



COMUNE DI TERNI
PROVINCIA DI TERNI



Unione Europea
NextGenerationEU

Intervento finanziato dall'Unione Europea
NextGenerationEU

**ADEGUAMENTO SISMICO
DEL COMPLESSO SCOLASTICO "LE GRAZIE" EDIFICI B-C
VIA DEI CICLAMINI 1 - TERNI
Finanziato dall'Unione Europea - NextGenerationEU**

Proprietà: Comune di Terni
Responsabile Unico del Procedimento: geom. Stefano Fredduzzi

**edificio C
FASCICOLO DEI CALCOLI**

PROGETTO DEFINITIVO-ESECUTIVO

 <p>CITTA FUTURA via S. Chiara, 9 – 55100 Lucca tel. 0583/490920 – Fax 490921 E. mail: posta@cittafutura.com</p>		EMISSIONE 01/09/2022
		REVISIONE
		FASCICOLO RS03
Responsabile integrazione prestazioni specialistiche:	ing. Alfredo Alunni-Macerini	Produzione: ing. Andrea Alunni Macerini
Progetto architettonico:	arch. Cristiana Brindisi ing. Nubia Salani ing. Alessio Bellucci arch. Elena Carnaroli	
Strutture:	ing. Andrea Alunni-Macerini Ing. Marco Andreoni	Verifica: ing. Giuliano Dalle Mura
Impianti:	ing. Alfredo Alunni-Macerini	
Impianti meccanici:	ing. Gian Piero Calissi	Approvazione: ing. Alfredo Alunni-Macerini
Impianti elettrici ordinari e speciali - Acustica:	dott.per.ind. Davide Possamai	
Prevenzione incendi - Energetica:	ing. Chiara Calissi	
Coordinamento Sicurezza:	ing. Paolo Amadio	
Rilievi:	geom. Alfredo Antonelli	
Geologia:	dott.ssa Roberta Giorgi dott. Paolo Bartocchini	

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Fascicolo dei calcoli - ed. C - Statica vento verso il basso e sismica

Sistemi di riferimento

Le coordinate, i carichi concentrati, i cedimenti, le reazioni vincolari e gli spostamenti dei NODI sono riferiti ad una terna destra cartesiana globale con l'asse Z verticale rivolto verso l'alto.

I carichi in coordinate locali e le sollecitazioni delle ASTE sono riferite ad una terna destra cartesiana locale così definita:

- origine nel nodo iniziale dell'asta;
 - asse X coincidente con l'asse dell'asta e con verso dal nodo iniziale al nodo finale;
 - immaginando la trave a sezione rettangolare l'asse Y è parallelo alla base e l'asse Z è parallelo all'altezza.
- La rotazione dell'asta comporta quindi una rotazione di tutta la terna locale.

Si può immaginare la terna locale di un'asta comunque disposta nello spazio come derivante da quella globale dopo una serie di trasformazioni:

- una rotazione intorno all'asse Z che porti l'asse X a coincidere con la proiezione dell'asse dell'asta sul piano orizzontale;
- una traslazione lungo il nuovo asse X così definito in modo da portare l'origine a coincidere con la proiezione del nodo iniziale dell'asta sul piano orizzontale;
- una traslazione lungo l'asse Z che porti l'origine a coincidere con il nodo iniziale dell'asta;
- una rotazione intorno all'asse Y così definito che porti l'asse X a coincidere con l'asse dell'asta;
- una rotazione intorno all'asse X così definito pari alla rotazione dell'asta.

In pratica le travi prive di rotazione avranno sempre l'asse Z rivolto verso l'alto e l'asse Y nel piano del solaio, mentre i pilastri privi di rotazione avranno l'asse Y parallelo all'asse Y globale e l'asse Z parallelo ma controverso all'asse X globale. Da notare quindi che per i pilastri la "base" è il lato parallelo a Y.

Le sollecitazioni ed i carichi in coordinate locali negli ELEMENTI BIDIMENSIONALI e nei MURI sono riferiti ad una terna destra cartesiana locale così definita:

- origine nel primo nodo dell'elemento;
- asse X coincidente con la congiungente il primo ed il secondo nodo dell'elemento;
- asse Y definito come prodotto vettoriale fra il versore dell'asse X e il versore della congiungente il primo e il quarto nodo. Asse Z a formare con gli altri due una terna destrorsa.

Praticamente un elemento verticale con l'asse X locale coincidente con l'asse X globale ha anche gli altri assi locali coincidenti con quelli globali.

Rotazioni e momenti

Seguendo il principio adottato per tutti i carichi che sono positivi se CONTROVERSI agli assi, anche i momenti concentrati e le rotazioni impresse in coordinate globali risultano positivi se CONTROVERSI al segno positivo delle rotazioni. Il segno positivo dei momenti e delle rotazioni è quello orario per l'osservatore posto nell'origine: X ruota su Y, Y ruota su Z, Z ruota su X. In pratica è sufficiente adottare la regola della mano destra: col pollice rivolto nella direzione dell'asse, la rotazione che porta a chiudere il palmo della mano corrisponde al segno positivo.

Normativa di riferimento

La normativa di riferimento è la seguente:

- Legge n. 64 del 2/2/1974 - Provvedimenti per le costruzioni con particolari prescrizioni per le zone sismiche.
- D.M. del 24/1/1986 - Norme tecniche relative alle costruzioni sismiche.
- Legge n. 1086 del 5/11/1971 - Norme per la disciplina delle opere di conglomerato cementizio armato, normale e precompresso ed a struttura metallica.
- D.M. del 14/2/1992 - Norme tecniche per l'esecuzione delle opere in c.a. normale e precompresso e per le strutture metalliche.
- D.M. del 9/1/1996 - Norme tecniche per l'esecuzione delle opere in c.a. normale e precompresso e per le strutture metalliche.
- D.M. del 16/1/1996 - Norme tecniche per le costruzioni in zone sismiche.
- Circolare n. 21745 del 30/7/1981 - Legge n. 219 del 14/5/1981 - Art. 10 - Istruzioni relative al rafforzamento degli edifici in muratura danneggiati dal sisma.
- Regione Autonoma Friuli Venezia Giulia - Legge Regionale n. 30 del 20/6/1977 - Documentazione tecnica per la progettazione e direzione delle opere di riparazione degli edifici - Documento Tecnico n. 2 - Raccomandazioni per la riparazione strutturale degli edifici in muratura.
- D.M. del 20/11/1987 - Norme Tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento.
- Norme Tecniche C.N.R. n. 10011-85 del 18/4/1985 - Costruzioni di acciaio - Istruzioni per il calcolo, l'esecuzione, il collaudo e la manutenzione.
- Norme Tecniche C.N.R. n. 10025-84 del 14/12/1984 - Istruzioni per il progetto, l'esecuzione ed il controllo delle strutture prefabbricate in conglomerato cementizio e per le strutture costruite con sistemi industrializzati di acciaio - Istruzioni per il calcolo, l'esecuzione, il collaudo e la manutenzione.
- Circolare n. 65 del 10/4/1997 - Istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. del 16/1/1996.
- Eurocodice 5 - Progettazione delle strutture di legno.
- DIN 1052 - Metodi di verifica per il legno.
- D.M. del 17/1/2018 - Norme tecniche per le costruzioni.
- Circolare n. 7 del 21/1/2019 - Istruzioni per l'applicazione dell'«Aggiornamento delle "Norme tecniche per le costruzioni"» di cui al decreto ministeriale 17 gennaio 2018.
- Documento Tecnico CNR-DT 200 R1/2012 - Istruzioni per la Progettazione, l'Esecuzione ed il Controllo di Interventi di Consolidamento Statico mediante l'utilizzo di Compositi Fibrorinforzati.
- Eurocodice 3 - Progettazione delle strutture in acciaio.

Unità di misura

Le unità di misura adottate sono le seguenti:

- lunghezze : m
- forze : daN
- masse : kg
- temperature : gradi centigradi
- angoli : gradi sessadecimali o radianti

Geometria

Elenco vincoli nodi

Simbologia

- Comm. = Commento
Kt =Coeff. di sottofondo su suolo elastico alla Winkler
Ly =Lunghezza (dir. Y locale)
Lz =Larghezza (dir. Z locale)
RL =Rotazione libera
Rx =Rotazione intorno all'asse X (L=libera, B=bloccata, E=elastica)
Ry =Rotazione intorno all'asse Y (L=libera, B=bloccata, E=elastica)
Rz =Rotazione intorno all'asse Z (L=libera, B=bloccata, E=elastica)
Sx =Spostamento in dir. X (L=libero, B=bloccato, E=elastico)
Sy =Spostamento in dir. Y (L=libero, B=bloccato, E=elastico)
Sz =Spostamento in dir. Z (L=libero, B=bloccato, E=elastico)
Vn =Numero del vincolo nodo

Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt
									<m>	<m>	<daN/cmc>
1	Libero	L	L	L	L	L					

Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt
									<m>	<m>	<daN/cmc>
2	Incastro	B	B	B	B	B	B				

Elenco nodi

Simbologia

- Imp. =Numero dell'impalcato
Nodo =Numero del nodo
Vn =Numero del vincolo nodo
X =Coordinata X del nodo
Y =Coordinata Y del nodo
Z =Coordinata Z del nodo

Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>		
-2285	38.80	2.56	11.00	5	1
-2282	38.80	11.52	11.00	5	1
-2275	37.50	11.52	11.00	5	1
-2272	37.50	7.68	11.00	5	1
-2269	37.50	1.28	11.00	5	1
-2266	1.30	3.84	11.00	5	1
-2263	1.30	10.24	11.00	5	1
-2260	1.30	5.12	11.00	5	1
-2257	34.47	9.05	7.60	4	1
-2254	29.51	0.00	3.85	0	1
-2251	28.04	0.00	3.85	0	1
-2248	26.57	0.00	3.85	0	1
-2245	25.09	0.00	3.85	0	1
-2242	29.02	0.00	3.43	0	1
-2239	27.55	0.00	3.43	0	1
-2236	26.07	0.00	3.43	0	1
-2233	25.09	0.00	4.28	2	1
-2230	26.57	0.00	4.28	2	1
-2227	28.04	0.00	4.28	2	1
-2224	29.51	0.00	4.28	2	1
-2221	30.50	0.00	3.43	0	1
-2218	29.02	0.00	3.00	1	2
-2215	27.55	0.00	3.00	1	2
-2212	26.07	0.00	3.00	1	2
-2209	25.09	12.80	3.85	0	1
-2206	26.57	12.80	3.85	0	1
-2203	28.04	12.80	3.85	0	1
-2200	29.51	12.80	3.85	0	1
-2197	25.58	12.80	3.43	0	1
-2194	27.06	12.80	3.43	0	1
-2191	28.53	12.80	3.43	0	1
-2188	30.00	12.80	3.43	0	1
-2185	30.00	12.80	4.28	2	1
-2182	28.53	12.80	4.28	2	1
-2179	27.06	12.80	4.28	2	1
-2176	25.58	12.80	4.28	2	1
-2173	25.58	12.80	3.00	1	2
-2170	27.06	12.80	3.00	1	2
-2167	28.53	12.80	3.00	1	2
-2164	30.00	12.80	3.00	1	2
-2159	24.60	1.41	10.15	0	1
-2156	24.60	1.41	8.83	0	1

Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>		
-2284	38.80	1.28	11.00	5	1
-2277	37.50	5.12	11.00	5	1
-2274	37.50	10.24	11.00	5	1
-2271	37.50	3.84	11.00	5	1
-2268	1.30	1.28	11.00	5	1
-2265	1.30	7.68	11.00	5	1
-2262	1.30	11.52	11.00	5	1
-2259	34.47	9.05	4.28	2	1
-2256	34.47	3.75	7.60	4	1
-2253	29.02	0.00	3.85	0	1
-2250	27.55	0.00	3.85	0	1
-2247	26.07	0.00	3.85	0	1
-2244	30.00	0.00	3.43	0	1
-2241	28.53	0.00	3.43	0	1
-2238	27.06	0.00	3.43	0	1
-2235	25.58	0.00	3.43	0	1
-2232	25.58	0.00	4.28	2	1
-2229	27.06	0.00	4.28	2	1
-2226	28.53	0.00	4.28	2	1
-2223	30.00	0.00	4.28	2	1
-2220	30.00	0.00	3.00	1	2
-2217	28.53	0.00	3.00	1	2
-2214	27.06	0.00	3.00	1	2
-2211	25.58	0.00	3.00	1	2
-2208	25.58	12.80	3.85	0	1
-2205	27.06	12.80	3.85	0	1
-2202	28.53	12.80	3.85	0	1
-2199	30.00	12.80	3.85	0	1
-2196	26.07	12.80	3.43	0	1
-2193	27.55	12.80	3.43	0	1
-2190	29.02	12.80	3.43	0	1
-2187	30.50	12.80	3.43	0	1
-2184	29.51	12.80	4.28	2	1
-2181	28.04	12.80	4.28	2	1
-2178	26.57	12.80	4.28	2	1
-2175	25.09	12.80	4.28	2	1
-2172	26.07	12.80	3.00	1	2
-2169	27.55	12.80	3.00	1	2
-2166	29.02	12.80	3.00	1	2
-2163	24.60	2.81	11.00	5	1
-2158	24.60	1.41	9.65	0	1
-2155	24.60	1.41	8.42	0	1

Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>		
-2283	38.80	10.24	11.00	5	1
-2276	37.50	6.40	11.00	5	1
-2273	37.50	8.96	11.00	5	1
-2270	37.50	2.56	11.00	5	1
-2267	1.30	2.56	11.00	5	1
-2264	1.30	8.96	11.00	5	1
-2261	1.30	6.40	11.00	5	1
-2258	34.47	3.75	4.28	2	1
-2255	30.00	0.00	3.85	0	1
-2252	28.53	0.00	3.85	0	1
-2249	27.06	0.00	3.85	0	1
-2246	25.58	0.00	3.85	0	1
-2243	29.51	0.00	3.43	0	1
-2240	28.04	0.00	3.43	0	1
-2237	26.57	0.00	3.43	0	1
-2234	25.09	0.00	3.43	0	1
-2231	26.07	0.00	4.28	2	1
-2228	27.55	0.00	4.28	2	1
-2225	29.02	0.00	4.28	2	1
-2222	30.50	0.00	3.85	0	1
-2219	29.51	0.00	3.00	1	2
-2216	28.04	0.00	3.00	1	2
-2213	26.57	0.00	3.00	1	2
-2210	25.09	0.00	3.00	1	2
-2207	26.07	12.80	3.85	0	1
-2204	27.55	12.80	3.85	0	1
-2201	29.02	12.80	3.85	0	1
-2198	25.09	12.80	3.43	0	1
-2195	26.57	12.80	3.43	0	1
-2192	28.04	12.80	3.43	0	1
-2189	29.51	12.80	3.43	0	1
-2186	30.50	12.80	3.85	0	1
-2183	29.02	12.80	4.28	2	1
-2180	27.55	12.80	4.28	2	1
-2177	26.07	12.80	4.28	2	1
-2174	25.09	12.80	3.00	1	2
-2171	26.57	12.80	3.00	1	2
-2168	28.04	12.80	3.00	1	2
-2165	29.51	12.80	3.00	1	2
-2160	24.60	1.41	10.57	0	1
-2157	24.60	1.41	9.24	0	1
-2154	24.60	1.41	8.01	0	1

-2146	24.60	0.94	10.57	0	1
-2143	24.60	0.94	9.24	0	1
-2140	24.60	0.94	8.01	0	1
-2137	24.60	0.47	9.65	0	1
-2134	24.60	0.47	8.42	0	1
-2130	36.87	10.24	11.00	5	1
-2127	36.87	6.40	11.00	5	1
-2124	36.87	2.56	11.00	5	1
-2121	35.91	6.38	6.79	0	1
-2078	0.00	10.24	11.00	5	1
-2040	24.60	1.28	11.00	5	1
-1920	36.39	12.80	11.00	5	1
-1914	38.80	12.33	11.00	5	1
-1911	38.80	11.86	11.00	5	1
-1906	24.60	11.52	11.00	5	1
-1903	24.60	11.10	11.00	5	1
-1898	0.00	9.99	11.00	5	1
-1895	0.00	9.53	11.00	5	1
-1892	36.39	7.75	11.00	5	1
-1889	34.95	7.75	11.00	5	1
-1885	36.39	5.03	11.00	5	1
-1882	34.95	5.03	11.00	5	1
-1879	38.80	3.27	11.00	5	1
-1876	35.91	3.27	11.00	5	1
-1873	34.47	3.27	11.00	5	1
-1870	38.80	2.81	11.00	5	1
-1864	38.80	1.87	11.00	5	1
-1858	38.80	0.94	11.00	5	1
-1855	24.60	0.47	11.00	5	1
-1851	36.39	0.00	11.00	5	1
-1845	38.80	12.80	10.57	0	1
-1836	38.80	12.33	10.57	0	1
-1833	38.80	11.86	10.57	0	1
-1830	38.80	11.40	10.57	0	1
-1827	38.80	10.93	10.57	0	1
-1824	38.80	10.46	10.57	0	1
-1820	0.00	9.99	10.57	0	1
-1815	24.60	9.05	10.57	0	1
-1812	35.91	7.75	10.57	0	1
-1809	34.47	7.75	10.57	0	1
-1806	35.91	5.03	10.57	0	1
-1803	34.47	5.03	10.57	0	1
-1799	36.87	3.27	10.57	0	1
-1796	35.43	3.27	10.57	0	1
-1793	0.00	3.27	10.57	0	1
-1788	38.80	2.34	10.57	0	1
-1785	38.80	1.87	10.57	0	1
-1781	0.00	1.40	10.57	0	1
-1777	38.80	0.47	10.57	0	1
-1767	24.60	0.00	10.57	0	1
-1758	30.50	12.80	10.15	0	1
-1755	12.40	12.80	10.15	0	1
-1752	38.80	12.33	10.15	0	1
-1749	38.80	11.86	10.15	0	1
-1746	38.80	11.40	10.15	0	1
-1743	38.80	10.93	10.15	0	1
-1740	38.80	10.46	10.15	0	1
-1736	0.00	9.99	10.15	0	1
-1731	24.60	9.05	10.15	0	1
-1728	35.91	7.75	10.15	0	1
-1725	34.47	7.75	10.15	0	1
-1722	36.39	5.03	10.15	0	1
-1719	34.95	5.03	10.15	0	1
-1715	38.80	3.27	10.15	0	1
-1712	35.91	3.27	10.15	0	1
-1709	34.47	3.27	10.15	0	1
-1705	0.00	2.81	10.15	0	1
-1701	24.60	1.70	10.15	0	1
-1697	38.80	1.40	10.15	0	1
-1693	0.00	0.94	10.15	0	1
-1689	38.80	0.00	10.15	0	1
-1680	18.50	0.00	10.15	0	1
-1677	0.00	0.00	10.15	0	1
-2145	24.60	0.94	10.15	0	1
-2142	24.60	0.94	8.83	0	1
-2139	24.60	0.47	10.57	0	1
-2136	24.60	0.47	9.24	0	1
-2133	24.60	0.47	8.01	0	1
-2129	36.87	8.96	11.00	5	1
-2126	36.87	5.12	11.00	5	1
-2123	36.87	1.28	11.00	5	1
-2120	35.43	6.38	7.19	0	1
-2075	0.00	2.56	11.00	5	1
-2039	0.00	1.28	11.00	5	1
-1916	34.47	12.80	11.00	5	1
-1913	24.60	12.33	11.00	5	1
-1910	0.00	11.86	11.00	5	1
-1905	38.80	10.93	11.00	5	1
-1900	24.60	10.24	11.00	5	1
-1897	24.60	9.99	11.00	5	1
-1894	24.60	9.52	11.00	5	1
-1891	35.91	7.75	11.00	5	1
-1888	34.47	7.75	11.00	5	1
-1884	35.91	5.03	11.00	5	1
-1881	34.47	5.03	11.00	5	1
-1878	36.87	3.27	11.00	5	1
-1875	35.43	3.27	11.00	5	1
-1872	0.00	3.27	11.00	5	1
-1869	0.00	2.81	11.00	5	1
-1863	0.00	1.87	11.00	5	1
-1857	0.00	0.94	11.00	5	1
-1854	0.00	0.47	11.00	5	1
-1847	34.47	0.00	11.00	5	1
-1838	24.60	12.80	10.57	0	1
-1835	24.60	12.33	10.57	0	1
-1832	0.00	11.86	10.57	0	1
-1829	0.00	11.40	10.57	0	1
-1826	0.00	10.93	10.57	0	1
-1823	0.00	10.46	10.57	0	1
-1818	38.80	9.53	10.57	0	1
-1814	36.87	7.75	10.57	0	1
-1811	35.43	7.75	10.57	0	1
-1808	36.87	5.03	10.57	0	1
-1805	35.43	5.03	10.57	0	1
-1802	24.60	3.75	10.57	0	1
-1798	36.39	3.27	10.57	0	1
-1795	34.95	3.27	10.57	0	1
-1791	38.80	2.81	10.57	0	1
-1787	0.00	2.34	10.57	0	1
-1784	0.00	1.87	10.57	0	1
-1779	38.80	0.94	10.57	0	1
-1775	0.00	0.47	10.57	0	1
-1766	0.00	0.00	10.57	0	1
-1757	24.60	12.80	10.15	0	1
-1754	6.30	12.80	10.15	0	1
-1751	24.60	12.33	10.15	0	1
-1748	0.00	11.86	10.15	0	1
-1745	0.00	11.40	10.15	0	1
-1742	0.00	10.93	10.15	0	1
-1739	0.00	10.46	10.15	0	1
-1734	38.80	9.53	10.15	0	1
-1730	36.87	7.75	10.15	0	1
-1727	35.43	7.75	10.15	0	1
-1724	30.50	6.40	10.15	0	1
-1721	35.91	5.03	10.15	0	1
-1718	34.47	5.03	10.15	0	1
-1714	36.87	3.27	10.15	0	1
-1711	35.43	3.27	10.15	0	1
-1708	0.00	3.27	10.15	0	1
-1703	38.80	2.34	10.15	0	1
-1700	38.80	1.87	10.15	0	1
-1696	0.00	1.40	10.15	0	1
-1692	38.80	0.47	10.15	0	1
-1682	30.50	0.00	10.15	0	1
-1679	12.40	0.00	10.15	0	1
-1676	38.80	12.80	9.65	0	1
-2144	24.60	0.94	9.65	0	1
-2141	24.60	0.94	8.42	0	1
-2138	24.60	0.47	10.15	0	1
-2135	24.60	0.47	8.83	0	1
-2131	36.87	11.52	11.00	5	1
-2128	36.87	7.68	11.00	5	1
-2125	36.87	3.84	11.00	5	1
-2122	36.39	6.38	6.38	0	1
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-1915	30.50	12.80	11.00	5	1
-1912	0.00	12.33	11.00	5	1
-1909	24.60	11.86	11.00	5	1
-1904	0.00	10.93	11.00	5	1
-1899	38.80	9.99	11.00	5	1
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-1893	36.87	7.75	11.00	5	1
-1890	35.43	7.75	11.00	5	1
-1886	36.87	5.03	11.00	5	1
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-1880	24.60	3.28	11.00	5	1
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-1834	0.00	12.33	10.57	0	1
-1831	24.60	11.86	10.57	0	1
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-1825	24.60	11.10	10.57	0	1
-1821	38.80	9.99	10.57	0	1
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-1813	36.39	7.75	10.57	0	1
-1810	34.95	7.75	10.57	0	1
-1807	36.39	5.03	10.57	0	1
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-1797	35.91	3.27	10.57	0	1
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-1782	38.80	1.40	10.57	0	1
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-1753	0.00	12.80	10.15	0	1
-1750	0.00	12.33	10.15	0	1
-1747	24.60	11.86	10.15	0	1
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-1741	24.60	11.10	10.15	0	1
-1737	38.80	9.99	10.15	0	1
-1733	0.00	9.53	10.15	0	1
-1729	36.39	7.75	10.15	0	1
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-1723	36.87	5.03	10.15	0	1
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-1710	34.95	3.27	10.15	0	1
-1706	38.80	2.81	10.15	0	1
-1702	0.00	2.34	10.15	0	1
-1699	0.00	1.87	10.15	0	1
-1694	38.80	0.94	10.15	0	1
-1690	0.00	0.47	10.15	0	1
-1681	24.60	0.00	10.15	0	1
-1678	6.30	0.00	10.15	0	1
-1669	30.50	12.80	9.65	0	1

-1668	24.60	12.80	9.65	0	1	-1667	18.50	12.80	9.65	0	1	-1666	12.40	12.80	9.65	0	1
-1665	6.30	12.80	9.65	0	1	-1664	0.00	12.80	9.65	0	1	-1663	38.80	12.33	9.65	0	1
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-1656	0.00	11.40	9.65	0	1	-1655	24.60	11.39	9.65	0	1	-1654	38.80	10.93	9.65	0	1
-1653	0.00	10.93	9.65	0	1	-1652	24.60	11.10	9.65	0	1	-1651	38.80	10.46	9.65	0	1
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-1645	38.80	9.53	9.65	0	1	-1644	0.00	9.53	9.65	0	1	-1642	24.60	9.05	9.65	0	1
-1641	36.87	7.75	9.65	0	1	-1640	36.39	7.75	9.65	0	1	-1639	35.91	7.75	9.65	0	1
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-1635	30.50	6.40	9.65	0	1	-1634	36.87	5.03	9.65	0	1	-1633	36.39	5.03	9.65	0	1
-1632	35.91	5.03	9.65	0	1	-1631	35.43	5.03	9.65	0	1	-1630	34.95	5.03	9.65	0	1
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-1619	0.00	3.27	9.65	0	1	-1617	38.80	2.81	9.65	0	1	-1616	0.00	2.81	9.65	0	1
-1614	38.80	2.34	9.65	0	1	-1613	0.00	2.34	9.65	0	1	-1612	24.60	1.70	9.65	0	1
-1611	38.80	1.87	9.65	0	1	-1610	0.00	1.87	9.65	0	1	-1608	38.80	1.40	9.65	0	1
-1607	0.00	1.40	9.65	0	1	-1605	38.80	0.94	9.65	0	1	-1604	0.00	0.94	9.65	0	1
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-1590	12.40	0.00	9.65	0	1	-1589	6.30	0.00	9.65	0	1	-1588	0.00	0.00	9.65	0	1
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-1578	38.80	12.33	9.24	0	1	-1577	24.60	12.33	9.24	0	1	-1576	0.00	12.33	9.24	0	1
-1575	38.80	11.86	9.24	0	1	-1574	0.00	11.86	9.24	0	1	-1573	24.60	11.86	9.24	0	1
-1572	38.80	11.40	9.24	0	1	-1571	0.00	11.40	9.24	0	1	-1570	24.60	11.39	9.24	0	1
-1569	38.80	10.93	9.24	0	1	-1568	0.00	10.93	9.24	0	1	-1567	24.60	11.10	9.24	0	1
-1566	38.80	10.46	9.24	0	1	-1565	0.00	10.46	9.24	0	1	-1563	38.80	9.99	9.24	0	1
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-1557	24.60	9.05	9.24	0	1	-1556	36.87	7.75	9.24	0	1	-1555	36.39	7.75	9.24	0	1
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-1541	36.87	3.27	9.24	0	1	-1540	36.39	3.27	9.24	0	1	-1539	35.91	3.27	9.24	0	1
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-1497	24.60	12.33	8.83	0	1	-1496	0.00	12.33	8.83	0	1	-1495	38.80	11.86	8.83	0	1
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-1428	0.00	0.00	8.83	0	1	-1427	38.80	12.80	8.42	0	1	-1420	24.60	12.80	8.42	0	1
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-1203	38.80	1.40	7.60	4	1
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-1197	24.60	0.47	7.60	4	1
-1194	36.87	0.00	7.60	4	1
-1191	35.43	0.00	7.60	4	1
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-1185	35.91	12.80	7.19	0	1
-1182	34.47	12.80	7.19	0	1
-1179	38.80	12.33	7.19	0	1
-1176	38.80	11.86	7.19	0	1
-1173	38.80	11.40	7.19	0	1
-1170	38.80	10.93	7.19	0	1
-1167	38.80	10.46	7.19	0	1
-1164	38.80	9.99	7.19	0	1
-1161	38.80	9.53	7.19	0	1
-1158	24.60	9.05	7.19	0	1
-1155	35.91	7.75	7.19	0	1
-1152	34.47	7.75	7.19	0	1
-1149	35.91	5.03	7.19	0	1
-1146	34.47	5.03	7.19	0	1
-1143	38.80	3.27	7.19	0	1
-1140	35.91	3.27	7.19	0	1
-1137	34.47	3.27	7.19	0	1
-1134	38.80	2.81	7.19	0	1
-1381	36.87	3.27	8.42	0	1
-1378	35.43	3.27	8.42	0	1
-1375	0.00	3.27	8.42	0	1
-1370	38.80	2.34	8.42	0	1
-1367	38.80	1.87	8.42	0	1
-1363	0.00	1.40	8.42	0	1
-1359	38.80	0.47	8.42	0	1
-1349	24.60	0.00	8.42	0	1
-1340	24.60	12.80	8.01	0	1
-1337	24.60	12.33	8.01	0	1
-1334	0.00	11.86	8.01	0	1
-1331	0.00	11.40	8.01	0	1
-1328	0.00	10.93	8.01	0	1
-1325	0.00	10.46	8.01	0	1
-1320	38.80	9.53	8.01	0	1
-1316	36.87	7.75	8.01	0	1
-1313	35.43	7.75	8.01	0	1
-1310	36.87	5.03	8.01	0	1
-1307	35.43	5.03	8.01	0	1
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-1300	36.39	3.27	8.01	0	1
-1297	34.95	3.27	8.01	0	1
-1293	38.80	2.81	8.01	0	1
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-1241	0.00	9.53	7.60	4	1
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-1235	35.43	7.75	7.60	4	1
-1232	24.60	6.40	7.60	4	1
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-1205	0.00	1.87	7.60	4	1
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-1169	0.00	10.93	7.19	0	1
-1166	0.00	10.46	7.19	0	1
-1163	0.00	9.99	7.19	0	1
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-1151	36.87	5.03	7.19	0	1
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-1133	0.00	2.81	7.19	0	1
-1380	36.39	3.27	8.42	0	1
-1377	34.95	3.27	8.42	0	1
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-1366	0.00	1.87	8.42	0	1
-1361	38.80	0.94	8.42	0	1
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-1339	0.00	12.80	8.01	0	1
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-1327	24.60	11.10	8.01	0	1
-1323	38.80	9.99	8.01	0	1
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-1252	24.60	11.39	7.60	4	1
-1249	24.60	11.10	7.60	4	1
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-1243	24.60	9.99	7.60	4	1
-1240	24.60	9.52	7.60	4	1
-1237	36.39	7.75	7.60	4	1
-1234	34.95	7.75	7.60	4	1
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-1228	36.39	5.03	7.60	4	1
-1225	34.95	5.03	7.60	4	1
-1222	24.60	3.28	7.60	4	1
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-1216	34.95	3.27	7.60	4	1
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-1207	24.60	1.70	7.60	4	1
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-1201	24.60	0.94	7.60	4	1
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-1195	38.80	0.00	7.60	4	1
-1192	35.91	0.00	7.60	4	1
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-1174	24.60	11.86	7.19	0	1
-1171	24.60	11.39	7.19	0	1
-1168	24.60	10.93	7.19	0	1
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-1131	38.80	2.34	7.19	0	1	-1130	0.00	2.34	7.19	0	1	-1129	24.60	1.88	7.19	0	1
-1128	38.80	1.87	7.19	0	1	-1127	0.00	1.87	7.19	0	1	-1126	24.60	1.41	7.19	0	1
-1125	38.80	1.40	7.19	0	1	-1124	0.00	1.40	7.19	0	1	-1123	24.60	0.94	7.19	0	1
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-1113	35.43	0.00	7.19	0	1	-1112	34.95	0.00	7.19	0	1	-1111	34.47	0.00	7.19	0	1
-1110	24.60	0.00	7.19	0	1	-1109	0.00	0.00	7.19	0	1	-1108	38.80	12.80	6.79	0	1
-1107	36.87	12.80	6.79	0	1	-1106	36.39	12.80	6.79	0	1	-1105	35.91	12.80	6.79	0	1
-1104	35.43	12.80	6.79	0	1	-1103	34.95	12.80	6.79	0	1	-1102	34.47	12.80	6.79	0	1
-1101	24.60	12.80	6.79	0	1	-1100	0.00	12.80	6.79	0	1	-1099	38.80	12.33	6.79	0	1
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-1092	0.00	11.40	6.79	0	1	-1091	24.60	11.39	6.79	0	1	-1090	38.80	10.93	6.79	0	1
-1089	0.00	10.93	6.79	0	1	-1088	24.60	10.93	6.79	0	1	-1087	38.80	10.46	6.79	0	1
-1086	0.00	10.46	6.79	0	1	-1085	24.60	10.46	6.79	0	1	-1084	38.80	9.99	6.79	0	1
-1083	0.00	9.99	6.79	0	1	-1082	24.60	9.99	6.79	0	1	-1081	38.80	9.53	6.79	0	1
-1080	0.00	9.53	6.79	0	1	-1079	24.60	9.52	6.79	0	1	-1078	24.60	9.05	6.79	0	1
-1077	36.87	7.75	6.79	0	1	-1076	36.39	7.75	6.79	0	1	-1075	35.91	7.75	6.79	0	1
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-1071	36.87	5.03	6.79	0	1	-1070	36.39	5.03	6.79	0	1	-1069	35.91	5.03	6.79	0	1
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-1065	24.60	3.75	6.79	0	1	-1064	24.60	3.28	6.79	0	1	-1063	38.80	3.27	6.79	0	1
-1062	36.87	3.27	6.79	0	1	-1061	36.39	3.27	6.79	0	1	-1060	35.91	3.27	6.79	0	1
-1059	35.43	3.27	6.79	0	1	-1058	34.95	3.27	6.79	0	1	-1057	34.47	3.27	6.79	0	1
-1056	0.00	3.27	6.79	0	1	-1055	24.60	2.81	6.79	0	1	-1054	38.80	2.81	6.79	0	1
-1053	0.00	2.81	6.79	0	1	-1052	24.60	2.34	6.79	0	1	-1051	38.80	2.34	6.79	0	1
-1050	0.00	2.34	6.79	0	1	-1049	24.60	1.88	6.79	0	1	-1048	38.80	1.87	6.79	0	1
-1047	0.00	1.87	6.79	0	1	-1046	24.60	1.41	6.79	0	1	-1045	38.80	1.40	6.79	0	1
-1044	0.00	1.40	6.79	0	1	-1043	24.60	0.94	6.79	0	1	-1042	38.80	0.94	6.79	0	1
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-1038	0.00	0.47	6.79	0	1	-1037	38.80	0.00	6.79	0	1	-1036	36.87	0.00	6.79	0	1
-1035	36.39	0.00	6.79	0	1	-1034	35.91	0.00	6.79	0	1	-1033	35.43	0.00	6.79	0	1
-1032	34.95	0.00	6.79	0	1	-1031	34.47	0.00	6.79	0	1	-1030	24.60	0.00	6.79	0	1
-1029	0.00	0.00	6.79	0	1	-1028	38.80	12.80	6.38	0	1	-1027	36.87	12.80	6.38	0	1
-1026	36.39	12.80	6.38	0	1	-1025	35.91	12.80	6.38	0	1	-1024	35.43	12.80	6.38	0	1
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-1020	0.00	12.80	6.38	0	1	-1019	38.80	12.33	6.38	0	1	-1018	24.60	12.33	6.38	0	1
-1017	0.00	12.33	6.38	0	1	-1016	38.80	11.86	6.38	0	1	-1015	0.00	11.86	6.38	0	1
-1014	24.60	11.86	6.38	0	1	-1013	38.80	11.40	6.38	0	1	-1012	0.00	11.40	6.38	0	1
-1011	24.60	11.39	6.38	0	1	-1010	38.80	10.93	6.38	0	1	-1009	0.00	10.93	6.38	0	1
-1008	24.60	10.93	6.38	0	1	-1007	38.80	10.46	6.38	0	1	-1006	0.00	10.46	6.38	0	1
-1005	24.60	10.46	6.38	0	1	-1004	38.80	9.99	6.38	0	1	-1003	0.00	9.99	6.38	0	1
-1002	24.60	9.99	6.38	0	1	-1001	38.80	9.53	6.38	0	1	-1000	0.00	9.53	6.38	0	1
-999	24.60	9.52	6.38	0	1	-998	24.60	9.05	6.38	0	1	-997	36.87	7.75	6.38	0	1
-996	36.39	7.75	6.38	0	1	-995	35.91	7.75	6.38	0	1	-994	35.43	7.75	6.38	0	1
-993	34.95	7.75	6.38	0	1	-992	34.47	7.75	6.38	0	1	-991	36.87	5.03	6.38	0	1
-990	36.39	5.03	6.38	0	1	-989	35.91	5.03	6.38	0	1	-988	35.43	5.03	6.38	0	1
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-981	36.39	3.27	6.38	0	1	-980	35.91	3.27	6.38	0	1	-979	35.43	3.27	6.38	0	1
-978	34.95	3.27	6.38	0	1	-977	34.47	3.27	6.38	0	1	-976	0.00	3.27	6.38	0	1
-975	24.60	2.81	6.38	0	1	-974	38.80	2.81	6.38	0	1	-973	0.00	2.81	6.38	0	1
-972	24.60	2.34	6.38	0	1	-971	38.80	2.34	6.38	0	1	-970	0.00	2.34	6.38	0	1
-969	24.60	1.88	6.38	0	1	-968	38.80	1.87	6.38	0	1	-967	0.00	1.87	6.38	0	1
-966	24.60	1.41	6.38	0	1	-965	38.80	1.40	6.38	0	1	-964	0.00	1.40	6.38	0	1
-963	24.60	0.94	6.38	0	1	-962	38.80	0.94	6.38	0	1	-961	0.00	0.94	6.38	0	1
-960	38.80	0.47	6.38	0	1	-959	24.60	0.47	6.38	0	1	-958	0.00	0.47	6.38	0	1
-957	38.80	0.00	6.38	0	1	-956	36.87	0.00	6.38	0	1	-955	36.39	0.00	6.38	0	1
-954	35.91	0.00	6.38	0	1	-953	35.43	0.00	6.38	0	1	-952	34.95	0.00	6.38	0	1
-951	34.47	0.00	6.38	0	1	-950	24.60	0.00	6.38	0	1	-949	0.00	0.00	6.38	0	1
-948	38.80	12.80	5.97	3	1	-947	36.87	12.80	5.97	3	1	-946	36.39	12.80	5.97	3	1
-945	35.91	12.80	5.97	3	1	-944	35.43	12.80	5.97	3	1	-943	34.95	12.80	5.97	3	1
-942	34.47	12.80	5.97	3	1	-941	30.50	12.80	5.97	3	1	-940	24.60	12.80	5.97	3	1
-939	18.50	12.80	5.97	3	1	-938	12.40	12.80	5.97	3	1	-937	6.30	12.80	5.97	3	1
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-933	0.00	12.33	5.97	3	1	-932	38.80	11.86	5.97	3	1	-931	0.00	11.86	5.97	3	1
-930	24.60	11.86	5.97	3	1	-929	38.80	11.40	5.97	3	1	-928	0.00	11.40	5.97	3	1
-927	24.60	11.39	5.97	3	1	-926	38.80	10.93	5.97	3	1	-925	0.00	10.93	5.97	3	1
-924	24.60	10.93	5.97	3	1	-923	38.80	10.46	5.97	3	1	-922	0.00	10.46	5.97	3	1
-921	24.60	10.46	5.97	3	1	-920	38.80	9.99	5.97	3	1	-919	0.00	9.99	5.97	3	1
-918	24.60	9.99	5.97	3	1	-917	38.80	9.53	5.97	3	1	-916	0.00	9.53	5.97	3	1
-915	24.60	9.52	5.97	3	1	-914	24.60	9.05	5.97	3	1	-913	36.87	7.75	5.97	3	1

-912	36.39	7.75	5.97	3	1
-909	34.95	7.75	5.97	3	1
-906	36.87	6.38	5.97	3	1
-903	35.91	5.03	5.97	3	1
-900	34.47	5.03	5.97	3	1
-897	38.80	3.27	5.97	3	1
-894	35.91	3.27	5.97	3	1
-891	34.47	3.27	5.97	3	1
-888	38.80	2.81	5.97	3	1
-885	38.80	2.34	5.97	3	1
-882	38.80	1.87	5.97	3	1
-879	38.80	1.40	5.97	3	1
-876	38.80	0.94	5.97	3	1
-873	24.60	0.47	5.97	3	1
-870	36.87	0.00	5.97	3	1
-867	35.43	0.00	5.97	3	1
-864	30.50	0.00	5.97	3	1
-861	12.40	0.00	5.97	3	1
-858	38.80	12.80	5.55	0	1
-855	35.91	12.80	5.55	0	1
-852	34.47	12.80	5.55	0	1
-849	38.80	12.33	5.55	0	1
-846	38.80	11.86	5.55	0	1
-843	38.80	11.40	5.55	0	1
-840	38.80	10.93	5.55	0	1
-837	38.80	10.46	5.55	0	1
-834	38.80	9.99	5.55	0	1
-831	38.80	9.53	5.55	0	1
-828	24.60	9.05	5.55	0	1
-825	35.91	7.75	5.55	0	1
-822	34.47	7.75	5.55	0	1
-819	35.91	5.03	5.55	0	1
-816	34.47	5.03	5.55	0	1
-813	38.80	3.27	5.55	0	1
-810	35.91	3.27	5.55	0	1
-807	34.47	3.27	5.55	0	1
-804	38.80	2.81	5.55	0	1
-801	38.80	2.34	5.55	0	1
-798	38.80	1.87	5.55	0	1
-795	38.80	1.40	5.55	0	1
-792	38.80	0.94	5.55	0	1
-789	24.60	0.47	5.55	0	1
-786	36.87	0.00	5.55	0	1
-783	35.43	0.00	5.55	0	1
-780	24.60	0.00	5.55	0	1
-777	36.87	12.80	5.12	0	1
-774	35.43	12.80	5.12	0	1
-771	24.60	12.80	5.12	0	1
-768	24.60	12.33	5.12	0	1
-765	0.00	11.86	5.12	0	1
-762	0.00	11.40	5.12	0	1
-759	0.00	10.93	5.12	0	1
-756	0.00	10.46	5.12	0	1
-753	0.00	9.99	5.12	0	1
-750	0.00	9.53	5.12	0	1
-747	36.87	7.75	5.12	0	1
-744	35.43	7.75	5.12	0	1
-741	36.87	5.03	5.12	0	1
-738	35.43	5.03	5.12	0	1
-735	24.60	3.75	5.12	0	1
-732	36.87	3.27	5.12	0	1
-729	35.43	3.27	5.12	0	1
-726	0.00	3.27	5.12	0	1
-723	0.00	2.81	5.12	0	1
-720	0.00	2.34	5.12	0	1
-717	0.00	1.87	5.12	0	1
-714	0.00	1.40	5.12	0	1
-711	0.00	0.94	5.12	0	1
-708	0.00	0.47	5.12	0	1
-705	36.39	0.00	5.12	0	1
-702	34.95	0.00	5.12	0	1
-699	0.00	0.00	5.12	0	1
-696	36.39	12.80	4.70	0	1

-911	35.91	7.75	5.97	3	1
-908	34.47	7.75	5.97	3	1
-905	36.87	5.03	5.97	3	1
-902	35.43	5.03	5.97	3	1
-899	24.60	3.75	5.97	3	1
-896	36.87	3.27	5.97	3	1
-893	35.43	3.27	5.97	3	1
-890	0.00	3.27	5.97	3	1
-887	0.00	2.81	5.97	3	1
-884	0.00	2.34	5.97	3	1
-881	0.00	1.87	5.97	3	1
-878	0.00	1.40	5.97	3	1
-875	0.00	0.94	5.97	3	1
-872	0.00	0.47	5.97	3	1
-869	36.39	0.00	5.97	3	1
-866	34.95	0.00	5.97	3	1
-863	24.60	0.00	5.97	3	1
-860	6.30	0.00	5.97	3	1
-857	36.87	12.80	5.55	0	1
-854	35.43	12.80	5.55	0	1
-851	24.60	12.80	5.55	0	1
-848	24.60	12.33	5.55	0	1
-845	0.00	11.86	5.55	0	1
-842	0.00	11.40	5.55	0	1
-839	0.00	10.93	5.55	0	1
-836	0.00	10.46	5.55	0	1
-833	0.00	9.99	5.55	0	1
-830	0.00	9.53	5.55	0	1
-827	36.87	7.75	5.55	0	1
-824	35.43	7.75	5.55	0	1
-821	36.87	5.03	5.55	0	1
-818	35.43	5.03	5.55	0	1
-815	24.60	3.75	5.55	0	1
-812	36.87	3.27	5.55	0	1
-809	35.43	3.27	5.55	0	1
-806	0.00	3.27	5.55	0	1
-803	0.00	2.81	5.55	0	1
-800	0.00	2.34	5.55	0	1
-797	0.00	1.87	5.55	0	1
-794	0.00	1.40	5.55	0	1
-791	0.00	0.94	5.55	0	1
-788	0.00	0.47	5.55	0	1
-785	36.39	0.00	5.55	0	1
-782	34.95	0.00	5.55	0	1
-779	0.00	0.00	5.55	0	1
-776	36.39	12.80	5.12	0	1
-773	34.95	12.80	5.12	0	1
-770	0.00	12.80	5.12	0	1
-767	0.00	12.33	5.12	0	1
-764	24.60	11.86	5.12	0	1
-761	24.60	11.39	5.12	0	1
-758	24.60	10.93	5.12	0	1
-755	24.60	10.46	5.12	0	1
-752	24.60	9.99	5.12	0	1
-749	24.60	9.52	5.12	0	1
-746	36.39	7.75	5.12	0	1
-743	34.95	7.75	5.12	0	1
-740	36.39	5.03	5.12	0	1
-737	34.95	5.03	5.12	0	1
-734	24.60	3.28	5.12	0	1
-731	36.39	3.27	5.12	0	1
-728	34.95	3.27	5.12	0	1
-725	24.60	2.81	5.12	0	1
-722	24.60	2.34	5.12	0	1
-719	24.60	1.88	5.12	0	1
-716	24.60	1.41	5.12	0	1
-713	24.60	0.94	5.12	0	1
-710	38.80	0.47	5.12	0	1
-707	38.80	0.00	5.12	0	1
-704	35.91	0.00	5.12	0	1
-701	34.47	0.00	5.12	0	1
-698	38.80	12.80	4.70	0	1
-695	35.91	12.80	4.70	0	1

-910	35.43	7.75	5.97	3	1
-907	30.50	6.40	5.97	3	1
-904	36.39	5.03	5.97	3	1
-901	34.95	5.03	5.97	3	1
-898	24.60	3.28	5.97	3	1
-895	36.39	3.27	5.97	3	1
-892	34.95	3.27	5.97	3	1
-889	24.60	2.81	5.97	3	1
-886	24.60	2.34	5.97	3	1
-883	24.60	1.88	5.97	0	1
-880	24.60	1.41	5.97	3	1
-877	24.60	0.94	5.97	3	1
-874	38.80	0.47	5.97	3	1
-871	38.80	0.00	5.97	3	1
-868	35.91	0.00	5.97	3	1
-865	34.47	0.00	5.97	3	1
-862	18.50	0.00	5.97	3	1
-859	0.00	0.00	5.97	3	1
-856	36.39	12.80	5.55	0	1
-853	34.95	12.80	5.55	0	1
-850	0.00	12.80	5.55	0	1
-847	0.00	12.33	5.55	0	1
-844	24.60	11.86	5.55	0	1
-841	24.60	11.39	5.55	0	1
-838	24.60	10.93	5.55	0	1
-835	24.60	10.46	5.55	0	1
-832	24.60	9.99	5.55	0	1
-829	24.60	9.52	5.55	0	1
-826	36.39	7.75	5.55	0	1
-823	34.95	7.75	5.55	0	1
-820	36.39	5.03	5.55	0	1
-817	34.95	5.03	5.55	0	1
-814	24.60	3.28	5.55	0	1
-811	36.39	3.27	5.55	0	1
-808	34.95	3.27	5.55	0	1
-805	24.60	2.81	5.55	0	1
-802	24.60	2.34	5.55	0	1
-799	24.60	1.88	5.55	0	1
-796	24.60	1.41	5.55	0	1
-793	24.60	0.94	5.55	0	1
-790	38.80	0.47	5.55	0	1
-787	38.80	0.00	5.55	0	1
-784	35.91	0.00	5.55	0	1
-781	34.47	0.00	5.55	0	1
-778	38.80	12.80	5.12	0	1
-775	35.91	12.80	5.12	0	1
-772	34.47	12.80	5.12	0	1
-769	38.80	12.33	5.12	0	1
-766	38.80	11.86	5.12	0	1
-763	38.80	11.40	5.12	0	1
-760	38.80	10.93	5.12	0	1
-757	38.80	10.46	5.12	0	1
-754	38.80	9.99	5.12	0	1
-751	38.80	9.53	5.12	0	1
-748	24.60	9.05	5.12	0	1
-745	35.91	7.75	5.12	0	1
-742	34.47	7.75	5.12	0	1
-739	35.91	5.03	5.12	0	1
-736	34.47	5.03	5.12	0	1
-733	38.80	3.27	5.12	0	1
-730	35.91	3.27	5.12	0	1
-727	34.47	3.27	5.12	0	1
-724	38.80	2.81	5.12	0	1
-721	38.80	2.34	5.12	0	1
-718	38.80	1.87	5.12	0	1
-715	38.80	1.40	5.12	0	1
-712	38.80	0.94	5.12	0	1
-709	24.60	0.47	5.12	0	1
-706	36.87	0.00	5.12	0	1
-703	35.43	0.00	5.12	0	1
-700	24.60	0.00	5.12	0	1
-697	36.87	12.80	4.70	0	1
-694	35.43	12.80	4.70	0	1

-693	34.95	12.80	4.70	0	1	-692	34.47	12.80	4.70	0	1	-691	24.60	12.80	4.70	0	1
-690	0.00	12.80	4.70	0	1	-689	38.80	12.33	4.70	0	1	-688	24.60	12.33	4.70	0	1
-687	0.00	12.33	4.70	0	1	-686	38.80	11.86	4.70	0	1	-685	0.00	11.86	4.70	0	1
-684	24.60	11.86	4.70	0	1	-683	38.80	11.40	4.70	0	1	-682	0.00	11.40	4.70	0	1
-681	24.60	11.39	4.70	0	1	-680	38.80	10.93	4.70	0	1	-679	0.00	10.93	4.70	0	1
-678	24.60	10.93	4.70	0	1	-677	38.80	10.46	4.70	0	1	-676	0.00	10.46	4.70	0	1
-675	24.60	10.46	4.70	0	1	-674	38.80	9.99	4.70	0	1	-673	0.00	9.99	4.70	0	1
-672	24.60	9.99	4.70	0	1	-671	38.80	9.53	4.70	0	1	-670	0.00	9.53	4.70	0	1
-669	24.60	9.52	4.70	0	1	-668	24.60	9.05	4.70	0	1	-667	36.87	7.75	4.70	0	1
-666	36.39	7.75	4.70	0	1	-665	35.91	7.75	4.70	0	1	-664	35.43	7.75	4.70	0	1
-663	34.95	7.75	4.70	0	1	-662	34.47	7.75	4.70	0	1	-661	36.87	5.03	4.70	0	1
-660	36.39	5.03	4.70	0	1	-659	35.91	5.03	4.70	0	1	-658	35.43	5.03	4.70	0	1
-657	34.95	5.03	4.70	0	1	-656	34.47	5.03	4.70	0	1	-655	24.60	3.75	4.70	0	1
-654	24.60	3.28	4.70	0	1	-653	38.80	3.27	4.70	0	1	-652	36.87	3.27	4.70	0	1
-651	36.39	3.27	4.70	0	1	-650	35.91	3.27	4.70	0	1	-649	35.43	3.27	4.70	0	1
-648	34.95	3.27	4.70	0	1	-647	34.47	3.27	4.70	0	1	-646	0.00	3.27	4.70	0	1
-645	24.60	2.81	4.70	0	1	-644	38.80	2.81	4.70	0	1	-643	0.00	2.81	4.70	0	1
-642	24.60	2.34	4.70	0	1	-641	38.80	2.34	4.70	0	1	-640	0.00	2.34	4.70	0	1
-639	24.60	1.88	4.70	0	1	-638	38.80	1.87	4.70	0	1	-637	0.00	1.87	4.70	0	1
-636	24.60	1.41	4.70	0	1	-635	38.80	1.40	4.70	0	1	-634	0.00	1.40	4.70	0	1
-633	24.60	0.94	4.70	0	1	-632	38.80	0.94	4.70	0	1	-631	0.00	0.94	4.70	0	1
-630	38.80	0.47	4.70	0	1	-629	24.60	0.47	4.70	0	1	-628	0.00	0.47	4.70	0	1
-627	38.80	0.00	4.70	0	1	-626	36.87	0.00	4.70	0	1	-625	36.39	0.00	4.70	0	1
-624	35.91	0.00	4.70	0	1	-623	35.43	0.00	4.70	0	1	-622	34.95	0.00	4.70	0	1
-621	34.47	0.00	4.70	0	1	-620	24.60	0.00	4.70	0	1	-619	0.00	0.00	4.70	0	1
-618	38.80	12.80	4.28	2	1	-617	36.87	12.80	4.28	2	1	-616	36.39	12.80	4.28	2	1
-615	35.91	12.80	4.28	2	1	-614	35.43	12.80	4.28	2	1	-613	34.95	12.80	4.28	2	1
-612	34.47	12.80	4.28	2	1	-611	0.00	12.80	4.28	2	1	-610	38.80	12.33	4.28	2	1
-609	24.60	12.33	4.28	2	1	-608	0.00	12.33	4.28	2	1	-607	38.80	11.86	4.28	2	1
-606	0.00	11.86	4.28	2	1	-605	24.60	11.86	4.28	2	1	-604	38.80	11.40	4.28	2	1
-603	0.00	11.40	4.28	2	1	-602	24.60	11.39	4.28	2	1	-601	38.80	10.93	4.28	2	1
-600	0.00	10.93	4.28	2	1	-599	24.60	10.93	4.28	2	1	-598	38.80	10.46	4.28	2	1
-597	0.00	10.46	4.28	2	1	-596	24.60	10.46	4.28	2	1	-595	38.80	9.99	4.28	2	1
-594	0.00	9.99	4.28	2	1	-593	24.60	9.99	4.28	2	1	-592	38.80	9.53	4.28	2	1
-591	0.00	9.53	4.28	2	1	-590	24.60	9.52	4.28	2	1	-589	30.50	9.05	4.28	2	1
-588	36.87	7.75	4.28	2	1	-587	36.39	7.75	4.28	2	1	-586	35.91	7.75	4.28	2	1
-585	35.43	7.75	4.28	2	1	-584	34.95	7.75	4.28	2	1	-583	34.47	7.75	4.28	2	1
-582	34.47	6.38	4.28	2	1	-581	36.87	5.03	4.28	2	1	-580	36.39	5.03	4.28	2	1
-579	35.91	5.03	4.28	2	1	-578	35.43	5.03	4.28	2	1	-577	34.95	5.03	4.28	2	1
-576	34.47	5.03	4.28	2	1	-575	30.50	3.75	4.28	2	1	-574	24.60	3.28	4.28	2	1
-573	38.80	3.27	4.28	2	1	-572	36.87	3.27	4.28	2	1	-571	36.39	3.27	4.28	2	1
-570	35.91	3.27	4.28	2	1	-569	35.43	3.27	4.28	2	1	-568	34.95	3.27	4.28	2	1
-567	34.47	3.27	4.28	2	1	-566	0.00	3.27	4.28	2	1	-565	24.60	2.81	4.28	2	1
-564	38.80	2.81	4.28	2	1	-563	0.00	2.81	4.28	2	1	-562	24.60	2.34	4.28	2	1
-561	38.80	2.34	4.28	2	1	-560	0.00	2.34	4.28	2	1	-559	24.60	1.88	4.28	2	1
-558	38.80	1.87	4.28	2	1	-557	0.00	1.87	4.28	2	1	-556	24.60	1.41	4.28	2	1
-555	38.80	1.40	4.28	2	1	-554	0.00	1.40	4.28	2	1	-553	24.60	0.94	4.28	2	1
-552	38.80	0.94	4.28	2	1	-551	0.00	0.94	4.28	2	1	-550	38.80	0.47	4.28	2	1
-549	24.60	0.47	4.28	2	1	-548	0.00	0.47	4.28	2	1	-547	38.80	0.00	4.28	2	1
-546	36.87	0.00	4.28	2	1	-545	36.39	0.00	4.28	2	1	-544	35.91	0.00	4.28	2	1
-543	35.43	0.00	4.28	2	1	-542	34.95	0.00	4.28	2	1	-541	34.47	0.00	4.28	2	1
-540	0.00	0.00	4.28	2	1	-539	38.80	12.80	3.85	0	1	-538	36.87	12.80	3.85	0	1
-537	36.39	12.80	3.85	0	1	-536	35.91	12.80	3.85	0	1	-535	35.43	12.80	3.85	0	1
-534	34.95	12.80	3.85	0	1	-533	34.47	12.80	3.85	0	1	-532	24.60	12.80	3.85	0	1
-531	0.00	12.80	3.85	0	1	-530	38.80	12.33	3.85	0	1	-529	24.60	12.33	3.85	0	1
-528	0.00	12.33	3.85	0	1	-527	38.80	11.86	3.85	0	1	-526	0.00	11.86	3.85	0	1
-525	24.60	11.86	3.85	0	1	-524	38.80	11.40	3.85	0	1	-523	0.00	11.40	3.85	0	1
-522	24.60	11.39	3.85	0	1	-521	38.80	10.93	3.85	0	1	-520	0.00	10.93	3.85	0	1
-519	24.60	10.93	3.85	0	1	-518	38.80	10.46	3.85	0	1	-517	0.00	10.46	3.85	0	1
-516	24.60	10.46	3.85	0	1	-515	38.80	9.99	3.85	0	1	-514	0.00	9.99	3.85	0	1
-513	24.60	9.99	3.85	0	1	-512	38.80	9.53	3.85	0	1	-511	0.00	9.53	3.85	0	1
-510	24.60	9.52	3.85	0	1	-509	24.60	9.05	3.85	0	1	-508	36.87	7.75	3.85	0	1
-507	36.39	7.75	3.85	0	1	-506	35.91	7.75	3.85	0	1	-505	35.43	7.75	3.85	0	1
-504	34.95	7.75	3.85	0	1	-503	34.47	7.75	3.85	0	1	-502	36.87	5.03	3.85	0	1
-501	36.39	5.03	3.85	0	1	-500	35.91	5.03	3.85	0	1	-499	35.43	5.03	3.85	0	1
-498	34.95	5.03	3.85	0	1	-497	34.47	5.03	3.85	0	1	-496	24.60	3.75	3.85	0	1
-495	24.60	3.28	3.85	0	1	-494	38.80	3.27	3.85	0	1	-493	36.87	3.27	3.85	0	1
-492	36.39	3.27	3.85	0	1	-491	35.91	3.27	3.85	0	1	-490	35.43	3.27	3.85	0	1
-489	34.95	3.27	3.85	0	1	-488	34.47	3.27	3.85	0	1	-487	0.00	3.27	3.85	0	1
-486	24.60	2.81	3.85	0	1	-485	38.80	2.81	3.85	0	1	-484	0.00	2.81	3.85	0	1
-483	24.60	2.34	3.85	0	1	-482	38.80	2.34	3.85	0	1	-481	0.00	2.34	3.85	0	1
-480	24.60	1.88	3.85	0	1	-479	38.80	1.87	3.85	0	1	-478	0.00	1.87	3.85	0	1
-477	24.60	1.41	3.85	0	1	-476	38.80	1.40	3.85	0	1	-475	0.00	1.40	3.85	0	1

-474	24.60	0.94	3.85	0	1
-471	38.80	0.47	3.85	0	1
-468	38.80	0.00	3.85	0	1
-465	35.91	0.00	3.85	0	1
-462	34.47	0.00	3.85	0	1
-459	38.80	12.80	3.43	0	1
-456	35.91	12.80	3.43	0	1
-453	34.47	12.80	3.43	0	1
-450	38.80	12.33	3.43	0	1
-447	38.80	11.86	3.43	0	1
-444	38.80	11.40	3.43	0	1
-441	38.80	10.93	3.43	0	1
-438	38.80	10.46	3.43	0	1
-435	38.80	9.99	3.43	0	1
-432	38.80	9.53	3.43	0	1
-429	24.60	9.05	3.43	0	1
-426	35.91	7.75	3.43	0	1
-423	34.47	7.75	3.43	0	1
-420	35.91	5.03	3.43	0	1
-417	34.47	5.03	3.43	0	1
-414	38.80	3.27	3.43	0	1
-411	35.91	3.27	3.43	0	1
-408	34.47	3.27	3.43	0	1
-405	38.80	2.81	3.43	0	1
-402	38.80	2.34	3.43	0	1
-399	38.80	1.87	3.43	0	1
-396	38.80	1.40	3.43	0	1
-393	38.80	0.94	3.43	0	1
-390	24.60	0.47	3.43	0	1
-387	36.87	0.00	3.43	0	1
-384	35.43	0.00	3.43	0	1
-381	24.60	0.00	3.43	0	1
-378	36.87	12.80	3.00	1	2
-375	35.43	12.80	3.00	1	2
-372	30.50	12.80	3.00	1	2
-369	12.40	12.80	3.00	1	2
-366	38.80	12.33	3.00	1	2
-363	38.80	11.86	3.00	1	2
-360	38.80	11.40	3.00	1	2
-357	38.80	10.93	3.00	1	2
-354	38.80	10.46	3.00	1	2
-351	38.80	9.99	3.00	1	2
-348	38.80	9.53	3.00	1	2
-345	24.60	9.05	3.00	1	1
-342	35.91	7.75	3.00	0	1
-339	34.47	7.75	3.00	0	1
-336	36.87	5.03	3.00	1	1
-333	35.43	5.03	3.00	0	1
-330	24.60	3.75	3.00	1	1
-327	36.87	3.27	3.00	1	1
-324	35.43	3.27	3.00	0	1
-321	0.00	3.27	3.00	1	2
-318	0.00	2.81	3.00	1	2
-315	0.00	2.34	3.00	1	2
-312	0.00	1.87	3.00	1	2
-309	0.00	1.40	3.00	1	2
-306	0.00	0.94	3.00	1	2
-303	0.00	0.47	3.00	1	2
-300	36.39	0.00	3.00	1	2
-297	34.95	0.00	3.00	1	2
-294	24.60	0.00	3.00	1	2
-291	6.30	0.00	3.00	1	2
-288	36.87	12.80	2.50	0	1
-285	35.43	12.80	2.50	0	1
-282	24.60	12.80	2.50	0	1
-279	24.60	12.33	2.50	0	1
-276	0.00	11.86	2.50	0	1
-273	0.00	11.40	2.50	0	1
-270	0.00	10.93	2.50	0	1
-267	0.00	10.46	2.50	0	1
-264	0.00	9.99	2.50	0	1
-261	0.00	9.53	2.50	0	1
-258	36.87	7.75	2.50	0	1
-473	38.80	0.94	3.85	0	1
-470	24.60	0.47	3.85	0	1
-467	36.87	0.00	3.85	0	1
-464	35.43	0.00	3.85	0	1
-461	24.60	0.00	3.85	0	1
-458	36.87	12.80	3.43	0	1
-455	35.43	12.80	3.43	0	1
-452	24.60	12.80	3.43	0	1
-449	24.60	12.33	3.43	0	1
-446	0.00	11.86	3.43	0	1
-443	0.00	11.40	3.43	0	1
-440	0.00	10.93	3.43	0	1
-437	0.00	10.46	3.43	0	1
-434	0.00	9.99	3.43	0	1
-431	0.00	9.53	3.43	0	1
-428	36.87	7.75	3.43	0	1
-425	35.43	7.75	3.43	0	1
-422	36.87	5.03	3.43	0	1
-419	35.43	5.03	3.43	0	1
-416	24.60	3.75	3.43	0	1
-413	36.87	3.27	3.43	0	1
-410	35.43	3.27	3.43	0	1
-407	0.00	3.27	3.43	0	1
-404	0.00	2.81	3.43	0	1
-401	0.00	2.34	3.43	0	1
-398	0.00	1.87	3.43	0	1
-395	0.00	1.40	3.43	0	1
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-389	0.00	0.47	3.43	0	1
-386	36.39	0.00	3.43	0	1
-383	34.95	0.00	3.43	0	1
-380	0.00	0.00	3.43	0	1
-377	36.39	12.80	3.00	1	2
-374	34.95	12.80	3.00	1	2
-371	24.60	12.80	3.00	1	2
-368	6.30	12.80	3.00	1	2
-365	24.60	12.33	3.00	1	1
-362	0.00	11.86	3.00	1	2
-359	0.00	11.40	3.00	1	2
-356	0.00	10.93	3.00	1	2
-353	0.00	10.46	3.00	1	2
-350	0.00	9.99	3.00	1	2
-347	0.00	9.53	3.00	1	2
-344	36.87	7.75	3.00	1	1
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-338	30.50	6.40	3.00	1	1
-335	36.39	5.03	3.00	0	1
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-326	36.39	3.27	3.00	0	1
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-320	24.60	2.81	3.00	1	1
-317	24.60	2.34	3.00	1	1
-314	24.60	1.88	3.00	0	1
-311	24.60	1.41	3.00	1	1
-308	24.60	0.94	3.00	1	1
-305	38.80	0.47	3.00	1	2
-302	38.80	0.00	3.00	1	2
-299	35.91	0.00	3.00	1	2
-296	34.47	0.00	3.00	1	2
-293	18.50	0.00	3.00	1	2
-290	0.00	0.00	3.00	1	2
-287	36.39	12.80	2.50	0	1
-284	34.95	12.80	2.50	0	1
-281	0.00	12.80	2.50	0	1
-278	0.00	12.33	2.50	0	1
-275	24.60	11.86	2.50	0	1
-272	24.60	11.39	2.50	0	1
-269	24.60	10.93	2.50	0	1
-266	24.60	10.46	2.50	0	1
-263	24.60	9.99	2.50	0	1
-260	24.60	9.52	2.50	0	1
-257	36.39	7.75	2.50	0	1
-472	0.00	0.94	3.85	0	1
-469	0.00	0.47	3.85	0	1
-466	36.39	0.00	3.85	0	1
-463	34.95	0.00	3.85	0	1
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-457	36.39	12.80	3.43	0	1
-454	34.95	12.80	3.43	0	1
-451	0.00	12.80	3.43	0	1
-448	0.00	12.33	3.43	0	1
-445	24.60	11.86	3.43	0	1
-442	24.60	11.39	3.43	0	1
-439	24.60	10.93	3.43	0	1
-436	24.60	10.46	3.43	0	1
-433	24.60	9.99	3.43	0	1
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-427	36.39	7.75	3.43	0	1
-424	34.95	7.75	3.43	0	1
-421	36.39	5.03	3.43	0	1
-418	34.95	5.03	3.43	0	1
-415	24.60	3.28	3.43	0	1
-412	36.39	3.27	3.43	0	1
-409	34.95	3.27	3.43	0	1
-406	24.60	2.81	3.43	0	1
-403	24.60	2.34	3.43	0	1
-400	24.60	1.88	3.43	0	1
-397	24.60	1.41	3.43	0	1
-394	24.60	0.94	3.43	0	1
-391	38.80	0.47	3.43	0	1
-388	38.80	0.00	3.43	0	1
-385	35.91	0.00	3.43	0	1
-382	34.47	0.00	3.43	0	1
-379	38.80	12.80	3.00	1	2
-376	35.91	12.80	3.00	1	2
-373	34.47	12.80	3.00	1	2
-370	18.50	12.80	3.00	1	2
-367	0.00	12.80	3.00	1	2
-364	0.00	12.33	3.00	1	2
-361	24.60	11.86	3.00	1	1
-358	24.60	11.39	3.00	1	1
-355	24.60	10.93	3.00	1	1
-352	24.60	10.46	3.00	1	1
-349	24.60	9.99	3.00	1	1
-346	24.60	9.52	3.00	1	1
-343	36.39	7.75	3.00	0	1
-340	34.95	7.75	3.00	0	1
-337	36.87	6.38	3.00	1	1
-334	35.91	5.03	3.00	0	1
-331	34.47	5.03	3.00	0	1
-328	38.80	3.27	3.00	1	2
-325	35.91	3.27	3.00	0	1
-322	34.47	3.27	3.00	0	1
-319	38.80	2.81	3.00	1	2
-316	38.80	2.34	3.00	1	2
-313	38.80	1.87	3.00	1	2
-310	38.80	1.40	3.00	1	2
-307	38.80	0.94	3.00	1	2
-304	24.60	0.47	3.00	1	1
-301	36.87	0.00	3.00	1	2
-298	35.43	0.00	3.00	1	2
-295	30.50	0.00	3.00	1	2
-292	12.40	0.00	3.00	1	2
-289	38.80	12.80	2.50	0	1
-286	35.91	12.80	2.50	0	1
-283	34.47	12.80	2.50	0	1
-280	38.80	12.33	2.50	0	1
-277	38.80	11.86	2.50	0	1
-274	38.80	11.40	2.50	0	1
-271	38.80	10.93	2.50	0	1
-268	38.80	10.46	2.50	0	1
-265	38.80	9.99	2.50	0	1
-262	38.80	9.53	2.50	0	1
-259	24.60	9.05	2.50	0	1
-256	35.91	7.75	2.50	0	1

-255	35.43	7.75	2.50	0	1	-254	34.95	7.75	2.50	0	1	-253	34.47	7.75	2.50	0	1
-252	36.87	5.03	2.50	0	1	-251	36.39	5.03	2.50	0	1	-250	35.91	5.03	2.50	0	1
-249	35.43	5.03	2.50	0	1	-248	34.95	5.03	2.50	0	1	-247	34.47	5.03	2.50	0	1
-246	24.60	3.75	2.50	0	1	-245	24.60	3.28	2.50	0	1	-244	38.80	3.27	2.50	0	1
-243	36.87	3.27	2.50	0	1	-242	36.39	3.27	2.50	0	1	-241	35.91	3.27	2.50	0	1
-240	35.43	3.27	2.50	0	1	-239	34.95	3.27	2.50	0	1	-238	34.47	3.27	2.50	0	1
-237	0.00	3.27	2.50	0	1	-236	24.60	2.81	2.50	0	1	-235	38.80	2.81	2.50	0	1
-234	0.00	2.81	2.50	0	1	-233	24.60	2.34	2.50	0	1	-232	38.80	2.34	2.50	0	1
-231	0.00	2.34	2.50	0	1	-230	24.60	1.88	2.50	0	1	-229	38.80	1.87	2.50	0	1
-228	0.00	1.87	2.50	0	1	-227	24.60	1.41	2.50	0	1	-226	38.80	1.40	2.50	0	1
-225	0.00	1.40	2.50	0	1	-224	24.60	0.94	2.50	0	1	-223	38.80	0.94	2.50	0	1
-222	0.00	0.94	2.50	0	1	-221	38.80	0.47	2.50	0	1	-220	24.60	0.47	2.50	0	1
-219	0.00	0.47	2.50	0	1	-218	38.80	0.00	2.50	0	1	-217	36.87	0.00	2.50	0	1
-216	36.39	0.00	2.50	0	1	-215	35.91	0.00	2.50	0	1	-214	35.43	0.00	2.50	0	1
-213	34.95	0.00	2.50	0	1	-212	34.47	0.00	2.50	0	1	-211	24.60	0.00	2.50	0	1
-210	0.00	0.00	2.50	0	1	-209	38.80	12.80	2.00	0	1	-208	36.87	12.80	2.00	0	1
-207	36.39	12.80	2.00	0	1	-206	35.91	12.80	2.00	0	1	-205	35.43	12.80	2.00	0	1
-204	34.95	12.80	2.00	0	1	-203	34.47	12.80	2.00	0	1	-202	24.60	12.80	2.00	0	1
-201	0.00	12.80	2.00	0	1	-200	38.80	12.33	2.00	0	1	-199	24.60	12.33	2.00	0	1
-198	0.00	12.33	2.00	0	1	-197	38.80	11.86	2.00	0	1	-196	0.00	11.86	2.00	0	1
-195	24.60	11.86	2.00	0	1	-194	38.80	11.40	2.00	0	1	-193	0.00	11.40	2.00	0	1
-192	24.60	11.39	2.00	0	1	-191	38.80	10.93	2.00	0	1	-190	0.00	10.93	2.00	0	1
-189	24.60	10.93	2.00	0	1	-188	38.80	10.46	2.00	0	1	-187	0.00	10.46	2.00	0	1
-186	24.60	10.46	2.00	0	1	-185	38.80	9.99	2.00	0	1	-184	0.00	9.99	2.00	0	1
-183	24.60	9.99	2.00	0	1	-182	38.80	9.53	2.00	0	1	-181	0.00	9.53	2.00	0	1
-180	24.60	9.52	2.00	0	1	-179	24.60	9.05	2.00	0	1	-178	36.87	7.75	2.00	0	1
-177	36.39	7.75	2.00	0	1	-176	35.91	7.75	2.00	0	1	-175	35.43	7.75	2.00	0	1
-174	34.95	7.75	2.00	0	1	-173	34.47	7.75	2.00	0	1	-172	36.87	5.03	2.00	0	1
-171	36.39	5.03	2.00	0	1	-170	35.91	5.03	2.00	0	1	-169	35.43	5.03	2.00	0	1
-168	34.95	5.03	2.00	0	1	-167	34.47	5.03	2.00	0	1	-166	24.60	3.75	2.00	0	1
-165	24.60	3.28	2.00	0	1	-164	38.80	3.27	2.00	0	1	-163	36.87	3.27	2.00	0	1
-162	36.39	3.27	2.00	0	1	-161	35.91	3.27	2.00	0	1	-160	35.43	3.27	2.00	0	1
-159	34.95	3.27	2.00	0	1	-158	34.47	3.27	2.00	0	1	-157	0.00	3.27	2.00	0	1
-156	24.60	2.81	2.00	0	1	-155	38.80	2.81	2.00	0	1	-154	0.00	2.81	2.00	0	1
-153	24.60	2.34	2.00	0	1	-152	38.80	2.34	2.00	0	1	-151	0.00	2.34	2.00	0	1
-150	24.60	1.88	2.00	0	1	-149	38.80	1.87	2.00	0	1	-148	0.00	1.87	2.00	0	1
-147	24.60	1.41	2.00	0	1	-146	38.80	1.40	2.00	0	1	-145	0.00	1.40	2.00	0	1
-144	24.60	0.94	2.00	0	1	-143	38.80	0.94	2.00	0	1	-142	0.00	0.94	2.00	0	1
-141	38.80	0.47	2.00	0	1	-140	24.60	0.47	2.00	0	1	-139	0.00	0.47	2.00	0	1
-138	38.80	0.00	2.00	0	1	-137	36.87	0.00	2.00	0	1	-136	36.39	0.00	2.00	0	1
-135	35.91	0.00	2.00	0	1	-134	35.43	0.00	2.00	0	1	-133	34.95	0.00	2.00	0	1
-132	34.47	0.00	2.00	0	1	-131	24.60	0.00	2.00	0	1	-130	0.00	0.00	2.00	0	1
-129	38.80	12.80	1.50	0	2	-128	36.87	12.80	1.50	0	2	-127	36.39	12.80	1.50	0	2
-126	35.91	12.80	1.50	0	2	-125	35.43	12.80	1.50	0	2	-124	34.95	12.80	1.50	0	2
-123	34.47	12.80	1.50	0	2	-122	24.60	12.80	1.50	0	2	-121	38.80	12.33	1.50	0	2
-120	24.60	12.33	1.50	0	2	-119	0.00	12.33	1.50	0	2	-118	38.80	11.86	1.50	0	2
-117	0.00	11.86	1.50	0	2	-116	24.60	11.86	1.50	0	2	-115	38.80	11.40	1.50	0	2
-114	0.00	11.40	1.50	0	2	-113	24.60	11.39	1.50	0	2	-112	38.80	10.93	1.50	0	2
-111	0.00	10.93	1.50	0	2	-110	24.60	10.93	1.50	0	2	-109	38.80	10.46	1.50	0	2
-108	0.00	10.46	1.50	0	2	-107	24.60	10.46	1.50	0	2	-106	38.80	9.99	1.50	0	2
-105	0.00	9.99	1.50	0	2	-104	24.60	9.99	1.50	0	2	-103	38.80	9.53	1.50	0	2
-102	0.00	9.53	1.50	0	2	-101	24.60	9.52	1.50	0	2	-100	24.60	9.05	1.50	0	2
-99	36.87	7.75	1.50	0	2	-98	36.39	7.75	1.50	0	2	-97	35.91	7.75	1.50	0	2
-96	35.43	7.75	1.50	0	2	-95	34.95	7.75	1.50	0	2	-94	34.47	7.75	1.50	0	2
-93	34.47	6.38	1.50	0	2	-92	36.87	5.03	1.50	0	2	-91	36.39	5.03	1.50	0	2
-90	35.91	5.03	1.50	0	2	-89	35.43	5.03	1.50	0	2	-88	34.95	5.03	1.50	0	2
-87	34.47	5.03	1.50	0	2	-86	24.60	3.75	1.50	0	2	-85	24.60	3.28	1.50	0	2
-84	38.80	3.27	1.50	0	2	-83	36.87	3.27	1.50	0	2	-82	36.39	3.27	1.50	0	2
-81	35.91	3.27	1.50	0	2	-80	35.43	3.27	1.50	0	2	-79	34.95	3.27	1.50	0	2
-78	34.47	3.27	1.50	0	2	-77	0.00	3.27	1.50	0	2	-76	24.60	2.81	1.50	0	2
-75	38.80	2.81	1.50	0	2	-74	0.00	2.81	1.50	0	2	-73	24.60	2.34	1.50	0	2
-72	38.80	2.34	1.50	0	2	-71	0.00	2.34	1.50	0	2	-70	24.60	1.88	1.50	0	2
-69	38.80	1.87	1.50	0	2	-68	0.00	1.87	1.50	0	2	-67	24.60	1.41	1.50	0	2
-66	38.80	1.40	1.50	0	2	-65	0.00	1.40	1.50	0	2	-64	24.60	0.94	1.50	0	2
-63	38.80	0.94	1.50	0	2	-62	0.00	0.94	1.50	0	2	-61	38.80	0.47	1.50	0	2
-60	24.60	0.47	1.50	0	2	-59	0.00	0.47	1.50	0	2	-58	38.80	0.00	1.50	0	2
-57	36.87	0.00	1.50	0	2	-56	36.39	0.00	1.50	0	2	-55	35.91	0.00	1.50	0	2
-54	35.43	0.00	1.50	0	2	-53	34.95	0.00	1.50	0	2	-52	34.47	0.00	1.50	0	2
-51	24.60	0.00	1.50	0	2	-50	24.60	12.80	1.00	0	1	-49	24.60	12.33	1.00	0	1
-48	24.60	11.86	1.00	0	1	-47	24.60	11.39	1.00	0	1	-46	24.60	10.93	1.00	0	1
-45	24.60	10.46	1.00	0	1	-44	24.60	9.99	1.00	0	1	-43	24.60	9.52	1.00	0	1
-42	24.60	9.05	1.00	0	1	-41	24.60	3.75	1.00	0	1	-40	24.60	3.28	1.00	0	1
-39	24.60	2.81	1.00	0	1	-38	24.60	2.34	1.00	0	1	-37	24.60	1.88	1.00	0	1

-36	24.60	1.41	1.00	0	1	-35	24.60	0.94	1.00	0	1	-34	24.60	0.47	1.00	0	1
-33	24.60	0.00	1.00	0	1	-32	24.60	12.80	0.50	0	1	-31	24.60	12.33	0.50	0	1
-30	24.60	11.86	0.50	0	1	-29	24.60	11.39	0.50	0	1	-28	24.60	10.93	0.50	0	1
-27	24.60	10.46	0.50	0	1	-26	24.60	9.99	0.50	0	1	-25	24.60	9.52	0.50	0	1
-24	24.60	9.05	0.50	0	1	-23	24.60	3.75	0.50	0	1	-22	24.60	3.28	0.50	0	1
-21	24.60	2.81	0.50	0	1	-20	24.60	2.34	0.50	0	1	-19	24.60	1.88	0.50	0	1
-18	24.60	1.41	0.50	0	1	-17	24.60	0.94	0.50	0	1	-16	24.60	0.47	0.50	0	1
-15	24.60	0.00	0.50	0	1	-14	24.60	12.33	0.00	0	2	-13	24.60	11.86	0.00	0	2
-12	24.60	11.39	0.00	0	2	-11	24.60	10.93	0.00	0	2	-10	24.60	10.46	0.00	0	2
-9	24.60	9.99	0.00	0	2	-8	24.60	9.52	0.00	0	2	-7	24.60	3.28	0.00	0	2
-6	24.60	2.81	0.00	0	2	-5	24.60	2.34	0.00	0	2	-4	24.60	1.88	0.00	0	2
-3	24.60	1.41	0.00	0	2	-2	24.60	0.94	0.00	0	2	-1	24.60	0.47	0.00	0	2
1	0.00	0.00	1.50	0	2	2	6.30	0.00	1.50	0	2	3	12.40	0.00	1.50	0	2
4	18.50	0.00	1.50	0	2	5	24.60	0.00	0.00	0	2	6	30.50	0.00	1.50	0	2
13	24.60	3.75	0.00	0	2	20	30.50	6.40	1.50	0	2	30	24.60	9.05	0.00	0	2
37	0.00	12.80	1.50	0	2	38	6.30	12.80	1.50	0	2	39	12.40	12.80	1.50	0	2
40	18.50	12.80	1.50	0	2	41	24.60	12.80	0.00	0	2	42	30.50	12.80	1.50	0	2
101	38.80	7.75	3.00	1	2	102	38.80	5.03	3.00	1	2	205	24.60	0.00	4.28	2	1
206	30.50	0.00	4.28	2	1	213	24.60	3.75	4.28	2	1	220	30.50	6.40	4.28	2	1
230	24.60	9.05	4.28	2	1	241	24.60	12.80	4.28	2	1	242	30.50	12.80	4.28	2	1
301	38.80	5.03	5.97	3	1	302	38.80	7.75	5.97	3	1	401	0.00	0.00	7.60	4	1
402	6.30	0.00	7.60	4	1	403	12.40	0.00	7.60	4	1	404	18.50	0.00	7.60	4	1
405	24.60	0.00	7.60	4	1	406	30.50	0.00	7.60	4	1	413	24.60	3.75	7.60	4	1
420	30.50	6.40	7.60	4	1	430	24.60	9.05	7.60	4	1	437	0.00	12.80	7.60	4	1
438	6.30	12.80	7.60	4	1	439	12.40	12.80	7.60	4	1	440	18.50	12.80	7.60	4	1
441	24.60	12.80	7.60	4	1	442	30.50	12.80	7.60	4	1	443	38.80	7.75	7.60	4	1
501	0.00	0.00	11.00	5	1	502	6.30	0.00	11.00	5	1	503	12.40	0.00	11.00	5	1
504	18.50	0.00	11.00	5	1	505	24.60	0.00	11.00	5	1	507	6.30	1.28	11.00	5	1
508	12.40	1.28	11.00	5	1	509	18.50	1.28	11.00	5	1	510	6.30	2.56	11.00	5	1
511	12.40	2.56	11.00	5	1	512	18.50	2.56	11.00	5	1	513	24.60	3.75	11.00	5	1
514	6.30	3.84	11.00	5	1	515	12.40	3.84	11.00	5	1	516	18.50	3.84	11.00	5	1
517	6.30	5.12	11.00	5	1	518	12.40	5.12	11.00	5	1	519	18.50	5.12	11.00	5	1
521	6.30	6.40	11.00	5	1	522	12.40	6.40	11.00	5	1	523	18.50	6.40	11.00	5	1
524	6.30	7.68	11.00	5	1	525	12.40	7.68	11.00	5	1	526	18.50	7.68	11.00	5	1
527	6.30	8.96	11.00	5	1	528	12.40	8.96	11.00	5	1	529	18.50	8.96	11.00	5	1
530	24.60	9.05	11.00	5	1	531	6.30	10.24	11.00	5	1	532	12.40	10.24	11.00	5	1
533	18.50	10.24	11.00	5	1	534	6.30	11.52	11.00	5	1	535	12.40	11.52	11.00	5	1
536	18.50	11.52	11.00	5	1	537	0.00	12.80	11.00	5	1	538	6.30	12.80	11.00	5	1
539	12.40	12.80	11.00	5	1	540	18.50	12.80	11.00	5	1	541	24.60	12.80	11.00	5	1
602	6.30	0.00	11.50	0	1	603	12.40	0.00	11.50	0	1	604	18.50	0.00	11.50	0	1
607	6.30	1.28	11.79	0	1	608	12.40	1.28	11.79	0	1	609	18.50	1.28	11.79	0	1
610	6.30	2.56	12.02	0	1	611	12.40	2.56	12.02	0	1	612	18.50	2.56	12.02	0	1
614	6.30	3.84	12.18	0	1	615	12.40	3.84	12.18	0	1	616	18.50	3.84	12.18	0	1
617	6.30	5.12	12.27	0	1	618	12.40	5.12	12.27	0	1	619	18.50	5.12	12.27	0	1
620	30.50	6.40	11.00	5	1	621	6.30	6.40	12.31	0	1	622	12.40	6.40	12.31	0	1
623	18.50	6.40	12.31	0	1	624	6.30	7.68	12.27	0	1	625	12.40	7.68	12.27	0	1
626	18.50	7.68	12.27	0	1	627	6.30	8.96	12.18	0	1	628	12.40	8.96	12.18	0	1
629	18.50	8.96	12.18	0	1	631	6.30	10.24	12.02	0	1	632	12.40	10.24	12.02	0	1
633	18.50	10.24	12.02	0	1	634	6.30	11.52	11.79	0	1	635	12.40	11.52	11.79	0	1
636	18.50	11.52	11.79	0	1	638	6.30	12.80	11.50	0	1	639	12.40	12.80	11.50	0	1
640	18.50	12.80	11.50	0	1	641	12.40	-1.38	11.18	0	1	642	18.50	-1.38	11.18	0	1
643	6.30	-1.38	11.18	0	1	644	12.40	14.18	11.18	0	1	645	30.50	1.28	11.00	5	1
646	34.47	1.28	11.00	5	1	647	30.50	11.52	11.00	5	1	648	34.47	11.52	11.00	5	1
649	30.50	2.56	11.00	5	1	650	34.47	2.56	11.00	5	1	651	30.50	10.24	11.00	5	1
652	34.47	10.24	11.00	5	1	653	0.00	3.84	11.00	5	1	654	24.60	3.84	11.00	5	1
655	30.50	3.84	11.00	5	1	656	34.47	3.84	11.00	5	1	657	38.80	3.84	11.00	5	1
658	0.00	8.96	11.00	5	1	659	24.60	8.96	11.00	5	1	660	30.50	8.96	11.00	5	1
661	34.47	8.96	11.00	5	1	662	38.80	8.96	11.00	5	1	663	0.00	5.12	11.00	5	1
664	24.60	5.12	11.00	5	1	665	30.50	5.12	11.00	5	1	666	34.47	5.12	11.00	5	1
667	38.80	5.12	11.00	5	1	668	0.00	7.68	11.00	5	1	669	24.60	7.68	11.00	5	1
670	30.50	7.68	11.00	5	1	671	34.47	7.68	11.00	5	1	672	38.80	7.68	11.00	5	1
673	0.00	6.40	11.00	5	1	674	24.60	6.40	11.00	5	1	675	34.47	6.40	11.00	5	1
676	38.80	6.40	11.00	5	1	677	18.50	14.18	11.18	0	1	678	6.30	14.18	11.18	0	1
679	0.00	14.18	11.18	0	1	680	0.00	-1.38	11.18	0	1	681	0.00	12.80	11.50	0	1
682	0.00	0.00	11.50	0	1	683	24.60	0.00	11.50	0	1	684	24.60	12.80	11.50	0	1
685	24.60	-1.38	11.18	0	1	686	24.60	14.18	11.18	0	1	687	30.50	0.00	11.50	0	1
688	30.50	12.80	11.50	0	1	689	30.50	-1.38	11.18	0	1	690	30.50	14.18	11.18	0	1
691	34.47	0.00	11.50	0	1	692	34.47	12.80	11.50	0	1	693	34.47	-1.38	11.18	0	1
694	34.47	14.18	11.18	0	1	695	38.80	0.00	11.50	0	1	696	38.80	12.80	11.50	0	1
697	38.80	-1.38	11.18	0	1	698	38.80	14.18	11.18	0	1	699	0.00	1.28	11.79	0	1
700	0.00	2.56	12.02	0	1	701	0.00	3.84	12.18	0	1	702	0.00	5.12	12.27	0	1
703	0.00	6.40	12.31	0	1	704	0.00	7.68	12.27	0	1	705	0.00	8.96	12.18	0	1
706	0.00	10.24	12.02	0	1	707	0.00	11.52	11.79	0	1	708	-1.50	11.52	11.79	0	1

709	-1.50	10.24	12.02	0	1	710	-1.50	8.96	12.18	0	1	711	-1.50	7.68	12.27	0	1
712	-1.50	6.40	12.31	0	1	713	-1.50	5.12	12.27	0	1	714	-1.50	3.84	12.18	0	1
715	-1.50	2.56	12.02	0	1	716	-1.50	1.28	11.79	0	1	717	-1.50	12.80	11.50	0	1
718	-1.50	0.00	11.50	0	1	719	-1.50	14.18	11.18	0	1	720	-1.50	-1.38	11.18	0	1
754	38.80	7.68	12.27	0	1	755	38.80	8.96	12.18	0	1	756	38.80	10.24	12.02	0	1
757	38.80	11.52	11.79	0	1	758	40.30	11.52	11.79	0	1	759	40.30	10.24	12.02	0	1
760	40.30	8.96	12.18	0	1	761	40.30	7.68	12.27	0	1	762	40.30	6.40	12.31	0	1
763	40.30	5.12	12.27	0	1	764	40.30	3.84	12.18	0	1	765	40.30	2.56	12.02	0	1
766	40.30	1.28	11.79	0	1	767	40.30	12.80	11.50	0	1	768	40.30	0.00	11.50	0	1
769	40.30	14.18	11.18	0	1	770	40.30	-1.38	11.18	0	1	771	38.80	12.80	11.00	5	1
772	38.80	0.00	11.00	5	1	778	38.80	1.28	11.79	0	1	779	38.80	2.56	12.02	0	1
780	38.80	3.84	12.18	0	1	781	38.80	5.12	12.27	0	1	782	38.80	6.40	12.31	0	1

Elenco materiali

Simbologia

- α =Coeff. di dilatazione termica
- ν =Coeff. di Poisson
- Comm. = Commento
- E =Modulo elastico
- G =Modulo elastico tangenziale
- Mat. =Numero del materiale
- P =Peso specifico

Mat.	Comm.	P <daN/mc>	E <daN/cm ² >	G <daN/cm ² >	ν	α
4	Calcestruzzo classe C20/25	2500	302005.00	137275.00	0.1	1.00E-05
5	Calcestruzzo classe C25/30	2500	314472.00	142942.00	0.1	1.00E-05
17	Pilastrini inseriti nei setti	10	0.00	0.00	0.1	1.00E-05
18	Acciaio	7850	2100000.00	800000.00	0.3	1.00E-05
22	Calcestruzzo classe C20/25 FESSURATO	2500	151002.00	68637.50	0.1	1.00E-05

Elenco sezioni aste

Simbologia

- % =Pendenza ala
- B =Base
- C =Numero del criterio di progetto
- Comm. =Commento
- Crit. C.F. =Criterio di progetto collegamento finale
- Crit. C.I. =Criterio di progetto collegamento iniziale
- D =Distanza
- H =Altezza
- Ma =Numero del materiale
- Mem. =Membratura
 - T = Trave
 - P = Pilastrino
- Sez. =Numero della sezione
- Tipo =Tipologia
 - 2Cdx = Doppia C lato costola
 - R = Rettangolare
 - Is = I stondata
- Ver. =Verifica prevista
 - C = Cemento armato
 - A = Acciaio
- a =Spessore anima
- r =Raggio raccordo anima-ala
- rl =Raggio in testa ala
- s =Spessore ala

Sez.	Comm.	Tipo	Mem.	Ver.	B <cm>	H <cm>	s <cm>	a <cm>	r <cm>	rl <cm>	%	D <cm>	Ma	C	Crit. C.I.	Crit. C.F.
1	PIL 40x60	R	P	C	40.00	60.00							22	1		
3	TR 40x100	R	T	C	40.00	100.00							22	1		
4	TR 35x110	R	T	C	30.00	110.00							22	1		
6	PIL 40x40	R	P	C	40.00	40.00							22	1		
7	TR 40x50	R	T	C	40.00	50.00							22	1		
17	TR 35x90	R	T	C	30.00	90.00							22	1		
18	PILn 40x40	R	P	C	40.00	40.00							5	2		
19	TRn 40x60	R	T	C	40.00	60.00							5	2		
20	HEA100	Is	T	A	10.00	9.60	0.80	0.50	1.20	0.00	0.00		18	1	3	3
21	TRn 30x60	R	T	C	30.00	60.00							5	2		
23	2UPN160	2Cdx	T	A	6.50	16.00	1.05	0.75	1.05	0.55	8.00	1.00	18	1	3	3
24	IPE240	Is	T	A	12.00	24.00	0.98	0.62	1.50	0.00	0.00		18	1	3	3
27	TRn 60x24	R	T	C	60.00	24.00							5	2		
28	PILn 30X30	R	P	C	30.00	30.00							5	2		

29	TRn 30x24	R	T	C	30.00	24.00							5	2		
30	TRn 20x24	R	T	C	20.00	24.00							5	2		
31	TRn 30x40	R	T	C	30.00	40.00							5	2		
32	TRn 40x50	R	T	C	40.00	50.00							5	2		
33	HEA140	Is	T	A	14.00	13.30	0.85	0.55	1.20	0.00	0.00		18	1	3	3
34	TRn 20x20	R	T	C	20.00	20.00							5	2		
35	TRn 25x24	R	T	C	25.00	24.00							5	2		
37	2UPN100	2Cdx	T	A	5.00	10.00	0.85	0.60	0.85	0.45	8.00	1.00	18	1	3	3
38	PIL 40x40	R	P	C	40.00	40.00							17	1		

Elenco vincoli aste

Simbologia

Comm. = Commento

Kt = Coeff. di sottofondo su suolo elastico alla Winkler

Mxf = Momento intorno all'asse X locale nodo finale (0=sbloccato, 1=bloccato)

Mxi = Momento intorno all'asse X locale nodo iniziale (0=sbloccato, 1=bloccato)

Myf = Momento intorno all'asse Y locale nodo finale (0=sbloccato, 1=bloccato)

Myi = Momento intorno all'asse Y locale nodo iniziale (0=sbloccato, 1=bloccato)

Mzf = Momento intorno all'asse Z locale nodo finale (0=sbloccato, 1=bloccato)

Mzi = Momento intorno all'asse Z locale nodo iniziale (0=sbloccato, 1=bloccato)

Nf = Sforzo normale nodo finale (0=sbloccato, 1=bloccato)

Ni = Sforzo normale nodo iniziale (0=sbloccato, 1=bloccato)

Tipo = Tipologia

SVI = Definizione di vincolamenti interni

ELA = Vincolo su suolo elastico alla Winkler

BIE-RTC = Biella resistente a trazione e a compressione

BIE-RC = Biella resistente solo a compressione

BIE-RT = Biella resistente solo a trazione

Tyf = Taglio in dir. Y locale nodo finale (0=sbloccato, 1=bloccato)

Tyi = Taglio in dir. Y locale nodo iniziale (0=sbloccato, 1=bloccato)

Tzf = Taglio in dir. Z locale nodo finale (0=sbloccato, 1=bloccato)

Tzi = Taglio in dir. Z locale nodo iniziale (0=sbloccato, 1=bloccato)

Va = Numero del vincolo asta

Va	Comm.	Tipo	Ni	Tyi	Tzi	Mxi	Myi	Mzi	Nf	Tyf	Tzf	Mxf	Myf	Mzf	Kt <daN/cm>
1	Inc+Inc	SVI	1	1	1	1	1	1	1	1	1	1	1	1	
4	Cer+Cer	SVI	1	1	1	0	0	0	1	1	1	1	0	0	
5	Inc+CerY	SVI	1	1	1	1	1	1	1	1	1	1	0	1	
6	CerY+Inc	SVI	1	1	1	1	0	1	1	1	1	1	1	1	
7	CerY+CerY	SVI	1	1	1	1	0	1	1	1	1	1	0	1	

Elenco aste

Simbologia

Asta = Numero dell'asta

Dy1 = Scost. filo fisso Y1

Dy2 = Scost. filo fisso Y2

Dz1 = Scost. filo fisso Z1

Dz2 = Scost. filo fisso Z2

FF = Filo fisso

Kt = Coeff. di sottofondo su suolo elastico alla Winkler

N1 = Nodo iniziale

N2 = Nodo finale

Par. = Numero dei parametri aggiuntivi

Rot. = Rotazione

Sez. = Numero della sezione

Va = Numero del vincolo asta

Asta	N1	N2	Sez.	Va	Par.	Rot. <grad>	FF	Dy1 <cm>	Dy2 <cm>	Dz1 <cm>	Dz2 <cm>	Kt <daN/cm>
0	1	-130	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-130	-210	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-210	-290	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-290	-380	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-380	-460	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-460	-540	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-540	-619	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-619	-699	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-699	-779	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-779	-859	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-859	-949	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-949	-1029	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-1029	-1109	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-1109	401	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	401	-1268	1	1		90.00	33	0.00	0.00	0.00	0.00	

0	401	-1196		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1268	-1348	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-1196	-1199		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1348	-1428	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-1199	-1202		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1428	-1508	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-1202	-1205		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1508	-1588	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-1205	-1208		1		0.00	33	0.00	0.00	0.00	0.00	
0	720	680	33	1		0.00	11	0.00	0.00	0.00	0.00	
0	-1588	-1677	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	-1208	-1211		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1211	-1214		1		0.00	33	0.00	0.00	0.00	0.00	
0	720	718	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	718	716	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-1677	-1766	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	718	682	33	1		0.00	11	0.00	0.00	0.00	0.00	
0	682	680	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1766	501	1	1		90.00	33	0.00	0.00	0.00	0.00	
0	682	501	33	1		90.00	22	0.00	0.00	0.00	0.00	
0	716	715	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	699	716	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	682	-2039	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	682	699	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	699	-2039	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	715	714	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	680	643	33	5		0.00	11	0.00	0.00	0.00	0.00	
0	700	715	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-2268	-2039	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	699	-2268	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	700	-2075	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	714	713	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-2267	-2075	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	699	700	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	701	714	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	682	602	33	5		0.00	11	0.00	0.00	0.00	0.00	
0	700	701	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	700	-2267	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	701	653	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	713	712	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-2266	653	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	507	-2268	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	602	643	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	602	502	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	607	602	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-201	-281	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	701	-2266	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	702	663	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	702	-2260	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	510	-2267	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	507	502	24	5		0.00	88	0.00	0.00	0.00	0.00	
0	507	602	20	1		0.00	55	0.00	0.00	0.00	0.00	
0	607	507	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	643	641	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	510	607	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	514	510	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	37	-201	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-281	-367	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-367	-451	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-451	-531	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	701	702	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-531	-611	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-611	-690	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-1241	-1244		1		0.00	33	0.00	0.00	0.00	0.00	
0	702	713	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-690	-770	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-1244	-1247		1		0.00	33	0.00	0.00	0.00	0.00	
0	712	711	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-2261	673	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	702	703	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	703	673	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	703	-2261	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	510	507	24	1		0.00	88	0.00	0.00	0.00	0.00	

0	-770	-850	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	703	712	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-2260	663	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	514	-2266	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	-2265	668	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	-936	-1020	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-1253	-1256		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1100	-1180	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	704	711	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	703	704	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	517	-2260	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	602	603	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	514	610	37	1		0.00	22	0.00	0.00	0.00	0.00	
0	-850	-936	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-1250	-1253		1		0.00	33	0.00	0.00	0.00	0.00	
0	704	668	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	-1020	-1100	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-1180	437	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	711	710	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	710	709	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	705	710	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	610	607	33	1		190.00	88	0.00	0.00	0.00	0.00	
0	704	-2265	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	610	510	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	-2264	658	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	704	705	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	705	658	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	614	610	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	511	510	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-1258	437		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1339	-1419	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-1419	-1499	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	709	708	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	706	709	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	705	-2264	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	614	514	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	521	-2261	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	-1247	-1250		1		0.00	33	0.00	0.00	0.00	0.00	
0	437	-1339	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	706	-2078	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	707	708	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	517	614	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	-1256	-1258		1		0.00	33	0.00	0.00	0.00	0.00	
0	-2263	-2078	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	705	706	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	508	507	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	708	717	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	517	514	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	617	614	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	706	707	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	706	-2263	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	617	517	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	524	-2265	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	603	641	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	621	617	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1499	-1579	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-1579	-1664	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	707	-2042	33	1		0.00	22	0.00	0.00	0.00	0.00	
0	717	719	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	717	681	33	1		0.00	11	0.00	0.00	0.00	0.00	
0	521	517	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	617	521	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	681	-2042	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-2262	-2042	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	707	-2262	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	521	621	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	-1664	-1753	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	-1837	537	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	707	681	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	603	503	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	527	-2264	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	-1753	-1837	1	1		90.00	99	0.00	0.00	0.00	0.00	
0	537	681	33	1		90.00	88	0.00	0.00	0.00	0.00	

0	508	503	24	5		0.00	88	0.00	0.00	0.00	0.00
0	508	603	20	1		0.00	55	0.00	0.00	0.00	0.00
0	608	603	33	1		180.00	88	0.00	0.00	0.00	0.00
0	515	514	23	7		0.00	22	0.00	0.00	0.00	0.00
0	524	521	24	1		0.00	88	0.00	0.00	0.00	0.00
0	624	521	20	1		0.00	22	0.00	0.00	0.00	0.00
0	524	624	20	1		90.00	22	0.00	0.00	0.00	0.00
0	624	621	33	1		180.00	88	0.00	0.00	0.00	0.00
0	719	679	33	1		0.00	11	0.00	0.00	0.00	0.00
0	679	681	33	1		180.00	88	0.00	0.00	0.00	0.00
0	608	508	20	1		90.00	22	0.00	0.00	0.00	0.00
0	531	-2263	23	6		0.00	22	0.00	0.00	0.00	0.00
0	511	508	24	1		0.00	88	0.00	0.00	0.00	0.00
0	511	608	20	1		0.00	22	0.00	0.00	0.00	0.00
0	611	608	33	1		180.00	88	0.00	0.00	0.00	0.00
0	518	517	23	7		0.00	22	0.00	0.00	0.00	0.00
0	527	524	24	1		0.00	88	0.00	0.00	0.00	0.00
0	627	524	20	1		0.00	22	0.00	0.00	0.00	0.00
0	627	624	33	1		180.00	88	0.00	0.00	0.00	0.00
0	611	511	20	1		90.00	22	0.00	0.00	0.00	0.00
0	527	627	20	1		90.00	22	0.00	0.00	0.00	0.00
0	534	-2262	23	6		0.00	22	0.00	0.00	0.00	0.00
0	603	604	33	7		0.00	11	0.00	0.00	0.00	0.00
0	515	511	24	1		0.00	88	0.00	0.00	0.00	0.00
0	515	611	37	1		0.00	22	0.00	0.00	0.00	0.00
0	615	611	33	1		180.00	88	0.00	0.00	0.00	0.00
0	522	521	23	7		0.00	22	0.00	0.00	0.00	0.00
0	531	527	24	1		0.00	88	0.00	0.00	0.00	0.00
0	631	527	37	1		0.00	55	0.00	0.00	0.00	0.00
0	631	627	33	1		180.00	88	0.00	0.00	0.00	0.00
0	681	638	33	7		0.00	11	0.00	0.00	0.00	0.00
0	615	515	20	1		90.00	22	0.00	0.00	0.00	0.00
0	531	631	20	1		90.00	22	0.00	0.00	0.00	0.00
0	509	508	23	7		0.00	22	0.00	0.00	0.00	0.00
0	518	515	24	1		0.00	88	0.00	0.00	0.00	0.00
0	518	615	20	1		0.00	22	0.00	0.00	0.00	0.00
0	618	615	33	7		180.00	88	0.00	0.00	0.00	0.00
0	525	524	23	7		0.00	22	0.00	0.00	0.00	0.00
0	534	531	24	1		0.00	88	0.00	0.00	0.00	0.00
0	634	531	20	1		0.00	22	0.00	0.00	0.00	0.00
0	634	631	33	1		180.00	88	0.00	0.00	0.00	0.00
0	679	678	33	5		0.00	11	0.00	0.00	0.00	0.00
0	618	518	20	1		90.00	22	0.00	0.00	0.00	0.00
0	534	634	20	1		90.00	22	0.00	0.00	0.00	0.00
0	512	511	23	7		0.00	22	0.00	0.00	0.00	0.00
0	522	518	24	1		0.00	88	0.00	0.00	0.00	0.00
0	618	522	20	1		0.00	22	0.00	0.00	0.00	0.00
0	622	618	33	1		180.00	88	0.00	0.00	0.00	0.00
0	528	527	23	7		0.00	22	0.00	0.00	0.00	0.00
0	538	534	24	6		0.00	88	0.00	0.00	0.00	0.00
0	638	534	20	1		0.00	55	0.00	0.00	0.00	0.00
0	638	634	33	1		180.00	88	0.00	0.00	0.00	0.00
0	522	622	20	1		90.00	22	0.00	0.00	0.00	0.00
0	538	638	20	1		90.00	88	0.00	0.00	0.00	0.00
0	625	522	20	1		0.00	22	0.00	0.00	0.00	0.00
0	525	625	20	1		90.00	22	0.00	0.00	0.00	0.00
0	528	525	24	1		0.00	88	0.00	0.00	0.00	0.00
0	625	622	33	1		180.00	88	0.00	0.00	0.00	0.00
0	628	525	20	1		0.00	22	0.00	0.00	0.00	0.00
0	628	625	33	1		180.00	88	0.00	0.00	0.00	0.00
0	535	534	23	7		0.00	22	0.00	0.00	0.00	0.00
0	523	522	23	7		0.00	22	0.00	0.00	0.00	0.00
0	532	528	24	1		0.00	88	0.00	0.00	0.00	0.00
0	632	628	33	1		180.00	88	0.00	0.00	0.00	0.00
0	532	632	20	1		90.00	22	0.00	0.00	0.00	0.00
0	639	635	33	1		180.00	88	0.00	0.00	0.00	0.00
0	5	-15	38	1		90.00	22	0.00	0.00	0.00	0.00
0	-15	-33	38	1		90.00	22	0.00	0.00	0.00	0.00
0	-51	-131	38	1		90.00	22	0.00	0.00	0.00	0.00
0	-131	-211	38	1		90.00	22	0.00	0.00	0.00	0.00
0	-211	-294	38	1		90.00	22	0.00	0.00	0.00	0.00
0	-100	-179	6	1		90.00	55	0.00	0.00	0.00	0.00
0	519	518	23	7		0.00	22	0.00	0.00	0.00	0.00

0	-294	-381	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	13	-23	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-2229	-2228		1		0.00	11	0.00	0.00	0.00	0.00	
0	-23	-41	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-86	-166	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	641	642	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	525	522	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	-246	-330	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	604	642	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	604	504	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	509	504	24	5		0.00	88	0.00	0.00	0.00	0.00	
0	509	604	20	1		0.00	55	0.00	0.00	0.00	0.00	
0	516	515	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	532	531	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	635	632	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	639	535	20	1		0.00	55	0.00	0.00	0.00	0.00	
0	-33	-51	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-461	205	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-562	-565		1		0.00	11	0.00	0.00	0.00	0.00	
0	-565	-574		1		0.00	11	0.00	0.00	0.00	0.00	
0	609	604	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	678	638	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	205	-2233		1		0.00	11	0.00	0.00	0.00	0.00	
0	-549	-553		1		0.00	11	0.00	0.00	0.00	0.00	
0	-496	213	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	609	509	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	642	685	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	528	628	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	-2233	-2232		1		0.00	11	0.00	0.00	0.00	0.00	
0	512	609	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	632	528	37	1		0.00	22	0.00	0.00	0.00	0.00	
0	638	639	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	535	532	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	635	532	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	678	644	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	205	-549		1		0.00	11	0.00	0.00	0.00	0.00	
0	-41	-86	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	529	528	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-381	-461	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-553	-556		1		0.00	11	0.00	0.00	0.00	0.00	
0	-416	-496	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	512	509	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	-620	-700	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-700	-780	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	213	-655	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	612	609	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	612	512	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	516	512	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	-2232	-2231		1		0.00	11	0.00	0.00	0.00	0.00	
0	-330	-416	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	616	612	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	519	516	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	519	616	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	623	619	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1110	405	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-2040	509	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	619	616	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	526	525	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	619	519	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	535	635	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	619	523	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	539	535	24	6		0.00	88	0.00	0.00	0.00	0.00	
0	205	-620	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-780	-863	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-556	-559		1		0.00	11	0.00	0.00	0.00	0.00	
0	-166	-246	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-559	-562		1		0.00	11	0.00	0.00	0.00	0.00	
0	405	-1269	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-1269	-1349	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	644	639	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-2231	-2230		1		0.00	11	0.00	0.00	0.00	0.00	
0	-863	-950	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-2230	-2229		1		0.00	11	0.00	0.00	0.00	0.00	

0	-950	-1030	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-1030	-1110	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-574	213		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1349	-1429	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-655	-735	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-735	-815	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-1871	512	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-1429	-1509	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	30	-24	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-1509	-1592	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-24	-42	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-42	-100	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-259	-345	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	516	612	37	1		0.00	22	0.00	0.00	0.00	0.00	
0	-815	-899	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	604	683	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	616	516	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	-1592	-1681	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	523	623	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	539	639	20	6		90.00	88	0.00	0.00	0.00	0.00	
0	533	532	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-2228	-2227		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1681	-1767	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	683	685	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-596	-599		1		0.00	11	0.00	0.00	0.00	0.00	
0	529	526	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	629	626	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	633	629	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	639	640	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-2227	-2226		1		0.00	11	0.00	0.00	0.00	0.00	
0	-899	-985	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-985	-1065	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-1065	-1145	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-1767	505	38	1		90.00	22	0.00	0.00	0.00	0.00	
0	-1145	413	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-2226	-2225		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2224	-2223		1		0.00	11	0.00	0.00	0.00	0.00	
0	683	505	33	1		90.00	22	0.00	0.00	0.00	0.00	
0	-179	-259	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	654	516	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	683	687	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-2175	241		1		0.00	11	0.00	0.00	0.00	0.00	
0	633	529	37	1		0.00	22	0.00	0.00	0.00	0.00	
0	-2225	-2224		1		0.00	11	0.00	0.00	0.00	0.00	
0	683	-2040	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	-345	-429	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-429	-509	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	41	-32	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	526	523	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	626	623	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	685	689	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-509	230	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-32	-50	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	644	677	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	687	689	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	230	-668	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	230	-590		1		0.00	11	0.00	0.00	0.00	0.00	
0	-590	-593		1		0.00	11	0.00	0.00	0.00	0.00	
0	-50	-122	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-122	-202	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-202	-282	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	664	519	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	536	535	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-605	-609		1		0.00	11	0.00	0.00	0.00	0.00	
0	523	519	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	526	626	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	529	629	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	674	523	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	533	529	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	533	633	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	-2040	645	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	536	533	24	1		0.00	88	0.00	0.00	0.00	0.00	
0	636	533	20	1		0.00	22	0.00	0.00	0.00	0.00	

0	636	633	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	536	636	20	1		90.00	22	0.00	0.00	0.00	0.00	
0	-2223	206		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1871	649	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	540	536	24	6		0.00	88	0.00	0.00	0.00	0.00	
0	640	536	20	1		0.00	55	0.00	0.00	0.00	0.00	
0	-543	-544		1		0.00	11	0.00	0.00	0.00	0.00	
0	687	-1846	33	1		90.00	22	0.00	0.00	0.00	0.00	
0	689	693	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	687	645	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	-668	-748	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	540	640	20	1		90.00	88	0.00	0.00	0.00	0.00	
0	-748	-828	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-541	-542		1		0.00	11	0.00	0.00	0.00	0.00	
0	-593	-596		1		0.00	11	0.00	0.00	0.00	0.00	
0	-828	-914	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	654	655	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-914	-998	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-599	-602		1		0.00	11	0.00	0.00	0.00	0.00	
0	-282	-371	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-998	-1078	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	664	665	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-544	-545		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1189	-1190		1		0.00	11	0.00	0.00	0.00	0.00	
0	-602	-605		1		0.00	11	0.00	0.00	0.00	0.00	
0	-452	-532	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-1158	430	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-609	241		1		0.00	11	0.00	0.00	0.00	0.00	
0	-532	241	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-2176	-2175		1		0.00	11	0.00	0.00	0.00	0.00	
0	-771	-851	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	626	523	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	629	526	20	1		0.00	22	0.00	0.00	0.00	0.00	
0	-2177	-2176		1		0.00	11	0.00	0.00	0.00	0.00	
0	669	526	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	659	529	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	640	636	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1900	533	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	677	640	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1078	-1158	6	1		90.00	55	0.00	0.00	0.00	0.00	
0	-1906	536	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	674	620	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-542	-543		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1190	-1191		1		0.00	11	0.00	0.00	0.00	0.00	
0	669	670	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-545	-546		1		0.00	11	0.00	0.00	0.00	0.00	
0	-567	-568		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1191	-1192		1		0.00	11	0.00	0.00	0.00	0.00	
0	649	650	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-1192	-1193		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1193	-1194		1		0.00	11	0.00	0.00	0.00	0.00	
0	691	693	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	691	-1847	33	1		90.00	22	0.00	0.00	0.00	0.00	
0	-371	-452	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	241	-691	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-691	-771	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-851	-940	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-940	-1021	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-2179	-2178		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1021	-1101	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-1101	-1181	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-1181	441	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	441	-1340	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	640	684	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	677	686	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-1340	-1420	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-1420	-1500	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-1668	-1757	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-569	-570		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1216	-1215		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2178	-2177		1		0.00	11	0.00	0.00	0.00	0.00	
0	659	660	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-1500	-1580	38	1		90.00	88	0.00	0.00	0.00	0.00	

0	-1580	-1668	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	-1757	-1838	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	684	-1906	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1838	541	38	1		90.00	88	0.00	0.00	0.00	0.00	
0	541	684	33	1		90.00	88	0.00	0.00	0.00	0.00	
0	-1900	651	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	686	684	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-568	-569		1		0.00	11	0.00	0.00	0.00	0.00	
0	-547	-550		1		0.00	11	0.00	0.00	0.00	0.00	
0	-570	-571		1		0.00	11	0.00	0.00	0.00	0.00	
0	-550	-552		1		0.00	11	0.00	0.00	0.00	0.00	
0	-576	-577		1		0.00	11	0.00	0.00	0.00	0.00	
0	-571	-572		1		0.00	11	0.00	0.00	0.00	0.00	
0	-552	-555		1		0.00	11	0.00	0.00	0.00	0.00	
0	-93	-94		1		0.00	33	0.00	0.00	0.00	0.00	
0	-337	-93		1		0.00	33	0.00	0.00	0.00	0.00	
0	-336	-576		1		0.00	33	0.00	0.00	0.00	0.00	
0	-577	-578		1		0.00	11	0.00	0.00	0.00	0.00	
0	-578	-579		1		0.00	11	0.00	0.00	0.00	0.00	
0	-579	-580		1		0.00	11	0.00	0.00	0.00	0.00	
0	-582	-337		1		0.00	33	0.00	0.00	0.00	0.00	
0	-336	102		1		0.00	22	0.00	0.00	0.00	0.00	
0	-1217	-1216		1		0.00	11	0.00	0.00	0.00	0.00	
0	-555	-558		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2181	-2180		1		0.00	11	0.00	0.00	0.00	0.00	
0	-558	-561		1		0.00	11	0.00	0.00	0.00	0.00	
0	-336	-337		1		0.00	11	0.00	0.00	0.00	0.00	
0	-580	-581		1		0.00	11	0.00	0.00	0.00	0.00	
0	-328	102	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	-564	-573		1		0.00	11	0.00	0.00	0.00	0.00	
0	-337	-344		1		0.00	11	0.00	0.00	0.00	0.00	
0	102	101	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	687	691	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	693	697	33	6		0.00	11	0.00	0.00	0.00	0.00	
0	-94	-344		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1218	-1217		1		0.00	11	0.00	0.00	0.00	0.00	
0	645	646	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-1195	-1198		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1206	-1209		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1212	-1221		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1852	-2123		1		0.00	11	0.00	0.00	0.00	0.00	
0	695	697	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-587	-586		1		0.00	11	0.00	0.00	0.00	0.00	
0	650	-2124	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	695	772	33	1		270.00	88	0.00	0.00	0.00	0.00	
0	695	778	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	-1224	-1225		1		0.00	11	0.00	0.00	0.00	0.00	
0	-561	-564		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1219	-1218		1		0.00	11	0.00	0.00	0.00	0.00	
0	691	646	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1198	-1200		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1220	-1219		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1203	-1206		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2182	-2181		1		0.00	11	0.00	0.00	0.00	0.00	
0	-584	-583		1		0.00	11	0.00	0.00	0.00	0.00	
0	-344	101		1		0.00	22	0.00	0.00	0.00	0.00	
0	691	695	33	6		0.00	11	0.00	0.00	0.00	0.00	
0	695	768	33	1		0.00	11	0.00	0.00	0.00	0.00	
0	-990	-1069		1		0.00	33	0.00	0.00	0.00	0.00	
0	655	656	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	646	-2123	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	697	770	33	1		0.00	11	0.00	0.00	0.00	0.00	
0	-2180	-2179		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1148	-1225		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1069	-1148		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1225	-1226		1		0.00	11	0.00	0.00	0.00	0.00	
0	-905	-990		1		0.00	33	0.00	0.00	0.00	0.00	
0	-2184	-2183		1		0.00	11	0.00	0.00	0.00	0.00	
0	620	675	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-1906	647	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-585	-584		1		0.00	11	0.00	0.00	0.00	0.00	
0	-906	-2122		1		0.00	33	0.00	0.00	0.00	0.00	
0	-2123	-2124		1		0.00	11	0.00	0.00	0.00	0.00	

0	778	-2269	37	4		180.00	88	0.00	0.00	0.00	0.00	
0	770	768	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	-906	-582		1		0.00	33	0.00	0.00	0.00	0.00	
0	-588	-587		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1873	-1874		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1200	-1203		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1875	-1876		1		0.00	11	0.00	0.00	0.00	0.00	
0	684	688	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-586	-585		1		0.00	11	0.00	0.00	0.00	0.00	
0	101	-348	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	-2123	-2269	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	-2269	-2284	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	695	-2284	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1225	-2119		1		0.00	33	0.00	0.00	0.00	0.00	
0	-905	-906		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1226	-1227		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1227	-1228		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1209	-1212		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1228	-1229		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1876	-1877		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2124	-2270	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	778	-2284	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	-913	-583		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1231	-2119		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2122	-2121		1		0.00	33	0.00	0.00	0.00	0.00	
0	-1878	-2125		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2270	-2285	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	766	778	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	768	766	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	-2120	-2119		1		0.00	33	0.00	0.00	0.00	0.00	
0	-2183	-2182		1		0.00	11	0.00	0.00	0.00	0.00	
0	-348	-351	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	-2121	-2120		1		0.00	33	0.00	0.00	0.00	0.00	
0	665	666	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	656	-2125	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	-2124	-1878		1		0.00	11	0.00	0.00	0.00	0.00	
0	779	-2270	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	778	779	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	-1234	-1233		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2185	-2184		1		0.00	11	0.00	0.00	0.00	0.00	
0	686	690	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-906	-913		1		0.00	11	0.00	0.00	0.00	0.00	
0	-351	-354	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	-1881	-1882		1		0.00	11	0.00	0.00	0.00	0.00	
0	-616	-615		1		0.00	11	0.00	0.00	0.00	0.00	
0	-354	-357	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	-357	-360	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	-1874	-1875		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1877	-1878		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1884	-1885		1		0.00	11	0.00	0.00	0.00	0.00	
0	779	-2285	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	-360	-363	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	-2125	-2271	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	-363	-366	21	1		0.00	11	0.00	0.00	0.00	0.00	
0	-1235	-1234		1		0.00	11	0.00	0.00	0.00	0.00	
0	670	671	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-1882	-1883		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1883	-1884		1		0.00	11	0.00	0.00	0.00	0.00	
0	666	-2126	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	660	661	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	766	765	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	688	647	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1236	-1235		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1237	-1236		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2125	-1886		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1885	-1886		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1886	-2126		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2271	657	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	-1238	-1237		1		0.00	11	0.00	0.00	0.00	0.00	
0	780	-2271	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	779	780	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	765	779	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-366	-379	21	1		0.00	11	0.00	0.00	0.00	0.00	

0	-2126	-2277	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	-1888	-1889		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2126	-2127		1		0.00	11	0.00	0.00	0.00	0.00	
0	780	657	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	242	-2185		1		0.00	11	0.00	0.00	0.00	0.00	
0	651	652	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-2277	667	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	781	-2277	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	-613	-612		1		0.00	11	0.00	0.00	0.00	0.00	
0	-614	-613		1		0.00	11	0.00	0.00	0.00	0.00	
0	-615	-614		1		0.00	11	0.00	0.00	0.00	0.00	
0	675	-2127	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	-1889	-1890		1		0.00	11	0.00	0.00	0.00	0.00	
0	780	781	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	-1915	688	33	1		90.00	88	0.00	0.00	0.00	0.00	
0	764	780	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1242	-1245		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1890	-1891		1		0.00	11	0.00	0.00	0.00	0.00	
0	765	764	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	-2127	-2276	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	-1891	-1892		1		0.00	11	0.00	0.00	0.00	0.00	
0	781	667	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	-617	-616		1		0.00	11	0.00	0.00	0.00	0.00	
0	671	-2128	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	690	688	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	647	648	23	7		0.00	22	0.00	0.00	0.00	0.00	
0	-1245	-1248		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2127	-2128		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1892	-1893		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2276	676	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	782	-2276	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	781	782	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	-2128	-1893		1		0.00	11	0.00	0.00	0.00	0.00	
0	661	-2129	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	763	781	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	764	763	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	-2128	-2272	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	782	676	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	688	692	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	-1254	-1257		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1893	-2129		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2272	672	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	754	-2272	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	782	754	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	762	782	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-2129	-2273	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	754	672	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	-2273	662	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	-1262	-1261		1		0.00	11	0.00	0.00	0.00	0.00	
0	652	-2130	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	763	762	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	-2129	-2130		1		0.00	11	0.00	0.00	0.00	0.00	
0	690	694	33	7		0.00	11	0.00	0.00	0.00	0.00	
0	761	754	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1263	-1262		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1264	-1263		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1265	-1264		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1266	-1265		1		0.00	11	0.00	0.00	0.00	0.00	
0	692	648	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	-1916	692	33	1		90.00	88	0.00	0.00	0.00	0.00	
0	-1248	-1251		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1251	-1254		1		0.00	11	0.00	0.00	0.00	0.00	
0	-1260	-1267		1		0.00	11	0.00	0.00	0.00	0.00	
0	755	-2273	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	754	755	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	648	-2131	23	6		0.00	22	0.00	0.00	0.00	0.00	
0	762	761	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	-1257	-1260		1		0.00	11	0.00	0.00	0.00	0.00	
0	-2130	-2274	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	-2130	-2131		1		0.00	11	0.00	0.00	0.00	0.00	
0	755	662	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	694	692	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	-2274	-2283	23	5		0.00	22	0.00	0.00	0.00	0.00	

0	756	-2274	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	755	756	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	760	755	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	761	760	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	-2131	-2275	23	1		0.00	22	0.00	0.00	0.00	0.00	
0	-2131	-1921		1		0.00	11	0.00	0.00	0.00	0.00	
0	756	-2283	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	692	696	33	6		0.00	11	0.00	0.00	0.00	0.00	
0	-2275	-2282	23	5		0.00	22	0.00	0.00	0.00	0.00	
0	757	-2275	37	1		180.00	88	0.00	0.00	0.00	0.00	
0	756	757	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	759	756	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	760	759	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	757	-2282	33	1		0.00	88	0.00	0.00	0.00	0.00	
0	694	698	33	6		0.00	11	0.00	0.00	0.00	0.00	
0	696	-2282	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	757	696	33	7		0.00	33	0.00	0.00	0.00	0.00	
0	758	757	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	759	758	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	771	696	33	1		270.00	22	0.00	0.00	0.00	0.00	
0	698	696	33	1		180.00	88	0.00	0.00	0.00	0.00	
0	696	767	33	1		0.00	11	0.00	0.00	0.00	0.00	
0	758	767	33	1		0.00	33	0.00	0.00	0.00	0.00	
0	698	769	33	1		0.00	11	0.00	0.00	0.00	0.00	
0	767	769	33	1		0.00	33	0.00	0.00	0.00	0.00	
2	2	-291	1	1		90.00	22	0.00	0.00	0.00	0.00	
2	-291	-860	1	1		90.00	22	0.00	0.00	0.00	0.00	
2	-860	402	1	1		90.00	22	0.00	0.00	0.00	0.00	
2	402	-1589	1	1		90.00	22	0.00	0.00	0.00	0.00	
2	-1589	-1678	1	1		90.00	22	0.00	0.00	0.00	0.00	
2	-1678	502	1	1		90.00	22	0.00	0.00	0.00	0.00	
3	3	-292	1	1		90.00	22	0.00	0.00	0.00	0.00	
3	-292	-861	1	1		90.00	22	0.00	0.00	0.00	0.00	
3	-861	403	1	1		90.00	22	0.00	0.00	0.00	0.00	
3	403	-1590	1	1		90.00	22	0.00	0.00	0.00	0.00	
3	-1590	-1679	1	1		90.00	22	0.00	0.00	0.00	0.00	
3	-1679	503	1	1		90.00	22	0.00	0.00	0.00	0.00	
4	4	-293	1	1		90.00	22	0.00	0.00	0.00	0.00	
4	-293	-862	1	1		90.00	22	0.00	0.00	0.00	0.00	
4	-862	404	1	1		90.00	22	0.00	0.00	0.00	0.00	
4	404	-1591	1	1		90.00	22	0.00	0.00	0.00	0.00	
4	-1591	-1680	1	1		90.00	22	0.00	0.00	0.00	0.00	
4	-1680	504	1	1		90.00	22	0.00	0.00	0.00	0.00	
6	6	-295	18	1		0.00	11	0.00	0.00	0.00	0.00	
6	-295	-2221	18	1		0.00	11	0.00	0.00	0.00	0.00	
6	-2221	-2222	18	1		0.00	11	0.00	0.00	0.00	0.00	
6	-2222	206	18	1		0.00	11	0.00	0.00	0.00	0.00	
6	206	-864	18	1		0.00	11	0.00	0.00	0.00	0.00	
6	-864	406	18	1		0.00	11	0.00	0.00	0.00	0.00	
6	406	-1593	18	1		0.00	11	0.00	0.00	0.00	0.00	
6	-1593	-1682	18	1		0.00	11	0.00	0.00	0.00	0.00	
6	-1682	-1846	18	1		0.00	11	0.00	0.00	0.00	0.00	
13	413	-1304	6	1		90.00	55	0.00	0.00	0.00	0.00	
13	-1304	-1384	6	1		90.00	55	0.00	0.00	0.00	0.00	
13	-1384	-1464	6	1		90.00	55	0.00	0.00	0.00	0.00	
13	-1464	-1544	6	1		90.00	55	0.00	0.00	0.00	0.00	
13	-1544	-1628	6	1		90.00	55	0.00	0.00	0.00	0.00	
13	-1628	-1717	6	1		90.00	55	0.00	0.00	0.00	0.00	
13	-1717	-1802	6	1		90.00	55	0.00	0.00	0.00	0.00	
13	-1802	513	6	1		90.00	55	0.00	0.00	0.00	0.00	
20	20	-338	18	1		0.00	22	0.00	0.00	0.00	0.00	
20	-338	220	18	1		0.00	22	0.00	0.00	0.00	0.00	
20	220	-907	18	1		0.00	22	0.00	0.00	0.00	0.00	
20	-907	420	18	1		0.00	22	0.00	0.00	0.00	0.00	
20	420	-1635	18	1		0.00	22	0.00	0.00	0.00	0.00	
20	-1635	-1724	18	1		0.00	22	0.00	0.00	0.00	0.00	
20	-1724	620	18	1		0.00	22	0.00	0.00	0.00	0.00	
30	430	-1317	6	1		90.00	55	0.00	0.00	0.00	0.00	
30	-1317	-1397	6	1		90.00	55	0.00	0.00	0.00	0.00	
30	-1397	-1477	6	1		90.00	55	0.00	0.00	0.00	0.00	
30	-1477	-1557	6	1		90.00	55	0.00	0.00	0.00	0.00	
30	-1557	-1642	6	1		90.00	55	0.00	0.00	0.00	0.00	
30	-1642	-1731	6	1		90.00	55	0.00	0.00	0.00	0.00	

30	-1731	-1815	6	1		90.00	55	0.00	0.00	0.00	0.00	
30	-1815	530	6	1		90.00	55	0.00	0.00	0.00	0.00	
38	38	-368	1	1		90.00	88	0.00	0.00	0.00	0.00	
38	-368	-937	1	1		90.00	88	0.00	0.00	0.00	0.00	
38	-937	438	1	1		90.00	88	0.00	0.00	0.00	0.00	
38	438	-1665	1	1		90.00	88	0.00	0.00	0.00	0.00	
38	-1665	-1754	1	1		90.00	88	0.00	0.00	0.00	0.00	
38	-1754	538	1	1		90.00	88	0.00	0.00	0.00	0.00	
39	39	-369	1	1		90.00	88	0.00	0.00	0.00	0.00	
39	-369	-938	1	1		90.00	88	0.00	0.00	0.00	0.00	
39	-938	439	1	1		90.00	88	0.00	0.00	0.00	0.00	
39	439	-1666	1	1		90.00	88	0.00	0.00	0.00	0.00	
39	-1666	-1755	1	1		90.00	88	0.00	0.00	0.00	0.00	
39	-1755	539	1	1		90.00	88	0.00	0.00	0.00	0.00	
40	40	-370	1	1		90.00	88	0.00	0.00	0.00	0.00	
40	-370	-939	1	1		90.00	88	0.00	0.00	0.00	0.00	
40	-939	440	1	1		90.00	88	0.00	0.00	0.00	0.00	
40	440	-1667	1	1		90.00	88	0.00	0.00	0.00	0.00	
40	-1667	-1756	1	1		90.00	88	0.00	0.00	0.00	0.00	
40	-1756	540	1	1		90.00	88	0.00	0.00	0.00	0.00	
42	42	-372	18	1		0.00	33	0.00	0.00	0.00	0.00	
42	-372	-2187	18	1		0.00	33	0.00	0.00	0.00	0.00	
42	-2187	-2186	18	1		0.00	33	0.00	0.00	0.00	0.00	
42	-2186	242	18	1		0.00	33	0.00	0.00	0.00	0.00	
42	242	-941	18	1		0.00	33	0.00	0.00	0.00	0.00	
42	-941	442	18	1		0.00	33	0.00	0.00	0.00	0.00	
42	442	-1669	18	1		0.00	33	0.00	0.00	0.00	0.00	
42	-1669	-1758	18	1		0.00	33	0.00	0.00	0.00	0.00	
42	-1758	-1915	18	1		0.00	33	0.00	0.00	0.00	0.00	
65	-1265	-1920	28	1		0.00	33	0.00	0.00	0.00	0.00	
93	-1193	-1851	28	1		0.00	11	0.00	0.00	0.00	0.00	
1016	-379	-378	21	1		0.00	11	0.00	0.00	0.00	0.00	
1024	-327	-336	31	1		0.00	11	0.00	0.00	0.00	0.00	
2001	206	-541	29	1		0.00	11	0.00	0.00	0.00	0.00	
2004	-573	-572	30	1		0.00	22	0.00	0.00	0.00	0.00	
2005	213	-575	27	1		0.00	33	0.00	0.00	0.00	0.00	
2005	-575	-2258	27	1		0.00	33	0.00	0.00	0.00	0.00	
2013	230	-589	27	1		0.00	11	0.00	0.00	0.00	0.00	
2013	-589	-2259	27	1		0.00	11	0.00	0.00	0.00	0.00	
2016	-612	242	29	1		0.00	11	0.00	0.00	0.00	0.00	
2021	213	230	32	1		0.00	22	0.00	0.00	0.00	0.00	
2022	206	-575	19	1		0.00	33	0.00	0.00	0.00	0.00	
2022	-575	220	19	1		0.00	33	0.00	0.00	0.00	0.00	
2022	220	-589	19	1		0.00	33	0.00	0.00	0.00	0.00	
2022	-589	242	19	1		0.00	33	0.00	0.00	0.00	0.00	
2023	-541	-567	27	1		0.00	33	0.00	0.00	0.00	0.00	
2023	-567	-2258	27	1		0.00	33	0.00	0.00	0.00	0.00	
2023	-2258	-576	27	1		0.00	33	0.00	0.00	0.00	0.00	
2023	-576	-582	27	1		0.00	33	0.00	0.00	0.00	0.00	
2023	-582	-583	27	1		0.00	33	0.00	0.00	0.00	0.00	
2023	-583	-2259	27	1		0.00	33	0.00	0.00	0.00	0.00	
2023	-2259	-612	27	1		0.00	33	0.00	0.00	0.00	0.00	
2024	-617	-588	29	1		0.00	33	0.00	0.00	0.00	0.00	
2027	-546	-547	29	1		0.00	11	0.00	0.00	0.00	0.00	
4001	401	402	4	1		0.00	11	0.00	0.00	0.00	0.00	
4001	402	403	4	1		0.00	11	0.00	0.00	0.00	0.00	
4001	403	404	4	1		0.00	11	0.00	0.00	0.00	0.00	
4001	404	405	4	1		0.00	11	0.00	0.00	0.00	0.00	
4005	413	-1223	21	1		0.00	33	0.00	0.00	0.00	0.00	
4005	-1223	-2256	27	1		0.00	33	0.00	0.00	0.00	0.00	
4007	-1229	-1230	30	1		0.00	22	0.00	0.00	0.00	0.00	
4011	-1238	443	30	1		0.00	22	0.00	0.00	0.00	0.00	
4013	430	-1239	21	1		0.00	11	0.00	0.00	0.00	0.00	
4013	-1239	-2257	27	1		0.00	11	0.00	0.00	0.00	0.00	
4016	437	438	4	1		0.00	33	0.00	0.00	0.00	0.00	
4016	438	439	4	1		0.00	33	0.00	0.00	0.00	0.00	
4016	439	440	4	1		0.00	33	0.00	0.00	0.00	0.00	
4016	440	441	4	1		0.00	33	0.00	0.00	0.00	0.00	
4017	-1214	-1241	3	1		0.00	33	0.00	0.00	0.00	0.00	
4018	438	402	3	1		0.00	22	0.00	0.00	0.00	0.00	
4019	439	403	3	1		0.00	22	0.00	0.00	0.00	0.00	
4020	440	404	3	1		0.00	22	0.00	0.00	0.00	0.00	
4021	405	-1197	7	1		0.00	22	0.00	0.00	0.00	0.00	

4021	-1197	-1201	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1201	-1204	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1204	-1207	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1207	-1210	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1210	-1213	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1213	-1222	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1222	413	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	413	-1232	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1232	430	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	430	-1240	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1240	-1243	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1243	-1246	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1246	-1249	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1249	-1252	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1252	-1255	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1255	-1259	7	1		0.00	22	0.00	0.00	0.00	0.00	
4021	-1259	441	7	1		0.00	22	0.00	0.00	0.00	0.00	
4022	406	-1223	19	1		0.00	33	0.00	0.00	0.00	0.00	
4022	-1223	420	19	1		0.00	33	0.00	0.00	0.00	0.00	
4022	420	-1239	19	1		0.00	33	0.00	0.00	0.00	0.00	
4022	-1239	442	19	1		0.00	33	0.00	0.00	0.00	0.00	
4023	-1189	-1215	27	1		0.00	33	0.00	0.00	0.00	0.00	
4023	-1215	-2256	27	1		0.00	33	0.00	0.00	0.00	0.00	
4023	-2256	-1224	27	1		0.00	33	0.00	0.00	0.00	0.00	
4023	-1224	-1231	35	1		0.00	33	0.00	0.00	0.00	0.00	
4023	-1231	-1233	35	1		0.00	33	0.00	0.00	0.00	0.00	
4023	-1233	-2257	27	1		0.00	33	0.00	0.00	0.00	0.00	
4023	-2257	-1261	27	1		0.00	33	0.00	0.00	0.00	0.00	
4024	-1220	-1229	29	1		0.00	11	0.00	0.00	0.00	0.00	
4026	-1221	-1230	31	1		0.00	11	0.00	0.00	0.00	0.00	
4026	-1230	443	31	1		0.00	11	0.00	0.00	0.00	0.00	
4026	443	-1242	31	1		0.00	11	0.00	0.00	0.00	0.00	
4027	-1194	-1195	21	1		0.00	11	0.00	0.00	0.00	0.00	
4042	-1267	-1266	21	1		0.00	11	0.00	0.00	0.00	0.00	
5001	501	502	17	1		0.00	11	0.00	0.00	0.00	0.00	
5001	502	503	17	1		0.00	11	0.00	0.00	0.00	0.00	
5001	503	504	17	1		0.00	11	0.00	0.00	0.00	0.00	
5001	504	505	17	1		0.00	11	0.00	0.00	0.00	0.00	
5016	537	538	17	1		0.00	33	0.00	0.00	0.00	0.00	
5016	538	539	17	1		0.00	33	0.00	0.00	0.00	0.00	
5016	539	540	17	1		0.00	33	0.00	0.00	0.00	0.00	
5016	540	541	17	1		0.00	33	0.00	0.00	0.00	0.00	
5017	501	-1854	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1854	-1857	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1857	-2039	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-2039	-1863	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1863	-2075	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-2075	-1869	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1869	-1872	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1872	653	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	653	663	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	663	673	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	673	668	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	668	658	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	658	-1895	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1895	-1898	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1898	-2078	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-2078	-1904	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1904	-2042	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-2042	-1910	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1910	-1912	21	1		0.00	33	0.00	0.00	0.00	0.00	
5017	-1912	537	21	1		0.00	33	0.00	0.00	0.00	0.00	
5021	505	-1855	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1855	-1859	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1859	-2040	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-2040	-1865	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1865	-1871	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1871	-2163	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-2163	-1880	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1880	513	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	513	654	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	654	664	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	664	674	7	1		0.00	22	0.00	0.00	0.00	0.00	

5021	674	669	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	669	659	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	659	530	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	530	-1894	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1894	-1897	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1897	-1900	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1900	-1903	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1903	-1906	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1906	-1909	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1909	-1913	7	1		0.00	22	0.00	0.00	0.00	0.00	
5021	-1913	541	7	1		0.00	22	0.00	0.00	0.00	0.00	
5022	-1846	645	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	645	649	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	649	655	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	655	665	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	665	620	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	620	670	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	670	660	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	660	651	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	651	647	19	1		0.00	33	0.00	0.00	0.00	0.00	
5022	647	-1915	19	1		0.00	33	0.00	0.00	0.00	0.00	
5023	-1847	646	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	646	650	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	650	-1873	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	-1873	656	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	656	-1881	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	-1881	666	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	666	675	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	675	671	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	671	-1888	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	-1888	661	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	661	652	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	652	648	31	1		0.00	33	0.00	0.00	0.00	0.00	
5023	648	-1916	31	1		0.00	33	0.00	0.00	0.00	0.00	
5025	772	-1856	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1856	-1858	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1858	-2284	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-2284	-1864	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1864	-2285	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-2285	-1870	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1870	-1879	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1879	657	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	657	667	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	667	676	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	676	672	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	672	662	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	662	-1896	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1896	-1899	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1899	-2283	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-2283	-1905	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1905	-2282	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-2282	-1911	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1911	-1914	21	1		0.00	11	0.00	0.00	0.00	0.00	
5025	-1914	771	21	1		0.00	11	0.00	0.00	0.00	0.00	
10241	-344	-378	31	1		0.00	11	0.00	0.00	0.00	0.00	
40010	405	406	21	1		0.00	11	0.00	0.00	0.00	0.00	
40010	406	-1189	21	1		0.00	11	0.00	0.00	0.00	0.00	
40071	-905	301	34	1		0.00	22	0.00	0.00	0.00	0.00	
40111	-913	302	34	1		0.00	22	0.00	0.00	0.00	0.00	
40160	442	441	21	1		0.00	11	0.00	0.00	0.00	0.00	
40160	-1261	442	21	1		0.00	11	0.00	0.00	0.00	0.00	
40261	-897	301	31	1		0.00	11	0.00	0.00	0.00	0.00	
40261	301	302	31	1		0.00	11	0.00	0.00	0.00	0.00	
40261	302	-917	31	1		0.00	11	0.00	0.00	0.00	0.00	
50010	505	-1846	21	1		0.00	11	0.00	0.00	0.00	0.00	
50010	-1846	-1847	21	1		0.00	11	0.00	0.00	0.00	0.00	
50010	-1847	-1851	21	1		0.00	11	0.00	0.00	0.00	0.00	
50010	-1851	-1852	21	1		0.00	11	0.00	0.00	0.00	0.00	
50010	-1852	772	21	1		0.00	11	0.00	0.00	0.00	0.00	
50160	541	-1915	21	1		0.00	33	0.00	0.00	0.00	0.00	
50160	-1915	-1916	21	1		0.00	33	0.00	0.00	0.00	0.00	
50160	-1916	-1920	21	1		0.00	33	0.00	0.00	0.00	0.00	
50160	-1920	-1921	21	1		0.00	33	0.00	0.00	0.00	0.00	

50160	-1921	771	21	1		0.00	33	0.00	0.00	0.00	0.00	
100411	-328	-327	30	1		0.00	22	-5.00	-5.00	0.00	0.00	

Elenco tipi elementi bidimensionali

Simbologia

Ang. att. =Angolo di attrito

Ang. dil. =Angolo di dilatanza

Coes. =Coesione

Comm. =Commento

Crit. =Numero del criterio di progetto

DP =Drucker-Prager

Kt =Coeff. di sottofondo su suolo elastico alla Winkler

Mat. =Numero del materiale

Spess. =Spessore

Tb =Numero del tipo muro/elemento bidimensionale

Tipo =Tipologia

F = Membranale e Flessionale

M = Membranale

W-RC = Winkler resistente solo a compressione

W-RTC = Winkler resistente a trazione e a compressione

Uso =Utilizzo

P = Parete

Tb	Comm.	Tipo	Uso	Spess. <cm>	Kt <daN/cm>	DP	Ang. att. <grad>	Coes. <daN/mq>	Ang. dil. <grad>	Crit.	Mat.
2	Setto 20 cm	F	P	20.00		N	0.00	0.00	0.00	1	5
3	Setto 30 cm	F	P	30.00		N	0.00	0.00	0.00	1	5
4	Setto 40 cm	F	P	40.00		N	0.00	0.00	0.00	1	5

Elenco elementi bidimensionali

Simbologia

Bid. =Numero del muro/elemento bidimensionale

Dy1 =Scost. filo fisso Y1

Dy2 =Scost. filo fisso Y2

FF =Filo fisso

Kt =Coeff. di sottofondo su suolo elastico alla Winkler

NN =Nodi

Tb =Numero del tipo muro/elemento bidimensionale

Bid.	Tb	FF	Dy1 <cm>	Dy2 <cm>	Kt <daN/cm>	NN
0	3	33	0.00	0.00		-105 -108 -187 -184
0	3	33	0.00	0.00		-154 -157 -237 -234
0	3	33	0.00	0.00		-148 -151 -231 -228
0	4	22	0.00	0.00	41	-32 -31 -14
0	4	22	0.00	0.00		-50 -122 -120 -49
0	4	22	0.00	0.00		-31 -49 -48 -30
0	4	22	0.00	0.00		-13 -30 -29 -12
0	4	22	0.00	0.00		-48 -116 -113 -47
0	4	22	0.00	0.00		-29 -47 -46 -28
0	4	22	0.00	0.00		-11 -28 -27 -10
0	4	22	0.00	0.00		-46 -110 -107 -45
0	4	22	0.00	0.00		-27 -45 -44 -26
0	3	11	0.00	0.00		-232 -235 -319 -316
0	3	11	0.00	0.00		-226 -229 -313 -310
0	3	11	0.00	0.00		-221 -223 -307 -305
0	3	11	0.00	0.00		-155 -164 -244 -235
0	3	11	0.00	0.00		-149 -152 -232 -229
0	3	11	0.00	0.00		-143 -146 -226 -223
0	3	11	0.00	0.00		-138 -141 -221 -218
0	3	11	0.00	0.00		-72 -75 -155 -152
0	3	11	0.00	0.00		-66 -69 -149 -146
0	3	11	0.00	0.00		-61 -63 -143 -141
0	3	33	0.00	0.00		-225 -228 -312 -309
0	3	33	0.00	0.00		-219 -222 -306 -303
0	4	22	0.00	0.00		-16 -17 -35 -34
0	4	22	0.00	0.00		-18 -19 -37 -36
0	3	33	0.00	0.00		-142 -145 -225 -222
0	3	33	0.00	0.00		-130 -139 -219 -210
0	3	33	0.00	0.00		-71 -74 -154 -151
0	3	33	0.00	0.00		-65 -68 -148 -145
0	3	33	0.00	0.00		-59 -62 -142 -139
0	3	11	0.00	0.00		-126 -125 -205 -206
0	3	11	0.00	0.00		-124 -123 -203 -204

Bid.	Tb	FF	Dy1 <cm>	Dy2 <cm>	Kt <daN/cm>	NN
0	3	33	0.00	0.00		-102 -105 -184 -181
0	3	33	0.00	0.00		-151 -154 -234 -231
0	3	33	0.00	0.00		-57 -56 -136 -137
0	4	22	0.00	0.00		-32 -50 -49 -31
0	4	22	0.00	0.00		-14 -31 -30 -13
0	4	22	0.00	0.00		-49 -120 -116 -48
0	4	22	0.00	0.00		-30 -48 -47 -29
0	4	22	0.00	0.00		-12 -29 -28 -11
0	4	22	0.00	0.00		-47 -113 -110 -46
0	4	22	0.00	0.00		-28 -46 -45 -27
0	4	22	0.00	0.00		-10 -27 -26 -9
0	3	11	0.00	0.00		-235 -244 -328 -319
0	3	11	0.00	0.00		-229 -232 -316 -313
0	3	11	0.00	0.00		-223 -226 -310 -307
0	3	11	0.00	0.00		-218 -221 -305 -302
0	3	11	0.00	0.00		-152 -155 -235 -232
0	3	11	0.00	0.00		-146 -149 -229 -226
0	3	11	0.00	0.00		-141 -143 -223 -221
0	3	11	0.00	0.00		-75 -84 -164 -155
0	3	11	0.00	0.00		-69 -72 -152 -149
0	3	11	0.00	0.00		-63 -66 -146 -143
0	3	11	0.00	0.00		-58 -61 -141 -138
0	3	33	0.00	0.00		-222 -225 -309 -306
0	3	33	0.00	0.00		-210 -219 -303 -290
0	4	22	0.00	0.00		-17 -18 -36 -35
0	3	33	0.00	0.00		-145 -148 -228 -225
0	3	33	0.00	0.00		-139 -142 -222 -219
0	3	33	0.00	0.00		-74 -77 -157 -154
0	3	33	0.00	0.00		-68 -71 -151 -148
0	3	33	0.00	0.00		-62 -65 -145 -142
0	3	33	0.00	0.00		1 -59 -139 -130
0	3	11	0.00	0.00		-125 -124 -204 -205
0	3	11	0.00	0.00		-208 -207 -287 -288

0	4	22	0.00	0.00	5	-1	-16	-15
0	4	22	0.00	0.00	-2	-3	-18	-17
0	4	22	0.00	0.00	-15	-16	-34	-33
0	3	11	0.00	0.00	-286	-285	-375	-376
0	3	33	0.00	0.00	-278	-281	-367	-364
0	3	33	0.00	0.00	-273	-276	-362	-359
0	3	33	0.00	0.00	-267	-270	-356	-353
0	3	33	0.00	0.00	-261	-264	-350	-347
0	3	33	0.00	0.00	-196	-198	-278	-276
0	3	33	0.00	0.00	-190	-193	-273	-270
0	3	33	0.00	0.00	-184	-187	-267	-264
0	3	33	0.00	0.00	-119	37	-201	-198
0	3	33	0.00	0.00	-114	-117	-196	-193
0	3	33	0.00	0.00	-108	-111	-190	-187
0	3	11	0.00	0.00	-182	-185	-265	-262
0	4	22	0.00	0.00	-45	-107	-104	-44
0	3	11	0.00	0.00	-106	-109	-188	-185
0	3	33	0.00	0.00	-56	-55	-135	-136
0	3	11	0.00	0.00	-280	-289	-379	-366
0	3	11	0.00	0.00	-274	-277	-363	-360
0	3	11	0.00	0.00	-128	-127	-207	-208
0	3	33	0.00	0.00	-134	-133	-213	-214
0	3	33	0.00	0.00	-217	-216	-300	-301
0	3	11	0.00	0.00	-207	-206	-286	-287
0	3	11	0.00	0.00	-205	-204	-284	-285
0	3	11	0.00	0.00	-185	-188	-268	-265
0	4	22	0.00	0.00	-19	-20	-38	-37
0	4	22	0.00	0.00	-9	-26	-25	-8
0	4	22	0.00	0.00	-34	-35	-64	-60
0	4	22	0.00	0.00	-43	-101	-100	-42
0	4	22	0.00	0.00	-5	-6	-21	-20
0	3	33	0.00	0.00	-53	-52	-132	-133
0	3	33	0.00	0.00	-136	-135	-215	-216
0	4	22	0.00	0.00	-22	-23	-41	-40
0	4	22	0.00	0.00	-38	-39	-76	-73
0	3	33	0.00	0.00	-231	-234	-318	-315
0	3	11	0.00	0.00	-188	-191	-271	-268
0	4	22	0.00	0.00	-44	-104	-101	-43
0	3	33	0.00	0.00	-135	-134	-214	-215
0	4	22	0.00	0.00	-26	-44	-43	-25
0	3	11	0.00	0.00	-265	-268	-354	-351
0	3	33	0.00	0.00	-214	-213	-297	-298
0	3	11	0.00	0.00	-268	-271	-357	-354
0	3	11	0.00	0.00	-262	-265	-351	-348
0	4	22	0.00	0.00	-39	-40	-85	-76
0	4	22	0.00	0.00	-40	-41	-86	-85
0	3	11	0.00	0.00	-112	-115	-194	-191
0	3	11	0.00	0.00	-109	-112	-191	-188
113	4	22	0.00	0.00	-180	-260	-259	-179
113	4	22	0.00	0.00	-1008	-1088	-1085	-1005
113	4	22	0.00	0.00	-183	-263	-260	-180
113	4	22	0.00	0.00	-1101	-1181	-1178	-1098
113	4	22	0.00	0.00	-516	-596	-593	-513
113	4	22	0.00	0.00	-1021	-1101	-1098	-1018
113	4	22	0.00	0.00	-755	-835	-832	-752
113	4	22	0.00	0.00	-593	-672	-669	-590
113	4	22	0.00	0.00	-752	-832	-829	-749
113	4	22	0.00	0.00	-590	-669	-668	230
113	4	22	0.00	0.00	-672	-752	-749	-669
113	4	22	0.00	0.00	-940	-1021	-1018	-934
113	4	22	0.00	0.00	-186	-266	-263	-183
113	4	22	0.00	0.00	-1162	-1243	-1240	-1159
113	4	22	0.00	0.00	-1098	-1178	-1174	-1094
113	4	22	0.00	0.00	-1014	-1094	-1091	-1011
113	4	22	0.00	0.00	-596	-675	-672	-593
113	4	22	0.00	0.00	-927	-1011	-1008	-924
113	4	22	0.00	0.00	-1091	-1171	-1168	-1088
113	4	22	0.00	0.00	-924	-1008	-1005	-921
113	4	22	0.00	0.00	-1168	-1249	-1246	-1165
113	4	22	0.00	0.00	-430	-510	-509	-429
113	4	22	0.00	0.00	-189	-269	-266	-186
113	4	22	0.00	0.00	-918	-1002	-999	-915
113	4	22	0.00	0.00	-1082	-1162	-1159	-1079

0	4	22	0.00	0.00	-1	-2	-17	-16
0	4	22	0.00	0.00	-3	-4	-19	-18
0	3	11	0.00	0.00	-287	-286	-376	-377
0	3	11	0.00	0.00	-285	-284	-374	-375
0	3	33	0.00	0.00	-276	-278	-364	-362
0	3	33	0.00	0.00	-270	-273	-359	-356
0	3	33	0.00	0.00	-264	-267	-353	-350
0	3	33	0.00	0.00	-198	-201	-281	-278
0	3	33	0.00	0.00	-193	-196	-276	-273
0	3	33	0.00	0.00	-187	-190	-270	-267
0	3	33	0.00	0.00	-181	-184	-264	-261
0	3	33	0.00	0.00	-117	-119	-198	-196
0	3	33	0.00	0.00	-111	-114	-193	-190
0	3	11	0.00	0.00	-288	-287	-377	-378
0	3	11	0.00	0.00	-121	-129	-209	-200
0	3	11	0.00	0.00	-284	-283	-373	-374
0	3	11	0.00	0.00	-103	-106	-185	-182
0	3	33	0.00	0.00	-55	-54	-134	-135
0	3	11	0.00	0.00	-277	-280	-366	-363
0	3	11	0.00	0.00	-271	-274	-360	-357
0	3	11	0.00	0.00	-127	-126	-206	-207
0	3	33	0.00	0.00	-133	-132	-212	-213
0	3	33	0.00	0.00	-216	-215	-299	-300
0	3	11	0.00	0.00	-206	-205	-285	-286
0	3	11	0.00	0.00	-204	-203	-283	-284
0	4	22	0.00	0.00	-7	13	-23	-22
0	4	22	0.00	0.00	-20	-21	-39	-38
0	4	22	0.00	0.00	-33	-34	-60	-51
0	4	22	0.00	0.00	-25	-43	-42	-24
0	4	22	0.00	0.00	-4	-5	-20	-19
0	4	22	0.00	0.00	-6	-7	-22	-21
0	3	33	0.00	0.00	-137	-136	-216	-217
0	4	22	0.00	0.00	-21	-22	-40	-39
0	4	22	0.00	0.00	-37	-38	-73	-70
0	3	33	0.00	0.00	-234	-237	-321	-318
0	3	33	0.00	0.00	-228	-231	-315	-312
0	3	11	0.00	0.00	-191	-194	-274	-271
0	4	22	0.00	0.00	-35	-36	-67	-64
0	3	11	0.00	0.00	-118	-121	-200	-197
0	3	11	0.00	0.00	-194	-197	-277	-274
0	4	22	0.00	0.00	-36	-37	-70	-67
0	3	33	0.00	0.00	-54	-53	-133	-134
0	3	11	0.00	0.00	-197	-200	-280	-277
0	3	33	0.00	0.00	-215	-214	-298	-299
0	3	33	0.00	0.00	-213	-212	-296	-297
0	3	11	0.00	0.00	-115	-118	-197	-194
0	4	22	0.00	0.00	-8	-25	-24	30
0	3	11	0.00	0.00	-200	-209	-289	-280
113	4	22	0.00	0.00	-934	-1018	-1014	-930
113	4	22	0.00	0.00	-101	-180	-179	-100
113	4	22	0.00	0.00	-1181	441	-1259	-1178
113	4	22	0.00	0.00	-266	-352	-349	-263
113	4	22	0.00	0.00	-1018	-1098	-1094	-1014
113	4	22	0.00	0.00	-675	-755	-752	-672
113	4	22	0.00	0.00	-835	-921	-918	-832
113	4	22	0.00	0.00	-263	-349	-346	-260
113	4	22	0.00	0.00	-832	-918	-915	-829
113	4	22	0.00	0.00	-1094	-1174	-1171	-1091
113	4	22	0.00	0.00	-104	-183	-180	-101
113	4	22	0.00	0.00	-107	-186	-183	-104
113	4	22	0.00	0.00	-436	-516	-513	-433
113	4	22	0.00	0.00	-349	-433	-430	-346
113	4	22	0.00	0.00	-260	-346	-345	-259
113	4	22	0.00	0.00	-838	-924	-921	-835
113	4	22	0.00	0.00	-1174	-1255	-1252	-1171
113	4	22	0.00	0.00	-1011	-1091	-1088	-1008
113	4	22	0.00	0.00	-1171	-1252	-1249	-1168
113	4	22	0.00	0.00	-1088	-1168	-1165	-1085
113	4	22	0.00	0.00	-921	-1005	-1002	-918
113	4	22	0.00	0.00	-510	-590	230	-509
113	4	22	0.00	0.00	-269	-355	-352	-266
113	4	22	0.00	0.00	-1002	-1082	-1079	-999
113	4	22	0.00	0.00	-844	-930	-927	-841

113	4	22	0.00	0.00		-915	-999	-998	-914
113	4	22	0.00	0.00		-1178	-1259	-1255	-1174
113	4	22	0.00	0.00		-678	-758	-755	-675
113	4	22	0.00	0.00		-371	-452	-449	-365
113	4	22	0.00	0.00		-532	241	-609	-529
113	4	22	0.00	0.00		-449	-529	-525	-445
113	4	22	0.00	0.00		-361	-445	-442	-358
113	4	22	0.00	0.00		-525	-605	-602	-522
113	4	22	0.00	0.00		-669	-749	-748	-668
113	4	22	0.00	0.00		-829	-915	-914	-828
113	4	22	0.00	0.00		-352	-436	-433	-349
113	4	22	0.00	0.00		-279	-365	-361	-275
113	4	22	0.00	0.00		-602	-681	-678	-599
113	4	22	0.00	0.00		-346	-430	-429	-345
113	4	22	0.00	0.00		-122	-202	-199	-120
113	4	22	0.00	0.00		-282	-371	-365	-279
113	4	22	0.00	0.00		-199	-279	-275	-195
113	4	22	0.00	0.00		-1005	-1085	-1082	-1002
113	4	22	0.00	0.00		-691	-771	-768	-688
113	4	22	0.00	0.00		-851	-940	-934	-848
113	4	22	0.00	0.00		-1085	-1165	-1162	-1082
113	4	22	0.00	0.00		-605	-684	-681	-602
113	4	22	0.00	0.00		-1079	-1159	-1158	-1078
113	4	22	0.00	0.00		-116	-195	-192	-113
113	4	22	0.00	0.00		-999	-1079	-1078	-998
113	4	22	0.00	0.00		-848	-934	-930	-844
113	4	22	0.00	0.00		-841	-927	-924	-838
113	4	22	0.00	0.00		-275	-361	-358	-272
113	4	22	0.00	0.00		-192	-272	-269	-189
113	4	22	0.00	0.00		-609	-688	-684	-605
113	4	22	0.00	0.00		-768	-848	-844	-764
114	4	22	0.00	0.00		-814	-815	-899	-898
114	4	22	0.00	0.00		-734	-735	-815	-814
114	4	22	0.00	0.00		-972	-975	-1055	-1052
114	4	22	0.00	0.00		-156	-165	-245	-236
114	4	22	0.00	0.00		-153	-156	-236	-233
114	4	22	0.00	0.00		-574	213	-655	-654
114	4	22	0.00	0.00		-975	-984	-1064	-1055
114	4	22	0.00	0.00		-1135	-1144	-1222	-1213
114	4	22	0.00	0.00		-642	-645	-725	-722
114	4	22	0.00	0.00		-1052	-1055	-1135	-1132
114	4	22	0.00	0.00		-969	-972	-1052	-1049
114	4	22	0.00	0.00		-1129	-1132	-1210	-1207
114	4	22	0.00	0.00		-230	-233	-317	-314
114	4	22	0.00	0.00		-562	-565	-645	-642
114	4	22	0.00	0.00		-789	-793	-877	-873
114	4	22	0.00	0.00		-629	-633	-713	-709
114	4	22	0.00	0.00		-233	-236	-320	-317
114	4	22	0.00	0.00		-645	-654	-734	-725
114	4	22	0.00	0.00		-716	-719	-799	-796
114	4	22	0.00	0.00		-556	-559	-639	-636
114	4	22	0.00	0.00		-1030	-1039	-1119	-1110
114	4	22	0.00	0.00		-863	-873	-959	-950
114	4	22	0.00	0.00		-1039	-1043	-1123	-1119
114	4	22	0.00	0.00		-873	-877	-963	-959
114	4	22	0.00	0.00		-85	-86	-166	-165
114	4	22	0.00	0.00		-245	-246	-330	-329
114	4	22	0.00	0.00		-1046	-1049	-1129	-1126
114	4	22	0.00	0.00		-461	-470	-549	205
114	4	22	0.00	0.00		-984	-985	-1065	-1064
114	4	22	0.00	0.00		-1144	-1145	413	-1222
114	4	22	0.00	0.00		-397	-400	-480	-477
114	4	22	0.00	0.00		-211	-220	-304	-294
114	4	22	0.00	0.00		-51	-60	-140	-131
114	4	22	0.00	0.00		-220	-224	-308	-304
114	4	22	0.00	0.00		-639	-642	-722	-719
114	4	22	0.00	0.00		-799	-802	-886	-883
114	4	22	0.00	0.00		-700	-709	-789	-780
114	4	22	0.00	0.00		-227	-230	-314	-311
114	4	22	0.00	0.00		-495	-496	213	-574
114	4	22	0.00	0.00		-549	-553	-633	-629
114	4	22	0.00	0.00		-1064	-1065	-1145	-1144
114	4	22	0.00	0.00		-477	-480	-559	-556
113	4	22	0.00	0.00		-433	-513	-510	-430
113	4	22	0.00	0.00		-930	-1014	-1011	-927
113	4	22	0.00	0.00		-758	-838	-835	-755
113	4	22	0.00	0.00		-452	-532	-529	-449
113	4	22	0.00	0.00		-365	-449	-445	-361
113	4	22	0.00	0.00		-529	-609	-605	-525
113	4	22	0.00	0.00		-445	-525	-522	-442
113	4	22	0.00	0.00		-358	-442	-439	-355
113	4	22	0.00	0.00		-749	-829	-828	-748
113	4	22	0.00	0.00		-519	-599	-596	-516
113	4	22	0.00	0.00		-439	-519	-516	-436
113	4	22	0.00	0.00		241	-691	-688	-609
113	4	22	0.00	0.00		-513	-593	-590	-510
113	4	22	0.00	0.00		-1159	-1240	430	-1158
113	4	22	0.00	0.00		-202	-282	-279	-199
113	4	22	0.00	0.00		-120	-199	-195	-116
113	4	22	0.00	0.00		-764	-844	-841	-761
113	4	22	0.00	0.00		-195	-275	-272	-192
113	4	22	0.00	0.00		-771	-851	-848	-768
113	4	22	0.00	0.00		-355	-439	-436	-352
113	4	22	0.00	0.00		-1165	-1246	-1243	-1162
113	4	22	0.00	0.00		-684	-764	-761	-681
113	4	22	0.00	0.00		-599	-678	-675	-596
113	4	22	0.00	0.00		-110	-189	-186	-107
113	4	22	0.00	0.00		-522	-602	-599	-519
113	4	22	0.00	0.00		-272	-358	-355	-269
113	4	22	0.00	0.00		-442	-522	-519	-439
113	4	22	0.00	0.00		-113	-192	-189	-110
113	4	22	0.00	0.00		-761	-841	-838	-758
113	4	22	0.00	0.00		-688	-768	-764	-684
113	4	22	0.00	0.00		-681	-761	-758	-678
114	4	22	0.00	0.00		-883	-886	-972	-969
114	4	22	0.00	0.00		-236	-245	-329	-320
114	4	22	0.00	0.00		-73	-76	-156	-153
114	4	22	0.00	0.00		-966	-969	-1049	-1046
114	4	22	0.00	0.00		-654	-655	-735	-734
114	4	22	0.00	0.00		-725	-734	-814	-805
114	4	22	0.00	0.00		-1055	-1064	-1144	-1135
114	4	22	0.00	0.00		-886	-889	-975	-972
114	4	22	0.00	0.00		-722	-725	-805	-802
114	4	22	0.00	0.00		-1132	-1135	-1213	-1210
114	4	22	0.00	0.00		-1049	-1052	-1132	-1129
114	4	22	0.00	0.00		-150	-153	-233	-230
114	4	22	0.00	0.00		-805	-814	-898	-889
114	4	22	0.00	0.00		205	-549	-629	-620
114	4	22	0.00	0.00		-709	-713	-793	-789
114	4	22	0.00	0.00		-880	-883	-969	-966
114	4	22	0.00	0.00		-565	-574	-654	-645
114	4	22	0.00	0.00		-796	-799	-883	-880
114	4	22	0.00	0.00		-636	-639	-719	-716
114	4	22	0.00	0.00		-1110	-1119	-1197	405
114	4	22	0.00	0.00		-950	-959	-1039	-1030
114	4	22	0.00	0.00		-1119	-1123	-1201	-1197
114	4	22	0.00	0.00		-959	-963	-1043	-1039
114	4	22	0.00	0.00		-1123	-1126	-1204	-1201
114	4	22	0.00	0.00		-165	-166	-246	-245
114	4	22	0.00	0.00		-76	-85	-165	-156
114	4	22	0.00	0.00		-67	-70	-150	-147
114	4	22	0.00	0.00		-898	-899	-985	-984
114	4	22	0.00	0.00		-70	-73	-153	-150
114	4	22	0.00	0.00		-889	-898	-984	-975
114	4	22	0.00	0.00		-311	-314	-400	-397
114	4	22	0.00	0.00		-131	-140	-220	-211
114	4	22	0.00	0.00		-802	-805	-889	-886
114	4	22	0.00	0.00		-559	-562	-642	-639
114	4	22	0.00	0.00		-719	-722	-802	-799
114	4	22	0.00	0.00		-780	-789	-873	-863
114	4	22	0.00	0.00		-620	-629	-709	-700
114	4	22	0.00	0.00		-147	-150	-230	-227
114	4	22	0.00	0.00		-320	-329	-415	-406
114	4	22	0.00	0.00		-793	-796	-880	-877
114	4	22	0.00	0.00		-553	-556	-636	-633
114	4	22	0.00	0.00		-308	-311	-397	-394

114	4	22	0.00	0.00		-474	-477	-556	-553
114	4	22	0.00	0.00		-415	-416	-496	-495
114	4	22	0.00	0.00		-480	-483	-562	-559
114	4	22	0.00	0.00		-486	-495	-574	-565
114	4	22	0.00	0.00		-403	-406	-486	-483
114	4	22	0.00	0.00		-314	-317	-403	-400
114	4	22	0.00	0.00		-963	-966	-1046	-1043
114	4	22	0.00	0.00		-64	-67	-147	-144
114	4	22	0.00	0.00		-394	-397	-477	-474
114	4	22	0.00	0.00		-381	-390	-470	-461
114	4	22	0.00	0.00		-400	-403	-483	-480
114	4	22	0.00	0.00		-140	-144	-224	-220
114	4	22	0.00	0.00		-144	-147	-227	-224
114	4	22	0.00	0.00		-60	-64	-144	-140
115	3	33	0.00	0.00		-1115	-1114	-1192	-1193
115	3	33	0.00	0.00		-543	-542	-622	-623
115	3	33	0.00	0.00		-542	-541	-621	-622
115	3	33	0.00	0.00		-782	-781	-865	-866
115	3	33	0.00	0.00		-870	-869	-955	-956
115	3	33	0.00	0.00		-702	-701	-781	-782
115	3	33	0.00	0.00		-298	-297	-383	-384
115	3	33	0.00	0.00		-623	-622	-702	-703
115	3	33	0.00	0.00		-625	-624	-704	-705
115	3	33	0.00	0.00		-300	-299	-385	-386
115	3	33	0.00	0.00		-784	-783	-867	-868
115	3	33	0.00	0.00		-1112	-1111	-1189	-1190
115	3	33	0.00	0.00		-953	-952	-1032	-1033
115	3	33	0.00	0.00		-1113	-1112	-1190	-1191
115	3	33	0.00	0.00		-954	-953	-1033	-1034
115	3	33	0.00	0.00		-386	-385	-465	-466
115	3	33	0.00	0.00		-955	-954	-1034	-1035
115	3	33	0.00	0.00		-463	-462	-541	-542
115	3	33	0.00	0.00		-705	-704	-784	-785
115	3	33	0.00	0.00		-546	-545	-625	-626
115	3	33	0.00	0.00		-299	-298	-384	-385
115	3	33	0.00	0.00		-465	-464	-543	-544
115	3	33	0.00	0.00		-297	-296	-382	-383
115	3	33	0.00	0.00		-783	-782	-866	-867
115	3	33	0.00	0.00		-624	-623	-703	-704
115	3	33	0.00	0.00		-703	-702	-782	-783
115	3	33	0.00	0.00		-544	-543	-623	-624
115	3	33	0.00	0.00		-464	-463	-542	-543
117	2	22	0.00	0.00		-896	-895	-981	-982
117	2	22	0.00	0.00		-808	-807	-891	-892
117	2	22	0.00	0.00		-1062	-1061	-1141	-1142
117	2	22	0.00	0.00		-1299	-1298	-1378	-1379
117	2	22	0.00	0.00		-1220	-1219	-1300	-1301
117	2	22	0.00	0.00		-1461	-1460	-1540	-1541
117	2	22	0.00	0.00		-163	-162	-242	-243
117	2	22	0.00	0.00		-979	-978	-1058	-1059
117	2	22	0.00	0.00		-1139	-1138	-1216	-1217
117	2	22	0.00	0.00		-980	-979	-1059	-1060
117	2	22	0.00	0.00		-1301	-1300	-1380	-1381
117	2	22	0.00	0.00		-981	-980	-1060	-1061
117	2	22	0.00	0.00		-1141	-1140	-1218	-1219
117	2	22	0.00	0.00		-1459	-1458	-1538	-1539
117	2	22	0.00	0.00		-1142	-1141	-1219	-1220
117	2	22	0.00	0.00		-82	-81	-161	-162
117	2	22	0.00	0.00		-892	-891	-977	-978
117	2	22	0.00	0.00		-1058	-1057	-1137	-1138
117	2	22	0.00	0.00		-1541	-1540	-1624	-1625
117	2	22	0.00	0.00		-648	-647	-727	-728
117	2	22	0.00	0.00		-729	-728	-808	-809
117	2	22	0.00	0.00		-570	-569	-649	-650
117	2	22	0.00	0.00		-730	-729	-809	-810
117	2	22	0.00	0.00		-571	-570	-650	-651
117	2	22	0.00	0.00		-731	-730	-810	-811
117	2	22	0.00	0.00		-1624	-1623	-1712	-1713
117	2	22	0.00	0.00		-1300	-1299	-1379	-1380
117	2	22	0.00	0.00		-1460	-1459	-1539	-1540
117	2	22	0.00	0.00		-412	-411	-491	-492
117	2	22	0.00	0.00		-327	-326	-412	-413
117	2	22	0.00	0.00		-1710	-1709	-1794	-1795

114	4	22	0.00	0.00		-329	-330	-416	-415
114	4	22	0.00	0.00		-1126	-1129	-1207	-1204
114	4	22	0.00	0.00		-406	-415	-495	-486
114	4	22	0.00	0.00		-317	-320	-406	-403
114	4	22	0.00	0.00		-483	-486	-565	-562
114	4	22	0.00	0.00		-1043	-1046	-1126	-1123
114	4	22	0.00	0.00		-877	-880	-966	-963
114	4	22	0.00	0.00		-633	-636	-716	-713
114	4	22	0.00	0.00		-304	-308	-394	-390
114	4	22	0.00	0.00		-713	-716	-796	-793
114	4	22	0.00	0.00		-294	-304	-390	-381
114	4	22	0.00	0.00		-224	-227	-311	-308
114	4	22	0.00	0.00		-390	-394	-474	-470
114	4	22	0.00	0.00		-470	-474	-553	-549
115	3	33	0.00	0.00		-956	-955	-1035	-1036
115	3	33	0.00	0.00		-1036	-1035	-1115	-1116
115	3	33	0.00	0.00		-1035	-1034	-1114	-1115
115	3	33	0.00	0.00		-866	-865	-951	-952
115	3	33	0.00	0.00		-1032	-1031	-1111	-1112
115	3	33	0.00	0.00		-786	-785	-869	-870
115	3	33	0.00	0.00		-1116	-1115	-1193	-1194
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115	3	33	0.00	0.00		-706	-705	-785	-786
115	3	33	0.00	0.00		-952	-951	-1031	-1032
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115	3	33	0.00	0.00		-867	-866	-952	-953
115	3	33	0.00	0.00		-1033	-1032	-1112	-1113
115	3	33	0.00	0.00		-868	-867	-953	-954
115	3	33	0.00	0.00		-1034	-1033	-1113	-1114
115	3	33	0.00	0.00		-466	-465	-544	-545
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115	3	33	0.00	0.00		-622	-621	-701	-702
115	3	33	0.00	0.00		-785	-784	-868	-869
115	3	33	0.00	0.00		-626	-625	-705	-706
115	3	33	0.00	0.00		-385	-384	-464	-465
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115	3	33	0.00	0.00		-387	-386	-466	-467
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117	2	22	0.00	0.00		-649	-648	-728	-729
117	2	22	0.00	0.00		-569	-568	-648	-649
117	2	22	0.00	0.00		-982	-981	-1061	-1062
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117	2	22	0.00	0.00		-1540	-1539	-1623	-1624
117	2	22	0.00	0.00		-1381	-1380	-1460	-1461
117	2	22	0.00	0.00		-79	-78	-158	-159
117	2	22	0.00	0.00		-1379	-1378	-1458	-1459
117	2	22	0.00	0.00		-1059	-1058	-1138	-1139
117	2	22	0.00	0.00		-894	-893	-979	-980
117	2	22	0.00	0.00		-1060	-1059	-1139	-1140
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117	2	22	0.00	0.00		-1622	-1621	-1710	-1711
117	2	22	0.00	0.00		-1539	-1538	-1622	-1623
117	2	22	0.00	0.00		-83	-82	-162	-163
117	2	22	0.00	0.00		-81	-80	-160	-161
117	2	22	0.00	0.00		-978	-977	-1057	-1058
117	2	22	0.00	0.00		-1138	-1137	-1215	-1216
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117	2	22	0.00	0.00		-728	-727	-807	-808
117	2	22	0.00	0.00		-809	-808	-892	-893
117	2	22	0.00	0.00		-650	-649	-729	-730
117	2	22	0.00	0.00		-810	-809	-893	-894
117	2	22	0.00	0.00		-651	-650	-730	-731
117	2	22	0.00	0.00		-1623	-1622	-1711	-1712
117	2	22	0.00	0.00		-1219	-1218	-1299	-1300
117	2	22	0.00	0.00		-1380	-1379	-1459	-1460
117	2	22	0.00	0.00		-326	-325	-411	-412
117	2	22	0.00	0.00		-492	-491	-570	-571
117	2	22	0.00	0.00		-893	-892	-978	-979
117	2	22	0.00	0.00		-1795	-1794	-1873	-1874

117	222	0.00	0.00		-1711	-1710	-1795	-1796	117	222	0.00	0.00		-1796	-1795	-1874	-1875
117	222	0.00	0.00		-1712	-1711	-1796	-1797	117	222	0.00	0.00		-1797	-1796	-1875	-1876
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117	222	0.00	0.00		-1714	-1713	-1798	-1799	117	222	0.00	0.00		-1799	-1798	-1877	-1878
117	222	0.00	0.00		-1621	-1620	-1709	-1710	117	222	0.00	0.00		-1538	-1537	-1621	-1622
117	222	0.00	0.00		-1216	-1215	-1296	-1297	117	222	0.00	0.00		-811	-810	-894	-895
117	222	0.00	0.00		-1625	-1624	-1713	-1714	117	222	0.00	0.00		-652	-651	-731	-732
117	222	0.00	0.00		-732	-731	-811	-812	117	222	0.00	0.00		-812	-811	-895	-896
117	222	0.00	0.00		-411	-410	-490	-491	117	222	0.00	0.00		-491	-490	-569	-570
117	222	0.00	0.00		-240	-239	-323	-324	117	222	0.00	0.00		-239	-238	-322	-323
117	222	0.00	0.00		-413	-412	-492	-493	117	222	0.00	0.00		-162	-161	-241	-242
117	222	0.00	0.00		-161	-160	-240	-241	117	222	0.00	0.00		-160	-159	-239	-240
117	222	0.00	0.00		-1457	-1456	-1536	-1537	117	222	0.00	0.00		-159	-158	-238	-239
117	222	0.00	0.00		-243	-242	-326	-327	117	222	0.00	0.00		-242	-241	-325	-326
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117	222	0.00	0.00		-324	-323	-409	-410	117	222	0.00	0.00		-572	-571	-651	-652
117	222	0.00	0.00		-410	-409	-489	-490	117	222	0.00	0.00		-490	-489	-568	-569
117	222	0.00	0.00		-325	-324	-410	-411	117	222	0.00	0.00		-1298	-1297	-1377	-1378
117	222	0.00	0.00		-1297	-1296	-1376	-1377	117	222	0.00	0.00		-1377	-1376	-1456	-1457
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117	222	0.00	0.00		-493	-492	-571	-572	117	222	0.00	0.00		-1217	-1216	-1297	-1298
117	222	0.00	0.00		-1537	-1536	-1620	-1621	118	222	0.00	0.00		-1309	-1308	-1388	-1389
118	222	0.00	0.00		-1389	-1388	-1468	-1469	118	222	0.00	0.00		-1390	-1389	-1469	-1470
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118	222	0.00	0.00		-989	-988	-1068	-1069	118	222	0.00	0.00		-1069	-1068	-1148	-1149
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118	222	0.00	0.00		-657	-656	-736	-737	118	222	0.00	0.00		-737	-736	-816	-817
118	222	0.00	0.00		-817	-816	-900	-901	118	222	0.00	0.00		-578	-577	-657	-658
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118	222	0.00	0.00		-740	-739	-819	-820	118	222	0.00	0.00		-820	-819	-903	-904
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118	222	0.00	0.00		-741	-740	-820	-821	118	222	0.00	0.00		-821	-820	-904	-905
118	222	0.00	0.00		-901	-900	-986	-987	118	222	0.00	0.00		-987	-986	-1066	-1067
118	222	0.00	0.00		-1067	-1066	-1146	-1147	118	222	0.00	0.00		-1147	-1146	-1224	-1225
118	222	0.00	0.00		-902	-901	-987	-988	118	222	0.00	0.00		-988	-987	-1067	-1068
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118	222	0.00	0.00		-498	-497	-576	-577	118	222	0.00	0.00		-333	-332	-418	-419
118	222	0.00	0.00		-419	-418	-498	-499	118	222	0.00	0.00		-499	-498	-577	-578
118	222	0.00	0.00		-334	-333	-419	-420	118	222	0.00	0.00		-1151	-1150	-1228	-1229
118	222	0.00	0.00		-92	-91	-171	-172	118	222	0.00	0.00		-335	-334	-420	-421
118	222	0.00	0.00		-91	-90	-170	-171	118	222	0.00	0.00		-90	-89	-169	-170
118	222	0.00	0.00		-89	-88	-168	-169	118	222	0.00	0.00		-88	-87	-167	-168
118	222	0.00	0.00		-172	-171	-251	-252	118	222	0.00	0.00		-171	-170	-250	-251
118	222	0.00	0.00		-170	-169	-249	-250	118	222	0.00	0.00		-169	-168	-248	-249
118	222	0.00	0.00		-168	-167	-247	-248	118	222	0.00	0.00		-252	-251	-335	-336
118	222	0.00	0.00		-1806	-1805	-1883	-1884	118	222	0.00	0.00		-1722	-1721	-1806	-1807
118	222	0.00	0.00		-579	-578	-658	-659	118	222	0.00	0.00		-659	-658	-738	-739
118	222	0.00	0.00		-418	-417	-497	-498	118	222	0.00	0.00		-332	-331	-417	-418
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118	222	0.00	0.00		-501	-500	-579	-580	118	222	0.00	0.00		-336	-335	-421	-422
118	222	0.00	0.00		-422	-421	-501	-502	118	222	0.00	0.00		-1225	-1224	-1305	-1306

118	2	22	0.00	0.00		-1386	-1385	-1465	-1466
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118	2	22	0.00	0.00		-1306	-1305	-1385	-1386
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118	2	22	0.00	0.00		-251	-250	-334	-335
119	2	22	0.00	0.00		-1313	-1312	-1392	-1393
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119	2	22	0.00	0.00		-1235	-1234	-1312	-1313
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119	2	22	0.00	0.00		-1641	-1640	-1729	-1730
119	2	22	0.00	0.00		-1475	-1474	-1554	-1555
119	2	22	0.00	0.00		-1154	-1153	-1234	-1235
119	2	22	0.00	0.00		-1395	-1394	-1474	-1475
119	2	22	0.00	0.00		-1556	-1555	-1640	-1641
119	2	22	0.00	0.00		-910	-909	-993	-994
119	2	22	0.00	0.00		-1074	-1073	-1153	-1154
119	2	22	0.00	0.00		-585	-584	-663	-664
119	2	22	0.00	0.00		-744	-743	-823	-824
119	2	22	0.00	0.00		-1814	-1813	-1892	-1893
119	2	22	0.00	0.00		-745	-744	-824	-825
119	2	22	0.00	0.00		-587	-586	-665	-666
119	2	22	0.00	0.00		-746	-745	-825	-826
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119	2	22	0.00	0.00		-824	-823	-909	-910
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119	2	22	0.00	0.00		-1153	-1152	-1233	-1234
119	2	22	0.00	0.00		-1392	-1391	-1471	-1472
119	2	22	0.00	0.00		-1810	-1809	-1888	-1889
119	2	22	0.00	0.00		-258	-257	-343	-344
119	2	22	0.00	0.00		-1473	-1472	-1552	-1553
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119	2	22	0.00	0.00		-1237	-1236	-1314	-1315
119	2	22	0.00	0.00		-996	-995	-1075	-1076
119	2	22	0.00	0.00		-1156	-1155	-1236	-1237
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119	2	22	0.00	0.00		-1157	-1156	-1237	-1238
119	2	22	0.00	0.00		-428	-427	-507	-508
119	2	22	0.00	0.00		-1726	-1725	-1809	-1810
119	2	22	0.00	0.00		-174	-173	-253	-254
119	2	22	0.00	0.00		-257	-256	-342	-343
119	2	22	0.00	0.00		-255	-254	-340	-341
119	2	22	0.00	0.00		-340	-339	-423	-424
119	2	22	0.00	0.00		-504	-503	-583	-584
119	2	22	0.00	0.00		-425	-424	-504	-505
119	2	22	0.00	0.00		-342	-341	-425	-426
119	2	22	0.00	0.00		-913	-912	-996	-997
119	2	22	0.00	0.00		-993	-992	-1072	-1073
119	2	22	0.00	0.00		-1234	-1233	-1311	-1312
119	2	22	0.00	0.00		-663	-662	-742	-743
119	2	22	0.00	0.00		-175	-174	-254	-255
119	2	22	0.00	0.00		-178	-177	-257	-258
119	2	22	0.00	0.00		-747	-746	-826	-827
119	2	22	0.00	0.00		-995	-994	-1074	-1075
119	2	22	0.00	0.00		-95	-94	-173	-174
119	2	22	0.00	0.00		-1155	-1154	-1235	-1236
119	2	22	0.00	0.00		-96	-95	-174	-175
119	2	22	0.00	0.00		-506	-505	-585	-586
119	2	22	0.00	0.00		-98	-97	-176	-177
119	2	22	0.00	0.00		-97	-96	-175	-176
120	3	33	0.00	0.00		-1823	-1826	-1904	-2078
120	3	33	0.00	0.00		-353	-356	-440	-437
120	3	33	0.00	0.00		-526	-528	-608	-606
120	3	33	0.00	0.00		-1571	-1574	-1659	-1656
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120	3	33	0.00	0.00		-1253	-1256	-1334	-1331
120	3	33	0.00	0.00		-1494	-1496	-1576	-1574
120	3	33	0.00	0.00		-1334	-1336	-1416	-1414
120	3	33	0.00	0.00		-1576	-1579	-1664	-1661
120	3	33	0.00	0.00		-446	-448	-528	-526
120	3	33	0.00	0.00		-1331	-1334	-1414	-1411
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118	2	22	0.00	0.00		-818	-817	-901	-902
118	2	22	0.00	0.00		-1805	-1804	-1882	-1883
118	2	22	0.00	0.00		-1226	-1225	-1306	-1307
118	2	22	0.00	0.00		-250	-249	-333	-334
118	2	22	0.00	0.00		-1546	-1545	-1629	-1630
119	2	22	0.00	0.00		-1812	-1811	-1890	-1891
119	2	22	0.00	0.00		-1729	-1728	-1812	-1813
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119	2	22	0.00	0.00		-1637	-1636	-1725	-1726
119	2	22	0.00	0.00		-1640	-1639	-1728	-1729
119	2	22	0.00	0.00		-1638	-1637	-1726	-1727
119	2	22	0.00	0.00		-1555	-1554	-1639	-1640
119	2	22	0.00	0.00		-911	-910	-994	-995
119	2	22	0.00	0.00		-1073	-1072	-1152	-1153
119	2	22	0.00	0.00		-1639	-1638	-1727	-1728
119	2	22	0.00	0.00		-994	-993	-1073	-1074
119	2	22	0.00	0.00		-1552	-1551	-1636	-1637
119	2	22	0.00	0.00		-664	-663	-743	-744
119	2	22	0.00	0.00		-1730	-1729	-1813	-1814
119	2	22	0.00	0.00		-665	-664	-744	-745
119	2	22	0.00	0.00		-825	-824	-910	-911
119	2	22	0.00	0.00		-666	-665	-745	-746
119	2	22	0.00	0.00		-826	-825	-911	-912
119	2	22	0.00	0.00		-1238	-1237	-1315	-1316
119	2	22	0.00	0.00		-586	-585	-664	-665
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120	3	33	0.00	0.00		-919	-922	-1006	-1003
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131	3	11	0.00	0.00		-381	-2234	-2245	-461
131	3	11	0.00	0.00		-2215	-2216	-2240	-2239
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131	3	11	0.00	0.00		-461	-2245	-2233	205
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121	3	33	0.00	0.00		-312	-315	-401	-398
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121	3	33	0.00	0.00		-484	-487	-566	-563
121	3	33	0.00	0.00		-1038	-1041	-1121	-1118
121	3	33	0.00	0.00		-1781	-1784	-1863	-2039
121	3	33	0.00	0.00		-1041	-1044	-1124	-1121
121	3	33	0.00	0.00		-875	-878	-964	-961
121	3	33	0.00	0.00		-1044	-1047	-1127	-1124
121	3	33	0.00	0.00		-878	-881	-967	-964
121	3	33	0.00	0.00		-475	-478	-557	-554
121	3	33	0.00	0.00		-1437	-1440	-1520	-1517
121	3	33	0.00	0.00		-1277	-1280	-1360	-1357
121	3	33	0.00	0.00		-1520	-1523	-1607	-1604
121	3	33	0.00	0.00		-1360	-1363	-1443	-1440
121	3	33	0.00	0.00		-1199	-1202	-1283	-1280
121	3	33	0.00	0.00		-1443	-1446	-1526	-1523
121	3	33	0.00	0.00		-540	-548	-628	-619
121	3	33	0.00	0.00		-788	-791	-875	-872
121	3	33	0.00	0.00		-1446	-1449	-1529	-1526
121	3	33	0.00	0.00		-1610	-1613	-1702	-1699
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121	3	33	0.00	0.00		-1702	-1705	-1790	-1787
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121	3	33	0.00	0.00		-1118	-1121	-1199	-1196
121	3	33	0.00	0.00		-640	-643	-723	-720
121	3	33	0.00	0.00		-803	-806	-890	-887
121	3	33	0.00	0.00		-1766	-1775	-1854	501
121	3	33	0.00	0.00		-563	-566	-646	-643
121	3	33	0.00	0.00		-1428	-1437	-1517	-1508
121	3	33	0.00	0.00		401	-1196	-1277	-1268
121	3	33	0.00	0.00		-1790	-1793	-1872	-1869
121	3	33	0.00	0.00		-1283	-1286	-1366	-1363
121	3	33	0.00	0.00		-554	-557	-637	-634
121	3	33	0.00	0.00		-1784	-1787	-2075	-1863
121	3	33	0.00	0.00		-1787	-1790	-1869	-2075
121	3	33	0.00	0.00		-720	-723	-803	-800
121	3	33	0.00	0.00		-800	-803	-887	-884
121	3	33	0.00	0.00		-460	-469	-548	-540
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131	3	11	0.00	0.00		-2220	-295	-2221	-2244
131	3	11	0.00	0.00		-2219	-2220	-2244	-2243
131	3	11	0.00	0.00		-2218	-2219	-2243	-2242
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131	3	11	0.00	0.00		-2210	-2211	-2235	-2234
131	3	11	0.00	0.00		-2249	-2250	-2228	-2229
131	3	11	0.00	0.00		-2216	-2217	-2241	-2240
131	3	11	0.00	0.00		-2248	-2249	-2229	-2230
131	3	11	0.00	0.00		-2250	-2251	-2227	-2228
131	3	11	0.00	0.00		-2244	-2221	-2222	-2255
131	3	11	0.00	0.00		-2239	-2240	-2251	-2250
131	3	11	0.00	0.00		-2214	-2215	-2239	-2238
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131	3	11	0.00	0.00		-2236	-2237	-2248	-2247
131	3	11	0.00	0.00		-2213	-2214	-2238	-2237
131	3	11	0.00	0.00		-2252	-2253	-2225	-2226
131	3	11	0.00	0.00		-2235	-2236	-2247	-2246
131	3	11	0.00	0.00		-2255	-2222	206	-2223
132	3	11	0.00	0.00		-2197	-2198	-2209	-2208
132	3	11	0.00	0.00		-2189	-2190	-2201	-2200
132	3	11	0.00	0.00		-2209	-532	241	-2175
132	3	11	0.00	0.00		-2208	-2209	-2175	-2176
132	3	11	0.00	0.00		-2187	-2188	-2199	-2186
132	3	11	0.00	0.00		-2188	-2189	-2200	-2199
132	3	11	0.00	0.00		-2200	-2201	-2183	-2184
132	3	11	0.00	0.00		-2166	-2167	-2191	-2190

132	3	11	0.00	0.00		-2186	-2199	-2185	242
132	3	11	0.00	0.00		-2196	-2197	-2208	-2207
132	3	11	0.00	0.00		-2167	-2168	-2192	-2191
132	3	11	0.00	0.00		-2193	-2194	-2205	-2204
132	3	11	0.00	0.00		-2206	-2207	-2177	-2178
132	3	11	0.00	0.00		-2192	-2193	-2204	-2203
132	3	11	0.00	0.00		-2173	-2174	-2198	-2197
132	3	11	0.00	0.00		-2195	-2196	-2207	-2206
132	3	11	0.00	0.00		-2203	-2204	-2180	-2181
132	3	11	0.00	0.00		-372	-2164	-2188	-2187
132	3	11	0.00	0.00		-2204	-2205	-2179	-2180
212	3	11	0.00	0.00		-632	-635	-715	-712
212	3	11	0.00	0.00		-965	-968	-1048	-1045
212	3	11	0.00	0.00		-1290	-1293	-1373	-1370
212	3	11	0.00	0.00		-550	-552	-632	-630
212	3	11	0.00	0.00		-1048	-1051	-1131	-1128
212	3	11	0.00	0.00		-1706	-1715	-1800	-1791
212	3	11	0.00	0.00		-974	-983	-1063	-1054
212	3	11	0.00	0.00		-712	-715	-795	-792
212	3	11	0.00	0.00		-798	-801	-885	-882
212	3	11	0.00	0.00		-473	-476	-555	-552
212	3	11	0.00	0.00		-1791	-1800	-1879	-1870
212	3	11	0.00	0.00		-396	-399	-479	-476
212	3	11	0.00	0.00		-393	-396	-476	-473
212	3	11	0.00	0.00		-635	-638	-718	-715
212	3	11	0.00	0.00		-1051	-1054	-1134	-1131
212	3	11	0.00	0.00		-885	-888	-974	-971
212	3	11	0.00	0.00		-888	-897	-983	-974
212	3	11	0.00	0.00		-468	-471	-550	-547
212	3	11	0.00	0.00		-302	-305	-391	-388
212	3	11	0.00	0.00		-962	-965	-1045	-1042
212	3	11	0.00	0.00		-1287	-1290	-1370	-1367
212	3	11	0.00	0.00		-1530	-1533	-1617	-1614
212	3	11	0.00	0.00		-1370	-1373	-1453	-1450
212	3	11	0.00	0.00		-1617	-1626	-1715	-1706
212	3	11	0.00	0.00		-1453	-1462	-1542	-1533
212	3	11	0.00	0.00		-555	-558	-638	-635
212	3	11	0.00	0.00		-718	-721	-801	-798
212	3	11	0.00	0.00		-1134	-1143	-1221	-1212
212	3	11	0.00	0.00		-721	-724	-804	-801
212	3	11	0.00	0.00		-388	-391	-471	-468
212	3	11	0.00	0.00		-724	-733	-813	-804
212	3	11	0.00	0.00		-1122	-1125	-1203	-1200
212	3	11	0.00	0.00		-1782	-1785	-1864	-2284
212	3	11	0.00	0.00		-1777	-1779	-1858	-1856
212	3	11	0.00	0.00		-1195	-1198	-1279	-1276
212	3	11	0.00	0.00		-1614	-1617	-1706	-1703
212	3	11	0.00	0.00		-968	-971	-1051	-1048
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212	3	11	0.00	0.00		-1361	-1364	-1444	-1441
212	3	11	0.00	0.00		-1200	-1203	-1284	-1281
212	3	11	0.00	0.00		-707	-710	-790	-787
212	3	11	0.00	0.00		-1040	-1042	-1122	-1120
212	3	11	0.00	0.00		-874	-876	-962	-960
212	3	11	0.00	0.00		-790	-792	-876	-874
212	3	11	0.00	0.00		-1436	-1439	-1519	-1516
212	3	11	0.00	0.00		-1276	-1279	-1359	-1356
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212	3	11	0.00	0.00		-485	-494	-573	-564
212	3	11	0.00	0.00		-871	-874	-960	-957
212	3	11	0.00	0.00		-1700	-1703	-1788	-1785
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212	3	11	0.00	0.00		-316	-319	-405	-402
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132	3	11	0.00	0.00		-2198	-452	-532	-2209
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132	3	11	0.00	0.00		-2165	-2166	-2190	-2189
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212	3	11	0.00	0.00		-879	-882	-968	-965
212	3	11	0.00	0.00		-1045	-1048	-1128	-1125
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212	3	11	0.00	0.00		-1125	-1128	-1206	-1203
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212	3	11	0.00	0.00		-792	-795	-879	-876
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212	3	11	0.00	0.00		-1516	-1519	-1603	-1600
212	3	11	0.00	0.00		-305	-307	-393	-391
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212	3	11	0.00	0.00		-1209	-1212	-1293	-1290
212	3	11	0.00	0.00		-715	-718	-798	-795
212	3	11	0.00	0.00		-564	-573	-653	-644
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212	3	11	0.00	0.00		-471	-473	-552	-550
212	3	11	0.00	0.00		-1367	-1370	-1450	-1447
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212	3	11	0.00	0.00		-1450	-1453	-1533	-1530
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212	3	11	0.00	0.00		-1533	-1542	-1626	-1617
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212	3	11	0.00	0.00		-1212	-1221	-1302	-1293
212	3	11	0.00	0.00		-638	-641	-721	-718
212	3	11	0.00	0.00		-801	-804	-888	-885
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212	3	11	0.00	0.00		-1042	-1045	-1125	-1122
212	3	11	0.00	0.00		-1692	-1694	-1779	-1777
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212	3	11	0.00	0.00		-1519	-1521	-1605	-1603
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212	3	11	0.00	0.00		-1600	-1603	-1692	-1689
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216	3	11	0.00	0.00		-616 -615 -695 -696
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222	3	11	0.00	0.00		-1004 -1007 -1087 -1084
222	3	11	0.00	0.00		-1167 -1170 -1251 -1248
222	3	11	0.00	0.00		-518 -521 -601 -598
222	3	11	0.00	0.00		-1170 -1173 -1254 -1251
222	3	11	0.00	0.00		-1010 -1013 -1093 -1090
222	3	11	0.00	0.00		-1173 -1176 -1257 -1254
222	3	11	0.00	0.00		-360 -363 -447 -444
222	3	11	0.00	0.00		-1176 -1179 -1260 -1257
222	3	11	0.00	0.00		-1016 -1019 -1099 -1096
222	3	11	0.00	0.00		-1248 -1251 -1329 -1326
222	3	11	0.00	0.00		-1489 -1492 -1572 -1569
222	3	11	0.00	0.00		-1329 -1332 -1412 -1409
222	3	11	0.00	0.00		-1572 -1575 -1660 -1657
222	3	11	0.00	0.00		-834 -837 -923 -920
222	3	11	0.00	0.00		-674 -677 -757 -754
222	3	11	0.00	0.00		-837 -840 -926 -923
222	3	11	0.00	0.00		-1335 -1338 -1418 -1415
222	3	11	0.00	0.00		-1578 -1587 -1676 -1663
222	3	11	0.00	0.00		-1418 -1427 -1507 -1498

212	3	11	0.00	0.00		-627 -630 -710 -707
212	3	11	0.00	0.00		-399 -402 -482 -479
212	3	11	0.00	0.00		-1447 -1450 -1530 -1527
212	3	11	0.00	0.00		-1203 -1206 -1287 -1284
216	3	11	0.00	0.00		-856 -855 -945 -946
216	3	11	0.00	0.00		-617 -616 -696 -697
216	3	11	0.00	0.00		-377 -376 -456 -457
216	3	11	0.00	0.00		-1187 -1186 -1265 -1266
216	3	11	0.00	0.00		-376 -375 -455 -456
216	3	11	0.00	0.00		-944 -943 -1023 -1024
216	3	11	0.00	0.00		-455 -454 -534 -535
216	3	11	0.00	0.00		-1104 -1103 -1183 -1184
216	3	11	0.00	0.00		-945 -944 -1024 -1025
216	3	11	0.00	0.00		-857 -856 -946 -947
216	3	11	0.00	0.00		-456 -455 -535 -536
216	3	11	0.00	0.00		-1106 -1105 -1185 -1186
216	3	11	0.00	0.00		-855 -854 -944 -945
216	3	11	0.00	0.00		-947 -946 -1026 -1027
216	3	11	0.00	0.00		-614 -613 -693 -694
216	3	11	0.00	0.00		-457 -456 -536 -537
216	3	11	0.00	0.00		-1023 -1022 -1102 -1103
216	3	11	0.00	0.00		-1186 -1185 -1264 -1265
216	3	11	0.00	0.00		-693 -692 -772 -773
216	3	11	0.00	0.00		-1184 -1183 -1262 -1263
216	3	11	0.00	0.00		-853 -852 -942 -943
216	3	11	0.00	0.00		-854 -853 -943 -944
216	3	11	0.00	0.00		-1185 -1184 -1263 -1264
216	3	11	0.00	0.00		-1183 -1182 -1261 -1262
216	3	11	0.00	0.00		-1105 -1104 -1184 -1185
216	3	11	0.00	0.00		-378 -377 -457 -458
216	3	11	0.00	0.00		-374 -373 -453 -454
222	3	11	0.00	0.00		-607 -610 -689 -686
222	3	11	0.00	0.00		-610 -618 -698 -689
222	3	11	0.00	0.00		-1099 -1108 -1188 -1179
222	3	11	0.00	0.00		-521 -524 -604 -601
222	3	11	0.00	0.00		-432 -435 -515 -512
222	3	11	0.00	0.00		-348 -351 -435 -432
222	3	11	0.00	0.00		-527 -530 -610 -607
222	3	11	0.00	0.00		-1657 -1660 -1749 -1746
222	3	11	0.00	0.00		-450 -459 -539 -530
222	3	11	0.00	0.00		-1019 -1028 -1108 -1099
222	3	11	0.00	0.00		-831 -834 -920 -917
222	3	11	0.00	0.00		-671 -674 -754 -751
222	3	11	0.00	0.00		-435 -438 -518 -515
222	3	11	0.00	0.00		-438 -441 -521 -518
222	3	11	0.00	0.00		-677 -680 -760 -757
222	3	11	0.00	0.00		-840 -843 -929 -926
222	3	11	0.00	0.00		-680 -683 -763 -760
222	3	11	0.00	0.00		-843 -846 -932 -929
222	3	11	0.00	0.00		-447 -450 -530 -527
222	3	11	0.00	0.00		-530 -539 -618 -610
222	3	11	0.00	0.00		-1081 -1084 -1164 -1161
222	3	11	0.00	0.00		-917 -920 -1004 -1001
222	3	11	0.00	0.00		-1084 -1087 -1167 -1164
222	3	11	0.00	0.00		-920 -923 -1007 -1004
222	3	11	0.00	0.00		-1087 -1090 -1170 -1167
222	3	11	0.00	0.00		-923 -926 -1010 -1007
222	3	11	0.00	0.00		-1090 -1093 -1173 -1170
222	3	11	0.00	0.00		-926 -929 -1013 -1010
222	3	11	0.00	0.00		-444 -447 -527 -524
222	3	11	0.00	0.00		-929 -932 -1016 -1013
222	3	11	0.00	0.00		-1096 -1099 -1179 -1176
222	3	11	0.00	0.00		-932 -935 -1019 -1016
222	3	11	0.00	0.00		-1569 -1572 -1657 -1654
222	3	11	0.00	0.00		-1409 -1412 -1492 -1489
222	3	11	0.00	0.00		-1251 -1254 -1332 -1329
222	3	11	0.00	0.00		-1492 -1495 -1575 -1572
222	3	11	0.00	0.00		-1007 -1010 -1090 -1087
222	3	11	0.00	0.00		-595 -598 -677 -674
222	3	11	0.00	0.00		-1415 -1418 -1498 -1495
222	3	11	0.00	0.00		-760 -763 -843 -840
222	3	11	0.00	0.00		-1498 -1507 -1587 -1578
222	3	11	0.00	0.00		-1338 -1347 -1427 -1418

222	3	11	0.00	0.00		-683 -686 -766 -763	222	3	11	0.00	0.00		-604 -607 -686 -683
222	3	11	0.00	0.00		-846 -849 -935 -932	222	3	11	0.00	0.00		-766 -769 -849 -846
222	3	11	0.00	0.00		-686 -689 -769 -766	222	3	11	0.00	0.00		-1836 -1845 771 -1914
222	3	11	0.00	0.00		-1752 -1765 -1845 -1836	222	3	11	0.00	0.00		-512 -515 -595 -592
222	3	11	0.00	0.00		-1821 -1824 -2283 -1899	222	3	11	0.00	0.00		-1737 -1740 -1824 -1821
222	3	11	0.00	0.00		-1824 -1827 -1905 -2283	222	3	11	0.00	0.00		-1734 -1737 -1821 -1818
222	3	11	0.00	0.00		-1560 -1563 -1648 -1645	222	3	11	0.00	0.00		-1480 -1483 -1563 -1560
222	3	11	0.00	0.00		-1400 -1403 -1483 -1480	222	3	11	0.00	0.00		-1320 -1323 -1403 -1400
222	3	11	0.00	0.00		-1242 -1245 -1323 -1320	222	3	11	0.00	0.00		-1563 -1566 -1651 -1648
222	3	11	0.00	0.00		-1483 -1486 -1566 -1563	222	3	11	0.00	0.00		-1403 -1406 -1486 -1483
222	3	11	0.00	0.00		-1323 -1326 -1406 -1403	222	3	11	0.00	0.00		-1245 -1248 -1326 -1323
222	3	11	0.00	0.00		-1566 -1569 -1654 -1651	222	3	11	0.00	0.00		-1486 -1489 -1569 -1566
222	3	11	0.00	0.00		-1406 -1409 -1489 -1486	222	3	11	0.00	0.00		-1326 -1329 -1409 -1406
222	3	11	0.00	0.00		-1746 -1749 -1833 -1830	222	3	11	0.00	0.00		-1827 -1830 -2282 -1905
222	3	11	0.00	0.00		-1743 -1746 -1830 -1827	222	3	11	0.00	0.00		-1830 -1833 -1911 -2282
222	3	11	0.00	0.00		-1740 -1743 -1827 -1824	222	3	11	0.00	0.00		-1645 -1648 -1737 -1734
222	3	11	0.00	0.00		-1093 -1096 -1176 -1173	222	3	11	0.00	0.00		-1013 -1016 -1096 -1093
222	3	11	0.00	0.00		-1412 -1415 -1495 -1492	222	3	11	0.00	0.00		-1332 -1335 -1415 -1412
222	3	11	0.00	0.00		-1254 -1257 -1335 -1332	222	3	11	0.00	0.00		-1575 -1578 -1663 -1660
222	3	11	0.00	0.00		-1495 -1498 -1578 -1575	222	3	11	0.00	0.00		-1654 -1657 -1746 -1743
222	3	11	0.00	0.00		-1651 -1654 -1743 -1740	222	3	11	0.00	0.00		-1257 -1260 -1338 -1335
222	3	11	0.00	0.00		-1648 -1651 -1740 -1737	222	3	11	0.00	0.00		-1833 -1836 -1914 -1911
222	3	11	0.00	0.00		-1660 -1663 -1752 -1749	222	3	11	0.00	0.00		-754 -757 -837 -834
222	3	11	0.00	0.00		-1260 -1267 -1347 -1338	222	3	11	0.00	0.00		-1749 -1752 -1836 -1833
222	3	11	0.00	0.00		-1818 -1821 -1899 -1896	222	3	11	0.00	0.00		-1663 -1676 -1765 -1752
1131	4	22	0.00	0.00		-1655 -1744 -1741 -1652	1131	4	22	0.00	0.00		-1751 -1835 -1831 -1747
1131	4	22	0.00	0.00		-1493 -1573 -1570 -1490	1131	4	22	0.00	0.00		-1744 -1828 -1825 -1741
1131	4	22	0.00	0.00		-1490 -1570 -1567 -1487	1131	4	22	0.00	0.00		-1333 -1413 -1410 -1330
1131	4	22	0.00	0.00		-1658 -1747 -1744 -1655	1131	4	22	0.00	0.00		-1570 -1655 -1652 -1567
1131	4	22	0.00	0.00		-1330 -1410 -1407 -1327	1131	4	22	0.00	0.00		-1252 -1330 -1327 -1249
1131	4	22	0.00	0.00		-1410 -1490 -1487 -1407	1131	4	22	0.00	0.00		441 -1340 -1337 -1259
1131	4	22	0.00	0.00		-1340 -1420 -1417 -1337	1131	4	22	0.00	0.00		-1420 -1500 -1497 -1417
1131	4	22	0.00	0.00		-1747 -1831 -1828 -1744	1131	4	22	0.00	0.00		-1668 -1757 -1751 -1662
1131	4	22	0.00	0.00		-1662 -1751 -1747 -1658	1131	4	22	0.00	0.00		-1580 -1668 -1662 -1577
1131	4	22	0.00	0.00		-1337 -1417 -1413 -1333	1131	4	22	0.00	0.00		-1417 -1497 -1493 -1413
1131	4	22	0.00	0.00		-1497 -1577 -1573 -1493	1131	4	22	0.00	0.00		-1757 -1838 -1835 -1751
1131	4	22	0.00	0.00		-1255 -1333 -1330 -1252	1131	4	22	0.00	0.00		-1500 -1580 -1577 -1497
1131	4	22	0.00	0.00		-1413 -1493 -1490 -1410	1131	4	22	0.00	0.00		-1259 -1337 -1333 -1255
1131	4	22	0.00	0.00		-1573 -1658 -1655 -1570	1131	4	22	0.00	0.00		-1577 -1662 -1658 -1573
1141	4	22	0.00	0.00		-1349 -2134 -2135 -1429	1141	4	22	0.00	0.00		-1197 -1201 -2140 -2133
1141	4	22	0.00	0.00		-2138 -2145 -2146 -2139	1141	4	22	0.00	0.00		-1201 -1204 -2154 -2140
1141	4	22	0.00	0.00		-2140 -2154 -2155 -2141	1141	4	22	0.00	0.00		-1681 -2138 -2139 -1767
1141	4	22	0.00	0.00		-2145 -2159 -2160 -2146	1141	4	22	0.00	0.00		-2137 -2144 -2145 -2138
1141	4	22	0.00	0.00		-1592 -2137 -2138 -1681	1141	4	22	0.00	0.00		-2158 -1612 -1701 -2159
1141	4	22	0.00	0.00		-2157 -1528 -1612 -2158	1141	4	22	0.00	0.00		-2134 -2141 -2142 -2135
1141	4	22	0.00	0.00		-2159 -1701 -1786 -2160	1141	4	22	0.00	0.00		-1429 -2135 -2136 -1509
1141	4	22	0.00	0.00		-1509 -2136 -2137 -1592	1141	4	22	0.00	0.00		-2155 -1368 -1448 -2156
1141	4	22	0.00	0.00		405 -1197 -2133 -1269	1141	4	22	0.00	0.00		-1269 -2133 -2134 -1349
1141	4	22	0.00	0.00		-2133 -2140 -2141 -2134	1141	4	22	0.00	0.00		-2142 -2156 -2157 -2143
1141	4	22	0.00	0.00		-2136 -2143 -2144 -2137	1141	4	22	0.00	0.00		-2154 -1288 -1368 -2155
1141	4	22	0.00	0.00		-2135 -2142 -2143 -2136	1141	4	22	0.00	0.00		-1204 -1207 -1288 -2154
1141	4	22	0.00	0.00		-2143 -2157 -2158 -2144	1141	4	22	0.00	0.00		-2156 -1448 -1528 -2157
1141	4	22	0.00	0.00		-2141 -2155 -2156 -2142	1141	4	22	0.00	0.00		-2144 -2158 -2159 -2145
11311	4	22	0.00	0.00		-1838 541 -1913 -1835	11311	4	22	0.00	0.00		-1831 -1909 -1906 -1828
11311	4	22	0.00	0.00		-1828 -1906 -1903 -1825	11311	4	22	0.00	0.00		-1835 -1913 -1909 -1831
11411	4	22	0.00	0.00		-1767 -2139 -1855 505	11411	4	22	0.00	0.00		-2139 -2146 -1859 -1855
11411	4	22	0.00	0.00		-2146 -2160 -2040 -1859	11411	4	22	0.00	0.00		-2160 -1786 -1865 -2040

Elenco tipi solai

Simbologia

Comm. = Commento
 Crit. = Numero del criterio di progetto
 Hs = Altezza solaio
 Lfl = Larghezza fascia laterale
 QA = Primo carico accidentale
 QA2 = Secondo carico accidentale
 QA3 = Terzo carico accidentale
 Qpn = Carico permanente non strutturale
 Qps = Carico permanente strutturale
 Rc = Ripartizione carichi
 UN = Unidirezionale
 Rip. int. = Ripartizione su aste interne
 Rip. ter. = Ripartizione su aste terminali
 Sc = Spessore cappa

Ts =Numero del tipo solaio
s =Coeff. di riduzione

Ts	Comm.	Rc	Qps <daN/mq>	Qpn <daN/mq>	QA <daN/mq>	QA2 <daN/mq>	QA3 <daN/mq>	Rip. ter.	Rip. int.	Lf1 <m>	s	Hs <cm>	Sc <cm>	Crit.
2	Copertura	UN	215.00	120.00	0.00	50.00	48.00	50.00	50.00	0.00	0.33	16.00	4.00	1
6	Solaio Mensa-Cucina	UN	285.00	145.00	300.00	0.00	0.00	50.00	50.00	0.40	0.33	20.00	4.00	1
7	Scale	UN	500.00	100.00	400.00	0.00	0.00	50.00	50.00	0.00	0.33	15.00	15.00	1
8	Solaio tipo REI120	UN	360.00	175.00	300.00	0.00	0.00	50.00	50.00	0.40	0.33	16.00	4.00	1
9	Copertura sbalzo	UN	30.00	30.00	0.00	50.00	50.00	50.00	50.00	0.00	0.33	16.00	4.00	1

Elenco solai

Simbologia
Nodi =Nodi del solaio
Ord. = Orditura
Sol. = Numero del solaio
Ts = Numero del tipo solaio

Sol.	Ts	Ord. <grad>	Nodi
100	8	0.00	-336 102 -328 -327
101	7	0.00	-93 -94 -344 -337
102	8	0.00	-344 101 -348 -351 -354 -357 -360 -363 -366 -379 -378
103	7	0.00	-336 102 101 -344 -337
200	8	90.00	205 -2233 -2232 -2231 -2230 -2229 -2228 -2227 -2226 -2225 -2224 -2223 206 -575 213 -574 -565 -562 -559 -556 -553 -549
201	8	90.00	230 -589 242 -2185 -2184 -2183 -2182 -2181 -2180 -2179 -2178 -2177 -2176 -2175 241 -609 -605 -602 -599 -596 -593 -590
202	8	0.00	213 -575 220 -589 230
203	7	90.00	-337 -582 -576 -336
204	8	0.00	-612 -613 -614 -615 -616 -617 -588 -587 -586 -585 -584 -583 -2259
205	8	0.00	-541 -542 -543 -544 -545 -546 -547 -550 -552 -555 -558 -561 -564 -573 -572 -571 -570 -569 -568 - 567
206	8	0.00	-589 -2259 -612 242
207	8	0.00	-575 -2258 -576 -582 -583 -2259 -589 220
208	8	0.00	206 -541 -567 -2258 -575
300	7	90.00	-905 301 302 -913 -906
301	7	0.00	-582 -583 -913 -906
400	6	0.00	401 -1196 -1199 -1202 -1205 -1208 -1211 -1214 -1241 -1244 -1247 -1250 -1253 -1256 -1258 437 438 402
401	6	0.00	402 403 439 438
402	6	0.00	403 404 440 439
403	8	90.00	405 406 -1223 413 -1222 -1213 -1210 -1207 -1204 -1201 -1197
404	6	0.00	404 440 441 -1259 -1255 -1252 -1249 -1246 -1243 -1240 430 -1232 413 -1222 -1213 -1210 -1207 -1204 -1201 -1197 405
405	8	0.00	-1239 -2257 -1261 442
406	8	0.00	-1261 -1262 -1263 -1264 -1265 -1266 -1267 -1260 -1257 -1254 -1251 -1248 -1245 -1242 443 -1238 - 1237 -1236 -1235 -1234 -1233 -2257
407	8	0.00	-1189 -1190 -1191 -1192 -1193 -1194 -1195 -1198 -1200 -1203 -1206 -1209 -1212 -1221 -1230 -1229 - 1220 -1219 -1218 -1217 -1216 -1215
408	8	90.00	430 -1239 442 441 -1259 -1255 -1252 -1249 -1246 -1243 -1240
409	8	90.00	413 -1223 420 -1239 430 -1232
410	7	90.00	-905 -990 -1069 -1148 -1225 -2119 -2120 -2121 -2122 -906
411	7	90.00	-1225 -1224 -1231 -2119
412	8	0.00	-1223 -2256 -1224 -1231 -1233 -2257 -1239 420
413	8	0.00	406 -1189 -1215 -2256 -1223
500	2	90.00	504 505 -1855 -1859 -2040 509
501	2	90.00	503 504 509 508
502	2	90.00	502 503 508 507
503	2	90.00	-1857 -1854 501 502 507 -2268 -2039
504	2	90.00	-2040 -1865 -1871 649 645
505	2	90.00	508 509 512 511
506	2	90.00	507 508 511 510
507	2	90.00	-1863 -2039 -2268 507 510 -2267 -2075
508	2	90.00	512 -1871 -2163 -1880 513 654 516
509	2	90.00	511 512 516 515
510	2	90.00	510 511 515 514
511	2	90.00	-1872 -1869 -2075 -2267 510 514 -2266 653
512	2	90.00	516 654 664 519
513	2	90.00	515 516 519 518
514	2	90.00	514 515 518 517
515	2	90.00	653 -2266 514 517 -2260 663
516	2	90.00	519 664 674 523
517	2	90.00	518 519 523 522

518	2	90.00	517 518 522 521
519	2	90.00	663 -2260 517 521 -2261 673
520	2	90.00	523 674 669 526
521	2	90.00	522 523 526 525
522	2	90.00	521 522 525 524
523	2	90.00	673 -2261 521 524 -2265 668
524	2	90.00	526 669 659 529
525	2	90.00	525 526 529 528
526	2	90.00	524 525 528 527
527	2	90.00	668 -2265 524 527 -2264 658
528	2	90.00	529 659 530 -1894 -1897 -1900 533
529	2	90.00	528 529 533 532
530	2	90.00	649 655 656 -1873 650
531	2	90.00	527 528 532 531
532	2	90.00	-1898 -1895 658 -2264 527 531 -2263 -2078
533	2	90.00	533 -1900 -1903 -1906 536
534	2	90.00	532 533 536 535
535	2	90.00	531 532 535 534
536	2	90.00	-1904 -2078 -2263 531 534 -2262 -2042
537	2	90.00	540 541 -1913 -1909 -1906 536
538	2	90.00	539 540 536 535
539	2	90.00	-1900 -1903 -1906 647 651
540	2	90.00	538 539 535 534
541	2	90.00	-1871 -2163 -1880 513 654 655 649
542	2	90.00	509 -2040 -1865 -1871 512
543	2	90.00	654 664 665 655
544	2	90.00	664 674 620 665
545	2	90.00	674 669 670 620
546	2	90.00	669 659 660 670
547	2	90.00	647 -1915 -1916 648
548	2	90.00	659 530 -1894 -1897 -1900 651 660
549	2	90.00	537 538 534 -2262 -2042 -1910 -1912
550	2	90.00	505 -1855 -1859 -2040 645 -1846
551	2	90.00	645 649 650 646
552	2	90.00	656 -1881 666 -2126 -2277 667 657 -2271 -2125
553	2	90.00	666 675 -2127 -2276 676 667 -2277 -2126
554	2	90.00	665 620 675 666
555	2	90.00	620 670 671 675
556	2	90.00	661 652 -2130 -2274 -2283 -1899 -1896 662 -2273 -2129
557	2	90.00	660 651 652 661
558	2	90.00	651 647 648 652
559	2	90.00	-1847 646 -2123 -2269 -2284 -1858 -1856 772 -1852 -1851
560	2	90.00	-1846 645 646 -1847
561	2	90.00	646 650 -2124 -2270 -2285 -1864 -2284 -2269 -2123
562	2	90.00	650 -1873 656 -2125 -2271 657 -1879 -1870 -2285 -2270 -2124
563	2	90.00	655 665 666 -1881 656
564	2	90.00	675 671 -2128 -2272 672 676 -2276 -2127
565	2	90.00	671 -1888 661 -2129 -2273 662 672 -2272 -2128
566	2	90.00	670 660 661 -1888 671
567	2	90.00	-1906 -1909 -1913 541 -1915 647
568	2	90.00	652 648 -2131 -2275 -2282 -1905 -2283 -2274 -2130
569	2	90.00	648 -1916 -1920 -1921 771 -1914 -1911 -2282 -2275 -2131
600	9	90.00	638 678 644 639
601	9	90.00	639 644 677 640
602	9	90.00	641 603 604 642
603	9	90.00	641 643 602 603
604	9	90.00	638 681 679 678
605	9	90.00	602 643 680 682
606	9	90.00	642 685 683 604
607	9	90.00	685 689 687 683
608	9	90.00	689 693 691 687
609	9	90.00	693 697 695 691
610	9	90.00	684 640 677 686
611	9	90.00	688 684 686 690
612	9	90.00	692 688 690 694
613	9	90.00	696 692 694 698
614	9	90.00	681 717 719 679
615	9	90.00	707 708 717 681
616	9	90.00	706 709 708 707
617	9	90.00	705 710 709 706
618	9	90.00	704 711 710 705
619	9	90.00	703 712 711 704
620	9	90.00	702 713 712 703

621	9	90.00	701 714 713 702
622	9	90.00	700 715 714 701
623	9	90.00	699 716 715 700
624	9	90.00	682 718 716 699
625	9	90.00	680 720 718 682
626	9	270.00	696 767 769 698
627	9	270.00	757 758 767 696
628	9	270.00	756 759 758 757
629	9	270.00	755 760 759 756
630	9	270.00	754 761 760 755
631	9	270.00	782 762 761 754
632	9	270.00	781 763 762 782
633	9	270.00	780 764 763 781
634	9	270.00	779 765 764 780
635	9	270.00	778 766 765 779
636	9	270.00	695 768 766 778
637	9	270.00	697 770 768 695

Carichi

Elenco tipi CCE

Simbologia

γ_{max} =Coeff. γ_{max}
 $\gamma_{min.}$ =Coeff. $\gamma_{min.}$
 Ψ_0 =Coeff. Ψ_0
 $\Psi_{0,s}$ =Coeff. Ψ_0 sismico (D.M. 96)
 Ψ_1 =Coeff. Ψ_1
 Ψ_2 =Coeff. Ψ_2
Comm. =Commento
Durata =Durata del carico
P = Permanente
L = Lunga
M = Media
B = Breve
Tipo =Tipologia
G = Permanente
Qv = Variabile vento
Q = Variabile
Tipo CCE =Tipo condizione di carico elementare

Tipo CCE	Comm.	Tipo	Durata	$\gamma_{min.}$	γ_{max}	Ψ_0	Ψ_1	Ψ_2	$\Psi_{0,s}$
1	D.M. 18 Permanenti strutturali	G	P	1.00	1.30				
2	D.M. 18 Permanenti non strutturali	G	L	0.80	1.30				
5	D.M. 18 Variabili Categoria C - Ambienti suscettibili di affollamento	Q	M	0.00	1.50	0.70	0.70	0.60	0.00
19	D.M. 18 Variabili Categoria H - Coperture accessibili per sola manutenzione	Q	M	0.00	1.50	0.00	0.00	0.00	1.00
12	D.M. 18 Variabili Neve (a quota <= 1000 m s.l.m.)	Q	M	0.00	1.50	0.50	0.20	0.00	0.00
11	D.M. 18 Variabili Vento	Qv	B	0.00	1.50	0.60	0.20	0.00	0.00

Condizioni di carico elementari

Simbologia

CCE =Numero della condizione di carico elementare
Comm. =Commento
Dir. =Direzione del vento
Jpx =Moltiplicatore del momento d'inerzia intorno all'asse X
Jpy =Moltiplicatore del momento d'inerzia intorno all'asse Y
Jpz =Moltiplicatore del momento d'inerzia intorno all'asse Z
Mx =Moltiplicatore della massa in dir. X
My =Moltiplicatore della massa in dir. Y
Mz =Moltiplicatore della massa in dir. Z
Sic. =Contributo alla sicurezza
S = a sfavore
Tipo =Tipologia di pressione vento
M = Massimizzata
E = Esterna
I = Interna
Tipo CCE =Tipo di CCE per calcolo agli stati limite
Var. =Tipo di variabilità
B = di base
A = ambigua
s =Coeff. di riduzione (T.A. o S.L. D.M. 96)

CCE	Comm.	Tipo CCE	Sic.	Var.	s	Dir. <grad>	Tipo	Mx	My	Mz	Jpx	Jpy	Jpz
1	PS	1	S	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
2	PNS	2	S	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
3	Cat.C	5	S	A	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
4	Cat.H	19	S	A	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00

5	Neve	12	S	A	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
6	VENTO	11	S	A	1.00	0.00	M	--	--	--	--	--	--

Elenco carichi nodi**Condizione di carico n. 1: PS**
Masse concentrate

Simbologia
 Jpx =Massa rotazionale intorno all'asse X
 Jpy =Massa rotazionale intorno all'asse Y
 Jpz =Massa rotazionale intorno all'asse Z
 Mx =Massa traslazionale in dir. X
 My =Massa traslazionale in dir. Y
 Mz =Massa traslazionale in dir. Z
 Nodo =Numero del nodo

Nodo	Mx <kg>	My <kg>	Mz <kg>	Jpx <kg*mq>	Jpy <kg*mq>	Jpz <kg*mq>	Nodo	Mx <kg>	My <kg>	Mz <kg>	Jpx <kg*mq>	Jpy <kg*mq>	Jpz <kg*mq>
-1896	3800.00	3800.00	0.00	0.00	0.00	0.00	-1895	3800.00	3800.00	0.00	0.00	0.00	0.00
-1851	3800.00	3800.00	0.00	0.00	0.00	0.00	-1846	3800.00	3800.00	0.00	0.00	0.00	0.00
-1242	9500.00	9500.00	0.00	0.00	0.00	0.00	-1241	11000.00	11000.00	0.00	0.00	0.00	0.00
-1195	9500.00	9500.00	0.00	0.00	0.00	0.00	-1193	9500.00	9500.00	0.00	0.00	0.00	0.00
-917	9500.00	9500.00	0.00	0.00	0.00	0.00	-547	9500.00	9500.00	0.00	0.00	0.00	0.00
-541	9500.00	9500.00	0.00	0.00	0.00	0.00	205	9500.00	9500.00	0.00	0.00	0.00	0.00
206	9500.00	9500.00	0.00	0.00	0.00	0.00	401	11000.00	11000.00	0.00	0.00	0.00	0.00
402	11000.00	11000.00	0.00	0.00	0.00	0.00	403	11000.00	11000.00	0.00	0.00	0.00	0.00
404	11000.00	11000.00	0.00	0.00	0.00	0.00	405	11000.00	11000.00	0.00	0.00	0.00	0.00
406	9500.00	9500.00	0.00	0.00	0.00	0.00	501	3800.00	3800.00	0.00	0.00	0.00	0.00
502	3800.00	3800.00	0.00	0.00	0.00	0.00	503	3800.00	3800.00	0.00	0.00	0.00	0.00
504	3800.00	3800.00	0.00	0.00	0.00	0.00	505	3800.00	3800.00	0.00	0.00	0.00	0.00
772	3800.00	3800.00	0.00	0.00	0.00	0.00							

Elenco carichi aste**Condizione di carico n. 1: PS**
Elenco peso proprio aste

Simbologia
 A =Area
 Comm. = Commento
 Mat. =Materiale
 P =Peso specifico
 PL =Peso specifico a metro lineare
 Sez. =Numero della sezione

Sez.	Comm.	A <cmq>	Mat.	P <daN/mc>	PL <daN/m>
1	PIL 40x60	2400.000000	Calcestruzzo classe C20/25 FESSURATO	2500.00	600.00
3	TR 40x100	4000.000000	Calcestruzzo classe C20/25 FESSURATO	2500.00	1000.00
4	TR 35x110	3300.000000	Calcestruzzo classe C20/25 FESSURATO	2500.00	825.00
6	PIL 40x40	1600.000000	Calcestruzzo classe C20/25 FESSURATO	2500.00	400.00
7	TR 40x50	2000.000000	Calcestruzzo classe C20/25 FESSURATO	2500.00	500.00
17	TR 35x90	2700.000000	Calcestruzzo classe C20/25 FESSURATO	2500.00	675.00
18	PILn 40x40	1600.000000	Calcestruzzo classe C25/30	2500.00	400.00
19	TRn 40x60	2400.000000	Calcestruzzo classe C25/30	2500.00	600.00
20	HEA100	21.236900	Acciaio	7850.00	16.67
21	TRn 30x60	1800.000000	Calcestruzzo classe C25/30	2500.00	450.00
23	2UPN160	48.029000	Acciaio	7850.00	37.70
24	IPE240	39.117400	Acciaio	7850.00	30.71
27	TRn 60x24	1440.000000	Calcestruzzo classe C25/30	2500.00	360.00
28	PILn 30X30	900.000000	Calcestruzzo classe C25/30	2500.00	225.00
29	TRn 30x24	720.000000	Calcestruzzo classe C25/30	2500.00	180.00
30	TRn 20x24	480.000000	Calcestruzzo classe C25/30	2500.00	120.00
31	TRn 30x40	1200.000000	Calcestruzzo classe C25/30	2500.00	300.00
32	TRn 40x50	2000.000000	Calcestruzzo classe C25/30	2500.00	500.00
33	HEA140	31.416900	Acciaio	7850.00	24.66
34	TRn 20x20	400.000000	Calcestruzzo classe C25/30	2500.00	100.00
35	TRn 25x24	600.000000	Calcestruzzo classe C25/30	2500.00	150.00
37	2UPN100	26.907500	Acciaio	7850.00	21.12
38	PIL 40x40	1600.000000	Pilastri inseriti nei setti	10.00	1.60

Condizione di carico n. 1: PS
Carichi distribuiti

Simbologia
 Asta =Numero dell'asta
 DC =Direzione del carico
 XG,YG,ZG = secondo gli assi globali

XL,YL,ZL = secondo gli assi locali
 E = Elemento provenienza del carico
 S = Solaio
 T = Tamponatura
 N1 = Nodo iniziale
 N2 = Nodo finale
 NE = Numero elemento di provenienza del carico
 Qf = Carico finale
 Qi = Carico iniziale
 T = Tipo di carico
 QA = Primo carico accidentale
 QA2 = Secondo carico accidentale
 QA3 = Terzo carico accidentale
 QPS = Carico permanente strutturale
 QPN = Carico permanente non strutturale
 VE = Vento
 M = Manuale
 Xf = Distanza finale
 Xi = Distanza iniziale

Asta	N1	N2	E	NE	T	DC	Xi <m>	Qi <daN/m>	Xf <m>	Qf <daN/m>
0	401	-1196	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	-1199	-1202	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	-1205	-1208	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	-1208	-1211	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	718	682	S	624	QPS	ZG	0.00	19.70	1.50	19.70
0	699	716	S	623	QPS	ZG	0.00	19.50	1.50	19.50
0	680	643	S	605	QPS	ZG	0.00	21.20	6.30	21.20
0	700	715	S	623	QPS	ZG	0.00	19.50	1.50	19.50
0	-2268	-2039	S	507	QPS	ZG	0.00	137.60	1.30	137.60
0	-2267	-2075	S	511	QPS	ZG	0.00	137.60	1.30	137.60
0	701	714	S	622	QPS	ZG	0.00	19.35	1.50	19.35
0	-2266	653	S	511	QPS	ZG	0.00	137.60	1.30	137.60
0	507	-2268	S	503	QPS	ZG	0.00	137.60	5.00	137.60
0	510	-2267	S	507	QPS	ZG	0.00	137.60	5.00	137.60
0	643	641	S	603	QPS	ZG	0.00	21.20	6.10	21.20
0	702	713	S	620	QPS	ZG	0.00	19.21	1.50	19.21
0	-1244	-1247	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	-2261	673	S	523	QPS	ZG	0.00	137.60	1.30	137.60
0	703	712	S	620	QPS	ZG	0.00	19.21	1.50	19.21
0	-2260	663	S	519	QPS	ZG	0.00	137.60	1.30	137.60
0	514	-2266	S	515	QPS	ZG	0.00	137.60	5.00	137.60
0	-2265	668	S	527	QPS	ZG	0.00	137.60	1.30	137.60
0	704	711	S	618	QPS	ZG	0.00	19.25	1.50	19.25
0	517	-2260	S	515	QPS	ZG	0.00	137.60	5.00	137.60
0	602	603	S	603	QPS	ZG	0.00	21.20	6.10	21.20
0	705	710	S	617	QPS	ZG	0.00	19.35	1.50	19.35
0	-2264	658	S	527	QPS	ZG	0.00	137.60	1.30	137.60
0	511	510	S	506	QPS	ZG	0.00	137.60	6.10	137.60
0	-1258	437	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	706	709	S	617	QPS	ZG	0.00	19.35	1.50	19.35
0	521	-2261	S	523	QPS	ZG	0.00	137.60	5.00	137.60
0	707	708	S	615	QPS	ZG	0.00	19.70	1.50	19.70
0	-1256	-1258	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	-2263	-2078	S	536	QPS	ZG	0.00	137.60	1.30	137.60
0	508	507	S	506	QPS	ZG	0.00	137.60	6.10	137.60
0	524	-2265	S	527	QPS	ZG	0.00	137.60	5.00	137.60
0	717	681	S	615	QPS	ZG	0.00	19.70	1.50	19.70
0	-2262	-2042	S	549	QPS	ZG	0.00	137.60	1.30	137.60
0	527	-2264	S	532	QPS	ZG	0.00	137.60	5.00	137.60
0	515	514	S	514	QPS	ZG	0.00	137.60	6.10	137.60
0	531	-2263	S	532	QPS	ZG	0.00	137.60	5.00	137.60
0	518	517	S	514	QPS	ZG	0.00	137.60	6.10	137.60
0	534	-2262	S	536	QPS	ZG	0.00	137.60	5.00	137.60
0	603	604	S	602	QPS	ZG	0.00	21.20	6.10	21.20
0	522	521	S	522	QPS	ZG	0.00	137.60	6.10	137.60
0	509	508	S	501	QPS	ZG	0.00	137.60	6.10	137.60
0	525	524	S	522	QPS	ZG	0.00	137.60	6.10	137.60
0	679	678	S	604	QPS	ZG	0.00	21.20	6.30	21.20
0	512	511	S	509	QPS	ZG	0.00	137.60	6.10	137.60
0	528	527	S	531	QPS	ZG	0.00	137.60	6.10	137.60
0	535	534	S	540	QPS	ZG	0.00	137.60	6.10	137.60
0	523	522	S	521	QPS	ZG	0.00	137.60	6.10	137.60

Asta	N1	N2	E	NE	T	DC	Xi <m>	Qi <daN/m>	Xf <m>	Qf <daN/m>
0	-1196	-1199	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	-1202	-1205	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	720	680	S	625	QPS	ZG	0.00	21.20	1.50	21.20
0	-1211	-1214	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	718	682	S	625	QPS	ZG	0.00	21.20	1.50	21.20
0	699	716	S	624	QPS	ZG	0.00	19.70	1.50	19.70
0	700	715	S	622	QPS	ZG	0.00	19.35	1.50	19.35
0	-2268	-2039	S	503	QPS	ZG	0.00	137.60	1.30	137.60
0	-2267	-2075	S	507	QPS	ZG	0.00	137.60	1.30	137.60
0	701	714	S	621	QPS	ZG	0.00	19.25	1.50	19.25
0	682	602	S	605	QPS	ZG	0.00	21.20	6.30	21.20
0	-2266	653	S	515	QPS	ZG	0.00	137.60	1.30	137.60
0	507	-2268	S	507	QPS	ZG	0.00	137.60	5.00	137.60
0	510	-2267	S	511	QPS	ZG	0.00	137.60	5.00	137.60
0	-1241	-1244	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	702	713	S	621	QPS	ZG	0.00	19.25	1.50	19.25
0	-2261	673	S	519	QPS	ZG	0.00	137.60	1.30	137.60
0	703	712	S	619	QPS	ZG	0.00	19.21	1.50	19.21
0	-2260	663	S	515	QPS	ZG	0.00	137.60	1.30	137.60
0	514	-2266	S	511	QPS	ZG	0.00	137.60	5.00	137.60
0	-2265	668	S	523	QPS	ZG	0.00	137.60	1.30	137.60
0	-1253	-1256	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	704	711	S	619	QPS	ZG	0.00	19.21	1.50	19.21
0	517	-2260	S	519	QPS	ZG	0.00	137.60	5.00	137.60
0	-1250	-1253	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	705	710	S	618	QPS	ZG	0.00	19.25	1.50	19.25
0	-2264	658	S	532	QPS	ZG	0.00	137.60	1.30	137.60
0	511	510	S	510	QPS	ZG	0.00	137.60	6.10	137.60
0	706	709	S	616	QPS	ZG	0.00	19.50	1.50	19.50
0	521	-2261	S	519	QPS	ZG	0.00	137.60	5.00	137.60
0	-1247	-1250	S	400	QPS	ZG	0.00	841.64	0.47	841.64
0	707	708	S	616	QPS	ZG	0.00	19.50	1.50	19.50
0	-2263	-2078	S	532	QPS	ZG	0.00	137.60	1.30	137.60
0	508	507	S	502	QPS	ZG	0.00	137.60	6.10	137.60
0	524	-2265	S	523	QPS	ZG	0.00	137.60	5.00	137.60
0	717	681	S	614	QPS	ZG	0.00	21.20	1.50	21.20
0	-2262	-2042	S	536	QPS	ZG	0.00	137.60	1.30	137.60
0	527	-2264	S	527	QPS	ZG	0.00	137.60	5.00	137.60
0	515	514	S	510	QPS	ZG	0.00	137.60	6.10	137.60
0	719	679	S	614	QPS	ZG	0.00	21.20	1.50	21.20
0	531	-2263	S	536	QPS	ZG	0.00	137.60	5.00	137.60
0	518	517	S	518	QPS	ZG	0.00	137.60	6.10	137.60
0	534	-2262	S	549	QPS	ZG	0.00	137.60	5.00	137.60
0	522	521	S	518	QPS	ZG	0.00	137.60	6.10	137.60
0	681	638	S	604	QPS	ZG	0.00	21.20	6.30	21.20
0	509	508	S	505	QPS	ZG	0.00	137.60	6.10	137.60
0	525	524	S	526	QPS	ZG	0.00	137.60	6.10	137.60
0	512	511	S	505	QPS	ZG	0.00	137.60	6.10	137.60
0	528	527	S	526	QPS	ZG	0.00	137.60	6.10	137.60
0	535	534	S	535	QPS	ZG	0.00	137.60	6.10	137.60
0	523	522	S	517	QPS	ZG	0.00	137.60	6.10	137.60
0	519	518	S	513	QPS	ZG	0.00	137.60	6.10	137.60

0	519	518	S517	QPS	ZG	0.00	137.60	6.10	137.60
0	641	642	S602	QPS	ZG	0.00	21.20	6.10	21.20
0	516	515	S513	QPS	ZG	0.00	137.60	6.10	137.60
0	532	531	S535	QPS	ZG	0.00	137.60	6.10	137.60
0	-565	-574	S200	QPS	ZG	0.00	144.00	0.47	144.00
0	-549	-553	S200	QPS	ZG	0.00	144.00	0.47	144.00
0	-2233	-2232	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	678	644	S600	QPS	ZG	0.00	21.20	6.10	21.20
0	529	528	S525	QPS	ZG	0.00	137.60	6.10	137.60
0	-553	-556	S200	QPS	ZG	0.00	144.00	0.47	144.00
0	-2040	509	S500	QPS	ZG	0.00	137.60	6.10	137.60
0	526	525	S521	QPS	ZG	0.00	137.60	6.10	137.60
0	-556	-559	S200	QPS	ZG	0.00	144.00	0.47	144.00
0	-2231	-2230	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	-574	213	S200	QPS	ZG	0.00	144.00	0.47	144.00
0	-1871	512	S542	QPS	ZG	0.00	137.60	6.10	137.60
0	533	532	S529	QPS	ZG	0.00	137.60	6.10	137.60
0	-2228	-2227	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	639	640	S601	QPS	ZG	0.00	21.20	6.10	21.20
0	-2226	-2225	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	654	516	S508	QPS	ZG	0.00	137.60	6.10	137.60
0	683	687	S607	QPS	ZG	0.00	21.20	5.89	21.20
0	-2225	-2224	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	644	677	S601	QPS	ZG	0.00	21.20	6.10	21.20
0	-590	-593	S201	QPS	ZG	0.00	144.00	0.47	144.00
0	664	519	S516	QPS	ZG	0.00	137.60	6.10	137.60
0	536	535	S538	QPS	ZG	0.00	137.60	6.10	137.60
0	674	523	S516	QPS	ZG	0.00	137.60	6.10	137.60
0	-2040	645	S504	QPS	ZG	0.00	137.60	5.89	137.60
0	-2223	206	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	-1871	649	S541	QPS	ZG	0.00	137.60	5.89	137.60
0	689	693	S608	QPS	ZG	0.00	21.20	3.97	21.20
0	-593	-596	S201	QPS	ZG	0.00	144.00	0.47	144.00
0	654	655	S543	QPS	ZG	0.00	137.60	5.89	137.60
0	664	665	S543	QPS	ZG	0.00	137.60	5.89	137.60
0	-544	-545	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	-602	-605	S201	QPS	ZG	0.00	144.00	0.47	144.00
0	-2176	-2175	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	669	526	S520	QPS	ZG	0.00	137.60	6.10	137.60
0	659	529	S524	QPS	ZG	0.00	137.60	6.10	137.60
0	-1900	533	S528	QPS	ZG	0.00	137.60	6.10	137.60
0	-1906	536	S533	QPS	ZG	0.00	137.60	6.10	137.60
0	674	620	S544	QPS	ZG	0.00	137.60	5.89	137.60
0	-542	-543	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	669	670	S545	QPS	ZG	0.00	137.60	5.89	137.60
0	-545	-546	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	-1191	-1192	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	649	650	S551	QPS	ZG	0.00	137.60	3.97	137.60
0	-1193	-1194	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	640	684	S610	QPS	ZG	0.00	21.20	6.10	21.20
0	-569	-570	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	-2178	-2177	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	659	660	S548	QPS	ZG	0.00	137.60	5.89	137.60
0	-1900	651	S548	QPS	ZG	0.00	137.60	5.89	137.60
0	-547	-550	S205	QPS	ZG	0.00	589.46	0.47	589.46
0	-550	-552	S205	QPS	ZG	0.00	589.46	0.47	589.46
0	-552	-555	S205	QPS	ZG	0.00	589.46	0.47	589.46
0	-336	-576	S203	QPS	ZG	0.00	680.00	2.72	680.00
0	-1217	-1216	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	-2181	-2180	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	-336	-337	S103	QPS	ZG	0.00	483.34	1.36	483.35
0	-564	-573	S205	QPS	ZG	0.00	589.46	0.47	589.46
0	-337	-344	S103	QPS	ZG	0.00	483.35	1.36	483.34
0	102	101	S103	QPS	ZG	1.36	483.35	2.72	483.34
0	693	697	S609	QPS	ZG	0.00	21.20	4.33	21.20
0	645	646	S551	QPS	ZG	0.00	137.60	3.97	137.60
0	-1195	-1198	S407	QPS	ZG	0.00	626.14	0.47	626.14
0	-1212	-1221	S407	QPS	ZG	0.00	626.14	0.47	626.14
0	650	-2124	S561	QPS	ZG	0.00	137.60	2.40	137.60
0	-1224	-1225	S411	QPS	ZG	0.00	680.00	0.48	680.00
0	-1219	-1218	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	-1220	-1219	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	-2182	-2181	S201	QPS	ZG	0.00	583.40	0.49	583.40

0	-2229	-2228	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	516	515	S509	QPS	ZG	0.00	137.60	6.10	137.60
0	532	531	S531	QPS	ZG	0.00	137.60	6.10	137.60
0	-562	-565	S200	QPS	ZG	0.00	144.00	0.47	144.00
0	205	-2233	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	642	685	S606	QPS	ZG	0.00	21.20	6.10	21.20
0	638	639	S600	QPS	ZG	0.00	21.20	6.10	21.20
0	205	-549	S200	QPS	ZG	0.00	144.00	0.47	144.00
0	529	528	S529	QPS	ZG	0.00	137.60	6.10	137.60
0	-2232	-2231	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	-2040	509	S542	QPS	ZG	0.00	137.60	6.10	137.60
0	526	525	S525	QPS	ZG	0.00	137.60	6.10	137.60
0	-559	-562	S200	QPS	ZG	0.00	144.00	0.47	144.00
0	-2230	-2229	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	-1871	512	S508	QPS	ZG	0.00	137.60	6.10	137.60
0	604	683	S606	QPS	ZG	0.00	21.20	6.10	21.20
0	533	532	S534	QPS	ZG	0.00	137.60	6.10	137.60
0	-596	-599	S201	QPS	ZG	0.00	144.00	0.47	144.00
0	-2227	-2226	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	-2224	-2223	S200	QPS	ZG	0.00	583.40	0.49	583.40
0	654	516	S512	QPS	ZG	0.00	137.60	6.10	137.60
0	-2175	241	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	685	689	S607	QPS	ZG	0.00	21.20	5.89	21.20
0	230	-590	S201	QPS	ZG	0.00	144.00	0.47	144.00
0	664	519	S512	QPS	ZG	0.00	137.60	6.10	137.60
0	536	535	S534	QPS	ZG	0.00	137.60	6.10	137.60
0	-605	-609	S201	QPS	ZG	0.00	144.00	0.47	144.00
0	674	523	S520	QPS	ZG	0.00	137.60	6.10	137.60
0	-2040	645	S550	QPS	ZG	0.00	137.60	5.89	137.60
0	-1871	649	S504	QPS	ZG	0.00	137.60	5.89	137.60
0	-543	-544	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	-541	-542	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	654	655	S541	QPS	ZG	0.00	137.60	5.89	137.60
0	-599	-602	S201	QPS	ZG	0.00	144.00	0.47	144.00
0	664	665	S544	QPS	ZG	0.00	137.60	5.89	137.60
0	-1189	-1190	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	-609	241	S201	QPS	ZG	0.00	144.00	0.47	144.00
0	-2177	-2176	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	669	526	S524	QPS	ZG	0.00	137.60	6.10	137.60
0	659	529	S528	QPS	ZG	0.00	137.60	6.10	137.60
0	-1900	533	S533	QPS	ZG	0.00	137.60	6.10	137.60
0	-1906	536	S537	QPS	ZG	0.00	137.60	6.10	137.60
0	674	620	S545	QPS	ZG	0.00	137.60	5.89	137.60
0	-1190	-1191	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	669	670	S546	QPS	ZG	0.00	137.60	5.89	137.60
0	-567	-568	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	649	650	S530	QPS	ZG	0.00	137.60	3.97	137.60
0	-1192	-1193	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	-2179	-2178	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	677	686	S610	QPS	ZG	0.00	21.20	6.10	21.20
0	-1216	-1215	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	659	660	S546	QPS	ZG	0.00	137.60	5.89	137.60
0	-1900	651	S539	QPS	ZG	0.00	137.60	5.89	137.60
0	-568	-569	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	-570	-571	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	-571	-572	S205	QPS	ZG	0.00	144.00	0.48	144.00
0	-93	-94	S101	QPS	ZG	0.00	707.54	1.36	707.53
0	-336	102	S100	QPS	ZG	0.00	144.00	1.93	144.00
0	-555	-558	S205	QPS	ZG	0.00	589.46	0.47	589.46
0	-558	-561	S205	QPS	ZG	0.00	589.46	0.47	589.46
0	-328	102	S100	QPS	ZG	0.00	188.92	1.75	188.92
0	-337	-344	S101	QPS	ZG	0.00	707.54	1.36	707.53
0	102	101	S103	QPS	ZG	0.00	483.34	1.36	483.35
0	687	691	S608	QPS	ZG	0.00	21.20	3.97	21.20
0	-1218	-1217	S407	QPS	ZG	0.00	144.00	0.48	144.00
0	645	646	S560	QPS	ZG	0.00	137.60	3.97	137.60
0	-1206	-1209	S407	QPS	ZG	0.00	626.14	0.47	626.14
0	-587	-586	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	650	-2124	S562	QPS	ZG	0.00	137.60	2.40	137.60
0	-561	-564	S205	QPS	ZG	0.00	589.46	0.47	589.46
0	-1198	-1200	S407	QPS	ZG	0.00	626.14	0.47	626.14
0	-1203	-1206	S407	QPS	ZG	0.00	626.14	0.47	626.14
0	-584	-583	S204	QPS	ZG	0.00	144.00	0.48	144.00

0	-344	101	S102	QPS	ZG	0.00	144.00	1.93	144.00
0	695	768	S637	QPS	ZG	0.00	21.20	1.50	21.20
0	-990	-1069	S410	QPS	ZG	0.00	680.00	0.63	680.00
0	655	656	S563	QPS	ZG	0.00	137.60	3.97	137.60
0	646	-2123	S559	QPS	ZG	1.92	137.60	2.40	137.60
0	697	770	S637	QPS	ZG	0.00	21.20	1.50	21.20
0	-1148	-1225	S410	QPS	ZG	0.00	680.00	0.63	680.00
0	-905	-990	S410	QPS	ZG	0.00	680.00	0.63	680.00
0	620	675	S554	QPS	ZG	0.00	137.60	3.97	137.60
0	-1906	647	S539	QPS	ZG	0.00	137.60	5.89	137.60
0	-585	-584	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	-1200	-1203	S407	QPS	ZG	0.00	626.14	0.47	626.14
0	-586	-585	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	-2123	-2269	S561	QPS	ZG	0.00	137.60	0.63	137.60
0	-2269	-2284	S561	QPS	ZG	0.00	137.60	1.30	137.60
0	-1209	-1212	S407	QPS	ZG	0.00	626.14	0.47	626.14
0	-2124	-2270	S562	QPS	ZG	0.00	137.60	0.63	137.60
0	-2270	-2285	S562	QPS	ZG	0.00	137.60	1.30	137.60
0	766	778	S636	QPS	ZG	0.00	19.70	1.50	19.70
0	-348	-351	S102	QPS	ZG	0.00	292.92	0.47	292.92
0	665	666	S563	QPS	ZG	0.00	137.60	3.97	137.60
0	656	-2125	S562	QPS	ZG	0.00	137.60	2.40	137.60
0	-2185	-2184	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	-906	-913	S301	QPS	ZG	0.00	733.82	1.36	733.82
0	-616	-615	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	-357	-360	S102	QPS	ZG	0.00	292.92	0.47	292.92
0	-2125	-2271	S552	QPS	ZG	0.00	137.60	0.63	137.60
0	-363	-366	S102	QPS	ZG	0.00	292.92	0.47	292.92
0	670	671	S555	QPS	ZG	0.00	137.60	3.97	137.60
0	666	-2126	S552	QPS	ZG	0.00	137.60	2.40	137.60
0	660	661	S557	QPS	ZG	0.00	137.60	3.97	137.60
0	-1236	-1235	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	-2271	657	S552	QPS	ZG	0.00	137.60	1.30	137.60
0	-1238	-1237	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	765	779	S635	QPS	ZG	0.00	19.50	1.50	19.50
0	-2126	-2277	S552	QPS	ZG	0.00	137.60	0.63	137.60
0	242	-2185	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	651	652	S558	QPS	ZG	0.00	137.60	3.97	137.60
0	-2277	667	S553	QPS	ZG	0.00	137.60	1.30	137.60
0	-614	-613	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	675	-2127	S553	QPS	ZG	0.00	137.60	2.40	137.60
0	764	780	S633	QPS	ZG	0.00	19.25	1.50	19.25
0	-1242	-1245	S406	QPS	ZG	0.00	656.56	0.47	656.56
0	-2127	-2276	S564	QPS	ZG	0.00	137.61	0.63	137.61
0	671	-2128	S564	QPS	ZG	0.00	137.60	2.40	137.60
0	647	648	S547	QPS	ZG	0.00	137.60	3.97	137.60
0	-1245	-1248	S406	QPS	ZG	0.00	656.56	0.47	656.56
0	-2276	676	S564	QPS	ZG	0.00	137.60	1.30	137.60
0	661	-2129	S556	QPS	ZG	0.00	137.60	2.40	137.60
0	763	781	S633	QPS	ZG	0.00	19.25	1.50	19.25
0	-2128	-2272	S565	QPS	ZG	0.00	137.60	0.63	137.60
0	-1254	-1257	S406	QPS	ZG	0.00	656.56	0.47	656.56
0	-2272	672	S565	QPS	ZG	0.00	137.60	1.30	137.60
0	762	782	S632	QPS	ZG	0.00	19.21	1.50	19.21
0	-2129	-2273	S556	QPS	ZG	0.00	137.60	0.63	137.60
0	-2273	662	S556	QPS	ZG	0.00	137.60	1.30	137.60
0	652	-2130	S556	QPS	ZG	0.00	137.60	2.40	137.60
0	690	694	S612	QPS	ZG	0.00	21.20	3.97	21.20
0	761	754	S631	QPS	ZG	0.00	19.21	1.50	19.21
0	-1264	-1263	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	-1266	-1265	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	-1251	-1254	S406	QPS	ZG	0.00	656.56	0.47	656.56
0	648	-2131	S569	QPS	ZG	0.00	137.60	2.40	137.60
0	-1257	-1260	S406	QPS	ZG	0.00	656.56	0.47	656.56
0	-2130	-2274	S568	QPS	ZG	0.00	137.60	0.63	137.60
0	-2274	-2283	S568	QPS	ZG	0.00	137.60	1.30	137.60
0	760	755	S630	QPS	ZG	0.00	19.25	1.50	19.25
0	-2131	-2275	S568	QPS	ZG	0.00	137.60	0.63	137.60
0	-2275	-2282	S569	QPS	ZG	0.00	137.60	1.30	137.60
0	759	756	S628	QPS	ZG	0.00	19.50	1.50	19.50
0	694	698	S613	QPS	ZG	0.00	21.20	4.33	21.20
0	758	757	S628	QPS	ZG	0.00	19.50	1.50	19.50
0	696	767	S626	QPS	ZG	0.00	21.20	1.50	21.20

0	691	695	S609	QPS	ZG	0.00	21.20	4.33	21.20
0	695	768	S636	QPS	ZG	0.00	19.70	1.50	19.70
0	655	656	S530	QPS	ZG	0.00	137.60	3.97	137.60
0	646	-2123	S561	QPS	ZG	0.00	137.60	2.40	137.60
0	646	-2123	S559	QPS	ZG	0.00	137.60	1.92	137.60
0	-2180	-2179	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	-1069	-1148	S410	QPS	ZG	0.00	680.00	0.63	680.00
0	-2184	-2183	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	620	675	S555	QPS	ZG	0.00	137.60	3.97	137.60
0	-1906	647	S567	QPS	ZG	0.00	137.60	5.89	137.60
0	-588	-587	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	684	688	S611	QPS	ZG	0.00	21.20	5.89	21.20
0	101	-348	S102	QPS	ZG	0.00	292.93	1.78	292.92
0	-2123	-2269	S559	QPS	ZG	0.00	137.60	0.63	137.60
0	-2269	-2284	S559	QPS	ZG	0.00	137.60	1.30	137.60
0	-2124	-2270	S561	QPS	ZG	0.00	137.60	0.63	137.60
0	-2270	-2285	S561	QPS	ZG	0.00	137.60	1.30	137.60
0	766	778	S635	QPS	ZG	0.00	19.50	1.50	19.50
0	-2183	-2182	S201	QPS	ZG	0.00	583.40	0.49	583.40
0	665	666	S554	QPS	ZG	0.00	137.60	3.97	137.60
0	656	-2125	S552	QPS	ZG	0.00	137.60	2.40	137.60
0	-1234	-1233	S406	QPS	ZG	0.00	144.00	0.48	144.00
0	686	690	S611	QPS	ZG	0.00	21.20	5.89	21.20
0	-351	-354	S102	QPS	ZG	0.00	292.92	0.47	292.92
0	-354	-357	S102	QPS	ZG	0.00	292.92	0.47	292.92
0	-360	-363	S102	QPS	ZG	0.00	292.92	0.47	292.92
0	-2125	-2271	S562	QPS	ZG	0.00	137.60	0.63	137.60
0	-1235	-1234	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	670	671	S566	QPS	ZG	0.00	137.60	3.97	137.60
0	666	-2126	S553	QPS	ZG	0.00	137.60	2.40	137.60
0	660	661	S566	QPS	ZG	0.00	137.60	3.97	137.60
0	-1237	-1236	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	-2271	657	S562	QPS	ZG	0.00	137.60	1.30	137.60
0	765	779	S634	QPS	ZG	0.00	19.35	1.50	19.35
0	-366	-379	S102	QPS	ZG	0.00	292.92	0.47	292.92
0	-2126	-2277	S553	QPS	ZG	0.00	137.61	0.63	137.61
0	651	652	S557	QPS	ZG	0.00	137.60	3.97	137.60
0	-2277	667	S552	QPS	ZG	0.00	137.60	1.30	137.60
0	-613	-612	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	-615	-614	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	675	-2127	S564	QPS	ZG	0.00	137.60	2.40	137.60
0	764	780	S634	QPS	ZG	0.00	19.35	1.50	19.35
0	-2127	-2276	S553	QPS	ZG	0.00	137.60	0.63	137.60
0	-617	-616	S204	QPS	ZG	0.00	143.98	0.48	143.98
0	671	-2128	S565	QPS	ZG	0.00	137.60	2.40	137.60
0	647	648	S558	QPS	ZG	0.00	137.60	3.97	137.60
0	-2276	676	S553	QPS	ZG	0.00	137.60	1.30	137.60
0	661	-2129	S565	QPS	ZG	0.00	137.60	2.40	137.60
0	763	781	S632	QPS	ZG	0.00	19.21	1.50	19.21
0	-2128	-2272	S564	QPS	ZG	0.00	137.60	0.63	137.60
0	688	692	S612	QPS	ZG	0.00	21.20	3.97	21.20
0	-2272	672	S564	QPS	ZG	0.00	137.60	1.30	137.60
0	762	782	S631	QPS	ZG	0.00	19.21	1.50	19.21
0	-2129	-2273	S565	QPS	ZG	0.00	137.60	0.63	137.60
0	-2273	662	S565	QPS	ZG	0.00	137.60	1.30	137.60
0	-1262	-1261	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	652	-2130	S568	QPS	ZG	0.00	137.60	2.40	137.60
0	761	754	S630	QPS	ZG	0.00	19.25	1.50	19.25
0	-1263	-1262	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	-1265	-1264	S406	QPS	ZG	0.00	143.98	0.48	143.98
0	-1248	-1251	S406	QPS	ZG	0.00	656.56	0.47	656.56
0	-1260	-1267	S406	QPS	ZG	0.00	656.56	0.47	656.56
0	648	-2131	S568	QPS	ZG	0.00	137.60	2.40	137.60
0	-2130	-2274	S556	QPS	ZG	0.00	137.60	0.63	137.60
0	-2274	-2283	S556	QPS	ZG	0.00	137.60	1.30	137.60
0	760	755	S629	QPS	ZG	0.00	19.35	1.50	19.35
0	-2131	-2275	S569	QPS	ZG	0.00	137.60	0.63	137.60
0	692	696	S613	QPS	ZG	0.00	21.20	4.33	21.20
0	-2275	-2282	S568	QPS	ZG	0.00	137.60	1.30	137.60
0	759	756	S629	QPS	ZG	0.00	19.35	1.50	19.35
0	758	757	S629	QPS	ZG	0.00	19.70	1.50	19.70
0	696	767	S627	QPS	ZG	0.00	19.70	1.50	19.70
0	698	769	S626	QPS	ZG	0.00	21.20	1.50	21.20

1016	-379	-378	S102	QPS	ZG	0.00	144.00	1.93	144.00
2001	206	-541	S208	QPS	ZG	0.00	144.00	3.97	144.00
2005	213	-575	S200	QPS	ZG	0.00	583.40	5.89	583.40
2005	-575	-2258	S207	QPS	ZG	0.00	144.00	3.97	144.00
2013	230	-589	S201	QPS	ZG	0.00	583.40	5.89	583.40
2013	-589	-2259	S206	QPS	ZG	0.00	144.00	3.97	144.00
2016	-612	242	S206	QPS	ZG	0.00	144.00	3.97	144.00
2022	206	-575	S200	QPS	ZG	0.00	144.00	3.75	144.00
2022	-575	220	S202	QPS	ZG	0.00	900.93	2.65	900.93
2022	220	-589	S202	QPS	ZG	0.00	900.93	2.65	900.93
2022	-589	242	S201	QPS	ZG	0.00	144.00	3.75	144.00
2023	-541	-567	S205	QPS	ZG	0.00	589.46	3.27	589.46
2023	-567	-2258	S208	QPS	ZG	0.00	562.39	0.47	562.39
2023	-576	-582	S207	QPS	ZG	0.00	607.00	1.36	607.00
2023	-582	-583	S207	QPS	ZG	0.00	607.00	1.36	607.00
2023	-583	-2259	S207	QPS	ZG	0.00	607.00	1.30	607.00
2023	-2259	-612	S206	QPS	ZG	0.00	562.39	3.75	562.39
2024	-617	-588	S204	QPS	ZG	3.75	363.64	5.05	363.63
4001	401	402	S400	QPS	ZG	0.00	114.00	6.30	114.00
4001	403	404	S402	QPS	ZG	0.00	114.00	6.10	114.00
4005	413	-1223	S403	QPS	ZG	0.00	583.40	5.89	583.40
4005	-1223	-2256	S412	QPS	ZG	0.00	144.00	3.97	144.00
4007	-1229	-1230	S407	QPS	ZG	0.00	144.00	1.93	144.00
4013	430	-1239	S408	QPS	ZG	0.00	583.40	5.89	583.40
4013	-1239	-2257	S405	QPS	ZG	0.00	144.00	3.97	144.00
4016	437	438	S400	QPS	ZG	0.00	114.00	6.30	114.00
4016	439	440	S402	QPS	ZG	0.00	114.00	6.10	114.00
4017	-1214	-1241	S400	QPS	ZG	0.00	841.64	6.25	841.64
4018	438	402	S401	QPS	ZG	0.00	814.92	12.80	814.92
4019	439	403	S402	QPS	ZG	0.00	814.92	12.80	814.92
4020	440	404	S404	QPS	ZG	0.00	814.92	12.80	814.92
4021	405	-1197	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1197	-1201	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1201	-1204	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1204	-1207	S404	QPS	ZG	0.00	814.92	0.29	814.92
4021	-1207	-1210	S404	QPS	ZG	0.00	814.92	0.64	814.92
4021	-1210	-1213	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1213	-1222	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1222	413	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	413	-1232	S409	QPS	ZG	0.00	144.00	2.65	144.00
4021	-1232	430	S409	QPS	ZG	0.00	144.00	2.65	144.00
4021	430	-1240	S408	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1240	-1243	S408	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1243	-1246	S408	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1246	-1249	S408	QPS	ZG	0.00	144.00	0.64	144.00
4021	-1249	-1252	S408	QPS	ZG	0.00	144.00	0.29	144.00
4021	-1252	-1255	S408	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1255	-1259	S408	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1259	441	S408	QPS	ZG	0.00	144.00	0.47	144.00
4022	406	-1223	S413	QPS	ZG	0.00	562.39	3.75	562.39
4022	-1223	420	S412	QPS	ZG	0.00	607.00	2.65	607.00
4022	420	-1239	S412	QPS	ZG	0.00	607.00	2.65	607.00
4022	-1239	442	S408	QPS	ZG	0.00	144.00	3.75	144.00
4023	-1189	-1215	S413	QPS	ZG	0.00	562.39	3.27	562.39
4023	-2256	-1224	S412	QPS	ZG	0.00	607.00	1.27	607.00
4023	-1231	-1233	S412	QPS	ZG	0.00	607.00	1.36	607.00
4023	-1233	-2257	S412	QPS	ZG	0.00	607.00	1.30	607.00
4023	-2257	-1261	S406	QPS	ZG	0.00	656.56	3.75	656.56
4026	-1221	-1230	S407	QPS	ZG	0.00	279.36	1.75	279.36
4026	443	-1242	S406	QPS	ZG	1.30	656.56	1.78	656.56
4042	-1267	-1266	S406	QPS	ZG	0.00	144.00	1.93	144.00
5001	502	503	S502	QPS	ZG	0.00	137.60	6.10	137.60
5001	504	505	S500	QPS	ZG	0.00	137.60	6.10	137.60
5016	538	539	S540	QPS	ZG	0.00	137.60	6.10	137.60
5016	540	541	S537	QPS	ZG	0.00	137.60	6.10	137.60
10241	-344	-378	S102	QPS	ZG	1.78	292.92	5.05	292.92
40010	406	-1189	S413	QPS	ZG	0.00	144.00	3.97	144.00
40111	-913	302	S300	QPS	ZG	0.00	680.00	1.93	680.00
40160	-1261	442	S405	QPS	ZG	0.00	144.00	3.97	144.00
50010	-1846	-1847	S560	QPS	ZG	0.00	137.60	3.97	137.60
50010	-1851	-1852	S559	QPS	ZG	0.00	137.60	0.48	137.60
50010	-1852	772	S559	QPS	ZG	0.63	137.60	1.93	137.60
50160	-1915	-1916	S547	QPS	ZG	0.00	137.60	3.97	137.60

1024	-327	336	S100	QPS	ZG	0.00	188.92	1.75	188.92
2004	-573	-572	S205	QPS	ZG	0.00	144.00	1.93	144.00
2005	213	-575	S202	QPS	ZG	0.00	144.00	5.89	144.00
2005	-575	-2258	S208	QPS	ZG	0.00	144.00	3.97	144.00
2013	230	-589	S202	QPS	ZG	0.00	144.00	5.89	144.00
2013	-589	-2259	S207	QPS	ZG	0.00	144.00	3.97	144.00
2021	213	230	S202	QPS	ZG	0.00	900.93	5.30	900.93
2022	206	-575	S208	QPS	ZG	0.00	562.39	3.75	562.39
2022	-575	220	S207	QPS	ZG	0.00	607.00	2.65	607.00
2022	220	-589	S207	QPS	ZG	0.00	607.00	2.65	607.00
2022	-589	242	S206	QPS	ZG	0.00	562.39	3.75	562.39
2023	-541	-567	S208	QPS	ZG	0.00	562.39	3.27	562.39
2023	-2258	-576	S207	QPS	ZG	0.00	607.00	1.27	607.00
2023	-582	-583	S301	QPS	ZG	0.00	733.82	1.36	733.82
2023	-583	-2259	S204	QPS	ZG	0.00	363.63	1.30	363.64
2023	-2259	-612	S204	QPS	ZG	0.00	363.64	3.75	363.64
2024	-617	-588	S204	QPS	ZG	0.00	363.64	3.75	363.64
2027	-546	-547	S205	QPS	ZG	0.00	144.00	1.93	144.00
4001	402	403	S401	QPS	ZG	0.00	114.00	6.10	114.00
4001	404	405	S404	QPS	ZG	0.00	114.00	6.10	114.00
4005	413	-1223	S409	QPS	ZG	0.00	824.53	5.89	824.53
4005	-1223	-2256	S413	QPS	ZG	0.00	144.00	3.97	144.00
4011	-1238	443	S406	QPS	ZG	0.00	144.00	1.93	144.00
4013	430	-1239	S409	QPS	ZG	0.00	824.53	5.89	824.53
4013	-1239	-2257	S412	QPS	ZG	0.00	144.00	3.97	144.00
4016	438	439	S401	QPS	ZG	0.00	114.00	6.10	114.00
4016	440	441	S404	QPS	ZG	0.00	114.00	6.10	114.00
4018	438	402	S400	QPS	ZG	0.00	841.64	12.80	841.64
4019	439	403	S401	QPS	ZG	0.00	814.92	12.80	814.92
4020	440	404	S402	QPS	ZG	0.00	814.92	12.80	814.92
4021	405	-1197	S403	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1197	-1201	S403	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1201	-1204	S403	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1204	-1207	S403	QPS	ZG	0.00	144.00	0.29	144.00
4021	-1207	-1210	S403	QPS	ZG	0.00	144.00	0.64	144.00
4021	-1210	-1213	S403	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1213	-1222	S403	QPS	ZG	0.00	144.00	0.47	144.00
4021	-1222	413	S403	QPS	ZG	0.00	144.00	0.47	144.00
4021	413	-1232	S404	QPS	ZG	0.00	814.92	2.65	814.92
4021	-1232	430	S404	QPS	ZG	0.00	814.92	2.65	814.92
4021	430	-1240	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1240	-1243	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1243	-1246	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1246	-1249	S404	QPS	ZG	0.00	814.92	0.64	814.92
4021	-1249	-1252	S404	QPS	ZG	0.00	814.92	0.29	814.92
4021	-1252	-1255	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1255	-1259	S404	QPS	ZG	0.00	814.92	0.47	814.92
4021	-1259	441	S404	QPS	ZG	0.00	814.92	0.47	814.92
4022	406	-1223	S403	QPS	ZG	0.00	144.00	3.75	144.00
4022	-1223	420	S409	QPS	ZG	0.00	144.00	2.65	144.00
4022	420	-1239	S409	QPS	ZG	0.00	144.00	2.65	144.00
4022	-1239	442	S405	QPS	ZG	0.00	562.39	3.75	562.39
4023	-1189	-1215	S407	QPS	ZG	0.00	626.14	3.27	626.14
4023	-1215	-2256	S413	QPS	ZG	0.00	562.39	0.47	562.39
4023	-1224	-1231	S412	QPS	ZG	0.00	607.00	1.36	607.00
4023	-1233	-2257	S406	QPS	ZG	0.00	656.56	1.30	656.56
4023	-2257	-1261	S405	QPS	ZG	0.00	562.39	3.75	562.39
4024	-1220	-1229	S407	QPS	ZG	0.00	279.36	1.75	279.36
4026	443	-1242	S406	QPS	ZG	0.00	656.56	1.30	656.56
4027	-1194	-1195	S407	QPS	ZG	0.00	144.00	1.93	144.00
5001	501	502	S503	QPS	ZG	0.00	137.60	6.30	137.60
5001	503	504	S501	QPS	ZG	0.00	137.60	6.10	137.60
5016	537	538	S549	QPS	ZG	0.00	137.60	6.30	137.60
5016	539	540	S538	QPS	ZG	0.00	137.60	6.10	137.60
10241	-344	-378	S102	QPS	ZG	0.00	292.93	1.78	292.92
40010	405	406	S403	QPS	ZG	0.00	583.40	5.89	583.40
40071	-905	301	S300	QPS	ZG	0.00	680.00	1.93	680.00
40160	442	441	S408	QPS	ZG	0.00	583.40	5.89	583.40
50010	505	-1846	S550	QPS	ZG	0.00	137.60	5.89	137.60
50010	-1847	-1851	S559	QPS	ZG	0.00	137.60	1.92	137.60
50010	-1852	772	S559	QPS	ZG	0.00	137.60	0.63	137.60
50160	541	-1915	S567	QPS	ZG	0.00	137.60	5.89	137.60
50160	-1916	-1920	S569	QPS	ZG	0.00	137.60	1.92	137.60

50160	-1920	-1921	S	569	QPS	ZG	0.00	137.59	0.48	137.59
100411	-328	-327	S	100	QPS	ZG	0.00	144.00	1.93	144.00

50160	-1921	771	S	569	QPS	ZG	0.00	137.60	1.93	137.60
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Condizione di carico n. 2: PNS
Carichi distribuiti

Asta	N1	N2	E	NE	T	DC	Xi <m>	Qi <daN/m>	Xf <m>	Qf <daN/m>
0	401	-1196	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	-1199	-1202	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	-1205	-1208	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	-1208	-1211	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	718	682	S	624	QPN	ZG	0.00	19.70	1.50	19.70
0	699	716	S	623	QPN	ZG	0.00	19.50	1.50	19.50
0	680	643	S	605	QPN	ZG	0.00	21.20	6.30	21.20
0	700	715	S	623	QPN	ZG	0.00	19.50	1.50	19.50
0	-2268	-2039	S	507	QPN	ZG	0.00	76.80	1.30	76.80
0	-2267	-2075	S	511	QPN	ZG	0.00	76.80	1.30	76.80
0	701	714	S	622	QPN	ZG	0.00	19.35	1.50	19.35
0	-2266	653	S	511	QPN	ZG	0.00	76.80	1.30	76.80
0	507	-2268	S	503	QPN	ZG	0.00	76.80	5.00	76.80
0	510	-2267	S	507	QPN	ZG	0.00	76.80	5.00	76.80
0	643	641	S	603	QPN	ZG	0.00	21.20	6.10	21.20
0	702	713	S	620	QPN	ZG	0.00	19.21	1.50	19.21
0	-1244	-1247	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	-2261	673	S	523	QPN	ZG	0.00	76.80	1.30	76.80
0	703	712	S	620	QPN	ZG	0.00	19.21	1.50	19.21
0	-2260	663	S	519	QPN	ZG	0.00	76.80	1.30	76.80
0	514	-2266	S	515	QPN	ZG	0.00	76.80	5.00	76.80
0	-2265	668	S	527	QPN	ZG	0.00	76.80	1.30	76.80
0	704	711	S	618	QPN	ZG	0.00	19.25	1.50	19.25
0	517	-2260	S	515	QPN	ZG	0.00	76.80	5.00	76.80
0	602	603	S	603	QPN	ZG	0.00	21.20	6.10	21.20
0	705	710	S	617	QPN	ZG	0.00	19.35	1.50	19.35
0	-2264	658	S	527	QPN	ZG	0.00	76.80	1.30	76.80
0	511	510	S	506	QPN	ZG	0.00	76.80	6.10	76.80
0	-1258	437	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	706	709	S	617	QPN	ZG	0.00	19.35	1.50	19.35
0	521	-2261	S	523	QPN	ZG	0.00	76.80	5.00	76.80
0	707	708	S	615	QPN	ZG	0.00	19.70	1.50	19.70
0	-1256	-1258	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	-2263	-2078	S	536	QPN	ZG	0.00	76.80	1.30	76.80
0	508	507	S	506	QPN	ZG	0.00	76.80	6.10	76.80
0	524	-2265	S	527	QPN	ZG	0.00	76.80	5.00	76.80
0	717	681	S	615	QPN	ZG	0.00	19.70	1.50	19.70
0	-2262	-2042	S	549	QPN	ZG	0.00	76.80	1.30	76.80
0	527	-2264	S	532	QPN	ZG	0.00	76.80	5.00	76.80
0	515	514	S	514	QPN	ZG	0.00	76.80	6.10	76.80
0	531	-2263	S	532	QPN	ZG	0.00	76.80	5.00	76.80
0	518	517	S	514	QPN	ZG	0.00	76.80	6.10	76.80
0	534	-2262	S	536	QPN	ZG	0.00	76.80	5.00	76.80
0	603	604	S	602	QPN	ZG	0.00	21.20	6.10	21.20
0	522	521	S	522	QPN	ZG	0.00	76.80	6.10	76.80
0	509	508	S	501	QPN	ZG	0.00	76.80	6.10	76.80
0	525	524	S	522	QPN	ZG	0.00	76.80	6.10	76.80
0	679	678	S	604	QPN	ZG	0.00	21.20	6.30	21.20
0	512	511	S	509	QPN	ZG	0.00	76.80	6.10	76.80
0	528	527	S	531	QPN	ZG	0.00	76.80	6.10	76.80
0	535	534	S	540	QPN	ZG	0.00	76.80	6.10	76.80
0	523	522	S	521	QPN	ZG	0.00	76.80	6.10	76.80
0	519	518	S	517	QPN	ZG	0.00	76.80	6.10	76.80
0	641	642	S	602	QPN	ZG	0.00	21.20	6.10	21.20
0	516	515	S	513	QPN	ZG	0.00	76.80	6.10	76.80
0	532	531	S	535	QPN	ZG	0.00	76.80	6.10	76.80
0	-565	-574	S	200	QPN	ZG	0.00	70.00	0.47	70.00
0	-549	-553	S	200	QPN	ZG	0.00	70.00	0.47	70.00
0	-2233	-2232	S	200	QPN	ZG	0.00	283.60	0.49	283.60
0	678	644	S	600	QPN	ZG	0.00	21.20	6.10	21.20
0	529	528	S	525	QPN	ZG	0.00	76.80	6.10	76.80
0	-553	-556	S	200	QPN	ZG	0.00	70.00	0.47	70.00
0	-2040	509	S	500	QPN	ZG	0.00	76.80	6.10	76.80
0	526	525	S	521	QPN	ZG	0.00	76.80	6.10	76.80
0	-556	-559	S	200	QPN	ZG	0.00	70.00	0.47	70.00
0	-2231	-2230	S	200	QPN	ZG	0.00	283.60	0.49	283.60

Asta	N1	N2	E	NE	T	DC	Xi <m>	Qi <daN/m>	Xf <m>	Qf <daN/m>
0	-1196	-1199	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	-1202	-1205	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	720	680	S	625	QPN	ZG	0.00	21.20	1.50	21.20
0	-1211	-1214	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	718	682	S	625	QPN	ZG	0.00	21.20	1.50	21.20
0	699	716	S	624	QPN	ZG	0.00	19.70	1.50	19.70
0	700	715	S	622	QPN	ZG	0.00	19.35	1.50	19.35
0	-2268	-2039	S	503	QPN	ZG	0.00	76.80	1.30	76.80
0	-2267	-2075	S	507	QPN	ZG	0.00	76.80	1.30	76.80
0	701	714	S	621	QPN	ZG	0.00	19.25	1.50	19.25
0	682	602	S	605	QPN	ZG	0.00	21.20	6.30	21.20
0	-2266	653	S	515	QPN	ZG	0.00	76.80	1.30	76.80
0	507	-2268	S	507	QPN	ZG	0.00	76.80	5.00	76.80
0	510	-2267	S	511	QPN	ZG	0.00	76.80	5.00	76.80
0	-1241	-1244	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	702	713	S	621	QPN	ZG	0.00	19.25	1.50	19.25
0	-2261	673	S	519	QPN	ZG	0.00	76.80	1.30	76.80
0	703	712	S	619	QPN	ZG	0.00	19.21	1.50	19.21
0	-2260	663	S	515	QPN	ZG	0.00	76.80	1.30	76.80
0	514	-2266	S	511	QPN	ZG	0.00	76.80	5.00	76.80
0	-2265	668	S	523	QPN	ZG	0.00	76.80	1.30	76.80
0	-1253	-1256	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	704	711	S	619	QPN	ZG	0.00	19.21	1.50	19.21
0	517	-2260	S	519	QPN	ZG	0.00	76.80	5.00	76.80
0	-1250	-1253	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	705	710	S	618	QPN	ZG	0.00	19.25	1.50	19.25
0	-2264	658	S	532	QPN	ZG	0.00	76.80	1.30	76.80
0	511	510	S	510	QPN	ZG	0.00	76.80	6.10	76.80
0	706	709	S	616	QPN	ZG	0.00	19.50	1.50	19.50
0	521	-2261	S	519	QPN	ZG	0.00	76.80	5.00	76.80
0	-1247	-1250	S	400	QPN	ZG	0.00	428.20	0.47	428.20
0	707	708	S	616	QPN	ZG	0.00	19.50	1.50	19.50
0	-2263	-2078	S	532	QPN	ZG	0.00	76.80	1.30	76.80
0	508	507	S	502	QPN	ZG	0.00	76.80	6.10	76.80
0	524	-2265	S	523	QPN	ZG	0.00	76.80	5.00	76.80
0	717	681	S	614	QPN	ZG	0.00	21.20	1.50	21.20
0	-2262	-2042	S	536	QPN	ZG	0.00	76.80	1.30	76.80
0	527	-2264	S	527	QPN	ZG	0.00	76.80	5.00	76.80
0	515	514	S	510	QPN	ZG	0.00	76.80	6.10	76.80
0	719	679	S	614	QPN	ZG	0.00	21.20	1.50	21.20
0	531	-2263	S	536	QPN	ZG	0.00	76.80	5.00	76.80
0	518	517	S	518	QPN	ZG	0.00	76.80	6.10	76.80
0	534	-2262	S	549	QPN	ZG	0.00	76.80	5.00	76.80
0	522	521	S	518	QPN	ZG	0.00	76.80	6.10	76.80
0	681	638	S	604	QPN	ZG	0.00	21.20	6.30	21.20
0	509	508	S	505	QPN	ZG	0.00	76.80	6.10	76.80
0	525	524	S	526	QPN	ZG	0.00	76.80	6.10	76.80
0	512	511	S	505	QPN	ZG	0.00	76.80	6.10	76.80
0	528	527	S	526	QPN	ZG	0.00	76.80	6.10	76.80
0	535	534	S	535	QPN	ZG	0.00	76.80	6.10	76.80
0	523	522	S	517	QPN	ZG	0.00	76.80	6.10	76.80
0	519	518	S	513	QPN	ZG	0.00	76.80	6.10	76.80
0	-2229	-2228	S	200	QPN	ZG	0.00	283.60	0.49	283.60
0	516	515	S	509	QPN	ZG	0.00	76.80	6.10	76.80
0	532	531	S	531	QPN	ZG	0.00	76.80	6.10	76.80
0	-562	-565	S	200	QPN	ZG	0.00	70.00	0.47	70.00
0	205	-2233	S	200	QPN	ZG	0.00	283.60	0.49	283.60
0	642	685	S	606	QPN	ZG	0.00	21.20	6.10	21.20
0	638	639	S	600	QPN	ZG	0.00	21.20	6.10	21.20
0	205	-549	S	200	QPN	ZG	0.00	70.00	0.47	70.00
0	529	528	S	529	QPN	ZG	0.00	76.80	6.10	76.80
0	-2232	-2231	S	200	QPN	ZG	0.00	283.60	0.49	283.60
0	-2040	509	S	542	QPN	ZG	0.00	76.80	6.10	76.80

0	-574	213	S200	QPN	ZG	0.00	70.00	0.47	70.00
0	-1871	512	S542	QPN	ZG	0.00	76.80	6.10	76.80
0	533	532	S529	QPN	ZG	0.00	76.80	6.10	76.80
0	-2228	-2227	S200	QPN	ZG	0.00	283.60	0.49	283.60
0	639	640	S601	QPN	ZG	0.00	21.20	6.10	21.20
0	-2226	-2225	S200	QPN	ZG	0.00	283.60	0.49	283.60
0	654	516	S508	QPN	ZG	0.00	76.80	6.10	76.80
0	683	687	S607	QPN	ZG	0.00	21.20	5.89	21.20
0	-2225	-2224	S200	QPN	ZG	0.00	283.60	0.49	283.60
0	644	677	S601	QPN	ZG	0.00	21.20	6.10	21.20
0	-590	-593	S201	QPN	ZG	0.00	70.00	0.47	70.00
0	664	519	S516	QPN	ZG	0.00	76.80	6.10	76.80
0	536	535	S538	QPN	ZG	0.00	76.80	6.10	76.80
0	674	523	S516	QPN	ZG	0.00	76.80	6.10	76.80
0	-2040	645	S504	QPN	ZG	0.00	76.80	5.89	76.80
0	-2223	206	S200	QPN	ZG	0.00	283.60	0.49	283.60
0	-1871	649	S541	QPN	ZG	0.00	76.80	5.89	76.80
0	689	693	S608	QPN	ZG	0.00	21.20	3.97	21.20
0	-593	-596	S201	QPN	ZG	0.00	70.00	0.47	70.00
0	654	655	S543	QPN	ZG	0.00	76.80	5.89	76.80
0	664	665	S543	QPN	ZG	0.00	76.80	5.89	76.80
0	-544	-545	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	-602	-605	S201	QPN	ZG	0.00	70.00	0.47	70.00
0	-2176	-2175	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	669	526	S520	QPN	ZG	0.00	76.80	6.10	76.80
0	659	529	S524	QPN	ZG	0.00	76.80	6.10	76.80
0	-1900	533	S528	QPN	ZG	0.00	76.80	6.10	76.80
0	-1906	536	S533	QPN	ZG	0.00	76.80	6.10	76.80
0	674	620	S544	QPN	ZG	0.00	76.80	5.89	76.80
0	-542	-543	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	669	670	S545	QPN	ZG	0.00	76.80	5.89	76.80
0	-545	-546	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	-1191	-1192	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	649	650	S551	QPN	ZG	0.00	76.80	3.97	76.80
0	-1193	-1194	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	640	684	S610	QPN	ZG	0.00	21.20	6.10	21.20
0	-569	-570	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	-2178	-2177	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	659	660	S548	QPN	ZG	0.00	76.80	5.89	76.80
0	-1900	651	S548	QPN	ZG	0.00	76.80	5.89	76.80
0	-547	-550	S205	QPN	ZG	0.00	286.54	0.47	286.54
0	-550	-552	S205	QPN	ZG	0.00	286.54	0.47	286.54
0	-552	-555	S205	QPN	ZG	0.00	286.54	0.47	286.54
0	-336	-576	S203	QPN	ZG	0.00	136.00	2.72	136.00
0	-1217	-1216	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	-2181	-2180	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	-336	-337	S103	QPN	ZG	0.00	96.67	1.36	96.67
0	-564	-573	S205	QPN	ZG	0.00	286.54	0.47	286.54
0	-337	-344	S103	QPN	ZG	0.00	96.67	1.36	96.67
0	102	101	S103	QPN	ZG	1.36	96.67	2.72	96.67
0	693	697	S609	QPN	ZG	0.00	21.20	4.33	21.20
0	645	646	S551	QPN	ZG	0.00	76.80	3.97	76.80
0	-1195	-1198	S407	QPN	ZG	0.00	304.37	0.47	304.37
0	-1212	-1221	S407	QPN	ZG	0.00	304.37	0.47	304.37
0	650	-2124	S561	QPN	ZG	0.00	76.80	2.40	76.80
0	-1224	-1225	S411	QPN	ZG	0.00	136.00	0.48	136.00
0	-1219	-1218	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	-1220	-1219	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	-2182	-2181	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	-344	101	S102	QPN	ZG	0.00	70.00	1.93	70.00
0	695	768	S637	QPN	ZG	0.00	21.20	1.50	21.20
0	-990	-1069	S410	QPN	ZG	0.00	136.00	0.63	136.00
0	655	656	S563	QPN	ZG	0.00	76.80	3.97	76.80
0	646	-2123	S559	QPN	ZG	1.92	76.80	2.40	76.80
0	697	770	S637	QPN	ZG	0.00	21.20	1.50	21.20
0	-1148	-1225	S410	QPN	ZG	0.00	136.00	0.63	136.00
0	-905	-990	S410	QPN	ZG	0.00	136.00	0.63	136.00
0	620	675	S554	QPN	ZG	0.00	76.80	3.97	76.80
0	-1906	647	S539	QPN	ZG	0.00	76.80	5.89	76.80
0	-585	-584	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	-1200	-1203	S407	QPN	ZG	0.00	304.37	0.47	304.37
0	-586	-585	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	-2123	-2269	S561	QPN	ZG	0.00	76.80	0.63	76.80

0	-1871	512	S508	QPN	ZG	0.00	76.80	6.10	76.80
0	604	683	S606	QPN	ZG	0.00	21.20	6.10	21.20
0	533	532	S534	QPN	ZG	0.00	76.80	6.10	76.80
0	-596	-599	S201	QPN	ZG	0.00	70.00	0.47	70.00
0	-2227	-2226	S200	QPN	ZG	0.00	283.60	0.49	283.60
0	-2224	-2223	S200	QPN	ZG	0.00	283.60	0.49	283.60
0	654	516	S512	QPN	ZG	0.00	76.80	6.10	76.80
0	-2175	241	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	685	689	S607	QPN	ZG	0.00	21.20	5.89	21.20
0	230	-590	S201	QPN	ZG	0.00	70.00	0.47	70.00
0	664	519	S512	QPN	ZG	0.00	76.80	6.10	76.80
0	536	535	S534	QPN	ZG	0.00	76.80	6.10	76.80
0	-605	-609	S201	QPN	ZG	0.00	70.00	0.47	70.00
0	674	523	S520	QPN	ZG	0.00	76.80	6.10	76.80
0	-2040	645	S550	QPN	ZG	0.00	76.80	5.89	76.80
0	-1871	649	S504	QPN	ZG	0.00	76.80	5.89	76.80
0	-543	-544	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	-541	-542	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	654	655	S541	QPN	ZG	0.00	76.80	5.89	76.80
0	-599	-602	S201	QPN	ZG	0.00	70.00	0.47	70.00
0	664	665	S544	QPN	ZG	0.00	76.80	5.89	76.80
0	-1189	-1190	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	-609	241	S201	QPN	ZG	0.00	70.00	0.47	70.00
0	-2177	-2176	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	669	526	S524	QPN	ZG	0.00	76.80	6.10	76.80
0	659	529	S528	QPN	ZG	0.00	76.80	6.10	76.80
0	-1900	533	S533	QPN	ZG	0.00	76.80	6.10	76.80
0	-1906	536	S537	QPN	ZG	0.00	76.80	6.10	76.80
0	674	620	S545	QPN	ZG	0.00	76.80	5.89	76.80
0	-1190	-1191	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	669	670	S546	QPN	ZG	0.00	76.80	5.89	76.80
0	-567	-568	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	649	650	S530	QPN	ZG	0.00	76.80	3.97	76.80
0	-1192	-1193	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	-2179	-2178	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	677	686	S610	QPN	ZG	0.00	21.20	6.10	21.20
0	-1216	-1215	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	659	660	S546	QPN	ZG	0.00	76.80	5.89	76.80
0	-1900	651	S539	QPN	ZG	0.00	76.80	5.89	76.80
0	-568	-569	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	-570	-571	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	-571	-572	S205	QPN	ZG	0.00	70.00	0.48	70.00
0	-93	-94	S101	QPN	ZG	0.00	141.51	1.36	141.51
0	-336	102	S100	QPN	ZG	0.00	70.00	1.93	70.00
0	-555	-558	S205	QPN	ZG	0.00	286.54	0.47	286.54
0	-558	-561	S205	QPN	ZG	0.00	286.54	0.47	286.54
0	-328	102	S100	QPN	ZG	0.00	91.83	1.75	91.83
0	-337	-344	S101	QPN	ZG	0.00	141.51	1.36	141.51
0	102	101	S103	QPN	ZG	0.00	96.67	1.36	96.67
0	687	691	S608	QPN	ZG	0.00	21.20	3.97	21.20
0	-1218	-1217	S407	QPN	ZG	0.00	70.00	0.48	70.00
0	645	646	S560	QPN	ZG	0.00	76.80	3.97	76.80
0	-1206	-1209	S407	QPN	ZG	0.00	304.37	0.47	304.37
0	-587	-586	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	650	-2124	S562	QPN	ZG	0.00	76.80	2.40	76.80
0	-561	-564	S205	QPN	ZG	0.00	286.54	0.47	286.54
0	-1198	-1200	S407	QPN	ZG	0.00	304.37	0.47	304.37
0	-1203	-1206	S407	QPN	ZG	0.00	304.37	0.47	304.37
0	-584	-583	S204	QPN	ZG	0.00	70.00	0.48	70.00
0	691	695	S609	QPN	ZG	0.00	21.20	4.33	21.20
0	695	768	S636	QPN	ZG	0.00	19.70	1.50	19.70
0	655	656	S530	QPN	ZG	0.00	76.80	3.97	76.80
0	646	-2123	S561	QPN	ZG	0.00	76.80	2.40	76.80
0	646	-2123	S559	QPN	ZG	0.00	76.80	1.92	76.80
0	-2180	-2179	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	-1069	-1148	S410	QPN	ZG	0.00	136.00	0.63	136.00
0	-2184	-2183	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	620	675	S555	QPN	ZG	0.00	76.80	3.97	76.80
0	-1906	647	S567	QPN	ZG	0.00	76.80	5.89	76.80
0	-588	-587	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	684	688	S611	QPN	ZG	0.00	21.20	5.89	21.20
0	101	-348	S102	QPN	ZG	0.00	142.40	1.78	142.39
0	-2123	-2269	S559	QPN	ZG	0.00	76.80	0.63	76.80

0	-2269	-2284	S561	QPN	ZG	0.00	76.80	1.30	76.80
0	-1209	-1212	S407	QPN	ZG	0.00	304.37	0.47	304.37
0	-2124	-2270	S562	QPN	ZG	0.00	76.80	0.63	76.80
0	-2270	-2285	S562	QPN	ZG	0.00	76.80	1.30	76.80
0	766	778	S636	QPN	ZG	0.00	19.70	1.50	19.70
0	-348	-351	S102	QPN	ZG	0.00	142.39	0.47	142.39
0	665	666	S563	QPN	ZG	0.00	76.80	3.97	76.80
0	656	-2125	S562	QPN	ZG	0.00	76.80	2.40	76.80
0	-2185	-2184	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	-906	-913	S301	QPN	ZG	0.00	146.76	1.36	146.76
0	-616	-615	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	-357	-360	S102	QPN	ZG	0.00	142.39	0.47	142.39
0	-2125	-2271	S552	QPN	ZG	0.00	76.80	0.63	76.80
0	-363	-366	S102	QPN	ZG	0.00	142.39	0.47	142.39
0	670	671	S555	QPN	ZG	0.00	76.80	3.97	76.80
0	666	-2126	S552	QPN	ZG	0.00	76.80	2.40	76.80
0	660	661	S557	QPN	ZG	0.00	76.80	3.97	76.80
0	-1236	-1235	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	-2271	657	S552	QPN	ZG	0.00	76.80	1.30	76.80
0	-1238	-1237	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	765	779	S635	QPN	ZG	0.00	19.50	1.50	19.50
0	-2126	-2277	S552	QPN	ZG	0.00	76.80	0.63	76.80
0	242	-2185	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	651	652	S558	QPN	ZG	0.00	76.80	3.97	76.80
0	-2277	667	S553	QPN	ZG	0.00	76.80	1.30	76.80
0	-614	-613	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	675	-2127	S553	QPN	ZG	0.00	76.80	2.40	76.80
0	764	780	S633	QPN	ZG	0.00	19.25	1.50	19.25
0	-1242	-1245	S406	QPN	ZG	0.00	319.16	0.47	319.16
0	-2127	-2276	S564	QPN	ZG	0.00	76.80	0.63	76.80
0	671	-2128	S564	QPN	ZG	0.00	76.80	2.40	76.80
0	647	648	S547	QPN	ZG	0.00	76.80	3.97	76.80
0	-1245	-1248	S406	QPN	ZG	0.00	319.16	0.47	319.16
0	-2276	676	S564	QPN	ZG	0.00	76.80	1.30	76.80
0	661	-2129	S556	QPN	ZG	0.00	76.80	2.40	76.80
0	763	781	S633	QPN	ZG	0.00	19.25	1.50	19.25
0	-2128	-2272	S565	QPN	ZG	0.00	76.80	0.63	76.80
0	-1254	-1257	S406	QPN	ZG	0.00	319.16	0.47	319.16
0	-2272	672	S565	QPN	ZG	0.00	76.80	1.30	76.80
0	762	782	S632	QPN	ZG	0.00	19.21	1.50	19.21
0	-2129	-2273	S556	QPN	ZG	0.00	76.80	0.63	76.80
0	-2273	662	S556	QPN	ZG	0.00	76.80	1.30	76.80
0	652	-2130	S556	QPN	ZG	0.00	76.80	2.40	76.80
0	690	694	S612	QPN	ZG	0.00	21.20	3.97	21.20
0	761	754	S631	QPN	ZG	0.00	19.21	1.50	19.21
0	-1264	-1263	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	-1266	-1265	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	-1251	-1254	S406	QPN	ZG	0.00	319.16	0.47	319.16
0	648	-2131	S569	QPN	ZG	0.00	76.80	2.40	76.80
0	-1257	-1260	S406	QPN	ZG	0.00	319.16	0.47	319.16
0	-2130	-2274	S568	QPN	ZG	0.00	76.80	0.63	76.80
0	-2274	-2283	S568	QPN	ZG	0.00	76.80	1.30	76.80
0	760	755	S630	QPN	ZG	0.00	19.25	1.50	19.25
0	-2131	-2275	S568	QPN	ZG	0.00	76.80	0.63	76.80
0	-2275	-2282	S569	QPN	ZG	0.00	76.80	1.30	76.80
0	759	756	S628	QPN	ZG	0.00	19.50	1.50	19.50
0	694	698	S613	QPN	ZG	0.00	21.20	4.33	21.20
0	758	757	S628	QPN	ZG	0.00	19.50	1.50	19.50
0	696	767	S626	QPN	ZG	0.00	21.20	1.50	21.20
1016	-379	-378	S102	QPN	ZG	0.00	70.00	1.93	70.00
2001	206	-541	S208	QPN	ZG	0.00	70.00	3.97	70.00
2005	213	-575	S200	QPN	ZG	0.00	283.60	5.89	283.60
2005	-575	-2258	S207	QPN	ZG	0.00	70.00	3.97	70.00
2013	230	-589	S201	QPN	ZG	0.00	283.60	5.89	283.60
2013	-589	-2259	S206	QPN	ZG	0.00	70.00	3.97	70.00
2016	-612	242	S206	QPN	ZG	0.00	70.00	3.97	70.00
2022	206	-575	S200	QPN	ZG	0.00	70.00	3.75	70.00
2022	-575	220	S202	QPN	ZG	0.00	437.95	2.65	437.95
2022	220	-589	S202	QPN	ZG	0.00	437.95	2.65	437.95
2022	-589	242	S201	QPN	ZG	0.00	70.00	3.75	70.00
2023	-541	-567	S205	QPN	ZG	0.00	286.54	3.27	286.54
2023	-567	-2258	S208	QPN	ZG	0.00	273.38	0.47	273.38
2023	-576	-582	S207	QPN	ZG	0.00	295.07	1.36	295.07

0	-2269	-2284	S559	QPN	ZG	0.00	76.80	1.30	76.80
0	-2124	-2270	S561	QPN	ZG	0.00	76.80	0.63	76.80
0	-2270	-2285	S561	QPN	ZG	0.00	76.80	1.30	76.80
0	766	778	S635	QPN	ZG	0.00	19.50	1.50	19.50
0	-2183	-2182	S201	QPN	ZG	0.00	283.60	0.49	283.60
0	665	666	S554	QPN	ZG	0.00	76.80	3.97	76.80
0	656	-2125	S552	QPN	ZG	0.00	76.80	2.40	76.80
0	-1234	-1233	S406	QPN	ZG	0.00	70.00	0.48	70.00
0	686	690	S611	QPN	ZG	0.00	21.20	5.89	21.20
0	-351	-354	S102	QPN	ZG	0.00	142.39	0.47	142.39
0	-354	-357	S102	QPN	ZG	0.00	142.39	0.47	142.39
0	-360	-363	S102	QPN	ZG	0.00	142.39	0.47	142.39
0	-2125	-2271	S562	QPN	ZG	0.00	76.80	0.63	76.80
0	-1235	-1234	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	670	671	S566	QPN	ZG	0.00	76.80	3.97	76.80
0	666	-2126	S553	QPN	ZG	0.00	76.80	2.40	76.80
0	660	661	S566	QPN	ZG	0.00	76.80	3.97	76.80
0	-1237	-1236	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	-2271	657	S562	QPN	ZG	0.00	76.80	1.30	76.80
0	765	779	S634	QPN	ZG	0.00	19.35	1.50	19.35
0	-366	-379	S102	QPN	ZG	0.00	142.39	0.47	142.39
0	-2126	-2277	S553	QPN	ZG	0.00	76.80	0.63	76.80
0	651	652	S557	QPN	ZG	0.00	76.80	3.97	76.80
0	-2277	667	S552	QPN	ZG	0.00	76.80	1.30	76.80
0	-613	-612	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	-615	-614	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	675	-2127	S564	QPN	ZG	0.00	76.80	2.40	76.80
0	764	780	S634	QPN	ZG	0.00	19.35	1.50	19.35
0	-2127	-2276	S553	QPN	ZG	0.00	76.80	0.63	76.80
0	-617	-616	S204	QPN	ZG	0.00	69.99	0.48	69.99
0	671	-2128	S565	QPN	ZG	0.00	76.80	2.40	76.80
0	647	648	S558	QPN	ZG	0.00	76.80	3.97	76.80
0	-2276	676	S553	QPN	ZG	0.00	76.80	1.30	76.80
0	661	-2129	S565	QPN	ZG	0.00	76.80	2.40	76.80
0	763	781	S632	QPN	ZG	0.00	19.21	1.50	19.21
0	-2128	-2272	S564	QPN	ZG	0.00	76.80	0.63	76.80
0	688	692	S612	QPN	ZG	0.00	21.20	3.97	21.20
0	-2272	672	S564	QPN	ZG	0.00	76.80	1.30	76.80
0	762	782	S631	QPN	ZG	0.00	19.21	1.50	19.21
0	-2129	-2273	S565	QPN	ZG	0.00	76.80	0.63	76.80
0	-2273	662	S565	QPN	ZG	0.00	76.80	1.30	76.80
0	-1262	-1261	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	652	-2130	S568	QPN	ZG	0.00	76.80	2.40	76.80
0	761	754	S630	QPN	ZG	0.00	19.25	1.50	19.25
0	-1263	-1262	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	-1265	-1264	S406	QPN	ZG	0.00	69.99	0.48	69.99
0	-1248	-1251	S406	QPN	ZG	0.00	319.16	0.47	319.16
0	-1260	-1267	S406	QPN	ZG	0.00	319.16	0.47	319.16
0	648	-2131	S568	QPN	ZG	0.00	76.80	2.40	76.80
0	-2130	-2274	S556	QPN	ZG	0.00	76.80	0.63	76.80
0	-2274	-2283	S556	QPN	ZG	0.00	76.80	1.30	76.80
0	760	755	S629	QPN	ZG	0.00	19.35	1.50	19.35
0	-2131	-2275	S569	QPN	ZG	0.00	76.80	0.63	76.80
0	692	696	S613	QPN	ZG	0.00	21.20	4.33	21.20
0	-2275	-2282	S568	QPN	ZG	0.00	76.80	1.30	76.80
0	759	756	S629	QPN	ZG	0.00	19.35	1.50	19.35
0	758	757	S627	QPN	ZG	0.00	19.70	1.50	19.70
0	696	767	S627	QPN	ZG	0.00	19.70	1.50	19.70
0	698	769	S626	QPN	ZG	0.00	21.20	1.50	21.20
1024	-327	-336	S100	QPN	ZG	0.00	91.83	1.75	91.83
2004	-573	-572	S205	QPN	ZG	0.00	70.00	1.93	70.00
2005	213	-575	S202	QPN	ZG	0.00	70.00	5.89	70.00
2005	-575	-2258	S208	QPN	ZG	0.00	70.00	3.97	70.00
2013	230	-589	S202	QPN	ZG	0.00	70.00	5.89	70.00
2013	-589	-2259	S207	QPN	ZG	0.00	70.00	3.97	70.00
2021	213	230	S202	QPN	ZG	0.00	437.95	5.30	437.95
2022	206	-575	S208	QPN	ZG	0.00	273.38	3.75	273.38
2022	-575	220	S207	QPN	ZG	0.00	295.07	2.65	295.07
2022	220	-589	S207	QPN	ZG	0.00	295.07	2.65	295.07
2022	-589	242	S206	QPN	ZG	0.00	273.38	3.75	273.38
2023	-541	-567	S208	QPN	ZG	0.00	273.38	3.27	273.38
2023	-2258	-576	S207	QPN	ZG	0.00	295.07	1.27	295.07
2023	-582	-583	S301	QPN	ZG	0.00	146.76	1.36	146.76

2023	-582	-583	S	207	QPN	ZG	0.00	295.07	1.36	295.07	2023	-583	-2259	S	204	QPN	ZG	0.00	176.76	1.30	176.77
2023	-583	-2259	S	207	QPN	ZG	0.00	295.07	1.30	295.07	2023	-2259	-612	S	204	QPN	ZG	0.00	176.77	3.75	176.77
2023	-2259	-612	S	206	QPN	ZG	0.00	273.38	3.75	273.38	2024	-617	-588	S	204	QPN	ZG	0.00	176.77	3.75	176.77
2024	-617	-588	S	204	QPN	ZG	3.75	176.77	5.05	176.76	2027	-546	-547	S	205	QPN	ZG	0.00	70.00	1.93	70.00
4001	401	402	S	400	QPN	ZG	0.00	58.00	6.30	58.00	4001	402	403	S	401	QPN	ZG	0.00	58.00	6.10	58.00
4001	403	404	S	402	QPN	ZG	0.00	58.00	6.10	58.00	4001	404	405	S	404	QPN	ZG	0.00	58.00	6.10	58.00
4005	413	-1223	S	403	QPN	ZG	0.00	283.60	5.89	283.60	4005	413	-1223	S	409	QPN	ZG	0.00	400.81	5.89	400.81
4005	-1223	-2256	S	412	QPN	ZG	0.00	70.00	3.97	70.00	4005	-1223	-2256	S	413	QPN	ZG	0.00	70.00	3.97	70.00
4007	-1229	-1230	S	407	QPN	ZG	0.00	70.00	1.93	70.00	4011	-1238	443	S	406	QPN	ZG	0.00	70.00	1.93	70.00
4013	430	-1239	S	408	QPN	ZG	0.00	283.60	5.89	283.60	4013	430	-1239	S	409	QPN	ZG	0.00	400.81	5.89	400.81
4013	-1239	-2257	S	405	QPN	ZG	0.00	70.00	3.97	70.00	4013	-1239	-2257	S	412	QPN	ZG	0.00	70.00	3.97	70.00
4016	437	438	S	400	QPN	ZG	0.00	58.00	6.30	58.00	4016	438	439	S	401	QPN	ZG	0.00	58.00	6.10	58.00
4016	439	440	S	402	QPN	ZG	0.00	58.00	6.10	58.00	4016	440	441	S	404	QPN	ZG	0.00	58.00	6.10	58.00
4017	-1214	-1241	S	400	QPN	ZG	0.00	428.20	6.25	428.20	4018	438	402	S	400	QPN	ZG	0.00	428.20	12.80	428.20
4018	438	402	S	401	QPN	ZG	0.00	414.61	12.80	414.61	4019	439	403	S	401	QPN	ZG	0.00	414.61	12.80	414.61
4019	439	403	S	402	QPN	ZG	0.00	414.61	12.80	414.61	4020	440	404	S	402	QPN	ZG	0.00	414.61	12.80	414.61
4020	440	404	S	404	QPN	ZG	0.00	414.61	12.80	414.61	4021	405	-1197	S	403	QPN	ZG	0.00	70.00	0.47	70.00
4021	405	-1197	S	404	QPN	ZG	0.00	414.61	0.47	414.61	4021	-1197	-1201	S	403	QPN	ZG	0.00	70.00	0.47	70.00
4021	-1197	-1201	S	404	QPN	ZG	0.00	414.61	0.47	414.61	4021	-1201	-1204	S	403	QPN	ZG	0.00	70.00	0.47	70.00
4021	-1201	-1204	S	404	QPN	ZG	0.00	414.61	0.47	414.61	4021	-1204	-1207	S	403	QPN	ZG	0.00	70.00	0.29	70.00
4021	-1204	-1207	S	404	QPN	ZG	0.00	414.61	0.29	414.61	4021	-1207	-1210	S	403	QPN	ZG	0.00	70.00	0.64	70.00
4021	-1207	-1210	S	404	QPN	ZG	0.00	414.61	0.64	414.61	4021	-1210	-1213	S	403	QPN	ZG	0.00	70.00	0.47	70.00
4021	-1210	-1213	S	404	QPN	ZG	0.00	414.61	0.47	414.61	4021	-1213	-1222	S	403	QPN	ZG	0.00	70.00	0.47	70.00
4021	-1213	-1222	S	404	QPN	ZG	0.00	414.61	0.47	414.61	4021	-1222	413	S	403	QPN	ZG	0.00	70.00	0.47	70.00
4021	-1222	413	S	404	QPN	ZG	0.00	414.61	0.47	414.61	4021	413	-1232	S	404	QPN	ZG	0.00	414.61	2.65	414.61
4021	413	-1232	S	409	QPN	ZG	0.00	70.00	2.65	70.00	4021	-1232	430	S	404	QPN	ZG	0.00	414.61	2.65	414.61
4021	-1232	430	S	409	QPN	ZG	0.00	70.00	2.65	70.00	4021	430	-1240	S	404	QPN	ZG	0.00	414.61	0.47	414.61
4021	430	-1240	S	408	QPN	ZG	0.00	70.00	0.47	70.00	4021	-1240	-1243	S	404	QPN	ZG	0.00	414.61	0.47	414.61
4021	-1240	-1243	S	408	QPN	ZG	0.00	70.00	0.47	70.00	4021	-1243	-1246	S	404	QPN	ZG	0.00	414.61	0.47	414.61
4021	-1243	-1246	S	408	QPN	ZG	0.00	70.00	0.47	70.00	4021	-1246	-1249	S	404	QPN	ZG	0.00	414.61	0.64	414.61
4021	-1246	-1249	S	408	QPN	ZG	0.00	70.00	0.64	70.00	4021	-1249	-1252	S	404	QPN	ZG	0.00	414.61	0.29	414.61
4021	-1249	-1252	S	408	QPN	ZG	0.00	70.00	0.29	70.00	4021	-1252	-1255	S	404	QPN	ZG	0.00	414.61	0.47	414.61
4021	-1252	-1255	S	408	QPN	ZG	0.00	70.00	0.47	70.00	4021	-1255	-1259	S	404	QPN	ZG	0.00	414.61	0.47	414.61
4021	-1255	-1259	S	408	QPN	ZG	0.00	70.00	0.47	70.00	4021	-1259	441	S	404	QPN	ZG	0.00	414.61	0.47	414.61
4021	-1259	441	S	408	QPN	ZG	0.00	70.00	0.47	70.00	4022	406	-1223	S	403	QPN	ZG	0.00	70.00	3.75	70.00
4022	406	-1223	S	413	QPN	ZG	0.00	273.38	3.75	273.38	4022	-1223	420	S	409	QPN	ZG	0.00	70.00	2.65	70.00
4022	-1223	420	S	412	QPN	ZG	0.00	295.07	2.65	295.07	4022	420	-1239	S	409	QPN	ZG	0.00	70.00	2.65	70.00
4022	420	-1239	S	412	QPN	ZG	0.00	295.07	2.65	295.07	4022	-1239	442	S	405	QPN	ZG	0.00	273.38	3.75	273.38
4022	-1239	442	S	408	QPN	ZG	0.00	70.00	3.75	70.00	4023	-1189	-1215	S	407	QPN	ZG	0.00	304.37	3.27	304.37
4023	-1189	-1215	S	413	QPN	ZG	0.00	273.38	3.27	273.38	4023	-1215	-2256	S	413	QPN	ZG	0.00	273.38	0.47	273.38
4023	-2256	-1224	S	412	QPN	ZG	0.00	295.07	1.27	295.07	4023	-1224	-1231	S	412	QPN	ZG	0.00	295.07	1.36	295.07
4023	-1231	-1233	S	412	QPN	ZG	0.00	295.07	1.36	295.07	4023	-1233	-2257	S	406	QPN	ZG	0.00	319.16	1.30	319.16
4023	-1233	-2257	S	412	QPN	ZG	0.00	295.07	1.30	295.07	4023	-2257	-1261	S	405	QPN	ZG	0.00	273.38	3.75	273.38
4023	-2257	-1261	S	406	QPN	ZG	0.00	319.16	3.75	319.16	4024	-1220	-1229	S	407	QPN	ZG	0.00	135.80	1.75	135.80
4026	-1221	-1230	S	407	QPN	ZG	0.00	135.80	1.75	135.80	4026	443	-1242	S	406	QPN	ZG	0.00	319.16	1.30	319.16
4026	443	-1242	S	406	QPN	ZG	1.30	319.16	1.78	319.16	4027	-1194	-1195	S	407	QPN	ZG	0.00	70.00	1.93	70.00
4042	-1267	-1266	S	406	QPN	ZG	0.00	70.00	1.93	70.00	5001	501	502	S	503	QPN	ZG	0.00	76.80	6.30	76.80
5001	502	503	S	502	QPN	ZG	0.00	76.80	6.10	76.80	5001	503	504	S	501	QPN	ZG	0.00	76.80	6.10	76.80
5001	504	505	S	500	QPN	ZG	0.00	76.80	6.10	76.80	5016	537	538	S	549	QPN	ZG	0.00	76.80	6.30	76.80
5016	538	539	S	540	QPN	ZG	0.00	76.80	6.10	76.80	5016	539	540	S	538	QPN	ZG	0.00	76.80	6.10	76.80
5016	540	541	S	537	QPN	ZG	0.00	76.80	6.10	76.80	10241	-344	-378	S	102	QPN	ZG	0.00	142.40	5.05	142.39
40010	405	406	S	403	QPN	ZG	0.00	283.60	5.89	283.60	40010	406	-1189	S	413	QPN	ZG	0.00	70.00	3.97	70.00
40071	-905	301	S	300	QPN	ZG	0.00	136.00	1.93	136.00	40111	-913	302	S	300	QPN	ZG	0.00	136.00	1.93	136.00
40160	442	441	S	408	QPN	ZG	0.00	283.60	5.89	283.60	40160	-1261	442	S	405	QPN	ZG	0.00	70.00	3.97	70.00
50010	505	-1846	S	550	QPN	ZG	0.00	76.80	5.89	76.80	50010	-1846	-1847	S	560	QPN	ZG	0.00	76.80	3.97	76.80
50010	-1847	-1851	S	559	QPN	ZG	0.00	76.80	1.92	76.80	50010	-1851	-1852	S	559	QPN	ZG	0.00	76.80	0.48	76.80
50010	-1852	772	S	559	QPN	ZG	0.00	76.80	0.63	76.80	50010	-1852	772	S	559	QPN	ZG	0.63	76.80	1.93	76.80
50160	541	-1915	S	567	QPN	ZG	0.00	76.80	5.89	76.80	50160	-1915	-1916	S	547	QPN	ZG	0.00	76.80	3.97	76.80
50160	-1916	-1920	S	569	QPN	ZG	0.00	76.80	1.92	76.80	50160	-1920	-1921	S	569	QPN	ZG	0.00	76.80	0.48	76.80
50160	-1921	771	S	569	QPN	ZG	0.00	76.80	1.93	76.80	100411	-328	-327	S	100	QPN	ZG	0.00	70.00	1.93	70.00

Condizione di carico n. 3: Cat.C
Carichi distribuiti

Asta	N1	N2	E	NE	T	DC	Xi	Qi	Xf	Qf	Asta	N1	N2	E	NE	T	DC	Xi	Qi	Xf	Qf
							<m>	<daN/m>	<m>	<daN/m>								<m>	<daN/m>	<m>	<daN/m>
0	401	-1196	S	400	QA	ZG	0.00	885.94	0.47	885.94	0	-1196	-1199	S	400	QA	ZG	0.00	885.94	0.47	885.94
0	-1199	-1202	S	400	QA	ZG	0.00	885.94	0.47	885.94	0	-1202	-1205	S	400	QA	ZG	0.00	885.94	0.47	885.94
0	-1205	-1208	S	400	QA	ZG	0.00	885.94	0.47	885.94	0	-1208	-1211	S	400	QA	ZG	0.00	885.94	0.47	885.94
0	-1211	-1214	S	400	QA	ZG	0.00	885.94	0.47	885.94	0	-1241	-1244	S	400	QA	ZG	0.00	885.94	0.47	885.94
0	-1244	-1247	S	400	QA	ZG	0.00	885.94	0.47	885.94	0	-1253	-1256	S	400	QA	ZG	0.00	885.94	0.47	885.94
0	-1250	-1253	S	400	QA	ZG	0.00	885.94	0.47	885.94	0	-1258	437	S	400	QA	ZG	0.00	885.94	0.47	885.94
0	-1247	-1250	S	400	QA	ZG	0.00	885.94	0.47	885.94	0	-1256	-1258	S	400	QA	ZG	0.00	885.94	0.47	885.94
0	-2229	-2228	S	200	QA	ZG	0.00	486.16	0.49	486.16	0	-562	-565	S	200	QA	ZG	0.00	120.00	0.47	120.00

0	-565	-574	S	200	QA	ZG	0.00	120.00	0.47	120.00
0	-549	-553	S	200	QA	ZG	0.00	120.00	0.47	120.00
0	205	-549	S	200	QA	ZG	0.00	120.00	0.47	120.00
0	-2232	-2231	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-559	-562	S	200	QA	ZG	0.00	120.00	0.47	120.00
0	-2230	-2229	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-2228	-2227	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-2227	-2226	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-2224	-2223	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-2225	-2224	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-590	-593	S	201	QA	ZG	0.00	120.00	0.47	120.00
0	-2223	206	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-541	-542	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-599	-602	S	201	QA	ZG	0.00	120.00	0.47	120.00
0	-1189	-1190	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-609	241	S	201	QA	ZG	0.00	120.00	0.47	120.00
0	-2177	-2176	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-1190	-1191	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-567	-568	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-1192	-1193	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-2179	-2178	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-1216	-1215	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-568	-569	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-570	-571	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-571	-572	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-93	-94	S	101	QA	ZG	0.00	479.99	1.36	479.99
0	-336	102	S	100	QA	ZG	0.00	120.00	1.93	120.00
0	-555	-558	S	205	QA	ZG	0.00	491.22	0.47	491.22
0	-558	-561	S	205	QA	ZG	0.00	491.22	0.47	491.22
0	-328	102	S	100	QA	ZG	0.00	157.43	1.75	157.44
0	-337	-344	S	101	QA	ZG	0.00	479.99	1.36	479.99
0	102	101	S	103	QA	ZG	0.00	386.67	1.36	386.68
0	-1218	-1217	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-1206	-1209	S	407	QA	ZG	0.00	521.78	0.47	521.78
0	-587	-586	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-561	-564	S	205	QA	ZG	0.00	491.22	0.47	491.22
0	-1198	-1200	S	407	QA	ZG	0.00	521.78	0.47	521.78
0	-1203	-1206	S	407	QA	ZG	0.00	521.78	0.47	521.78
0	-584	-583	S	204	QA	ZG	0.00	120.00	0.48	120.00
0	-990	-1069	S	410	QA	ZG	0.00	414.71	0.63	414.71
0	-1148	-1225	S	410	QA	ZG	0.00	414.71	0.63	414.71
0	-905	-990	S	410	QA	ZG	0.00	414.71	0.63	414.71
0	-585	-584	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-1200	-1203	S	407	QA	ZG	0.00	521.78	0.47	521.78
0	101	-348	S	102	QA	ZG	0.00	244.11	1.78	244.10
0	-2183	-2182	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-1234	-1233	S	406	QA	ZG	0.00	120.00	0.48	120.00
0	-906	-913	S	301	QA	ZG	0.00	479.99	1.36	479.99
0	-616	-615	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-357	-360	S	102	QA	ZG	0.00	244.10	0.47	244.10
0	-363	-366	S	102	QA	ZG	0.00	244.10	0.47	244.10
0	-1236	-1235	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	-1238	-1237	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	242	-2185	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-614	-613	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-1242	-1245	S	406	QA	ZG	0.00	547.14	0.47	547.14
0	-1245	-1248	S	406	QA	ZG	0.00	547.14	0.47	547.14
0	-1262	-1261	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	-1264	-1263	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	-1266	-1265	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	-1251	-1254	S	406	QA	ZG	0.00	547.14	0.47	547.14
0	-1257	-1260	S	406	QA	ZG	0.00	547.14	0.47	547.14
1024	-327	-336	S	100	QA	ZG	0.00	157.43	1.75	157.44
2004	-573	-572	S	205	QA	ZG	0.00	120.00	1.93	120.00
2005	213	-575	S	202	QA	ZG	0.00	120.00	5.89	120.00
2005	-575	-2258	S	208	QA	ZG	0.00	120.00	3.97	120.00
2013	230	-589	S	202	QA	ZG	0.00	120.00	5.89	120.00
2013	-589	-2259	S	207	QA	ZG	0.00	120.00	3.97	120.00
2021	213	230	S	202	QA	ZG	0.00	750.78	5.30	750.78
2022	206	-575	S	208	QA	ZG	0.00	468.66	3.75	468.66
2022	-575	220	S	207	QA	ZG	0.00	505.83	2.65	505.83
2022	220	-589	S	207	QA	ZG	0.00	505.83	2.65	505.83
2022	-589	242	S	206	QA	ZG	0.00	468.66	3.75	468.66

0	205	-2233	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-2233	-2232	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-553	-556	S	200	QA	ZG	0.00	120.00	0.47	120.00
0	-556	-559	S	200	QA	ZG	0.00	120.00	0.47	120.00
0	-2231	-2230	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-574	213	S	200	QA	ZG	0.00	120.00	0.47	120.00
0	-596	-599	S	201	QA	ZG	0.00	120.00	0.47	120.00
0	-2226	-2225	S	200	QA	ZG	0.00	486.16	0.49	486.16
0	-2175	241	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	230	-590	S	201	QA	ZG	0.00	120.00	0.47	120.00
0	-605	-609	S	201	QA	ZG	0.00	120.00	0.47	120.00
0	-543	-544	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-593	-596	S	201	QA	ZG	0.00	120.00	0.47	120.00
0	-544	-545	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-602	-605	S	201	QA	ZG	0.00	120.00	0.47	120.00
0	-2176	-2175	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-542	-543	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-545	-546	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-1191	-1192	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-1193	-1194	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-569	-570	S	205	QA	ZG	0.00	120.00	0.48	120.00
0	-2178	-2177	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-547	-550	S	205	QA	ZG	0.00	491.22	0.47	491.22
0	-550	-552	S	205	QA	ZG	0.00	491.22	0.47	491.22
0	-552	-555	S	205	QA	ZG	0.00	491.22	0.47	491.22
0	-336	-576	S	203	QA	ZG	0.00	480.00	2.72	480.00
0	-1217	-1216	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-2181	-2180	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-336	-337	S	103	QA	ZG	0.00	386.67	1.36	386.68
0	-564	-573	S	205	QA	ZG	0.00	491.22	0.47	491.22
0	-337	-344	S	103	QA	ZG	0.00	386.68	1.36	386.67
0	102	101	S	103	QA	ZG	1.36	386.68	2.72	386.67
0	-1195	-1198	S	407	QA	ZG	0.00	521.78	0.47	521.78
0	-1212	-1221	S	407	QA	ZG	0.00	521.78	0.47	521.78
0	-1224	-1225	S	411	QA	ZG	0.00	544.00	0.48	544.00
0	-1219	-1218	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-1220	-1219	S	407	QA	ZG	0.00	120.00	0.48	120.00
0	-2182	-2181	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-344	101	S	102	QA	ZG	0.00	120.00	1.93	120.00
0	-2180	-2179	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-1069	-1148	S	410	QA	ZG	0.00	414.71	0.63	414.71
0	-2184	-2183	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-588	-587	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-586	-585	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-1209	-1212	S	407	QA	ZG	0.00	521.78	0.47	521.78
0	-348	-351	S	102	QA	ZG	0.00	244.10	0.47	244.10
0	-2185	-2184	S	201	QA	ZG	0.00	486.16	0.49	486.16
0	-351	-354	S	102	QA	ZG	0.00	244.10	0.47	244.10
0	-354	-357	S	102	QA	ZG	0.00	244.10	0.47	244.10
0	-360	-363	S	102	QA	ZG	0.00	244.10	0.47	244.10
0	-1235	-1234	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	-1237	-1236	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	-366	-379	S	102	QA	ZG	0.00	244.10	0.47	244.10
0	-613	-612	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-615	-614	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-617	-616	S	204	QA	ZG	0.00	119.98	0.48	119.98
0	-1254	-1257	S	406	QA	ZG	0.00	547.14	0.47	547.14
0	-1263	-1262	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	-1265	-1264	S	406	QA	ZG	0.00	119.98	0.48	119.98
0	-1248	-1251	S	406	QA	ZG	0.00	547.14	0.47	547.14
0	-1260	-1267	S	406	QA	ZG	0.00	547.14	0.47	547.14
1016	-379	-378	S	102	QA	ZG	0.00	120.00	1.93	120.00
2001	206	-541	S	208	QA	ZG	0.00	120.00	3.97	120.00
2005	213	-575	S	200	QA	ZG	0.00	486.16	5.89	486.16
2005	-575	-2258	S	207	QA	ZG	0.00	120.00	3.97	120.00
2013	230	-589	S	201	QA	ZG	0.00	486.16	5.89	486.16
2013	-589	-2259	S	206	QA	ZG	0.00	120.00	3.97	120.00
2016	-612	242	S	206	QA	ZG	0.00	120.00	3.97	120.00
2022	206	-575	S	200	QA	ZG	0.00	120.00	3.75	120.00
2022	-575	220	S	202	QA	ZG	0.00	750.78	2.65	750.78
2022	220	-589	S	202	QA	ZG	0.00	750.78	2.65	750.78
2022	-589	242	S	201	QA	ZG	0.00	120.00	3.75	120.00
2023	-541	-567	S	205	QA	ZG	0.00	491.22	3.27	491.22

2023	-541	-567	S208	QA	ZG	0.00	468.66	3.27	468.66
2023	-2258	-576	S207	QA	ZG	0.00	505.83	1.27	505.83
2023	-582	-583	S301	QA	ZG	0.00	479.99	1.36	479.99
2023	-583	-2259	S204	QA	ZG	0.00	303.03	1.30	303.04
2023	-2259	-612	S204	QA	ZG	0.00	303.04	3.75	303.04
2024	-617	-588	S204	QA	ZG	0.00	303.04	3.75	303.04
2027	-546	-547	S205	QA	ZG	0.00	120.00	1.93	120.00
4001	402	403	S401	QA	ZG	0.00	120.00	6.10	120.00
4001	404	405	S404	QA	ZG	0.00	120.00	6.10	120.00
4005	413	-1223	S409	QA	ZG	0.00	687.11	5.89	687.11
4005	-1223	-2256	S413	QA	ZG	0.00	120.00	3.97	120.00
4011	-1238	443	S406	QA	ZG	0.00	120.00	1.93	120.00
4013	430	-1239	S409	QA	ZG	0.00	687.11	5.89	687.11
4013	-1239	-2257	S412	QA	ZG	0.00	120.00	3.97	120.00
4016	438	439	S401	QA	ZG	0.00	120.00	6.10	120.00
4016	440	441	S404	QA	ZG	0.00	120.00	6.10	120.00
4018	438	402	S400	QA	ZG	0.00	885.94	12.80	885.94
4019	439	403	S401	QA	ZG	0.00	857.81	12.80	857.81
4020	440	404	S402	QA	ZG	0.00	857.81	12.80	857.81
4021	405	-1197	S403	QA	ZG	0.00	120.00	0.47	120.00
4021	-1197	-1201	S403	QA	ZG	0.00	120.00	0.47	120.00
4021	-1201	-1204	S403	QA	ZG	0.00	120.00	0.47	120.00
4021	-1204	-1207	S403	QA	ZG	0.00	120.00	0.29	120.00
4021	-1207	-1210	S403	QA	ZG	0.00	120.00	0.64	120.00
4021	-1210	-1213	S403	QA	ZG	0.00	120.00	0.47	120.00
4021	-1213	-1222	S403	QA	ZG	0.00	120.00	0.47	120.00
4021	-1222	413	S403	QA	ZG	0.00	120.00	0.47	120.00
4021	413	-1232	S404	QA	ZG	0.00	857.81	2.65	857.81
4021	-1232	430	S404	QA	ZG	0.00	857.81	2.65	857.81
4021	430	-1240	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1240	-1243	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1243	-1246	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1246	-1249	S404	QA	ZG	0.00	857.81	0.64	857.81
4021	-1249	-1252	S404	QA	ZG	0.00	857.81	0.29	857.81
4021	-1252	-1255	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1255	-1259	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1259	441	S404	QA	ZG	0.00	857.81	0.47	857.81
4022	406	-1223	S403	QA	ZG	0.00	120.00	3.75	120.00
4022	-1223	420	S409	QA	ZG	0.00	120.00	2.65	120.00
4022	420	-1239	S409	QA	ZG	0.00	120.00	2.65	120.00
4022	-1239	442	S405	QA	ZG	0.00	468.66	3.75	468.66
4023	-1189	-1215	S407	QA	ZG	0.00	521.78	3.27	521.78
4023	-1215	-2256	S413	QA	ZG	0.00	468.66	0.47	468.66
4023	-1224	-1231	S412	QA	ZG	0.00	505.83	1.36	505.83
4023	-1233	-2257	S406	QA	ZG	0.00	547.14	1.30	547.14
4023	-2257	-1261	S405	QA	ZG	0.00	468.66	3.75	468.66
4024	-1220	-1229	S407	QA	ZG	0.00	232.80	1.75	232.80
4026	443	-1242	S406	QA	ZG	0.00	547.13	1.30	547.13
4027	-1194	-1195	S407	QA	ZG	0.00	120.00	1.93	120.00
10241	-344	-378	S102	QA	ZG	0.00	244.11	1.78	244.10
40010	405	406	S403	QA	ZG	0.00	486.16	5.89	486.16
40071	-905	301	S300	QA	ZG	0.00	544.00	1.93	544.00
40160	442	441	S408	QA	ZG	0.00	486.16	5.89	486.16
100411	-328	-327	S100	QA	ZG	0.00	120.00	1.93	120.00

2023	-567	-2258	S208	QA	ZG	0.00	468.66	0.47	468.66
2023	-576	-582	S207	QA	ZG	0.00	505.83	1.36	505.83
2023	-582	-583	S207	QA	ZG	0.00	505.83	1.36	505.83
2023	-583	-2259	S207	QA	ZG	0.00	505.83	1.30	505.83
2023	-2259	-612	S206	QA	ZG	0.00	468.66	3.75	468.66
2024	-617	-588	S204	QA	ZG	3.75	303.04	5.05	303.03
4001	401	402	S400	QA	ZG	0.00	120.00	6.30	120.00
4001	403	404	S402	QA	ZG	0.00	120.00	6.10	120.00
4005	413	-1223	S403	QA	ZG	0.00	486.16	5.89	486.16
4005	-1223	-2256	S412	QA	ZG	0.00	120.00	3.97	120.00
4007	-1229	-1230	S407	QA	ZG	0.00	120.00	1.93	120.00
4013	430	-1239	S408	QA	ZG	0.00	486.16	5.89	486.16
4013	-1239	-2257	S405	QA	ZG	0.00	120.00	3.97	120.00
4016	437	438	S400	QA	ZG	0.00	120.00	6.30	120.00
4016	439	440	S402	QA	ZG	0.00	120.00	6.10	120.00
4017	-1214	-1241	S400	QA	ZG	0.00	885.94	6.25	885.94
4018	438	402	S401	QA	ZG	0.00	857.81	12.80	857.81
4019	439	403	S402	QA	ZG	0.00	857.81	12.80	857.81
4020	440	404	S404	QA	ZG	0.00	857.81	12.80	857.81
4021	405	-1197	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1197	-1201	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1201	-1204	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1204	-1207	S404	QA	ZG	0.00	857.81	0.29	857.81
4021	-1207	-1210	S404	QA	ZG	0.00	857.81	0.64	857.81
4021	-1210	-1213	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1213	-1222	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	-1222	413	S404	QA	ZG	0.00	857.81	0.47	857.81
4021	413	-1232	S409	QA	ZG	0.00	120.00	2.65	120.00
4021	-1232	430	S409	QA	ZG	0.00	120.00	2.65	120.00
4021	430	-1240	S408	QA	ZG	0.00	120.00	0.47	120.00
4021	-1240	-1243	S408	QA	ZG	0.00	120.00	0.47	120.00
4021	-1243	-1246	S408	QA	ZG	0.00	120.00	0.47	120.00
4021	-1246	-1249	S408	QA	ZG	0.00	120.00	0.64	120.00
4021	-1249	-1252	S408	QA	ZG	0.00	120.00	0.29	120.00
4021	-1252	-1255	S408	QA	ZG	0.00	120.00	0.47	120.00
4021	-1255	-1259	S408	QA	ZG	0.00	120.00	0.47	120.00
4021	-1259	441	S408	QA	ZG	0.00	120.00	0.47	120.00
4022	406	-1223	S413	QA	ZG	0.00	468.66	3.75	468.66
4022	-1223	420	S412	QA	ZG	0.00	505.83	2.65	505.83
4022	420	-1239	S412	QA	ZG	0.00	505.83	2.65	505.83
4022	-1239	442	S408	QA	ZG	0.00	120.00	3.75	120.00
4023	-1189	-1215	S413	QA	ZG	0.00	468.66	3.27	468.66
4023	-2256	-1224	S412	QA	ZG	0.00	505.83	1.27	505.83
4023	-1231	-1233	S412	QA	ZG	0.00	505.83	1.36	505.83
4023	-1233	-2257	S412	QA	ZG	0.00	505.83	1.30	505.83
4023	-2257	-1261	S406	QA	ZG	0.00	547.14	3.75	547.14
4026	-1221	-1230	S407	QA	ZG	0.00	232.80	1.75	232.80
4026	443	-1242	S406	QA	ZG	1.30	547.14	1.78	547.14
4042	-1267	-1266	S406	QA	ZG	0.00	120.00	1.93	120.00
10241	-344	-378	S102	QA	ZG	1.78	244.10	5.05	244.10
40010	406	-1189	S413	QA	ZG	0.00	120.00	3.97	120.00
40111	-913	302	S300	QA	ZG	0.00	544.00	1.93	544.00
40160	-1261	442	S405	QA	ZG	0.00	120.00	3.97	120.00

Condizione di carico n. 4: Cat.H
Carichi distribuiti

Asta	N1	N2	E	NE	T	DC	Xi <m>	Qi <daN/m>	Xf <m>	Qf <daN/m>
0	720	680	S625	QA2	ZG	0.00	34.44	1.50	34.44	
0	718	682	S625	QA2	ZG	0.00	34.44	1.50	34.44	
0	699	716	S624	QA2	ZG	0.00	32.00	1.50	32.00	
0	700	715	S622	QA2	ZG	0.00	32.00	1.50	32.00	
0	-2268	-2039	S503	QA2	ZG	0.00	32.00	1.30	32.00	
0	-2267	-2075	S507	QA2	ZG	0.00	32.00	1.30	32.00	
0	701	714	S621	QA2	ZG	0.00	32.00	1.50	32.00	
0	682	602	S605	QA2	ZG	0.00	34.44	6.30	34.44	
0	-2266	653	S515	QA2	ZG	0.00	32.00	1.30	32.00	
0	507	-2268	S507	QA2	ZG	0.00	32.00	5.00	32.00	
0	510	-2267	S511	QA2	ZG	0.00	32.00	5.00	32.00	
0	702	713	S620	QA2	ZG	0.00	32.00	1.50	32.00	
0	-2261	673	S519	QA2	ZG	0.00	32.00	1.30	32.00	
0	703	712	S619	QA2	ZG	0.00	32.00	1.50	32.00	

Asta	N1	N2	E	NE	T	DC	Xi <m>	Qi <daN/m>	Xf <m>	Qf <daN/m>
0	718	682	S	624	QA2	ZG	0.00	32.00	1.50	32.00
0	699	716	S	623	QA2	ZG	0.00	32.00	1.50	32.00
0	680	643	S	605	QA2	ZG	0.00	34.44	6.30	34.44
0	700	715	S	623	QA2	ZG	0.00	32.00	1.50	32.00
0	-2268	-2039	S	507	QA2	ZG	0.00	32.00	1.30	32.00
0	-2267	-2075	S	511	QA2	ZG	0.00	32.00	1.30	32.00
0	701	714	S	622	QA2	ZG	0.00	32.00	1.50	32.00
0	-2266	653	S	511	QA2	ZG	0.00	32.00	1.30	32.00
0	507	-2268	S	503	QA2	ZG	0.00	32.00	5.00	32.00
0	510	-2267	S	507	QA2	ZG	0.00	32.00	5.00	32.00
0	643	641	S	603	QA2	ZG	0.00	34.44	6.10	34.44
0	702	713	S	621	QA2	ZG	0.00	32.00	1.50	32.00
0	-2261	673	S	523	QA2	ZG	0.00	32.00	1.30	32.00
0	703	712	S	620	QA2	ZG	0.00	32.00	1.50	32.00

0	-2260	663	S515	QA2	ZG	0.00	32.00	1.30	32.00
0	514	-2266	S511	QA2	ZG	0.00	32.00	5.00	32.00
0	-2265	668	S523	QA2	ZG	0.00	32.00	1.30	32.00
0	704	711	S618	QA2	ZG	0.00	32.00	1.50	32.00
0	517	-2260	S515	QA2	ZG	0.00	32.00	5.00	32.00
0	602	603	S603	QA2	ZG	0.00	34.44	6.10	34.44
0	705	710	S618	QA2	ZG	0.00	32.00	1.50	32.00
0	-2264	658	S532	QA2	ZG	0.00	32.00	1.30	32.00
0	511	510	S510	QA2	ZG	0.00	32.00	6.10	32.00
0	706	709	S617	QA2	ZG	0.00	32.00	1.50	32.00
0	521	-2261	S523	QA2	ZG	0.00	32.00	5.00	32.00
0	707	708	S616	QA2	ZG	0.00	32.00	1.50	32.00
0	-2263	-2078	S536	QA2	ZG	0.00	32.00	1.30	32.00
0	508	507	S506	QA2	ZG	0.00	32.00	6.10	32.00
0	524	-2265	S527	QA2	ZG	0.00	32.00	5.00	32.00
0	717	681	S615	QA2	ZG	0.00	32.00	1.50	32.00
0	-2262	-2042	S549	QA2	ZG	0.00	32.00	1.30	32.00
0	527	-2264	S532	QA2	ZG	0.00	32.00	5.00	32.00
0	515	514	S514	QA2	ZG	0.00	32.00	6.10	32.00
0	531	-2263	S532	QA2	ZG	0.00	32.00	5.00	32.00
0	518	517	S514	QA2	ZG	0.00	32.00	6.10	32.00
0	534	-2262	S536	QA2	ZG	0.00	32.00	5.00	32.00
0	603	604	S602	QA2	ZG	0.00	34.44	6.10	34.44
0	522	521	S522	QA2	ZG	0.00	32.00	6.10	32.00
0	509	508	S501	QA2	ZG	0.00	32.00	6.10	32.00
0	525	524	S522	QA2	ZG	0.00	32.00	6.10	32.00
0	679	678	S604	QA2	ZG	0.00	34.44	6.30	34.44
0	512	511	S509	QA2	ZG	0.00	32.00	6.10	32.00
0	528	527	S531	QA2	ZG	0.00	32.00	6.10	32.00
0	535	534	S540	QA2	ZG	0.00	32.00	6.10	32.00
0	523	522	S521	QA2	ZG	0.00	32.00	6.10	32.00
0	519	518	S517	QA2	ZG	0.00	32.00	6.10	32.00
0	516	515	S509	QA2	ZG	0.00	32.00	6.10	32.00
0	532	531	S531	QA2	ZG	0.00	32.00	6.10	32.00
0	642	685	S606	QA2	ZG	0.00	34.44	6.10	34.44
0	678	644	S600	QA2	ZG	0.00	34.44	6.10	34.44
0	529	528	S529	QA2	ZG	0.00	32.00	6.10	32.00
0	-2040	509	S542	QA2	ZG	0.00	32.00	6.10	32.00
0	526	525	S525	QA2	ZG	0.00	32.00	6.10	32.00
0	-1871	512	S542	QA2	ZG	0.00	32.00	6.10	32.00
0	533	532	S529	QA2	ZG	0.00	32.00	6.10	32.00
0	639	640	S601	QA2	ZG	0.00	34.44	6.10	34.44
0	654	516	S512	QA2	ZG	0.00	32.00	6.10	32.00
0	685	689	S607	QA2	ZG	0.00	34.44	5.89	34.44
0	664	519	S512	QA2	ZG	0.00	32.00	6.10	32.00
0	536	535	S534	QA2	ZG	0.00	32.00	6.10	32.00
0	674	523	S516	QA2	ZG	0.00	32.00	6.10	32.00
0	-2040	645	S504	QA2	ZG	0.00	32.00	5.89	32.00
0	-1871	649	S504	QA2	ZG	0.00	32.00	5.89	32.00
0	689	693	S608	QA2	ZG	0.00	34.44	3.97	34.44
0	654	655	S543	QA2	ZG	0.00	32.00	5.89	32.00
0	664	665	S544	QA2	ZG	0.00	32.00	5.89	32.00
0	669	526	S524	QA2	ZG	0.00	32.00	6.10	32.00
0	659	529	S528	QA2	ZG	0.00	32.00	6.10	32.00
0	-1900	533	S533	QA2	ZG	0.00	32.00	6.10	32.00
0	-1906	536	S537	QA2	ZG	0.00	32.00	6.10	32.00
0	674	620	S545	QA2	ZG	0.00	32.00	5.89	32.00
0	669	670	S546	QA2	ZG	0.00	32.00	5.89	32.00
0	649	650	S551	QA2	ZG	0.00	32.00	3.97	32.00
0	677	686	S610	QA2	ZG	0.00	34.44	6.10	34.44
0	659	660	S548	QA2	ZG	0.00	32.00	5.89	32.00
0	-1900	651	S548	QA2	ZG	0.00	32.00	5.89	32.00
0	693	697	S609	QA2	ZG	0.00	34.44	4.33	34.44
0	645	646	S560	QA2	ZG	0.00	32.00	3.97	32.00
0	650	-2124	S562	QA2	ZG	0.00	32.00	2.40	32.00
0	695	768	S637	QA2	ZG	0.00	34.44	1.50	34.44
0	655	656	S530	QA2	ZG	0.00	32.00	3.97	32.00
0	646	-2123	S561	QA2	ZG	0.00	32.00	2.40	32.00
0	646	-2123	S559	QA2	ZG	0.00	32.00	1.92	32.00
0	620	675	S554	QA2	ZG	0.00	32.00	3.97	32.00
0	-1906	647	S539	QA2	ZG	0.00	32.00	5.89	32.00
0	684	688	S611	QA2	ZG	0.00	34.44	5.89	34.44
0	-2123	-2269	S559	QA2	ZG	0.00	32.00	0.63	32.00

0	-2260	663	S519	QA2	ZG	0.00	32.00	1.30	32.00
0	514	-2266	S515	QA2	ZG	0.00	32.00	5.00	32.00
0	-2265	668	S527	QA2	ZG	0.00	32.00	1.30	32.00
0	704	711	S619	QA2	ZG	0.00	32.00	1.50	32.00
0	517	-2260	S519	QA2	ZG	0.00	32.00	5.00	32.00
0	705	710	S617	QA2	ZG	0.00	32.00	1.50	32.00
0	-2264	658	S527	QA2	ZG	0.00	32.00	1.30	32.00
0	511	510	S506	QA2	ZG	0.00	32.00	6.10	32.00
0	706	709	S616	QA2	ZG	0.00	32.00	1.50	32.00
0	521	-2261	S519	QA2	ZG	0.00	32.00	5.00	32.00
0	707	708	S615	QA2	ZG	0.00	32.00	1.50	32.00
0	-2263	-2078	S532	QA2	ZG	0.00	32.00	1.30	32.00
0	508	507	S502	QA2	ZG	0.00	32.00	6.10	32.00
0	524	-2265	S523	QA2	ZG	0.00	32.00	5.00	32.00
0	717	681	S614	QA2	ZG	0.00	34.44	1.50	34.44
0	-2262	-2042	S536	QA2	ZG	0.00	32.00	1.30	32.00
0	527	-2264	S527	QA2	ZG	0.00	32.00	5.00	32.00
0	515	514	S510	QA2	ZG	0.00	32.00	6.10	32.00
0	719	679	S614	QA2	ZG	0.00	34.44	1.50	34.44
0	531	-2263	S536	QA2	ZG	0.00	32.00	5.00	32.00
0	518	517	S518	QA2	ZG	0.00	32.00	6.10	32.00
0	534	-2262	S549	QA2	ZG	0.00	32.00	5.00	32.00
0	522	521	S518	QA2	ZG	0.00	32.00	6.10	32.00
0	681	638	S604	QA2	ZG	0.00	34.44	6.30	34.44
0	509	508	S505	QA2	ZG	0.00	32.00	6.10	32.00
0	525	524	S526	QA2	ZG	0.00	32.00	6.10	32.00
0	512	511	S505	QA2	ZG	0.00	32.00	6.10	32.00
0	528	527	S526	QA2	ZG	0.00	32.00	6.10	32.00
0	535	534	S535	QA2	ZG	0.00	32.00	6.10	32.00
0	523	522	S517	QA2	ZG	0.00	32.00	6.10	32.00
0	519	518	S513	QA2	ZG	0.00	32.00	6.10	32.00
0	641	642	S602	QA2	ZG	0.00	34.44	6.10	34.44
0	516	515	S513	QA2	ZG	0.00	32.00	6.10	32.00
0	532	531	S535	QA2	ZG	0.00	32.00	6.10	32.00
0	638	639	S600	QA2	ZG	0.00	34.44	6.10	34.44
0	529	528	S525	QA2	ZG	0.00	32.00	6.10	32.00
0	-2040	509	S500	QA2	ZG	0.00	32.00	6.10	32.00
0	526	525	S521	QA2	ZG	0.00	32.00	6.10	32.00
0	-1871	512	S508	QA2	ZG	0.00	32.00	6.10	32.00
0	604	683	S606	QA2	ZG	0.00	34.44	6.10	34.44
0	533	532	S534	QA2	ZG	0.00	32.00	6.10	32.00
0	654	516	S508	QA2	ZG	0.00	32.00	6.10	32.00
0	683	687	S607	QA2	ZG	0.00	34.44	5.89	34.44
0	644	677	S601	QA2	ZG	0.00	34.44	6.10	34.44
0	664	519	S516	QA2	ZG	0.00	32.00	6.10	32.00
0	536	535	S538	QA2	ZG	0.00	32.00	6.10	32.00
0	674	523	S520	QA2	ZG	0.00	32.00	6.10	32.00
0	-2040	645	S550	QA2	ZG	0.00	32.00	5.89	32.00
0	-1871	649	S541	QA2	ZG	0.00	32.00	5.89	32.00
0	654	655	S541	QA2	ZG	0.00	32.00	5.89	32.00
0	664	665	S543	QA2	ZG	0.00	32.00	5.89	32.00
0	669	526	S520	QA2	ZG	0.00	32.00	6.10	32.00
0	659	529	S524	QA2	ZG	0.00	32.00	6.10	32.00
0	-1900	533	S528	QA2	ZG	0.00	32.00	6.10	32.00
0	-1906	536	S533	QA2	ZG	0.00	32.00	6.10	32.00
0	674	620	S544	QA2	ZG	0.00	32.00	5.89	32.00
0	669	670	S545	QA2	ZG	0.00	32.00	5.89	32.00
0	649	650	S530	QA2	ZG	0.00	32.00	3.97	32.00
0	640	684	S610	QA2	ZG	0.00	34.44	6.10	34.44
0	659	660	S546	QA2	ZG	0.00	32.00	5.89	32.00
0	-1900	651	S539	QA2	ZG	0.00	32.00	5.89	32.00
0	687	691	S608	QA2	ZG	0.00	34.44	3.97	34.44
0	645	646	S551	QA2	ZG	0.00	32.00	3.97	32.00
0	650	-2124	S561	QA2	ZG	0.00	32.00	2.40	32.00
0	691	695	S609	QA2	ZG	0.00	34.44	4.33	34.44
0	695	768	S636	QA2	ZG	0.00	32.00	1.50	32.00
0	655	656	S563	QA2	ZG	0.00	32.00	3.97	32.00
0	646	-2123	S559	QA2	ZG	1.92	32.00	2.40	32.00
0	697	770	S637	QA2	ZG	0.00	34.44	1.50	34.44
0	620	675	S555	QA2	ZG	0.00	32.00	3.97	32.00
0	-1906	647	S567	QA2	ZG	0.00	32.00	5.89	32.00
0	-2123	-2269	S561	QA2	ZG	0.00	32.00	0.63	32.00
0	-2269	-2284	S561	QA2	ZG	0.00	32.00	1.30	32.00

0	-2269	-2284	S559	QA2	ZG	0.00	32.00	1.30	32.00
0	-2124	-2270	S562	QA2	ZG	0.00	32.00	0.63	32.00
0	-2270	-2285	S562	QA2	ZG	0.00	32.00	1.30	32.00
0	766	778	S636	QA2	ZG	0.00	32.00	1.50	32.00
0	665	666	S563	QA2	ZG	0.00	32.00	3.97	32.00
0	656	-2125	S562	QA2	ZG	0.00	32.00	2.40	32.00
0	-2125	-2271	S552	QA2	ZG	0.00	32.00	0.63	32.00
0	670	671	S555	QA2	ZG	0.00	32.00	3.97	32.00
0	666	-2126	S552	QA2	ZG	0.00	32.00	2.40	32.00
0	660	661	S557	QA2	ZG	0.00	32.00	3.97	32.00
0	-2271	657	S552	QA2	ZG	0.00	32.00	1.30	32.00
0	765	779	S634	QA2	ZG	0.00	32.00	1.50	32.00
0	-2126	-2277	S552	QA2	ZG	0.00	32.00	0.63	32.00
0	651	652	S557	QA2	ZG	0.00	32.00	3.97	32.00
0	-2277	667	S552	QA2	ZG	0.00	32.00	1.30	32.00
0	675	-2127	S553	QA2	ZG	0.00	32.00	2.40	32.00
0	764	780	S633	QA2	ZG	0.00	32.00	1.50	32.00
0	-2127	-2276	S553	QA2	ZG	0.00	32.00	0.63	32.00
0	671	-2128	S564	QA2	ZG	0.00	32.00	2.40	32.00
0	647	648	S547	QA2	ZG	0.00	32.00	3.97	32.00
0	-2276	676	S553	QA2	ZG	0.00	32.00	1.30	32.00
0	661	-2129	S565	QA2	ZG	0.00	32.00	2.40	32.00
0	763	781	S632	QA2	ZG	0.00	32.00	1.50	32.00
0	-2128	-2272	S564	QA2	ZG	0.00	32.00	0.63	32.00
0	688	692	S612	QA2	ZG	0.00	34.44	3.97	34.44
0	-2272	672	S565	QA2	ZG	0.00	32.00	1.30	32.00
0	762	782	S632	QA2	ZG	0.00	32.00	1.50	32.00
0	-2129	-2273	S556	QA2	ZG	0.00	32.00	0.63	32.00
0	-2273	662	S556	QA2	ZG	0.00	32.00	1.30	32.00
0	652	-2130	S568	QA2	ZG	0.00	32.00	2.40	32.00
0	761	754	S630	QA2	ZG	0.00	32.00	1.50	32.00
0	648	-2131	S569	QA2	ZG	0.00	32.00	2.40	32.00
0	-2130	-2274	S556	QA2	ZG	0.00	32.00	0.63	32.00
0	-2274	-2283	S556	QA2	ZG	0.00	32.00	1.30	32.00
0	760	755	S629	QA2	ZG	0.00	32.00	1.50	32.00
0	-2131	-2275	S569	QA2	ZG	0.00	32.00	0.63	32.00
0	692	696	S613	QA2	ZG	0.00	34.44	4.33	34.44
0	-2275	-2282	S568	QA2	ZG	0.00	32.00	1.30	32.00
0	759	756	S629	QA2	ZG	0.00	32.00	1.50	32.00
0	758	757	S627	QA2	ZG	0.00	32.00	1.50	32.00
0	696	767	S627	QA2	ZG	0.00	32.00	1.50	32.00
0	698	769	S626	QA2	ZG	0.00	34.44	1.50	34.44
5001	502	503	S502	QA2	ZG	0.00	32.00	6.10	32.00
5001	504	505	S500	QA2	ZG	0.00	32.00	6.10	32.00
5016	538	539	S540	QA2	ZG	0.00	32.00	6.10	32.00
5016	540	541	S537	QA2	ZG	0.00	32.00	6.10	32.00
50010	-1846	-1847	S560	QA2	ZG	0.00	32.00	3.97	32.00
50010	-1851	-1852	S559	QA2	ZG	0.00	32.00	0.48	32.00
50160	541	-1915	S567	QA2	ZG	0.00	32.00	5.89	32.00
50160	-1916	-1920	S569	QA2	ZG	0.00	32.00	1.92	32.00
50160	-1921	771	S569	QA2	ZG	0.00	32.00	1.93	32.00

Condizione di carico n. 5: Neve

Carichi distribuiti

Asta	N1	N2	E	NE	T	DC	Xi <m>	Qi <daN/m>	Xf <m>	Qf <daN/m>
0	720	680	S625	QA3	ZG	0.00	34.44	1.50	34.44	
0	718	682	S625	QA3	ZG	0.00	34.44	1.50	34.44	
0	699	716	S624	QA3	ZG	0.00	32.00	1.50	32.00	
0	700	715	S622	QA3	ZG	0.00	32.00	1.50	32.00	
0	-2268	-2039	S503	QA3	ZG	0.00	30.72	1.30	30.72	
0	-2267	-2075	S507	QA3	ZG	0.00	30.72	1.30	30.72	
0	701	714	S621	QA3	ZG	0.00	32.00	1.50	32.00	
0	682	602	S605	QA3	ZG	0.00	34.44	6.30	34.44	
0	-2266	653	S515	QA3	ZG	0.00	30.72	1.30	30.72	
0	507	-2268	S507	QA3	ZG	0.00	30.72	5.00	30.72	
0	510	-2267	S511	QA3	ZG	0.00	30.72	5.00	30.72	
0	702	713	S620	QA3	ZG	0.00	32.00	1.50	32.00	
0	-2261	673	S519	QA3	ZG	0.00	30.72	1.30	30.72	
0	703	712	S619	QA3	ZG	0.00	32.00	1.50	32.00	
0	-2260	663	S515	QA3	ZG	0.00	30.72	1.30	30.72	
0	514	-2266	S511	QA3	ZG	0.00	30.72	5.00	30.72	
0	-2265	668	S523	QA3	ZG	0.00	30.72	1.30	30.72	
0	704	711	S618	QA3	ZG	0.00	32.00	1.50	32.00	

0	-2124	-2270	S561	QA2	ZG	0.00	32.00	0.63	32.00
0	-2270	-2285	S561	QA2	ZG	0.00	32.00	1.30	32.00
0	766	778	S635	QA2	ZG	0.00	32.00	1.50	32.00
0	665	666	S554	QA2	ZG	0.00	32.00	3.97	32.00
0	656	-2125	S552	QA2	ZG	0.00	32.00	2.40	32.00
0	686	690	S611	QA2	ZG	0.00	34.44	5.89	34.44
0	-2125	-2271	S562	QA2	ZG	0.00	32.00	0.63	32.00
0	670	671	S566	QA2	ZG	0.00	32.00	3.97	32.00
0	666	-2126	S553	QA2	ZG	0.00	32.00	2.40	32.00
0	660	661	S566	QA2	ZG	0.00	32.00	3.97	32.00
0	-2271	657	S562	QA2	ZG	0.00	32.00	1.30	32.00
0	765	779	S635	QA2	ZG	0.00	32.00	1.50	32.00
0	-2126	-2277	S553	QA2	ZG	0.00	32.00	0.63	32.00
0	651	652	S558	QA2	ZG	0.00	32.00	3.97	32.00
0	-2277	667	S553	QA2	ZG	0.00	32.00	1.30	32.00
0	675	-2127	S564	QA2	ZG	0.00	32.00	2.40	32.00
0	764	780	S634	QA2	ZG	0.00	32.00	1.50	32.00
0	-2127	-2276	S564	QA2	ZG	0.00	32.00	0.63	32.00
0	671	-2128	S565	QA2	ZG	0.00	32.00	2.40	32.00
0	647	648	S558	QA2	ZG	0.00	32.00	3.97	32.00
0	-2276	676	S564	QA2	ZG	0.00	32.00	1.30	32.00
0	661	-2129	S556	QA2	ZG	0.00	32.00	2.40	32.00
0	763	781	S633	QA2	ZG	0.00	32.00	1.50	32.00
0	-2128	-2272	S565	QA2	ZG	0.00	32.00	0.63	32.00
0	-2272	672	S564	QA2	ZG	0.00	32.00	1.30	32.00
0	762	782	S631	QA2	ZG	0.00	32.00	1.50	32.00
0	-2129	-2273	S565	QA2	ZG	0.00	32.00	0.63	32.00
0	-2273	662	S565	QA2	ZG	0.00	32.00	1.30	32.00
0	652	-2130	S556	QA2	ZG	0.00	32.00	2.40	32.00
0	690	694	S612	QA2	ZG	0.00	34.44	3.97	34.44
0	761	754	S631	QA2	ZG	0.00	32.00	1.50	32.00
0	648	-2131	S568	QA2	ZG	0.00	32.00	2.40	32.00
0	-2130	-2274	S568	QA2	ZG	0.00	32.00	0.63	32.00
0	-2274	-2283	S568	QA2	ZG	0.00	32.00	1.30	32.00
0	760	755	S630	QA2	ZG	0.00	32.00	1.50	32.00
0	-2131	-2275	S568	QA2	ZG	0.00	32.00	0.63	32.00
0	-2275	-2282	S569	QA2	ZG	0.00	32.00	1.30	32.00
0	759	756	S628	QA2	ZG	0.00	32.00	1.50	32.00
0	694	698	S613	QA2	ZG	0.00	34.44	4.33	34.44
0	758	757	S628	QA2	ZG	0.00	32.00	1.50	32.00
0	696	767	S626	QA2	ZG	0.00	34.44	1.50	34.44
5001	501	502	S503	QA2	ZG	0.00	32.00	6.30	32.00
5001	503	504	S501	QA2	ZG	0.00	32.00	6.10	32.00
5016	537	538	S549	QA2	ZG	0.00	32.00	6.30	32.00
5016	539	540	S538	QA2	ZG	0.00	32.00	6.10	32.00
50010	505	-1846	S550	QA2	ZG	0.00	32.00	5.89	32.00
50010	-1847	-1851	S559	QA2	ZG	0.00	32.00	1.92	32.00
50010	-1852	772	S559	QA2	ZG	0.00	32.00	1.93	32.00
50160	-1915	-1916	S547	QA2	ZG	0.00	32.00	3.97	32.00
50160	-1920	-1921	S569	QA2	ZG	0.00	32.00	0.48	32.00

Asta	N1	N2	E	NE	T	DC	Xi ⟨m⟩	Qi ⟨daN/m⟩	Xf ⟨m⟩	Qf ⟨daN/m⟩
0	718	682	S	624	QA3	ZG	0.00	32.00	1.50	32.00
0	699	716	S	623	QA3	ZG	0.00	32.00	1.50	32.00
0	680	643	S	605	QA3	ZG	0.00	34.44	6.30	34.44
0	700	715	S	623	QA3	ZG	0.00	32.00	1.50	32.00
0	-2268	-2039	S	507	QA3	ZG	0.00	30.72	1.30	30.72
0	-2267	-2075	S	511	QA3	ZG	0.00	30.72	1.30	30.72
0	701	714	S	622	QA3	ZG	0.00	32.00	1.50	32.00
0	-2266	653	S	511	QA3	ZG	0.00	30.72	1.30	30.72
0	507	-2268	S	503	QA3	ZG	0.00	30.72	5.00	30.72
0	510	-2267	S	507	QA3	ZG	0.00	30.72	5.00	30.72
0	643	641	S	603	QA3	ZG	0.00	34.44	6.10	34.44
0	702	713	S	621	QA3	ZG	0.00	32.00	1.50	32.00
0	-2261	673	S	523	QA3	ZG	0.00	30.72	1.30	30.72
0	703	712	S	620	QA3	ZG	0.00	32.00	1.50	32.00
0	-2260	663	S	519	QA3	ZG	0.00	30.72	1.30	30.72
0	514	-2266	S	515	QA3	ZG	0.00	30.72	5.00	30.72
0	-2265	668	S	527	QA3	ZG	0.00	30.72	1.30	30.72
0	704	711	S	619	QA3	ZG	0.00	32.00	1.50	32.00

0	517	-2260	S515	QA3	ZG	0.00	30.72	5.00	30.72
0	602	603	S603	QA3	ZG	0.00	34.44	6.10	34.44
0	705	710	S618	QA3	ZG	0.00	32.00	1.50	32.00
0	-2264	658	S532	QA3	ZG	0.00	30.72	1.30	30.72
0	511	510	S510	QA3	ZG	0.00	30.72	6.10	30.72
0	706	709	S617	QA3	ZG	0.00	32.00	1.50	32.00
0	521	-2261	S523	QA3	ZG	0.00	30.72	5.00	30.72
0	707	708	S616	QA3	ZG	0.00	32.00	1.50	32.00
0	-2263	-2078	S536	QA3	ZG	0.00	30.72	1.30	30.72
0	508	507	S506	QA3	ZG	0.00	30.72	6.10	30.72
0	524	-2265	S527	QA3	ZG	0.00	30.72	5.00	30.72
0	717	681	S615	QA3	ZG	0.00	32.00	1.50	32.00
0	-2262	-2042	S549	QA3	ZG	0.00	30.72	1.30	30.72
0	527	-2264	S532	QA3	ZG	0.00	30.72	5.00	30.72
0	515	514	S514	QA3	ZG	0.00	30.72	6.10	30.72
0	531	-2263	S532	QA3	ZG	0.00	30.72	5.00	30.72
0	518	517	S514	QA3	ZG	0.00	30.72	6.10	30.72
0	534	-2262	S536	QA3	ZG	0.00	30.72	5.00	30.72
0	603	604	S602	QA3	ZG	0.00	34.44	6.10	34.44
0	522	521	S522	QA3	ZG	0.00	30.72	6.10	30.72
0	509	508	S501	QA3	ZG	0.00	30.72	6.10	30.72
0	525	524	S522	QA3	ZG	0.00	30.72	6.10	30.72
0	679	678	S604	QA3	ZG	0.00	34.44	6.30	34.44
0	512	511	S509	QA3	ZG	0.00	30.72	6.10	30.72
0	528	527	S531	QA3	ZG	0.00	30.72	6.10	30.72
0	535	534	S540	QA3	ZG	0.00	30.72	6.10	30.72
0	523	522	S521	QA3	ZG	0.00	30.72	6.10	30.72
0	519	518	S517	QA3	ZG	0.00	30.72	6.10	30.72
0	516	515	S509	QA3	ZG	0.00	30.72	6.10	30.72
0	532	531	S531	QA3	ZG	0.00	30.72	6.10	30.72
0	642	685	S606	QA3	ZG	0.00	34.44	6.10	34.44
0	678	644	S600	QA3	ZG	0.00	34.44	6.10	34.44
0	529	528	S529	QA3	ZG	0.00	30.72	6.10	30.72
0	-2040	509	S542	QA3	ZG	0.00	30.72	6.10	30.72
0	526	525	S525	QA3	ZG	0.00	30.72	6.10	30.72
0	-1871	512	S542	QA3	ZG	0.00	30.72	6.10	30.72
0	533	532	S529	QA3	ZG	0.00	30.72	6.10	30.72
0	639	640	S601	QA3	ZG	0.00	34.44	6.10	34.44
0	654	516	S512	QA3	ZG	0.00	30.72	6.10	30.72
0	685	689	S607	QA3	ZG	0.00	34.44	5.89	34.44
0	664	519	S512	QA3	ZG	0.00	30.72	6.10	30.72
0	536	535	S534	QA3	ZG	0.00	30.72	6.10	30.72
0	674	523	S516	QA3	ZG	0.00	30.72	6.10	30.72
0	-2040	645	S504	QA3	ZG	0.00	30.72	5.89	30.72
0	-1871	649	S504	QA3	ZG	0.00	30.72	5.89	30.72
0	689	693	S608	QA3	ZG	0.00	34.44	3.97	34.44
0	654	655	S543	QA3	ZG	0.00	30.72	5.89	30.72
0	664	665	S544	QA3	ZG	0.00	30.72	5.89	30.72
0	669	526	S524	QA3	ZG	0.00	30.72	6.10	30.72
0	659	529	S528	QA3	ZG	0.00	30.72	6.10	30.72
0	-1900	533	S533	QA3	ZG	0.00	30.72	6.10	30.72
0	-1906	536	S537	QA3	ZG	0.00	30.72	6.10	30.72
0	674	620	S545	QA3	ZG	0.00	30.72	5.89	30.72
0	669	670	S546	QA3	ZG	0.00	30.72	5.89	30.72
0	649	650	S551	QA3	ZG	0.00	30.72	3.97	30.72
0	677	686	S610	QA3	ZG	0.00	34.44	6.10	34.44
0	659	660	S548	QA3	ZG	0.00	30.72	5.89	30.72
0	-1900	651	S548	QA3	ZG	0.00	30.72	5.89	30.72
0	693	697	S609	QA3	ZG	0.00	34.44	4.33	34.44
0	645	646	S560	QA3	ZG	0.00	30.72	3.97	30.72
0	650	-2124	S562	QA3	ZG	0.00	30.72	2.40	30.72
0	695	768	S637	QA3	ZG	0.00	34.44	1.50	34.44
0	655	656	S530	QA3	ZG	0.00	30.72	3.97	30.72
0	646	-2123	S561	QA3	ZG	0.00	30.72	2.40	30.72
0	646	-2123	S559	QA3	ZG	0.00	30.72	1.92	30.72
0	620	675	S554	QA3	ZG	0.00	30.72	3.97	30.72
0	-1906	647	S539	QA3	ZG	0.00	30.72	5.89	30.72
0	684	688	S611	QA3	ZG	0.00	34.44	5.89	34.44
0	-2123	-2269	S559	QA3	ZG	0.00	30.72	0.63	30.72
0	-2269	-2284	S559	QA3	ZG	0.00	30.72	1.30	30.72
0	-2124	-2270	S562	QA3	ZG	0.00	30.72	0.63	30.72
0	-2270	-2285	S562	QA3	ZG	0.00	30.72	1.30	30.72
0	766	778	S636	QA3	ZG	0.00	32.00	1.50	32.00

0	517	-2260	S519	QA3	ZG	0.00	30.72	5.00	30.72
0	705	710	S617	QA3	ZG	0.00	32.00	1.50	32.00
0	-2264	658	S527	QA3	ZG	0.00	30.72	1.30	30.72
0	511	510	S506	QA3	ZG	0.00	30.72	6.10	30.72
0	706	709	S616	QA3	ZG	0.00	32.00	1.50	32.00
0	521	-2261	S519	QA3	ZG	0.00	30.72	5.00	30.72
0	707	708	S615	QA3	ZG	0.00	32.00	1.50	32.00
0	-2263	-2078	S532	QA3	ZG	0.00	30.72	1.30	30.72
0	508	507	S502	QA3	ZG	0.00	30.72	6.10	30.72
0	524	-2265	S523	QA3	ZG	0.00	30.72	5.00	30.72
0	717	681	S614	QA3	ZG	0.00	34.44	1.50	34.44
0	-2262	-2042	S536	QA3	ZG	0.00	30.72	1.30	30.72
0	527	-2264	S527	QA3	ZG	0.00	30.72	5.00	30.72
0	515	514	S510	QA3	ZG	0.00	30.72	6.10	30.72
0	719	679	S614	QA3	ZG	0.00	34.44	1.50	34.44
0	531	-2263	S536	QA3	ZG	0.00	30.72	5.00	30.72
0	518	517	S518	QA3	ZG	0.00	30.72	6.10	30.72
0	534	-2262	S549	QA3	ZG	0.00	30.72	5.00	30.72
0	522	521	S518	QA3	ZG	0.00	30.72	6.10	30.72
0	681	638	S604	QA3	ZG	0.00	34.44	6.30	34.44
0	509	508	S505	QA3	ZG	0.00	30.72	6.10	30.72
0	525	524	S526	QA3	ZG	0.00	30.72	6.10	30.72
0	512	511	S505	QA3	ZG	0.00	30.72	6.10	30.72
0	528	527	S526	QA3	ZG	0.00	30.72	6.10	30.72
0	535	534	S535	QA3	ZG	0.00	30.72	6.10	30.72
0	523	522	S517	QA3	ZG	0.00	30.72	6.10	30.72
0	519	518	S513	QA3	ZG	0.00	30.72	6.10	30.72
0	641	642	S602	QA3	ZG	0.00	34.44	6.10	34.44
0	516	515	S513	QA3	ZG	0.00	30.72	6.10	30.72
0	532	531	S535	QA3	ZG	0.00	30.72	6.10	30.72
0	638	639	S600	QA3	ZG	0.00	34.44	6.10	34.44
0	529	528	S525	QA3	ZG	0.00	30.72	6.10	30.72
0	-2040	509	S500	QA3	ZG	0.00	30.72	6.10	30.72
0	526	525	S521	QA3	ZG	0.00	30.72	6.10	30.72
0	-1871	512	S508	QA3	ZG	0.00	30.72	6.10	30.72
0	604	683	S606	QA3	ZG	0.00	34.44	6.10	34.44
0	533	532	S534	QA3	ZG	0.00	30.72	6.10	30.72
0	654	516	S508	QA3	ZG	0.00	30.72	6.10	30.72
0	683	687	S607	QA3	ZG	0.00	34.44	5.89	34.44
0	644	677	S601	QA3	ZG	0.00	34.44	6.10	34.44
0	664	519	S516	QA3	ZG	0.00	30.72	6.10	30.72
0	536	535	S538	QA3	ZG	0.00	30.72	6.10	30.72
0	674	523	S520	QA3	ZG	0.00	30.72	6.10	30.72
0	-2040	645	S550	QA3	ZG	0.00	30.72	5.89	30.72
0	-1871	649	S541	QA3	ZG	0.00	30.72	5.89	30.72
0	654	655	S541	QA3	ZG	0.00	30.72	5.89	30.72
0	664	665	S543	QA3	ZG	0.00	30.72	5.89	30.72
0	669	526	S520	QA3	ZG	0.00	30.72	6.10	30.72
0	659	529	S524	QA3	ZG	0.00	30.72	6.10	30.72
0	-1900	533	S528	QA3	ZG	0.00	30.72	6.10	30.72
0	-1906	536	S533	QA3	ZG	0.00	30.72	6.10	30.72
0	674	620	S544	QA3	ZG	0.00	30.72	5.89	30.72
0	669	670	S545	QA3	ZG	0.00	30.72	5.89	30.72
0	649	650	S530	QA3	ZG	0.00	30.72	3.97	30.72
0	640	684	S610	QA3	ZG	0.00	34.44	6.10	34.44
0	659	660	S546	QA3	ZG	0.00	30.72	5.89	30.72
0	-1900	651	S539	QA3	ZG	0.00	30.72	5.89	30.72
0	687	691	S608	QA3	ZG	0.00	34.44	3.97	34.44
0	645	646	S551	QA3	ZG	0.00	30.72	3.97	30.72
0	650	-2124	S561	QA3	ZG	0.00	30.72	2.40	30.72
0	691	695	S609	QA3	ZG	0.00	34.44	4.33	34.44
0	695	768	S636	QA3	ZG	0.00	32.00	1.50	32.00
0	655	656	S563	QA3	ZG	0.00	30.72	3.97	30.72
0	646	-2123	S559	QA3	ZG	1.92	30.72	2.40	30.72
0	697	770	S637	QA3	ZG	0.00	34.44	1.50	34.44
0	620	675	S555	QA3	ZG	0.00	30.72	3.97	30.72
0	-1906	647	S567	QA3	ZG	0.00	30.72	5.89	30.72
0	-2123	-2269	S561	QA3	ZG	0.00	30.72	0.63	30.72
0	-2269	-2284	S561	QA3	ZG	0.00	30.72	1.30	30.72
0	-2124	-2270	S561	QA3	ZG	0.00	30.72	0.63	30.72
0	-2270	-2285	S561	QA3	ZG	0.00	30.72	1.30	30.72
0	766	778	S635	QA3	ZG	0.00	32.00	1.50	32.00
0	665	666	S554	QA3	ZG	0.00	30.72	3.97	30.72

0	665	666	S563	QA3	ZG	0.00	30.72	3.97	30.72
0	656	-2125	S562	QA3	ZG	0.00	30.72	2.40	30.72
0	-2125	-2271	S552	QA3	ZG	0.00	30.72	0.63	30.72
0	670	671	S555	QA3	ZG	0.00	30.72	3.97	30.72
0	666	-2126	S552	QA3	ZG	0.00	30.72	2.40	30.72
0	660	661	S557	QA3	ZG	0.00	30.72	3.97	30.72
0	-2271	657	S552	QA3	ZG	0.00	30.72	1.30	30.72
0	765	779	S634	QA3	ZG	0.00	32.00	1.50	32.00
0	-2126	-2277	S552	QA3	ZG	0.00	30.72	0.63	30.72
0	651	652	S557	QA3	ZG	0.00	30.72	3.97	30.72
0	-2277	667	S552	QA3	ZG	0.00	30.72	1.30	30.72
0	675	-2127	S553	QA3	ZG	0.00	30.72	2.40	30.72
0	764	780	S633	QA3	ZG	0.00	32.00	1.50	32.00
0	-2127	-2276	S553	QA3	ZG	0.00	30.72	0.63	30.72
0	671	-2128	S564	QA3	ZG	0.00	30.72	2.40	30.72
0	647	648	S547	QA3	ZG	0.00	30.72	3.97	30.72
0	-2276	676	S553	QA3	ZG	0.00	30.72	1.30	30.72
0	661	-2129	S565	QA3	ZG	0.00	30.72	2.40	30.72
0	763	781	S632	QA3	ZG	0.00	32.00	1.50	32.00
0	-2128	-2272	S564	QA3	ZG	0.00	30.72	0.63	30.72
0	688	692	S612	QA3	ZG	0.00	34.44	3.97	34.44
0	-2272	672	S565	QA3	ZG	0.00	30.72	1.30	30.72
0	762	782	S632	QA3	ZG	0.00	32.00	1.50	32.00
0	-2129	-2273	S556	QA3	ZG	0.00	30.72	0.63	30.72
0	-2273	662	S556	QA3	ZG	0.00	30.72	1.30	30.72
0	652	-2130	S568	QA3	ZG	0.00	30.72	2.40	30.72
0	761	754	S630	QA3	ZG	0.00	32.00	1.50	32.00
0	648	-2131	S569	QA3	ZG	0.00	30.72	2.40	30.72
0	-2130	-2274	S556	QA3	ZG	0.00	30.72	0.63	30.72
0	-2274	-2283	S556	QA3	ZG	0.00	30.72	1.30	30.72
0	760	755	S629	QA3	ZG	0.00	32.00	1.50	32.00
0	-2131	-2275	S569	QA3	ZG	0.00	30.72	0.63	30.72
0	692	696	S613	QA3	ZG	0.00	34.44	4.33	34.44
0	-2275	-2282	S568	QA3	ZG	0.00	30.72	1.30	30.72
0	759	756	S629	QA3	ZG	0.00	32.00	1.50	32.00
0	758	757	S627	QA3	ZG	0.00	32.00	1.50	32.00
0	696	767	S627	QA3	ZG	0.00	32.00	1.50	32.00
0	698	769	S626	QA3	ZG	0.00	34.44	1.50	34.44
5001	502	503	S502	QA3	ZG	0.00	30.72	6.10	30.72
5001	504	505	S500	QA3	ZG	0.00	30.72	6.10	30.72
5016	538	539	S540	QA3	ZG	0.00	30.72	6.10	30.72
5016	540	541	S537	QA3	ZG	0.00	30.72	6.10	30.72
50010	-1846	-1847	S560	QA3	ZG	0.00	30.72	3.97	30.72
50010	-1851	-1852	S559	QA3	ZG	0.00	30.72	0.48	30.72
50160	541	-1915	S567	QA3	ZG	0.00	30.72	5.89	30.72
50160	-1916	-1920	S569	QA3	ZG	0.00	30.72	1.92	30.72
50160	-1921	771	S569	QA3	ZG	0.00	30.72	1.93	30.72

0	656	-2125	S552	QA3	ZG	0.00	30.72	2.40	30.72
0	686	690	S611	QA3	ZG	0.00	34.44	5.89	34.44
0	-2125	-2271	S562	QA3	ZG	0.00	30.72	0.63	30.72
0	670	671	S566	QA3	ZG	0.00	30.72	3.97	30.72
0	666	-2126	S553	QA3	ZG	0.00	30.72	2.40	30.72
0	660	661	S566	QA3	ZG	0.00	30.72	3.97	30.72
0	-2271	657	S562	QA3	ZG	0.00	30.72	1.30	30.72
0	765	779	S635	QA3	ZG	0.00	32.00	1.50	32.00
0	-2126	-2277	S553	QA3	ZG	0.00	30.72	0.63	30.72
0	651	652	S558	QA3	ZG	0.00	30.72	3.97	30.72
0	-2277	667	S553	QA3	ZG	0.00	30.72	1.30	30.72
0	675	-2127	S564	QA3	ZG	0.00	30.72	2.40	30.72
0	764	780	S634	QA3	ZG	0.00	32.00	1.50	32.00
0	-2127	-2276	S564	QA3	ZG	0.00	30.72	0.63	30.72
0	671	-2128	S565	QA3	ZG	0.00	30.72	2.40	30.72
0	647	648	S558	QA3	ZG	0.00	30.72	3.97	30.72
0	-2276	676	S564	QA3	ZG	0.00	30.72	1.30	30.72
0	661	-2129	S556	QA3	ZG	0.00	30.72	2.40	30.72
0	763	781	S633	QA3	ZG	0.00	32.00	1.50	32.00
0	-2128	-2272	S565	QA3	ZG	0.00	30.72	0.63	30.72
0	-2272	672	S564	QA3	ZG	0.00	30.72	1.30	30.72
0	762	782	S631	QA3	ZG	0.00	32.00	1.50	32.00
0	-2129	-2273	S565	QA3	ZG	0.00	30.72	0.63	30.72
0	-2273	662	S565	QA3	ZG	0.00	30.72	1.30	30.72
0	652	-2130	S556	QA3	ZG	0.00	30.72	2.40	30.72
0	690	694	S612	QA3	ZG	0.00	34.44	3.97	34.44
0	761	754	S631	QA3	ZG	0.00	32.00	1.50	32.00
0	648	-2131	S568	QA3	ZG	0.00	30.72	2.40	30.72
0	-2130	-2274	S568	QA3	ZG	0.00	30.72	0.63	30.72
0	-2274	-2283	S568	QA3	ZG	0.00	30.72	1.30	30.72
0	760	755	S630	QA3	ZG	0.00	32.00	1.50	32.00
0	-2131	-2275	S568	QA3	ZG	0.00	30.72	0.63	30.72
0	-2275	-2282	S569	QA3	ZG	0.00	30.72	1.30	30.72
0	759	756	S628	QA3	ZG	0.00	32.00	1.50	32.00
0	694	698	S613	QA3	ZG	0.00	34.44	4.33	34.44
0	758	757	S628	QA3	ZG	0.00	32.00	1.50	32.00
0	696	767	S626	QA3	ZG	0.00	34.44	1.50	34.44
5001	501	502	S503	QA3	ZG	0.00	30.72	6.30	30.72
5001	503	504	S501	QA3	ZG	0.00	30.72	6.10	30.72
5016	537	538	S549	QA3	ZG	0.00	30.72	6.30	30.72
5016	539	540	S538	QA3	ZG	0.00	30.72	6.10	30.72
50010	505	-1846	S550	QA3	ZG	0.00	30.72	5.89	30.72
50010	-1847	-1851	S559	QA3	ZG	0.00	30.72	1.92	30.72
50010	-1852	772	S559	QA3	ZG	0.00	30.72	1.93	30.72
50160	-1915	-1916	S547	QA3	ZG	0.00	30.72	3.97	30.72
50160	-1920	-1921	S569	QA3	ZG	0.00	30.72	0.48	30.72

Condizione di carico n. 6: VENTO

Carichi distribuiti

Asta	N1	N2	EN	T	DC	Xi	Qi	Xf	Qf
						<m>	<daN/m>	<m>	<daN/m>
0	720	680	--	M	ZG	0.00	120.00	1.50	120.00
0	718	716	--	M	ZG	0.00	120.00	1.31	120.00
0	715	714	--	M	ZG	0.00	120.00	1.29	120.00
0	714	713	--	M	ZG	0.00	120.00	1.28	120.00
0	643	641	--	M	ZG	0.00	120.00	6.10	120.00
0	711	710	--	M	ZG	0.00	120.00	1.28	120.00
0	709	708	--	M	ZG	0.00	120.00	1.30	120.00
0	717	719	--	M	ZG	0.00	120.00	1.41	120.00
0	679	678	--	M	ZG	0.00	120.00	6.30	120.00
0	642	685	--	M	ZG	0.00	120.00	6.10	120.00
0	685	689	--	M	ZG	0.00	120.00	5.89	120.00
0	689	693	--	M	ZG	0.00	120.00	3.97	120.00
0	693	697	--	M	ZG	0.00	120.00	4.33	120.00
0	770	768	--	M	ZG	0.00	120.00	1.41	120.00
0	686	690	--	M	ZG	0.00	120.00	5.89	120.00
0	765	764	--	M	ZG	0.00	120.00	1.29	120.00
0	763	762	--	M	ZG	0.00	120.00	1.28	120.00
0	762	761	--	M	ZG	0.00	120.00	1.28	120.00
0	760	759	--	M	ZG	0.00	120.00	1.29	120.00
0	759	758	--	M	ZG	0.00	120.00	1.30	120.00
0	698	769	--	M	ZG	0.00	120.00	1.50	120.00

Asta	N1	N2	EN	T	DC	Xi	Qi	Xf	Qf
						<m>	<daN/m>	<m>	<daN/m>
0	720	718	--	M	ZG	0.00	120.00	1.41	120.00
0	716	715	--	M	ZG	0.00	120.00	1.30	120.00
0	680	643	--	M	ZG	0.00	120.00	6.30	120.00
0	713	712	--	M	ZG	0.00	120.00	1.28	120.00
0	712	711	--	M	ZG	0.00	120.00	1.28	120.00
0	710	709	--	M	ZG	0.00	120.00	1.29	120.00
0	708	717	--	M	ZG	0.00	120.00	1.31	120.00
0	719	679	--	M	ZG	0.00	120.00	1.50	120.00
0	641	642	--	M	ZG	0.00	120.00	6.10	120.00
0	678	644	--	M	ZG	0.00	120.00	6.10	120.00
0	644	677	--	M	ZG	0.00	120.00	6.10	120.00
0	677	686	--	M	ZG	0.00	120.00	6.10	120.00
0	697	770	--	M	ZG	0.00	120.00	1.50	120.00
0	768	766	--	M	ZG	0.00	120.00	1.31	120.00
0	766	765	--	M	ZG	0.00	120.00	1.30	120.00
0	764	763	--	M	ZG	0.00	120.00	1.28	120.00
0	690	694	--	M	ZG	0.00	120.00	3.97	120.00
0	761	760	--	M	ZG	0.00	120.00	1.28	120.00
0	694	698	--	M	ZG	0.00	120.00	4.33	120.00
0	758	767	--	M	ZG	0.00	120.00	1.31	120.00
0	767	769	--	M	ZG	0.00	120.00	1.41	120.00

Elenco carichi elementi bidimensionaliElenco peso proprio elementi bidimensionali

Simbologia

Comm. = Commento
Mat. = Materiale
P = Peso specifico
PQ = Peso specifico per unità di superficie
Spess. = Spessore
Tb = Numero del tipo muro/elemento bidimensionale

Tb	Comm.	Spess. <cm>	Mat.	P <daN/mc>	PQ <daN/mq>
2	Setto 20 cm	20.00	Calcestruzzo classe C25/30	2500.00	500.00
3	Setto 30 cm	30.00	Calcestruzzo classe C25/30	2500.00	750.00
4	Setto 40 cm	40.00	Calcestruzzo classe C25/30	2500.00	1000.00

Risultati del calcolo

Parametri di calcolo

La modellazione della struttura e la rielaborazione dei risultati del calcolo sono stati effettuati con:
ModeSt ver. 8.27, licenza n. 5637, prodotto da Tecnisoft s.a.s. - Prato
La struttura è stata calcolata utilizzando come solutore agli elementi finiti:
Xfinest ver. 9.3.5, licenza n. -1523908944, prodotto da Ce.A.S. S.r.l. - Milano

Tipo di normativa: stati limite D.M. 18

Tipo di calcolo: sismica dinamica

Vincoli esterni: Considera sempre vincoli assegnati in modellazione

Schematizzazione piani rigidi:

Imp.1: impalcato non rigido

Imp.2: controventatura solai

Imp.3: impalcato non rigido

Imp.4: controventatura solai

Imp.5: metodo Master-Slave

Selezione solai controventati: ALL

Modalità di recupero masse secondarie: mantenere sul nodo masse e forze relative

Generazione combinazioni

- Lineari: Sì
- Valuta spostamenti e non sollecitazioni: No
- Buckling: No

Opzioni di calcolo

- Sono state considerate infinitamente rigide le zone di connessione fra travi, pilastri ed elementi bidimensionali con una riduzione del 20%
- Calcolo con offset rigidi dai nodi: No
- Uniformare i carichi variabili: No
- Massimizzare i carichi variabili: No
- Recupero carichi zone rigide: taglio e momento flettente
- Modalità di combinazione momento torcente: disaccoppiare le azioni

Opzioni del solutore

- Tipo di elemento bidimensionale: QF46
- Calcolo sforzo nei nodi: No
- Trascura deformabilità a taglio delle aste: No
- Analisi dinamica con metodo di Lanczos: Sì
- Check sequenza di Sturm: Sì
- Analisi non lineare con Newton modificato: No
- Usa formulazione secante per buckling: No
- Trascura buckling torsionale: No
- Opzioni aggiuntive per analisi non lineari in presenza di elementi bidimensionali con comportamento Drucker-Prager:
OPTION PARAM CONV=E
OPTION PARAM RESENORM=1.E-8
OPTION PARAM AUTO_INCREMENT=YES
OPTION PARAM LINE_SEARCHES=YES
OPTION PARAM BGINCRS=1.0
OPTION PARAM AVINCRS=1.0

Dati struttura

- Sito di costruzione: Via dei Ciclamini, 1, 05100 Terni TR, Italia LON. 12.65230 LAT. 42.54700
Contenuto tra ID reticolo: 25629 25628 25407 25406

Simbologia

Ag =Accelerazione orizzontale massima al sito

C_e =Coefficiente funzione della categoria del suolo

F_o =Valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale

S_s =Coefficiente di amplificazione stratigrafica

T_g =Periodo di ritorno <anni>

TCC=Tipo di combinazione di carico

SLU = Stato limite ultimo

SLE R = Stato limite d'esercizio, combinazione rara

SLE F = Stato limite d'esercizio, combinazione frequente

SLE Q = Stato limite d'esercizio, combinazione quasi permanente

SLD = Stato limite di danno

SLV = Stato limite di salvaguardia della vita

SND = Stato limite di salvaguardia della vita (non dissipativo)

Tc* = Periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale <sec>

TCC	T _R	Ag <g>	Fo	Tc*	S _s	C _c
SLD	75	0.0821	2.50	0.29	1.50	1.58
SLV	712	0.1882	2.47	0.33	1.42	1.52

- Edificio esistente: Sì
- Spettri: Automatici da normativa
- Tipo di opera: Opera ordinaria
- Vita nominale V_N: 50.00
- Classe d'uso: Classe III
- SL Esercizio: SLOPvr No, SLDPvr 63.00
- SL Ultimi: SLVPvr 10.00, SLCPvr No
- Struttura dissipativa: Sì
- Classe di duttilità: Classe B
- Quota di riferimento: 3.00 <m>
- Quota max della struttura: 12.31 <m>
- Altezza della struttura: 9.31 <m>
- Numero piani edificio: 5
- Coefficiente θ : 0.00
- Edificio regolare in altezza: No
- Edificio regolare in pianta: No
- Forze orizzontali convenzionali per stati limite non sismici: 1.00%
- Genera stati limite per verifiche di resistenza al fuoco: No

Dati di piano

Simbologia

Ea =Eccentricità complessiva

Ex =Eccentricità in dir. X

Ey =Eccentricità in dir. Y

Imp. =Numero dell'impalcato

Lx =Dimensione del piano in dir. X

Ly =Dimensione del piano in dir. Y

Imp.	Lx <m>	Ly <m>	Ex <m>	Ey <m>	Ea <m>
1	38.80	12.80	1.94	0.64	2.04
2	38.80	12.80	1.94	0.64	2.04
3	38.80	12.80	1.94	0.64	2.04
4	38.80	12.80	1.94	0.64	2.04
5	38.80	12.80	1.94	0.64	2.04

- Eccentricità di calcolo: 2.04 <m>
- Considera eccentricità aggiuntiva sugli impalcati non rigidi: No

Dati di calcolo

- Categoria del suolo di fondazione: C

- Tipologia strutturale: c.a. o prefabbricata a telaio a più piani e più campate

Periodo T ₁	0.21913
Coeff. λ SLD	0.85
Coeff. λ SLV	0.85
Rapporto di sovrarresistenza (α_u/α_1)	1.15
Valore di riferimento del fattore di comportamento (q_0)	3.45
Fattore riduttivo (K_w)	1.00
Fattore riduttivo regolarità in altezza (KR)	0.80
Fattore di comportamento dissipativo (q)	1.50
Fattore di comportamento non dissipativo (qND)	1.50
Fattore di comportamento per SLD (qD)	1.50

- Categoria topografica: T1 - Superficie pianeggiante, pendii e rilievi isolati con inclinazione media $i \leq 15^\circ$
- Coeff. amplificazione topografica S_T: 1.00
- Fattore di comportamento per sisma verticale (qv): 1.50
- Modalità di calcolo modi di vibrare: Ritz-vectors
- Numero vettori: 2
- CCE per vettori di Ritz e numero di modi da calcolare

7) Forze dir. X

Numero modi: 10

8) Forze dir. Y

Numero modi: 10

- Modi da considerare: Tutti i modi calcolati

- Smorzamento spettro: 5.00%

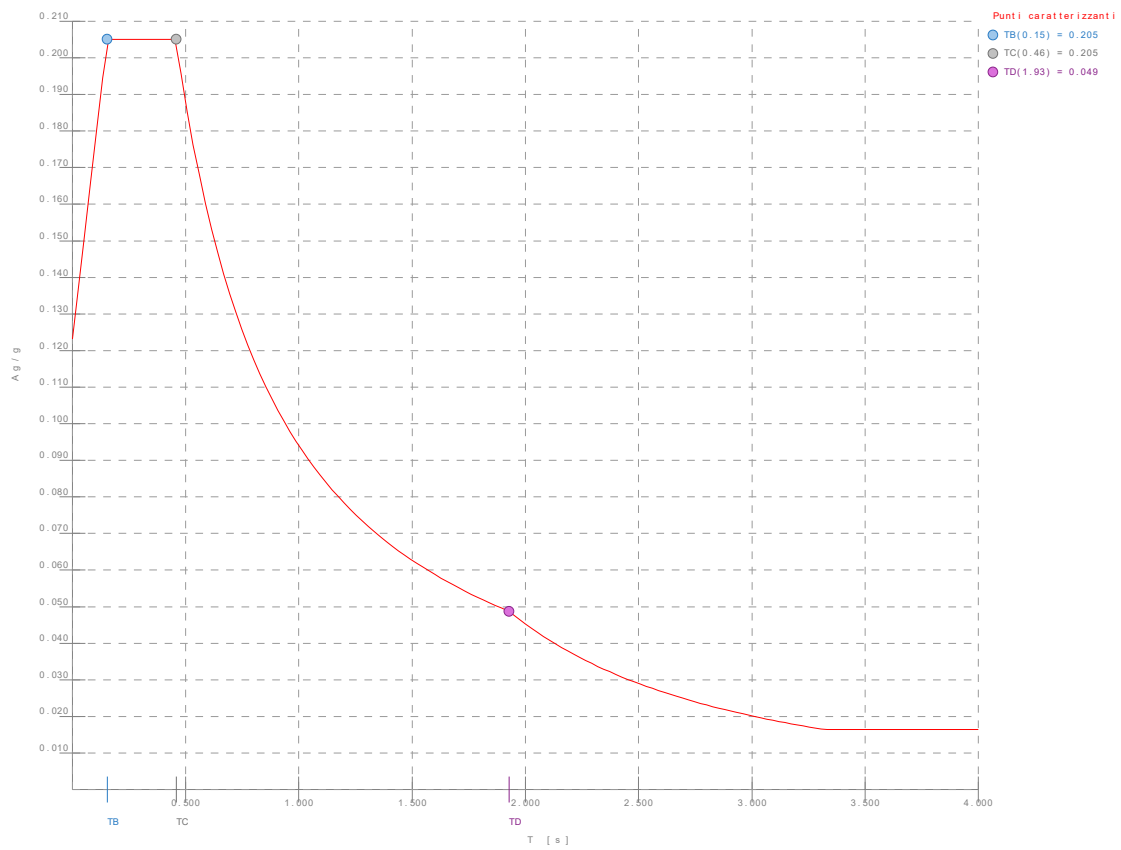


Figura numero 1: Spettro SLD

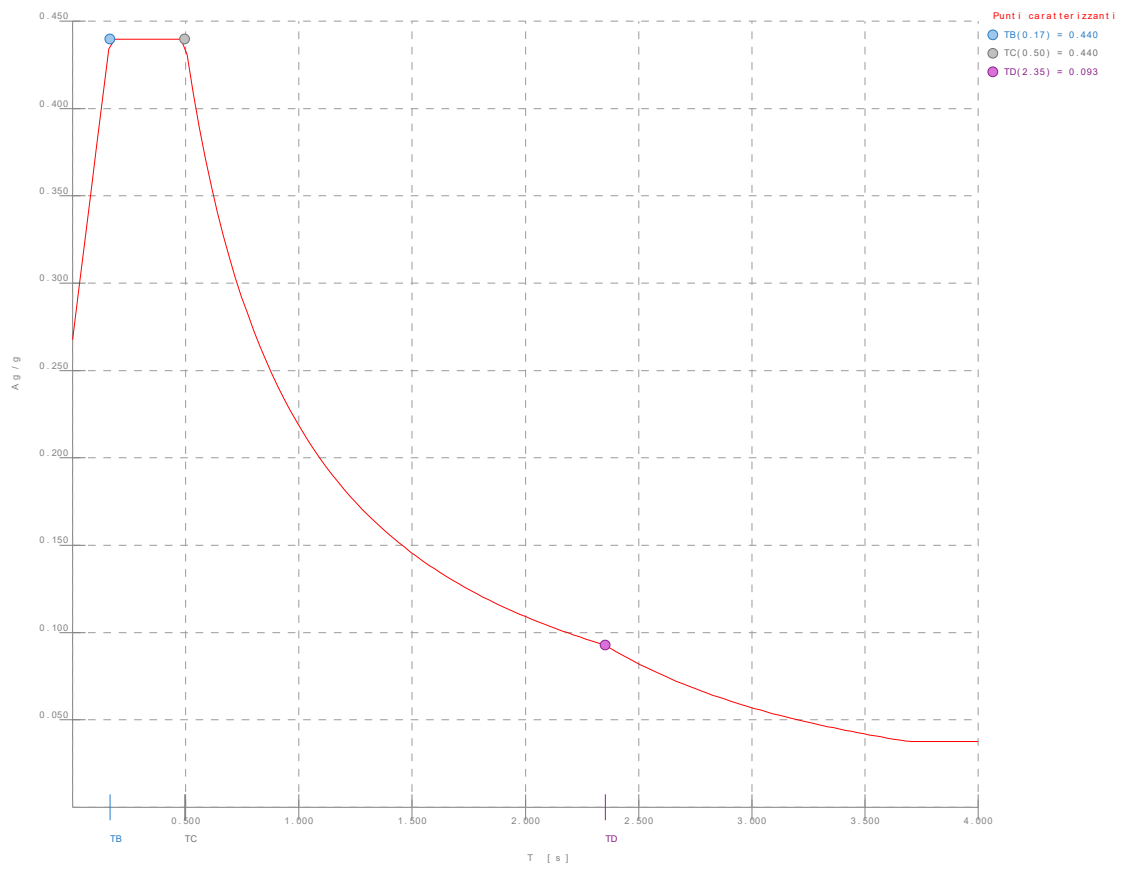


Figura numero 2: Spettro SLV

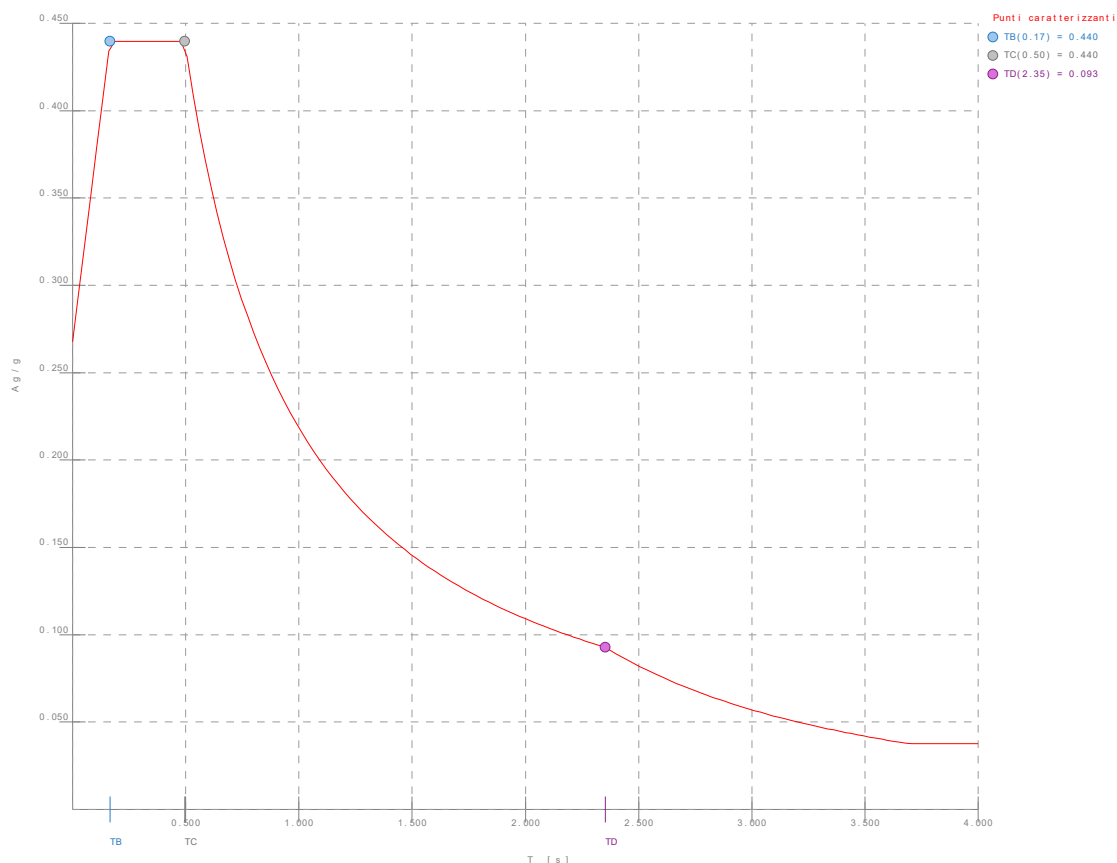


Figura numero 3: Spettro SND

- Angolo di ingresso del sisma: 0.00 <grad>

Ambienti di carico

Simbologia

N = Numero

Comm. = Commento

1 = PS

2 = PNS

3 = Cat.C

4 = Cat.H

5 = Neve

6 = VENTO

F = azioni orizzontali convenzionali

SLU = Stato limite ultimo

SLR = Stato limite per combinazioni rare

SLF = Stato limite per combinazioni frequenti

SLQ/D = Stato limite per combinazioni quasi permanenti o di danno

S = Sì

N = No

N	Comm.	1	2	3	4	5	6	F	S	SLU	SLR	SLF	SLQ
1	Calcolo sismico	S	S	S	S	S	N	S	N	N	N	N	N
2	Calcolo statico	S	S	S	S	S	N	N	S	S	S	S	S

Elenco combinazioni di carico simboliche

Simbologia

CC = Numero della combinazione delle condizioni di carico elementari

Comm. = Commento

TCC = Tipo di combinazione di carico

SLU = Stato limite ultimo

SLE R = Stato limite d'esercizio, combinazione rara

SLE F = Stato limite d'esercizio, combinazione frequente

SLE Q = Stato limite d'esercizio, combinazione quasi permanente

SLD = Stato limite di danno

SLV = Stato limite di salvaguardia della vita

SND = Stato limite di salvaguardia della vita (non dissipativo)

CC	Comm.	TCC	1	2	3	4	5	6	F	S
1	Amb. 1 (Sisma)	SLU S1	1	ψ_2	ψ_2	ψ_2	ψ_2	ψ_2	-----	1
2	Amb. 2 (SLU)	SLU	γ max	γ max	$\psi_0 * \gamma$ max	$\psi_0 * \gamma$ max	$\psi_0 * \gamma$ max	γ max	-----	-----

3	Amb. 2 (SLU)	SLU	γ max	γ max	$\Psi_0 * \gamma$ max	$\Psi_0 * \gamma$ max	γ max	$\Psi_0 * \gamma$ max	-----	-----
4	Amb. 2 (SLU)	SLU	γ max	γ max	$\Psi_0 * \gamma$ max	γ max	$\Psi_0 * \gamma$ max	$\Psi_0 * \gamma$ max	-----	-----
5	Amb. 2 (SLU)	SLU	γ max	γ max	γ max	$\Psi_0 * \gamma$ max	$\Psi_0 * \gamma$ max	$\Psi_0 * \gamma$ max	-----	-----
6	Amb. 2 (SLE R)	SLE R	1	1	Ψ_0	Ψ_0	Ψ_0	1	-----	-----
7	Amb. 2 (SLE R)	SLE R	1	1	Ψ_0	Ψ_0	1	Ψ_0	-----	-----
8	Amb. 2 (SLE R)	SLE R	1	1	Ψ_0	1	Ψ_0	Ψ_0	-----	-----
9	Amb. 2 (SLE R)	SLE R	1	1	1	Ψ_0	Ψ_0	Ψ_0	-----	-----
10	Amb. 2 (SLE F)	SLE F	1	1	Ψ_2	Ψ_2	Ψ_2	Ψ_1	-----	-----
11	Amb. 2 (SLE F)	SLE F	1	1	Ψ_2	Ψ_2	Ψ_1	Ψ_2	-----	-----
12	Amb. 2 (SLE F)	SLE F	1	1	Ψ_2	Ψ_1	Ψ_2	Ψ_2	-----	-----
13	Amb. 2 (SLE F)	SLE F	1	1	Ψ_1	Ψ_2	Ψ_2	Ψ_2	-----	-----
14	Amb. 2 (SLE Q)	SLE Q	1	1	Ψ_2	Ψ_2	Ψ_2	Ψ_2	-----	-----

Genera le combinazioni con un solo carico di tipo variabile come di base: Sì
 Considera sollecitazioni dinamiche con segno dei modi principali: No

Combinazioni delle CCE

Simbologia

- An. =Tipo di analisi
 L = Lineare
 NL = Non lineare
 Bk =Buckling
 S = Sì
 N = No
 CC =Numero della combinazione delle condizioni di carico elementari
 Comm.= Commento
 TCC =Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SND = Stato limite di salvaguardia della vita (non dissipativo)

CC	Comm.	TCC	An.	Bk	1	2	3	4	5	6	F X	F Y	Mt	±S X	±S Y
1	Amb. 1 (SLU S) S Mt+X+0.3Y	SLV+SND	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30
2	Amb. 1 (SLE) S Mt+X+0.3Y	SLD	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.30
3	Amb. 1 (SLU S) S Mt+X-0.3Y	SLV+SND	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	1.00	1.00	-0.30
4	Amb. 1 (SLE) S Mt+X-0.3Y	SLD	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	1.00	1.00	-0.30
5	Amb. 1 (SLU S) S Mt+0.3X+Y	SLV+SND	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	1.00	0.30	1.00
6	Amb. 1 (SLE) S Mt+0.3X+Y	SLD	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	1.00	0.30	1.00
7	Amb. 1 (SLU S) S Mt-0.3X+Y	SLV+SND	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	1.00	-0.30	1.00
8	Amb. 1 (SLE) S Mt-0.3X+Y	SLD	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	1.00	-0.30	1.00
9	Amb. 1 (SLU S) S -Mt+X+0.3Y	SLV+SND	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	-1.00	1.00	0.30
10	Amb. 1 (SLE) S -Mt+X+0.3Y	SLD	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	-1.00	1.00	0.30
11	Amb. 1 (SLU S) S -Mt+X-0.3Y	SLV+SND	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	-1.00	1.00	-0.30
12	Amb. 1 (SLE) S -Mt+X-0.3Y	SLD	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	-1.00	1.00	-0.30
13	Amb. 1 (SLU S) S -Mt+0.3X+Y	SLV+SND	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	-1.00	0.30	1.00
14	Amb. 1 (SLE) S -Mt+0.3X+Y	SLD	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	-1.00	0.30	1.00
15	Amb. 1 (SLU S) S -Mt-0.3X+Y	SLV+SND	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	-1.00	-0.30	1.00
16	Amb. 1 (SLE) S -Mt-0.3X+Y	SLD	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	-1.00	-0.30	1.00
17	Amb. 2 (SLU)	SLU	L	N	1.30	1.30	1.05	0.00	0.75	1.50	0.00	0.00	0.00	0.00	0.00
18	Amb. 2 (SLU)	SLU	L	N	1.30	1.30	1.05	0.00	1.50	0.90	0.00	0.00	0.00	0.00	0.00
19	Amb. 2 (SLU)	SLU	L	N	1.30	1.30	1.05	1.50	0.75	0.90	0.00	0.00	0.00	0.00	0.00
20	Amb. 2 (SLU)	SLU	L	N	1.30	1.30	1.50	0.00	0.75	0.90	0.00	0.00	0.00	0.00	0.00
21	Amb. 2 (SLE R)	SLE R	L	N	1.00	1.00	0.70	0.00	0.50	1.00	0.00	0.00	0.00	0.00	0.00
22	Amb. 2 (SLE R)	SLE R	L	N	1.00	1.00	0.70	0.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00
23	Amb. 2 (SLE R)	SLE R	L	N	1.00	1.00	0.70	1.00	0.50	0.60	0.00	0.00	0.00	0.00	0.00
24	Amb. 2 (SLE R)	SLE R	L	N	1.00	1.00	1.00	0.00	0.50	0.60	0.00	0.00	0.00	0.00	0.00
25	Amb. 2 (SLE F)	SLE F	L	N	1.00	1.00	0.60	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00
26	Amb. 2 (SLE F)	SLE F	L	N	1.00	1.00	0.60	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
27	Amb. 2 (SLE F)	SLE F	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	Amb. 2 (SLE F)	SLE F	L	N	1.00	1.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	Amb. 2 (SLE Q)	SLE Q	L	N	1.00	1.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Elenco modi di vibrare, masse partecipanti e coefficienti di partecipazione

Simbologia

- Φ_x =Coefficiente di partecipazione in dir. X
 Φ_y =Coefficiente di partecipazione in dir. Y
 Φ_z =Coefficiente di partecipazione in dir. Z
 $\%Jp_z$ =Percentuale momento d'inerzia polare partecipante intorno all'asse Z
 $\%M_x$ =Percentuale massa partecipante in dir. X

%My = Percentuale massa partecipante in dir. Y
 %Mz = Percentuale massa partecipante in dir. Z
 C = * indica che il modo è stato considerato
 Diff. = Minima differenza percentuale dagli altri periodi
 Modo = Numero del modo di vibrare
 T = Periodo

Modo	C	T	Diff.	Φ _x	Φ _y	Φ _z	%M _x	%M _y	%M _z	%J _{pz}
1	*	0.28	0.89	9.34	-0.03	0.00	0.07	0.00	0.00	0.00
2	*	0.28	0.13	-2.27	0.07	0.00	0.00	0.00	0.00	0.00
3	*	0.28	0.13	35.37	-0.11	0.00	0.97	0.00	0.00	0.00
4	*	0.22	28.26	290.56	-1.76	0.00	65.23	0.00	0.00	0.00
5	*	0.12	5.34	-1.16	-287.64	0.00	0.00	63.92	0.00	4.16
6	*	0.11	0.64	0.06	4.13	0.00	0.00	0.01	0.00	0.01
7	*	0.11	0.18	-0.00	-0.27	0.00	0.00	0.00	0.00	0.00
8	*	0.11	0.18	0.22	14.66	0.00	0.00	0.17	0.00	0.09
9	*	0.10	12.38	-3.60	-83.99	0.00	0.01	5.45	0.00	53.12
10	*	0.07	9.65	150.12	-2.64	0.00	17.41	0.01	0.00	0.03
11	*	0.06	2.10	0.97	0.05	0.00	0.00	0.00	0.00	0.00
12	*	0.06	2.10	-14.66	0.71	0.00	0.17	0.00	0.00	0.01
13	*	0.05	24.42	-1.15	0.86	0.00	0.00	0.00	0.00	0.05
14	*	0.04	2.83	11.44	-1.14	0.00	0.10	0.00	0.00	0.02
15	*	0.03	2.83	-0.52	-156.90	0.00	0.00	19.02	0.00	0.00
16	*	0.03	9.28	0.50	22.71	0.00	0.00	0.40	0.00	5.58
17	*	0.02	35.55	0.31	-9.80	0.00	0.00	0.07	0.00	0.20
18	*	0.02	23.33	10.13	-76.41	0.00	0.08	4.51	0.00	0.23
19	*	0.01	23.31	-122.92	15.99	0.00	11.67	0.20	0.00	0.23
20	*	0.01	23.31	44.48	71.66	0.00	1.53	3.97	0.00	0.00
Tot.cons.							97.24	97.73	0.00	63.72

Criteri di progetto utilizzati

Pilastrì in c.a.

Generali	
Parametri di progetto	
Pilaastro prefabbricato	No
Progettazione dell'armatura con sollecitazioni più gravose	Si
Disaccoppia sovrarresistenza	No
Limita fattore di sovrarresistenza al massimo valore di struttura	No
Tipo verifica di stabilità	
-Per N*Ω-M e per N-c*M (standard)	Si
-Per N*Ω-c*M (doppia)	No
-Per N*Ω (sforzo normale e momento nullo)	No
-Per c*M (momento e sforzo normale nullo)	No
Max angolo di piegatura ferri <grad>	20.00
Progettazione armatura di ripresa	Si
Minimizzazione armatura di ripresa	No
Minimizzazione area di ferro totale nella sezione	No
Non progettare riprese ma estendi solo i ferri	Si
Verifiche in relazione	Minimizzate
Ancoraggi	
Lunghezza ancoraggi	
-Lunghezza minima come multiplo del diametro	40.00
Ancoraggi tutti uguali	Si
Piegatura ancoraggi per discontinuità	Si
Piegatura ancoraggi ferri di ripresa	Si
Armatura a taglio	
Staffatura a spirale pilastrì circolari	Si
Cambiare le staffe nei nodi appartenenti all'impalcato 0 se sul nodo incidono elementi	Si
Considera solo la zona critica alla base della pilastrata (strutture pendolari)	No
Progetta a taglio con traliccio ad inclinazione variabile	Si
-Classe A	
-In zona critica limita ctg θ a	1.00
-In zona non critica limita ctg θ a	2.50
-Classe B	
-In zona critica limita ctg θ a	2.50

-In zona non critica limita ctg θ a	2.50
Estendi nel nodo staffe sottostanti anche se non richiesto dalla normativa	No
Parametri di disegno	
Scala disegno sezioni pilastri	25.00
Scala disegno viste pilastri	50.00
Creazione tabelle pilastri	Si
-Tipo di tabella	Armature disposte dal basso verso l'alto
-Max lunghezza tavole <cm>	70.00
-Max altezza tavole <cm>	50.00
Creazione viste pilastri	
-Disegno ferri dentro pilastro in vista	Si
-Disegno staffe dentro pilastro in vista	Si
-Modalità di individuazione ferri	
-Modalità di indicazione ferri	Mediante una tabella
-Minimizzazione riferimenti	Si
-Modalità di individuazione ferri	Per posizione
-Modalità di indicazione ferri	Mediante una tabella
-Minimizzazione riferimenti	Si

	1	2
Specifici		
Materiali		
-Considera come elemento esistente	Si	No
-Calcestruzzo		
-Livello di conoscenza	LC1	LC2
-Fattore di confidenza	1.35	1.20
-Tipo di calcestruzzo	C20/25	C28/35
-Rck calcestruzzo	230.00	350.00
-Modulo elastico <daN/cm ² >	296664.00	325881.00
-Resistenza caratteristica cilindrica (Fck)	190.90	290.50
-Resistenza caratteristica a trazione (Fctk)	15.00	19.84
-Resistenza media (Fcm) <daN/cm ² >	270.90	370.50
-Resistenza media a trazione (Fctm) <daN/cm ² >	21.43	28.35
- σ amm. calcestruzzo <daN/cm ² >	80.00	110.00
- τ_{c0} <daN/cm ² >	5.10	6.70
- τ_{c1} <daN/cm ² >	16.30	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si	Si
- γ_c per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Acciaio		
-Livello di conoscenza	LC3	LC2
-Fattore di confidenza	1.00	1.20
-Tipo di acciaio	32	B450C
-Modulo elastico <daN/cm ² >	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	3255.00	4500.00
-Tensione media di snervamento (Fym) <daN/cm ² >	3255.00	4500.00
-Sigma amm. acciaio <daN/cm ² >	1600.00	2600.00
-Sigma amm. reti e tralicci <daN/cm ² >	2200.00	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00	4.00
- γ_s per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Coeff. di omogeneizzazione	15.00	15.00
Parametri per analisi pushover		
Numero fibre	200.00	200.00
Fattore di confinamento nucleo interno	1.00	1.00
Fattore di incrudimento acciaio <%>	0.10	0.10
Parametri per verifiche di duttilità		
Considera formulazione per pareti	No	No
Considera rotazione massima di esercizio per determinare SLO e SLD	No	No
Modalità di calcolo luce di taglio Lv		
-Lv=L/2	x	x
-Lv=M/V		
-Lv=Punto di nullo del momento flettente		
Capacità di rotazione alla corda al collasso		
-Formula C8.7.2.1 con fattore di riduzione pari a		
-Formula C8.7.2.5	x	x

Sforzo normale di verifica per analisi pushover		
-Gravitazionale		
-Dal calcolo	x	x
Parametri di calcolo		
Strategia di progetto	RETTANG	RETTANG
Copriferro reale al bordo staffa <cm>	2.50	2.50
Diametro staffa teorica <mm>	9.00	9.00
Continuità dei ferri nei nodi appartenenti all'impalcato 0	Si	Si
Coeff. β in direzione Z locale	1.00	1.00
Coeff. β in direzione Y locale	1.00	1.00
Armatura secondo Circ. 65 del 10/04/97	No	No
-Raffittimento staffe in testa e al piede del pilastro	No	No
-Passo <cm>		
Parametri di progetto secondo il D.M. 18		
Elemento dissipativo	Si	Si
Trascura gerarchia	Si	Si
Verifica a taglio ciclico elementi esistenti	No	No
Limita verifica a pressoflessione ad elemento non dissipativo	No	No
Limita verifica a taglio ad elemento non dissipativo	No	No
Elemento secondario	No	Si
Incremento percentuale per piano debole	No	No
Non progettare e verificare i nodi fra trave e pilastro	No	No
-Progetta e verifica secondo Circolare n.7 del 21/01/2019	Si	Si
Verifiche a pressoflessione deviata	Si	Si
Per calcoli secondo il D.M. 18 usa espressione 4.1.19	No	No
Verifiche a taglio		
Verifiche a taglio per sezioni circolari		
-Usa formulazione sezioni generiche		
-Considera rettangolo inscritto con B/H pari a	1.00	1.00
Verifiche a taglio per sezioni generiche		
-Considera Vrdu minimo		
-Considera Vrdu calcolato in corrispondenza di bw minimo		
-Considera Vrdu in corrispondenza di bw medio	x	x
-Considera Vrdu in corrispondenza di bw massimo		
-Considera sempre Af Staffe non proiettata in direzione del taglio	Si	Si
Armatura a pressoflessione		
Elenco diametri ferri longitudinali 1 <mm>	12	20
Elenco diametri ferri longitudinali 2 <mm>	14	22
Elenco diametri ferri longitudinali 3 <mm>	16	24
Elenco diametri ferri longitudinali 4 <mm>	18	
Elenco diametri ferri longitudinali 5 <mm>	20	
Elenco diametri ferri longitudinali 6 <mm>		
Elenco diametri ferri longitudinali 7 <mm>		
Max distanza fra i ferri su un lato <cm>	25.00	25.00
Min. interferro ammissibile <cm>	7.00	7.00
Distanza fra i ferri di spigolo <cm>	3.00	3.00
Min. numero ferri per pilastri circolari	8.00	8.00
Reggistaffe aggiuntivi sezioni non rettangolari	Si	Si
Fattore di riduzione τ_{c0} per ancoraggio ferri	1.00	1.00
Armatura a taglio		
Elenco diametri staffe 1 <mm>	6	8
Elenco diametri staffe 2 <mm>	8	10
Elenco diametri staffe 3 <mm>		
Elenco diametri staffe 4 <mm>		
Elenco diametri staffe 5 <mm>		
Elenco diametri staffe 6 <mm>		
Elenco diametri staffe 7 <mm>		
Mantieni diametro costante nell'interpiano	Si	Si
Passi staffe	4.00	4.00
-Minimo <cm>	Si	Si
-Massimo <cm>	30.00	30.00
-Incremento <cm>	2.00	2.00
Tipo di minimizzazione staffatura		
-Minimizza il numero delle staffe		
-Minimizza il peso delle staffe	x	x
Max distanza fra ferri non collegati <cm>	20.00	20.00
Max numero ferri non collegati	2.00	2.00
Max distanza fra ferri nei nodi non collegati <cm>	7.00	7.00
Max numero ferri nei nodi non collegati	1.00	1.00

Collegamenti ferri		
Con spilli		
Con staffe rettangolari		
Con staffe poligonali	x	x
Ferri orizzontali pareti realizzati con staffe	No	No
Quote di alleggerimento armature pilastri prefabbricati		
Quota di alleggerimento n. 1 <m>	0.00	0.00
Quota di alleggerimento n. 2 <m>	0.00	0.00
Quota di alleggerimento n. 3 <m>	0.00	0.00
Quota di alleggerimento n. 4 <m>	0.00	0.00
Quota di alleggerimento n. 5 <m>	0.00	0.00
Quota di alleggerimento n. 6 <m>	0.00	0.00
Quota di alleggerimento n. 7 <m>	0.00	0.00
Dati per progettazione interattiva sezioni		
Distanza fra ferri su più strati <cm>	1.00	1.00
Integrare lo scorrimento lungo il tratto	Si	Si
-Lunghezza del tratto <m>	1.00	1.00
Dati per progettazione agli stati limite		
Condizioni ambientali		
-Ordinarie	x	x
-Aggressive		
-Molto aggressive		
Usa dominio N-M per flessioni rette	No	No
-Ricerca della sicurezza con sforzo normale costante		
-Ricerca della sicurezza con eccentricità costante		
Controllo rapporto X/D	No	No
Classificazione barre tese/comprese		
-Solo le barre con deformazione percentuale rispetto alla barra più tesa/compressa non inferiore a <%>	30.00	30.00
-In funzione della deformazione		
Dati per verifiche di resistenza al fuoco		
-Tempo di verifica (REI) <minuti>	120.00	120.00
Dimensione MESH <cm>	2.00	2.00
-Passo di calcolo <secondi>	10.00	10.00
-Temperatura ambiente <C°>	20.00	20.00
-Coeff. di convezione a temperatura ambiente <W/mq K>	9.00	9.00
Calcestruzzo		
-Tipo di aggregati	SILICEI	SILICEI
-Massa volumica iniziale <kg/mc>	2300.00	2300.00
-Umidità iniziale <%>	3.00	3.00
-Fattore di interpolazione conducibilità	0.50	0.50
Dati per verifiche FRP		
Rinforzo longitudinale		
Tipo di fibra/resina		
-Vetro/Epossidica		
-Arammidica/Epossidica		
-Carbonio/Epossidica	x	x
Resistenza caratteristica(f_{fk}) <daN/cm ² >	49000.00	49000.00
Modulo elastico(E_c) <daN/cm ² >	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione(ϵ_{fk}) <%>	2.00	2.00
Spessore equivalente(t_f) <mm>	0.17	0.17
Sistemi di rinforzo		
-Preformati		
-Impregnati in situ	x	x
Rinforzo trasversale		
Tipo di fibra/resina		
-Vetro/Epossidica		
-Arammidica/Epossidica		
-Carbonio/Epossidica	x	x
Resistenza caratteristica(f_{fk}) <daN/cm ² >	49000.00	49000.00
Modulo elastico(E_c) <daN/cm ² >	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione(ϵ_{fk}) <%>	2.00	2.00
Spessore equivalente(t_f) <mm>	0.17	0.17
Sistemi di rinforzo		
-Preformati		
-Impregnati in situ	x	x
Trascura resistenza a taglio dei rinforzi	No	No
Modalità di carico		

-Lungo termine	x	x
-Ciclico		
Coeff. parziale di sicurezza per SLU di distacco(γ_{fd})	1.50	1.50
Fattore di conversione ambientale(η_a)	0.95	0.95
Raggio di arrotondamento spigoli(r_c) <cm>	2.00	2.00
Coeff. condizione di carico(K_q)	1.25	1.25
Dati per verifiche incamiciature in acciaio non CAM		
Resistenza di progetto strisce di collegamento (Fyd) <daN/cm ² >	2350.00	2350.00
Dati per verifiche incamiciature c.a.		
-Tipo di calcestruzzo	C25/30	C25/30
-Rck calcestruzzo <daN/cm ² >	300.00	300.00
-Modulo elastico <daN/cm ² >	314472.00	314472.00
-Resistenza caratteristica cilindrica (Fck) <daN/cm ² >	249.00	249.00
-Tipo di acciaio	B450C	B450C
-Modulo elastico <daN/cm ² >	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	4500.00	4500.00
-Considera resistenza a taglio della nuova sezione	Si	Si
-Considera anche contributo della sezione esistente	Si	Si

Travi in c.a.

Generali	
Parametri di progetto	
Passo di progettazione <m>	0.30
Tipo di sollecitazioni zone rigide	Costanti
Min. angolo per spinte a vuoto <grad>	10.00
Invertire i ferri anche in presenza di pilastro sottostante	Si
Max differenza larghezza travi continue <cm>	5.00
Armatura a taglio	
Progetta a taglio con traliccio ad inclinazione variabile	Si
-Classe A	
-In zona critica limita ctg θ a	1.00
-In zona non critica limita ctg θ a	2.50
-Classe B	
-In zona critica limita ctg θ a	2.50
-In zona non critica limita ctg θ a	2.50
Lunghezze e arrotondamenti	
Max lunghezza barre <m>	12.00
Arrotondamento lunghezza ferri <cm>	50.00
Lunghezza ferri nei muri d'estremità <m>	1.00
Min. interferro ammissibile <cm>	2.00
Elenco diametri minimizzazione interferri <mm>	14 16 18 20 24
Riduzione ancoraggi	
-Nella zona compressa per flessione	No
-Nei punti inferiori della travata	Si
Considerare nel calcolo degli ancoraggi i risvolti specificati nei criteri generali di disegno	No
Risvoltare i ferri per garantire l'ancoraggio agli estremi della trave	No
Reggistaffe	
Interruzione reggistaffe in campata	No
Modalità di sovrapposizione reggistaffe	Per garantire la copertura del momento negativo
Modalità di unificazione reggistaffe	Solo se la geometria della travata e la lunghezza totale delle barre lo consentono
Minimi di regolamento	
Min. percentuale di regolamento	
-Per le travi di fondazione	No
-Per le travi di elevazione	Si
Min. di armatura a taglio (T.A. o S.L. D.M.96)	
-Per le travi di fondazione	No
-Per le travi di elevazione	No
Tipo di armatura per taglio (T.A.)	Mista
Controllo passo e l2Fi	Si
Min. di regolamento a torsione nell'ala	No
Min. di regolamento nell'ala	No

Stampe	
Verifiche a flessione in relazione	Minimizzate
Verifiche a taglio in relazione	Max scorrimento per taglio e torsione
Parametri di disegno	
Scala disegno travi	50.00
Scala disegno sezioni	25.00
Campitura sezioni	Fitta
Disegno sezione travi in falso	Si
Disegna sezioni	Si
-Disegno ferri nelle sezioni	No
Campitura travi in falso	Fitta
Campitura muri	Rada
Tipo di quotatura luci nette trave	Con riferimento ai pilastri superiori
Lunghezza monconi di pilastro	Minimizzata
Linee di riferimento quote	Si
Quotatura zone di staffatura	No
Quotatura zone di staffatura	No
Indicazione numero bracci staffe	Solo se il numero è maggiore di due
Disegno ferri longitudinali	
Disegno ferri dentro la trave	Si
Disegno esploso ferri di parete	No
Distanza fra ferri esplosi <cm>	0.10
Disegno reggistaffe aggiuntivi per travi a T e L	Reggistaffe aggiuntivi tipo 3
Disegno staffe	
Posizione staffe esterne	In automatico
Disegno staffe dentro la sezione	Si

Specifici	1	2
Materiali		
-Considera come elemento esistente	Si	No
-Calcestruzzo		
-Livello di conoscenza	LC1	LC2
-Fattore di confidenza	1.35	1.20
-Tipo di calcestruzzo	C20/25	C28/35
-Rck calcestruzzo	230.00	350.00
-Modulo elastico <daN/cmq>	296664.00	325881.00
-Resistenza caratteristica cilindrica (Fck)	190.90	290.50
-Resistenza caratteristica a trazione (Fctk)	15.00	19.84
-Resistenza media (Fcm) <daN/cmq>	270.90	370.50
-Resistenza media a trazione (Fctm) <daN/cmq>	21.43	28.35
-σ amm. calcestruzzo <daN/cmq>	80.00	110.00
-τc0 <daN/cmq>	5.10	6.70
-τc1 <daN/cmq>	16.30	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si	Si
-γc per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Acciaio		
-Livello di conoscenza	LC3	LC2
-Fattore di confidenza	1.00	1.20
-Tipo di acciaio	32	B450C
-Modulo elastico <daN/cmq>	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cmq>	3200.00	4500.00
-Tensione media di snervamento (Fym) <daN/cmq>	3200.00	4500.00
-Sigma amm. acciaio <daN/cmq>	1600.00	2600.00
-Sigma amm. reti e tralicci <daN/cmq>	2200.00	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00	4.00
-γs per stati limite ultimi		
-Automatico	x	x
-Pari a		
-Coeff. di omogeneizzazione	15.00	15.00
Parametri per analisi pushover		
Numero fibre	200.00	200.00
Fattore di confinamento nucleo interno	1.00	1.00
Fattore di incrudimento acciaio <%>	0.10	0.10

Parametri per verifiche di duttilità		
Considera rotazione massima di esercizio per determinare SLO e SLD	No	No
Modalità di calcolo luce di taglio Lv		
-Lv=L/2	x	x
-Lv=M/V		
-Lv=Punto di nullo del momento flettente		
Capacità di rotazione alla corda al collasso		
-Formula C8.7.2.1 con fattore di riduzione pari a		
-Formula C8.7.2.5	x	x
Sforzo normale di verifica per analisi pushover		
-Gravitazionale		
-Dal calcolo	x	x
Parametri di calcolo		
Progetto a pressoflessione	Si	Si
-Per tutte le travi		
-Solo per travi inclinate	x	x
-Min. angolo per pressoflessione <grad>	10.00	10.00
-Compressione massima senza progetto a pressoflessione <%>	10.00	10.00
Progetto a torsione	No	No
-Trazione senza progetto a torsione<%>		
Armatura secondo Circ. 65 del 10/04/97	No	No
Parametri di progetto secondo il D.M. 18		
Elemento dissipativo	Si	Si
Trascura gerarchia	No	Si
Verifica a taglio ciclico elementi esistenti	No	No
Limita verifica a taglio ad elemento non dissipativo	Si	No
Elemento secondario	No	No
Sollecitazioni dissipative amplificate per elementi di fondazione	Si	Si
Escludi dal calcolo sovrarresistenza per pilastri incidenti	No	No
Sollecitazioni complanari ad eventuali elementi bidimensionali	No	No
Copriferro teorico superiore <cm>	4.10	4.10
Copriferro teorico inferiore <cm>	4.10	4.10
Min. momento fittizio agli appoggi	No	No
-Denominatore		
Min. momento fittizio in campata	No	No
-Denominatore		
Incremento percentuale momento in campata <%>	10.00	10.00
Usa taglio max per traslazione momento (S.L.)	Si	Si
Limitare momento traslato al valore max di appoggio (S.L.)	No	No
Limitare momento traslato al valore max di campata (S.L.)	No	No
Taglio da momento resistente in fondazione (S.L.)	No	No
Tipo di progetto in doppia armatura (T.A.)		
-Tensioni pari ai valori amm.		
-Tensioni pari ai valori amm. con AfComp/AfTesa minore o pari a	1.00	1.00
-Con AfComp/AfTesa pari a		
Parametri di progettazione armatura		
Utilizzo		
-Trave	x	x
-Cordolo		
-Soletta rampante		
Max differenza fra diametri per unificazioni	2.00	2.00
Max distanza fra barre per unificazioni <m>	1.00	1.00
Denominatore per individuazione zona di campata	32.00	32.00
Fattore di copertura appoggi (0+1)	0.00	0.00
Fattore di riduzione per ancoraggio ferri	1.00	1.00
Minimizzazione momenti resistenti di appoggio (stati limite D.M. 18)	Si	Si
-Tolleranza di copertura da sovrapposizione <%>	10.00	0.00
Tipo di distribuzione armatura eccedente in fase di verifica		
-Ripartita proporzionalmente per flessione, torsione e taglio	x	x
-Tutta agente per flessione		
-Tutta agente per taglio		
Armatura a flessione		
Elenco diametri ferri longitudinali 1 <mm>	12	14
Elenco diametri ferri longitudinali 2 <mm>	14	16
Elenco diametri ferri longitudinali 3 <mm>	16	18
Elenco diametri ferri longitudinali 4 <mm>	18	20
Elenco diametri ferri longitudinali 5 <mm>	20	24
Elenco diametri ferri longitudinali 6 <mm>		
Elenco diametri ferri longitudinali 7 <mm>		
Max differenza fra diametri nella trave	8.00	8.00

Max differenza fra diametri ferri accoppiati	4.00	4.00
Reggistaffe superiori		
-Numero		
-Automatico		x
-Pari a	2.00	
-Max mutua distanza <cm>		
-Diametro		
-Automatico	x	x
-Pari a <mm>		
-Minimo <mm>		
Reggistaffe inferiori		
-Numero		
-Automatico		x
-Pari a	2.00	
-Max mutua distanza <cm>		
-Diametro		
-Automatico	x	x
-Pari a <mm>		
-Minimo <mm>		
Armatura a taglio		
Scorrimento (T.A.)		
-Percentuale assorbita dalle staffe <%>	100.00	100.00
-Percentuale assorbita dai ferri piegati <%>	0.00	0.00
-Percentuale assorbita dai ferri di parete <%>	0	0
-Considerare il valore relativo alle staffe come minimo percentuale da adottare	No	No
Variabilità staffe		
-Staffe uguali a passo costante		
-Staffe diverse in tre parti della trave in funzione delle zone critiche	x	x
-Staffe diverse in tre parti della trave in funzione di un multiplo dell'altezza pari a		
Variabilità staffe ala		
-Passi uguali a passi anima	x	x
-Passi multipli di passi anima		
-Passi indipendenti da passi anima		
Min. lunghezza tratto centrale come multiplo dell'altezza della trave	1.10	1.10
Elenco diametri staffe 1 <mm>	6	6
Elenco diametri staffe 2 <mm>	8	8
Elenco diametri staffe 3 <mm>		
Elenco diametri staffe 4 <mm>		
Elenco diametri staffe 5 <mm>		
Elenco diametri staffe 6 <mm>		
Elenco diametri staffe 7 <mm>		
Elenco numero bracci staffe 1	2	2
Elenco numero bracci staffe 2	4	4
Elenco numero bracci staffe 3		
Elenco numero bracci staffe 4		
Elenco numero bracci staffe 5		
Passi staffe		
-Minimo <cm>	4.00	4.00
-Massimo <cm>	32.00	32.00
-Incremento <cm>	4.00	4.00
Elementi costanti		
-Diametro	Si	Si
-Passo	No	No
-Bracci	Si	Si
Tipo di minimizzazione staffatura		
-Minimizza il numero delle staffe	x	x
-Minimizza il peso delle staffe		
Raffittimento staffe all'estremità della trave	No	No
-Passo non superiore a		
Lunghezza max del tratto di calcolo scorrimento		
-Pari al tratto in cui $\tau > \tau_{c0}$	x	x
-Pari a <cm>		
-Come multiplo dell'altezza pari a		
Armatura a taglio e torsione		
Elenco diametri ferri piegati 1 <mm>	12	12
Elenco diametri ferri piegati 2 <mm>	14	14
Elenco diametri ferri piegati 3 <mm>	16	16
Elenco diametri ferri piegati 4 <mm>	18	18
Elenco diametri ferri piegati 5 <mm>	20	20
Elenco diametri ferri piegati 6 <mm>		

Elenco diametri ferri piegati 7 <mm>		
Angolo di piegatura <grad>	45.00	45.00
Posizione primo punto di piegatura		
-Pari al multiplo dell'altezza		
-Distanza <cm>	5.00	5.00
Interasse punti di piegatura		
-Pari al multiplo dell'altezza		
-Distanza <cm>	25.00	25.00
Tipo di ferri piegati		
-Solo sagomati		
-Solo cavallotti		
-Sia sagomati che cavallotti	x	x
Ferri di parete	Si	Si
-Max distanza fra le barre <cm>	30.00	30.00
Elenco diametri ferri di parete 1 <mm>	12	12
Elenco diametri ferri di parete 2 <mm>	14	14
Elenco diametri ferri di parete 3 <mm>	16	16
Elenco diametri ferri di parete 4 <mm>	18	18
Elenco diametri ferri di parete 5 <mm>	20	20
Elenco diametri ferri di parete 6 <mm>		
Elenco diametri ferri di parete 7 <mm>		
Elenco diametri staffe orizzontali 1 <mm>	6	6
Elenco diametri staffe orizzontali 2 <mm>	8	8
Elenco diametri staffe orizzontali 3 <mm>		
Elenco diametri staffe orizzontali 4 <mm>		
Elenco diametri staffe orizzontali 5 <mm>		
Elenco diametri staffe orizzontali 6 <mm>		
Elenco diametri staffe orizzontali 7 <mm>		
Parametri di disegno		
Copriferro per calcolo lunghezza ferri <cm>	6.00	6.00
Risvolto ferri superiori	Si	Si
-Pari a <cm>	25.00	25.00
-Pari all'altezza della trave		
-Pari alla minima altezza delle travi incidenti		
Risvolto ferri inferiori	Si	Si
-Pari a <cm>	25.00	25.00
-Pari all'altezza della trave		
-Pari alla minima altezza delle travi incidenti		
Risvolto ferri laterali	Si	Si
-Pari a <cm>	25.00	25.00
-Pari alla larghezza della trave		
Magrone	Si	Si
-Allargamento laterale <cm>	0.00	0.00
-Altezza <cm>	20.00	20.00
Dati per progettazione interattiva sezioni		
Copriferro reale al bordo staffa <cm>	2.50	2.50
Diametro staffa teorica <mm>	8.00	8.00
Distanza fra ferri su più strati <cm>	1.00	1.00
Verifiche a pressoflessione	Si	Si
Verifica con barre in posizione teorica	No	No
Verifiche a flessione/pressoflessione retta	Si	Si
-Considera My	x	x
-Considera Mz		
-Considera My e Mz		
Tipo di progetto in doppia armatura (T.A.)		
-Considera Vrdu minimo		
-Considera Vrdu calcolato in corrispondenza di bw minimo		
-Considera Vrdu in corrispondenza di bw medio	x	x
-Considera Vrdu in corrispondenza di bw massimo		
-Considera sempre Af Staffe non proiettata in direzione del taglio	Si	Si
Integrare lo scorrimento lungo il tratto	Si	Si
-Lunghezza del tratto <m>	1.00	1.00
Dati per progettazione agli stati limite		
Condizioni ambientali		
-Ordinarie	x	x
-Aggressive		
-Molto aggressive		
Usa dominio N-M per flessioni rette	Si	Si
-Ricerca della sicurezza con sforzo normale costante		
-Ricerca della sicurezza con eccentricità costante	x	x

Controllo rapporto X/D	Si	Si
Classificazione barre tese/compresse		
-Solo le barre con deformazione percentuale rispetto alla barra più tesa/compressa non inferiore a <%>	30.00	30.00
-In funzione della deformazione		
Dati per verifiche di resistenza al fuoco		
-Tempo di verifica (REI) <minuti>	120.00	120.00
Dimensione MESH <cm>	2.00	2.00
-Passo di calcolo <secondi>	10.00	10.00
-Temperatura ambiente <C°>	20.00	20.00
-Coeff. di convezione a temperatura ambiente <W/mq K>	9.00	9.00
Calcestruzzo		
-Tipo di aggregati	SILICEI	SILICEI
-Massa volumica iniziale <kg/mc>	2300.00	2300.00
-Umidità iniziale <%>	3.00	3.00
-Fattore di interpolazione conducibilità	0.50	0.50
Dati per verifiche FRP		
Rinforzo longitudinale		
Tipo di fibra/resina		
-Vetro/Epossidica		
-Arammidica/Epossidica		
-Carbonio/Epossidica	x	x
Resistenza caratteristica(f_{fk}) <daN/cm ² >	49000.00	49000.00
Modulo elastico(E_c) <daN/cm ² >	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione(ϵ_{fk}) <%>	2.00	2.00
Spessore equivalente(t_f) <mm>	0.17	0.17
Sistemi di rinforzo		
-Preformati		
-Impregnati in situ	x	x
Rinforzo trasversale		
Tipo di fibra/resina		
-Vetro/Epossidica		
-Arammidica/Epossidica		
-Carbonio/Epossidica	x	x
Resistenza caratteristica(f_{fk}) <daN/cm ² >	49000.00	49000.00
Modulo elastico(E_c) <daN/cm ² >	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione(ϵ_{fk}) <%>	2.00	2.00
Spessore equivalente(t_f) <mm>	0.17	0.17
Sistemi di rinforzo		
-Preformati		
-Impregnati in situ	x	x
Modalità di carico		
-Lungo termine	x	x
-Ciclico		
Coeff. parziale SLU di distacco(γ_{fd})	1.50	1.50
Fattore di conversione ambientale(η_a)	0.95	0.95
Raggio di arrotondamento spigoli(r_c) <cm>	2.00	2.00
Coeff. condizione di carico(K_q)	1.25	1.25

Pareti

Generali	
Parametri di disegno	
Scala disegno pareti	50.00
Campitura disegno parete	Rada
Disegno armatura diffusa	No
Disegno prospetto e pianta	Sempre
Stampe	
Tipo di relazione	Sintetica

Specifici	1
Materiali	
-Considera come elemento esistente	No
-Calcestruzzo	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di calcestruzzo	C28/35

-Rck calcestruzzo	350.00
-Modulo elastico <daN/cm ² >	325881.00
-Resistenza caratteristica cilindrica (Fck)	290.50
-Resistenza caratteristica a trazione (Fctk)	19.84
-Resistenza media (Fcm) <daN/cm ² >	370.50
-Resistenza media a trazione (Fctm) <daN/cm ² >	28.35
-σ amm. calcestruzzo <daN/cm ² >	110.00
-rc0 <daN/cm ² >	6.70
-rc1 <daN/cm ² >	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si
-γc per stati limite ultimi	
-Automatico	x
-Pari a	
-Acciaio	
-Livello di conoscenza	LC2
-Fattore di confidenza	1.20
-Tipo di acciaio	B450C
-Modulo elastico <daN/cm ² >	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	4500.00
-Tensione media di snervamento (Fym) <daN/cm ² >	4500.00
-Sigma amm. acciaio <daN/cm ² >	2600.00
-Sigma amm. reti e tralicci <daN/cm ² >	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00
-γs per stati limite ultimi	
-Automatico	x
-Pari a	
-Coeff. di omogeneizzazione	15.00
Parametri di calcolo	
Elemento dissipativo	Si
Copriferro <cm>	2.50
Fattore moltiplicativo per calcolo τ l	1.00
Fattore moltiplicativo per calcolo τ t	1.00
Fattore di riduzione per ancoraggio ferri	1.00
Lunghezza ancoraggi armature	
-Calcolata in funzione della σ f	
-Imposta come multiplo del diametro	20.00
Lunghezza minima pari a <m>	0.50
-Inserire solo armatura al centro della parete	No
Modalità di progettazione e verifica armatura verticale	
-In funzione delle zone di incidenza elementi	
-In funzione delle sollecitazioni globali	x
-Inserisci armatura di rinforzo nelle zone di incidenza elementi	No
-Dimensione minima zone di incidenza elementi	No
-Pari a multiplo dello spessore	1.00
-Passo di verifica	1.50
-Trascura zone con pilastro inglobato	Si
-Effettuare verifiche nel piano della parete	No
-Elimina armatura diffusa nelle zone di rinforzo	Si
Elimina armatura diffusa nell'architrave	Si
-Effettuare verifiche su sezioni verticali	No
-Passo di verifica	1.00
Controllare resistenza a taglio trasversale come sezione priva di armatura a taglio	No
Min. Af armatura diffusa <cm ² /m>	3.00
Considera come parete debolmente armata ai sensi D.M. 18	No
-Modalità di valutazione parametri nel caso di sisma diverso per X e Y	
-Usa valore massimo	x
-Componi in direzione parete	
-Incremento del 50% delle forze assiali	
Sempre	x
-Solo per analisi sismiche statiche	
-Mai	
Coeff. β per controllo snellezza <m>	1.00
Armatura diffusa	
Considera armatura con rete elettrosaldata	No
Armatura verticale o rete	
Elenco diametri utilizzabili 1 <mm>	10
Elenco diametri utilizzabili 2 <mm>	12
Elenco diametri utilizzabili 3 <mm>	
Elenco diametri utilizzabili 4 <mm>	
Elenco diametri utilizzabili 5 <mm>	

Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Passi utilizzabili	
-Minimo <cm>	15.00
-Massimo <cm>	30.00
-Incremento <cm>	5.00
-Modalità di completamento armatura	
-Adattata	x
-Terminata	
-Nessuna	
Armatura orizzontale	
Elenco diametri utilizzabili 1 <mm>	8
Elenco diametri utilizzabili 2 <mm>	10
Elenco diametri utilizzabili 3 <mm>	
Elenco diametri utilizzabili 4 <mm>	
Elenco diametri utilizzabili 5 <mm>	
Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Passi utilizzabili	
-Minimo <cm>	10.00
-Massimo <cm>	30.00
-Incremento <cm>	5.00
Tipo di armatura orizzontale	
-Dritta	x
-Con risvolti di estremità	
-Modalità di chiusura orizzontale	
-Nessuna chiusura	
-Chiusura con ferri ad U	x
-Chiusura con staffe	
-Lunghezza armatura di chiusura	
-Multiplo dello spessore pari a	
-Lunghezza fissa pari a <cm>	0.50
-Tipo di ottimizzazione armatura	
-Minimizza il peso complessivo dei ferri	x
-Minimizza il numero dei ferri	
Armatura di rinforzo	
Elenco diametri utilizzabili 1 <mm>	16
Elenco diametri utilizzabili 2 <mm>	
Elenco diametri utilizzabili 3 <mm>	
Elenco diametri utilizzabili 4 <mm>	
Elenco diametri utilizzabili 5 <mm>	
Elenco diametri utilizzabili 6 <mm>	
Elenco diametri utilizzabili 7 <mm>	
Numero minimo ferri	2.00
Interferro minimo sotto il quale non è possibile aggiungere ferri <cm>	10.00
-Aggiungi staffe chiuse	Si
-Stesso diametro armatura diffusa orizzontale	x
-Diametro imposto	
-Stesso passo armatura diffusa orizzontale	x
-Passo imposto	
Armatura secondaria	
Diametro ferri di collegamento <mm>	6.00
Numero ferri di collegamento (a mq)	6.00
Lunghezza ancoraggio ferri di collegamento <cm>	10.00
Dati per progettazione agli stati limite	
Condizioni ambientali	
-Ordinarie	x
-Aggressive	
-Molto aggressive	
Controllo rapporto X/D	No
Classificazione barre tese/comprese	
-Solo le barre con deformazione percentuale rispetto alla barra più tesa/compressa non inferiore a <%>	30.00
-In funzione della deformazione	

Verifiche e armature travi

Simbologia

Δ_{sm}	=Distanza media tra le fessure
Φ_{eq}	=Diametro equivalente delle barre
ϵ_{sm}	=Deformazione unitaria media dell'armatura (*1000)
σ_c	=Tensione nel calcestruzzo
σ_f inf	=Tensione nel ferro - inferiore
σ_f sup	=Tensione nel ferro - superiore
σ_s	=Tensione nell'acciaio nella sezione fessurata
A_c eff	=Area di calcestruzzo efficace
A_s	=Area complessiva dei ferri nell'area di calcestruzzo efficace
AfE I	=Area di ferro effettiva totale presente nel punto di verifica, inferiore
AfE S	=Area di ferro effettiva totale presente nel punto di verifica, superiore
AfE St.	=Area di ferro effettiva della staffatura (d'anima per travi a T o L)
AfEP I	=Area di ferro effettiva parziale presente nella CC considerata, per la sollecitazione indicata, inferiore
AfEP S	=Area di ferro effettiva parziale presente nella CC considerata, per la sollecitazione indicata, superiore
B	=Base
CC	=Combinazione delle condizioni di carico elementari c = momento fittizio in campata a = momento fittizio agli appoggi T = momento traslato per taglio e = eccentricità aggiuntiva in caso di compressione o pressoflessione TG = taglio da gerarchia delle resistenze TGND = taglio non dissipativo limitante la gerarchia TG (Li) = taglio da gerarchia delle resistenze, limite inferiore TG (Ls) = taglio da gerarchia delle resistenze, limite superiore
Caso	=Caso di verifica
Cf inf	=Copriferro inferiore
Cf sup	=Copriferro superiore
Cls	=Tipo di calcestruzzo
El	=Elemento (asta) in cui viene effettuato il progetto/verifica (progressivo sul numero di aste)
Fcd	=Resistenza di calcolo a compressione del calcestruzzo
Fcd (Tag)	=Resistenza di calcolo a compressione del calcestruzzo per verifica a taglio
Fck	=Resistenza caratteristica cilindrica a compressione del calcestruzzo
Fcm	=Resistenza media
Fctd	=Resistenza di calcolo a trazione del calcestruzzo
Fctk	=Resistenza caratteristica a trazione del calcestruzzo
Fctm	=Resistenza media a trazione
Fyd	=Resistenza di calcolo dell'acciaio
Fyd (Tag)	=Resistenza di calcolo dell'acciaio per verifica a taglio
Fyk	=Tensione caratteristica di snervamento dell'acciaio
Fym	=Tensione media di snervamento
H	=Altezza
K ₂	=Coefficiente per distribuzione deformazioni
Lung.	=Lunghezza del tratto di progettazione
MRdy	=Momento resistente allo stato limite ultimo intorno all'asse Y
My	=Momento flettente intorno all'asse Y
Sez.	=Numero della sezione
Sic.	=Sicurezza
Staff.	=Staffatura adottata
TCC	=Tipo di combinazione di carico SLU = Stato limite ultimo SLE R = Stato limite d'esercizio, combinazione rara SLE F = Stato limite d'esercizio, combinazione frequente SLE Q = Stato limite d'esercizio, combinazione quasi permanente SLD = Stato limite di danno SLV = Stato limite di salvaguardia della vita SND = Stato limite di salvaguardia della vita (non dissipativo)
Tipo	=Tipologia 2Cdx = Doppia C lato costola R = Rettangolare Is = I stondata
Tp	=Tipo di acciaio
VRcd	=Taglio ultimo lato calcestruzzo
VRsd	=Taglio ultimo lato armatura
Vrdu	=Taglio ultimo resistente
Vsdu	=Taglio agente nella direzione del momento ultimo
Wk	=Ampiezza caratteristica delle fessure
X	=Coordinata progressiva rispetto al nodo iniziale
X0	=Coordinata progressiva (dal nodo iniziale) dell'inizio del tratto
X1	=Coordinata progressiva (dal nodo iniziale) della fine del tratto
Xg	=Coordinata progressiva (dal primo nodo) in cui viene effettuato il progetto/verifica
bw	=Larghezza membratura resistente al taglio
c	=Ricoprimento dell'armatura
ctgθ	=Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo
s	=Distanza massima tra le barre

Travata n. 2027

Nodi: -546 -547

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
29	R	30.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.009	SLV		1	0.00	6.03	6.03	6.03	6.03	-929.88	-4131.30	4.443
1.539	SLV	1	152.54	6.03	6.03	6.03	6.03	6.03	1406.29	4131.30	2.938
1.639	SLV	1	163.33	6.03	6.03	6.03	6.03	6.03	1406.29	4131.30	2.938

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _ε sup	σ _ε inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.00	24	SLE R	1	0.00	6.03	6.03	-82.46	80.46	-21.46	3.19
0.00	29	SLE Q	1	0.00	6.03	6.03	-74.02	72.22	-19.27	2.87
1.53	24	SLE R	1	152.54	6.03	6.03	59.73	-15.55	58.28	2.31
1.53	29	SLE Q	1	152.54	6.03	6.03	53.53	-13.93	52.23	2.07
1.63	24	SLE R	1	163.33	6.03	6.03	-50.10	48.89	-13.04	1.94
1.63	29	SLE Q	1	163.33	6.03	6.03	-46.32	45.20	-12.06	1.79

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
34	0.00	29	SLE Q	1	29	0.00	-74.02	33.00	109.00	0.50	16.00	109.96	6.03	165.73	72.22	0.02	0.00
42	0.00	28	SLE F	1	29	0.00	-76.12	33.00	109.00	0.50	16.00	109.96	6.03	165.73	74.28	0.02	0.00
76	1.53	29	SLE Q	1	29	152.54	53.53	33.00	109.00	0.50	16.00	109.96	6.03	165.73	52.23	0.02	0.00
84	1.53	28	SLE F	1	29	152.54	55.04	33.00	109.00	0.50	16.00	109.96	6.03	165.73	53.70	0.02	0.00
117	1.63	29	SLE Q	1	29	163.33	-46.32	33.00	109.00	0.50	16.00	109.96	6.03	165.73	45.20	0.01	0.00
125	1.63	28	SLE F	1	29	163.33	-47.32	33.00	109.00	0.50	16.00	109.96	6.03	165.73	46.17	0.01	0.00

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLV	0.00	1.73	1.73	ø8/ 4 2 br.	25.13	0.30	1732.60	1.23	21649.70	21649.70	21649.70	12.495

Travata n. 4018

Nodi: 402 438

Caratteristiche delle sezioni e dei materiali utilizzati

Sez. Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
3R	40.00	100.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.60	20	SLU	1	1220.00	19.01	28.63	19.01	28.63	-55630.70	-56391.00	1.014
5.48	20	SLU	1	731.58	19.01	28.63	19.01	28.63	71383.90	84576.60	1.185
12.20	20	SLU	1	60.00	19.01	28.63	19.01	28.63	-55604.70	-56391.00	1.014

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _ε sup	σ _ε inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.60	24	SLE R	1	1220.00	19.01	28.63	-40717.70	2393.53	-673.47	54.03
0.60	29	SLE Q	1	1220.00	19.01	28.63	-35317.70	2076.10	-584.15	46.86
5.48	24	SLE R	1	731.58	19.01	28.63	52229.30	-890.04	2092.04	68.22
5.48	29	SLE Q	1	731.58	19.01	28.63	45262.70	-771.32	1813.00	59.12
12.20	24	SLE R	1	60.00	19.01	28.63	-40698.60	2392.41	-673.15	54.00
12.20	29	SLE Q	1	60.00	19.01	28.63	-35301.30	2075.13	-583.88	46.84

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.60	29	SLE Q	1	3	1220.00	-35317.70	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2076.10	0.89	0.23
29	0.60	28	SLE F	1	3	1220.00	-36665.70	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2155.34	0.87	0.23
54	5.48	29	SLE Q	1	3	731.58	45262.70	27.50	76.75	0.50	27.00	132.34	28.63	410.00	1813.00	0.79	0.18
58	5.48	28	SLE F	1	3	731.58	47006.40	27.50	76.75	0.50	27.00	132.34	28.63	410.00	1882.84	0.78	0.18
83	12.20	29	SLE Q	1	3	60.00	-35301.30	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2075.13	0.89	0.23
87	12.20	28	SLE F	1	3	60.00	-36648.80	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2154.35	0.87	0.23

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.60	1.60	1.00	ø8/20 4 br.	10.05	0.40	41558.20	2.50	60360.50	67685.60	60360.50	1.452
20 SLU	1.60	11.20	9.60	ø8/20 4 br.	10.05	0.40	34393.30	2.50	60360.50	67685.60	60360.50	1.755
20 SLU	11.20	12.20	1.00	ø8/20 4 br.	10.05	0.40	41553.70	2.50	60360.50	67685.60	60360.50	1.453

Travata n. 100411

Nodi: -327 -328

Caratteristiche delle sezioni e dei materiali utilizzati

Sez. Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
30R	20.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.00	1	SLV	1	193.33	3.08	3.08	3.08	3.08	-269.58	-2167.36	8.040
1.29	9	SLV	1	64.48	3.08	3.08	3.08	3.08	-192.29	-2167.36	11.271
1.63	9	SLV	1	30.00	3.08	3.08	3.08	3.08	-244.96	-2167.36	8.848

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.00	24	SLE R	1	193.33	3.08	3.08	-169.37	319.43	-68.15	11.25
0.00	29	SLE Q	1	193.33	3.08	3.08	-152.20	287.05	-61.24	10.11
1.29	24	SLE R	1	64.48	3.08	3.08	-49.61	93.56	-19.96	3.29
1.29	29	SLE Q	1	64.48	3.08	3.08	-44.91	84.69	-18.07	2.98
1.63	24	SLE R	1	30.00	3.08	3.08	-84.86	160.06	-34.15	5.64
1.63	29	SLE Q	1	30.00	3.08	3.08	-76.42	144.13	-30.75	5.08

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
26	0.00	29	SLE Q	1	30	193.33	-152.20	34.00	120.00	0.50	14.00	119.91	3.08	114.15	287.05	0.08	0.02
30	0.00	28	SLE F	1	30	193.33	-156.47	34.00	120.00	0.50	14.00	119.91	3.08	114.15	295.10	0.09	0.02
68	1.29	29	SLE Q	1	30	64.48	-44.91	34.00	120.00	0.50	14.00	119.91	3.08	114.15	84.69	0.02	0.01
76	1.29	28	SLE F	1	30	64.48	-46.04	34.00	120.00	0.50	14.00	119.91	3.08	114.15	86.84	0.03	0.01
103	1.63	29	SLE Q	1	30	30.00	-76.42	34.00	120.00	0.50	14.00	119.91	3.08	114.15	144.13	0.04	0.01
107	1.63	28	SLE F	1	30	30.00	-78.49	34.00	120.00	0.50	14.00	119.91	3.08	114.15	148.03	0.04	0.01

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.00	0.24	0.24	ø8/ 4 2 br.	25.13	0.20	571.53	1.00	17613.70	14741.40	14741.40	25.793
1 SLV	0.24	1.39	1.15	ø8/10 2 br.	10.05	0.20	455.51	1.78	12573.10	12573.10	12573.10	27.602
9 SLV	1.39	1.63	0.24	ø8/ 4 2 br.	25.13	0.20	460.16	1.00	17613.70	14741.40	14741.40	32.035

Travata n. 10241

Nodi: -344 -378

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
31	R	30.00	40.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.10	20	SLU	1	10.00	4.02	4.02	4.02	4.02	-1150.20	-5394.11	4.690
1.96	20	SLU	1	196.20	4.02	4.02	4.02	4.02	1770.14	5394.11	3.047
4.75	20	SLU	1	475.50	4.02	4.02	4.02	4.02	-2900.18	-5394.11	1.860

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.10	24	SLE R	1	10.00	4.02	4.02	-851.28	649.18	-126.43	15.10
0.10	29	SLE Q	1	10.00	4.02	4.02	-764.15	582.74	-113.49	13.55
1.96	24	SLE R	1	196.20	4.02	4.02	1311.67	-194.81	1000.28	23.26
1.96	29	SLE Q	1	196.20	4.02	4.02	1181.77	-175.51	901.21	20.96
4.75	24	SLE R	1	475.50	4.02	4.02	-2148.93	1638.76	-319.16	38.11
4.75	29	SLE Q	1	475.50	4.02	4.02	-1935.80	1476.24	-287.50	34.33

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.10	29	SLE Q	1	31	10.00	-764.15	33.00	218.00	0.50	16.00	230.37	4.02	307.16	582.74	0.17	0.07
29	0.10	28	SLE F	1	31	10.00	-785.91	33.00	218.00	0.50	16.00	230.37	4.02	307.16	599.33	0.17	0.07
54	1.96	29	SLE Q	1	31	196.20	1181.77	33.00	218.00	0.50	16.00	230.37	4.02	307.16	901.21	0.26	0.10
58	1.96	28	SLE F	1	31	196.20	1214.26	33.00	218.00	0.50	16.00	230.37	4.02	307.16	925.99	0.27	0.11
83	4.75	29	SLE Q	1	31	475.50	-1935.80	33.00	218.00	0.50	16.00	230.37	4.02	307.16	1476.24	0.43	0.17
87	4.75	28	SLE F	1	31	475.50	-1989.10	33.00	218.00	0.50	16.00	230.37	4.02	307.16	1516.88	0.44	0.17

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.10	0.50	0.40	ø8/ 5 2 br.	20.11	0.30	2701.17	1.46	37173.60	37173.60	37173.60	13.762

20 SLU	0.50	4.35	3.85	ø8/10 2 br.	10.05	0.30	2924.19	2.30	29197.40	29197.40	29197.40	9.985
20 SLU	4.35	4.75	0.40	ø8/ 5 2 br.	20.11	0.30	3453.02	1.46	37173.60	37173.60	37173.60	10.766

Travata n. 2001

Nodi: 206 -541

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
29R		30.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.409	SLV	1		40.00	6.03	6.03	6.03	6.03	-1291.60	-4131.30	3.199
1.371	SLV	1		137.41	6.03	6.03	6.03	6.03	552.43	4131.30	7.478
3.971	SLV	1		397.17	6.03	6.03	6.03	6.03	-908.27	-4131.30	4.549

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.4024	SLE R	1		40.00	6.03	6.03	-595.43	580.98	-154.98	23.06
0.4029	SLE Q	1		40.00	6.03	6.03	-538.64	525.57	-140.20	20.86
1.3724	SLE R	1		137.41	6.03	6.03	252.93	-65.84	246.79	9.80
1.3729	SLE Q	1		137.41	6.03	6.03	229.87	-59.83	224.29	8.90
3.9724	SLE R	1		397.17	6.03	6.03	-313.55	305.94	-81.61	12.15
3.9729	SLE Q	1		397.17	6.03	6.03	-285.10	278.19	-74.21	11.04

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.4029	SLE Q	1		29	40.00	-538.64	33.00	109.00	0.50	16.00	109.96	6.03	165.73	525.57	0.15	0.03
29	0.4028	SLE F	1		29	40.00	-553.07	33.00	109.00	0.50	16.00	109.96	6.03	165.73	539.64	0.16	0.03
58	1.3729	SLE Q	1		29	137.41	229.87	33.00	109.00	0.50	16.00	109.96	6.03	165.73	224.29	0.07	0.01
62	1.3728	SLE F	1		29	137.41	235.52	33.00	109.00	0.50	16.00	109.96	6.03	165.73	229.80	0.07	0.01
90	3.9729	SLE Q	1		29	397.17	-285.10	33.00	109.00	0.50	16.00	109.96	6.03	165.73	278.19	0.08	0.02
94	3.9728	SLE F	1		29	397.17	-292.08	33.00	109.00	0.50	16.00	109.96	6.03	165.73	284.99	0.08	0.02

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.40	0.64	0.24	ø8/ 4 2 br.	25.13	0.30	1342.85	1.23	21649.70	21649.70	21649.70	16.122
20 SLU	0.64	3.73	3.09	ø8/10 2 br.	10.05	0.30	1176.72	2.30	16184.60	16184.60	16184.60	13.754
1 SLV	3.73	3.97	0.24	ø8/ 4 2 br.	25.13	0.30	1146.48	1.23	21649.70	21649.70	21649.70	18.884

Travata n. 2004

Nodi: -572 -573

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
30R		20.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.009	SLV	1		193.33	4.02	4.02	4.02	4.02	901.37	2754.22	3.056
1.639	SLV	1		30.00	4.02	4.02	4.02	4.02	-1122.62	-2754.22	2.453

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.0024	SLE R	1		193.33	4.02	4.02	125.66	-49.06	183.91	7.30
0.0029	SLE Q	1		193.33	4.02	4.02	114.52	-44.71	167.61	6.65
1.6324	SLE R	1		30.00	4.02	4.02	-134.81	197.30	-52.63	7.83
1.6329	SLE Q	1		30.00	4.02	4.02	-122.50	179.29	-47.83	7.12

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.0029	SLE Q	1		30	193.33	114.52	33.00	118.00	0.50	16.00	109.96	4.02	110.48	167.61	0.05	0.01
29	0.0028	SLE F	1		30	193.33	117.22	33.00	118.00	0.50	16.00	109.96	4.02	110.48	171.56	0.05	0.01
54	1.6329	SLE Q	1		30	30.00	-122.50	33.00	118.00	0.50	16.00	109.96	4.02	110.48	179.29	0.05	0.01
58	1.6328	SLE F	1		30	30.00	-125.54	33.00	118.00	0.50	16.00	109.96	4.02	110.48	183.74	0.05	0.01

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
<m>	<m>	<m>			<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
1 SLV	0.00	0.24	0.24	ø8/ 4 2 br.	25.13	0.20	1289.85	1.00	17613.70	14741.40	14741.40	11.429
9 SLV	0.24	1.39	1.15	ø8/10 2 br.	10.05	0.20	1423.07	1.78	12573.10	12573.10	12573.10	8.835
9 SLV	1.39	1.63	0.24	ø8/ 4 2 br.	25.13	0.20	1520.51	1.00	17613.70	14741.40	14741.40	9.695

Travata n. 2005

Nodi: 213 -575 -2258

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
27R		60.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	20	SLU	1	20.00	14.07	10.05	14.07	10.05	-8042.58	-9507.18	1.182

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.20	24	SLE R	1	20.00	14.07	10.05	-5917.13	2488.28	-816.86	111.64
0.20	29	SLE Q	1	20.00	14.07	10.05	-5216.19	2193.52	-720.10	98.41

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.20	29	SLE Q	1	27	20.00	-5216.19	33.00	86.33	0.50	16.00	102.37	14.07	319.90	2193.52	0.90	0.16
29	0.20	28	SLE F	1	27	20.00	-5391.29	33.00	86.33	0.50	16.00	102.37	14.07	319.90	2267.16	0.86	0.15

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
<m>	<m>	<m>			<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.20	0.44	0.24	ø8/ 4 2 br.	25.13	0.60	8234.34	2.01	35322.30	35322.30	35322.30	4.290
20 SLU	0.44	9.81	9.37	ø8/10 2 br.	10.05	0.60	7566.53	2.50	17613.70	30499.50	17613.70	2.328

Travata n. 2013

Nodi: 230 -589 -2259

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
27R		60.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	20	SLU	1	20.00	14.07	10.05	14.07	10.05	-7969.49	-9507.18	1.193

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.20	24	SLE R	1	20.00	14.07	10.05	-5863.35	2465.67	-809.44	110.62
0.20	29	SLE Q	1	20.00	14.07	10.05	-5168.74	2173.57	-713.55	97.52

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.20	29	SLE Q	1	27	20.00	-5168.74	33.00	86.33	0.50	16.00	102.37	14.07	319.90	2173.57	0.90	0.16
29	0.20	28	SLE F	1	27	20.00	-5342.26	33.00	86.33	0.50	16.00	102.37	14.07	319.90	2246.54	0.85	0.15

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
<m>	<m>	<m>			<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.20	0.44	0.24	ø8/ 4 2 br.	25.13	0.60	8190.15	2.01	35322.30	35322.30	35322.30	4.313
20 SLU	0.44	9.81	9.37	ø8/10 2 br.	10.05	0.60	7522.33	2.50	17613.70	30499.50	17613.70	2.342

Travata n. 2016

Nodi: 242 -612

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
29	R	30.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	Afep S	Afep I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.40	1	SLV	1	357.17	6.03	6.03	6.03	6.03	-1247.39	-4131.30	3.312
1.37	9	SLV	1	259.76	6.03	6.03	6.03	6.03	554.44	4131.30	7.451
3.97	9	SLV	1	0.00	6.03	6.03	6.03	6.03	-927.15	-4131.30	4.456

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.40	24	SLE R	1	357.17	6.03	6.03	-564.03	550.34	-146.81	21.85
0.40	29	SLE Q	1	357.17	6.03	6.03	-511.01	498.61	-133.01	19.79
1.37	24	SLE R	1	259.76	6.03	6.03	258.38	-67.25	252.11	10.01
1.37	29	SLE Q	1	259.76	6.03	6.03	234.81	-61.12	229.11	9.10
3.97	24	SLE R	1	0.00	6.03	6.03	-360.99	352.23	-93.96	13.98
3.97	29	SLE Q	1	0.00	6.03	6.03	-326.47	318.54	-84.98	12.65

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _c eff	σ _s	ε _{sm}	W _k
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.40	29	SLE Q	1	29	357.17	-511.01	33.00	109.00	0.50	16.00	109.96	6.03	165.73	498.61	0.15	0.03
29	0.40	28	SLE F	1	29	357.17	-524.52	33.00	109.00	0.50	16.00	109.96	6.03	165.73	511.80	0.15	0.03
58	1.37	29	SLE Q	1	29	259.76	234.81	33.00	109.00	0.50	16.00	109.96	6.03	165.73	229.11	0.07	0.01
62	1.37	28	SLE F	1	29	259.76	240.57	33.00	109.00	0.50	16.00	109.96	6.03	165.73	234.74	0.07	0.01
89	3.97	29	SLE Q	1	29	0.00	-326.47	33.00	109.00	0.50	16.00	109.96	6.03	165.73	318.54	0.09	0.02
93	3.97	28	SLE F	1	29	0.00	-334.93	33.00	109.00	0.50	16.00	109.96	6.03	165.73	326.80	0.10	0.02

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.40	0.64	0.24	ø8/ 4 2 br.	25.13	0.30	1312.80	1.23	21649.70	21649.70	21649.70	16.491
20 SLU	0.64	3.73	3.09	ø8/10 2 br.	10.05	0.30	1146.67	2.30	16184.60	16184.60	16184.60	14.114
20 SLU	3.73	3.97	0.24	ø8/ 4 2 br.	25.13	0.30	1159.53	1.23	21649.70	21649.70	21649.70	18.671

Travata n. 2021

Nodi: 213 230

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
32	R	40.00	50.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	Afep S	Afep I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	20	SLU	1	20.00	8.04	8.04	8.04	8.04	-5622.94	-13690.80	2.435
2.32	20	SLU	1	232.04	8.04	8.04	8.04	8.04	5425.71	13690.80	2.523
5.10	20	SLU	1	510.00	8.04	8.04	8.04	8.04	-5621.27	-13690.80	2.436

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.20	24	SLE R	1	20.00	8.04	8.04	-4140.75	1232.11	-303.08	30.24
0.20	29	SLE Q	1	20.00	8.04	8.04	-3660.79	1089.29	-267.95	26.74
2.32	24	SLE R	1	232.04	8.04	8.04	3995.45	-292.45	1188.88	29.18
2.32	29	SLE Q	1	232.04	8.04	8.04	3532.25	-258.54	1051.04	25.80
5.10	24	SLE R	1	510.00	8.04	8.04	-4139.27	1231.67	-302.97	30.23
5.10	29	SLE Q	1	510.00	8.04	8.04	-3658.80	1088.70	-267.81	26.72

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _c eff	σ _s	ε _{sm}	W _k
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	0.20	29	SLE Q	1	32	20.00	-3660.79	33.00	106.00	0.50	16.00	147.57	8.04	410.00	1089.29	0.32	0.08
33	0.20	28	SLE F	1	32	20.00	-3780.77	33.00	106.00	0.50	16.00	147.57	8.04	410.00	1125.00	0.33	0.08
58	2.32	29	SLE Q	1	32	232.04	3532.25	33.00	106.00	0.50	16.00	147.57	8.04	410.00	1051.04	0.31	0.08
62	2.32	28	SLE F	1	32	232.04	3648.06	33.00	106.00	0.50	16.00	147.57	8.04	410.00	1085.51	0.32	0.08
91	5.10	29	SLE Q	1	32	510.00	-3658.80	33.00	106.00	0.50	16.00	147.57	8.04	410.00	1088.70	0.32	0.08
95	5.10	28	SLE F	1	32	510.00	-3778.91	33.00	106.00	0.50	16.00	147.57	8.04	410.00	1124.44	0.33	0.08

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.20	0.70	0.50	ø8/10 2 br.	10.05	0.40	8616.31	2.50	40626.50	46898.70	40626.50	4.715
20 SLU	0.70	4.60	3.90	ø8/10 2 br.	10.05	0.40	6857.93	2.50	40626.50	46898.70	40626.50	5.924
20 SLU	4.60	5.10	0.50	ø8/10 2 br.	10.05	0.40	8615.63	2.50	40626.50	46898.70	40626.50	4.715

Travata n. 2022

Nodi: 206 -575 220 -589 242

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cm²>	<daN/cm²>	<daN/cm²>	<daN/cm²>		<daN/cm²>	<daN/cm²>
19R		40.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.40	20	SLU	1	40.00	9.42	9.42	9.42	9.42	-10793.40	-19641.30	1.820
3.75	20	SLU	2	0.00	21.99	21.99	21.99	21.99	15720.60	45079.30	2.868
6.20	20	SLU	2	245.00	12.57	12.57	12.57	12.57	-22939.30	-26006.10	1.134
6.60	20	SLU	3	20.00	12.57	12.57	12.57	12.57	-23278.10	-26006.10	1.117
9.05	20	SLU	4	0.00	21.99	9.42	21.99	9.42	16575.40	19636.50	1.185
12.40	20	SLU	4	335.00	9.42	9.42	9.42	9.42	-11167.70	-19641.30	1.759

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cm²>	<daN/cm²>	<daN/cm²>
0.40	24	SLE R	1	40.00	9.42	9.42	-7963.21	1650.09	-424.78	39.27
0.40	29	SLE Q	1	40.00	9.42	9.42	-7078.70	1466.80	-377.60	34.91
3.75	24	SLE R	2	0.00	21.99	21.99	11590.40	-422.75	1044.37	35.92
3.75	29	SLE Q	2	0.00	21.99	21.99	10283.40	-375.08	926.60	31.87
6.20	24	SLE R	2	245.00	12.57	12.57	-16896.40	2641.34	-801.12	71.57
6.20	29	SLE Q	2	245.00	12.57	12.57	-14952.30	2337.44	-708.95	63.34
6.60	24	SLE R	3	20.00	12.57	12.57	-17146.40	2680.43	-812.98	72.63
6.60	29	SLE Q	3	20.00	12.57	12.57	-15174.90	2372.23	-719.50	64.28
9.05	24	SLE R	4	0.00	21.99	9.42	12219.70	-502.21	2506.82	49.36
9.05	29	SLE Q	4	0.00	21.99	9.42	10839.00	-445.47	2223.57	43.78
12.40	24	SLE R	4	335.00	9.42	9.42	-8237.14	1706.85	-439.39	40.62
12.40	29	SLE Q	4	335.00	9.42	9.42	-7316.67	1516.11	-390.29	36.08

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cm²>		<mm>
25	0.40	29	SLE Q	1	19	40.00	-7078.70	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1466.80	0.44	0.11
29	0.40	28	SLE F	1	19	40.00	-7298.94	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1512.44	0.44	0.11
54	3.75	29	SLE Q	2	19	0.00	10283.40	31.00	52.33	0.50	20.00	99.29	21.99	410.00	926.60	0.31	0.05
58	3.75	28	SLE F	2	19	0.00	10609.90	31.00	52.33	0.50	20.00	99.29	21.99	410.00	956.02	0.28	0.05
83	6.20	29	SLE Q	2	19	245.00	-14952.30	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2337.44	0.92	0.20
87	6.20	28	SLE F	2	19	245.00	-15440.00	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2413.68	0.85	0.18
112	6.60	29	SLE Q	3	19	20.00	-15174.90	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2372.23	0.94	0.20
116	6.60	28	SLE F	3	19	20.00	-15669.40	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2449.54	0.87	0.19
141	9.05	29	SLE Q	4	19	0.00	10839.00	31.00	157.00	0.50	20.00	149.00	9.42	410.00	2223.57	0.81	0.20
145	9.05	28	SLE F	4	19	0.00	11183.70	31.00	157.00	0.50	20.00	149.00	9.42	410.00	2294.28	0.70	0.18
170	12.40	29	SLE Q	4	19	335.00	-7316.67	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1516.11	0.46	0.12
174	12.40	28	SLE F	4	19	335.00	-7546.12	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1563.66	0.46	0.12

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.40	1.00	0.60	ø8/10 2 br.	10.05	0.40	12460.50	2.50	49477.60	57116.30	49477.60	3.971
20 SLU	1.00	5.60	4.60	ø8/10 2 br.	10.05	0.40	18682.60	2.50	49477.60	57116.30	49477.60	2.648
20 SLU	5.60	6.20	0.60	ø8/10 2 br.	10.05	0.40	22029.50	2.50	49477.60	57116.30	49477.60	2.246
20 SLU	6.60	7.20	0.60	ø8/10 2 br.	10.05	0.40	22158.60	2.50	49477.60	57116.30	49477.60	2.233
20 SLU	7.20	11.80	4.60	ø8/10 2 br.	10.05	0.40	18811.70	2.50	49477.60	57116.30	49477.60	2.630
20 SLU	11.80	12.40	0.60	ø8/10 2 br.	10.05	0.40	12903.10	2.50	49477.60	57116.30	49477.60	3.835

Travata n. 2023

Nodi: -541 -567 -2258 -576 -582 -583 -2259 -612

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cm²>	<daN/cm²>	<daN/cm²>	<daN/cm²>		<daN/cm²>	<daN/cm²>
27R		60.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.30	20	SLU	1	30.00	10.05	10.05	10.05	10.05	-2059.58	-7011.39	3.404
1.58	20	SLU	1	157.78	10.05	10.05	10.05	10.05	2158.55	7011.39	3.248
3.17	20	SLU	1	317.50	10.05	10.05	10.05	10.05	-2563.97	-7011.39	2.735
3.38	20	SLU	2	10.00	10.05	10.05	10.05	10.05	-1910.44	-7011.39	3.670
4.53	5	SLV	3	78.33	10.05	10.05	10.05	10.05	-645.36	-7011.39	10.864
4.92	5	SLV	3	117.50	10.05	10.05	10.05	10.05	-893.76	-7011.39	7.845
5.12	5	SLV	4	10.00	10.05	10.05	10.05	10.05	-651.96	-7011.39	10.754
6.07	9	SLV	4	104.12	10.05	10.05	10.05	10.05	780.96	7011.39	8.978
7.64	20	SLU	5	126.00	10.05	10.05	10.05	10.05	-4611.99	-7011.39	1.520
7.84	20	SLU	6	10.00	10.05	10.05	10.05	10.05	-6674.51	-7011.39	1.050
9.99	20	SLU	7	94.09	10.05	10.05	10.05	10.05	4283.01	7011.39	1.637
12.50	20	SLU	7	345.00	10.05	10.05	10.05	10.05	-5384.45	-7011.39	1.302

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cm>	<daN/cm>	<daN/cm>
0.30	24	SLE R	1	30.00	10.05	10.05	-1511.27	876.70	-201.47	32.08
0.30	29	SLE Q	1	30.00	10.05	10.05	-1321.20	766.44	-176.14	28.05
1.58	24	SLE R	1	157.78	10.05	10.05	1582.88	-211.02	918.24	33.60
1.58	29	SLE Q	1	157.78	10.05	10.05	1381.23	-184.14	801.26	29.32
3.17	24	SLE R	1	317.50	10.05	10.05	-1880.86	1091.10	-250.75	39.93
3.17	29	SLE Q	1	317.50	10.05	10.05	-1643.46	953.38	-219.10	34.89
3.38	24	SLE R	2	10.00	10.05	10.05	-1401.29	812.90	-186.81	29.75
3.38	29	SLE Q	2	10.00	10.05	10.05	-1224.07	710.09	-163.19	25.99
4.53	24	SLE R	3	78.33	10.05	10.05	-195.07	113.16	-26.01	4.14
4.53	29	SLE Q	3	78.33	10.05	10.05	-180.60	104.77	-24.08	3.83
4.92	24	SLE R	3	117.50	10.05	10.05	-350.86	203.54	-46.78	7.45
4.92	29	SLE Q	3	117.50	10.05	10.05	-323.42	187.62	-43.12	6.87
5.12	24	SLE R	4	10.00	10.05	10.05	-330.13	191.51	-44.01	7.01
5.12	29	SLE Q	4	10.00	10.05	10.05	-301.28	174.78	-40.17	6.40
6.07	24	SLE R	4	104.12	10.05	10.05	502.45	-66.98	291.47	10.67
6.07	29	SLE Q	4	104.12	10.05	10.05	443.50	-59.13	257.28	9.42
7.64	24	SLE R	5	126.00	10.05	10.05	-3394.06	1968.91	-452.48	72.05
7.64	29	SLE Q	5	126.00	10.05	10.05	-2994.60	1737.19	-399.23	63.57
7.84	24	SLE R	6	10.00	10.05	10.05	-4912.20	2849.60	-654.87	104.28
7.84	29	SLE Q	6	10.00	10.05	10.05	-4334.85	2514.67	-577.90	92.03
9.99	24	SLE R	7	94.09	10.05	10.05	3150.11	-419.96	1827.40	66.88
9.99	29	SLE Q	7	94.09	10.05	10.05	2774.31	-369.86	1609.39	58.90
12.50	24	SLE R	7	345.00	10.05	10.05	-3959.01	2296.64	-527.79	84.05
12.50	29	SLE Q	7	345.00	10.05	10.05	-3483.49	2020.79	-464.40	73.95

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk	
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>	
25	0.30	29	SLE	Q	1	27	30.00	-1321.20	33.00	129.50	0.50	16.00	119.95	10.05	338.95	766.44	0.22	0.05
29	0.30	28	SLE	F	1	27	30.00	-1368.64	33.00	129.50	0.50	16.00	119.95	10.05	338.95	793.96	0.23	0.05
54	1.58	29	SLE	Q	1	27	157.78	1381.23	33.00	129.50	0.50	16.00	119.95	10.05	338.95	801.26	0.23	0.05
58	1.58	28	SLE	F	1	27	157.78	1431.63	33.00	129.50	0.50	16.00	119.95	10.05	338.95	830.50	0.24	0.05
83	3.17	29	SLE	Q	1	27	317.50	-1643.46	33.00	129.50	0.50	16.00	119.95	10.05	338.95	953.38	0.28	0.06
87	3.17	28	SLE	F	1	27	317.50	-1702.93	33.00	129.50	0.50	16.00	119.95	10.05	338.95	987.88	0.29	0.06
112	3.38	29	SLE	Q	2	27	10.00	-1224.07	33.00	129.50	0.50	16.00	119.95	10.05	338.95	710.09	0.21	0.04
116	3.38	28	SLE	F	2	27	10.00	-1268.51	33.00	129.50	0.50	16.00	119.95	10.05	338.95	735.87	0.21	0.04
141	4.53	29	SLE	Q	3	27	78.33	-180.60	33.00	129.50	0.50	16.00	119.95	10.05	338.95	104.77	0.03	0.01
145	4.53	28	SLE	F	3	27	78.33	-184.08	33.00	129.50	0.50	16.00	119.95	10.05	338.95	106.79	0.03	0.01
170	4.92	29	SLE	Q	3	27	117.50	-323.42	33.00	129.50	0.50	16.00	119.95	10.05	338.95	187.62	0.05	0.01
174	4.92	28	SLE	F	3	27	117.50	-330.09	33.00	129.50	0.50	16.00	119.95	10.05	338.95	191.49	0.06	0.01
205	5.12	29	SLE	Q	4	27	10.00	-301.28	33.00	129.50	0.50	16.00	119.95	10.05	338.95	174.78	0.05	0.01
209	5.12	28	SLE	F	4	27	10.00	-308.40	33.00	129.50	0.50	16.00	119.95	10.05	338.95	178.91	0.05	0.01
234	6.07	29	SLE	Q	4	27	104.12	443.50	33.00	129.50	0.50	16.00	119.95	10.05	338.95	257.28	0.07	0.02
238	6.07	28	SLE	F	4	27	104.12	458.33	33.00	129.50	0.50	16.00	119.95	10.05	338.95	265.88	0.08	0.02
263	7.64	29	SLE	Q	5	27	126.00	-2994.60	33.00	129.50	0.50	16.00	119.95	10.05	338.95	1737.19	0.62	0.13
267	7.64	28	SLE	F	5	27	126.00	-3094.46	33.00	129.50	0.50	16.00	119.95	10.05	338.95	1795.11	0.54	0.11
292	7.84	29	SLE	Q	6	27	10.00	-4334.85	33.00	129.50	0.50	16.00	119.95	10.05	338.95	2514.67	1.00	0.20
296	7.84	28	SLE	F	6	27	10.00	-4479.16	33.00	129.50	0.50	16.00	119.95	10.05	338.95	2598.39	0.93	0.19
321	9.99	29	SLE	Q	7	27	94.09	2774.31	33.00	129.50	0.50	16.00	119.95	10.05	338.95	1609.39	0.56	0.11
325	9.99	28	SLE	F	7	27	94.09	2868.22	33.00	129.50	0.50	16.00	119.95	10.05	338.95	1663.87	0.48	0.10
350	12.50	29	SLE	Q	7	27	345.00	-3483.49	33.00	129.50	0.50	16.00	119.95	10.05	338.95	2020.79	0.76	0.16
354	12.50	28	SLE	F	7	27	345.00	-3602.36	33.00	129.50	0.50	16.00	119.95	10.05	338.95	2089.75	0.68	0.14

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
<m>	<m>	<m>			<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.30	0.54	0.24	ø8/ 4 2 br.	25.13	0.60	5765.94	2.01	35322.30	35322.30	35322.30	6.126
20 SLU	0.54	2.94	2.40	ø8/10 2 br.	10.05	0.60	5124.86	2.50	17613.70	30499.50	17613.70	3.437
20 SLU	2.94	3.17	0.24	ø8/ 4 2 br.	25.13	0.60	6116.82	2.01	35322.30	35322.30	35322.30	5.775
20 SLU	3.38	3.62	0.24	ø8/ 4 2 br.	25.13	0.60	4649.19	2.01	35322.30	35322.30	35322.30	7.598
20 SLU	3.62	4.68	1.07	ø8/10 2 br.	10.05	0.60	4107.38	2.50	17613.70	30499.50	17613.70	4.288
5 SLV	4.68	4.92	0.24	ø8/ 4 2 br.	25.13	0.60	1611.91	2.01	35322.30	35322.30	35322.30	21.913
20 SLU	5.12	5.37	0.24	ø8/ 4 2 br.	25.13	0.60	2259.87	2.01	35322.30	35322.30	35322.30	15.630
20 SLU	5.37	7.41	2.04	ø8/10 2 br.	10.05	0.60	5719.58	2.50	17613.70	30499.50	17613.70	3.080
20 SLU	7.41	7.64	0.24	ø8/ 4 2 br.	25.13	0.60	6742.99	2.01	35322.30	35322.30	35322.30	5.238
20 SLU	7.84	8.09	0.24	ø8/ 4 2 br.	25.13	0.60	10008.30	2.01	35322.30	35322.30	35322.30	3.529
20 SLU	8.09	12.26	4.17	ø8/10 2 br.	10.05	0.60	9154.73	2.50	17613.70	30499.50	17613.70	1.924
20 SLU	12.26	12.50	0.24	ø8/ 4 2 br.	25.13	0.60	7960.02	2.01	35322.30	35322.30	35322.30	4.437

Travata n. 2024

Nodi: -588 -617

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
<cm>		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
29R		30.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.10	20	SLU	1	495.50	4.02	4.02	4.02	4.02	-2055.71	-2876.44	1.399
2.27	20	SLU	1	278.27	4.02	4.02	4.02	4.02	1695.44	2876.44	1.697
4.75	20	SLU	1	30.00	4.02	4.02	4.02	4.02	-2401.52	-2876.44	1.198

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.10	24	SLE R	1	495.50	4.02	4.02	-1512.43	2168.34	-406.39	71.63
0.10	29	SLE Q	1	495.50	4.02	4.02	-1333.39	1911.65	-358.28	63.15
2.27	24	SLE R	1	278.27	4.02	4.02	1247.39	-335.18	1788.36	59.08
2.27	29	SLE Q	1	278.27	4.02	4.02	1099.71	-295.49	1576.62	52.09
4.75	24	SLE R	1	30.00	4.02	4.02	-1766.77	2532.98	-474.73	83.68
4.75	29	SLE Q	1	30.00	4.02	4.02	-1557.34	2232.72	-418.46	73.76

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _c eff	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.10	29	SLE Q	1	29	495.50	-1333.39	33.00	218.00	0.50	16.00	135.26	4.02	174.06	1911.65	0.65	0.15
29	0.10	28	SLE F	1	29	495.50	-1378.17	33.00	218.00	0.50	16.00	135.26	4.02	174.06	1975.85	0.58	0.13
54	2.27	29	SLE Q	1	29	278.27	1099.71	33.00	218.00	0.50	16.00	135.26	4.02	174.06	1576.62	0.49	0.11
58	2.27	28	SLE F	1	29	278.27	1136.62	33.00	218.00	0.50	16.00	135.26	4.02	174.06	1629.55	0.47	0.11
83	4.75	29	SLE Q	1	29	30.00	-1557.34	33.00	218.00	0.50	16.00	135.26	4.02	174.06	2232.72	0.81	0.19
87	4.75	28	SLE F	1	29	30.00	-1609.69	33.00	218.00	0.50	16.00	135.26	4.02	174.06	2307.78	0.71	0.16

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
<m>	<m>	<m>			<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.10	0.34	0.24	ø8/ 4 2 br.	25.13	0.30	3163.45	1.23	21649.70	21649.70	21649.70	6.844
20 SLU	0.34	4.51	4.17	ø8/10 2 br.	10.05	0.30	2978.18	2.30	16184.60	16184.60	16184.60	5.434
20 SLU	4.51	4.75	0.24	ø8/ 4 2 br.	25.13	0.30	3312.05	1.23	21649.70	21649.70	21649.70	6.537

Travata n. 4001

Nodi: 401 402 403 404 405

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
4R		30.00	110.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.40	9	SLV	1	40.00	6.03	6.03	6.03	6.03	-18499.50	-20060.00	1.084
6.10	1	SLV	1	610.00	6.03	6.03	6.03	6.03	-11968.80	-20060.00	1.676
6.50	1	SLV	2	20.00	6.03	6.03	6.03	6.03	-8182.32	-20060.00	2.452
10.30	1	SLV	2	400.00	6.03	6.03	6.03	6.03	-6760.64	-20060.00	2.967
12.20	1	SLV	2	590.00	6.03	6.03	6.03	6.03	-10399.40	-20060.00	1.929
12.60	9	SLV	3	20.00	6.03	6.03	6.03	6.03	-10746.10	-20060.00	1.867

17.03	1	SLV	3	463.33	6.03	6.03	6.03	6.03	-7015.63	-20060.00	2.859
18.30	1	SLV	3	590.00	6.03	6.03	6.03	6.03	-7392.85	-20060.00	2.713
18.70	9	SLV	4	20.00	6.03	6.03	6.03	6.03	-10255.70	-20060.00	1.956
23.45	1	SLV	4	495.00	6.03	6.03	6.03	6.03	-21478.40	-20060.00	0.934
24.40	1	SLV	4	590.00	6.03	6.03	6.03	6.03	-21478.40	-20060.00	0.934

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.40	24	SLE R	1	40.00	6.03	6.03	-2596.04	432.08	-82.51	6.88
0.40	29	SLE Q	1	40.00	6.03	6.03	-2395.63	398.72	-76.14	6.35
6.10	24	SLE R	1	610.00	6.03	6.03	1447.86	-46.02	240.98	3.84
6.10	29	SLE Q	1	610.00	6.03	6.03	-1493.95	248.65	-47.48	3.96
6.50	24	SLE R	2	20.00	6.03	6.03	-2204.54	366.92	-70.07	5.84
6.50	29	SLE Q	2	20.00	6.03	6.03	-2174.06	361.84	-69.10	5.76
10.30	24	SLE R	2	400.00	6.03	6.03	1978.53	-62.89	329.30	5.25
10.30	29	SLE Q	2	400.00	6.03	6.03	1871.37	-59.48	311.46	4.96
12.20	24	SLE R	2	590.00	6.03	6.03	-3304.29	549.96	-105.03	8.76
12.20	29	SLE Q	2	590.00	6.03	6.03	-3132.87	521.42	-99.58	8.31
12.60	24	SLE R	3	20.00	6.03	6.03	-3551.40	591.08	-112.88	9.42
12.60	29	SLE Q	3	20.00	6.03	6.03	-3356.38	558.63	-106.68	8.90
17.03	24	SLE R	3	463.33	6.03	6.03	2487.53	-79.07	414.02	6.59
17.03	29	SLE Q	3	463.33	6.03	6.03	2325.10	-73.90	386.98	6.16
18.30	24	SLE R	3	590.00	6.03	6.03	1477.25	-46.95	245.87	3.92
18.30	29	SLE Q	3	590.00	6.03	6.03	1318.31	-41.90	219.42	3.50
18.70	24	SLE R	4	20.00	6.03	6.03	1490.52	-47.38	248.08	3.95
18.70	29	SLE Q	4	20.00	6.03	6.03	1350.83	-42.94	224.83	3.58
23.45	24	SLE R	4	495.00	6.03	6.03	-6648.67	1106.58	-211.32	17.63
23.45	29	SLE Q	4	495.00	6.03	6.03	-6058.48	1008.35	-192.57	16.06
24.40	24	SLE R	4	590.00	6.03	6.03	-6648.67	1106.58	-211.32	17.63
24.40	29	SLE Q	4	590.00	6.03	6.03	-6058.48	1008.35	-192.57	16.06

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
34	0.40	29	SLE Q	1	4	40.00	-2395.63	33.00	109.00	0.50	16.00	229.13	6.03	307.50	398.72	0.12	0.05
42	0.40	28	SLE F	1	4	40.00	-2433.26	33.00	109.00	0.50	16.00	229.13	6.03	307.50	404.99	0.12	0.05
79	6.10	29	SLE Q	1	4	610.00	-1493.95	33.00	109.00	0.50	16.00	229.13	6.03	307.50	248.65	0.07	0.03
85	6.10	27	SLE F	1	4	610.00	-1493.95	33.00	109.00	0.50	16.00	229.13	6.03	307.50	248.65	0.07	0.03
126	6.50	29	SLE Q	2	4	20.00	-2174.06	33.00	109.00	0.50	16.00	229.13	6.03	307.50	361.84	0.11	0.04
134	6.50	28	SLE F	2	4	20.00	-2188.00	33.00	109.00	0.50	16.00	229.13	6.03	307.50	364.16	0.11	0.04
176	10.30	29	SLE Q	2	4	400.00	1871.37	33.00	109.00	0.50	16.00	229.13	6.03	307.50	311.46	0.09	0.04
184	10.30	28	SLE F	2	4	400.00	1895.15	33.00	109.00	0.50	16.00	229.13	6.03	307.50	315.42	0.09	0.04
213	12.20	29	SLE Q	2	4	590.00	-3132.87	33.00	109.00	0.50	16.00	229.13	6.03	307.50	521.42	0.15	0.06
217	12.20	28	SLE F	2	4	590.00	-3174.40	33.00	109.00	0.50	16.00	229.13	6.03	307.50	528.34	0.15	0.06
246	12.60	29	SLE Q	3	4	20.00	-3356.38	33.00	109.00	0.50	16.00	229.13	6.03	307.50	558.63	0.16	0.06
250	12.60	28	SLE F	3	4	20.00	-3402.85	33.00	109.00	0.50	16.00	229.13	6.03	307.50	566.36	0.16	0.06
294	17.03	29	SLE Q	3	4	463.33	2325.10	33.00	109.00	0.50	16.00	229.13	6.03	307.50	386.98	0.11	0.04
302	17.03	28	SLE F	3	4	463.33	2360.63	33.00	109.00	0.50	16.00	229.13	6.03	307.50	392.90	0.11	0.04
340	18.30	29	SLE Q	3	4	590.00	1318.31	33.00	109.00	0.50	16.00	229.13	6.03	307.50	219.42	0.06	0.02
348	18.30	28	SLE F	3	4	590.00	1350.00	33.00	109.00	0.50	16.00	229.13	6.03	307.50	224.69	0.07	0.03
383	18.70	29	SLE Q	4	4	20.00	1350.83	33.00	109.00	0.50	16.00	229.13	6.03	307.50	224.83	0.07	0.03
391	18.70	28	SLE F	4	4	20.00	1375.40	33.00	109.00	0.50	16.00	229.13	6.03	307.50	228.92	0.07	0.03
426	23.45	29	SLE Q	4	4	495.00	-6058.48	33.00	109.00	0.50	16.00	229.13	6.03	307.50	1008.35	0.29	0.11
434	23.45	28	SLE F	4	4	495.00	-6187.90	33.00	109.00	0.50	16.00	229.13	6.03	307.50	1029.89	0.30	0.12
464	24.40	29	SLE Q	4	4	590.00	-6058.48	33.00	109.00	0.50	16.00	229.13	6.03	307.50	1008.35	0.29	0.11
468	24.40	28	SLE F	4	4	590.00	-6187.90	33.00	109.00	0.50	16.00	229.13	6.03	307.50	1029.89	0.30	0.12

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLV	0.40	1.50	1.10	ø8/20 2 br.	5.03	0.30	7867.68	2.50	33327.30	56057.60	33327.30	4.236
9 SLV	1.50	5.00	3.50	ø8/20 2 br.	5.03	0.30	6691.77	2.50	33327.30	56057.60	33327.30	4.980
1 SLV	5.00	6.10	1.10	ø8/20 2 br.	5.03	0.30	7551.30	2.50	33327.30	56057.60	33327.30	4.413
9 SLV	6.50	7.60	1.10	ø8/20 2 br.	5.03	0.30	5194.01	2.50	33327.30	56057.60	33327.30	6.417
1 SLV	7.60	11.10	3.50	ø8/20 2 br.	5.03	0.30	4354.52	2.50	33327.30	56057.60	33327.30	7.654
1 SLV	11.10	12.20	1.10	ø8/20 2 br.	5.03	0.30	5530.43	2.50	33327.30	56057.60	33327.30	6.026
9 SLV	12.60	13.70	1.10	ø8/20 2 br.	5.03	0.30	5797.64	2.50	33327.30	56057.60	33327.30	5.748
9 SLV	13.70	17.20	3.50	ø8/20 2 br.	5.03	0.30	4621.73	2.50	33327.30	56057.60	33327.30	7.211
1 SLV	17.20	18.30	1.10	ø8/20 2 br.	5.03	0.30	5050.72	2.50	33327.30	56057.60	33327.30	6.599
9 SLV	18.70	19.80	1.10	ø8/20 2 br.	5.03	0.30	6488.06	2.50	33327.30	56057.60	33327.30	5.137
1 SLV	19.80	23.30	3.50	ø8/20 2 br.	5.03	0.30	7270.83	2.50	33327.30	56057.60	33327.30	4.584
1 SLV	23.30	24.40	1.10	ø8/20 2 br.	5.03	0.30	8446.74	2.50	33327.30	56057.60	33327.30	3.946

Travata n. 40010

Nodi: 405 406 -1189

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
21	R	30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	9	SLV	1	20.00	8.04	6.03	8.04	6.03	-12581.40	-16702.30	1.328
4.31	9	SLV	1	431.31	8.04	6.03	8.04	6.03	5759.09	12626.90	2.193
5.89	1	SLV	1	589.50	8.04	6.03	8.04	6.03	-10385.80	-16702.30	1.608
6.29	1	SLV	2	40.00	8.04	6.03	8.04	6.03	10268.60	12626.90	1.230
9.87	9	SLV	2	397.17	8.04	6.03	8.04	6.03	3198.50	12626.90	3.948

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.20	24	SLE R	1	20.00	8.04	6.03	-5801.42	1417.83	-415.97	37.41
0.20	29	SLE Q	1	20.00	8.04	6.03	-5217.88	1275.21	-374.13	33.65
4.31	24	SLE R	1	431.31	8.04	6.03	2920.12	-206.90	939.49	19.84
4.31	29	SLE Q	1	431.31	8.04	6.03	2589.71	-183.49	833.19	17.60
5.89	24	SLE R	1	589.50	8.04	6.03	-3331.14	814.11	-238.85	21.48
5.89	29	SLE Q	1	589.50	8.04	6.03	-2968.16	725.40	-212.82	19.14
6.29	24	SLE R	2	40.00	8.04	6.03	-2059.28	503.27	-147.65	13.28
6.29	29	SLE Q	2	40.00	8.04	6.03	-1834.53	448.35	-131.54	11.83
9.87	24	SLE R	2	397.17	8.04	6.03	787.55	-55.80	253.38	5.35
9.87	29	SLE Q	2	397.17	8.04	6.03	737.09	-52.23	237.14	5.01

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _c eff	σ _s	ε _{sm}	W _k
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
27	0.20	29	SLE Q	1	21	20.00	-5217.88	33.00	72.67	0.50	16.00	127.17	8.04	307.50	1275.21	0.37	0.08
31	0.20	28	SLE F	1	21	20.00	-5356.02	33.00	72.67	0.50	16.00	127.17	8.04	307.50	1308.97	0.38	0.08
64	4.31	29	SLE Q	1	21	431.31	2589.71	33.00	109.00	0.50	16.00	147.57	6.03	307.50	833.19	0.24	0.06
68	4.31	28	SLE F	1	21	431.31	2670.77	33.00	109.00	0.50	16.00	147.57	6.03	307.50	859.27	0.25	0.06
95	5.89	29	SLE Q	1	21	589.50	-2968.16	33.00	72.67	0.50	16.00	127.17	8.04	307.50	725.40	0.21	0.05
99	5.89	28	SLE F	1	21	589.50	-3066.11	33.00	72.67	0.50	16.00	127.17	8.04	307.50	749.34	0.22	0.05
124	6.29	29	SLE Q	2	21	40.00	-1834.53	33.00	72.67	0.50	16.00	127.17	8.04	307.50	448.35	0.13	0.03
128	6.29	28	SLE F	2	21	40.00	-1893.41	33.00	72.67	0.50	16.00	127.17	8.04	307.50	462.74	0.13	0.03
161	9.87	29	SLE Q	2	21	397.17	737.09	33.00	109.00	0.50	16.00	147.57	6.03	307.50	237.14	0.07	0.02
165	9.87	28	SLE F	2	21	397.17	749.89	33.00	109.00	0.50	16.00	147.57	6.03	307.50	241.26	0.07	0.02

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9	SLV	0.20	0.80	0.60	ø8/10 2 br.	10.05	0.30	7571.21	2.30	45463.40	45463.40	6.005
9	SLV	0.80	5.29	4.49	ø8/10 2 br.	10.05	0.30	6605.98	2.30	45463.40	45463.40	6.882
1	SLV	5.29	5.89	0.60	ø8/10 2 br.	10.05	0.30	6781.14	2.30	45463.40	45463.40	6.704
9	SLV	6.29	6.90	0.60	ø8/10 2 br.	10.05	0.30	5769.30	2.30	45463.40	45463.40	7.880
9	SLV	6.90	9.27	2.37	ø8/10 2 br.	10.05	0.30	5327.70	2.30	45463.40	45463.40	8.533
1	SLV	9.27	9.87	0.60	ø8/10 2 br.	10.05	0.30	4529.98	2.30	45463.40	45463.40	10.036

Travata n. 4005

Nodi: 413 -1223 -2256

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
21	R	30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
27	R	60.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	9	SLV	1	20.00	10.05	10.05	10.05	10.05	-16826.70	-20776.30	1.235

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.20	24	SLE R	1	20.00	10.05	10.05	-10228.10	2001.06	-628.75	55.79
0.20	29	SLE Q	1	20.00	10.05	10.05	-8963.48	1753.65	-551.01	48.90

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	0.20	29	SLE Q	1	21	20.00	-8963.48	33.00	54.50	0.50	16.00	114.94	10.05	307.50	1753.65	0.65	0.13
33	0.20	28	SLE F	1	21	20.00	-9278.26	33.00	54.50	0.50	16.00	114.94	10.05	307.50	1815.23	0.58	0.11

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.20	0.80	0.60	ø8/10 2 br.	10.05	0.30	15912.70	2.30	45463.40	45463.40	45463.40	2.857
20 SLU	0.80	5.89	5.09	ø8/10 2 br.	10.05	0.30	12932.30	2.30	45463.40	45463.40	45463.40	3.515
20 SLU	5.89	6.13	0.24	ø8/ 4 2 br.	25.13	0.60	3023.99	2.01	35322.30	35322.30	35322.30	11.681
20 SLU	6.13	9.81	3.67	ø8/10 2 br.	10.05	0.60	2691.73	2.50	17613.70	30499.50	17613.70	6.544

Travata n. 4007

Nodi: -1229 -1230

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
30R		20.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfE P S	AfE P I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.001	SLV	1	0.00	4.02	4.02	4.02	4.02	4.02	-1421.90	-2754.22	1.937

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _ε sup	σ _ε inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.0024	SLE R	1	0.00	4.02	4.02	4.02	-324.12	474.38	-126.55	18.83
0.0029	SLE Q	1	0.00	4.02	4.02	4.02	-300.04	439.13	-117.14	17.43

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
27	0.00	29	SLE Q	1	30	0.00	-300.04	33.00	118.00	0.50	16.00	109.96	4.02	110.48	439.13	0.13	0.02
31	0.00	28	SLE F	1	30	0.00	-306.00	33.00	118.00	0.50	16.00	109.96	4.02	110.48	447.86	0.13	0.02

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
1 SLV	0.00	0.24	0.24	ø8/ 4 2 br.	25.13	0.20	1930.47	1.00	17613.70	14741.40	14741.40	7.636
1 SLV	0.24	1.87	1.63	ø8/10 2 br.	10.05	0.20	1833.03	1.78	12573.10	12573.10	12573.10	6.859

Travata n. 40071

Nodi: -905 301

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
34R		20.00	20.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfE P S	AfE P I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.001	SLV	1	0.00	4.02	4.02	4.02	4.02	4.02	-1112.46	-2124.80	1.910

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _ε sup	σ _ε inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.0024	SLE R	1	0.00	4.02	4.02	4.02	-556.93	1046.03	-266.92	48.21
0.0029	SLE Q	1	0.00	4.02	4.02	4.02	-485.15	911.22	-232.52	41.99

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
26	0.00	29	SLE Q	1	34	0.00	-485.15	33.00	118.00	0.50	16.00	101.81	4.02	90.01	911.22	0.28	0.05
30	0.00	28	SLE F	1	34	0.00	-503.17	33.00	118.00	0.50	16.00	101.81	4.02	90.01	945.06	0.28	0.05

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.00	0.20	0.20	ø8/ 3 2 br.	33.51	0.20	2350.16	1.00	18764.30	11778.30	11778.30	5.012
20 SLU	0.20	1.87	1.67	ø8/10 2 br.	10.05	0.20	1948.80	1.78	10045.80	10045.80	10045.80	5.155

Travata n. 4011

Nodi: -1238 443

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
30R		20.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.009	SLV	1	0.00	4.02	4.02	4.02	4.02	4.02	-1166.67	-2754.22	2.361

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.0024	SLE R	1	0.00	4.02	4.02	-305.16	446.63	-119.14	17.73	
0.0029	SLE Q	1	0.00	4.02	4.02	-279.54	409.13	-109.14	16.24	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
27	0.00	29	SLE Q	1	30	0.00	-279.54	33.00	118.00	0.50	16.00	109.96	4.02	110.48	409.13	0.12	0.02
31	0.00	28	SLE F	1	30	0.00	-285.95	33.00	118.00	0.50	16.00	109.96	4.02	110.48	418.52	0.12	0.02

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLV	0.00	0.24	0.24	ø8/ 4 2 br.	25.13	0.20	1760.95	1.00	17613.70	14741.40	14741.40	8.371
9 SLV	0.24	1.87	1.63	ø8/10 2 br.	10.05	0.20	1663.51	1.78	12573.10	12573.10	12573.10	7.558

Travata n. 40111

Nodi: -913 302

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
34R		20.00	20.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.009	SLV	1	0.00	4.02	4.02	4.02	4.02	4.02	-1067.56	-2124.80	1.990

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.0024	SLE R	1	0.00	4.02	4.02	-587.59	1103.62	-281.62	50.86	
0.0029	SLE Q	1	0.00	4.02	4.02	-512.69	962.93	-245.72	44.38	

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c off}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
27	0.00	29	SLE Q	1	34	0.00	-512.69	33.00	118.00	0.50	16.00	101.81	4.02	90.01	962.93	0.31	0.05
31	0.00	28	SLE F	1	34	0.00	-531.40	33.00	118.00	0.50	16.00	101.81	4.02	90.01	998.09	0.29	0.05

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.00	0.20	0.20	ø8/ 3 2 br.	33.51	0.20	2382.04	1.00	18764.30	11778.30	11778.30	4.945
20 SLU	0.20	1.87	1.67	ø8/10 2 br.	10.05	0.20	1980.68	1.78	10045.80	10045.80	10045.80	5.072

Travata n. 4013

Nodi: 430 -1239 -2257

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
21R		30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
27R		60.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	1	SLV	1	20.00	10.05	10.05	10.05	10.05	-16781.80	-20776.30	1.238

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.20	24	SLE R	1	20.00	10.05	10.05	-10146.90	1985.17	-623.76	55.35
0.20	29	SLE Q	1	20.00	10.05	10.05	-8892.12	1739.69	-546.62	48.51

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	0.20	29	SLE Q	1	21	20.00	-8892.12	33.00	54.50	0.50	16.00	114.94	10.05	307.50	1739.69	0.64	0.13
33	0.20	28	SLE F	1	21	20.00	-9204.47	33.00	54.50	0.50	16.00	114.94	10.05	307.50	1800.79	0.57	0.11

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.20	0.80	0.60	ø8/ 5 2 br.	20.11	0.30	15736.40	1.46	57883.20	57883.20	57883.20	3.678
20 SLU	0.80	5.89	5.09	ø8/10 2 br.	10.05	0.30	13108.50	2.30	45463.40	45463.40	45463.40	3.468
20 SLU	5.89	6.13	0.24	ø8/ 4 2 br.	25.13	0.60	3808.93	2.01	35322.30	35322.30	35322.30	9.274
20 SLU	6.13	9.81	3.67	ø8/10 2 br.	10.05	0.60	3476.67	2.50	17613.70	30499.50	17613.70	5.066

Travata n. 4016

Nodi: 437 438 439 440 441

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
4R		30.00	110.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CCTCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>			<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.40	1	SLV	1	40.00	6.03	6.03	6.03	-18491.80	-20060.00	1.085
6.10	9	SLV	1	610.00	6.03	6.03	6.03	-11920.30	-20060.00	1.683
6.50	9	SLV	2	20.00	6.03	6.03	6.03	-8189.58	-20060.00	2.449
10.30	9	SLV	2	400.00	6.03	6.03	6.03	-6766.45	-20060.00	2.965
12.20	9	SLV	2	590.00	6.03	6.03	6.03	-10399.90	-20060.00	1.929
12.60	1	SLV	3	20.00	6.03	6.03	6.03	-10744.30	-20060.00	1.867
17.03	9	SLV	3	463.33	6.03	6.03	6.03	-7028.04	-20060.00	2.854
18.30	9	SLV	3	590.00	6.03	6.03	6.03	-7405.66	-20060.00	2.709
18.70	1	SLV	4	20.00	6.03	6.03	6.03	-10283.70	-20060.00	1.951
23.45	9	SLV	4	495.00	6.03	6.03	6.03	-21500.40	-20060.00	0.933
24.40	9	SLV	4	590.00	6.03	6.03	6.03	-21500.40	-20060.00	0.933

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.40	24	SLE R	1	40.00	6.03	6.03	-2600.03	432.74	-82.64	6.89
0.40	29	SLE Q	1	40.00	6.03	6.03	-2398.21	399.15	-76.23	6.36
6.10	24	SLE R	1	610.00	6.03	6.03	1449.77	-46.08	241.29	3.84
6.10	29	SLE Q	1	610.00	6.03	6.03	-1491.04	248.16	-47.39	3.95
6.50	24	SLE R	2	20.00	6.03	6.03	-2206.57	367.25	-70.14	5.85
6.50	29	SLE Q	2	20.00	6.03	6.03	-2175.07	362.01	-69.13	5.77
10.30	24	SLE R	2	400.00	6.03	6.03	1982.53	-63.01	329.96	5.26
10.30	29	SLE Q	2	400.00	6.03	6.03	1874.66	-59.59	312.01	4.97
12.20	24	SLE R	2	590.00	6.03	6.03	-3294.26	548.29	-104.71	8.73
12.20	29	SLE Q	2	590.00	6.03	6.03	-3125.40	520.18	-99.34	8.29
12.60	24	SLE R	3	20.00	6.03	6.03	-3539.55	589.11	-112.50	9.38
12.60	29	SLE Q	3	20.00	6.03	6.03	-3346.78	557.03	-106.38	8.87
17.03	24	SLE R	3	463.33	6.03	6.03	2480.56	-78.84	412.86	6.58
17.03	29	SLE Q	3	463.33	6.03	6.03	2319.03	-73.71	385.97	6.15
18.30	24	SLE R	3	590.00	6.03	6.03	1462.47	-46.48	243.41	3.88
18.30	29	SLE Q	3	590.00	6.03	6.03	1305.74	-41.50	217.32	3.46
18.70	24	SLE R	4	20.00	6.03	6.03	1471.53	-46.77	244.92	3.90
18.70	29	SLE Q	4	20.00	6.03	6.03	1334.41	-42.41	222.09	3.54
23.45	24	SLE R	4	495.00	6.03	6.03	-6623.88	1102.46	-210.54	17.56
23.45	29	SLE Q	4	495.00	6.03	6.03	-6038.33	1005.00	-191.93	16.01
24.40	24	SLE R	4	590.00	6.03	6.03	-6623.88	1102.46	-210.54	17.56
24.40	29	SLE Q	4	590.00	6.03	6.03	-6038.33	1005.00	-191.93	16.01

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
34	0.40	29	SLE Q	1	4	40.00	-2398.21	33.00	109.00	0.50	16.00	229.13	6.03	307.50	399.15	0.12	0.05
42	0.40	28	SLE F	1	4	40.00	-2436.16	33.00	109.00	0.50	16.00	229.13	6.03	307.50	405.47	0.12	0.05
79	6.10	29	SLE Q	1	4	610.00	-1491.04	33.00	109.00	0.50	16.00	229.13	6.03	307.50	248.16	0.07	0.03
85	6.10	27	SLE F	1	4	610.00	-1491.04	33.00	109.00	0.50	16.00	229.13	6.03	307.50	248.16	0.07	0.03
126	6.50	29	SLE Q	2	4	20.00	-2175.07	33.00	109.00	0.50	16.00	229.13	6.03	307.50	362.01	0.11	0.04
134	6.50	28	SLE F	2	4	20.00	-2189.32	33.00	109.00	0.50	16.00	229.13	6.03	307.50	364.38	0.11	0.04
176	10.30	29	SLE Q	2	4	400.00	1874.66	33.00	109.00	0.50	16.00	229.13	6.03	307.50	312.01	0.09	0.04
184	10.30	28	SLE F	2	4	400.00	1898.54	33.00	109.00	0.50	16.00	229.13	6.03	307.50	315.99	0.09	0.04
213	12.20	29	SLE Q	2	4	590.00	-3125.40	33.00	109.00	0.50	16.00	229.13	6.03	307.50	520.18	0.15	0.06
217	12.20	28	SLE F	2	4	590.00	-3166.40	33.00	109.00	0.50	16.00	229.13	6.03	307.50	527.00	0.15	0.06
246	12.60	29	SLE Q	3	4	20.00	-3346.78	33.00	109.00	0.50	16.00	229.13	6.03	307.50	557.03	0.16	0.06
250	12.60	28	SLE F	3	4	20.00	-3392.95	33.00	109.00	0.50	16.00	229.13	6.03	307.50	564.71	0.16	0.06
294	17.03	29	SLE Q	3	4	463.33	2319.03	33.00	109.00	0.50	16.00	229.13	6.03	307.50	385.97	0.11	0.04
302	17.03	28	SLE F	3	4	463.33	2354.35	33.00	109.00	0.50	16.00	229.13	6.03	307.50	391.85	0.11	0.04
340	18.30	29	SLE Q	3	4	590.00	1305.74	33.00	109.00	0.50	16.00	229.13	6.03	307.50	217.32	0.06	0.02
348	18.30	28	SLE F	3	4	590.00	1337.02	33.00	109.00	0.50	16.00	229.13	6.03	307.50	222.53	0.06	0.03
383	18.70	29	SLE Q	4	4	20.00	1334.41	33.00	109.00	0.50	16.00	229.13	6.03	307.50	222.09	0.06	0.03
391	18.70	28	SLE F	4	4	20.00	1358.49	33.00	109.00	0.50	16.00	229.13	6.03	307.50	226.10	0.07	0.03
426	23.45	29	SLE Q	4	4	495.00	-6038.33	33.00	109.00	0.50	16.00	229.13	6.03	307.50	1005.00	0.29	0.11
434	23.45	28	SLE F	4	4	495.00	-6166.26	33.00	109.00	0.50	16.00	229.13	6.03	307.50	1026.29	0.30	0.12
464	24.40	29	SLE Q	4	4	590.00	-6038.33	33.00	109.00	0.50	16.00	229.13	6.03	307.50	1005.00	0.29	0.11
468	24.40	28	SLE F	4	4	590.00	-6166.26	33.00	109.00	0.50	16.00	229.13	6.03	307.50	1026.29	0.30	0.12

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
1 SLV	0.40	1.50	1.10	ø8/20 2 br.	5.03	0.30	7858.72	2.50	33327.30	56057.60	33327.30	4.241
1 SLV	1.50	5.00	3.50	ø8/20 2 br.	5.03	0.30	6682.81	2.50	33327.30	56057.60	33327.30	4.987
9 SLV	5.00	6.10	1.10	ø8/20 2 br.	5.03	0.30	7540.42	2.50	33327.30	56057.60	33327.30	4.420
1 SLV	6.50	7.60	1.10	ø8/20 2 br.	5.03	0.30	5199.35	2.50	33327.30	56057.60	33327.30	6.410
9 SLV	7.60	11.10	3.50	ø8/20 2 br.	5.03	0.30	4356.89	2.50	33327.30	56057.60	33327.30	7.649
9 SLV	11.10	12.20	1.10	ø8/20 2 br.	5.03	0.30	5532.80	2.50	33327.30	56057.60	33327.30	6.024
1 SLV	12.60	13.70	1.10	ø8/20 2 br.	5.03	0.30	5793.54	2.50	33327.30	56057.60	33327.30	5.752
1 SLV	13.70	17.20	3.50	ø8/20 2 br.	5.03	0.30	4617.63	2.50	33327.30	56057.60	33327.30	7.217
9 SLV	17.20	18.30	1.10	ø8/20 2 br.	5.03	0.30	5055.95	2.50	33327.30	56057.60	33327.30	6.592
1 SLV	18.70	19.80	1.10	ø8/20 2 br.	5.03	0.30	6503.73	2.50	33327.30	56057.60	33327.30	5.124
9 SLV	19.80	23.30	3.50	ø8/20 2 br.	5.03	0.30	7270.93	2.50	33327.30	56057.60	33327.30	4.584
9 SLV	23.30	24.40	1.10	ø8/20 2 br.	5.03	0.30	8446.85	2.50	33327.30	56057.60	33327.30	3.946

Travata n. 40160

Nodi: 441 442 -1261

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
21R		30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	Afep S	Afep I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.201	SLV	1	569.50	8.04	6.03	8.04	6.03	6.03	-12630.70	-16702.30	1.322
4.311	SLV	1	158.19	8.04	6.03	8.04	6.03	6.03	5804.58	12626.90	2.175
5.899	SLV	1	0.00	8.04	6.03	8.04	6.03	6.03	-10340.30	-16702.30	1.615
6.299	SLV	2	357.17	8.04	6.03	8.04	6.03	6.03	10195.70	12626.90	1.238
9.871	SLV	2	0.00	8.04	6.03	8.04	6.03	6.03	2660.85	12626.90	4.745

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.2024	SLE R	1	569.50	8.04	6.03	6.03	-5831.15	1425.09	-418.10	37.60
0.2029	SLE Q	1	569.50	8.04	6.03	6.03	-5246.50	1282.21	-376.18	33.83
4.3124	SLE R	1	158.19	8.04	6.03	6.03	2943.87	-208.58	947.13	20.00
4.3129	SLE Q	1	158.19	8.04	6.03	6.03	2613.04	-185.14	840.70	17.76
5.8924	SLE R	1	0.00	8.04	6.03	6.03	-3276.98	800.87	-234.96	21.13
5.8929	SLE Q	1	0.00	8.04	6.03	6.03	-2915.32	712.48	-209.03	18.80
6.2924	SLE R	2	357.17	8.04	6.03	6.03	-2043.85	499.50	-146.55	13.18
6.2929	SLE Q	2	357.17	8.04	6.03	6.03	-1826.71	446.44	-130.98	11.78
9.8724	SLE R	2	0.00	8.04	6.03	6.03	507.44	-35.95	163.26	3.45
9.8729	SLE Q	2	0.00	8.04	6.03	6.03	491.17	-34.80	158.03	3.34

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
27	0.20	29	SLE Q	1	21	569.50	-5246.50	33.00	72.67	0.50	16.00	127.17	8.04	307.50	1282.21	0.38	0.08
31	0.20	28	SLE F	1	21	569.50	-5384.65	33.00	72.67	0.50	16.00	127.17	8.04	307.50	1315.97	0.38	0.08
64	4.31	29	SLE Q	1	21	158.19	2613.04	33.00	109.00	0.50	16.00	147.57	6.03	307.50	840.70	0.24	0.06
68	4.31	28	SLE F	1	21	158.19	2693.83	33.00	109.00	0.50	16.00	147.57	6.03	307.50	866.69	0.25	0.06
95	5.89	29	SLE Q	1	21	0.00	-2915.32	33.00	72.67	0.50	16.00	127.17	8.04	307.50	712.48	0.21	0.04
99	5.89	28	SLE F	1	21	0.00	-3013.67	33.00	72.67	0.50	16.00	127.17	8.04	307.50	736.52	0.21	0.05
124	6.29	29	SLE Q	2	21	357.17	-1826.71	33.00	72.67	0.50	16.00	127.17	8.04	307.50	446.44	0.13	0.03
128	6.29	28	SLE F	2	21	357.17	-1882.98	33.00	72.67	0.50	16.00	127.17	8.04	307.50	460.19	0.13	0.03
161	9.87	29	SLE Q	2	21	0.00	491.17	33.00	109.00	0.50	16.00	147.57	6.03	307.50	158.03	0.05	0.01
165	9.87	28	SLE F	2	21	0.00	495.68	33.00	109.00	0.50	16.00	147.57	6.03	307.50	159.48	0.05	0.01

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
1 SLV	0.20	0.80	0.60	ø8/10 2 br.	10.05	0.30	7590.44	2.30	45463.40	45463.40	45463.40	5.990
1 SLV	0.80	5.29	4.49	ø8/10 2 br.	10.05	0.30	6625.21	2.30	45463.40	45463.40	45463.40	6.862
9 SLV	5.29	5.89	0.60	ø8/10 2 br.	10.05	0.30	6771.76	2.30	45463.40	45463.40	45463.40	6.714
1 SLV	6.29	6.90	0.60	ø8/10 2 br.	10.05	0.30	5609.51	2.30	45463.40	45463.40	45463.40	8.105
1 SLV	6.90	9.27	2.37	ø8/10 2 br.	10.05	0.30	5167.90	2.30	45463.40	45463.40	45463.40	8.797
9 SLV	9.27	9.87	0.60	ø8/10 2 br.	10.05	0.30	4527.43	2.30	45463.40	45463.40	45463.40	10.042

Travata n. 4017

Nodi: -1214 -1241

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
3R		40.00	100.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.00	20	SLU	1	0.00	6.03	8.04	6.03	8.04	11502.40	24173.70	2.102
2.19	20	SLU	1	218.75	6.03	8.04	6.03	8.04	21358.50	24173.70	1.132
6.25	20	SLU	1	625.00	6.03	8.04	6.03	8.04	11505.30	24173.70	2.101

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.00	24	SLE R	1	0.00	6.03	8.04	8481.55	-241.03	1175.60	20.29
0.00	29	SLE Q	1	0.00	6.03	8.04	7528.24	-213.94	1043.46	18.01
2.19	24	SLE R	1	218.75	6.03	8.04	15749.30	-447.57	2182.95	37.67
2.19	29	SLE Q	1	218.75	6.03	8.04	13979.80	-397.28	1937.69	33.44
6.25	24	SLE R	1	625.00	6.03	8.04	8483.68	-241.09	1175.89	20.29
6.25	29	SLE Q	1	625.00	6.03	8.04	7530.07	-213.99	1043.72	18.01

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
46	0.00	29	SLE Q	1	3	0.00	7528.24	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1043.46	0.30	0.12
54	0.00	28	SLE F	1	3	0.00	7766.32	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1076.46	0.31	0.12
80	2.19	29	SLE Q	1	3	218.75	13979.80	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1937.69	0.70	0.27
84	2.19	28	SLE F	1	3	218.75	14421.90	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1998.97	0.61	0.24
131	6.25	29	SLE Q	1	3	625.00	7530.07	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1043.72	0.30	0.12
139	6.25	28	SLE F	1	3	625.00	7768.25	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1076.73	0.31	0.12

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.00	1.00	1.00	ø8/20 2 br.	5.03	0.40	13374.70	2.50	30180.30	67685.60	30180.30	2.257
20 SLU	1.00	5.25	4.25	ø8/20 2 br.	5.03	0.40	9094.98	2.50	30180.30	67685.60	30180.30	3.318
20 SLU	5.25	6.25	1.00	ø8/20 2 br.	5.03	0.40	13373.40	2.50	30180.30	67685.60	30180.30	2.257

Travata n. 4019

Nodi: 403 439

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
3R		40.00	100.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CCT	CC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.60	20	SLU	1	1220.00	19.01	28.63	19.01	28.63	-54373.40	-56391.00	1.037
5.48	20	SLU	1	731.58	19.01	28.63	19.01	28.63	71068.80	84576.60	1.190
12.20	20	SLU	1	60.00	19.01	28.63	19.01	28.63	-54252.80	-56391.00	1.039

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.60	24	SLE R	1	1220.00	19.01	28.63	-39805.40	2339.90	-658.38	52.82
0.60	29	SLE Q	1	1220.00	19.01	28.63	-34545.10	2030.69	-571.38	45.84
5.48	24	SLE R	1	731.58	19.01	28.63	52004.20	-886.20	2083.03	67.92
5.48	29	SLE Q	1	731.58	19.01	28.63	45082.70	-768.25	1805.78	58.88
12.20	24	SLE R	1	60.00	19.01	28.63	-39718.00	2334.76	-656.93	52.70
12.20	29	SLE Q	1	60.00	19.01	28.63	-34477.40	2026.71	-570.25	45.75

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.60	29	SLE Q	1	3	1220.00	-34545.10	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2030.69	0.87	0.23
29	0.60	28	SLE F	1	3	1220.00	-35857.00	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2107.80	0.85	0.22
54	5.48	29	SLE Q	1	3	731.58	45082.70	27.50	76.75	0.50	27.00	132.34	28.63	410.00	1805.78	0.79	0.18
58	5.48	28	SLE F	1	3	731.58	46815.20	27.50	76.75	0.50	27.00	132.34	28.63	410.00	1875.18	0.78	0.17
83	12.20	29	SLE Q	1	3	60.00	-34477.40	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2026.71	0.87	0.23
87	12.20	28	SLE F	1	3	60.00	-35786.80	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2103.68	0.84	0.22

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.60	1.60	1.00	ø8/20 4 br.	10.05	0.40	41017.70	2.50	60360.50	67685.60	60360.50	1.472
20 SLU	1.60	11.20	9.60	ø8/20 4 br.	10.05	0.40	33947.40	2.50	60360.50	67685.60	60360.50	1.778
20 SLU	11.20	12.20	1.00	ø8/20 4 br.	10.05	0.40	40996.90	2.50	60360.50	67685.60	60360.50	1.472

Travata n. 4020

Nodi: 404 440

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
3R		40.00	100.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CCT	CC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.60	20	SLU	1	1220.00	19.01	28.63	19.01	28.63	-54940.40	-56391.00	1.026
5.48	20	SLU	1	731.58	19.01	28.63	19.01	28.63	70381.50	84576.60	1.202
12.20	20	SLU	1	60.00	19.01	28.63	19.01	28.63	-54935.30	-56391.00	1.026

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.60	24	SLE R	1	1220.00	19.01	28.63	-40220.10	2364.28	-665.24	53.37
0.60	29	SLE Q	1	1220.00	19.01	28.63	-34905.70	2051.88	-577.34	46.32
5.48	24	SLE R	1	731.58	19.01	28.63	51502.10	-877.65	2062.91	67.27
5.48	29	SLE Q	1	731.58	19.01	28.63	44650.60	-760.89	1788.48	58.32
12.20	24	SLE R	1	60.00	19.01	28.63	-40216.20	2364.05	-665.17	53.36
12.20	29	SLE Q	1	60.00	19.01	28.63	-34902.40	2051.69	-577.28	46.31

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.60	29	SLE Q	1	3	1220.00	-34905.70	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2051.88	0.88	0.23
29	0.60	28	SLE F	1	3	1220.00	-36232.00	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2129.85	0.86	0.23
54	5.48	29	SLE Q	1	3	731.58	44650.60	27.50	76.75	0.50	27.00	132.34	28.63	410.00	1788.48	0.78	0.18
58	5.48	28	SLE F	1	3	731.58	46366.00	27.50	76.75	0.50	27.00	132.34	28.63	410.00	1857.19	0.77	0.17
83	12.20	29	SLE Q	1	3	60.00	-34902.40	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2051.69	0.88	0.23
87	12.20	28	SLE F	1	3	60.00	-36228.70	30.00	78.00	0.50	22.00	154.91	19.01	410.00	2129.65	0.86	0.23

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.60	1.60	1.00	ø8/20 4 br.	10.05	0.40	41007.70	2.50	60360.50	67685.60	60360.50	1.472
20 SLU	1.60	11.20	9.60	ø8/20 4 br.	10.05	0.40	33937.40	2.50	60360.50	67685.60	60360.50	1.779
20 SLU	11.20	12.20	1.00	ø8/20 4 br.	10.05	0.40	41006.80	2.50	60360.50	67685.60	60360.50	1.472

Travata n. 4021

Nodi: 405 -1197 -1201 -1204 -1207 -1210 -1213 -1222 413 -1232 430 -1240 -1243 -1246 -1249 -1252 -1255 -1259 441

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
7	R	40.00	50.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
3.95	20	SLU	9	20.00	6.03	6.03	6.03	6.03	-7243.30	-8601.14	1.187
6.06	20	SLU	9	231.06	6.03	6.03	6.03	6.03	5187.83	8601.14	1.658
8.85	20	SLU	10	245.00	6.03	6.03	6.03	6.03	-7294.14	-8601.14	1.179

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
3.95	24	SLE R	9	20.00	6.03	6.03	-5297.19	2086.15	-425.51	44.79
3.95	29	SLE Q	9	20.00	6.03	6.03	-4584.22	1805.37	-368.24	38.76
6.06	24	SLE R	9	231.06	6.03	6.03	3796.96	-305.00	1495.33	32.11
6.06	29	SLE Q	9	231.06	6.03	6.03	3292.38	-264.47	1296.61	27.84
8.85	24	SLE R	10	245.00	6.03	6.03	-5334.63	2100.89	-428.52	45.11
8.85	29	SLE Q	10	245.00	6.03	6.03	-4617.28	1818.39	-370.90	39.04

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	3.95	29	SLE Q	9	7	20.00	-4584.22	33.00	159.00	0.50	16.00	283.51	6.03	410.00	1805.37	0.56	0.27
29	3.95	28	SLE F	9	7	20.00	-4762.86	33.00	159.00	0.50	16.00	283.51	6.03	410.00	1875.72	0.55	0.26
54	6.06	29	SLE Q	9	7	231.06	3292.38	33.00	159.00	0.50	16.00	283.51	6.03	410.00	1296.61	0.38	0.18
58	6.06	28	SLE F	9	7	231.06	3418.10	33.00	159.00	0.50	16.00	283.51	6.03	410.00	1346.13	0.39	0.19
83	8.85	29	SLE Q	10	7	245.00	-4617.28	33.00	159.00	0.50	16.00	283.51	6.03	410.00	1818.39	0.57	0.28
87	8.85	28	SLE F	10	7	245.00	-4796.99	33.00	159.00	0.50	16.00	283.51	6.03	410.00	1889.16	0.55	0.27

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	3.95	4.45	0.50	ø8/10 2 br.	10.05	0.40	9773.23	2.50	28890.00	32395.90	28890.00	2.956
20 SLU	4.45	8.35	3.90	ø8/20 2 br.	5.03	0.40	7797.31	2.50	14445.00	32395.90	14445.00	1.853
20 SLU	8.35	8.85	0.50	ø8/10 2 br.	10.05	0.40	9793.98	2.50	28890.00	32395.90	28890.00	2.950

Travata n. 4022

Nodi: 406 -1223 420 -1239 442

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cl _s	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
19	R	40.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.40	20	SLU	1	40.00	9.42	12.57	9.42	12.57	-11000.90	-19641.00	1.785
3.75	20	SLU	2	0.00	12.57	12.57	12.57	12.57	18536.60	26006.10	1.403
6.20	20	SLU	2	245.00	12.57	12.57	12.57	12.57	-24240.70	-26006.10	1.073
6.60	20	SLU	3	20.00	12.57	12.57	12.57	12.57	-24683.00	-26006.10	1.054
9.05	20	SLU	4	0.00	12.57	12.57	12.57	12.57	20013.30	26006.10	1.299
12.40	20	SLU	4	335.00	9.42	12.57	9.42	12.57	-11283.80	-19641.00	1.741

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.40	24	SLE R	1	40.00	9.42	12.57	-8138.38	1680.62	-404.75	37.99
0.40	29	SLE Q	1	40.00	9.42	12.57	-7283.89	1504.16	-362.25	34.00
3.75	24	SLE R	2	0.00	12.57	12.57	13646.30	-647.02	2133.27	57.81
3.75	29	SLE Q	2	0.00	12.57	12.57	12055.20	-571.58	1884.54	51.07
6.20	24	SLE R	2	245.00	12.57	12.57	-17835.60	2788.17	-845.65	75.55
6.20	29	SLE Q	2	245.00	12.57	12.57	-15738.00	2460.26	-746.20	66.67
6.60	24	SLE R	3	20.00	12.57	12.57	-18161.10	2839.06	-861.09	76.93
6.60	29	SLE Q	3	20.00	12.57	12.57	-16025.00	2505.12	-759.80	67.88
9.05	24	SLE R	4	0.00	12.57	12.57	14731.00	-698.45	2302.83	62.40
9.05	29	SLE Q	4	0.00	12.57	12.57	13006.90	-616.71	2033.32	55.10
12.40	24	SLE R	4	335.00	9.42	12.57	-8347.90	1723.88	-415.17	38.96
12.40	29	SLE Q	4	335.00	9.42	12.57	-7471.55	1542.91	-371.58	34.87

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.40	29	SLE Q	1	19	40.00	-7283.89	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1504.16	0.46	0.12
29	0.40	28	SLE F	1	19	40.00	-7492.35	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1547.21	0.45	0.11
54	3.75	29	SLE Q	2	19	0.00	12055.20	31.00	104.67	0.50	20.00	127.25	12.57	410.00	1884.54	0.70	0.15
58	3.75	28	SLE F	2	19	0.00	12453.70	31.00	104.67	0.50	20.00	127.25	12.57	410.00	1946.84	0.62	0.13
83	6.20	29	SLE Q	2	19	245.00	-15738.00	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2460.26	0.98	0.21
87	6.20	28	SLE F	2	19	245.00	-16267.10	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2542.97	0.91	0.20
112	6.60	29	SLE Q	3	19	20.00	-16025.00	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2505.12	1.00	0.22
116	6.60	28	SLE F	3	19	20.00	-16563.50	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2589.31	0.94	0.20
141	9.05	29	SLE Q	4	19	0.00	13006.90	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2033.32	0.77	0.17
145	9.05	28	SLE F	4	19	0.00	13438.80	31.00	104.67	0.50	20.00	127.25	12.57	410.00	2100.84	0.70	0.15
170	12.40	29	SLE Q	4	19	335.00	-7471.55	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1542.91	0.47	0.12
174	12.40	28	SLE F	4	19	335.00	-7685.06	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1587.00	0.46	0.12

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.40	1.00	0.60	ø8/10 2 br.	10.05	0.40	13209.60	2.50	49477.60	57116.30	49477.60	3.746
20 SLU	1.00	5.60	4.60	ø8/10 2 br.	10.05	0.40	18753.30	2.50	49477.60	57116.30	49477.60	2.638
20 SLU	5.60	6.20	0.60	ø8/10 2 br.	10.05	0.40	20655.10	2.50	49477.60	57116.30	49477.60	2.395
20 SLU	6.60	7.20	0.60	ø8/10 2 br.	10.05	0.40	20955.10	2.50	49477.60	57116.30	49477.60	2.361
20 SLU	7.20	11.80	4.60	ø8/10 2 br.	10.05	0.40	19053.30	2.50	49477.60	57116.30	49477.60	2.597
20 SLU	11.80	12.40	0.60	ø8/10 2 br.	10.05	0.40	13870.70	2.50	49477.60	57116.30	49477.60	3.567

Travata n. 4023

Nodi: -1189 -1215 -2256 -1224 -1231 -1233 -2257 -1261

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
27	R	60.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
35	R	25.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CCTCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>			<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.30	20	SLU	1	30.00	10.05	10.05	10.05	-1243.66	-7011.39	5.638
1.52	20	SLU	1	152.01	10.05	10.05	10.05	2526.56	7011.39	2.775
3.17	20	SLU	1	317.50	10.05	10.05	10.05	-3035.94	-7011.39	2.309
3.38	20	SLU	2	10.00	10.05	10.05	10.05	-2267.03	-7011.39	3.093
4.73	5	SLV	3	98.04	16.09	16.09	16.09	-692.49	-10750.40	15.524
4.92	5	SLV	3	117.50	16.09	16.09	16.09	-692.49	-10750.40	15.524
5.12	20	SLU	4	10.00	6.03	6.03	6.03	274.29	4065.23	14.821
5.67	20	SLU	4	64.81	6.03	6.03	6.03	452.85	4065.23	8.977
7.64	20	SLU	5	126.00	6.03	6.03	6.03	-3448.32	-4065.23	1.179
7.84	20	SLU	6	10.00	16.09	16.09	16.09	-7344.01	-10750.40	1.464
10.16	20	SLU	7	111.23	10.05	10.05	10.05	6048.10	7011.39	1.159
12.50	20	SLU	7	345.00	10.05	10.05	10.05	-5811.25	-7011.39	1.207

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.30	24	SLE R	1	30.00	10.05	10.05	-912.29	529.23	-121.62	19.37
0.30	29	SLE Q	1	30.00	10.05	10.05	-796.45	462.02	-106.18	16.91
1.52	24	SLE R	1	152.01	10.05	10.05	1852.30	-246.94	1074.53	39.32
1.52	29	SLE Q	1	152.01	10.05	10.05	1615.26	-215.34	937.02	34.29
3.17	24	SLE R	1	317.50	10.05	10.05	-2227.47	1292.17	-296.95	47.29
3.17	29	SLE Q	1	317.50	10.05	10.05	-1947.41	1129.71	-259.62	41.34
3.38	24	SLE R	2	10.00	10.05	10.05	-1662.74	964.56	-221.67	35.30
3.38	29	SLE Q	2	10.00	10.05	10.05	-1452.81	842.78	-193.68	30.84
4.73	24	SLE R	3	98.04	16.09	16.09	110.17	-13.44	40.87	1.84
4.73	29	SLE Q	3	98.04	16.09	16.09	103.19	-12.59	38.28	1.72
4.92	24	SLE R	3	117.50	16.09	16.09	82.77	-10.10	30.70	1.38
4.92	29	SLE Q	3	117.50	16.09	16.09	73.63	-8.98	27.31	1.23
5.12	24	SLE R	4	10.00	6.03	6.03	200.35	-60.28	197.22	8.47
5.12	29	SLE Q	4	10.00	6.03	6.03	173.33	-52.15	170.62	7.33
5.67	24	SLE R	4	64.81	6.03	6.03	330.61	-99.47	325.45	13.98
5.67	29	SLE Q	4	64.81	6.03	6.03	284.90	-85.72	280.45	12.05
7.64	24	SLE R	5	126.00	6.03	6.03	-2529.89	2490.35	-761.16	106.99
7.64	29	SLE Q	5	126.00	6.03	6.03	-2211.76	2177.20	-665.45	93.54
7.84	24	SLE R	6	10.00	16.09	16.09	-5395.21	2001.37	-658.28	89.90
7.84	29	SLE Q	6	10.00	16.09	16.09	-4734.31	1756.21	-577.64	78.88
10.16	24	SLE R	7	111.23	10.05	10.05	4440.21	-591.95	2575.79	94.26

10.16	29	SLE Q	7	111.23	10.05	10.05	3888.81	-518.43	2255.92	82.56
12.50	24	SLE R	7	345.00	10.05	10.05	-4266.91	2475.26	-568.84	90.58
12.50	29	SLE Q	7	345.00	10.05	10.05	-3738.09	2168.49	-498.34	79.36

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
32	0.30	29	SLE Q	1	27	30.00	-796.45	33.00	129.50	0.50	16.00	119.95	10.05	338.95	462.02	0.13	0.03
36	0.30	28	SLE F	1	27	30.00	-825.21	33.00	129.50	0.50	16.00	119.95	10.05	338.95	478.71	0.14	0.03
61	1.52	29	SLE Q	1	27	152.01	1615.26	33.00	129.50	0.50	16.00	119.95	10.05	338.95	937.02	0.27	0.06
65	1.52	28	SLE F	1	27	152.01	1674.56	33.00	129.50	0.50	16.00	119.95	10.05	338.95	971.42	0.28	0.06
90	3.17	29	SLE Q	1	27	317.50	-1947.41	33.00	129.50	0.50	16.00	119.95	10.05	338.95	1129.71	0.33	0.07
94	3.17	28	SLE F	1	27	317.50	-2017.60	33.00	129.50	0.50	16.00	119.95	10.05	338.95	1170.42	0.34	0.07
119	3.38	29	SLE Q	2	27	10.00	-1452.81	33.00	129.50	0.50	16.00	119.95	10.05	338.95	842.78	0.25	0.05
123	3.38	28	SLE F	2	27	10.00	-1505.72	33.00	129.50	0.50	16.00	119.95	10.05	338.95	873.47	0.25	0.05
159	4.73	29	SLE Q	3	27	98.04	103.19	33.00	74.00	0.50	16.00	97.81	16.09	319.79	38.28	0.01	0.00
167	4.73	28	SLE F	3	27	98.04	104.97	33.00	74.00	0.50	16.00	97.81	16.09	319.79	38.94	0.01	0.00
202	4.92	29	SLE Q	3	27	117.50	73.63	33.00	74.00	0.50	16.00	97.81	16.09	319.79	27.31	0.01	0.00
210	4.92	28	SLE F	3	27	117.50	76.13	33.00	74.00	0.50	16.00	97.81	16.09	319.79	28.24	0.01	0.00
243	5.12	29	SLE Q	4	35	10.00	173.33	33.00	84.00	0.50	16.00	101.81	6.03	135.01	170.62	0.05	0.01
247	5.12	28	SLE F	4	35	10.00	180.35	33.00	84.00	0.50	16.00	101.81	6.03	135.01	177.53	0.05	0.01
272	5.67	29	SLE Q	4	35	64.81	284.90	33.00	84.00	0.50	16.00	101.81	6.03	135.01	280.45	0.08	0.01
276	5.67	28	SLE F	4	35	64.81	296.48	33.00	84.00	0.50	16.00	101.81	6.03	135.01	291.85	0.09	0.01
301	7.64	29	SLE Q	5	35	126.00	-2211.76	33.00	84.00	0.50	16.00	101.81	6.03	135.01	2177.20	0.90	0.16
305	7.64	28	SLE F	5	35	126.00	-2291.63	33.00	84.00	0.50	16.00	101.81	6.03	135.01	2255.81	0.86	0.15
330	7.84	29	SLE Q	6	27	10.00	-4734.31	33.00	74.00	0.50	16.00	97.81	16.09	319.79	1756.21	0.71	0.12
334	7.84	28	SLE F	6	27	10.00	-4899.35	33.00	74.00	0.50	16.00	97.81	16.09	319.79	1817.43	0.67	0.11
359	10.16	29	SLE Q	7	27	111.23	3888.81	33.00	129.50	0.50	16.00	119.95	10.05	338.95	2255.92	0.87	0.18
363	10.16	28	SLE F	7	27	111.23	4026.73	33.00	129.50	0.50	16.00	119.95	10.05	338.95	2335.93	0.80	0.16
388	12.50	29	SLE Q	7	27	345.00	-3738.09	33.00	129.50	0.50	16.00	119.95	10.05	338.95	2168.49	0.83	0.17
392	12.50	28	SLE F	7	27	345.00	-3870.17	33.00	129.50	0.50	16.00	119.95	10.05	338.95	2245.11	0.76	0.15

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.30	0.54	0.24	ø8/ 4 2 br.	25.13	0.60	5485.75	2.01	35322.30	35322.30	35322.30	6.439
20 SLU	0.54	2.94	2.40	ø8/10 2 br.	10.05	0.60	5712.58	2.50	17613.70	30499.50	17613.70	3.083
20 SLU	2.94	3.17	0.24	ø8/ 4 2 br.	25.13	0.60	6732.56	2.01	35322.30	35322.30	35322.30	5.246
20 SLU	3.38	3.62	0.24	ø8/ 4 2 br.	25.13	0.60	5214.81	2.01	35322.30	35322.30	35322.30	6.773
20 SLU	3.62	4.68	1.07	ø8/10 2 br.	10.05	0.60	4673.01	2.50	17613.70	30499.50	17613.70	3.769
5 SLV	4.68	4.92	0.24	ø8/ 4 2 br.	25.13	0.60	1430.14	2.01	35322.30	35322.30	35322.30	24.698
20 SLU	5.12	5.37	0.24	ø8/ 4 2 br.	25.13	0.25	1306.93	1.05	18408.80	18408.80	18408.80	14.086
20 SLU	5.37	7.41	2.04	ø8/10 2 br.	10.05	0.25	3541.32	2.06	14491.80	14491.80	14491.80	4.092
20 SLU	7.41	7.64	0.24	ø8/ 4 2 br.	25.13	0.25	4051.67	1.05	18408.80	18408.80	18408.80	4.544
20 SLU	7.84	8.09	0.24	ø8/ 4 2 br.	25.13	0.60	12178.70	2.01	35322.30	35322.30	35322.30	2.900
20 SLU	8.09	12.26	4.17	ø8/10 2 br.	10.05	0.60	11101.40	2.50	17613.70	30499.50	17613.70	1.587
20 SLU	12.26	12.50	0.24	ø8/ 4 2 br.	25.13	0.60	9915.50	2.01	35322.30	35322.30	35322.30	3.562

Travata n. 4024

Nodi: -1220 -1229

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
29	R	30.00	24.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.10	13	SLV	1	10.00	4.02	4.02	4.02	4.02	-547.20	-2876.44	5.257
1.65	5	SLV	1	165.00	4.02	4.02	4.02	4.02	-704.91	-2876.44	4.081

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.10	24	SLE R	1	10.00	4.02	4.02	67.10	-18.03	96.20	3.18
0.10	29	SLE Q	1	10.00	4.02	4.02	61.42	-16.50	88.05	2.91
1.65	24	SLE R	1	165.00	4.02	4.02	-140.21	201.02	-37.68	6.64
1.65	29	SLE Q	1	165.00	4.02	4.02	-126.88	181.90	-34.09	6.01

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
35	0.10	29	SLE Q	1	29	10.00	61.42	33.00	218.00	0.50	16.00	135.26	4.02	174.06	88.05	0.03	0.01
43	0.10	28	SLE F	1	29	10.00	62.70	33.00	218.00	0.50	16.00	135.26	4.02	174.06	89.89	0.03	0.01

70	1.65	29	SLE Q	1	29	165.00	-126.88	33.00	218.00	0.50	16.00	135.26	4.02	174.06	181.90	0.05	0.01
74	1.65	28	SLE F	1	29	165.00	-130.12	33.00	218.00	0.50	16.00	135.26	4.02	174.06	186.54	0.05	0.01

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
<m>	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
13 SLV	0.10	0.34	0.24	ø8/ 4 2 br.	25.13	0.30	1213.02	1.23	21649.70	21649.70	21649.70	17.848
5 SLV	0.34	1.41	1.07	ø8/10 2 br.	10.05	0.30	1147.71	2.30	16184.60	16184.60	16184.60	14.102
5 SLV	1.41	1.65	0.24	ø8/ 4 2 br.	25.13	0.30	1324.07	1.23	21649.70	21649.70	21649.70	16.351

Travata n. 4026

Nodi: -1221 -1230 443 -1242

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
31R		30.00	40.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.009	SLV	1		0.00	6.03	6.03	6.03	6.03	-1721.66	-7907.81	4.593
4.479	SLV	3		0.00	6.03	6.03	6.03	6.03	3516.62	7907.81	2.249
6.251	SLV	3		178.00	6.03	6.03	6.03	6.03	-1842.67	-7907.81	4.291

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.0024	SLE R	1		0.00	6.03	6.03	-987.48	508.22	-131.36	14.25
0.0029	SLE Q	1		0.00	6.03	6.03	-905.94	466.26	-120.51	13.08
4.4724	SLE R	3		0.00	6.03	6.03	2413.66	-321.08	1242.23	34.84
4.4729	SLE Q	3		0.00	6.03	6.03	2177.62	-289.68	1120.75	31.43
6.2524	SLE R	3		178.00	6.03	6.03	-1178.11	606.33	-156.72	17.01
6.2529	SLE Q	3		178.00	6.03	6.03	-1069.13	550.24	-142.22	15.43

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _c eff	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
32	0.00	29	SLE Q	1	31	0.00	-905.94	33.00	109.00	0.50	16.00	143.90	6.03	293.69	466.26	0.14	0.03
36	0.00	28	SLE F	1	31	0.00	-926.61	33.00	109.00	0.50	16.00	143.90	6.03	293.69	476.89	0.14	0.03
61	4.47	29	SLE Q	3	31	0.00	2177.62	33.00	109.00	0.50	16.00	143.90	6.03	293.69	1120.75	0.33	0.08
65	4.47	28	SLE F	3	31	0.00	2236.47	33.00	109.00	0.50	16.00	143.90	6.03	293.69	1151.04	0.34	0.08
106	6.25	29	SLE Q	3	31	178.00	-1069.13	33.00	109.00	0.50	16.00	143.90	6.03	293.69	550.24	0.16	0.04
114	6.25	28	SLE F	3	31	178.00	-1096.68	33.00	109.00	0.50	16.00	143.90	6.03	293.69	564.42	0.16	0.04

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
<m>	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLV	0.00	0.40	0.40	ø8/ 5 2 br.	20.11	0.30	3328.10	1.46	37173.60	37173.60	37173.60	11.170
20 SLU	0.40	5.85	5.45	ø8/10 2 br.	10.05	0.30	3768.72	2.30	29197.40	29197.40	29197.40	7.747
20 SLU	5.85	6.25	0.40	ø8/ 5 2 br.	20.11	0.30	4760.39	1.46	37173.60	37173.60	37173.60	7.809

Travata n. 40261

Nodi: -897 301 302 -917

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
31R		30.00	40.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.0020	SLU	1		0.00	6.03	6.03	6.03	6.03	-1491.53	-7907.81	5.302
2.9620	SLU	2		120.89	6.03	6.03	6.03	6.03	3328.25	7907.81	2.376
6.2520	SLU	3		178.00	6.03	6.03	6.03	6.03	-1401.11	-7907.81	5.644

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.0024	SLE R	1		0.00	6.03	6.03	-1105.54	568.98	-147.06	15.96
0.0029	SLE Q	1		0.00	6.03	6.03	-997.12	513.18	-132.64	14.39
2.9624	SLE R	2		120.89	6.03	6.03	2473.30	-329.01	1272.92	35.70
2.9629	SLE Q	2		120.89	6.03	6.03	2247.15	-298.93	1156.53	32.44
6.2524	SLE R	3		178.00	6.03	6.03	-1039.17	534.83	-138.24	15.00
6.2529	SLE Q	3		178.00	6.03	6.03	-939.09	483.31	-124.92	13.56

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.00	29	SLE Q	1	31	0.00	-997.12	33.00	109.00	0.50	16.00	143.90	6.03	293.69	513.18	0.15	0.04
29	0.00	28	SLE F	1	31	0.00	-1024.32	33.00	109.00	0.50	16.00	143.90	6.03	293.69	527.18	0.15	0.04
54	2.96	29	SLE Q	2	31	120.89	2247.15	33.00	109.00	0.50	16.00	143.90	6.03	293.69	1156.53	0.34	0.08
58	2.96	28	SLE F	2	31	120.89	2303.57	33.00	109.00	0.50	16.00	143.90	6.03	293.69	1185.57	0.35	0.08
83	6.25	29	SLE Q	3	31	178.00	-939.09	33.00	109.00	0.50	16.00	143.90	6.03	293.69	483.31	0.14	0.03
87	6.25	28	SLE F	3	31	178.00	-964.22	33.00	109.00	0.50	16.00	143.90	6.03	293.69	496.25	0.14	0.04

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
20 SLU	0.00	0.40	0.40	ø8/ 5 2 br.	20.11	0.30	2763.38	1.46	37173.60	37173.60	37173.60	13.452
20 SLU	0.40	5.85	5.45	ø8/10 2 br.	10.05	0.30	2607.37	2.30	29197.40	29197.40	29197.40	11.198
20 SLU	5.85	6.25	0.40	ø8/ 5 2 br.	20.11	0.30	2701.80	1.46	37173.60	37173.60	37173.60	13.759

Travata n. 4027

Nodi: -1194 -1195

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
21	R	30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.00	9	SLV	1	0.00	6.03	6.03	6.03	6.03	4152.57	12628.40	3.041
1.00	9	SLV	1	100.36	6.03	6.03	6.03	6.03	11982.70	12628.40	1.054
1.63	9	SLV	1	163.33	6.03	6.03	6.03	6.03	11982.70	12628.40	1.054

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.00	24	SLE R	1	0.00	6.03	6.03	357.52	-27.00	115.35	2.55
0.00	29	SLE Q	1	0.00	6.03	6.03	332.76	-25.13	107.36	2.37
1.00	24	SLE R	1	100.36	6.03	6.03	415.01	-31.34	133.90	2.96
1.00	29	SLE Q	1	100.36	6.03	6.03	384.56	-29.04	124.07	2.74
1.63	24	SLE R	1	163.33	6.03	6.03	414.97	-31.34	133.88	2.96
1.63	29	SLE Q	1	163.33	6.03	6.03	384.44	-29.03	124.03	2.74

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
33	0.00	29	SLE Q	1	21	0.00	332.76	33.00	109.00	0.50	16.00	147.57	6.03	307.50	107.36	0.03	0.01
41	0.00	28	SLE F	1	21	0.00	338.55	33.00	109.00	0.50	16.00	147.57	6.03	307.50	109.23	0.03	0.01
67	1.00	29	SLE Q	1	21	100.36	384.56	33.00	109.00	0.50	16.00	147.57	6.03	307.50	124.07	0.04	0.01
71	1.00	28	SLE F	1	21	100.36	391.27	33.00	109.00	0.50	16.00	147.57	6.03	307.50	126.24	0.04	0.01
96	1.63	29	SLE Q	1	21	163.33	384.44	33.00	109.00	0.50	16.00	147.57	6.03	307.50	124.03	0.04	0.01
100	1.63	28	SLE F	1	21	163.33	391.16	33.00	109.00	0.50	16.00	147.57	6.03	307.50	126.20	0.04	0.01

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLV	0.00	1.63	1.63	ø8/10 2 br.	10.05	0.30	7919.86	2.30	45463.40	45463.40	45463.40	5.740

Travata n. 4042

Nodi: -1266 -1267

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
21	R	30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.00	1	SLV	1	193.33	6.03	6.03	6.03	6.03	3898.45	12628.40	3.239
1.01	1	SLV	1	92.60	6.03	6.03	6.03	6.03	11532.40	12628.40	1.095
1.63	1	SLV	1	30.00	6.03	6.03	6.03	6.03	11532.40	12628.40	1.095

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.00	24	SLE R	1	193.33	6.03	6.03	347.53	-26.25	112.12	2.48

0.00	29	SLE Q	1	193.33	6.03	6.03	323.66	-24.44	104.42	2.31
1.01	24	SLE R	1	92.60	6.03	6.03	411.75	-31.10	132.85	2.94
1.01	29	SLE Q	1	92.60	6.03	6.03	381.37	-28.80	123.04	2.72
1.63	24	SLE R	1	30.00	6.03	6.03	411.75	-31.10	132.85	2.94
1.63	29	SLE Q	1	30.00	6.03	6.03	381.37	-28.80	123.04	2.72

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
34	0.00	29	SLE Q	1	21	193.33	323.66	33.00	109.00	0.50	16.00	147.57	6.03	307.50	104.42	0.03	0.01
42	0.00	28	SLE F	1	21	193.33	329.47	33.00	109.00	0.50	16.00	147.57	6.03	307.50	106.30	0.03	0.01
67	1.01	29	SLE Q	1	21	92.60	381.37	33.00	109.00	0.50	16.00	147.57	6.03	307.50	123.04	0.04	0.01
71	1.01	28	SLE F	1	21	92.60	388.40	33.00	109.00	0.50	16.00	147.57	6.03	307.50	125.31	0.04	0.01
96	1.63	29	SLE Q	1	21	30.00	381.37	33.00	109.00	0.50	16.00	147.57	6.03	307.50	123.04	0.04	0.01
100	1.63	28	SLE F	1	21	30.00	388.40	33.00	109.00	0.50	16.00	147.57	6.03	307.50	125.31	0.04	0.01

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
1 SLV	0.00	1.63	1.63	ø8/10 2 br.	10.05	0.30	7742.84	2.30	45463.40	45463.40	45463.40	5.872

Travata n. 5001

Nodi: 501 502 503 504 505

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
17R		30.00	90.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.40	9	SLV	1	40.00	6.03	6.03	6.03	6.03	-13589.50	-16199.60	1.192
6.10	1	SLV	1	610.00	6.03	6.03	6.03	6.03	-8292.81	-16199.60	1.953
6.50	1	SLV	2	20.00	6.03	6.03	6.03	6.03	-4820.62	-16199.60	3.360
9.67	9	SLV	2	336.67	6.03	6.03	6.03	6.03	2999.45	16199.60	5.401
12.20	1	SLV	2	590.00	6.03	6.03	6.03	6.03	-6686.25	-16199.60	2.423
12.60	9	SLV	3	20.00	6.03	6.03	6.03	6.03	-7090.09	-16199.60	2.285
13.23	9	SLV	3	83.33	6.03	6.03	6.03	6.03	-7090.09	-16199.60	2.285
18.30	1	SLV	3	590.00	6.03	6.03	6.03	6.03	-4999.29	-16199.60	3.240
18.70	9	SLV	4	20.00	6.03	6.03	6.03	6.03	-6546.39	-16199.60	2.475
23.13	1	SLV	4	463.33	6.03	6.03	6.03	6.03	-11183.10	-16199.60	1.449
24.40	1	SLV	4	590.00	6.03	6.03	6.03	6.03	-12833.90	-16199.60	1.262

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.40	23	SLE R	1	40.00	6.03	6.03	-1931.77	398.93	-81.92	7.07
0.40	29	SLE Q	1	40.00	6.03	6.03	-1824.47	376.77	-77.37	6.68
6.10	23	SLE R	1	610.00	6.03	6.03	-1573.22	324.88	-66.71	5.76
6.10	29	SLE Q	1	610.00	6.03	6.03	-1540.35	318.10	-65.32	5.64
6.50	23	SLE R	2	20.00	6.03	6.03	-1933.23	399.23	-81.98	7.07
6.50	29	SLE Q	2	20.00	6.03	6.03	-1870.31	386.24	-79.31	6.84
9.67	23	SLE R	2	336.67	6.03	6.03	1632.70	-69.24	337.17	5.97
9.67	29	SLE Q	2	336.67	6.03	6.03	1537.12	-65.18	317.43	5.62
12.20	23	SLE R	2	590.00	6.03	6.03	-2727.80	563.31	-115.67	9.98
12.20	29	SLE Q	2	590.00	6.03	6.03	-2576.33	532.03	-109.25	9.43
12.60	23	SLE R	3	20.00	6.03	6.03	-2775.33	573.13	-117.69	10.15
12.60	29	SLE Q	3	20.00	6.03	6.03	-2629.45	543.00	-111.50	9.62
13.23	23	SLE R	3	83.33	6.03	6.03	-2775.33	573.13	-117.69	10.15
13.23	29	SLE Q	3	83.33	6.03	6.03	-2629.45	543.00	-111.50	9.62
18.30	23	SLE R	3	590.00	6.03	6.03	-1360.71	281.00	-57.70	4.98
18.30	29	SLE Q	3	590.00	6.03	6.03	-1362.17	281.30	-57.76	4.98
18.70	23	SLE R	4	20.00	6.03	6.03	861.93	-36.55	178.00	3.15
18.70	29	SLE Q	4	20.00	6.03	6.03	-866.40	178.92	-36.74	3.17
23.13	23	SLE R	4	463.33	6.03	6.03	-3213.02	663.51	-136.25	11.76
23.13	29	SLE Q	4	463.33	6.03	6.03	-2925.61	604.16	-124.06	10.70
24.40	23	SLE R	4	590.00	6.03	6.03	-4149.51	856.91	-175.96	15.18
24.40	29	SLE Q	4	590.00	6.03	6.03	-3801.31	785.00	-161.20	13.91

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
34	0.40	29	SLE Q	1	17	40.00	-1824.47	33.00	109.00	0.50	16.00	229.13	6.03	307.50	376.77	0.11	0.04
42	0.40	28	SLE F	1	17	40.00	-1847.29	33.00	109.00	0.50	16.00	229.13	6.03	307.50	381.48	0.11	0.04

79	6.10	29	SLE Q	1	17	610.00	-1540.35	33.00	109.00	0.50	16.00	229.13	6.03	307.50	318.10	0.09	0.04
83	6.10	26	SLE F	1	17	610.00	-1546.77	33.00	109.00	0.50	16.00	229.13	6.03	307.50	319.42	0.09	0.04
128	6.50	29	SLE Q	2	17	20.00	-1870.31	33.00	109.00	0.50	16.00	229.13	6.03	307.50	386.24	0.11	0.04
132	6.50	26	SLE F	2	17	20.00	-1879.93	33.00	109.00	0.50	16.00	229.13	6.03	307.50	388.22	0.11	0.04
169	9.67	29	SLE Q	2	17	336.67	1537.12	33.00	109.00	0.50	16.00	229.13	6.03	307.50	317.43	0.09	0.04
171	9.67	26	SLE F	2	17	336.67	1549.02	33.00	109.00	0.50	16.00	229.13	6.03	307.50	319.89	0.09	0.04
202	12.20	29	SLE Q	2	17	590.00	-2576.33	33.00	109.00	0.50	16.00	229.13	6.03	307.50	532.03	0.15	0.06
204	12.20	26	SLE F	2	17	590.00	-2595.31	33.00	109.00	0.50	16.00	229.13	6.03	307.50	535.95	0.16	0.06
235	12.60	29	SLE Q	3	17	20.00	-2629.45	33.00	109.00	0.50	16.00	229.13	6.03	307.50	543.00	0.16	0.06
237	12.60	26	SLE F	3	17	20.00	-2647.71	33.00	109.00	0.50	16.00	229.13	6.03	307.50	546.77	0.16	0.06
279	13.23	29	SLE Q	3	17	83.33	-2629.45	33.00	109.00	0.50	16.00	229.13	6.03	307.50	543.00	0.16	0.06
283	13.23	26	SLE F	3	17	83.33	-2647.71	33.00	109.00	0.50	16.00	229.13	6.03	307.50	546.77	0.16	0.06
324	18.30	29	SLE Q	3	17	590.00	-1362.17	33.00	109.00	0.50	16.00	229.13	6.03	307.50	281.30	0.08	0.03
328	18.30	26	SLE F	3	17	590.00	-1364.13	33.00	109.00	0.50	16.00	229.13	6.03	307.50	281.70	0.08	0.03
370	18.70	29	SLE Q	4	17	20.00	-866.40	33.00	109.00	0.50	16.00	229.13	6.03	307.50	178.92	0.05	0.02
376	18.70	27	SLE F	4	17	20.00	-866.40	33.00	109.00	0.50	16.00	229.13	6.03	307.50	178.92	0.05	0.02
415	23.13	29	SLE Q	4	17	463.33	-2925.61	33.00	109.00	0.50	16.00	229.13	6.03	307.50	604.16	0.18	0.07
419	23.13	26	SLE F	4	17	463.33	-2960.02	33.00	109.00	0.50	16.00	229.13	6.03	307.50	611.27	0.18	0.07
451	24.40	29	SLE Q	4	17	590.00	-3801.31	33.00	109.00	0.50	16.00	229.13	6.03	307.50	785.00	0.23	0.09
453	24.40	26	SLE F	4	17	590.00	-3843.25	33.00	109.00	0.50	16.00	229.13	6.03	307.50	793.66	0.23	0.09

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
9 SLV	0.40	1.30	0.90	ø8/20 2 br.	5.03	0.30	5833.22	2.50	27033.20	45470.70	27033.20	4.634
9 SLV	1.30	5.20	3.90	ø8/20 2 br.	5.03	0.30	5032.75	2.50	27033.20	45470.70	27033.20	5.371
1 SLV	5.20	6.10	0.90	ø8/20 2 br.	5.03	0.30	5733.53	2.50	27033.20	45470.70	27033.20	4.715
1 SLV	6.50	7.40	0.90	ø8/20 2 br.	5.03	0.30	3639.99	2.50	27033.20	45470.70	27033.20	7.427
9 SLV	7.40	11.30	3.90	ø8/20 2 br.	5.03	0.30	3087.24	2.50	27033.20	45470.70	27033.20	8.756
9 SLV	11.30	12.20	0.90	ø8/20 2 br.	5.03	0.30	3887.71	2.50	27033.20	45470.70	27033.20	6.954
9 SLV	12.60	13.50	0.90	ø8/20 2 br.	5.03	0.30	4177.44	2.50	27033.20	45470.70	27033.20	6.471
9 SLV	13.50	17.40	3.90	ø8/20 2 br.	5.03	0.30	3376.98	2.50	27033.20	45470.70	27033.20	8.005
1 SLV	17.40	18.30	0.90	ø8/20 2 br.	5.03	0.30	3732.79	2.50	27033.20	45470.70	27033.20	7.242
9 SLV	18.70	19.60	0.90	ø8/20 2 br.	5.03	0.30	4600.99	2.50	27033.20	45470.70	27033.20	5.876
1 SLV	19.60	23.50	3.90	ø8/20 2 br.	5.03	0.30	4830.32	2.50	27033.20	45470.70	27033.20	5.597
1 SLV	23.50	24.40	0.90	ø8/20 2 br.	5.03	0.30	5630.78	2.50	27033.20	45470.70	27033.20	4.801

Travata n. 50010

Nodi: 505 -1846 -1847 -1851 -1852 772

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
21R		30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.20	9	SLV	1	20.00	6.03	6.03	6.03	6.03	-10998.30	-12628.40	1.148
5.58	1	SLV	1	557.86	6.03	6.03	6.03	6.03	-10441.30	-12628.40	1.209
5.89	1	SLV	1	589.50	6.03	6.03	6.03	6.03	-10441.30	-12628.40	1.209
6.29	9	SLV	2	40.00	6.03	6.03	6.03	6.03	-8621.16	-12628.40	1.465
11.79	9	SLV	3	192.00	6.03	6.03	6.03	6.03	-6878.32	-12628.40	1.836
12.09	9	SLV	4	30.00	6.03	6.03	6.03	6.03	-8834.70	-12628.40	1.429
13.57	9	SLV	5	130.66	6.03	6.03	6.03	6.03	10162.90	12628.40	1.243
13.90	9	SLV	5	163.33	6.03	6.03	6.03	6.03	10162.90	12628.40	1.243

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ _f sup <daN/cmq>	σ _f inf <daN/cmq>	σ _e <daN/cmq>
0.20	23	SLE R	1	20.00	6.03	6.03	-3003.86	969.15	-226.86	21.43
0.20	29	SLE Q	1	20.00	6.03	6.03	-2812.67	907.47	-212.42	20.07
5.58	23	SLE R	1	557.86	6.03	6.03	-1794.96	579.12	-135.56	12.81
5.58	29	SLE Q	1	557.86	6.03	6.03	-1610.60	519.64	-121.64	11.49
5.89	23	SLE R	1	589.50	6.03	6.03	-1794.96	579.12	-135.56	12.81
5.89	29	SLE Q	1	589.50	6.03	6.03	-1610.60	519.64	-121.64	11.49
6.29	23	SLE R	2	40.00	6.03	6.03	-1349.51	435.40	-101.92	9.63
6.29	29	SLE Q	2	40.00	6.03	6.03	-1159.53	374.11	-87.57	8.27
11.79	23	SLE R	3	192.00	6.03	6.03	-3491.85	1126.60	-263.71	24.92
11.79	29	SLE Q	3	192.00	6.03	6.03	-2959.70	954.90	-223.53	21.12
12.09	23	SLE R	4	30.00	6.03	6.03	-2522.29	813.78	-190.49	18.00
12.09	29	SLE Q	4	30.00	6.03	6.03	-2120.24	684.06	-160.13	15.13
13.57	23	SLE R	5	130.66	6.03	6.03	-1148.29	370.48	-86.72	8.19
13.57	29	SLE Q	5	130.66	6.03	6.03	-941.47	303.75	-71.10	6.72

13.90	23	SLE R	5	163.33	6.03	6.03	-762.72	246.08	-57.60	5.44
13.90	29	SLE Q	5	163.33	6.03	6.03	-621.10	200.39	-46.91	4.43

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
25	0.20	29	SLE Q	1	21	20.00	-2812.67	33.00	109.00	0.50	16.00	147.57	6.03	307.50	907.47	0.26	0.07
27	0.20	26	SLE F	1	21	20.00	-2835.88	33.00	109.00	0.50	16.00	147.57	6.03	307.50	914.96	0.27	0.07
55	5.58	29	SLE Q	1	21	557.86	-1610.60	33.00	109.00	0.50	16.00	147.57	6.03	307.50	519.64	0.15	0.04
57	5.58	26	SLE F	1	21	557.86	-1633.14	33.00	109.00	0.50	16.00	147.57	6.03	307.50	526.91	0.15	0.04
85	5.89	29	SLE Q	1	21	589.50	-1610.60	33.00	109.00	0.50	16.00	147.57	6.03	307.50	519.64	0.15	0.04
87	5.89	26	SLE F	1	21	589.50	-1633.14	33.00	109.00	0.50	16.00	147.57	6.03	307.50	526.91	0.15	0.04
114	6.29	29	SLE Q	2	21	40.00	-1159.53	33.00	109.00	0.50	16.00	147.57	6.03	307.50	374.11	0.11	0.03
116	6.29	26	SLE F	2	21	40.00	-1182.15	33.00	109.00	0.50	16.00	147.57	6.03	307.50	381.40	0.11	0.03
146	11.79	29	SLE Q	3	21	192.00	-2959.70	33.00	109.00	0.50	16.00	147.57	6.03	307.50	954.90	0.28	0.07
148	11.79	26	SLE F	3	21	192.00	-3014.72	33.00	109.00	0.50	16.00	147.57	6.03	307.50	972.66	0.28	0.07
175	12.09	29	SLE Q	4	21	30.00	-2120.24	33.00	109.00	0.50	16.00	147.57	6.03	307.50	684.06	0.20	0.05
177	12.09	26	SLE F	4	21	30.00	-2161.78	33.00	109.00	0.50	16.00	147.57	6.03	307.50	697.47	0.20	0.05
208	13.57	29	SLE Q	5	21	130.66	-941.47	33.00	109.00	0.50	16.00	147.57	6.03	307.50	303.75	0.09	0.02
210	13.57	26	SLE F	5	21	130.66	-965.01	33.00	109.00	0.50	16.00	147.57	6.03	307.50	311.35	0.09	0.02
237	13.90	29	SLE Q	5	21	163.33	-621.10	33.00	109.00	0.50	16.00	147.57	6.03	307.50	200.39	0.06	0.01
239	13.90	26	SLE F	5	21	163.33	-638.97	33.00	109.00	0.50	16.00	147.57	6.03	307.50	206.15	0.06	0.02

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLV	0.20	0.80	0.60	ø8/10 2 br.	10.05	0.30	5090.83	2.30	45463.40	45463.40	45463.40	8.930
9 SLV	0.80	5.29	4.49	ø8/10 2 br.	10.05	0.30	4692.19	2.30	45463.40	45463.40	45463.40	9.689
1 SLV	5.29	5.89	0.60	ø8/10 2 br.	10.05	0.30	4668.68	2.30	45463.40	45463.40	45463.40	9.738
9 SLV	6.29	6.90	0.60	ø8/10 2 br.	10.05	0.30	4808.40	2.30	45463.40	45463.40	45463.40	9.455
9 SLV	6.90	11.19	4.29	ø8/10 2 br.	10.05	0.30	5740.16	2.30	45463.40	45463.40	45463.40	7.920
9 SLV	11.19	11.79	0.60	ø8/10 2 br.	10.05	0.30	6138.81	2.30	45463.40	45463.40	45463.40	7.406
9 SLV	12.09	13.90	1.81	ø8/10 2 br.	10.05	0.30	10562.50	2.30	45463.40	45463.40	45463.40	4.304

Travata n. 5016

Nodi: 537 538 539 540 541

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
17	R	30.00	90.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	1	SLV	1	20.00	6.03	6.03	6.03	6.03	-15538.90	-16199.60	1.043
0.40	1	SLV	1	40.00	6.03	6.03	6.03	6.03	-15538.90	-16199.60	1.043
6.10	9	SLV	1	610.00	6.03	6.03	6.03	6.03	-9145.00	-16199.60	1.771
6.25	9	SLV	1	625.00	6.03	6.03	6.03	6.03	-9145.00	-16199.60	1.771
6.35	9	SLV	2	5.00	6.03	6.03	6.03	6.03	-5406.87	-16199.60	2.996
6.50	9	SLV	2	20.00	6.03	6.03	6.03	6.03	-5406.87	-16199.60	2.996
9.82	1	SLV	2	352.37	6.03	6.03	6.03	6.03	3012.15	16199.60	5.378
12.20	9	SLV	2	590.00	6.03	6.03	6.03	6.03	-7262.89	-16199.60	2.230
12.35	9	SLV	2	605.00	6.03	6.03	6.03	6.03	-7262.89	-16199.60	2.230
12.45	1	SLV	3	5.00	6.03	6.03	6.03	6.03	-7733.08	-16199.60	2.095
12.60	1	SLV	3	20.00	6.03	6.03	6.03	6.03	-7733.08	-16199.60	2.095
13.35	1	SLV	3	95.00	6.03	6.03	6.03	6.03	-7733.08	-16199.60	2.095
18.30	9	SLV	3	590.00	6.03	6.03	6.03	6.03	-5616.81	-16199.60	2.884
18.45	9	SLV	3	605.00	6.03	6.03	6.03	6.03	-5616.81	-16199.60	2.884
18.55	1	SLV	4	5.00	6.03	6.03	6.03	6.03	-7270.88	-16199.60	2.228
18.70	1	SLV	4	20.00	6.03	6.03	6.03	6.03	-7270.88	-16199.60	2.228
22.96	9	SLV	4	445.63	6.03	6.03	6.03	6.03	-10098.70	-16199.60	1.604
24.40	9	SLV	4	590.00	6.03	6.03	6.03	6.03	-13400.90	-16199.60	1.209
24.53	9	SLV	4	603.00	6.03	6.03	6.03	6.03	-13400.90	-16199.60	1.209

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.20	23	SLE R	1	20.00	6.03	6.03	-2847.14	587.96	-120.74	10.42
0.20	29	SLE Q	1	20.00	6.03	6.03	-2710.83	559.81	-114.96	9.92
0.40	23	SLE R	1	40.00	6.03	6.03	-2847.14	587.96	-120.74	10.42
0.40	29	SLE Q	1	40.00	6.03	6.03	-2710.83	559.81	-114.96	9.92
6.10	23	SLE R	1	610.00	6.03	6.03	-1979.19	408.72	-83.93	7.24
6.10	29	SLE Q	1	610.00	6.03	6.03	-1924.83	397.49	-81.62	7.04

6.25	23	SLE R	1	625.00	6.03	6.03	-1979.19	408.72	-83.93	7.24
6.25	29	SLE Q	1	625.00	6.03	6.03	-1924.83	397.49	-81.62	7.04
6.35	23	SLE R	2	5.00	6.03	6.03	-2351.06	485.51	-99.70	8.60
6.35	29	SLE Q	2	5.00	6.03	6.03	-2258.12	466.32	-95.76	8.26
6.50	23	SLE R	2	20.00	6.03	6.03	-2351.06	485.51	-99.70	8.60
6.50	29	SLE Q	2	20.00	6.03	6.03	-2258.12	466.32	-95.76	8.26
9.82	23	SLE R	2	352.37	6.03	6.03	1632.05	-69.21	337.03	5.97
9.82	29	SLE Q	2	352.37	6.03	6.03	1538.52	-65.24	317.72	5.63
12.20	23	SLE R	2	590.00	6.03	6.03	-3130.43	646.46	-132.75	11.45
12.20	29	SLE Q	2	590.00	6.03	6.03	-2964.76	612.25	-125.72	10.85
12.35	23	SLE R	2	605.00	6.03	6.03	-3130.43	646.46	-132.75	11.45
12.35	29	SLE Q	2	605.00	6.03	6.03	-2964.76	612.25	-125.72	10.85
12.45	23	SLE R	3	5.00	6.03	6.03	-3215.28	663.98	-136.35	11.76
12.45	29	SLE Q	3	5.00	6.03	6.03	-3043.64	628.54	-129.07	11.14
12.60	23	SLE R	3	20.00	6.03	6.03	-3215.28	663.98	-136.35	11.76
12.60	29	SLE Q	3	20.00	6.03	6.03	-3043.64	628.54	-129.07	11.14
13.35	23	SLE R	3	95.00	6.03	6.03	-3215.28	663.98	-136.35	11.76
13.35	29	SLE Q	3	95.00	6.03	6.03	-3043.64	628.54	-129.07	11.14
18.30	23	SLE R	3	590.00	6.03	6.03	-1758.44	363.13	-74.57	6.43
18.30	29	SLE Q	3	590.00	6.03	6.03	-1741.71	359.68	-73.86	6.37
18.45	23	SLE R	3	605.00	6.03	6.03	-1758.44	363.13	-74.57	6.43
18.45	29	SLE Q	3	605.00	6.03	6.03	-1741.71	359.68	-73.86	6.37
18.55	21	SLE R	4	5.00	6.03	6.03	-1180.21	243.72	-50.05	4.32
18.55	29	SLE Q	4	5.00	6.03	6.03	-1221.32	252.21	-51.79	4.47
18.70	21	SLE R	4	20.00	6.03	6.03	-1180.21	243.72	-50.05	4.32
18.70	29	SLE Q	4	20.00	6.03	6.03	-1221.32	252.21	-51.79	4.47
22.96	23	SLE R	4	445.63	6.03	6.03	-2600.28	536.98	-110.27	9.51
22.96	29	SLE Q	4	445.63	6.03	6.03	-2367.77	488.96	-100.41	8.66
24.40	23	SLE R	4	590.00	6.03	6.03	-4463.38	921.73	-189.27	16.33
24.40	29	SLE Q	4	590.00	6.03	6.03	-4112.38	849.24	-174.39	15.05
24.53	23	SLE R	4	603.00	6.03	6.03	-4463.38	921.73	-189.27	16.33
24.53	29	SLE Q	4	603.00	6.03	6.03	-4112.38	849.24	-174.39	15.05

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X <cm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cmq>	ε _{sm}	Wk <mm>
19	0.20	29	SLE Q	1	17	20.00	-2710.83	33.00	109.00	0.50	16.00	229.13	6.03	307.50	559.81	0.16	0.06
23	0.20	28	SLE F	1	17	20.00	-2736.40	33.00	109.00	0.50	16.00	229.13	6.03	307.50	565.09	0.16	0.06
59	0.40	29	SLE Q	1	17	40.00	-2710.83	33.00	109.00	0.50	16.00	229.13	6.03	307.50	559.81	0.16	0.06
67	0.40	28	SLE F	1	17	40.00	-2736.40	33.00	109.00	0.50	16.00	229.13	6.03	307.50	565.09	0.16	0.06
104	6.10	29	SLE Q	1	17	610.00	-1924.83	33.00	109.00	0.50	16.00	229.13	6.03	307.50	397.49	0.12	0.05
108	6.10	26	SLE F	1	17	610.00	-1933.95	33.00	109.00	0.50	16.00	229.13	6.03	307.50	399.38	0.12	0.05
132	6.25	29	SLE Q	1	17	625.00	-1924.83	33.00	109.00	0.50	16.00	229.13	6.03	307.50	397.49	0.12	0.05
134	6.25	26	SLE F	1	17	625.00	-1933.95	33.00	109.00	0.50	16.00	229.13	6.03	307.50	399.38	0.12	0.05
157	6.35	29	SLE Q	2	17	5.00	-2258.12	33.00	109.00	0.50	16.00	229.13	6.03	307.50	466.32	0.14	0.05
159	6.35	26	SLE F	2	17	5.00	-2271.44	33.00	109.00	0.50	16.00	229.13	6.03	307.50	469.07	0.14	0.05
200	6.50	29	SLE Q	2	17	20.00	-2258.12	33.00	109.00	0.50	16.00	229.13	6.03	307.50	466.32	0.14	0.05
204	6.50	26	SLE F	2	17	20.00	-2271.44	33.00	109.00	0.50	16.00	229.13	6.03	307.50	469.07	0.14	0.05
241	9.82	29	SLE Q	2	17	352.37	1538.52	33.00	109.00	0.50	16.00	229.13	6.03	307.50	317.72	0.09	0.04
243	9.82	26	SLE F	2	17	352.37	1550.16	33.00	109.00	0.50	16.00	229.13	6.03	307.50	320.12	0.09	0.04
274	12.20	29	SLE Q	2	17	590.00	-2964.76	33.00	109.00	0.50	16.00	229.13	6.03	307.50	612.25	0.18	0.07
276	12.20	26	SLE F	2	17	590.00	-2985.81	33.00	109.00	0.50	16.00	229.13	6.03	307.50	616.59	0.18	0.07
299	12.35	29	SLE Q	2	17	605.00	-2964.76	33.00	109.00	0.50	16.00	229.13	6.03	307.50	612.25	0.18	0.07
301	12.35	26	SLE F	2	17	605.00	-2985.81	33.00	109.00	0.50	16.00	229.13	6.03	307.50	616.59	0.18	0.07
324	12.45	29	SLE Q	3	17	5.00	-3043.64	33.00	109.00	0.50	16.00	229.13	6.03	307.50	628.54	0.18	0.07
326	12.45	26	SLE F	3	17	5.00	-3065.35	33.00	109.00	0.50	16.00	229.13	6.03	307.50	633.02	0.18	0.07
357	12.60	29	SLE Q	3	17	20.00	-3043.64	33.00	109.00	0.50	16.00	229.13	6.03	307.50	628.54	0.18	0.07
359	12.60	26	SLE F	3	17	20.00	-3065.35	33.00	109.00	0.50	16.00	229.13	6.03	307.50	633.02	0.18	0.07
403	13.35	29	SLE Q	3	17	95.00	-3043.64	33.00	109.00	0.50	16.00	229.13	6.03	307.50	628.54	0.18	0.07
407	13.35	26	SLE F	3	17	95.00	-3065.35	33.00	109.00	0.50	16.00	229.13	6.03	307.50	633.02	0.18	0.07
448	18.30	29	SLE Q	3	17	590.00	-1741.71	33.00	109.00	0.50	16.00	229.13	6.03	307.50	359.68	0.10	0.04
452	18.30	26	SLE F	3	17	590.00	-1745.96	33.00	109.00	0.50	16.00	229.13	6.03	307.50	360.56	0.11	0.04
476	18.45	29	SLE Q	3	17	605.00	-1741.71	33.00	109.00	0.50	16.00	229.13	6.03	307.50	359.68	0.10	0.04
478	18.45	26	SLE F	3	17	605.00	-1745.96	33.00	109.00	0.50	16.00	229.13	6.03	307.50	360.56	0.11	0.04
499	18.55	29	SLE Q	4	17	5.00	-1221.32	33.00	109.00	0.50	16.00	229.13	6.03	307.50	252.21	0.07	0.03
502	18.55	27	SLE F	4	17	5.00	-1221.32	33.00	109.00	0.50	16.00	229.13	6.03	307.50	252.21	0.07	0.03
541	18.70	29	SLE Q	4	17	20.00	-1221.32	33.00	109.00	0.50	16.00	229.13	6.03	307.50	252.21	0.07	0.03
547	18.70	27	SLE F	4	17	20.00	-1221.32	33.00	109.00	0.50	16.00	229.13	6.03	307.50	252.21	0.07	0.03
586	22.96	29	SLE Q	4	17	445.63	-2367.77	33.00	109.00	0.50	16.00	229.13	6.03	307.50	488.96	0.14	0.06
590	22.96	26	SLE F	4	17	445.63	-2395.36	33.00	109.00	0.50	16.00	229.13	6.03	307.50	494.66	0.14	0.06
623	24.40	29	SLE Q	4	17	590.00	-4112.38	33.00	109.00	0.50	16.00	229.13	6.03	307.50	849.24	0.25	0.10
625	24.40	26	SLE F	4	17	590.00	-4154.67	33.00	109.00	0.50	16.00	229.13	6.03	307.50	857.97	0.25	0.10
648	24.53	29	SLE Q	4	17	603.00	-4112.38	33.00	109.00	0.50	16.00	229.13	6.03	307.50	849.24	0.25	0.10

650	24.53	26	SLE F	4	17	603.00	-4154.67	33.00	109.00	0.50	16.00	229.13	6.03	307.50	857.97	0.25	0.10
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Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1 SLV	0.40	1.30	0.90	ø8/20 2 br.	5.03	0.30	5825.87	2.50	27033.20	45470.70	27033.20	4.640
1 SLV	1.30	5.20	3.90	ø8/20 2 br.	5.03	0.30	5025.40	2.50	27033.20	45470.70	27033.20	5.379
9 SLV	5.20	6.10	0.90	ø8/20 2 br.	5.03	0.30	5731.59	2.50	27033.20	45470.70	27033.20	4.717
1 SLV	6.50	7.40	0.90	ø8/20 2 br.	5.03	0.30	3646.60	2.50	27033.20	45470.70	27033.20	7.413
9 SLV	7.40	11.30	3.90	ø8/20 2 br.	5.03	0.30	3081.67	2.50	27033.20	45470.70	27033.20	8.772
9 SLV	11.30	12.20	0.90	ø8/20 2 br.	5.03	0.30	3882.14	2.50	27033.20	45470.70	27033.20	6.963
1 SLV	12.60	13.50	0.90	ø8/20 2 br.	5.03	0.30	4178.81	2.50	27033.20	45470.70	27033.20	6.469
1 SLV	13.50	17.40	3.90	ø8/20 2 br.	5.03	0.30	3378.35	2.50	27033.20	45470.70	27033.20	8.002
9 SLV	17.40	18.30	0.90	ø8/20 2 br.	5.03	0.30	3744.83	2.50	27033.20	45470.70	27033.20	7.219
1 SLV	18.70	19.60	0.90	ø8/20 2 br.	5.03	0.30	4607.29	2.50	27033.20	45470.70	27033.20	5.867
9 SLV	19.60	23.50	3.90	ø8/20 2 br.	5.03	0.30	4791.52	2.50	27033.20	45470.70	27033.20	5.642
9 SLV	23.50	24.40	0.90	ø8/20 2 br.	5.03	0.30	5591.99	2.50	27033.20	45470.70	27033.20	4.834

Travata n. 50160

Nodi: 541 -1915 -1916 -1920 -1921 771

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
21	R	30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.071	1	SLV	1	7.00	6.03	6.03	6.03	6.03	-11710.90	-12628.40	1.078
5.229	1	SLV	1	521.92	6.03	6.03	6.03	6.03	-10954.70	-12628.40	1.153
5.839	1	SLV	1	582.50	6.03	6.03	6.03	6.03	-10954.70	-12628.40	1.153
5.961	1	SLV	2	7.00	6.03	6.03	6.03	6.03	-10100.90	-12628.40	1.250
9.8719	1	SLU	3	0.00	6.03	6.03	6.03	6.03	5716.97	12628.40	2.209
11.791	1	SLV	3	192.00	6.03	6.03	6.03	6.03	-6739.33	-12628.40	1.874
12.091	1	SLV	4	30.00	6.03	6.03	6.03	6.03	-8724.34	-12628.40	1.447
13.511	1	SLV	5	124.22	6.03	6.03	6.03	6.03	12740.60	12628.40	0.991
14.131	1	SLV	5	186.33	6.03	6.03	6.03	6.03	12740.60	12628.40	0.991

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ _f sup <daN/cm²>	σ _f inf <daN/cm²>	σ _c <daN/cm²>
0.07	23	SLE R	1	7.00	6.03	6.03	-3155.24	1017.99	-238.29	22.52
0.07	29	SLE Q	1	7.00	6.03	6.03	-2959.50	954.84	-223.51	21.12
5.22	23	SLE R	1	521.92	6.03	6.03	-2097.85	676.84	-158.44	14.97
5.22	29	SLE Q	1	521.92	6.03	6.03	-1868.26	602.77	-141.10	13.33
5.83	23	SLE R	1	582.50	6.03	6.03	-2097.85	676.84	-158.44	14.97
5.83	29	SLE Q	1	582.50	6.03	6.03	-1868.26	602.77	-141.10	13.33
5.96	23	SLE R	2	7.00	6.03	6.03	-3273.05	1056.00	-247.19	23.36
5.96	29	SLE Q	2	7.00	6.03	6.03	-2826.98	912.09	-213.50	20.17
9.87	23	SLE R	3	0.00	6.03	6.03	4288.89	-323.91	1383.75	30.60
9.87	29	SLE Q	3	0.00	6.03	6.03	3557.62	-268.68	1147.82	25.39
11.79	23	SLE R	3	192.00	6.03	6.03	-4993.16	1610.97	-377.10	35.63
11.79	29	SLE Q	3	192.00	6.03	6.03	-4248.82	1370.82	-320.88	30.32
12.09	23	SLE R	4	30.00	6.03	6.03	-3643.61	1175.56	-275.18	26.00
12.09	29	SLE Q	4	30.00	6.03	6.03	-3086.23	995.73	-233.08	22.02
13.51	23	SLE R	5	124.22	6.03	6.03	-1886.48	608.65	-142.47	13.46
13.51	29	SLE Q	5	124.22	6.03	6.03	-1585.79	511.63	-119.76	11.32
14.13	23	SLE R	5	186.33	6.03	6.03	-823.46	265.68	-62.19	5.88
14.13	29	SLE Q	5	186.33	6.03	6.03	-702.92	226.79	-53.09	5.02

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	X <cm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cm²>	ε _{sm}	Wk <mm>
25	0.07	29	SLE Q	1	21	7.00	-2959.50	33.00	109.00	0.50	16.00	147.57	6.03	307.50	954.84	0.28	0.07
27	0.07	26	SLE F	1	21	7.00	-2983.18	33.00	109.00	0.50	16.00	147.57	6.03	307.50	962.48	0.28	0.07
56	5.22	29	SLE Q	1	21	521.92	-1868.26	33.00	109.00	0.50	16.00	147.57	6.03	307.50	602.77	0.18	0.04
58	5.22	26	SLE F	1	21	521.92	-1896.89	33.00	109.00	0.50	16.00	147.57	6.03	307.50	612.01	0.18	0.04
87	5.83	29	SLE Q	1	21	582.50	-1868.26	33.00	109.00	0.50	16.00	147.57	6.03	307.50	602.77	0.18	0.04
89	5.83	26	SLE F	1	21	582.50	-1896.89	33.00	109.00	0.50	16.00	147.57	6.03	307.50	612.01	0.18	0.04
120	5.96	29	SLE Q	2	21	7.00	-2826.98	33.00	109.00	0.50	16.00	147.57	6.03	307.50	912.09	0.27	0.07
122	5.96	26	SLE F	2	21	7.00	-2881.98	33.00	109.00	0.50	16.00	147.57	6.03	307.50	929.83	0.27	0.07
149	9.87	29	SLE Q	3	21	0.00	3557.62	33.00	109.00	0.50	16.00	147.57	6.03	307.50	1147.82	0.33	0.08
151	9.87	26	SLE F	3	21	0.00	3643.15	33.00	109.00	0.50	16.00	147.57	6.03	307.50	1175.41	0.34	0.09
180	11.79	29	SLE Q	3	21	192.00	-4248.82	33.00	109.00	0.50	16.00	147.57	6.03	307.50	1370.82	0.40	0.10

182	11.79	26	SLE F	3	21	192.00	-4331.89	33.00	109.00	0.50	16.00	147.57	6.03	307.50	1397.62	0.41	0.10
210	12.09	29	SLE Q	4	21	30.00	-3086.23	33.00	109.00	0.50	16.00	147.57	6.03	307.50	995.73	0.29	0.07
212	12.09	26	SLE F	4	21	30.00	-3148.26	33.00	109.00	0.50	16.00	147.57	6.03	307.50	1015.74	0.30	0.07
250	13.51	29	SLE Q	5	21	124.22	-1585.79	33.00	109.00	0.50	16.00	147.57	6.03	307.50	511.63	0.15	0.04
252	13.51	26	SLE F	5	21	124.22	-1621.23	33.00	109.00	0.50	16.00	147.57	6.03	307.50	523.07	0.15	0.04
282	14.13	29	SLE Q	5	21	186.33	-702.92	33.00	109.00	0.50	16.00	147.57	6.03	307.50	226.79	0.07	0.02
284	14.13	26	SLE F	5	21	186.33	-720.25	33.00	109.00	0.50	16.00	147.57	6.03	307.50	232.38	0.07	0.02

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1 SLV	0.20	0.80	0.60	ø8/10 2 br.	10.05	0.30	5114.49	2.30	45463.40	45463.40	45463.40	8.889
1 SLV	0.80	5.29	4.49	ø8/10 2 br.	10.05	0.30	4715.84	2.30	45463.40	45463.40	45463.40	9.641
9 SLV	5.29	5.89	0.60	ø8/10 2 br.	10.05	0.30	4821.63	2.30	45463.40	45463.40	45463.40	9.429
1 SLV	6.29	6.90	0.60	ø8/10 2 br.	10.05	0.30	4705.01	2.30	45463.40	45463.40	45463.40	9.663
19 SLU	6.90	11.19	4.29	ø8/10 2 br.	10.05	0.30	6708.49	2.30	45463.40	45463.40	45463.40	6.777
19 SLU	11.19	11.79	0.60	ø8/10 2 br.	10.05	0.30	7269.35	2.30	45463.40	45463.40	45463.40	6.254
1 SLV	12.09	13.90	1.81	ø8/10 2 br.	10.05	0.30	10610.20	2.30	45463.40	45463.40	45463.40	4.285

Travata n. 5017

Nodi: 501 -1854 -1857 -2039 -1863 -2075 -1869 -1872 653 663 673 668 658 -1895 -1898 -2078 -1904 -2042 -1910 -1912 537

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
21R		30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
3.27	5	SLV	8	0.00	6.03	6.03	6.03	6.03	-9090.38	-12628.40	1.389
8.96	13	SLV	13	0.00	6.03	6.03	6.03	6.03	-9085.51	-12628.40	1.390
9.53	13	SLV	13	56.50	6.03	6.03	6.03	6.03	-9085.51	-12628.40	1.390

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ _f sup <daN/cmq>	σ _f inf <daN/cmq>	σ _c <daN/cmq>
3.27	21	SLE R	8	0.00	6.03	6.03	-2394.72	772.62	-180.86	17.09
3.27	29	SLE Q	8	0.00	6.03	6.03	-1483.14	478.51	-112.01	10.58
8.96	21	SLE R	13	0.00	6.03	6.03	-2389.27	770.87	-180.44	17.05
8.96	29	SLE Q	13	0.00	6.03	6.03	-1477.29	476.63	-111.57	10.54
9.53	21	SLE R	13	56.50	6.03	6.03	-2389.27	770.87	-180.44	17.05
9.53	29	SLE Q	13	56.50	6.03	6.03	-1477.29	476.63	-111.57	10.54

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	X <cm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cmq>	ε _{sm}	Wk <mm>
26	3.27	29	SLE Q	8	21	0.00	-1483.14	33.00	109.00	0.50	16.00	147.57	6.03	307.50	478.51	0.14	0.03
27	3.27	25	SLE F	8	21	0.00	-1641.65	33.00	109.00	0.50	16.00	147.57	6.03	307.50	529.66	0.15	0.04
56	8.96	29	SLE Q	13	21	0.00	-1477.29	33.00	109.00	0.50	16.00	147.57	6.03	307.50	476.63	0.14	0.03
57	8.96	25	SLE F	13	21	0.00	-1635.92	33.00	109.00	0.50	16.00	147.57	6.03	307.50	527.80	0.15	0.04
86	9.53	29	SLE Q	13	21	56.50	-1477.29	33.00	109.00	0.50	16.00	147.57	6.03	307.50	476.63	0.14	0.03
87	9.53	25	SLE F	13	21	56.50	-1635.92	33.00	109.00	0.50	16.00	147.57	6.03	307.50	527.80	0.15	0.04

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
5 SLV	3.27	3.88	0.60	ø8/10 2 br.	10.05	0.30	4157.86	2.30	45463.40	45463.40	45463.40	10.934
5 SLV	3.88	8.92	5.05	ø8/10 2 br.	10.05	0.30	3822.17	2.30	45463.40	45463.40	45463.40	11.895
13 SLV	8.92	9.53	0.60	ø8/10 2 br.	10.05	0.30	4154.91	2.30	45463.40	45463.40	45463.40	10.942

Travata n. 5021

Nodi: 505 -1855 -1859 -2040 -1865 -1871 -2163 -1880 513 654 664 674 669 659 530 -1894 -1897 -1900 -1903 -1906 -1909 -1913 541

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
7R		40.00	50.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	3200.00	3200.00	2782.61

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
1.70	13	SLV	5	0.00	8.04	8.04	8.04	8.04	-1798.07	-11304.90	6.287

3.55	19	SLU	8	26.87	8.04	8.04	8.04	8.04	-4923.38	-11304.90	2.296
3.95	19	SLU	9	20.00	8.04	8.04	8.04	8.04	-8222.06	-11304.90	1.375
6.40	19	SLU	12	0.00	8.04	8.04	8.04	8.04	7203.29	11304.90	1.569
8.85	19	SLU	14	-11.00	8.04	8.04	8.04	8.04	-8255.02	-11304.90	1.369
9.25	19	SLU	15	20.00	8.04	8.04	8.04	8.04	-4969.98	-11304.90	2.275
10.60	5	SLV	18	36.05	8.04	8.04	8.04	8.04	-1763.44	-11304.90	6.411
11.10	5	SLV	18	86.00	8.04	8.04	8.04	8.04	-1763.44	-11304.90	6.411

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ _f sup <daN/cmq>	σ _f inf <daN/cmq>	σ _c <daN/cmq>
1.70	23	SLE R	5	0.00	8.04	8.04	-465.23	138.43	-34.05	3.40
1.70	29	SLE Q	5	0.00	8.04	8.04	-422.61	125.75	-30.93	3.09
3.55	23	SLE R	8	26.87	8.04	8.04	-3710.57	1104.11	-271.60	27.10
3.55	29	SLE Q	8	26.87	8.04	8.04	-3158.15	939.73	-231.16	23.07
3.95	23	SLE R	9	20.00	8.04	8.04	-6190.82	1842.12	-453.14	45.22
3.95	29	SLE Q	9	20.00	8.04	8.04	-5316.52	1581.97	-389.14	38.83
6.40	23	SLE R	12	0.00	8.04	8.04	5420.90	-396.78	1613.03	39.59
6.40	29	SLE Q	12	0.00	8.04	8.04	4643.12	-339.85	1381.59	33.91
8.85	23	SLE R	14	-11.00	8.04	8.04	-6215.39	1849.43	-454.94	45.40
8.85	29	SLE Q	14	-11.00	8.04	8.04	-5339.66	1588.85	-390.84	39.00
9.25	23	SLE R	15	20.00	8.04	8.04	-3745.43	1114.48	-274.15	27.36
9.25	29	SLE Q	15	20.00	8.04	8.04	-3190.29	949.29	-233.51	23.30
10.60	23	SLE R	18	36.05	8.04	8.04	-416.25	123.86	-30.47	3.04
10.60	29	SLE Q	18	36.05	8.04	8.04	-378.37	112.59	-27.70	2.76
11.10	23	SLE R	18	86.00	8.04	8.04	-416.25	123.86	-30.47	3.04
11.10	29	SLE Q	18	86.00	8.04	8.04	-378.37	112.59	-27.70	2.76

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	X <cm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cmq>	ε _{sm}	Wk <mm>
26	1.70	29	SLE Q	5	7	0.00	-422.61	33.00	106.00	0.50	16.00	229.13	8.04	410.00	125.75	0.04	0.01
30	1.70	28	SLE F	5	7	0.00	-430.37	33.00	106.00	0.50	16.00	229.13	8.04	410.00	128.06	0.04	0.01
55	3.55	29	SLE Q	8	7	26.87	-3158.15	33.00	106.00	0.50	16.00	229.13	8.04	410.00	939.73	0.27	0.11
57	3.55	26	SLE F	8	7	26.87	-3230.92	33.00	106.00	0.50	16.00	229.13	8.04	410.00	961.38	0.28	0.11
84	3.95	29	SLE Q	9	7	20.00	-5316.52	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1581.97	0.53	0.21
86	3.95	26	SLE F	9	7	20.00	-5430.00	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1615.74	0.47	0.18
113	6.40	29	SLE Q	12	7	0.00	4643.12	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1381.59	0.43	0.17
115	6.40	26	SLE F	12	7	0.00	4744.00	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1411.61	0.41	0.16
142	8.85	29	SLE Q	14	7	-11.00	-5339.66	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1588.85	0.53	0.21
144	8.85	26	SLE F	14	7	-11.00	-5453.25	33.00	106.00	0.50	16.00	229.13	8.04	410.00	1622.65	0.47	0.18
171	9.25	29	SLE Q	15	7	20.00	-3190.29	33.00	106.00	0.50	16.00	229.13	8.04	410.00	949.29	0.28	0.11
173	9.25	26	SLE F	15	7	20.00	-3263.35	33.00	106.00	0.50	16.00	229.13	8.04	410.00	971.03	0.28	0.11
200	10.60	29	SLE Q	18	7	36.05	-378.37	33.00	106.00	0.50	16.00	229.13	8.04	410.00	112.59	0.03	0.01
204	10.60	28	SLE F	18	7	36.05	-385.58	33.00	106.00	0.50	16.00	229.13	8.04	410.00	114.73	0.03	0.01
229	11.10	29	SLE Q	18	7	86.00	-378.37	33.00	106.00	0.50	16.00	229.13	8.04	410.00	112.59	0.03	0.01
233	11.10	28	SLE F	18	7	86.00	-385.58	33.00	106.00	0.50	16.00	229.13	8.04	410.00	114.73	0.03	0.01

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
13 SLV	1.70	2.20	0.50	ø8/10 2 br.	10.05	0.40	1207.21	2.50	28890.00	32395.90	28890.00	23.931
19 SLU	2.20	3.05	0.85	ø8/10 2 br.	10.05	0.40	4688.52	2.50	28890.00	32395.90	28890.00	6.162
19 SLU	3.05	3.55	0.50	ø8/10 2 br.	10.05	0.40	5013.53	2.50	28890.00	32395.90	28890.00	5.762
19 SLU	3.95	4.45	0.50	ø8/10 2 br.	10.05	0.40	8321.38	2.50	28890.00	32395.90	28890.00	3.472
19 SLU	4.45	8.35	3.90	ø8/10 2 br.	10.05	0.40	8008.82	2.50	28890.00	32395.90	28890.00	3.607
19 SLU	8.35	8.85	0.50	ø8/10 2 br.	10.05	0.40	8333.83	2.50	28890.00	32395.90	28890.00	3.467
19 SLU	9.25	9.75	0.50	ø8/10 2 br.	10.05	0.40	5074.00	2.50	28890.00	32395.90	28890.00	5.694
19 SLU	9.75	10.60	0.85	ø8/10 2 br.	10.05	0.40	4749.00	2.50	28890.00	32395.90	28890.00	6.083
5 SLV	10.60	11.10	0.50	ø8/10 2 br.	10.05	0.40	1173.77	2.50	28890.00	32395.90	28890.00	24.613

Travata n. 5022

Nodi: -1846 645 649 655 665 620 670 660 651 647 -1915

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
19	R	40.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.40	13	SLV	1	40.00	9.42	9.42	9.42	9.42	-6095.37	-19641.30	3.222
2.56	19	SLU	3	0.00	9.42	9.42	9.42	9.42	6834.73	19641.30	2.874

6.20	19	SLU	5	108.00	9.42	9.42	9.42	9.42	-10378.90	-19641.30	1.892
6.60	19	SLU	6	20.00	9.42	9.42	9.42	9.42	-10497.70	-19641.30	1.871
9.28	19	SLU	8	32.00	9.42	9.42	9.42	9.42	7022.30	19641.30	2.797
12.60	5	SLV	10	108.00	9.42	9.42	9.42	9.42	-7408.82	-19641.30	2.651

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	My <daNm>	σ _f sup <daN/cmq>	σ _f inf <daN/cmq>	σ _c <daN/cmq>
0.40	23	SLE R	1	40.00	9.42	9.42	-4101.33	849.85	-218.78	20.22
0.40	29	SLE Q	1	40.00	9.42	9.42	-3731.15	773.15	-199.03	18.40
2.56	23	SLE R	3	0.00	9.42	9.42	5161.35	-275.32	1069.50	25.45
2.56	29	SLE Q	3	0.00	9.42	9.42	4499.05	-239.99	932.26	22.19
6.20	23	SLE R	5	108.00	9.42	9.42	-7850.21	1626.67	-418.75	38.71
6.20	29	SLE Q	5	108.00	9.42	9.42	-6722.04	1392.90	-358.57	33.15
6.60	23	SLE R	6	20.00	9.42	9.42	-7939.20	1645.11	-423.50	39.15
6.60	29	SLE Q	6	20.00	9.42	9.42	-6802.23	1409.52	-362.85	33.54
9.28	23	SLE R	8	32.00	9.42	9.42	5304.60	-282.96	1099.19	26.16
9.28	29	SLE Q	8	32.00	9.42	9.42	4610.05	-245.91	955.27	22.73
12.60	23	SLE R	10	108.00	9.42	9.42	-5501.07	1139.90	-293.44	27.13
12.60	29	SLE Q	10	108.00	9.42	9.42	-5032.18	1042.74	-268.43	24.81

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg <m>	CC	TCC	El	Sez.	X <cm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cmq>	ε _{sm}	W _k <mm>
30	0.40	29	SLE Q	1	19	40.00	-3731.15	31.00	157.00	0.50	20.00	149.00	9.42	410.00	773.15	0.23	0.06
34	0.40	28	SLE F	1	19	40.00	-3783.34	31.00	157.00	0.50	20.00	149.00	9.42	410.00	783.96	0.23	0.06
59	2.56	29	SLE Q	3	19	0.00	4499.05	31.00	157.00	0.50	20.00	149.00	9.42	410.00	932.26	0.27	0.07
61	2.56	26	SLE F	3	19	0.00	4588.62	31.00	157.00	0.50	20.00	149.00	9.42	410.00	950.83	0.28	0.07
88	6.20	29	SLE Q	5	19	108.00	-6722.04	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1392.90	0.41	0.10
90	6.20	26	SLE F	5	19	108.00	-6877.75	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1425.16	0.42	0.11
117	6.60	29	SLE Q	6	19	20.00	-6802.23	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1409.52	0.41	0.10
119	6.60	26	SLE F	6	19	20.00	-6958.94	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1441.99	0.42	0.11
146	9.28	29	SLE Q	8	19	32.00	4610.05	31.00	157.00	0.50	20.00	149.00	9.42	410.00	955.27	0.28	0.07
148	9.28	26	SLE F	8	19	32.00	4704.42	31.00	157.00	0.50	20.00	149.00	9.42	410.00	974.82	0.28	0.07
179	12.60	29	SLE Q	10	19	108.00	-5032.18	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1042.74	0.30	0.08
183	12.60	28	SLE F	10	19	108.00	-5095.42	31.00	157.00	0.50	20.00	149.00	9.42	410.00	1055.84	0.31	0.08

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
19 SLU	0.40	1.00	0.60	ø8/10 2 br.	10.05	0.40	6660.21	2.50	49477.60	57116.30	49477.60	7.429
19 SLU	1.00	5.60	4.60	ø8/15 2 br.	6.70	0.40	9381.41	2.50	32985.10	57116.30	32985.10	3.516
19 SLU	5.60	6.20	0.60	ø8/10 2 br.	10.05	0.40	9849.42	2.50	49477.60	57116.30	49477.60	5.023
19 SLU	6.60	7.20	0.60	ø8/10 2 br.	10.05	0.40	9939.29	2.50	49477.60	57116.30	49477.60	4.978
19 SLU	7.20	11.80	4.60	ø8/15 2 br.	6.70	0.40	9471.29	2.50	32985.10	57116.30	32985.10	3.483
19 SLU	11.80	12.40	0.60	ø8/10 2 br.	10.05	0.40	6983.56	2.50	49477.60	57116.30	49477.60	7.085

Travata n. 5023

Nodi: -1847 646 650 -1873 656 -1881 666 675 671 -1888 661 652 648 -1916

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
31	R	30.00	40.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfeP S <cmq>	AfeP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
3.17	1	SLV	3	61.50	6.03	6.03	6.03	6.03	-5102.73	-7907.81	1.550
3.38	1	SLV	4	10.00	6.03	6.03	6.03	6.03	-4495.05	-7907.81	1.759
4.92	5	SLV	5	108.50	6.03	6.03	6.03	6.03	-1274.66	-7907.81	6.204
5.12	1	SLV	6	10.00	6.03	6.03	6.03	6.03	-1317.12	-7907.81	6.004
7.64	9	SLV	9	-3.50	6.03	6.03	6.03	6.03	-4450.33	-7907.81	1.777
7.84	9	SLV	10	10.00	6.03	6.03	6.03	6.03	-5102.06	-7907.81	1.550

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	My <daNm>	σ _f sup <daN/cmq>	σ _f inf <daN/cmq>	σ _c <daN/cmq>
3.17	23	SLE R	3	61.50	6.03	6.03	-1703.21	876.58	-226.57	24.59
3.17	29	SLE Q	3	61.50	6.03	6.03	-1465.07	754.02	-194.89	21.15
3.38	23	SLE R	4	10.00	6.03	6.03	-1536.61	790.84	-204.41	22.18
3.38	29	SLE Q	4	10.00	6.03	6.03	-1318.11	678.38	-175.34	19.03
4.92	23	SLE R	5	108.50	6.03	6.03	-243.04	125.09	-32.33	3.51

4.92	29	SLE Q	5	108.50	6.03	6.03	-216.98	111.67	-28.86	3.13
5.12	24	SLE R	6	10.00	6.03	6.03	-178.81	92.02	-23.79	2.58
5.12	29	SLE Q	6	10.00	6.03	6.03	-157.89	81.26	-21.00	2.28
7.64	23	SLE R	9	-3.50	6.03	6.03	-2794.76	1438.36	-371.77	40.34
7.64	29	SLE Q	9	-3.50	6.03	6.03	-2396.04	1233.16	-318.73	34.59
7.84	23	SLE R	10	10.00	6.03	6.03	-3095.48	1593.13	-411.78	44.68
7.84	29	SLE Q	10	10.00	6.03	6.03	-2679.12	1378.85	-356.39	38.67

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	3.17	29	SLE Q	3	31	61.50	-1465.07	33.00	109.00	0.50	16.00	143.90	6.03	293.69	754.02	0.22	0.05
31	3.17	26	SLE F	3	31	61.50	-1496.35	33.00	109.00	0.50	16.00	143.90	6.03	293.69	770.12	0.22	0.05
61	3.38	29	SLE Q	4	31	10.00	-1318.11	33.00	109.00	0.50	16.00	143.90	6.03	293.69	678.38	0.20	0.05
63	3.38	26	SLE F	4	31	10.00	-1347.10	33.00	109.00	0.50	16.00	143.90	6.03	293.69	693.31	0.20	0.05
92	4.92	29	SLE Q	5	31	108.50	-216.98	33.00	109.00	0.50	16.00	143.90	6.03	293.69	111.67	0.03	0.01
94	4.92	26	SLE F	5	31	108.50	-219.94	33.00	109.00	0.50	16.00	143.90	6.03	293.69	113.20	0.03	0.01
129	5.12	29	SLE Q	6	31	10.00	-157.89	33.00	109.00	0.50	16.00	143.90	6.03	293.69	81.26	0.02	0.01
137	5.12	28	SLE F	6	31	10.00	-162.58	33.00	109.00	0.50	16.00	143.90	6.03	293.69	83.67	0.02	0.01
162	7.64	29	SLE Q	9	31	-3.50	-2396.04	33.00	109.00	0.50	16.00	143.90	6.03	293.69	1233.16	0.36	0.09
164	7.64	26	SLE F	9	31	-3.50	-2448.97	33.00	109.00	0.50	16.00	143.90	6.03	293.69	1260.40	0.37	0.09
194	7.84	29	SLE Q	10	31	10.00	-2679.12	33.00	109.00	0.50	16.00	143.90	6.03	293.69	1378.85	0.40	0.10
196	7.84	26	SLE F	10	31	10.00	-2733.41	33.00	109.00	0.50	16.00	143.90	6.03	293.69	1406.79	0.41	0.10

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
1 SLV	0.06	2.77	2.71	ø8/10 2 br.	10.05	0.30	5720.62	2.30	29197.40	29197.40	29197.40	5.104
1 SLV	2.77	3.17	0.40	ø8/ 5 2 br.	20.11	0.30	5840.62	1.46	37173.60	37173.60	37173.60	6.365
9 SLV	3.38	3.77	0.40	ø8/ 5 2 br.	20.11	0.30	4734.51	1.46	37173.60	37173.60	37173.60	7.852
9 SLV	3.77	4.52	0.75	ø8/10 2 br.	10.05	0.30	4614.51	2.30	29197.40	29197.40	29197.40	6.327
9 SLV	4.52	4.92	0.40	ø8/ 5 2 br.	20.11	0.30	2900.35	1.46	37173.60	37173.60	37173.60	12.817
1 SLV	5.12	5.53	0.40	ø8/ 5 2 br.	20.11	0.30	1423.03	1.46	37173.60	37173.60	37173.60	26.123
9 SLV	5.53	7.25	1.72	ø8/10 2 br.	10.05	0.30	3004.26	2.30	29197.40	29197.40	29197.40	9.719
9 SLV	7.25	7.64	0.40	ø8/ 5 2 br.	20.11	0.30	3124.26	1.46	37173.60	37173.60	37173.60	11.898
19 SLU	7.84	8.24	0.40	ø8/ 5 2 br.	20.11	0.30	4801.59	1.46	37173.60	37173.60	37173.60	7.742
19 SLU	8.24	12.74	4.50	ø8/10 2 br.	10.05	0.30	4645.59	2.30	29197.40	29197.40	29197.40	6.285

Travata n. 5025

Nodi: 772 -1856 -1858 -2284 -1864 -2285 -1870 -1879 657 667 676 672 662 -1896 -1899 -2283 -1905 -2282 -1911 -1914 771

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf sup	Cf inf	Cl _s	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
21	R	30.00	60.00	4.10	4.10	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
3.27	13	SLV	8	0.00	6.03	6.03	6.03	6.03	-7160.41	-12628.40	1.764
6.08	19	SLU	10	96.00	6.03	6.03	6.03	6.03	4104.65	12628.40	3.077
9.53	5	SLV	13	56.50	6.03	6.03	6.03	6.03	-7138.70	-12628.40	1.769

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN/cmq>	<daN/cmq>	<daN/cmq>
3.27	23	SLE R	8	0.00	6.03	6.03	-3494.48	1127.44	-263.91	24.94
3.27	29	SLE Q	8	0.00	6.03	6.03	-2437.87	786.54	-184.12	17.40
6.08	23	SLE R	10	96.00	6.03	6.03	3005.21	-226.96	969.59	21.44
6.08	29	SLE Q	10	96.00	6.03	6.03	2088.21	-157.71	673.73	14.90
9.53	23	SLE R	13	56.50	6.03	6.03	-3468.90	1119.19	-261.98	24.75
9.53	29	SLE Q	13	56.50	6.03	6.03	-2419.77	780.70	-182.75	17.27

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
26	3.27	29	SLE Q	8	21	0.00	-2437.87	33.00	109.00	0.50	16.00	147.57	6.03	307.50	786.54	0.23	0.06
27	3.27	25	SLE F	8	21	0.00	-2599.22	33.00	109.00	0.50	16.00	147.57	6.03	307.50	838.60	0.24	0.06
56	6.08	29	SLE Q	10	21	96.00	2088.21	33.00	109.00	0.50	16.00	147.57	6.03	307.50	673.73	0.20	0.05
57	6.08	25	SLE F	10	21	96.00	2228.79	33.00	109.00	0.50	16.00	147.57	6.03	307.50	719.09	0.21	0.05
86	9.53	29	SLE Q	13	21	56.50	-2419.77	33.00	109.00	0.50	16.00	147.57	6.03	307.50	780.70	0.23	0.06
87	9.53	25	SLE F	13	21	56.50	-2581.14	33.00	109.00	0.50	16.00	147.57	6.03	307.50	832.77	0.24	0.06

Stato limite ultimo - Verifiche a taglio

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
19 SLU	3.27	3.88	0.60	ø8/10 2 br.	10.05	0.30	5483.32	2.30	45463.40	45463.40	45463.40	8.291
19 SLU	3.88	8.92	5.05	ø8/10 2 br.	10.05	0.30	3643.07	2.30	45463.40	45463.40	45463.40	12.479
19 SLU	8.92	9.53	0.60	ø8/10 2 br.	10.05	0.30	5478.16	2.30	45463.40	45463.40	45463.40	8.299

Verifiche e armature pilastri

Simbologia

Δ_{sm}	= Distanza media tra le fessure
$E_{sy,d}$	= Deformazione di snervamento dell'acciaio
Φ_{eq}	= Diametro equivalente delle barre
α	= Angolo asse neutro a rottura
α_e	= Coefficiente di efficacia del confinamento
ϵ_Y	= Deformazione nell'acciaio (*1000)
ϵ_{sm}	= Deformazione unitaria media dell'armatura (*1000)
$\mu\Phi$	= Valore di progetto della duttilità di curvatura
$\mu\Phi_c$	= Capacità della duttilità di curvatura
$\mu\Phi_d$	= Domanda della duttilità di curvatura
vd_s	= Sforzo normale normalizzato del pilastro superiore (%)
vd_i	= Sforzo normale normalizzato del pilastro inferiore (%)
σ_c	= Tensione nel calcestruzzo
σ_f	= Tensione nel ferro
σ_{nc}	= Azione agente di compressione diagonale (C8.7.2.12)
σ_{ncR}	= Resistenza a compressione diagonale (C8.7.2.12)
σ_{nt}	= Azione agente di trazione diagonale (C8.7.2.11)
σ_{ntR}	= Resistenza a trazione diagonale (C8.7.2.11)
σ_s	= Tensione nell'acciaio nella sezione fessurata
ϕ_{nd}	= Rapporto meccanico dell'armatura trasversale di confinamento all'interno della zona dissipativa
$A_{c,eff}$	= Area di calcestruzzo efficace
A_s	= Area complessiva dei ferri nell'area di calcestruzzo efficace
A_{fC}	= Area di ferro compressa
A_{fT}	= Area di ferro tesa
A_{fni}	= Azione di fessurazione sul nodo integro [7.4.10]
$As1$	= Area di ferro superiore delle travi incidenti sulla faccia
$As2$	= Area di ferro inferiore delle travi incidenti sulla faccia
A_{sh}	= Area totale della sezione della staffa
B	= Base
B_j	= Larghezza effettiva utile del nodo
Br_y	= Numero bracci in dir. Y locale
Br_z	= Numero bracci in dir. Z locale
$Br.$	= Numero bracci
CC	= Combinazione delle condizioni di carico elementari e = eccentricità aggiuntiva in caso di compressione o pressoflessione α = amplificazione per gerarchia delle resistenze TG = taglio da gerarchia delle resistenze
Cf	= Copriferro
Cls	= Tipo di calcestruzzo
Conf.	= Nodo confinato S = Sì N = No
El	= Elemento (asta) in cui viene effettuato il progetto/verifica (progressivo sul numero di aste)
F	= Identificativo faccia del nodo Y+ = Faccia sul lato positivo Y locale pilastro Z+ = Faccia sul lato positivo Z locale pilastro Y- = Faccia sul lato negativo Y locale pilastro Z- = Faccia sul lato negativo Z locale pilastro
Fcd	= Resistenza di calcolo a compressione del calcestruzzo
Fcd (Tag)	= Resistenza di calcolo a compressione del calcestruzzo per verifica a taglio
Fck	= Resistenza caratteristica cilindrica a compressione del calcestruzzo
Fcm	= Resistenza media
Fctd	= Resistenza di calcolo a trazione del calcestruzzo
Fctk	= Resistenza caratteristica a trazione del calcestruzzo
Fctm	= Resistenza media a trazione
Fyd	= Resistenza di calcolo dell'acciaio
Fyd (Tag)	= Resistenza di calcolo dell'acciaio per verifica a taglio
Fyk	= Tensione caratteristica di snervamento dell'acciaio
Fym	= Tensione media di snervamento
H	= Altezza
Hjc	= Distanza tra armature pilastro
Hjw	= Distanza tra armature trave
In	= Identificativo della pilastrata facente parte dell'involuppo
K_2	= Coefficiente per distribuzione deformazioni
M	= Momento flettente
MRd	= Momento resistente allo stato limite ultimo
MRdy	= Momento resistente allo stato limite ultimo intorno all'asse Y
MRdz	= Momento resistente allo stato limite ultimo intorno all'asse Z
Mod.	= Modalità di verifica faccia I = Interna

E = Esterna

My = Momento flettente intorno all'asse Y

My ver. = Momento flettente di verifica intorno all'asse Y

Mz = Momento flettente intorno all'asse Z

Mz ver. = Momento flettente di verifica intorno all'asse Z

N = Azione assiale nel pilastro superiore

Nodo = Numero del nodo

Nu = Sforzo normale ultimo

Rfni = Resistenza a fessurazione nodo intero [7.4.10]

Sez. = Numero della sezione

Sic. = Sicurezza

Staff. = Staffatura adottata

TCC = Tipo di combinazione di carico

SLU = Stato limite ultimo

SLE R = Stato limite d'esercizio, combinazione rara

SLE F = Stato limite d'esercizio, combinazione frequente

SLE Q = Stato limite d'esercizio, combinazione quasi permanente

SLD = Stato limite di danno

SLV = Stato limite di salvaguardia della vita

SND = Stato limite di salvaguardia della vita (non dissipativo)

Tipo = Tipologia

2Cdx = Doppia C lato costola

R = Rettangolare

Is = I stondata

Tp = Tipo di acciaio

VRcd_y = Taglio ultimo lato calcestruzzo in dir. Y

VRcd_z = Taglio ultimo lato calcestruzzo in dir. Z

VRsd_y = Taglio ultimo lato armatura in dir. Y

VRsd_z = Taglio ultimo lato armatura in dir. Z

Vc = Taglio nel pilastro al di sopra del nodo

Vc_y = Taglio in dir. Y locale nel pilastro al di sopra del nodo

Vc_z = Taglio in dir. Z locale nel pilastro al di sopra del nodo

VjbR = Resistenza a compressione del nucleo di calcestruzzo [7.4.8]

Vjbd = Taglio agente nel nucleo di calcestruzzo [7.4.6/7]

VjwR = Resistenza a trazione diagonale [7.4.11/12]

Vjwd = Azione agente di trazione diagonale [7.4.11/12]

Vn = Taglio totale agente sul nodo in valore assoluto

Vrd_y = Taglio resistente in dir. Y

Vrd_z = Taglio resistente in dir. Z

Vsdu_y = Taglio agente in dir. Y

Vsdu_z = Taglio agente in dir. Z

Vt_y = Effetto armature travi in dir. Y locale del pilastro

Vt_z = Effetto armature travi in dir. Z locale del pilastro

Wk = Ampiezza caratteristica delle fessure

X = Coordinata progressiva rispetto al nodo iniziale

X0 = Coordinata progressiva (dal nodo iniziale) dell'inizio del tratto

X1 = Coordinata progressiva (dal nodo iniziale) della fine del tratto

Xg = Coordinata progressiva (dal primo nodo) in cui viene effettuato il progetto/verifica

b_c/b₀ = Rapporto tra la larghezza minima della sezione trasversale lorda e la larghezza del nucleo confinato

bw_y = Larghezza membratura resistente al taglio in dir. Y

bw_z = Larghezza membratura resistente al taglio in dir. Z

c = Ricoprimento dell'armatura

ctgθ_y = Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo in dir. Y

ctgθ_z = Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo in dir. Z

d_y = Altezza utile per resistenza al taglio in dir. Y

d_z = Altezza utile per resistenza al taglio in dir. Z

s = Distanza massima tra le barre

v_d = Forza assiale adimensionalizzata di progetto

Pilastrate n. 2 3 4 38 39 40

2 (a) Nodi: 2 -291 -860 402 -1589 -1678 502

3 (b) Nodi: 3 -292 -861 403 -1590 -1679 503

4 (c) Nodi: 4 -293 -862 404 -1591 -1680 504

38 (d) Nodi: 38 -368 -937 438 -1665 -1754 538

39 (e) Nodi: 39 -369 -938 439 -1666 -1755 539

40 (f) Nodi: 40 -370 -939 440 -1667 -1756 540

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
1R		40.00	60.00	4.30	270.90	21.43	170.57	113.71	10.58	3255.00	3255.00	2830.43
1R		40.00	60.00	2.50	270.90	21.43	170.57	113.71	10.58	3255.00	3255.00	2830.43

Stato limite ultimo - Verifiche a flessione/presoflessione

Xg <cm>	CC	TCC	In	EL	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
1.501	1(e)	SLV	a	1	1	0.00	-450.00	0.00	9.00	0.00	9.00	-266084.00	12246.70	12581.20	73.12	8.37	>100
1.501	1(e)	SLV	a	1	1	0.00	-450.00	0.00	9.00	0.00	9.00	-266084.00	12246.70	12581.20	73.12	8.37	>100
3.0020	(e)	SLU	a	2	1	0.00	-90402.40	23270.30	23270.30	227.81	-1808.05	-90402.40	38835.50	-2443.18	348.75	5.54	1.667
3.0020	(e)	SLU	a	2	1	0.00	-90402.40	23270.30	23270.30	227.81	-1808.05	-90402.40	38835.50	-2443.18	348.75	5.54	1.667
5.9720	(e)	SLU	a	2	1	297.00	-88085.80	-25224.30	-25224.30	-215.01	1761.72	-88085.80	-38570.30	2378.68	168.75	5.67	1.528
5.9720	(e)	SLU	a	3	1	0.00	-88085.80	-25224.30	-25224.30	-215.01	1761.72	-88085.80	-38570.30	2378.68	168.75	5.67	1.528
5.9720	(e)	SLU	a	3	1	0.00	-88085.80	-25224.30	-25224.30	-215.01	1761.72	-88085.80	-38570.30	2378.68	168.75	5.67	1.528
6.5020	(e)	SLU	a	3	1	53.00	-87672.40	-33878.20	-33878.20	-294.03	1753.45	-87672.40	-38522.70	2367.34	168.75	5.70	1.138
7.6020	(e)	SLU	a	4	1	0.00	-32494.80	27499.90	27499.90	571.09	649.89	-32494.80	29322.20	1201.83	5.62	13.19	1.067
7.6020	(e)	SLU	a	4	1	0.00	-32494.80	27499.90	27499.90	571.09	649.89	-32494.80	29322.20	1201.83	5.62	13.19	1.067

9.65	20(e)	SLU	d	4	1	205.00	-30919.10	-8332.64	-8332.64	-150.55	-618.38	-30919.10	-28687.50	-2557.15	191.25	11.02	3.447
9.65	20(e)	SLU	d	5	1	0.00	-30919.10	-8332.64	-8332.64	-150.55	-618.38	-30919.10	-28687.50	-2557.15	191.25	11.02	3.447
10.10	1	SLV	a	5	1	45.00	-19186.80	-2413.34	-2413.34	-5165.20	-5165.20	-19186.80	-7315.07	-16238.40	261.56	9.18	3.124

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	In	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ _c <daN/cmq>	σ _f <daN/cmq>
1.50	21	SLE	R	a	1	1	0.00	-450.00	0.00	0.00	25.13	0.16	2.43
1.50	29	SLE	Q	a	1	1	0.00	-450.00	0.00	0.00	25.13	0.16	2.43
1.50	21	SLE	R	a	1	1	0.00	-450.00	0.00	0.00	25.13	0.16	2.43
1.50	29	SLE	Q	a	1	1	0.00	-450.00	0.00	0.00	25.13	0.16	2.43
3.00	21	SLE	R	a	1	1	150.00	450.00	0.00	25.13	0.00	0.00	17.91
3.00	29	SLE	Q	a	1	1	150.00	450.00	0.00	25.13	0.00	0.00	17.91
3.00	24	SLE	R	e	2	1	0.00	-72452.60	66.50	-17221.40	9.42	15.71	1253.79
3.00	24	SLE	R	a	2	1	0.00	-67551.40	168.45	17021.10	9.42	15.71	1240.03
3.00	29	SLE	Q	e	2	1	0.00	-65946.60	58.52	-14913.20	9.42	15.71	1092.98
3.00	24	SLE	R	e	2	1	0.00	-72452.60	66.50	-17221.40	9.42	15.71	1253.79
3.00	24	SLE	R	a	2	1	0.00	-67551.40	168.45	17021.10	9.42	15.71	1240.03
3.00	29	SLE	Q	e	2	1	0.00	-65946.60	58.52	-14913.20	9.42	15.71	1092.98
5.97	24	SLE	R	e	2	1	297.00	-70670.60	-49.53	18674.40	9.42	15.71	1340.30
5.97	24	SLE	R	a	2	1	297.00	-65769.40	-159.41	-18450.30	9.42	15.71	1326.24
5.97	29	SLE	Q	e	2	1	297.00	-64164.60	-44.07	16171.70	9.42	15.71	1167.23
5.97	24	SLE	R	e	3	1	0.00	-70670.60	-49.53	18674.40	9.42	15.71	1340.30
5.97	24	SLE	R	a	3	1	0.00	-65769.40	-159.41	-18450.30	9.42	15.71	1326.24
5.97	29	SLE	Q	e	3	1	0.00	-64164.60	-44.07	16171.70	9.42	15.71	1167.23
5.97	24	SLE	R	e	3	1	0.00	-70670.60	-49.53	18674.40	9.42	15.71	1340.30
5.97	24	SLE	R	a	3	1	0.00	-65769.40	-159.41	-18450.30	9.42	15.71	1326.24
5.97	29	SLE	Q	e	3	1	0.00	-64164.60	-44.07	16171.70	9.42	15.71	1167.23
6.50	24	SLE	R	e	3	1	53.00	-70352.60	-70.24	25080.10	15.71	9.42	2142.88
6.50	24	SLE	R	a	3	1	53.00	-65451.40	-217.92	-24780.30	15.71	9.42	2262.36
6.50	29	SLE	Q	e	3	1	53.00	-63846.60	-62.38	21718.80	15.71	9.42	119.97
7.60	24	SLE	R	a	4	1	0.00	-24815.40	424.59	20150.30	15.71	9.42	2877.16
7.60	29	SLE	Q	a	4	1	0.00	-23410.30	378.64	17525.90	15.71	9.42	2434.21
7.60	24	SLE	R	a	4	1	0.00	-24815.40	424.59	20150.30	15.71	9.42	2877.16
7.60	29	SLE	Q	a	4	1	0.00	-23410.30	378.64	17525.90	15.71	9.42	2434.21
9.65	24	SLE	R	e	4	1	205.00	-27933.10	-43.37	-6303.29	9.42	15.71	463.75
9.65	24	SLE	R	d	4	1	205.00	-23604.70	-111.80	-6063.49	9.42	15.71	445.69
9.65	29	SLE	Q	e	4	1	205.00	-26180.00	-40.45	-5360.87	9.42	15.71	400.44
9.65	24	SLE	R	e	5	1	0.00	-27933.10	-43.37	-6303.29	9.42	15.71	463.75
9.65	24	SLE	R	d	5	1	0.00	-23604.70	-111.80	-6063.49	9.42	15.71	445.69
9.65	29	SLE	Q	e	5	1	0.00	-26180.00	-40.45	-5360.87	9.42	15.71	400.44
10.10	24	SLE	R	e	5	1	45.00	-27663.10	-91.76	-3252.60	0.00	25.13	293.43
10.10	24	SLE	R	d	5	1	45.00	-23334.70	-229.31	-2972.91	6.28	18.85	268.31
10.10	29	SLE	Q	e	5	1	45.00	-25910.00	-84.81	-2673.48	0.00	25.13	258.46

Stato limite d'esercizio - Verifiche a fessurazione

Xg <m>	CC	TCC	In	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cmq>	ε _{sm}	Wk <mm>
3.00	29	SLE	Q	a	1	1	150.00	450.00	0.00	0.00	34.00	299.78	1.00	20.00	614.22	25.13	1716.00	17.91	0.01
3.00	25	SLE	F	a	1	1	150.00	450.00	0.00	0.00	34.00	299.78	1.00	20.00	614.22	25.13	1716.00	17.91	0.01
3.00	29	SLE	Q	a	2	1	0.00	-61458.30	14740.00	148.38	34.00	156.00	0.50	20.00	203.45	9.42	319.14	727.97	0.21
3.00	28	SLE	F	a	2	1	0.00	-62597.30	15312.20	152.38	34.00	156.00	0.50	20.00	206.31	9.42	325.89	784.42	0.23
3.00	29	SLE	Q	a	2	1	0.00	-61458.30	14740.00	148.38	34.00	156.00	0.50	20.00	203.45	9.42	319.14	727.97	0.21
3.00	28	SLE	F	a	2	1	0.00	-62597.30	15312.20	152.38	34.00	156.00	0.50	20.00	206.31	9.42	325.89	784.42	0.23
5.97	29	SLE	Q	a	2	1	297.00	-59676.30	-15977.60	-140.86	34.00	156.00	0.50	20.00	218.90	9.42	355.54	953.38	0.28
5.97	28	SLE	F	a	2	1	297.00	-60815.30	-16597.90	-144.24	34.00	156.00	0.50	20.00	221.32	9.42	361.25	1020.39	0.30
5.97	29	SLE	Q	a	3	1	0.00	-59676.30	-15977.60	-140.86	34.00	156.00	0.50	20.00	218.90	9.42	355.54	953.38	0.28
5.97	28	SLE	F	a	3	1	0.00	-60815.30	-16597.90	-144.24	34.00	156.00	0.50	20.00	221.32	9.42	361.25	1020.39	0.30
5.97	29	SLE	Q	a	3	1	0.00	-59676.30	-15977.60	-140.86	34.00	156.00	0.50	20.00	218.90	9.42	355.54	953.38	0.28
5.97	28	SLE	F	a	3	1	0.00	-60815.30	-16597.90	-144.24	34.00	156.00	0.50	20.00	221.32	9.42	361.25	1020.39	0.30
6.50	29	SLE	Q	a	3	1	53.00	-59358.30	-21459.20	-192.47	34.00	156.00	0.50	20.00	249.12	9.42	426.75	1874.34	0.69
6.50	28	SLE	F	a	3	1	53.00	-60497.30	-22292.20	-197.18	34.00	156.00	0.50	20.00	250.46	9.42	429.91	1983.64	0.63
7.60	29	SLE	Q	a	4	1	0.00	-23410.30	17525.90	378.64	34.00	156.00	0.50	20.00	254.74	9.42	440.00	2434.21	0.96
7.60	28	SLE	F	a	4	1	0.00	-23371.80	18175.70	386.92	34.00	156.00	0.50	20.00	254.74	9.42	440.00	2558.09	0.91
7.60	29	SLE	Q	a	4	1	0.00	-23410.30	17525.90	378.64	34.00	156.00	0.50	20.00	254.74	9.42	440.00	2434.21	0.96
7.60	28	SLE	F	a	4	1	0.00	-23371.80	18175.70	386.92	34.00	156.00	0.50	20.00	254.74	9.42	440.00	2558.09	0.91
9.65	29	SLE	Q	d	4	1	205.00	-22198.10	-5182.59	-99.81	34.00	156.00	0.50	20.00	194.36	9.42	297.72	247.35	0.07
9.65	28	SLE	F	d	4	1	205.00	-22157.90	-5410.85	-102.16	34.00	156.00	0.50	20.00	201.09	9.42	313.60	280.89	0.08
9.65	29	SLE	Q	d	5	1	0.00	-22198.10	-5182.59	-99.81	34.00	156.00	0.50	20.00	194.36	9.42	297.72	247.35	0.07
9.65	28	SLE	F	d	5	1	0.00	-22157.90	-5410.85	-102.16	34.00	156.00	0.50	20.00	201.09	9.42	313.60	280.89	0.08

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _z	Br _z	CC	TCC	In	b _{w,r} <cm>	d _{r,r} <cm>	Vsdu _{r,r} <daN>	ctgθ _{r,r}	VRsd _{r,r} <daN>	VRed _{r,r} <daN>	Vrd _{r,r} <daN>	b _{w,z} <cm>	d _{r,z} <cm>	Vsdu _{r,z} <daN>	ctgθ _{r,z}	VRsd _{r,z} <daN>	VRed _{r,z} <daN>	Vrd _{r,z} <daN>	Sic.
3.00	3.60	ø8/20	2	2	20	SLU	e	0.60	0.36	53.10	2.50	11396.10	47111.70	11396.10	0.40	0.56	16523.20	2.50	17798.40	49052.60	17798.40	1.077
3.00	3.60	ø8/20	2	2	20	SLU	c	0.60	0.36	217.72	2.50	11396.10	47111.70	11396.10	0.40	0.56	16070.10	2.50	17798.40	49052.60	17798.40	1.108
3.00	3.60	ø8/20	2	25	SLV	a	0.60	0.36	1089.24	2.50	11396.10	46901.80	11396.10	0.40	0.56	11684.50	2.50	17798.40	48834.10	17798.40	1.523	
3.00	3.60	ø8/20	2	21	SLV	d	0.60	0.36	2910.37	2.50	11396.10	46826.90	11396.10	0.40	0.56	10663.30	2.50	17798.40	48756.00	17798.40	1.669	
3.60	5.37	ø8/20	2	2	20	SLU	e	0.60	0.36	53.10	2.50	11396.10	47111.70	11396.10	0.40	0.56	16523.20	2.50	17798.40	49052.60	17798.40	1.077

3.60	5.37	ø8/20	2	2	20	SLU	c	0.60	0.36	217.72	2.50	11396.10	47111.70	11396.10	0.40	0.56	16070.10	2.50	17798.40	49052.60	17798.40	1.108
3.60	5.37	ø8/20	2	25		SLV	a	0.60	0.36	1089.24	2.50	11396.10	46852.10	11396.10	0.40	0.56	11684.50	2.50	17798.40	48782.30	17798.40	1.523
3.60	5.37	ø8/20	2	21		SLV	d	0.60	0.36	2910.37	2.50	11396.10	46777.10	11396.10	0.40	0.56	10663.30	2.50	17798.40	48704.30	17798.40	1.669
5.37	5.97	ø8/20	2	2	20	SLU	e	0.60	0.36	53.10	2.50	11396.10	47111.70	11396.10	0.40	0.56	16523.20	2.50	17798.40	49052.60	17798.40	1.077
5.37	5.97	ø8/20	2	2	20	SLU	c	0.60	0.36	217.72	2.50	11396.10	47111.70	11396.10	0.40	0.56	16070.10	2.50	17798.40	49052.60	17798.40	1.108
5.37	5.97	ø8/20	2	25		SLV	a	0.60	0.36	1089.24	2.50	11396.10	46705.40	11396.10	0.40	0.56	11684.50	2.50	17798.40	48629.60	17798.40	1.523
5.37	5.97	ø8/20	2	21		SLV	d	0.60	0.36	2910.37	2.50	11396.10	46630.50	11396.10	0.40	0.56	10663.30	2.50	17798.40	48551.60	17798.40	1.669
5.97	6.50	ø8/20	2	2	20	SLU	e	0.60	0.36	53.10	2.50	11396.10	47111.70	11396.10	0.40	0.56	16523.20	2.50	17798.40	49052.60	17798.40	1.077
5.97	6.50	ø8/20	2	2	20	SLU	c	0.60	0.36	217.72	2.50	11396.10	47111.70	11396.10	0.40	0.56	16070.10	2.50	17798.40	49052.60	17798.40	1.108
5.97	6.50	ø8/20	2	25		SLV	a	0.60	0.36	946.52	2.50	11396.10	46655.70	11396.10	0.40	0.56	11416.90	2.50	17798.40	48577.80	17798.40	1.559
5.97	6.50	ø8/20	2	29		SLV	a	0.60	0.36	2609.40	2.50	11396.10	46596.60	11396.10	0.40	0.56	10585.10	2.50	17798.40	48516.30	17798.40	1.681
7.60	8.20	ø8/20	2	2	20	SLU	b	0.60	0.36	147.55	2.50	11396.10	42953.30	11396.10	0.40	0.56	9420.68	2.50	17798.40	44722.90	17798.40	1.889
7.60	8.20	ø8/20	2	2	19	SLU	c	0.60	0.36	370.68	2.50	11396.10	43413.00	11396.10	0.40	0.56	8632.73	2.50	17798.40	45201.60	17798.40	2.062
7.60	8.20	ø8/20	2	25		SLV	a	0.60	0.36	2315.06	2.50	11396.10	41326.60	11396.10	0.40	0.56	7065.59	2.50	17798.40	43029.20	17798.40	2.519
7.60	8.20	ø8/20	2	21		SLV	d	0.60	0.36	6411.57	2.50	11396.10	41242.20	11396.10	0.40	0.56	6275.56	2.50	17798.40	42941.30	17798.40	1.777
8.20	9.50	ø8/20	2	2	20	SLU	b	0.60	0.36	147.55	2.50	11396.10	42888.70	11396.10	0.40	0.56	9420.68	2.50	17798.40	44655.60	17798.40	1.889
8.20	9.50	ø8/20	2	2	19	SLU	c	0.60	0.36	370.68	2.50	11396.10	43348.40	11396.10	0.40	0.56	8632.73	2.50	17798.40	45134.30	17798.40	2.062
8.20	9.50	ø8/20	2	25		SLV	a	0.60	0.36	2315.06	2.50	11396.10	41276.90	11396.10	0.40	0.56	7065.59	2.50	17798.40	42977.40	17798.40	2.519
8.20	9.50	ø8/20	2	21		SLV	d	0.60	0.36	6411.57	2.50	11396.10	41192.40	11396.10	0.40	0.56	6275.57	2.50	17798.40	42889.50	17798.40	1.777
9.50	10.10	ø8/20	2	2	20	SLU	b	0.60	0.36	147.55	2.50	11396.10	42748.60	11396.10	0.40	0.56	9420.68	2.50	17798.40	44509.80	17798.40	1.889
9.50	10.10	ø8/20	2	2	19	SLU	c	0.60	0.36	370.68	2.50	11396.10	43208.30	11396.10	0.40	0.56	8632.73	2.50	17798.40	44988.50	17798.40	2.062
9.50	10.10	ø8/20	2	25		SLV	a	0.60	0.36	2315.06	2.50	11396.10	41169.20	11396.10	0.40	0.56	7065.58	2.50	17798.40	42865.30	17798.40	2.519
9.50	10.10	ø8/20	2	21		SLV	d	0.60	0.36	6411.57	2.50	11396.10	41084.70	11396.10	0.40	0.56	6275.57	2.50	17798.40	42777.40	17798.40	1.777

Pilastrata n. 6

Nodi: 6 -295 -2221 -2222 206 -864 406 -1593 -1682 -1846

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
18R		40.00	40.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
18R		40.00	40.00	2.50	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
1.50	17(e)	SLU	1	18	0.00	-390.00	0.00	7.80	0.00	7.80	-361732.00	11184.20	11184.30	45.00	5.63	>100
1.50	17(e)	SLU	1	18	0.00	-390.00	0.00	7.80	0.00	7.80	-361732.00	11184.20	11184.30	45.00	5.63	>100
3.00	20	SLU	2	18	0.00	-24973.50	674.69	674.69	-2368.40	-2368.40	-24973.50	5240.14	-17641.10	286.88	5.71	7.473
3.00	20	SLU	2	18	0.00	-24973.50	674.69	674.69	-2368.40	-2368.40	-24973.50	5240.14	-17641.10	286.88	5.71	7.473
3.43	20(e)	SLU	2	18	42.70	-24751.50	-99.36	-495.03	-118.04	-495.03	-361732.00	-12450.20	-12450.30	225.00	4.55	14.615
3.43	20(e)	SLU	3	18	0.00	-30866.00	-49.83	-617.32	258.57	617.32	-361732.00	-12752.00	12752.10	135.00	4.32	11.719
3.68	20(e)	SLU	3	18	25.30	-30734.50	-282.30	614.69	1797.40	1797.40	-30734.50	6116.73	17830.40	70.31	5.13	9.923
4.28	20(e)	SLU	5	18	0.00	-44114.60	-625.32	-882.29	-6742.22	-6742.22	-44114.60	-2703.81	-20649.40	261.56	5.39	3.063
4.28	20(e)	SLU	5	18	0.00	-44114.60	-625.32	-882.29	-6742.22	-6742.22	-44114.60	-2703.81	-20649.40	261.56	5.39	3.063
5.97	20(e)	SLU	5	18	169.00	-43235.80	547.36	864.72	1705.61	1705.61	-361732.00	8578.39	17629.50	61.88	4.07	8.366
5.97	20(e)	SLU	6	18	0.00	-43235.80	547.36	864.72	1705.61	1705.61	-361732.00	8578.39	17629.50	61.88	4.07	8.366
5.97	20(e)	SLU	6	18	0.00	-43235.80	547.36	864.72	1705.61	1705.61	-361732.00	8578.39	17629.50	61.88	4.07	8.366
7.00	20	SLU	6	18	103.00	-42700.20	1262.07	1262.07	6854.28	6854.28	-42700.20	3658.40	20130.60	78.75	5.20	2.936
7.60	20(e)	SLU	7	18	0.00	-18370.60	-227.04	-367.41	-6417.00	-6417.00	-18370.60	-1000.53	-18501.00	267.19	9.32	2.883
7.60	20(e)	SLU	7	18	0.00	-18370.60	-227.04	-367.41	-6417.00	-6417.00	-18370.60	-1000.53	-18501.00	267.19	9.32	2.883
9.65	19	SLU	7	18	205.00	-19080.50	-714.11	-714.11	2025.78	2025.78	-19080.50	-6013.05	16636.00	109.69	5.80	8.235
9.65	19	SLU	8	18	0.00	-19080.50	-714.11	-714.11	2025.78	2025.78	-19080.50	-6013.05	16636.00	109.69	5.80	8.235
10.15	19	SLU	8	18	50.00	-18820.50	-870.71	-870.71	4022.08	4022.08	-18820.50	-3802.05	17640.80	102.66	6.59	4.385
10.15	19	SLU	9	18	0.00	-18820.50	-870.71	-870.71	4022.08	4022.08	-18820.50	-3802.05	17640.80	102.66	6.59	4.385
10.40	19	SLU	9	18	25.00	-18690.50	-949.01	-949.01	5020.23	5020.23	-18690.50	-3302.28	17854.10	101.25	6.79	3.554

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ _c <daN/cmq>	σ _ε <daN/cmq>	
1.50	21	SLE	R	1	18	0.00	-300.00	0.00	0.00	0.00	25.13	0.15	2.28
1.50	29	SLE	Q	1	18	0.00	-300.00	0.00	0.00	0.00	25.13	0.15	2.28
1.50	21	SLE	R	1	18	0.00	-300.00	0.00	0.00	0.00	25.13	0.15	2.28
1.50	29	SLE	Q	1	18	0.00	-300.00	0.00	0.00	0.00	25.13	0.15	2.28
3.00	21	SLE	R	1	18	150.00	300.00	0.00	0.00	25.13	0.00	0.00	11.94
3.00	29	SLE	Q	1	18	150.00	300.00	0.00	0.00	25.13	0.00	0.00	11.94
3.00	24	SLE	R	2	18	0.00	-18678.40	-1750.39	503.05	6.28	18.85	26.37	338.54
3.00	29	SLE	Q	2	18	0.00	-17077.90	-1563.23	458.27	6.28	18.85	23.74	305.35
3.00	24	SLE	R	2	18	0.00	-18678.40	-1750.39	503.05	6.28	18.85	26.37	338.54
3.00	29	SLE	Q	2	18	0.00	-17077.90	-1563.23	458.27	6.28	18.85	23.74	305.35
3.43	24	SLE	R	2	18	42.70	-18507.60	-87.63	-74.51	0.00	25.13	10.51	153.87
3.43	21	SLE	R	2	18	42.70	-17650.90	-81.55	-71.83	0.00	25.13	10.02	146.64
3.43	29	SLE	Q	2	18	42.70	-16907.10	-79.19	-68.26	0.00	25.13	9.60	140.51
3.43	24	SLE	R	3	18	0.00	-23073.00	190.66	-37.51	0.00	25.13	13.29	193.99
3.43	21	SLE	R	3	18	0.00	-21979.60	174.50	-36.87	0.00	25.13	12.62	184.30
3.43	29	SLE	Q	3	18	0.00	-21072.00	169.20	-34.30	0.00	25.13	12.10	176.76
3.68	24	SLE	R	3	18	25.30	-22971.80	1327.66	-211.62	0.00	25.13	22.53	301.96
3.68	29	SLE	Q	3	18	25.30	-20970.80	1183.98	-194.63	0.00	25.13	20.38	273.45
4.28	24	SLE	R	5	18	0.00	-33087.70	-4966.92	-455.10	9.42	15.71	62.36	766.99
4.28	29	SLE	Q	5	18	0.00	-30400.90	-4398.65	-385.12	9.42	15.71	55.15	681.76
4.28	24	SLE	R	5	18	0.00	-33087.70	-4966.92	-455.10	9.42	15.71	62.36	766.99
4.28	29	SLE	Q	5	18	0.00	-30400.90	-4398.65	-385.12	9.42	15.71	55.15	681.76
5.97	24	SLE	R	5	18	169.00	-32411.70	1251.72	402.20	0.00	25.13	28.12	383.09
5.97	29	SLE	Q	5	18	169.00	-29724.90	1097.37	350.70	0.00	25.13	25.30	345.63
5.97	24	SLE	R	6	18	0.00	-32411.70	1251.72	402.20	0.00	25.13	28.12	383.09
5.97	29	SLE	Q	6	18	0.00	-29724.90	1097.37	350.70	0.00	25.13	25.30	345.63

5.97	24	SLE R	6	18	0.00	-32411.70	1251.72	402.20	0.00	25.13		28.12	383.09
5.97	29	SLE Q	6	18	0.00	-29724.90	1097.37	350.70	0.00	25.13		25.30	345.63
7.00	24	SLE R	6	18	103.00	-31999.70	5041.77	924.69	9.42	15.71		67.95	827.13
7.00	29	SLE Q	6	18	103.00	-29312.90	4447.01	799.16	9.42	15.71		59.79	731.44
7.60	24	SLE R	7	18	0.00	-14000.50	-4779.09	-150.44	15.71	9.42		55.37	925.15
7.60	29	SLE Q	7	18	0.00	-13169.80	-4348.92	-106.40	15.71	9.42		50.06	821.66
7.60	24	SLE R	7	18	0.00	-14000.50	-4779.09	-150.44	15.71	9.42		55.37	925.15
7.60	29	SLE Q	7	18	0.00	-13169.80	-4348.92	-106.40	15.71	9.42		50.06	821.66
9.65	23	SLE R	7	18	205.00	-14364.50	1532.35	-533.21	6.28	18.85		23.49	296.69
9.65	29	SLE Q	7	18	205.00	-12349.80	1361.12	-450.42	6.28	18.85		20.59	259.37
9.65	23	SLE R	8	18	0.00	-14364.50	1532.35	-533.21	6.28	18.85		23.49	296.69
9.65	29	SLE Q	8	18	0.00	-12349.80	1361.12	-450.42	6.28	18.85		20.59	259.37
10.15	23	SLE R	8	18	50.00	-14164.50	3029.79	-651.77	12.57	12.57		41.96	491.44
10.15	29	SLE Q	8	18	50.00	-12149.80	2753.81	-534.33	12.57	12.57		37.49	457.25
10.15	23	SLE R	9	18	0.00	-14164.50	3029.79	-651.77	12.57	12.57		41.96	491.44
10.15	29	SLE Q	9	18	0.00	-12149.80	2753.81	-534.33	12.57	12.57		37.49	457.25
10.40	23	SLE R	9	18	25.00	-14064.50	3778.50	-711.05	12.57	12.57		51.21	714.52
10.40	29	SLE Q	9	18	25.00	-12049.80	3450.16	-576.28	12.57	12.57		45.88	669.38

Stato limite d'esercizio - Verifiche a fessurazione

Xg <mm>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cmq>	ε _{sm}	Wk <mm>
3.00	29	SLE Q	1	18	150.00	300.00	0.00	0.00	34.00	220.62	1.00	20.00	271.08	25.13	1276.00	11.94	0.00	0.00
3.00	25	SLE F	1	18	150.00	300.00	0.00	0.00	34.00	220.62	1.00	20.00	271.08	25.13	1276.00	11.94	0.00	0.00
4.28	29	SLE Q	5	18	0.00	-30400.90	-385.12	-4398.65	34.00	156.00	0.50	20.00	159.58	3.14	143.86	350.21	0.10	0.03
4.28	28	SLE F	5	18	0.00	-30870.30	-401.54	-4541.62	34.00	156.00	0.50	20.00	161.73	3.14	147.23	374.31	0.11	0.03
4.28	29	SLE Q	5	18	0.00	-30400.90	-385.12	-4398.65	34.00	156.00	0.50	20.00	159.58	3.14	143.86	350.21	0.10	0.03
4.28	28	SLE F	5	18	0.00	-30870.30	-401.54	-4541.62	34.00	156.00	0.50	20.00	161.73	3.14	147.23	374.31	0.11	0.03
7.00	29	SLE Q	6	18	103.00	-29312.90	799.16	4447.01	34.00	156.00	0.50	20.00	136.79	3.14	108.05	441.63	0.13	0.03
7.00	28	SLE F	6	18	103.00	-29782.30	828.21	4597.86	34.00	156.00	0.50	20.00	138.79	3.14	111.20	470.31	0.14	0.03
7.60	29	SLE Q	7	18	0.00	-13169.80	-106.40	-4348.92	34.00	156.00	0.50	20.00	130.65	9.42	295.21	821.66	0.24	0.05
7.60	28	SLE F	7	18	0.00	-13172.90	-125.28	-4447.36	34.00	156.00	0.50	20.00	130.60	9.42	295.00	853.45	0.25	0.06
7.60	29	SLE Q	7	18	0.00	-13169.80	-106.40	-4348.92	34.00	156.00	0.50	20.00	130.65	9.42	295.21	821.66	0.24	0.05
7.60	28	SLE F	7	18	0.00	-13172.90	-125.28	-4447.36	34.00	156.00	0.50	20.00	130.60	9.42	295.00	853.45	0.25	0.06
10.15	29	SLE Q	8	18	50.00	-12149.80	-534.33	2753.81	34.00	156.00	0.50	20.00	176.01	3.14	169.66	457.25	0.13	0.04
10.15	28	SLE F	8	18	50.00	-12152.90	-534.26	2777.28	34.00	156.00	0.50	20.00	177.27	3.14	171.65	463.82	0.14	0.04
10.15	29	SLE Q	9	18	0.00	-12149.80	-534.33	2753.81	34.00	156.00	0.50	20.00	176.01	3.14	169.66	457.25	0.13	0.04
10.15	28	SLE F	9	18	0.00	-12152.90	-534.26	2777.28	34.00	156.00	0.50	20.00	177.27	3.14	171.65	463.82	0.14	0.04
10.40	29	SLE Q	9	18	25.00	-12049.80	-576.28	3450.16	34.00	156.00	0.50	20.00	135.16	6.28	210.99	669.38	0.19	0.04
10.40	28	SLE F	9	18	25.00	-12052.90	-574.35	3485.58	34.00	156.00	0.50	20.00	135.83	6.28	213.10	679.38	0.20	0.05

Stato limite ultimo - Verifiche a taglio

X0 <mm>	X1 <mm>	Staff.	Br. _y	Br. _z	CC	TCC	bw _{,y} <mm>	d _{,y} <cm>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	Vrd _{,y} <daN>	bw _{,z} <mm>	d _{,z} <cm>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Vrd _{,z} <daN>	Sic.
3.00	3.68	ø8/10	2	2/20	SLU	0.40	0.36	6082.29	2.50	31509.90	40619.10	31509.90	31509.90	0.40	0.36	1812.77	2.50	31509.90	40619.10	31509.90	5.181
4.28	4.73	ø8/10	2	2/20	SLU	0.40	0.36	4998.71	2.50	31509.90	42467.00	31509.90	31509.90	0.40	0.36	693.89	2.50	31509.90	42467.00	31509.90	6.304
4.73	5.52	ø8/10	2	2/20	SLU	0.40	0.36	4998.71	2.50	31509.90	42434.70	31509.90	31509.90	0.40	0.36	693.89	2.50	31509.90	42434.70	31509.90	6.304
5.52	5.97	ø8/10	2	2/20	SLU	0.40	0.36	4998.71	2.50	31509.90	42377.90	31509.90	31509.90	0.40	0.36	693.89	2.50	31509.90	42377.90	31509.90	6.304
5.97	7.00	ø8/10	2	2/20	SLU	0.40	0.36	4998.71	2.50	31509.90	42345.60	31509.90	31509.90	0.40	0.36	693.89	2.50	31509.90	42345.60	31509.90	6.304
7.60	8.07	ø8/10	2	2/19	SLU	0.40	0.36	3992.60	2.50	31509.90	39156.90	31509.90	31509.90	0.40	0.36	313.20	2.50	31509.90	39156.90	31509.90	7.892
7.60	8.07	ø8/10	2	2/20	SLU	0.40	0.36	4020.72	2.50	31509.90	38911.70	31509.90	31509.90	0.40	0.36	212.19	2.50	31509.90	38911.70	31509.90	7.837
8.07	9.93	ø8/10	2	2/19	SLU	0.40	0.36	3992.60	2.50	31509.90	39123.40	31509.90	31509.90	0.40	0.36	313.20	2.50	31509.90	39123.40	31509.90	7.892
8.07	9.93	ø8/10	2	2/20	SLU	0.40	0.36	4020.72	2.50	31509.90	38878.10	31509.90	31509.90	0.40	0.36	212.19	2.50	31509.90	38878.10	31509.90	7.837
9.93	10.40	ø8/10	2	2/19	SLU	0.40	0.36	3992.60	2.50	31509.90	38989.30	31509.90	31509.90	0.40	0.36	313.20	2.50	31509.90	38989.30	31509.90	7.892
9.93	10.40	ø8/10	2	2/20	SLU	0.40	0.36	4020.73	2.50	31509.90	38744.10	31509.90	31509.90	0.40	0.36	212.19	2.50	31509.90	38744.10	31509.90	7.837

Dettagli costruttivi per la duttilità

- α_e=0.31931 ω_{wd}=0.13975 μΦ_d=14.8237 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.16959
0.04462 >= -0.035 [7.4.29]
- α_e=0.31931 ω_{wd}=0.13975 μΦ_d=26.0497 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.16959
0.04462 >= -0.035 [7.4.29]

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F	Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
206N		ø8/10	Y+	E	2	9.42	9.42	0.40	0.31	0.52	6.03
			Z-	E	2	6.03	6.03	0.40	0.31	0.16	2.01
406N		ø8/10	Y+	E	2	9.42	12.57	0.40	0.31	0.52	6.03
			Z+	I	2	8.04	6.03	0.40	0.31	0.52	6.03
			Z-	I	2	8.04	6.03	0.40	0.31	0.52	6.03
-1846N		ø8/10	Y+	E	2	9.42	9.42	0.40	0.31	0.52	6.03
			Z+	I	2	6.03	6.03	0.40	0.31	0.52	6.03
			Z-	I	2	6.03	6.03	0.40	0.31	0.52	6.03

Pilastrata n. 13

Nodi: 413 -1304 -1384 -1464 -1544 -1628 -1717 -1802 513

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
6R		40.00	40.00	3.80	270.90	21.43	170.57	113.71	10.58	3255.00	3255.00	2830.43
6R		40.00	40.00	2.50	270.90	21.43	170.57	113.71	10.58	3255.00	3255.00	2830.43

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
7.60	9	SLV	1	6	0.00	-12840.10	1534.15	1534.15	3558.95	3558.95	-12840.10	2392.01	5644.36	81.56	15.73	1.582
7.60	9	SLV	1	6	0.00	-12840.10	1534.15	1534.15	3558.95	3558.95	-12840.10	2392.01	5644.36	81.56	15.73	1.582
8.01	9	SLV	1	6	41.00	-12676.10	1099.59	1099.59	2971.23	2971.23	-12676.10	2090.48	5653.46	82.97	16.84	1.903
8.01	9	SLV	2	6	0.00	-12676.10	1099.59	1099.59	2971.23	2971.23	-12676.10	2090.48	5653.46	82.97	16.84	1.903
8.42	9	SLV	2	6	41.00	-12512.10	672.96	672.96	2400.08	2400.08	-12512.10	1589.38	5675.09	85.08	19.01	2.363
8.42	9	SLV	3	6	0.00	-12512.10	672.96	672.96	2400.08	2400.08	-12512.10	1589.38	5675.09	85.08	19.01	2.363
8.83	9	SLV	3	6	41.00	-12348.10	253.98	253.98	1847.63	1847.63	-12348.10	681.00	5656.92	87.89	20.00	3.055
8.83	9	SLV	4	6	0.00	-12348.10	253.98	253.98	1847.63	1847.63	-12348.10	681.00	5656.92	87.89	20.00	3.055
9.24	9(e)	SLV	4	6	41.00	-12184.10	-79.26	-243.68	1316.58	1316.58	-12184.10	-988.44	5637.75	92.81	20.00	4.275
9.24	9(e)	SLV	5	6	-0.00	-12184.10	-79.26	-243.68	1316.58	1316.58	-12184.10	-988.44	5637.75	92.81	20.00	4.275
9.65	13	SLV	5	6	41.00	-11734.80	-850.68	-850.68	573.89	573.89	-11734.80	-5285.96	3677.94	163.12	11.94	6.275
9.65	13	SLV	6	6	-0.00	-11734.80	-850.68	-850.68	573.89	573.89	-11734.80	-5285.96	3677.94	163.12	11.94	6.275
10.15	13(e)	SLV	6	6	50.00	-11534.80	-1533.17	-1533.17	218.34	230.69	-11534.80	-5527.59	847.89	177.54	20.00	3.607
10.15	13(e)	SLV	7	6	-0.00	-11534.80	-1533.17	-1533.17	218.34	230.69	-11534.80	-5527.59	847.89	177.54	20.00	3.607
10.50	13(e)	SLV	7	6	35.00	-11394.80	-1982.74	-1982.74	65.94	227.90	-11394.80	-5514.95	585.69	178.59	20.00	2.779

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ _c <daN/cmq>	σ _t <daN/cmq>
7.60	24	SLE R	1	6	0.00	-13621.80	1684.38	1269.46	3.08	3.08	43.82	530.69
7.60	29	SLE Q	1	6	0.00	-13018.90	1475.64	1156.55	1.54	4.62	38.13	466.63
7.60	24	SLE R	1	6	0.00	-13621.80	1684.38	1269.46	3.08	3.08	43.82	530.69
7.60	29	SLE Q	1	6	0.00	-13018.90	1475.64	1156.55	1.54	4.62	38.13	466.63
8.01	24	SLE R	1	6	41.00	-13457.80	1447.93	922.69	1.54	4.62	33.36	415.28
8.01	29	SLE Q	1	6	41.00	-12854.90	1268.58	836.21	1.54	4.62	29.21	367.06
8.01	24	SLE R	2	6	0.00	-13457.80	1447.93	922.69	1.54	4.62	33.36	415.28
8.01	29	SLE Q	2	6	0.00	-12854.90	1268.58	836.21	1.54	4.62	29.21	367.06
8.42	24	SLE R	2	6	41.00	-13293.80	1211.48	575.93	1.54	4.62	24.73	317.18
8.42	29	SLE Q	2	6	41.00	-12690.90	1061.52	515.87	1.54	4.62	21.94	283.55
8.42	24	SLE R	3	6	0.00	-13293.80	1211.48	575.93	1.54	4.62	24.73	317.18
8.42	29	SLE Q	3	6	0.00	-12690.90	1061.52	515.87	1.54	4.62	21.94	283.55
8.83	24	SLE R	3	6	41.00	-13129.80	975.03	229.16	1.54	4.62	18.09	239.44
8.83	29	SLE Q	3	6	41.00	-12526.90	854.46	195.53	0.00	6.16	16.32	217.35
8.83	24	SLE R	4	6	0.00	-13129.80	975.03	229.16	1.54	4.62	18.09	239.44
8.83	29	SLE Q	4	6	0.00	-12526.90	854.46	195.53	0.00	6.16	16.32	217.35
9.24	23	SLE R	4	6	41.00	-14322.50	672.75	-163.39	0.00	6.16	15.53	211.20
9.24	24	SLE R	4	6	41.00	-12965.80	738.59	-117.61	0.00	6.16	14.90	201.20
9.24	29	SLE Q	4	6	41.00	-12362.90	647.40	-124.80	0.00	6.16	13.83	187.39
9.24	23	SLE R	5	6	-0.00	-14322.50	672.75	-163.39	0.00	6.16	15.53	211.20
9.24	24	SLE R	5	6	-0.00	-12965.80	738.59	-117.61	0.00	6.16	14.90	201.20
9.24	29	SLE Q	5	6	-0.00	-12362.90	647.40	-124.80	0.00	6.16	13.83	187.39
9.65	23	SLE R	5	6	41.00	-14158.50	457.88	-524.58	0.00	6.16	16.67	224.49
9.65	24	SLE R	5	6	41.00	-12801.80	502.14	-464.38	0.00	6.16	15.73	210.89
9.65	29	SLE Q	5	6	41.00	-12198.90	440.34	-445.14	0.00	6.16	14.69	197.35
9.65	23	SLE R	6	6	-0.00	-14158.50	457.88	-524.58	0.00	6.16	16.67	224.49
9.65	24	SLE R	6	6	-0.00	-12801.80	502.14	-464.38	0.00	6.16	15.73	210.89
9.65	29	SLE Q	6	6	-0.00	-12198.90	440.34	-445.14	0.00	6.16	14.69	197.35
10.15	23	SLE R	6	6	50.00	-13958.50	195.86	-965.05	0.00	6.16	18.11	241.24
10.15	24	SLE R	6	6	50.00	-12601.80	213.79	-887.26	1.54	4.62	16.83	223.56
10.15	29	SLE Q	6	6	50.00	-11998.90	187.83	-835.80	0.00	6.16	15.80	210.15
10.15	23	SLE R	7	6	-0.00	-13958.50	195.86	-965.05	0.00	6.16	18.11	241.24
10.15	24	SLE R	7	6	-0.00	-12601.80	213.79	-887.26	1.54	4.62	16.83	223.56
10.15	29	SLE Q	7	6	-0.00	-11998.90	187.83	-835.80	0.00	6.16	15.80	210.15
10.50	23	SLE R	7	6	35.00	-13818.50	12.44	-1273.38	3.08	3.08	19.45	256.21
10.50	24	SLE R	7	6	35.00	-12461.80	11.95	-1183.28	3.08	3.08	17.94	235.68
10.50	29	SLE Q	7	6	35.00	-11858.90	11.07	-1109.25	3.08	3.08	16.88	222.05

Stato limite d'esercizio - Verifiche a fessurazione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	C <mm>	S <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cmq>	ε _{sm}	Wk <mm>
7.60	29	SLE Q	1	6	0.00	-13018.90	1156.55	1475.64	34.00	0.00	0.50	14.00	196.42	1.54	70.60	349.95	0.10	0.03
7.60	28	SLE F	1	6	0.00	-13009.70	1176.32	1527.47	34.00	0.00	0.50	14.00	202.35	1.54	73.87	380.05	0.11	0.04
7.60	29	SLE Q	1	6	0.00	-13018.90	1156.55	1475.64	34.00	0.00	0.50	14.00	196.42	1.54	70.60	349.95	0.10	0.03
7.60	28	SLE F	1	6	0.00	-13009.70	1176.32	1527.47	34.00	0.00	0.50	14.00	202.35	1.54	73.87	380.05	0.11	0.04
8.01	29	SLE Q	1	6	41.00	-12854.90	836.21	1268.58	34.00	0.00	0.50	14.00	158.84	1.54	49.94	184.42	0.05	0.01
8.01	28	SLE F	1	6	41.00	-12845.70	852.38	1313.09	34.00	0.00	0.50	14.00	164.99	1.54	53.33	202.94	0.06	0.02
8.01	29	SLE Q	2	6	0.00	-12854.90	836.21	1268.58	34.00	0.00	0.50	14.00	158.84	1.54	49.94	184.42	0.05	0.01
8.01	28	SLE F	2	6	0.00	-12845.70	852.38	1313.09	34.00	0.00	0.50	14.00	164.99	1.54	53.33	202.94	0.06	0.02

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	d _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	Vrd _y <daN>	b _{w,z} <m>	d _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Vrd _z <daN>	Sic.
7.60	8.07	ø6/20	2	219	SLU	0.40	0.36	706.48	2.50	6410.30	27868.00	6410.30	0.40	0.36	1175.71	2.50	6410.30	27868.00	6410.30	5.452	
7.60	8.07	ø6/20	2	220	SLU	0.40	0.36	785.45	2.50	6410.30	27586.90	6410.30	0.40	0.36	1122.96	2.50	6410.30	27586.90	6410.30	5.708	
7.60	8.07	ø6/20	2	213	SLV	0.40	0.36	801.37	2.50	6410.30	26977.50	6410.30	0.40	0.36	1613.44	2.50	6410.30	26977.50	6410.30	3.973	

7.60	8.07	ø6/20	2	29	SLV	0.40	0.36	1441.41	2.50	6410.30	26938.10	6410.30	0.40	0.36	1064.41	2.50	6410.30	26938.10	6410.30	4.447
8.07	9.93	ø6/20	2	219	SLU	0.40	0.36	706.48	2.50	6410.30	27834.50	6410.30	0.40	0.36	1175.71	2.50	6410.30	27834.50	6410.30	5.452
8.07	9.93	ø6/20	2	220	SLU	0.40	0.36	785.45	2.50	6410.30	27553.40	6410.30	0.40	0.36	1122.96	2.50	6410.30	27553.40	6410.30	5.708
8.07	9.93	ø6/20	2	213	SLV	0.40	0.36	789.87	2.50	6410.30	26951.70	6410.30	0.40	0.36	1578.13	2.50	6410.30	26951.70	6410.30	4.062
8.07	9.93	ø6/20	2	29	SLV	0.40	0.36	1399.94	2.50	6410.30	26912.30	6410.30	0.40	0.36	1048.35	2.50	6410.30	26912.30	6410.30	4.579
9.93	10.50	ø6/20	2	219	SLU	0.40	0.36	706.48	2.50	6410.30	27700.40	6410.30	0.40	0.36	1175.71	2.50	6410.30	27700.40	6410.30	5.452
9.93	10.50	ø6/20	2	220	SLU	0.40	0.36	785.45	2.50	6410.30	27419.40	6410.30	0.40	0.36	1122.96	2.50	6410.30	27419.40	6410.30	5.708
9.93	10.50	ø6/20	2	213	SLV	0.40	0.36	727.07	2.50	6410.30	26848.60	6410.30	0.40	0.36	1367.07	2.50	6410.30	26848.60	6410.30	4.689
9.93	10.50	ø6/20	2	29	SLV	0.40	0.36	1165.51	2.50	6410.30	26809.20	6410.30	0.40	0.36	979.55	2.50	6410.30	26809.20	6410.30	5.500

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{ncR}	σ _{nt}	σ _{ntR}
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
513	13	SLV	0.00	0.00	0.00	0.00	4382.99	4382.99	2.74	56.86	2.74	10.12

Pilastrata n. 20

Nodi: 20 -338 220 -907 420 -1635 -1724 620

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf	Cl _s	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
18	R	40.00	40.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _r	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
1.50	20(e)	SLU	1	18	0.00	-115497.00	-767.12	-2309.95	-122.86	-2309.95	-361732.00	-14399.70	-14399.80	225.00	2.23	3.132
1.50	20(e)	SLU	1	18	0.00	-115497.00	-767.12	-2309.95	-122.86	-2309.95	-361732.00	-14399.70	-14399.80	225.00	2.23	3.132
3.00	20(e)	SLU	1	18	150.00	-114717.00	599.94	2294.35	59.41	2294.35	-361732.00	14397.90	14397.90	45.00	2.24	3.153
3.00	20(e)	SLU	2	18	0.00	-114717.00	599.94	2294.35	59.41	2294.35	-361732.00	14397.90	14397.90	45.00	2.24	3.153
3.00	20(e)	SLU	2	18	0.00	-114717.00	599.94	2294.35	59.41	2294.35	-361732.00	14397.90	14397.90	45.00	2.24	3.153
3.68	20(e)	SLU	2	18	68.00	-114364.00	1219.67	2287.28	142.03	2287.28	-361732.00	14397.00	14397.00	45.00	2.25	3.163
4.28	20(e)	SLU	3	18	0.00	-67632.50	-1770.68	-1770.68	-149.64	-1352.65	-361732.00	-15728.60	-12349.40	219.38	3.19	5.348
4.28	20(e)	SLU	3	18	0.00	-67632.50	-1770.68	-1770.68	-149.64	-1352.65	-361732.00	-15728.60	-12349.40	219.38	3.19	5.348
5.97	20(e)	SLU	3	18	169.00	-66753.70	485.05	1335.07	77.99	1335.07	-361732.00	14043.70	14043.70	45.00	3.19	5.419
5.97	20(e)	SLU	4	18	0.00	-66753.70	485.05	1335.07	77.99	1335.07	-361732.00	14043.70	14043.70	45.00	3.19	5.419
5.97	20(e)	SLU	4	18	0.00	-66753.70	485.05	1335.07	77.99	1335.07	-361732.00	14043.70	14043.70	45.00	3.19	5.419
7.00	20(e)	SLU	4	18	103.00	-66218.10	1859.85	1859.85	216.72	1324.36	-361732.00	16442.90	11456.30	36.56	3.26	5.463
7.60	19(e)	SLU	5	18	0.00	-25711.80	-353.00	-514.24	-193.48	-514.24	-361732.00	-12498.50	-12498.50	225.00	4.51	14.069
7.60	19(e)	SLU	5	18	0.00	-25711.80	-353.00	-514.24	-193.48	-514.24	-361732.00	-12498.50	-12498.50	225.00	4.51	14.069
9.65	19(e)	SLU	5	18	205.00	-24645.80	-544.85	-544.85	5.60	492.92	-361732.00	-13107.20	11773.10	137.81	4.56	14.677
9.65	19(e)	SLU	6	18	0.00	-24645.80	-544.85	-544.85	5.60	492.92	-361732.00	-13107.20	11773.10	137.81	4.56	14.677
10.15	19(e)	SLU	6	18	50.00	-24385.80	-591.64	-591.64	54.15	487.72	-361732.00	-13763.30	11079.10	140.62	4.59	14.834
10.15	19(e)	SLU	7	18	0.00	-24385.80	-591.64	-591.64	54.15	487.72	-361732.00	-13763.30	11079.10	140.62	4.59	14.834
10.40	19(e)	SLU	7	18	25.00	-24255.80	-615.04	-615.04	78.43	485.12	-361732.00	-13756.50	11072.70	140.62	4.59	14.913

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	Sez.	X	N	Mz	My	AfT	AfC	σ _c	σ _f
<m>					<cm>	<daN>	<daNm>	<daNm>	<cmq>	<cmq>	<daN/cmq>	<daN/cmq>
1.50	24	SLE	R	1	18	0.00	-85831.80	-91.20	-561.38	0.00	25.13	705.36
1.50	21	SLE	R	1	18	0.00	-80169.50	-84.88	-504.61	0.00	25.13	657.16
1.50	29	SLE	Q	1	18	0.00	-77544.60	-82.38	-487.67	0.00	25.13	635.63
1.50	24	SLE	R	1	18	0.00	-85831.80	-91.20	-561.38	0.00	25.13	705.36
1.50	21	SLE	R	1	18	0.00	-80169.50	-84.88	-504.61	0.00	25.13	657.16
1.50	29	SLE	Q	1	18	0.00	-77544.60	-82.38	-487.67	0.00	25.13	635.63
3.00	24	SLE	R	1	18	150.00	-85231.80	44.05	439.24	0.00	25.13	686.76
3.00	21	SLE	R	1	18	150.00	-79569.50	40.90	395.14	0.00	25.13	639.88
3.00	29	SLE	Q	1	18	150.00	-76944.60	39.68	382.17	0.00	25.13	618.79
3.00	24	SLE	R	2	18	0.00	-85231.80	44.05	439.24	0.00	25.13	686.76
3.00	21	SLE	R	2	18	0.00	-79569.50	40.90	395.14	0.00	25.13	639.88
3.00	29	SLE	Q	2	18	0.00	-76944.60	39.68	382.17	0.00	25.13	618.79
3.00	24	SLE	R	2	18	0.00	-85231.80	44.05	439.24	0.00	25.13	686.76
3.00	21	SLE	R	2	18	0.00	-79569.50	40.90	395.14	0.00	25.13	639.88
3.00	29	SLE	Q	2	18	0.00	-76944.60	39.68	382.17	0.00	25.13	618.79
3.68	24	SLE	R	2	18	68.00	-84959.80	105.37	892.85	0.00	25.13	727.40
3.68	21	SLE	R	2	18	68.00	-79297.50	97.92	803.02	0.00	25.13	676.37
3.68	29	SLE	Q	2	18	68.00	-76672.60	95.01	776.49	0.00	25.13	654.02
4.28	24	SLE	R	3	18	0.00	-50551.80	-109.73	-1297.14	0.00	25.13	500.23
4.28	21	SLE	R	3	18	0.00	-47891.80	-99.13	-1172.68	0.00	25.13	468.85
4.28	29	SLE	Q	3	18	0.00	-46263.60	-95.99	-1125.73	0.00	25.13	452.34
4.28	24	SLE	R	3	18	0.00	-50551.80	-109.73	-1297.14	0.00	25.13	500.23
4.28	21	SLE	R	3	18	0.00	-47891.80	-99.13	-1172.68	0.00	25.13	468.85
4.28	29	SLE	Q	3	18	0.00	-46263.60	-95.99	-1125.73	0.00	25.13	452.34
5.97	24	SLE	R	3	18	169.00	-49875.80	57.06	354.84	0.00	25.13	412.58
5.97	21	SLE	R	3	18	169.00	-47215.80	51.27	320.21	0.00	25.13	389.05
5.97	29	SLE	Q	3	18	169.00	-45587.60	49.60	305.66	0.00	25.13	375.35
5.97	24	SLE	R	4	18	0.00	-49875.80	57.06	354.84	0.00	25.13	412.58
5.97	21	SLE	R	4	18	0.00	-47215.80	51.27	320.21	0.00	25.13	389.05
5.97	29	SLE	Q	4	18	0.00	-45587.60	49.60	305.66	0.00	25.13	375.35
5.97	24	SLE	R	4	18	0.00	-49875.80	57.06	354.84	0.00	25.13	412.58

5.97	21	SLE R	4	18	0.00	-47215.80	51.27	320.21	0.00	25.13	26.52	389.05
5.97	29	SLE Q	4	18	0.00	-45587.60	49.60	305.66	0.00	25.13	25.58	375.35
7.00	24	SLE R	4	18	103.00	-49463.80	158.72	1361.66	0.00	25.13	35.80	501.39
7.00	21	SLE R	4	18	103.00	-46803.80	142.93	1230.08	0.00	25.13	33.41	468.99
7.00	29	SLE Q	4	18	103.00	-45175.60	138.33	1178.05	0.00	25.13	32.18	451.94
7.60	23	SLE R	5	18	0.00	-19431.30	-144.18	-255.82	0.00	25.13	12.66	180.61
7.60	24	SLE R	5	18	0.00	-17642.10	-151.69	-343.47	0.00	25.13	12.43	174.92
7.60	29	SLE Q	5	18	0.00	-16987.20	-135.66	-276.01	0.00	25.13	11.51	163.03
7.60	23	SLE R	5	18	0.00	-19431.30	-144.18	-255.82	0.00	25.13	12.66	180.61
7.60	24	SLE R	5	18	0.00	-17642.10	-151.69	-343.47	0.00	25.13	12.43	174.92
7.60	29	SLE Q	5	18	0.00	-16987.20	-135.66	-276.01	0.00	25.13	11.51	163.03
9.65	23	SLE R	5	18	205.00	-18611.30	4.57	-405.57	0.00	25.13	12.32	175.23
9.65	24	SLE R	5	18	205.00	-16822.10	-0.58	-400.54	0.00	25.13	11.35	160.90
9.65	29	SLE Q	5	18	205.00	-16167.20	1.39	-358.61	0.00	25.13	10.73	152.52
9.65	23	SLE R	6	18	0.00	-18611.30	4.57	-405.57	0.00	25.13	12.32	175.23
9.65	24	SLE R	6	18	0.00	-16822.10	-0.58	-400.54	0.00	25.13	11.35	160.90
9.65	29	SLE Q	6	18	0.00	-16167.20	1.39	-358.61	0.00	25.13	10.73	152.52
10.15	23	SLE R	6	18	50.00	-18411.30	40.86	-442.10	0.00	25.13	12.74	179.75
10.15	24	SLE R	6	18	50.00	-16622.10	36.27	-414.46	0.00	25.13	11.60	163.50
10.15	29	SLE Q	6	18	50.00	-15967.20	34.81	-378.75	0.00	25.13	11.01	155.45
10.15	23	SLE R	7	18	0.00	-18411.30	40.86	-442.10	0.00	25.13	12.74	179.75
10.15	24	SLE R	7	18	0.00	-16622.10	36.27	-414.46	0.00	25.13	11.60	163.50
10.15	29	SLE Q	7	18	0.00	-15967.20	34.81	-378.75	0.00	25.13	11.01	155.45
10.40	23	SLE R	7	18	25.00	-18311.30	59.00	-460.36	0.00	25.13	12.94	182.01
10.40	24	SLE R	7	18	25.00	-16522.10	54.70	-421.42	0.00	25.13	11.73	164.84
10.40	29	SLE Q	7	18	25.00	-15867.20	51.52	-388.83	0.00	25.13	11.15	156.91

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{r,y} <m>	d _{r,y} <m>	Vsdu _{r,y} <daN>	ctgθ _{r,y}	VRsd _{r,y} <daN>	VRcd _{r,y} <daN>	Vrd _{r,y} <daN>	bw _{r,z} <m>	d _{r,z} <m>	Vsdu _{r,z} <daN>	ctgθ _{r,z}	VRsd _{r,z} <daN>	VRcd _{r,z} <daN>	Vrd _{r,z} <daN>	Sic.
1.50	1.95	ø8/10	2	2	20	SLU	0.40	0.36	121.51	2.50	31509.90	45468.30	31509.90	0.40	0.36	911.37	2.50	31509.90	45468.30	31509.90	34.574
1.95	2.55	ø8/15	2	2	20	SLU	0.40	0.36	121.51	2.50	21006.60	45468.30	21006.60	0.40	0.36	911.37	2.50	21006.60	45468.30	21006.60	23.049
2.55	3.00	ø8/10	2	2	20	SLU	0.40	0.36	121.51	2.50	31509.90	45468.30	31509.90	0.40	0.36	911.37	2.50	31509.90	45468.30	31509.90	34.574
3.00	3.68	ø8/15	2	2	20	SLU	0.40	0.36	121.51	2.50	21006.60	45468.30	21006.60	0.40	0.36	911.37	2.50	21006.60	45468.30	21006.60	23.049
4.28	4.73	ø8/10	2	2	20	SLU	0.40	0.36	134.69	2.50	31509.90	45468.30	31509.90	0.40	0.36	1334.75	2.50	31509.90	45468.30	31509.90	23.607
4.73	5.52	ø8/15	2	2	20	SLU	0.40	0.36	134.69	2.50	21006.60	45468.30	21006.60	0.40	0.36	1334.75	2.50	21006.60	45468.30	21006.60	15.738
5.52	5.97	ø8/10	2	2	20	SLU	0.40	0.36	134.69	2.50	31509.90	45468.30	31509.90	0.40	0.36	1334.75	2.50	31509.90	45468.30	31509.90	23.607
5.97	7.00	ø8/15	2	2	20	SLU	0.40	0.36	134.69	2.50	21006.60	45468.30	21006.60	0.40	0.36	1334.75	2.50	21006.60	45468.30	21006.60	15.738
7.00	8.07	ø8/10	2	2	19	SLU	0.40	0.36	97.11	2.50	31509.90	39925.50	31509.90	0.40	0.36	93.59	2.50	31509.90	39925.50	31509.90	>100
7.60	8.07	ø8/10	2	2	20	SLU	0.40	0.36	98.83	2.50	31509.90	39554.90	31509.90	0.40	0.36	25.77	2.50	31509.90	39554.90	31509.90	>100
8.07	9.93	ø8/15	2	2	19	SLU	0.40	0.36	97.11	2.50	21006.60	39892.00	21006.60	0.40	0.36	93.59	2.50	21006.60	39892.00	21006.60	>100
8.07	9.93	ø8/15	2	2	20	SLU	0.40	0.36	98.83	2.50	21006.60	39521.40	21006.60	0.40	0.36	25.77	2.50	21006.60	39521.40	21006.60	>100
9.93	10.40	ø8/10	2	2	19	SLU	0.40	0.36	97.11	2.50	31509.90	39757.90	31509.90	0.40	0.36	93.59	2.50	31509.90	39757.90	31509.90	>100
9.93	10.40	ø8/10	2	2	20	SLU	0.40	0.36	98.83	2.50	31509.90	39387.30	31509.90	0.40	0.36	25.77	2.50	31509.90	39387.30	31509.90	>100

Dettagli costruttivi per la duttilità

- α_e=0.31931 ω_{Wd}=0.13975 μΦ_d=14.8237 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.16959
0.04462 >= -0.035 [7.4.29]

- α_e=0.31931 ω_{Wd}=0.13975 μΦ_d=26.0497 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.16959
0.04462 >= -0.035 [7.4.29]

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F	Mod.	Br.	As1 <cmq>	As2 <cmq>	Bj <m>	Hjc <m>	Hjw <m>	Ash <cmq>
220N		ø8/ 9	Y+	I	2	12.57	12.57	0.40	0.31	0.52	7.04
			Y-	I	2	12.57	12.57	0.40	0.31	0.52	7.04
420N		ø8/ 9	Y+	I	2	12.57	12.57	0.40	0.31	0.52	7.04
			Y-	I	2	12.57	12.57	0.40	0.31	0.52	7.04
620N		ø8/ 9	Y+	I	2	9.42	9.42	0.40	0.31	0.52	7.04
			Y-	I	2	9.42	9.42	0.40	0.31	0.52	7.04

Pilastrata n. 30

Nodi: 430 -1317 -1397 -1477 -1557 -1642 -1731 -1815 530

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
6R		40.00	40.00	3.80	270.90	21.43	170.57	113.71	10.58	3255.00	3255.00	2830.43
6R		40.00	40.00	2.50	270.90	21.43	170.57	113.71	10.58	3255.00	3255.00	2830.43

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
7.60	1	SLV	1	6	0.00	-12866.70	-1543.63	-1543.63	3549.67	3549.67	-12866.70	-2391.64	5648.71	98.44	15.72	1.585
7.60	1	SLV	1	6	0.00	-12866.70	-1543.63	-1543.63	3549.67	3549.67	-12866.70	-2391.64	5648.71	98.44	15.72	1.585
8.01	1	SLV	1	6	41.00	-12702.70	-1108.94	-1108.94	2961.55	2961.55	-12702.70	-2090.04	5657.67	97.03	16.83	1.907
8.01	1	SLV	2	6	0.00	-12702.70	-1108.94	-1108.94	2961.55	2961.55	-12702.70	-2090.04	5657.67	97.03	16.83	1.907
8.42	1	SLV	2	6	41.00	-12538.70	-679.40	-679.40	2390.67	2390.67	-12538.70	-1590.04	5666.67	94.92	19.03	2.368

8.42	1	SLV	3	6	0.00	-12538.70	-679.40	-679.40	2390.67	2390.67	-12538.70	-1590.04	5666.67	94.92	19.03	2.368
8.83	1(e)	SLV	3	6	41.00	-12374.70	-140.71	-247.49	1839.28	1839.28	-12374.70	-681.02	5661.14	92.11	20.00	3.072
8.83	1(e)	SLV	4	6	0.00	-12374.70	-140.71	-247.49	1839.28	1839.28	-12374.70	-681.02	5661.14	92.11	20.00	3.072
9.24	1(e)	SLV	4	6	41.00	-12210.70	172.77	244.21	1310.04	1310.04	-12210.70	988.48	5642.18	87.19	20.00	4.298
9.24	1(e)	SLV	5	6	-0.00	-12210.70	172.77	244.21	1310.04	1310.04	-12210.70	988.48	5642.18	87.19	20.00	4.298
9.65	5	SLV	5	6	41.00	-11777.80	847.59	847.59	567.90	567.90	-11777.80	5292.72	3677.57	16.88	11.92	6.317
9.65	5	SLV	6	6	-0.00	-11777.80	847.59	847.59	567.90	567.90	-11777.80	5292.72	3677.57	16.88	11.92	6.317
10.15	5(e)	SLV	6	6	50.00	-11577.80	1527.31	1527.31	219.01	231.56	-11577.80	5534.76	847.95	2.46	20.00	3.625
10.15	5(e)	SLV	7	6	-0.00	-11577.80	1527.31	1527.31	219.01	231.56	-11577.80	5534.76	847.95	2.46	20.00	3.625
10.50	5(e)	SLV	7	6	35.00	-11437.80	1974.95	1974.95	71.05	228.76	-11437.80	5522.03	585.72	1.41	20.00	2.793

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cmq>	AfC <cmq>	σ _c <daN/cmq>	σ _t <daN/cmq>
7.60	24	SLE R	1	6	0.00	-13676.40	1665.22	-1249.51	3.08	3.08	43.00	522.00
7.60	29	SLE Q	1	6	0.00	-13068.90	1458.67	-1138.01	1.54	4.62	37.42	459.13
7.60	24	SLE R	1	6	0.00	-13676.40	1665.22	-1249.51	3.08	3.08	43.00	522.00
7.60	29	SLE Q	1	6	0.00	-13068.90	1458.67	-1138.01	1.54	4.62	37.42	459.13
8.01	24	SLE R	1	6	41.00	-13512.40	1431.76	-907.37	1.54	4.62	32.81	409.29
8.01	29	SLE Q	1	6	41.00	-12904.90	1254.26	-821.99	1.54	4.62	28.75	362.04
8.01	24	SLE R	2	6	0.00	-13512.40	1431.76	-907.37	1.54	4.62	32.81	409.29
8.01	29	SLE Q	2	6	0.00	-12904.90	1254.26	-821.99	1.54	4.62	28.75	362.04
8.42	24	SLE R	2	6	41.00	-13348.40	1198.30	-565.22	1.54	4.62	24.42	313.76
8.42	29	SLE Q	2	6	41.00	-12740.90	1049.86	-505.96	1.54	4.62	21.68	280.75
8.42	24	SLE R	3	6	0.00	-13348.40	1198.30	-565.22	1.54	4.62	24.42	313.76
8.42	29	SLE Q	3	6	0.00	-12740.90	1049.86	-505.96	1.54	4.62	21.68	280.75
8.83	24	SLE R	3	6	41.00	-13184.40	964.84	-223.07	1.54	4.62	17.96	238.00
8.83	29	SLE Q	3	6	41.00	-12576.90	845.45	-189.94	0.00	6.16	16.22	216.19
8.83	24	SLE R	4	6	0.00	-13184.40	964.84	-223.07	1.54	4.62	17.96	238.00
8.83	29	SLE Q	4	6	0.00	-12576.90	845.45	-189.94	0.00	6.16	16.22	216.19
9.24	23	SLE R	4	6	41.00	-14377.10	666.23	164.68	0.00	6.16	15.52	211.16
9.24	24	SLE R	4	6	41.00	-13020.40	731.38	119.08	0.00	6.16	14.88	201.10
9.24	29	SLE Q	4	6	41.00	-12412.90	641.04	126.08	0.00	6.16	13.82	187.32
9.24	23	SLE R	5	6	-0.00	-14377.10	666.23	164.68	0.00	6.16	15.52	211.16
9.24	24	SLE R	5	6	-0.00	-13020.40	731.38	119.08	0.00	6.16	14.88	201.10
9.24	29	SLE Q	5	6	-0.00	-12412.90	641.04	126.08	0.00	6.16	13.82	187.32
9.65	23	SLE R	5	6	41.00	-14213.10	454.18	521.07	0.00	6.16	16.64	224.25
9.65	24	SLE R	5	6	41.00	-12856.40	497.93	461.23	0.00	6.16	15.70	210.62
9.65	29	SLE Q	5	6	41.00	-12248.90	436.64	442.11	0.00	6.16	14.66	197.12
9.65	23	SLE R	6	6	-0.00	-14213.10	454.18	521.07	0.00	6.16	16.64	224.25
9.65	24	SLE R	6	6	-0.00	-12856.40	497.93	461.23	0.00	6.16	15.70	210.62
9.65	29	SLE Q	6	6	-0.00	-12248.90	436.64	442.11	0.00	6.16	14.66	197.12
10.15	23	SLE R	6	6	50.00	-14013.10	195.58	955.68	0.00	6.16	18.05	240.65
10.15	24	SLE R	6	6	50.00	-12656.40	213.22	878.48	0.00	6.16	16.77	222.96
10.15	29	SLE Q	6	6	50.00	-12048.90	187.36	827.50	0.00	6.16	15.74	209.60
10.15	23	SLE R	7	6	-0.00	-14013.10	195.58	955.68	0.00	6.16	18.05	240.65
10.15	24	SLE R	7	6	-0.00	-12656.40	213.22	878.48	0.00	6.16	16.77	222.96
10.15	29	SLE Q	7	6	-0.00	-12048.90	187.36	827.50	0.00	6.16	15.74	209.60
10.50	23	SLE R	7	6	35.00	-13873.10	14.56	1259.91	3.08	3.08	19.34	255.12
10.50	24	SLE R	7	6	35.00	-12516.40	13.93	1170.56	3.08	3.08	17.83	234.60
10.50	29	SLE Q	7	6	35.00	-11908.90	12.87	1097.28	3.08	3.08	16.78	221.04

Stato limite d'esercizio - Verifiche a fessurazione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	Mz <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cmq>	ε _{sm}	Wk <mm>
7.60	29	SLE Q	1	6	0.00	-13068.90	-1138.01	1458.67	34.00	0.00	0.50	14.00	193.12	1.54	68.79	333.88	0.10	0.03
7.60	28	SLE F	1	6	0.00	-13060.60	-1157.57	1509.97	34.00	0.00	0.50	14.00	199.08	1.54	72.07	362.80	0.11	0.04
7.60	29	SLE Q	1	6	0.00	-13068.90	-1138.01	1458.67	34.00	0.00	0.50	14.00	193.12	1.54	68.79	333.88	0.10	0.03
7.60	28	SLE F	1	6	0.00	-13060.60	-1157.57	1509.97	34.00	0.00	0.50	14.00	199.08	1.54	72.07	362.80	0.11	0.04
8.01	29	SLE Q	1	6	41.00	-12904.90	-821.99	1254.26	34.00	0.00	0.50	14.00	155.59	1.54	48.16	174.97	0.05	0.01
8.01	28	SLE F	1	6	41.00	-12896.60	-837.98	1298.33	34.00	0.00	0.50	14.00	161.67	1.54	51.50	192.72	0.06	0.02
8.01	29	SLE Q	2	6	0.00	-12904.90	-821.99	1254.26	34.00	0.00	0.50	14.00	155.59	1.54	48.16	174.97	0.05	0.01
8.01	28	SLE F	2	6	0.00	-12896.60	-837.98	1298.33	34.00	0.00	0.50	14.00	161.67	1.54	51.50	192.72	0.06	0.02

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{,y}	d _{,y}	Vsdu _{,y}	ctgθ _{,y}	VRsd _{,y}	VRcd _{,y}	Vrd _{,y}	bw _{,z}	d _{,z}	Vsdu _{,z}	ctgθ _{,z}	VRsd _{,z}	VRcd _{,z}	Vrd _{,z}	Sic.
<m>	<m>						<mm>	<mm>	<daN>		<daN>	<daN>	<daN>	<mm>	<mm>	<daN>		<daN>	<daN>	<daN>	
7.60	8.07	ø6/20	2	219	SLU	0.40	0.36	697.26	2.50	6410.30	27878.10	6410.30	0.40	0.36	1160.11	2.50	6410.30	27878.10	6410.30	5.526	
7.60	8.07	ø6/20	2	220	SLU	0.40	0.36	775.59	2.50	6410.30	27597.00	6410.30	0.40	0.36	1108.03	2.50	6410.30	27597.00	6410.30	5.785	
7.60	8.07	ø6/20	2	25	SLV	0.40	0.36	815.42	2.50	6410.30	26985.40	6410.30	0.40	0.36	1605.92	2.50	6410.30	26985.40	6410.30	3.992	
7.60	8.07	ø6/20	2	21	SLV	0.40	0.36	1442.55	2.50	6410.30	26948.20	6410.30	0.40	0.36	1064.24	2.50	6410.30	26948.20	6410.30	4.444	
8.07	9.93	ø6/20	2	219	SLU	0.40	0.36	697.26	2.50	6410.30	27844.60	6410.30	0.40	0.36	1160.11	2.50	6410.30	27844.60	6410.30	5.526	
8.07	9.93	ø6/20	2	220	SLU	0.40	0.36	775.59	2.50	6410.30	27563.50	6410.30	0.40	0.36	1108.03	2.50	6410.30	27563.50	6410.30	5.785	
8.07	9.93	ø6/20	2	25	SLV	0.40	0.36	799.72	2.50	6410.30	26959.60	6410.30	0.40	0.36	1571.33	2.50	6410.30	26959.60	6410.30	4.080	
8.07	9.93	ø6/20	2	21	SLV	0.40	0.36	1399.85	2.50	6410.30	26922.50	6410.30	0.40	0.36	1050.58	2.50	6410.30	26922.50	6410.30	4.579	

9.93	10.50	ø6/20	2	2	19	SLV	0.40	0.36	697.26	2.50	6410.30	27710.50	6410.30	0.40	0.36	1160.11	2.50	6410.30	27710.50	6410.30	5.526
9.93	10.50	ø6/20	2	2	20	SLV	0.40	0.36	775.59	2.50	6410.30	27429.50	6410.30	0.40	0.36	1108.03	2.50	6410.30	27429.50	6410.30	5.785
9.93	10.50	ø6/20	2	2	5	SLV	0.40	0.36	717.45	2.50	6410.30	26856.50	6410.30	0.40	0.36	1361.04	2.50	6410.30	26856.50	6410.30	4.710
9.93	10.50	ø6/20	2	2	1	SLV	0.40	0.36	1159.90	2.50	6410.30	26819.30	6410.30	0.40	0.36	984.52	2.50	6410.30	26819.30	6410.30	5.527

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{ncR}	σ _{nt}	σ _{ntR}
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
530	5	SLV	0.00	0.00	0.00	0.00	-4363.14	4363.14	2.73	56.86	2.73	10.12

Pilastrata n. 42

Nodi: 42 -372 -2187 -2186 242 -941 442 -1669 -1758 -1915

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
18R		40.00	40.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
18R		40.00	40.00	2.50	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _r	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
1.50	17(e)	SLU	1	18	0.00	-390.00	0.00	7.80	0.00	7.80	-361732.00	11184.10	11184.30	45.00	5.63	>100
1.50	17(e)	SLU	1	18	0.00	-390.00	0.00	7.80	0.00	7.80	-361732.00	11184.10	11184.30	45.00	5.63	>100
3.00	20(e)	SLU	2	18	0.00	-27252.90	537.80	545.06	2112.76	2112.76	-27252.90	4820.01	18075.90	74.53	5.71	8.574
3.00	20(e)	SLU	2	18	0.00	-27252.90	537.80	545.06	2112.76	2112.76	-27252.90	4820.01	18075.90	74.53	5.71	8.574
3.43	20(e)	SLU	2	18	42.70	-27030.90	-127.71	-540.62	-52.39	-540.62	-361732.00	-12564.00	-12564.10	225.00	4.46	13.382
3.43	20(e)	SLU	3	18	0.00	-32684.40	-89.48	-653.69	-412.02	-653.69	-361732.00	-12840.50	-12840.50	225.00	4.25	11.067
3.68	20(e)	SLU	3	18	25.30	-32552.90	-319.33	-651.06	-1896.66	-1896.66	-32552.90	-6131.40	-18012.00	250.31	5.03	9.488
4.28	20(e)	SLU	5	18	0.00	-45310.60	-475.78	906.21	7472.14	7472.14	-45310.60	2724.63	20745.30	81.56	5.31	2.780
4.28	20(e)	SLU	5	18	0.00	-45310.60	-475.78	906.21	7472.14	7472.14	-45310.60	2724.63	20745.30	81.56	5.31	2.780
5.97	20(e)	SLU	5	18	169.00	-44431.80	571.55	888.64	-1972.37	-1972.37	-361732.00	8102.74	-18056.10	296.72	4.07	8.141
5.97	20(e)	SLU	6	18	0.00	-44431.80	571.55	888.64	-1972.37	-1972.37	-361732.00	8102.74	-18056.10	296.72	4.07	8.141
5.97	20(e)	SLU	6	18	0.00	-44431.80	571.55	888.64	-1972.37	-1972.37	-361732.00	8102.74	-18056.10	296.72	4.07	8.141
7.00	20	SLU	6	18	103.00	-43896.20	1209.87	1209.87	-7728.50	-7728.50	-43896.20	3193.66	-20435.60	279.84	5.27	2.644
7.60	20(e)	SLU	7	18	0.00	-19050.70	66.56	381.01	7066.11	7066.11	-19050.70	980.64	18594.40	87.19	9.20	2.631
7.60	20(e)	SLU	7	18	0.00	-19050.70	66.56	381.01	7066.11	7066.11	-19050.70	980.64	18594.40	87.19	9.20	2.631
9.65	19	SLU	7	18	205.00	-19860.00	-1052.61	-1052.61	-2146.12	-2146.12	-19860.00	-7526.12	-15955.70	244.69	5.30	7.380
9.65	19	SLU	8	18	0.00	-19860.00	-1052.61	-1052.61	-2146.12	-2146.12	-19860.00	-7526.12	-15955.70	244.69	5.30	7.380
10.15	19	SLU	8	18	50.00	-19600.00	-1370.70	-1370.70	-4318.95	-4318.95	-19600.00	-5186.16	-17091.50	253.12	6.04	3.942
10.15	19	SLU	9	18	0.00	-19600.00	-1370.70	-1370.70	-4318.95	-4318.95	-19600.00	-5186.16	-17091.50	253.12	6.04	3.942
10.40	19	SLU	9	18	25.00	-19470.00	-1529.74	-1529.74	-5405.36	-5405.36	-19470.00	-4734.52	-17285.20	254.53	6.20	3.190

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	Sez.	X	N	Mz	My	AfT	AfC	σ _c	σ _f
<m>					<cm>	<daN>	<daNm>	<daNm>	<cmq>	<cmq>	<daN/cmq>	<daN/cmq>
1.50	21	SLE	R	1	18	0.00	-300.00	0.00	0.00	25.13	0.15	2.28
1.50	29	SLE	Q	1	18	0.00	-300.00	0.00	0.00	25.13	0.15	2.28
1.50	21	SLE	R	1	18	0.00	-300.00	0.00	0.00	25.13	0.15	2.28
1.50	29	SLE	Q	1	18	0.00	-300.00	0.00	0.00	25.13	0.15	2.28
3.00	21	SLE	R	1	18	150.00	300.00	0.00	0.00	25.13	0.00	11.94
3.00	29	SLE	Q	1	18	150.00	300.00	0.00	0.00	25.13	0.00	11.94
3.00	24	SLE	R	2	18	0.00	-20374.50	1560.11	401.52	3.14	21.99	319.56
3.00	29	SLE	Q	2	18	0.00	-18615.50	1390.07	366.58	3.14	21.99	288.62
3.00	24	SLE	R	2	18	0.00	-20374.50	1560.11	401.52	3.14	21.99	319.56
3.00	29	SLE	Q	2	18	0.00	-18615.50	1390.07	366.58	3.14	21.99	288.62
3.43	24	SLE	R	2	18	42.70	-20203.70	-39.13	-95.58	0.00	25.13	164.46
3.43	21	SLE	R	2	18	42.70	-19239.60	-36.95	-91.49	0.00	25.13	156.63
3.43	29	SLE	Q	2	18	42.70	-18444.70	-35.92	-87.33	0.00	25.13	150.17
3.43	24	SLE	R	3	18	0.00	-24427.80	-304.75	-66.98	0.00	25.13	216.17
3.43	21	SLE	R	3	18	0.00	-23253.00	-281.11	-64.36	0.00	25.13	205.08
3.43	29	SLE	Q	3	18	0.00	-22302.10	-272.75	-60.99	0.00	25.13	196.89
3.68	24	SLE	R	3	18	25.30	-24326.60	-1401.36	-239.10	0.00	25.13	320.63
3.68	29	SLE	Q	3	18	25.30	-22200.90	-1250.58	-219.38	0.00	25.13	290.36
4.28	24	SLE	R	5	18	0.00	-33988.40	5503.83	-345.53	9.42	15.71	819.83
4.28	29	SLE	Q	5	18	0.00	-31234.60	4872.01	-289.19	9.42	15.71	728.71
4.28	24	SLE	R	5	18	0.00	-33988.40	5503.83	-345.53	9.42	15.71	819.83
4.28	29	SLE	Q	5	18	0.00	-31234.60	4872.01	-289.19	9.42	15.71	728.71
5.97	24	SLE	R	5	18	169.00	-33312.40	-1446.89	420.84	0.00	25.13	407.65
5.97	29	SLE	Q	5	18	169.00	-30558.60	-1266.96	368.81	0.00	25.13	367.52
5.97	24	SLE	R	6	18	0.00	-33312.40	-1446.89	420.84	0.00	25.13	407.65
5.97	29	SLE	Q	6	18	0.00	-30558.60	-1266.96	368.81	0.00	25.13	367.52
5.97	24	SLE	R	6	18	0.00	-33312.40	-1446.89	420.84	0.00	25.13	407.65
5.97	29	SLE	Q	6	18	0.00	-30558.60	-1266.96	368.81	0.00	25.13	367.52
7.00	24	SLE	R	6	18	103.00	-32900.40	-5683.13	887.92	9.42	15.71	902.26
7.00	29	SLE	Q	6	18	103.00	-30146.60	-5008.46	769.83	9.42	15.71	797.85
7.60	24	SLE	R	7	18	0.00	-14521.70	5258.37	73.41	15.71	9.42	1036.44
7.60	29	SLE	Q	7	18	0.00	-13669.10	4773.72	106.58	15.71	9.42	929.09
7.60	24	SLE	R	7	18	0.00	-14521.70	5258.37	73.41	15.71	9.42	1036.44
7.60	29	SLE	Q	7	18	0.00	-13669.10	4773.72	106.58	15.71	9.42	929.09
9.65	23	SLE	R	7	18	205.00	-14951.90	-1623.50	-788.55	6.28	18.85	338.01

9.65	29	SLE Q	7	18	205.00	-12849.10	-1435.60	-671.89	6.28	18.85		23.61	294.77
9.65	23	SLE R	8	18	0.00	-14951.90	-1623.50	-788.55	6.28	18.85		27.02	338.01
9.65	29	SLE Q	8	18	0.00	-12849.10	-1435.60	-671.89	6.28	18.85		23.61	294.77
10.15	23	SLE R	8	18	50.00	-14751.90	-3252.63	-1028.86	12.57	12.57		48.85	590.33
10.15	29	SLE Q	8	18	50.00	-12649.10	-2950.07	-861.76	12.57	12.57		43.54	548.75
10.15	23	SLE R	9	18	0.00	-14751.90	-3252.63	-1028.86	12.57	12.57		48.85	590.33
10.15	29	SLE Q	9	18	0.00	-12649.10	-2950.07	-861.76	12.57	12.57		43.54	548.75
10.40	23	SLE R	9	18	25.00	-14651.90	-4067.20	-1149.02	12.57	12.57		59.74	849.92
10.40	29	SLE Q	9	18	25.00	-12549.10	-3707.31	-956.70	12.57	12.57		53.40	789.21

Stato limite d'esercizio - Verifiche a fessurazione

Xg	CC	TCC	El	Sez.	X	N	My	Mz	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
<cm>					<cm>	<daN>	<daNm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cm>		<mm>
3.00	29	SLE Q	1	18	150.00	300.00	0.00	0.00	34.00	220.62	1.00	20.00	271.08	25.13	1276.00	11.94	0.00	0.00
3.00	25	SLE F	1	18	150.00	300.00	0.00	0.00	34.00	220.62	1.00	20.00	271.08	25.13	1276.00	11.94	0.00	0.00
4.28	29	SLE Q	5	18	0.00	-31234.60	-289.19	4872.01	34.00	156.00	0.50	20.00	124.12	6.28	176.30	430.01	0.13	0.03
4.28	25	SLE F	5	18	0.00	-31311.00	-289.90	4872.69	34.00	156.00	0.50	20.00	179.88	3.14	175.74	428.34	0.12	0.04
4.28	29	SLE Q	5	18	0.00	-31234.60	-289.19	4872.01	34.00	156.00	0.50	20.00	124.12	6.28	176.30	430.01	0.13	0.03
4.28	25	SLE F	5	18	0.00	-31311.00	-289.90	4872.69	34.00	156.00	0.50	20.00	179.88	3.14	175.74	428.34	0.12	0.04
7.00	29	SLE Q	6	18	103.00	-30146.60	769.83	-5008.46	34.00	156.00	0.50	20.00	155.82	3.14	137.95	555.32	0.16	0.04
7.00	28	SLE F	6	18	103.00	-30625.70	796.47	-5179.70	34.00	156.00	0.50	20.00	158.10	3.14	141.53	589.61	0.17	0.05
7.60	29	SLE Q	7	18	0.00	-13669.10	106.58	4773.72	34.00	156.00	0.50	20.00	131.74	9.42	300.38	929.09	0.27	0.06
7.60	28	SLE F	7	18	0.00	-13670.80	88.05	4884.80	34.00	156.00	0.50	20.00	132.54	9.42	304.12	959.16	0.28	0.06
7.60	29	SLE Q	7	18	0.00	-13669.10	106.58	4773.72	34.00	156.00	0.50	20.00	131.74	9.42	300.38	929.09	0.27	0.06
7.60	28	SLE F	7	18	0.00	-13670.80	88.05	4884.80	34.00	156.00	0.50	20.00	132.54	9.42	304.12	959.16	0.28	0.06
9.65	29	SLE Q	7	18	205.00	-12849.10	-671.89	-1435.60	34.00	156.00	0.50	20.00	98.30	3.14	47.59	126.67	0.04	0.01
9.65	26	SLE F	7	18	205.00	-13092.70	-685.28	-1463.17	34.00	156.00	0.50	20.00	98.31	3.14	47.62	129.23	0.04	0.01
9.65	29	SLE Q	8	18	0.00	-12849.10	-671.89	-1435.60	34.00	156.00	0.50	20.00	98.30	3.14	47.59	126.67	0.04	0.01
9.65	26	SLE F	8	18	0.00	-13092.70	-685.28	-1463.17	34.00	156.00	0.50	20.00	98.31	3.14	47.62	129.23	0.04	0.01
10.15	29	SLE Q	8	18	50.00	-12649.10	-861.76	-2950.07	34.00	156.00	0.50	20.00	154.82	3.14	136.37	548.75	0.16	0.04
10.15	28	SLE F	8	18	50.00	-12650.80	-861.56	-2975.09	34.00	156.00	0.50	20.00	155.75	3.14	137.84	555.85	0.16	0.04
10.15	29	SLE Q	9	18	0.00	-12649.10	-861.76	-2950.07	34.00	156.00	0.50	20.00	154.82	3.14	136.37	548.75	0.16	0.04
10.15	28	SLE F	9	18	0.00	-12650.80	-861.56	-2975.09	34.00	156.00	0.50	20.00	155.75	3.14	137.84	555.85	0.16	0.04
10.40	29	SLE Q	9	18	25.00	-12549.10	-956.70	-3707.31	34.00	156.00	0.50	20.00	176.19	3.14	169.95	789.21	0.23	0.07
10.40	28	SLE F	9	18	25.00	-12550.80	-954.66	-3745.66	34.00	156.00	0.50	20.00	177.62	3.14	172.18	800.14	0.23	0.07

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{ry}	d _{ry}	Vsdu _{ry}	ctgθ _{ry}	VRsd _{ry}	VRcd _{ry}	Vrd _{ry}	bw _{rz}	d _{rz}	Vsdu _{rz}	ctgθ _{rz}	VRsd _{rz}	VRcd _{rz}	Vrd _{rz}	Sic.
<cm>	<cm>						<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	
3.00	3.68	ø8/10	2	2	20	SLU	0.40	0.36	5868.14	2.50	31509.90	40870.30	31509.90	0.40	0.36	1558.58	2.50	31509.90	40870.30	31509.90	5.370
4.28	4.73	ø8/10	2	2	20	SLU	0.40	0.36	5588.47	2.50	31509.90	42632.20	31509.90	0.40	0.36	619.72	2.50	31509.90	42632.20	31509.90	5.638
4.73	5.52	ø8/10	2	2	20	SLU	0.40	0.36	5588.47	2.50	31509.90	42599.80	31509.90	0.40	0.36	619.72	2.50	31509.90	42599.80	31509.90	5.638
5.52	5.97	ø8/10	2	2	20	SLU	0.40	0.36	5588.47	2.50	31509.90	42543.10	31509.90	0.40	0.36	619.72	2.50	31509.90	42543.10	31509.90	5.638
5.97	7.00	ø8/10	2	2	20	SLU	0.40	0.36	5588.47	2.50	31509.90	42510.80	31509.90	0.40	0.36	619.72	2.50	31509.90	42510.80	31509.90	5.638
7.60	8.07	ø8/10	2	2	19	SLU	0.40	0.36	4345.66	2.50	31509.90	39264.60	31509.90	0.40	0.36	636.17	2.50	31509.90	39264.60	31509.90	7.251
7.60	8.07	ø8/10	2	2	20	SLU	0.40	0.36	4384.65	2.50	31509.90	39005.60	31509.90	0.40	0.36	503.00	2.50	31509.90	39005.60	31509.90	7.186
8.07	9.93	ø8/10	2	2	19	SLU	0.40	0.36	4345.66	2.50	31509.90	39231.00	31509.90	0.40	0.36	636.17	2.50	31509.90	39231.00	31509.90	7.251
8.07	9.93	ø8/10	2	2	20	SLU	0.40	0.36	4384.65	2.50	31509.90	38972.10	31509.90	0.40	0.36	503.00	2.50	31509.90	38972.10	31509.90	7.186
9.93	10.40	ø8/10	2	2	19	SLU	0.40	0.36	4345.66	2.50	31509.90	39097.00	31509.90	0.40	0.36	636.17	2.50	31509.90	39097.00	31509.90	7.251
9.93	10.40	ø8/10	2	2	20	SLU	0.40	0.36	4384.66	2.50	31509.90	38838.00	31509.90	0.40	0.36	503.00	2.50	31509.90	38838.00	31509.90	7.186

Dettagli costruttivi per la duttilità

- α_e=0.31931 ω_{wd}=0.13975 μΦ_d=14.8237 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.16959
0.04462 >= -0.035 [7.4.29]
- α_e=0.31931 ω_{wd}=0.13975 μΦ_d=26.0497 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.16959
0.04462 >= -0.035 [7.4.29]

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F	Mod.	Br.	As1	As2	Bj	Hjc	Hjw	Ash
						<cm>	<cm>	<cm>	<cm>	<cm>	<cm>
242	N	ø8/ 9	Y-E	2	2	9.42	9.42	0.40	0.31	0.52	7.04
			Z-E	2	2	6.03	6.03	0.40	0.31	0.16	3.02
442	N	ø8/ 9	Z+I	2	2	8.04	6.03	0.40	0.31	0.52	7.04
			Y-E	2	2	9.42	12.57	0.40	0.31	0.52	7.04
			Z-I	2	2	8.04	6.03	0.40	0.31	0.52	7.04
-1915	N	ø8/ 9	Z+I	2	2	6.03	6.03	0.40	0.31	0.52	7.04
			Y-E	2	2	0.00	0.00	0.40	0.31	0.52	7.04
			Z-I	2	2	6.03	6.03	0.40	0.31	0.52	7.04

Pilastrata n. 65

Nodi: -1265 -1920

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>		<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>		<daN/cm>	<daN/cm>
28	R	30.00	30.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _y	Sic.
<cm>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
7.60	19(e)	SLU	1	28	0.00	-11866.00	-184.37	-237.32	257.61	257.61	-246501.00	-6834.04	7577.17	132.19	3.64	20.774
7.60	19(e)	SLU	1	28	0.00	-11866.00	-184.37	-237.32	257.61	257.61	-246501.00	-6834.04	7577.17	132.19	3.64	20.774
10.40	19	SLU	1	28	280.00	-11047.00	589.15	589.15	-446.63	-446.63	-11047.00	8111.20	-6234.20	322.03	3.69	13.838

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	Sez.	X	N	Mz	My	AfT	AfC	σ _c	σ _ε
<m>					<cm>	<daN>	<daNm>	<daNm>	<cmq>	<cmq>	<daN/cmq>	<daN/cmq>
7.60	23	SLE R	1	28	0.00	-8940.67	194.10	-139.33	0.00	25.13	12.04	158.43
7.60	24	SLE R	1	28	0.00	-8296.09	184.48	-129.01	0.00	25.13	11.23	147.66
7.60	29	SLE Q	1	28	0.00	-7778.64	176.22	-122.79	0.00	25.13	10.61	139.26
7.60	23	SLE R	1	28	0.00	-8940.67	194.10	-139.33	0.00	25.13	12.04	158.43
7.60	24	SLE R	1	28	0.00	-8296.09	184.48	-129.01	0.00	25.13	11.23	147.66
7.60	29	SLE Q	1	28	0.00	-7778.64	176.22	-122.79	0.00	25.13	10.61	139.26
10.40	23	SLE R	1	28	280.00	-8310.67	-338.05	443.46	3.14	21.99	18.94	228.57
10.40	29	SLE Q	1	28	280.00	-7148.64	-303.24	378.75	3.14	21.99	16.47	198.50

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br. _y	Br. _z	CC	TCC	bw _{,y}	d _{,y}	Vsdu _{,y}	ctgθ _{,y}	VRsd _{,y}	VRcd _{,y}	Vrd _{,y}	bw _{,z}	d _{,z}	Vsdu _{,z}	ctgθ _{,z}	VRsd _{,z}	VRcd _{,z}	Vrd _{,z}	Sic.
<m>	<m>						<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	
7.60	8.07	ø8/10	2	219	SLU	0.30	0.26	251.51	2.40	21789.60	21789.60	21789.60	0.30	0.26	276.26	2.40	21789.60	21789.60	21789.60	21789.60	78.874
8.07	9.93	ø8/10	2	219	SLU	0.30	0.26	251.51	2.40	21778.70	21778.70	21778.70	0.30	0.26	276.26	2.40	21778.70	21778.70	21778.70	21778.70	78.835
9.93	10.40	ø8/10	2	219	SLU	0.30	0.26	251.51	2.40	21735.10	21735.10	21735.10	0.30	0.26	276.26	2.40	21735.10	21735.10	21735.10	21735.10	78.677

Dettagli costruttivi per la duttilità

- α_e=0.30131 ω_{wd}=0.19749 μΦ_d=14.8237 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.23967
0.05951 >= -0.035 [7.4.29]
- α_e=0.30131 ω_{wd}=0.19749 μΦ_d=26.0497 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.23967
0.05951 >= -0.035 [7.4.29]

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F	Mod.	Br.	As1	As2	Bj	Hjc	Hjw	Ash
						<cmq>	<cmq>	<m>	<m>	<m>	<cmq>
-1920	N	ø8/ 9	Z+ I	2	6.03	6.03	0.30	0.21	0.52	7.04	
			Z- I	2	6.03	6.03	0.30	0.21	0.52	7.04	

Pilastrata n. 93

Nodi: -1193 -1851

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
		<cm>	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
28	R	30.00	30.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
7.60	19(e)	SLU	1	28	0.00	-8793.03	-156.89	-175.86	-121.69	-175.86	-246501.00	-7111.37	-7111.29	225.00	3.78	28.034
7.60	19(e)	SLU	1	28	0.00	-8793.03	-156.89	-175.86	-121.69	-175.86	-246501.00	-7111.37	-7111.29	225.00	3.78	28.034
10.40	19(e)	SLU	1	28	280.00	-7974.03	372.67	372.67	137.75	-159.48	-7974.03	9702.08	-4210.83	334.69	4.06	26.091

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	Sez.	X	N	Mz	My	AfT	AfC	σ _c	σ _ε
<m>					<cm>	<daN>	<daNm>	<daNm>	<cmq>	<cmq>	<daN/cmq>	<daN/cmq>
7.60	23	SLE R	1	28	0.00	-6626.34	-91.89	-118.23	0.00	25.13	8.36	111.49
7.60	24	SLE R	1	28	0.00	-6209.36	-92.48	-113.99	0.00	25.13	7.98	106.01
7.60	29	SLE Q	1	28	0.00	-5792.62	-89.11	-106.50	0.00	25.13	7.49	99.37
7.60	23	SLE R	1	28	0.00	-6626.34	-91.89	-118.23	0.00	25.13	8.36	111.49
7.60	24	SLE R	1	28	0.00	-6209.36	-92.48	-113.99	0.00	25.13	7.98	106.01
7.60	29	SLE Q	1	28	0.00	-5792.62	-89.11	-106.50	0.00	25.13	7.49	99.37
10.40	23	SLE R	1	28	280.00	-5996.34	105.34	280.05	0.00	25.13	10.55	132.43
10.40	22	SLE R	1	28	280.00	-5767.11	101.76	267.41	0.00	25.13	10.12	127.11
10.40	29	SLE Q	1	28	280.00	-5162.62	103.18	237.99	0.00	25.13	9.23	115.59

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br. _y	Br. _z	CC	TCC	bw _{,y}	d _{,y}	Vsdu _{,y}	ctgθ _{,y}	VRsd _{,y}	VRcd _{,y}	Vrd _{,y}	bw _{,z}	d _{,z}	Vsdu _{,z}	ctgθ _{,z}	VRsd _{,z}	VRcd _{,z}	Vrd _{,z}	Sic.
<m>	<m>						<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	
7.60	8.07	ø8/10	2	219	SLU	0.30	0.26	92.66	2.38	21542.80	21542.80	21542.80	0.30	0.26	189.13	2.38	21542.80	21542.80	21542.80	21542.80	>100
8.07	9.93	ø8/10	2	219	SLU	0.30	0.26	92.66	2.38	21531.80	21531.80	21531.80	0.30	0.26	189.13	2.38	21531.80	21531.80	21531.80	21531.80	>100
9.93	10.40	ø8/10	2	219	SLU	0.30	0.26	92.66	2.37	21487.60	21487.60	21487.60	0.30	0.26	189.13	2.37	21487.60	21487.60	21487.60	21487.60	>100

Dettagli costruttivi per la duttilità

- α_e=0.30131 ω_{wd}=0.19749 μΦ_d=14.8237 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.23967
0.05951 >= -0.035 [7.4.29]
- α_e=0.30131 ω_{wd}=0.19749 μΦ_d=26.0497 v_d=0 E_{sy,d}=0.0018995 b_c/b₀=1.23967
0.05951 >= -0.035 [7.4.29]

Caratteristiche nodi trave-pilastro

Nodo	Conf.	Staff.	F	Mod.	Br.	As1	As2	Bj	Hjc	Hjw	Ash
						<cmq>	<cmq>	<m>	<m>	<m>	<cmq>
-1851	N	ø8/ 9	Z+ I	2	6.03	6.03	0.30	0.21	0.52	7.04	
			Z- I	2	6.03	6.03	0.30	0.21	0.52	7.04	

Verifiche e armature pareti

Simbologia

Δ_{sm}	=Distanza media tra le fessure
Φ_{eq}	=Diametro equivalente delle barre
ϵ_{sm}	=Deformazione unitaria media dell'armatura (*1000)
σ_c	=Tensione nel calcestruzzo
σ_f	=Tensione nel ferro
σ_s	=Tensione nell'acciaio nella sezione fessurata
$A_{c\ eff}$	=Area di calcestruzzo efficace
A_s	=Area complessiva dei ferri nell'area di calcestruzzo efficace
CC	=Numero della combinazione delle condizioni di carico elementari
Cf	=Copriferro
Cls	=Tipo di calcestruzzo
Fcd	=Resistenza di calcolo a compressione del calcestruzzo
Fck	=Resistenza caratteristica cilindrica a compressione del calcestruzzo
Fctd	=Resistenza di calcolo a trazione del calcestruzzo
Fctk	=Resistenza caratteristica a trazione del calcestruzzo
Fyd	=Resistenza di calcolo dell'acciaio
Fyk	=Tensione caratteristica di snervamento dell'acciaio
K_2	=Coefficiente per distribuzione deformazioni
M' ydy	=Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
MRdy	=Momento resistente allo stato limite ultimo intorno all'asse Y
My	=Momento flettente intorno all'asse Y
N	=Sforzo normale
Nu	=Sforzo normale ultimo
Sez.	=Sezione di verifica
Sic.	=Sicurezza
Spess.	=Spessore
TCC	=Tipo di combinazione di carico
	SLU = Stato limite ultimo
	SLE R = Stato limite d'esercizio, combinazione rara
	SLE F = Stato limite d'esercizio, combinazione frequente
	SLE Q = Stato limite d'esercizio, combinazione quasi permanente
	SLD = Stato limite di danno
	SLV = Stato limite di salvaguardia della vita
	SND = Stato limite di salvaguardia della vita (non dissipativo)
Tp	=Tipo di acciaio
Ty	=Taglio in dir. Y
VRcd	=Taglio ultimo lato calcestruzzo
VRsd	=Taglio ultimo lato armatura
Vrdu	=Taglio ultimo resistente
Vsdu	=Taglio agente nella direzione del momento ultimo
Wk	=Ampiezza caratteristica delle fessure
Xf	=Coordinata X finale
Xi	=Coordinata X iniziale
Xv	=Coordinata X di verifica
Zona	=Zona di verifica
Zv	=Coordinata Z di verifica
c	=Ricoprimento dell'armatura
s	=Distanza massima tra le barre

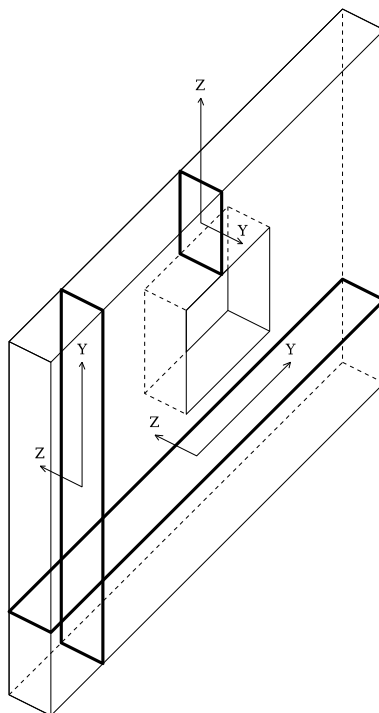


Figura numero 4: Riferimenti sezione

Parete n. 113

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cm²>	<daN/cm²>	<daN/cm²>	<daN/cm²>		<daN/cm²>	<daN/cm²>
Oriz.	40.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
1	SLV	Diff.	0.00	0.00	3.75	-32535.20	7294.01	-32535.20	30483.20	4.179
9	SLV	Diff.	1.22	0.00	3.75	-30138.40	-6420.59	-30138.40	-30080.20	4.685
1	SLV	Diff.	2.44	0.00	3.75	-69173.90	24574.60	-69173.90	36628.30	1.490
1	SLV	Diff.	3.66	0.00	3.75	-68475.20	17399.00	-68475.20	36511.70	2.099
9	SLV	Diff.	4.88	0.00	3.75	-62126.10	-7937.11	-62126.10	-35449.50	4.466
1	SLV	Diff.	6.10	0.00	3.75	-48689.90	-14717.30	-48689.90	-33197.80	2.256

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ_c	σ_f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cm²>	<daN/cm²>
24	SLE R	Diff.	0.00	0.00	3.75	-80889.00	570.97	5.75	84.70
21	SLE R	Diff.	0.00	0.00	3.75	-77274.70	533.79	5.48	80.79
29	SLE Q	Diff.	0.00	0.00	3.75	-74995.80	518.05	5.32	78.40
24	SLE R	Diff.	1.22	0.00	3.75	-75777.10	-156.07	5.03	75.06
21	SLE R	Diff.	1.22	0.00	3.75	-72195.20	-147.42	4.79	71.50
29	SLE Q	Diff.	1.22	0.00	3.75	-69924.30	-141.38	4.64	69.23
24	SLE R	Diff.	2.44	0.00	3.75	-87947.60	109.00	5.77	86.30
21	SLE R	Diff.	2.44	0.00	3.75	-83798.00	63.22	5.46	81.76
29	SLE Q	Diff.	2.44	0.00	3.75	-81004.10	61.01	5.28	79.04
24	SLE R	Diff.	3.66	0.00	3.75	-77956.70	671.12	5.66	83.00
21	SLE R	Diff.	3.66	0.00	3.75	-74528.80	609.29	5.38	78.98
29	SLE Q	Diff.	3.66	0.00	3.75	-71883.00	595.35	5.19	76.27
24	SLE R	Diff.	4.88	0.00	3.75	-69182.10	-3895.98	8.12	111.04
29	SLE Q	Diff.	4.88	0.00	3.75	-63606.30	-3379.26	7.27	99.80
24	SLE R	Diff.	6.10	0.00	3.75	-53704.40	-6946.36	11.67	146.66
29	SLE Q	Diff.	6.10	0.00	3.75	-49291.10	-6020.66	10.00	127.19

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ_{eq}	Δ_{sm}	A _s	A _{c eff}	σ_s	ϵ_{sm}	W _k
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cm²>	<cm²>	<daN/cm²>		<mm>
29	SLE Q	Diff.	6.10	0.00	3.75	-49291.10	-6020.66	33.00	300.00	0.50	12.00	192.48	16.96	1788.06	60.72	0.02	0.01
28	SLE F	Diff.	6.10	0.00	3.75	-50114.50	-6256.01	33.00	300.00	0.50	12.00	197.89	16.96	1864.59	68.69	0.02	0.01

Parete n. 114

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	40.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali
Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
9	SLV	Diff.	0.00	0.00	3.75	-25914.00	7263.98	-25914.00	29368.70	4.043
9	SLV	Diff.	1.22	0.00	3.75	-19476.00	-6416.90	-19476.00	-28283.00	4.408
1	SLV	Diff.	2.44	0.00	3.75	-68480.40	-24339.40	-68480.40	-36512.70	1.500
9	SLV	Diff.	3.66	0.00	3.75	-68338.60	17043.80	-68338.60	36488.90	2.141
1	SLV	Diff.	4.88	0.00	3.75	-63188.90	-7857.56	-63188.90	-35627.50	4.534
9	SLV	Diff.	6.10	0.00	3.75	-48737.60	-14586.70	-48737.60	-33206.00	2.276

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ_c	σ_f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	3.75	-80759.80	675.67	5.84	85.76
21	SLE R	Diff.	0.00	0.00	3.75	-77140.40	631.12	5.57	81.76
29	SLE Q	Diff.	0.00	0.00	3.75	-74854.30	612.44	5.40	79.34
24	SLE R	Diff.	1.22	0.00	3.75	-75161.30	-83.49	4.92	73.64
21	SLE R	Diff.	1.22	0.00	3.75	-71606.00	-79.95	4.69	70.16
29	SLE Q	Diff.	1.22	0.00	3.75	-69341.30	-75.80	4.54	67.92
24	SLE R	Diff.	2.44	0.00	3.75	-88325.70	-62.73	5.75	86.14
21	SLE R	Diff.	2.44	0.00	3.75	-84160.20	-96.50	5.52	82.49
29	SLE Q	Diff.	2.44	0.00	3.75	-81348.00	-93.66	5.33	79.74
24	SLE R	Diff.	3.66	0.00	3.75	-77885.90	565.90	5.55	81.74
21	SLE R	Diff.	3.66	0.00	3.75	-74478.50	512.12	5.28	77.84
29	SLE Q	Diff.	3.66	0.00	3.75	-71826.80	500.87	5.10	75.14
24	SLE R	Diff.	4.88	0.00	3.75	-71444.90	-3846.25	8.21	112.67
29	SLE Q	Diff.	4.88	0.00	3.75	-65647.10	-3334.89	7.36	101.27
24	SLE R	Diff.	6.10	0.00	3.75	-54026.40	-6869.48	11.49	145.02
29	SLE Q	Diff.	6.10	0.00	3.75	-49589.50	-5949.19	9.85	125.79

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ_{eq}	Δ_{sm}	A _s	A _{c eff}	σ_s	ϵ_{sm}	W _k
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	SLE Q	Diff.	6.10	0.00	3.75	-49589.50	-5949.19	33.00	300.00	0.50	12.00	188.00	16.96	1724.81	55.83	0.02	0.01
28	SLE F	Diff.	6.10	0.00	3.75	-50415.20	-6183.89	33.00	300.00	0.50	12.00	193.53	16.96	1802.84	63.41	0.02	0.01

Parete n. 115

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali
Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
13	SLV	Diff.	0.00	0.00	2.40	-19969.90	4329.75	-19969.90	14533.00	3.357
5	SLV	Diff.	1.15	0.00	2.40	-16750.40	-1888.92	-16750.40	-14152.90	7.493
13	SLV	Diff.	2.30	0.00	2.40	-9871.01	630.12	-9871.01	13338.90	21.169
5	SLV	Diff.	3.45	0.00	2.40	-6404.18	-1235.55	-6404.18	-12931.00	10.466
20	SLU	Diff.	4.60	0.00	2.40	-17984.00	-2607.20	-17984.00	-14298.70	5.484

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ_c	σ_f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	2.40	-28950.80	1165.59	6.85	90.96
29	SLE Q	Diff.	0.00	0.00	2.40	-26839.90	1034.06	6.23	82.99
24	SLE R	Diff.	1.15	0.00	2.40	-27030.80	-1221.17	6.73	88.73
29	SLE Q	Diff.	1.15	0.00	2.40	-24920.00	-1072.99	6.07	80.29
24	SLE R	Diff.	2.30	0.00	2.40	-17526.50	217.31	2.88	41.09
21	SLE R	Diff.	2.30	0.00	2.40	-17004.90	193.92	2.76	39.38
29	SLE Q	Diff.	2.30	0.00	2.40	-16301.30	186.87	2.64	37.78
24	SLE R	Diff.	3.45	0.00	2.40	-15285.50	-952.21	4.53	58.05
29	SLE Q	Diff.	3.45	0.00	2.40	-14060.30	-827.60	4.02	51.82

24	SLE R	Diff.	4.60	0.00	2.40	-13451.70	-1909.19	9.86	172.42
29	SLE Q	Diff.	4.60	0.00	2.40	-12226.50	-1657.71	8.43	135.23

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	C	S	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	SLE Q	Diff.	4.60	0.00	2.40	-12226.50	-1657.71	33.00	300.00	0.50	12.00	213.57	11.31	1390.78	135.23	0.04	0.01
28	SLE F	Diff.	4.60	0.00	2.40	-12436.30	-1720.17	33.00	300.00	0.50	12.00	215.70	11.31	1410.88	146.84	0.04	0.02

Parete n. 117

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	20.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
20	SLU	Diff.	0.00	0.00	2.40	-50186.60	-143.93	-878659.00	-11144.90	17.508
20	SLU	Diff.	1.36	0.00	2.40	-48235.90	61.20	-878659.00	11014.30	18.216
20	SLU	Diff.	2.71	0.00	2.40	-44796.80	252.87	-878659.00	10784.10	19.614
9	SLV	Diff.	4.07	0.00	2.40	-26794.60	-117.96	-790148.00	-9572.03	29.489
5	SLV	Diff.	5.43	0.00	2.40	-15878.90	315.12	-15878.90	8830.37	28.022
5	SLV	Diff.	6.79	0.00	2.40	-6313.42	-850.90	-6313.42	-8179.07	9.612
13	SLV	Diff.	8.14	0.00	2.40	-4507.47	405.49	-4507.47	8057.88	19.872
1	SLV	Diff.	9.50	0.00	2.40	616.31	872.14	616.31	7615.00	8.731

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	2.40	-37595.40	-105.19	7.92	115.31
21	SLE R	Diff.	0.00	0.00	2.40	-35692.00	-94.44	7.49	109.18
29	SLE Q	Diff.	0.00	0.00	2.40	-34827.10	-90.70	7.30	106.46
24	SLE R	Diff.	1.36	0.00	2.40	-36094.80	45.06	7.28	107.74
21	SLE R	Diff.	1.36	0.00	2.40	-34191.50	41.20	6.89	101.98
29	SLE Q	Diff.	1.36	0.00	2.40	-33326.60	39.65	6.71	99.37
24	SLE R	Diff.	2.71	0.00	2.40	-33486.80	184.56	7.59	107.52
21	SLE R	Diff.	2.71	0.00	2.40	-31656.70	165.18	7.12	101.15
29	SLE Q	Diff.	2.71	0.00	2.40	-30815.70	158.57	6.91	98.35
24	SLE R	Diff.	4.07	0.00	2.40	-22023.50	-49.07	4.57	66.88
21	SLE R	Diff.	4.07	0.00	2.40	-21055.10	-45.33	4.36	63.86
29	SLE Q	Diff.	4.07	0.00	2.40	-20500.70	-43.78	4.24	62.16
24	SLE R	Diff.	5.43	0.00	2.40	-20547.50	202.15	5.17	70.69
21	SLE R	Diff.	5.43	0.00	2.40	-19579.20	179.18	4.85	66.64
29	SLE Q	Diff.	5.43	0.00	2.40	-19024.70	172.20	4.70	64.66
23	SLE R	Diff.	6.79	0.00	2.40	-8889.48	-144.31	2.57	33.60
24	SLE R	Diff.	6.79	0.00	2.40	-8345.34	-157.42	2.54	32.70
29	SLE Q	Diff.	6.79	0.00	2.40	-8124.59	-136.58	2.37	30.95
23	SLE R	Diff.	8.14	0.00	2.40	-7167.62	54.01	1.71	23.78
21	SLE R	Diff.	8.14	0.00	2.40	-6633.27	46.29	1.56	21.81
29	SLE Q	Diff.	8.14	0.00	2.40	-6402.73	44.33	1.50	21.04
23	SLE R	Diff.	9.50	0.00	2.40	-5547.62	240.57	2.52	29.21
24	SLE R	Diff.	9.50	0.00	2.40	-5003.47	229.65	2.37	27.16
29	SLE Q	Diff.	9.50	0.00	2.40	-4782.73	214.52	2.23	25.63

Parete n. 118

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	20.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
13	SLV	Diff.	0.00	0.00	2.40	-86104.10	-139.68	-790160.00	-13508.10	9.177
13	SLV	Diff.	1.36	0.00	2.40	-84604.20	-84.17	-790160.00	-13411.10	9.339
9	SLV	Diff.	2.71	0.00	2.40	-72836.60	-114.06	-790160.00	-12648.50	10.848
13	SLV	Diff.	4.07	0.00	2.40	-54738.40	-231.83	-790160.00	-11449.00	14.435
1	SLV	Diff.	5.43	0.00	2.40	9857.98	270.08	9857.98	6936.46	25.683
5	SLV	Diff.	6.79	0.00	2.40	-3154.16	-685.82	-3154.16	-7966.91	11.617

5	SLV	Diff.	8.14	0.00	2.40	-1432.22	-397.23	-1432.22	-7850.95	19.764
5	SLV	Diff.	9.50	0.00	2.40	187.78	365.98	187.78	7646.30	20.893

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	σ_c <daN/cm ² >	σ_f <daN/cm ² >
24	SLE R	Diff.	0.00	0.00	2.40	-18272.50	21.02	3.68	54.45
21	SLE R	Diff.	0.00	0.00	2.40	-17344.90	17.94	3.48	51.58
29	SLE Q	Diff.	0.00	0.00	2.40	-16953.50	16.95	3.40	50.38
24	SLE R	Diff.	1.36	0.00	2.40	-16772.50	22.84	3.40	50.16
21	SLE R	Diff.	1.36	0.00	2.40	-15844.90	22.42	3.21	47.43
29	SLE Q	Diff.	1.36	0.00	2.40	-15453.50	22.16	3.14	46.28
24	SLE R	Diff.	2.71	0.00	2.40	-17260.90	-91.91	3.89	55.25
21	SLE R	Diff.	2.71	0.00	2.40	-16364.10	-83.67	3.67	52.20
29	SLE Q	Diff.	2.71	0.00	2.40	-15929.20	-80.82	3.57	50.78
24	SLE R	Diff.	4.07	0.00	2.40	-20772.60	93.06	4.58	65.56
21	SLE R	Diff.	4.07	0.00	2.40	-19637.40	86.58	4.32	61.90
29	SLE Q	Diff.	4.07	0.00	2.40	-19099.50	84.02	4.20	60.20
24	SLE R	Diff.	5.43	0.00	2.40	-9817.30	109.86	2.55	34.48
21	SLE R	Diff.	5.43	0.00	2.40	-9391.90	103.75	2.43	32.91
29	SLE Q	Diff.	5.43	0.00	2.40	-9176.93	101.08	2.37	32.14
24	SLE R	Diff.	6.79	0.00	2.40	-5231.84	-102.17	1.61	20.69
29	SLE Q	Diff.	6.79	0.00	2.40	-5104.19	-94.03	1.54	19.88
23	SLE R	Diff.	8.14	0.00	2.40	-3650.10	-44.74	0.97	13.03
24	SLE R	Diff.	8.14	0.00	2.40	-3509.83	-46.38	0.95	12.70
29	SLE Q	Diff.	8.14	0.00	2.40	-3382.18	-42.40	0.90	12.12
23	SLE R	Diff.	9.50	0.00	2.40	-2030.10	4.38	0.42	6.16
21	SLE R	Diff.	9.50	0.00	2.40	-1870.24	5.32	0.39	5.74
29	SLE Q	Diff.	9.50	0.00	2.40	-1762.18	6.18	0.38	5.47

Parete n. 119

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm ² >	Fctk <daN/cm ² >	Fcd <daN/cm ² >	Fctd <daN/cm ² >	Tp	Fyk <daN/cm ² >	Fyd <daN/cm ² >
Oriz.	20.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	MRdy <daNm>	Sic.
9	SLV	Diff.	0.00	0.00	2.40	24752.10	590.21	24752.10	5821.89	9.864
1	SLV	Diff.	1.36	0.00	2.40	-74675.00	-355.91	-790137.00	-12767.80	10.581
13	SLV	Diff.	2.71	0.00	2.40	15645.50	-1464.48	15645.50	-6506.23	4.443
9	SLV	Diff.	4.07	0.00	2.40	-6536.86	703.02	-6536.86	8194.10	11.656
20	SLU	Diff.	5.43	0.00	2.40	-34504.90	-1750.99	-34504.90	-10093.00	5.764
20	SLU	Diff.	6.79	0.00	2.40	-13507.30	1415.05	-13507.30	8668.31	6.126
5	SLV	Diff.	8.14	0.00	2.40	-6714.32	540.40	-6714.32	8206.06	15.185
9	SLV	Diff.	9.50	0.00	2.40	-4443.21	-1102.38	-4443.21	-8053.56	7.306

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	σ_c <daN/cm ² >	σ_f <daN/cm ² >
24	SLE R	Diff.	0.00	0.00	2.40	-28015.30	549.20	8.63	110.88
21	SLE R	Diff.	0.00	0.00	2.40	-26406.20	505.74	8.07	103.88
29	SLE Q	Diff.	0.00	0.00	2.40	-25709.70	490.88	7.85	101.06
24	SLE R	Diff.	1.36	0.00	2.40	-26515.80	-304.80	6.93	93.55
21	SLE R	Diff.	1.36	0.00	2.40	-24906.60	-282.34	6.48	87.66
29	SLE Q	Diff.	1.36	0.00	2.40	-24210.10	-274.87	6.30	85.23
24	SLE R	Diff.	2.71	0.00	2.40	-35374.00	-1466.09	15.56	182.06
29	SLE Q	Diff.	2.71	0.00	2.40	-32224.90	-1299.43	13.92	163.67
24	SLE R	Diff.	4.07	0.00	2.40	-28786.80	105.81	6.21	89.63
21	SLE R	Diff.	4.07	0.00	2.40	-27237.00	100.70	5.88	84.84
29	SLE Q	Diff.	4.07	0.00	2.40	-26410.60	98.24	5.71	82.29
24	SLE R	Diff.	5.43	0.00	2.40	-25828.20	-1284.21	13.09	146.79
29	SLE Q	Diff.	5.43	0.00	2.40	-23758.80	-1122.98	11.53	131.09
24	SLE R	Diff.	6.79	0.00	2.40	-10341.60	1041.04	12.15	191.00
29	SLE Q	Diff.	6.79	0.00	2.40	-10002.10	916.45	10.42	139.81
24	SLE R	Diff.	8.14	0.00	2.40	-8619.81	170.52	2.67	34.20
29	SLE Q	Diff.	8.14	0.00	2.40	-8280.29	135.59	2.40	31.36
23	SLE R	Diff.	9.50	0.00	2.40	-7747.27	-664.22	7.40	87.07
24	SLE R	Diff.	9.50	0.00	2.40	-6999.88	-648.41	7.40	101.24
29	SLE Q	Diff.	9.50	0.00	2.40	-6660.35	-598.99	6.77	87.74

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
28	SLE F	Diff.	6.79	0.00	2.40	-9998.20	947.09	33.00	300.00	0.50	12.00	165.66	11.31	939.22	154.82	0.05	0.01

Parete n. 120

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
9	SLV	Diff.	0.00	0.00	3.27	-15714.40	9963.93	-15714.40	17796.60	1.786
9	SLV	Diff.	1.33	0.00	3.27	-16789.80	-6276.78	-16789.80	-17922.80	2.855
9	SLV	Diff.	2.67	0.00	3.27	-17694.80	-3959.65	-17694.80	-18030.30	4.554
9	SLV	Diff.	4.00	0.00	3.27	-17911.60	-3018.08	-17911.60	-18055.80	5.983
1	SLV	Diff.	5.33	0.00	3.27	-7328.90	8737.26	-7328.90	16812.10	1.924
1	SLV	Diff.	6.67	0.00	3.27	-5179.14	-5327.98	-5179.14	-16559.20	3.108
1	SLV	Diff.	8.00	0.00	3.27	-2219.73	-9958.34	-2219.73	-16210.50	1.628

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	3.27	-48036.30	319.81	5.29	76.92
22	SLE R	Diff.	0.00	0.00	3.27	-46577.70	281.33	5.07	73.98
29	SLE Q	Diff.	0.00	0.00	3.27	-44065.70	289.33	4.84	70.47
24	SLE R	Diff.	1.33	0.00	3.27	-44564.00	51.50	4.44	66.20
22	SLE R	Diff.	1.33	0.00	3.27	-43066.10	44.01	4.28	63.85
29	SLE Q	Diff.	1.33	0.00	3.27	-40532.80	44.35	4.03	60.16
24	SLE R	Diff.	2.67	0.00	3.27	-41417.50	-199.38	4.41	64.71
22	SLE R	Diff.	2.67	0.00	3.27	-39883.30	-180.20	4.23	62.07
29	SLE Q	Diff.	2.67	0.00	3.27	-37339.10	-185.19	3.99	58.45
24	SLE R	Diff.	4.00	0.00	3.27	-37577.10	-222.85	4.08	59.59
22	SLE R	Diff.	4.00	0.00	3.27	-36055.40	-184.14	3.86	56.56
29	SLE Q	Diff.	4.00	0.00	3.27	-33522.70	-203.27	3.65	53.26
23	SLE R	Diff.	5.33	0.00	3.27	-15732.60	1129.96	3.80	47.87
24	SLE R	Diff.	5.33	0.00	3.27	-15166.90	1135.63	3.80	47.48
29	SLE Q	Diff.	5.33	0.00	3.27	-13453.30	1058.34	3.52	43.64
23	SLE R	Diff.	6.67	0.00	3.27	-10433.00	-1575.81	6.17	122.54
29	SLE Q	Diff.	6.67	0.00	3.27	-8267.34	-1380.77	5.57	128.38
23	SLE R	Diff.	8.00	0.00	3.27	-6250.11	-2774.11	12.59	566.28
29	SLE Q	Diff.	8.00	0.00	3.27	-4411.93	-2449.58	11.18	536.69

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	SLE Q	Diff.	6.67	0.00	3.27	-8267.34	-1380.77	33.00	300.00	0.50	12.00	241.59	14.70	2151.42	128.38	0.04	0.02
26	SLE F	Diff.	6.67	0.00	3.27	-8392.62	-1403.76	33.00	300.00	0.50	12.00	241.71	14.70	2152.77	130.83	0.04	0.02
29	SLE Q	Diff.	8.00	0.00	3.27	-4411.93	-2449.58	33.00	300.00	0.50	12.00	277.92	14.70	2596.45	536.69	0.16	0.07
26	SLE F	Diff.	8.00	0.00	3.27	-4514.04	-2487.65	33.00	300.00	0.50	12.00	277.84	14.70	2595.47	543.91	0.16	0.07

Parete n. 121

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
1	SLV	Diff.	0.00	0.00	3.27	-12124.20	9952.42	-12124.20	17375.90	1.746
1	SLV	Diff.	1.33	0.00	3.27	-14319.80	-6273.04	-14319.80	-17633.30	2.811
1	SLV	Diff.	2.67	0.00	3.27	-16216.50	-3922.44	-16216.50	-17855.50	4.552
1	SLV	Diff.	4.00	0.00	3.27	-17407.00	-2980.12	-17407.00	-17996.30	6.039
1	SLV	Diff.	5.33	0.00	3.27	-3923.61	8524.45	-3923.61	16411.50	1.925
9	SLV	Diff.	6.67	0.00	3.27	-5233.20	-5341.05	-5233.20	-16565.50	3.102
9	SLV	Diff.	8.00	0.00	3.27	-2376.37	-9995.88	-2376.37	-16228.70	1.624

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ_c	σ_f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	3.27	-47731.20	307.13	5.23	76.20
22	SLE R	Diff.	0.00	0.00	3.27	-46308.70	268.72	5.02	73.32
29	SLE Q	Diff.	0.00	0.00	3.27	-43780.60	278.44	4.79	69.83
24	SLE R	Diff.	1.33	0.00	3.27	-44395.00	48.21	4.42	65.88
22	SLE R	Diff.	1.33	0.00	3.27	-42920.70	41.09	4.26	63.58
29	SLE Q	Diff.	1.33	0.00	3.27	-40368.10	41.56	4.01	59.86
24	SLE R	Diff.	2.67	0.00	3.27	-41368.60	-194.56	4.40	64.54
22	SLE R	Diff.	2.67	0.00	3.27	-39846.90	-174.81	4.21	61.90
29	SLE Q	Diff.	2.67	0.00	3.27	-37280.70	-180.99	3.97	58.28
24	SLE R	Diff.	4.00	0.00	3.27	-37648.20	-209.84	4.07	59.42
22	SLE R	Diff.	4.00	0.00	3.27	-36128.20	-170.19	3.84	56.37
29	SLE Q	Diff.	4.00	0.00	3.27	-33570.50	-192.03	3.63	53.09
23	SLE R	Diff.	5.33	0.00	3.27	-15847.50	1136.67	3.83	48.17
24	SLE R	Diff.	5.33	0.00	3.27	-15277.90	1141.21	3.82	47.74
29	SLE Q	Diff.	5.33	0.00	3.27	-13537.40	1063.54	3.54	43.87
23	SLE R	Diff.	6.67	0.00	3.27	-10502.40	-1610.52	6.34	128.94
29	SLE Q	Diff.	6.67	0.00	3.27	-8312.86	-1403.82	5.68	132.86
23	SLE R	Diff.	8.00	0.00	3.27	-6308.98	-2861.01	12.99	588.52
29	SLE Q	Diff.	8.00	0.00	3.27	-4453.63	-2504.33	11.44	550.58

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ_{eq}	Δ_{sm}	A _s	A _{c eff}	σ_s	ϵ_{sm}	W _k
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	SLE Q	Diff.	6.67	0.00	3.27	-8312.86	-1403.82	33.00	300.00	0.50	12.00	242.41	14.70	2161.42	132.86	0.04	0.02
26	SLE F	Diff.	6.67	0.00	3.27	-8440.64	-1428.23	33.00	300.00	0.50	12.00	242.56	14.70	2163.20	135.60	0.04	0.02
29	SLE Q	Diff.	8.00	0.00	3.27	-4453.63	-2504.33	33.00	300.00	0.50	12.00	278.05	14.70	2598.10	550.58	0.16	0.08
26	SLE F	Diff.	8.00	0.00	3.27	-4558.17	-2546.34	33.00	300.00	0.50	12.00	277.98	14.70	2597.25	558.82	0.16	0.08

Parete n. 131

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
13	SLV	Diff.	0.00	0.00	5.89	7084.53	-12788.50	7084.53	-25192.10	1.970
5	SLV	Diff.	0.64	0.00	5.89	3423.54	4585.85	3423.54	25662.60	5.596
20	SLU	Diff.	1.28	0.00	5.89	-35978.90	2032.26	-35978.90	31490.40	15.495

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ_c	σ_f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	5.89	-52038.80	-1950.84	4.89	65.25
21	SLE R	Diff.	0.00	0.00	5.89	-49454.70	-1803.75	4.59	61.42
29	SLE Q	Diff.	0.00	0.00	5.89	-47784.30	-1749.98	4.44	59.43
24	SLE R	Diff.	0.64	0.00	5.89	-40734.30	530.02	2.77	39.37
21	SLE R	Diff.	0.64	0.00	5.89	-38531.90	484.30	2.60	37.04
29	SLE Q	Diff.	0.64	0.00	5.89	-37148.20	469.35	2.51	35.74
24	SLE R	Diff.	1.28	0.00	5.89	-26720.00	1501.67	3.04	39.43
29	SLE Q	Diff.	1.28	0.00	5.89	-24031.50	1340.34	2.73	35.33

Parete n. 132

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
5	SLV	Diff.	0.00	0.00	5.89	6061.53	-11747.90	6061.53	-25323.50	2.156
13	SLV	Diff.	0.64	0.00	5.89	2336.40	4951.93	2336.40	25802.40	5.211
20	SLU	Diff.	1.28	0.00	5.89	-37010.90	1998.73	-37010.90	31611.70	15.816

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	5.89	-52084.00	-850.59	3.73	52.37
21	SLE R	Diff.	0.00	0.00	5.89	-49493.30	-773.51	3.50	49.36
29	SLE Q	Diff.	0.00	0.00	5.89	-47812.30	-749.18	3.39	47.71
24	SLE R	Diff.	0.64	0.00	5.89	-41309.30	947.76	3.24	44.74
21	SLE R	Diff.	0.64	0.00	5.89	-39068.80	875.08	3.05	42.07
29	SLE Q	Diff.	0.64	0.00	5.89	-37662.00	848.95	2.94	40.62
24	SLE R	Diff.	1.28	0.00	5.89	-27487.30	1476.59	3.05	39.72
21	SLE R	Diff.	1.28	0.00	5.89	-25734.70	1358.06	2.83	36.89
29	SLE Q	Diff.	1.28	0.00	5.89	-24723.80	1317.21	2.74	35.59

Parete n. 212

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
9	SLV	Diff.	0.00	0.00	3.27	-17569.60	4468.93	-17569.60	18015.50	4.031
1	SLV	Diff.	1.33	0.00	3.27	-11924.40	-10499.40	-11924.40	-17351.80	1.653
1	SLV	Diff.	2.67	0.00	3.27	-8811.17	-4952.49	-8811.17	-16986.40	3.430
1	SLV	Diff.	4.00	0.00	3.27	-4523.60	2138.24	-4523.60	16482.30	7.708
9	SLV	Diff.	5.33	0.00	3.27	-2190.56	8322.66	-2190.56	16207.50	1.947
9	SLV	Diff.	6.67	0.00	3.27	1948.22	-5938.66	1948.22	-15106.30	2.544
9	SLV	Diff.	8.00	0.00	3.27	4650.09	-13489.50	4650.09	-14760.30	1.094

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	3.27	-43097.00	242.13	4.66	68.07
22	SLE R	Diff.	0.00	0.00	3.27	-42123.00	229.23	4.54	66.37
29	SLE Q	Diff.	0.00	0.00	3.27	-39288.70	220.37	4.24	62.04
23	SLE R	Diff.	1.33	0.00	3.27	-33871.50	-240.61	3.76	54.55
22	SLE R	Diff.	1.33	0.00	3.27	-33363.50	-235.29	3.70	53.70
29	SLE Q	Diff.	1.33	0.00	3.27	-30719.50	-222.60	3.41	49.57
24	SLE R	Diff.	2.67	0.00	3.27	-30656.20	-102.15	3.18	46.94
22	SLE R	Diff.	2.67	0.00	3.27	-30250.20	-96.97	3.13	46.24
29	SLE Q	Diff.	2.67	0.00	3.27	-27606.20	-98.88	2.88	42.42
23	SLE R	Diff.	4.00	0.00	3.27	-25817.90	111.93	2.73	40.08
22	SLE R	Diff.	4.00	0.00	3.27	-25310.20	100.91	2.66	39.10
29	SLE Q	Diff.	4.00	0.00	3.27	-22712.10	87.08	2.38	35.02
23	SLE R	Diff.	5.33	0.00	3.27	-15677.10	337.86	2.17	30.02
24	SLE R	Diff.	5.33	0.00	3.27	-14729.30	338.58	2.08	28.65
29	SLE Q	Diff.	5.33	0.00	3.27	-12794.30	307.75	1.83	25.17
23	SLE R	Diff.	6.67	0.00	3.27	-11538.30	-376.36	1.84	24.78
24	SLE R	Diff.	6.67	0.00	3.27	-10590.50	-329.45	1.66	22.41
29	SLE Q	Diff.	6.67	0.00	3.27	-8655.47	-310.85	1.43	19.19
23	SLE R	Diff.	8.00	0.00	3.27	-8836.40	-842.61	2.84	33.59
29	SLE Q	Diff.	8.00	0.00	3.27	-5953.59	-714.67	2.58	32.15

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	SLE Q	Diff.	8.00	0.00	3.27	-5953.59	-714.67	33.00	300.00	0.50	12.00	206.34	14.70	1719.42	32.15	0.01	0.00
28	SLE F	Diff.	8.00	0.00	3.27	-5977.74	-719.66	33.00	300.00	0.50	12.00	206.75	14.70	1724.52	32.64	0.01	0.00

Parete n. 216

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
5	SLV	Diff.	0.00	0.00	2.40	-29499.70	-4938.38	-29499.70	-15655.70	3.170
20	SLU	Diff.	1.15	0.00	2.40	-48563.60	4407.90	-48563.60	17890.00	4.059
5	SLV	Diff.	2.30	0.00	2.40	-15653.90	-1452.51	-15653.90	-14023.00	9.654

20	SLU	Diff.	3.45	0.00	2.40	-27706.60	3168.49	-27706.60	15444.90	4.875
20	SLU	Diff.	4.60	0.00	2.40	-25322.70	7014.66	-25322.70	15164.50	2.162

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	2.40	-38208.70	-1802.41	9.71	127.60
29	SLE Q	Diff.	0.00	0.00	2.40	-35138.60	-1583.14	8.74	115.22
24	SLE R	Diff.	1.15	0.00	2.40	-36288.70	3244.96	14.70	177.21
29	SLE Q	Diff.	1.15	0.00	2.40	-33218.60	2865.63	12.95	157.45
24	SLE R	Diff.	2.30	0.00	2.40	-22994.90	-1128.41	5.96	78.04
29	SLE Q	Diff.	2.30	0.00	2.40	-21248.40	-998.14	5.39	70.84
24	SLE R	Diff.	3.45	0.00	2.40	-20753.90	2320.81	11.05	124.16
29	SLE Q	Diff.	3.45	0.00	2.40	-19007.50	2019.18	9.46	108.36
24	SLE R	Diff.	4.60	0.00	2.40	-18920.10	5143.20	30.31	1065.26
29	SLE Q	Diff.	4.60	0.00	2.40	-17173.70	4488.17	26.34	903.10

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	SLE Q	Diff.	3.45	0.00	2.40	-19007.50	2019.18	33.00	300.00	0.50	12.00	180.72	11.31	1081.24	82.79	0.02	0.01
28	SLE F	Diff.	3.45	0.00	2.40	-19321.90	2095.12	33.00	300.00	0.50	12.00	183.93	11.31	1111.47	91.93	0.03	0.01
29	SLE Q	Diff.	4.60	0.00	2.40	-17173.70	4488.17	33.00	300.00	0.50	12.00	253.22	11.31	1764.48	903.10	0.26	0.11
28	SLE F	Diff.	4.60	0.00	2.40	-17488.10	4652.74	33.00	300.00	0.50	12.00	253.75	11.31	1769.54	948.78	0.28	0.12

Parete n. 222

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	30.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
1	SLV	Diff.	0.00	0.00	3.27	-16455.90	10544.60	-16455.90	17883.90	1.696
1	SLV	Diff.	1.33	0.00	3.27	-12792.70	6311.28	-12792.70	17454.40	2.766
1	SLV	Diff.	2.67	0.00	3.27	-9679.34	3857.56	-9679.34	17088.90	4.430
9	SLV	Diff.	4.00	0.00	3.27	-6016.30	2435.74	-6016.30	16658.10	6.839
1	SLV	Diff.	5.33	0.00	3.27	-2211.44	9131.46	-2211.44	16209.90	1.775
1	SLV	Diff.	6.67	0.00	3.27	1926.89	-5684.33	1926.89	-15108.50	2.658
1	SLV	Diff.	8.00	0.00	3.27	4628.83	-13649.50	4628.83	-14763.60	1.082

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
24	SLE R	Diff.	0.00	0.00	3.27	-38054.80	25.83	3.76	56.15
22	SLE R	Diff.	0.00	0.00	3.27	-37455.50	11.92	3.67	54.98
29	SLE Q	Diff.	0.00	0.00	3.27	-34857.20	18.97	3.43	51.33
24	SLE R	Diff.	1.33	0.00	3.27	-34392.00	46.13	3.44	51.22
22	SLE R	Diff.	1.33	0.00	3.27	-33792.60	37.65	3.36	50.17
29	SLE Q	Diff.	1.33	0.00	3.27	-31194.30	37.34	3.11	46.36
24	SLE R	Diff.	2.67	0.00	3.27	-31278.50	63.38	3.17	47.04
22	SLE R	Diff.	2.67	0.00	3.27	-30679.20	59.52	3.10	46.08
29	SLE Q	Diff.	2.67	0.00	3.27	-28080.90	52.96	2.84	42.14
23	SLE R	Diff.	4.00	0.00	3.27	-26239.00	63.38	2.68	39.67
22	SLE R	Diff.	4.00	0.00	3.27	-25780.40	54.93	2.62	38.82
29	SLE Q	Diff.	4.00	0.00	3.27	-23226.30	47.59	2.35	34.94
23	SLE R	Diff.	5.33	0.00	3.27	-14858.30	232.56	1.89	26.60
24	SLE R	Diff.	5.33	0.00	3.27	-14010.70	234.53	1.81	25.41
29	SLE Q	Diff.	5.33	0.00	3.27	-12121.00	212.73	1.58	22.19
23	SLE R	Diff.	6.67	0.00	3.27	-10719.50	-365.78	1.74	23.36
24	SLE R	Diff.	6.67	0.00	3.27	-9871.97	-335.03	1.60	21.47
29	SLE Q	Diff.	6.67	0.00	3.27	-7982.31	-323.91	1.39	18.48
23	SLE R	Diff.	8.00	0.00	3.27	-8017.66	-756.39	2.54	30.19
24	SLE R	Diff.	8.00	0.00	3.27	-7170.09	-706.85	2.40	28.09
29	SLE Q	Diff.	8.00	0.00	3.27	-5280.43	-674.24	2.49	35.88

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	SLE Q	Diff.	8.00	0.00	3.27	-5280.43	-674.24	33.00	300.00	0.50	12.00	214.75	14.70	1822.48	35.88	0.01	0.00
28	SLE F	Diff.	8.00	0.00	3.27	-5305.59	-678.89	33.00	300.00	0.50	12.00	215.02	14.70	1825.83	36.33	0.01	0.00

Parete n. 1131

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	40.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
9	SLV	Diff.	0.00	0.00	1.70	-15048.80	-20070.30	-15048.80	-22904.80	1.141
1	SLV	Diff.	1.49	0.00	1.70	-12505.40	3850.54	-12505.40	22485.40	5.840
9	SLV	Diff.	2.98	0.00	1.70	-9987.18	14140.10	-9987.18	22070.10	1.561

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
23	SLE R	Diff.	0.00	0.00	1.70	-17559.70	-127.68	2.68	39.40
21	SLE R	Diff.	0.00	0.00	1.70	-16773.30	-94.65	2.50	36.98
29	SLE Q	Diff.	0.00	0.00	1.70	-15912.50	-87.05	2.37	35.02
23	SLE R	Diff.	1.49	0.00	1.70	-15142.00	476.91	3.03	42.65
24	SLE R	Diff.	1.49	0.00	1.70	-14262.20	519.60	2.99	41.83
29	SLE Q	Diff.	1.49	0.00	1.70	-13501.80	448.08	2.74	38.57
23	SLE R	Diff.	2.98	0.00	1.70	-12498.10	1125.24	3.99	53.13
24	SLE R	Diff.	2.98	0.00	1.70	-11614.80	1099.80	3.85	50.98
29	SLE Q	Diff.	2.98	0.00	1.70	-10850.90	1021.90	3.58	47.46

Parete n. 11311

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	40.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
9	SLV	Diff.	0.00	0.00	1.70	-9986.50	14140.10	-9986.50	20621.80	1.458
9	SLV	Diff.	0.21	0.00	1.70	-9707.38	16185.40	-9707.38	20574.90	1.271
9	SLV	Diff.	0.42	0.00	1.70	-9264.00	18429.30	-9264.00	20502.30	1.112

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daN/cmq>	<daN/cmq>
23	SLE R	Diff.	0.00	0.00	1.70	-12497.40	1125.24	4.02	53.52
24	SLE R	Diff.	0.00	0.00	1.70	-11614.10	1099.80	3.88	51.37
29	SLE Q	Diff.	0.00	0.00	1.70	-10850.20	1021.90	3.61	47.82
23	SLE R	Diff.	0.21	0.00	1.70	-12218.80	1213.45	4.23	55.81
24	SLE R	Diff.	0.21	0.00	1.70	-11334.10	1179.42	4.08	53.54
29	SLE Q	Diff.	0.21	0.00	1.70	-10562.80	1100.29	3.81	49.93
23	SLE R	Diff.	0.42	0.00	1.70	-11774.90	1304.23	4.48	58.33
24	SLE R	Diff.	0.42	0.00	1.70	-10891.60	1259.99	4.32	55.89
29	SLE Q	Diff.	0.42	0.00	1.70	-10127.70	1180.33	4.05	52.29

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
			<m>	<m>	<m>	<daN>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
29	SLE Q	Diff.	0.42	0.00	1.70	-10127.70	1180.33	33.00	170.00	0.50	12.00	125.85	13.57	676.87	17.41	0.01	0.00
28	SLE F	Diff.	0.42	0.00	1.70	-10146.60	1189.16	33.00	170.00	0.50	12.00	126.57	13.57	685.01	17.95	0.01	0.00

Parete n. 1141

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
	<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
Oriz.	40.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	My	Nu	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daN>	<daNm>	
1	SLV	Diff.	0.00	0.00	1.70	-15611.90	-19935.80	-15611.90	-22997.70	1.154

9	SLV	Diff.	1.49	0.00	1.70	-12996.20	3884.94	-12996.20	22566.70	5.809
1	SLV	Diff.	2.98	0.00	1.70	-10550.30	13954.90	-10550.30	22162.80	1.588

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	σ_c <daN/cm ² >	σ_f <daN/cm ² >
23	SLE R	Diff.	0.00	0.00	1.70	-17895.70	-52.92	2.58	38.32
24	SLE R	Diff.	0.00	0.00	1.70	-16986.20	49.77	2.44	36.36
29	SLE Q	Diff.	0.00	0.00	1.70	-16202.90	-21.74	2.28	34.08
23	SLE R	Diff.	1.49	0.00	1.70	-15448.50	474.61	3.06	43.23
24	SLE R	Diff.	1.49	0.00	1.70	-14543.80	521.93	3.03	42.47
29	SLE Q	Diff.	1.49	0.00	1.70	-13765.90	449.66	2.78	39.15
23	SLE R	Diff.	2.98	0.00	1.70	-12834.10	1040.19	3.83	51.37
24	SLE R	Diff.	2.98	0.00	1.70	-11924.60	1028.13	3.70	49.41
29	SLE Q	Diff.	2.98	0.00	1.70	-11141.30	955.04	3.44	46.01

Parete n. 11411

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm ² >	Fctk <daN/cm ² >	Fcd <daN/cm ² >	Fctd <daN/cm ² >	Tp	Fyk <daN/cm ² >	Fyd <daN/cm ² >
Oriz.	40.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Verifiche su sezioni orizzontali

Stato limite ultimo - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	MRdy <daNm>	Sic.
1	SLV	Diff.	0.00	0.00	1.70	-10549.60	13954.90	-10549.60	16349.60	1.172
1	SLV	Diff.	0.21	0.00	1.70	-10239.40	16007.30	-10239.40	16298.20	1.018
1	SLV	Diff.	0.42	0.00	1.70	-9827.08	18204.80	-9827.08	16229.80	0.892

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	σ_c <daN/cm ² >	σ_f <daN/cm ² >
23	SLE R	Diff.	0.00	0.00	1.70	-12833.40	1040.19	3.94	52.83
24	SLE R	Diff.	0.00	0.00	1.70	-11923.90	1028.13	3.81	50.86
29	SLE Q	Diff.	0.00	0.00	1.70	-11140.60	955.04	3.55	47.35
23	SLE R	Diff.	0.21	0.00	1.70	-12508.10	1122.10	4.11	54.67
24	SLE R	Diff.	0.21	0.00	1.70	-11610.00	1102.84	3.98	52.68
29	SLE Q	Diff.	0.21	0.00	1.70	-10810.60	1028.75	3.72	49.11
23	SLE R	Diff.	0.42	0.00	1.70	-12110.90	1196.35	4.29	56.48
24	SLE R	Diff.	0.42	0.00	1.70	-11201.40	1167.89	4.16	54.38
29	SLE Q	Diff.	0.42	0.00	1.70	-10418.10	1094.58	3.89	50.87

Indici di sicurezza in analisi lineare

Simbologia

$\zeta_E (A_g)$	=Indice di sicurezza in termini di accelerazione
$\zeta_E (T_R)$	=Indice di sicurezza in termini di periodo di ritorno
$\zeta_{ESLD} (A_g)$	=Indice di sicurezza in termini di accelerazione (SLD)
$\zeta_{ESLD} (T_R)$	=Indice di sicurezza in termini di periodo di ritorno (SLD)
$\zeta_{ESLV} (A_g)$	=Indice di sicurezza in termini di accelerazione (SLV)
$\zeta_{ESLV} (T_R)$	=Indice di sicurezza in termini di periodo di ritorno (SLV)
CC	=Numero della combinazione delle condizioni di carico elementari
Elem.	=Elemento
PGA_C	=Accelerazione al suolo (capacità)
PGA_{CLD}	=Capacità per lo stato limite di danno (SLD)
PGA_{CLV}	=Capacità per lo stato limite di salvaguardia della vita (SLV)
PGA_D	=Accelerazione al suolo (domanda)
PVR_C	=Capacità di probabilità di superamento dell'azione sismica
PVR_D	=Domanda di probabilità di superamento dell'azione sismica
Sfr.C	=Tasso di sfruttamento (capacità)
Sfr.D	=Tasso di sfruttamento (domanda)
$T_{R,C}$	=Periodo di ritorno (capacità)
$T_{R,D}$	=Periodo di ritorno (domanda)
TCC	=Tipo di combinazione di carico
	SLU = Stato limite ultimo
	SLE R = Stato limite d'esercizio, combinazione rara
	SLE F = Stato limite d'esercizio, combinazione frequente
	SLE Q = Stato limite d'esercizio, combinazione quasi permanente
	SLD = Stato limite di danno
	SLV = Stato limite di salvaguardia della vita
	SND = Stato limite di salvaguardia della vita (non dissipativo)
TV	=Tipo di verifica
	PRFL = Flessione e pressoflessione
	TAG = Taglio o altre rotture fragili
	NOD = Nodi in c.a. e collegamenti in acciaio
	STAB = Stabilità
	CP = Capacità portante
	RNP = Resistenza nel piano
	RFP = Resistenza fuori piano
	CIN = Cinematismi
	DEF = Deformazione
	N/C = Non calcolabile
Tr_{CLD}	=Periodo di ritorno per lo stato limite di danno (SLD)
Tr_{CLV}	=Periodo di ritorno per lo stato limite di salvaguardia della vita (SLV)

Capacità in termini di accelerazione al suolo e periodo di ritorno

Nome indice di sicurezza	PGA_{CLD} <g>	$\zeta_{ESLD} (A_g)$	Tr_{CLD}	$\zeta_{ESLD} (T_R)$	PGA_{CLV} <g>	$\zeta_{ESLV} (A_g)$	Tr_{CLV}	$\zeta_{ESLV} (T_R)$
PIL_PRFL					0.315	1.176	1462	1.343
PIL_TAG					0.349	1.306	2475	1.667
TR_PRFL					0.240	0.895	461	0.837
TR_TAG					0.349	1.306	2475	1.667
PAR					0.283	1.059	899	1.100

Tabella elementi critici

Nome indice di sicurezza	Elem.	CC	TCC	TV	Sfr.D	CC	TV	Sfr.C
TR_PRFL	Travata 4016 (Tr4016)	9	SLV	PRFL	1.072	9	PRFL	0.986
	Travata 4001 (Tr4001)	1	SLV	PRFL	1.071	1	PRFL	0.985
	Travata 50160 (Tr50160)	1	SLV	PRFL	1.009	1	PRFL	0.896

Capacità e domanda - riepilogo generale

TCC	PGA_D <g>	PGA_C <g>	$\zeta_E (A_g)$	$T_{R,D}$	PVR_D	$T_{R,C}$	PVR_C	$\zeta_E (T_R)$
SLD	0.123	>0.123	>1	75	63.00	>75	<63.00	>1
SLV	0.268	0.240	0.895	712	10.00	461	15.00	0.837

Fascicolo dei calcoli - ed. C - Statica vento verso l'alto

È stato realizzato analogo modello con vento diretto verso l'alto, che ha fornito risultati meno gravosi e pertanto vengono omessi i calcoli nel presente fascicolo. Come descritto nella Relazione di Calcolo, si riporta di seguito un modello locale contenente le verifiche della copertura con vento verso l'alto.

Fascicolo dei calcoli - ed. C - Fondazioni

Criteri di analisi geotecnica e progetto delle fondazioni

Fondazioni superficiali

Generali	
Generali	
Condizioni di calcolo per terreni coesivi	Sia drenate che non drenate
Calcolo di a' dal rapporto con c'	1.00
Calcolo di a_u dal rapporto con c_u	1.00
Calcolo di σ' dal rapporto con ϕ'	1.00
Considera l'angolo di attrito in deformazione piana per fondazioni nastriformi	No
Calcolo dei parametri rappresentativi per terreni stratificati	Media pesata
-Calcola i valori medi dell'angolo di attrito secondo la sua tangente	No
Capacità portante in condizioni statiche	
Calcolo della capacità portante per rottura generale	Brinch - Hansen (1970)
-Combinazione dei fattori di forma e di inclinazione del carico	Considera solo i fattori di forma
-Considera il fattore di riduzione per platee	No
-Considera gli effetti dell'eccentricità del carico con un unico fattore riduttivo	No
Considera eccentricità e inclinazione dei carichi attraverso domini di interazione	No
-Parametro correttivo del momento	0.00
-Parametro correttivo del carico orizzontale	0.00
Calcolo della capacità portante per rottura locale	No
	Vesic (1975)
Calcolo della capacità portante per rottura per punzonamento	No
Calcolo della capacità portante per scorrimento	No
-Percentuale di carico orizzontale assorbito dai cordoli <%>	0.00
-Percentuale di spinta passiva mobilitata <%>	0.00
Calcolo della capacità portante per sollevamento	No
Capacità portante in condizioni sismiche	
Calcolo della capacità portante per rottura generale	Metodo scelto per le condizioni statiche
Riduzione dell'angolo d'attrito per terreni incoerenti ben addensati	Si
-Pari a	0.00
Calcolo della capacità portante per scorrimento	No
-Percentuale di carico orizzontale assorbito dai cordoli <%>	0.00
-Percentuale di spinta passiva mobilitata <%>	0.00
Cedimenti	
Cedimenti	Bowles
-Spessore del terreno responsabile del cedimento	
-Dal rapporto con le dimensioni della fondazione pari a	5.00
Considera pressioni di esercizio al netto delle tensioni litostatiche	Si
Calcola costante di sottofondo per pressioni di esercizio	No
Limita costante di sottofondo ad un valore	No

Fondazioni profonde

Generali	
Generali	
Calcolo capacità portante per carichi verticali	Secondo formule statiche
Considera capacità portante	Entrambe
Condizioni di calcolo per terreni coesivi	Sia drenate che non drenate
Calcolo della profondità critica	No
Effettua calcolo elasto-plastico per cedimenti	Si
Effettua calcolo elasto-plastico per spostamenti orizzontali	Si
Rapporto di elasticità trazione/compressione pari a	1.00
Fattori di correlazione	1.70
Considera fattori di correlazione anche per carichi orizzontali	No
Considera peso del palo	No
Divisore del raggio del palo per lunghezza conci	1.00

Max numero conci palo	50.00
Attrito laterale limite da prove in sito	
Correlato con prove CPT	No
Correlato con prove SPT	No
Fattore di riduzione attrito laterale per pali trivellati	No
Pressione limite alla base da prove in sito	
Correlata con prove CPT	No
Correlata con prove SPT	No
Fattore di riduzione pressione limite alla base per pali trivellati	No
Spostamenti orizzontali	
Spostamenti orizzontali	Risposta elastica in funzione della stratigrafia

Specifici	1	2	3	4	5	6	7	8	9	10
Attrito laterale limite										
Calcolo dell'attrito laterale limite	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
-Condizioni non drenate										
-Calcolo di α										
-Pari a										
-A.G.I. (1984)	x	x	x	x	x	x	x	x	x	x
-A.P.I. (1984)										
-Viggiani (1999)										
-Olson e Dennis (1982)										
-Stas e Kulhavy (1984)										
-Skempton (1986)										
-Reese e O'Neill (1989)										
-Metodo di Bustamente e Doix (1985) per micropali	No	No	No	No	No	No	No	No	No	No
-Iniezioni ripetute	x	x	x	x	x	x	x	x	x	x
-Unica iniezione										
-Condizioni drenate										
-Calcolo di β										
-Pari a	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
-Reese e O'Neill (1989)										
-Calcolato										
-Calcolo di k										
-Pari a										
-Dal rapporto con k_0 pari a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-Fleming (1985)										
-Calcolo di δ										
-Pari a <grad>										
-Dal rapporto con ϕ' pari a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-Calcolo di a' dal rapporto con c'	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Calcolo dell'attrito laterale limite per trazione										
-Considera i risultati del calcolo per l'attrito laterale limite percompressione con un fattore di riduzione pari a	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
-Sowa (1970)	No	No	No	No	No	No	No	No	No	No
-Bowles (1991)	No	No	No	No	No	No	No	No	No	No
Considera l'effetto dell'attrito negativo	No	No	No	No	No	No	No	No	No	No
-Coefficiente di Lambe										
Pressione limite alla base										
Calcolo della pressione limite alla base del palo	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
-Terzaghi (1943)	x	x	x	x	x	x	x	x	x	x
-Meyerhof (1963)										
-Hansen (1970)										
-Vesic (1975)										
-Berezantzev (1961)										
-Berezantzev (1965)										
-Stagg e Zienkiewicz (1968)										
-Relazione generale, coefficienti di capacità portante										
-In condizioni drenate										
- N_q										
- N_c										
-In condizioni non drenate										
- N_c										
-Fattore di riduzione per terreni coesivi sovraconsolidati	No	No	No	No	No	No	No	No	No	No

Cedimenti											
Risposta elastica laterale											
-Calcolata dalla rigidezza dello strato	x	x	x	x	x	x	x	x	x	x	x
-Coefficiente di influenza	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
-Pari a <daN/mq>											
Risposta elastica alla base											
-Calcolata dalla rigidezza dello strato	x	x	x	x	x	x	x	x	x	x	x
-Pari a <daN/mq>											
Spostamenti orizzontali											
Risposta elastica											
-Vesic (1961)											
-Broms (1964)											
-Glick (1948)											
-Chen (1978)											
-Pari a <daN/mq>											
-Dal modulo elastico	x	x	x	x	x	x	x	x	x	x	x
-Coefficiente effetto tridimensionale	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Resistenza limite											
-Calcolata dai parametri plastici	x	x	x	x	x	x	x	x	x	x	x
-Coefficiente effetto tridimensionale resistenza per attrito	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
-Coefficiente effetto tridimensionale resistenza per coesione	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
-Pari a <daN/mq>											

Caratterizzazione

	1	2	3	4	5	6	7	8	9	10
Specifici										
Informazioni preliminari										
Coefficiente di uniformità	No	No	No	No	No	No	No	No	No	No
-Pari a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Definizione della composizione granulometrica, per terreni incoerenti	No	No	No	No	No	No	No	No	No	No
-Sabbia fine uniforme	x	x	x	x	x	x	x	x	x	x
-Sabbia fine ben gradata - sabbia media uniforme										
-Sabbia media ben gradata - sabbia grossa uniforme										
-Sabbia e ghiaia - ghiaia media										
Definizione indici compressibilità edometrica, per terreni coesivi	No	No	No	No	No	No	No	No	No	No
-Indice di compressione (Cc)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-Indice di ricomprensione (Cr)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-Considera incremento preconsolidazione costante	No	No	No	No	No	No	No	No	No	No
-Pari a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Correggi NSPT se la misura è sottofalda	No	No	No	No	No	No	No	No	No	No
Densità relativa										
Correlata con prove SPT										
-Terzaghi e Peck (1948)	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
-Gibbs e Holtz (1957)	No	No	No	No	No	No	No	No	No	No
-Meyerhof (1957)	No	No	No	No	No	No	No	No	No	No
-Schultze e Menzenbach (1961)	No	No	No	No	No	No	No	No	No	No
-Bazaara (1967)	No	No	No	No	No	No	No	No	No	No
-Marcuson e Bieganousky (1977)	No	No	No	No	No	No	No	No	No	No
-Skempton (1986)	No	No	No	No	No	No	No	No	No	No
Correlata con prove CPT										
-Schmertmann (1976)	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
-Jamiolkowski et al. (1985)	No	No	No	No	No	No	No	No	No	No
-Baldi et al. (1986)	No	No	No	No	No	No	No	No	No	No
Elaborazione dei risultati										
-Valore medio	x	x	x	x	x	x	x	x	x	x
-Valore minore										
Angolo d'attrito										
Correlato con prove SPT										
-Terzaghi e Peck (1948)	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
-Schmertmann (1975)	No	No	No	No	No	No	No	No	No	No
-Wolff (1989)	No	No	No	No	No	No	No	No	No	No
-Hatanaka e Uchida (1996)	No	No	No	No	No	No	No	No	No	No
-Road Bridge Specification	No	No	No	No	No	No	No	No	No	No
-Owasaki e Iwasaki	No	No	No	No	No	No	No	No	No	No
-Japanese National Railway	No	No	No	No	No	No	No	No	No	No
-Peck-Hanson e Thornburn	No	No	No	No	No	No	No	No	No	No
-De Mello	No	No	No	No	No	No	No	No	No	No

Correlato con prove CPT										
-Robertson e Campanella (1983)	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
-Durgunoglu e Mitchell	No	No	No	No	No	No	No	No	No	No
-Caquot	No	No	No	No	No	No	No	No	No	No
Correlata con proprietà indice										
-In funzione della densità relativa, per terreni incoerenti	No	No	No	No	No	No	No	No	No	No
-In funzione dell'indice di plasticità, per terreni coesivi	No	No	No	No	No	No	No	No	No	No
Elaborazione dei risultati										
-Valore medio	x	x	x	x	x	x	x	x	x	x
-Valore minore										
Coesione non drenata										
Correlata con prove SPT										
-Hara et al. (1971)	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
-Stroud (1974)	No	No	No	No	No	No	No	No	No	No
Correlata con prove CPT										
-Mayne e Kemper (1988)	Si	Si	Si	Si	Si	Si	Si	Si	Si	Si
-Lunne e Eide	No	No	No	No	No	No	No	No	No	No
Correlata con proprietà indice										
-Bjerrum e Simons (1960)	No	No	No	No	No	No	No	No	No	No
-Skempton (1953)	No	No	No	No	No	No	No	No	No	No
-Calcolata da $\sigma'v_0$ con moltiplicatore pari a	No	No	No	No	No	No	No	No	No	No
Pari a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Elaborazione dei risultati										
-Valore medio	x	x	x	x	x	x	x	x	x	x
-Valore minore										
Caratteristiche litostatiche										
Grado di sovraconsolidazione										
-Correlato con prove SPT										
-Mayne e Kemper (1988)	No	No	No	No	No	No	No	No	No	No
-Correlato con prove CPT										
-Mayne e Kemper (1988)	No	No	No	No	No	No	No	No	No	No
-Elaborazione dei risultati										
-Valore medio	x	x	x	x	x	x	x	x	x	x
-Valore minore										
Coefficiente di spinta a riposo										
-Calcolo di k_0 (NC)										
-Jaky (1936)	x	x	x	x	x	x	x	x	x	x
-Brooker e Ireland (1965)										
-Alpan (1967)										
-Massarsch (1979)										
-Correlato con Dr										
-Calcolato dal coefficiente di Poisson										
-Calcolo di α										
-Pari a										
-Kulhawy (1989)	x	x	x	x	x	x	x	x	x	x
-Alpan (1967) per terreni coesivi										
-Alpan (1967) per terreni incoerenti										
-Correlato con Dr										
Parametri elastici										
Correlati con prove GFS										
Correlati con prove SPT										
-Stroud e Butler (1975)										
-Stroud (1989)	x	x	x	x	x	x	x	x	x	x
-Schmertmann (1978)										
-Farrent										
-Menzenbach e Malcev										
-D'Appolonia										
-Schulze e Menzenbach										
-Crespellani e Vannucchi										
-Ohsaki e Iwasaki, per sabbie										
-Ohsaki e Iwasaki, per sabbie con fini										
Correlati con prove CPT										
-Schmertmann (1977)										
-Robertson e Campanella (1983)										
-Kulhawy e Mayne (1990)										
-Rix e Stokoe (1992)										
-Mayne e Rix (1993)										
Fattore correttivo	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Geotecnica

Elenco unità geotecniche

1 LIVELLO 1:

Classificazione: Incoerente

Pesi:

- Peso specifico del terreno naturale: $\gamma = 1943.00$ daN/mc

- Peso specifico del terreno saturo: $\gamma_{sat} = 1943.00$ daN/mc

Parametri plastici:

- Angolo di attrito efficace: $\phi' = 28.67$ grad

- Coesione efficace: $c' = 0.00$ daN/mq

Caratteristiche litostatiche:

- Grado di sovraconsolidazione: OCR = 1.00

- Coeff. di spinta a riposo: $\kappa_0 = 0.52$

calcolato utilizzando le seguenti opzioni:

-Calcolo di k_0 Jaky(1936)

-Calcolo di α Kulhawy (1989)

2 LIVELLO 2:

Classificazione: Coesivo

Pesi:

- Peso specifico del terreno naturale: $\gamma = 1963.00$ daN/mc

- Peso specifico del terreno saturo: $\gamma_{sat} = 1963.00$ daN/mc

Parametri plastici:

- Angolo di attrito efficace: $\phi' = 23.00$ grad

- Coesione efficace: $c' = 1970.00$ daN/mq

- Coesione non drenata: $c_u = 6639.00$ daN/mq

Caratteristiche litostatiche:

- Grado di sovraconsolidazione: OCR = 1.00

- Coeff. di spinta a riposo: $\kappa_0 = 0.61$

calcolato utilizzando le seguenti opzioni:

-Calcolo di k_0 Jaky(1936)

-Calcolo di α Kulhawy (1989)

3 LIVELLO 3:

Classificazione: Incoerente

Pesi:

- Peso specifico del terreno naturale: $\gamma = 1993.00$ daN/mc

- Peso specifico del terreno saturo: $\gamma_{sat} = 2020.00$ daN/mc

Parametri plastici:

- Angolo di attrito efficace: $\phi' = 27.48$ grad

- Coesione efficace: $c' = 0.00$ daN/mq

Caratteristiche litostatiche:

- Grado di sovraconsolidazione: OCR = 1.00

- Coeff. di spinta a riposo: $\kappa_0 = 0.54$

calcolato utilizzando le seguenti opzioni:

-Calcolo di k_0 Jaky(1936)

-Calcolo di α Kulhawy (1989)

4 LIVELLO 4:

Classificazione: Incoerente

Pesi:

- Peso specifico del terreno naturale: $\gamma = 2003.00$ daN/mc

- Peso specifico del terreno saturo: $\gamma_{sat} = 2103.00$ daN/mc

Parametri plastici:

- Angolo di attrito efficace: $\phi' = 31.34$ grad

- Coesione efficace: $c' = 0.00$ daN/mq

Caratteristiche litostatiche:

- Grado di sovraconsolidazione: OCR = 1.00

- Coeff. di spinta a riposo: $\kappa_0 = 0.48$

calcolato utilizzando le seguenti opzioni:

-Calcolo di k_0 Jaky(1936)

-Calcolo di α Kulhawy (1989)

Elenco colonne stratigrafiche

Colonna stratigrafica numero 1

Posizione: X=0.00 <m> Y=0.00 <m> Z=3.00 <m>

Falda a profondità: 5.50 m

Simbologia

ϕ'	=Angolo di attrito efficace
γ	=Peso specifico del terreno naturale
γ_{sat}	=Peso specifico del terreno saturo
κ_0	=Coeff. di spinta a riposo
Class.	=Classificazione
	Coes. = Coesivo
	Inc. = Incoerente
Crit.	=Criterio di progetto
D_r	=Densità relativa
I_p	=Indice di plasticità

OCR =Grado di sovraconsolidazione
St. =Strato
Unità geotecnica =Unità geotecnica
c_u =Coesione non drenata
c' =Coesione efficace
z =Profondità della superficie superiore dello strato

St.	z <m>	Unità geotecnica	Class.	γ <daN/mc>	γ _{sat} <daN/mc>	D _r	I _p	φ' <grad>	c' <daN/mq>	c _u <daN/mq>	OCR	κ ₀	Crit.
1	0.00	1 LIVELLO 1	Inc.	1943.00	1943.00			28.67	0.00		1.00	0.52	1
2	1.80	2 LIVELLO 2	Coes.	1963.00	1963.00			23.00	1970.00	6639.00	1.00	0.61	1
3	3.40	3 LIVELLO 3	Inc.	1993.00	2020.00			27.48	0.00		1.00	0.54	1
4	6.60	4 LIVELLO 4	Inc.	2003.00	2103.00			31.34	0.00		1.00	0.48	1

Simbologia
v =Coeff. di Poisson
Crit. =Criterio di progetto
E =Modulo elastico normale
E_{ed} =Modulo edometrico
E_u =Modulo elastico non drenato
G =Modulo elastico tangenziale
St. =Strato
k_j =Esponente del parametro tensionale
z =Profondità della superficie superiore dello strato

St.	z <m>	E <daN/mq>	G <daN/mq>	k _j	v	E _{ed} <daN/mq>	E _u <daN/mq>	Crit.
1	0.00							1
3	3.40							1

St.	z <m>	E <daN/mq>	G <daN/mq>	k _j	v	E _{ed} <daN/mq>	E _u <daN/mq>	Crit.
2	1.80							1
4	6.60							1

Strati Commenti Pressioni litostatiche

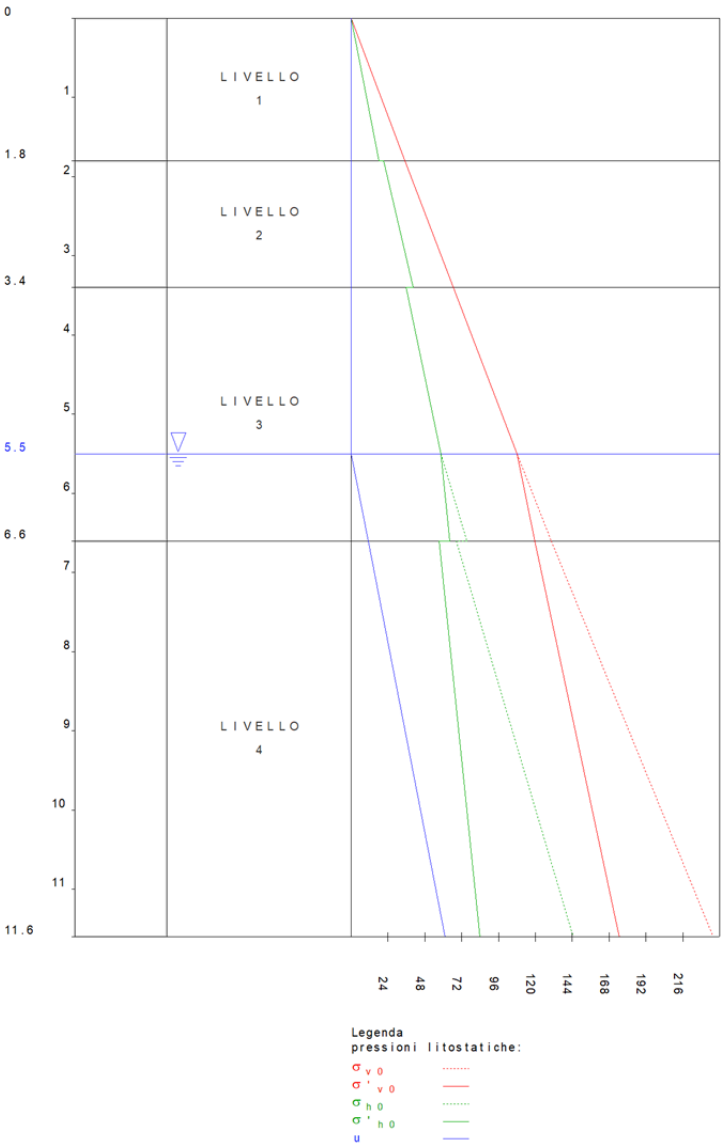


Figura numero 1: Colonna stratigrafica numero 1 STRATIGRAFIA

Le verifiche degli elementi di fondazione sono state effettuate utilizzando l'approccio 2.

Coefficienti parziali per le azioni, per verifiche in condizioni statiche:

Permanenti strutturali, sicurezza a favore	$\gamma_A = 1.00;$
Permanenti strutturali, sicurezza a sfavore	$\gamma_A = 1.30;$
Permanenti non strutturali, sicurezza a favore	$\gamma_A = 0.00;$
Permanenti non strutturali, sicurezza a sfavore	$\gamma_A = 1.50;$
Variabili, sicurezza a favore	$\gamma_A = 0.00;$
Variabili, sicurezza a sfavore	$\gamma_A = 1.50.$

I coefficienti parziali per le azioni sono posti pari all'unità per le verifiche in condizioni sismiche.

Tali coefficienti sono comunque desumibili dalla tabella delle combinazioni delle CCE (Parametri di calcolo).

Coefficienti parziali per i parametri geotecnici:

Tangente dell'angolo di attrito	$\gamma_M = 1.00;$
Coesione efficace	$\gamma_M = 1.00;$
Coesione non drenata	$\gamma_M = 1.00;$

Coefficienti parziali per la resistenza delle fondazioni superficiali:

Capacità portante	$\gamma_R = 2.30;$
Scorrimento	$\gamma_R = 1.10;$

Fondazioni superficiali

Simbologia

β	=Inclinazione del piano di campagna
γ_x	=Peso specifico rappresentativo del terreno di fondazione
η	=Inclinazione del piano di posa della fondazione
ϕ'_x	=Angolo di attrito rappresentativo del terreno di fondazione
$\sigma_{v0,f}$	=Pressione verticale alla profondità del piano di posa della fondazione
B	=Base della fondazione
B'	=Base della fondazione reagente
CC	=Numero della combinazione delle condizioni di carico elementari
D	=Profondità del piano di posa della fondazione
L	=Lunghezza della fondazione ($L > B$)
L'	=Lunghezza della fondazione reagente
Mx	=Momento intorno all'asse X
My	=Momento intorno all'asse Y
N	=Sforzo normale
N_c	=Coefficiente di capacità portante relativo alla coesione del terreno di fondazione
N_g	=Coefficiente di capacità portante relativo al peso del terreno di fondazione
N_q	=Coefficiente di capacità portante relativo al sovraccarico laterale
R_d	=Resistenza di progetto (Carico limite)
Sic.	=Sicurezza
Tx	=Taglio in dir. X
Ty	=Taglio in dir. Y
b_c	=Fattore di inclinazione del piano di fondazione relativo a coesione
b_g	=Fattore di inclinazione del piano di fondazione relativo a peso del terreno
b_q	=Fattore di inclinazione del piano di fondazione relativo a sovraccarico laterale
c_{ur}	=Coesione non drenata rappresentativa del terreno di fondazione
c'_x	=Coesione efficace rappresentativa del terreno di fondazione
d_c	=Fattore di profondità relativo alla coesione
d_q	=Fattore di profondità relativo al sovraccarico laterale
g_c	=Fattore di inclinazione del piano di campagna relativo a coesione
g_g	=Fattore di inclinazione del piano di campagna relativo a peso del terreno
g_q	=Fattore di inclinazione del piano di campagna relativo a sovraccarico laterale
i_c	=Fattore di inclinazione relativo alla coesione
i_g	=Fattore di inclinazione relativo al peso del terreno
i_q	=Fattore di inclinazione relativo al sovraccarico laterale
q_{lim}	=Pressione limite
s_c	=Fattore di forma relativo alla coesione
s_g	=Fattore di forma relativo al peso del terreno
s_q	=Fattore di forma relativo al sovraccarico laterale

Verifiche capacità portante

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 901

B=1.00 <m> L=24.60 <m> D=1.90 <m> β =0.00 <grad> η =0.00 <grad> γ_x =1963.00 <daN/mc>
 $\sigma_{v0,f}$ =3693.70 <daN/mq>

Verifiche in condizioni drenate

$\varphi'_x=23.00$ <grad> $c'_x=1970.00$ <daN/mq>
 $N_q=8.66$ $N_c=18.05$ $N_g=8.20$ $g_q=1.00$ $g_c=1.00$ $g_g=1.00$
 $b_q=1.00$ $b_c=1.00$ $b_g=1.00$

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	Q _{lim} <daN/mq>	R _d <daN>	Sic.
5	414615.00	45390.40	1015.76	-13619.20	-56674.10	0.93	24.33	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101590.00	1003910.00	2.42
6	395374.00	44247.50	1006.15	-12116.30	-51392.30	0.94	24.34	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101587.00	1009170.00	2.55
7	408644.00	42059.20	983.95	-13633.30	-62716.40	0.93	24.29	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101593.00	1001440.00	2.45
8	389403.00	40916.30	974.34	-12130.40	-57434.60	0.94	24.30	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101590.00	1006650.00	2.59
9	411629.00	43724.80	999.86	-13626.20	-59695.30	0.93	24.31	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101591.00	1002680.00	2.44
10	392388.00	42581.90	990.25	-12123.30	-54413.50	0.94	24.32	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101589.00	1007920.00	2.57
11	405658.00	40393.60	968.04	-13640.40	-65737.60	0.93	24.28	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101594.00	1000180.00	2.47

Verifiche in condizioni non drenate

$c_{ur}=6639.01$ <daN/mq>
 $N_q=1.00$ $N_c=5.14$ $g_c=1.00$ $b_c=1.00$

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _c	d _c	i _q	i _c	Q _{lim} <daN/mq>	R _d <daN>	Sic.
5	414615.00	45390.40	1015.76	-13619.20	-56674.10	0.93	24.33	1.01	1.45	1.00	1.00	53415.40	527848.00	1.27
6	395374.00	44247.50	1006.15	-12116.30	-51392.30	0.94	24.34	1.01	1.44	1.00	1.00	53391.30	530389.00	1.34
7	408644.00	42059.20	983.95	-13633.30	-62716.40	0.93	24.29	1.01	1.45	1.00	1.00	53421.50	526599.00	1.29
8	389403.00	40916.30	974.34	-12130.40	-57434.60	0.94	24.30	1.01	1.44	1.00	1.00	53397.30	529115.00	1.36
9	411629.00	43724.80	999.86	-13626.20	-59695.30	0.93	24.31	1.01	1.45	1.00	1.00	53418.40	527227.00	1.28
10	392388.00	42581.90	990.25	-12123.30	-54413.50	0.94	24.32	1.01	1.44	1.00	1.00	53394.30	529757.00	1.35
11	405658.00	40393.60	968.04	-13640.40	-65737.60	0.93	24.28	1.01	1.45	1.00	1.00	53424.60	525961.00	1.30

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 902

$B=1.00$ <m> $L=12.80$ <m> $D=1.90$ <m> $\beta=0.00$ <grad> $\eta=0.00$ <grad> $\gamma_x=1963.00$ <daN/mc>
 $\sigma_{v0,f}=3693.70$ <daN/mq>

Verifiche in condizioni drenate

$\varphi'_x=23.00$ <grad> $c'_x=1970.00$ <daN/mq>
 $N_q=8.66$ $N_c=18.05$ $N_g=8.20$ $g_q=1.00$ $g_c=1.00$ $g_g=1.00$
 $b_q=1.00$ $b_c=1.00$ $b_g=1.00$

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	Q _{lim} <daN/mq>	R _d <daN>	Sic.
5	236484.00	-20006.40	58.80	-399.94	4793.02	1.00	12.76	1.02	1.04	0.98	1.34	1.39	1.00	1.00	1.00	102697.00	567796.00	2.40
6	229618.00	-18734.50	111.13	-431.72	4538.95	1.00	12.76	1.02	1.04	0.98	1.34	1.39	1.00	1.00	1.00	102697.00	567623.00	2.47
7	228879.00	-19599.00	38.84	-352.63	4732.41	1.00	12.76	1.02	1.04	0.98	1.34	1.39	1.00	1.00	1.00	102698.00	567933.00	2.48
8	222014.00	-18327.00	91.17	-384.41	4478.34	1.00	12.76	1.02	1.04	0.98	1.34	1.39	1.00	1.00	1.00	102697.00	567758.00	2.56
9	232682.00	-19802.70	48.82	-376.29	4762.72	1.00	12.76	1.02	1.04	0.98	1.34	1.39	1.00	1.00	1.00	102697.00	567863.00	2.44
10	225816.00	-18530.80	101.15	-408.07	4508.64	1.00	12.76	1.02	1.04	0.98	1.34	1.39	1.00	1.00	1.00	102697.00	567689.00	2.51
11	225077.00	-19395.20	28.86	-328.98	4702.11	1.00	12.76	1.02	1.04	0.98	1.34	1.39	1.00	1.00	1.00	102698.00	568005.00	2.52

Verifiche in condizioni non drenate

$c_{ur}=6639.01$ <daN/mq>
 $N_q=1.00$ $N_c=5.14$ $g_c=1.00$ $b_c=1.00$

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _c	d _c	i _q	i _c	Q _{lim} <daN/mq>	R _d <daN>	Sic.
5	236484.00	-20006.40	58.80	-399.94	4793.02	1.00	12.76	1.02	1.44	1.00	1.00	53445.70	295492.00	1.25
6	229618.00	-18734.50	111.13	-431.72	4538.95	1.00	12.76	1.02	1.44	1.00	1.00	53447.50	295413.00	1.29
7	228879.00	-19599.00	38.84	-352.63	4732.41	1.00	12.76	1.02	1.44	1.00	1.00	53444.20	295554.00	1.29
8	222014.00	-18327.00	91.17	-384.41	4478.34	1.00	12.76	1.02	1.44	1.00	1.00	53446.10	295475.00	1.33
9	232682.00	-19802.70	48.82	-376.29	4762.72	1.00	12.76	1.02	1.44	1.00	1.00	53445.00	295523.00	1.27
10	225816.00	-18530.80	101.15	-408.07	4508.64	1.00	12.76	1.02	1.44	1.00	1.00	53446.80	295443.00	1.31
11	225077.00	-19395.20	28.86	-328.98	4702.11	1.00	12.76	1.02	1.44	1.00	1.00	53443.50	295587.00	1.31

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 903

$B=1.00$ <m> $L=24.60$ <m> $D=1.90$ <m> $\beta=0.00$ <grad> $\eta=0.00$ <grad> $\gamma_x=1963.00$ <daN/mc>
 $\sigma_{v0,f}=3693.70$ <daN/mq>

Verifiche in condizioni drenate

$\varphi'_x=23.00$ <grad> $c'_x=1970.00$ <daN/mq>
 $N_q=8.66$ $N_c=18.05$ $N_g=8.20$ $g_q=1.00$ $g_c=1.00$ $g_g=1.00$

b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	T _x <daN>	T _y <daN>	M _x <daNm>	M _y <daNm>	B'<m>	L'<m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	417959.00	37807.60	-20117.80	-13804.00	-109263.00	0.93	24.08	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101603.00	993356.00	2.38
6	398543.00	37337.20	-18497.40	-12283.00	-101091.00	0.94	24.09	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101600.00	998666.00	2.51
7	411905.00	34479.60	-19874.00	-13816.40	-114378.00	0.93	24.04	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101605.00	990940.00	2.41
8	392489.00	34009.20	-18253.50	-12295.40	-106205.00	0.94	24.06	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101602.00	996205.00	2.54
9	414932.00	36143.60	-19995.90	-13810.20	-111820.00	0.93	24.06	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101604.00	992156.00	2.39
10	395516.00	35673.20	-18375.50	-12289.20	-103648.00	0.94	24.08	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101601.00	997445.00	2.52
11	408878.00	32815.60	-19752.10	-13822.60	-116935.00	0.93	24.03	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101606.00	989706.00	2.42

Verifiche in condizioni non drenate

c_{ux}=6639.01 <daN/mq>
N_q=1.00 N_c=5.14 g_c=1.00 b_c=1.00

CC	N <daN>	T _x <daN>	T _y <daN>	M _x <daNm>	M _y <daNm>	B'<m>	L'<m>	s _c	d _c	i _q	i _c	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	417959.00	37807.60	-20117.80	-13804.00	-109263.00	0.93	24.08	1.01	1.45	1.00	1.00	53421.20	522291.00	1.25
6	398543.00	37337.20	-18497.40	-12283.00	-101091.00	0.94	24.09	1.01	1.44	1.00	1.00	53397.10	524862.00	1.32
7	411905.00	34479.60	-19874.00	-13816.40	-114378.00	0.93	24.04	1.01	1.45	1.00	1.00	53427.30	521070.00	1.27
8	392489.00	34009.20	-18253.50	-12295.40	-106205.00	0.94	24.06	1.01	1.45	1.00	1.00	53403.10	523616.00	1.33
9	414932.00	36143.60	-19995.90	-13810.20	-111820.00	0.93	24.06	1.01	1.45	1.00	1.00	53424.30	521685.00	1.26
10	395516.00	35673.20	-18375.50	-12289.20	-103648.00	0.94	24.08	1.01	1.44	1.00	1.00	53400.00	524243.00	1.33
11	408878.00	32815.60	-19752.10	-13822.60	-116935.00	0.93	24.03	1.01	1.45	1.00	1.00	53430.50	520446.00	1.27

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 904

B=1.00 <m> L=3.75 <m> D=3.40 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1993.00 <daN/mc>
σ_{v0,f}=6638.20 <daN/mq>

Verifiche in condizioni drenate

φ'_r=27.48 <grad> c'_r=0.00 <daN/mq>
N_q=13.91 N_c=24.81 N_g=15.51 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	T _x <daN>	T _y <daN>	M _x <daNm>	M _y <daNm>	B'<m>	L'<m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	75985.20	-3374.26	-33038.00	-66.83	143.05	1.00	3.75	1.07	1.14	0.93	1.39	1.42	1.00	1.00	1.00	151675.00	246613.00	3.25
6	73155.20	-3241.63	-32231.40	-59.89	157.17	1.00	3.75	1.07	1.14	0.93	1.39	1.42	1.00	1.00	1.00	151678.00	246613.00	3.37
7	74508.50	-3208.67	-31576.20	-65.63	125.15	1.00	3.75	1.07	1.14	0.93	1.39	1.42	1.00	1.00	1.00	151674.00	246638.00	3.31
8	71678.40	-3076.04	-30769.60	-58.70	139.27	1.00	3.75	1.07	1.14	0.93	1.39	1.42	1.00	1.00	1.00	151677.00	246638.00	3.44
9	75246.90	-3291.46	-32307.10	-66.23	134.10	1.00	3.75	1.07	1.14	0.93	1.39	1.42	1.00	1.00	1.00	151674.00	246625.00	3.28
10	72416.80	-3158.84	-31500.50	-59.30	148.22	1.00	3.75	1.07	1.14	0.93	1.39	1.42	1.00	1.00	1.00	151677.00	246625.00	3.41
11	73770.10	-3125.87	-30845.30	-65.04	116.20	1.00	3.75	1.07	1.14	0.93	1.39	1.42	1.00	1.00	1.00	151673.00	246650.00	3.34

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 905

B=1.00 <m> L=3.75 <m> D=3.40 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1993.00 <daN/mc>
σ_{v0,f}=6638.20 <daN/mq>

Verifiche in condizioni drenate

φ'_r=27.48 <grad> c'_r=0.00 <daN/mq>
N_q=13.91 N_c=24.81 N_g=15.51 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	T _x <daN>	T _y <daN>	M _x <daNm>	M _y <daNm>	B'<m>	L'<m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	73533.70	-3613.94	43965.40	-76.74	-758.95	1.00	3.73	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151707.00	245473.00	3.34
6	70810.90	-3442.96	42027.50	-69.01	-718.82	1.00	3.73	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151708.00	245532.00	3.47
7	72112.10	-3452.84	42473.60	-75.47	-734.94	1.00	3.73	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151706.00	245488.00	3.40
8	69389.30	-3281.87	40535.70	-67.74	-694.81	1.00	3.73	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151708.00	245548.00	3.54
9	72822.90	-3533.39	43219.50	-76.11	-746.94	1.00	3.73	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151707.00	245480.00	3.37
10	70100.10	-3362.42	41281.60	-68.38	-706.82	1.00	3.73	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151708.00	245540.00	3.50
11	71401.30	-3372.29	41727.70	-74.84	-722.93	1.00	3.73	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151706.00	245495.00	3.44

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 906

B=1.00 <m> L=14.20 <m> D=3.40 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1993.00 <daN/mc>
σ_{v0,f}=6638.20 <daN/mq>

Verifiche in condizioni drenate

$\varphi'_x=27.48$ <grad> $c'_x=0.00$ <daN/mq>
 $N_q=13.91$ $N_c=24.81$ $N_g=15.51$ $g_q=1.00$ $g_c=1.00$ $g_g=1.00$
 $b_q=1.00$ $b_c=1.00$ $b_g=1.00$

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	286182.00	-44363.40	-4604.65	-576.23	-10809.60	1.00	14.12	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145666.00	890944.00	3.11
6	275186.00	-44079.00	-4465.50	-525.11	-9845.88	1.00	14.13	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145668.00	891393.00	3.24
7	281607.00	-40812.10	-4340.71	-572.49	-12721.00	1.00	14.11	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145668.00	889988.00	3.16
8	270611.00	-40527.70	-4201.56	-521.37	-11757.30	1.00	14.11	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145670.00	890405.00	3.29
9	283895.00	-42587.80	-4472.68	-574.36	-11765.30	1.00	14.12	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145667.00	890470.00	3.14
10	272899.00	-42303.40	-4333.53	-523.24	-10801.60	1.00	14.12	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145669.00	890903.00	3.26
11	279320.00	-39036.50	-4208.74	-570.62	-13676.70	1.00	14.10	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145669.00	889497.00	3.18

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 907

$B=1.00$ <m> $L=12.80$ <m> $D=3.40$ <m> $\beta=0.00$ <grad> $\eta=0.00$ <grad> $\gamma_x=1993.00$ <daN/mc>
 $\sigma_{v0,f}=6638.20$ <daN/mq>

Verifiche in condizioni drenate

$\varphi'_x=27.48$ <grad> $c'_x=0.00$ <daN/mq>
 $N_q=13.91$ $N_c=24.81$ $N_g=15.51$ $g_q=1.00$ $g_c=1.00$ $g_g=1.00$
 $b_q=1.00$ $b_c=1.00$ $b_g=1.00$

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	253380.00	2602.48	-15160.10	-243.79	-25766.20	1.00	12.60	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145949.00	797792.00	3.15
6	243684.00	2519.80	-14305.80	-229.47	-24399.60	1.00	12.60	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145948.00	798022.00	3.27
7	249979.00	2455.12	-14973.80	-245.74	-25337.60	1.00	12.60	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145948.00	797798.00	3.19
8	240284.00	2372.43	-14119.60	-231.42	-23971.00	1.00	12.60	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145948.00	798031.00	3.32
9	251680.00	2528.80	-15066.90	-244.76	-25551.90	1.00	12.60	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145948.00	797795.00	3.17
10	241984.00	2446.12	-14212.70	-230.44	-24185.30	1.00	12.60	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145948.00	798026.00	3.30
11	248279.00	2381.43	-14880.70	-246.72	-25123.30	1.00	12.60	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145948.00	797801.00	3.21

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 908

$B=1.00$ <m> $L=14.20$ <m> $D=3.40$ <m> $\beta=0.00$ <grad> $\eta=0.00$ <grad> $\gamma_x=1993.00$ <daN/mc>
 $\sigma_{v0,f}=6638.20$ <daN/mq>

Verifiche in condizioni drenate

$\varphi'_x=27.48$ <grad> $c'_x=0.00$ <daN/mq>
 $N_q=13.91$ $N_c=24.81$ $N_g=15.51$ $g_q=1.00$ $g_c=1.00$ $g_g=1.00$
 $b_q=1.00$ $b_c=1.00$ $b_g=1.00$

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	267041.00	-57221.30	4170.45	-297.21	6160.50	1.00	14.15	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145679.00	894493.00	3.35
6	257213.00	-55709.10	3929.20	-268.39	6074.32	1.00	14.15	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145681.00	894557.00	3.48
7	262767.00	-53563.90	3944.85	-296.65	4049.03	1.00	14.17	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145677.00	895416.00	3.41
8	252939.00	-52051.60	3703.60	-267.82	3962.85	1.00	14.17	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145678.00	895518.00	3.54
9	264904.00	-55392.60	4057.65	-296.93	5104.76	1.00	14.16	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145678.00	894951.00	3.38
10	255076.00	-53880.30	3816.40	-268.10	5018.59	1.00	14.16	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145679.00	895034.00	3.51
11	260630.00	-51735.20	3832.04	-296.36	2993.29	1.00	14.18	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145675.00	895889.00	3.44

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 909

$B=1.00$ <m> $L=2.40$ <m> $D=2.50$ <m> $\beta=0.00$ <grad> $\eta=0.00$ <grad> $\gamma_x=1963.00$ <daN/mc>
 $\sigma_{v0,f}=4871.50$ <daN/mq>

Verifiche in condizioni drenate

$\varphi'_x=23.00$ <grad> $c'_x=1970.00$ <daN/mq>
 $N_q=8.66$ $N_c=18.05$ $N_g=8.20$ $g_q=1.00$ $g_c=1.00$ $g_g=1.00$
 $b_q=1.00$ $b_c=1.00$ $b_g=1.00$

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	46941.90	-7264.07	-1266.38	107.84	-379.33	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131133.00	135286.00	2.88

6	44848.40	-6678.66	-1264.28	108.79	-360.11	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131129.00	135253.00	3.02
7	46291.60	-7155.20	-1256.29	107.09	-386.13	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131135.00	135255.00	2.92
8	44198.10	-6569.79	-1254.19	108.04	-366.91	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131132.00	135220.00	3.06
9	46616.70	-7209.64	-1261.34	107.47	-382.73	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131134.00	135270.00	2.90
10	44523.20	-6624.22	-1259.23	108.41	-363.51	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131130.00	135237.00	3.04
11	45966.40	-7100.77	-1251.25	106.72	-389.54	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131137.00	135239.00	2.94

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 910

B=1.00 <m> L=2.40 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	47107.30	-2982.21	-103.01	-61.63	-553.67	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131200.00	135209.00	2.87
6	44803.90	-2918.21	-139.16	-54.44	-522.06	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131201.00	135246.00	3.02
7	46425.90	-2930.11	-104.58	-60.38	-557.23	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131203.00	135186.00	2.91
8	44122.60	-2866.11	-140.73	-53.19	-525.61	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131204.00	135223.00	3.06
9	46766.60	-2956.16	-103.80	-61.00	-555.45	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131201.00	135197.00	2.89
10	44463.30	-2892.16	-139.95	-53.82	-523.84	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131202.00	135235.00	3.04
11	46085.30	-2904.06	-105.36	-59.76	-559.00	1.00	2.38	1.10	1.19	0.90	1.38	1.42	1.00	1.00	1.00	131205.00	135174.00	2.93

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 911

B=1.00 <m> L=3.84 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	71872.30	-39866.70	25504.90	-162.90	7231.51	1.00	3.64	1.06	1.12	0.94	1.38	1.42	1.00	1.00	1.00	126158.00	198683.00	2.76
6	68303.00	-37674.60	24109.90	-155.57	6843.03	1.00	3.64	1.06	1.12	0.94	1.38	1.42	1.00	1.00	1.00	126156.00	198722.00	2.91
7	70864.90	-39278.30	25134.00	-159.97	7078.97	1.00	3.64	1.06	1.12	0.94	1.38	1.42	1.00	1.00	1.00	126155.00	198760.00	2.80
8	67295.60	-37086.20	23739.00	-152.64	6690.49	1.00	3.64	1.06	1.12	0.94	1.38	1.42	1.00	1.00	1.00	126152.00	198803.00	2.95
9	71368.60	-39572.50	25319.40	-161.43	7155.24	1.00	3.64	1.06	1.12	0.94	1.38	1.42	1.00	1.00	1.00	126156.00	198721.00	2.78
10	67799.30	-37380.40	23924.50	-154.10	6766.76	1.00	3.64	1.06	1.12	0.94	1.38	1.42	1.00	1.00	1.00	126154.00	198762.00	2.93
11	70361.10	-38984.10	24948.60	-158.50	7002.70	1.00	3.64	1.06	1.12	0.94	1.38	1.42	1.00	1.00	1.00	126153.00	198799.00	2.83

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 912

B=1.00 <m> L=4.47 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	84087.90	86551.40	25203.70	206.00	-1150.08	1.00	4.44	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124446.00	239200.00	2.84
6	80014.60	82111.80	23814.20	194.81	-921.15	1.00	4.45	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124439.00	239427.00	2.99
7	82830.80	85082.50	24835.20	204.12	-1121.67	1.00	4.44	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124445.00	239207.00	2.89
8	78757.50	80642.90	23445.80	192.93	-892.74	1.00	4.45	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124438.00	239437.00	3.04
9	83459.30	85817.00	25019.50	205.06	-1135.87	1.00	4.44	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124446.00	239203.00	2.87
10	79386.10	81377.40	23630.00	193.87	-906.95	1.00	4.45	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124438.00	239432.00	3.02
11	82202.20	84348.10	24651.00	203.19	-1107.46	1.00	4.44	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124445.00	239210.00	2.91

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 913

B=1.00 <m> L=5.14 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
5	73953.90	74112.60	35.11	72.31	-18099.20	1.00	4.65	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124113.00	250555.00	3.39
6	70302.60	70303.80	34.85	65.47	-17059.00	1.00	4.66	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124107.00	250791.00	3.57
7	72693.60	72892.40	34.58	71.90	-17552.50	1.00	4.66	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124103.00	250881.00	3.45
8	69042.30	69083.60	34.32	65.06	-16512.30	1.00	4.66	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124096.00	251138.00	3.64
9	73323.70	73502.50	34.84	72.11	-17825.80	1.00	4.66	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124108.00	250717.00	3.42
10	69672.40	69693.70	34.59	65.27	-16785.70	1.00	4.66	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124102.00	250963.00	3.60
11	72063.40	72282.30	34.31	71.70	-17279.20	1.00	4.66	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124097.00	251049.00	3.48

Verifiche di capacità portante per rottura generale in condizioni sismiche

Metodo utilizzato: Condizioni statiche

Travata 901

B=1.00 <m> L=24.60 <m> D=1.90 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=3693.70 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	378780.00	102131.00	80582.70	-13004.70	-233480.00	0.93	23.37	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101640.00	961725.00	2.54
2	302279.00	70775.50	-58181.10	-7462.38	-16665.70	0.95	24.49	1.01	1.02	0.99	1.35	1.39	1.00	1.00	1.00	101574.00	1028130.00	3.40
3	449931.00	100052.00	235188.00	-18966.40	-434600.00	0.92	22.67	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101686.00	917695.00	2.04
4	434418.00	66913.20	228943.00	-18534.20	-390174.00	0.91	22.80	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101679.00	922091.00	2.12

Verifiche in condizioni non drenate

c_{ur}=6639.01 <daN/mq>
N_q=1.00 N_c=5.14 g_c=1.00 b_c=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _c	d _c	i _q	i _c	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	378780.00	102131.00	80582.70	-13004.70	-233480.00	0.93	23.37	1.01	1.45	1.00	1.00	53447.00	505717.00	1.34
2	302279.00	70775.50	-58181.10	-7462.38	-16665.70	0.95	24.49	1.01	1.44	1.00	1.00	53324.50	539750.00	1.79
3	449931.00	100052.00	235188.00	-18966.40	-434600.00	0.92	22.67	1.01	1.45	1.00	1.00	53544.00	483224.00	1.07
4	434418.00	66913.20	228943.00	-18534.20	-390174.00	0.91	22.80	1.01	1.45	1.00	1.00	53547.20	485600.00	1.12

Verifiche di capacità portante per rottura generale in condizioni sismiche

Metodo utilizzato: Condizioni statiche

Travata 902

B=1.00 <m> L=12.80 <m> D=1.90 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=3693.70 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	255080.00	-47710.40	77534.40	-3298.75	130938.00	0.97	11.77	1.02	1.04	0.98	1.35	1.39	1.00	1.00	1.00	102879.00	513003.00	2.01
2	252747.00	-46871.10	-43495.60	-3218.44	-68121.60	0.97	12.26	1.02	1.04	0.98	1.35	1.39	1.00	1.00	1.00	102779.00	533945.00	2.11
3	204619.00	-25748.00	206883.00	-1322.38	343714.00	0.99	9.44	1.02	1.05	0.98	1.34	1.39	1.00	1.00	1.00	103522.00	419418.00	2.05
4	159034.00	-6083.75	196724.00	451.95	327035.00	0.99	8.69	1.03	1.05	0.97	1.34	1.39	1.00	1.00	1.00	103810.00	389869.00	2.45

Verifiche in condizioni non drenate

c_{ur}=6639.01 <daN/mq>
N_q=1.00 N_c=5.14 g_c=1.00 b_c=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _c	d _c	i _q	i _c	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	255080.00	-47710.40	77534.40	-3298.75	130938.00	0.97	11.77	1.02	1.44	1.00	1.00	53620.50	267376.00	1.05
2	252747.00	-46871.10	-43495.60	-3218.44	-68121.60	0.97	12.26	1.02	1.44	1.00	1.00	53586.20	278385.00	1.10
3	204619.00	-25748.00	206883.00	-1322.38	343714.00	0.99	9.44	1.02	1.44	1.00	1.00	53759.80	217807.00	1.06
4	159034.00	-6083.75	196724.00	451.95	327035.00	0.99	8.69	1.02	1.44	1.00	1.00	53815.10	202107.00	1.27

Verifiche di capacità portante per rottura generale in condizioni sismiche

Metodo utilizzato: Condizioni statiche

Travata 903

B=1.00 <m> L=24.60 <m> D=1.90 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,ε}=3693.70 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	392816.00	100895.00	-106295.00	-13079.20	-363590.00	0.93	22.75	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101673.00	938658.00	2.39
2	317007.00	71221.20	32265.50	-7512.04	-151308.00	0.95	23.65	1.01	1.02	0.99	1.35	1.39	1.00	1.00	1.00	101616.00	995163.00	3.14
3	454810.00	93279.30	-252131.00	-19116.70	-494069.00	0.92	22.43	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101699.00	908308.00	2.00
4	432139.00	57077.70	-238572.00	-18724.50	-393627.00	0.91	22.78	1.01	1.02	0.99	1.35	1.40	1.00	1.00	1.00	101681.00	919741.00	2.13

Verifiche in condizioni non drenate

c_{ur}=6639.01 <daN/mq>
N_q=1.00 N_c=5.14 g_c=1.00 b_c=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _c	d _c	i _q	i _c	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	392816.00	100895.00	-106295.00	-13079.20	-363590.00	0.93	22.75	1.01	1.45	1.00	1.00	53446.50	493425.00	1.26
2	317007.00	71221.20	32265.50	-7512.04	-151308.00	0.95	23.65	1.01	1.44	1.00	1.00	53327.50	522257.00	1.65
3	454810.00	93279.30	-252131.00	-19116.70	-494069.00	0.92	22.43	1.01	1.45	1.00	1.00	53546.90	478244.00	1.05
4	432139.00	57077.70	-238572.00	-18724.50	-393627.00	0.91	22.78	1.01	1.45	1.00	1.00	53554.90	484422.00	1.12

Verifiche di capacità portante per rottura generale in condizioni sismiche

Metodo utilizzato: Condizioni statiche

Travata 904

B=1.00 <m> L=3.75 <m> D=3.40 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1993.00 <daN/mc>
σ_{v0,ε}=6638.20 <daN/mq>

Verifiche in condizioni drenate

φ'_r=27.48 <grad> c'_r=0.00 <daN/mq>
N_q=13.91 N_c=24.81 N_g=15.51 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	64777.40	-7099.10	-122437.00	-203.08	3543.98	0.99	3.64	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151845.00	238843.00	3.69
2	56954.00	-6200.00	-11932.80	-162.10	-1365.38	0.99	3.70	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151715.00	242809.00	4.26
3	71874.00	-5170.11	-221401.00	-154.69	8585.96	1.00	3.51	1.08	1.15	0.92	1.39	1.42	1.00	1.00	1.00	152183.00	231316.00	3.22
4	70133.30	-2617.60	-195724.00	-72.22	7998.29	1.00	3.52	1.08	1.15	0.92	1.39	1.42	1.00	1.00	1.00	152189.00	232562.00	3.32

Verifiche di capacità portante per rottura generale in condizioni sismiche

Metodo utilizzato: Condizioni statiche

Travata 905

B=1.00 <m> L=3.75 <m> D=3.40 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1993.00 <daN/mc>
σ_{v0,ε}=6638.20 <daN/mq>

Verifiche in condizioni drenate

φ'_r=27.48 <grad> c'_r=0.00 <daN/mq>
N_q=13.91 N_c=24.81 N_g=15.51 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	64859.20	-7097.81	112879.00	-215.22	-3292.57	0.99	3.65	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151822.00	239236.00	3.69
2	56733.00	-6304.20	1705.73	-176.16	1625.21	0.99	3.69	1.07	1.15	0.93	1.39	1.42	1.00	1.00	1.00	151728.00	242091.00	4.27
3	71072.60	-5120.68	224914.00	-160.44	-8829.47	1.00	3.50	1.08	1.15	0.92	1.39	1.42	1.00	1.00	1.00	152203.00	230669.00	3.25
4	68272.30	-2632.39	209771.00	-74.42	-8657.60	1.00	3.50	1.08	1.15	0.92	1.39	1.42	1.00	1.00	1.00	152251.00	230942.00	3.38

Verifiche di capacità portante per rottura generale in condizioni sismiche
Metodo utilizzato: Condizioni statiche

Travata 906
B=1.00 <m> L=14.20 <m> D=3.40 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1993.00 <daN/mc>
σ_{v0,f}=6638.20 <daN/mq>

Verifiche in condizioni drenate

φ'_r=27.48 <grad> c'_r=0.00 <daN/mq>
N_q=13.91 N_c=24.81 N_g=15.51 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	250112.00	-367192.00	-8109.19	-1073.44	-150796.00	0.99	12.99	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145809.00	816699.00	3.27
2	195485.00	-274948.00	536.76	41.15	-129334.00	1.00	12.88	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145911.00	816552.00	4.18
3	311551.00	-271861.00	-17828.60	-2300.92	-85543.50	0.99	13.65	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145637.00	851611.00	2.73
4	309587.00	-97905.00	-17513.60	-2238.46	-8150.25	0.99	14.15	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145562.00	882410.00	2.85

Verifiche di capacità portante per rottura generale in condizioni sismiche
Metodo utilizzato: Condizioni statiche

Travata 907
B=1.00 <m> L=12.80 <m> D=3.40 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1993.00 <daN/mc>
σ_{v0,f}=6638.20 <daN/mq>

Verifiche in condizioni drenate

φ'_r=27.48 <grad> c'_r=0.00 <daN/mq>
N_q=13.91 N_c=24.81 N_g=15.51 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	275557.00	20372.90	-53762.30	-2117.43	-91047.30	0.98	12.14	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145907.00	758246.00	2.75
2	273400.00	19567.40	17250.20	-2063.68	21388.70	0.98	12.64	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145810.00	789445.00	2.89
3	222803.00	8622.16	-131780.00	-849.88	-211301.00	0.99	10.90	1.02	1.05	0.98	1.39	1.42	1.00	1.00	1.00	146267.00	688095.00	3.09
4	175426.00	-2255.47	-127640.00	290.34	-201939.00	1.00	10.50	1.03	1.05	0.97	1.39	1.42	1.00	1.00	1.00	146419.00	666078.00	3.80

Verifiche di capacità portante per rottura generale in condizioni sismiche
Metodo utilizzato: Condizioni statiche

Travata 908
B=1.00 <m> L=14.20 <m> D=3.40 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1993.00 <daN/mc>
σ_{v0,f}=6638.20 <daN/mq>

Verifiche in condizioni drenate

φ'_r=27.48 <grad> c'_r=0.00 <daN/mq>
N_q=13.91 N_c=24.81 N_g=15.51 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	238239.00	-381999.00	12701.70	-999.93	130630.00	0.99	13.10	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145792.00	823621.00	3.46
2	182895.00	-303796.00	4340.39	120.01	107082.00	1.00	13.03	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145874.00	825263.00	4.51
3	299204.00	-261334.00	18466.10	-2146.60	75969.60	0.99	13.69	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145634.00	854540.00	2.86
4	296115.00	-79704.20	15045.80	-2009.53	5569.54	0.99	14.16	1.02	1.04	0.98	1.39	1.42	1.00	1.00	1.00	145569.00	884182.00	2.99

Verifiche di capacità portante per rottura generale in condizioni sismiche
Metodo utilizzato: Condizioni statiche

Travata 909
B=1.00 <m> L=2.40 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	53878.90	-61081.90	-2520.95	225.90	-5294.57	0.99	2.20	1.10	1.21	0.90	1.38	1.43	1.00	1.00	1.00	132266.00	125650.00	2.33
2	50225.80	-57919.60	-729.83	93.29	-5169.08	1.00	2.19	1.10	1.21	0.90	1.38	1.42	1.00	1.00	1.00	132391.00	125827.00	2.51
3	46753.80	-26739.50	-4208.96	332.79	-1993.22	0.99	2.31	1.10	1.19	0.90	1.38	1.43	1.00	1.00	1.00	131448.00	130405.00	2.79
4	36993.60	5859.08	-3864.70	291.78	962.00	0.98	2.35	1.10	1.19	0.90	1.38	1.43	1.00	1.00	1.00	131222.00	131844.00	3.56

Verifiche di capacità portante per rottura generale in condizioni sismiche
Metodo utilizzato: Condizioni statiche

Travata 910

B=1.00 <m> L=2.40 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	52382.40	-42157.10	-911.04	-205.78	-5389.17	0.99	2.19	1.10	1.21	0.90	1.38	1.43	1.00	1.00	1.00	132338.00	125260.00	2.39
2	49451.50	-34572.00	279.45	-25.44	-5271.31	1.00	2.19	1.10	1.21	0.90	1.38	1.42	1.00	1.00	1.00	132477.00	125828.00	2.54
3	45072.00	-25795.20	-2176.02	-363.46	-2097.69	0.98	2.31	1.10	1.19	0.90	1.38	1.43	1.00	1.00	1.00	131475.00	129744.00	2.88
4	35875.00	-4185.65	-2069.80	-318.28	841.42	0.98	2.35	1.10	1.19	0.90	1.38	1.43	1.00	1.00	1.00	131167.00	131814.00	3.67

Verifiche di capacità portante per rottura generale in condizioni sismiche
Metodo utilizzato: Condizioni statiche

Travata 911

B=1.00 <m> L=3.84 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	89219.10	-120807.00	33207.70	-404.96	17177.20	0.99	3.45	1.07	1.13	0.93	1.38	1.43	1.00	1.00	1.00	126626.00	188481.00	2.11
2	80590.40	-107964.00	12212.90	101.59	16419.70	1.00	3.43	1.07	1.13	0.93	1.38	1.42	1.00	1.00	1.00	126742.00	188668.00	2.34
3	77847.20	-76558.50	55149.80	-975.82	10036.40	0.97	3.58	1.06	1.12	0.94	1.38	1.43	1.00	1.00	1.00	126156.00	191553.00	2.46
4	59471.10	-25789.20	52962.50	-958.57	3158.34	0.97	3.73	1.06	1.12	0.94	1.38	1.43	1.00	1.00	1.00	125723.00	197513.00	3.32

Verifiche di capacità portante per rottura generale in condizioni sismiche
Metodo utilizzato: Condizioni statiche

Travata 912

B=1.00 <m> L=4.47 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	72905.20	154831.00	32750.70	791.89	-6458.77	0.98	4.29	1.05	1.10	0.95	1.38	1.43	1.00	1.00	1.00	124615.00	227534.00	3.12
2	71533.00	140677.00	11488.20	773.71	-21.64	0.98	4.47	1.05	1.10	0.95	1.38	1.43	1.00	1.00	1.00	124304.00	236324.00	3.30
3	68409.20	113234.00	55248.40	374.33	-12131.20	0.99	4.12	1.05	1.11	0.95	1.38	1.43	1.00	1.00	1.00	125023.00	221253.00	3.23
4	63183.30	63425.10	53269.60	-1.75	-10556.20	1.00	4.14	1.06	1.11	0.94	1.38	1.42	1.00	1.00	1.00	125050.00	224853.00	3.56

Verifiche di capacità portante per rottura generale in condizioni sismiche
Metodo utilizzato: Condizioni statiche

Travata 913

B=1.00 <m> L=5.14 <m> D=2.50 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=4871.50 <daN/mq>

Verifiche in condizioni drenate

φ'_r=23.00 <grad> c'_r=1970.00 <daN/mq>
N_q=8.66 N_c=18.05 N_g=8.20 g_q=1.00 g_c=1.00 g_g=1.00
b_q=1.00 b_c=1.00 b_g=1.00

CC	N <daN>	Tx <daN>	Ty <daN>	Mx <daNm>	My <daNm>	B' <m>	L' <m>	s _q	s _c	s _g	d _q	d _c	i _q	i _c	i _g	q _{lim} <daN/mq>	R _d <daN>	Sic.
1	57946.80	73527.90	874.95	523.41	-18052.30	0.98	4.52	1.05	1.10	0.95	1.38	1.43	1.00	1.00	1.00	124241.00	239679.00	4.14
2	56941.50	69853.90	-87.91	-202.26	-17583.00	0.99	4.52	1.05	1.10	0.95	1.38	1.42	1.00	1.00	1.00	124294.00	242752.00	4.26
3	57758.90	66473.00	1742.76	1293.47	-15214.40	0.96	4.61	1.05	1.09	0.95	1.38	1.43	1.00	1.00	1.00	123937.00	237540.00	4.11
4	56592.60	56752.00	1523.73	1227.87	-12312.60	0.96	4.71	1.05	1.09	0.95	1.38	1.43	1.00	1.00	1.00	123805.00	242354.00	4.28

Fascicolo dei calcoli - Copertura edificio C - Vento verso l'alto

Geometria

Elenco vincoli nodi

Simbologia

Comm. = Commento
Kt =Coeff. di sottofondo su suolo elastico alla Winkler
Ly =Lunghezza (dir. Y locale)
Lz =Larghezza (dir. Z locale)
RL =Rotazione libera
Rx =Rotazione intorno all'asse X (L=libera, B=bloccata, E=elastica)
Ry =Rotazione intorno all'asse Y (L=libera, B=bloccata, E=elastica)
Rz =Rotazione intorno all'asse Z (L=libera, B=bloccata, E=elastica)
Sx =Spostamento in dir. X (L=libero, B=bloccato, E=elastico)
Sy =Spostamento in dir. Y (L=libero, B=bloccato, E=elastico)
Sz =Spostamento in dir. Z (L=libero, B=bloccato, E=elastico)
Vn =Numero del vincolo nodo

Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt
									<m>	<m>	<daN/cm<div>c>
1	Libero	L	L	L	L	L	L				
4	Carrello	L	L	B	L	L	L				

Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt
									<m>	<m>	<daN/cm<div>c>
2	Incastro	B	B	B	B	B	B				
5	Cerniera	B	B	B	L	L	L				

Elenco nodi

Simbologia

Imp. =Numero dell'impalcato
Nodo =Numero del nodo
Vn =Numero del vincolo nodo
X =Coordinata X del nodo
Y =Coordinata Y del nodo
Z =Coordinata Z del nodo

Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>		
-2285	38.80	2.56	0.00	0	2
-2282	38.80	11.52	0.00	0	2
-2275	37.50	11.52	0.00	0	1
-2272	37.50	7.68	0.00	0	1
-2269	37.50	1.28	0.00	0	1
-2266	1.30	3.84	0.00	0	1
-2263	1.30	10.24	0.00	0	1
-2260	1.30	5.12	0.00	0	1
-2129	36.87	8.96	0.00	0	1
-2126	36.87	5.12	0.00	0	1
-2123	36.87	1.28	0.00	0	1
-2042	0.00	11.52	0.00	0	2
-1921	36.87	12.80	0.00	0	1
-1906	24.60	11.52	0.00	0	2
-1888	34.47	7.75	0.00	0	2
-1878	36.87	3.27	0.00	0	1
-1852	36.87	0.00	0.00	0	1
1	0.00	0.00	0.00	0	2
504	18.50	0.00	0.00	0	5
508	12.40	1.28	0.00	0	1
511	12.40	2.56	0.00	0	1
515	12.40	3.84	0.00	0	1
518	12.40	5.12	0.00	0	1
522	12.40	6.40	0.00	0	1
525	12.40	7.68	0.00	0	1
528	12.40	8.96	0.00	0	1
532	12.40	10.24	0.00	0	1
535	12.40	11.52	0.00	0	1
538	6.30	12.80	0.00	0	4
541	24.60	12.80	0.00	0	2
604	18.50	0.00	0.50	0	1
609	18.50	1.28	0.79	0	1
612	18.50	2.56	1.02	0	1
616	18.50	3.84	1.18	0	1
619	18.50	5.12	1.27	0	1
622	12.40	6.40	1.31	0	1
625	12.40	7.68	1.27	0	1
628	12.40	8.96	1.18	0	1
632	12.40	10.24	1.02	0	1
635	12.40	11.52	0.79	0	1
639	12.40	12.80	0.50	0	1
642	18.50	-1.38	0.18	0	1
645	30.50	1.28	0.00	0	2
648	34.47	11.52	0.00	0	2
651	30.50	10.24	0.00	0	2
654	24.60	3.84	0.00	0	2
657	38.80	3.84	0.00	0	2
660	30.50	8.96	0.00	0	2
663	0.00	5.12	0.00	0	2
666	34.47	5.12	0.00	0	2

Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>		
-2284	38.80	1.28	0.00	0	2
-2277	37.50	5.12	0.00	0	1
-2274	37.50	10.24	0.00	0	1
-2271	37.50	3.84	0.00	0	1
-2268	1.30	1.28	0.00	0	1
-2265	1.30	7.68	0.00	0	1
-2262	1.30	11.52	0.00	0	1
-2131	36.87	11.52	0.00	0	1
-2128	36.87	7.68	0.00	0	1
-2125	36.87	3.84	0.00	0	1
-2078	0.00	10.24	0.00	0	2
-2040	24.60	1.28	0.00	0	2
-1916	34.47	12.80	0.00	0	2
-1900	24.60	10.24	0.00	0	2
-1886	36.87	5.03	0.00	0	1
-1873	34.47	3.27	0.00	0	2
-1847	34.47	0.00	0.00	0	2
502	6.30	0.00	0.00	0	5
505	24.60	0.00	0.00	0	2
509	18.50	1.28	0.00	0	1
512	18.50	2.56	0.00	0	1
516	18.50	3.84	0.00	0	1
519	18.50	5.12	0.00	0	1
523	18.50	6.40	0.00	0	1
526	18.50	7.68	0.00	0	1
529	18.50	8.96	0.00	0	1
533	18.50	10.24	0.00	0	1
536	18.50	11.52	0.00	0	1
539	12.40	12.80	0.00	0	4
602	6.30	0.00	0.50	0	1
607	6.30	1.28	0.79	0	1
610	6.30	2.56	1.02	0	1
614	6.30	3.84	1.18	0	1
617	6.30	5.12	1.27	0	1
620	30.50	6.40	0.00	0	2
623	18.50	6.40	1.31	0	1
626	18.50	7.68	1.27	0	1
629	18.50	8.96	1.18	0	1
633	18.50	10.24	1.02	0	1
636	18.50	11.52	0.79	0	1
640	18.50	12.80	0.50	0	1
643	6.30	-1.38	0.18	0	1
646	34.47	1.28	0.00	0	2
649	30.50	2.56	0.00	0	2
652	34.47	10.24	0.00	0	2
655	30.50	3.84	0.00	0	2
658	0.00	8.96	0.00	0	2
661	34.47	8.96	0.00	0	2
664	24.60	5.12	0.00	0	2
667	38.80	5.12	0.00	0	2

Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>		
-2283	38.80	10.24	0.00	0	2
-2276	37.50	6.40	0.00	0	1
-2273	37.50	8.96	0.00	0	1
-2270	37.50	2.56	0.00	0	1
-2267	1.30	2.56	0.00	0	1
-2264	1.30	8.96	0.00	0	1
-2261	1.30	6.40	0.00	0	1
-2130	36.87	10.24	0.00	0	1
-2127	36.87	6.40	0.00	0	1
-2124	36.87	2.56	0.00	0	1
-2075	0.00	2.56	0.00	0	2
-2039	0.00	1.28	0.00	0	2
-1915	30.50	12.80	0.00	0	2
-1893	36.87	7.75	0.00	0	1
-1881	34.47	5.03	0.00	0	2
-1871	24.60	2.56	0.00	0	2
-1846	30.50	0.00	0.00	0	2
503	12.40	0.00	0.00	0	5
507	6.30	1.28	0.00	0	1
510	6.30	2.56	0.00	0	1
514	6.30	3.84	0.00	0	1
517	6.30	5.12	0.00	0	1
521	6.30	6.40	0.00	0	1
524	6.30	7.68	0.00	0	1
527	6.30	8.96	0.00	0	1
531	6.30	10.24	0.00	0	1
534	6.30	11.52	0.00	0	1
537	0.00	12.80	0.00	0	2
540	18.50	12.80	0.00	0	4
603	12.40	0.00	0.50	0	1
608	12.40	1.28	0.79	0	1
611	12.40	2.56	1.02	0	1
615	12.40	3.84	1.18	0	1
618	12.40	5.12	1.27	0	1
621	6.30	6.40	1.31	0	1
624	6.30	7.68	1.27	0	1
627	6.30	8.96	1.18	0	1
631	6.30	10.24	1.02	0	1
634	6.30	11.52	0.79	0	1
638	6.30	12.80	0.50	0	1
641	12.40	-1.38	0.18	0	1
644	12.40	14.18	0.18	0	1
647	30.50	11.52	0.00	0	2
650	34.47	2.56	0.00	0	2
653	0.00	3.84	0.00	0	2
656	34.47	3.84	0.00	0	2
659	24.60	8.96	0.00	0	2
662	38.80	8.96	0.00	0	2
665	30.50	5.12	0.00	0	2
668	0.00	7.68	0.00	0	2

669	24.60	7.68	0.00	0	2	670	30.50	7.68	0.00	0	2	671	34.47	7.68	0.00	0	2
672	38.80	7.68	0.00	0	2	673	0.00	6.40	0.00	0	2	674	24.60	6.40	0.00	0	2
675	34.47	6.40	0.00	0	2	676	38.80	6.40	0.00	0	2	677	18.50	14.18	0.18	0	1
678	6.30	14.18	0.18	0	1	679	0.00	14.18	0.18	0	1	680	0.00	-1.38	0.18	0	1
681	0.00	12.80	0.50	0	1	682	0.00	0.00	0.50	0	1	683	24.60	0.00	0.50	0	1
684	24.60	12.80	0.50	0	1	685	24.60	-1.38	0.18	0	1	686	24.60	14.18	0.18	0	1
687	30.50	0.00	0.50	0	1	688	30.50	12.80	0.50	0	1	689	30.50	-1.38	0.18	0	1
690	30.50	14.18	0.18	0	1	691	34.47	0.00	0.50	0	1	692	34.47	12.80	0.50	0	1
693	34.47	-1.38	0.18	0	1	694	34.47	14.18	0.18	0	1	695	38.80	0.00	0.50	0	1
696	38.80	12.80	0.50	0	1	697	38.80	-1.38	0.18	0	1	698	38.80	14.18	0.18	0	1
699	0.00	1.28	0.79	0	1	700	0.00	2.56	1.02	0	1	701	0.00	3.84	1.18	0	1
702	0.00	5.12	1.27	0	1	703	0.00	6.40	1.31	0	1	704	0.00	7.68	1.27	0	1
705	0.00	8.96	1.18	0	1	706	0.00	10.24	1.02	0	1	707	0.00	11.52	0.79	0	1
708	-1.50	11.52	0.79	0	1	709	-1.50	10.24	1.02	0	1	710	-1.50	8.96	1.18	0	1
711	-1.50	7.68	1.27	0	1	712	-1.50	6.40	1.31	0	1	713	-1.50	5.12	1.27	0	1
714	-1.50	3.84	1.18	0	1	715	-1.50	2.56	1.02	0	1	716	-1.50	1.28	0.79	0	1
717	-1.50	12.80	0.50	0	1	718	-1.50	0.00	0.50	0	1	719	-1.50	14.18	0.18	0	1
720	-1.50	-1.38	0.18	0	1	754	38.80	7.68	1.27	0	1	755	38.80	8.96	1.18	0	1
756	38.80	10.24	1.02	0	1	757	38.80	11.52	0.79	0	1	758	40.30	11.52	0.79	0	1
759	40.30	10.24	1.02	0	1	760	40.30	8.96	1.18	0	1	761	40.30	7.68	1.27	0	1
762	40.30	6.40	1.31	0	1	763	40.30	5.12	1.27	0	1	764	40.30	3.84	1.18	0	1
765	40.30	2.56	1.02	0	1	766	40.30	1.28	0.79	0	1	767	40.30	12.80	0.50	0	1
768	40.30	0.00	0.50	0	1	769	40.30	14.18	0.18	0	1	770	40.30	-1.38	0.18	0	1
771	38.80	12.80	0.00	0	2	772	38.80	0.00	0.00	0	2	778	38.80	1.28	0.79	0	1
779	38.80	2.56	1.02	0	1	780	38.80	3.84	1.18	0	1	781	38.80	5.12	1.27	0	1
782	38.80	6.40	1.31	0	1												

Elenco materiali

Simbologia

α =Coeff. di dilatazione termica
v =Coeff. di Poisson
Comm. = Commento
E =Modulo elastico
G =Modulo elastico tangenziale
Mat. =Numero del materiale
P =Peso specifico

Mat.	Comm.	P <daN/mc>	E <daN/cm ² >	G <daN/cm ² >	v	α
4	Calcestruzzo classe C20/25	2500	302005.00	137275.00	0.1	1.00E-05
5	Calcestruzzo classe C25/30	2500	314472.00	142942.00	0.1	1.00E-05
18	Acciaio	7850	2100000.00	800000.00	0.3	1.00E-05
22	Calcestruzzo classe C20/25 FESSURATO	2500	151002.00	68637.50	0.1	1.00E-05

Elenco sezioni aste

Simbologia

% =Pendenza ala
B =Base
C =Numero del criterio di progetto
Comm. = Commento
Crit. C.F. =Criterio di progetto collegamento finale
Crit. C.I. =Criterio di progetto collegamento iniziale
D =Distanza
H =Altezza
Ma =Numero del materiale
Mem. =Membratura
T = Trave
P = Pilastro
Sez. =Numero della sezione
Tipo =Tipologia
2Cdx = Doppia C lato costola
R = Rettangolare
Cs = C stondata
Is = I stondata
Ver. =Verifica prevista
C = Cemento armato
A = Acciaio
a =Spessore anima
r =Raggio raccordo anima-ala
rl =Raggio in testa ala
s =Spessore ala

Sez.	Comm.	Tipo	Mem.	Ver.	B <cm>	H <cm>	s <cm>	a <cm>	r <cm>	rl <cm>	%	D <cm>	Ma	C	Crit. C.I.	Crit. C.F.
20	HEB100	Is	T	A	10.00	10.00	1.00	0.60	1.20	0.00	0.00		18	1	3	3
23	2UPN160	2Cdx	T	A	6.50	16.00	1.05	0.75	1.05	0.55	8.00	1.00	18	3	3	3
24	IPE240	Is	T	A	12.00	24.00	0.98	0.62	1.50	0.00	0.00		18	1	3	3
33	HEB140	Is	T	A	14.00	14.00	1.20	0.70	1.20	0.00	0.00		18	1	3	3
37	2UPN100	2Cdx	T	A	5.00	10.00	0.85	0.60	0.85	0.45	8.00	1.00	18	1	3	3
38	UPN140	Cs	T	A	6.00	14.00	1.00	0.70	1.00	0.50	8.00		18	1	3	3

Elenco vincoli aste

Simbologia

Comm. = Commento

Kt =Coeff. di sottofondo su suolo elastico alla Winkler
 Mxf =Momento intorno all'asse X locale nodo finale (0=sbloccato, 1=bloccato)
 Mxi =Momento intorno all'asse X locale nodo iniziale (0=sbloccato, 1=bloccato)
 Myf =Momento intorno all'asse Y locale nodo finale (0=sbloccato, 1=bloccato)
 Myi =Momento intorno all'asse Y locale nodo iniziale (0=sbloccato, 1=bloccato)
 Mzf =Momento intorno all'asse Z locale nodo finale (0=sbloccato, 1=bloccato)
 Mzi =Momento intorno all'asse Z locale nodo iniziale (0=sbloccato, 1=bloccato)
 Nf =Sforzo normale nodo finale (0=sbloccato, 1=bloccato)
 Ni =Sforzo normale nodo iniziale (0=sbloccato, 1=bloccato)
 Tipo =Tipologia
 SVI = Definizione di vincolamenti interni
 ELA = Vincolo su suolo elastico alla Winkler
 BIE-RTC = Biella resistente a trazione e a compressione
 BIE-RC = Biella resistente solo a compressione
 BIE-RT = Biella resistente solo a trazione
 Tyf =Taglio in dir. Y locale nodo finale (0=sbloccato, 1=bloccato)
 Tyi =Taglio in dir. Y locale nodo iniziale (0=sbloccato, 1=bloccato)
 Tzf =Taglio in dir. Z locale nodo finale (0=sbloccato, 1=bloccato)
 Tzi =Taglio in dir. Z locale nodo iniziale (0=sbloccato, 1=bloccato)
 Va =Numero del vincolo asta

Va	Comm.	Tipo	Ni	Tyi	Tzi	Mxi	Myi	Mzi	Nf	Tyf	Tzf	Mxf	Myf	Mzf	Kt
															<daN/cmc>
1	Inc+Inc	SVI	1	1	1	1	1	1	1	1	1	1	1	1	
5	Inc+CerY	SVI	1	1	1	1	1	1	1	1	1	1	0	1	
6	CerY+Inc	SVI	1	1	1	1	0	1	1	1	1	1	1	1	
7	CerY+CerY	SVI	1	1	1	1	0	1	1	1	1	1	0	1	

Elenco aste

Simbologia

Asta =Numero dell'asta
 Dy1 =Scost. filo fisso Y1
 Dy2 =Scost. filo fisso Y2
 Dz1 =Scost. filo fisso Z1
 Dz2 =Scost. filo fisso Z2
 FF =Filo fisso
 Kt =Coeff. di sottofondo su suolo elastico alla Winkler
 N1 =Nodo iniziale
 N2 =Nodo finale
 Par. =Numero dei parametri aggiuntivi
 Rot. =Rotazione
 Sez. =Numero della sezione
 TC1 =Tipo collegamento iniziale
 TC2 =Tipo collegamento finale
 Va =Numero del vincolo asta

Asta	N1	N2	Sez.	Va	Par.	Rot.	FF	Dy1	Dy2	Dz1	Dz2	TC1	TC2	Kt
						<grad>		<cm>	<cm>	<cm>	<cm>			<daN/cmc>
0	1	-2039		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2039	-2075		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	1	502		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2075	653		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	653	663		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	663	673		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	673	668		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	668	658		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	502	503		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	658	-2078		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2078	-2042		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2042	537		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	503	504		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	538	537		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	504	505		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	539	538		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	505	-2040		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2040	-1871		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	505	-1846		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1871	654		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	540	539		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	654	664		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	664	674		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1846	645		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	674	669		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	645	649		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1846	-1847		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	669	659		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	649	655		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	659	-1900		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	541	540		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	655	665		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1847	646		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1900	-1906		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1847	-1852		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	665	620		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	646	650		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	

0	-1906	541		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	650	-1873		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1852	-2123		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	620	670		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1852	772		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1873	656		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2123	-2124		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	670	660		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	656	-1881		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1873	-1878		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	772	-2284		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1881	666		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2124	-1878		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	660	651		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	666	675		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1915	541		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1878	-2125		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1881	-1886		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2284	-2285		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2125	-1886		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	651	647		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	675	671		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1886	-2126		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2285	657		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	671	-1888		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2126	-2127		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	647	-1915		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1888	661		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	657	667		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1888	-1893		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2127	-2128		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	661	652		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	667	676		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2128	-1893		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1893	-2129		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1916	-1915		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	652	648		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	676	672		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2129	-2130		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	648	-1916		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	672	662		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2130	-2131		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	662	-2283		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1921	-1916		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2131	-1921		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2283	-2282		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	771	-1921		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2282	771		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
7	607	507	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
8	608	508	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
9	609	509	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
10	610	510	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
11	611	511	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
12	612	512	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
14	614	514	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
15	615	515	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
16	616	516	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
17	617	517	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
18	618	518	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
19	619	519	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
21	521	621	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
22	522	622	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
23	523	623	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
24	524	624	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
25	525	625	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
26	526	626	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
27	527	627	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
28	528	628	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
29	529	629	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
31	531	631	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
32	532	632	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	533	633	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
34	534	634	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
35	535	635	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
36	536	636	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
43	603	503	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
44	604	504	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
45	539	639	20	6		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
46	540	640	20	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
47	602	502	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
48	538	638	20	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
1000	720	680	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1000	680	643	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1000	643	641	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	

1000	641	642	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1000	642	685	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1000	685	689	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1000	689	693	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1000	693	697	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1000	697	770	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1001	718	682	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1001	682	602	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1001	602	603	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1001	603	604	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1001	604	683	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1001	683	687	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1001	687	691	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1001	691	695	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1003	720	718	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	718	716	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	716	715	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	715	714	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	714	713	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	713	712	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	712	711	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	711	710	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	710	709	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	709	708	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	708	717	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1003	717	719	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1004	770	768	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	768	766	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	766	765	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	765	764	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	764	763	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	763	762	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	762	761	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	761	760	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	760	759	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	759	758	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	758	767	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1004	767	769	38	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1005	717	681	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1005	681	638	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1005	638	639	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1005	639	640	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1005	640	684	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1005	684	688	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1005	688	692	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1005	692	696	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1005	696	767	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1006	719	679	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1006	679	678	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1006	678	644	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1006	644	677	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1006	677	686	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1006	686	690	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1006	690	694	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1006	694	698	33	7		0.00	11	0.00	0.00	0.00	0.00	FPL	FPL	
1006	698	769	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	682	699	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	699	700	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	700	701	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	701	702	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	702	703	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	703	704	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	704	705	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	705	706	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	706	707	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1007	707	681	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1008	695	778	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	778	779	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	779	780	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	780	781	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	781	782	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	782	754	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	754	755	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	755	756	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	756	757	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1008	757	696	38	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1009	602	643	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1010	603	641	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1011	604	642	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1012	683	685	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1013	687	689	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1014	691	693	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1015	678	638	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1016	644	639	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	

1017	677	640	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1018	686	684	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1019	694	692	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1020	683	-2040	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1021	687	645	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1022	691	646	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1023	684	-1906	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1024	688	647	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1025	692	648	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1028	699	-2268	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1029	700	-2267	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1030	701	-2266	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1031	702	-2260	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1032	703	-2261	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1033	704	-2265	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1034	705	-2264	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1035	706	-2263	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1036	707	-2262	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1039	778	-2269	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1040	779	-2270	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1041	780	-2271	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1042	781	-2277	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1043	782	-2276	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1044	754	-2272	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1045	755	-2273	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1046	757	-2275	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1047	699	716	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1048	700	715	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1049	701	714	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1050	702	713	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1051	703	712	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1052	704	711	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1053	705	710	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1054	706	709	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1055	707	708	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1056	695	768	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
1057	766	778	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1058	765	779	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1059	764	780	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1060	763	781	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1061	762	782	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1062	761	754	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1063	760	755	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1064	759	756	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1065	758	757	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1066	756	-2274	37	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1067	690	688	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1068	682	1	33	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
1069	699	-2039	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1070	700	-2075	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1071	701	653	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1072	702	663	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1073	703	673	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1074	704	668	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1075	705	658	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1076	706	-2078	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1077	707	-2042	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1078	537	681	33	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
1079	695	772	33	1		270.00	88	0.00	0.00	0.00	0.00	ND	ND	
1080	778	-2284	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1081	779	-2285	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1082	780	657	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1083	781	667	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1084	782	676	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1085	754	672	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1086	755	662	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1087	756	-2283	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1088	757	-2282	33	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
1089	771	696	33	1		270.00	22	0.00	0.00	0.00	0.00	ND	ND	
1090	683	505	33	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
1091	687	-1846	33	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
1092	691	-1847	33	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
1093	541	684	33	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
1094	-1915	688	33	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
1095	-1916	692	33	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
5002	-2268	-2039	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5002	507	-2268	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5002	508	507	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5002	509	508	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5002	-2040	509	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5002	-2040	645	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5002	645	646	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5002	646	-2123	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5002	-2123	-2269	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	

5002	-2269	-2284	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	-2267	-2075	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	510	-2267	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	511	510	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	512	511	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	-1871	512	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	-1871	649	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	649	650	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	650	-2124	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	-2124	-2270	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5003	-2270	-2285	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	-2266	653	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	514	-2266	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	515	514	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	516	515	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	654	516	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	654	655	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	655	656	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	656	-2125	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	-2125	-2271	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5006	-2271	657	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	-2260	663	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	517	-2260	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	518	517	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	519	518	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	664	519	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	664	665	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	665	666	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	666	-2126	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	-2126	-2277	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5008	-2277	667	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	-2261	673	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	521	-2261	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	522	521	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	523	522	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	674	523	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	674	620	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	620	675	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	675	-2127	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	-2127	-2276	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5009	-2276	676	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	-2265	668	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	524	-2265	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	525	524	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	526	525	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	669	526	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	669	670	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	670	671	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	671	-2128	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	-2128	-2272	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5010	-2272	672	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	-2264	658	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	527	-2264	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	528	527	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	529	528	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	659	529	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	659	660	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	660	661	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	661	-2129	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	-2129	-2273	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5012	-2273	662	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	-2263	-2078	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	531	-2263	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	532	531	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	533	532	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	-1900	533	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	-1900	651	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	651	652	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	652	-2130	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	-2130	-2274	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5014	-2274	-2283	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	-2262	-2042	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	534	-2262	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	535	534	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	536	535	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	-1906	536	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	-1906	647	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	647	648	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	648	-2131	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	-2131	-2275	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5015	-2275	-2282	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
5018	507	502	24	5		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5018	510	507	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5018	514	510	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	

5018	517	514	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5018	521	517	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5018	524	521	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5018	527	524	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5018	531	527	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5018	534	531	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5018	538	534	24	6		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	508	503	24	5		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	511	508	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	515	511	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	518	515	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	522	518	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	525	522	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	528	525	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	532	528	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	535	532	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5019	539	535	24	6		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	509	504	24	5		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	512	509	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	516	512	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	519	516	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	523	519	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	526	523	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	529	526	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	533	529	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	536	533	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
5020	540	536	24	6		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
6018	507	602	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
6019	508	603	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
6020	509	604	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
6044	607	602	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6044	610	607	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6045	608	603	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6045	611	608	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6046	609	604	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6046	612	609	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6070	510	607	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6071	511	608	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6072	512	609	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6096	514	610	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6097	515	611	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6098	516	612	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6122	614	610	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6122	617	614	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6123	615	611	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6123	618	615	33	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6124	616	612	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6124	619	616	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6148	517	614	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6149	518	615	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6150	519	616	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6174	617	521	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6175	618	522	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6176	619	523	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6200	621	617	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6200	624	621	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6201	622	618	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6201	625	622	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6202	623	619	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6202	626	623	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6226	624	521	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6227	625	522	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6228	626	523	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6252	627	524	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6253	628	525	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6254	629	526	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6278	627	624	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6278	631	627	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6279	628	625	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6279	632	628	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6280	629	626	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6280	633	629	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6304	631	527	37	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
6305	632	528	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6306	633	529	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6330	634	531	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6331	635	532	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6332	636	533	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
6356	634	631	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6356	638	634	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6357	635	632	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6357	639	635	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6358	636	633	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6358	640	636	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	

6382	638	534	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
6383	639	535	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
6384	640	536	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
10071	679	681	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
10072	682	680	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
10081	698	696	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
10082	695	697	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	

Elenco tipi solai

Simbologia

Comm. = Commento
 Crit. = Numero del criterio di progetto
 Hs = Altezza solaio
 Lfl = Larghezza fascia laterale
 QA = Primo carico accidentale
 QA2 = Secondo carico accidentale
 QA3 = Terzo carico accidentale
 Qpn = Carico permanente non strutturale
 Qps = Carico permanente strutturale
 Rc = Ripartizione carichi
 UN = Unidirezionale
 Rip. int. = Ripartizione su aste interne
 Rip. ter. = Ripartizione su aste terminali
 Sc = Spessore cappa
 Ts = Numero del tipo solaio
 s = Coeff. di riduzione

Ts	Comm.	Rc	Qps <daN/mq>	Qpn <daN/mq>	QA <daN/mq>	QA2 <daN/mq>	QA3 <daN/mq>	Rip. ter.	Rip. int.	Lfl <m>	s	Hs <cm>	Sc <cm>	Crit.
2	Copertura	UN	215.00	120.00	0.00	50.00	48.00	50.00	50.00	0.00	0.33	16.00	4.00	1
9	Copertura sbalzo	UN	0.00	50.00	0.00	50.00	50.00	50.00	50.00	0.00	0.33	16.00	4.00	1

Elenco solai

Simbologia

Nodi = Nodi del solaio
 Ord. = Orditura
 Sol. = Numero del solaio
 Ts = Numero del tipo solaio

Sol.	Ts	Ord. <grad>	Nodi											
500	2	90.00	504 505 -2040 509											
501	2	90.00	503 504 509 508											
502	2	90.00	502 503 508 507											
503	2	90.00	1 502 507 -2268 -2039											
504	2	90.00	-2040 -1871 649 645											
505	2	90.00	508 509 512 511											
506	2	90.00	507 508 511 510											
507	2	90.00	-2039 -2268 507 510 -2267 -2075											
508	2	90.00	512 -1871 654 516											
509	2	90.00	511 512 516 515											
510	2	90.00	510 511 515 514											
511	2	90.00	-2075 -2267 510 514 -2266 653											
512	2	90.00	516 654 664 519											
513	2	90.00	515 516 519 518											
514	2	90.00	514 515 518 517											
515	2	90.00	653 -2266 514 517 -2260 663											
516	2	90.00	519 664 674 523											
517	2	90.00	518 519 523 522											
518	2	90.00	517 518 522 521											
519	2	90.00	663 -2260 517 521 -2261 673											
520	2	90.00	523 674 669 526											
521	2	90.00	522 523 526 525											
522	2	90.00	521 522 525 524											
523	2	90.00	673 -2261 521 524 -2265 668											
524	2	90.00	526 669 659 529											
525	2	90.00	525 526 529 528											
526	2	90.00	524 525 528 527											
527	2	90.00	668 -2265 524 527 -2264 658											
528	2	90.00	529 659 -1900 533											
529	2	90.00	528 529 533 532											
530	2	90.00	649 655 656 -1873 650											
531	2	90.00	527 528 532 531											
532	2	90.00	658 -2264 527 531 -2263 -2078											
533	2	90.00	533 -1900 -1906 536											
534	2	90.00	532 533 536 535											
535	2	90.00	531 532 535 534											
536	2	90.00	-2078 -2263 531 534 -2262 -2042											
537	2	90.00	540 541 -1906 536											
538	2	90.00	539 540 536 535											
539	2	90.00	-1900 -1906 647 651											
540	2	90.00	538 539 535 534											
541	2	90.00	-1871 654 655 649											
542	2	90.00	509 -2040 -1871 512											

543	2	90.00	654 664 665 655
544	2	90.00	664 674 620 665
545	2	90.00	674 669 670 620
546	2	90.00	669 659 660 670
547	2	90.00	647 -1915 -1916 648
548	2	90.00	659 -1900 651 660
549	2	90.00	537 538 534 -2262 -2042
550	2	90.00	505 -2040 645 -1846
551	2	90.00	645 649 650 646
552	2	90.00	656 -1881 666 -2126 -2277 667 657 -2271 -2125
553	2	90.00	666 675 -2127 -2276 676 667 -2277 -2126
554	2	90.00	665 620 675 666
555	2	90.00	620 670 671 675
556	2	90.00	661 652 -2130 -2274 -2283 662 -2273 -2129
557	2	90.00	660 651 652 661
558	2	90.00	651 647 648 652
559	2	90.00	-1847 646 -2123 -2269 -2284 772 -1852
560	2	90.00	-1846 645 646 -1847
561	2	90.00	646 650 -2124 -2270 -2285 -2284 -2269 -2123
562	2	90.00	650 -1873 656 -2125 -2271 657 -2285 -2270 -2124
563	2	90.00	655 665 666 -1881 656
564	2	90.00	675 671 -2128 -2272 672 676 -2276 -2127
565	2	90.00	671 -1888 661 -2129 -2273 662 672 -2272 -2128
566	2	90.00	670 660 661 -1888 671
567	2	90.00	-1906 541 -1915 647
568	2	90.00	652 648 -2131 -2275 -2282 -2283 -2274 -2130
569	2	90.00	648 -1916 -1921 771 -2282 -2275 -2131
600	9	90.00	638 678 644 639
601	9	90.00	639 644 677 640
602	9	90.00	641 603 604 642
603	9	90.00	641 643 602 603
604	9	90.00	638 681 679 678
605	9	90.00	602 643 680 682
606	9	90.00	642 685 683 604
607	9	90.00	685 689 687 683
608	9	90.00	689 693 691 687
609	9	90.00	693 697 695 691
610	9	90.00	684 640 677 686
611	9	90.00	688 684 686 690
612	9	90.00	692 688 690 694
613	9	90.00	696 692 694 698
614	9	90.00	681 717 719 679
615	9	90.00	707 708 717 681
616	9	90.00	706 709 708 707
617	9	90.00	705 710 709 706
618	9	90.00	704 711 710 705
619	9	90.00	703 712 711 704
620	9	90.00	702 713 712 703
621	9	90.00	701 714 713 702
622	9	90.00	700 715 714 701
623	9	90.00	699 716 715 700
624	9	90.00	682 718 716 699
625	9	90.00	680 720 718 682
626	9	270.00	696 767 769 698
627	9	270.00	757 758 767 696
628	9	270.00	756 759 758 757
629	9	270.00	755 760 759 756
630	9	270.00	754 761 760 755
631	9	270.00	782 762 761 754
632	9	270.00	781 763 762 782
633	9	270.00	780 764 763 781
634	9	270.00	779 765 764 780
635	9	270.00	778 766 765 779
636	9	270.00	695 768 766 778
637	9	270.00	697 770 768 695

Carichi

Elenco tipi CCE

Simbologia

- γ_{\max}

=Coeff. γ_{\max}
- $\gamma_{\min.}$

=Coeff. $\gamma_{\min.}$
- ψ_0

=Coeff. ψ_0
- $\psi_{0,s}$

=Coeff. ψ_0 sismico (D.M. 96)
- ψ_1

=Coeff. ψ_1
- ψ_2

=Coeff. ψ_2
- Comm.

=Commento
- Durata

=Durata del carico

P = Permanente

L = Lunga

M = Media

B = Breve
- Tipo

=Tipologia

G = Permanente

Qv = Variabile vento

Q = Variabile

Tipo CCE = Tipo condizione di carico elementare

Tipo CCE	Comm.	Tipo	Durata	γ min.	γ max	Ψ_0	Ψ_1	Ψ_2	$\Psi_{0,s}$
1	D.M. 18 Permanenti strutturali	G	P	1.00	1.30				
2	D.M. 18 Permanenti non strutturali	G	L	0.80	1.30				
19	D.M. 18 Variabili Categoria H - Coperture accessibili per sola manutenzione	Q	M	0.00	1.50	0.00	0.00	0.00	1.00
12	D.M. 18 Variabili Neve (a quota <= 1000 m s.l.m.)	Q	M	0.00	1.50	0.50	0.20	0.00	0.00
11	D.M. 18 Variabili Vento	Qv	B	0.00	1.50	0.60	0.20	0.00	0.00

Condizioni di carico elementari

Simbologia

CCE = Numero della condizione di carico elementare

Comm. = Commento

Dir. = Direzione del vento

Jpx = Moltiplicatore del momento d'inerzia intorno all'asse X

Jpy = Moltiplicatore del momento d'inerzia intorno all'asse Y

Jpz = Moltiplicatore del momento d'inerzia intorno all'asse Z

Mx = Moltiplicatore della massa in dir. X

My = Moltiplicatore della massa in dir. Y

Mz = Moltiplicatore della massa in dir. Z

Sic. = Contributo alla sicurezza

S = a sfavore

Tipo = Tipologia di pressione vento

M = Massimizzata

E = Esterna

I = Interna

Tipo CCE = Tipo di CCE per calcolo agli stati limite

Var. = Tipo di variabilità

B = di base

A = ambigua

s = Coeff. di riduzione (T.A. o S.L. D.M. 96)

CCE	Comm.	Tipo CCE	Sic.	Var.	s	Dir. <grad>	Tipo	Mx	My	Mz	Jpx	Jpy	Jpz
1	PS	1	S	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
2	PNS	2	S	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
3	Cat.H	19	S	A	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
4	Neve	12	S	A	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
5	VENTO	11	S	A	1.00	0.00	M	--	--	--	--	--	--

Risultati del calcolo

Parametri di calcolo

La modellazione della struttura e la rielaborazione dei risultati del calcolo sono stati effettuati con:

ModeSt ver. 8.27, licenza n. 5637, prodotto da Tecnisoft s.a.s. - Prato

La struttura è stata calcolata utilizzando come solutore agli elementi finiti:

Xfinest ver. 9.3.5, licenza n. -1523908944, prodotto da Ce.A.S. S.r.l. - Milano

Tipo di normativa: stati limite D.M. 18

Tipo di calcolo: statico

Vincoli esterni: Considera sempre vincoli assegnati in modellazione

Schematizzazione piani rigidi: nessun impalcato rigido

Modalità di recupero masse secondarie: mantenere sul nodo masse e forze relative

Generazione combinazioni

- Lineari: Sì

- Valuta spostamenti e non sollecitazioni: No

- Buckling: No

Opzioni di calcolo

- Sono state considerate infinitamente rigide le zone di connessione fra travi, pilastri ed elementi bidimensionali con una riduzione del 20%

- Calcolo con offset rigidi dai nodi: No

- Uniformare i carichi variabili: No

- Massimizzare i carichi variabili: No

- Recupero carichi zone rigide: taglio e momento flettente

Opzioni del solutore

- Tipo di elemento bidimensionale: QF46

- Calcolo sforzo nei nodi: No

- Trascura deformabilità a taglio delle aste: No

- Analisi dinamica con metodo di Lanczos: Sì

- Check sequenza di Sturm: Sì

- Analisi non lineare con Newton modificato: No

- Usa formulazione secante per buckling: No

- Trascura buckling torsionale: No

- Opzioni aggiuntive per analisi non lineari in presenza di elementi bidimensionali con comportamento Drucker-Prager:

OPTION PARAM CONV=E

OPTION PARAM RESENORM=1.E-8

OPTION PARAM AUTO_INCREMENT=YES

OPTION PARAM LINE_SEARCHES=YES

OPTION PARAM BGINCRS=1.0

OPTION PARAM AVINCRS=1.0

Dati struttura
- Edificio esistente: No
- Tipo di opera: Opera ordinaria
- Vita nominale V_N : 50.00
- Classe d'uso: Classe III
- Forze orizzontali convenzionali per stati limite non sismici: No
- Genera stati limite per verifiche di resistenza al fuoco: No

Ambienti di carico

Simbologia

N = Numero
Comm. = Commento
1 = PS
2 = PNS
3 = Cat.H
4 = Neve
5 = VENTO
F = azioni orizzontali convenzionali
SLU = Stato limite ultimo
SLR = Stato limite per combinazioni rare
SLF = Stato limite per combinazioni frequenti
SLQ/D = Stato limite per combinazioni quasi permanenti o di danno
S = Sì
N = No

N	Comm.	1	2	3	4	5	SLU	SLR	SLF	SLQ
1	Calcolo statico	S	S	S	S	S	S	S	S	S

Elenco combinazioni di carico simboliche

Simbologia

CC = Numero della combinazione delle condizioni di carico elementari
Comm. = Commento
TCC = Tipo di combinazione di carico
SLU = Stato limite ultimo
SLE R = Stato limite d'esercizio, combinazione rara
SLE F = Stato limite d'esercizio, combinazione frequente
SLE Q = Stato limite d'esercizio, combinazione quasi permanente

CC	Comm.	TCC	1	2	3	4	5
1	Amb. 1 (SLU)	SLU	γ max	γ max	$\psi_0 * \gamma$ max	$\psi_0 * \gamma$ max	γ max
2	Amb. 1 (SLU)	SLU	γ max	γ max	$\psi_0 * \gamma$ max	γ max	$\psi_0 * \gamma$ max
3	Amb. 1 (SLU)	SLU	γ max	γ max	γ max	$\psi_0 * \gamma$ max	$\psi_0 * \gamma$ max
4	Amb. 1 (SLE R)	SLE R	1	1	ψ_0	ψ_0	1
5	Amb. 1 (SLE R)	SLE R	1	1	ψ_0	1	ψ_0
6	Amb. 1 (SLE R)	SLE R	1	1	1	ψ_0	ψ_0
7	Amb. 1 (SLE F)	SLE F	1	1	ψ_2	ψ_2	ψ_1
8	Amb. 1 (SLE F)	SLE F	1	1	ψ_2	ψ_1	ψ_2
9	Amb. 1 (SLE F)	SLE F	1	1	ψ_1	ψ_2	ψ_2
10	Amb. 1 (SLE Q)	SLE Q	1	1	ψ_2	ψ_2	ψ_2

Genera le combinazioni con un solo carico di tipo variabile come di base: Sì

Considera sollecitazioni dinamiche con segno dei modi principali: No

Combinazioni delle CCE

Simbologia

An. = Tipo di analisi
L = Lineare
NL = Non lineare
Bk = Buckling
S = Sì
N = No
CC = Numero della combinazione delle condizioni di carico elementari
Comm. = Commento
TCC = Tipo di combinazione di carico
SLU = Stato limite ultimo
SLE R = Stato limite d'esercizio, combinazione rara
SLE F = Stato limite d'esercizio, combinazione frequente
SLE Q = Stato limite d'esercizio, combinazione quasi permanente

CC	Comm.	TCC	An.	Bk	1	2	3	4	5
1	Amb. 1 (SLU)	SLU	L	N	1.30	1.30	0.00	0.75	1.50
2	Amb. 1 (SLU)	SLU	L	N	1.30	1.30	0.00	1.50	0.90
3	Amb. 1 (SLU)	SLU	L	N	1.30	1.30	1.50	0.75	0.90
4	Amb. 1 (SLE R)	SLE R	L	N	1.00	1.00	0.00	0.50	1.00
5	Amb. 1 (SLE R)	SLE R	L	N	1.00	1.00	0.00	1.00	0.60
6	Amb. 1 (SLE R)	SLE R	L	N	1.00	1.00	1.00	0.50	0.60
7	Amb. 1 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.00	0.20
8	Amb. 1 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.20	0.00
9	Amb. 1 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.00	0.00
10	Amb. 1 (SLE Q)	SLE Q	L	N	1.00	1.00	0.00	0.00	0.00

Criteri di progetto utilizzati

Aste in acciaio

Generali	
Verifica aste in acciaio	
Numero punti di verifica	10.00
Numero CC da considerare di tipo I	99.00
Stati limite D.M. 18	
Verifiche con EC3	No
Coeff. amplificativo sollecitazioni per effetti del secondo ordine	1.00
Stampe	
Verifiche da riportare in relazione	Aste più sollecitate a parità di sezione
Stampa dettaglio verifiche	No

Specifici	1	3
Materiali		
CNR 10011		
Tipo di acciaio	FE430	FE430
D.M. 18		
Tipo di acciaio per profilati a sezione aperta	S275	S275
	UNI EN	UNI EN
	10025-2	10025-2
Tipo di acciaio per profilati a sezione cava	S275H	S275H
	UNI EN	UNI EN
	10210-1	10210-1
EC3		
Tipo di acciaio	S275	S275
-Fy <daN/cm²>	2750.00	2750.00
-Fu <daN/cm²>	4300.00	4300.00
-Fy,40 <daN/cm²>	2550.00	2550.00
-Fu,40 <daN/cm²>	4100.00	4100.00
γ M0	1.00	1.00
γ M1	1.00	1.00
γ M2	1.25	1.25
γ Rd	1.30	1.30
γ Ov	1.25	1.25
-Considera come elemento esistente (S.L. D.M. 18/EC3)	No	No
-Livello di conoscenza	LC1	LC1
-Fattore di confidenza	1.35	1.35
Verifiche di resistenza		
Rapporto fra area effettiva e area nominale	1.00	1.00
Rapporto fra area netta e area nominale	1.00	1.00
Coeff. di forma intorno all'asse Y	1.00	1.00
Coeff. di forma intorno all'asse Z	1.00	1.00
Verifica le bielle solo con sollecitazioni di trazione moltiplicate per	Si	Si
Valutare la τ per torsione nei punti di spigolo (CNR 10011)	No	No
-Pari a		
Stati limite D.M. 18/EC3		
-Elemento dissipativo	Si	Si
-Effettua le verifiche della gerarchia delle resistenze per strutture intelaiate	No	No
-Usa classe 1 in pressoflessione deviata se non presente in archivio	No	No
-Verifica in campo plastico elemento non dissipativo	No	No
Stati limite D.M. 18		
-Usa prescrizioni EC3 quando più dettagliate	Si	Si
-Considera prescrizioni relative ai ponti	No	No
Verifiche di resistenza sezioni generiche		
Spessore nominale <cm>	0.00	0.00
Momento di inerzia torsionale <cm⁴>	0.00	0.00
Costante di ingobbamento <cm⁶>	0.00	0.00
Riduzione resistenza flessionale come per sezioni a I	No	No
Area resistente a taglio in dir. Y locale <cm²>	0.00	0.00
Area resistente a taglio in dir. Z locale <cm²>	0.00	0.00
Verifiche di deformabilità		
Max valore del rapporto tra la luce e la freccia (totale)	200.00	200.00
Max valore del rapporto tra la luce e la freccia (solo accidentali)	250.00	250.00
Max valore del rapporto tra altezza e spostamento orizz. (aste)	300.00	300.00
Max valore del rapporto tra altezza e spostamento orizz. (membrature)	500.00	500.00
Considerare anche spostamento relativo nodi per calcolo freccia	No	No
Considerare solo la verifica di deformabilità delle membrature	Si	Si
Trascura deformazione dovuta al sisma (T.A.)	No	No
Verifiche di stabilità		
Riduzione lunghezza libera d'inflessione		
-Distanza fra i nodi dell'asta	x	x
-Distanza ridotta delle zone rigide moltiplicate per il valore		

Tipo di accoppiamento aste composte		
-Separate	x	x
-Calastrellate		
-Imbottite		
-Automatico		
Calcolo momento medio usando valori assoluti	Si	Si
Interasse calastrelli o imbottiture		
-Distanza pari a <m>		
-Interasse da normativa moltiplicato per il valore	0.80	0.80
-Aste rigidamente collegate		
Curva di stabilità (D.M. 18/EC3)	Automatica	Automatica
Aste laminate	Si	Si
Sigma max amm. senza verifiche di stabilità (CNR 10011) <%>	2.00	2.00
Verifica nei piani principali	Si	Si
Carichi sull'estradosso (CNR 10011)	Si	Si
Verifiche di stabilità asta		
Verifiche di stabilità globale nel piano XZ locale	Si	Si
-Coeff. β intorno all'asse Y	1.00	1.00
Verifiche di stabilità globale nel piano XY locale	Si	Si
-Coeff. β intorno all'asse Z	1.00	1.00
Verifiche di stabilità flessione - torsionale	Si	Si
-Coeff. per calcolo interasse ritegni torsionali	1.00	1.00
Eeguire anche le verifiche al punto 7.3.2 (CNR 10011)	Si	Si
Aste inflesse (D.M. 18/EC3)		
-Coeff. Ψ per calcolo momento critico		
-Valuta in base ai momenti dell'asta	x	x
-Utilizza valore imposto		
-Fattore correttivo di distribuzione K_c	0.94	0.94
-Snellezza di riferimento $\lambda_{LT,0}$	0.40	0.40
-Coeff. β	0.75	0.75
Aste pressoinflesse (D.M. 18/EC3)		
-Considera come molto deformabile a torsione	No	No
-Fattore correttivo di distribuzione α_{mY}/C_{mY}	0.95	0.95
-Fattore correttivo di distribuzione α_{mZ}/C_{mZ}	0.95	0.95
-Fattore correttivo di distribuzione α_{mLT}/C_{mLT}	0.95	0.95
Verifiche di stabilità all'imbozzamento (CNR 10011)		
-Numero irrigidimenti orizzontali anima	0.00	0.00
-Interasse irrigidimenti verticali anima		
-Numero di suddivisioni		
-Distanza non inferiore a <cm>		
-Pari alla lunghezza dell'asta	x	x
-Modalità di calcolo $\sigma_{cr,id}$		
-Normativa		
-Massonet	x	x
-Ballio		
Verifiche di stabilità membratura		
Massimo numero aste costituenti unica membratura	1.00	1.00
Sforzo normale di verifica		
-Massimo valore fra tutte le aste	x	x
-Media aritmetica dei valori di tutte le aste		
-Media pesata di tutte le aste		
Contributo eventuali sforzi di trazione	No	No
Incremento snellezza	Si	Si
Verifiche di stabilità globale nel piano XZ locale	Si	Si
-Coeff. β intorno all'asse Y calcolato in funzione dello sforzo normale		
-Coeff. β intorno all'asse Y	1.00	1.00
Verifiche di stabilità globale nel piano XY locale	Si	Si
-Coeff. β intorno all'asse Z calcolato in funzione dello sforzo normale		
-Coeff. β intorno all'asse Z	1.00	1.00
Verifiche di stabilità flessione - torsionale	Si	Si
-Coeff. per calcolo interasse ritegni torsionali	1.00	1.00
Membrature inflesse (D.M. 18/EC3)		
-Coeff. Ψ per calcolo momento critico		
-Valuta in base ai momenti della membratura	x	x
-Utilizza valore imposto		
-Fattore correttivo di distribuzione K_c	0.94	0.94
-Snellezza di riferimento $\lambda_{LT,0}$	0.40	0.40
-Coeff. β	0.75	0.75
Membrature pressoinflesse (D.M. 18/EC3)		
-Considera come molto deformabile a torsione	No	No
-Fattore correttivo di distribuzione α_{mY}/C_{mY}	0.95	0.95
-Fattore correttivo di distribuzione α_{mZ}/C_{mZ}	0.95	0.95
-Fattore correttivo di distribuzione α_{mLT}/C_{mLT}	0.95	0.95
Dati per verifiche di resistenza al fuoco		
-Tempo di verifica (REI) <minuti>	120.00	120.00
-Fattore di momento uniforme equivalente β_M, y	1.10	1.10
-Fattore di momento uniforme equivalente β_M, z	1.10	1.10
-Fattore di momento uniforme equivalente β_M, LT	1.10	1.10

Verifiche aste in acciaio

Simbologia

Φ_{LT}	=	Coefficiente Φ per stabilità laterale membrature inflesse
Φ_y	=	Coefficiente Φ per inflessione intorno all'asse y(c)
Φ_z	=	Coefficiente Φ per inflessione intorno all'asse z(e)
α	=	Esponente sfruttamento per flessione retta intorno all'asse y
α_{imp}	=	Coefficiente di imperfezione
$\alpha_{my}, \alpha_{mz}, \alpha_{LT}$	=	Coefficienti correttivi per il momento flettente
β	=	Esponente sfruttamento per flessione retta intorno all'asse z
β_{LT}	=	Coefficiente per calcolo Φ_{LT}
χ_{LT}	=	Coefficiente di riduzione per stabilità laterale membrature inflesse
χ_y	=	Coefficiente χ di riduzione per instabilità intorno all'asse y(c)
χ_z	=	Coefficiente χ di riduzione per instabilità intorno all'asse z(e)
λ^*_y	=	Snellezza adimensionale per inflessione intorno all'asse y(c)
λ^*_z	=	Snellezza adimensionale per inflessione intorno all'asse z(e)
λ_{LT}	=	Coefficiente di imperfezione per stabilità laterale membrature inflesse
$\lambda_{LT,0}$	=	Coefficiente di imperfezione di confronto per stabilità laterale membrature inflesse
λ_y	=	Snellezza per inflessione intorno all'asse y(c)
λ_z	=	Snellezza per inflessione intorno all'asse z(e)
$\sigma_{ID,max}$	<daN/cm ² >	= Tensione ideale massima
σ_N	<daN/cm ² >	= Tensione normale per momento flettente
σ_N	<daN/cm ² >	= Tensione normale per sforzo normale
τ	<daN/cm ² >	= Tensione tangenziale per taglio e/o torsione
τ_{Ed}	<daN/cm ² >	= Tensione tangenziale
τ_{Rd}	<daN/cm ² >	= Resistenza tangenziale in termini tensionali
Ψ	=	Coeff. di correzione momento critico per stabilità laterale membrature inflesse
A_{eff}	<cm ² >	= Area effettiva per trazione
A_{net}	<cm ² >	= Area netta per compressione
A_{area}	<cm ² >	= Area
$A_{tag,y}$	<cm ² >	= Area resistente a taglio in dir. Y
$A_{tag,z}$	<cm ² >	= Area resistente a taglio in dir. Z
CC	=	Numero della combinazione delle condizioni di carico elementari
Cod.	=	Codice
Curva	=	Curva di instabilità adottata
D	<cm>	= Distanza
F_{yk}	<daN/cm ² >	= Tensione caratteristica di snervamento dell'acciaio
F_{yt}	<daN/cm ² >	= Tensione caratteristica di rottura
I _y	<cm>	= Raggio giratorio d'inerzia rispetto all'asse Y
I _z	<cm>	= Raggio giratorio d'inerzia rispetto all'asse Z
J ₀	<cm ⁶ >	= Costante di ingobbamento
J _y	<cm ⁴ >	= Momento d'inerzia rispetto all'asse Y
J _z	<cm ⁴ >	= Momento d'inerzia rispetto all'asse Z
K _{yy} , K _{yz} , K _{zy} , K _{zz}	=	Coefficienti di interazione
L	<cm>	= Lunghezza dell'asta
L _{cr}	<cm>	= Lunghezza di libera inflessione laterale fra ritegni torsionali
M _{cr}	<daNm>	= Momento critico per instabilità flessione torsionale
M _{Ny,c,Rd}	<daNm>	= Resistenza di calcolo a pressoflessione intorno all'asse Y
M _{Nz,c,Rd}	<daNm>	= Resistenza di calcolo a pressoflessione intorno all'asse Z
M _x	<daNm>	= Momento torcente intorno all'asse X
M _y	<daNm>	= Momento flettente intorno all'asse Y
M _{y,Ed}	<daNm>	= Momento flettente di calcolo intorno all'asse Y
M _{y,V,c,Rd}	<daNm>	= Resistenza di calcolo a flessione ridotta per taglio intorno all'asse Y
M _{y,b,Rd}	<daNm>	= Resistenza di calcolo a flessione ridotta per stabilità laterale membrature inflesse
M _{y,c,Rd}	<daNm>	= Resistenza di calcolo a flessione intorno all'asse Y
M _{yeq,Ed}	<daNm>	= Valore equivalente del momento flettente intorno all'asse Y
M _z	<daNm>	= Momento flettente intorno all'asse Z
M _{z,Ed}	<daNm>	= Momento flettente di calcolo intorno all'asse Z
M _{z,V,c,Rd}	<daNm>	= Resistenza di calcolo a flessione ridotta per taglio intorno all'asse Z
M _{zeq,Ed}	<daNm>	= Valore equivalente del momento flettente intorno all'asse Z
N	<daN>	= Sforzo normale
N _{Ed}	<daN>	= Forza assiale di calcolo
N _{c,Rd}	<daN>	= Resistenza a compressione
N _{cr,y}	<daN>	= Sforzo normale critico euleriano per inflessione intorno all'asse y(c)
N _{cr,z}	<daN>	= Sforzo normale critico euleriano per inflessione intorno all'asse z(e)
N _{pl,Rd}	<daN>	= Resistenza plastica a trazione per sezione lorda
N _{t,Rd}	<daN>	= Resistenza a trazione ultima
N _{u,Rd}	<daN>	= Resistenza a rottura di trazione per sezione netta
Sez.	=	Numero della sezione
Tipo	=	Tipologia
		2Cdx = Doppia C lato costola
		R = Rettangolare
		Cs = C stondata
		Is = I stondata
Tp	=	Tipo di acciaio
T _y	<daN>	= Taglio in dir. Y
T _z	<daN>	= Taglio in dir. Z
V _{Ed}	<daN>	= Forza di taglio di calcolo
V _{c,Rd}	<daN>	= Resistenza a taglio
V _{c,Rd,Red}	<daN>	= Resistenza a taglio ridotta
W _{y,plas}	<cm ³ >	= Modulo di resistenza plastico intorno all'asse Y
W _{ymin}	<cm ³ >	= Modulo di resistenza minimo rispetto all'asse Y
W _{z,plas}	<cm ³ >	= Modulo di resistenza plastico intorno all'asse Z
W _{zmin}	<cm ³ >	= Modulo di resistenza minimo rispetto all'asse Z
X _l	<cm>	= Coordinata progressiva (dal nodo iniziale dell'asta) in cui viene effettuato il progetto/verifica
f	=	Fattore di modifica per il coefficiente di riduzione
f _{z,G}	<cm>	= Freccia in direzione Z globale
f _{z,L}	<cm>	= Freccia in direzione Z locale
k _c	=	Coeff. di correzione momento flettente per stabilità laterale membrature inflesse

Caratteristiche profilati utilizzati

Sez.	Cod.	Tipo	D	Area	Anet	Aeff	J _y	J _z	I _y	I _z	Wymin	Wzmin	Tp	Fyk	Fyt
			<cm>	<cm ² >	<cm ² >	<cm ² >	<cm ⁴ >	<cm ⁴ >	<cm>	<cm>	<cm ³ >	<cm ³ >		<daN/cm ² >	<daN/cm ² >
20	HEB100	Is	--	26.04	26.04	26.04	449.56	167.27	4.16	2.53	89.91	33.45	S275 UNI EN 10025-2	2750.00	4300.00
23	2UPN160	2Cdx	1.00	48.03	48.03	48.03	1849.50	432.99	6.21	3.00	231.19	61.86	S275 UNI EN 10025-2	2750.00	4300.00

24	IPE240	Is	--	39.12	39.12	39.12	3891.76	283.63	9.97	2.69	324.31	47.27	S275 UNI EN 10025-2	2750.00	4300.00
33	HEB140	Is	--	42.96	42.96	42.96	1509.25	549.67	5.93	3.58	215.61	78.52	S275 UNI EN 10025-2	2750.00	4300.00
37	2UPN100	2Cdx	1.00	26.91	26.91	26.91	410.70	171.44	3.91	2.52	82.14	31.17	S275 UNI EN 10025-2	2750.00	4300.00
38	UPN140	Cs	--	20.37	20.37	20.37	604.82	62.48	5.45	1.75	86.40	14.72	S275 UNI EN 10025-2	2750.00	4300.00

Caratteristiche profilati utilizzati

Sez.	Cod.	Wy,plas <cmc>	Wz,plas <cmc>	Atag,y <cmq>	Atag,z <cmq>	Jw <cm6>
20	HEB100	104.62	51.51	22.68	9.04	3375.00
23	2UPN160	275.41	0.00	30.33	24.51	
24	IPE240	368.53	74.08	27.31	19.14	37391.20
33	HEB140	246.04	119.88	36.52	13.08	22478.90
37	2UPN100	98.05	0.00	18.99	12.37	
38	UPN140	102.91	30.70	13.37	10.07	

Aste di sezione 20 HEB100 - Crit. 1

Asta n. 45 (539 639)

-
- Verifica a taglio Dir. Y [4.2.16] - CC 1 SLU Xl=0.00 - Classe 1
Sollecitazioni: Ty=-16.91
V,Ed=-16.91 Vc,Rd=34290.90 V,Ed/Vc,Rd=0.00
- Verifica a taglio Dir. Z [4.2.16] - CC 1 SLU Xl=0.00 - Classe 1
Sollecitazioni: Tz=1295.99
V,Ed=1295.99 Vc,Rd=13665.10 V,Ed/Vc,Rd=0.09

Asta n. 44 (604 504)

-
- Verifica a compressione (4.2.4.1.2.2) - CC 3 SLU Xl=0.50 - Classe 1
Sollecitazioni: N=-21798.10 Tz=784.02 Ty=-40.79
Verifica a compressione [4.2.9]
N,Ed=-21798.10 Nc,Rd=-68191.80 N,Ed/Nc,Rd=0.32

Asta n. 43 (603 503)

-
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SLU - Classe 1
Sollecitazioni: N,Ed=-17916.90 My,Ed=646.83 Mz,Ed=42.74 L=0.50
amy, amz, αLT=0.95, 0.95, 0.95
Lcr=0.50 Curva b: αimp=0.34 ke=0.94 ψ=1.75 M,cr=121004.00 λLT=0.15
λLT,0=0.40 ΦLT=0.47 βLT=0.75 f=1.00 χLT=1.00
λy=12.03 Ncr,y=3727020.00 λ'y=0.14 Curva b: Φy=0.50 χy=1.00
λz=19.73 Ncr,z=1386770.00 λ'z=0.23 Curva c: Φz=0.53 χz=0.99
Kyy, Kyz, Kzy, Kzz=0.93, 0.55, 0.56, 0.91
Verifica YY: 0.26+0.22+0.02=0.50
Verifica ZZ: 0.26+0.13+0.03=0.42

Asta n. 47 (602 502)

-
- Verifica freccia massima per soli carichi accidentali - CC 4
fz,L=0.00 (L/12633) fz,G=0.00

Asta n. 44 (604 504)

-
- Verifica freccia massima carichi totali - CC 6
fz,G=0.01 (L/3428) fz,L=0.00

Aste di sezione 23 2UPN160 - Crit. 3

Asta n. 5015 (-1906 536)

-
- L'asta accoppiata è stata considerata come due aste separate
- Verifica a taglio e torsione Dir. Y [4.2.26] - CC 3 SLU Xl=6.10
Sollecitazioni: N=327.38 Tz=-2283.40 Ty=26.83 Mz=80.58 Mx=-1.15
V,Ed=26.83
τ,Ed=120.97 τ,Rd=1512.15 τ,Ed/τ,Rd=0.08

Asta n. 5015 (536 535)

-
- L'asta accoppiata è stata considerata come due aste separate
- Verifica in termini tensionali [4.2.4] - CC 3 SLU Xl=3.05 - Classe 1
Sollecitazioni: N=332.06 My=-3482.19 Mz=2.73
Tensioni: σN=6.91 σm,d=1506.22 τ=0.00 σmax=1513.13 (sfrut=0.58)
Tensioni: σN=0.00 σm,d=0.00 τ=0.00 τmax=0.00 (sfrut=0.00)
Tensioni: σN=6.91 σm,d=1506.22 τ=0.00 σID,max=1513.13 (sfrut=0.58)

Asta n. 5015 (-2262 -2042)

-
- L'asta accoppiata è stata considerata come due aste separate
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-5373.53 Myeq,Ed=806.93
L=1.30
λc=20.95 Ncr,y=1134120.00 λ'y=0.24 Curva b: Φy=0.54 χy=0.99
λe=69.08 Ncr,z=104304.00 λ'z=0.80 Curva b: Φz=0.92 χz=0.73
χ,min=0.73

Verifica: $0.04+0.11=0.16$

Asta n. 5014 (-1900 533)

L'asta accoppiata è stata considerata come due aste separate

- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,g}=0.44$ (L/1387)

- Verifica freccia massima carichi totali - CC 6
 $f_{z,g}=2.61$ (L/234)

Aste di sezione 24 IPE240 - Crit. 1

Asta n. 5019 (508 503)

- Verifica a taglio Dir. Y [4.2.16] - CC 1 SLU $X_l=1.28$ - Classe 1
 Sollecitazioni: $T_y=-4.38$
 $V,Ed=-4.38$ $V_c,Rd=41300.90$ $V,Ed/V_c,Rd=0.00$

- Verifica a taglio Dir. Z [4.2.16] - CC 1 SLU $X_l=1.28$ - Classe 1
 Sollecitazioni: $T_z=-830.34$
 $V,Ed=-830.34$ $V_c,Rd=28950.20$ $V,Ed/V_c,Rd=0.03$

Asta n. 5019 (522 518)

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 3 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=56214.70$ $T_z=208.97$ $M_y=-753.22$ $T_y=2.36$ $M_z=-1.54$
 $N,Ed=56214.70$ $N_c,Rd=102450.00$ $n=N,Ed/N_c,Rd=0.55$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-753.22$ $M_y,V,c,Rd=9652.05$ $MN_y,c,Rd=5440.64$ $M_y,Ed/MN_y,c,Rd=0.14$
 Pressoflessione retta ZZ [4.2.35]:
 $M_z,Ed=-1.54$ $M_z,V,c,Rd=1940.16$ $MN_z,c,Rd=1819.47$ $M_z,Ed/MN_z,c,Rd=0.00$
 $\alpha=2.00$ $\beta=2.74$ $(M_y,Ed/MN_y,c,Rd)^2+(M_z,Ed/MN_z,c,Rd)^{2.74}=0.55$

Asta n. 5020 (536 533)

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
 Sollecitazioni: $M_y,Ed=-1100.80$ $M_z,Ed=-29.20$ $L=1.28$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=1.28$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.10$ $M_{cr}=49566.90$ $\lambda_{LT}=0.45$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=12.83$ $N_{cr,y}=4923170.00$ $\lambda_y^*=0.15$ Curva a: $\Phi_y=0.51$ $\chi_y=1.00$
 $\lambda_z=47.54$ $N_{cr,z}=358805.00$ $\lambda_z^*=0.55$ Curva b: $\Phi_z=0.71$ $\chi_z=0.86$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.57, 0.57, 0.95$
 Verifica YY: $0.00+0.11+0.01=0.12$
 Verifica ZZ: $0.00+0.07+0.01=0.08$

Asta n. 5019 (511 508)

- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.00$ (L/39405)

Asta n. 5020 (512 509)

- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.02$ (L/6747)

Aste di sezione 33 HEB140 - Crit. 1

Asta n. 1077 (707 -2042)

- Verifica a taglio e torsione Dir. Y [4.2.24] - CC 3 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-16.03$ $M_x=1.13$
 $V,Ed=-16.03$ $V_c,Rd,Red=55108.10$ $V,Ed/V_c,Rd,Red=0.00$

- Verifica a taglio e torsione Dir. Z [4.2.24] - CC 3 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=5455.46$ $M_x=1.13$
 $V,Ed=5455.46$ $V_c,Rd,Red=19734.50$ $V,Ed/V_c,Rd,Red=0.28$

Asta n. 1070 (700 -2075)

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 3 SLU $X_l=1.02$ - Classe 1
 Sollecitazioni: $N=-3758.77$ $T_z=4380.47$ $M_y=-4394.52$ $T_y=9.28$ $M_z=3.63$
 $N,Ed=-3758.77$ $N_c,Rd=112506.00$ $n=N,Ed/N_c,Rd=0.03$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-4394.52$ $M_y,V,c,Rd=6444.02$ $MN_y,c,Rd=6444.02$ $M_y,Ed/MN_y,c,Rd=0.68$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=3.63$ $M_z,V,c,Rd=3139.61$ $MN_z,c,Rd=3139.61$ $M_z,Ed/MN_z,c,Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/MN_y,c,Rd)^2+(M_z,Ed/MN_z,c,Rd)^1=0.68$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
 Sollecitazioni: $N,Ed=-3758.77$ $M_y,Ed=-4394.52$ $M_z,Ed=-5.82$ $L=1.02$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=1.02$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.77$ $M_{cr}=142509.00$ $\lambda_{LT}=0.22$

$\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=17.19$ Ncr,y=3013130.00 $\lambda^*_y=0.20$ Curva b: $\Phi_y=0.52$ $\chi_y=1.00$
 $\lambda_z=28.48$ Ncr,z=1097380.00 $\lambda^*_z=0.33$ Curva c: $\Phi_z=0.59$ $\chi_z=0.93$
Kyy, Kyz, Kzy, Kzz=0.95, 0.57, 0.57, 0.95
Verifica YY: 0.03+0.65+0.00=0.68
Verifica ZZ: 0.03+0.39+0.00=0.42

Asta n. 1000 (680 643)

 - Verifica freccia massima per soli carichi accidentali - CC 4
 $f_{z,L}=0.96$ (L/658)

Asta n. 1005 (681 638)

 - Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.77$ (L/813)

Aste di sezione 37 2UPN100 - Crit. 1

Asta n. 6305 (632 528)

 L'asta accoppiata è stata considerata come due aste separate
 - Verifica a taglio Dir. Y [4.2.16] - CC 3 SLU $X_1=1.64$ - Classe 1
 Sollecitazioni: $T_y=1.05$
 $V,Ed=1.05$ $V_c,Rd=28712.00$ $V,Ed/V_c,Rd=0.00$

- Verifica a taglio Dir. Z [4.2.16] - CC 3 SLU $X_1=1.64$ - Classe 1
 Sollecitazioni: $T_z=-46.01$
 $V,Ed=-46.01$ $V_c,Rd=18709.10$ $V,Ed/V_c,Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 3 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $N=8399.30$ $T_z=-10.79$ $M_y=-88.72$ $T_y=1.05$ $M_z=-1.02$
 Tensioni: $\sigma_N=312.15$ $\sigma_{m,d}=108.01$ $\tau=0.00$ $\sigma_{max}=420.16$ (sfrut=0.16)
 Tensioni: $\sigma_N=312.15$ $\sigma_{m,d}=0.00$ $\tau=1.09$ $\tau_{max}=1.09$ (sfrut=0.00)
 Tensioni: $\sigma_N=312.15$ $\sigma_{m,d}=108.01$ $\tau=0.00$ $\sigma_{ID,max}=420.16$ (sfrut=0.16)

Asta n. 1025 (692 648)

 L'asta accoppiata è stata considerata come due aste separate
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 3 SLU - Classe 1
 $L_{cr}=1.37$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=6.05$ $M_y,b,Rd=2567.95$ $M_y,Ed/M_y,b,Rd=0.00$

Asta n. 1020 (683 -2040)

 L'asta accoppiata è stata considerata come due aste separate
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SLU - Classe 1
 Sollecitazioni: $N,Ed=-2024.17$ $Myeq,Ed=4.54$
 $L=1.37$
 $\lambda_c=35.17$ Ncr,y=225381.00 $\lambda^*_y=0.41$ Curva b: $\Phi_y=0.62$ $\chi_y=0.92$
 $\lambda_e=93.36$ Ncr,z=31991.30 $\lambda^*_z=1.08$ Curva b: $\Phi_z=1.23$ $\chi_z=0.55$
 $\chi_{min}=0.55$
 Verifica: 0.03+0.00=0.03

Asta n. 6305 (632 528)

 L'asta accoppiata è stata considerata come due aste separate
 - Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.00$ (L/44558)

- Verifica freccia massima carichi totali - CC 6
 $f_{z,G}=0.02$ (L/7333) $f_{z,L}=0.02$ (L/7780)

Aste di sezione 38 UPN140 - Crit. 1

Asta n. 1003 (720 718)

 - Verifica a taglio e torsione Dir. Y [4.2.24] - CC 1 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $T_y=-39.52$ $M_x=-30.42$
 $V,Ed=-39.52$ $V_c,Rd,Red=12403.60$ $V,Ed/V_c,Rd,Red=0.00$

- Verifica a taglio e torsione Dir. Z [4.2.24] - CC 1 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $T_z=-156.12$ $M_x=-30.42$
 $V,Ed=-156.12$ $V_c,Rd,Red=9342.14$ $V,Ed/V_c,Rd,Red=0.02$

- Verifica in termini tensionali [4.2.4] - CC 1 SLU $X_1=1.41$ - Classe 1
 Sollecitazioni: $N=-328.95$ $T_z=156.12$ $T_y=-39.52$ $M_z=-40.79$ $M_x=-30.42$
 Tensioni: $\sigma_N=-16.15$ $\sigma_{m,d}=-277.07$ $\tau=584.43$ $\sigma_{max}=-293.22$ (sfrut=0.11)
 Tensioni: $\sigma_N=-16.15$ $\sigma_{m,d}=-0.00$ $\tau=588.73$ $\tau_{max}=588.73$ (sfrut=0.39)
 Tensioni: $\sigma_N=-16.15$ $\sigma_{m,d}=-277.07$ $\tau=584.43$ $\sigma_{ID,max}=1053.87$ (sfrut=0.40)

Asta n. 1007 (682 699)

 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SLU - Classe 3
 Sollecitazioni: $N,Ed=-1194.66$ $Myeq,Ed=-3.28$ $Mzeq,Ed=-79.34$

L=1.31
 $\lambda_y=24.10$ Ncr,y=726965.00 $\lambda_y^*=0.28$ Curva c: $\Phi_y=0.56$ $\chi_y=0.96$
 $\lambda_z=74.98$ Ncr,z=75103.50 $\lambda_z^*=0.86$ Curva c: $\Phi_z=1.04$ $\chi_z=0.62$
 $\chi_{min}=0.62$
Verifica: 0.02+0.00+0.21=0.23

Asta n. 1003 (720 718)

- Verifica freccia massima per soli carichi accidentali - CC 4
 $f_{z,g}=0.07$ (L/1895) $f_{z,L}=0.01$ (L/21632)

- Verifica freccia massima carichi totali - CC 4
 $f_{z,g}=0.05$ (L/2947) $f_{z,L}=0.01$ (L/23924)

Fascicolo dei calcoli - Instabilità capriata edificio C
Geometria

Elenco vincoli nodi

Simbologia

Comm. = Commento
Kt = Coeff. di sottofondo su suolo elastico alla Winkler
Ly = Lunghezza (dir. Y locale)
Lz = Larghezza (dir. Z locale)
RL = Rotazione libera
Rx = Rotazione intorno all'asse X (L=libera, B=bloccata, E=elastica)
Ry = Rotazione intorno all'asse Y (L=libera, B=bloccata, E=elastica)
Rz = Rotazione intorno all'asse Z (L=libera, B=bloccata, E=elastica)
Sx = Spostamento in dir. X (L=libero, B=bloccato, E=elastico)
Sy = Spostamento in dir. Y (L=libero, B=bloccato, E=elastico)
Sz = Spostamento in dir. Z (L=libero, B=bloccato, E=elastico)
Vn = Numero del vincolo nodo

Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt
									<m>	<m>	<daN/cmc>
1	Libero	L	L	L	L	L	L				
4	Carrello	L	L	B	L	L	L				
Vn	Comm.	Sx	Sy	Sz	Rx	Ry	Rz	RL	Ly	Lz	Kt
									<m>	<m>	<daN/cmc>
2	Incastro	B	B	B	B	B	B				
5	Cerniera	B	B	B	L	L	L				

Elenco nodi

Simbologia

Imp. = Numero dell'impalcato
Nodo = Numero del nodo
Vn = Numero del vincolo nodo
X = Coordinata X del nodo
Y = Coordinata Y del nodo
Z = Coordinata Z del nodo

Nodo	X	Y	Z	Imp.	Vn	Nodo	X	Y	Z	Imp.	Vn	Nodo	X	Y	Z	Imp.	Vn
	<m>	<m>	<m>				<m>	<m>	<m>				<m>	<m>	<m>		
-2285	38.80	2.56	0.00	0	2	-2284	38.80	1.28	0.00	0	2	-2283	38.80	10.24	0.00	0	2
-2282	38.80	11.52	0.00	0	2	-2277	37.50	5.12	0.00	0	1	-2276	37.50	6.40	0.00	0	1
-2275	37.50	11.52	0.00	0	1	-2274	37.50	10.24	0.00	0	1	-2273	37.50	8.96	0.00	0	1
-2272	37.50	7.68	0.00	0	1	-2271	37.50	3.84	0.00	0	1	-2270	37.50	2.56	0.00	0	1
-2269	37.50	1.28	0.00	0	1	-2268	1.30	1.28	0.00	0	1	-2267	1.30	2.56	0.00	0	1
-2266	1.30	3.84	0.00	0	1	-2265	1.30	7.68	0.00	0	1	-2264	1.30	8.96	0.00	0	1
-2263	1.30	10.24	0.00	0	1	-2262	1.30	11.52	0.00	0	1	-2261	1.30	6.40	0.00	0	1
-2260	1.30	5.12	0.00	0	1	-2131	36.87	11.52	0.00	0	1	-2130	36.87	10.24	0.00	0	1
-2129	36.87	8.96	0.00	0	1	-2128	36.87	7.68	0.00	0	1	-2127	36.87	6.40	0.00	0	1
-2126	36.87	5.12	0.00	0	1	-2125	36.87	3.84	0.00	0	1	-2124	36.87	2.56	0.00	0	1
-2123	36.87	1.28	0.00	0	1	-2078	0.00	10.24	0.00	0	2	-2075	0.00	2.56	0.00	0	2
-2042	0.00	11.52	0.00	0	2	-2040	24.60	1.28	0.00	0	2	-2039	0.00	1.28	0.00	0	2
-1921	36.87	12.80	0.00	0	1	-1916	34.47	12.80	0.00	0	2	-1915	30.50	12.80	0.00	0	2
-1906	24.60	11.52	0.00	0	2	-1900	24.60	10.24	0.00	0	2	-1893	36.87	7.75	0.00	0	1
-1888	34.47	7.75	0.00	0	2	-1886	36.87	5.03	0.00	0	1	-1881	34.47	5.03	0.00	0	2
-1878	36.87	3.27	0.00	0	1	-1873	34.47	3.27	0.00	0	2	-1871	24.60	2.56	0.00	0	2
-1852	36.87	0.00	0.00	0	1	-1847	34.47	0.00	0.00	0	2	-1846	30.50	0.00	0.00	0	2
1	0.00	0.00	0.00	0	2	502	6.30	0.00	0.00	0	5	503	12.40	0.00	0.00	0	5
504	18.50	0.00	0.00	0	5	505	24.60	0.00	0.00	0	2	507	6.30	1.28	0.00	0	1
508	12.40	1.28	0.00	0	1	509	18.50	1.28	0.00	0	1	510	6.30	2.56	0.00	0	1
511	12.40	2.56	0.00	0	1	512	18.50	2.56	0.00	0	1	514	6.30	3.84	0.00	0	1
515	12.40	3.84	0.00	0	1	516	18.50	3.84	0.00	0	1	517	6.30	5.12	0.00	0	1
518	12.40	5.12	0.00	0	1	519	18.50	5.12	0.00	0	1	521	6.30	6.40	0.00	0	1
522	12.40	6.40	0.00	0	1	523	18.50	6.40	0.00	0	1	524	6.30	7.68	0.00	0	1
525	12.40	7.68	0.00	0	1	526	18.50	7.68	0.00	0	1	527	6.30	8.96	0.00	0	1
528	12.40	8.96	0.00	0	1	529	18.50	8.96	0.00	0	1	531	6.30	10.24	0.00	0	1
532	12.40	10.24	0.00	0	1	533	18.50	10.24	0.00	0	1	534	6.30	11.52	0.00	0	1
535	12.40	11.52	0.00	0	1	536	18.50	11.52	0.00	0	1	537	0.00	12.80	0.00	0	2
538	6.30	12.80	0.00	0	4	539	12.40	12.80	0.00	0	4	540	18.50	12.80	0.00	0	4
541	24.60	12.80	0.00	0	2	602	6.30	0.00	0.50	0	1	603	12.40	0.00	0.50	0	1
604	18.50	0.00	0.50	0	1	607	6.30	1.28	0.66	0	1	608	12.40	1.28	0.66	0	1
609	18.50	1.28	0.66	0	1	610	6.30	2.56	0.82	0	1	611	12.40	2.56	0.82	0	1
612	18.50	2.56	0.82	0	1	614	6.30	3.84	0.98	0	1	615	12.40	3.84	0.98	0	1
616	18.50	3.84	0.98	0	1	617	6.30	5.12	1.14	0	1	618	12.40	5.12	1.14	0	1
619	18.50	5.12	1.14	0	1	620	30.50	6.40	0.00	0	2	621	6.30	6.40	1.31	0	1
622	12.40	6.40	1.31	0	1	623	18.50	6.40	1.31	0	1	624	6.30	7.68	1.14	0	1

625	12.40	7.68	1.14	0	1	626	18.50	7.68	1.14	0	1	627	6.30	8.96	0.98	0	1
628	12.40	8.96	0.98	0	1	629	18.50	8.96	0.98	0	1	631	6.30	10.24	0.82	0	1
632	12.40	10.24	0.82	0	1	633	18.50	10.24	0.82	0	1	634	6.30	11.52	0.66	0	1
635	12.40	11.52	0.66	0	1	636	18.50	11.52	0.66	0	1	638	6.30	12.80	0.50	0	1
639	12.40	12.80	0.50	0	1	640	18.50	12.80	0.50	0	1	641	12.40	-1.38	0.18	0	1
642	18.50	-1.38	0.18	0	1	643	6.30	-1.38	0.18	0	1	644	12.40	14.18	0.18	0	1
645	30.50	1.28	0.00	0	2	646	34.47	1.28	0.00	0	2	647	30.50	11.52	0.00	0	2
648	34.47	11.52	0.00	0	2	649	30.50	2.56	0.00	0	2	650	34.47	2.56	0.00	0	2
651	30.50	10.24	0.00	0	2	652	34.47	10.24	0.00	0	2	653	0.00	3.84	0.00	0	2
654	24.60	3.84	0.00	0	2	655	30.50	3.84	0.00	0	2	656	34.47	3.84	0.00	0	2
657	38.80	3.84	0.00	0	2	658	0.00	8.96	0.00	0	2	659	24.60	8.96	0.00	0	2
660	30.50	8.96	0.00	0	2	661	34.47	8.96	0.00	0	2	662	38.80	8.96	0.00	0	2
663	0.00	5.12	0.00	0	2	664	24.60	5.12	0.00	0	2	665	30.50	5.12	0.00	0	2
666	34.47	5.12	0.00	0	2	667	38.80	5.12	0.00	0	2	668	0.00	7.68	0.00	0	2
669	24.60	7.68	0.00	0	2	670	30.50	7.68	0.00	0	2	671	34.47	7.68	0.00	0	2
672	38.80	7.68	0.00	0	2	673	0.00	6.40	0.00	0	2	674	24.60	6.40	0.00	0	2
675	34.47	6.40	0.00	0	2	676	38.80	6.40	0.00	0	2	677	18.50	14.18	0.18	0	1
678	6.30	14.18	0.18	0	1	679	0.00	14.18	0.18	0	1	680	0.00	-1.38	0.18	0	1
681	0.00	12.80	0.50	0	1	682	0.00	0.00	0.50	0	1	683	24.60	0.00	0.50	0	1
684	24.60	12.80	0.50	0	1	685	24.60	-1.38	0.18	0	1	686	24.60	14.18	0.18	0	1
687	30.50	0.00	0.50	0	1	688	30.50	12.80	0.50	0	1	689	30.50	-1.38	0.18	0	1
690	30.50	14.18	0.18	0	1	691	34.47	0.00	0.50	0	1	692	34.47	12.80	0.50	0	1
693	34.47	-1.38	0.18	0	1	694	34.47	14.18	0.18	0	1	695	38.80	0.00	0.50	0	1
696	38.80	12.80	0.50	0	1	697	38.80	-1.38	0.18	0	1	698	38.80	14.18	0.18	0	1
699	0.00	1.28	0.79	0	1	700	0.00	2.56	1.02	0	1	701	0.00	3.84	1.18	0	1
702	0.00	5.12	1.27	0	1	703	0.00	6.40	1.31	0	1	704	0.00	7.68	1.27	0	1
705	0.00	8.96	1.18	0	1	706	0.00	10.24	1.02	0	1	707	0.00	11.52	0.79	0	1
708	-1.50	11.52	0.79	0	1	709	-1.50	10.24	1.02	0	1	710	-1.50	8.96	1.18	0	1
711	-1.50	7.68	1.27	0	1	712	-1.50	6.40	1.31	0	1	713	-1.50	5.12	1.27	0	1
714	-1.50	3.84	1.18	0	1	715	-1.50	2.56	1.02	0	1	716	-1.50	1.28	0.79	0	1
717	-1.50	12.80	0.50	0	1	718	-1.50	0.00	0.50	0	1	719	-1.50	14.18	0.18	0	1
720	-1.50	-1.38	0.18	0	1	754	38.80	7.68	1.27	0	1	755	38.80	8.96	1.18	0	1
756	38.80	10.24	1.02	0	1	757	38.80	11.52	0.79	0	1	758	40.30	11.52	0.79	0	1
759	40.30	10.24	1.02	0	1	760	40.30	8.96	1.18	0	1	761	40.30	7.68	1.27	0	1
762	40.30	6.40	1.31	0	1	763	40.30	5.12	1.27	0	1	764	40.30	3.84	1.18	0	1
765	40.30	2.56	1.02	0	1	766	40.30	1.28	0.79	0	1	767	40.30	12.80	0.50	0	1
768	40.30	0.00	0.50	0	1	769	40.30	14.18	0.18	0	1	770	40.30	-1.38	0.18	0	1
771	38.80	12.80	0.00	0	2	772	38.80	0.00	0.00	0	2	778	38.80	1.28	0.79	0	1
779	38.80	2.56	1.02	0	1	780	38.80	3.84	1.18	0	1	781	38.80	5.12	1.27	0	1
782	38.80	6.40	1.31	0	1												

Elenco materiali

- Simbologia**
α =Coeff. di dilatazione termica
ν =Coeff. di Poisson
Comm. = Commento
E =Modulo elastico
G =Modulo elastico tangenziale
Mat. =Numero del materiale
P =Peso specifico

Mat.	Comm.	P <daN/mc>	E <daN/cm ² >	G <daN/cm ² >	ν	α
4	Calcestruzzo classe C20/25	2500	302005.00	137275.00	0.1	1.00E-05
5	Calcestruzzo classe C25/30	2500	314472.00	142942.00	0.1	1.00E-05
18	Acciaio	7850	2100000.00	800000.00	0.3	1.00E-05
22	Calcestruzzo classe C20/25 FESSURATO	2500	151002.00	68637.50	0.1	1.00E-05

Elenco sezioni aste

- Simbologia**
% =Pendenza ala
B =Base
C =Numero del criterio di progetto
Comm. = Commento
Crit. C.F. =Criterio di progetto collegamento finale
Crit. C.I. =Criterio di progetto collegamento iniziale
D =Distanza
H =Altezza
Ma =Numero del materiale
Mem. =Membratura
T = Trave
P = Pilastro
Sez. =Numero della sezione
Tipo =Tipologia
2Cdx = Doppia C lato costola
R = Rettangolare
Is = I stondata
Ver. =Verifica prevista
C = Cemento armato
A = Acciaio
a =Spessore anima
r =Raggio raccordo anima-ala
rl =Raggio in testa ala
s =Spessore ala

Sez.	Comm.	Tipo	Mem.	Ver.	B <cm>	H <cm>	s <cm>	a <cm>	r <cm>	r1 <cm>	%	D <cm>	Ma	C	Crit. C.I.	Crit. C.F.
20	HEB100	Is	T	A	10.00	10.00	1.00	0.60	1.20	0.00	0.00		18	1		3
23	2UPN160	2Cdx	T	A	6.50	16.00	1.05	0.75	1.05	0.55	8.00	1.00	18	3		3
24	IPE240	Is	T	A	12.00	24.00	0.98	0.62	1.50	0.00	0.00		18	1		3
33	HEB140	Is	T	A	14.00	14.00	1.20	0.70	1.20	0.00	0.00		18	4		3
37	HEB140_NO RETICOLARE	Is	T	A	14.00	14.00	1.20	0.70	1.20	0.00	0.00		18	1		3
38	2UPN100	2Cdx	T	A	5.00	10.00	0.85	0.60	0.85	0.45	8.00	1.00	18	1		3

Elenco vincoli aste

Simbologia

Comm. = Commento

Kt =Coeff. di sottofondo su suolo elastico alla Winkler

Mxf =Momento intorno all'asse X locale nodo finale (0=sbloccato, 1=bloccato)

Mxi =Momento intorno all'asse X locale nodo iniziale (0=sbloccato, 1=bloccato)

Myf =Momento intorno all'asse Y locale nodo finale (0=sbloccato, 1=bloccato)

Myi =Momento intorno all'asse Y locale nodo iniziale (0=sbloccato, 1=bloccato)

Mzf =Momento intorno all'asse Z locale nodo finale (0=sbloccato, 1=bloccato)

Mzi =Momento intorno all'asse Z locale nodo iniziale (0=sbloccato, 1=bloccato)

Nf =Sforzo normale nodo finale (0=sbloccato, 1=bloccato)

Ni =Sforzo normale nodo iniziale (0=sbloccato, 1=bloccato)

Tipo = Tipologia

SVI = Definizione di vincolamenti interni

ELA = Vincolo su suolo elastico alla Winkler

BIE-RTC = Biella resistente a trazione e a compressione

BIE-RC = Biella resistente solo a compressione

BIE-RT = Biella resistente solo a trazione

Tyf =Taglio in dir. Y locale nodo finale (0=sbloccato, 1=bloccato)

Tyi =Taglio in dir. Y locale nodo iniziale (0=sbloccato, 1=bloccato)

Tzf =Taglio in dir. Z locale nodo finale (0=sbloccato, 1=bloccato)

Tzi =Taglio in dir. Z locale nodo iniziale (0=sbloccato, 1=bloccato)

Va =Numero del vincolo asta

Va	Comm.	Tipo	Ni	Tyi	Tzi	Mxi	Myi	Mzi	Nf	Tyf	Tzf	Mxf	Myf	Mzf	Kt <daN/cmc>
1	Inc+Inc	SVI	1	1	1	1	1	1	1	1	1	1	1	1	
5	Inc+CerY	SVI	1	1	1	1	1	1	1	1	1	1	0	1	
6	CerY+Inc	SVI	1	1	1	1	0	1	1	1	1	1	1	1	
7	CerY+CerY	SVI	1	1	1	1	0	1	1	1	1	1	0	1	

Elenco aste

Simbologia

Asta=Numero dell'asta

Dy1 =Scost. filo fisso Y1

Dy2 =Scost. filo fisso Y2

Dz1 =Scost. filo fisso Z1

Dz2 =Scost. filo fisso Z2

FF =Filo fisso

Kt =Coeff. di sottofondo su suolo elastico alla Winkler

N1 =Nodo iniziale

N2 =Nodo finale

Par.=Numero dei parametri aggiuntivi

Rot.=Rotazione

Sez.=Numero della sezione

TC1 =Tipo collegamento iniziale

TC2 =Tipo collegamento finale

Va =Numero del vincolo asta

Asta	N1	N2	Sez.	Va	Par.	Rot. <grad>	FF	Dy1 <cm>	Dy2 <cm>	Dz1 <cm>	Dz2 <cm>	TC1	TC2	Kt <daN/cmc>
0	720	718	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	720	680	37	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	718	716	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	718	682	37	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	682	680	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	682	1	33	1		90.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	716	715	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	1	-2039		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	699	716	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	682	699	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	699	-2039	33	1		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	715	714	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	680	643	37	5		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2039	-2075		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	700	715	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-2268	-2039	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	699	700	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	699	-2268	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	700	-2075	33	1		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	714	713	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	701	714	33	1		180.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	1	502		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	682	602	37	5		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2075	653		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	

0	-2267	-2075	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	700	701	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	700	-2267	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	701	653	33	1		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	713	712	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	653	663		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	702	713	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-2266	653	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	701	702	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	701	-2266	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	507	-2268	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	702	663	33	1		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	712	711	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	663	673		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	703	712	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-2260	663	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	702	-2260	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	702	703	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	602	502	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	510	-2267	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	711	710	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	507	602	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	673	668		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2261	673	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	703	673	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	PF	
0	704	711	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	507	502	24	5		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	703	704	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	703	-2261	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	607	507	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	514	-2266	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	704	668	33	1		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	643	641	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	710	709	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	705	710	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	510	507	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	510	607	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	668	658		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2265	668	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	704	705	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	704	-2265	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	610	510	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	517	-2260	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	705	658	33	1		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	502	503		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	602	603	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	709	708	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	514	510	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	514	610	38	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	658	-2078		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	706	709	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-2264	658	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	705	706	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	705	-2264	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	614	514	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	521	-2261	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	706	-2078	33	1		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	508	507	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	708	717	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	707	708	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	517	514	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	517	614	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2078	-2042		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2263	-2078	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	706	707	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	706	-2263	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	617	517	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	524	-2265	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	707	-2042	33	1		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	511	510	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	717	719	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	717	681	37	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	521	517	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	617	521	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2042	537		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	707	681	33	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2262	-2042	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	707	-2262	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	603	503	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	521	621	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	527	-2264	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	537	681	33	1		90.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	508	503	24	5		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	508	603	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	

0	515	514	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	524	521	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	624	521	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	719	679	37	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	679	681	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	608	508	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	524	624	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	531	-2263	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	641	642	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	511	508	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	511	608	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	518	517	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	527	524	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	627	524	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	611	511	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	527	627	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	534	-2262	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	503	504		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	603	604	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	515	511	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	515	611	38	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	522	521	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	531	527	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	631	527	38	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	538	537		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	681	638	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	615	515	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	531	631	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	509	508	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	518	515	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	518	615	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	525	524	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	534	531	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	634	531	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	679	678	37	5		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	618	518	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	534	634	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	512	511	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	522	518	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	618	522	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	528	527	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	538	534	24	6		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	638	534	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	604	504	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	516	515	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	525	522	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	522	622	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	538	638	20	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	509	504	24	5		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	509	604	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	625	522	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	532	531	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	609	509	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	525	625	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	642	685	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	512	509	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	512	609	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	519	518	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	528	525	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	628	525	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	535	534	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	612	512	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	528	628	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	504	505		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	604	683	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	516	512	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	516	612	38	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	523	522	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	532	528	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	632	528	38	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	539	538		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	638	639	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	616	516	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	532	632	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2040	509	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	519	516	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	519	616	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	526	525	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	535	532	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	635	532	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	678	644	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	619	519	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	683	685	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	535	635	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	

0	-1871	512	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	523	519	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	619	523	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	529	528	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	539	535	24	6		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	639	535	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	683	505	33	1		90.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	523	623	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	539	639	20	6		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	505	-2040		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	683	-2040	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	654	516	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	526	523	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	626	523	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	533	532	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	685	689	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	526	626	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2040	-1871		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	664	519	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	529	526	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	629	526	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	536	535	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	529	629	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	505	-1846		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	683	687	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1871	654		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	674	523	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	533	529	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	633	529	38	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	540	539		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	639	640	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	533	633	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2040	645	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	654	664		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	669	526	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	536	533	24	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	636	533	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	644	677	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	687	689	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	536	636	20	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-1871	649	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	664	674		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	687	-1846	33	1		90.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	659	529	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	540	536	24	6		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	640	536	33	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	689	693	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1846	645		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	687	645	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	540	640	20	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	654	655	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	674	669		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1900	533	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	645	649		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1846	-1847		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	687	691	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	664	665	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	669	659		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1906	536	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	649	655		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	645	646	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	691	693	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	674	620	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	659	-1900		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	541	540		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	640	684	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	691	-1847	33	1		90.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	655	665		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	649	650	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-1847	646		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	691	646	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	669	670	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	693	697	37	6		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1900	-1906		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1847	-1852		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	677	686	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	665	620		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	655	656	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	646	650		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	659	660	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	691	695	37	6		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1906	541		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	684	-1906	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	646	-2123	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	

0	650	-1873		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	541	684	33	1		90.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	-1852	-2123		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	620	670		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	665	666	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-1900	651	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-1852	772		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1873	656		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	686	684	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	695	697	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	697	770	37	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	650	-2124	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2123	-2269	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2123	-2124		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	695	772	33	1		270.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	670	660		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	620	675	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	656	-1881		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1873	-1878		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1906	647	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2269	-2284	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	778	-2269	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	772	-2284		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	695	778	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	656	-2125	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-1881	666		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	695	768	33	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	770	768	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2124	-2270	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2124	-1878		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	778	-2284	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	660	651		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	670	671	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	666	675		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1915	541		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	684	688	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1878	-2125		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1881	-1886		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2270	-2285	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	779	-2270	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-2284	-2285		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	778	779	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	666	-2126	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	766	778	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	768	766	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2125	-2271	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2125	-1886		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	779	-2285	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	651	647		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	660	661	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	675	671		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	686	690	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1886	-2126		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2271	657	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	780	-2271	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-2285	657		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	779	780	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	675	-2127	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	765	779	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	671	-1888		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	766	765	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2126	-2277	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2126	-2127		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	780	657	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	647	-1915		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	688	647	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	651	652	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-1888	661		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2277	667	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	781	-2277	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	657	667		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	780	781	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-1915	688	33	1		90.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	671	-2128	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	764	780	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-1888	-1893		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	765	764	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2127	-2276	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2127	-2128		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	781	667	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	690	688	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	647	648	23	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	661	652		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2276	676	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	

0	667	676		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	782	-2276	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	781	782	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2128	-1893		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	661	-2129	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	763	781	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	764	763	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2128	-2272	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	782	676	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	-1893	-2129		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1916	-1915		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	688	692	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	652	648		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2272	672	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	754	-2272	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	676	672		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	782	754	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	652	-2130	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	762	782	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	763	762	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2129	-2273	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2129	-2130		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	754	672	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	648	-1916		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	692	648	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	690	694	37	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2273	662	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	755	-2273	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	672	662		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	754	755	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	648	-2131	23	6		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	761	754	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-1916	692	33	1		90.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	762	761	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2130	-2274	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2130	-2131		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	755	662	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	694	692	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-2274	-2283	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	756	-2274	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	662	-2283		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	755	756	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-1921	-1916		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	760	755	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	761	760	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-2131	-2275	23	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-2131	-1921		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	756	-2283	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	692	696	37	6		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2275	-2282	23	5		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	757	-2275	38	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	-2283	-2282		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	756	757	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	759	756	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	760	759	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	757	-2282	33	1		0.00	88	0.00	0.00	0.00	0.00	PF	ND	
0	771	-1921		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	694	698	37	6		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-2282	771		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	757	696	33	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	758	757	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	759	758	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	771	696	33	1		270.00	22	0.00	0.00	0.00	0.00	PF	ND	
0	698	696	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
0	696	767	37	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	758	767	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	698	769	37	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	767	769	33	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
1009	602	643	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1010	603	641	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1011	604	642	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1015	678	638	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1016	644	639	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
1017	677	640	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6046	612	609	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6046	616	612	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6122	610	607	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6122	614	610	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6124	619	616	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6124	623	619	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6200	617	614	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6200	621	617	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6201	618	615	33	7		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6201	622	618	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	

6202	626	623	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6202	629	626	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6278	624	621	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6278	627	624	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6279	625	622	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6279	628	625	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6280	633	629	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6280	636	633	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6356	631	627	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6356	634	631	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6357	632	628	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
6357	635	632	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
60441	607	602	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
60451	608	603	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
60451	611	608	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
60451	615	611	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
60461	609	604	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
63561	638	634	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
63571	639	635	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	
63581	640	636	33	1		180.00	88	0.00	0.00	0.00	0.00	ND	ND	

Elenco tipi solai

Simbologia

Comm. = Commento
 Crit. = Numero del criterio di progetto
 Hs = Altezza solaio
 Lfl = Larghezza fascia laterale
 QA = Primo carico accidentale
 QA2 = Secondo carico accidentale
 QA3 = Terzo carico accidentale
 Qpn = Carico permanente non strutturale
 Qps = Carico permanente strutturale
 Rc = Ripartizione carichi
 UN = Unidirezionale
 Rip. int. = Ripartizione su aste interne
 Rip. ter. = Ripartizione su aste terminali
 Sc = Spessore cappa
 Ts = Numero del tipo solaio
 s = Coeff. di riduzione

Ts	Comm.	Rc	Qps <daN/mq>	Qpn <daN/mq>	QA <daN/mq>	QA2 <daN/mq>	QA3 <daN/mq>	Rip. ter.	Rip. int.	Lfl <m>	s	Hs <cm>	Sc <cm>	Crit.
2	Copertura	UN	215.00	120.00	0.00	50.00	48.00	50.00	50.00	0.00	0.33	16.00	4.00	1
9	Copertura sbalzo	UN	0.00	50.00	0.00	50.00	50.00	50.00	50.00	0.00	0.33	16.00	4.00	1

Elenco solai

Simbologia

Nodi = Nodi del solaio
 Ord. = Orditura
 Sol. = Numero del solaio
 Ts = Numero del tipo solaio

Sol.	Ts	Ord. <grad>	Nodi
500	2	90.00	504 505 -2040 509
501	2	90.00	503 504 509 508
502	2	90.00	502 503 508 507
503	2	90.00	1 502 507 -2268 -2039
504	2	90.00	-2040 -1871 649 645
505	2	90.00	508 509 512 511
506	2	90.00	507 508 511 510
507	2	90.00	-2039 -2268 507 510 -2267 -2075
508	2	90.00	512 -1871 654 516
509	2	90.00	511 512 516 515
510	2	90.00	510 511 515 514
511	2	90.00	-2075 -2267 510 514 -2266 653
512	2	90.00	516 654 664 519
513	2	90.00	515 516 519 518
514	2	90.00	514 515 518 517
515	2	90.00	653 -2266 514 517 -2260 663
516	2	90.00	519 664 674 523
517	2	90.00	518 519 523 522
518	2	90.00	517 518 522 521
519	2	90.00	663 -2260 517 521 -2261 673
520	2	90.00	523 674 669 526
521	2	90.00	522 523 526 525
522	2	90.00	521 522 525 524
523	2	90.00	673 -2261 521 524 -2265 668
524	2	90.00	526 669 659 529
525	2	90.00	525 526 529 528
526	2	90.00	524 525 528 527
527	2	90.00	668 -2265 524 527 -2264 658
528	2	90.00	529 659 -1900 533
529	2	90.00	528 529 533 532

530	2	90.00	649 655 656 -1873 650
531	2	90.00	527 528 532 531
532	2	90.00	658 -2264 527 531 -2263 -2078
533	2	90.00	533 -1900 -1906 536
534	2	90.00	532 533 536 535
535	2	90.00	531 532 535 534
536	2	90.00	-2078 -2263 531 534 -2262 -2042
537	2	90.00	540 541 -1906 536
538	2	90.00	539 540 536 535
539	2	90.00	-1900 -1906 647 651
540	2	90.00	538 539 535 534
541	2	90.00	-1871 654 655 649
542	2	90.00	509 -2040 -1871 512
543	2	90.00	654 664 665 655
544	2	90.00	664 674 620 665
545	2	90.00	674 669 670 620
546	2	90.00	669 659 660 670
547	2	90.00	647 -1915 -1916 648
548	2	90.00	659 -1900 651 660
549	2	90.00	537 538 534 -2262 -2042
550	2	90.00	505 -2040 645 -1846
551	2	90.00	645 649 650 646
552	2	90.00	656 -1881 666 -2126 -2277 667 657 -2271 -2125
553	2	90.00	666 675 -2127 -2276 676 667 -2277 -2126
554	2	90.00	665 620 675 666
555	2	90.00	620 670 671 675
556	2	90.00	661 652 -2130 -2274 -2283 662 -2273 -2129
557	2	90.00	660 651 652 661
558	2	90.00	651 647 648 652
559	2	90.00	-1847 646 -2123 -2269 -2284 772 -1852
560	2	90.00	-1846 645 646 -1847
561	2	90.00	646 650 -2124 -2270 -2285 -2284 -2269 -2123
562	2	90.00	650 -1873 656 -2125 -2271 657 -2285 -2270 -2124
563	2	90.00	655 665 666 -1881 656
564	2	90.00	675 671 -2128 -2272 672 676 -2276 -2127
565	2	90.00	671 -1888 661 -2129 -2273 662 672 -2272 -2128
566	2	90.00	670 660 661 -1888 671
567	2	90.00	-1906 541 -1915 647
568	2	90.00	652 648 -2131 -2275 -2282 -2283 -2274 -2130
569	2	90.00	648 -1916 -1921 771 -2282 -2275 -2131
600	9	90.00	638 678 644 639
601	9	90.00	639 644 677 640
602	9	90.00	641 603 604 642
603	9	90.00	641 643 602 603
604	9	90.00	638 681 679 678
605	9	90.00	602 643 680 682
606	9	90.00	642 685 683 604
607	9	90.00	685 689 687 683
608	9	90.00	689 693 691 687
609	9	90.00	693 697 695 691
610	9	90.00	684 640 677 686
611	9	90.00	688 684 686 690
612	9	90.00	692 688 690 694
613	9	90.00	696 692 694 698
614	9	90.00	681 717 719 679
615	9	90.00	707 708 717 681
616	9	90.00	706 709 708 707
617	9	90.00	705 710 709 706
618	9	90.00	704 711 710 705
619	9	90.00	703 712 711 704
620	9	90.00	702 713 712 703
621	9	90.00	701 714 713 702
622	9	90.00	700 715 714 701
623	9	90.00	699 716 715 700
624	9	90.00	682 718 716 699
625	9	90.00	680 720 718 682
626	9	270.00	696 767 769 698
627	9	270.00	757 758 767 696
628	9	270.00	756 759 758 757
629	9	270.00	755 760 759 756
630	9	270.00	754 761 760 755
631	9	270.00	782 762 761 754
632	9	270.00	781 763 762 782
633	9	270.00	780 764 763 781
634	9	270.00	779 765 764 780
635	9	270.00	778 766 765 779
636	9	270.00	695 768 766 778
637	9	270.00	697 770 768 695

Carichi

Elenco tipi CCE

Simbologia

γ_{max} =Coeff. γ_{max}
 $\gamma_{min.}$ =Coeff. $\gamma_{min.}$
 Ψ_0 =Coeff. Ψ_0
 $\Psi_{0,s}$ =Coeff. Ψ_0 sismico (D.M. 96)
 Ψ_1 =Coeff. Ψ_1
 Ψ_2 =Coeff. Ψ_2
Comm. =Commento
Durata =Durata del carico
P = Permanente
L = Lunga
M = Media
B = Breve
Tipo =Tipologia
G = Permanente
Qv = Variabile vento
Q = Variabile
Tipo CCE =Tipo condizione di carico elementare

Tipo CCE	Comm.	Tipo	Durata	$\gamma_{min.}$	γ_{max}	Ψ_0	Ψ_1	Ψ_2	$\Psi_{0,s}$
1	D.M. 18 Permanenti strutturali	G	P	1.00	1.30				
2	D.M. 18 Permanenti non strutturali	G	L	0.80	1.30				
19	D.M. 18 Variabili Categoria H - Coperture accessibili per sola manutenzione	Q	M	0.00	1.50	0.00	0.00	0.00	1.00
12	D.M. 18 Variabili Neve (a quota <= 1000 m s.l.m.)	Q	M	0.00	1.50	0.50	0.20	0.00	0.00
11	D.M. 18 Variabili Vento	Qv	B	0.00	1.50	0.60	0.20	0.00	0.00

Condizioni di carico elementari

Simbologia

CCE =Numero della condizione di carico elementare
Comm. =Commento
Dir. =Direzione del vento
Jpx =Moltiplicatore del momento d'inerzia intorno all'asse X
Jpy =Moltiplicatore del momento d'inerzia intorno all'asse Y
Jpz =Moltiplicatore del momento d'inerzia intorno all'asse Z
Mx =Moltiplicatore della massa in dir. X
My =Moltiplicatore della massa in dir. Y
Mz =Moltiplicatore della massa in dir. Z
Sic. =Contributo alla sicurezza
S = a sfavore
Tipo =Tipologia di pressione vento
M = Massimizzata
E = Esterna
I = Interna
Tipo CCE =Tipo di CCE per calcolo agli stati limite
Var. =Tipo di variabilit 
B = di base
A = ambigua
s =Coeff. di riduzione (T.A. o S.L. D.M. 96)

CCE	Comm.	Tipo CCE	Sic.	Var.	s	Dir. <grad>	Tipo	Mx	My	Mz	Jpx	Jpy	Jpz
1PS		1S	--	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
2PNS		2S	--	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
3Cat.H		19S	A	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
4Neve		12S	A	--	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00
5VENTO		11S	A	--	1.00	0.00	M	--	--	--	--	--	--

Risultati del calcolo

Parametri di calcolo

La modellazione della struttura e la rielaborazione dei risultati del calcolo sono stati effettuati con:
ModeSt ver. 8.27, licenza n. 5637, prodotto da Tecnisoft s.a.s. - Prato
La struttura   stata calcolata utilizzando come solutore agli elementi finiti:
Xfinest ver. 9.3.5, licenza n. -1523908944, prodotto da Ce.A.S. S.r.l. - Milano

Tipo di normativa: stati limite D.M. 18
Tipo di calcolo: statico
Vincoli esterni: Considera sempre vincoli assegnati in modellazione
Schematizzazione piani rigidi: nessun impalcato rigido
Modalit  di recupero masse secondarie: mantenere sul nodo masse e forze relative

Generazione combinazioni

- Lineari: Si
- Valuta spostamenti e non sollecitazioni: No
- Buckling: No

Opzioni di calcolo

- Sono state considerate infinitamente rigide le zone di connessione fra travi, pilastri ed elementi bidimensionali con una riduzione del 20%
- Calcolo con offset rigidi dai nodi: No
- Uniformare i carichi variabili: No
- Massimizzare i carichi variabili: No
- Recupero carichi zone rigide: taglio e momento flettente

Opzioni del solutore

- Tipo di elemento bidimensionale: QF46
- Calcolo sforzo nei nodi: No
- Trascura deformabilità a taglio delle aste: No
- Analisi dinamica con metodo di Lanczos: Sì
- Check sequenza di Sturm: Sì
- Analisi non lineare con Newton modificato: No
- Usa formulazione secante per buckling: No
- Trascura buckling torsionale: No
- Opzioni aggiuntive per analisi non lineari in presenza di elementi bidimensionali con comportamento Drucker-Prager:

OPTION PARAM CONV=E
OPTION PARAM RESENORM=1.E-8
OPTION PARAM AUTO_INCREMENT=YES
OPTION PARAM LINE_SEARCHES=YES
OPTION PARAM BGINCRS=1.0
OPTION PARAM AVINCRS=1.0

Dati struttura

- Edificio esistente: No
- Tipo di opera: Opera ordinaria
- Vita nominale V_N : 50.00
- Classe d'uso: Classe III
- Forze orizzontali convenzionali per stati limite non sismici: No
- Genera stati limite per verifiche di resistenza al fuoco: No

Ambienti di carico

Simbologia

N = Numero
Comm. = Commento
1 = PS
2 = PNS
3 = Cat.H
4 = Neve
5 = VENTO
F = azioni orizzontali convenzionali
SLU = Stato limite ultimo
SLR = Stato limite per combinazioni rare
SLF = Stato limite per combinazioni frequenti
SLQ/D = Stato limite per combinazioni quasi permanenti o di danno
S = Sì
N = No

N	Comm.	1	2	3	4	5	SLU	SLR	SLF	SLQ
1	Calcolo statico	S	S	S	S	S	S	S	S	S

Elenco combinazioni di carico simboliche

Simbologia

CC = Numero della combinazione delle condizioni di carico elementari
Comm. = Commento
TCC = Tipo di combinazione di carico
SLU = Stato limite ultimo
SLE R = Stato limite d'esercizio, combinazione rara
SLE F = Stato limite d'esercizio, combinazione frequente
SLE Q = Stato limite d'esercizio, combinazione quasi permanente

CC	Comm.	TCC	1	2	3	4	5
1	Amb. 1 (SLU)	SLU	γ max	γ max	$\psi_0 * \gamma$ max	$\psi_0 * \gamma$ max	γ max
2	Amb. 1 (SLU)	SLU	γ max	γ max	$\psi_0 * \gamma$ max	γ max	$\psi_0 * \gamma$ max
3	Amb. 1 (SLU)	SLU	γ max	γ max	γ max	$\psi_0 * \gamma$ max	$\psi_0 * \gamma$ max
4	Amb. 1 (SLE R)	SLE R	1	ψ_0	ψ_0	ψ_0	1
5	Amb. 1 (SLE R)	SLE R	1	1	ψ_0	1	ψ_0
6	Amb. 1 (SLE R)	SLE R	1	1	1	ψ_0	ψ_0
7	Amb. 1 (SLE F)	SLE F	1	1	ψ_2	ψ_2	ψ_1
8	Amb. 1 (SLE F)	SLE F	1	1	ψ_2	ψ_1	ψ_2
9	Amb. 1 (SLE F)	SLE F	1	1	ψ_1	ψ_2	ψ_2
10	Amb. 1 (SLE Q)	SLE Q	1	1	ψ_2	ψ_2	ψ_2

Genera le combinazioni con un solo carico di tipo variabile come di base: Sì
Considera sollecitazioni dinamiche con segno dei modi principali: No

Combinazioni delle CCE

Simbologia

An. = Tipo di analisi
L = Lineare
NL = Non lineare
Bk = Buckling
S = Sì
N = No
CC = Numero della combinazione delle condizioni di carico elementari
Comm. = Commento
TCC = Tipo di combinazione di carico
SLU = Stato limite ultimo
SLE R = Stato limite d'esercizio, combinazione rara

SLE F = Stato limite d'esercizio, combinazione frequente
SLE Q = Stato limite d'esercizio, combinazione quasi permanente

CC	Comm.	TCC	An.	Bk	1	2	3	4	5
1	Amb. 1 (SLU)	SLU	L	N	1.30	1.30	0.00	0.75	1.50
2	Amb. 1 (SLU)	SLU	L	N	1.30	1.30	0.00	1.50	0.90
3	Amb. 1 (SLU)	SLU	L	N	1.30	1.30	1.50	0.75	0.90
4	Amb. 1 (SLE R)	SLE R	L	N	1.00	1.00	0.00	0.50	1.00
5	Amb. 1 (SLE R)	SLE R	L	N	1.00	1.00	0.00	1.00	0.60
6	Amb. 1 (SLE R)	SLE R	L	N	1.00	1.00	1.00	0.50	0.60
7	Amb. 1 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.00	0.20
8	Amb. 1 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.20	0.00
9	Amb. 1 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.00	0.00
10	Amb. 1 (SLE Q)	SLE Q	L	N	1.00	1.00	0.00	0.00	0.00

Criteri di progetto utilizzati

Aste in acciaio

Generali	
Verifica aste in acciaio	
Numero punti di verifica	10.00
Numero CC da considerare di tipo I	99.00
Stati limite D.M. 18	
Verifiche con EC3	No
Coeff. amplificativo sollecitazioni per effetti del secondo ordine	1.00
Stampe	
Verifiche da riportare in relazione	Aste più sollecitate a parità di sezione
Stampa dettaglio verifiche	No

Specifici		4
Materiali		
CNR 10011		
Tipo di acciaio		FE430
D.M. 18		
Tipo di acciaio per profilati a sezione aperta		S275
		UNI EN
		10025-2
Tipo di acciaio per profilati a sezione cava		S275H
		UNI EN
		10210-1
EC3		
Tipo di acciaio		S275
-Fy <daN/cm²>		2750.00
-Fu <daN/cm²>		4300.00
-Fy,40 <daN/cm²>		2550.00
-Fu,40 <daN/cm²>		4100.00
γ M0		1.00
γ M1		1.00
γ M2		1.25
γ Rd		1.30
γ Ov		1.25
-Considera come elemento esistente (S.L. D.M. 18/EC3)		No
-Livello di conoscenza		LC1
-Fattore di confidenza		1.35
Verifiche di resistenza		
Rapporto fra area effettiva e area nominale		1.00
Rapporto fra area netta e area nominale		1.00
Coeff. di forma intorno all'asse Y		1.00
Coeff. di forma intorno all'asse Z		1.00
Verifica le bielle solo con sollecitazioni di trazione moltiplicate per		Si
Valutare la τ per torsione nei punti di spigolo (CNR 10011)		No
-Pari a		
Stati limite D.M. 18/EC3		
-Elemento dissipativo		Si
-Effettua le verifiche della gerarchia delle resistenze per strutture intelaiate		No
-Usa classe 1 in pressoflessione deviata se non presente in archivio		No
-Verifica in campo plastico elemento non dissipativo		No
Stati limite D.M. 18		
-Usa prescrizioni EC3 quando più dettagliate		Si
-Considera prescrizioni relative ai ponti		No
Verifiche di resistenza sezioni generiche		
Spessore nominale <cm>		0.00
Momento di inerzia torsionale <cm⁴>		0.00
Costante di ingobbamento <cm⁶>		0.00
Riduzione resistenza flessionale come per sezioni a I		No
Area resistente a taglio in dir. Y locale <cm²>		0.00

Area resistente a taglio in dir. Z locale <cmq>	0.00
Verifiche di deformabilità	
Max valore del rapporto tra la luce e la freccia (totale)	200.00
Max valore del rapporto tra la luce e la freccia (solo accidentali)	250.00
Max valore del rapporto tra altezza e spostamento orizz. (aste)	300.00
Max valore del rapporto tra altezza e spostamento orizz. (membrature)	500.00
Considerare anche spostamento relativo nodi per calcolo freccia	No
Considerare solo la verifica di deformabilità delle membrature	Si
Trascura deformazione dovuta al sisma (T.A.)	No
Verifiche di stabilità	
Riduzione lunghezza libera d'inflessione	
-Distanza fra i nodi dell'asta	x
-Distanza ridotta delle zone rigide moltiplicate per il valore	
Tipo di accoppiamento aste composte	
-Separate	
-Calastrellate	
-Imbottite	
-Automatico	x
Calcolo momento medio usando valori assoluti	Si
Interasse calastrelli o imbottiture	
-Distanza pari a <m>	
-Interasse da normativa moltiplicato per il valore	0.80
-Aste rigidamente collegate	
Curva di stabilità (D.M. 18/EC3)	Automatica
Aste laminate	Si
Sigma max amm. senza verifiche di stabilità (CNR 10011) <%>	2.00
Verifica nei piani principali	Si
Carichi sull'estradosso (CNR 10011)	Si
Verifiche di stabilità asta	
Verifiche di stabilità globale nel piano XZ locale	Si
-Coeff. β intorno all'asse Y	1.00
Verifiche di stabilità globale nel piano XY locale	Si
-Coeff. β intorno all'asse Z	1.00
Verifiche di stabilità flessione - torsionale	Si
-Coeff. per calcolo interasse ritegni torsionali	1.00
Eeguire anche le verifiche al punto 7.3.2 (CNR 10011)	Si
Aste inflesse (D.M. 18/EC3)	
-Coeff. Ψ per calcolo momento critico	
-Valuta in base ai momenti dell'asta	x
-Utilizza valore imposto	
-Fattore correttivo di distribuzione K_c	0.94
-Snellezza di riferimento $\lambda_{LT,0}$	0.40
-Coeff. β	0.75
Aste pressoinflesse (D.M. 18/EC3)	
-Considera come molto deformabile a torsione	No
-Fattore correttivo di distribuzione α_{mY}/C_{mY}	0.95
-Fattore correttivo di distribuzione α_{mZ}/C_{mZ}	0.95
-Fattore correttivo di distribuzione α_{mLT}/C_{mLT}	0.95
Verifiche di stabilità all'imbozzamento (CNR 10011)	
-Numero irrigidimenti orizzontali anima	0.00
-Interasse irrigidimenti verticali anima	
-Numero di suddivisioni	
-Distanza non inferiore a <cm>	
-Pari alla lunghezza dell'asta	x
-Modalità di calcolo $\sigma_{cr,id}$	
-Normativa	
-Massonet	x
-Ballio	
Verifiche di stabilità membratura	
Massimo numero aste costituenti unica membratura	2.00
Sforzo normale di verifica	
-Massimo valore fra tutte le aste	x
-Media aritmetica dei valori di tutte le aste	
-Media pesata di tutte le aste	
Contributo eventuali sforzi di trazione	No
Incremento snellezza	Si
Verifiche di stabilità globale nel piano XZ locale	Si
-Coeff. β intorno all'asse Y calcolato in funzione dello sforzo normale	
-Coeff. β intorno all'asse Y	1.00
Verifiche di stabilità globale nel piano XY locale	Si
-Coeff. β intorno all'asse Z calcolato in funzione dello sforzo normale	
-Coeff. β intorno all'asse Z	1.00
Verifiche di stabilità flessione - torsionale	Si
-Coeff. per calcolo interasse ritegni torsionali	1.00
Membrature inflesse (D.M. 18/EC3)	
-Coeff. Ψ per calcolo momento critico	
-Valuta in base ai momenti della membratura	x
-Utilizza valore imposto	

-Fattore correttivo di distribuzione K_c	0.94
-Snellezza di riferimento $\lambda_{LT,0}$	0.40
-Coeff. β	0.75
Membrature pressoinflesse (D.M. 18/EC3)	
-Considera come molto deformabile a torsione	No
-Fattore correttivo di distribuzione α_{my}/C_{my}	0.95
-Fattore correttivo di distribuzione α_{mz}/C_{mz}	0.95
-Fattore correttivo di distribuzione α_{mLT}/C_{mLT}	0.95
Dati per verifiche di resistenza al fuoco	
-Tempo di verifica (REI) <minuti>	120.00
-Fattore di momento uniforme equivalente β_M, y	1.10
-Fattore di momento uniforme equivalente β_M, z	1.10
-Fattore di momento uniforme equivalente β_M, LT	1.10

Verifiche aste in acciaio

Simbologia

Φ_{LT}	= Coefficiente Φ per stabilità laterale membrature inflesse
Φ_y	= Coefficiente Φ per inflessione intorno all'asse y(c)
Φ_z	= Coefficiente Φ per inflessione intorno all'asse z(e)
α	= Esponente sfruttamento per flessione retta intorno all'asse y
α_{imp}	= Coefficiente di imperfezione
$\alpha_{my}, \alpha_{mz}, \alpha_{LT}$	= Coefficienti correttivi per il momento flettente
β	= Esponente sfruttamento per flessione retta intorno all'asse z
β_{LT}	= Coefficiente per calcolo Φ_{LT}
χ_{LT}	= Coefficiente di riduzione per stabilità laterale membrature inflesse
χ_y	= Coefficiente χ di riduzione per instabilità intorno all'asse y(c)
χ_z	= Coefficiente χ di riduzione per instabilità intorno all'asse z(e)
λ_y^*	= Snellezza adimensionale per inflessione intorno all'asse y(c)
λ_z^*	= Snellezza adimensionale per inflessione intorno all'asse z(e)
λ_{LT}	= Coefficiente di imperfezione per stabilità laterale membrature inflesse
$\lambda_{LT,0}$	= Coefficiente di imperfezione di confronto per stabilità laterale membrature inflesse
λ_y	= Snellezza per inflessione intorno all'asse y(c)
λ_z	= Snellezza per inflessione intorno all'asse z(e)
ψ	= Coeff. di correzione momento critico per stabilità laterale membrature inflesse
Aeff	<cmq> = Area effettiva per trazione
Anet	<cmq> = Area netta per compressione
Area	<cmq> = Area
Atag,y	<cmq> = Area resistente a taglio in dir. Y
Atag,z	<cmq> = Area resistente a taglio in dir. Z
CC	= Numero della combinazione delle condizioni di carico elementari
Cod.	= Codice
Curva	= Curva di instabilità adottata
D	<cm> = Distanza
Fyk	<daN/cm> = Tensione caratteristica di snervamento dell'acciaio
Fyt	<daN/cm> = Tensione caratteristica di rottura
Iy	<cm> = Raggio giratorio d'inerzia rispetto all'asse Y
Iz	<cm> = Raggio giratorio d'inerzia rispetto all'asse Z
J ω	<cm6> = Costante di ingobbamento
Jy	<cm4> = Momento d'inerzia rispetto all'asse Y
Jz	<cm4> = Momento d'inerzia rispetto all'asse Z
Kyy, Kyz, Kzy, Kzz	= Coefficienti di interazione
L	<m> = Lunghezza dell'asta
L _{cr}	<m> = Lunghezza di libera inflessione laterale fra ritegni torsionali
M, cr	<daNm> = Momento critico per instabilità flessa torsionale
MNy, c, Rd	<daNm> = Resistenza di calcolo a pressoflessione intorno all'asse Y
MNz, c, Rd	<daNm> = Resistenza di calcolo a pressoflessione intorno all'asse Z
Mx	<daNm> = Momento torcente intorno all'asse X
My	<daNm> = Momento flettente intorno all'asse Y
My, Ed	<daNm> = Momento flettente di calcolo intorno all'asse Y
My, V, c, Rd	<daNm> = Resistenza di calcolo a flessione ridotta per taglio intorno all'asse Y
Mz	<daNm> = Momento flettente intorno all'asse Z
Mz, Ed	<daNm> = Momento flettente di calcolo intorno all'asse Z
N	<daN> = Sforzo normale
N, Ed	<daN> = Forza assiale di calcolo
Nc, Rd	<daN> = Resistenza a compressione
Ncr, y	<daN> = Sforzo normale critico euleriano per inflessione intorno all'asse y(c)
Ncr, z	<daN> = Sforzo normale critico euleriano per inflessione intorno all'asse z(e)
Sez.	= Numero della sezione
Tipo	= Tipologia 2Cdx = Doppia C lato costola R = Rettangolare Is = I stondata
Tp	= Tipo di acciaio
Ty	<daN> = Taglio in dir. Y
Tz	<daN> = Taglio in dir. Z
V, Ed	<daN> = Forza di taglio di calcolo
Vc, Rd	<daN> = Resistenza a taglio
Vc, Rd, Red	<daN> = Resistenza a taglio ridotta
Wy, plas	<cmc> = Modulo di resistenza plastico intorno all'asse Y
Wymin	<cmc> = Modulo di resistenza minimo rispetto all'asse Y
Wz, plas	<cmc> = Modulo di resistenza plastico intorno all'asse Z
Wzmin	<cmc> = Modulo di resistenza minimo rispetto all'asse Z
Xl	<m> = Coordinata progressiva (dal nodo iniziale dell'asta) in cui viene effettuato il progetto/verifica
f	= Fattore di modifica per il coefficiente di riduzione
f _{z, G}	<cm> = Freccia in direzione Z globale
f _{z, L}	<cm> = Freccia in direzione Z locale
k _c	= Coeff. di correzione momento flettente per stabilità laterale membrature inflesse

Caratteristiche profilati utilizzati

Sez.	Cod.	Tipo	D <cm>	Area <cmq>	Anet <cmq>	Aeff <cmq>	Jy <cm4>	Jz <cm4>	Iy <cm>	Iz <cm>	Wymin <cm>	Wzmin <cm>	TP	Fyk <daN/cm>	Fyt <daN/cm>
33	HEB140	Is	--	42.96	42.96	42.96	1509.25	549.67	5.93	3.58	215.61	78.52	S275 UNI EN 10025-2	2750.00	4300.00

Caratteristiche profilati utilizzati

Sez.	Cod.	Wy,plas <cm>	Wz,plas <cm>	Atag,y <cmq>	Atag,z <cmq>	Jw <cm6>
33	HEB140	246.04	119.88	36.52	13.08	22478.90

Aste di sezione 33 HEB140 - Crit. 4

Asta n. 63581 (640 636)

- Verifica a taglio Dir. Y [4.2.16] - CC 3 SLU $X_L=0.00$ - Classe 1
Sollecitazioni: $T_y=-15.05$
 $V,Ed=-15.05$ $V_c,Rd=55219.00$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio Dir. Z [4.2.16] - CC 3 SLU $X_L=0.00$ - Classe 1
Sollecitazioni: $T_z=-1110.19$
 $V,Ed=-1110.19$ $V_c,Rd=19774.20$ $V,Ed/V_c,Rd=0.06$

Asta n. 60451 (615 611)

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 3 SLU $X_L=1.29$ - Classe 1
Sollecitazioni: $N=-63138.20$ $T_z=-208.29$ $M_y=597.81$
 $M_y,Ed=597.81$ $M_y,V,c,Rd=6444.02$
 $N,Ed=-63138.20$ $N_c,Rd=-112506.00$ YY $n=N,Ed/N_c,Rd=0.56$ $MN_y,c,Rd=3173.24$ $M_y,Ed/MN_y,c,Rd=0.19$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: $N,Ed=-63138.20$ $M_y,Ed=597.81$ $M_z,Ed=0.91$ $L=1.29$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=1.29$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.31$ $M_{cr}=70388.30$ $\lambda_{LT}=0.31$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.52$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=21.77$ $N_{cr,y}=1879420.00$ $\lambda_y^*=0.25$ Curva b: $\Phi_y=0.54$ $\chi_y=0.98$
 $\lambda_z=36.07$ $N_{cr,z}=684481.00$ $\lambda_z^*=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.98, 0.65, 0.59, 1.09$
Verifica YY: $0.57+0.09+0.00=0.66$
Verifica ZZ: $0.63+0.05+0.00=0.69$

Asta n. 1011 (604 642)

- Verifica freccia massima per soli carichi accidentali - CC 4
 $f_{z,L}=0.05$ (L/2632) $f_{z,G}=0.05$ (L/2699)
- Verifica freccia massima carichi totali - CC 4
 $f_{z,L}=0.03$ (L/5040) $f_{z,G}=0.03$ (L/5111)

Membratura

Asta n. 6046 (609 612 616) - Sez. 33 (HEB140) - Crit. 4

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: $N,Ed=-62909.70$ $M_y,Ed=829.56$ $M_z,Ed=7.07$ $L=2.58$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.20$ $M_{cr}=23069.90$ $\lambda_{LT}=0.54$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.63$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.97$
 $\lambda_y=43.53$ $N_{cr,y}=469855.00$ $\lambda_y^*=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ $N_{cr,z}=171120.00$ $\lambda_z^*=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.13, 1.10, 0.68, 1.83$
Verifica YY: $0.63+0.15+0.00=0.79$
Verifica ZZ: $0.87+0.09+0.00=0.96$
- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.09$ (L/2785) $f_{z,G}=0.02$ (L/12522)
- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.55$ (L/473) $f_{z,G}=0.12$ (L/2139)

Membratura

Asta n. 6122 (607 610 614) - Sez. 33 (HEB140) - Crit. 4

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: $N,Ed=-54109.70$ $M_y,Ed=712.75$ $M_z,Ed=2.87$ $L=2.58$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.20$ $M_{cr}=23069.90$ $\lambda_{LT}=0.54$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.63$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.97$
 $\lambda_y=43.53$ $N_{cr,y}=469855.00$ $\lambda_y^*=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ $N_{cr,z}=171120.00$ $\lambda_z^*=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.11, 1.02, 0.66, 1.70$
Verifica YY: $0.54+0.13+0.00=0.67$
Verifica ZZ: $0.75+0.08+0.00=0.83$
- Verifica freccia massima per soli carichi accidentali - CC 6

$f_{z,L}=0.08$ (L/3211) $f_{z,G}=0.02$ (L/14432)

- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.47$ (L/549) $f_{z,G}=0.10$ (L/2486)

Membratura
Asta n. 6124 (616 619 623) - Sez. 33 (HEB140) - Crit. 4

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-62308.40 My,Ed=656.05 Mz,Ed=1.49 L=2.58
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.10$ M,cr=21059.30 $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=43.53$ Ncr,y=469855.00 $\lambda_y^*=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ Ncr,z=171120.00 $\lambda_z^*=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
Kyy, Kyz, Kzy, Kzz=1.13, 1.09, 0.68, 1.82
Verifica YY: 0.63+0.12+0.00=0.75
Verifica ZZ: 0.86+0.07+0.00=0.93

- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.02$ (L/13600) $f_{z,G}=0.02$ (L/16035)

- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.11$ (L/2293) $f_{z,G}=0.10$ (L/2711)

Membratura
Asta n. 6200 (614 617 621) - Sez. 33 (HEB140) - Crit. 4

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-53597.20 My,Ed=563.95 Mz,Ed=1.17 L=2.58
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.10$ M,cr=21069.40 $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=43.53$ Ncr,y=469855.00 $\lambda_y^*=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ Ncr,z=171120.00 $\lambda_z^*=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
Kyy, Kyz, Kzy, Kzz=1.10, 1.02, 0.66, 1.70
Verifica YY: 0.54+0.10+0.00=0.64
Verifica ZZ: 0.74+0.06+0.00=0.80

- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.02$ (L/15698) $f_{z,G}=0.01$ (L/18468)

- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.10$ (L/2665) $f_{z,G}=0.08$ (L/3150)

Membratura
Asta n. 6201 (615 618 622) - Sez. 33 (HEB140) - Crit. 4

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-62793.30 My,Ed=346.51 Mz,Ed=0.69 L=2.58
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=33509.50 $\lambda_{LT}=0.45$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.58$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=43.53$ Ncr,y=469855.00 $\lambda_y^*=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ Ncr,z=171120.00 $\lambda_z^*=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
Kyy, Kyz, Kzy, Kzz=1.13, 1.10, 0.68, 1.83
Verifica YY: 0.63+0.06+0.00=0.69
Verifica ZZ: 0.87+0.04+0.00=0.91

- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.02$ (L/13742) $f_{z,G}=0.02$ (L/15790)

- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.11$ (L/2315) $f_{z,G}=0.10$ (L/2672)

Membratura
Asta n. 6202 (623 626 629) - Sez. 33 (HEB140) - Crit. 4

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-62312.40 My,Ed=656.16 Mz,Ed=1.07 L=2.58
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.10$ M,cr=21061.40 $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.96$
 $\lambda_y=43.53$ Ncr,y=469855.00 $\lambda_y^*=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ Ncr,z=171120.00 $\lambda_z^*=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
Kyy, Kyz, Kzy, Kzz=1.13, 1.09, 0.68, 1.82
Verifica YY: 0.63+0.12+0.00=0.75
Verifica ZZ: 0.86+0.07+0.00=0.93

- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.04$ (L/7372) $f_{z,G}=0.02$ (L/16032)

- Verifica freccia massima carichi totali - CC 6

$f_{z,L}=0.21$ (L/1244) $f_{z,G}=0.10$ (L/2710)

Membratura

Asta n. 6278 (621 624 627) - Sez. 33 (HEB140) - Crit. 4

-
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-53599.90 My,Ed=564.02 Mz,Ed=1.97 L=2.58
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.10$ M,cr=21071.10 $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ f=0.97 $\chi_{LT}=0.96$
 $\lambda_y=43.53$ Ncr,y=469855.00 $\lambda^*_y=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ Ncr,z=171120.00 $\lambda^*_z=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
Kyy, Kyz, Kzy, Kzz=1.10, 1.02, 0.66, 1.70
Verifica YY: 0.54+0.10+0.00=0.64
Verifica ZZ: 0.74+0.06+0.00=0.80
- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.03$ (L/8494) $f_{z,G}=0.01$ (L/18468)
- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.18$ (L/1446) $f_{z,G}=0.08$ (L/3147)

Membratura

Asta n. 6279 (622 625 628) - Sez. 33 (HEB140) - Crit. 4

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-62314.80 My,Ed=648.72 Mz,Ed=0.83 L=2.58
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.10$ M,cr=21032.10 $\lambda_{LT}=0.57$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.65$ $\beta_{LT}=0.75$ f=0.97 $\chi_{LT}=0.96$
 $\lambda_y=43.53$ Ncr,y=469855.00 $\lambda^*_y=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ Ncr,z=171120.00 $\lambda^*_z=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
Kyy, Kyz, Kzy, Kzz=1.13, 1.09, 0.68, 1.82
Verifica YY: 0.63+0.12+0.00=0.75
Verifica ZZ: 0.86+0.07+0.00=0.93
- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.04$ (L/7337) $f_{z,G}=0.02$ (L/15962)
- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.21$ (L/1238) $f_{z,G}=0.10$ (L/2698)

Membratura

Asta n. 6280 (629 633 636) - Sez. 33 (HEB140) - Crit. 4

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-62918.60 My,Ed=829.75 Mz,Ed=2.45 L=2.58
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.20$ M,cr=23061.80 $\lambda_{LT}=0.54$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.63$ $\beta_{LT}=0.75$ f=0.97 $\chi_{LT}=0.97$
 $\lambda_y=43.53$ Ncr,y=469855.00 $\lambda^*_y=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ Ncr,z=171120.00 $\lambda^*_z=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
Kyy, Kyz, Kzy, Kzz=1.13, 1.10, 0.68, 1.83
Verifica YY: 0.63+0.15+0.00=0.78
Verifica ZZ: 0.87+0.09+0.00=0.96
- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.11$ (L/2278) $f_{z,G}=0.02$ (L/12511)
- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.67$ (L/387) $f_{z,G}=0.12$ (L/2138)

Membratura

Asta n. 6356 (627 631 634) - Sez. 33 (HEB140) - Crit. 4

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-54115.40 My,Ed=712.91 Mz,Ed=6.05 L=2.58
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=2.58$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.20$ M,cr=23063.60 $\lambda_{LT}=0.54$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.63$ $\beta_{LT}=0.75$ f=0.97 $\chi_{LT}=0.97$
 $\lambda_y=43.53$ Ncr,y=469855.00 $\lambda^*_y=0.50$ Curva b: $\Phi_y=0.68$ $\chi_y=0.88$
 $\lambda_z=72.13$ Ncr,z=171120.00 $\lambda^*_z=0.83$ Curva c: $\Phi_z=1.00$ $\chi_z=0.64$
Kyy, Kyz, Kzy, Kzz=1.11, 1.02, 0.66, 1.70
Verifica YY: 0.54+0.13+0.00=0.67
Verifica ZZ: 0.75+0.08+0.00=0.83
- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}=0.10$ (L/2626) $f_{z,G}=0.02$ (L/14429)
- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}=0.57$ (L/450) $f_{z,G}=0.10$ (L/2486)

Membratura

Asta n. 6357 (628 632 635) - Sez. 33 (HEB140) - Crit. 4

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-62916.80 My,Ed=830.22 Mz,Ed=3.61 L=2.58
 α_{my} , α_{mz} , α_{LT} =0.95, 0.95, 0.95
 L_{cr} =2.58 Curva b: α_{imp} =0.34 k_c =0.94 ψ =1.20 M,cr=23059.30 λ_{LT} =0.54
 $\lambda_{LT,0}$ =0.40 Φ_{LT} =0.63 β_{LT} =0.75 f =0.97 χ_{LT} =0.97
 λ_y =43.53 Ncr,y=469855.00 λ_y^* =0.50 Curva b: Φ_y =0.68 χ_y =0.88
 λ_z =72.13 Ncr,z=171120.00 λ_z^* =0.83 Curva c: Φ_z =1.00 χ_z =0.64
Kyy, Kyz, Kzy, Kzz=1.13, 1.10, 0.68, 1.83
Verifica YY: 0.63+0.15+0.00=0.78
Verifica ZZ: 0.87+0.09+0.00=0.96
- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}$ =0.11 (L/2272) $f_{z,G}$ =0.02 (L/12496)
- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}$ =0.67 (L/386) $f_{z,G}$ =0.12 (L/2137)

Membratura

Asta n. 60451 (603 608 611) - Sez. 33 (HEB140) - Crit. 4

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- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLU - Classe 1
Sollecitazioni: N,Ed=-55998.30 My,Ed=878.34 Mz,Ed=5.43 L=2.58
 α_{my} , α_{mz} , α_{LT} =0.95, 0.95, 0.95
 L_{cr} =2.58 Curva b: α_{imp} =0.34 k_c =0.94 ψ =1.47 M,cr=28211.00 λ_{LT} =0.49
 $\lambda_{LT,0}$ =0.40 Φ_{LT} =0.61 β_{LT} =0.75 f =0.98 χ_{LT} =0.99
 λ_y =43.53 Ncr,y=469854.00 λ_y^* =0.50 Curva b: Φ_y =0.68 χ_y =0.88
 λ_z =72.13 Ncr,z=171120.00 λ_z^* =0.83 Curva c: Φ_z =1.00 χ_z =0.64
Kyy, Kyz, Kzy, Kzz=1.11, 1.04, 0.67, 1.73
Verifica YY: 0.56+0.15+0.00=0.72
Verifica ZZ: 0.77+0.09+0.00=0.87
- Verifica freccia massima per soli carichi accidentali - CC 6
 $f_{z,L}$ =0.13 (L/1964) $f_{z,G}$ =0.02 (L/14270)
- Verifica freccia massima carichi totali - CC 6
 $f_{z,L}$ =0.76 (L/340) $f_{z,G}$ =0.09 (L/2856)