-447429099	31146	584831719	-0	345.28	0.26
23	207480	-130053	-564925636	31141	614012130	-0	345.28	0.28
24	210156	-130679	-682928706	31136	643114653	-0	345.28	0.29
25	212894	-131319	-801438906	31131	672140036	-0	345.28	0.31
26	215695	-131975	-920458154	31126	701089026	-0	345.28	0.33
27	218560	-132646	-1039989504	31120	729962354	-0	345.28	0.34
28	221487	-133331	-1160036986	31115	758760725	-0	345.28	0.36
29	224478	-134032	-1280605468	31110	787484816	-0	345.28	0.37
30	227532	-134748	-1401700547	31105	816135267	-0	345.28	0.38
31	239512	-135486	-1523475063	31104	844773469	-0	345.28	0.39
32	243086	-136248	-1644536038	31113	873141125	-0	345.28	0.40
33	246731	-136956	-1765589993	31094	901224661	-0	345.28	0.37
34	250448	-137705	-1887183572	31090	929245556	-0	345.28	0.38
35	254237	-138470	-2009324396	31085	957204059	-0	345.28	0.38
36	258097	-139249	-2132020520	31081	985100473	-0	345.28	0.39
37	262028	-140043	-2255280220	31077	1012935060	-0	345.28	0.39
38	266031	-140851	-2379111957	31072	1040708037	-0	345.28	0.40
39	270105	-141675	-2503524354	31068	1068419581	-0	345.28	0.40
40	274251	-142512	-2628526168	31064	1096069828	-0	345.28	0.41
41	278469	-143365	-2754126269	31060	1123658875	-0	345.28	0.41
42	295535	-144237	-2880447746	31058	1151228562	-0	345.28	0.41
43	299659	-145086	-3002924235	31053	1177767410	-0	345.28	0.42
44	303848	-145936	-3126004119	31050	1204261570	-0	345.28	0.44
45	308104	-146797	-3249641286	31046	1230691181	-0	345.28	0.44
46	312427	-147671	-3373844120	31041	1257056355	-0	345.28	0.44
47	316816	-148559	-3498620986	31037	1283357145	-0	345.28	0.44
48	321271	-149461	-3623980279	31033	1309593570	-0	345.28	0.44
49	325792	-150377	-3749930413	31029	1335765618	-0	345.28	0.44
50	330380	-151306	-3876479819	31025	1361873247	-0	345.28	0.44
51	335034	-152249	-4003636936	31021	1387916386	-0	345.28	0.44
52	339754	-153206	-4131410210	31017	1413894936	-0	345.28	0.44
53	344541	-154176	-4259808084	31013	1439808771	-0	345.28	0.44
54	349394	-155160	-4388839000	31009	1465657742	-0	345.28	0.45
55	354313	-156158	-4518511391	31006	1491441673	-0	345.28	0.45
56	359299	-157170	-4648833682	31002	1517160365	-0	345.28	0.45

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 66 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-3520.00	31000.00	0.00
<b>2.00</b>	37.16	0.00	-38720.00	0.00	4.75
---	---	---	Ft = 5145	Fp = -41711	---
---	---	Pa = 4338	Ta = 2765	La = 0	---
---	---	Pb = -4338	Tb = -41485	Lb = 0	---
<b>3.00</b>	33.69	0.00	-38720.00	0.00	-4.75
---	---	---	Ft = -5145	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -38720	Lb = 0	---
<b>4.00</b>	30.23	0.00	-38720.00	0.00	4.75
---	---	---	Ft = 5145	Fp = -41711	---
---	---	Pa = 4338	Ta = 2765	La = 0	---
---	---	Pb = -4338	Tb = -41485	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-3821	-3700412	31000	30389932	0	345.28	0.10
3	883	-4135	-7010853	31000	55054838	0	345.28	0.17
4	1350	-4461	-10592899	31000	79729437	0	345.28	0.22
5	1836	-4800	-14456887	31000	104413197	-0	345.28	0.27
6	3733	-5152	-18648953	31001	129132701	0	345.28	0.31
7	4822	-5542	-23611965	31002	155606318	0	345.28	0.36
8	9020	11873	-18026614	31002	182060389	-0	345.28	0.20
9	13258	-3586	-18381865	31003	208587486	-0	345.28	0.21
10	14467	-4011	-22178370	31003	235126636	-0	345.28	0.22
11	15715	-4451	-26380383	31003	261676595	-0	345.28	0.23
12	15734	-17642	-38670514	31003	288215125	-0	345.28	0.24
13	15793	-46858	-84412181	31003	314742851	-0	345.28	0.25
14	17161	-47340	-125002894	31003	341279463	-0	345.28	0.27
15	18569	-47837	-166047542	31003	367823659	-0	345.28	0.28
16	23086	-44906	-205683849	31004	394415838	-0	345.28	0.29
17	27643	-84832	-271994688	31004	421050330	-0	345.28	0.31
18	29171	-85372	-345103935	31004	447684185	-0	345.28	0.33
19	35259	-85928	-418820056	31005	474368172	-0	345.28	0.35
20	35513	-91703	-498563707	31007	501943496	-0	345.28	0.37
21	35829	-128584	-617370746	31005	529316948	-0	345.28	0.28
22	38378	-129188	-730784260	31005	556698766	-0	345.28	0.31
23	40990	-129807	-844773524	31005	584087609	-0	345.28	0.32
24	43666	-130441	-959348009	31005	611482155	-0	345.28	0.34
25	46404	-131090	-1074517078	31005	638881088	-0	345.28	0.36
26	49205	-131754	-1190289996	31005	666283100	-0	345.28	0.37
27	52070	-132433	-1306675945	31005	693686888	-0	345.28	0.39
28	54997	-133127	-1423684033	31005	721091157	-0	345.28	0.40
29	57988	-133837	-1541323305	31005	748494619	-0	345.28	0.41
30	61042	-134561	-1659602746	31005	775895993	-0	345.28	0.42
31	73022	-135303	-1778685398	31006	803349566	-0	345.28	0.43
32	76596	-136048	-1896852668	31007	830461648	-0	345.28	0.44
33	80241	-136789	-2015480784	31006	857505859	-0	345.28	0.40
34	83958	-137547	-2134756297	31006	884544669	-0	345.28	0.40
35	87747	-138319	-2254687590	31006	911576891	-0	345.28	0.41
36	91607	-139106	-2375283028	31006	938601352	-0	345.28	0.41
37	95538	-139907	-2496550954	31006	965616886	-0	345.28	0.42
38	99541	-140723	-2618499686	31006	992622330	-0	345.28	0.42
39	103615	-141554	-2741137520	31005	1019616528	-0	345.28	0.42
40	107761	-142399	-2864472733	31005	1046598330	-0	345.28	0.43
41	111979	-143259	-2988513581	31005	1073566591	-0	345.28	0.43
42	129045	-144135	-3113386133	31005	1100558631	-0	345.28	0.43
43	133169	-144993	-3234590440	31005	1126593677	-0	345.28	0.43
44	137358	-145848	-3356472091	31005	1152616328	-0	345.28	0.45
45	141614	-146717	-3479013481	31004	1178617485	-0	345.28	0.45
46	145937	-147599	-3602221909	31004	1204596198	-0	345.28	0.46
47	150326	-148494	-3726104661	31004	1230551514	-0	345.28	0.46
48	154781	-149404	-3850669011	31003	1256482486	-0	345.28	0.46
49	159302	-150326	-3975922221	31003	1282388163	-0	345.28	0.46
50	163890	-151263	-4101871544	31003	1308267599	-0	345.28	0.46
51	168544	-152213	-4228524220	31002	1334119848	-0	345.28	0.46
52	173264	-153176	-4355887482	31002	1359943963	-0	345.28	0.46
53	178051	-154153	-4483968547	31001	1385739002	-0	345.28	0.46
54	182904	-155144	-4612774624	31001	1411504021	-0	345.28	0.46
55	187823	-156149	-4742312910	31001	1437238080	-0	345.28	0.46
56	192809	-157167	-4872590591	31000	1462940237	-0	345.28	0.46

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 67 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	7060.00	-7040.00	6000.00	0.00
<b>2.00</b>	37.16	43490.00	-30190.00	81000.00	4.75
---	---	---	Ft = 108535	Fp = -21220	---
---	---	Pa = 35120	Ta = -24645	La = 99695	---
---	---	Pb = 8370	Tb = -5545	Lb = -18695	---
<b>3.00</b>	33.69	54320.00	-38720.00	0.00	-4.75
---	---	---	Ft = 63870	Fp = 4416	---
---	---	Pa = 53861	Ta = -34328	La = 0	---
---	---	Pb = 459	Tb = -4392	Lb = 0	---
<b>4.00</b>	30.23	54320.00	-38720.00	0.00	4.75
---	---	---	Ft = 74159	Fp = -79007	---
---	---	Pa = 62537	Ta = 39858	La = 0	---
---	---	Pb = -8217	Tb = -78578	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	7493	-7357	-7370125	6018	6174341	0	345.28	0.03
3	7943	-7671	-13699788	6019	11255226	-0	345.28	0.06
4	8410	-7998	-20301340	6020	16352831	0	345.28	0.08
5	8896	-8338	-27184738	6021	21467358	-0	345.28	0.09
6	10793	-8693	-34398232	6025	26648039	-0	345.28	0.11
7	11882	-9108	-42824539	6055	32695192	-0	345.28	0.13
8	31471	127662	31999194	20924	47857916	-0	345.28	0.07
9	51100	-34617	20259926	105812	151288721	272481919	345.28	0.16
10	52308	-35043	-11003713	105813	242961742	272481919	345.28	0.24
11	53557	-35484	-42674534	105814	334640900	272481919	345.28	0.30
12	86861	-191116	-167298221	102548	425539372	272481919	345.28	0.39
13	120204	-76406	-313400218	87258	501428447	263301532	345.28	0.47
14	121572	-76886	-382018895	87255	579497429	263301532	345.28	0.52
15	122980	-77379	-450994510	87251	657457559	263301532	345.28	0.56
16	156826	21208	-464099974	87310	736366369	263301532	345.28	0.58
17	190712	-43055	-356937582	87363	816126930	263301532	345.28	0.57
18	192240	-43585	-398745588	87351	895664829	263301532	345.28	0.59
19	198328	-44136	-441052945	87346	975103268	263301532	345.28	0.61
20	196642	-54669	-493113081	87478	1058938011	263301532	345.28	0.63
21	195019	-123853	-616961736	87308	1139905550	263301532	345.28	0.46
22	197568	-124449	-729991318	87299	1220726672	263301532	345.28	0.48
23	200180	-125059	-843490602	87289	1301398333	263301532	345.28	0.50
24	202856	-125684	-957462112	87279	1381918897	263301532	345.28	0.52
25	205594	-126324	-1071909547	87269	1462287071	263301532	345.28	0.53
26	208395	-126979	-1186837607	87259	1542501827	263301532	345.28	0.54
27	211260	-127649	-1302251846	87249	1622562350	263301532	345.28	0.55
28	214187	-128334	-1418158544	87239	1702467984	263301532	345.28	0.56
29	217178	-129034	-1534564605	87228	1782218196	263301532	345.28	0.57
30	220232	-129749	-1651477459	87218	1861812540	263301532	345.28	0.58
31	232212	-130488	-1769062853	87216	1941396521	263301532	345.28	0.59
32	235786	-131250	-1886000459	87235	2020176720	263301532	345.28	0.59
33	239431	-131956	-2002894801	87197	2098304387	263301532	345.28	0.54
34	243148	-132705	-2120316152	87188	2176294827	263301532	345.28	0.54
35	246937	-133469	-2238273135	87179	2254147439	263301532	345.28	0.54
36	250797	-134248	-2356774733	87170	2331861808	263301532	345.28	0.54
37	254728	-135041	-2475830070	87161	2409437483	263301532	345.28	0.55
38	258731	-135849	-2595448383	87152	2486873981	263301532	345.28	0.55
39	262805	-136672	-2715639004	87144	2564170777	263301532	345.28	0.55
40	266951	-137509	-2836411340	87135	2641327304	263301532	345.28	0.55
41	271169	-138362	-2957774864	87127	2718342951	263301532	345.28	0.55
42	288235	-139234	-3079858854	87124	2795319713	263301532	345.28	0.55
43	292359	-140082	-3198236607	87112	2869453643	263301532	345.28	0.55
44	296548	-140931	-3317212892	87106	2943483808	263301532	345.28	0.57
45	300804	-141792	-3436740730	87097	3017361959	263301532	345.28	0.57
46	305127	-142666	-3556828932	87088	3091087711	263301532	345.28	0.57
47	309516	-143554	-3677486256	87079	3164660572	263301532	345.28	0.57
48	313971	-144455	-3798721463	87070	3238079996	263301532	345.28	0.57
49	318492	-145370	-3920543307	87062	3311345387	263301532	345.28	0.57
50	323080	-146299	-4042960534	87053	3384456101	263301532	345.28	0.56
51	327734	-147241	-4165981878	87045	3457411444	263301532	345.28	0.56
52	332454	-148198	-4289616055	87036	3530210677	263301532	345.28	0.56
53	337241	-149168	-4413871766	87028	3602853014	263301532	345.28	0.56
54	342094	-150151	-4538757690	87020	3675337624	263301532	345.28	0.56
55	347013	-151149	-4664282484	87012	3747663636	263301532	345.28	0.56
56	351999	-152160	-4790454779	87004	3819830133	263301532	345.28	0.55

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 68 " MST - MSA - ZONA A - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-7040.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	-30190.00	81000.00	4.75
---	---	---	Ft = 70328	Fp = 22883	---
---	---	Pa = 12292	Ta = -31365	La = 61735	---
---	---	Pb = -12292	Tb = 1175	Lb = 19265	---
<b>3.00</b>	33.69	0.00	-38720.00	0.00	-4.75
---	---	---	Ft = -5145	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -38720	Lb = 0	---
<b>4.00</b>	30.23	0.00	-38720.00	0.00	4.75
---	---	---	Ft = 5145	Fp = -41711	---
---	---	Pa = 4338	Ta = 2765	La = 0	---
---	---	Pb = -4338	Tb = -41485	Lb = 0	---

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TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-7341	-7151499	6000	5893923	0	345.28	0.03
3	883	-7655	-13263333	6000	10692224	-0	345.28	0.05
4	1350	-7981	-19648259	6001	15505296	0	345.28	0.07
5	1836	-8320	-26316566	6001	20333483	-0	345.28	0.09
6	3733	-8672	-33318541	6002	25219683	-0	345.28	0.10
7	4822	-9063	-41296010	6004	30624693	-0	345.28	0.12
8	12997	35165	-22381198	15202	41590781	-0	345.28	0.05
9	21212	-41240	-53978994	67744	106999665	168731169	345.28	0.12
10	22420	-41665	-89977059	67744	165146991	168731169	345.28	0.18
11	23669	-42105	-126378434	67745	223321971	168731169	345.28	0.23
12	19711	-57450	-172233357	71182	283407509	168731169	345.28	0.28
13	15793	-41848	-209545991	87006	359987558	178191879	345.28	0.32
14	17161	-42331	-245920828	87007	434246402	178191879	345.28	0.36
15	18569	-42828	-282747357	87007	508529531	178191879	345.28	0.40
16	23086	-39897	-318167295	87008	582919268	178191879	345.28	0.43
17	27643	-79823	-380262223	87010	657406211	178191879	345.28	0.47
18	29171	-80363	-449152062	87010	731901996	178191879	345.28	0.50
19	35259	-80918	-518648938	87011	806514073	178191879	345.28	0.53
20	35513	-86694	-594064146	87016	883524751	178191879	345.28	0.56
21	35829	-123575	-708527936	87011	960108898	178191879	345.28	0.42
22	38378	-124179	-817596418	87011	1036717806	178191879	345.28	0.44
23	40990	-124798	-927238863	87011	1113348351	178191879	345.28	0.46
24	43666	-125432	-1037464759	87011	1189997411	178191879	345.28	0.47
25	46404	-126081	-1148283493	87012	1266661843	178191879	345.28	0.49
26	49205	-126745	-1259704368	87012	1343338487	178191879	345.28	0.50
27	52070	-127424	-1371736614	87012	1420024172	178191879	345.28	0.51
28	54997	-128118	-1484389392	87012	1496715720	178191879	345.28	0.52
29	57988	-128827	-1597671809	87012	1573409950	178191879	345.28	0.53
30	61042	-129552	-1711592917	87012	1650103677	178191879	345.28	0.54
31	73022	-130293	-1826316268	87014	1726921854	178191879	345.28	0.55
32	76596	-131039	-1940186378	87016	1802761128	178191879	345.28	0.56
33	80241	-131780	-2054515729	87014	1878447048	178191879	345.28	0.51
34	83958	-132537	-2169491308	87014	1954123835	178191879	345.28	0.51
35	87747	-133309	-2285121587	87013	2029788465	178191879	345.28	0.51
36	91607	-134096	-2401415026	87013	2105437930	178191879	345.28	0.52
37	95538	-134898	-2518380061	87013	2181069230	178191879	345.28	0.52
38	99541	-135714	-2636025108	87013	2256679373	178191879	345.28	0.52
39	103615	-136544	-2754358561	87012	2332265375	178191879	345.28	0.52
40	107761	-137390	-2873388798	87012	2407824260	178191879	345.28	0.52
41	111979	-138250	-2993124176	87011	2483353059	178191879	345.28	0.52
42	129045	-139126	-3113690169	87012	2558940467	178191879	345.28	0.53
43	133169	-139984	-3230736385	87011	2631860402	178191879	345.28	0.53
44	137358	-140839	-3348459643	87011	2704752361	178191879	345.28	0.55
45	141614	-141707	-3466842592	87010	2777594389	178191879	345.28	0.55
46	145937	-142589	-3585892644	87009	2850383949	178191879	345.28	0.55
47	150326	-143485	-3705617193	87009	2923118500	178191879	345.28	0.55
48	154781	-144394	-3826023622	87008	2995795508	178191879	345.28	0.55
49	159302	-145317	-3947119304	87007	3068412439	178191879	345.28	0.55
50	163890	-146253	-4068911600	87006	3140966766	178191879	345.28	0.54
51	168544	-147203	-4191407859	87005	3213455964	178191879	345.28	0.54
52	173264	-148166	-4314615421	87004	3285877515	178191879	345.28	0.54
53	178051	-149144	-4438541611	87003	3358228901	178191879	345.28	0.54
54	182904	-150134	-4563193745	87002	3430507609	178191879	345.28	0.54
55	187823	-151139	-4688579127	87001	3502711132	178191879	345.28	0.54
56	192809	-152157	-4814705049	87000	3574836965	178191879	345.28	0.54

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 69 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	3470.00	-3480.00	30200.00	0.00
<b>2.00</b>	37.16	53420.00	-38100.00	0.00	4.75
---	---	---	Ft = 72933	Fp = -77721	---
---	---	Pa = 61504	Ta = 39199	La = 0	---
---	---	Pb = -8084	Tb = -77299	Lb = 0	---
<b>3.00</b>	33.69	53420.00	-38100.00	0.00	-4.75
---	---	---	Ft = 62809	Fp = 4366	---
---	---	Pa = 52966	Ta = -33758	La = 0	---
---	---	Pb = 454	Tb = -4342	Lb = 0	---
<b>4.00</b>	30.23	53420.00	-38100.00	0.00	4.75
---	---	---	Ft = 72933	Fp = -77721	---
---	---	Pa = 61504	Ta = 39199	La = 0	---
---	---	Pb = -8084	Tb = -77299	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	3903	-3788	-3727530	30204	29688885	0	345.28	0.10
3	4353	-4102	-7069066	30205	53799734	0	345.28	0.16
4	4820	-4429	-10678565	30205	77918530	0	345.28	0.22
5	5306	-4769	-14566161	30206	102044192	0	345.28	0.27
6	7203	-5123	-18767599	30208	126203286	0	345.28	0.31
7	8292	-5528	-23767489	30218	152155134	0	345.28	0.35
8	41073	246540	124467975	30245	178595628	0	345.28	0.24
9	73893	32762	194028201	30280	205655148	0	345.28	0.30
10	75102	32335	219934912	30281	232683437	0	345.28	0.31
11	76350	31895	245393791	30281	259678275	0	345.28	0.33
12	100980	-154009	159824366	30304	287046553	0	345.28	0.29
13	125649	-80164	1828883	30327	314751155	-0	345.28	0.26
14	127017	-80644	-69278738	30324	342381978	-0	345.28	0.27
15	128425	-81138	-140814764	30322	369938081	-0	345.28	0.29
16	161752	15814	-157298485	30348	397880474	-0	345.28	0.30
17	195118	-47408	-55444535	30371	426161267	-0	345.28	0.29
18	196646	-47939	-100189534	30365	454318946	-0	345.28	0.29
19	202734	-48491	-145496138	30362	482409591	-0	345.28	0.30
20	201115	-58852	-200332717	30423	512215222	-0	345.28	0.31
21	199559	-126934	-326133198	30343	540761070	-0	345.28	0.23
22	202108	-127531	-441341052	30338	569231673	-0	345.28	0.25
23	204720	-128142	-557058039	30334	597627205	-0	345.28	0.27
24	207396	-128768	-673283614	30329	625948350	-0	345.28	0.29
25	210134	-129409	-790018714	30324	654195805	-0	345.28	0.31
26	212935	-130066	-907265555	30319	682370260	-0	345.28	0.32
27	215800	-130737	-1025027446	30314	710472391	-0	345.28	0.34
28	218727	-131423	-1143308638	30309	738502851	-0	345.28	0.35
29	221718	-132124	-1262114194	30304	766462261	-0	345.28	0.36
30	224772	-132840	-1381449878	30300	794351212	-0	345.28	0.38
31	236752	-133578	-1501466517	30298	822229381	-0	345.28	0.39
32	240326	-134339	-1620785099	30307	849842740	-0	345.28	0.40
33	243971	-135049	-1740114048	30289	877183151	-0	345.28	0.36
34	247688	-135799	-1859986130	30285	904463560	-0	345.28	0.37
35	251477	-136564	-1980409047	30281	931684182	-0	345.28	0.38
36	255337	-137343	-2101390922	30277	958845286	-0	345.28	0.38
37	259268	-138137	-2222940089	30273	985947101	-0	345.28	0.39
38	263271	-138946	-2345065062	30269	1012989813	-0	345.28	0.39
39	267345	-139769	-2467774508	30265	1039973570	-0	345.28	0.40
40	271491	-140608	-2591077225	30261	1066898481	-0	345.28	0.40
41	275709	-141461	-2714982121	30257	1093764617	-0	345.28	0.40
42	292775	-142333	-2839610669	30255	1120612657	-0	345.28	0.41
43	296899	-143182	-2960457690	30250	1146457764	-0	345.28	0.41
44	301088	-144032	-3081910919	30248	1172259909	-0	345.28	0.43
45	305344	-144893	-3203925548	30243	1197999932	-0	345.28	0.43
46	309667	-145768	-3326509973	30239	1223677924	-0	345.28	0.43
47	314056	-146657	-3449672576	30235	1249293916	-0	345.28	0.43
48	318511	-147559	-3573421763	30232	1274847910	-0	345.28	0.43
49	323032	-148475	-3697765962	30228	1300339878	-0	345.28	0.44
50	327620	-149404	-3822713617	30224	1325769760	-0	345.28	0.44
51	332274	-150348	-3948273178	30220	1351137472	-0	345.28	0.44
52	336994	-151305	-4074453099	30216	1376442902	-0	345.28	0.44
53	341781	-152275	-4201261837	30213	1401685914	-0	345.28	0.44
54	346634	-153260	-4328707843	30209	1426866345	-0	345.28	0.44
55	351553	-154258	-4456799559	30205	1451984012	-0	345.28	0.44
56	356539	-155270	-4585545421	30202	1477038708	-0	345.28	0.44



## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 70 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-3480.00	30200.00	0.00
<b>2.00</b>	37.16	0.00	-38100.00	0.00	4.75
---	---	---	Ft = 5062	Fp = -41043	---
---	---	Pa = 4269	Ta = 2721	La = 0	---
---	---	Pb = -4269	Tb = -40821	Lb = 0	---
<b>3.00</b>	33.69	0.00	-38100.00	0.00	-4.75
---	---	---	Ft = -5062	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -38100	Lb = 0	---
<b>4.00</b>	30.23	0.00	-38100.00	0.00	4.75
---	---	---	Ft = 5062	Fp = -41043	---
---	---	Pa = 4269	Ta = 2721	La = 0	---
---	---	Pb = -4269	Tb = -40821	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-3781	-3661054	30200	29605676	0	345.28	0.10
3	883	-4095	-6939374	30200	53634068	0	345.28	0.16
4	1350	-4421	-10489130	30200	77671902	0	345.28	0.22
5	1836	-4760	-14320656	30200	101718661	0	345.28	0.26
6	3733	-5112	-18479596	30201	125800241	0	345.28	0.30
7	4822	-5502	-23405051	30202	151590663	0	345.28	0.35
8	8985	11628	-17955426	30202	177361385	0	345.28	0.19
9	13189	-3590	-18356177	30202	203202637	0	345.28	0.21
10	14397	-4015	-22148921	30203	229055680	0	345.28	0.22
11	15646	-4455	-26346716	30203	254919303	0	345.28	0.23
12	15700	-17442	-38510212	30203	280772402	0	345.28	0.24
13	15793	-46197	-83596886	30203	306615536	0	345.28	0.25
14	17161	-46680	-123621696	30203	332467326	0	345.28	0.26
15	18569	-47177	-164099975	30203	358326504	0	345.28	0.27
16	23052	-44301	-203198726	30204	384231967	0	345.28	0.28
17	27574	-83596	-268551360	30204	410178237	-0	345.28	0.30
18	29101	-84136	-340600942	30204	436123935	-0	345.28	0.32
19	35190	-84692	-41325517	30205	462118515	-0	345.28	0.34
20	35478	-90384	-491853826	30207	488981654	-0	345.28	0.37
21	35829	-126684	-608898581	30205	515648687	-0	345.28	0.28
22	38378	-127288	-720644668	30205	542323869	-0	345.28	0.30
23	40990	-127907	-832965987	30205	569005896	-0	345.28	0.32
24	43666	-128541	-945872063	30205	595693478	-0	345.28	0.34
25	46404	-129190	-1059372314	30205	622385335	-0	345.28	0.35
26	49205	-129854	-1173476062	30205	649080191	-0	345.28	0.37
27	52070	-130533	-1288192548	30205	675776777	-0	345.28	0.38
28	54997	-131227	-1403530937	30205	702473833	-0	345.28	0.39
29	57988	-131937	-1519500334	30205	729170102	-0	345.28	0.40
30	61042	-132661	-1636109782	30205	755864337	-0	345.28	0.41
31	73022	-133402	-1753520249	30206	782609423	-0	345.28	0.42
32	76596	-134148	-1870037202	30207	809021830	-0	345.28	0.43
33	80241	-134889	-1987017465	30206	835368120	-0	345.28	0.39
34	83958	-135646	-2104645181	30206	861709147	-0	345.28	0.40
35	87747	-136419	-2222928791	30206	888043757	-0	345.28	0.40
36	91607	-137205	-2341876721	30206	914370807	-0	345.28	0.41
37	95538	-138007	-2461497371	30206	940689159	-0	345.28	0.41
38	99541	-138823	-2581799118	30205	966997683	-0	345.28	0.41
39	103615	-139654	-2702790319	30205	993295251	-0	345.28	0.42
40	107761	-140499	-2824479307	30205	1019580743	-0	345.28	0.42
41	111979	-141359	-2946874399	30205	1045853044	-0	345.28	0.42
42	129045	-142235	-3070100108	30205	1072148510	-0	345.28	0.43
43	133169	-143093	-3189715393	30205	1097511679	-0	345.28	0.43
44	137358	-143948	-3310008470	30205	1122862774	-0	345.28	0.45
45	141614	-144817	-3430962128	30204	1148192929	-0	345.28	0.45
46	145937	-145699	-3552583721	30204	1173501219	-0	345.28	0.45
47	150326	-146594	-3674880585	30204	1198786718	-0	345.28	0.45
48	154781	-147503	-3797860046	30203	1224048500	-0	345.28	0.45
49	159302	-148426	-3921529420	30203	1249285641	-0	345.28	0.45
50	163890	-149363	-4045896011	30203	1274497218	-0	345.28	0.45
51	168544	-150313	-4170967112	30202	1299682310	-0	345.28	0.45
52	173264	-151276	-4296750006	30202	1324839995	-0	345.28	0.45
53	178051	-152253	-4423251963	30201	1349969354	-0	345.28	0.45
54	182904	-153244	-4550480244	30201	1375069468	-0	345.28	0.45
55	187823	-154249	-4678442097	30201	1400139421	-0	345.28	0.45
56	192809	-155267	-4807144759	30200	1425178297	-0	345.28	0.45

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 71 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	6940.00	-6950.00	6000.00	0.00
<b>2.00</b>	37.16	42820.00	-29730.00	78000.00	4.75
---	---	---	Ft = 105807	Fp = -21781	---
---	---	Pa = 34226	Ta = -24042	La = 97189	---
---	---	Pb = 8594	Tb = -5688	Lb = -19189	---
<b>3.00</b>	33.69	53420.00	-38100.00	0.00	-4.75
---	---	---	Ft = 62809	Fp = 4366	---
---	---	Pa = 52966	Ta = -33758	La = 0	---
---	---	Pb = 454	Tb = -4342	Lb = 0	---
<b>4.00</b>	30.23	53420.00	-38100.00	0.00	4.75
---	---	---	Ft = 72933	Fp = -77721	---
---	---	Pa = 61504	Ta = 39199	La = 0	---
---	---	Pb = -8084	Tb = -77299	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	7373	-7266	-7274861	6017	6160777	0	345.28	0.03
3	7823	-7581	-13525738	6018	11227593	0	345.28	0.06
4	8290	-7908	-20048339	6019	16310611	0	345.28	0.07
5	8776	-8247	-26852626	6020	21410020	0	345.28	0.09
6	10673	-8602	-33986331	6024	26573571	0	345.28	0.11
7	11762	-9016	-42317870	6052	32581443	0	345.28	0.13
8	30904	124262	30479661	20546	47460846	-0	345.28	0.07
9	50086	-33918	18894338	103298	148367606	265633460	345.28	0.16
10	51295	-34345	-11725261	103300	237812253	265633460	345.28	0.23
11	52543	-34785	-42751486	103301	327263262	265633460	345.28	0.30
12	85511	-187435	-164934176	99942	415830660	265633460	345.28	0.38
13	118519	-75276	-308670364	84243	488914566	256210327	345.28	0.46
14	119887	-75756	-376234716	84240	564242896	256210327	345.28	0.51
15	121295	-76249	-444158493	84236	639467203	256210327	345.28	0.55
16	154622	20697	-457133994	84291	715594107	256210327	345.28	0.57
17	187988	-42530	-351845952	84341	792531089	256210327	345.28	0.55
18	189516	-43060	-393071868	84330	869255625	256210327	345.28	0.58
19	195604	-43611	-434798573	84325	945887012	256210327	345.28	0.59
20	193985	-53980	-486105287	84450	1026735480	256210327	345.28	0.61
21	192429	-122051	-608072480	84290	1104850200	256210327	345.28	0.45
22	194978	-122647	-719406794	84281	1182825733	256210327	345.28	0.47
23	197590	-123258	-831213643	84272	1260659194	256210327	345.28	0.49
24	200266	-123883	-943495824	84263	1338349019	256210327	345.28	0.50
25	203004	-124524	-1056257268	84253	1415893960	256210327	345.28	0.52
26	205805	-125179	-1169502874	84244	1493293021	256210327	345.28	0.53
27	208670	-125849	-1283238364	84234	1570545402	256210327	345.28	0.54
28	211597	-126535	-1397470165	84225	1647650451	256210327	345.28	0.55
29	214588	-127235	-1512205300	84215	1724607630	256210327	345.28	0.56
30	217642	-127951	-1627451305	84206	1801416480	256210327	345.28	0.56
31	229622	-128689	-1743371694	84204	1878217559	256210327	345.28	0.57
32	233196	-129451	-1858658525	84222	1954240124	256210327	345.28	0.58
33	236841	-130159	-1973920189	84185	2029639644	256210327	345.28	0.52
34	240558	-130908	-2089712683	84177	2104908475	256210327	345.28	0.53
35	244347	-131672	-2206044678	84169	2180046007	256210327	345.28	0.53
36	248207	-132451	-2322925192	84160	2255051804	256210327	345.28	0.53
37	252138	-133245	-2440363379	84152	2329925396	256210327	345.28	0.53
38	256141	-134053	-2558368501	84144	2404666280	256210327	345.28	0.53
39	260215	-134877	-2676949912	84136	2479273915	256210327	345.28	0.54
40	264361	-135714	-2796117040	84128	2553747718	256210327	345.28	0.54
41	268579	-136567	-2915879374	84120	2628087064	256210327	345.28	0.54
42	285645	-137439	-3036364484	84117	2702390445	256210327	345.28	0.54
43	289769	-138288	-3153203673	84106	2773951443	256210327	345.28	0.54
44	293958	-139138	-3270644286	84100	2845413310	256210327	345.28	0.56
45	298214	-139998	-3388640638	84092	2916729818	256210327	345.28	0.56
46	302537	-140873	-3507201541	84083	2987900563	256210327	345.28	0.56
47	306926	-141761	-3626335758	84075	3058925037	256210327	345.28	0.56
48	311381	-142662	-3746052050	84067	3129802684	256210327	345.28	0.56
49	315902	-143578	-3866359175	84059	3200532899	256210327	345.28	0.55
50	320490	-144507	-3987265882	84050	3271115030	256210327	345.28	0.55
51	325144	-145450	-4108780905	84042	3341548380	256210327	345.28	0.55
52	329864	-146406	-4230912966	84035	3411832205	256210327	345.28	0.55
53	334651	-147377	-4353670767	84027	3481965720	256210327	345.28	0.55
54	339504	-148361	-4477062990	84019	3551948097	256210327	345.28	0.55
55	344423	-149358	-4601098296	84011	3621778467	256210327	345.28	0.54
56	349409	-150370	-4725785321	84004	3691455921	256210327	345.28	0.54

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## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 72 " MST - MSA - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -706.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6950.00	6000.00	0.00
<b>2.00</b>	37.16	0.00	-29730.00	78000.00	4.75
---	---	---	Ft = 68237	Fp = 21683	--
---	---	Pa = 11712	Ta = -30747	La = 59781	---
---	---	Pb = -11712	Tb = 1017	Lb = 18219	---
<b>3.00</b>	33.69	0.00	-38100.00	0.00	-4.75
---	---	---	Ft = -5062	Fp = 0	--
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -38100	Lb = 0	---
<b>4.00</b>	30.23	0.00	-38100.00	0.00	4.75
---	---	---	Ft = 5062	Fp = -41043	--
---	---	Pa = 4269	Ta = 2721	La = 0	---
---	---	Pb = -4269	Tb = -40821	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-7251	-7063131	6000	5893493	0	345.28	0.03
3	883	-7565	-13103073	6000	10690916	-0	345.28	0.05
4	1350	-7891	-19415928	6001	15502647	0	345.28	0.07
5	1836	-8230	-26011984	6001	20329015	0	345.28	0.09
6	3733	-8582	-32941010	6002	25211561	0	345.28	0.10
7	4822	-8972	-40838354	6004	30606482	0	345.28	0.12
8	12707	33024	-23197377	14911	41377117	-0	345.28	0.05
9	20632	-40532	-54459815	65790	104858359	163391521	345.28	0.12
10	21841	-40957	-89831594	65790	161307967	163391521	345.28	0.18
11	23089	-41397	-125606388	65790	217784549	163391521	345.28	0.22
12	19421	-56059	-170422579	69041	276073900	163391521	345.28	0.27
13	15793	-41298	-207210285	84006	349967653	172338395	345.28	0.32
14	17161	-41781	-243112265	84006	421666799	172338395	345.28	0.36
15	18569	-42278	-279465515	84007	493389379	172338395	345.28	0.39
16	23052	-39402	-314440965	84008	565214082	172338395	345.28	0.42
17	27574	-78697	-375670761	84009	637131873	172338395	345.28	0.46
18	29101	-79237	-443594075	84009	709058228	172338395	345.28	0.49
19	35190	-79793	-512122606	84011	781097047	172338395	345.28	0.52
20	35478	-85485	-586488324	84015	855452676	172338395	345.28	0.54
21	35829	-121785	-699285725	84010	929397042	172338395	345.28	0.41
22	38378	-122389	-806782712	84011	1003365310	172338395	345.28	0.43
23	40990	-123007	-914853179	84011	1077354461	172338395	345.28	0.45
24	43666	-123641	-1023506665	84011	1151361478	172338395	345.28	0.46
25	46404	-124290	-1132752612	84011	1225383322	172338395	345.28	0.48
26	49205	-124954	-1242600379	84011	1299416942	172338395	345.28	0.49
27	52070	-125634	-1353059249	84012	1373459273	172338395	345.28	0.50
28	54997	-126328	-1464138442	84012	1447507245	172338395	345.28	0.51
29	57988	-127037	-1575847119	84012	1521557784	172338395	345.28	0.52
30	61042	-127762	-1688194392	84012	1595607814	172338395	345.28	0.53
31	73022	-128503	-1801341785	84013	1669778100	172338395	345.28	0.54
32	76596	-129249	-1913656486	84015	1743003330	172338395	345.28	0.54
33	80241	-129990	-2026432845	84013	1816080328	172338395	345.28	0.49
34	83958	-130747	-2139855501	84013	1889148483	172338395	345.28	0.50
35	87747	-131519	-2253932980	84013	1962204872	172338395	345.28	0.50
36	91607	-132306	-2368673800	84013	2035246589	172338395	345.28	0.50
37	95538	-133107	-2484086452	84012	2108270738	172338395	345.28	0.51
38	99541	-133923	-2600179409	84012	2181274427	172338395	345.28	0.51
39	103615	-134754	-2716961122	84012	2254254775	172338395	345.28	0.51
40	107761	-135599	-2834440023	84011	2327208907	172338395	345.28	0.51
41	111979	-136459	-2952624528	84011	2400133956	172338395	345.28	0.51
42	129045	-137335	-3071638602	84012	2473115628	172338395	345.28	0.52
43	133169	-138194	-3187187419	84011	2543521729	172338395	345.28	0.51
44	137358	-139049	-3303413718	84011	2613900787	172338395	345.28	0.54
45	141614	-139917	-3420300528	84010	2684231591	172338395	345.28	0.54
46	145937	-140799	-3537855312	84009	2754511690	172338395	345.28	0.54
47	150326	-141695	-3656085513	84008	2824738630	172338395	345.28	0.54
48	154781	-142604	-3774998563	84008	2894909962	172338395	345.28	0.53
49	159302	-143527	-3894601886	84007	2965023241	172338395	345.28	0.53
50	163890	-144463	-4014902890	84006	3035076027	172338395	345.28	0.53
51	168544	-145413	-4135908976	84005	3105065880	172338395	345.28	0.53
52	173264	-146376	-4257627530	84004	3174990368	172338395	345.28	0.53
53	178051	-147353	-4380065930	84003	3244847060	172338395	345.28	0.53
54	182904	-148344	-4503231538	84002	3314633530	172338395	345.28	0.53
55	187823	-149349	-4627131709	84001	3384347356	172338395	345.28	0.53
56	192809	-150367	-4751773783	84000	3453986117	172338395	345.28	0.53

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 73 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	5660.00	-3180.00	39000.00	0.00
<b>2.00</b>	37.16	69540.00	-28220.00	0.00	4.75
---	---	---	Ft = 92102	Fp = -78145	---
---	---	Pa = 77668	Ta = 49502	La = 0	---
---	---	Pb = -8128	Tb = -77722	Lb = 0	---
<b>3.00</b>	33.69	69540.00	-28220.00	0.00	-4.75
---	---	---	Ft = 84603	Fp = -17345	---
---	---	Pa = 71344	Ta = -45471	La = 0	---
---	---	Pb = -1804	Tb = 17251	Lb = 0	---
<b>4.00</b>	30.23	69540.00	-28220.00	0.00	4.75
---	---	---	Ft = 92102	Fp = -78145	---
---	---	Pa = 77668	Ta = 49502	La = 0	---
---	---	Pb = -8128	Tb = -77722	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	6093	-3263	-3229540	39012	38411547	0	345.28	0.13
3	6543	-3342	-5936491	39013	69618831	0	345.28	0.21
4	7010	-3424	-8711581	39013	100834916	-0	345.28	0.28
5	7496	-3509	-11557242	39014	132057937	0	345.28	0.34
6	9393	-3598	-14486786	39018	163322058	0	345.28	0.39
7	10482	-3710	-17793293	39039	196970981	0	345.28	0.45
8	51345	315023	173117522	39096	231424212	0	345.28	0.32
9	92248	45499	265502366	39171	266902255	0	345.28	0.39
10	93456	45392	303123065	39171	302322470	-0	345.28	0.42
11	94705	45282	340552062	39170	337681413	-0	345.28	0.44
12	128501	-196510	234079799	39226	373733338	-0	345.28	0.38
13	162337	-78220	51841275	39278	410410838	-0	345.28	0.34
14	163705	-78338	-16468576	39272	446954644	-0	345.28	0.35
15	165113	-78460	-84890463	39265	483363384	-0	345.28	0.36
16	205393	49046	-80239056	39318	520385463	-0	345.28	0.37
17	245712	-12045	94503653	39365	557943809	-0	345.28	0.38
18	247240	-12172	81329840	39351	595289573	-0	345.28	0.38
19	253328	-12307	67942676	39342	632497960	-0	345.28	0.38
20	251687	-22274	46732468	39472	672311000	-0	345.28	0.38
21	250109	-90296	-46097197	39303	710027247	-0	345.28	0.27
22	252658	-90440	-127906155	39292	747608540	-0	345.28	0.27
23	255270	-90588	-209846365	39281	785055509	-0	345.28	0.27
24	257946	-90739	-291906929	39270	822369886	-0	345.28	0.28
25	260684	-90893	-374078613	39259	859553438	-0	345.28	0.28
26	263485	-91051	-456353616	39248	896607931	-0	345.28	0.29
27	266350	-91213	-538725380	39237	933535118	-0	345.28	0.30
28	269277	-91378	-621188417	39226	970336715	-0	345.28	0.30
29	272268	-91547	-703738170	39216	1007014392	-0	345.28	0.31
30	275322	-91720	-786370888	39205	1043569760	-0	345.28	0.31
31	287302	-91902	-869173634	39201	1080083087	-0	345.28	0.32
32	290876	-92102	-951240856	39217	1116284705	-0	345.28	0.32
33	294521	-92257	-1032991204	39181	1152040120	-0	345.28	0.29
34	298238	-92439	-1114820827	39172	1187693092	-0	345.28	0.30
35	302027	-92625	-1196728757	39163	1223244515	-0	345.28	0.30
36	305887	-92814	-1278714486	39154	1258695407	-0	345.28	0.30
37	309818	-93007	-1360777772	39146	1294046709	-0	345.28	0.31
38	313821	-93203	-1442918600	39137	1329299289	-0	345.28	0.31
39	317895	-93403	-1525137158	39129	1364453942	-0	345.28	0.31
40	322041	-93607	-1607433804	39121	1399511394	-0	345.28	0.31
41	326259	-93815	-1689809052	39113	1434472301	-0	345.28	0.31
42	343325	-94030	-1772334798	39109	1469391236	-0	345.28	0.31
43	347449	-94235	-1852044416	39099	1502983179	-0	345.28	0.31
44	351638	-94444	-1931852043	39093	1536505685	-0	345.28	0.33
45	355894	-94653	-2011719169	39085	1569929398	-0	345.28	0.33
46	360217	-94866	-2091646793	39077	1603254925	-0	345.28	0.33
47	364606	-95083	-2171635929	39069	1636482761	-0	345.28	0.33
48	369061	-95303	-2251687647	39061	1669613347	-0	345.28	0.33
49	373582	-95526	-2331803058	39053	1702647070	-0	345.28	0.33
50	378170	-95753	-2411983314	39046	1735584264	-0	345.28	0.33
51	382824	-95984	-2492229598	39038	1768425215	-0	345.28	0.33
52	387544	-96217	-2572543118	39031	1801170161	-0	345.28	0.33
53	392331	-96455	-2652925103	39024	1833819294	-0	345.28	0.32
54	397184	-96696	-2733376799	39017	1866372763	-0	345.28	0.32
55	402103	-96940	-2813899465	39010	1898830675	-0	345.28	0.32
56	407089	-97188	-2894494371	39003	1931193097	-0	345.28	0.32

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 74 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-3180.00	39000.00	0.00
<b>2.00</b>	37.16	0.00	-28220.00	0.00	4.75
---	---	---	Ft = 3749	Fp = -30400	---
---	---	Pa = 3162	Ta = 2015	La = 0	---
---	---	Pb = -3162	Tb = -30235	Lb = 0	---
<b>3.00</b>	33.69	0.00	-28220.00	0.00	-4.75
---	---	---	Ft = -3749	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -28220	Lb = 0	---
<b>4.00</b>	30.23	0.00	-28220.00	0.00	4.75
---	---	---	Ft = 3749	Fp = -30400	---
---	---	Pa = 3162	Ta = 2015	La = 0	---
---	---	Pb = -3162	Tb = -30235	Lb = 0	---

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## TABELLA DESCRITTIVA DELLE AZIONI INTERNE.

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-3255	-3183993	39000	38232491	0	345.28	0.13
3	883	-3333	-5850040	39000	69262526	0	345.28	0.21
4	1350	-3415	-8589168	39000	100304750	0	345.28	0.28
5	1836	-3499	-11404076	39000	131358496	0	345.28	0.34
6	3733	-3587	-14321861	39001	162457192	0	345.28	0.39
7	4822	-3686	-17626813	39002	195762613	0	345.28	0.45
8	8432	9197	-13072251	39002	229029048	0	345.28	0.25
9	12082	-1872	-12663592	39003	262373972	-0	345.28	0.27
10	13290	-1979	-14588720	39003	295735136	0	345.28	0.28
11	14539	-2088	-16629283	39003	329110993	-0	345.28	0.29
12	15146	-11485	-24391420	39003	362485813	-0	345.28	0.30
13	15793	-32554	-56354630	39003	395859276	0	345.28	0.31
14	17161	-32674	-84366044	39004	429243914	0	345.28	0.32
15	18569	-32798	-112504830	39004	462638091	-0	345.28	0.33
16	22498	-30417	-139393423	39004	496082560	0	345.28	0.34
17	26467	-59263	-185493906	39005	529571237	-0	345.28	0.35
18	27994	-59398	-236328928	39005	563060149	-0	345.28	0.36
19	34083	-59537	-287374860	39006	596613118	-0	345.28	0.37
20	34924	-63466	-342483330	39009	631292319	-0	345.28	0.38
21	35829	-90064	-425851689	39006	665729722	-0	345.28	0.28
22	38378	-90215	-505035035	39006	700177649	-0	345.28	0.29
23	40990	-90369	-584377688	39006	734634416	-0	345.28	0.30
24	43666	-90528	-663880341	39006	769098359	-0	345.28	0.31
25	46404	-90690	-743543617	39006	803567824	-0	345.28	0.31
26	49205	-90855	-823368081	39007	838041165	-0	345.28	0.32
27	52070	-91025	-903354249	39007	872516743	-0	345.28	0.33
28	54997	-91198	-983502593	39007	906992929	-0	345.28	0.33
29	57988	-91375	-1063813550	39007	941468104	-0	345.28	0.34
30	61042	-91555	-1144287528	39007	975940655	-0	345.28	0.34
31	73022	-91741	-1225029217	39008	1010478860	-0	345.28	0.35
32	76596	-91928	-1304875623	39009	1044587433	-0	345.28	0.35
33	80241	-92111	-1384760766	39007	1078610647	-0	345.28	0.32
34	83958	-92300	-1464805450	39007	1112627069	-0	345.28	0.32
35	87747	-92493	-1545009958	39007	1146635209	-0	345.28	0.32
36	91607	-92689	-1625374572	39007	1180633590	-0	345.28	0.33
37	95538	-92888	-1705899565	39007	1214620743	-0	345.28	0.33
38	99541	-93092	-1786585206	39007	1248595208	-0	345.28	0.33
39	103615	-93299	-1867431754	39007	1282555530	-0	345.28	0.33
40	107761	-93509	-1948439467	39006	1316500263	-0	345.28	0.33
41	111979	-93723	-2029608597	39006	1350427965	-0	345.28	0.33
42	129045	-93942	-2111018425	39007	1384385578	-0	345.28	0.33
43	133169	-94156	-2189748186	39006	1417139242	-0	345.28	0.33
44	137358	-94369	-2268632934	39006	1449877320	-0	345.28	0.35
45	141614	-94585	-2347656168	39006	1482588362	-0	345.28	0.34
46	145937	-94804	-2426818105	39005	1515271175	-0	345.28	0.34
47	150326	-95027	-2506118957	39005	1547924563	-0	345.28	0.34
48	154781	-95254	-2585558938	39004	1580547330	-0	345.28	0.34
49	159302	-95483	-2665138263	39004	1613138283	-0	345.28	0.34
50	163890	-95716	-2744857146	39003	1645696231	-0	345.28	0.34
51	168544	-95953	-2824715802	39003	1678219982	-0	345.28	0.34
52	173264	-96192	-2904714446	39002	1710708349	-0	345.28	0.34
53	178051	-96436	-2984853294	39002	1743160143	-0	345.28	0.34
54	182904	-96682	-3065132561	39001	1775574179	-0	345.28	0.34
55	187823	-96932	-3145552461	39001	1807949272	-0	345.28	0.34
56	192809	-97185	-3226113212	39000	1840284240	-0	345.28	0.34

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 75 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	11320.00	-6350.00	8000.00	0.00
<b>2.00</b>	37.16	54910.00	-21450.00	96000.00	4.75
---	---	---	Ft = 123239	Fp = -18513	---
---	---	Pa = 48909	Ta = -14699	La = 112159	---
---	---	Pb = 6001	Tb = -6751	Lb = -16159	---
<b>3.00</b>	33.69	69540.00	-28220.00	0.00	-4.75
---	---	---	Ft = 84603	Fp = -17345	---
---	---	Pa = 71344	Ta = -45471	La = 0	---
---	---	Pb = -1804	Tb = 17251	Lb = 0	---
<b>4.00</b>	30.23	69540.00	-28220.00	0.00	4.75
---	---	---	Ft = 92102	Fp = -78145	---
---	---	Pa = 77668	Ta = 49502	La = 0	---
---	---	Pb = -8128	Tb = -77722	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm2]	% Uso
2	11753	-6447	-6519882	8045	8403928	0	345.28	0.04
3	12203	-6525	-11934801	8046	15347157	0	345.28	0.06
4	12670	-6607	-17421620	8048	22309540	0	345.28	0.08
5	13156	-6693	-22982520	8049	29291035	0	345.28	0.10
6	15053	-6783	-28643608	8055	36349179	0	345.28	0.12
7	16142	-6910	-35109100	8117	44720635	-0	345.28	0.13
8	42626	186940	76607453	24862	63506803	0	345.28	0.12
9	69149	-21874	85702928	120408	182001044	306550311	345.28	0.21
10	70357	-21980	65713980	120409	287256085	306550311	345.28	0.29
11	71606	-22090	45594712	120409	392501669	306550311	345.28	0.36
12	112467	-233877	-100526913	117659	497827459	306550311	345.28	0.43
13	153367	-74673	-270438703	104514	590884494	298614894	345.28	0.52
14	154735	-74790	-336713641	104505	685745539	298614894	345.28	0.58
15	156143	-74909	-403003507	104495	780425262	298614894	345.28	0.62
16	196423	52584	-396364365	104601	876469604	298614894	345.28	0.65
17	236742	-8517	-219738870	104698	973737599	298614894	345.28	0.64
18	238270	-8641	-230910973	104673	1070657485	298614894	345.28	0.66
19	244358	-8773	-242206532	104659	1167378009	298614894	345.28	0.68
20	242717	-18764	-261551602	104911	1270115418	298614894	345.28	0.70
21	241139	-86754	-352015097	104587	1368543788	298614894	345.28	0.51
22	243688	-86895	-431398122	104567	1466732775	298614894	345.28	0.52
23	246300	-87040	-510857300	104547	1564678272	298614894	345.28	0.53
24	248976	-87188	-590386146	104527	1662378800	298614894	345.28	0.54
25	251714	-87340	-669979399	104506	1759833465	298614894	345.28	0.55
26	254515	-87496	-749632841	104485	1857041826	298614894	345.28	0.56
27	257380	-87655	-829343150	104465	1954003806	298614894	345.28	0.57
28	260307	-87819	-909107769	104444	2050719600	298614894	345.28	0.57
29	263298	-87985	-988924795	104424	2147189614	298614894	345.28	0.58
30	266352	-88156	-1068792890	104404	2243414406	298614894	345.28	0.58
31	278332	-88337	-1148815521	104397	2339572747	298614894	345.28	0.58
32	281906	-88540	-1228160590	104430	2434833814	298614894	345.28	0.59
33	285551	-88689	-1307119085	104358	2529129163	298614894	345.28	0.53
34	289268	-88869	-1386135214	104341	2623212201	298614894	345.28	0.53
35	293057	-89053	-1465209336	104324	2717083144	298614894	345.28	0.53
36	296917	-89240	-1544342190	104307	2810742549	298614894	345.28	0.53
37	300848	-89432	-1623534676	104290	2904190922	298614894	345.28	0.53
38	304851	-89627	-1702787831	104273	2997428711	298614894	345.28	0.53
39	308925	-89825	-1782102805	104257	3090456294	298614894	345.28	0.53
40	313071	-90028	-1861480846	104241	3183273982	298614894	345.28	0.53
41	317289	-90234	-1940923282	104225	3275882009	298614894	345.28	0.52
42	334355	-90449	-2020510445	104218	3368405650	298614894	345.28	0.52
43	338479	-90652	-2097367224	104198	3457466619	298614894	345.28	0.52
44	342668	-90859	-2174312300	104186	3546375538	298614894	345.28	0.54
45	346924	-91068	-2251304621	104170	3635065217	298614894	345.28	0.54
46	351247	-91279	-2328345772	104154	3723536079	298614894	345.28	0.53
47	355636	-91494	-2405437304	104138	3811788363	298614894	345.28	0.53
48	360091	-91713	-2482580785	104123	3899822222	298614894	345.28	0.53
49	364612	-91935	-2559777790	104107	3987637727	298614894	345.28	0.53
50	369200	-92161	-2637029901	104092	4075234871	298614894	345.28	0.52
51	373854	-92390	-2714338702	104078	4162613566	298614894	345.28	0.52
52	378574	-92623	-2791705772	104063	4249773648	298614894	345.28	0.52
53	383361	-92859	-2869132691	104049	4336714880	298614894	345.28	0.51
54	388214	-93099	-2946621028	104034	4423436949	298614894	345.28	0.51
55	393133	-93342	-3024172344	104021	4509939475	298614894	345.28	0.51
56	398119	-93589	-3101788190	104007	4596222008	298614894	345.28	0.50

## CONDIZIONI GENERALI DI CARICO

Condizione di carico n. 76 " MST - MSB - ZONA B - ECCEZIONALE - RESISTENZA - 2 x 40.5 - (-) "

Pressione trasversale del vento = -176.0 N/mq

Pressione longitudinale del vento = 0.0 N/mq

Tipo di condizione di carico: accidentale

### CARICHI CONCENTRATI

Livello	H [m]	Verticali [N]	Trasversali [N]	Longitudinali [N]	Eccentricità del conduttore [m]
<b>1.00</b>	46.67	0.00	-6350.00	8000.00	0.00
<b>2.00</b>	37.16	0.00	-21450.00	96000.00	4.75
---	---	---	Ft = 72573	Fp = 35144	---
---	---	Pa = 16914	Ta = -26144	La = 65553	---
---	---	Pb = -16914	Tb = 4694	Lb = 30447	---
<b>3.00</b>	33.69	0.00	-28220.00	0.00	-4.75
---	---	---	Ft = -3749	Fp = 0	---
---	---	Pa = 0	Ta = 0	La = 0	---
---	---	Pb = 0	Tb = -28220	Lb = 0	---
<b>4.00</b>	30.23	0.00	-28220.00	0.00	4.75
---	---	---	Ft = 3749	Fp = -30400	---
---	---	Pa = 3162	Ta = 2015	La = 0	---
---	---	Pb = -3162	Tb = -30235	Lb = 0	---

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**TABELLA DESCRITTIVA DELLE AZIONI INTERNE.**

Nodo	Carico verticale [N]	Tx [N]	My [Nmm]	Ty [N]	Mx [Nmm]	Mt [Nmm]	Sig. amm. [N/mm <sup>2</sup> ]	% Uso
2	433	-6425	-6291647	8000	7856445	0	345.28	0.03
3	883	-6503	-11479957	8000	14249860	0	345.28	0.06
4	1350	-6585	-16742380	8001	20660692	-0	345.28	0.07
5	1836	-6669	-22081562	8001	27089321	-0	345.28	0.09
6	3733	-6758	-27527438	8002	33586274	-0	345.28	0.10
7	4822	-6856	-33540422	8005	40743299	-0	345.28	0.12
8	15308	56983	-644846	17774	53908233	-0	345.28	0.06
9	25833	-33207	-21806323	73567	125002973	179168738	345.28	0.13
10	27042	-33313	-50604617	73568	188388319	179168738	345.28	0.19
11	28290	-33423	-79516759	73568	251803685	179168738	345.28	0.24
12	22022	-53478	-120716396	79000	318206632	179168738	345.28	0.28
13	15793	-28954	-147096942	104008	410646633	194120214	345.28	0.34
14	17161	-29075	-172079500	104008	499407929	194120214	345.28	0.39
15	18569	-29199	-197187812	104008	588198358	194120214	345.28	0.43
16	22498	-26817	-221046679	104010	677095900	194120214	345.28	0.46
17	26467	-55664	-264117416	104011	766091002	194120214	345.28	0.50
18	27994	-55799	-311920307	104011	855098561	194120214	345.28	0.53
19	34083	-55938	-359934419	104013	944245772	194120214	345.28	0.56
20	34924	-59867	-411933113	104019	1036266069	194120214	345.28	0.58
21	35829	-86465	-492181143	104013	1127806139	194120214	345.28	0.43
22	38378	-86616	-568242878	104013	1219375858	194120214	345.28	0.45
23	40990	-86770	-644462632	104014	1310971513	194120214	345.28	0.46
24	43666	-86928	-720841106	104014	1402589393	194120214	345.28	0.47
25	46404	-87090	-797378942	104014	1494225762	194120214	345.28	0.48
26	49205	-87256	-874076731	104014	1585876860	194120214	345.28	0.49
27	52070	-87425	-950935020	104015	1677538917	194120214	345.28	0.50
28	54997	-87598	-1027954321	104015	1769208149	194120214	345.28	0.51
29	57988	-87775	-1105135112	104015	1860880769	194120214	345.28	0.52
30	61042	-87956	-1182477850	104015	1952552985	194120214	345.28	0.52
31	73022	-88142	-1260087655	104017	2044373156	194120214	345.28	0.53
32	76596	-88328	-1336846879	104019	2135022387	194120214	345.28	0.53
33	80241	-88512	-1413643598	104016	2225489667	194120214	345.28	0.48
34	83958	-88701	-1490599003	104016	2315946253	194120214	345.28	0.48
35	87747	-88893	-1567713442	104016	2406388540	194120214	345.28	0.48
36	91607	-89089	-1644987262	104016	2496812944	194120214	345.28	0.48
37	95538	-89289	-1722420804	104015	2587215887	194120214	345.28	0.48
38	99541	-89492	-1800014406	104015	2677593803	194120214	345.28	0.48
39	103615	-89699	-1877768397	104015	2767943135	194120214	345.28	0.48
40	107761	-89910	-1955683108	104014	2858260335	194120214	345.28	0.48
41	111979	-90124	-2033758862	104014	2948541863	194120214	345.28	0.48
42	129045	-90343	-2112074550	104015	3038893151	194120214	345.28	0.48
43	133169	-90556	-2187816811	104014	3126056412	194120214	345.28	0.48
44	137358	-90769	-2263713826	104013	3213186480	194120214	345.28	0.50
45	141614	-90985	-2339749268	104012	3300257246	194120214	345.28	0.50
46	145937	-91205	-2415923433	104011	3387265679	194120214	345.28	0.50
47	150326	-91428	-2492236613	104010	3474208749	194120214	345.28	0.50
48	154781	-91654	-2568689100	104009	3561083428	194120214	345.28	0.49
49	159302	-91883	-2645281186	104008	3647886695	194120214	345.28	0.49
50	163890	-92116	-2722013163	104007	3734615532	194120214	345.28	0.49
51	168544	-92353	-2798885325	104006	3821266928	194120214	345.28	0.49
52	173264	-92593	-2875897963	104005	3907837874	194120214	345.28	0.49
53	178051	-92836	-2953051370	104004	3994325367	194120214	345.28	0.48
54	182904	-93082	-3030345839	104003	4080726410	194120214	345.28	0.48
55	187823	-93332	-3107781660	104002	4167038007	194120214	345.28	0.48
56	192809	-93585	-3185359126	104001	4253257170	194120214	345.28	0.48

## VERIFICA DEI TIRAFONDI

La tensione nei tirafondi è valutata considerando simultaneamente carico assiale, il momento flettente, il taglio e la Torsione.

La combinazione più sfavorevole per il calcolo dei tirafondi è la n. 5

Numero dei tirafondi = 40

Diametro dei tirafondi = 39.0 [mm]

Cerchio dei tirafondi = 1950.0 [mm]

Sezione resistente del cerchio di tirafondi = 39040.0 [mm<sup>2</sup>]

Modulo di resistenza del cerchio di tirafondi = 19032000.0 [mm<sup>3</sup>]

Le barre per la realizzazione dei tirafondi sono in acciaio tipo: CLASSE 8.8 ( EN 20898 ). La tensione ammissibile è pari a 320 [N/mm<sup>2</sup>]

Tensione normalizzata nei tirafondi = 0.99 [N/mm<sup>2</sup>]

## VERIFICA DELLA FLANGIA DI BASE

Il dispositivo di fissaggio alla fondazione è costituito da un doppio anello circolare saldato al palo ed opportunamente forato al fine di inserirvi i tirafondi. Le due flange sono collegate ed irrigidite da un gruppo di nervature. Ad ogni tirafondo corrisponde una nervatura.

Le tensioni nella flangia e nelle nervature sono calcolate ripartendo il tiro totale di un tirafondo secondo un traliccio che coinvolge la flangia ed una nervatura. Inoltre localmente si valutano gli effetti delle flessioni, indotte dai tirafondi, sul settore di flangia.

La verifica della stabilità delle nervature compresse è condotta secondo i criteri delle CNR 10011.

Spessore della piastra di base = 50.0 [mm]

Diametro esterno della flangia = 2070.0 [mm]

La combinazione più sfavorevole per il calcolo della flangia è la n. 5

Tensione normalizzata della flangia = 0.54 [N/mm<sup>2</sup>]

N. 40 nervature spessore = 15 [mm]

Tensione ammissibile nella flangia = 215.8 [N/mm<sup>2</sup>]

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## LINEA ELASTICA

Cond. n.	Tipo	H [mm]	Freccia trasversale [mm]	Freccia longitudinale [mm]	Freccia totale [mm]	Rotazione totale
1	N	46485	422	0	422	1.085°
2	N	46485	104	0	104	0.011°
3	N	46485	614	34	615	1.504°
4	N	46485	272	33	274	0.372°
5	N	46485	1224	94	1227	2.816°
6	N	46485	1027	90	1031	2.191°
7	N	46485	1200	78	1202	2.754°
8	N	46485	1008	75	1011	2.144°
9	N	46485	962	127	970	2.389°
10	N	46485	699	120	710	1.554°
11	N	46485	825	89	830	1.526°
12	N	46485	1004	89	1008	2.124°
13	N	46485	811	74	815	1.491°
14	N	46485	986	74	989	2.079°
15	E	46485	454	119	470	0.783°
16	E	46485	683	119	694	1.508°
17	N	46485	1173	94	1177	2.732°
18	N	46485	970	90	975	2.086°
19	N	46485	1156	94	1160	2.691°
20	N	46485	957	90	961	2.058°
21	N	46485	931	127	940	2.337°
22	N	46485	671	120	682	1.507°
23	N	46485	767	89	772	1.413°
24	N	46485	949	89	953	2.024°
25	N	46485	757	89	762	1.396°
26	N	46485	936	89	940	1.997°
27	N	46485	429	119	445	0.749°
28	N	46485	656	119	667	1.464°
29	E	46485	1107	806	1369	3.324°
30	E	46485	958	729	1204	2.828°
31	E	46485	1067	1009	1469	3.347°
32	E	46485	977	857	1300	2.830°
33	E	46485	1087	758	1325	3.198°
34	E	46485	941	686	1164	2.713°
35	E	46485	1048	951	1415	3.214°
36	E	46485	959	805	1252	2.714°
37	E	46485	833	995	1298	3.395°
38	E	46485	645	882	1093	2.805°
39	E	46485	766	1250	1466	3.452°
40	E	46485	671	1033	1232	2.749°
41	E	46485	880	834	1212	2.785°
42	E	46485	977	774	1247	2.927°
43	E	46485	1077	1126	1558	3.608°
44	E	46485	1058	977	1440	3.258°
45	E	46485	865	789	1171	2.663°
46	E	46485	961	730	1206	2.811°
47	E	46485	1058	1070	1505	3.473°
48	E	46485	1040	923	1391	3.136°
49	E	46485	509	986	1110	2.822°
50	E	46485	649	913	1120	2.867°
51	E	46485	691	1302	1474	3.472°
52	E	46485	705	1120	1323	3.023°
53	E	46485	1116	484	1216	3.002°
54	E	46485	918	465	1029	2.460°
55	E	46485	1031	935	1392	3.265°
56	E	46485	926	825	1240	2.808°

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## LINEA ELASTICA

Cond. n.	Tipo	H [mm]	Freccia trasversale [mm]	Freccia longitudinale [mm]	Freccia totale [mm]	Rotazione totale
57	E	46485	1099	471	1196	2.947°
58	E	46485	905	453	1012	2.414°
59	E	46485	1017	904	1360	3.191°
60	E	46485	913	797	1212	2.743°
61	E	46485	878	617	1073	2.964°
62	E	46485	624	585	855	2.372°
63	E	46485	760	1163	1389	3.399°
64	E	46485	638	1008	1193	2.810°
65	E	46485	714	460	850	1.978°
66	E	46485	897	460	1008	2.407°
67	E	46485	884	969	1312	3.115°
68	E	46485	939	887	1292	2.994°
69	E	46485	705	448	836	1.937°
70	E	46485	884	448	992	2.362°
71	E	46485	873	939	1282	3.043°
72	E	46485	927	859	1264	2.928°
73	E	46485	382	579	694	2.033°
74	E	46485	609	579	840	2.338°
75	E	46485	564	1149	1280	3.155°
76	E	46485	639	1049	1228	2.930°

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Cond.	Tipo	Carico verticale [N]	Tx [N]	Ty [N]	Rt [N]	My [Nmm]	Mx [Nmm]	Rm [Nmm]	Mt [Nmm]
1	N	339909	38151	-0	38151	1637755748	-0	1637755748	-0
2	N	339909	-38151	-0	38151	-1067054998	-0	1067054998	-0
3	N	346409	69547	2200	69582	2624453179	107349629	2626647756	-0
4	N	346409	-69546	2200	69581	-2027480336	107360401	2030320853	-0
5	N	357989	169591	6000	169698	5778419432	293595386	5785873260	-0
6	N	192809	169587	6000	169693	5360868574	283098840	5368338367	0
7	N	354269	167021	5000	167096	5675167558	244439241	5680429329	-0
8	N	192809	167017	5000	167091	5270070776	235914813	5275348499	0
9	N	413369	105141	8001	105445	4084443215	397015900	4103693215	-0
10	N	192809	105135	8000	105439	3549402477	377443886	3569414775	0
11	N	357989	-169590	6000	169696	-5138841947	293741343	5147230375	-0
12	N	192809	-169587	6000	169693	-5340754834	283158089	5348255856	-0
13	N	354269	-167020	5000	167095	-5050309950	244557933	5056227761	-0
14	N	192809	-167017	5000	167091	-5250327178	235963250	5255626902	-0
15	E	413369	-105139	8001	105443	-3216750657	397167254	3241176733	-0
16	E	192809	-105135	8000	105439	-3534848955	377500477	3554949190	-0
17	N	362829	160691	6000	160803	5484497613	293944046	5492368994	-0
18	N	192809	160687	6000	160799	5057393195	283094770	5065310315	0
19	N	360009	158741	6000	158855	5406905969	293745259	5414879356	-0
20	N	192809	158737	6000	158850	4989294644	283093935	4997319603	0
21	N	412749	100361	8001	100679	3918205698	396996162	3938266350	-0
22	N	192809	100355	8000	100674	3389432517	377440833	3410383317	0
23	N	362829	-160690	6000	160802	-4824795797	294080356	4833749863	-0
24	N	192809	-160687	6000	160799	-5038705095	283149723	5046654615	-0
25	N	360009	-158740	6000	158853	-4758826251	293878864	4767891786	-0
26	N	192809	-158737	6000	158850	-4970898690	283148006	4978956374	-0
27	N	412749	-100358	8001	100677	-3054973647	397138906	3080679031	-0
28	N	192809	-100355	8000	100674	-3375695290	377494203	3396736752	-0
29	E	347609	159961	84003	180676	5341139493	3319771415	6288772005	128901598
30	E	192809	159957	84000	180671	5034126711	3121942438	5923593194	58692252
31	E	344069	157210	115004	194784	5202940848	4456806295	6850818624	252676994
32	E	192809	157207	115001	194779	4988435577	4127090406	6474362109	112523471
33	E	344229	157620	79503	176536	5250175705	3134246723	6114560282	123257981
34	E	192809	157617	79500	176531	4950660955	2946853024	5761335490	55142741
35	E	340729	154900	109004	189409	5114679404	4215103426	6627747906	241623890
36	E	192809	154897	109000	189404	4903776546	3900819796	6266052944	105650669
37	E	398119	97340	99006	138842	3654376741	4017500131	5430909378	177695106
38	E	192809	97335	99000	138835	3287862218	3723142528	4967074415	83937461
39	E	393729	95559	134007	164589	3497565431	5348820093	6390840346	349356155
40	E	192809	95555	134001	164581	3276613854	4870746688	5870295704	162194972
41	E	347609	-159960	84003	180676	-5085214382	3485641349	6165152141	233980999
42	E	192809	-159957	84000	180671	-5115894371	3246113932	6058847322	140539505
43	E	344069	-157210	115004	194785	-5326781567	4785924347	7160982735	462438929
44	E	192809	-157207	115001	194779	-5172438754	4374887007	6774493264	275908854
45	E	344229	-157620	79503	176535	-5000052727	3297426073	5989452895	226699475
46	E	192809	-157617	79500	176531	-5032605787	3067938105	5894010963	134949945
47	E	340729	-154900	109004	189409	-5235531224	4539035359	6929186762	448116195
48	E	192809	-154897	109001	189404	-5087741144	4142492630	6560895910	264963660
49	E	398119	-97339	99006	138842	-3201915285	4150568476	5242087386	260566795
50	E	192809	-97335	99001	138835	-3327142669	3817850611	5064174328	146367139
51	E	393729	-95559	134008	164589	-3454116280	5612980807	6590635236	514786541
52	E	192809	-95555	134001	164581	-3370196600	5059760339	6079424299	286818541
53	E	359299	157171	31002	160199	5306930574	1516463376	5519345368	-0
54	E	192809	157167	31000	160195	4891310930	1462656314	5105319393	0
55	E	351999	152160	87004	175278	5037234367	3683889986	6240574933	178184104
56	E	192809	152157	87000	175273	4769589330	3460158598	5892510492	103005295

## SFORZI TRASMESSI ALLA FONDAZIONE

Cond. n.	Tipo	Carico verticale [N]	Tx [N]	Ty [N]	Rt [N]	My [Nmm]	Mx [Nmm]	Rm [Nmm]	Mt [Nmm]
56	E	192809	152157	87000	175273	4769589330	3460158598	5892510492	103005295
57	E	356539	155271	30202	158181	5232079263	1476373046	5436389499	-0
58	E	192809	155267	30200	158176	4825571984	1424906139	5031550704	0
59	E	349409	150370	84004	172243	4969265293	3557320086	6111311131	172165252
60	E	192809	150367	84000	172239	4706547974	3341275203	5771976595	98444069
61	E	407089	97190	39003	104725	3754066813	1930509319	4221360428	-0
62	E	192809	97185	39000	104719	3239871587	1840024062	3725916860	0
63	E	398119	93589	104007	139916	3466769404	4493956261	5675749552	235605792
64	E	192809	93585	104001	139908	3163322778	4169431872	5233619506	139150510
65	E	359299	-157170	31002	160198	-4648833682	1517160365	4890136009	-0
66	E	192809	-157167	31000	160195	-4872590591	1462940237	5087468251	-0
67	E	351999	-152160	87004	175278	-4790454779	3819830133	6126953503	263301532
68	E	192809	-152157	87000	175273	-4814705049	3574836965	5996736115	178191879
69	E	356539	-155270	30202	158180	-4585545421	1477038708	4817558526	-0
70	E	192809	-155267	30200	158176	-4807144759	1425178297	5013957909	-0
71	E	349409	-150370	84004	172243	-4725785321	3691455921	5996656879	256210327
72	E	192809	-150367	84000	172239	-4751773783	3453986117	5874467992	172338395
73	E	407089	-97188	39003	104722	-2894494371	1931193097	3479598316	-0
74	E	192809	-97185	39000	104719	-3226113212	1840284240	3714088386	-0
75	E	398119	-93589	104007	139915	-3101788190	4596222008	5544938838	298614894
76	E	192809	-93585	104001	139908	-3185359126	4253257170	5313822477	194120214

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# SFORZI MASSIMI TRASMESSI ALLA FONDAZIONE

## CONDIZIONE NORMALE

### SFORZO ASSIALE MASSIMO

Condizione numero	Sforzo assiale [N]
9	413369

### SFORZO ASSIALE MINIMO

Condizione numero	Sforzo assiale [N]
28	192809

### TAGLIO TRASVERSALE MASSIMO

Condizione numero	Taglio [N]
5	169591

### TAGLIO LONGITUDINALE MASSIMO

Condizione numero	Taglio [N]
27	8001

### TAGLIO RISULTANTE MASSIMO

Condizione numero	Taglio [N]
5	169698

### MOMENTO TRASVERSALE MASSIMO

Condizione numero	Momento [Nmm]
5	5778419432

### MOMENTO LONGITUDINALE MASSIMO

Condizione numero	Momento [Nmm]
27	397138906

### MOMENTO RISULTANTE MASSIMO

Condizione numero	Momento [Nmm]
5	5785873260

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# SFORZI MASSIMI TRASMESSI ALLA FONDAZIONE

## CONDIZIONE ECCEZIONALE

### SFORZO ASSIALE MASSIMO

Condizione numero	Sforzo assiale [N]
15	413369

### SFORZO ASSIALE MINIMO

Condizione numero	Sforzo assiale [N]
74	192809

### TAGLIO TRASVERSALE MASSIMO

Condizione numero	Taglio [N]
29	159961

### TAGLIO LONGITUDINALE MASSIMO

Condizione numero	Taglio [N]
51	134008

### TAGLIO RISULTANTE MASSIMO

Condizione numero	Taglio [N]
43	194785

### MOMENTO TRASVERSALE MASSIMO

Condizione numero	Momento [Nmm]
29	5341139493

### MOMENTO LONGITUDINALE MASSIMO

Condizione numero	Momento [Nmm]
51	5612980807

### MOMENTO RISULTANTE MASSIMO

Condizione numero	Momento [Nmm]
43	7160982735

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