



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 B
FASCICOLO DEI CALCOLI**

PROGETTO DEFINITIVO-ESECUTIVO

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Fascicolo dei calcoli - edificio B - Sovrastruttura

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

Table with 14 columns: Vn, Comm., Sx, Sy, Sz, Rx, Ry, Rz, RL, Ly, Lz, Kt. It contains two rows of data: one for 'Libero' and one for 'Incastro'.

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

Table with 14 columns: Nodo, X, Y, Z, Imp., Vn. It contains multiple rows of data representing node coordinates and associated values.

-956	21.70	5.22	5.58	0	1	-955	21.28	5.22	5.58	0	1	-954	20.86	5.22	5.58	0	1
-953	20.44	5.22	5.58	0	1	-952	20.02	5.22	5.58	0	1	-951	19.60	5.22	5.58	0	1
-950	28.10	11.90	5.33	0	1	-949	27.72	11.90	5.33	0	1	-948	27.34	11.90	5.33	0	1
-947	26.96	11.90	5.33	0	1	-946	26.57	11.90	5.33	0	1	-945	10.78	11.90	5.34	0	1
-944	10.30	11.90	5.34	0	1	-943	9.82	11.90	5.34	0	1	-942	9.35	11.90	5.34	0	1
-941	28.10	5.22	5.34	0	1	-940	27.72	5.22	5.33	0	1	-939	27.34	5.22	5.33	0	1
-938	26.96	5.22	5.33	0	1	-937	26.57	5.22	5.33	0	1	-936	12.78	5.22	5.33	0	1
-935	12.20	5.22	5.33	0	1	-934	11.72	5.22	5.33	0	1	-933	11.25	5.22	5.33	0	1
-932	19.60	11.90	5.13	0	1	-931	19.16	11.90	5.13	0	1	-930	18.72	11.90	5.13	0	1
-929	18.27	11.90	5.13	0	1	-928	21.70	5.22	5.13	0	1	-927	21.28	5.22	5.13	0	1
-926	20.86	5.22	5.13	0	1	-925	20.44	5.22	5.13	0	1	-924	20.02	5.22	5.13	0	1
-923	19.60	5.22	5.13	0	1	-922	28.10	11.90	4.95	0	1	-921	27.72	11.90	4.95	0	1
-920	27.34	11.90	4.95	0	1	-919	26.96	11.90	4.95	0	1	-918	26.57	11.90	4.95	0	1
-917	11.25	11.90	4.95	0	1	-916	10.78	11.90	4.95	0	1	-915	10.30	11.90	4.95	0	1
-914	9.82	11.90	4.95	0	1	-913	9.35	11.90	4.95	0	1	-912	28.10	5.22	4.95	0	1
-911	27.72	5.22	4.95	0	1	-910	27.34	5.22	4.95	0	1	-909	26.96	5.22	4.95	0	1
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-896	20.44	5.22	4.69	0	1	-895	20.02	5.22	4.69	0	1	-894	19.60	5.22	4.69	0	1
-893	28.10	11.90	4.57	0	1	-892	27.72	11.90	4.57	0	1	-891	27.34	11.90	4.57	0	1
-890	26.96	11.90	4.57	0	1	-889	26.57	11.90	4.57	0	1	-888	11.25	11.90	4.57	0	1
-887	10.78	11.90	4.57	0	1	-886	10.30	11.90	4.57	0	1	-885	9.82	11.90	4.57	0	1
-884	9.35	11.90	4.57	0	1	-883	28.10	5.22	4.57	0	1	-882	27.72	5.22	4.57	0	1
-881	27.34	5.22	4.57	0	1	-880	26.96	5.22	4.57	0	1	-879	26.57	5.22	4.57	0	1
-878	12.78	5.22	4.57	0	1	-877	12.20	5.22	4.57	0	1	-876	11.72	5.22	4.57	0	1
-875	11.25	5.22	4.57	0	1	-874	6.35	17.90	4.54	0	1	-873	6.78	17.90	4.43	0	1
-872	7.21	17.90	4.33	0	1	-871	19.60	11.90	4.24	0	1	-870	19.16	11.90	4.24	0	1
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-857	26.96	11.90	4.18	0	1	-856	26.57	11.90	4.18	0	1	-855	11.25	11.90	4.18	0	1
-854	10.78	11.90	4.18	0	1	-853	10.30	11.90	4.18	0	1	-852	9.82	11.90	4.18	0	1
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-827	7.35	17.90	3.80	0	1	-826	6.85	17.90	3.80	0	1	-825	6.35	17.90	3.80	0	1
-824	6.35	17.48	3.80	0	1	-823	27.72	11.90	3.80	1	1	-822	27.34	11.90	3.80	1	1
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-812	15.26	11.90	3.80	1	1	-811	14.82	11.90	3.80	1	1	-810	14.38	11.90	3.80	1	1
-809	12.78	11.90	3.80	1	1	-808	12.39	11.90	3.80	1	1	-807	12.01	11.90	3.80	1	1
-806	11.63	11.90	3.80	1	1	-805	10.78	11.90	3.80	1	1	-804	10.30	11.90	3.80	1	1
-803	9.82	11.90	3.80	1	1	-802	6.35	10.00	3.80	1	1	-801	6.35	9.55	3.80	1	1
-800	6.35	9.10	3.80	1	1	-799	14.68	8.75	3.80	1	1	-798	12.78	8.75	3.80	1	1
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-782	14.68	6.75	3.80	1	1	-781	14.20	6.75	3.80	1	1	-780	13.72	6.75	3.80	1	1
-779	13.25	6.75	3.80	1	1	-778	12.78	6.75	3.80	1	1	-777	11.25	6.75	3.80	1	1
-776	11.25	6.37	3.80	1	1	-775	11.25	5.99	3.80	1	1	-774	11.25	5.61	3.80	1	1
-773	24.00	5.40	3.80	1	1	-772	19.60	5.40	3.80	1	1	-771	27.72	5.22	3.80	1	1
-770	27.34	5.22	3.80	1	1	-769	26.96	5.22	3.80	1	1	-768	26.57	5.22	3.80	1	1
-767	24.43	5.22	3.80	1	1	-766	24.00	5.22	3.80	1	1	-765	23.55	5.22	3.80	1	1
-764	21.28	5.22	3.80	1	1	-763	20.86	5.22	3.80	1	1	-762	20.44	5.22	3.80	1	1
-761	20.02	5.22	3.80	1	1	-760	15.53	5.22	3.80	1	1	-759	15.05	5.22	3.80	1	1
-758	14.68	5.22	3.80	1	1	-757	14.10	5.22	3.80	1	1	-756	13.62	5.22	3.80	1	1
-755	13.15	5.22	3.80	1	1	-754	12.78	5.22	3.80	1	1	-753	12.20	5.22	3.80	1	1
-752	11.72	5.22	3.80	1	1	-750	6.35	7.57	3.73	0	1	-749	0.35	7.57	3.73	0	1
-748	28.10	18.65	3.52	0	1	-747	9.35	18.65	3.52	0	1	-746	14.68	8.25	3.45	0	1
-745	1.88	19.90	3.35	0	1	-744	1.49	19.90	3.35	0	1	-743	1.11	19.90	3.35	0	1
-742	0.73	19.90	3.35	0	1	-741	0.35	19.90	3.35	0	1	-740	9.35	17.90	3.35	0	1
-739	8.85	17.90	3.35	0	1	-738	8.35	17.90	3.35	0	1	-737	7.85	17.90	3.35	0	1
-736	7.35	17.90	3.35	0	1	-735	6.85	17.90	3.35	0	1	-734	6.35	17.90	3.35	0	1
-733	28.10	11.90	3.35	0	1	-732	27.72	11.90	3.35	0	1	-731	27.34	11.90	3.35	0	1
-730	26.96	11.90	3.35	0	1	-729	26.57	11.90	3.35	0	1	-728	25.32	11.90	3.35	0	1
-727	24.88	11.90	3.35	0	1	-726	24.44	11.90	3.35	0	1	-725	24.00	11.90	3.35	0	1
-724	19.60	11.90	3.35	0	1	-723	19.16	11.90	3.35	0	1	-722	18.72	11.90	3.35	0	1
-721	18.27	11.90	3.35	0	1	-720	15.70	11.90	3.35	0	1	-719	15.26	11.90	3.35	0	1
-718	14.82	11.90	3.35	0	1	-717	14.38	11.90	3.35	0	1	-716	14.68	8.75	3.35	0	1
-715	12.78	8.75	3.35	0	1	-714	12.78	8.25	3.35	0	1	-713	14.68	7.75	3.35	0	1
-712	12.78	7.75	3.35	0	1	-711	1.88	7.75	3.35	0	1	-710	1.49	7.75	3.35	0	1
-709	1.11	7.75	3.35	0	1	-708	0.73	7									

-703	14.20	6.75	3.35	0	1	-702	13.72	6.75	3.35	0	1	-701	13.25	6.75	3.35	0	1
-700	12.78	6.75	3.35	0	1	-699	28.10	5.22	3.35	0	1	-698	27.72	5.22	3.35	0	1
-697	27.34	5.22	3.35	0	1	-696	26.96	5.22	3.35	0	1	-695	26.57	5.22	3.35	0	1
-694	24.43	5.22	3.35	0	1	-693	24.00	5.22	3.35	0	1	-692	23.55	5.22	3.35	0	1
-691	23.10	5.22	3.35	0	1	-690	21.70	5.22	3.35	0	1	-689	21.28	5.22	3.35	0	1
-688	20.86	5.22	3.35	0	1	-687	20.44	5.22	3.35	0	1	-686	20.02	5.22	3.35	0	1
-685	19.60	5.22	3.35	0	1	-684	6.35	17.48	3.34	0	1	-683	6.35	17.05	3.33	0	1
-682	12.78	11.90	3.33	0	1	-681	12.39	11.90	3.33	0	1	-680	12.01	11.90	3.33	0	1
-679	11.63	11.90	3.33	0	1	-678	11.25	11.90	3.33	0	1	-677	10.78	11.90	3.33	0	1
-676	10.30	11.90	3.33	0	1	-675	9.82	11.90	3.33	0	1	-674	9.35	11.90	3.33	0	1
-673	6.35	10.45	3.33	0	1	-672	6.35	10.00	3.33	0	1	-671	6.35	9.55	3.33	0	1
-670	6.35	9.10	3.33	0	1	-669	11.25	8.75	3.33	0	1	-668	6.35	8.65	3.33	0	1
-667	11.25	8.25	3.33	0	1	-666	6.35	8.20	3.33	0	1	-665	11.25	7.75	3.33	0	1
-664	6.35	7.75	3.33	0	1	-663	11.25	7.25	3.33	0	1	-661	16.00	5.22	3.33	0	1
-660	15.53	5.22	3.33	0	1	-659	15.05	5.22	3.33	0	1	-658	14.68	5.22	3.33	0	1
-657	12.78	5.22	3.33	0	1	-656	12.20	5.22	3.33	0	1	-655	11.72	5.22	3.33	0	1
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-651	1.49	19.90	2.90	0	1	-650	1.11	19.90	2.90	0	1	-649	0.73	19.90	2.90	0	1
-648	0.35	19.90	2.90	0	1	-647	28.10	17.90	2.90	0	1	-646	25.98	17.90	2.90	0	1
-645	21.90	17.90	2.90	0	1	-644	19.77	17.90	2.90	0	1	-643	15.70	17.90	2.90	0	1
-642	13.57	17.90	2.90	0	1	-641	9.35	17.90	2.90	0	1	-640	8.85	17.90	2.90	0	1
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-636	6.85	17.90	2.90	0	1	-635	6.35	17.90	2.90	0	1	-634	0.35	16.00	2.90	0	1
-633	0.35	13.82	2.90	0	1	-632	28.10	11.90	2.90	0	1	-631	27.72	11.90	2.90	0	1
-630	27.34	11.90	2.90	0	1	-629	26.96	11.90	2.90	0	1	-628	26.57	11.90	2.90	0	1
-627	25.32	11.90	2.90	0	1	-626	24.88	11.90	2.90	0	1	-625	24.44	11.90	2.90	0	1
-624	24.00	11.90	2.90	0	1	-623	19.60	11.90	2.90	0	1	-622	19.16	11.90	2.90	0	1
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-618	15.26	11.90	2.90	0	1	-617	14.82	11.90	2.90	0	1	-616	14.38	11.90	2.90	0	1
-615	0.35	11.65	2.90	0	1	-614	14.68	8.75	2.90	0	1	-613	12.78	8.75	2.90	0	1
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-609	1.88	7.75	2.90	0	1	-608	1.49	7.75	2.90	0	1	-607	1.11	7.75	2.90	0	1
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-588	21.28	5.22	2.90	0	1	-587	20.86	5.22	2.90	0	1	-586	20.44	5.22	2.90	0	1
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-582	6.35	17.05	2.85	0	1	-581	12.78	11.90	2.85	0	1	-580	12.39	11.90	2.85	0	1
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-576	10.78	11.90	2.85	0	1	-575	10.30	11.90	2.85	0	1	-574	9.82	11.90	2.85	0	1
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-548	1.88	19.90	2.42	0	1	-547	1.49	19.90	2.42	0	1	-546	1.11	19.90	2.42	0	1
-545	0.73	19.90	2.42	0	1	-544	0.35	19.90	2.42	0	1	-543	9.35	17.90	2.42	0	1
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-494	24.00	5.22	2.42	0	1	-493	23.55	5.22	2.42	0	1	-492	23.10	5.22	2.42	0	1
-491	21.70	5.22	2.42	0	1	-490	21.28	5.22	2.42	0	1	-489	20.86	5.22	2.42	0	1
-488	20.44	5.22	2.42	0	1	-487	20.02	5.22	2.42	0	1	-486	19.60	5.22	2.42	0	1
-485	6.35	17.48	2.39	0	1	-484	6.35	17.05	2.38	0	1	-483	12.78	11.90	2.38	0	1
-482	12.39	11.90	2.38	0	1	-481	12.01	11.90	2.38	0	1	-480	11.63	11.90	2.38	0	1
-479	11.25	11.90	2.38	0	1	-478	10.78	11.90	2.38	0	1	-477	10.30	11.90	2.38	0	1
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-461	15.53	5.22	2.38	0	1	-460	15.05	5.22	2.38	0	1	-459	14.68	5.22	2.38	0	1
-458	12.78	5.22	2.38	0	1	-457	12.20	5.22	2.38	0	1	-456	11.72	5.22	2.38	0	1
-455	11.25	5.22	2.38	0	1	-454	1.88	19.90	1.93	0	1	-453	1.49	19.90	1.93	0	1
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-440	27.34	11.90	1.93	0	1	-439	26.96	11.90	1.93	0	1	-438	26.57	11.90	1.93	0	1
-437	25.32	11.90	1.93	0	1	-436	24.88	11.90	1.93	0	1	-435	24.44	11.90	1.93	0	1
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-431	18.72	11.90	1.93	0	1	-430	18.27	11.90	1.93	0	1	-429	15.70	11.90	1.93	0	1
-428	15.26	11.90	1.93	0	1	-427	14.82	11.90	1.93	0	1	-426	14.38	11.90	1.93	0	1
-425	14.68	8.75	1.93	0	1	-424	12.78	8.75	1.93	0	1	-423	14.68	8.25	1.93	0	1
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-410	13.72	6.75	1.93	0	1	-409	13.25	6.75	1.93	0	1	-408	12.78	6.75	1.93	0	1
-407	28.10	5.22	1.93	0	1	-406	27.72	5.22	1.93	0	1	-405	27.34	5.22	1.93	0	1
-404	26.96	5.22	1.93	0	1	-403	26.57	5.22	1.93	0	1	-402	24.43	5.22	1.93	0	1
-401	24.00	5.22	1.93	0	1	-400	23.55	5.22	1.93	0	1	-399	23.10	5.22	1.93	0	1
-398	21.70	5.22	1.93	0	1	-397	21.28	5.22	1.93	0	1	-396	20.86	5.22	1.93	0	1
-395	20.44	5.22	1.93	0	1	-394	20.02	5.22	1.93	0	1	-393	19.60	5.22	1.93	0	1
-392	6.35	17.48	1.92	0	1	-391	6.35	17.05	1.90	0	1	-390	12.78	11.90	1.90	0	1
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-371	11.25	7.25	1.90	0	1	-370	11.25	6.75	1.90	0	1	-369	16.00	5.22	1.90	0	1
-368	15.53	5.22	1.90	0	1	-367	15.05	5.22	1.90	0	1	-366	14.68	5.22	1.90	0	1
-365	12.78	5.22	1.90	0	1	-364	12.20	5.22	1.90	0	1	-363	11.72	5.22	1.90	0	1
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-347	27.34	11.90	1.45	0	1	-346	26.96	11.90	1.45	0	1	-345	26.57	11.90	1.45	0	1
-344	25.32	11.90	1.45	0	1	-343	24.88	11.90	1.45	0	1	-342	24.44	11.90	1.45	0	1
-341	24.00	11.90	1.45	0	1	-340	19.60	11.90	1.45	0	1	-339	19.16	11.90	1.45	0	1
-338	18.72	11.90	1.45	0	1	-337	18.27	11.90	1.45	0	1	-336	15.70	11.90	1.45	0	1
-335	15.26	11.90	1.45	0	1	-334	14.82	11.90	1.45	0	1	-333	14.38	11.90	1.45	0	1
-332	14.68	8.75	1.45	0	1	-331	12.78	8.75	1.45	0	1	-330	14.68	8.25	1.45	0	1
-329	12.78	8.25	1.45	0	1	-328	14.68	7.75	1.45	0	1	-327	12.78	7.75	1.45	0	1
-326	1.88	7.75	1.45	0	1	-325	1.49	7.75	1.45	0	1	-324	1.11	7.75	1.45	0	1
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-320	12.78	7.25	1.45	0	1	-319	14.68	6.75	1.45	0	1	-318	14.20	6.75	1.45	0	1
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-314	28.10	5.22	1.45	0	1	-313	27.72	5.22	1.45	0	1	-312	27.34	5.22	1.45	0	1
-311	26.96	5.22	1.45	0	1	-310	26.57	5.22	1.45	0	1	-309	24.43	5.22	1.45	0	1
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-287	6.35	10.00	1.43	0	1	-286	6.35	9.55	1.43	0	1	-285	6.35	9.10	1.43	0	1
-284	11.25	8.75	1.43	0	1	-283	6.35	8.65	1.43	0	1	-282	11.25	8.25	1.43	0	1
-281	6.35	8.20	1.43	0	1	-280	11.25	7.75	1.43	0	1	-279	6.35	7.75	1.43	0	1
-278	11.25	7.25	1.43	0	1	-277	11.25	6.75	1.43	0	1	-276	16.00	5.22	1.43	0	1
-275	15.53	5.22	1.43	0	1	-274	15.05	5.22	1.43	0	1	-273	14.68	5.22	1.43	0	1
-272	12.78	5.22	1.43	0	1	-271	12.20	5.22	1.43	0	1	-270	11.72	5.22	1.43	0	1
-269	11.25	5.22	1.43	0	1	-268	1.88	19.90	0.97	0	1	-267	1.49	19.90	0.97	0	1
-266	1.11	19.90	0.97	0	1	-265	0.73	19.90	0.97	0	1	-264	0.35	19.90	0.97	0	1
-263	9.35	17.90	0.97	0	1	-262	8.85	17.90	0.97	0	1	-261	8.35	17.90	0.97	0	1
-260	7.85	17.90	0.97	0	1	-259	7.35	17.90	0.97	0	1	-258	6.85	17.90	0.97	0	1
-257	6.35	17.90	0.97	0	1	-256	28.10	11.90	0.97	0	1	-255	27.72	11.90	0.97	0	1
-254	27.34	11.90	0.97	0	1	-253	26.96	11.90	0.97	0	1	-252	26.57	11.90	0.97	0	1
-251	25.32	11.90	0.97	0	1	-250	24.88	11.90	0.97	0	1	-249	24.44	11.90	0.97	0	1
-248	24.00	11.90	0.97	0	1	-247	19.60	11.90	0.97	0	1	-246	19.16	11.90	0.97	0	1
-245	18.72	11.90	0.97	0	1	-244	18.27	11.90	0.97	0	1	-243	15.70	11.90	0.97	0	1
-242	15.26	11.90	0.97	0	1	-241	14.82	11.90	0.97	0	1	-240	14.38	11.90	0.97	0	1
-239	14.68	8.75	0.97	0	1	-238	12.78	8.75	0.97	0	1	-237	14.68	8.25	0.97	0	1
-236	12.78	8.25	0.97	0	1	-235	14.68	7.75	0.97	0	1	-234	12.78	7.75	0.97	0	1
-233	1.88	7.75	0.97	0	1	-232	1.49	7.75	0.97	0	1	-231	1.11	7.75	0.97	0	1
-230	0.73	7.75	0.97	0	1	-229	0.35	7.75	0.97	0	1	-228	14.68	7.25	0.97	0	1
-227	12.78	7.25	0.97	0	1	-226	14.68	6.75	0.97	0	1	-225	14.20	6.75	0.97	0	1
-224	13.72	6.75	0.97	0	1	-223	13.25	6.75	0.97	0	1	-222	12.78	6.75	0.97	0	1
-221	28.10	5.22	0.97	0	1	-220	27.72	5.22	0.97	0	1	-219	27.34	5.22	0.97	0	1
-218	26.96	5.22	0.97	0	1	-217	26.57	5.22	0.97	0	1	-216	24.43	5.22	0.97	0	1
-215	24.00	5.22	0.97	0	1	-214	23.55	5.22	0.97	0	1	-213	23.10	5.22	0.97	0	1
-212	21.70	5.22	0.97	0	1	-211	21.28	5.22	0.97	0	1	-210	20.86	5.22	0.97	0	1
-209	20.44	5.22	0.97	0	1	-208	20.02	5.22	0.97	0	1	-207	19.60	5.22	0.97	0	1
-206	6.35	17.48	0.96	0	1	-205	6.35	17.05	0.95	0	1	-204	12.78	11.90	0.95	0	1
-203	12.39	11.90	0.95	0	1	-202	12.01	11.90	0.95	0	1	-201	11.63	11.90	0.95	0	1
-200	11.25	11.90	0.95	0	1	-199	10.78	11.90	0.95	0							

-194	6.35	10.00	0.95	0	1	-193	6.35	9.55	0.95	0	1	-192	6.35	9.10	0.95	0	1
-191	11.25	8.75	0.95	0	1	-190	6.35	8.65	0.95	0	1	-189	11.25	8.25	0.95	0	1
-188	6.35	8.20	0.95	0	1	-187	11.25	7.75	0.95	0	1	-186	6.35	7.75	0.95	0	1
-185	11.25	7.25	0.95	0	1	-184	11.25	6.75	0.95	0	1	-183	16.00	5.22	0.95	0	1
-182	15.53	5.22	0.95	0	1	-181	15.05	5.22	0.95	0	1	-180	14.68	5.22	0.95	0	1
-179	12.78	5.22	0.95	0	1	-178	12.20	5.22	0.95	0	1	-177	11.72	5.22	0.95	0	1
-176	11.25	5.22	0.95	0	1	-175	1.88	19.90	0.48	0	1	-174	1.49	19.90	0.48	0	1
-173	1.11	19.90	0.48	0	1	-172	0.73	19.90	0.48	0	1	-171	0.35	19.90	0.48	0	1
-170	9.35	17.90	0.48	0	1	-169	8.85	17.90	0.48	0	1	-168	8.35	17.90	0.48	0	1
-167	7.85	17.90	0.48	0	1	-166	7.35	17.90	0.48	0	1	-165	6.85	17.90	0.48	0	1
-164	6.35	17.90	0.48	0	1	-163	28.10	11.90	0.48	0	1	-162	27.72	11.90	0.48	0	1
-161	27.34	11.90	0.48	0	1	-160	26.96	11.90	0.48	0	1	-159	26.57	11.90	0.48	0	1
-158	25.32	11.90	0.48	0	1	-157	24.88	11.90	0.48	0	1	-156	24.44	11.90	0.48	0	1
-155	24.00	11.90	0.48	0	1	-154	19.60	11.90	0.48	0	1	-153	19.16	11.90	0.48	0	1
-152	18.72	11.90	0.48	0	1	-151	18.27	11.90	0.48	0	1	-150	15.70	11.90	0.48	0	1
-149	15.26	11.90	0.48	0	1	-148	14.82	11.90	0.48	0	1	-147	14.38	11.90	0.48	0	1
-146	14.68	8.75	0.48	0	1	-145	12.78	8.75	0.48	0	1	-144	14.68	8.25	0.48	0	1
-143	12.78	8.25	0.48	0	1	-142	14.68	7.75	0.48	0	1	-141	12.78	7.75	0.48	0	1
-140	1.88	7.75	0.48	0	1	-139	1.49	7.75	0.48	0	1	-138	1.11	7.75	0.48	0	1
-137	0.73	7.75	0.48	0	1	-136	0.35	7.75	0.48	0	1	-135	14.68	7.25	0.48	0	1
-134	12.78	7.25	0.48	0	1	-133	14.68	6.75	0.48	0	1	-132	14.20	6.75	0.48	0	1
-131	13.72	6.75	0.48	0	1	-130	13.25	6.75	0.48	0	1	-129	12.78	6.75	0.48	0	1
-128	28.10	5.22	0.48	0	1	-127	27.72	5.22	0.48	0	1	-126	27.34	5.22	0.48	0	1
-125	26.96	5.22	0.48	0	1	-124	26.57	5.22	0.48	0	1	-123	24.43	5.22	0.48	0	1
-122	24.00	5.22	0.48	0	1	-121	23.55	5.22	0.48	0	1	-120	23.10	5.22	0.48	0	1
-119	21.70	5.22	0.48	0	1	-118	21.28	5.22	0.48	0	1	-117	20.86	5.22	0.48	0	1
-116	20.44	5.22	0.48	0	1	-115	20.02	5.22	0.48	0	1	-114	19.60	5.22	0.48	0	1
-113	6.35	17.48	0.48	0	1	-112	6.35	17.05	0.47	0	1	-111	12.78	11.90	0.47	0	1
-110	12.39	11.90	0.47	0	1	-109	12.01	11.90	0.47	0	1	-108	11.63	11.90	0.47	0	1
-107	11.25	11.90	0.47	0	1	-106	10.78	11.90	0.47	0	1	-105	10.30	11.90	0.47	0	1
-104	9.82	11.90	0.47	0	1	-103	9.35	11.90	0.47	0	1	-102	6.35	10.45	0.47	0	1
-101	6.35	10.00	0.47	0	1	-100	6.35	9.55	0.47	0	1	-99	6.35	9.10	0.47	0	1
-98	11.25	8.75	0.47	0	1	-97	6.35	8.65	0.47	0	1	-96	11.25	8.25	0.47	0	1
-95	6.35	8.20	0.47	0	1	-94	11.25	7.75	0.47	0	1	-93	6.35	7.75	0.47	0	1
-92	11.25	7.25	0.47	0	1	-91	11.25	6.75	0.47	0	1	-90	16.00	5.22	0.47	0	1
-89	15.53	5.22	0.47	0	1	-88	15.05	5.22	0.47	0	1	-87	14.68	5.22	0.47	0	1
-86	12.78	5.22	0.47	0	1	-85	12.20	5.22	0.47	0	1	-84	11.72	5.22	0.47	0	1
-83	11.25	5.22	0.47	0	1	-82	1.88	19.90	0.00	0	2	-81	1.49	19.90	0.00	0	2
-80	1.11	19.90	0.00	0	2	-79	0.73	19.90	0.00	0	2	-78	8.85	17.90	0.00	0	2
-77	8.35	17.90	0.00	0	2	-76	7.85	17.90	0.00	0	2	-75	7.35	17.90	0.00	0	2
-74	6.85	17.90	0.00	0	2	-73	6.35	17.90	0.00	0	2	-72	6.35	17.48	0.00	0	2
-71	27.72	11.90	0.00	0	2	-70	27.34	11.90	0.00	0	2	-69	26.96	11.90	0.00	0	2
-68	26.57	11.90	0.00	0	2	-67	25.32	11.90	0.00	0	2	-66	24.88	11.90	0.00	0	2
-65	24.44	11.90	0.00	0	2	-64	19.16	11.90	0.00	0	2	-63	18.72	11.90	0.00	0	2
-62	18.27	11.90	0.00	0	2	-61	15.26	11.90	0.00	0	2	-60	14.82	11.90	0.00	0	2
-59	14.38	11.90	0.00	0	2	-58	12.78	11.90	0.00	0	2	-57	12.39	11.90	0.00	0	2
-56	12.01	11.90	0.00	0	2	-55	11.63	11.90	0.00	0	2	-54	11.25	11.90	0.00	0	2
-53	10.78	11.90	0.00	0	2	-52	10.30	11.90	0.00	0	2	-51	9.82	11.90	0.00	0	2
-50	9.35	11.90	0.00	0	2	-49	6.35	10.00	0.00	0	2	-48	6.35	9.55	0.00	0	2
-47	6.35	9.10	0.00	0	2	-46	14.68	8.75	0.00	0	2	-45	12.78	8.75	0.00	0	2
-44	11.25	8.75	0.00	0	2	-43	6.35	8.65	0.00	0	2	-42	14.68	8.25	0.00	0	2
-41	12.78	8.25	0.00	0	2	-40	11.25	8.25	0.00	0	2	-39	6.35	8.20	0.00	0	2
-38	14.68	7.75	0.00	0	2	-37	12.78	7.75	0.00	0	2	-36	1.88	7.75	0.00	0	2
-35	1.49	7.75	0.00	0	2	-34	1.11	7.75	0.00	0	2	-33	0.73	7.75	0.00	0	2
-32	14.68	7.25	0.00	0	2	-31	12.78	7.25	0.00	0	2	-30	11.25	7.25	0.00	0	2
-29	14.68	6.75	0.00	0	2	-28	14.20	6.75	0.00	0	2	-27	13.72	6.75	0.00	0	2
-26	13.25	6.75	0.00	0	2	-25	12.78	6.75	0.00	0	2	-24	11.25	6.75	0.00	0	2
-23	11.25	6.37	0.00	0	2	-22	11.25	5.99	0.00	0	2	-21	11.25	5.61	0.00	0	2
-20	27.72	5.22	0.00	0	2	-19	27.34	5.22	0.00	0	2	-18	26.96	5.22	0.00	0	2
-17	26.57	5.22	0.00	0	2	-16	24.43	5.22	0.00	0	2	-15	24.00	5.22	0.00	0	2
-14	23.55	5.22	0.00	0	2	-13	21.28	5.22	0.00	0	2	-12	20.86	5.22	0.00	0	2
-11	20.44	5.22	0.00	0	2	-10	20.02	5.22	0.00	0	2	-9	15.53	5.22	0.00	0	2
-8	15.05	5.22	0.00	0	2	-7	14.68	5.22	0.00	0	2	-6	14.10	5.22	0.00	0	2
-5	13.62	5.22	0.00	0	2	-4	13.15	5.22	0.00	0	2	-3	12.78	5.22	0.00	0	2
-2	12.20	5.22	0.00	0	2	-1	11.72	5.22	0.00	0	2	1	11.25	0.30	0.00	0	2
2	12.40	0.30	0.00	0	2	3	13.40	0.30	0.00	0	2	4	14.40	0.30	0.00	0	2
5	16.00	0.30	0.00	0	2	6	17.60	0.30	0.00	0	2	7	18.60	0.30	0.00	0	2
8	19.60	0.30	0.00	0	2	9	20.60	0.30	0.00	0	2	10	21.55	0.30	0.00	0	2
13	11.25	4.11	0.00	0	2	14	11.25	5.22	0.00	0	2	15	16.00	5.22	0.00	0	2
16	19.60	5.22	0.00	0	2	17	21.70	5.22	0.00	0	2	18	23.10	5.22	0.00	0	2
19	28.10	5.22	0.00	0	2	20	28.10	6.90	0.00	0	2	21	0.35	7.75	0.00	0	2
22	6.35	7.75	0.00	0	2	23	11.25	7.75	0.00	0	2	24	28.10	8.45	0.00	0	2
25	28.10	10.00	0.00	0	2	26	6.35	10.45	0.00	0	2	27	0.35	11.65	0.00	0	2
28	15.70	11.90	0.00	0	2	29	19.60	11.90	0.00	0	2	30	24.00	11.90	0.00	0	2
31	28.10	11.90	0.00	0	2	32	0.35	13.82	0.00	0	2	33	6.35	13.82	0.00	0	2
34	0.35	16.00	0.00	0	2	35	6.35	17.05	0.00	0	2	36	9.35	17.05	0.00	0	2
37	9.35	17.90	0.00	0	2	38	13.57	17.90	0.00	0	2	39	15.70	17.90	0.00	0	2
40	19.77	17.90	0.00	0	2	41	21.90	17.90	0.00	0	2	42	25.98	17.90	0.00	0	2
43	28.10	17.90	0.00	0	2	44	0.35	19.90	0.00	0	2	45	6.35	19.90	0.00	0	2
46	6.35	11.90	5.34	0	1	47	11.25	11.90	5.34	0	1	48	15.70	11.90	6.02	0	1
49	24.00	11.90	6.02	0	1	50	0.35	13.82	6.05	0	1	51	6.35	13.82	6.05	0	1
101	11.25	0.30	3.80	1	1	102	12.40	0.30	3.80	1	1	103	13.40	0.30	3.80	1	1
104	14.40	0.30	3.80	1	1	105	16.00	0.30	3.80	1	1	106	17.60	0.30	3.80	1	1
107	18.60	0.30	3.80	1	1	108	19.60	0.30	3.80	1	1	109	20.60	0.30			

110	21.55	0.30	3.80	1	1	114	11.25	5.22	3.80	1	1	115	16.00	5.22	3.80	1	1
116	19.60	5.22	3.80	1	1	117	21.70	5.22	3.80	1	1	118	23.10	5.22	3.80	1	1
119	28.10	5.22	3.80	1	1	120	28.10	6.90	3.80	1	1	121	0.35	7.75	3.80	1	1
122	6.35	7.75	3.80	1	1	123	11.25	7.75	3.80	1	1	124	28.10	8.45	3.80	1	1
125	28.10	10.00	3.80	1	1	126	6.35	10.45	3.80	1	1	127	0.35	11.65	3.80	1	1
128	15.70	11.90	3.80	1	1	129	19.60	11.90	3.80	1	1	130	24.00	11.90	3.80	1	1
131	28.10	11.90	3.80	1	1	132	0.35	13.82	3.80	1	1	133	6.35	13.82	3.80	1	1
134	0.35	16.00	3.80	1	1	135	6.35	17.05	3.80	1	1	136	9.35	17.05	3.80	1	1
137	9.35	17.90	3.80	1	1	138	13.57	17.90	3.80	1	1	139	15.70	17.90	3.80	1	1
140	19.77	17.90	3.80	1	1	141	21.90	17.90	3.80	1	1	142	25.98	17.90	3.80	1	1
143	28.10	17.90	3.80	1	1	144	0.35	19.90	3.80	1	1	145	6.35	19.90	3.80	1	1
146	16.00	8.75	3.80	1	1	147	9.35	11.90	3.80	1	1	148	11.25	11.90	3.80	1	1
214	11.25	5.22	6.60	2	1	215	16.00	5.22	6.60	2	1	216	19.60	5.22	6.60	2	1
217	21.70	5.22	6.60	2	1	219	28.10	5.22	6.60	2	1	220	28.10	6.90	6.60	2	1
224	28.10	8.45	6.60	2	1	225	28.10	10.00	6.60	2	1	229	19.60	11.90	6.60	2	1
231	28.10	11.90	6.60	2	1	232	11.25	11.90	6.60	2	1	320	28.10	6.90	7.18	0	1
323	11.25	7.75	7.48	0	1	324	28.10	8.45	7.72	0	1	325	28.10	10.00	7.22	0	1
326	15.43	5.22	7.72	0	1	327	23.85	5.22	7.72	0	1	328	15.43	11.90	7.72	0	1
329	23.85	11.90	7.72	0	1	334	0.35	3.82	0.00	0	2	335	6.35	3.82	0.00	0	2
336	11.05	3.82	0.00	0	2												

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
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

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
 - L = Sezione a L
 - R = Rettangolare
 - T = Sezione a T
 - Cs = C stondata
 - Is = I stondata
- Ver. = Verifica prevista
 - C = Cemento armato
 - A = Acciaio
- a = Spessore anima
- b = Base inferiore
- h = Altezza parte inf.
- r = Raggio raccordo anima-ala
- rl = Raggio in testa ala
- s = Spessore ala

Sez.	Comm.	Tipo	Mem.	Ver.	B <cm>	b <cm>	H <cm>	h <cm>	s <cm>	a <cm>	r <cm>	rl <cm>	%	D <cm>	Ma	C	Crit. C.I.	Crit. C.F.
1	PIL_SA_30X30	R	P	C	30.00		30.00								5	1		
2	PIL_SA_20X35	R	P	C	20.00		35.00								5	1		
3	PIL_SA_25X60	R	P	C	25.00		60.00								5	1		
4	PIL_SA_30X35	R	P	C	30.00		35.00								5	1		
5	PIL_SA_30X45	R	P	C	30.00		45.00								5	1		
6	PIL_SA_20X40	R	P	C	20.00		40.00								5	1		
7	PIL_SA_20X30	R	P	C	20.00		30.00								5	1		
8	TR_SA_30X33.5	R	T	C	30.00		33.50								5	1		
9	TR_SA_30X56	R	T	C	30.00		56.00								5	1		
10	TR_SA_30X42.5	R	T	C	30.00		42.50								5	1		
11	TR_SA_30X40	R	T	C	30.00		40.00								5	1		
12	TR_SA_30X28.5	R	T	C	30.00		28.50								5	1		
13	TR_SA_L45X56	L	T	C	30.00	45.00		40.00							5	1		
14	TR_SA_L20X50	L	T	C	20.00	30.00	34.00	16.00							5	1		

15	TR_SA_30X50	R	T	C	30.00		50.00								5	1		
16	TR_SA_L37.5X56	L	T	C	30.00	37.50	16.00	40.00							5	1		
17	TR_SA_30X73.5	R	T	C	30.00		73.50								5	1		
18	TR_SA_30X73	R	T	C	30.00		73.00								5	1		
19	TR_SA_40X20	R	T	C	40.00		20.00								5	1		
20	TR_SA_T30X135X65	T	T	C	135.00	35.00	20.00	45.00							5	1		
21	TR_SA_L30X60	L	T	C	60.00	30.00	20.00	40.00							5	1		
22	TR_SA_25X50	R	T	C	25.00		50.00								5	1		
23	TR_SA_L35X65	L	T	C	60.00	35.00	20.00	45.00							5	1		
24	TR_SA_67.5X20	R	T	C	67.50		20.00								5	1		
25	TR_SA_L30X50	L	T	C	60.00	30.00	20.00	30.00							5	1		
26	TR_SA_30X55	R	T	C	30.00		55.00								5	1		
27	TR_SA_45X40	R	T	C	45.00		40.00								5	1		
28	TR_FOND_TIPO 1	T	T	C	45.00	120.00	60.00	20.00							5	1		
29	TR_FOND_TIPO 2	T	T	C	45.00	130.00	60.00	20.00							5	1		
30	TR_SP_30X50	R	T	C	30.00		50.00								5	2		
31	PIL_SP_20X40	R	P	C	20.00		40.00								5	3		
33	TR_SP_30X16	R	T	C	30.00		16.00								5	3		
35	TR_SP_30X40	R	T	C	30.00		40.00								5	2		
36	HEB160	Is	P	A	16.00		16.00		1.30	0.80	1.50	0.00	0.00		18	1	1	2
37	IPE240	Is	T	A	12.00		24.00		0.98	0.62	1.50	0.00	0.00		18	2	2	2
38	2UPN160	2Cdx	T	A	6.50		16.00		1.05	0.75	1.05	0.55	8.00	1.00	18	1	2	2
39	UPN160	Cs	T	A	6.50		16.00		1.05	0.75	1.05	0.55	8.00		18	1	2	2
40	TR_FOND_SP	T	T	C	30.00	90.00	65.00	30.00							5	2		

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			
2	Inc+Cer	SVI	1	1	1	1	1	1	1	1	1	0	0	0			
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			
31	WINKLER	ELA													5.00		

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/cm>		
0	334	335	40	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00		
0	21	-33	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00		
0	-33	-34	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00		
0	-34	-35	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00		
0	-35	-36	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00		
0	27	21	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00		
0	-36	22	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00		
0	121	-749	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND			

0	1	2	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	335	336	40	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	32	27	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	2	3	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	1	13	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	3	4	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-39	22	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-43	-39	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-47	-43	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	34	32	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-48	-47	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	122	-750	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	4	5	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	13	14	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-49	-48	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	22	23	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	26	-49	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	14	-21	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	14	-1	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-21	-22	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	5	6	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	50	51		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1	-2	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-22	-23	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-2	-3	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-23	-24	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-269	-270		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-3	-4	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-270	-271		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-24	-30	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-277	-269		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-271	-272		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-277	-185		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	44	34	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	6	7	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	33	26	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-4	-5	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-30	23	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-185	-94		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-5	-6	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-315	-272		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-272	-459		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	23	-94	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
0	23	-40	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-277	-315		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-94	-40		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-94	-187	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
0	-40	-44	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-187	-280	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
0	-280	-373	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
0	-373	-466	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
0	-466	-564	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
0	7	8	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-6	-7	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-227	-315		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-7	-8	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-40	-41		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-141	-227		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-315	-410		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-459	-460		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	8	9	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	44	-79	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-8	-9	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-45	-44		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-41	-141		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-564	-665	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
0	-665	123	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
0	-1097	-1099	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-79	-80	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	15	-90	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-183	-276	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-460	-461		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-505	-459		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-410	-505		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-80	-81	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-90	-183	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-369	-462	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-462	-560	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-44	-54	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-981	-980		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-9	15	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-276	-369	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-461	-462		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-560	-661	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	

0	-45	-41		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-661	115	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	9	10	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-50	-51	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-81	-82	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-505	-552		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	35	33	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-51	-52	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-52	-53	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-53	-54	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-54	-55	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-805	148		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-72	35	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-55	-56	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	36	-50	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-56	-57	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	46	-942		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	147	-803		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-73	-72	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-58	-59	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-981	51		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-803	-804		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-942	-970		1		0.00	11	0.00	0.00	0.00	-62.50	ND	ND	
0	-942	-943		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-60	-61	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-970	-997		1		0.00	11	0.00	0.00	0.00	-62.50	ND	ND	
0	-942	-981		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-943	-944		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-997	-1026		1		0.00	11	0.00	0.00	0.00	-62.50	ND	ND	
0	-998	-997		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-506	-462		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-505	-506		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-552	-653		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-57	-58	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-804	-805		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-944	-945		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	115	146		1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-393	-486	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-59	-60	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	38	39	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-1026	-1043		1		0.00	11	0.00	0.00	0.00	-62.50	ND	ND	
0	-999	-998		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1043	-1044		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-945	47		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-1000	-999		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1044	-1045		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-1001	-1000		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	15	16	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-653	-746		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-1046	232		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-746	-799		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-506	146		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	-82	45	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	10	17	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	16	-10	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	16	-114	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-114	-207	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-207	-300	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-300	-393	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	35	36	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-12	-13	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-13	17	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-584	-685	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-685	116	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-872	-873		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-772	116	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	37	36	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-835	-836		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	17	-119	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-486	-584	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-690	117	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-61	28	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-1045	-1046		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	45	-73	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-873	-874		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-861	-872		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-10	-11	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-11	-12	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-1048	328		1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	-839	-861		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-836	-839		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	-119	-212	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-212	-305	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-305	-398	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	

0	-398	-491	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	-589	-690	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	28	-150	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-150	-243	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-243	-336	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-429	-523	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-619	-720	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	17	18	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	18	-14	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-491	-589	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
0	137	-835		1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
0	28	-62	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-336	-429	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-523	-619	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-720	128	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-14	-15	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-15	-16	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-773	-766	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	37	38	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-62	-63	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-16	-17	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-63	-64	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-64	29	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	29	-154	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-154	-247	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-247	-340	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-340	-433	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-433	-527	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	29	30	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	326	-1048		1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	137	-747		1		0.00	33	0.00	0.00	0.00	4.19	ND	ND	
0	-527	-623	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-623	-724	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-724	129	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-17	-18	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-19	-20	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	19	20	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	39	40	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	20	24	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	30	-65	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-65	-66	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-155	-248	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-248	-341	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-1005	229	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-18	-19	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-20	19	29	31		0.00	22	0.00	0.00	0.00	0.00	ND	ND	5.00
0	30	-155	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-66	-67	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-341	-434	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-67	-68	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-434	-528	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-528	-624	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	-68	-69	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-624	-725	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	24	25	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-69	-70	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-70	-71	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-725	130	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
0	25	31	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-71	31	29	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	327	-1050		1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	219	220	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	40	41	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-748	-747		1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
0	41	42	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	31	-1051	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-1051	-1055	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-1055	-1054	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	225	231	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	42	43	28	31		0.00	11	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-1054	-1053	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-1053	43	28	31		0.00	33	0.00	0.00	0.00	0.00	ND	ND	5.00
0	-1050	329		1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
0	143	-748		1		0.00	33	0.00	0.00	0.00	4.19	ND	ND	
1	44	-171	1	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
1	-171	-264	1	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
1	-264	-357	1	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
1	-357	-450	1	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
1	-450	-544	1	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
1	-544	-648	1	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
1	-648	-741	1	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
1	-741	144	1	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
2	45	145	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3	37	-170	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	

3	-170	-263	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3	-263	-356	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3	-356	-449	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3	-449	-543	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3	-543	-641	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3	-641	-740	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3	-740	137	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
4	38	-642	2	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
4	-642	138	2	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
5	39	-643	1	1		0.00	44	0.00	0.00	0.00	0.00	ND	ND	
5	-643	139	1	1		0.00	44	0.00	0.00	0.00	0.00	ND	ND	
6	40	-644	2	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
6	-644	140	2	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
7	41	-645	1	1		0.00	44	0.00	0.00	0.00	0.00	ND	ND	
7	-645	141	1	1		0.00	44	0.00	0.00	0.00	0.00	ND	ND	
8	42	-646	2	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
8	-646	142	2	1		90.00	22	0.00	0.00	0.00	0.00	ND	ND	
9	43	-1071	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
9	-1071	-1070	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
9	-1070	-1069	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
9	-1069	-1068	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
9	-1068	-1067	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
9	-1067	-647	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
9	-647	-1066	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
9	-1066	143	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
10	35	-112	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
10	-112	-205	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
10	-205	-298	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
10	-298	-391	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
10	-391	-484	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
10	-484	-582	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
10	-582	-683	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
10	-683	135	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
11	36	136	1	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
12	34	-634	2	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
12	-634	134	2	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
13	32	-633	1	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
13	-633	132	1	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
13	132	50	1	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
14	33	133	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
14	133	51	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
15	27	-615	2	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
15	-615	127	2	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
17	128	48	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
18	129	-871	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
18	-871	-903	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
18	-903	-932	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
18	-932	-960	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
18	-960	-1005	4	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
19	130	49	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
20	31	-163	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-163	-256	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-256	-349	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-349	-442	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-442	-536	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-536	-632	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-632	-733	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-733	131	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	131	-860	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-860	-893	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-893	-922	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-922	-950	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-950	-979	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-979	-1010	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
20	-1010	231	4	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
21	26	-102	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
21	-102	-195	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
21	-195	-288	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
21	-288	-381	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
21	-381	-474	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
21	-474	-572	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
21	-572	-673	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
21	-673	126	1	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
22	25	125	6	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
23	24	124	5	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
23	124	224	5	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
23	224	324	5	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
24	21	-136	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
24	-136	-229	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
24	-229	-322	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
24	-322	-415	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
24	-415	-509	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
24	-509	-605	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
24	-605	-707	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	

24	-707	121	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
25	22	-93	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
25	-93	-186	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
25	-186	-279	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
25	-279	-372	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
25	-372	-465	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
25	-465	-563	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
25	-563	-664	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
25	-664	122	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
26	123	323	3	1		90.00	44	5.00	5.00	30.00	30.00	ND	ND	
27	20	120	6	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
28	14	-83	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-83	-176	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-176	-269	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-269	-362	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-362	-455	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-455	-1094	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-1094	-654	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-654	114	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	114	-842	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-842	-875	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-875	-904	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-904	-933	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-933	-961	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-961	-982	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-982	-1011	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
28	-1011	214	4	1		0.00	88	0.00	0.00	0.00	0.00	ND	ND	
29	115	215	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
30	116	-862	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
30	-862	-894	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
30	-894	-923	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
30	-923	-951	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
30	-951	-986	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
30	-986	-1015	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
30	-1015	216	4	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
31	117	-867	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
31	-867	-899	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
31	-899	-928	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
31	-928	-956	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
31	-956	-991	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
31	-991	-1020	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
31	-1020	217	1	1		0.00	55	0.00	0.00	0.00	0.00	ND	ND	
32	18	-120	6	1		90.00	55	0.00	0.00	0.00	0.00	ND	ND	
32	-120	-213	6	1		90.00	55	0.00	0.00	0.00	0.00	ND	ND	
32	-213	-306	6	1		90.00	55	0.00	0.00	0.00	0.00	ND	ND	
32	-306	-399	6	1		90.00	55	0.00	0.00	0.00	0.00	ND	ND	
32	-399	-492	6	1		90.00	55	0.00	0.00	0.00	0.00	ND	ND	
32	-492	-590	6	1		90.00	55	0.00	0.00	0.00	0.00	ND	ND	
32	-590	-691	6	1		90.00	55	0.00	0.00	0.00	0.00	ND	ND	
32	-691	118	6	1		90.00	55	0.00	0.00	0.00	0.00	ND	ND	
33	19	-128	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-128	-221	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-221	-314	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-314	-407	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-407	-500	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-500	-598	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-598	-699	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-699	119	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	119	-850	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-850	-883	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-883	-912	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-912	-941	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-941	-969	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-969	-996	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-996	-1025	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
33	-1025	219	4	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
34	1	101	1	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
36	3	103	7	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
38	5	105	1	1		0.00	66	0.00	0.00	0.00	0.00	ND	ND	
39	7	107	7	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
41	8	108	7	1		90.00	88	0.00	0.00	0.00	0.00	ND	ND	
43	10	110	1	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
101	101	102	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
101	102	103	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
101	103	104	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
101	104	105	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
101	105	106	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
101	106	107	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
101	107	108	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
101	108	109	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
101	109	110	17	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
102	114	-752	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-752	-753	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-753	-754	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	

102	-754	-755	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-755	-756	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-756	-757	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-757	-758	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-758	-759	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-759	-760	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-760	115	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	115	116	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	116	-761	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-761	-762	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-762	-763	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-763	-764	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	-764	117	16	1		0.00	22	0.00	0.00	16.00	16.00	ND	ND	
102	117	118	27	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
102	118	-765	27	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
102	-765	-766	27	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
102	-766	-767	27	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
102	-767	-768	27	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
102	-768	-769	27	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
102	-769	-770	27	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
102	-770	-771	27	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
102	-771	119	27	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
103	121	-786	8	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
103	-786	-787	8	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
103	-787	-788	8	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
103	-788	-789	8	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
103	-789	122	8	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
103	122	-1097	8	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
103	-1097	123	8	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
105	-806	148	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-807	-806	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-808	-807	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-809	-808	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-810	-809	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-811	-810	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-812	-811	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	128	-812	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-813	128	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-814	-813	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-815	-814	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-816	-815	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	129	-816	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	130	129	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-817	130	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-818	-817	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-819	-818	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-820	-819	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-821	-820	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-822	-821	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	-823	-822	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
105	131	-823	13	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
106	135	136	11	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
107	137	138	12	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
107	138	139	12	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
107	139	140	12	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
107	140	141	12	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
107	141	142	12	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
107	142	143	12	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
108	144	-831	8	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
108	-831	-832	8	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
108	-832	-833	8	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
108	-833	-834	8	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
108	-834	145	8	1		0.00	77	0.00	0.00	0.00	0.00	ND	ND	
110	-641	-642	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
110	-642	-643	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
110	-643	-644	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
110	-644	-645	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
110	-645	-646	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
110	-646	-647	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
111	147	136	9	1		0.00	99	0.00	0.00	-40.00	-40.00	ND	ND	
111	136	137	9	1		0.00	99	0.00	0.00	-40.00	-40.00	ND	ND	
112	114	101	15	1		0.00	33	0.00	0.00	16.00	16.00	ND	ND	
112	-774	114	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
112	-775	-774	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
112	-776	-775	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
112	-777	-776	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
112	-783	-777	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
112	123	-783	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
112	-793	123	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
112	-797	-793	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
112	148	-797	14	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
113	-615	-605	11	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
113	-633	-615	11	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
113	-634	-633	11	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	

113	-648	-634	11	7		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
114	120	119	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
114	124	120	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
114	125	124	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
114	131	125	11	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
114	-1052	131	9	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
114	-1063	-1052	9	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
114	-1064	-1063	9	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
114	-1065	-1064	9	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
114	143	-1065	9	1		0.00	11	0.00	0.00	16.00	16.00	ND	ND	
115	110	117	15	1		0.00	33	0.00	0.00	16.00	16.00	ND	ND	
132	127	121	10	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
132	132	127	10	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
132	134	132	10	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
132	144	134	10	1		0.00	99	0.00	0.00	0.00	0.00	ND	ND	
133	-792	122	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	-796	-792	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	-800	-796	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	-801	-800	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	-802	-801	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	126	-802	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	133	126	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	135	133	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	-824	135	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	-825	-824	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
133	145	-825	9	1		0.00	77	0.00	0.00	-22.50	-22.50	ND	ND	
134	-997	-981	26	1		0.00	33	0.00	0.00	0.00	5.16	ND	ND	
134	-981	137	26	1		0.00	33	0.00	0.00	5.16	33.50	ND	ND	
135	47	123	22	1		0.00	33	0.00	0.00	0.00	40.00	ND	ND	
137	143	-1010	21	1		0.00	11	0.00	0.00	33.50	0.00	ND	ND	
202	214	-1031	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1031	-1032	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1032	-1033	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1033	215	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	215	216	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	216	-1034	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1034	-1035	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1035	-1036	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1036	-1037	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1037	217	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	217	-1038	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1038	-1039	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1039	-1040	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1040	-1041	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1041	-1042	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
202	-1042	219	15	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
205	-1001	48	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	48	-1002	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	-1002	-1003	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	-1003	-1004	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	-1004	-1005	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	-1005	49	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	49	-1006	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	-1006	-1007	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	-1007	-1008	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	-1008	-1009	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
205	-1009	-1010	15	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
215	217	110	25	1		0.00	11	0.00	0.00	-30.00	50.00	ND	ND	
304	-1047	-1048	18	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
304	-1048	-1049	18	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
304	-1049	-1050	18	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
304	-1050	324	18	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
316	-1048	216	19	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
317	216	-1050	19	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
318	-1050	219	19	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
319	214	-1048	19	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
320	-1050	229	19	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
321	-1050	231	19	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
322	-1048	229	19	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
323	-1048	232	19	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
901	-813	146		1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
902	-1096	-772	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
902	129	-1096	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
903	130	-773	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
904	-771	-823	35	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
905	140	129	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
906	132	133	33	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
907	-797	-798	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
907	-798	-799	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
907	-799	146	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
907	146	-1096	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
908	220	224	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
908	224	225	30	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
909	-1117	-1110	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	

909	-1116	-1117	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
909	-1115	-1116	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
909	-749	-1115	37	6		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
910	-1114	-1111	37	1		0.00	44	0.00	0.00	0.00	0.00	ND	ND	
910	-1113	-1114	37	1		0.00	44	0.00	0.00	0.00	0.00	ND	ND	
910	-1112	-1113	37	1		0.00	44	0.00	0.00	0.00	0.00	ND	ND	
910	-750	-1112	37	6		0.00	44	0.00	0.00	0.00	0.00	PF	ND	
912	-749	-750	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
912	-750	-1099	38	7		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
913	-1111	-1110	38	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
913	-1109	-1111	38	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
914	-1117	-1114	38	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
914	-1114	-1120	38	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
915	-1116	-1113	38	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
915	-1113	-1119	38	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
916	-1115	-1112	38	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
916	-1112	-1118	38	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
917	-1125	-1124	39	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
917	-1126	-1125	39	7		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
917	120	220	31	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
917	220	320	31	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
918	125	225	31	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
918	225	325	31	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
1091	50	144	21	1		0.00	11	0.00	0.00	0.00	33.50	ND	ND	
1092	121	50	21	1		0.00	11	0.00	0.00	33.50	0.00	ND	ND	
1101	-874	51	21	1		0.00	11	0.00	0.00	22.47	0.00	ND	ND	
1101	145	-874	21	1		0.00	11	0.00	0.00	33.50	22.47	ND	ND	
1102	46	122	21	1		0.00	11	0.00	0.00	10.62	33.50	ND	ND	
1102	-980	46	21	1		0.00	11	0.00	0.00	6.61	10.62	ND	ND	
1102	51	-980	21	1		0.00	11	0.00	0.00	2.28	6.61	ND	ND	
3021	327	219	24	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
3022	216	327	24	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
3023	326	216	24	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
3024	214	326	24	1		0.00	33	0.00	0.00	0.00	0.00	ND	ND	
3051	329	231	24	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
3052	229	329	24	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
3053	328	229	24	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
3054	232	328	24	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
3121	-1047	232	23	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3122	214	323	23	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3122	323	-1047	23	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3123	101	214	25	1		0.00	11	0.00	0.00	50.00	-30.00	ND	ND	
3131	-1049	229	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
3132	216	-1049	20	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
3141	325	324	23	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3141	231	325	23	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3142	320	219	23	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
3142	324	320	23	1		0.00	11	0.00	0.00	0.00	0.00	ND	ND	
9141	334	-1110	36	2		90.00	55	0.00	0.00	0.00	0.00	PF	ND	
9142	335	-1111	36	2		90.00	55	0.00	0.00	0.00	0.00	PF	ND	
9143	336	-1109	36	2		90.00	55	0.00	0.00	0.00	0.00	PF	ND	
9152	-1120	-1109	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
9152	-1119	-1120	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
9152	-1118	-1119	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
9152	-1099	-1118	37	6		0.00	22	0.00	0.00	0.00	0.00	PF	ND	
90911	-1110	-1124	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	
91011	-1111	-1125	37	1		0.00	44	0.00	0.00	0.00	0.00	ND	ND	
91521	-1109	-1126	37	1		0.00	22	0.00	0.00	0.00	0.00	ND	ND	

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/cmc>	DP	Ang. att. <grad>	Coes. <daN/mq>	Ang. dil. <grad>	Crit.	Mat.
1	SETTO_SA_S = 30	F	P	30.00		N	0.00	0.00	0.00	1	5
2	Setto_SP_30	F	P	30.00		N	0.00	0.00	0.00	2	5
3	Setto_SP_20	F	P	20.00		N	0.00	0.00	0.00	2	5
4	Setto_SP_25	F	P	25.00		N	0.00	0.00	0.00	2	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
16	133	0.00	0.00			-50 -51 -104 -103
16	133	0.00	0.00			-942 -943 -971 -970
16	133	0.00	0.00			-944 -945 -973 -972
16	133	0.00	0.00			-970 -971 -998 -997
16	133	0.00	0.00			-972 -973 -1000 -999
16	133	0.00	0.00			-1029 -1030 232 -1046
16	133	0.00	0.00			-1027 -1028 -1045 -1044
16	133	0.00	0.00			-1026 -1027 -1044 -1043
16	133	0.00	0.00			-998 -999 -1028 -1027
16	133	0.00	0.00			-803 -804 -853 -852
16	133	0.00	0.00			-805 148 -855 -854
16	133	0.00	0.00			-852 -853 -886 -885
16	133	0.00	0.00			-854 -855 -888 -887
16	133	0.00	0.00			-885 -886 -915 -914
16	133	0.00	0.00			-887 -888 -917 -916
16	133	0.00	0.00			-914 -915 -944 -943
16	133	0.00	0.00			-916 -917 47 -945
16	133	0.00	0.00			-52 -53 -106 -105
16	133	0.00	0.00			-103 -104 -197 -196
16	133	0.00	0.00			-105 -106 -199 -198
16	133	0.00	0.00			-196 -197 -290 -289
16	133	0.00	0.00			-198 -199 -292 -291
16	133	0.00	0.00			-289 -290 -383 -382
16	133	0.00	0.00			-291 -292 -385 -384
16	133	0.00	0.00			-382 -383 -476 -475
16	133	0.00	0.00			-384 -385 -478 -477
16	133	0.00	0.00			-475 -476 -574 -573
16	133	0.00	0.00			-477 -478 -576 -575
16	133	0.00	0.00			-573 -574 -675 -674
16	133	0.00	0.00			-575 -576 -677 -676
16	133	0.00	0.00			-674 -675 -803 147
16	133	0.00	0.00			-676 -677 -805 -804
120	222	0.00	0.00			-295 -296 -389 -388
120	222	0.00	0.00			-386 -387 -480 -479
120	222	0.00	0.00			-54 -55 -108 -107
120	222	0.00	0.00			-479 -480 -578 -577
120	222	0.00	0.00			-481 -482 -580 -579
120	222	0.00	0.00			-577 -578 -679 -678
120	222	0.00	0.00			-579 -580 -681 -680
120	222	0.00	0.00			-678 -679 -806 148
120	222	0.00	0.00			-680 -681 -808 -807
120	222	0.00	0.00			-109 -110 -203 -202
120	222	0.00	0.00			-200 -201 -294 -293
120	222	0.00	0.00			-202 -203 -296 -295
120	222	0.00	0.00			-293 -294 -387 -386
120	222	0.00	0.00			-55 -56 -109 -108
120	222	0.00	0.00			-57 -58 -111 -110
120	222	0.00	0.00			-108 -109 -202 -201
121	222	0.00	0.00			-178 -179 -272 -271
121	222	0.00	0.00			-934 -935 -963 -962
121	222	0.00	0.00			-456 -457 -555 -554
121	222	0.00	0.00			-363 -364 -457 -456
121	222	0.00	0.00			-906 -907 -936 -935
121	222	0.00	0.00			-176 -177 -270 -269
121	222	0.00	0.00			-455 -456 -554 -1094
121	222	0.00	0.00			-84 -85 -178 -177
121	222	0.00	0.00			114 -752 -843 -842
121	222	0.00	0.00			-875 -876 -905 -904
121	222	0.00	0.00			14 -1 -84 -83
121	222	0.00	0.00			-935 -936 -964 -963
121	222	0.00	0.00			-177 -178 -271 -270
121	222	0.00	0.00			-843 -844 -877 -876
121	222	0.00	0.00			-555 -556 -657 -656
121	222	0.00	0.00			-962 -963 -984 -983
121	222	0.00	0.00			-983 -984 -1013 -1012
121	222	0.00	0.00			-982 -983 -1012 -1011
121	222	0.00	0.00			-844 -845 -878 -877
121	222	0.00	0.00			-656 -657 -754 -753
121	222	0.00	0.00			-876 -877 -906 -905
121	222	0.00	0.00			-753 -754 -845 -844
121	222	0.00	0.00			-1 -2 -85 -84
121	222	0.00	0.00			-933 -934 -962 -961

Bid.	Tb	FF	Dy1 <cm>	Dy2 <cm>	Kt <daN/cm>	NN
16	133	0.00	0.00			147 -803 -852 -851
16	133	0.00	0.00			-943 -944 -972 -971
16	133	0.00	0.00			-945 47 -974 -973
16	133	0.00	0.00			-971 -972 -999 -998
16	133	0.00	0.00			-973 -974 -1001 -1000
16	133	0.00	0.00			-1028 -1029 -1046 -1045
16	133	0.00	0.00			-997 -998 -1027 -1026
16	133	0.00	0.00			-999 -1000 -1029 -1028
16	133	0.00	0.00			-1000 -1001 -1030 -1029
16	133	0.00	0.00			-804 -805 -854 -853
16	133	0.00	0.00			-851 -852 -885 -884
16	133	0.00	0.00			-853 -854 -887 -886
16	133	0.00	0.00			-884 -885 -914 -913
16	133	0.00	0.00			-886 -887 -916 -915
16	133	0.00	0.00			-913 -914 -943 -942
16	133	0.00	0.00			-915 -916 -945 -944
16	133	0.00	0.00			-51 -52 -105 -104
16	133	0.00	0.00			-53 -54 -107 -106
16	133	0.00	0.00			-104 -105 -198 -197
16	133	0.00	0.00			-106 -107 -200 -199
16	133	0.00	0.00			-197 -198 -291 -290
16	133	0.00	0.00			-199 -200 -293 -292
16	133	0.00	0.00			-290 -291 -384 -383
16	133	0.00	0.00			-292 -293 -386 -385
16	133	0.00	0.00			-383 -384 -477 -476
16	133	0.00	0.00			-385 -386 -479 -478
16	133	0.00	0.00			-476 -477 -575 -574
16	133	0.00	0.00			-478 -479 -577 -576
16	133	0.00	0.00			-574 -575 -676 -675
16	133	0.00	0.00			-576 -577 -678 -677
16	133	0.00	0.00			-675 -676 -804 -803
16	133	0.00	0.00			-677 -678 148 -805
120	222	0.00	0.00			-296 -297 -390 -389
120	222	0.00	0.00			-387 -388 -481 -480
120	222	0.00	0.00			-389 -390 -483 -482
120	222	0.00	0.00			-480 -481 -579 -578
120	222	0.00	0.00			-482 -483 -581 -580
120	222	0.00	0.00			-578 -579 -680 -679
120	222	0.00	0.00			-580 -581 -682 -681
120	222	0.00	0.00			-679 -680 -807 -806
120	222	0.00	0.00			-681 -682 -809 -808
120	222	0.00	0.00			-110 -111 -204 -203
120	222	0.00	0.00			-201 -202 -295 -294
120	222	0.00	0.00			-203 -204 -297 -296
120	222	0.00	0.00			-294 -295 -388 -387
120	222	0.00	0.00			-56 -57 -110 -109
120	222	0.00	0.00			-107 -108 -201 -200
120	222	0.00	0.00			-388 -389 -482 -481
121	222	0.00	0.00			-984 -985 -1014 -1013
121	222	0.00	0.00			-1094 -554 -655 -654
121	222	0.00	0.00			-457 -458 -556 -555
121	222	0.00	0.00			-364 -365 -458 -457
121	222	0.00	0.00			-654 -655 -752 114
121	222	0.00	0.00			-271 -272 -365 -364
121	222	0.00	0.00			-83 -84 -177 -176
121	222	0.00	0.00			-85 -86 -179 -178
121	222	0.00	0.00			-842 -843 -876 -875
121	222	0.00	0.00			-362 -363 -456 -455
121	222	0.00	0.00			-904 -905 -934 -933
121	222	0.00	0.00			-270 -271 -364 -363
121	222	0.00	0.00			-963 -964 -985 -984
121	222	0.00	0.00			-554 -555 -656 -655
121	222	0.00	0.00			-905 -906 -935 -934
121	222	0.00	0.00			-1012 -1013 -1032 -1031
121	222	0.00	0.00			-1011 -1012 -1031 214
121	222	0.00	0.00			-269 -270 -363 -362
121	222	0.00	0.00			-752 -753 -844 -843
121	222	0.00	0.00			-877 -878 -907 -906
121	222	0.00	0.00			-961 -962 -983 -982
121	222	0.00	0.00			-655 -656 -753 -752
121	222	0.00	0.00			-1013 -1014 -1033 -1032
121	222	0.00	0.00			-2 -3 -86 -85

122	2	22	0.00	0.00		-762	-763	-865	-864
122	2	22	0.00	0.00		-686	-687	-762	-761
122	2	22	0.00	0.00		-490	-491	-589	-588
122	2	22	0.00	0.00		-989	-990	-1019	-1018
122	2	22	0.00	0.00		-588	-589	-690	-689
122	2	22	0.00	0.00		-685	-686	-761	116
122	2	22	0.00	0.00		-896	-897	-926	-925
122	2	22	0.00	0.00		-953	-954	-989	-988
122	2	22	0.00	0.00		-951	-952	-987	-986
122	2	22	0.00	0.00		-926	-927	-955	-954
122	2	22	0.00	0.00		-761	-762	-864	-863
122	2	22	0.00	0.00		-587	-588	-689	-688
122	2	22	0.00	0.00		-115	-116	-209	-208
122	2	22	0.00	0.00		-117	-118	-211	-210
122	2	22	0.00	0.00		-207	-208	-301	-300
122	2	22	0.00	0.00		-209	-210	-303	-302
122	2	22	0.00	0.00		-1016	-1017	-1035	-1034
122	2	22	0.00	0.00		-895	-896	-925	-924
122	2	22	0.00	0.00		-303	-304	-397	-396
122	2	22	0.00	0.00		-925	-926	-954	-953
122	2	22	0.00	0.00		-396	-397	-490	-489
122	2	22	0.00	0.00		-763	-764	-866	-865
122	2	22	0.00	0.00		-486	-487	-585	-584
122	2	22	0.00	0.00		-10	-11	-116	-115
122	2	22	0.00	0.00		16	-10	-115	-114
122	2	22	0.00	0.00		-114	-115	-208	-207
122	2	22	0.00	0.00		116	-761	-863	-862
122	2	22	0.00	0.00		-687	-688	-763	-762
122	2	22	0.00	0.00		-894	-895	-924	-923
122	2	22	0.00	0.00		-211	-212	-305	-304
122	2	22	0.00	0.00		-302	-303	-396	-395
122	2	22	0.00	0.00		-986	-987	-1016	-1015
122	2	22	0.00	0.00		-898	-899	-928	-927
122	2	22	0.00	0.00		-990	-991	-1020	-1019
122	2	22	0.00	0.00		-12	-13	-118	-117
122	2	22	0.00	0.00		-897	-898	-927	-926
122	2	22	0.00	0.00		-118	-119	-212	-211
122	2	22	0.00	0.00		-300	-301	-394	-393
123	2	22	0.00	0.00		-947	-948	-977	-976
123	2	22	0.00	0.00		-534	-535	-631	-630
123	2	22	0.00	0.00		-441	-442	-536	-535
123	2	22	0.00	0.00		-70	-71	-162	-161
123	2	22	0.00	0.00		-438	-439	-533	-532
123	2	22	0.00	0.00		-859	-860	-893	-892
123	2	22	0.00	0.00		-630	-631	-732	-731
123	2	22	0.00	0.00		-631	-632	-733	-732
123	2	22	0.00	0.00		-348	-349	-442	-441
123	2	22	0.00	0.00		-892	-893	-922	-921
123	2	22	0.00	0.00		-161	-162	-255	-254
123	2	22	0.00	0.00		-159	-160	-253	-252
123	2	22	0.00	0.00		-71	31	-163	-162
123	2	22	0.00	0.00		-975	-976	-1007	-1006
123	2	22	0.00	0.00		-978	-979	-1010	-1009
123	2	22	0.00	0.00		-918	-919	-947	-946
123	2	22	0.00	0.00		-891	-892	-921	-920
123	2	22	0.00	0.00		-821	-822	-858	-857
123	2	22	0.00	0.00		-890	-891	-920	-919
123	2	22	0.00	0.00		-732	-733	131	-823
123	2	22	0.00	0.00		-347	-348	-441	-440
123	2	22	0.00	0.00		-949	-950	-979	-978
123	2	22	0.00	0.00		-162	-163	-256	-255
123	2	22	0.00	0.00		-345	-346	-439	-438
123	2	22	0.00	0.00		-977	-978	-1009	-1008
123	2	22	0.00	0.00		-976	-977	-1008	-1007
123	2	22	0.00	0.00		-346	-347	-440	-439
123	2	22	0.00	0.00		-255	-256	-349	-348
124	2	22	0.00	0.00		-217	-218	-311	-310
124	2	22	0.00	0.00		-849	-850	-883	-882
124	2	22	0.00	0.00		-20	19	-128	-127
124	2	22	0.00	0.00		-768	-769	-847	-846
124	2	22	0.00	0.00		-847	-848	-881	-880
124	2	22	0.00	0.00		-911	-912	-941	-940
124	2	22	0.00	0.00		-220	-221	-314	-313
124	2	22	0.00	0.00		-18	-19	-126	-125
124	2	22	0.00	0.00		-938	-939	-967	-966
124	2	22	0.00	0.00		-125	-126	-219	-218
124	2	22	0.00	0.00		-1023	-1024	-1042	-1041
124	2	22	0.00	0.00		-994	-995	-1024	-1023
124	2	22	0.00	0.00		-218	-219	-312	-311
124	2	22	0.00	0.00		-992	-993	-1022	-1021
124	2	22	0.00	0.00		-312	-313	-406	-405
124	2	22	0.00	0.00		-881	-882	-911	-910
124	2	22	0.00	0.00		-405	-406	-499	-498
124	2	22	0.00	0.00		-769	-770	-848	-847

122	222	0.00	0.00		-489	-490	-588	-587
122	222	0.00	0.00		-688	-689	-764	-763
122	222	0.00	0.00		-488	-489	-587	-586
122	222	0.00	0.00		-955	-956	-991	-990
122	222	0.00	0.00		-689	-690	117	-764
122	222	0.00	0.00		-764	117	-867	-866
122	222	0.00	0.00		-395	-396	-489	-488
122	222	0.00	0.00		-584	-585	-686	-685
122	222	0.00	0.00		-1018	-1019	-1037	-1036
122	222	0.00	0.00		-954	-955	-990	-989
122	222	0.00	0.00		-863	-864	-896	-895
122	222	0.00	0.00		-952	-953	-988	-987
122	222	0.00	0.00		-116	-117	-210	-209
122	222	0.00	0.00		-923	-924	-952	-951
122	222	0.00	0.00		-208	-209	-302	-301
122	222	0.00	0.00		-210	-211	-304	-303
122	222	0.00	0.00		-987	-988	-1017	-1016
122	222	0.00	0.00		-924	-925	-953	-952
122	222	0.00	0.00		-304	-305	-398	-397
122	222	0.00	0.00		-394	-395	-488	-487
122	222	0.00	0.00		-1019	-1020	217	-1037
122	222	0.00	0.00		-397	-398	-491	-490
122	222	0.00	0.00		-487	-488	-586	-585
122	222	0.00	0.00		-927	-928	-956	-955
122	222	0.00	0.00		-866	-867	-899	-898
122	222	0.00	0.00		-393	-394	-487	-486
122	222	0.00	0.00		-586	-587	-688	-687
122	222	0.00	0.00		-585	-586	-687	-686
122	222	0.00	0.00		-865	-866	-898	-897
122	222	0.00	0.00		-11	-12	-117	-116
122	222	0.00	0.00		-1015	-1016	-1034	216
122	222	0.00	0.00		-13	17	-119	-118
122	222	0.00	0.00		-988	-989	-1018	-1017
122	222	0.00	0.00		-864	-865	-897	-896
122	222	0.00	0.00		-862	-863	-895	-894
122	222	0.00	0.00		-1017	-1018	-1036	-1035
122	222	0.00	0.00		-301	-302	-395	-394
123	222	0.00	0.00		-533	-534	-630	-629
123	222	0.00	0.00		-535	-536	-632	-631
123	222	0.00	0.00		-823	131	-860	-859
123	222	0.00	0.00		-440	-441	-535	-534
123	222	0.00	0.00		-439	-440	-534	-533
123	222	0.00	0.00		-857	-858	-891	-890
123	222	0.00	0.00		-730	-731	-822	-821
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123	222	0.00	0.00		-160	-161	-254	-253
123	222	0.00	0.00		-731	-732	-823	-822
123	222	0.00	0.00		-68	-69	-160	-159
123	222	0.00	0.00		-946	-947	-976	-975
123	222	0.00	0.00		-253	-254	-347	-346
123	222	0.00	0.00		-858	-859	-892	-891
123	222	0.00	0.00		-920	-921	-949	-948
123	222	0.00	0.00		-532	-533	-629	-628
123	222	0.00	0.00		-919	-920	-948	-947
123	222	0.00	0.00		-820	-821	-857	-856
123	222	0.00	0.00		-889	-890	-919	-918
123	222	0.00	0.00		-252	-253	-346	-345
123	222	0.00	0.00		-729	-730	-821	-820
123	222	0.00	0.00		-69	-70	-161	-160
123	222	0.00	0.00		-948	-949	-978	-977
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123	222	0.00	0.00		-628	-629	-730	-729
124	222	0.00	0.00		-19	-20	-127	-126
124	222	0.00	0.00		-126	-127	-220	-219
124	222	0.00	0.00		-848	-849	-882	-881
124	222	0.00	0.00		-910	-911	-940	-939
124	222	0.00	0.00		-403	-404	-497	-496
124	222	0.00	0.00		-880	-881	-910	-909
124	222	0.00	0.00		-219	-220	-313	-312
124	222	0.00	0.00		-846	-847	-880	-879
124	222	0.00	0.00		-967	-968	-995	-994
124	222	0.00	0.00		-124	-125	-218	-217
124	222	0.00	0.00		-127	-128	-221	-220
124	222	0.00	0.00		-594	-595	-696	-695
124	222	0.00	0.00		-882	-883	-912	-911
124	222	0.00	0.00		-310	-311	-404	-403
124	222	0.00	0.00		-311	-312	-405	-404
124	222	0.00	0.00		-313	-314	-407	-406
124	222	0.00	0.00		-404	-405	-498	-497
124	222	0.00	0.00		-879	-880	-909	-908
124	222	0.00	0.00		-406	-407	-500	-499

124	2	22	0.00	0.00		-909	-910	-939	-938
124	2	22	0.00	0.00		-597	-598	-699	-698
124	2	22	0.00	0.00		-596	-597	-698	-697
124	2	22	0.00	0.00		-966	-967	-994	-993
124	2	22	0.00	0.00		-968	-969	-996	-995
124	2	22	0.00	0.00		-695	-696	-769	-768
124	2	22	0.00	0.00		-17	-18	-125	-124
124	2	22	0.00	0.00		-497	-498	-596	-595
124	2	22	0.00	0.00		-1022	-1023	-1041	-1040
124	2	22	0.00	0.00		-995	-996	-1025	-1024
124	2	22	0.00	0.00		-595	-596	-697	-696
124	2	22	0.00	0.00		-498	-499	-597	-596
124	2	22	0.00	0.00		-993	-994	-1023	-1022
124	2	22	0.00	0.00		-499	-500	-598	-597
125	2	22	0.00	0.00		-213	-214	-307	-306
125	2	22	0.00	0.00		-120	-121	-214	-213
125	2	22	0.00	0.00		-493	-494	-592	-591
125	2	22	0.00	0.00		-215	-216	-309	-308
125	2	22	0.00	0.00		-592	-593	-694	-693
125	2	22	0.00	0.00		-15	-16	-123	-122
125	2	22	0.00	0.00		-591	-592	-693	-692
125	2	22	0.00	0.00		-590	-591	-692	-691
125	2	22	0.00	0.00		-691	-692	-765	118
125	2	22	0.00	0.00		-14	-15	-122	-121
125	2	22	0.00	0.00		-306	-307	-400	-399
125	2	22	0.00	0.00		-692	-693	-766	-765
126	4	11	0.00	0.00		-81	-82	-175	-174
126	4	11	0.00	0.00		-741	-742	-831	144
126	4	11	0.00	0.00		-545	-546	-650	-649
126	4	11	0.00	0.00		-266	-267	-360	-359
126	4	11	0.00	0.00		-79	-80	-173	-172
126	4	11	0.00	0.00		-651	-652	-745	-744
126	4	11	0.00	0.00		-80	-81	-174	-173
126	4	11	0.00	0.00		-358	-359	-452	-451
126	4	11	0.00	0.00		-172	-173	-266	-265
126	4	11	0.00	0.00		-174	-175	-268	-267
126	4	11	0.00	0.00		-743	-744	-833	-832
126	4	11	0.00	0.00		-451	-452	-546	-545
126	4	11	0.00	0.00		-173	-174	-267	-266
126	4	11	0.00	0.00		-265	-266	-359	-358
126	4	11	0.00	0.00		-171	-172	-265	-264
126	4	11	0.00	0.00		-452	-453	-547	-546
127	2	22	0.00	0.00		-510	-511	-607	-606
127	2	22	0.00	0.00		-33	-34	-138	-137
127	2	22	0.00	0.00		-417	-418	-512	-511
127	2	22	0.00	0.00		-322	-323	-416	-415
127	2	22	0.00	0.00		-511	-512	-608	-607
127	2	22	0.00	0.00		-325	-326	-419	-418
127	2	22	0.00	0.00		-139	-140	-233	-232
127	2	22	0.00	0.00		-231	-232	-325	-324
127	2	22	0.00	0.00		-607	-608	-710	-709
127	2	22	0.00	0.00		-512	-513	-609	-608
127	2	22	0.00	0.00		-509	-510	-606	-605
127	2	22	0.00	0.00		-324	-325	-418	-417
127	2	22	0.00	0.00		-136	-137	-230	-229
127	2	22	0.00	0.00		-605	-606	-708	-707
127	2	22	0.00	0.00		-137	-138	-231	-230
127	2	22	0.00	0.00		-606	-607	-709	-708
128	4	22	0.00	0.00		-539	-538	-636	-637
128	4	22	0.00	0.00		-840	-873	-872	-838
128	4	22	0.00	0.00		-540	-539	-637	-638
128	4	22	0.00	0.00		-169	-168	-261	-262
128	4	22	0.00	0.00		-170	-169	-262	-263
128	4	22	0.00	0.00		-356	-355	-448	-449
128	4	22	0.00	0.00		-739	-738	-829	-830
128	4	22	0.00	0.00		-258	-257	-350	-351
128	4	22	0.00	0.00		-75	-74	-165	-166
128	4	22	0.00	0.00		-636	-635	-734	-735
128	4	22	0.00	0.00		-542	-541	-639	-640
128	4	22	0.00	0.00		-826	-825	-841	-840
128	4	22	0.00	0.00		-840	-841	-874	-873
128	4	22	0.00	0.00		-735	-734	-825	-826
128	4	22	0.00	0.00		-77	-76	-167	-168
128	4	22	0.00	0.00		-828	-827	-838	-837
128	4	22	0.00	0.00		-259	-258	-351	-352
128	4	22	0.00	0.00		-837	-861	-839	-828
128	4	22	0.00	0.00		-447	-446	-540	-541
128	4	22	0.00	0.00		-827	-826	-840	-838
128	4	22	0.00	0.00		-449	-448	-542	-543
128	4	22	0.00	0.00		-736	-735	-826	-827
128	4	22	0.00	0.00		-445	-444	-538	-539
128	4	22	0.00	0.00		-353	-352	-445	-446
128	4	22	0.00	0.00		-354	-353	-446	-447
128	4	22	0.00	0.00		-737	-736	-827	-828

124	2	22	0.00	0.00		-771	119	-850	-849
124	2	22	0.00	0.00		-698	-699	119	-771
124	2	22	0.00	0.00		-697	-698	-771	-770
124	2	22	0.00	0.00		-965	-966	-993	-992
124	2	22	0.00	0.00		-940	-941	-969	-968
124	2	22	0.00	0.00		-908	-909	-938	-937
124	2	22	0.00	0.00		-496	-497	-595	-594
124	2	22	0.00	0.00		-1021	-1022	-1040	-1039
124	2	22	0.00	0.00		-770	-771	-849	-848
124	2	22	0.00	0.00		-1024	-1025	219	-1042
124	2	22	0.00	0.00		-937	-938	-966	-965
124	2	22	0.00	0.00		-696	-697	-770	-769
124	2	22	0.00	0.00		-939	-940	-968	-967
125	2	22	0.00	0.00		18	-14	-121	-120
125	2	22	0.00	0.00		-308	-309	-402	-401
125	2	22	0.00	0.00		-693	-694	-767	-766
125	2	22	0.00	0.00		-122	-123	-216	-215
125	2	22	0.00	0.00		-121	-122	-215	-214
125	2	22	0.00	0.00		-214	-215	-308	-307
125	2	22	0.00	0.00		-401	-402	-495	-494
125	2	22	0.00	0.00		-307	-308	-401	-400
125	2	22	0.00	0.00		-400	-401	-494	-493
125	2	22	0.00	0.00		-492	-493	-591	-590
125	2	22	0.00	0.00		-494	-495	-593	-592
125	2	22	0.00	0.00		-399	-400	-493	-492
126	4	11	0.00	0.00		44	-79	-172	-171
126	4	11	0.00	0.00		-648	-649	-742	-741
126	4	11	0.00	0.00		-744	-745	-834	-833
126	4	11	0.00	0.00		-267	-268	-361	-360
126	4	11	0.00	0.00		-649	-650	-743	-742
126	4	11	0.00	0.00		-650	-651	-744	-743
126	4	11	0.00	0.00		-742	-743	-832	-831
126	4	11	0.00	0.00		-357	-358	-451	-450
126	4	11	0.00	0.00		-544	-545	-649	-648
126	4	11	0.00	0.00		-546	-547	-651	-650
126	4	11	0.00	0.00		-264	-265	-358	-357
126	4	11	0.00	0.00		-453	-454	-548	-547
126	4	11	0.00	0.00		-450	-451	-545	-544
126	4	11	0.00	0.00		-547	-548	-652	-651
126	4	11	0.00	0.00		-360	-361	-454	-453
126	4	11	0.00	0.00		-359	-360	-453	-452
127	2	22	0.00	0.00		-34	-35	-139	-138
127	2	22	0.00	0.00		-232	-233	-326	-325
127	2	22	0.00	0.00		-416	-417	-511	-510
127	2	22	0.00	0.00		-138	-139	-232	-231
127	2	22	0.00	0.00		-230	-231	-324	-323
127	2	22	0.00	0.00		-35	-36	-140	-139
127	2	22	0.00	0.00		-709	-710	-788	-787
127	2	22	0.00	0.00		-229	-230	-323	-322
127	2	22	0.00	0.00		-415	-416	-510	-509
127	2	22	0.00	0.00		-707	-708	-786	121
127	2	22	0.00	0.00		21	-33	-137	-136
127	2	22	0.00	0.00		-608	-609	-711	-710
127	2	22	0.00	0.00		-323	-324	-417	-416
127	2	22	0.00	0.00		-418	-419	-513	-512
127	2	22	0.00	0.00		-710	-711	-789	-788
127	2	22	0.00	0.00		-708	-709	-787	-786
128	4	22	0.00	0.00		137	-830	-835	
128	4	22	0.00	0.00		-541	-540	-638	-639
128	4	22	0.00	0.00		-740	-739	-830	137
128	4	22	0.00	0.00		-641	-640	-739	-740
128	4	22	0.00	0.00		-640	-639	-738	-739
128	4	22	0.00	0.00		-76	-75	-166	-167
128	4	22	0.00	0.00		-538	-537	-635	-636
128	4	22	0.00	0.00		-738	-737	-828	-829
128	4	22	0.00	0.00		-78	-77	-168	-169
128	4	22	0.00	0.00		-168	-167	-260	-261
128	4	22	0.00	0.00		-838	-872	-861	-837
128	4	22	0.00	0.00		-543	-542	-640	-641
128	4	22	0.00	0.00		-444	-443	-537	-538
128	4	22	0.00	0.00		-167	-166	-259	-260
128	4	22	0.00	0.00		-637	-636	-735	-736
128	4	22	0.00	0.00		-829	-828	-839	-836
128	4	22	0.00	0.00		-639	-638	-737	-738
128	4	22	0.00	0.00		-260	-259	-352	-353
128	4	22	0.00	0.00		-448	-447	-541	-542
128	4	22	0.00	0.00		-355	-354	-447	-448
128	4	22	0.00	0.00		-351	-350	-443	-444
128	4	22	0.00	0.00		37	-78	-169	-170
128	4	22	0.00	0.00		-446	-445	-539	-540
128	4	22	0.00	0.00		-74	-73	-164	-165
128	4	22	0.00	0.00		-352	-351	-444	-445
128	4	22	0.00	0.00		-638	-637	-736	-737
128	4	22	0.00	0.00		-261	-260	-353	-354

128	4	22	0.00	0.00		-830	-829	-836	-835
128	4	22	0.00	0.00		-262	-261	-354	-355
128	4	22	0.00	0.00		-166	-165	-258	-259
129	2	22	0.00	0.00		-181	-182	-275	-274
129	2	22	0.00	0.00		-460	-461	-559	-558
129	2	22	0.00	0.00		-459	-460	-558	-557
129	2	22	0.00	0.00		-367	-368	-461	-460
129	2	22	0.00	0.00		-9	15	-90	-89
129	2	22	0.00	0.00		-559	-560	-661	-660
129	2	22	0.00	0.00		-275	-276	-369	-368
129	2	22	0.00	0.00		-658	-659	-759	-758
129	2	22	0.00	0.00		-7	-8	-88	-87
129	2	22	0.00	0.00		-88	-89	-182	-181
129	2	22	0.00	0.00		-368	-369	-462	-461
129	2	22	0.00	0.00		-273	-274	-367	-366
130	3	22	0.00	0.00		-566	-564	-665	-667
130	3	22	0.00	0.00		-377	-375	-468	-470
130	3	22	0.00	0.00		-189	-187	-280	-282
130	3	22	0.00	0.00		-665	-663	-783	123
130	3	22	0.00	0.00		-669	-667	-793	-797
130	3	22	0.00	0.00		-278	-277	-370	-371
130	3	22	0.00	0.00		-470	-468	-566	-568
130	3	22	0.00	0.00		23	-30	-92	-94
130	3	22	0.00	0.00		-94	-92	-185	-187
130	3	22	0.00	0.00		-564	-562	-663	-665
130	3	22	0.00	0.00		-466	-464	-562	-564
130	3	22	0.00	0.00		-98	-96	-189	-191
130	3	22	0.00	0.00		-187	-185	-278	-280
130	3	22	0.00	0.00		-92	-91	-184	-185
130	3	22	0.00	0.00		-30	-24	-91	-92
130	3	22	0.00	0.00		-280	-278	-371	-373
131	3	22	0.00	0.00		-412	-414	-508	-505
131	3	22	0.00	0.00		-713	-746	-795	-791
131	3	22	0.00	0.00		-321	-328	-421	-414
131	3	22	0.00	0.00		-330	-332	-425	-423
131	3	22	0.00	0.00		-414	-421	-515	-508
131	3	22	0.00	0.00		-421	-423	-517	-515
131	3	22	0.00	0.00		-603	-552	-706	-704
131	3	22	0.00	0.00		-42	-46	-146	-144
131	3	22	0.00	0.00		-29	-32	-135	-133
131	3	22	0.00	0.00		-38	-42	-144	-142
131	3	22	0.00	0.00		-612	-614	-716	-746
131	3	22	0.00	0.00		-142	-144	-237	-235
131	3	22	0.00	0.00		-226	-228	-321	-319
131	3	22	0.00	0.00		-517	-519	-614	-612
131	3	22	0.00	0.00		-505	-508	-552	-603
131	3	22	0.00	0.00		-552	-653	-713	-706
132	3	22	0.00	0.00		-315	-316	-409	-408
132	3	22	0.00	0.00		-130	-131	-224	-223
132	3	22	0.00	0.00		-317	-318	-411	-410
132	3	22	0.00	0.00		-599	-600	-701	-700
132	3	22	0.00	0.00		-411	-412	-505	-504
132	3	22	0.00	0.00		-132	-133	-226	-225
132	3	22	0.00	0.00		-225	-226	-319	-318
132	3	22	0.00	0.00		-504	-505	-603	-602
132	3	22	0.00	0.00		-318	-319	-412	-411
132	3	22	0.00	0.00		-600	-601	-702	-701
132	3	22	0.00	0.00		-28	-29	-133	-132
132	3	22	0.00	0.00		-501	-502	-600	-599
132	3	22	0.00	0.00		-503	-504	-602	-601
132	3	22	0.00	0.00		-703	-704	-782	-781
132	3	22	0.00	0.00		-26	-27	-131	-130
132	3	22	0.00	0.00		-502	-503	-601	-600
133	3	22	0.00	0.00		-424	-422	-516	-518
133	3	22	0.00	0.00		-518	-516	-611	-613
133	3	22	0.00	0.00		-331	-329	-422	-424
133	3	22	0.00	0.00		-320	-315	-408	-413
133	3	22	0.00	0.00		-227	-222	-315	-320
133	3	22	0.00	0.00		-715	-714	-794	-798
133	3	22	0.00	0.00		-238	-236	-329	-331
133	3	22	0.00	0.00		-134	-129	-222	-227
133	3	22	0.00	0.00		-514	-507	-604	-610
133	3	22	0.00	0.00		-507	-501	-599	-604
133	3	22	0.00	0.00		-705	-700	-778	-784
133	3	22	0.00	0.00		-31	-25	-129	-134
133	3	22	0.00	0.00		-143	-141	-234	-236
133	3	22	0.00	0.00		-714	-712	-790	-794
133	3	22	0.00	0.00		-611	-610	-712	-714
133	3	22	0.00	0.00		-45	-41	-143	-145
134	2	22	0.00	0.00		-530	-531	-627	-626
134	2	22	0.00	0.00		-725	-726	-817	130
134	2	22	0.00	0.00		30	-65	-156	-155
134	2	22	0.00	0.00		-157	-158	-251	-250
134	2	22	0.00	0.00		-727	-728	-819	-818

128	4	22	0.00	0.00		-263	-262	-355	-356
128	4	22	0.00	0.00		-165	-164	-257	-258
129	2	22	0.00	0.00		-87	-88	-181	-180
129	2	22	0.00	0.00		-461	-462	-560	-559
129	2	22	0.00	0.00		-180	-181	-274	-273
129	2	22	0.00	0.00		-660	-661	115	-760
129	2	22	0.00	0.00		-659	-660	-760	-759
129	2	22	0.00	0.00		-558	-559	-660	-659
129	2	22	0.00	0.00		-366	-367	-460	-459
129	2	22	0.00	0.00		-89	-90	-183	-182
129	2	22	0.00	0.00		-182	-183	-276	-275
129	2	22	0.00	0.00		-274	-275	-368	-367
129	2	22	0.00	0.00		-8	-9	-89	-88
129	2	22	0.00	0.00		-557	-558	-659	-658
130	3	22	0.00	0.00		-568	-566	-667	-669
130	3	22	0.00	0.00		-96	-94	-187	-189
130	3	22	0.00	0.00		-284	-282	-375	-377
130	3	22	0.00	0.00		-562	-561	-1095	-663
130	3	22	0.00	0.00		-40	23	-94	-96
130	3	22	0.00	0.00		-667	-665	123	-793
130	3	22	0.00	0.00		-282	-280	-373	-375
130	3	22	0.00	0.00		-468	-466	-564	-566
130	3	22	0.00	0.00		-44	-40	-96	-98
130	3	22	0.00	0.00		-191	-189	-282	-284
130	3	22	0.00	0.00		-663	-1095	-777	-783
130	3	22	0.00	0.00		-464	-463	-561	-562
130	3	22	0.00	0.00		-371	-370	-463	-464
130	3	22	0.00	0.00		-185	-184	-277	-278
130	3	22	0.00	0.00		-375	-373	-466	-468
130	3	22	0.00	0.00		-373	-371	-464	-466
131	3	22	0.00	0.00		-228	-235	-328	-321
131	3	22	0.00	0.00		-237	-239	-332	-330
131	3	22	0.00	0.00		-235	-237	-330	-328
131	3	22	0.00	0.00		-328	-330	-423	-421
131	3	22	0.00	0.00		-653	-612	-746	-713
131	3	22	0.00	0.00		-135	-142	-235	-228
131	3	22	0.00	0.00		-423	-425	-519	-517
131	3	22	0.00	0.00		-508	-515	-653	-552
131	3	22	0.00	0.00		-319	-321	-414	-412
131	3	22	0.00	0.00		-32	-38	-142	-135
131	3	22	0.00	0.00		-746	-716	-799	-795
131	3	22	0.00	0.00		-133	-135	-228	-226
131	3	22	0.00	0.00		-144	-146	-239	-237
131	3	22	0.00	0.00		-706	-713	-791	-785
131	3	22	0.00	0.00		-515	-517	-612	-653
131	3	22	0.00	0.00		-704	-706	-785	-782
132	3	22	0.00	0.00		-701	-702	-780	-779
132	3	22	0.00	0.00		-129	-130	-223	-222
132	3	22	0.00	0.00		-700	-701	-779	-778
132	3	22	0.00	0.00		-408	-409	-502	-501
132	3	22	0.00	0.00		-410	-411	-504	-503
132	3	22	0.00	0.00		-409	-410	-503	-502
132	3	22	0.00	0.00		-316	-317	-410	-409
132	3	22	0.00	0.00		-224	-225	-318	-317
132	3	22	0.00	0.00		-131	-132	-225	-224
132	3	22	0.00	0.00		-702	-703	-781	-780
132	3	22	0.00	0.00		-27	-28	-132	-131
132	3	22	0.00	0.00		-223	-224	-317	-316
132	3	22	0.00	0.00		-222	-223	-316	-315
132	3	22	0.00	0.00		-25	-26	-130	-129
132	3	22	0.00	0.00		-601	-602	-703	-702
132	3	22	0.00	0.00		-602	-603	-704	-703
133	3	22	0.00	0.00		-234	-227	-320	-327
133	3	22	0.00	0.00		-420	-413	-507	-514
133	3	22	0.00	0.00		-516	-514	-610	-611
133	3	22	0.00	0.00		-329	-327	-420	-422
133	3	22	0.00	0.00		-610	-604	-705	-712
133	3	22	0.00	0.00		-422	-420	-514	-516
133	3	22	0.00	0.00		-413	-408	-501	-507
133	3	22	0.00	0.00		-236	-234	-327	-329
133	3	22	0.00	0.00		-37	-31	-134	-141
133	3	22	0.00	0.00		-327	-320	-413	-420
133	3	22	0.00	0.00		-604	-599	-700	-705
133	3	22	0.00	0.00		-41	-37	-141	-143
133	3	22	0.00	0.00		-145	-143	-236	-238
133	3	22	0.00	0.00		-141	-134	-227	-234
133	3	22	0.00	0.00		-613	-611	-714	-715
133	3	22	0.00	0.00		-712	-705	-784	-790
134	2	22	0.00	0.00		-626	-627	-728	-727
134	2	22	0.00	0.00		-248	-249	-342	-341
134	2	22	0.00	0.00		-65	-66	-157	-156
134	2	22	0.00	0.00		-156	-157	-250	-249
134	2	22	0.00	0.00		-529	-530	-626	-625
134	2	22	0.00	0.00		-625	-626	-727	-726

134	2	22	0.00	0.00		-726	-727	-818	-817
134	2	22	0.00	0.00		-250	-251	-344	-343
134	2	22	0.00	0.00		-435	-436	-530	-529
134	2	22	0.00	0.00		-155	-156	-249	-248
134	2	22	0.00	0.00		-436	-437	-531	-530
134	2	22	0.00	0.00		-66	-67	-158	-157
134	2	22	0.00	0.00		-342	-343	-436	-435
135	2	22	0.00	0.00		-722	-723	-816	-815
135	2	22	0.00	0.00		-870	-871	-903	-902
135	2	22	0.00	0.00		-816	129	-871	-870
135	2	22	0.00	0.00		-723	-724	129	-816
135	2	22	0.00	0.00		-246	-247	-340	-339
135	2	22	0.00	0.00		-339	-340	-433	-432
135	2	22	0.00	0.00		-431	-432	-526	-525
135	2	22	0.00	0.00		-524	-525	-621	-620
135	2	22	0.00	0.00		-900	-901	-930	-929
135	2	22	0.00	0.00		-62	-63	-152	-151
135	2	22	0.00	0.00		-902	-903	-932	-931
135	2	22	0.00	0.00		-620	-621	-722	-721
135	2	22	0.00	0.00		-957	-958	-1003	-1002
135	2	22	0.00	0.00		-869	-870	-902	-901
135	2	22	0.00	0.00		-814	-815	-869	-868
135	2	22	0.00	0.00		-152	-153	-246	-245
135	2	22	0.00	0.00		-244	-245	-338	-337
135	2	22	0.00	0.00		-930	-931	-959	-958
135	2	22	0.00	0.00		-64	29	-154	-153
136	2	22	0.00	0.00		-241	-242	-335	-334
136	2	22	0.00	0.00		-148	-149	-242	-241
136	2	22	0.00	0.00		-240	-241	-334	-333
136	2	22	0.00	0.00		-428	-429	-523	-522
136	2	22	0.00	0.00		-521	-522	-618	-617
136	2	22	0.00	0.00		-617	-618	-719	-718
136	2	22	0.00	0.00		-616	-617	-718	-717
136	2	22	0.00	0.00		-334	-335	-428	-427
136	2	22	0.00	0.00		-426	-427	-521	-520
136	2	22	0.00	0.00		-60	-61	-149	-148
136	2	22	0.00	0.00		-147	-148	-241	-240
136	2	22	0.00	0.00		-522	-523	-619	-618
137	4	22	0.00	0.00		-73	-72	-113	-164
137	4	22	0.00	0.00		-257	-206	-299	-350
137	4	22	0.00	0.00		-350	-299	-392	-443
137	4	22	0.00	0.00		-443	-392	-485	-537
137	4	22	0.00	0.00		-537	-485	-583	-635
137	4	22	0.00	0.00		-734	-684	-824	-825
137	4	22	0.00	0.00		-164	-113	-206	-257
137	4	22	0.00	0.00		-684	-683	135	-824
138	2	22	0.00	0.00		26	-49	-101	-102
138	2	22	0.00	0.00		-378	-376	-469	-471
138	2	22	0.00	0.00		-472	-471	-569	-570
138	2	22	0.00	0.00		-469	-467	-565	-567
138	2	22	0.00	0.00		-474	-473	-571	-572
138	2	22	0.00	0.00		-570	-569	-670	-671
138	2	22	0.00	0.00		-567	-565	-666	-668
138	2	22	0.00	0.00		-673	-672	-802	126
138	2	22	0.00	0.00		-671	-670	-800	-801
138	2	22	0.00	0.00		-668	-666	-792	-796
138	2	22	0.00	0.00		-572	-571	-672	-673
138	2	22	0.00	0.00		-380	-379	-472	-473
138	2	22	0.00	0.00		-49	-48	-100	-101
138	2	22	0.00	0.00		-47	-43	-97	-99
138	2	22	0.00	0.00		-39	22	-93	-95
138	2	22	0.00	0.00		-101	-100	-193	-194
138	2	22	0.00	0.00		-99	-97	-190	-192
138	2	22	0.00	0.00		-95	-93	-186	-188
138	2	22	0.00	0.00		-194	-193	-286	-287
138	2	22	0.00	0.00		-192	-190	-283	-285
138	2	22	0.00	0.00		-188	-186	-279	-281
138	2	22	0.00	0.00		-287	-286	-379	-380
138	2	22	0.00	0.00		-285	-283	-376	-378
138	2	22	0.00	0.00		-281	-279	-372	-374
140	4	22	0.00	0.00		43	-1053	-1075	-1071
140	4	22	0.00	0.00		-1054	-1055	-1077	-1076
140	4	22	0.00	0.00		-1071	-1075	-1078	-1070
140	4	22	0.00	0.00		-1076	-1077	-1080	-1079
140	4	22	0.00	0.00		-1070	-1078	-1081	-1069
140	4	22	0.00	0.00		-1079	-1080	-1083	-1082
140	4	22	0.00	0.00		-1069	-1081	-1084	-1068
140	4	22	0.00	0.00		-1082	-1083	-1086	-1085
140	4	22	0.00	0.00		-1068	-1084	-1087	-1067
140	4	22	0.00	0.00		-1085	-1086	-1089	-1088
140	4	22	0.00	0.00		-1067	-1087	-1072	-647
140	4	22	0.00	0.00		-1088	-1089	-1074	-1073
140	4	22	0.00	0.00		-1074	-1061	-1062	-1090
140	4	22	0.00	0.00		-1073	-1074	-1090	-1091

134	2	22	0.00	0.00		-624	-625	-726	-725
134	2	22	0.00	0.00		-341	-342	-435	-434
134	2	22	0.00	0.00		-249	-250	-343	-342
134	2	22	0.00	0.00		-434	-435	-529	-528
134	2	22	0.00	0.00		-528	-529	-625	-624
134	2	22	0.00	0.00		-343	-344	-437	-436
135	2	22	0.00	0.00		-337	-338	-431	-430
135	2	22	0.00	0.00		-526	-527	-623	-622
135	2	22	0.00	0.00		-338	-339	-432	-431
135	2	22	0.00	0.00		-430	-431	-525	-524
135	2	22	0.00	0.00		-621	-622	-723	-722
135	2	22	0.00	0.00		-868	-869	-901	-900
135	2	22	0.00	0.00		-929	-930	-958	-957
135	2	22	0.00	0.00		-432	-433	-527	-526
135	2	22	0.00	0.00		-525	-526	-622	-621
135	2	22	0.00	0.00		-622	-623	-724	-723
135	2	22	0.00	0.00		-153	-154	-247	-246
135	2	22	0.00	0.00		-931	-932	-960	-959
135	2	22	0.00	0.00		-721	-722	-815	-814
135	2	22	0.00	0.00		-815	-816	-870	-869
135	2	22	0.00	0.00		-901	-902	-931	-930
135	2	22	0.00	0.00		-958	-959	-1004	-1003
135	2	22	0.00	0.00		-151	-152	-245	-244
135	2	22	0.00	0.00		-245	-246	-339	-338
135	2	22	0.00	0.00		-959	-960	-1005	-1004
135	2	22	0.00	0.00		-63	-64	-153	-152
136	2	22	0.00	0.00		-333	-334	-427	-426
136	2	22	0.00	0.00		-242	-243	-336	-335
136	2	22	0.00	0.00		-59	-60	-148	-147
136	2	22	0.00	0.00		-520	-521	-617	-616
136	2	22	0.00	0.00		-149	-150	-243	-242
136	2	22	0.00	0.00		-718	-719	-812	-811
136	2	22	0.00	0.00		-717	-718	-811	-810
136	2	22	0.00	0.00		-335	-336	-429	-428
136	2	22	0.00	0.00		-427	-428	-522	-521
136	2	22	0.00	0.00		-61	28	-150	-149
136	2	22	0.00	0.00		-719	-720	128	-812
136	2	22	0.00	0.00		-618	-619	-720	-719
137	4	22	0.00	0.00		-113	-112	-205	-206
137	4	22	0.00	0.00		-206	-205	-298	-299
137	4	22	0.00	0.00		-299	-298	-391	-392
137	4	22	0.00	0.00		-392	-391	-484	-485
137	4	22	0.00	0.00		-485	-484	-582	-583
137	4	22	0.00	0.00		-72	35	-112	-113
137	4	22	0.00	0.00		-583	-582	-683	-684
137	4	22	0.00	0.00		-635	-583	-684	-734
138	2	22	0.00	0.00		-374	-372	-465	-467
138	2	22	0.00	0.00		-376	-374	-467	-469
138	2	22	0.00	0.00		-471	-469	-567	-569
138	2	22	0.00	0.00		-467	-465	-563	-565
138	2	22	0.00	0.00		-473	-472	-570	-571
138	2	22	0.00	0.00		-569	-567	-668	-670
138	2	22	0.00	0.00		-565	-563	-664	-666
138	2	22	0.00	0.00		-672	-671	-801	-802
138	2	22	0.00	0.00		-670	-668	-796	-800
138	2	22	0.00	0.00		-666	-664	122	-792
138	2	22	0.00	0.00		-571	-570	-671	-672
138	2	22	0.00	0.00		-379	-378	-471	-472
138	2	22	0.00	0.00		-48	-47	-99	-100
138	2	22	0.00	0.00		-43	-39	-95	-97
138	2	22	0.00	0.00		-102	-101	-194	-195
138	2	22	0.00	0.00		-100	-99	-192	-193
138	2	22	0.00	0.00		-97	-95	-188	-190
138	2	22	0.00	0.00		-195	-194	-287	-288
138	2	22	0.00	0.00		-193	-192	-285	-286
138	2	22	0.00	0.00		-190	-188	-281	-283
138	2	22	0.00	0.00		-288	-287	-380	-381
138	2	22	0.00	0.00		-286	-285	-378	-379
138	2	22	0.00	0.00		-283	-281	-374	-376
138	2	22	0.00	0.00		-381	-380	-473	-474
140	4	22	0.00	0.00		-1053	-1054	-1076	-1075
140	4	22	0.00	0.00		-1055	-1051	-1056	-1077
140	4	22	0.00	0.00		-1075	-1076	-1079	-1078
140	4	22	0.00	0.00		-1077	-1056	-1057	-1080
140	4	22	0.00	0.00		-1078	-1079	-1082	-1081
140	4	22	0.00	0.00		-1080	-1057	-1058	-1083
140	4	22	0.00	0.00		-1081	-1082	-1085	-1084
140	4	22	0.00	0.00		-1083	-1058	-1059	-1086
140	4	22	0.00	0.00		-1084	-1085	-1088	-1087
140	4	22	0.00	0.00		-1086	-1059	-1060	-1089
140	4	22	0.00	0.00		-1087	-1088	-1073	-1072
140	4	22	0.00	0.00		-1089	-1060	-1061	-1074
140	4	22	0.00	0.00		-1090	-1062	-1052	-1063
140	4	22	0.00	0.00		-1091	-1090	-1063	-1064

140	4	22	0.00	0.00		-1072	-1073	-1091	-1092	140	4	22	0.00	0.00		-1092	-1091	-1064	-1065
140	4	22	0.00	0.00		-647	-1072	-1092	-1066	140	4	22	0.00	0.00		-1066	-1092	-1065	143

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.
1	SOLAIO SOTTOTETTO	UN	130.00	80.00	0.00	50.00	0.00	50.00	50.00	0.00	0.33	20.00	4.00	1
2	SOLAIO COPERTURA	UN	160.00	160.00	0.00	50.00	48.00	50.00	50.00	0.00	0.33	20.00	4.00	1
4	SOLAIO P1	UN	300.00	150.00	300.00	0.00	0.00	50.00	50.00	0.50	0.33	20.00	4.00	1
5	SOLAIO COPERTURA NUOVO	UN	215.00	100.00	0.00	50.00	48.00	50.00	50.00	0.00	0.33	20.00	4.00	1
6	SCALA	UN	500.00	100.00	400.00	0.00	0.00	50.00	50.00	0.00	0.33	20.00	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	1	0.00	121 144	-786 134	-787 132	-788 127	-789	122	-792	-796	-800	-801	-802	126	133	135	-824	-825	145	-834	-833	-832	-831		
101	1	0.00	122	-1097	123	-793	-797	148	-805	-804	-803	147	136	135	133	126	-802	-801	-800	-796	-792				
102	1	90.00	101 755	102 -754	103 -753	104 -752	105 114	106	107	108	109	110	117	-764	-763	-762	-761	116	115	-760	-759	-758	-757	-756	-
103	4	90.00	148	-806	-807	-808	-809	-810	-811	-812	128	-813	146	-799	-798	-797									
104	1	90.00	147 818	-803 -819	-804 -820	-805 -821	148 -822	-806 -823	-807 131	-808 -1052	-809 -1063	-810 -1064	-811 -1065	-812 143	128 142	-813 141	-814 140	-815 139	-816 138	129 137	130 136	-817	-		
105	2	0.00	121	-786	-787	-788	-789	122	46	-980	51	50													
106	2	0.00	122	-1097	123	47	-945	-944	-943	-942	46														
107	2	90.00	-1010 138	-1009 139	-1008 140	-1007 141	-1006 142	49 143	-1005	-1004	-1003	-1002	48	-1001	-1000	-999	-998	-997	-981	137					
108	2	0.00	137	-835	-836	-839	-861	-872	-873	-874	51	-981													
109	2	0.00	-874	51	50	144	-831	-832	-833	-834	145														
110	2	90.00	-748	-747	137	138	139	140	141	142	143														
111	4	0.00	130	-817	-818	-819	-820	-821	-822	-823	131	125	124	120	119	-771	-770	-769	-768	-767	-766	-773			
112	4	0.00	129	130	-773	-766	-765	118	117	-764	-763	-762	-761	116	-772	-1096									
113	4	90.00	146	-1096	129	-816	-815	-814	-813																
114	6	0.00	-505	-552	-653	-746	-799	146	-506																
115	4	90.00	115	116	-772	-1096	146																		
200	2	90.00	101	102	103	104	105	106	107	108	109	110	217	-1037	-1036	-1035	-1034	216	215	-1033	-1032	-1031	214		
300	2	0.00	324	-1050	231	325																			
301	2	0.00	-1050	-1049	229																				
302	2	0.00	-1049	-1048	229																				
303	2	0.00	-1048	-1047	232																				
304	2	90.00	-1050	329	231																				
305	2	90.00	329	-1050	229																				
306	2	90.00	229	-1048	328																				
307	2	90.00	328	-1048	232																				
308	2	0.00	-1048	214	323	-1047																			
309	2	90.00	-1048	216	326																				
310	2	90.00	-1048	326	214																				
311	2	90.00	-1050	327	216																				
312	2	90.00	-1050	219	327																				
313	2	0.00	324	320	219	-1050																			
314	2	0.00	-1050	216	-1049																				
315	2	0.00	-1049	216	-1048																				
500	2	0.00	46	-942	-981	-980																			
501	2	0.00	51	-981	-980																				
503	6	90.00	-459	-460	-461	-462	-506	-505																	
505	6	90.00	-315	-410	-505	-459	-272																		
506	6	90.00	-277	-315	-272	-271	-270	-269																	
507	4	90.00	-45	-41	-40	-44																			
508	6	0.00	-41	-141	-227	-315	-277	-185	-94	-40															
1000	5	90.00	-1117	-1114	-1111	-1110																			
1001	5	90.00	-1117	-1114	-1113	-1116																			

1002	5	90.00	-1116 -1113 -1112 -1115
1003	5	90.00	-1115 -1112 -750 -749
1004	5	90.00	-1114 -1120 -1109 -1111
1005	5	90.00	-1114 -1120 -1119 -1113
1006	5	90.00	-1113 -1119 -1118 -1112
1007	5	90.00	-1112 -1118 -1099 -750
1008	5	90.00	-1110 -1111 -1125 -1124
1009	5	90.00	-1111 -1109 -1126 -1125

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
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	1.50				
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
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

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	MANUTENZIONE	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	FOLLA	5	S	A	1.00	--	--	1.00	1.00	0.00	0.00	0.00	1.00

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 incastrate fondazioni per analisi sismiche
Schematizzazione piani rigidi:
Imp.1: impalcato non rigido
Imp.2: impalcato non rigido
Selezione solai controventati: 103 113 112 111 115 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009
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

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_c =Coefficiente funzione della categoria del suolo
Fo =Valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale
S_s =Coefficiente di amplificazione stratigrafica
T_R =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
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
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 No
- SL Ultimi: SLVPvr 10.00, SLCPvr No
- Struttura dissipativa: Sì
- Classe di duttilità: Classe B
- Quota di riferimento: 0.00 <m>
- Quota max della struttura: 7.72 <m>
- Altezza della struttura: 7.72 <m>
- Numero piani edificio: 2
- 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	27.75	19.60	1.39	0.98	1.70
2	18.75	6.67	0.94	0.33	1.00

- Eccentricità di calcolo: 1.70 <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	0.08979
Coeff. λ SLV	1.00
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 (q_v): 1.50
- Modalità di calcolo modi di vibrare: Ritz-vectors
- Numero vettori: 2
- CCE per vettori di Ritz e numero di modi da calcolare

6) Forze dir. X

Numero modi: 5

7) Forze dir. Y

Numero modi: 5

- Modi da considerare: Tutti i modi calcolati
- Smorzamento spettro: 5.00%

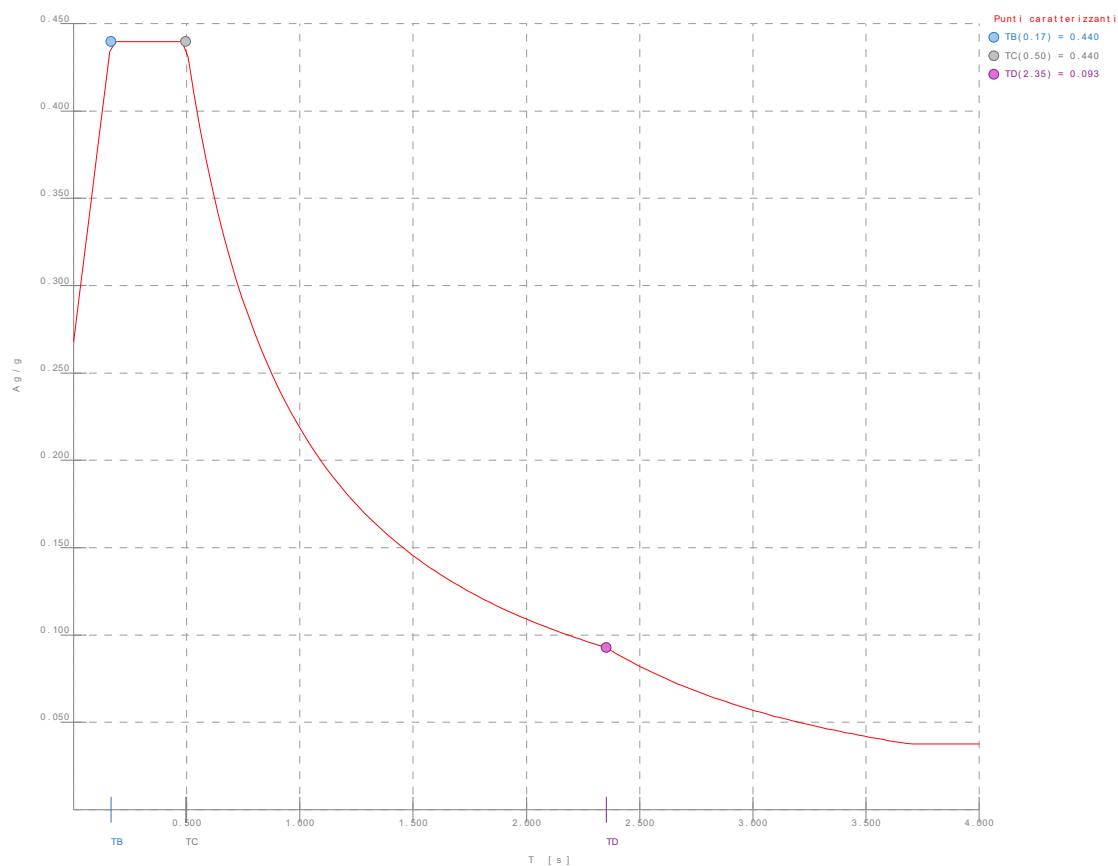


Figura numero 1: Spettro SLV

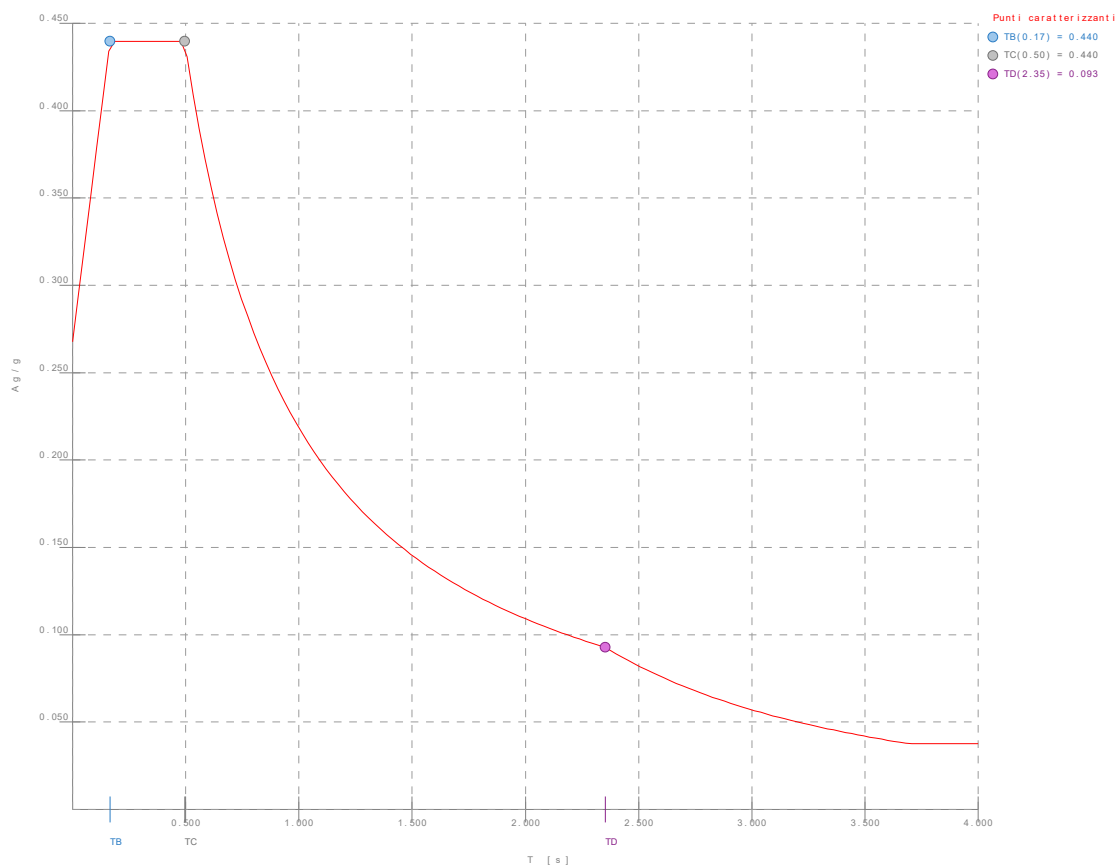


Figura numero 2: Spettro SND

- Angolo di ingresso del sisma: 0.00 <grad>

Ambienti di carico

Simbologia

N = Numero

Comm. = Commento

1 = PS

2 = PNS

3 = MANUTENZIONE

4 = NEVE

5 = FOLLA

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	F	SLU	SLR	SLF	SLQ
1	Calcolo sismico	S	S	S	S	S	N	S	N	N	N
2	Calcolo statico	S	S	S	S	N	N	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

SLV = Stato limite di salvaguardia della vita

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

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

9	Amb. 2 (SLE F)	SLE F	1	1	Ψ_2	Ψ_1	Ψ_2	-----	-----
10	Amb. 2 (SLE F)	SLE F	1	1	Ψ_1	Ψ_2	Ψ_2	-----	-----
11	Amb. 2 (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

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	F X	F Y	±S X	±S Y
1	Amb. 1 (SLU S) S +X+0.3Y	SLV+SND	L	N	1.00	1.00	0.00	0.00	0.60	0.00	0.00	1.00	0.30
2	Amb. 1 (SLU S) S +X-0.3Y	SLV+SND	L	N	1.00	1.00	0.00	0.00	0.60	0.00	0.00	1.00	-0.30
3	Amb. 1 (SLU S) S +0.3X+Y	SLV+SND	L	N	1.00	1.00	0.00	0.00	0.60	0.00	0.00	0.30	1.00
4	Amb. 1 (SLU S) S -0.3X+Y	SLV+SND	L	N	1.00	1.00	0.00	0.00	0.60	0.00	0.00	-0.30	1.00
5	Amb. 2 (SLU)	SLU	L	N	1.30	1.30	0.00	0.75	1.50	0.00	0.00	0.00	0.00
6	Amb. 2 (SLU)	SLU	L	N	1.30	1.30	0.00	1.50	1.05	0.00	0.00	0.00	0.00
7	Amb. 2 (SLU)	SLU	L	N	1.30	1.30	1.50	0.75	1.05	0.00	0.00	0.00	0.00
8	Amb. 2 (SLE R)	SLE R	L	N	1.00	1.00	0.00	0.50	1.00	0.00	0.00	0.00	0.00
9	Amb. 2 (SLE R)	SLE R	L	N	1.00	1.00	0.00	1.00	0.70	0.00	0.00	0.00	0.00
10	Amb. 2 (SLE R)	SLE R	L	N	1.00	1.00	1.00	0.50	0.70	0.00	0.00	0.00	0.00
11	Amb. 2 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.00	0.70	0.00	0.00	0.00	0.00
12	Amb. 2 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.20	0.60	0.00	0.00	0.00	0.00
13	Amb. 2 (SLE F)	SLE F	L	N	1.00	1.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00
14	Amb. 2 (SLE Q)	SLE Q	L	N	1.00	1.00	0.00	0.00	0.60	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

%Jpz = Percentuale momento d'inerzia polare partecipante intorno all'asse Z

%Mx = 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	%Mx	%My	%Mz	%Jpz
1*	0.25	6.41	54.30	7.05	0.00	4.88	0.08	0.00	0.00	
2*	0.23	6.41	-7.65	44.56	0.00	0.10	3.29	0.00	0.00	
3*	0.20	4.24	-58.14	0.06	0.00	5.60	0.00	0.00	0.00	
4*	0.19	4.24	-32.18	-5.83	0.00	1.71	0.06	0.00	0.00	
5*	0.15	27.09	4.36	116.86	0.00	0.03	22.61	0.00	0.00	
6*	0.12	28.55	1.30	155.02	0.00	0.00	39.79	0.00	0.00	
7*	0.09	9.97	-177.12	7.83	0.00	51.95	0.10	0.00	0.00	
8*	0.08	9.97	8.44	-97.91	0.00	0.12	15.87	0.00	0.00	
9*	0.06	37.57	-94.32	-37.90	0.00	14.73	2.38	0.00	0.00	
10*	0.04	44.30	-65.88	64.93	0.00	7.19	6.98	0.00	0.00	
Tot.cons.							86.31	91.17	0.00	0.00

Domanda in duttilità di curvatura

Direzione X μ_{Edx} =34.45

Direzione Y μ_{Edy} =26.83

Criteri di progetto utilizzati

Pilastrri 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^*Q -M e per N-c*M (standard)	Si
-Per N^*Q -c*M (doppia)	No
-Per N^*Q (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 pilastrri 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 pilastrri	25.00
Scala disegno viste pilastrri	50.00
Creazione tabelle pilastrri	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 pilastrri	
-Disegno ferri dentro pilaastro in vista	Si
-Disegno staffe dentro pilaastro 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

Specifici	1	3
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	44	B450C
-Modulo elastico <daN/cm ² >	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	4400.00	4500.00
-Tensione media di snervamento (Fym) <daN/cm ² >	4400.00	4500.00
-Sigma amm. acciaio <daN/cm ² >	2600.00	2600.00
-Sigma amm. reti e tralicci <daN/cm ² >	2600.00	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	No
Trascura gerarchia	Si	No
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	No
Incremento percentuale per piano debole	No	No
Non progettare e verificare i nodi fra trave e pilastro	No	Si
-Progetta e verifica secondo Circolare n.7 del 21/01/2019	Si	No
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>	16	20
Elenco diametri ferri longitudinali 2 <mm>	20	22
Elenco diametri ferri longitudinali 3 <mm>	22	24
Elenco diametri ferri longitudinali 4 <mm>		
Elenco diametri ferri longitudinali 5 <mm>		
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 γ_{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/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
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 (F_{yd}) <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 (F_{ck}) <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 (F_{yk}) <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 12Fi	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

	1	2	3
Specifici			
Materiali			
-Considera come elemento esistente	Si	No	No
-Calcestruzzo			
-Livello di conoscenza	LC1	LC2	LC2
-Fattore di confidenza	1.35	1.20	1.20
-Tipo di calcestruzzo	C20/25	C28/35	C28/35
-Rck calcestruzzo	230.00	350.00	350.00
-Modulo elastico <daN/cm ² >	296664.00	325881.00	325881.00
-Resistenza caratteristica cilindrica (Fck)	190.90	290.50	290.50
-Resistenza caratteristica a trazione (Fctk)	15.00	19.84	19.84
-Resistenza media (Fcm) <daN/cm ² >	270.90	370.50	370.50
-Resistenza media a trazione (Fctm) <daN/cm ² >	21.43	28.35	28.35
-σ amm. calcestruzzo <daN/cm ² >	80.00	110.00	110.00
-tc0 <daN/cm ² >	5.10	6.70	6.70
-tc1 <daN/cm ² >	16.30	19.70	19.70
-Riduci Fcd per tutte le verifiche secondo il D.M. 18	Si	Si	Si
-γc per stati limite ultimi			
-Automatico	x	x	x
-Pari a			
-Acciaio			
-Livello di conoscenza	LC3	LC2	LC2
-Fattore di confidenza	1.00	1.20	1.20
-Tipo di acciaio	44	B450C	B450C
-Modulo elastico <daN/cm ² >	2060000.00	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	4400.00	4500.00	4500.00
-Tensione media di snervamento (Fym) <daN/cm ² >	4400.00	4500.00	4500.00
-Sigma amm. acciaio <daN/cm ² >	2600.00	2600.00	2600.00
-Sigma amm. reti e tralicci <daN/cm ² >	2600.00	2600.00	2600.00
-Allungamento per verifiche di duttilità (Agt) <%>	4.00	4.00	4.00
-γs per stati limite ultimi			
-Automatico	x	x	x
-Pari a			
-Coeff. di omogeneizzazione	15.00	15.00	15.00
Parametri per analisi pushover			
Numero fibre	200.00	200.00	200.00
Fattore di confinamento nucleo interno	1.00	1.00	1.00
Fattore di incrudimento acciaio <%>	0.10	0.10	0.10
Parametri per verifiche di duttilità			
Considera rotazione massima di esercizio per determinare SLO e SLD	No	No	No
Modalità di calcolo luce di taglio Lv			
-Lv=L/2	x	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	x

Sforzo normale di verifica per analisi pushover			
-Gravitazionale			
-Dal calcolo	x	x	x
Parametri di calcolo			
Progetto a pressoflessione	Si	Si	Si
-Per tutte le travi			
-Solo per travi inclinate	x	x	x
-Min. angolo per pressoflessione <grad>	10.00	10.00	10.00
-Compressione massima senza progetto a pressoflessione <%>	10.00	10.00	10.00
Progetto a torsione	No	No	No
-Trazione senza progetto a torsione<%>			
Armatura secondo Circ. 65 del 10/04/97	No	No	No
Parametri di progetto secondo il D.M. 18			
Elemento dissipativo	Si	Si	No
Trascura gerarchia	Si	No	No
Verifica a taglio ciclico elementi esistenti	No	No	No
Limita verifica a taglio ad elemento non dissipativo	No	Si	No
Elemento secondario	No	No	No
Sollecitazioni dissipative amplificate per elementi di fondazione	Si	Si	Si
Escludi dal calcolo sovraresistenza per pilastri incidenti	No	No	No
Sollecitazioni complanari ad eventuali elementi bidimensionali	No	No	No
Copriferro teorico superiore <cm>	4.10	4.10	4.10
Copriferro teorico inferiore <cm>	4.10	4.10	4.10
Min. momento fittizio agli appoggi	No	No	No
-Denominatore			
Min. momento fittizio in campata	No	No	No
-Denominatore			
Incremento percentuale momento in campata <%>	10.00	10.00	10.00
Usa taglio max per traslazione momento (S.L.)	Si	Si	Si
Limitare momento traslato al valore max di appoggio (S.L.)	No	No	No
Limitare momento traslato al valore max di campata (S.L.)	No	No	No
Taglio da momento resistente in fondazione (S.L.)	No	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	1.00
-Con AfComp/AfTesa pari a			
Parametri di progettazione armatura			
Utilizzo			
-Trave	x	x	x
-Cordolo			
-Soletta rampante			
Max differenza fra diametri per unificazioni	2.00	2.00	2.00
Max distanza fra barre per unificazioni <m>	1.00	1.00	1.00
Denominatore per individuazione zona di campata	32.00	32.00	32.00
Fattore di copertura appoggi (0+1)	0.00	0.00	0.00
Fattore di riduzione per ancoraggio ferri	1.00	1.00	1.00
Minimizzazione momenti resistenti di appoggio (stati limite D.M. 18)	Si	Si	Si
-Tolleranza di copertura da sovrapposizione <%>	10.00	0.00	0.00
Tipo di distribuzione armatura eccedente in fase di verifica			
-Ripartita proporzionalmente per flessione, torsione e taglio	x	x	x
-Tutta agente per flessione			
-Tutta agente per taglio			
Armatura a flessione			
Elenco diametri ferri longitudinali 1 <mm>	14	14	14
Elenco diametri ferri longitudinali 2 <mm>	16	16	16
Elenco diametri ferri longitudinali 3 <mm>	18	18	18
Elenco diametri ferri longitudinali 4 <mm>	20	20	20
Elenco diametri ferri longitudinali 5 <mm>	24	24	24
Elenco diametri ferri longitudinali 6 <mm>			
Elenco diametri ferri longitudinali 7 <mm>			
Max differenza fra diametri nella trave	8.00	8.00	8.00
Max differenza fra diametri ferri accoppiati	4.00	4.00	4.00
Reggistaffe superiori			
-Numero			
-Automatico		x	x
-Pari a	2.00		
-Max mutua distanza <cm>			
-Diametro			
-Automatico	x	x	x
-Pari a <mm>			
-Minimo <mm>			
Reggistaffe inferiori			
-Numero			
-Automatico		x	x
-Pari a	2.00		
-Max mutua distanza <cm>			
-Diametro			
-Automatico	x	x	x
-Pari a <mm>			
-Minimo <mm>			

Armatura a taglio			
Scorrimento (T.A.)			
-Percentuale assorbita dalle staffe <%>	100.00	100.00	100.00
-Percentuale assorbita dai ferri piegati <%>	0.00	0.00	0.00
-Percentuale assorbita dai ferri di parete <%>	0	0	0
-Considerare il valore relativo alle staffe come minimo percentuale da adottare	No	No	No
Variabilità staffe			
-Staffe uguali a passo costante			
-Staffe diverse in tre parti della trave in funzione delle zone critiche	x	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	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	1.10
Elenco diametri staffe 1 <mm>	6	6	6
Elenco diametri staffe 2 <mm>	8	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	2
Elenco numero bracci staffe 2	4	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	4.00
-Massimo <cm>	32.00	32.00	32.00
-Incremento <cm>	4.00	4.00	4.00
Elementi costanti			
-Diametro	Si	Si	Si
-Passo	No	No	No
-Bracci	Si	Si	Si
Tipo di minimizzazione staffatura			
-Minimizza il numero delle staffe	x	x	x
-Minimizza il peso delle staffe			
Raffittimento staffe all'estremità della trave	No	No	No
-Passo non superiore a			
Lunghezza max del tratto di calcolo scorrimento			
-Pari al tratto in cui $\tau > \tau_{c0}$	x	x	x
-Pari a <cm>			
-Come multiplo dell'altezza pari a			
Armatura a taglio e torsione			
Elenco diametri ferri piegati 1 <mm>	12	12	12
Elenco diametri ferri piegati 2 <mm>	14	14	14
Elenco diametri ferri piegati 3 <mm>	16	16	16
Elenco diametri ferri piegati 4 <mm>	18	18	18
Elenco diametri ferri piegati 5 <mm>	20	20	20
Elenco diametri ferri piegati 6 <mm>			
Elenco diametri ferri piegati 7 <mm>			
Angolo di piegatura <grad>	45.00	45.00	45.00
Posizione primo punto di piegatura			
-Pari al multiplo dell'altezza			
-Distanza <cm>	5.00	5.00	5.00
Interasse punti di piegatura			
-Pari al multiplo dell'altezza			
-Distanza <cm>	25.00	25.00	25.00
Tipo di ferri piegati			
-Solo sagomati			
-Solo cavallotti			
-Sia sagomati che cavallotti	x	x	x
Ferri di parete	Si	Si	Si
-Max distanza fra le barre <cm>	30.00	30.00	30.00
Elenco diametri ferri di parete 1 <mm>	12	12	12
Elenco diametri ferri di parete 2 <mm>	14	14	14
Elenco diametri ferri di parete 3 <mm>	16	16	16
Elenco diametri ferri di parete 4 <mm>	18	18	18
Elenco diametri ferri di parete 5 <mm>	20	20	20
Elenco diametri ferri di parete 6 <mm>			
Elenco diametri ferri di parete 7 <mm>			
Elenco diametri staffe orizzontali 1 <mm>	6	6	6
Elenco diametri staffe orizzontali 2 <mm>	8	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	6.00

Risvolto ferri superiori	Si	Si	Si
-Pari a <cm>	25.00	25.00	25.00
-Pari all'altezza della trave			
-Pari alla minima altezza delle travi incidenti			
Risvolto ferri inferiori	Si	Si	Si
-Pari a <cm>	25.00	25.00	25.00
-Pari all'altezza della trave			
-Pari alla minima altezza delle travi incidenti			
Risvolto ferri laterali	Si	Si	Si
-Pari a <cm>	25.00	25.00	25.00
-Pari alla larghezza della trave			
Magrone	Si	Si	Si
-Allargamento laterale <cm>	0.00	0.00	0.00
-Altezza <cm>	20.00	20.00	20.00
Dati per progettazione interattiva sezioni			
Copriferro reale al bordo staffa <cm>	2.50	2.50	2.50
Diametro staffa teorica <mm>	8.00	8.00	8.00
Distanza fra ferri su più strati <cm>	1.00	1.00	1.00
Verifiche a pressoflessione	Si	Si	Si
Verifica con barre in posizione teorica	No	No	No
Verifiche a flessione/pressoflessione retta	Si	Si	Si
-Considera My	x	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	x
-Considera Vrdu in corrispondenza di bw massimo			
-Considera sempre Af Staffe non proiettata in direzione del taglio	Si	Si	Si
Integrare lo scorrimento lungo il tratto	Si	Si	Si
-Lunghezza del tratto <m>	1.00	1.00	1.00
Dati per progettazione agli stati limite			
Condizioni ambientali			
-Ordinarie	x	x	x
-Aggressive			
-Molto aggressive			
Usa dominio N-M per flessioni rette	Si	Si	Si
-Ricerca della sicurezza con sforzo normale costante			
-Ricerca della sicurezza con eccentricità costante	x	x	x
Controllo rapporto X/D	Si	Si	Si
Classificazione barre tese/comprese			
-Solo le barre con deformazione percentuale rispetto alla barra più tesa/compressa non inferiore a <%>	30.00	30.00	30.00
-In funzione della deformazione			
Dati per verifiche di resistenza al fuoco			
-Tempo di verifica (REI) <minuti>	120.00	120.00	120.00
Dimensione MESH <cm>	2.00	2.00	2.00
-Passo di calcolo <secondi>	10.00	10.00	10.00
-Temperatura ambiente <C°>	20.00	20.00	20.00
-Coeff. di convezione a temperatura ambiente <W/mq K>	9.00	9.00	9.00
Calcestruzzo			
-Tipo di aggregati	SILICEI	SILICEI	SILICEI
-Massa volumica iniziale <kg/mc>	2300.00	2300.00	2300.00
-Umidità iniziale <%>	3.00	3.00	3.00
-Fattore di interpolazione conducibilità	0.50	0.50	0.50
Dati per verifiche FRP			
Rinforzo longitudinale			
Tipo di fibra/resina			
-Vetro/Epossidica			
-Arammidica/Epossidica			
-Carbonio/Epossidica	x	x	x
Resistenza caratteristica(f_{fk}) <daN/cm ² >	49000.00	49000.00	49000.00
Modulo elastico(E_c) <daN/cm ² >	2500000.00	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione(ϵ_{fk}) <%>	2.00	2.00	2.00
Spessore equivalente(t_f) <mm>	0.17	0.17	0.17
Sistemi di rinforzo			
-Preformati			
-Impregnati in situ	x	x	x
Rinforzo trasversale			
Tipo di fibra/resina			
-Vetro/Epossidica			
-Arammidica/Epossidica			
-Carbonio/Epossidica	x	x	x
Resistenza caratteristica(f_{fk}) <daN/cm ² >	49000.00	49000.00	49000.00
Modulo elastico(E_c) <daN/cm ² >	2500000.00	2500000.00	2500000.00
Deformazione caratteristica a rottura per trazione(ϵ_{fk}) <%>	2.00	2.00	2.00
Spessore equivalente(t_f) <mm>	0.17	0.17	0.17
Sistemi di rinforzo			
-Preformati			

-Impregnati in situ	x	x	x
Modalità di carico			
-Lungo termine	x	x	x
-Ciclico			
Coeff. parziale SLU di distacco(γ_{fd})	1.50	1.50	1.50
Fattore di conversione ambientale(η_a)	0.95	0.95	0.95
Raggio di arrotondamento spigoli(r_c) <cm>	2.00	2.00	2.00
Coeff. condizione di carico(K_q)	1.25	1.25	1.25

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	Tutte
Stampa dettaglio verifiche	No

	1	2
Specifici		
Materiali		
CNR 10011		
Tipo di acciaio	FE360	FE430
D.M. 18		
Tipo di acciaio per profilati a sezione aperta	S235	S275
	UNI EN	UNI EN
	10025-2	10025-2
Tipo di acciaio per profilati a sezione cava	S235H	S235H
	UNI EN	UNI EN
	10210-1	10210-1
EC3		
Tipo di acciaio	S235	S275
-Fy <daN/cm²>	2350.00	2750.00
-Fu <daN/cm²>	3600.00	4300.00
-Fy,40 <daN/cm²>	2150.00	2550.00
-Fu,40 <daN/cm²>	3600.00	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)	250.00	250.00
Max valore del rapporto tra la luce e la freccia (solo accidentali)	300.00	300.00
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	4.00
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

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	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/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	44	B450C
-Modulo elastico <daN/cm ² >	2060000.00	2060000.00
-Tensione caratteristica di snervamento (Fyk) <daN/cm ² >	4300.00	4500.00
-Tensione media di snervamento (Fym) <daN/cm ² >	4300.00	4500.00
-Sigma amm. acciaio <daN/cm ² >	2600.00	2600.00
-Sigma amm. reti e tralicci <daN/cm ² >	2600.00	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 di calcolo		
Elemento dissipativo	No	No
Copriferro <cm>	2.50	2.50
Fattore moltiplicativo per calcolo τ_l	1.00	1.00
Fattore moltiplicativo per calcolo τ_t	1.00	1.00
Fattore di riduzione per ancoraggio ferri	1.00	1.00
Lunghezza ancoraggi armature		
-Calcolata in funzione della σ_f		
-Imposta come multiplo del diametro	20.00	20.00
Lunghezza minima pari a <m>	0.50	0.50
-Inserire solo armatura al centro della parete	No	No
Modalità di progettazione e verifica armatura verticale		
-In funzione delle zone di incidenza elementi		
-In funzione delle sollecitazioni globali	x	x
-Inserisci armatura di rinforzo nelle zone di incidenza elementi	Si	Si
-Dimensione minima zone di incidenza elementi	Si	Si
-Pari a multiplo dello spessore	1.00	1.00
-Passo di verifica	1.50	1.50
-Trascura zone con pilastro inglobato	Si	Si
-Effettuare verifiche nel piano della parete	No	Si
-Elimina armatura diffusa nelle zone di rinforzo	Si	Si

Elimina armatura diffusa nell'architrave	Si	Si
-Effettuare verifiche su sezioni verticali	No	No
-Passo di verifica	1.00	1.00
Controllare resistenza a taglio trasversale come sezione priva di armatura a taglio	No	Si
Min. Af armatura diffusa <cmq/m>	3.00	3.00
Considera come parete debolmente armata ai sensi D.M. 18	No	No
-Modalità di valutazione parametri nel caso di sisma diverso per X e Y		
-Usa valore massimo	x	x
-Componi in direzione parete		
-Incremento del 50% delle forze assiali		
Sempre	x	x
-Solo per analisi sismiche statiche		
-Mai		
Coeff. β per controllo snellezza <m>	1.00	1.00
Armatura diffusa		
Considera armatura con rete elettrosaldata	No	No
Armatura verticale o rete		
Elenco diametri utilizzabili 1 <mm>	10	10
Elenco diametri utilizzabili 2 <mm>	12	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	15.00
-Massimo <cm>	30.00	30.00
-Incremento <cm>	5.00	5.00
-Modalità di completamento armatura		
-Adattata	x	x
-Terminata		
-Nessuna		
Armatura orizzontale		
Elenco diametri utilizzabili 1 <mm>	8	8
Elenco diametri utilizzabili 2 <mm>	10	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	10.00
-Massimo <cm>	30.00	30.00
-Incremento <cm>	5.00	5.00
Tipo di armatura orizzontale		
-Dritta	x	x
-Con risvolti di estremità		
-Modalità di chiusura orizzontale		
-Nessuna chiusura		
-Chiusura con ferri ad U	x	x
-Chiusura con staffe		
-Lunghezza armatura di chiusura		
-Multiplo dello spessore pari a		
-Lunghezza fissa pari a <cm>	0.50	0.50
-Tipo di ottimizzazione armatura		
-Minimizza il peso complessivo dei ferri	x	x
-Minimizza il numero dei ferri		
Armatura di rinforzo		
Elenco diametri utilizzabili 1 <mm>	16	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	2.00
Interferro minimo sotto il quale non è possibile aggiungere ferri <cm>	10.00	10.00
-Aggiungi staffe chiuse	Si	Si
-Stesso diametro armatura diffusa orizzontale	x	x
-Diametro imposto		
-Stesso passo armatura diffusa orizzontale	x	x
-Passo imposto		
Armatura secondaria		
Diametro ferri di collegamento <mm>	6.00	6.00
Numero ferri di collegamento (a mq)	6.00	6.00
Lunghezza ancoraggio ferri di collegamento <cm>	10.00	10.00
Dati per progettazione agli stati limite		
Condizioni ambientali		
-Ordinarie	x	x
-Aggressive		

-Molto aggressive		
Controllo rapporto X/D	No	No
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		

Nodi in acciaio

Generali	
Parametri di disegno reticolari	
Scala disegno esecutivo reticolare	10.00
Disegna a parte particolari collegamenti	Si
Scala disegno particolari collegamenti	5.00
Crea solo disegno schematico	No
Scala disegno schematico	25.00
Parametri di disegno collegamenti	
Scala disegno collegamenti	5.00
Scala disegno telai	10.00
Stampe	
Tipo di relazione	Sintetica

Specifici	1	2
Progettazione bullonature		
Elenco diametri bulloni utilizzabili 1 <mm>	12	12
Elenco diametri bulloni utilizzabili 2 <mm>	14	14
Elenco diametri bulloni utilizzabili 3 <mm>	16	16
Elenco diametri bulloni utilizzabili 4 <mm>	18	18
Elenco diametri bulloni utilizzabili 5 <mm>	20	20
Elenco diametri bulloni utilizzabili 6 <mm>	22	
Elenco diametri bulloni utilizzabili 7 <mm>	24	
Elenco diametri bulloni utilizzabili 8 <mm>	27	
Elenco diametri bulloni utilizzabili 9 <mm>	30	
Numero minimo bulloni	2.00	2.00
Classe bulloni	6.8	6.8
Zona filettata	Si	Si
Progettazione saldature		
Arretra piastra nelle saldature di bordo	Si	Si
Saldature con dimensioni bilanciate	Si	Si
Classe saldature a completa penetrazione	SECONDA	SECONDA
Arrotondamento lunghezza cordoni di saldatura	5.00	5.00
Rapporto minimo fra lunghezza e spessore cordone	15.00	15.00
Altezza della saldatura		
-Uguale allo spessore del profilato		
-Valore minimo tra profilato e la piastra	x	x
Progettazione reticolari		
Rendi continue aste allineate	Si	Si
Modalità di calcolo sforzo normale per giunti su aste continue		
-Considera per ogni semigiunto le sollecitazioni di calcolo delle aste	x	x
-Considera per ogni semigiunto la differenza fra le sollecitazioni delle aste		
-Considera per ogni semigiunto la differenza fra le sollecitazioni delle aste divisa per due		
-Considera per ogni semigiunto il massimo fra le sollecitazioni delle aste diviso per due		
Finali equidistanti per aste incrociate	Si	Si
Forma della piastra		
-Rettangolare		
-Poligonale	x	x
Massimo ingombro collegamento lungo il profilo	33.00	33.00
Allargamento piastra ai lati del profilo	10.00	10.00
Minimo spazio libero tra i profili	10.00	10.00
Spessore piastra se non imposto dal profilo	10.00	10.00
Progettazione collegamenti		
Trascura sollecitazioni teoricamente nulle	No	Si
Componenti sollecitazioni da trascurare		
-Sforzo normale	No	No
-Taglio in dir. Y	No	Si
-Taglio in dir. Z	No	No
-Momento torcente intorno all'asse X	Si	Si
-Momento flettente intorno all'asse Y	No	No
-Momento flettente intorno all'asse Z	No	Si
Considera solo bulloni per verifiche a flessione	No	No
Angolo massimo di incidenza <grad>	15.00	20.00
Piastre di fondazione		
-Elenco diametri tirafondi utilizzabili 1 <mm>	12	12

-Elenco diametri tirafondi utilizzabili 2 <mm>	16	16
-Elenco diametri tirafondi utilizzabili 3 <mm>	20	20
-Elenco diametri tirafondi utilizzabili 4 <mm>	30	30
-Elenco diametri tirafondi utilizzabili 5 <mm>		
-Elenco diametri tirafondi utilizzabili 6 <mm>		
-Elenco diametri tirafondi utilizzabili 7 <mm>		
-Elenco diametri tirafondi utilizzabili 8 <mm>		
-Elenco diametri tirafondi utilizzabili 9 <mm>		
Lunghezza minima d'infissione <mm>	0.40	0.40
-Verifica piastra e tirafondi con reazioni vincolari	No	No
-Trascura tirafondi compressi	Si	No
-Tirafondi con barre filettate	No	No
-Tipo di tirafondi	UNCINI	UNCINI
-Fattore di riduzione per ancoraggio tirafondi	1.00	0.70
Piastra circolare per sezioni circolari cave	Si	Si
Numero minimo bulloni per piastra circolare	6.00	6.00
Collegamenti a piastra d'anima di aste inclinate con piastra di forma rettangolare	Si	Si
Disposizione della piastra nel collegamento "continuità con flangia"	Orto. finale	Orto. finale
Disposizione della piastra nel collegamento "piastra di fondazione"	Ortogonal e	Ortogonal e
Progetta i collegamenti ignorando i controlli sulle distanze della bullonatura	Si	Si
Verifiche ai sensi D.M. 18		
Esposizione a fenomeni corrosivi		
Unione non esposta alla corrosione	x	x
Unione esposta alla corrosione		
Unioni di elementi in acciaio resistente alla corrosione		

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
$A_{fE\ I}$	=Area di ferro effettiva totale presente nel punto di verifica, inferiore
$A_{fE\ S}$	=Area di ferro effettiva totale presente nel punto di verifica, superiore
$A_{fE\ St.}$	=Area di ferro effettiva della staffatura (d'anima per travi a T o L)
$A_{fEP\ I}$	=Area di ferro effettiva parziale presente nella CC considerata, per la sollecitazione indicata, inferiore
$A_{fEP\ S}$	=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
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.	=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
	SLV = Stato limite di salvaguardia della vita
	SND = Stato limite di salvaguardia della vita (non dissipativo)

Tipo =Tipologia
2Cdx = Doppia C lato costola
L = Sezione a L
R = Rettangolare
T = Sezione a T
Cs = C stondata
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
Xl =Coordinata progressiva (dal nodo iniziale) della fine del tratto
Xg =Coordinata progressiva (dal primo nodo) in cui viene effettuato il progetto/verifica
b =Base inferiore
bw =Larghezza membratura resistente al taglio
c =Ricoprimento dell'armatura
ctgθ =Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo
h =Altezza parte inf.
s =Distanza massima tra le barre

Travata n. 101

Nodi: 101 102 103 104 105 106 107 108 109 110

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>
17	R	30.00	73.50	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	1	SLV	1	0.00	2.26	2.26	2.26	2.26	-2798.51	-6872.41	2.456
2.05	3	SLV	2	90.00	2.26	2.26	2.26	2.26	1812.45	6872.41	3.792
2.25	1	SLV	3	10.00	2.26	2.26	2.26	2.26	-1198.89	-6872.41	5.732
3.15	1	SLV	4	0.00	2.26	2.26	2.26	2.26	1536.20	6872.41	4.474
4.60	1	SLV	4	145.00	2.26	2.26	2.26	2.26	-2944.89	-6872.41	2.334
4.90	1	SLV	5	15.00	2.26	2.26	2.26	2.26	-2894.86	-6872.41	2.374
7.25	1	SLV	6	90.00	2.26	2.26	2.26	2.26	-1301.43	-6872.41	5.281
7.45	1	SLV	7	10.00	2.26	2.26	2.26	2.26	-1310.29	-6872.41	5.245
7.85	1	SLV	7	50.00	2.26	2.26	2.26	2.26	-1347.11	-6872.41	5.102
8.25	1	SLV	7	90.00	2.26	2.26	2.26	2.26	-1347.11	-6872.41	5.102
8.45	3	SLV	8	10.00	2.26	2.26	2.26	2.26	1604.36	6872.41	4.284
9.67	1	SLV	9	31.67	2.26	2.26	2.26	2.26	-2930.39	-6872.41	2.345
10.30	1	SLV	9	95.00	2.26	2.26	2.26	2.26	-2930.39	-6872.41	2.345

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>
0.00	10	SLE R	1	0.00	2.26	2.26	887.67	-68.59	597.00	7.36
0.00	14	SLE Q	1	0.00	2.26	2.26	762.29	-58.90	512.68	6.32
2.05	10	SLE R	2	90.00	2.26	2.26	861.11	-66.53	579.14	7.14
2.05	14	SLE Q	2	90.00	2.26	2.26	732.26	-56.58	492.49	6.07
2.25	10	SLE R	3	10.00	2.26	2.26	788.34	-60.91	530.20	6.54
2.25	14	SLE Q	3	10.00	2.26	2.26	667.16	-51.55	448.70	5.53
3.15	10	SLE R	4	0.00	2.26	2.26	854.52	-66.03	574.71	7.08
3.15	14	SLE Q	4	0.00	2.26	2.26	727.07	-56.18	488.99	6.03
4.60	10	SLE R	4	145.00	2.26	2.26	-1268.86	853.38	-98.04	10.52
4.60	14	SLE Q	4	145.00	2.26	2.26	-1097.25	737.96	-84.78	9.10
4.90	10	SLE R	5	15.00	2.26	2.26	-1232.06	828.62	-95.20	10.21
4.90	14	SLE Q	5	15.00	2.26	2.26	-1064.48	715.92	-82.25	8.82
7.25	10	SLE R	6	90.00	2.26	2.26	-644.55	433.49	-49.80	5.34
7.25	14	SLE Q	6	90.00	2.26	2.26	-575.64	387.15	-44.48	4.77
7.45	10	SLE R	7	10.00	2.26	2.26	-771.18	518.66	-59.59	6.39
7.45	14	SLE Q	7	10.00	2.26	2.26	-687.70	462.51	-53.14	5.70
7.85	10	SLE R	7	50.00	2.26	2.26	-771.18	518.66	-59.59	6.39
7.85	14	SLE Q	7	50.00	2.26	2.26	-687.70	462.51	-53.14	5.70
8.25	10	SLE R	7	90.00	2.26	2.26	-753.29	506.63	-58.20	6.24
8.25	14	SLE Q	7	90.00	2.26	2.26	-672.46	452.27	-51.96	5.57
8.45	10	SLE R	8	10.00	2.26	2.26	-585.78	393.97	-45.26	4.86
8.45	14	SLE Q	8	10.00	2.26	2.26	-537.97	361.81	-41.57	4.46
9.67	10	SLE R	9	31.67	2.26	2.26	645.35	-49.86	434.03	5.35
9.67	14	SLE Q	9	31.67	2.26	2.26	547.25	-42.28	368.06	4.54
10.30	10	SLE R	9	95.00	2.26	2.26	641.53	-49.57	431.46	5.32
10.30	14	SLE Q	9	95.00	2.26	2.26	545.03	-42.11	366.56	4.52

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>
22	0.00	14	SLE Q	1	17	0.00	762.29	35.00	222.00	0.50	12.00	470.03	2.26	307.50	512.68	0.15	0.12
26	0.00	12	SLE F	1	17	0.00	771.71	35.00	222.00	0.50	12.00	470.03	2.26	307.50	519.02	0.15	0.12
54	2.05	14	SLE Q	2	17	90.00	732.26	35.00	222.00	0.50	12.00	470.03	2.26	307.50	492.49	0.14	0.11
58	2.05	12	SLE F	2	17	90.00	742.03	35.00	222.00	0.50	12.00	470.03	2.26	307.50	499.06	0.15	0.12
86	2.25	14	SLE Q	3	17	10.00	667.16	35.00	222.00	0.50	12.00	470.03	2.26	307.50	448.70	0.13	0.10

90	2.25	12	SLE F	3	17	10.00	676.56	35.00	222.00	0.50	12.00	470.03	2.26	307.50	455.02	0.13	0.11
111	3.15	14	SLE Q	4	17	0.00	727.07	35.00	222.00	0.50	12.00	470.03	2.26	307.50	488.99	0.14	0.11
113	3.15	12	SLE F	4	17	0.00	736.94	35.00	222.00	0.50	12.00	470.03	2.26	307.50	495.63	0.14	0.12
138	4.60	14	SLE Q	4	17	145.00	-1097.25	35.00	222.00	0.50	12.00	470.03	2.26	307.50	737.96	0.21	0.17
142	4.60	12	SLE F	4	17	145.00	-1110.56	35.00	222.00	0.50	12.00	470.03	2.26	307.50	746.91	0.22	0.17
170	4.90	14	SLE Q	5	17	15.00	-1064.48	35.00	222.00	0.50	12.00	470.03	2.26	307.50	715.92	0.21	0.17
174	4.90	12	SLE F	5	17	15.00	-1077.20	35.00	222.00	0.50	12.00	470.03	2.26	307.50	724.48	0.21	0.17
203	7.25	14	SLE Q	6	17	90.00	-575.64	35.00	222.00	0.50	12.00	470.03	2.26	307.50	387.15	0.11	0.09
207	7.25	12	SLE F	6	17	90.00	-581.50	35.00	222.00	0.50	12.00	470.03	2.26	307.50	391.09	0.11	0.09
225	7.45	14	SLE Q	7	17	10.00	-687.70	35.00	222.00	0.50	12.00	470.03	2.26	307.50	462.51	0.13	0.11
227	7.45	12	SLE F	7	17	10.00	-694.68	35.00	222.00	0.50	12.00	470.03	2.26	307.50	467.21	0.14	0.11
244	7.85	14	SLE Q	7	17	50.00	-687.70	35.00	222.00	0.50	12.00	470.03	2.26	307.50	462.51	0.13	0.11
246	7.85	12	SLE F	7	17	50.00	-694.68	35.00	222.00	0.50	12.00	470.03	2.26	307.50	467.21	0.14	0.11
263	8.25	14	SLE Q	7	17	90.00	-672.46	35.00	222.00	0.50	12.00	470.03	2.26	307.50	452.27	0.13	0.11
265	8.25	12	SLE F	7	17	90.00	-679.25	35.00	222.00	0.50	12.00	470.03	2.26	307.50	456.83	0.13	0.11
290	8.45	14	SLE Q	8	17	10.00	-537.97	35.00	222.00	0.50	12.00	470.03	2.26	307.50	361.81	0.11	0.08
294	8.45	12	SLE F	8	17	10.00	-542.62	35.00	222.00	0.50	12.00	470.03	2.26	307.50	364.94	0.11	0.08
318	9.67	14	SLE Q	9	17	31.67	547.25	35.00	222.00	0.50	12.00	470.03	2.26	307.50	368.06	0.11	0.09
322	9.67	12	SLE F	9	17	31.67	553.86	35.00	222.00	0.50	12.00	470.03	2.26	307.50	372.50	0.11	0.09
346	10.30	14	SLE Q	9	17	95.00	545.03	35.00	222.00	0.50	12.00	470.03	2.26	307.50	366.56	0.11	0.09
350	10.30	12	SLE F	9	17	95.00	551.53	35.00	222.00	0.50	12.00	470.03	2.26	307.50	370.93	0.11	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.
1 SLV	0.00	2.05	2.05	ø8/20 2 br.	5.03	0.30	3430.78	2.50	30030.80	36736.50	30030.80	8.753
1 SLV	2.25	2.99	0.74	ø8/20 2 br.	5.03	0.30	3135.58	2.50	30030.80	36736.50	30030.80	9.577
1 SLV	2.99	3.86	0.88	ø8/20 2 br.	5.03	0.30	2313.66	2.50	30030.80	36736.50	30030.80	12.980
7 SLU	3.86	4.60	0.74	ø8/20 2 br.	5.03	0.30	4054.48	2.50	30030.80	36736.50	30030.80	7.407
7 SLU	4.90	5.64	0.74	ø8/20 2 br.	5.03	0.30	3888.61	2.50	30030.80	36736.50	30030.80	7.723
1 SLV	5.64	6.51	0.88	ø8/20 2 br.	5.03	0.30	2159.76	2.50	30030.80	36736.50	30030.80	13.905
7 SLU	6.51	7.25	0.74	ø8/20 2 br.	5.03	0.30	3220.83	2.50	30030.80	36736.50	30030.80	9.324
1 SLV	7.45	8.25	0.80	ø8/20 2 br.	5.03	0.30	1983.57	2.50	30030.80	36736.50	30030.80	15.140
1 SLV	8.45	10.30	1.85	ø8/20 2 br.	5.03	0.30	3674.06	2.50	30030.80	36736.50	30030.80	8.174

Travata n. 102

Nodi: 114 -752 -753 -754 -755 -756 -757 -758 -759 -760 115 116 -761 -762 -763 -764 117 118 -765 -766 -767 -768 -769 -770 -771 119

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
16	L	30.00	37.50	16.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09
27	R	45.00		40.00		4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
1.52	1	SLV	4	0.00	3.08	3.08	3.08	3.08	-5986.27	-6949.94	1.161
3.42	1	SLV	7	57.50	3.08	3.08	3.08	3.08	4366.62	6869.64	1.573
4.90	1	SLV	11	15.00	3.08	3.08	3.08	3.08	-5904.23	-6949.94	1.177
7.85	1	SLV	11	309.75	3.08	3.08	3.08	3.08	-5293.04	-6949.94	1.313
8.18	1	SLV	11	342.50	3.08	3.08	3.08	3.08	-5293.04	-6949.94	1.313
10.60	5	SLU	17	15.00	3.08	3.08	3.08	3.08	182.73	4856.77	26.580
10.98	5	SLU	17	53.33	3.08	3.08	3.08	3.08	200.48	4856.77	24.225
11.75	5	SLU	17	130.00	3.08	3.08	3.08	3.08	182.73	4856.77	26.579
13.18	1	SLV	21	0.00	3.08	3.08	3.08	3.08	-2593.95	-4856.77	1.872
15.02	1	SLV	21	184.29	3.08	3.08	3.08	3.08	-3076.16	-4856.77	1.579
15.32	1	SLV	21	215.00	3.08	3.08	3.08	3.08	-3076.16	-4856.77	1.579

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	My <daNm>	σ _E sup <daN/cm>	σ _E inf <daN/cm>	σ _E <daN/cm>
1.52	10	SLE R	4	0.00	3.08	3.08	-892.97	596.76	-76.59	8.96
1.52	14	SLE Q	4	0.00	3.08	3.08	-790.82	528.50	-67.83	7.93
3.42	10	SLE R	7	57.50	3.08	3.08	122.10	-12.47	82.05	1.37
3.42	14	SLE Q	7	57.50	3.08	3.08	101.56	-10.38	68.25	1.14
4.90	8	SLE R	11	15.00	3.08	3.08	-1832.94	1224.92	-157.20	18.38
4.90	14	SLE Q	11	15.00	3.08	3.08	-1695.39	1133.00	-145.41	17.00
7.85	8	SLE R	11	309.75	3.08	3.08	1050.10	-107.28	705.66	11.80
7.85	14	SLE Q	11	309.75	3.08	3.08	967.63	-98.85	650.24	10.87
8.18	10	SLE R	11	342.50	3.08	3.08	-925.79	618.69	-79.40	9.29
8.18	14	SLE Q	11	342.50	3.08	3.08	-834.70	557.82	-71.59	8.37
10.60	8	SLE R	17	15.00	3.08	3.08	136.73	-14.60	133.36	2.25
10.60	14	SLE Q	17	15.00	3.08	3.08	126.79	-13.54	123.66	2.08
10.98	8	SLE R	17	53.33	3.08	3.08	150.02	-16.02	146.32	2.46
10.98	14	SLE Q	17	53.33	3.08	3.08	139.11	-14.85	135.68	2.28
11.75	8	SLE R	17	130.00	3.08	3.08	136.73	-14.60	133.36	2.25
11.75	14	SLE Q	17	130.00	3.08	3.08	126.79	-13.54	123.66	2.08
13.18	8	SLE R	21	0.00	3.08	3.08	-184.71	180.15	-19.72	3.03
13.18	14	SLE Q	21	0.00	3.08	3.08	-180.20	175.75	-19.24	2.96
15.02	8	SLE R	21	184.29	3.08	3.08	-392.13	382.45	-41.87	6.44
15.02	14	SLE Q	21	184.29	3.08	3.08	-355.64	346.87	-37.98	5.84
15.32	8	SLE R	21	215.00	3.08	3.08	-392.13	382.45	-41.87	6.44
15.32	14	SLE Q	21	215.00	3.08	3.08	-355.64	346.87	-37.98	5.84

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>
15	1.52	14	SLE Q	4	16	0.00	-790.82	34.00	220.00	0.50	14.00	348.47	3.08	307.50	528.50	0.15	0.09
17	1.52	12	SLE F	4	16	0.00	-800.12	34.00	220.00	0.50	14.00	348.47	3.08	307.50	534.71	0.16	0.09
40	3.42	14	SLE Q	7	16	57.50	101.56	34.00	295.00	0.50	14.00	341.94	3.08	384.38	68.25	0.02	0.01
46	3.42	13	SLE F	7	16	57.50	101.56	34.00	295.00	0.50	14.00	341.94	3.08	384.38	68.25	0.02	0.01
62	4.90	14	SLE Q	11	16	15.00	-1695.39	34.00	220.00	0.50	14.00	348.47	3.08	307.50	1133.00	0.33	0.20
63	4.90	11	SLE F	11	16	15.00	-1729.58	34.00	220.00	0.50	14.00	348.47	3.08	307.50	1155.85	0.34	0.20
89	7.85	14	SLE Q	11	16	309.75	967.63	34.00	295.00	0.50	14.00	341.94	3.08	384.38	650.24	0.19	0.11
91	7.85	11	SLE F	11	16	309.75	987.03	34.00	295.00	0.50	14.00	341.94	3.08	384.38	663.28	0.19	0.11
118	8.18	14	SLE Q	11	16	342.50	-834.70	34.00	220.00	0.50	14.00	348.47	3.08	307.50	557.82	0.16	0.10
120	8.18	11	SLE F	11	16	342.50	-854.07	34.00	220.00	0.50	14.00	348.47	3.08	307.50	570.76	0.17	0.10
154	10.60	14	SLE Q	17	27	15.00	126.79	34.00	370.00	0.50	14.00	277.74	3.08	461.25	123.66	0.04	0.02
156	10.60	11	SLE F	17	27	15.00	129.28	34.00	370.00	0.50	14.00	277.74	3.08	461.25	126.08	0.04	0.02
190	10.98	14	SLE Q	17	27	53.33	139.11	34.00	370.00	0.50	14.00	277.74	3.08	461.25	135.68	0.04	0.02
192	10.98	11	SLE F	17	27	53.33	141.84	34.00	370.00	0.50	14.00	277.74	3.08	461.25	138.34	0.04	0.02
212	11.75	14	SLE Q	17	27	130.00	126.79	34.00	370.00	0.50	14.00	277.74	3.08	461.25	123.66	0.04	0.02
213	11.75	11	SLE F	17	27	130.00	129.28	34.00	370.00	0.50	14.00	277.74	3.08	461.25	126.08	0.04	0.02
238	13.18	14	SLE Q	21	27	0.00	-180.20	34.00	370.00	0.50	14.00	277.74	3.08	461.25	175.75	0.05	0.02
240	13.18	11	SLE F	21	27	0.00	-181.73	34.00	370.00	0.50	14.00	277.74	3.08	461.25	177.24	0.05	0.02
267	15.02	14	SLE Q	21	27	184.29	-355.64	34.00	370.00	0.50	14.00	277.74	3.08	461.25	346.87	0.10	0.05
269	15.02	11	SLE F	21	27	184.29	-363.48	34.00	370.00	0.50	14.00	277.74	3.08	461.25	354.51	0.10	0.05
289	15.32	14	SLE Q	21	27	215.00	-355.64	34.00	370.00	0.50	14.00	277.74	3.08	461.25	346.87	0.10	0.05
290	15.32	11	SLE F	21	27	215.00	-363.48	34.00	370.00	0.50	14.00	277.74	3.08	461.25	354.51	0.10	0.05

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	1.52	2.08	0.56	ø8/20 2 br.	5.03	0.30	6200.68	2.50	22458.20	27473.00	22458.20	3.622
1 SLV	2.08	2.87	0.78	ø8/20 2 br.	5.03	0.30	5633.88	2.50	22458.20	27473.00	22458.20	3.986
1 SLV	2.87	3.42	0.56	ø8/20 2 br.	5.03	0.30	5449.59	2.50	22458.20	27473.00	22458.20	4.121
1 SLV	4.90	5.46	0.56	ø8/20 2 br.	5.03	0.30	5879.57	2.50	22458.20	27473.00	22458.20	3.820
1 SLV	5.46	7.62	2.15	ø8/20 2 br.	5.03	0.30	4863.68	2.50	22458.20	27473.00	22458.20	4.618
1 SLV	7.62	8.18	0.56	ø8/20 2 br.	5.03	0.30	5353.96	2.50	22458.20	27473.00	22458.20	4.195
5 SLU	10.60	11.75	1.15	ø8/20 2 br.	5.03	0.45	633.94	2.50	15534.70	28505.20	15534.70	24.505
1 SLV	13.18	13.57	0.40	ø8/20 2 br.	5.03	0.45	3128.36	2.50	15534.70	28505.20	15534.70	4.966
1 SLV	13.57	14.93	1.35	ø8/20 2 br.	5.03	0.45	2985.56	2.50	15534.70	28505.20	15534.70	5.203
1 SLV	14.93	15.32	0.40	ø8/20 2 br.	5.03	0.45	3291.57	2.50	15534.70	28505.20	15534.70	4.720

Travata n. 103

Nodi: 121 -786 -787 -788 -789 122 -1097 123

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>
8R	30.00	33.50	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
1.52	1	SLV	5	0.00	2.26	2.26	2.26	2.26	-1170.17	-2891.38	2.471
4.98	1	SLV	5	345.97	2.26	2.26	2.26	2.26	-804.26	-2891.38	3.595
6.00	1	SLV	5	447.50	2.26	2.26	2.26	2.26	-1382.75	-2891.38	2.091
6.30	1	SLV	6	30.00	2.26	2.26	2.26	2.26	-1384.29	-2891.38	2.089
10.60	3	SLV	7	-10.00	2.26	2.26	2.26	2.26	-1035.43	-2891.38	2.792

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>
1.52	10	SLE R	5	0.00	2.26	2.26	-440.49	722.85	-83.93	14.31
1.52	14	SLE Q	5	0.00	2.26	2.26	-424.77	697.05	-80.94	13.80
4.98	10	SLE R	5	345.97	2.26	2.26	135.77	-25.87	222.79	4.41
4.98	14	SLE Q	5	345.97	2.26	2.26	131.62	-25.08	216.00	4.28
6.00	8	SLE R	5	447.50	2.26	2.26	-399.94	656.31	-76.21	12.99
6.00	14	SLE Q	5	447.50	2.26	2.26	-402.86	661.09	-76.76	13.09
6.30	10	SLE R	6	30.00	2.26	2.26	-530.21	870.08	-101.03	17.23
6.30	14	SLE Q	6	30.00	2.26	2.26	-514.70	844.62	-98.07	16.72
10.60	10	SLE R	7	-10.00	2.26	2.26	-403.42	662.01	-76.87	13.11
10.60	14	SLE Q	7	-10.00	2.26	2.26	-390.80	641.30	-74.46	12.70

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>
15	1.52	14	SLE Q	5	8	0.00	-424.77	35.00	222.00	0.50	12.00	212.01	2.26	267.68	697.05	0.20	0.07
17	1.52	12	SLE F	5	8	0.00	-426.47	35.00	222.00	0.50	12.00	212.01	2.26	267.68	699.84	0.20	0.07
42	4.98	14	SLE Q	5	8	345.97	131.62	35.00	222.00	0.50	12.00	212.01	2.26	267.68	216.00	0.06	0.02
46	4.98	12	SLE F	5	8	345.97	132.06	35.00	222.00	0.50	12.00	212.01	2.26	267.68	216.72	0.06	0.02
63	6.00	14	SLE Q	5	8	447.50	-402.86	35.00	222.00	0.50	12.00	212.01	2.26	267.68	661.09	0.19	0.07
64	6.00	11	SLE F	5	8	447.50	-402.94	35.00	222.00	0.50	12.00	212.01	2.26	267.68	661.23	0.19	0.07
81	6.30	14	SLE Q	6	8	30.00	-514.70	35.00	222.00	0.50	12.00	212.01	2.26	267.68	844.62	0.25	0.09
83	6.30	12	SLE F	6	8	30.00	-516.61	35.00	222.00	0.50	12.00	212.01	2.26	267.68	847.76	0.25	0.09
102	10.60	14	SLE Q	7	8	-10.00	-390.80	35.00	222.00	0.50	12.00	212.01	2.26	267.68	641.30	0.19	0.07

104	10.60	12	SLE F	7	8	-10.00	-392.62	35.00	222.00	0.50	12.00	212.01	2.26	267.68	644.30	0.19	0.07
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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	1.52	1.86	0.34	ø8/20 2 br.	5.03	0.30	946.74	2.50	12722.00	15562.70	12722.00	13.438
1 SLV	1.86	5.67	3.80	ø8/20 2 br.	5.03	0.30	862.57	2.50	12722.00	15562.70	12722.00	14.749
1 SLV	5.67	6.00	0.34	ø8/20 2 br.	5.03	0.30	936.95	2.50	12722.00	15562.70	12722.00	13.578
1 SLV	6.30	6.63	0.34	ø8/20 2 br.	5.03	0.30	1005.41	2.50	12722.00	15562.70	12722.00	12.653
1 SLV	6.63	10.27	3.63	ø8/20 2 br.	5.03	0.30	921.24	2.50	12722.00	15562.70	12722.00	13.810
1 SLV	10.27	10.60	0.34	ø8/20 2 br.	5.03	0.30	774.60	2.50	12722.00	15562.70	12722.00	16.424

Travata n. 105

Nodi: 148 -806 -807 -808 -809 -810 -811 -812 128 -813 -814 -815 -816 129 130 -817 -818 -819 -820 -821 -822 -823 131

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
13L	L	30.00	45.00	16.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CCT	CC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfeP S <cmq>	AfeP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
1.521	SLV	5	160.00	3.08	3.08	3.08	3.08	3.08	-3934.43	-7024.22	1.785
3.121	SLV	5	0.00	3.08	3.08	3.08	3.08	3.08	-4132.37	-7024.22	1.700
4.601	SLV	9	15.00	3.08	3.08	3.08	3.08	3.08	-5266.53	-7024.22	1.334
6.701	SLV	10	32.50	3.08	3.08	3.08	3.08	3.08	-4776.56	-7024.22	1.471
7.031	SLV	10	0.00	3.08	3.08	3.08	3.08	3.08	-4776.56	-7024.22	1.471
8.531	SLV	14	422.50	3.08	3.08	3.08	3.08	3.08	-4960.80	-7024.22	1.416
9.151	SLV	14	359.81	3.08	3.08	3.08	3.08	3.08	-4763.62	-7024.22	1.475
12.601	SLV	14	15.00	3.08	3.08	3.08	3.08	3.08	-4367.84	-7024.22	1.608
14.071	SLV	18	125.00	3.08	3.08	3.08	3.08	3.08	-4255.06	-7024.22	1.651
15.011	SLV	18	31.25	3.08	3.08	3.08	3.08	3.08	-5946.11	-7024.22	1.181
15.321	SLV	18	0.00	3.08	3.08	3.08	3.08	3.08	-5946.11	-7024.22	1.181

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>
1.528	SLE R	5	160.00	3.08	3.08	3.08	356.45	-36.41	239.53	4.01
1.5214	SLE Q	5	160.00	3.08	3.08	3.08	328.52	-33.56	220.77	3.69
3.1210	SLE R	5	0.00	3.08	3.08	3.08	-422.65	281.20	-31.12	3.86
3.1214	SLE Q	5	0.00	3.08	3.08	3.08	-389.99	259.47	-28.72	3.56
4.6010	SLE R	9	15.00	3.08	3.08	3.08	-1069.15	711.34	-78.73	9.77
4.6014	SLE Q	9	15.00	3.08	3.08	3.08	-991.30	659.54	-73.00	9.06
6.7010	SLE R	10	32.50	3.08	3.08	3.08	814.95	-83.26	547.64	9.16
6.7014	SLE Q	10	32.50	3.08	3.08	3.08	738.67	-75.46	496.38	8.30
7.0310	SLE R	10	0.00	3.08	3.08	3.08	513.44	-52.45	345.03	5.77
7.038	SLE R	10	0.00	3.08	3.08	3.08	-588.93	391.83	-43.37	5.38
7.0314	SLE Q	10	0.00	3.08	3.08	3.08	464.72	-47.48	312.29	5.22
8.5310	SLE R	14	422.50	3.08	3.08	3.08	-1908.49	1269.77	-140.54	17.43
8.5314	SLE Q	14	422.50	3.08	3.08	3.08	-1705.53	1134.74	-125.59	15.58
9.1510	SLE R	14	359.81	3.08	3.08	3.08	-1760.72	1171.46	-129.65	16.08
9.1514	SLE Q	14	359.81	3.08	3.08	3.08	-1572.45	1046.20	-115.79	14.36
12.6010	SLE R	14	15.00	3.08	3.08	3.08	-1721.09	1145.09	-126.74	15.72
12.6014	SLE Q	14	15.00	3.08	3.08	3.08	-1553.46	1033.56	-114.39	14.19
14.0710	SLE R	18	125.00	3.08	3.08	3.08	-412.39	274.38	-30.37	3.77
14.0714	SLE Q	18	125.00	3.08	3.08	3.08	-385.10	256.22	-28.36	3.52
15.0110	SLE R	18	31.25	3.08	3.08	3.08	-925.56	615.80	-68.16	8.45
15.0114	SLE Q	18	31.25	3.08	3.08	3.08	-831.73	553.37	-61.25	7.60
15.3210	SLE R	18	0.00	3.08	3.08	3.08	-925.56	615.80	-68.16	8.45
15.3214	SLE Q	18	0.00	3.08	3.08	3.08	-831.73	553.37	-61.25	7.60

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>
24	1.5214	SLE Q	5	13	160.00	328.52	34.00	370.00	0.50	14.00	341.94	3.08	461.25	220.77	0.06	0.04	
26	1.5211	SLE F	5	13	160.00	336.61	34.00	370.00	0.50	14.00	341.94	3.08	461.25	226.20	0.07	0.04	
54	3.1214	SLE Q	5	13	0.00	-389.99	34.00	220.00	0.50	14.00	353.53	3.08	307.50	259.47	0.08	0.05	
56	3.1211	SLE F	5	13	0.00	-396.45	34.00	220.00	0.50	14.00	353.53	3.08	307.50	263.77	0.08	0.05	
75	4.6014	SLE Q	9	13	15.00	-991.30	34.00	220.00	0.50	14.00	353.53	3.08	307.50	659.54	0.19	0.12	
76	4.6011	SLE F	9	13	15.00	-1008.57	34.00	220.00	0.50	14.00	353.53	3.08	307.50	671.03	0.20	0.12	
102	6.7014	SLE Q	10	13	32.50	738.67	34.00	370.00	0.50	14.00	341.94	3.08	461.25	496.38	0.14	0.08	
104	6.7011	SLE F	10	13	32.50	750.08	34.00	370.00	0.50	14.00	341.94	3.08	461.25	504.05	0.15	0.09	
133	7.0314	SLE Q	10	13	0.00	-533.49	34.00	220.00	0.50	14.00	353.53	3.08	307.50	354.95	0.10	0.06	
135	7.0311	SLE F	10	13	0.00	-548.42	34.00	220.00	0.50	14.00	353.53	3.08	307.50	364.88	0.11	0.06	
156	8.5314	SLE Q	14	13	422.50	-1705.53	34.00	220.00	0.50	14.00	353.53	3.08	307.50	1134.74	0.33	0.20	
157	8.5311	SLE F	14	13	422.50	-1724.63	34.00	220.00	0.50	14.00	353.53	3.08	307.50	1147.45	0.33	0.20	
184	9.1514	SLE Q	14	13	359.81	-1572.45	34.00	220.00	0.50	14.00	353.53	3.08	307.50	1046.20	0.30	0.18	
186	9.1511	SLE F	14	13	359.81	-1590.12	34.00	220.00	0.50	14.00	353.53	3.08	307.50	1057.95	0.31	0.19	
209	12.6014	SLE Q	14	13	15.00	-1553.46	34.00	220.00	0.50	14.00	353.53	3.08	307.50	1033.56	0.30	0.18	
210	12.6011	SLE F	14	13	15.00	-1560.42	34.00	220.00	0.50	14.00	353.53	3.08	307.50	1038.19	0.30	0.18	
227	14.0714	SLE Q	18	13	125.00	-385.10	34.00	220.00	0.50	14.00	353.53	3.08	307.50	256.22	0.07	0.04	
228	14.0711	SLE F	18	13	125.00	-390.55	34.00	220.00	0.50	14.00	353.53	3.08	307.50	259.84	0.08	0.05	
246	15.0114	SLE Q	18	13	31.25	-831.73	34.00	220.00	0.50	14.00	353.53	3.08	307.50	553.37	0.16	0.10	

248	15.01	12	SLE F	18	13	31.25	-842.51	34.00	220.00	0.50	14.00	353.53	3.08	307.50	560.55	0.16	0.10
265	15.32	14	SLE Q	18	13	0.00	-831.73	34.00	220.00	0.50	14.00	353.53	3.08	307.50	553.37	0.16	0.10
267	15.32	12	SLE F	18	13	0.00	-842.51	34.00	220.00	0.50	14.00	353.53	3.08	307.50	560.55	0.16	0.10

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	1.52	3.12	1.60	ø8/20 2 br.	5.03	0.30	6338.33	2.50	22458.20	27473.00	22458.20	3.543
1 SLV	4.60	5.16	0.56	ø8/20 2 br.	5.03	0.30	6965.17	2.50	22458.20	27473.00	22458.20	3.224
1 SLV	5.16	6.46	1.30	ø8/20 2 br.	5.03	0.30	4889.60	2.50	22458.20	27473.00	22458.20	4.593
1 SLV	6.46	7.03	0.56	ø8/20 2 br.	5.03	0.30	5708.71	2.50	22458.20	27473.00	22458.20	3.934
7 SLU	8.53	9.09	0.56	ø8/20 2 br.	5.03	0.30	4618.90	2.50	22458.20	27473.00	22458.20	4.862
1 SLV	9.09	12.04	2.95	ø8/20 2 br.	5.03	0.30	3764.94	2.50	22458.20	27473.00	22458.20	5.965
1 SLV	12.04	12.60	0.56	ø8/20 2 br.	5.03	0.30	4538.70	2.50	22458.20	27473.00	22458.20	4.948
1 SLV	14.07	15.32	1.25	ø8/20 2 br.	5.03	0.30	8486.50	2.50	22458.20	27473.00	22458.20	2.646

Travata n. 106

Nodi: 135 136

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>
11	R	30.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.30	1	SLV	1	30.00	2.26	3.39	2.26	3.39	-678.48	-3546.42	5.227
3.00	7	SLU	1	300.00	2.26	3.39	2.26	3.39	-1163.34	-3546.42	3.048

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>
0.30	8	SLE R	1	30.00	2.26	3.39	-43.60	58.09	-6.56	0.99
0.30	14	SLE Q	1	30.00	2.26	3.39	-49.60	66.10	-7.46	1.13
3.00	10	SLE R	1	300.00	2.26	3.39	-874.30	1165.04	-131.57	19.92
3.00	14	SLE Q	1	300.00	2.26	3.39	-740.73	987.05	-111.47	16.87

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>
15	0.30	14	SLE Q	1	11	30.00	-49.60	35.00	222.00	0.50	12.00	245.05	2.26	307.50	66.10	0.02	0.01
18	0.30	13	SLE F	1	11	30.00	-49.60	35.00	222.00	0.50	12.00	245.05	2.26	307.50	66.10	0.02	0.01
33	3.00	14	SLE Q	1	11	300.00	-740.73	35.00	222.00	0.50	12.00	245.05	2.26	307.50	987.05	0.29	0.12
35	3.00	12	SLE F	1	11	300.00	-752.23	35.00	222.00	0.50	12.00	245.05	2.26	307.50	1002.38	0.29	0.12

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	0.30	0.70	0.40	ø8/20 2 br.	5.03	0.30	526.84	2.50	15534.70	19003.50	15534.70	29.487
1 SLV	0.70	2.60	1.90	ø8/20 2 br.	5.03	0.30	918.78	2.50	15534.70	19003.50	15534.70	16.908
1 SLV	2.60	3.00	0.40	ø8/20 2 br.	5.03	0.30	1038.78	2.50	15534.70	19003.50	15534.70	14.955

Travata n. 107

Nodi: 137 138 139 140 141 142 143

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>
12	R	30.00	28.50	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.15	7	SLU	1	15.00	8.64	4.62	8.64	4.62	-5857.28	-8100.47	1.383
0.30	7	SLU	1	30.00	8.64	4.62	8.64	4.62	-5664.87	-8100.47	1.430
2.06	7	SLU	1	206.25	4.62	4.62	4.62	4.62	2868.06	4537.60	1.582
4.12	7	SLU	1	412.50	4.62	4.62	4.62	4.62	-3494.70	-4537.60	1.298
4.33	7	SLU	2	10.00	4.62	4.62	4.62	4.62	-2109.36	-4537.60	2.151
6.20	7	SLU	2	197.50	9.24	9.24	9.24	9.24	-1669.14	-8660.45	5.189
6.50	7	SLU	3	15.00	9.24	9.24	9.24	9.24	-3788.29	-8660.45	2.286
8.40	7	SLU	3	205.41	4.62	4.62	4.62	4.62	2840.80	4537.60	1.597
10.32	7	SLU	3	397.50	4.62	4.62	4.62	4.62	-3490.37	-4537.60	1.300
10.53	7	SLU	4	10.00	4.62	4.62	4.62	4.62	-2103.79	-4537.60	2.157
12.40	7	SLU	4	197.50	9.24	9.24	9.24	9.24	-1623.73	-8660.45	5.334
12.70	7	SLU	5	15.00	9.24	9.24	9.24	9.24	-3767.42	-8660.45	2.299
14.59	7	SLU	5	203.94	4.62	4.62	4.62	4.62	2795.51	4537.60	1.623
16.52	7	SLU	5	397.50	4.62	4.62	4.62	4.62	-3592.45	-4537.60	1.263
16.73	7	SLU	6	10.00	4.62	4.62	4.62	4.62	-2478.20	-4537.60	1.831
18.01	3	SLV	6	138.82	4.62	4.62	4.62	4.62	480.95	4537.60	9.435
18.75	3	SLV	6	212.50	4.62	4.62	4.62	4.62	-803.30	-4537.60	5.649

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>
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0.15	10	SLE R	1	15.00	8.64	4.62	-4392.59	2429.86	-975.32	110.87
0.15	14	SLE Q	1	15.00	8.64	4.62	-3658.15	2023.58	-812.25	92.33
0.30	10	SLE R	1	30.00	8.64	4.62	-4248.31	2350.05	-943.29	107.23
0.30	14	SLE Q	1	30.00	8.64	4.62	-3538.03	1957.14	-785.58	89.30
2.06	10	SLE R	1	206.25	4.62	4.62	2150.64	-475.00	2167.57	67.25
2.06	14	SLE Q	1	206.25	4.62	4.62	1789.46	-395.23	1803.55	55.95
4.12	10	SLE R	1	412.50	4.62	4.62	-2620.62	2641.26	-578.81	81.94
4.12	14	SLE Q	1	412.50	4.62	4.62	-2181.16	2198.33	-481.74	68.20
4.33	10	SLE R	2	10.00	4.62	4.62	-1581.47	1593.92	-349.29	49.45
4.33	14	SLE Q	2	10.00	4.62	4.62	-1314.29	1324.64	-290.28	41.10
6.20	10	SLE R	2	197.50	9.24	9.24	-1251.59	647.89	-230.86	27.22
6.20	14	SLE Q	2	197.50	9.24	9.24	-1041.06	538.91	-192.03	22.64
6.50	10	SLE R	3	15.00	9.24	9.24	-2841.11	1470.72	-524.05	61.80
6.50	14	SLE Q	3	15.00	9.24	9.24	-2366.83	1225.21	-436.56	51.48
8.40	10	SLE R	3	205.41	4.62	4.62	2130.23	-470.49	2147.00	66.61
8.40	14	SLE Q	3	205.41	4.62	4.62	1772.60	-391.51	1786.56	55.43
10.32	10	SLE R	3	397.50	4.62	4.62	-2617.27	2637.88	-578.07	81.84
10.32	14	SLE Q	3	397.50	4.62	4.62	-2177.86	2195.01	-481.01	68.10
10.53	10	SLE R	4	10.00	4.62	4.62	-1577.15	1589.57	-348.34	49.32
10.53	14	SLE Q	4	10.00	4.62	4.62	-1309.69	1320.01	-289.27	40.95
12.40	10	SLE R	4	197.50	9.24	9.24	-1217.77	630.39	-224.62	26.49
12.40	14	SLE Q	4	197.50	9.24	9.24	-1014.28	525.05	-187.09	22.06
12.70	10	SLE R	5	15.00	9.24	9.24	-2825.44	1462.61	-521.16	61.45
12.70	14	SLE Q	5	15.00	9.24	9.24	-2353.76	1218.44	-434.15	51.20
14.59	10	SLE R	5	203.94	4.62	4.62	2096.27	-463.00	2112.78	65.55
14.59	14	SLE Q	5	203.94	4.62	4.62	1744.39	-385.28	1758.13	54.55
16.52	10	SLE R	5	397.50	4.62	4.62	-2693.81	2715.01	-594.97	84.23
16.52	14	SLE Q	5	397.50	4.62	4.62	-2241.48	2259.13	-495.07	70.09
16.73	10	SLE R	6	10.00	4.62	4.62	-1857.66	1872.29	-410.29	58.09
16.73	14	SLE Q	6	10.00	4.62	4.62	-1543.03	1555.17	-340.80	48.25
18.01	10	SLE R	6	138.82	4.62	4.62	290.08	-64.07	292.37	9.07
18.01	14	SLE Q	6	138.82	4.62	4.62	240.43	-53.10	242.32	7.52
18.75	10	SLE R	6	212.50	4.62	4.62	-425.92	429.27	-94.07	13.32
18.75	14	SLE Q	6	212.50	4.62	4.62	-357.89	360.71	-79.05	11.19

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>
15	0.15	14	SLE Q	1	12	15.00	-3658.15	33.60	55.00	0.50	14.86	99.18	8.64	185.86	2023.59	0.86	0.15
17	0.15	12	SLE F	1	12	15.00	-3719.87	33.60	55.00	0.50	14.86	99.18	8.64	185.86	2057.73	0.82	0.14
33	0.30	14	SLE Q	1	12	30.00	-3538.03	33.60	55.00	0.50	14.86	99.18	8.64	185.86	1957.14	0.83	0.14
35	0.30	12	SLE F	1	12	30.00	-3597.72	33.60	55.00	0.50	14.86	99.18	8.64	185.86	1990.16	0.79	0.13
51	2.06	14	SLE Q	1	12	206.25	1789.46	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1803.55	0.66	0.15
53	2.06	12	SLE F	1	12	206.25	1819.90	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1834.22	0.57	0.13
69	4.12	14	SLE Q	1	12	412.50	-2181.16	34.00	110.00	0.50	14.00	130.91	4.62	207.51	2198.33	0.85	0.19
71	4.12	12	SLE F	1	12	412.50	-2218.25	34.00	110.00	0.50	14.00	130.91	4.62	207.51	2235.71	0.76	0.17
87	4.33	14	SLE Q	2	12	10.00	-1314.29	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1324.64	0.43	0.10
89	4.33	12	SLE F	2	12	10.00	-1336.78	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1347.30	0.39	0.09
105	6.20	14	SLE Q	2	12	197.50	-1041.06	34.00	44.00	0.50	14.00	96.90	9.24	190.67	538.91	0.16	0.03
107	6.20	12	SLE F	2	12	197.50	-1058.83	34.00	44.00	0.50	14.00	96.90	9.24	190.67	548.11	0.16	0.03
123	6.50	14	SLE Q	3	12	15.00	-2366.83	34.00	44.00	0.50	14.00	96.90	9.24	190.67	1225.21	0.48	0.08
125	6.50	12	SLE F	3	12	15.00	-2406.75	34.00	44.00	0.50	14.00	96.90	9.24	190.67	1245.87	0.43	0.07
141	8.40	14	SLE Q	3	12	205.41	1772.60	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1786.56	0.65	0.14
143	8.40	12	SLE F	3	12	205.41	1802.72	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1816.92	0.56	0.12
159	10.32	14	SLE Q	3	12	397.50	-2177.86	34.00	110.00	0.50	14.00	130.91	4.62	207.51	2195.01	0.85	0.19
161	10.32	12	SLE F	3	12	397.50	-2214.88	34.00	110.00	0.50	14.00	130.91	4.62	207.51	2232.31	0.76	0.17
177	10.53	14	SLE Q	4	12	10.00	-1309.69	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1320.01	0.42	0.09
179	10.53	12	SLE F	4	12	10.00	-1332.19	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1342.68	0.39	0.09
195	12.40	14	SLE Q	4	12	197.50	-1014.28	34.00	44.00	0.50	14.00	96.90	9.24	190.67	525.05	0.15	0.03
197	12.40	12	SLE F	4	12	197.50	-1031.47	34.00	44.00	0.50	14.00	96.90	9.24	190.67	533.95	0.16	0.03
213	12.70	14	SLE Q	5	12	15.00	-2353.76	34.00	44.00	0.50	14.00	96.90	9.24	190.67	1218.44	0.48	0.08
215	12.70	12	SLE F	5	12	15.00	-2393.46	34.00	44.00	0.50	14.00	96.90	9.24	190.67	1238.99	0.43	0.07
231	14.59	14	SLE Q	5	12	203.94	1744.39	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1758.13	0.64	0.14
233	14.59	12	SLE F	5	12	203.94	1774.04	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1788.00	0.54	0.12
249	16.52	14	SLE Q	5	12	397.50	-2241.48	34.00	110.00	0.50	14.00	130.91	4.62	207.51	2259.13	0.88	0.20
251	16.52	12	SLE F	5	12	397.50	-2279.58	34.00	110.00	0.50	14.00	130.91	4.62	207.51	2297.52	0.79	0.18
267	16.73	14	SLE Q	6	12	10.00	-1543.03	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1555.17	0.54	0.12
269	16.73	12	SLE F	6	12	10.00	-1569.42	34.00	110.00	0.50	14.00	130.91	4.62	207.51	1581.78	0.46	0.10
289	18.01	14	SLE Q	6	12	138.82	240.43	34.00	110.00	0.50	14.00	130.91	4.62	207.51	242.32	0.07	0.02
291	18.01	12	SLE F	6	12	138.82	244.48	34.00	110.00	0.50	14.00	130.91	4.62	207.51	246.40	0.07	0.02
309	18.75	14	SLE Q	6	12	212.50	-357.89	34.00	110.00	0.50	14.00	130.91	4.62	207.51	360.71	0.11	0.02
311	18.75	12	SLE F	6	12	212.50	-363.87	34.00	110.00	0.50	14.00	130.91	4.62	207.51	366.74	0.11	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.
7 SLU	0.30	0.58	0.28	ø8/20 2 br.	5.03	0.30	6568.11	2.50	10558.40	12916.00	10558.40	1.608
7 SLU	0.58	3.84	3.25	ø8/20 2 br.	5.03	0.30	5598.64	2.50	10558.40	12916.00	10558.40	1.886
7 SLU	3.84	4.12	0.28	ø8/20 2 br.	5.03	0.30	6443.11	2.50	10558.40	12916.00	10558.40	1.639
7 SLU	4.33	4.61	0.28	ø8/20 2 br.	5.03	0.30	3423.81	2.50	10558.40	12916.00	10558.40	3.084
7 SLU	4.61	5.92	1.30	ø8/20 2 br.	5.03	0.30	2454.34	2.50	10558.40	12916.00	10558.40	4.302
7 SLU	5.92	6.20	0.28	ø8/20 2 br.	5.03	0.30	2954.24	2.50	10558.40	12916.00	10558.40	3.574
7 SLU	6.50	6.79	0.28	ø8/20 2 br.	5.03	0.30	6583.50	2.50	10558.40	12916.00	10558.40	1.604
7 SLU	6.79	10.04	3.25	ø8/20 2 br.	5.03	0.30	5614.03	2.50	10558.40	12916.00	10558.40	1.881

7 SLU	10.04	10.32	0.28	ø8/20 2 br.	5.03	0.30	6427.73	2.50	10558.40	12916.00	10558.40	1.643
7 SLU	10.53	10.81	0.28	ø8/20 2 br.	5.03	0.30	3445.06	2.50	10558.40	12916.00	10558.40	3.065
7 SLU	10.81	12.12	1.30	ø8/20 2 br.	5.03	0.30	2475.58	2.50	10558.40	12916.00	10558.40	4.265
7 SLU	12.12	12.40	0.28	ø8/20 2 br.	5.03	0.30	2933.00	2.50	10558.40	12916.00	10558.40	3.600
7 SLU	12.70	12.98	0.28	ø8/20 2 br.	5.03	0.30	6551.36	2.50	10558.40	12916.00	10558.40	1.612
7 SLU	12.98	16.24	3.25	ø8/20 2 br.	5.03	0.30	5581.88	2.50	10558.40	12916.00	10558.40	1.892
7 SLU	16.24	16.52	0.28	ø8/20 2 br.	5.03	0.30	6459.87	2.50	10558.40	12916.00	10558.40	1.634
7 SLU	16.73	17.01	0.28	ø8/20 2 br.	5.03	0.30	4388.12	2.50	10558.40	12916.00	10558.40	2.406
7 SLU	17.01	18.46	1.45	ø8/20 2 br.	5.03	0.30	3418.64	2.50	10558.40	12916.00	10558.40	3.088
7 SLU	18.46	18.75	0.28	ø8/20 2 br.	5.03	0.30	2500.18	2.50	10558.40	12916.00	10558.40	4.223

Travata n. 108

Nodi: 144 -831 -832 -833 -834 145

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <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>
8R		30.00	33.50	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
1.521	SLV	5		0.00	2.26	2.26	2.26	2.26	-804.64	-2891.38	3.593
4.081	SLV	5		255.71	2.26	2.26	2.26	2.26	460.02	2891.38	6.285
6.001	SLV	5		447.50	2.26	2.26	2.26	2.26	-626.27	-2891.38	4.617

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	My <daNm>	σ _f sup <daN/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
1.5210	SLE R	5		0.00	2.26	2.26	-492.93	808.91	-93.92	16.02
1.5214	SLE Q	5		0.00	2.26	2.26	-477.91	784.26	-91.06	15.53
4.089	SLE R	5		255.71	2.26	2.26	295.91	-56.38	485.59	9.61
4.0814	SLE Q	5		255.71	2.26	2.26	295.70	-56.34	485.25	9.61
6.008	SLE R	5		447.50	2.26	2.26	-249.15	408.86	-47.47	8.10
6.0014	SLE Q	5		447.50	2.26	2.26	-252.41	414.21	-48.09	8.20

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 <cm>	A _c eff <cm>	σ _s <daN/cm>	ε _{sm}	Wk <mm>
15	1.5214	SLE Q	5		8	0.00	-477.91	35.00	222.00	0.50	12.00	212.01	2.26	267.68	784.26	0.23	0.08
17	1.5212	SLE F	5		8	0.00	-479.27	35.00	222.00	0.50	12.00	212.01	2.26	267.68	786.49	0.23	0.08
33	4.0814	SLE Q	5		8	255.71	295.70	35.00	222.00	0.50	12.00	212.01	2.26	267.68	485.25	0.14	0.05
35	4.0812	SLE F	5		8	255.71	295.74	35.00	222.00	0.50	12.00	212.01	2.26	267.68	485.31	0.14	0.05
52	6.0014	SLE Q	5		8	447.50	-252.41	35.00	222.00	0.50	12.00	212.01	2.26	267.68	414.21	0.12	0.04
55	6.0013	SLE F	5		8	447.50	-252.41	35.00	222.00	0.50	12.00	212.01	2.26	267.68	414.21	0.12	0.04

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
7 SLU	1.52	1.86	0.34	ø8/20 2 br.	5.03	0.30	805.64	2.50	12722.00	15562.70	12722.00	15.791
7 SLU	1.86	5.67	3.80	ø8/20 2 br.	5.03	0.30	696.22	2.50	12722.00	15562.70	12722.00	18.273
5 SLU	5.67	6.00	0.34	ø8/20 2 br.	5.03	0.30	662.98	2.50	12722.00	15562.70	12722.00	19.189

Travata n. 110

Nodi: -641 -642 -643 -644 -645 -646 -647

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <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>
11R		30.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.301	SLV	1		30.00	4.62	4.62	4.62	4.62	-809.34	-6874.39	8.494
1.571	SLV	1		157.50	4.62	4.62	4.62	4.62	311.12	6874.39	22.095
4.121	SLV	1		412.50	4.62	4.62	4.62	4.62	-575.50	-6874.39	11.945
4.331	SLV	2		10.00	4.62	4.62	4.62	4.62	314.48	6874.39	21.860
5.581	SLV	2		135.00	4.62	4.62	4.62	4.62	-393.43	-6874.39	17.473
6.201	SLV	2		197.50	4.62	4.62	4.62	4.62	-546.14	-6874.39	12.587
6.501	SLV	3		15.00	4.62	4.62	4.62	4.62	-720.31	-6874.39	9.544
7.781	SLV	3		142.50	4.62	4.62	4.62	4.62	240.18	6874.39	28.622
10.321	SLV	3		397.50	4.62	4.62	4.62	4.62	-536.65	-6874.39	12.810
10.531	SLV	4		10.00	4.62	4.62	4.62	4.62	447.68	6874.39	15.356
12.401	SLV	4		197.50	4.62	4.62	4.62	4.62	-684.77	-6874.39	10.039
12.701	SLV	5		15.00	4.62	4.62	4.62	4.62	-856.52	-6874.39	8.026
15.203	SLV	5		264.58	4.62	4.62	4.62	4.62	402.02	6874.39	17.100
16.523	SLV	5		397.50	4.62	4.62	4.62	4.62	-600.19	-6874.39	11.454
16.733	SLV	6		10.00	4.62	4.62	4.62	4.62	874.94	6874.39	7.857
18.753	SLV	6		212.50	4.62	4.62	4.62	4.62	-1325.36	-6874.39	5.187

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	My <daNm>	σ _f sup <daN/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
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0.30	10	SLE R	1	30.00	4.62	4.62	-425.91	284.03	-61.19	7.05
0.30	14	SLE Q	1	30.00	4.62	4.62	-417.38	278.34	-59.96	6.91
1.57	8	SLE R	1	157.50	4.62	4.62	182.00	-26.15	121.37	3.01
1.57	14	SLE Q	1	157.50	4.62	4.62	184.13	-26.45	122.79	3.05
4.12	10	SLE R	1	412.50	4.62	4.62	-327.01	218.08	-46.98	5.41
4.12	14	SLE Q	1	412.50	4.62	4.62	-316.44	211.02	-45.46	5.24
4.33	10	SLE R	2	10.00	4.62	4.62	205.28	-29.49	136.89	3.40
4.33	14	SLE Q	2	10.00	4.62	4.62	151.12	-21.71	100.78	2.50
5.58	10	SLE R	2	135.00	4.62	4.62	176.99	-25.43	118.03	2.93
5.58	14	SLE Q	2	135.00	4.62	4.62	136.30	-19.58	90.90	2.26
6.20	8	SLE R	2	197.50	4.62	4.62	-132.68	88.48	-19.06	2.20
6.20	14	SLE Q	2	197.50	4.62	4.62	-134.47	89.67	-19.32	2.22
6.50	10	SLE R	3	15.00	4.62	4.62	-459.38	306.35	-66.00	7.60
6.50	14	SLE Q	3	15.00	4.62	4.62	-438.83	292.65	-63.04	7.26
7.78	8	SLE R	3	142.50	4.62	4.62	156.77	-22.52	104.54	2.59
7.78	14	SLE Q	3	142.50	4.62	4.62	160.68	-23.08	107.15	2.66
10.32	10	SLE R	3	397.50	4.62	4.62	-349.87	233.32	-50.26	5.79
10.32	14	SLE Q	3	397.50	4.62	4.62	-337.57	225.12	-48.50	5.58
10.53	10	SLE R	4	10.00	4.62	4.62	186.15	-26.74	124.14	3.08
10.53	14	SLE Q	4	10.00	4.62	4.62	135.10	-19.41	90.09	2.24
12.40	8	SLE R	4	197.50	4.62	4.62	-139.99	93.35	-20.11	2.32
12.40	14	SLE Q	4	197.50	4.62	4.62	-141.94	94.66	-20.39	2.35
12.70	10	SLE R	5	15.00	4.62	4.62	-542.22	361.59	-77.90	8.97
12.70	14	SLE Q	5	15.00	4.62	4.62	-505.71	337.25	-72.65	8.37
15.20	8	SLE R	5	264.58	4.62	4.62	223.12	-32.05	148.79	3.69
15.20	14	SLE Q	5	264.58	4.62	4.62	224.22	-32.21	149.53	3.71
16.52	8	SLE R	5	397.50	4.62	4.62	-200.63	133.79	-28.82	3.32
16.52	14	SLE Q	5	397.50	4.62	4.62	-204.57	136.42	-29.39	3.38
16.73	10	SLE R	6	10.00	4.62	4.62	258.83	-37.18	172.60	4.28
16.73	14	SLE Q	6	10.00	4.62	4.62	176.63	-25.38	117.79	2.92
18.75	10	SLE R	6	212.50	4.62	4.62	-398.21	265.56	-57.21	6.59
18.75	14	SLE Q	6	212.50	4.62	4.62	-336.51	224.41	-48.34	5.57

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>
18	0.30	14	SLE Q	1	11	30.00	-417.38	34.00	110.00	0.50	14.00	159.75	4.62	302.64	278.34	0.08	0.02
20	0.30	12	SLE F	1	11	30.00	-417.95	34.00	110.00	0.50	14.00	159.75	4.62	302.64	278.72	0.08	0.02
46	1.57	14	SLE Q	1	11	157.50	184.13	34.00	110.00	0.50	14.00	159.75	4.62	302.64	122.79	0.04	0.01
52	1.57	13	SLE F	1	11	157.50	184.13	34.00	110.00	0.50	14.00	159.75	4.62	302.64	122.79	0.04	0.01
71	4.12	14	SLE Q	1	11	412.50	-316.44	34.00	110.00	0.50	14.00	159.75	4.62	302.64	211.02	0.06	0.02
73	4.12	12	SLE F	1	11	412.50	-317.43	34.00	110.00	0.50	14.00	159.75	4.62	302.64	211.68	0.06	0.02
92	4.33	14	SLE Q	2	11	10.00	151.12	34.00	110.00	0.50	14.00	159.75	4.62	302.64	100.78	0.03	0.01
94	4.33	12	SLE F	2	11	10.00	155.68	34.00	110.00	0.50	14.00	159.75	4.62	302.64	103.82	0.03	0.01
121	5.58	14	SLE Q	2	11	135.00	136.30	34.00	110.00	0.50	14.00	159.75	4.62	302.64	90.90	0.03	0.01
125	5.58	12	SLE F	2	11	135.00	139.70	34.00	110.00	0.50	14.00	159.75	4.62	302.64	93.16	0.03	0.01
149	6.20	14	SLE Q	2	11	197.50	-134.47	34.00	110.00	0.50	14.00	159.75	4.62	302.64	89.67	0.03	0.01
155	6.20	13	SLE F	2	11	197.50	-134.47	34.00	110.00	0.50	14.00	159.75	4.62	302.64	89.67	0.03	0.01
172	6.50	14	SLE Q	3	11	15.00	-438.83	34.00	110.00	0.50	14.00	159.75	4.62	302.64	292.65	0.09	0.02
174	6.50	12	SLE F	3	11	15.00	-440.52	34.00	110.00	0.50	14.00	159.75	4.62	302.64	293.77	0.09	0.02
200	7.78	14	SLE Q	3	11	142.50	160.68	34.00	110.00	0.50	14.00	159.75	4.62	302.64	107.15	0.03	0.01
206	7.78	13	SLE F	3	11	142.50	160.68	34.00	110.00	0.50	14.00	159.75	4.62	302.64	107.15	0.03	0.01
223	10.32	14	SLE Q	3	11	397.50	-337.57	34.00	110.00	0.50	14.00	159.75	4.62	302.64	225.12	0.07	0.02
225	10.32	12	SLE F	3	11	397.50	-338.64	34.00	110.00	0.50	14.00	159.75	4.62	302.64	225.83	0.07	0.02
243	10.53	14	SLE Q	4	11	10.00	135.10	34.00	110.00	0.50	14.00	159.75	4.62	302.64	90.09	0.03	0.01
245	10.53	12	SLE F	4	11	10.00	139.43	34.00	110.00	0.50	14.00	159.75	4.62	302.64	92.98	0.03	0.01
267	12.40	14	SLE Q	4	11	197.50	-141.94	34.00	110.00	0.50	14.00	159.75	4.62	302.64	94.66	0.03	0.01
270	12.40	13	SLE F	4	11	197.50	-141.94	34.00	110.00	0.50	14.00	159.75	4.62	302.64	94.66	0.03	0.01
286	12.70	14	SLE Q	5	11	15.00	-505.71	34.00	110.00	0.50	14.00	159.75	4.62	302.64	337.25	0.10	0.03
288	12.70	12	SLE F	5	11	15.00	-508.73	34.00	110.00	0.50	14.00	159.75	4.62	302.64	339.26	0.10	0.03
307	15.20	14	SLE Q	5	11	264.58	224.22	34.00	110.00	0.50	14.00	159.75	4.62	302.64	149.53	0.04	0.01
310	15.20	13	SLE F	5	11	264.58	224.22	34.00	110.00	0.50	14.00	159.75	4.62	302.64	149.53	0.04	0.01
326	16.52	14	SLE Q	5	11	397.50	-204.57	34.00	110.00	0.50	14.00	159.75	4.62	302.64	136.42	0.04	0.01
327	16.52	11	SLE F	5	11	397.50	-204.65	34.00	110.00	0.50	14.00	159.75	4.62	302.64	136.47	0.04	0.01
345	16.73	14	SLE Q	6	11	10.00	176.63	34.00	110.00	0.50	14.00	159.75	4.62	302.64	117.79	0.03	0.01
347	16.73	12	SLE F	6	11	10.00	182.94	34.00	110.00	0.50	14.00	159.75	4.62	302.64	122.00	0.04	0.01
363	18.75	14	SLE Q	6	11	212.50	-336.51	34.00	110.00	0.50	14.00	159.75	4.62	302.64	224.41	0.07	0.02
365	18.75	12	SLE F	6	11	212.50	-341.87	34.00	110.00	0.50	14.00	159.75	4.62	302.64	227.98	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.
5 SLU	0.30	0.70	0.40	ø8/20 2 br.	5.03	0.30	779.87	2.50	15534.70	19003.50	15534.70	19.919
1 SLV	0.70	3.72	3.02	ø8/20 2 br.	5.03	0.30	650.29	2.50	15534.70	19003.50	15534.70	23.889
1 SLV	3.72	4.12	0.40	ø8/20 2 br.	5.03	0.30	717.52	2.50	15534.70	19003.50	15534.70	21.651
1 SLV	4.33	4.72	0.40	ø8/20 2 br.	5.03	0.30	475.79	2.50	15534.70	19003.50	15534.70	32.650
1 SLV	4.72	5.80	1.07	ø8/20 2 br.	5.03	0.30	604.21	2.50	15534.70	19003.50	15534.70	25.711
1 SLV	5.80	6.20	0.40	ø8/20 2 br.	5.03	0.30	724.21	2.50	15534.70	19003.50	15534.70	21.451
7 SLU	6.50	6.90	0.40	ø8/20 2 br.	5.03	0.30	783.53	2.50	15534.70	19003.50	15534.70	19.826
7 SLU	6.90	9.93	3.02	ø8/20 2 br.	5.03	0.30	627.53	2.50	15534.70	19003.50	15534.70	24.755
5 SLU	9.93	10.32	0.40	ø8/20 2 br.	5.03	0.30	710.84	2.50	15534.70	19003.50	15534.70	21.854
1 SLV	10.53	10.93	0.40	ø8/20 2 br.	5.03	0.30	624.61	2.50	15534.70	19003.50	15534.70	24.871
1 SLV	10.93	12.00	1.07	ø8/20 2 br.	5.03	0.30	743.39	2.50	15534.70	19003.50	15534.70	20.897
1 SLV	12.00	12.40	0.40	ø8/20 2 br.	5.03	0.30	863.39	2.50	15534.70	19003.50	15534.70	17.993

7 SLU	12.70	13.10	0.40	ø8/20 2 br.	5.03	0.30	870.63	2.50	15534.70	19003.50	15534.70	17.843
7 SLU	13.10	16.12	3.02	ø8/20 2 br.	5.03	0.30	714.63	2.50	15534.70	19003.50	15534.70	21.738
3 SLV	16.12	16.52	0.40	ø8/20 2 br.	5.03	0.30	671.53	2.50	15534.70	19003.50	15534.70	23.133
3 SLV	16.73	17.12	0.40	ø8/20 2 br.	5.03	0.30	863.15	2.50	15534.70	19003.50	15534.70	17.998
3 SLV	17.12	18.35	1.22	ø8/20 2 br.	5.03	0.30	1227.90	2.50	15534.70	19003.50	15534.70	12.651
3 SLV	18.35	18.75	0.40	ø8/20 2 br.	5.03	0.30	1347.90	2.50	15534.70	19003.50	15534.70	11.525

Travata n. 111

Nodi: 147 136 137

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <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>
9R		30.00	56.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.003	SLV	1		0.00	2.26	2.26	2.26	2.26	-1950.02	-5130.69	2.631
2.117	SLU	1		211.50	2.26	2.26	2.26	2.26	1992.26	5130.69	2.575
5.153	SLV	1		515.00	3.80	2.26	3.80	2.26	-2091.69	-8400.14	4.016
5.453	SLV	2		30.00	3.80	2.26	3.80	2.26	3156.56	5140.86	1.629
5.883	SLV	2		72.50	3.80	2.26	3.80	2.26	3156.56	5140.86	1.629
6.003	SLV	2		85.00	3.80	2.26	3.80	2.26	3156.56	5140.86	1.629

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	My <daNm>	σ _f sup <daN/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
0.0010	SLE R	1		0.00	2.26	2.26	-1134.75	1030.04	-123.51	14.83
0.0014	SLE Q	1		0.00	2.26	2.26	-1032.44	937.17	-112.37	13.49
2.1110	SLE R	1		211.50	2.26	2.26	1511.75	-164.54	1372.25	19.76
2.1114	SLE Q	1		211.50	2.26	2.26	1376.89	-149.86	1249.83	17.99
5.1510	SLE R	1		515.00	3.80	2.26	-1493.40	818.63	-153.72	15.81
5.1514	SLE Q	1		515.00	3.80	2.26	-1342.56	735.94	-138.20	14.21
5.4510	SLE R	2		30.00	3.80	2.26	2051.29	-207.38	1861.27	25.65
5.4514	SLE Q	2		30.00	3.80	2.26	1822.55	-184.26	1653.72	22.79
5.8810	SLE R	2		72.50	3.80	2.26	2051.29	-207.38	1861.27	25.65
5.8814	SLE Q	2		72.50	3.80	2.26	1822.55	-184.26	1653.72	22.79
6.0010	SLE R	2		85.00	3.80	2.26	2051.29	-207.38	1861.27	25.65
6.0014	SLE Q	2		85.00	3.80	2.26	1822.55	-184.26	1653.72	22.79

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 <cm>	A _c eff <cm>	σ _s <daN/cm>	ε _{sm}	Wk <mm>
18	0.0014	SLE Q	1		9	0.00	-1032.44	35.00	222.00	0.50	12.00	350.87	2.26	307.50	937.17	0.27	0.16
20	0.0012	SLE F	1		9	0.00	-1033.69	35.00	222.00	0.50	12.00	350.87	2.26	307.50	938.30	0.27	0.16
36	2.1114	SLE Q	1		9	211.50	1376.89	35.00	222.00	0.50	12.00	350.87	2.26	307.50	1249.83	0.36	0.22
37	2.1111	SLE F	1		9	211.50	1376.90	35.00	222.00	0.50	12.00	350.87	2.26	307.50	1249.84	0.36	0.22
57	5.1514	SLE Q	1		9	515.00	-1342.56	34.67	111.00	0.50	12.74	172.37	3.80	307.50	735.94	0.21	0.06
58	5.1511	SLE F	1		9	515.00	-1342.88	34.67	111.00	0.50	12.74	172.37	3.80	307.50	736.12	0.21	0.06
78	5.4514	SLE Q	2		9	30.00	1822.55	35.00	222.00	0.50	12.00	353.31	2.26	307.50	1653.72	0.48	0.29
80	5.4512	SLE F	2		9	30.00	1859.66	35.00	222.00	0.50	12.00	353.31	2.26	307.50	1687.39	0.49	0.30
99	5.8814	SLE Q	2		9	72.50	1822.55	35.00	222.00	0.50	12.00	353.31	2.26	307.50	1653.72	0.48	0.29
101	5.8812	SLE F	2		9	72.50	1859.66	35.00	222.00	0.50	12.00	353.31	2.26	307.50	1687.39	0.49	0.30
117	6.0014	SLE Q	2		9	85.00	1822.55	35.00	222.00	0.50	12.00	353.31	2.26	307.50	1653.72	0.48	0.29
119	6.0012	SLE F	2		9	85.00	1859.66	35.00	222.00	0.50	12.00	353.31	2.26	307.50	1687.39	0.49	0.30

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
7 SLU	0.00	0.56	0.56	ø8/20 2 br.	5.03	0.30	2657.53	2.50	22458.20	27473.00	22458.20	8.451
7 SLU	0.56	4.59	4.03	ø8/20 2 br.	5.03	0.30	2244.58	2.50	22458.20	27473.00	22458.20	10.005
7 SLU	4.59	5.15	0.56	ø8/20 2 br.	5.03	0.30	2842.66	2.50	22458.20	27473.00	22458.20	7.900
3 SLV	5.45	6.00	0.55	ø8/20 2 br.	5.03	0.30	6025.57	2.50	22458.20	27473.00	22458.20	3.727

Travata n. 112

Nodi: 101 114 -774 -775 -776 -777 -783 123 -793 -797 148

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
15R		30.00		50.00		4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09
14L		20.00	30.00	34.00	16.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.003	SLV	1		492.50	2.26	2.26	2.26	2.26	1099.76	4533.55	4.122
0.953	SLV	1		397.00	2.26	2.26	2.26	2.26	1230.43	4533.55	3.685
4.783	SLV	1		15.00	2.26	2.26	2.26	2.26	-1321.77	-4533.55	3.430
5.083	SLV	2		23.12	4.62	3.08	4.62	3.08	2452.89	5936.78	2.420
6.453	SLV	5		0.00	4.62	3.08	4.62	3.08	2218.56	5936.78	2.676
8.453	SLV	10		315.00	3.08	3.08	3.08	3.08	-2012.44	-6056.86	3.010
8.773	SLV	10		283.33	3.08	3.08	3.08	3.08	-2012.44	-6056.86	3.010
11.303	SLV	10		30.00	3.08	3.08	3.08	3.08	-1647.45	-6056.86	3.676

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>
0.008	SLE R	1	492.50	2.26	2.26	343.21	-42.80	353.84	5.45	
0.0014	SLE Q	1	492.50	2.26	2.26	342.49	-42.71	353.10	5.44	
0.958	SLE R	1	397.00	2.26	2.26	714.24	-89.07	736.37	11.34	
0.9514	SLE Q	1	397.00	2.26	2.26	712.94	-88.91	735.03	11.32	
4.788	SLE R	1	15.00	2.26	2.26	-821.78	847.25	-102.49	13.04	
4.7814	SLE Q	1	15.00	2.26	2.26	-824.80	850.36	-102.86	13.09	
5.089	SLE R	2	23.12	4.62	3.08	-51.76	26.69	-5.86	0.60	
5.0814	SLE Q	2	23.12	4.62	3.08	-59.88	30.88	-6.78	0.70	
6.4510	SLE R	5	0.00	4.62	3.08	-507.91	261.91	-57.50	5.92	
6.4514	SLE Q	5	0.00	4.62	3.08	-469.94	242.33	-53.20	5.48	
8.4510	SLE R	10	315.00	3.08	3.08	-538.00	410.86	-63.62	7.34	
8.4514	SLE Q	10	315.00	3.08	3.08	-468.00	357.40	-55.34	6.39	
8.7710	SLE R	10	283.33	3.08	3.08	562.91	-89.88	434.56	9.42	
8.7714	SLE Q	10	283.33	3.08	3.08	507.81	-81.08	392.02	8.50	
11.3010	SLE R	10	30.00	3.08	3.08	-559.47	427.26	-66.16	7.64	
11.3014	SLE Q	10	30.00	3.08	3.08	-505.13	385.76	-59.73	6.90	

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/cm q>	ε _{sm}	Wk <mm>
24	0.00	14	SLE Q	1	15	492.50	342.49	35.00	222.00	0.50	12.00	310.42	2.26	307.50	353.10	0.10	0.05
26	0.00	11	SLE F	1	15	492.50	342.92	35.00	222.00	0.50	12.00	310.42	2.26	307.50	353.55	0.10	0.05
48	0.95	14	SLE Q	1	15	397.00	712.94	35.00	222.00	0.50	12.00	310.42	2.26	307.50	735.03	0.21	0.11
49	0.95	11	SLE F	1	15	397.00	713.32	35.00	222.00	0.50	12.00	310.42	2.26	307.50	735.42	0.21	0.11
68	4.78	14	SLE Q	1	15	15.00	-824.80	35.00	222.00	0.50	12.00	310.42	2.26	307.50	850.36	0.25	0.13
71	4.78	13	SLE F	1	15	15.00	-824.80	35.00	222.00	0.50	12.00	310.42	2.26	307.50	850.36	0.25	0.13
90	5.08	14	SLE Q	2	14	23.12	-59.88	34.00	60.00	0.50	14.00	130.15	4.62	205.00	30.88	0.01	0.00
93	5.08	13	SLE F	2	14	23.12	-59.88	34.00	60.00	0.50	14.00	130.15	4.62	205.00	30.88	0.01	0.00
108	6.45	14	SLE Q	5	14	0.00	-469.94	34.00	60.00	0.50	14.00	130.15	4.62	205.00	242.33	0.07	0.02
109	6.45	11	SLE F	5	14	0.00	-476.29	34.00	60.00	0.50	14.00	130.15	4.62	205.00	245.60	0.07	0.02
134	8.45	14	SLE Q	10	14	315.00	-468.00	34.00	120.00	0.50	14.00	161.22	3.08	205.00	357.40	0.10	0.03
136	8.45	11	SLE F	10	14	315.00	-470.01	34.00	120.00	0.50	14.00	161.22	3.08	205.00	358.94	0.10	0.03
166	8.77	14	SLE Q	10	14	283.33	507.81	34.00	220.00	0.50	14.00	290.52	3.08	307.50	392.02	0.11	0.06
168	8.77	11	SLE F	10	14	283.33	517.48	34.00	220.00	0.50	14.00	290.52	3.08	307.50	399.48	0.12	0.06
196	11.30	14	SLE Q	10	14	30.00	-505.13	34.00	120.00	0.50	14.00	161.22	3.08	205.00	385.76	0.11	0.03
198	11.30	11	SLE F	10	14	30.00	-513.30	34.00	120.00	0.50	14.00	161.22	3.08	205.00	392.00	0.11	0.03

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.
3 SLV	0.00	0.50	0.50	ø8/20 2 br.	5.03	0.30	991.23	2.50	19861.90	24296.90	19861.90	20.038
3 SLV	0.50	4.27	3.77	ø8/20 2 br.	5.03	0.30	1143.67	2.50	19861.90	24296.90	19861.90	17.367
5 SLU	4.27	4.78	0.50	ø8/20 2 br.	5.03	0.30	1384.09	2.50	19861.90	24296.90	19861.90	14.350
3 SLV	5.08	6.45	1.38	ø8/20 2 br.	5.03	0.20	3959.24	2.22	17609.00	17609.00	17609.00	4.448
3 SLV	8.45	8.95	0.50	ø8/20 2 br.	5.03	0.20	2524.12	2.22	17609.00	17609.00	17609.00	6.976
3 SLV	8.95	10.80	1.85	ø8/20 2 br.	5.03	0.20	1990.42	2.22	17609.00	17609.00	17609.00	8.847
3 SLV	10.80	11.30	0.50	ø8/20 2 br.	5.03	0.20	2550.18	2.22	17609.00	17609.00	17609.00	6.905

Travata n. 113

Nodi: -605 -615 -633 -634 -648

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>
11	R	30.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.005	SLU	1	390.00	3.08	3.08	3.08	3.08	3.08	294.21	4702.19	15.982
1.585	SLU	1	231.67	3.08	3.08	3.08	3.08	3.08	774.35	4702.19	6.072
3.805	SLU	1	10.00	3.08	3.08	3.08	3.08	3.08	294.21	4702.19	15.982
4.005	SLU	2	207.50	3.08	3.08	3.08	3.08	3.08	131.78	4702.19	35.683
4.645	SLU	2	143.33	3.08	3.08	3.08	3.08	3.08	198.71	4702.19	23.663
5.925	SLU	2	15.00	3.08	3.08	3.08	3.08	3.08	131.78	4702.19	35.683
6.225	SLU	3	202.50	3.08	3.08	3.08	3.08	3.08	131.78	4702.19	35.683
6.875	SLU	3	138.33	3.08	3.08	3.08	3.08	3.08	198.71	4702.19	23.663
8.155	SLU	3	10.00	3.08	3.08	3.08	3.08	3.08	131.78	4702.19	35.683
8.355	SLU	4	380.00	3.08	3.08	3.08	3.08	3.08	294.21	4702.19	15.982
9.935	SLU	4	221.67	3.08	3.08	3.08	3.08	3.08	774.35	4702.19	6.072
12.155	SLU	4	0.00	3.08	3.08	3.08	3.08	3.08	294.21	4702.19	15.982

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/cm q>	σ _f inf <daN/cm q>	σ _c <daN/cm q>
0.008	SLE R	1	390.00	3.08	3.08	226.32	-35.31	223.54	4.58	
0.0014	SLE Q	1	390.00	3.08	3.08	226.32	-35.31	223.54	4.58	
1.588	SLE R	1	231.67	3.08	3.08	595.65	-92.93	588.34	12.05	
1.5814	SLE Q	1	231.67	3.08	3.08	595.65	-92.93	588.34	12.05	
3.808	SLE R	1	10.00	3.08	3.08	226.32	-35.31	223.54	4.58	
3.8014	SLE Q	1	10.00	3.08	3.08	226.32	-35.31	223.54	4.58	

4.00	8	SLE R	2	207.50	3.08	3.08	101.37	-15.81	100.12	2.05
4.00	14	SLE Q	2	207.50	3.08	3.08	101.37	-15.81	100.12	2.05
4.64	8	SLE R	2	143.33	3.08	3.08	152.86	-23.85	150.98	3.09
4.64	14	SLE Q	2	143.33	3.08	3.08	152.86	-23.85	150.98	3.09
5.92	8	SLE R	2	15.00	3.08	3.08	101.37	-15.81	100.12	2.05
5.92	14	SLE Q	2	15.00	3.08	3.08	101.37	-15.81	100.12	2.05
6.22	8	SLE R	3	202.50	3.08	3.08	101.37	-15.81	100.12	2.05
6.22	14	SLE Q	3	202.50	3.08	3.08	101.37	-15.81	100.12	2.05
6.87	8	SLE R	3	138.33	3.08	3.08	152.86	-23.85	150.98	3.09
6.87	14	SLE Q	3	138.33	3.08	3.08	152.86	-23.85	150.98	3.09
8.15	8	SLE R	3	10.00	3.08	3.08	101.37	-15.81	100.12	2.05
8.15	14	SLE Q	3	10.00	3.08	3.08	101.37	-15.81	100.12	2.05
8.35	8	SLE R	4	380.00	3.08	3.08	226.32	-35.31	223.54	4.58
8.35	14	SLE Q	4	380.00	3.08	3.08	226.32	-35.31	223.54	4.58
9.93	8	SLE R	4	221.67	3.08	3.08	595.65	-92.93	588.34	12.05
9.93	14	SLE Q	4	221.67	3.08	3.08	595.65	-92.93	588.34	12.05
12.15	8	SLE R	4	0.00	3.08	3.08	226.32	-35.31	223.54	4.58
12.15	14	SLE Q	4	0.00	3.08	3.08	226.32	-35.31	223.54	4.58

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>
15	0.00	14	SLE Q	1	11	390.00	226.32	34.00	220.00	0.50	14.00	236.72	3.08	307.50	223.54	0.07	0.03
16	0.00	11	SLE F	1	11	390.00	226.32	34.00	220.00	0.50	14.00	236.72	3.08	307.50	223.54	0.07	0.03
33	1.58	14	SLE Q	1	11	231.67	595.65	34.00	220.00	0.50	14.00	236.72	3.08	307.50	588.34	0.17	0.07
34	1.58	11	SLE F	1	11	231.67	595.65	34.00	220.00	0.50	14.00	236.72	3.08	307.50	588.34	0.17	0.07
65	3.80	14	SLE Q	1	11	10.00	226.32	34.00	220.00	0.50	14.00	236.72	3.08	307.50	223.54	0.07	0.03
67	3.80	11	SLE F	1	11	10.00	226.32	34.00	220.00	0.50	14.00	236.72	3.08	307.50	223.54	0.07	0.03
102	4.00	14	SLE Q	2	11	207.50	101.37	34.00	220.00	0.50	14.00	236.72	3.08	307.50	100.12	0.03	0.01
104	4.00	11	SLE F	2	11	207.50	101.37	34.00	220.00	0.50	14.00	236.72	3.08	307.50	100.12	0.03	0.01
123	4.64	14	SLE Q	2	11	143.33	152.86	34.00	220.00	0.50	14.00	236.72	3.08	307.50	150.98	0.04	0.02
124	4.64	11	SLE F	2	11	143.33	152.86	34.00	220.00	0.50	14.00	236.72	3.08	307.50	150.98	0.04	0.02
155	5.92	14	SLE Q	2	11	15.00	101.37	34.00	220.00	0.50	14.00	236.72	3.08	307.50	100.12	0.03	0.01
157	5.92	11	SLE F	2	11	15.00	101.37	34.00	220.00	0.50	14.00	236.72	3.08	307.50	100.12	0.03	0.01
192	6.22	14	SLE Q	3	11	202.50	101.37	34.00	220.00	0.50	14.00	236.72	3.08	307.50	100.12	0.03	0.01
194	6.22	11	SLE F	3	11	202.50	101.37	34.00	220.00	0.50	14.00	236.72	3.08	307.50	100.12	0.03	0.01
213	6.87	14	SLE Q	3	11	138.33	152.86	34.00	220.00	0.50	14.00	236.72	3.08	307.50	150.98	0.04	0.02
214	6.87	11	SLE F	3	11	138.33	152.86	34.00	220.00	0.50	14.00	236.72	3.08	307.50	150.98	0.04	0.02
245	8.15	14	SLE Q	3	11	10.00	101.37	34.00	220.00	0.50	14.00	236.72	3.08	307.50	100.12	0.03	0.01
247	8.15	11	SLE F	3	11	10.00	101.37	34.00	220.00	0.50	14.00	236.72	3.08	307.50	100.12	0.03	0.01
267	8.35	14	SLE Q	4	11	380.00	226.32	34.00	220.00	0.50	14.00	236.72	3.08	307.50	223.54	0.07	0.03
268	8.35	11	SLE F	4	11	380.00	226.32	34.00	220.00	0.50	14.00	236.72	3.08	307.50	223.54	0.07	0.03
285	9.93	14	SLE Q	4	11	221.67	595.65	34.00	220.00	0.50	14.00	236.72	3.08	307.50	588.34	0.17	0.07
286	9.93	11	SLE F	4	11	221.67	595.65	34.00	220.00	0.50	14.00	236.72	3.08	307.50	588.34	0.17	0.07
317	12.15	14	SLE Q	4	11	0.00	226.32	34.00	220.00	0.50	14.00	236.72	3.08	307.50	223.54	0.07	0.03
319	12.15	11	SLE F	4	11	0.00	226.32	34.00	220.00	0.50	14.00	236.72	3.08	307.50	223.54	0.07	0.03

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 SLU	0.00	0.40	0.40	ø8/20 2 br.	5.03	0.30	741.00	2.50	15534.70	19003.50	15534.70	20.965
5 SLU	0.40	3.40	3.00	ø8/20 2 br.	5.03	0.30	585.00	2.50	15534.70	19003.50	15534.70	26.555
5 SLU	3.40	3.80	0.40	ø8/20 2 br.	5.03	0.30	741.00	2.50	15534.70	19003.50	15534.70	20.965
5 SLU	4.00	4.40	0.40	ø8/20 2 br.	5.03	0.30	375.38	2.50	15534.70	19003.50	15534.70	41.384
5 SLU	4.40	5.53	1.12	ø8/20 2 br.	5.03	0.30	219.37	2.50	15534.70	19003.50	15534.70	70.814
5 SLU	5.53	5.92	0.40	ø8/20 2 br.	5.03	0.30	375.38	2.50	15534.70	19003.50	15534.70	41.384
5 SLU	6.22	6.62	0.40	ø8/20 2 br.	5.03	0.30	375.38	2.50	15534.70	19003.50	15534.70	41.384
5 SLU	6.62	7.75	1.12	ø8/20 2 br.	5.03	0.30	219.37	2.50	15534.70	19003.50	15534.70	70.814
5 SLU	7.75	8.15	0.40	ø8/20 2 br.	5.03	0.30	375.38	2.50	15534.70	19003.50	15534.70	41.384
5 SLU	8.35	8.75	0.40	ø8/20 2 br.	5.03	0.30	741.00	2.50	15534.70	19003.50	15534.70	20.965
5 SLU	8.75	11.75	3.00	ø8/20 2 br.	5.03	0.30	585.00	2.50	15534.70	19003.50	15534.70	26.555
5 SLU	11.75	12.15	0.40	ø8/20 2 br.	5.03	0.30	741.00	2.50	15534.70	19003.50	15534.70	20.965

Travata n. 114

Nodi: 119 120 124 125 131 -1052 -1063 -1064 -1065 143

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>
11R		30.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09
9R		30.00	56.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.15	3	SLV	1	152.50	6.03	6.03	6.03	6.03	2230.99	8857.62	3.970
1.57	3	SLV	1	10.00	6.03	6.03	6.03	6.03	-754.88	-8857.62	11.734
1.77	1	SLV	2	145.00	6.03	6.03	6.03	6.03	-463.44	-8857.62	19.113
2.70	3	SLV	2	52.20	6.03	6.03	6.03	6.03	-1141.91	-8857.62	7.757
3.08	3	SLV	2	15.00	6.03	6.03	6.03	6.03	-1141.91	-8857.62	7.757
3.38	3	SLV	3	140.00	6.03	6.03	6.03	6.03	-1270.26	-8857.62	6.973
4.67	3	SLV	3	10.00	6.03	6.03	6.03	6.03	-691.07	-8857.62	12.817
4.88	1	SLV	4	180.00	6.03	6.03	6.03	6.03	-512.94	-8857.62	17.268
5.91	3	SLV	4	76.09	6.03	6.03	6.03	6.03	748.32	8857.62	11.837

6.38	3	SLV	4	30.00	6.03	6.03	6.03	6.03	748.32	8857.62	11.837
6.67	3	SLV	5	400.00	2.26	8.29	2.26	8.29	-4019.33	-5151.30	1.282
10.37	3	SLV	5	30.77	2.26	2.26	2.26	2.26	-4144.61	-5130.69	1.238
10.68	3	SLV	5	0.00	2.26	2.26	2.26	2.26	-4144.61	-5130.69	1.238

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>
0.15	8	SLE R	1	152.50	6.03	6.03	272.71	-36.28	140.36	3.94
0.15	14	SLE Q	1	152.50	6.03	6.03	244.15	-32.48	125.65	3.52
1.57	8	SLE R	1	10.00	6.03	6.03	226.19	-30.09	116.41	3.27
1.57	14	SLE Q	1	10.00	6.03	6.03	201.86	-26.85	103.89	2.91
1.77	8	SLE R	2	145.00	6.03	6.03	-226.68	116.67	-30.15	3.27
1.77	14	SLE Q	2	145.00	6.03	6.03	-198.53	102.18	-26.41	2.87
2.70	8	SLE R	2	52.20	6.03	6.03	-184.26	94.83	-24.51	2.66
2.70	14	SLE Q	2	52.20	6.03	6.03	-155.13	79.84	-20.64	2.24
3.08	8	SLE R	2	15.00	6.03	6.03	-184.26	94.83	-24.51	2.66
3.08	14	SLE Q	2	15.00	6.03	6.03	-155.13	79.84	-20.64	2.24
3.38	8	SLE R	3	140.00	6.03	6.03	-287.31	147.87	-38.22	4.15
3.38	14	SLE Q	3	140.00	6.03	6.03	-252.40	129.90	-33.58	3.64
4.67	8	SLE R	3	10.00	6.03	6.03	-207.78	106.94	-27.64	3.00
4.67	14	SLE Q	3	10.00	6.03	6.03	-177.25	91.23	-23.58	2.56
4.88	8	SLE R	4	180.00	6.03	6.03	217.79	-28.97	112.09	3.14
4.88	14	SLE Q	4	180.00	6.03	6.03	193.56	-25.75	99.62	2.79
5.91	8	SLE R	4	76.09	6.03	6.03	384.43	-51.14	197.85	5.55
5.91	14	SLE Q	4	76.09	6.03	6.03	339.71	-45.19	174.84	4.90
6.38	8	SLE R	4	30.00	6.03	6.03	325.57	-43.31	167.56	4.70
6.38	14	SLE Q	4	30.00	6.03	6.03	289.22	-38.47	148.85	4.17
6.67	8	SLE R	5	400.00	2.26	8.29	-914.11	829.36	-75.96	10.24
6.67	14	SLE Q	5	400.00	2.26	8.29	-881.41	799.69	-73.25	9.87
10.37	10	SLE R	5	30.77	2.26	2.26	-464.44	421.58	-50.55	6.07
10.37	14	SLE Q	5	30.77	2.26	2.26	-443.18	402.28	-48.24	5.79
10.68	10	SLE R	5	0.00	2.26	2.26	-464.44	421.58	-50.55	6.07
10.68	14	SLE Q	5	0.00	2.26	2.26	-443.18	402.28	-48.24	5.79

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>
23	0.15	14	SLE Q	1	11	152.50	244.15	33.00	109.00	0.50	16.00	143.90	6.03	293.69	125.65	0.04	0.01
25	0.15	11	SLE F	1	11	152.50	252.28	33.00	109.00	0.50	16.00	143.90	6.03	293.69	129.84	0.04	0.01
54	1.57	14	SLE Q	1	11	10.00	201.86	33.00	109.00	0.50	16.00	143.90	6.03	293.69	103.89	0.03	0.01
56	1.57	11	SLE F	1	11	10.00	207.94	33.00	109.00	0.50	16.00	143.90	6.03	293.69	107.02	0.03	0.01
84	1.77	14	SLE Q	2	11	145.00	-198.53	33.00	109.00	0.50	16.00	143.90	6.03	293.69	102.18	0.03	0.01
86	1.77	11	SLE F	2	11	145.00	-205.77	33.00	109.00	0.50	16.00	143.90	6.03	293.69	105.90	0.03	0.01
114	2.70	14	SLE Q	2	11	52.20	-155.13	33.00	109.00	0.50	16.00	143.90	6.03	293.69	79.84	0.02	0.01
116	2.70	11	SLE F	2	11	52.20	-162.89	33.00	109.00	0.50	16.00	143.90	6.03	293.69	83.83	0.02	0.01
142	3.08	14	SLE Q	2	11	15.00	-155.13	33.00	109.00	0.50	16.00	143.90	6.03	293.69	79.84	0.02	0.01
144	3.08	11	SLE F	2	11	15.00	-162.89	33.00	109.00	0.50	16.00	143.90	6.03	293.69	83.83	0.02	0.01
170	3.38	14	SLE Q	3	11	140.00	-252.40	33.00	109.00	0.50	16.00	143.90	6.03	293.69	129.90	0.04	0.01
172	3.38	11	SLE F	3	11	140.00	-260.84	33.00	109.00	0.50	16.00	143.90	6.03	293.69	134.24	0.04	0.01
201	4.67	14	SLE Q	3	11	10.00	-177.25	33.00	109.00	0.50	16.00	143.90	6.03	293.69	91.23	0.03	0.01
203	4.67	11	SLE F	3	11	10.00	-185.35	33.00	109.00	0.50	16.00	143.90	6.03	293.69	95.39	0.03	0.01
234	4.88	14	SLE Q	4	11	180.00	193.56	33.00	109.00	0.50	16.00	143.90	6.03	293.69	99.62	0.03	0.01
236	4.88	11	SLE F	4	11	180.00	199.39	33.00	109.00	0.50	16.00	143.90	6.03	293.69	102.62	0.03	0.01
259	5.91	14	SLE Q	4	11	76.09	339.71	33.00	109.00	0.50	16.00	143.90	6.03	293.69	174.84	0.05	0.01
260	5.91	11	SLE F	4	11	76.09	350.83	33.00	109.00	0.50	16.00	143.90	6.03	293.69	180.56	0.05	0.01
281	6.38	14	SLE Q	4	11	30.00	289.22	33.00	109.00	0.50	16.00	143.90	6.03	293.69	148.85	0.04	0.01
282	6.38	11	SLE F	4	11	30.00	298.33	33.00	109.00	0.50	16.00	143.90	6.03	293.69	153.54	0.04	0.01
299	6.67	14	SLE Q	5	9	400.00	-881.41	35.00	222.00	0.50	12.00	359.17	2.26	307.50	799.69	0.23	0.14
300	6.67	11	SLE F	5	9	400.00	-890.73	35.00	222.00	0.50	12.00	359.17	2.26	307.50	808.14	0.24	0.14
324	10.37	14	SLE Q	5	9	30.77	-443.18	35.00	222.00	0.50	12.00	350.87	2.26	307.50	402.28	0.12	0.07
328	10.37	12	SLE F	5	9	30.77	-445.38	35.00	222.00	0.50	12.00	350.87	2.26	307.50	404.29	0.12	0.07
345	10.68	14	SLE Q	5	9	0.00	-443.18	35.00	222.00	0.50	12.00	350.87	2.26	307.50	402.28	0.12	0.07
347	10.68	12	SLE F	5	9	0.00	-445.38	35.00	222.00	0.50	12.00	350.87	2.26	307.50	404.29	0.12	0.07

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctg θ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3 SLV	0.15	0.55	0.40	ø8/20 2 br.	5.03	0.30	2823.55	2.50	15534.70	19003.50	15534.70	5.502
3 SLV	0.55	1.18	0.62	ø8/20 2 br.	5.03	0.30	2388.91	2.50	15534.70	19003.50	15534.70	6.503
3 SLV	1.18	1.57	0.40	ø8/20 2 br.	5.03	0.30	2948.12	2.50	15534.70	19003.50	15534.70	5.269
3 SLV	1.77	2.17	0.40	ø8/20 2 br.	5.03	0.30	1841.84	2.50	15534.70	19003.50	15534.70	8.434
3 SLV	2.17	2.67	0.50	ø8/20 2 br.	5.03	0.30	1282.63	2.50	15534.70	19003.50	15534.70	12.112
3 SLV	2.67	3.08	0.40	ø8/20 2 br.	5.03	0.30	1775.07	2.50	15534.70	19003.50	15534.70	8.752
3 SLV	3.38	3.77	0.40	ø8/20 2 br.	5.03	0.30	2131.50	2.50	15534.70	19003.50	15534.70	7.288
3 SLV	3.77	4.28	0.50	ø8/20 2 br.	5.03	0.30	1572.29	2.50	15534.70	19003.50	15534.70	9.880
3 SLV	4.28	4.67	0.40	ø8/20 2 br.	5.03	0.30	2015.90	2.50	15534.70	19003.50	15534.70	7.706
5 SLU	4.88	5.28	0.40	ø8/20 2 br.	5.03	0.30	1837.79	2.50	15534.70	19003.50	15534.70	8.453
3 SLV	5.28	5.97	0.70	ø8/20 2 br.	5.03	0.30	1226.59	2.50	15534.70	19003.50	15534.70	12.665
3 SLV	5.97	6.38	0.40	ø8/20 2 br.	5.03	0.30	1534.57	2.50	15534.70	19003.50	15534.70	10.123
3 SLV	6.67	7.24	0.56	ø8/20 2 br.	5.03	0.30	2658.97	2.50	22458.20	27473.00	22458.20	8.446
3 SLV	7.24	10.12	2.88	ø8/20 2 br.	5.03	0.30	2423.77	2.50	22458.20	27473.00	22458.20	9.266
3 SLV	10.12	10.68	0.56	ø8/20 2 br.	5.03	0.30	2439.85	2.50	22458.20	27473.00	22458.20	9.205

Travata n. 115

Nodi: 110 117

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <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>
15	R	30.00	50.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	Afep S <cm>	Afep I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.013	SLV	1		0.91	2.26	2.26	2.26	2.26	1560.35	4533.55	2.905
4.773	SLV	1		477.28	3.80	2.26	3.80	2.26	-2512.36	-7396.56	2.944

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	My <daNm>	σ _f sup <daN/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
0.018	SLE	R	1	0.91	2.26	2.26	523.74	-65.32	539.97	8.31
0.0114	SLE	Q	1	0.91	2.26	2.26	493.71	-61.57	509.01	7.84
4.778	SLE	R	1	477.28	3.80	2.26	-1319.02	821.76	-158.50	16.98
4.7714	SLE	Q	1	477.28	3.80	2.26	-1220.40	760.31	-146.65	15.71

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 <cm>	A _{c eff} <cm>	σ _s <daN/cm>	ε _{sm}	Wk <mm>
17	0.0114	SLE	Q	1	15	0.91	493.71	35.00	222.00	0.50	12.00	310.42	2.26	307.50	509.01	0.15	0.08
18	0.0111	SLE	F	1	15	0.91	502.48	35.00	222.00	0.50	12.00	310.42	2.26	307.50	518.04	0.15	0.08
35	4.7714	SLE	Q	1	15	477.28	-1220.40	34.67	111.00	0.50	12.74	172.37	3.80	307.50	760.31	0.22	0.06
36	4.7711	SLE	F	1	15	477.28	-1248.54	34.67	111.00	0.50	12.74	172.37	3.80	307.50	777.85	0.23	0.07

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	SLV	0.01	0.51	0.50	ø8/20 2 br.	5.03	0.30	1146.51	2.50	19861.90	24296.90	19861.90
3	SLV	0.51	4.27	3.76	ø8/20 2 br.	5.03	0.30	1533.44	2.50	19861.90	24296.90	19861.90
3	SLV	4.27	4.77	0.50	ø8/20 2 br.	5.03	0.30	1721.59	2.50	19861.90	24296.90	19861.90

Travata n. 132

Nodi: 121 127 132 134 144

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <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>
10	R	30.00	42.50	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	Afep S <cm>	Afep I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.003	SLV	1		390.00	2.26	2.26	2.26	2.26	-1467.28	-3787.06	2.581
0.953	SLV	1		295.00	2.26	2.26	2.26	2.26	1677.03	3787.06	2.258
3.807	SLU	1		10.00	4.52	2.26	4.52	2.26	-2002.35	-7241.64	3.617
4.007	SLU	2		207.50	4.52	2.26	4.52	2.26	-1890.17	-7241.64	3.831
5.603	SLV	2		47.08	4.52	4.52	4.52	4.52	1275.24	7239.61	5.677
5.923	SLV	2		15.00	4.52	4.52	4.52	4.52	1275.24	7239.61	5.677
6.223	SLV	3		202.50	4.52	4.52	4.52	4.52	1544.08	7239.61	4.689
8.157	SLU	3		10.00	4.52	2.26	4.52	2.26	-1894.78	-7241.64	3.822
8.357	SLU	4		380.00	4.52	2.26	4.52	2.26	-2115.50	-7241.64	3.423
10.633	SLV	4		151.62	2.26	2.26	2.26	2.26	1803.53	3787.06	2.100
12.153	SLV	4		0.00	2.26	2.26	2.26	2.26	1580.27	3787.06	2.396

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	My <daNm>	σ _f sup <daN/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
0.009	SLE	R	1	390.00	2.26	2.26	410.47	-61.61	509.48	8.66
0.0014	SLE	Q	1	390.00	2.26	2.26	341.74	-51.29	424.17	7.21
0.9510	SLE	R	1	295.00	2.26	2.26	1188.27	-178.35	1474.88	25.06
0.9514	SLE	Q	1	295.00	2.26	2.26	1035.94	-155.49	1285.81	21.85
3.8010	SLE	R	1	10.00	4.52	2.26	-1510.50	959.06	-222.26	24.23
3.8014	SLE	Q	1	10.00	4.52	2.26	-1315.17	835.04	-193.52	21.10
4.0010	SLE	R	2	207.50	4.52	2.26	-1425.56	905.13	-209.77	22.87
4.0014	SLE	Q	2	207.50	4.52	2.26	-1242.07	788.63	-182.77	19.93
5.609	SLE	R	2	47.08	4.52	4.52	533.01	-71.04	337.70	7.99
5.6014	SLE	Q	2	47.08	4.52	4.52	472.87	-63.02	299.60	7.09
5.929	SLE	R	2	15.00	4.52	4.52	533.01	-71.04	337.70	7.99
5.9214	SLE	Q	2	15.00	4.52	4.52	472.87	-63.02	299.60	7.09
6.229	SLE	R	3	202.50	4.52	4.52	440.63	-58.73	279.17	6.61
6.2214	SLE	Q	3	202.50	4.52	4.52	392.29	-52.28	248.54	5.88
8.1510	SLE	R	3	10.00	4.52	2.26	-1429.32	907.52	-210.32	22.93
8.1514	SLE	Q	3	10.00	4.52	2.26	-1244.97	790.47	-183.19	19.97
8.3510	SLE	R	4	380.00	4.52	2.26	-1595.34	1012.93	-234.75	25.59
8.3514	SLE	Q	4	380.00	4.52	2.26	-1389.30	882.11	-204.43	22.29
10.6310	SLE	R	4	151.62	2.26	2.26	1347.48	-202.25	1672.49	28.42
10.6314	SLE	Q	4	151.62	2.26	2.26	1172.85	-176.04	1455.75	24.74
12.159	SLE	R	4	0.00	2.26	2.26	637.75	-95.72	791.57	13.45
12.1514	SLE	Q	4	0.00	2.26	2.26	549.65	-82.50	682.23	11.59

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>
24	0.00	14	SLE Q	1	10	390.00	341.74	35.00	222.00	0.50	12.00	260.25	2.26	307.50	424.17	0.12	0.05
28	0.00	12	SLE F	1	10	390.00	355.62	35.00	222.00	0.50	12.00	260.25	2.26	307.50	441.40	0.13	0.06
48	0.95	14	SLE Q	1	10	295.00	1035.94	35.00	222.00	0.50	12.00	260.25	2.26	307.50	1285.81	0.37	0.17
50	0.95	12	SLE F	1	10	295.00	1043.14	35.00	222.00	0.50	12.00	260.25	2.26	307.50	1294.75	0.38	0.17
66	3.80	14	SLE Q	1	10	10.00	-1315.17	35.00	74.00	0.50	12.00	151.57	4.52	307.50	835.04	0.24	0.06
68	3.80	12	SLE F	1	10	10.00	-1324.08	35.00	74.00	0.50	12.00	151.57	4.52	307.50	840.70	0.24	0.06
84	4.00	14	SLE Q	2	10	207.50	-1242.07	35.00	74.00	0.50	12.00	151.57	4.52	307.50	788.63	0.23	0.06
86	4.00	12	SLE F	2	10	207.50	-1251.37	35.00	74.00	0.50	12.00	151.57	4.52	307.50	794.53	0.23	0.06
102	5.60	14	SLE Q	2	10	47.08	472.87	35.00	74.00	0.50	12.00	151.57	4.52	307.50	299.60	0.09	0.02
104	5.60	12	SLE F	2	10	47.08	484.78	35.00	74.00	0.50	12.00	151.57	4.52	307.50	307.14	0.09	0.02
120	5.92	14	SLE Q	2	10	15.00	472.87	35.00	74.00	0.50	12.00	151.57	4.52	307.50	299.60	0.09	0.02
122	5.92	12	SLE F	2	10	15.00	484.78	35.00	74.00	0.50	12.00	151.57	4.52	307.50	307.14	0.09	0.02
138	6.22	14	SLE Q	3	10	202.50	392.29	35.00	74.00	0.50	12.00	151.57	4.52	307.50	248.54	0.07	0.02
140	6.22	12	SLE F	3	10	202.50	401.84	35.00	74.00	0.50	12.00	151.57	4.52	307.50	254.59	0.07	0.02
156	8.15	14	SLE Q	3	10	10.00	-1244.97	35.00	74.00	0.50	12.00	151.57	4.52	307.50	790.47	0.23	0.06
158	8.15	12	SLE F	3	10	10.00	-1254.26	35.00	74.00	0.50	12.00	151.57	4.52	307.50	796.37	0.23	0.06
174	8.35	14	SLE Q	4	10	380.00	-1389.30	35.00	74.00	0.50	12.00	151.57	4.52	307.50	882.11	0.26	0.07
176	8.35	12	SLE F	4	10	380.00	-1399.43	35.00	74.00	0.50	12.00	151.57	4.52	307.50	888.54	0.26	0.07
192	10.63	14	SLE Q	4	10	151.62	1172.85	35.00	222.00	0.50	12.00	260.25	2.26	307.50	1455.75	0.42	0.19
194	10.63	12	SLE F	4	10	151.62	1181.10	35.00	222.00	0.50	12.00	260.25	2.26	307.50	1465.98	0.43	0.19
214	12.15	14	SLE Q	4	10	0.00	549.65	35.00	222.00	0.50	12.00	260.25	2.26	307.50	682.23	0.20	0.09
218	12.15	12	SLE F	4	10	0.00	567.16	35.00	222.00	0.50	12.00	260.25	2.26	307.50	703.96	0.21	0.09

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>	
7 SLU	0.00	0.42	0.42	ø8/20 2 br.	5.03	0.30	2358.49	2.50	16616.50	20326.80	16616.50	7.045
7 SLU	0.42	3.38	2.95	ø8/20 2 br.	5.03	0.30	2563.52	2.50	16616.50	20326.80	16616.50	6.482
7 SLU	3.38	3.80	0.42	ø8/20 2 br.	5.03	0.30	3183.34	2.50	16616.50	20326.80	16616.50	5.220
7 SLU	4.00	4.42	0.42	ø8/20 2 br.	5.03	0.30	2715.99	2.50	16616.50	20326.80	16616.50	6.118
7 SLU	4.42	5.50	1.07	ø8/20 2 br.	5.03	0.30	2096.17	2.50	16616.50	20326.80	16616.50	7.927
3 SLV	5.50	5.92	0.42	ø8/20 2 br.	5.03	0.30	875.59	2.50	16616.50	20326.80	16616.50	18.977
3 SLV	6.22	6.65	0.42	ø8/20 2 br.	5.03	0.30	1101.33	2.50	16616.50	20326.80	16616.50	15.088
3 SLV	6.65	7.72	1.07	ø8/20 2 br.	5.03	0.30	2121.23	2.50	16616.50	20326.80	16616.50	7.833
7 SLU	7.72	8.15	0.42	ø8/20 2 br.	5.03	0.30	2657.47	2.50	16616.50	20326.80	16616.50	6.253
7 SLU	8.35	8.78	0.42	ø8/20 2 br.	5.03	0.30	3302.83	2.50	16616.50	20326.80	16616.50	5.031
7 SLU	8.78	11.72	2.95	ø8/20 2 br.	5.03	0.30	2683.02	2.50	16616.50	20326.80	16616.50	6.193
7 SLU	11.72	12.15	0.42	ø8/20 2 br.	5.03	0.30	2238.99	2.50	16616.50	20326.80	16616.50	7.421

Travata n. 133

Nodi: 122 -792 -796 -800 -801 -802 126 133 135 -824 -825 145

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>
9R		30.00	56.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfE P	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
2.853	SLV	7	322.50	2.26	2.26	2.26	2.26	-4611.56	-5130.69	1.113
3.463	SLV	7	261.00	2.26	2.26	2.26	2.26	-4484.89	-5130.69	1.144
5.923	SLV	7	15.00	2.26	2.26	2.26	2.26	-1400.15	-5130.69	3.664
6.227	SLU	8	307.50	2.26	2.26	2.26	2.26	1139.42	5130.69	4.503
7.183	SLV	8	212.05	2.26	2.26	2.26	2.26	1763.89	5130.69	2.909
9.303	SLV	8	0.00	2.26	2.26	2.26	2.26	-4253.99	-5130.69	1.206
10.283	SLV	11	187.50	2.26	2.26	2.26	2.26	2778.15	5130.69	1.847
12.153	SLV	11	0.00	2.26	2.26	2.26	2.26	-1106.98	-5130.69	4.635

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>
2.8510	SLE R	7	322.50	2.26	2.26	2.26	-2005.11	1820.08	-218.24	26.20
2.8514	SLE Q	7	322.50	2.26	2.26	2.26	-1730.04	1570.39	-188.30	22.61
3.4610	SLE R	7	261.00	2.26	2.26	2.26	-1904.87	1729.09	-207.33	24.89
3.4614	SLE Q	7	261.00	2.26	2.26	2.26	-1644.14	1492.42	-178.95	21.49
5.9210	SLE R	7	15.00	2.26	2.26	2.26	620.04	-67.49	562.82	8.10
5.9214	SLE Q	7	15.00	2.26	2.26	2.26	541.61	-58.95	491.63	7.08
6.2210	SLE R	8	307.50	2.26	2.26	2.26	859.54	-93.55	780.22	11.23
6.2214	SLE Q	8	307.50	2.26	2.26	2.26	749.02	-81.52	679.90	9.79
7.1810	SLE R	8	212.05	2.26	2.26	2.26	1017.54	-110.75	923.64	13.30
7.1814	SLE Q	8	212.05	2.26	2.26	2.26	880.10	-95.79	798.88	11.50
9.3010	SLE R	8	0.00	2.26	2.26	2.26	-2468.51	2240.71	-268.67	32.26
9.3014	SLE Q	8	0.00	2.26	2.26	2.26	-2133.62	1936.73	-232.22	27.88
10.2810	SLE R	11	187.50	2.26	2.26	2.26	383.89	-41.78	348.47	5.02
10.2814	SLE Q	11	187.50	2.26	2.26	2.26	333.43	-36.29	302.66	4.36
12.1510	SLE R	11	0.00	2.26	2.26	2.26	393.12	-42.79	356.84	5.14
12.1514	SLE Q	11	0.00	2.26	2.26	2.26	346.23	-37.68	314.28	4.52

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>	
16	2.85	14	SLE	Q	7	9	322.50	-1730.04	35.00	222.00	0.50	12.00	350.87	2.26	307.50	1570.39	0.46	0.27
18	2.85	12	SLE	F	7	9	322.50	-1744.11	35.00	222.00	0.50	12.00	350.87	2.26	307.50	1583.16	0.46	0.28
43	3.46	14	SLE	Q	7	9	261.00	-1644.14	35.00	222.00	0.50	12.00	350.87	2.26	307.50	1492.42	0.43	0.26
47	3.46	12	SLE	F	7	9	261.00	-1657.94	35.00	222.00	0.50	12.00	350.87	2.26	307.50	1504.94	0.44	0.26
76	5.92	14	SLE	Q	7	9	15.00	541.61	35.00	222.00	0.50	12.00	350.87	2.26	307.50	491.63	0.14	0.09
80	5.92	12	SLE	F	7	9	15.00	550.66	35.00	222.00	0.50	12.00	350.87	2.26	307.50	499.84	0.15	0.09
100	6.22	14	SLE	Q	8	9	307.50	749.02	35.00	222.00	0.50	12.00	350.87	2.26	307.50	679.90	0.20	0.12
102	6.22	12	SLE	F	8	9	307.50	762.96	35.00	222.00	0.50	12.00	350.87	2.26	307.50	692.56	0.20	0.12
120	7.18	14	SLE	Q	8	9	212.05	880.10	35.00	222.00	0.50	12.00	350.87	2.26	307.50	798.88	0.23	0.14
122	7.18	12	SLE	F	8	9	212.05	888.20	35.00	222.00	0.50	12.00	350.87	2.26	307.50	806.23	0.23	0.14
141	9.30	14	SLE	Q	8	9	0.00	-2133.62	35.00	222.00	0.50	12.00	350.87	2.26	307.50	1936.73	0.56	0.34
143	9.30	12	SLE	F	8	9	0.00	-2152.98	35.00	222.00	0.50	12.00	350.87	2.26	307.50	1954.30	0.57	0.34
167	10.28	14	SLE	Q	11	9	187.50	333.43	35.00	222.00	0.50	12.00	350.87	2.26	307.50	302.66	0.09	0.05
171	10.28	12	SLE	F	11	9	187.50	337.12	35.00	222.00	0.50	12.00	350.87	2.26	307.50	306.01	0.09	0.05
198	12.15	14	SLE	Q	11	9	0.00	346.23	35.00	222.00	0.50	12.00	350.87	2.26	307.50	314.28	0.09	0.05
202	12.15	12	SLE	F	11	9	0.00	349.21	35.00	222.00	0.50	12.00	350.87	2.26	307.50	316.99	0.09	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>	
7 SLU	2.85	3.41	0.56	ø8/20 2 br.	5.03	0.30	4316.30	2.50	22458.20	27473.00	22458.20	5.203
3 SLV	3.41	5.37	1.95	ø8/20 2 br.	5.03	0.30	3217.95	2.50	22458.20	27473.00	22458.20	6.979
3 SLV	5.37	5.92	0.56	ø8/20 2 br.	5.03	0.30	2982.79	2.50	22458.20	27473.00	22458.20	7.529
7 SLU	6.22	6.79	0.56	ø8/20 2 br.	5.03	0.30	2132.67	2.50	22458.20	27473.00	22458.20	10.530
7 SLU	6.79	8.74	1.95	ø8/20 2 br.	5.03	0.30	3178.99	2.50	22458.20	27473.00	22458.20	7.065
7 SLU	8.74	9.30	0.56	ø8/20 2 br.	5.03	0.30	4361.73	2.50	22458.20	27473.00	22458.20	5.149
3 SLV	10.30	10.86	0.56	ø8/20 2 br.	5.03	0.30	2907.82	2.50	22458.20	27473.00	22458.20	7.723
3 SLV	10.86	11.59	0.73	ø8/20 2 br.	5.03	0.30	2319.82	2.50	22458.20	27473.00	22458.20	9.681
3 SLV	11.59	12.15	0.56	ø8/20 2 br.	5.03	0.30	2901.17	2.50	22458.20	27473.00	22458.20	7.741

Travata n. 134

Nodi: -997 -981 137

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>
26R		30.00	55.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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	7	SLU	1	0.00	3.08	3.08	3.08	3.08	-2012.24	-6734.25	3.347
2.39	7	SLU	2	154.93	3.08	3.08	3.08	3.08	3470.03	6734.25	1.941

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	10	SLE R	1	0.00	3.08	3.08	-1524.24	1045.21	-159.41	17.66
0.00	14	SLE Q	1	0.00	3.08	3.08	-1371.28	940.32	-143.41	15.89
2.39	10	SLE R	2	154.93	3.08	3.08	2628.57	-274.91	1802.47	30.46
2.39	14	SLE Q	2	154.93	3.08	3.08	2363.16	-247.15	1620.48	27.38

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 eff}	σ _s	ε _{sm}	Wk	
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmqs>		<mm>	
18	0.00	14	SLE	Q	1	26	0.00	-1371.28	34.00	220.00	0.50	14.00	335.30	3.08	307.50	940.32	0.27	0.16
20	0.00	12	SLE	F	1	26	0.00	-1389.93	34.00	220.00	0.50	14.00	335.30	3.08	307.50	953.11	0.28	0.16
36	2.39	14	SLE	Q	2	26	154.93	2363.16	34.00	220.00	0.50	14.00	335.30	3.08	307.50	1620.48	0.47	0.27
38	2.39	12	SLE	F	2	26	154.93	2397.12	34.00	220.00	0.50	14.00	335.30	3.08	307.50	1643.76	0.48	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>	
7 SLU	0.08	0.61	0.55	ø8/20 2 br.	5.03	0.30	3172.65	2.50	22025.50	26943.70	22025.50	6.942
7 SLU	0.62	5.57	5.18	ø8/20 2 br.	5.03	0.30	3742.86	2.50	22025.50	26943.70	22025.50	5.885
7 SLU	5.57	6.10	0.55	ø8/20 2 br.	5.03	0.30	4170.23	2.50	22025.50	26943.70	22025.50	5.282

Travata n. 135

Nodi: 123 47

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>
22R		25.00	50.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
1.81	7	SLU	1	261.06	2.26	3.08	2.26	3.08	1594.66	5998.87	3.762
3.95	3	SLV	1	31.89	2.26	3.08	2.26	3.08	-1857.06	-4485.47	2.415

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>
1.81	10	SLE R	1	261.06	2.26	3.08	1200.56	-170.27	922.18	18.50
1.81	14	SLE Q	1	261.06	2.26	3.08	1036.75	-147.04	796.36	15.97
3.95	10	SLE R	1	31.89	2.26	3.08	-1042.22	1079.39	-144.77	17.66
3.95	14	SLE Q	1	31.89	2.26	3.08	-919.55	952.34	-127.73	15.58

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>
16	1.81	14	SLE Q	1	22	261.06	1036.75	34.00	170.00	0.50	14.00	184.52	3.08	256.25	796.36	0.23	0.07
18	1.81	12	SLE F	1	22	261.06	1057.72	34.00	170.00	0.50	14.00	184.52	3.08	256.25	812.47	0.24	0.07
37	3.95	14	SLE Q	1	22	31.89	-919.55	35.00	172.00	0.50	12.00	205.94	2.26	256.25	952.34	0.28	0.10
39	3.95	12	SLE F	1	22	31.89	-935.32	35.00	172.00	0.50	12.00	205.94	2.26	256.25	968.67	0.28	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>	
7 SLU	0.04	0.52	0.50	ø8/20 2 br.	5.03	0.25	3464.31	2.50	19861.90	20247.40	19861.90	5.733
7 SLU	0.52	3.41	2.99	ø8/20 2 br.	5.03	0.25	2720.97	2.50	19861.90	20247.40	19861.90	7.300
7 SLU	3.41	3.89	0.50	ø8/20 2 br.	5.03	0.25	2753.93	2.50	19861.90	20247.40	19861.90	7.212

Travata n. 137

Nodi: -1010 143

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
21L	L	60.00	30.00	20.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.68	3	SLV	1	577.68	2.76	2.26	2.76	2.26	-4105.07	-6686.29	1.629
6.10	3	SLV	1	0.00	2.76	2.26	2.76	2.26	-5623.74	-6686.29	1.189

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>
0.68	8	SLE R	1	577.68	2.76	2.26	-960.74	664.19	-94.13	10.28
0.68	14	SLE Q	1	577.68	2.76	2.26	-967.61	668.94	-94.81	10.35
6.10	10	SLE R	1	0.00	2.76	2.26	-2196.26	1518.34	-215.19	23.49
6.10	14	SLE Q	1	0.00	2.76	2.26	-2161.08	1494.03	-211.75	23.12

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>
23	0.68	14	SLE Q	1	21	577.68	-967.61	35.67	261.00	0.50	11.00	371.02	2.76	615.00	668.94	0.19	0.12
25	0.68	11	SLE F	1	21	577.68	-967.64	35.67	261.00	0.50	11.00	371.02	2.76	615.00	668.96	0.19	0.12
46	6.10	14	SLE Q	1	21	0.00	-2161.08	35.67	261.00	0.50	11.00	371.02	2.76	615.00	1494.03	0.44	0.27
48	6.10	12	SLE F	1	21	0.00	-2164.83	35.67	261.00	0.50	11.00	371.02	2.76	615.00	1496.62	0.44	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>	
3 SLV	0.20	0.78	0.60	ø8/20 2 br.	5.03	0.30	2526.17	2.50	24189.10	29590.40	24189.10	9.575
3 SLV	0.78	5.63	5.08	ø8/20 2 br.	5.03	0.30	2711.96	2.50	24189.10	29590.40	24189.10	8.919
3 SLV	5.63	6.20	0.60	ø8/20 2 br.	5.03	0.30	3005.25	2.50	24189.10	29590.40	24189.10	8.049

Travata n. 202

Nodi: 214 -1031 -1032 -1033 215 216 -1034 -1035 -1036 -1037 217 -1038 -1039 -1040 -1041 -1042 219

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>
15R	R	30.00	50.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
1.52	1	SLV	4	0.00	6.03	6.03	6.03	6.03	-3131.98	-11511.70	3.676
2.14	1	SLV	4	61.50	6.03	6.03	6.03	6.03	-2856.28	-11511.70	4.030
4.60	1	SLV	4	307.50	6.03	6.03	6.03	6.03	-1601.99	-11511.70	7.186
4.90	1	SLV	5	15.00	6.03	6.03	6.03	6.03	-2751.41	-11511.70	4.184
7.29	1	SLV	5	253.58	6.03	6.03	6.03	6.03	2711.38	11511.70	4.246
8.18	1	SLV	5	342.50	6.03	6.03	6.03	6.03	-2732.13	-11511.70	4.213
10.60	1	SLV	11	15.00	6.03	6.03	6.03	6.03	-3124.31	-11511.70	3.685
15.32	1	SLV	12	272.50	6.03	6.03	6.03	6.03	-3058.94	-11511.70	3.763

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>
1.52	10	SLE R	4	0.00	6.03	6.03	-1289.25	511.50	-125.82	12.56
1.52	14	SLE Q	4	0.00	6.03	6.03	-1139.84	452.22	-111.24	11.10

2.14	10	SLE R	4	61.50	6.03	6.03	-1069.58	424.35	-104.38	10.42
2.14	14	SLE Q	4	61.50	6.03	6.03	-947.27	375.82	-92.45	9.23
4.60	10	SLE R	4	307.50	6.03	6.03	-1138.13	451.55	-111.07	11.08
4.60	14	SLE Q	4	307.50	6.03	6.03	-1000.04	396.76	-97.60	9.74
4.90	10	SLE R	5	15.00	6.03	6.03	-1727.49	685.37	-168.59	16.82
4.90	14	SLE Q	5	15.00	6.03	6.03	-1534.19	608.68	-149.73	14.94
7.29	10	SLE R	5	253.58	6.03	6.03	1143.12	-111.56	453.53	11.13
7.29	14	SLE Q	5	253.58	6.03	6.03	1013.43	-98.90	402.07	9.87
8.18	10	SLE R	5	342.50	6.03	6.03	609.35	-59.47	241.75	5.93
8.18	14	SLE Q	5	342.50	6.03	6.03	561.25	-54.77	222.67	5.47
10.60	8	SLE R	11	15.00	6.03	6.03	-597.06	236.88	-58.27	5.81
10.60	14	SLE Q	11	15.00	6.03	6.03	-594.01	235.67	-57.97	5.78
15.32	10	SLE R	12	272.50	6.03	6.03	-722.46	286.63	-70.51	7.04
15.32	14	SLE Q	12	272.50	6.03	6.03	-703.67	279.18	-68.67	6.85

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>
15	1.52	14	SLE Q	4	15	0.00	-1139.84	33.00	109.00	0.50	16.00	147.57	6.03	307.50	452.22	0.13	0.03
17	1.52	12	SLE F	4	15	0.00	-1158.43	33.00	109.00	0.50	16.00	147.57	6.03	307.50	459.60	0.13	0.03
42	2.14	14	SLE Q	4	15	61.50	-947.27	33.00	109.00	0.50	16.00	147.57	6.03	307.50	375.82	0.11	0.03
46	2.14	12	SLE F	4	15	61.50	-962.40	33.00	109.00	0.50	16.00	147.57	6.03	307.50	381.83	0.11	0.03
63	4.60	14	SLE Q	4	15	307.50	-1000.04	33.00	109.00	0.50	16.00	147.57	6.03	307.50	396.76	0.12	0.03
65	4.60	12	SLE F	4	15	307.50	-1018.81	33.00	109.00	0.50	16.00	147.57	6.03	307.50	404.21	0.12	0.03
83	4.90	14	SLE Q	5	15	15.00	-1534.19	33.00	109.00	0.50	16.00	147.57	6.03	307.50	608.68	0.18	0.04
85	4.90	12	SLE F	5	15	15.00	-1559.20	33.00	109.00	0.50	16.00	147.57	6.03	307.50	618.60	0.18	0.05
103	7.29	14	SLE Q	5	15	253.58	1013.43	33.00	109.00	0.50	16.00	147.57	6.03	307.50	402.07	0.12	0.03
105	7.29	12	SLE F	5	15	253.58	1030.13	33.00	109.00	0.50	16.00	147.57	6.03	307.50	408.70	0.12	0.03
129	8.18	14	SLE Q	5	15	342.50	561.25	33.00	109.00	0.50	16.00	147.57	6.03	307.50	222.67	0.06	0.02
133	8.18	12	SLE F	5	15	342.50	567.31	33.00	109.00	0.50	16.00	147.57	6.03	307.50	225.08	0.07	0.02
150	10.60	14	SLE Q	11	15	15.00	-594.01	33.00	109.00	0.50	16.00	147.57	6.03	307.50	235.67	0.07	0.02
151	10.60	11	SLE F	11	15	15.00	-595.52	33.00	109.00	0.50	16.00	147.57	6.03	307.50	236.27	0.07	0.02
168	15.32	14	SLE Q	12	15	272.50	-703.67	33.00	109.00	0.50	16.00	147.57	6.03	307.50	279.18	0.08	0.02
170	15.32	12	SLE F	12	15	272.50	-706.38	33.00	109.00	0.50	16.00	147.57	6.03	307.50	280.25	0.08	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.
7 SLU	1.52	2.02	0.50	ø8/20 2 br.	5.03	0.30	3047.97	2.50	19861.90	24296.90	19861.90	6.516
1 SLV	2.02	4.10	2.07	ø8/20 2 br.	5.03	0.30	2218.11	2.50	19861.90	24296.90	19861.90	8.954
7 SLU	4.10	4.60	0.50	ø8/20 2 br.	5.03	0.30	2915.13	2.50	19861.90	24296.90	19861.90	6.813
7 SLU	4.90	5.40	0.50	ø8/20 2 br.	5.03	0.30	3768.18	2.50	19861.90	24296.90	19861.90	5.271
1 SLV	5.40	7.67	2.27	ø8/20 2 br.	5.03	0.30	3015.48	2.50	19861.90	24296.90	19861.90	6.587
1 SLV	7.67	8.18	0.50	ø8/20 2 br.	5.03	0.30	2835.72	2.50	19861.90	24296.90	19861.90	7.004
1 SLV	10.60	11.10	0.50	ø8/20 2 br.	5.03	0.30	1895.86	2.50	19861.90	24296.90	19861.90	10.476
1 SLV	11.10	14.82	3.72	ø8/20 2 br.	5.03	0.30	1754.77	2.50	19861.90	24296.90	19861.90	11.319
1 SLV	14.82	15.32	0.50	ø8/20 2 br.	5.03	0.30	1942.28	2.50	19861.90	24296.90	19861.90	10.226

Travata n. 205

Nodi: -1001 48 -1002 -1003 -1004 -1005 49 -1006 -1007 -1008 -1009 -1010

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>
15	R	30.00	50.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfE P S <cmq>	AfE P I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.00	7	SLU	1	0.00	6.03	6.03	6.03	6.03	1799.12	11511.70	6.398
1.54	7	SLU	1	153.57	6.03	6.03	6.03	6.03	3596.25	11511.70	3.201
4.30	7	SLU	1	430.00	6.03	6.03	6.03	6.03	-3731.09	-11511.70	3.085
4.60	1	SLV	2	15.00	6.03	6.03	6.03	6.03	-3973.81	-11511.70	2.897
6.63	1	SLV	2	217.62	6.03	6.03	6.03	6.03	2806.71	11511.70	4.101
7.03	1	SLV	2	257.50	6.03	6.03	6.03	6.03	2806.71	11511.70	4.101
8.53	1	SLV	6	17.50	6.03	6.03	6.03	6.03	-3634.52	-11511.70	3.167
9.47	1	SLV	6	111.54	6.03	6.03	6.03	6.03	2638.90	11511.70	4.362
12.60	1	SLV	6	425.00	6.03	6.03	6.03	6.03	-3087.65	-11511.70	3.728
12.90	1	SLV	7	15.00	6.03	6.03	6.03	6.03	-1680.72	-11511.70	6.849
14.42	1	SLV	7	166.56	6.03	6.03	6.03	6.03	-2091.99	-11511.70	5.503
15.32	1	SLV	7	257.50	6.03	6.03	6.03	6.03	-3165.91	-11511.70	3.636

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>
0.00	10	SLE R	1	0.00	6.03	6.03	1356.97	-132.43	538.37	13.22
0.00	14	SLE Q	1	0.00	6.03	6.03	1179.78	-115.14	468.07	11.49
1.54	10	SLE R	1	153.57	6.03	6.03	2710.01	-264.48	1075.18	26.39
1.54	14	SLE Q	1	153.57	6.03	6.03	2341.96	-228.56	929.16	22.81
4.30	10	SLE R	1	430.00	6.03	6.03	-2811.71	1115.52	-274.40	27.38
4.30	14	SLE Q	1	430.00	6.03	6.03	-2434.04	965.69	-237.55	23.70
4.60	10	SLE R	2	15.00	6.03	6.03	-2400.10	952.22	-234.23	23.37
4.60	14	SLE Q	2	15.00	6.03	6.03	-2084.01	826.82	-203.38	20.30
6.63	10	SLE R	2	217.62	6.03	6.03	214.98	-20.98	85.29	2.09

6.63	14	SLE Q	2	217.62	6.03	6.03	182.60	-17.82	72.44	1.78
7.03	10	SLE R	2	257.50	6.03	6.03	202.39	-19.75	80.30	1.97
7.03	14	SLE Q	2	257.50	6.03	6.03	172.44	-16.83	68.42	1.68
8.53	10	SLE R	6	17.50	6.03	6.03	-1414.88	561.34	-138.08	13.78
8.53	14	SLE Q	6	17.50	6.03	6.03	-1186.92	470.90	-115.84	11.56
9.47	10	SLE R	6	111.54	6.03	6.03	1549.34	-151.21	614.69	15.09
9.47	14	SLE Q	6	111.54	6.03	6.03	1353.92	-132.13	537.16	13.19
12.60	10	SLE R	6	425.00	6.03	6.03	-2162.36	857.90	-211.03	21.06
12.60	14	SLE Q	6	425.00	6.03	6.03	-1884.72	747.75	-183.94	18.35
12.90	10	SLE R	7	15.00	6.03	6.03	-988.75	392.28	-96.49	9.63
12.90	14	SLE Q	7	15.00	6.03	6.03	-831.80	330.01	-81.18	8.10
14.42	10	SLE R	7	166.56	6.03	6.03	-571.69	226.81	-55.79	5.57
14.42	14	SLE Q	7	166.56	6.03	6.03	-524.46	208.07	-51.18	5.11
15.32	10	SLE R	7	257.50	6.03	6.03	-1263.26	501.19	-123.28	12.30
15.32	14	SLE Q	7	257.50	6.03	6.03	-1131.46	448.90	-110.42	11.02

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/cmq>	ε _{sm}	Wk <mm>
25	0.00	14	SLE Q	1	15	0.00	1179.78	33.00	109.00	0.50	16.00	147.57	6.03	307.50	468.07	0.14	0.03
29	0.00	12	SLE F	1	15	0.00	1202.49	33.00	109.00	0.50	16.00	147.57	6.03	307.50	477.08	0.14	0.03
47	1.54	14	SLE Q	1	15	153.57	2341.96	33.00	109.00	0.50	16.00	147.57	6.03	307.50	929.16	0.27	0.07
49	1.54	12	SLE F	1	15	153.57	2389.54	33.00	109.00	0.50	16.00	147.57	6.03	307.50	948.03	0.28	0.07
65	4.30	14	SLE Q	1	15	430.00	-2434.04	33.00	109.00	0.50	16.00	147.57	6.03	307.50	965.69	0.28	0.07
67	4.30	12	SLE F	1	15	430.00	-2482.96	33.00	109.00	0.50	16.00	147.57	6.03	307.50	985.10	0.29	0.07
83	4.60	14	SLE Q	2	15	15.00	-2084.01	33.00	109.00	0.50	16.00	147.57	6.03	307.50	826.82	0.24	0.06
85	4.60	12	SLE F	2	15	15.00	-2124.45	33.00	109.00	0.50	16.00	147.57	6.03	307.50	842.86	0.25	0.06
108	6.63	14	SLE Q	2	15	217.62	182.60	33.00	109.00	0.50	16.00	147.57	6.03	307.50	72.44	0.02	0.01
112	6.63	12	SLE F	2	15	217.62	186.62	33.00	109.00	0.50	16.00	147.57	6.03	307.50	74.04	0.02	0.01
136	7.03	14	SLE Q	2	15	257.50	172.44	33.00	109.00	0.50	16.00	147.57	6.03	307.50	68.42	0.02	0.00
140	7.03	12	SLE F	2	15	257.50	176.10	33.00	109.00	0.50	16.00	147.57	6.03	307.50	69.87	0.02	0.01
160	8.53	14	SLE Q	6	15	17.50	-1186.92	33.00	109.00	0.50	16.00	147.57	6.03	307.50	470.90	0.14	0.03
164	8.53	12	SLE F	6	15	17.50	-1216.09	33.00	109.00	0.50	16.00	147.57	6.03	307.50	482.48	0.14	0.04
191	9.47	14	SLE Q	6	15	111.54	1353.92	33.00	109.00	0.50	16.00	147.57	6.03	307.50	537.16	0.16	0.04
195	9.47	12	SLE F	6	15	111.54	1379.40	33.00	109.00	0.50	16.00	147.57	6.03	307.50	547.27	0.16	0.04
215	12.60	14	SLE Q	6	15	425.00	-1884.72	33.00	109.00	0.50	16.00	147.57	6.03	307.50	747.75	0.22	0.05
217	12.60	12	SLE F	6	15	425.00	-1921.14	33.00	109.00	0.50	16.00	147.57	6.03	307.50	762.20	0.22	0.06
233	12.90	14	SLE Q	7	15	15.00	-831.80	33.00	109.00	0.50	16.00	147.57	6.03	307.50	330.01	0.10	0.02
235	12.90	12	SLE F	7	15	15.00	-854.40	33.00	109.00	0.50	16.00	147.57	6.03	307.50	338.98	0.10	0.02
258	14.42	14	SLE Q	7	15	166.56	-524.46	33.00	109.00	0.50	16.00	147.57	6.03	307.50	208.07	0.06	0.02
262	14.42	12	SLE F	7	15	166.56	-529.64	33.00	109.00	0.50	16.00	147.57	6.03	307.50	210.13	0.06	0.02
281	15.32	14	SLE Q	7	15	257.50	-1131.46	33.00	109.00	0.50	16.00	147.57	6.03	307.50	448.90	0.13	0.03
283	15.32	12	SLE F	7	15	257.50	-1147.00	33.00	109.00	0.50	16.00	147.57	6.03	307.50	455.06	0.13	0.03

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.
7 SLU	0.00	0.50	0.50	ø8/20 2 br.	5.03	0.30	3762.03	2.50	19861.90	24296.90	19861.90	5.280
7 SLU	0.50	3.80	3.30	ø8/20 2 br.	5.03	0.30	4412.40	2.50	19861.90	24296.90	19861.90	4.501
7 SLU	3.80	4.30	0.50	ø8/20 2 br.	5.03	0.30	5488.00	2.50	19861.90	24296.90	19861.90	3.619
1 SLV	4.60	5.10	0.50	ø8/20 2 br.	5.03	0.30	4386.61	2.50	19861.90	24296.90	19861.90	4.528
1 SLV	5.10	6.53	1.42	ø8/20 2 br.	5.03	0.30	3687.31	2.50	19861.90	24296.90	19861.90	5.387
1 SLV	6.53	7.03	0.50	ø8/20 2 br.	5.03	0.30	2760.76	2.50	19861.90	24296.90	19861.90	7.194
7 SLU	8.53	9.03	0.50	ø8/20 2 br.	5.03	0.30	4142.85	2.50	19861.90	24296.90	19861.90	4.794
7 SLU	9.03	12.10	3.07	ø8/20 2 br.	5.03	0.30	3547.57	2.50	19861.90	24296.90	19861.90	5.599
7 SLU	12.10	12.60	0.50	ø8/20 2 br.	5.03	0.30	4623.17	2.50	19861.90	24296.90	19861.90	4.296
1 SLV	12.90	13.40	0.50	ø8/20 2 br.	5.03	0.30	2760.77	2.50	19861.90	24296.90	19861.90	7.194
1 SLV	13.40	14.82	1.42	ø8/20 2 br.	5.03	0.30	2308.61	2.50	19861.90	24296.90	19861.90	8.603
1 SLV	14.82	15.32	0.50	ø8/20 2 br.	5.03	0.30	3007.92	2.50	19861.90	24296.90	19861.90	6.603

Travata n. 215

Nodi: 110 217

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
25	L	60.00	30.00	20.00	30.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
1.94	3	SLV	1	377.77	2.26	2.26	2.26	2.26	1553.83	4775.73	3.074

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>
1.94	8	SLE R	1	377.77	2.26	2.26	1124.02	-68.57	1139.08	12.47
1.94	14	SLE Q	1	377.77	2.26	2.26	1122.58	-68.48	1137.62	12.45

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>
15	1.94	14	SLE Q	1	25	377.77	1122.58	35.00	222.00	0.50	12.00	326.45	2.26	307.50	1137.62	0.33	0.18
16	1.94	11	SLE F	1	25	377.77	1123.21	35.00	222.00	0.50	12.00	326.45	2.26	307.50	1138.25	0.33	0.18

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 SLU	0.19	0.66	0.50	ø8/20 2 br.	5.03	0.30	1548.38	2.50	19861.90	24296.90	19861.90	12.828
5 SLU	0.66	4.49	4.12	ø8/20 2 br.	5.03	0.30	1263.71	2.50	19861.90	24296.90	19861.90	15.717
7 SLU	4.49	4.96	0.50	ø8/20 2 br.	5.03	0.30	1555.25	2.50	19861.90	24296.90	19861.90	12.771

Travata n. 304

Nodi: -1047 -1048 -1049 -1050 324

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B<cm>	H<cm>	Cf sup<cm>	Cf inf<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>
18	R	30.00	73.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg<m>	CC	TCC	El	X<cm>	AfE S<cm>	AfE I<cm>	AfEP S<cm>	AfEP I<cm>	My<daNm>	MRdy<daNm>	Sic.
16.85	7	SLU	4	425.00	4.02	6.28	4.02	6.28	-9333.70	-11872.90	1.272

Stato limite d'esercizio - Verifiche tensionali

Xg<m>	CC	TCC	El	X<cm>	AfE S<cm>	AfE I<cm>	My<daNm>	σ _f sup<daN/cm>	σ _f inf<daN/cm>	σ _c <daN/cm>
16.85	10	SLE R	4	425.00	4.02	6.28	-7074.84	2722.40	-433.23	42.19
16.85	14	SLE Q	4	425.00	4.02	6.28	-6332.25	2436.65	-387.76	37.76

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 <cm>	A _{c eff} <cm>	σ _s <daN/cm>	ε _{sm}	W _k <mm>
15	16.85	14	SLE Q	4	18	425.00	-6332.25	33.00	218.00	0.50	16.00	450.03	4.02	307.50	2436.65	0.84	0.64
17	16.85	12	SLE F	4	18	425.00	-6429.93	33.00	218.00	0.50	16.00	450.03	4.02	307.50	2474.24	0.72	0.55

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.
7 SLU	0.06	16.12	16.06	ø8/20 2 br.	5.03	0.30	5472.19	2.50	29814.40	36471.90	29814.40	5.448
7 SLU	16.12	16.85	0.73	ø8/20 2 br.	5.03	0.30	5991.77	2.50	29814.40	36471.90	29814.40	4.976

Travata n. 316

Nodi: -1048 216

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B<cm>	H<cm>	Cf sup<cm>	Cf inf<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>
19	R	40.00	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg<m>	CC	TCC	El	X<cm>	AfE S<cm>	AfE I<cm>	AfEP S<cm>	AfEP I<cm>	My<daNm>	MRdy<daNm>	Sic.
5.05	7	SLU	1	515.88	4.62	2.36	4.62	2.36	-1738.77	-2928.96	1.685

Stato limite d'esercizio - Verifiche tensionali

Xg<m>	CC	TCC	El	X<cm>	AfE S<cm>	AfE I<cm>	My<daNm>	σ _f sup<daN/cm>	σ _f inf<daN/cm>	σ _c <daN/cm>
5.05	10	SLE R	1	515.88	4.62	2.36	-1312.55	2056.01	-322.67	76.61
5.05	14	SLE Q	1	515.88	4.62	2.36	-1151.22	1803.31	-283.01	67.19

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 <cm>	A _{c eff} <cm>	σ _s <daN/cm>	ε _{sm}	W _k <mm>
15	5.05	14	SLE Q	1	19	515.88	-1151.22	35.60	82.00	0.50	10.89	116.15	4.62	190.66	1803.31	0.67	0.13
17	5.05	12	SLE F	1	19	515.88	-1172.14	35.60	82.00	0.50	10.89	116.15	4.62	190.66	1836.08	0.59	0.12

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.
7 SLU	0.04	4.87	4.94	ø6/15 2 br.	3.77	0.40	2992.50	2.50	5160.19	11222.10	5160.19	1.724
7 SLU	4.87	5.07	0.20	ø6/15 2 br.	3.77	0.40	1819.25	2.50	5160.19	11222.10	5160.19	2.836

Travata n. 317

Nodi: 216 -1050

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B<cm>	H<cm>	Cf sup<cm>	Cf inf<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>
19	R	40.00	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg<m>	CC	TCC	El	X<cm>	AfE S<cm>	AfE I<cm>	AfEP S<cm>	AfEP I<cm>	My<daNm>	MRdy<daNm>	Sic.
0.23	7	SLU	1	23.51	4.62	2.36	4.62	2.36	-1873.01	-2928.96	1.564

Stato limite d'esercizio - Verifiche tensionali

Xg<m>	CC	TCC	El	X<cm>	AfE S<cm>	AfE I<cm>	My<daNm>	σ _f sup<daN/cm>	σ _f inf<daN/cm>	σ _c <daN/cm>
0.23	10	SLE R	1	23.51	4.62	2.36	-1413.91	2214.79	-347.59	82.53
0.23	14	SLE Q	1	23.51	4.62	2.36	-1240.98	1943.91	-305.08	72.43

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>
15	0.23	14	SLE Q	1	19	23.51	-1240.98	35.60	82.00	0.50	10.89	116.15	4.62	190.66	1943.91	0.74	0.15
17	0.23	12	SLE F	1	19	23.51	-1263.38	35.60	82.00	0.50	10.89	116.15	4.62	190.66	1978.99	0.66	0.13

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>	
7 SLU	0.21	0.41	0.20	ø6/15 2 br.	3.77	0.40	1877.23	2.50	5160.19	11222.10	5160.19	2.749
7 SLU	0.41	5.30	5.00	ø6/15 2 br.	3.77	0.40	3014.18	2.50	5160.19	11222.10	5160.19	1.712

Travata n. 318

Nodi: -1050 219

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>
19	R	40.00	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	N	MRdy	Nu	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daN>	<daNm>	<daN>	
5.24	7	SLU	1	535.97	4.62	2.36	4.62	2.36	-2229.59	-12854.80	-3710.50	-12854.80	1.664

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	N	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>
5.24	10	SLE R	1	535.97	4.62	2.36	-1684.15	-9725.90	1602.58	-704.39	100.40
5.24	14	SLE Q	1	535.97	4.62	2.36	-1480.85	-8672.05	1397.27	-622.38	88.27

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>	
7 SLU	0.04	5.07	5.14	ø6/15 2 br.	3.77	0.40	3024.97	2.50	5160.19	12806.70	5160.19	1.706
7 SLU	5.07	5.27	0.20	ø6/15 2 br.	3.77	0.40	1908.45	2.50	5160.19	12807.90	5160.19	2.704

Travata n. 319

Nodi: 214 -1048

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>
19	R	40.00	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	N	MRdy	Nu	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daN>	<daNm>	<daN>	
0.09	7	SLU	1	9.38	4.62	2.36	4.62	2.36	-2248.16	-10812.40	-3592.47	-10812.40	1.598

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	N	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.09	10	SLE R	1	9.38	4.62	2.36	-1698.63	-8185.62	1779.33	-668.36	101.26
0.09	14	SLE Q	1	9.38	4.62	2.36	-1496.65	-7246.12	1564.32	-589.79	89.22

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	N	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<daN>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
15	0.09	14	SLE Q	1	19	9.38	-1496.65	-7246.12	35.60	82.00	0.50	10.89	111.03	4.62	168.92	1564.32	0.58	0.11
17	0.09	12	SLE F	1	19	9.38	-1522.90	-7369.61	35.60	82.00	0.50	10.89	111.03	4.62	168.94	1592.12	0.50	0.09

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>	
7 SLU	0.07	0.27	0.20	ø6/15 2 br.	3.77	0.40	1905.66	2.50	5160.19	12556.00	5160.19	2.708
7 SLU	0.27	5.24	5.08	ø6/15 2 br.	3.77	0.40	2947.86	2.50	5160.19	12554.70	5160.19	1.750

Travata n. 320

Nodi: 229 -1050

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>
19	R	40.00	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.32	7	SLU	1	525.67	4.62	2.36	4.62	2.36	-2022.95	-2928.96	1.448

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>
0.32	10	SLE R	1	525.67	4.62	2.36	-1526.08	2390.50	-375.17	89.07
0.32	14	SLE Q	1	525.67	4.62	2.36	-1333.82	2089.33	-327.90	77.85

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>
15	0.32	14	SLE Q	1	19	525.67	-1333.82	35.60	82.00	0.50	10.89	116.15	4.62	190.66	2089.33	0.81	0.16
17	0.32	12	SLE F	1	19	525.67	-1358.69	35.60	82.00	0.50	10.89	116.15	4.62	190.66	2128.29	0.73	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>	
7 SLU	0.30	0.50	0.20	ø6/15 2 br.	3.77	0.40	1998.46	2.50	5160.19	11222.10	5160.19	2.582
7 SLU	0.50	5.44	5.04	ø6/15 2 br.	3.77	0.40	3143.00	2.50	5160.19	11222.10	5160.19	1.642

Travata n. 321

Nodi: -1050 231

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>
19	R	40.00	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	N	MRdy	Nu	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daN>	<daNm>	<daN>	
5.28	7	SLU	1	539.54	4.62	2.36	4.62	2.36	-2427.45	-11310.70	-3621.70	-11310.70	1.492

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	AfE S	AfE I	My	N	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>
5.28	10	SLE R	1	539.54	4.62	2.36	-1833.12	-8570.86	1947.05	-714.23	109.26
5.28	14	SLE Q	1	539.54	4.62	2.36	-1607.11	-7567.34	1701.55	-627.61	95.79

Stato limite d'esercizio - Verifiche a fessurazione

Caso	Xg	CC	TCC	El	Sez.	X	My	N	C	S	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _{c eff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<daN>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
15	5.28	14	SLE Q	1	19	539.54	-1607.11	-7567.34	35.60	82.00	0.50	10.89	111.19	4.62	169.61	1701.55	0.64	0.12
17	5.28	12	SLE F	1	19	539.54	-1636.52	-7700.91	35.60	82.00	0.50	10.89	111.19	4.62	169.62	1733.19	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>	
7 SLU	0.04	5.11	5.18	ø6/15 2 br.	3.77	0.40	3140.42	2.50	5160.19	12616.10	5160.19	1.643
7 SLU	5.11	5.31	0.20	ø6/15 2 br.	3.77	0.40	2045.48	2.50	5160.19	12617.40	5160.19	2.523

Travata n. 322

Nodi: -1048 229

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>
19	R	40.00	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
5.09	7	SLU	1	519.87	4.62	2.36	4.62	2.36	-2013.67	-2928.96	1.455

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>
5.09	10	SLE R	1	519.87	4.62	2.36	-1519.26	2379.81	-373.49	88.68
5.09	14	SLE Q	1	519.87	4.62	2.36	-1327.78	2079.87	-326.42	77.50

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>
15	5.09	14	SLE Q	1	19	519.87	-1327.78	35.60	82.00	0.50	10.89	116.15	4.62	190.66	2079.87	0.81	0.16
17	5.09	12	SLE F	1	19	519.87	-1352.61	35.60	82.00	0.50	10.89	116.15	4.62	190.66	2118.76	0.73	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>	
7 SLU	0.04	4.91	4.98	ø6/15 2 br.	3.77	0.40	3069.89	2.50	5160.19	11222.10	5160.19	1.681
7 SLU	4.91	5.11	0.20	ø6/15 2 br.	3.77	0.40	1987.80	2.50	5160.19	11222.10	5160.19	2.596

Travata n. 323

Nodi: 232 -1048

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>
19	R	40.00	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	N	MRdy	Nu	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daN>	<daNm>	<daN>	
0.19	7	SLU	1	533.64	4.62	2.36	4.62	2.36	-1816.14	-16021.50	-3886.88	-16021.50	2.140

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	El	X	Afe S	Afe I	My	N	σ _f sup	σ _f inf	σ _c
<m>				<cm>	<cmq>	<cmq>	<daNm>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>
0.19	10	SLE R	1	533.64	4.62	2.36	-1370.36	-12136.30	911.19	-668.84	81.19
0.19	14	SLE Q	1	533.64	4.62	2.36	-1195.93	-10823.70	775.23	-588.38	70.81

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>	
7 SLU	0.17	0.37	0.20	ø6/15 2 br.	3.77	0.40	1874.01	2.50	5160.19	13198.60	5160.19	2.754
7 SLU	0.37	5.38	5.12	ø6/15 2 br.	3.77	0.40	3227.89	2.50	5160.19	13197.20	5160.19	1.599

Travata n. 902

Nodi: -772 -1096 129

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>
30	R	30.00	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>	
6.20	5	SLU	2	30.00	7.63	9.42	7.63	9.42	-11518.90	-12889.90	1.119

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>
6.20	8	SLE R	2	30.00	7.63	9.42	-8474.01	2664.93	-716.80	69.90
6.20	14	SLE Q	2	30.00	7.63	9.42	-7450.00	2342.90	-630.18	61.45

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>
15	6.20	14	SLE Q	2	30	30.00	-7450.00	32.00	108.00	0.50	18.00	136.50	7.63	307.50	2342.90	0.88	0.20
16	6.20	11	SLE F	2	30	30.00	-7698.25	32.00	108.00	0.50	18.00	136.50	7.63	307.50	2420.97	0.79	0.18

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>	
5 SLU	0.06	5.70	5.64	ø8/10 2 br.	10.05	0.30	11690.60	2.30	37330.40	37330.40	37330.40	3.193
5 SLU	5.70	6.20	0.50	ø8/10 2 br.	10.05	0.30	12092.60	2.30	37330.40	37330.40	37330.40	3.087

Travata n. 903

Nodi: -773 130

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>
30	R	30.00	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>	
6.20	5	SLU	1	30.00	7.63	12.57	7.63	12.57	-9343.19	-12889.30	1.380

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>
6.20	8	SLE R	1	30.00	7.63	12.57	-6825.42	2139.43	-525.96	52.49
6.20	14	SLE Q	1	30.00	7.63	12.57	-5881.40	1843.52	-453.21	45.23

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>
15	6.20	14	SLE Q	1	30	30.00	-5881.40	32.00	108.00	0.50	18.00	136.50	7.63	307.50	1843.52	0.64	0.15
16	6.20	11	SLE F	1	30	30.00	-6115.84	32.00	108.00	0.50	18.00	136.50	7.63	307.50	1917.01	0.56	0.13

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>	
5 SLU	0.06	5.70	5.64	ø8/20 2 br.	5.03	0.30	13072.30	2.50	20313.30	35174.00	20313.30	1.554
5 SLU	5.70	6.20	0.50	ø8/10 2 br.	10.05	0.30	12883.10	2.30	37330.40	37330.40	37330.40	2.898

Travata n. 904

Nodi: -771 -823

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>
35	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>	
0.15	3	SLV	1	15.00	7.63	7.63	7.63	7.63	-1640.83	-9902.47	6.035
3.10	5	SLU	1	309.94	7.63	7.63	7.63	7.63	904.42	9902.47	10.949
6.53	3	SLV	1	652.50	7.63	7.63	7.63	7.63	-1486.26	-9902.47	6.663

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>
0.15	10	SLE R	1	15.00	7.63	7.63	-923.28	377.92	-113.31	11.78
0.15	14	SLE Q	1	15.00	7.63	7.63	-921.51	377.20	-113.10	11.75
3.10	8	SLE R	1	309.94	7.63	7.63	692.54	-85.00	283.48	8.83
3.10	14	SLE Q	1	309.94	7.63	7.63	684.42	-84.00	280.15	8.73
6.53	9	SLE R	1	652.50	7.63	7.63	-878.60	359.63	-107.83	11.21
6.53	14	SLE Q	1	652.50	7.63	7.63	-882.27	361.13	-108.28	11.25

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 e _{ff}	σ _s	ε _{sm}	Wk
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
17	0.15	14	SLE Q	1	35	15.00	-921.51	32.00	108.00	0.50	18.00	131.35	7.63	285.65	377.20	0.11	0.02
19	0.15	12	SLE F	1	35	15.00	-921.99	32.00	108.00	0.50	18.00	131.35	7.63	285.65	377.39	0.11	0.02
35	3.10	14	SLE Q	1	35	309.94	684.42	32.00	108.00	0.50	18.00	131.35	7.63	285.65	280.15	0.08	0.02
36	3.10	11	SLE F	1	35	309.94	686.49	32.00	108.00	0.50	18.00	131.35	7.63	285.65	281.00	0.08	0.02
53	6.53	14	SLE Q	1	35	652.50	-882.27	32.00	108.00	0.50	18.00	131.35	7.63	285.65	361.13	0.11	0.02
56	6.53	13	SLE F	1	35	652.50	-882.27	32.00	108.00	0.50	18.00	131.35	7.63	285.65	361.13	0.11	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>	
7 SLU	0.15	0.55	0.40	ø8/ 8 2 br.	12.57	0.30	1252.66	2.01	31861.00	31861.00	31861.00	25.435
7 SLU	0.55	6.12	5.57	ø8/ 8 2 br.	12.57	0.30	1096.65	2.01	31861.00	31861.00	31861.00	29.053
5 SLU	6.12	6.53	0.40	ø8/ 8 2 br.	12.57	0.30	1234.47	2.01	31861.00	31861.00	31861.00	25.810

Travata n. 905

Nodi: 129 140

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>
33R		30.00	16.00	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>	
0.015	SLU	1	599.75	6.03	6.03	6.03	6.03	6.03	-569.74	-2243.06	3.937
3.157	SLU	1	285.59	6.03	6.03	6.03	6.03	6.03	246.76	2243.06	9.090
6.007	SLU	1	0.29	6.03	6.03	6.03	6.03	6.03	-407.49	-2243.06	5.505

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.013	SND	1	599.75	6.03	6.03	6.03	6.03	6.03	-502.54	-2190.47	4.359
3.153	SND	1	285.59	6.03	6.03	6.03	6.03	6.03	204.67	2190.47	10.703
6.003	SND	1	0.29	6.03	6.03	6.03	6.03	6.03	-401.07	-2190.47	5.462

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>
0.018	SLE R	1	599.75	6.03	6.03	6.03	-432.77	749.44	-163.38	42.88
0.014	SLE Q	1	599.75	6.03	6.03	6.03	-419.39	726.27	-158.33	41.55
3.1510	SLE R	1	285.59	6.03	6.03	6.03	190.65	-71.97	330.14	18.89
3.1514	SLE Q	1	285.59	6.03	6.03	6.03	190.24	-71.82	329.44	18.85
6.0010	SLE R	1	0.29	6.03	6.03	6.03	-315.04	545.57	-118.93	31.21
6.0014	SLE Q	1	0.29	6.03	6.03	6.03	-315.27	545.96	-119.02	31.24

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>	
5 SLU	0.01	0.17	0.16	ø8/ 8 2 br.	12.57	0.30	496.13	2.01	10561.20	10561.20	10561.20	21.287
5 SLU	0.17	5.84	5.67	ø8/ 8 2 br.	12.57	0.30	471.16	2.01	10561.20	10561.20	10561.20	22.415
7 SLU	5.84	6.00	0.16	ø8/ 8 2 br.	12.57	0.30	443.99	2.01	10561.20	10561.20	10561.20	23.787

Travata n. 906

Nodi: 132 133

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>
33R		30.00	16.00	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>	
0.007	SLU	1	0.00	6.03	6.03	6.03	6.03	6.03	-474.59	-2243.06	4.726
2.075	SLU	1	207.48	6.03	6.03	6.03	6.03	6.03	207.03	2243.06	10.835
6.005	SLU	1	600.00	6.03	6.03	6.03	6.03	6.03	-451.94	-2243.06	4.963

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.001	SND	1	0.00	6.03	6.03	6.03	6.03	6.03	-803.16	-2190.47	2.727
2.071	SND	1	207.48	6.03	6.03	6.03	6.03	6.03	361.56	2190.47	6.058
6.001	SND	1	600.00	6.03	6.03	6.03	6.03	6.03	-636.47	-2190.47	3.442

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>
0.00	10	SLE R	1	0.00	6.03	6.03	-364.80	631.72	-137.72	36.14
0.00	14	SLE Q	1	0.00	6.03	6.03	-363.03	628.66	-137.05	35.97
2.07	8	SLE R	1	207.48	6.03	6.03	159.27	-60.13	275.81	15.78
2.07	14	SLE Q	1	207.48	6.03	6.03	159.42	-60.18	276.07	15.80
6.00	8	SLE R	1	600.00	6.03	6.03	-347.70	602.12	-131.26	34.45
6.00	14	SLE Q	1	600.00	6.03	6.03	-348.01	602.66	-131.38	34.48

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 SND	0.00	0.16	0.16	ø8/ 8 2 br.	12.57	0.30	482.03	2.01	10561.20	10561.20	10561.20	21.910
1 SND	0.16	5.84	5.68	ø8/ 8 2 br.	12.57	0.30	462.83	2.01	10561.20	10561.20	10561.20	22.819
1 SND	5.84	6.00	0.16	ø8/ 8 2 br.	12.57	0.30	477.03	2.01	10561.20	10561.20	10561.20	22.140

Travata n. 907

Nodi: -797 -798 -799 146 -1096

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>
30	R	30.00	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 <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfeP S <cmq>	AfeP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.10	5	SLU	1	10.00	9.42	9.42	9.42	9.42	641.64	15816.60	24.650
0.75	5	SLU	1	74.55	9.42	9.42	9.42	9.42	776.87	15816.60	20.360
1.43	5	SLU	1	142.50	9.42	9.42	9.42	9.42	776.87	15816.60	20.360
1.62	5	SLU	2	10.00	9.42	9.42	9.42	9.42	-2083.38	-15816.60	7.592
3.33	5	SLU	2	180.00	9.42	9.42	9.42	9.42	-9078.15	-15816.60	1.742
3.52	5	SLU	3	10.00	9.42	9.42	9.42	9.42	-9655.40	-15816.60	1.638

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>
0.10	8	SLE R	1	10.00	9.42	9.42	462.49	-38.00	118.64	3.56
0.10	14	SLE Q	1	10.00	9.42	9.42	384.71	-31.61	98.69	2.96
0.75	8	SLE R	1	74.55	9.42	9.42	558.47	-45.89	143.27	4.30
0.75	14	SLE Q	1	74.55	9.42	9.42	460.73	-37.86	118.19	3.54
1.43	8	SLE R	1	142.50	9.42	9.42	558.47	-45.89	143.27	4.30
1.43	14	SLE Q	1	142.50	9.42	9.42	460.73	-37.86	118.19	3.54
1.62	8	SLE R	2	10.00	9.42	9.42	-1525.48	391.34	-125.35	11.74
1.62	14	SLE Q	2	10.00	9.42	9.42	-1324.18	339.70	-108.81	10.19
3.33	8	SLE R	2	180.00	9.42	9.42	-6626.95	1700.04	-544.55	50.98
3.33	14	SLE Q	2	180.00	9.42	9.42	-5706.20	1463.84	-468.89	43.90
3.52	8	SLE R	3	10.00	9.42	9.42	-7047.84	1808.01	-579.14	54.22
3.52	14	SLE Q	3	10.00	9.42	9.42	-6067.59	1556.54	-498.59	46.68

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>
24	0.10	14	SLE Q	1	30	10.00	384.71	31.00	107.00	0.50	20.00	127.25	9.42	307.50	98.69	0.03	0.01
26	0.10	11	SLE F	1	30	10.00	405.41	31.00	107.00	0.50	20.00	127.25	9.42	307.50	104.00	0.03	0.01
49	0.75	14	SLE Q	1	30	74.55	460.73	31.00	107.00	0.50	20.00	127.25	9.42	307.50	118.19	0.03	0.01
50	0.75	11	SLE F	1	30	74.55	486.62	31.00	107.00	0.50	20.00	127.25	9.42	307.50	124.83	0.04	0.01
67	1.43	14	SLE Q	1	30	142.50	460.73	31.00	107.00	0.50	20.00	127.25	9.42	307.50	118.19	0.03	0.01
68	1.43	11	SLE F	1	30	142.50	486.62	31.00	107.00	0.50	20.00	127.25	9.42	307.50	124.83	0.04	0.01
96	1.62	14	SLE Q	2	30	10.00	-1324.18	31.00	107.00	0.50	20.00	127.25	9.42	307.50	339.70	0.10	0.02
98	1.62	11	SLE F	2	30	10.00	-1374.18	31.00	107.00	0.50	20.00	127.25	9.42	307.50	352.52	0.10	0.02
118	3.33	14	SLE Q	2	30	180.00	-5706.20	31.00	107.00	0.50	20.00	127.25	9.42	307.50	1463.84	0.50	0.11
119	3.33	11	SLE F	2	30	180.00	-5938.67	31.00	107.00	0.50	20.00	127.25	9.42	307.50	1523.47	0.44	0.10
136	3.52	14	SLE Q	3	30	10.00	-6067.59	31.00	107.00	0.50	20.00	127.25	9.42	307.50	1556.54	0.54	0.12
137	3.52	11	SLE F	3	30	10.00	-6315.22	31.00	107.00	0.50	20.00	127.25	9.42	307.50	1620.07	0.47	0.10

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 SLU	0.10	1.43	1.32	ø8/10 2 br.	10.05	0.30	1576.79	2.30	37330.40	37330.40	37330.40	23.675
5 SLU	1.62	2.12	0.50	ø8/10 2 br.	10.05	0.30	4830.44	2.30	37330.40	37330.40	37330.40	7.728
5 SLU	2.12	2.82	0.70	ø8/10 2 br.	10.05	0.30	6072.53	2.30	37330.40	37330.40	37330.40	6.147
5 SLU	2.82	3.33	0.50	ø8/10 2 br.	10.05	0.30	6959.76	2.30	37330.40	37330.40	37330.40	5.364
5 SLU	3.52	4.03	0.50	ø8/10 2 br.	10.05	0.30	9725.87	2.30	37330.40	37330.40	37330.40	3.838
5 SLU	4.03	8.29	4.26	ø8/10 2 br.	10.05	0.30	8838.64	2.30	37330.40	37330.40	37330.40	4.224

Travata n. 908

Nodi: 220 224 225

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>
30	R	30.00	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>	
0.10	3	SLV	1	10.00	6.03	6.03	6.03	6.03	-660.16	-10268.10	15.554
0.99	3	SLV	1	98.92	6.03	6.03	6.03	6.03	1007.78	10268.10	10.189
1.40	3	SLV	1	140.00	6.03	6.03	6.03	6.03	1007.78	10268.10	10.189
1.70	3	SLV	2	15.00	6.03	6.03	6.03	6.03	-750.76	-10268.10	13.677
3.00	3	SLV	2	145.00	6.03	6.03	6.03	6.03	519.16	10268.10	19.778

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	8	SLE R	1	10.00	6.03	6.03	100.25	-9.78	39.77	0.98
0.10	14	SLE Q	1	10.00	6.03	6.03	93.98	-9.17	37.29	0.92
0.99	10	SLE R	1	98.92	6.03	6.03	133.85	-13.06	53.10	1.30
0.99	14	SLE Q	1	98.92	6.03	6.03	123.23	-12.03	48.89	1.20
1.40	10	SLE R	1	140.00	6.03	6.03	133.85	-13.06	53.10	1.30
1.40	14	SLE Q	1	140.00	6.03	6.03	123.23	-12.03	48.89	1.20
1.70	8	SLE R	2	15.00	6.03	6.03	-67.00	26.58	-6.54	0.65
1.70	14	SLE Q	2	15.00	6.03	6.03	-60.25	23.90	-5.88	0.59
3.00	8	SLE R	2	145.00	6.03	6.03	49.25	-4.81	19.54	0.48
3.00	14	SLE Q	2	145.00	6.03	6.03	44.98	-4.39	17.84	0.44

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>
23	0.10	14	SLE Q	1	30	10.00	93.98	33.00	109.00	0.50	16.00	147.57	6.03	307.50	37.29	0.01	0.00
25	0.10	11	SLE F	1	30	10.00	95.57	33.00	109.00	0.50	16.00	147.57	6.03	307.50	37.92	0.01	0.00
47	0.99	14	SLE Q	1	30	98.92	123.23	33.00	109.00	0.50	16.00	147.57	6.03	307.50	48.89	0.01	0.00
49	0.99	12	SLE F	1	30	98.92	124.44	33.00	109.00	0.50	16.00	147.57	6.03	307.50	49.37	0.01	0.00
66	1.40	14	SLE Q	1	30	140.00	123.23	33.00	109.00	0.50	16.00	147.57	6.03	307.50	48.89	0.01	0.00
68	1.40	12	SLE F	1	30	140.00	124.44	33.00	109.00	0.50	16.00	147.57	6.03	307.50	49.37	0.01	0.00
92	1.70	14	SLE Q	2	30	15.00	-60.25	33.00	109.00	0.50	16.00	147.57	6.03	307.50	23.90	0.01	0.00
94	1.70	11	SLE F	2	30	15.00	-62.40	33.00	109.00	0.50	16.00	147.57	6.03	307.50	24.76	0.01	0.00
122	3.00	14	SLE Q	2	30	145.00	44.98	33.00	109.00	0.50	16.00	147.57	6.03	307.50	17.84	0.01	0.00
124	3.00	11	SLE F	2	30	145.00	46.38	33.00	109.00	0.50	16.00	147.57	6.03	307.50	18.40	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>	
3	SLV	0.10	1.40	1.30	ø8/10 2 br.	10.05	0.30	1422.54	2.30	37330.40	37330.40	26.242
3	SLV	1.70	3.00	1.30	ø8/10 2 br.	10.05	0.30	1123.61	2.30	37330.40	37330.40	33.224

Travata n. 1091

Nodi: 50 144

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
21	L	60.00	30.00	20.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.15	7	SLU	1	15.96	4.02	4.02	4.02	4.02	-8494.75	-9573.20	1.127
2.97	7	SLU	1	316.21	4.02	4.02	4.02	4.02	5623.01	9894.11	1.760

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>
0.15	10	SLE R	1	15.96	4.02	4.02	-6416.68	3076.02	-555.52	56.20
0.15	14	SLE Q	1	15.96	4.02	4.02	-5651.24	2709.08	-489.25	49.49
2.97	10	SLE R	1	316.21	4.02	4.02	4246.96	-216.59	2002.72	26.15
2.97	14	SLE Q	1	316.21	4.02	4.02	3740.96	-190.79	1764.11	23.03

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>
15	0.15	14	SLE Q	1	21	15.96	-5651.24	33.00	518.00	0.50	16.00	359.82	4.02	615.00	2709.08	0.79	0.48
17	0.15	12	SLE F	1	21	15.96	-5744.72	33.00	518.00	0.50	16.00	359.82	4.02	615.00	2753.90	0.80	0.49
33	2.97	14	SLE Q	1	21	316.21	3740.96	33.00	218.00	0.50	16.00	381.33	4.02	307.50	1764.11	0.51	0.33
35	2.97	12	SLE F	1	21	316.21	3801.44	33.00	218.00	0.50	16.00	381.33	4.02	307.50	1792.63	0.52	0.34

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>	
7	SLU	0.25	0.83	0.60	ø8/20 2 br.	5.03	0.30	7295.55	2.50	24189.10	29590.40	3.316
7	SLU	0.83	5.61	5.01	ø8/20 2 br.	5.03	0.30	5980.35	2.50	24189.10	29590.40	4.045
7	SLU	5.61	6.18	0.60	ø8/20 2 br.	5.03	0.30	6110.79	2.50	24189.10	29590.40	3.958

Travata n. 1092

Nodi: 121 50

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
21	L	60.00	30.00	20.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.003	SLV	1		0.00	4.02	4.02	4.02	4.02	-4746.54	-9573.20	2.017
2.257	SLU	1		240.20	4.02	4.02	4.02	4.02	5226.96	9894.11	1.893

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>
0.0010	SLE R	1		0.00	4.02	4.02	-3159.42	1514.56	-273.52	27.67
0.0014	SLE Q	1		0.00	4.02	4.02	-2797.95	1341.28	-242.23	24.50
2.2510	SLE R	1		240.20	4.02	4.02	3949.60	-201.43	1862.50	24.32
2.2514	SLE Q	1		240.20	4.02	4.02	3482.67	-177.61	1642.31	21.44

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>
18	0.0014	SLE Q	1	21		0.00	-2797.95	33.00	518.00	0.50	16.00	359.82	4.02	615.00	1341.28	0.39	0.24
20	0.0012	SLE F	1	21		0.00	-2857.13	33.00	518.00	0.50	16.00	359.82	4.02	615.00	1369.65	0.40	0.24
36	2.2514	SLE Q	1	21		240.20	3482.67	33.00	218.00	0.50	16.00	381.33	4.02	307.50	1642.31	0.48	0.31
38	2.2512	SLE F	1	21		240.20	3538.70	33.00	218.00	0.50	16.00	381.33	4.02	307.50	1668.73	0.49	0.32

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>	
7 SLU	-0.10	0.47	0.60	ø8/20 2 br.	5.03	0.30	6262.16	2.50	24189.10	29590.40	24189.10	3.863
7 SLU	0.47	5.25	5.01	ø8/20 2 br.	5.03	0.30	5856.61	2.50	24189.10	29590.40	24189.10	4.130
7 SLU	5.25	5.82	0.60	ø8/20 2 br.	5.03	0.30	7171.81	2.50	24189.10	29590.40	24189.10	3.373

Travata n. 1101

Nodi: 51 -874 145

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
21	L	60.00	30.00	20.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
1.997	SLU	1		229.43	4.02	4.02	4.02	4.02	1728.91	9894.11	5.723
4.057	SLU	1		9.80	4.02	4.02	4.02	4.02	-2779.42	-9573.20	3.444
5.247	SLU	2		99.77	4.02	4.02	4.02	4.02	-1360.66	-9573.20	7.036
6.173	SLV	2		0.00	4.02	4.02	4.02	4.02	508.14	9894.11	19.471

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>
1.9910	SLE R	1		229.43	4.02	4.02	1303.79	-66.49	614.82	8.03
1.9914	SLE Q	1		229.43	4.02	4.02	1133.91	-57.83	534.71	6.98
4.0510	SLE R	1		9.80	4.02	4.02	-2097.23	1005.36	-181.56	18.37
4.0514	SLE Q	1		9.80	4.02	4.02	-1831.89	878.17	-158.59	16.04
5.2410	SLE R	2		99.77	4.02	4.02	-1025.97	491.83	-88.82	8.99
5.2414	SLE Q	2		99.77	4.02	4.02	-891.28	427.26	-77.16	7.81
6.1710	SLE R	2		0.00	4.02	4.02	204.44	-10.43	96.41	1.26
6.1714	SLE Q	2		0.00	4.02	4.02	180.10	-9.19	84.93	1.11

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>
28	1.9914	SLE Q	1	21		229.43	1133.91	33.00	218.00	0.50	16.00	381.33	4.02	307.50	534.71	0.16	0.10
32	1.9912	SLE F	1	21		229.43	1156.99	33.00	218.00	0.50	16.00	381.33	4.02	307.50	545.60	0.16	0.10
52	4.0514	SLE Q	1	21		9.80	-1831.89	33.00	518.00	0.50	16.00	359.82	4.02	615.00	878.17	0.26	0.16
54	4.0512	SLE F	1	21		9.80	-1861.79	33.00	518.00	0.50	16.00	359.82	4.02	615.00	892.50	0.26	0.16
81	5.2414	SLE Q	2	21		99.77	-891.28	33.00	518.00	0.50	16.00	359.82	4.02	615.00	427.26	0.12	0.08
85	5.2412	SLE F	2	21		99.77	-906.68	33.00	518.00	0.50	16.00	359.82	4.02	615.00	434.64	0.13	0.08
104	6.1714	SLE Q	2	21		0.00	180.10	33.00	218.00	0.50	16.00	381.33	4.02	307.50	84.93	0.02	0.02
106	6.1712	SLE F	2	21		0.00	180.56	33.00	218.00	0.50	16.00	381.33	4.02	307.50	85.15	0.02	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>	
7 SLU	0.32	0.89	0.60	ø8/20 2 br.	5.03	0.30	6384.63	2.50	24189.10	29590.40	24189.10	3.789
7 SLU	0.89	3.56	2.79	ø8/20 2 br.	5.03	0.30	4621.76	2.50	24189.10	29590.40	24189.10	5.234
7 SLU	3.56	4.13	0.60	ø8/20 2 br.	5.03	0.30	5059.92	2.50	24189.10	29590.40	24189.10	4.781
7 SLU	4.43	5.00	0.60	ø8/20 2 br.	5.03	0.30	3162.27	2.50	24189.10	29590.40	24189.10	7.649
7 SLU	5.00	5.71	0.74	ø8/20 2 br.	5.03	0.30	1847.07	2.50	24189.10	29590.40	24189.10	13.096
1 SLV	5.71	6.28	0.60	ø8/20 2 br.	5.03	0.30	964.01	2.50	24189.10	29590.40	24189.10	25.092

Travata n. 1102

Nodi: 122 46 -980 51

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
21	L	60.00	30.00	20.00	40.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
2.74	7	SLU	1	157.72	4.02	4.02	4.02	4.02	7615.35	9894.11	1.299
6.02	7	SLU	3	15.97	8.04	4.02	8.04	4.02	-7826.57	-18721.70	2.392

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>
2.74	10	SLE R	1	157.72	4.02	4.02	5735.83	-292.52	2704.82	35.32
2.74	14	SLE Q	1	157.72	4.02	4.02	4942.81	-252.08	2330.86	30.43
6.02	10	SLE R	3	15.97	8.04	4.02	-5896.26	1447.45	-449.93	40.01
6.02	14	SLE Q	3	15.97	8.04	4.02	-5090.15	1249.56	-388.42	34.54

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>
15	2.74	14	SLE Q	1	21	157.72	4942.81	33.00	218.00	0.50	16.00	381.33	4.02	307.50	2330.86	0.78	0.51
17	2.74	12	SLE F	1	21	157.72	5044.94	33.00	218.00	0.50	16.00	381.33	4.02	307.50	2379.02	0.69	0.45
33	6.02	14	SLE Q	3	21	15.97	-5090.15	33.00	172.67	0.50	16.00	188.35	8.04	615.00	1249.56	0.36	0.12
35	6.02	12	SLE F	3	21	15.97	-5197.81	33.00	172.67	0.50	16.00	188.35	8.04	615.00	1275.99	0.37	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>	
7 SLU	-0.04	0.54	0.60	ø8/20 2 br.	5.03	0.30	11082.20	2.50	24189.10	29590.40	24189.10	2.183
7 SLU	0.54	3.69	3.30	ø8/20 2 br.	5.03	0.30	9345.24	2.50	24189.10	29590.40	24189.10	2.588
7 SLU	3.69	4.26	0.60	ø8/20 2 br.	5.03	0.30	3855.10	2.50	24189.10	29590.40	24189.10	6.275
7 SLU	4.60	5.91	1.38	ø8/20 2 br.	5.03	0.30	8686.12	2.50	24189.10	29590.40	24189.10	2.785

Travata n. 3021

Nodi: 327 219

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>
24	R	67.50	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
4.25	7	SLU	1	439.64	3.14	3.14	3.14	3.14	-1540.57	-2381.04	1.546

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>
4.25	10	SLE R	1	439.64	3.14	3.14	-1169.89	2559.28	6.59	58.69
4.25	14	SLE Q	1	439.64	3.14	3.14	-1072.10	2345.34	6.04	53.78

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>
15	4.25	14	SLE Q	1	24	439.64	-1072.10	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2345.34	0.68	0.22
17	4.25	12	SLE F	1	24	439.64	-1084.76	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2373.04	0.69	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>	
7 SLU	0.03	4.08	4.19	ø6/15 4 br.	7.54	0.68	1953.64	2.50	10320.40	18937.30	10320.40	5.283
7 SLU	4.08	4.28	0.20	ø6/15 4 br.	7.54	0.68	1632.58	2.50	10320.40	18937.30	10320.40	6.322

Travata n. 3022

Nodi: 216 327

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>
24	R	67.50	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.17	7	SLU	1	18.10	3.14	3.14	3.14	3.14	-1483.12	-2381.04	1.605

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>
0.17	10	SLE R	1	18.10	3.14	3.14	-1125.57	2462.30	6.34	56.47
0.17	14	SLE Q	1	18.10	3.14	3.14	-1026.85	2246.35	5.79	51.51

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>
15	0.17	14	SLE Q	1	24	18.10	-1026.85	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2246.35	0.65	0.21
17	0.17	12	SLE F	1	24	18.10	-1039.63	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2274.31	0.66	0.21

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.
7 SLU	0.15	0.34	0.20	ø6/15 4 br.	7.54	0.68	1607.54	2.50	10320.40	18937.30	10320.40	6.420
7 SLU	0.34	4.22	4.01	ø6/15 4 br.	7.54	0.68	1898.85	2.50	10320.40	18937.30	10320.40	5.435

Travata n. 3023

Nodi: 326 216

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <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>
24	R	67.50	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
4.00	7	SLU	1	414.27	3.14	3.14	3.14	3.14	-1195.39	-2381.04	1.992

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/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
4.00	10	SLE R	1	414.27	3.14	3.14	-908.24	1986.87	5.12	45.56
4.00	14	SLE Q	1	414.27	3.14	3.14	-832.57	1821.33	4.69	41.77

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/cm>	ε _{sm}	Wk <mm>
15	4.00	14	SLE Q	1	24	414.27	-832.57	36.00	201.00	0.50	10.00	186.09	3.14	358.44	1821.33	0.53	0.17
17	4.00	12	SLE F	1	24	414.27	-842.50	36.00	201.00	0.50	10.00	186.09	3.14	358.44	1843.07	0.54	0.17

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.
7 SLU	0.03	3.83	3.94	ø6/15 4 br.	7.54	0.68	1939.89	2.50	10320.40	18937.30	10320.40	5.320
7 SLU	3.83	4.03	0.20	ø6/15 4 br.	7.54	0.68	1501.67	2.50	10320.40	18937.30	10320.40	6.873

Travata n. 3024

Nodi: 214 326

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <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>
24	R	67.50	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	7	SLU	1	0.00	3.14	3.14	3.14	3.14	-1457.80	-2381.04	1.633

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/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
0.00	10	SLE R	1	0.00	3.14	3.14	-1107.50	2422.78	6.24	55.56
0.00	14	SLE Q	1	0.00	3.14	3.14	-1017.13	2225.09	5.73	51.03

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/cm>	ε _{sm}	Wk <mm>
15	0.00	14	SLE Q	1	24	0.00	-1017.13	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2225.09	0.65	0.21
17	0.00	12	SLE F	1	24	0.00	-1028.90	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2250.83	0.66	0.21

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.
7 SLU	-0.03	0.17	0.20	ø6/15 4 br.	7.54	0.68	1577.59	2.50	10320.40	18937.30	10320.40	6.542
7 SLU	0.17	4.15	4.12	ø6/15 4 br.	7.54	0.68	1943.84	2.50	10320.40	18937.30	10320.40	5.309

Travata n. 3051

Nodi: 329 231

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <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>
24	R	67.50	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
4.25	7	SLU	1	439.64	4.68	3.14	4.68	3.14	-1881.43	-3234.09	1.719

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/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
4.25	10	SLE R	1	439.64	4.68	3.14	-1428.25	2144.44	-120.73	60.52
4.25	14	SLE Q	1	439.64	4.68	3.14	-1299.19	1950.67	-109.82	55.05

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>
15	4.25	14	SLE Q	1	24	439.64	-1299.19	35.60	150.75	0.50	11.04	152.22	4.68	343.60	1950.67	0.61	0.16
17	4.25	12	SLE F	1	24	439.64	-1316.09	35.60	150.75	0.50	11.04	152.22	4.68	343.60	1976.04	0.58	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>	
7 SLU	0.03	4.08	4.19	ø6/15 4 br.	7.54	0.68	1939.26	2.50	10320.40	18937.30	10320.40	5.322
7 SLU	4.08	4.28	0.20	ø6/15 4 br.	7.54	0.68	1768.78	2.50	10320.40	18937.30	10320.40	5.835

Travata n. 3052

Nodi: 229 329

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>
24	R	67.50	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.17	1	SLV	1	18.10	3.14	3.14	3.14	3.14	-1559.64	-2381.04	1.527

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>
0.17	10	SLE R	1	18.10	3.14	3.14	-1162.23	2542.52	6.55	58.31
0.17	14	SLE Q	1	18.10	3.14	3.14	-1058.70	2316.03	5.97	53.11

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>
15	0.17	14	SLE Q	1	24	18.10	-1058.70	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2316.03	0.67	0.21
17	0.17	12	SLE F	1	24	18.10	-1072.22	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2345.60	0.68	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>	
7 SLU	0.15	0.34	0.20	ø6/15 4 br.	7.54	0.68	1679.88	2.50	10320.40	18937.30	10320.40	6.144
7 SLU	0.34	4.22	4.01	ø6/15 4 br.	7.54	0.68	1948.13	2.50	10320.40	18937.30	10320.40	5.298

Travata n. 3053

Nodi: 328 229

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>
24	R	67.50	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
4.00	1	SLV	1	414.27	3.14	3.14	3.14	3.14	-1544.57	-2381.04	1.542

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>
4.00	10	SLE R	1	414.27	3.14	3.14	-1041.89	2279.25	5.87	52.27
4.00	14	SLE Q	1	414.27	3.14	3.14	-946.83	2071.29	5.34	47.50

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>
15	4.00	14	SLE Q	1	24	414.27	-946.83	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2071.29	0.60	0.19
17	4.00	12	SLE F	1	24	414.27	-959.26	36.00	201.00	0.50	10.00	186.09	3.14	358.44	2098.50	0.61	0.19

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>	
7 SLU	0.03	3.83	3.94	ø6/15 4 br.	7.54	0.68	2008.76	2.50	10320.40	18937.30	10320.40	5.138
7 SLU	3.83	4.03	0.20	ø6/15 4 br.	7.54	0.68	1552.17	2.50	10320.40	18937.30	10320.40	6.649

Travata n. 3054

Nodi: 232 328

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>
24	R	67.50	20.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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	3	SLV	1	0.00	3.14	3.14	3.14	3.14	-647.38	-2381.04	3.678

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	10	SLE R	1	0.00	3.14	3.14	-426.58	933.20	2.40	21.40
0.00	14	SLE Q	1	0.00	3.14	3.14	-405.58	887.25	2.29	20.35

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>
15	0.00	14	SLE Q	1	24	0.00	-405.58	36.00	201.00	0.50	10.00	186.09	3.14	358.44	887.25	0.26	0.08
17	0.00	12	SLE F	1	24	0.00	-408.29	36.00	201.00	0.50	10.00	186.09	3.14	358.44	893.18	0.26	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>	
7 SLU	-0.03	0.17	0.20	ø6/15 4 br.	7.54	0.68	1377.33	2.50	10320.40	18937.30	10320.40	7.493
7 SLU	0.17	4.15	4.12	ø6/15 4 br.	7.54	0.68	2263.70	2.50	10320.40	18937.30	10320.40	4.559

Travata n. 3121

Nodi: -1047 232

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
23L		60.00	35.00	20.00	45.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
3.15	3	SLV	1	331.32	5.09	5.09	5.09	5.09	2475.57	13483.60	5.447

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>
3.15	10	SLE R	1	331.32	5.09	5.09	1550.60	-68.30	531.68	7.44
3.15	14	SLE Q	1	331.32	5.09	5.09	1427.41	-62.87	489.44	6.85

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>
18	3.15	14	SLE Q	1	23	331.32	1427.41	32.00	266.00	0.50	18.00	408.26	5.09	358.75	489.44	0.14	0.10
20	3.15	12	SLE F	1	23	331.32	1443.42	32.00	266.00	0.50	18.00	408.26	5.09	358.75	494.93	0.14	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>	
3 SLV	-0.03	2.65	2.82	ø8/20 2 br.	5.03	0.35	2635.32	2.50	26352.70	37609.90	26352.70	10.000
3 SLV	2.65	3.26	0.65	ø8/20 2 br.	5.03	0.35	2965.23	2.50	26352.70	37609.90	26352.70	8.887

Travata n. 3122

Nodi: 214 323 -1047

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
23L		60.00	35.00	20.00	45.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.15	3	SLV	1	15.89	5.09	5.09	5.09	5.09	-1600.18	-13199.00	8.248
1.93	3	SLV	1	203.88	5.09	5.09	5.09	5.09	-2496.67	-13199.00	5.287
2.52	7	SLU	2	0.00	5.09	5.09	5.09	5.09	-5602.89	-13199.00	2.356

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>
0.15	8	SLE R	1	15.89	5.09	5.09	-349.08	121.18	-22.61	2.20
0.15	14	SLE Q	1	15.89	5.09	5.09	-359.73	124.88	-23.30	2.27
1.93	10	SLE R	1	203.88	5.09	5.09	-1743.46	605.23	-112.94	10.99
1.93	14	SLE Q	1	203.88	5.09	5.09	-1600.87	555.73	-103.70	10.09
2.52	10	SLE R	2	0.00	5.09	5.09	-4252.66	1476.28	-275.49	26.80
2.52	14	SLE Q	2	0.00	5.09	5.09	-3874.52	1345.01	-250.99	24.41

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>
16	0.15	14	SLE Q	1	23	15.89	-359.73	32.00	516.00	0.50	18.00	389.76	5.09	615.00	124.88	0.04	0.02
19	0.15	13	SLE F	1	23	15.89	-359.73	32.00	516.00	0.50	18.00	389.76	5.09	615.00	124.88	0.04	0.02
34	1.93	14	SLE Q	1	23	203.88	-1600.87	32.00	516.00	0.50	18.00	389.76	5.09	615.00	555.73	0.16	0.11
36	1.93	12	SLE F	1	23	203.88	-1619.94	32.00	516.00	0.50	18.00	389.76	5.09	615.00	562.35	0.16	0.11
65	2.52	14	SLE Q	2	23	0.00	-3874.52	32.00	516.00	0.50	18.00	389.76	5.09	615.00	1345.01	0.39	0.26
69	2.52	12	SLE F	2	23	0.00	-3922.69	32.00	516.00	0.50	18.00	389.76	5.09	615.00	1361.73	0.40	0.26

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>	
3 SLV	0.03	1.80	1.88	ø8/20 2 br.	5.03	0.35	2526.71	2.50	26352.70	37609.90	26352.70	10.430
7 SLU	2.62	3.27	0.68	ø8/20 2 br.	5.03	0.35	11424.90	2.50	26352.70	37609.90	26352.70	2.307

Travata n. 3123

Nodi: 101 214

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
25	L	60.00	30.00	20.00	30.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>		
-0.00	3	SLV	1	0.00	2.26	2.26	2.26	2.26	-1227.81	-4533.56	3.692
1.31	3	SLV	1	150.47	2.26	2.26	2.26	2.26	1505.90	4775.73	3.171

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	My <daNm>	σ _f sup <daN/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
-0.00	8	SLE R	1	0.00	2.26	2.26	-271.92	280.34	-33.91	4.32
-0.00	14	SLE Q	1	0.00	2.26	2.26	-276.26	284.82	-34.45	4.38
1.31	8	SLE R	1	150.47	2.26	2.26	987.66	-60.25	1000.90	10.96
1.31	14	SLE Q	1	150.47	2.26	2.26	987.23	-60.23	1000.46	10.95

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 <cm>	A _c eff <cm>	σ _s <daN/cm>	ε _{sm}	Wk <mm>
24	-0.00	14	SLE Q	1	25	0.00	-276.26	35.00	522.00	0.50	12.00	396.27	2.26	615.00	284.82	0.08	0.06
30	-0.00	13	SLE F	1	25	0.00	-276.26	35.00	522.00	0.50	12.00	396.27	2.26	615.00	284.82	0.08	0.06
47	1.31	14	SLE Q	1	25	150.47	987.23	35.00	222.00	0.50	12.00	326.45	2.26	307.50	1000.46	0.29	0.16
48	1.31	11	SLE F	1	25	150.47	987.61	35.00	222.00	0.50	12.00	326.45	2.26	307.50	1000.84	0.29	0.16

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
5 SLU	-0.11	0.36	0.50	ø8/20 2 br.	5.03	0.30	1327.21	2.50	19861.90	24296.90	19861.90	14.965
7 SLU	0.36	4.20	4.13	ø8/20 2 br.	5.03	0.30	1398.91	2.50	19861.90	24296.90	19861.90	14.198
7 SLU	4.20	4.67	0.50	ø8/20 2 br.	5.03	0.30	1692.60	2.50	19861.90	24296.90	19861.90	11.735

Travata n. 3131

Nodi: -1049 229

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
20	T	135.00	35.00	20.00	45.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfeP S <cm>	AfeP I <cm>	My <daNm>	MRdy <daNm>	Sic.
3.15	3	SLV	1	331.32	9.05	9.05	9.05	9.05	-5987.28	-23098.40	3.858

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	My <daNm>	σ _f sup <daN/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
3.15	10	SLE R	1	331.32	9.05	9.05	-2607.48	515.60	-136.63	12.25
3.15	10	SLE R	1	331.32	9.05	9.05	3530.15	-72.57	677.32	8.45
3.15	14	SLE Q	1	331.32	9.05	9.05	-2433.61	481.22	-127.52	11.43

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 <cm>	A _c eff <cm>	σ _s <daN/cm>	ε _{sm}	Wk <mm>
28	3.15	14	SLE Q	1	20	331.32	3129.81	29.00	256.00	0.50	24.00	415.52	9.05	358.75	600.51	0.17	0.12
32	3.15	12	SLE F	1	20	331.32	3186.74	29.00	256.00	0.50	24.00	415.52	9.05	358.75	611.43	0.18	0.13

Stato limite ultimo - Verifiche a taglio

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
7 SLU	-0.01	2.67	2.82	ø10/20 4 br.	15.71	0.35	11027.30	1.52	50077.10	50077.10	50077.10	4.541
7 SLU	2.67	3.28	0.65	ø10/20 4 br.	15.71	0.35	11740.80	1.52	50077.10	50077.10	50077.10	4.265

Travata n. 3132

Nodi: 216 -1049

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
20	T	135.00	35.00	20.00	45.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfeP S <cm>	AfeP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.15	3	SLV	1	15.89	9.05	9.05	9.05	9.05	-10502.60	-23098.40	2.199

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	My <daNm>	σ _f sup <daN/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
0.15	10	SLE R	1	15.89	9.05	9.05	-7626.72	1508.10	-399.63	35.82
0.15	14	SLE Q	1	15.89	9.05	9.05	-6947.70	1373.84	-364.05	32.63

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>
18	0.15	14	SLE Q	1	20	15.89	-6947.70	29.00	1256.00	0.50	24.00	425.05	9.05	1383.75	1373.84	0.40	0.29
20	0.15	12	SLE F	1	20	15.89	-7034.14	29.00	1256.00	0.50	24.00	425.05	9.05	1383.75	1390.93	0.41	0.29

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>	
7 SLU	0.01	0.62	0.65	ø10/20 4 br.	15.71	0.35	13687.10	1.52	50077.10	50077.10	50077.10	3.659
7 SLU	0.62	3.24	2.78	ø10/20 4 br.	15.71	0.35	13036.80	1.52	50077.10	50077.10	50077.10	3.841

Travata n. 3141

Nodi: 324 325 231

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
23	L	60.00	35.00	20.00	45.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.15	1	SLV	1	147.25	2.26	2.26	2.26	2.26	909.08	6268.58	6.896
0.33	1	SLV	1	127.97	2.26	2.26	2.26	2.26	909.82	6268.58	6.890
1.45	1	SLV	1	10.52	2.26	2.26	2.26	2.26	-1369.34	-6075.15	4.437
1.65	3	SLV	2	189.33	2.26	2.26	2.26	2.26	2546.65	6268.58	2.462
2.55	3	SLV	2	94.66	2.26	2.26	2.26	2.26	5670.14	6268.58	1.106
3.15	3	SLV	2	31.55	2.26	2.26	2.26	2.26	5670.14	6268.58	1.106

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>
0.15	10	SLE R	1	147.25	2.26	2.26	480.55	-23.33	364.46	3.42
0.15	14	SLE Q	1	147.25	2.26	2.26	429.53	-20.85	325.76	3.06
0.33	10	SLE R	1	127.97	2.26	2.26	480.55	-23.33	364.46	3.42
0.33	14	SLE Q	1	127.97	2.26	2.26	429.53	-20.85	325.76	3.06
1.45	10	SLE R	1	10.52	2.26	2.26	-452.16	346.75	-36.08	4.25
1.45	14	SLE Q	1	10.52	2.26	2.26	-387.47	297.13	-30.92	3.64
1.65	10	SLE R	2	189.33	2.26	2.26	533.56	-25.90	404.66	3.80
1.65	14	SLE Q	2	189.33	2.26	2.26	498.46	-24.20	378.04	3.55
2.55	10	SLE R	2	94.66	2.26	2.26	765.92	-37.19	580.89	5.45
2.55	14	SLE Q	2	94.66	2.26	2.26	678.54	-32.94	514.61	4.83
3.15	10	SLE R	2	31.55	2.26	2.26	765.92	-37.19	580.89	5.45
3.15	14	SLE Q	2	31.55	2.26	2.26	678.54	-32.94	514.61	4.83

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>
19	0.15	14	SLE Q	1	23	147.25	429.53	35.00	272.00	0.50	12.00	431.12	2.26	358.75	325.76	0.09	0.07
21	0.15	12	SLE F	1	23	147.25	436.25	35.00	272.00	0.50	12.00	431.12	2.26	358.75	330.86	0.10	0.07
41	0.33	14	SLE Q	1	23	127.97	429.53	35.00	272.00	0.50	12.00	431.12	2.26	358.75	325.76	0.09	0.07
43	0.33	12	SLE F	1	23	127.97	436.25	35.00	272.00	0.50	12.00	431.12	2.26	358.75	330.86	0.10	0.07
66	1.45	14	SLE Q	1	23	10.52	-387.47	35.00	522.00	0.50	12.00	416.60	2.26	615.00	297.13	0.09	0.06
70	1.45	12	SLE F	1	23	10.52	-396.60	35.00	522.00	0.50	12.00	416.60	2.26	615.00	304.14	0.09	0.06
96	1.65	14	SLE Q	2	23	189.33	498.46	35.00	272.00	0.50	12.00	431.12	2.26	358.75	378.04	0.11	0.08
98	1.65	11	SLE F	2	23	189.33	502.93	35.00	272.00	0.50	12.00	431.12	2.26	358.75	381.43	0.11	0.08
120	2.55	14	SLE Q	2	23	94.66	678.54	35.00	272.00	0.50	12.00	431.12	2.26	358.75	514.61	0.15	0.11
122	2.55	12	SLE F	2	23	94.66	689.42	35.00	272.00	0.50	12.00	431.12	2.26	358.75	522.86	0.15	0.11
139	3.15	14	SLE Q	2	23	31.55	678.54	35.00	272.00	0.50	12.00	431.12	2.26	358.75	514.61	0.15	0.11
141	3.15	12	SLE F	2	23	31.55	689.42	35.00	272.00	0.50	12.00	431.12	2.26	358.75	522.86	0.15	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>	
3 SLV	0.26	1.46	1.26	ø8/20 2 br.	5.03	0.35	1924.60	2.50	26352.70	37609.90	26352.70	13.693
3 SLV	1.76	3.26	1.58	ø8/20 2 br.	5.03	0.35	4296.05	2.50	26352.70	37609.90	26352.70	6.134

Travata n. 3142

Nodi: 219 320 324

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
23	L	60.00	35.00	20.00	45.00	4.10	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	
0.15	3	SLV	1	161.51	2.26	2.26	2.26	2.26	2281.36	6268.58	2.748
1.57	3	SLV	1	10.59	2.26	2.26	2.26	2.26	1657.64	6268.58	3.782
1.77	1	SLV	2	153.57	2.26	2.26	2.26	2.26	1112.05	6268.58	5.637
3.08	1	SLV	2	15.89	2.26	2.26	2.26	2.26	1030.72	6268.58	6.082

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>
0.15	10	SLE R	1	161.51	2.26	2.26	422.58	-20.52	320.49	3.01
0.15	14	SLE Q	1	161.51	2.26	2.26	388.96	-18.88	294.99	2.77
1.57	10	SLE R	1	10.59	2.26	2.26	413.06	-20.05	313.27	2.94
1.57	14	SLE Q	1	10.59	2.26	2.26	385.66	-18.72	292.49	2.75
1.77	10	SLE R	2	153.57	2.26	2.26	489.32	-23.76	371.11	3.48
1.77	14	SLE Q	2	153.57	2.26	2.26	454.51	-22.07	344.70	3.24
3.08	10	SLE R	2	15.89	2.26	2.26	515.58	-25.03	391.03	3.67
3.08	14	SLE Q	2	15.89	2.26	2.26	473.48	-22.99	359.10	3.37

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>
16	0.15	14	SLE Q	1	23	161.51	388.96	35.00	272.00	0.50	12.00	431.12	2.26	358.75	294.99	0.09	0.06
18	0.15	12	SLE F	1	23	161.51	393.63	35.00	272.00	0.50	12.00	431.12	2.26	358.75	298.54	0.09	0.06
36	1.57	14	SLE Q	1	23	10.59	385.66	35.00	272.00	0.50	12.00	431.12	2.26	358.75	292.49	0.09	0.06
38	1.57	12	SLE F	1	23	10.59	389.31	35.00	272.00	0.50	12.00	431.12	2.26	358.75	295.26	0.09	0.06
57	1.77	14	SLE Q	2	23	153.57	454.51	35.00	272.00	0.50	12.00	431.12	2.26	358.75	344.70	0.10	0.07
59	1.77	12	SLE F	2	23	153.57	458.71	35.00	272.00	0.50	12.00	431.12	2.26	358.75	347.89	0.10	0.07
78	3.08	14	SLE Q	2	23	15.89	473.48	35.00	272.00	0.50	12.00	431.12	2.26	358.75	359.10	0.10	0.08
80	3.08	12	SLE F	2	23	15.89	478.75	35.00	272.00	0.50	12.00	431.12	2.26	358.75	363.10	0.11	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>	
3 SLV	0.03	1.45	1.51	ø8/20 2 br.	5.03	0.35	1805.76	2.50	26352.70	37609.90	26352.70	14.594
3 SLV	1.77	2.95	1.26	ø8/20 2 br.	5.03	0.35	1787.98	2.50	26352.70	37609.90	26352.70	14.739

Verifiche e armature pilastri

Simbologia

Δ_{sm}	=Distanza media tra le fessure
Φ_{eq}	=Diametro equivalente delle barre
α	=Angolo asse neutro a rottura
ϵ_y	=Deformazione nell'acciaio (*1000)
ϵ_{sm}	=Deformazione unitaria media dell'armatura (*1000)
$\mu\Phi$	=Valore di progetto della duttilità di curvatura
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
A _{c eff}	=Area di calcestruzzo efficace
A _s	=Area complessiva dei ferri nell'area di calcestruzzo efficace
AfC	=Area di ferro compressa
AfT	=Area di ferro tesa
As1	=Area di ferro superiore delle travi incidenti sulla faccia
As2	=Area di ferro inferiore delle travi incidenti sulla faccia
Ash	=Area totale della sezione della staffa
B	=Base
Bj	=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	=Numero della combinazione delle condizioni di carico elementari
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
M'ydy =Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
M'ydz =Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Z
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 =Sforzo normale
Nodo =Numero del nodo
Nu =Sforzo normale ultimo
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
SLV = Stato limite di salvaguardia della vita
SND = Stato limite di salvaguardia della vita (non dissipativo)
Tipo =Tipologia
2Cdx = Doppia C lato costola
L = Sezione a L
R = Rettangolare
T = Sezione a T
Cs = C stondata
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_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
Vn =Taglio totale agente sul nodo in valore assoluto
Vrd,y =Taglio resistente in dir. Y
Vrd,z =Taglio resistente in dir. Z
Vsd_y =Taglio agente in dir. Y
Vsd_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
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

Pilastrata n. 2

Nodi: 45 145

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		30.00	30.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.003	SLV	1	1	1	0.00	143.10	-264.11	-264.11	568.12	568.12	143.10	-2353.76	5049.14	106.88	8.38	8.892
0.003	SLV	1	1	1	0.00	143.10	-264.11	-264.11	568.12	568.12	143.10	-2353.76	5049.14	106.88	8.38	8.892
3.553	SLV	1	1	1	354.70	941.18	328.67	328.67	-506.90	-506.90	941.18	3196.67	-4786.88	298.12	6.93	9.528

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cm>	AfC <cm>	σ _c <daN/cm>	σ _s <daN/cm>
0.0010	SLE R	1	1	1	0.00	-4633.43	57.68	-10.90	0.00	10.18	5.61	78.97
0.008	SLE R	1	1	1	0.00	-4314.18	52.09	-16.20	0.00	10.18	5.30	74.37
0.0014	SLE Q	1	1	1	0.00	-4229.45	50.02	-17.70	0.00	10.18	5.21	73.06
0.0010	SLE R	1	1	1	0.00	-4633.43	57.68	-10.90	0.00	10.18	5.61	78.97

0.00	8	SLE R	1	1	0.00	-4314.18	52.09	-16.20	0.00	10.18	5.30	74.37
0.00	14	SLE Q	1	1	0.00	-4229.45	50.02	-17.70	0.00	10.18	5.21	73.06
3.55	10	SLE R	1	1	354.70	-3835.35	-60.72	72.96	0.00	10.18	6.00	79.90
3.55	8	SLE R	1	1	354.70	-3516.10	-54.77	76.88	0.00	10.18	5.66	74.96
3.55	14	SLE Q	1	1	354.70	-3431.37	-52.57	77.77	0.00	10.18	5.56	73.51

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>						<m>	<m>	<daN>		<daN>	<daN>	<daN>	<m>	<m>	<daN>		<daN>	<daN>	<daN>	
0.00	0.59	ø8/20	2	25	SLU	0.30	0.26	39.47	2.50	11077.60	14296.20	11077.60	0.30	0.26	33.97	2.50	11077.60	14296.20	11077.60	>100	
0.00	0.59	ø8/20	2	27	SLU	0.30	0.26	44.35	2.50	11077.60	14359.60	11077.60	0.30	0.26	30.07	2.50	11077.60	14359.60	11077.60	>100	
0.00	0.59	ø8/20	2	21	SLV	0.30	0.26	166.97	2.50	11077.60	14390.90	11077.60	0.30	0.26	266.92	2.50	11077.60	14390.90	11077.60	41.502	
0.00	0.59	ø8/20	2	23	SLV	0.30	0.26	302.85	2.50	11077.60	14690.30	11077.60	0.30	0.26	165.76	2.50	11077.60	14690.30	11077.60	36.578	
0.59	2.96	ø8/20	2	25	SLU	0.30	0.26	39.47	2.50	11077.60	14273.30	11077.60	0.30	0.26	33.97	2.50	11077.60	14273.30	11077.60	>100	
0.59	2.96	ø8/20	2	27	SLU	0.30	0.26	44.35	2.50	11077.60	14336.70	11077.60	0.30	0.26	30.07	2.50	11077.60	14336.70	11077.60	>100	
0.59	2.96	ø8/20	2	21	SLV	0.30	0.26	166.97	2.50	11077.60	14373.30	11077.60	0.30	0.26	266.92	2.50	11077.60	14373.30	11077.60	41.502	
0.59	2.96	ø8/20	2	23	SLV	0.30	0.26	302.85	2.50	11077.60	14672.60	11077.60	0.30	0.26	165.76	2.50	11077.60	14672.60	11077.60	36.578	
2.96	3.55	ø8/20	2	25	SLU	0.30	0.26	39.47	2.50	11077.60	14181.70	11077.60	0.30	0.26	33.97	2.50	11077.60	14181.70	11077.60	>100	
2.96	3.55	ø8/20	2	27	SLU	0.30	0.26	44.35	2.50	11077.60	14245.10	11077.60	0.30	0.26	30.07	2.50	11077.60	14245.10	11077.60	>100	
2.96	3.55	ø8/20	2	21	SLV	0.30	0.26	166.97	2.50	11077.60	14302.90	11077.60	0.30	0.26	266.92	2.50	11077.60	14302.90	11077.60	41.502	
2.96	3.55	ø8/20	2	23	SLV	0.30	0.26	302.85	2.50	11077.60	14602.20	11077.60	0.30	0.26	165.76	2.50	11077.60	14602.20	11077.60	36.578	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{nc} R <daN/cmq>	σ _{nt} <daN/cmq>	σ _{nt} R <daN/cmq>
145	3	SLV	0.00	0.00	-2739.21	0.00	-1838.32	3298.89	3.67	56.86	3.67	10.12

Pilastrata n. 4

Nodi: 38 -642 138

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tip	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>
2	R	20.00	35.00	4.00	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	3(e)	SLV	1	2	0.00	-7787.48	-4033.06	-4033.06	102.24	155.75	-7787.48	-4924.20	231.84	174.38	13.13	1.221
0.00	3(e)	SLV	1	2	0.00	-7787.48	-4033.06	-4033.06	102.24	155.75	-7787.48	-4924.20	231.84	174.38	13.13	1.221
2.50	1(e)	SLV	1	2	250.00	-7883.55	117.19	157.67	93.96	157.67	-77607.80	2365.77	2364.78	76.64	5.53	9.844
2.90	1	SLV	2	2	0.00	-6599.52	537.33	537.33	-813.09	-813.09	-6599.52	1595.70	-2381.22	277.73	6.76	2.941
3.80	7(e)	SLU	2	2	90.00	-10547.30	46.99	-210.94	1687.28	1687.28	-10547.30	-325.26	2681.13	91.05	8.03	1.588

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 _f <daN/cmq>
0.00	10	SLE R	1	2	0.00	-9311.39	18.85	-43.37	0.00	6.16	13.32	192.45
0.00	8	SLE R	1	2	0.00	-8285.64	14.31	-43.28	0.00	6.16	11.86	171.50
0.00	14	SLE Q	1	2	0.00	-8011.76	13.11	-40.76	0.00	6.16	11.42	165.34
0.00	10	SLE R	1	2	0.00	-9311.39	18.85	-43.37	0.00	6.16	13.32	192.45
0.00	8	SLE R	1	2	0.00	-8285.64	14.31	-43.28	0.00	6.16	11.86	171.50
0.00	14	SLE Q	1	2	0.00	-8011.76	13.11	-40.76	0.00	6.16	11.42	165.34
2.50	10	SLE R	1	2	250.00	-8873.89	-28.88	29.62	0.00	6.16	12.88	184.38
2.50	8	SLE R	1	2	250.00	-7848.14	-21.55	27.72	0.00	6.16	11.27	162.08
2.50	14	SLE Q	1	2	250.00	-7574.26	-19.62	27.32	0.00	6.16	10.84	156.16
2.90	10	SLE R	2	2	0.00	-8066.64	-564.22	49.48	3.08	3.08	38.52	377.61
2.90	14	SLE Q	2	2	0.00	-6739.86	-478.75	44.87	3.08	3.08	32.84	319.86
3.80	10	SLE R	2	2	90.00	-7909.14	1265.59	35.74	3.08	3.08	91.75	1682.14
3.80	14	SLE Q	2	2	90.00	-6582.36	1055.38	33.32	3.08	3.08	76.66	1406.40

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>
3.80	14	SLE Q	2	2	90.00	-6582.36	33.32	1055.38	34.00	268.00	0.50	14.00	134.91	3.08	147.14	1406.40	0.45	0.10
3.80	12	SLE F	2	2	90.00	-6694.12	33.57	1073.18	34.00	268.00	0.50	14.00	134.92	3.08	147.17	1429.85	0.42	0.10

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	d _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	Vrd _{,y} <daN>	bw _{,z} <m>	d _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Vrd _{,z} <daN>	Sic.
0.00	0.45	ø8/20	2	27	SLV	0.35	0.16	26.03	2.50	6750.44	11130.60	6750.44	0.20	0.31	38.56	2.41	12789.80	12789.80	12789.80	>100	
0.00	0.45	ø8/20	2	23	SLV	0.35	0.16	82.42	2.50	6750.44	10630.90	6750.44	0.20	0.31	1551.39	2.35	12448.90	12448.90	12448.90	8.024	
0.00	0.45	ø8/20	2	21	SLV	0.35	0.16	106.82	2.50	6750.44	10641.20	6750.44	0.20	0.31	760.69	2.35	12456.00	12456.00	12456.00	16.375	
0.45	2.05	ø8/20	2	27	SLV	0.35	0.16	26.03	2.50	6750.44	11118.20	6750.44	0.20	0.31	38.56	2.41	12781.40	12781.40	12781.40	>100	
0.45	2.05	ø8/20	2	23	SLV	0.35	0.16	82.42	2.50	6750.44	10621.40	6750.44	0.20	0.31	1551.39	2.35	12442.30	12442.30	12442.30	8.020	
0.45	2.05	ø8/20	2	21	SLV	0.35	0.16	106.82	2.50	6750.44	10631.70	6750.44	0.20	0.31	760.69	2.35	12449.40	12449.40	12449.40	16.366	
2.05	2.50	ø8/20	2	27	SLV	0.35	0.16	26.03	2.50	6750.44	11074.20	6750.44	0.20	0.31	38.56	2.41	12751.70	12751.70	12751.70	>100	
2.05	2.50	ø8/20	2	23	SLV	0.35	0.16	82.42	2.50	6750.44	10587.50	6750.44	0.20	0.31	1551.39	2.34	12418.80	12418.80	12418.80	8.005	
2.05	2.50	ø8/20	2	21	SLV	0.35	0.16	106.82	2.50	6750.44	10597.80	6750.44	0.20	0.31	760.69	2.35	12425.90	12425.90	12425.90	16.335	
2.90	3.80	ø8/20	2	27	SLV	0.35	0.16	2708.70	2.50	6750.44	10935.40	6750.44	0.20	0.31	20.28	2.39	12657.70	12657.70	12657.70	2.492	
2.90	3.80	ø8/20	2	23	SLV	0.35	0.16	2191.26	2.50	6750.44	10462.60	6750.44	0.20	0.31	2030.87	2.33	12331.90	12331.90	12331.90	3.081	
2.90	3.80	ø8/20	2	21	SLV	0.35	0.16	2417.96	2.50	6750.44	10466.80	6750.44	0.20	0.31	976.17	2.33	12334.90	12334.90	12334.90	2.792	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{nc} R <daN/cmq>	σ _{nt} <daN/cmq>	σ _{nt} R <daN/cmq>
-642	1	SLV	6880.20	2417.96	98.02	-2030.87	0.00	3233.36	11.66	56.86	1.83	10.12
138	1	SLV	0.00	0.00	-5237.08	0.00	0.00	5237.08	7.48	56.86	7.48	10.12

Pilastrata n. 5

Nodi: 39 -643 139

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>
1	R	30.00	30.00	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.003	SLV	1	1	1	0.00	-8310.63	-222.87	-222.87	4056.61	4056.61	-8310.63	-313.55	5143.31	91.41	13.19	1.268
0.003	SLV	1	1	1	0.00	-8310.63	-222.87	-222.87	4056.61	4056.61	-8310.63	-313.55	5143.31	91.41	13.19	1.268
2.503	SLV	1	1	1	250.00	-7748.13	181.08	181.08	-528.78	-528.78	-7748.13	1683.08	-4979.37	282.66	8.68	9.401
2.903	SLV	2	1	1	0.00	-6696.23	693.23	693.23	-1087.52	-1087.52	-6696.23	2880.25	-4592.50	298.12	6.45	4.201
3.807(e)	SLU	2	1	1	90.00	-10558.20	-2663.55	-2663.55	-36.23	-211.16	-10558.20	-5374.45	-442.24	182.81	11.57	2.018

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>
0.0010	SLE	R	1	1	0.00	-9898.32	26.46	-12.67	0.00	8.04	10.42	153.24
0.008	SLE	R	1	1	0.00	-8828.10	27.42	-5.33	0.00	8.04	9.25	136.25
0.0014	SLE	Q	1	1	0.00	-8542.89	26.28	-3.37	0.00	8.04	8.92	131.44
0.0010	SLE	R	1	1	0.00	-9898.32	26.46	-12.67	0.00	8.04	10.42	153.24
0.008	SLE	R	1	1	0.00	-8828.10	27.42	-5.33	0.00	8.04	9.25	136.25
0.0014	SLE	Q	1	1	0.00	-8542.89	26.28	-3.37	0.00	8.04	8.92	131.44
2.5010	SLE	R	1	1	250.00	-9335.82	-16.60	41.20	0.00	8.04	10.21	148.69
2.508	SLE	R	1	1	250.00	-8265.60	-15.90	26.66	0.00	8.04	8.88	129.93
2.5014	SLE	Q	1	1	250.00	-7980.39	-16.78	22.78	0.00	8.04	8.55	125.14
2.9010	SLE	R	2	1	0.00	-8120.30	-21.87	408.64	0.00	8.04	15.87	204.84
2.908	SLE	R	2	1	0.00	-7073.70	-21.32	370.59	0.00	8.04	14.14	181.81
2.9014	SLE	Q	2	1	0.00	-6794.70	-21.99	360.54	0.00	8.04	13.69	175.86
3.8010	SLE	R	2	1	90.00	-7917.80	-27.85	-1997.76	4.02	4.02	64.51	1267.14
3.8014	SLE	Q	2	1	90.00	-6592.20	-27.08	-1665.58	4.02	4.02	53.93	1059.02

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>
3.8014	SLE	Q	2	1	90.00	-6592.20	-1665.58	-27.08	34.00	216.00	0.50	16.00	143.25	4.02	184.46	1059.02	0.31	0.08
3.8012	SLE	F	2	1	90.00	-6703.85	-1693.49	-27.17	34.00	216.00	0.50	16.00	143.22	4.02	184.51	1076.49	0.31	0.08

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>	
0.00	0.45	ø8/20	2	27	SLU	0.30	0.26	22.42	2.50	11077.60	15291.00	11077.60	0.30	0.26	30.20	2.50	11077.60	15291.00	11077.60	>100	
0.00	0.45	ø8/20	2	25	SLU	0.30	0.26	22.58	2.50	11077.60	15078.40	11077.60	0.30	0.26	17.07	2.50	11077.60	15078.40	11077.60	>100	
0.00	0.45	ø8/20	2	21	SLV	0.30	0.26	788.98	2.50	11077.60	14726.50	11077.60	0.30	0.26	211.75	2.50	11077.60	14726.50	11077.60	14.040	
0.00	0.45	ø8/20	2	23	SLV	0.30	0.26	1653.89	2.50	11077.60	14713.20	11077.60	0.30	0.26	161.48	2.50	11077.60	14713.20	11077.60	6.698	
0.45	2.05	ø8/20	2	27	SLU	0.30	0.26	22.42	2.50	11077.60	15273.60	11077.60	0.30	0.26	30.20	2.50	11077.60	15273.60	11077.60	>100	
0.45	2.05	ø8/20	2	25	SLU	0.30	0.26	22.58	2.50	11077.60	15061.00	11077.60	0.30	0.26	17.07	2.50	11077.60	15061.00	11077.60	>100	
0.45	2.05	ø8/20	2	21	SLV	0.30	0.26	788.98	2.50	11077.60	14713.10	11077.60	0.30	0.26	211.75	2.50	11077.60	14713.10	11077.60	14.040	
0.45	2.05	ø8/20	2	23	SLV	0.30	0.26	1653.89	2.50	11077.60	14699.80	11077.60	0.30	0.26	161.48	2.50	11077.60	14699.80	11077.60	6.698	
2.05	2.50	ø8/20	2	27	SLU	0.30	0.26	22.42	2.50	11077.60	15211.60	11077.60	0.30	0.26	30.20	2.50	11077.60	15211.60	11077.60	>100	
2.05	2.50	ø8/20	2	25	SLU	0.30	0.26	22.58	2.50	11077.60	14999.00	11077.60	0.30	0.26	17.07	2.50	11077.60	14999.00	11077.60	>100	
2.05	2.50	ø8/20	2	21	SLV	0.30	0.26	788.98	2.50	11077.60	14665.40	11077.60	0.30	0.26	211.75	2.50	11077.60	14665.40	11077.60	14.040	
2.05	2.50	ø8/20	2	23	SLV	0.30	0.26	1653.89	2.50	11077.60	14652.10	11077.60	0.30	0.26	161.48	2.50	11077.60	14652.10	11077.60	6.698	
2.90	3.80	ø8/20	2	27	SLU	0.30	0.26	8.92	2.50	11077.60	14984.10	11077.60	0.30	0.26	3560.48	2.50	11077.60	14984.10	11077.60	3.111	
2.90	3.80	ø8/20	2	21	SLV	0.30	0.26	990.31	2.50	11077.60	14469.40	11077.60	0.30	0.26	3253.23	2.50	11077.60	14469.40	11077.60	3.405	
2.90	3.80	ø8/20	2	23	SLV	0.30	0.26	2111.66	2.50	11077.60	14464.00	11077.60	0.30	0.26	2941.71	2.50	11077.60	14464.00	11077.60	3.766	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
-643	1	SLV	6655.19	-2111.66	0.00	-3253.23	-1203.28	4931.49	10.31	56.86	2.91	10.12
139	1	SLV	0.00	0.00	0.00	0.00	7757.88	7757.88	8.62	56.86	8.62	10.12

Pilastrata n. 6

Nodi: 40 -644 140

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>
2	R	20.00	35.00	4.00	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.003(e)	SLV	1	2	2	0.00	-8748.25	-567.49	-567.49	125.43	174.97	-8748.25	-4525.38	1469.74	129.38	5.41	8.011
0.003(e)	SLV	1	2	2	0.00	-8748.25	-567.49	-567.49	125.43	174.97	-8748.25	-4525.38	1469.74	129.38	5.41	8.011
2.501(e)	SLV	1	2	2	250.00	-8467.82	241.44	241.44	126.54	169.36	-77607.80	3078.52	2218.38	70.31	4.98	9.165
2.903	SLV	2	2	2	0.00	-6936.00	2067.87	2067.87	-756.74	-756.74	-6936.00	4269.91	-1519.75	306.56	5.54	2.058
3.647	SLU	2	2	2	74.00	-11034.00	297.03	297.03	1230.94	1230.94	-11034.00	674.79	2714.42	87.19	7.35	2.209

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>
0.0010	SLE	R	1	2	0.00	-9661.79	15.59	-99.75	0.00	6.16	14.76	210.87
0.008	SLE	R	1	2	0.00	-8632.10	11.31	-99.20	0.00	6.16	13.29	189.83
0.0014	SLE	Q	1	2	0.00	-8361.13	10.15	-98.93	0.00	6.16	12.90	184.25
0.0010	SLE	R	1	2	0.00	-9661.79	15.59	-99.75	0.00	6.16	14.76	210.87

0.00	8	SLE R	1	2	0.00	-8632.10	11.31	-99.20	0.00	6.16	13.29	189.83
0.00	14	SLE Q	1	2	0.00	-8361.13	10.15	-98.93	0.00	6.16	12.90	184.25
2.50	10	SLE R	1	2	250.00	-9224.28	-23.09	93.47	0.00	6.16	14.37	203.66
2.50	8	SLE R	1	2	250.00	-8194.60	-16.21	91.27	0.00	6.16	12.77	181.37
2.50	14	SLE Q	1	2	250.00	-7923.63	-14.36	93.70	0.00	6.16	12.40	176.18
2.90	10	SLE R	2	2	0.00	-8413.49	-558.98	130.05	3.08	3.08	40.37	407.24
2.90	14	SLE Q	2	2	0.00	-7084.49	-476.31	130.58	3.08	3.08	35.05	352.59
3.64	10	SLE R	2	2	74.00	-8283.99	923.31	229.58	3.08	3.08	72.69	963.78
3.64	14	SLE Q	2	2	74.00	-6954.99	769.70	229.52	3.08	3.08	61.97	815.32

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>						<m>	<m>	<daN>		<daN>	<daN>	<daN>	<m>	<m>	<daN>		<daN>	<daN>	<daN>	
0.00	0.45	ø8/20	2	26	SLU	0.35	0.16	16.22	2.50	6750.44	11048.90	6750.44	0.20	0.31	99.91	2.40	12734.60	12734.60	12734.60	>100	
0.00	0.45	ø8/20	2	27	SLU	0.35	0.16	21.26	2.50	6750.44	11185.70	6750.44	0.20	0.31	100.22	2.42	12826.80	12826.80	12826.80	>100	
0.00	0.45	ø8/20	2	23	SLV	0.35	0.16	97.48	2.50	6750.44	10692.90	6750.44	0.20	0.31	212.00	2.36	12491.70	12491.70	12491.70	58.924	
0.00	0.45	ø8/20	2	21	SLV	0.35	0.16	128.99	2.50	6750.44	10711.90	6750.44	0.20	0.31	157.76	2.36	12504.80	12504.80	12504.80	52.334	
0.45	2.05	ø8/20	2	26	SLU	0.35	0.16	16.22	2.50	6750.44	11036.50	6750.44	0.20	0.31	99.91	2.40	12726.20	12726.20	12726.20	>100	
0.45	2.05	ø8/20	2	27	SLU	0.35	0.16	21.26	2.50	6750.44	11173.30	6750.44	0.20	0.31	100.22	2.42	12818.40	12818.40	12818.40	>100	
0.45	2.05	ø8/20	2	23	SLV	0.35	0.16	97.48	2.50	6750.44	10683.40	6750.44	0.20	0.31	212.00	2.36	12485.10	12485.10	12485.10	58.893	
0.45	2.05	ø8/20	2	21	SLV	0.35	0.16	128.99	2.50	6750.44	10702.40	6750.44	0.20	0.31	157.76	2.36	12498.20	12498.20	12498.20	52.334	
2.05	2.50	ø8/20	2	26	SLU	0.35	0.16	16.22	2.50	6750.44	10992.40	6750.44	0.20	0.31	99.91	2.40	12696.40	12696.40	12696.40	>100	
2.05	2.50	ø8/20	2	27	SLU	0.35	0.16	21.26	2.50	6750.44	11129.20	6750.44	0.20	0.31	100.22	2.41	12788.80	12788.80	12788.80	>100	
2.05	2.50	ø8/20	2	23	SLV	0.35	0.16	97.48	2.50	6750.44	10649.50	6750.44	0.20	0.31	212.00	2.35	12461.70	12461.70	12461.70	58.782	
2.05	2.50	ø8/20	2	21	SLV	0.35	0.16	128.99	2.50	6750.44	10668.50	6750.44	0.20	0.31	157.76	2.36	12474.80	12474.80	12474.80	52.334	
2.90	3.64	ø8/20	2	26	SLU	0.35	0.16	2391.20	2.50	6750.44	10850.20	6750.44	0.20	0.31	173.67	2.38	12599.60	12599.60	12599.60	2.823	
2.90	3.64	ø8/20	2	27	SLU	0.35	0.16	2667.64	2.50	6750.44	10989.90	6750.44	0.20	0.31	174.49	2.40	12694.70	12694.70	12694.70	2.530	
2.90	3.64	ø8/20	2	23	SLV	0.35	0.16	2286.55	2.50	6750.44	10509.50	6750.44	0.20	0.31	3675.57	2.33	12364.60	12364.60	12364.60	2.952	
2.90	3.64	ø8/20	2	21	SLV	0.35	0.16	2540.42	2.50	6750.44	10516.50	6750.44	0.20	0.31	1501.75	2.34	12369.50	12369.50	12369.50	2.657	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm²>	σ _{ncR} <daN/cm²>	σ _{nt} <daN/cm²>	σ _{ntR} <daN/cm²>
-644	1	SLV	7291.04	2540.42	323.92	3675.57	0.00	4659.86	13.66	56.86	3.24	10.12
140	1	SLV	0.00	0.00	-5499.36	0.00	-3262.18	6394.12	9.13	56.86	9.13	10.12

Pilastrata n. 7

Nodi: 41 -645 141

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm²>	Fctm <daN/cm²>	Fcd <daN/cm²>	Fcd (Tag) <daN/cm²>	Fctd <daN/cm²>	Fym <daN/cm²>	Fyd <daN/cm²>	Fyd (Tag) <daN/cm²>
1R		30.00	30.00	4.10	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	3	SLV	1	1	0.00	-8168.80	-294.80	-294.80	3848.93	3848.93	-8168.80	-453.95	5126.05	92.81	12.24	1.333
0.00	3	SLV	1	1	0.00	-8168.80	-294.80	-294.80	3848.93	3848.93	-8168.80	-453.95	5126.05	92.81	12.24	1.333
2.50	3	SLV	1	1	250.00	-7606.30	237.63	237.63	-554.13	-554.13	-7606.30	2068.90	-4897.71	286.88	7.74	8.812
2.90	3	SLV	2	1	0.00	-6626.79	904.86	904.86	-1729.60	-1729.60	-6626.79	2521.99	-4692.58	292.50	7.07	2.729
3.80	7(e)	SLU	2	1	90.00	-10504.80	-2686.43	-2686.43	-49.55	-210.10	-10504.80	-5368.83	-442.51	182.81	11.59	1.999

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	Aft <cm²>	AfC <cm²>	σ _c <daN/cm²>	σ _ε <daN/cm²>
0.00	10	SLE R	1	1	0.00	-9917.23	41.27	-16.71	0.00	8.04	10.78	157.26
0.00	8	SLE R	1	1	0.00	-8844.03	41.82	-9.18	0.00	8.04	9.60	140.11
0.00	14	SLE Q	1	1	0.00	-8558.45	40.69	-7.22	0.00	8.04	9.27	135.30
0.00	10	SLE R	1	1	0.00	-9917.23	41.27	-16.71	0.00	8.04	10.78	157.26
0.00	8	SLE R	1	1	0.00	-8844.03	41.82	-9.18	0.00	8.04	9.60	140.11
0.00	14	SLE Q	1	1	0.00	-8558.45	40.69	-7.22	0.00	8.04	9.27	135.30
2.50	10	SLE R	1	1	250.00	-9354.73	-36.24	44.38	0.00	8.04	10.65	153.50
2.50	8	SLE R	1	1	250.00	-8281.53	-35.35	30.05	0.00	8.04	9.32	134.70
2.50	14	SLE Q	1	1	250.00	-7995.95	-36.51	26.25	0.00	8.04	8.99	129.98
2.90	10	SLE R	2	1	0.00	-8080.47	-46.10	498.41	0.00	8.04	18.08	228.29
2.90	8	SLE R	2	1	0.00	-7040.17	-45.09	447.04	0.00	8.04	16.13	202.92
2.90	14	SLE Q	2	1	0.00	-6762.83	-46.26	433.15	2.01	6.03	15.64	196.45
3.80	10	SLE R	2	1	90.00	-7877.97	-38.29	-2014.64	4.02	4.02	65.45	1293.47
3.80	14	SLE Q	2	1	90.00	-6560.33	-38.31	-1678.04	4.02	4.02	54.76	1080.23

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 <cm²>	A _{c eff} <cm²>	σ _s <daN/cm²>	ε _{sm}	Wk <mm>
3.80	14	SLE Q	2	1	90.00	-6560.33	-1678.04	-38.31	34.00	216.00	0.50	16.00	144.28	4.02	183.22	1080.23	0.31	0.08
3.80	12	SLE F	2	1	90.00	-6671.32	-1706.31	-38.34	34.00	216.00	0.50	16.00	144.24	4.02	183.32	1098.11	0.32	0.08

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	d _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	Vrd _{,y} <daN>	bw _{,z} <m>	d _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Vrd _{,z} <daN>	Sic.
0.00	0.45	ø8/20	2	27	SLU	0.30	0.26	40.32	2.50	11077.60	15294.30	11077.60	0.30	0.26	33.94	2.50	11077.60	15294.30	11077.60	>100	
0.00	0.45	ø8/20	2	21	SLV	0.30	0.26	685.17	2.50	11077.60	14753.40	11077.60	0.30	0.26	279.15	2.50	11077.60	14753.40	11077.60	16.168	
0.00	0.45	ø8/20	2	23	SLV	0.30	0.26	1705.42	2.50	11077.60	14736.10	11077.60	0.30	0.26	212.80	2.50	11077.60	14736.10	11077.60	6.496	
0.45	2.05	ø8/20	2	27	SLU	0.30	0.26	40.32	2.50	11077.60	15276.90	11077.60	0.30	0.26	33.94	2.50	11077.60	15276.90	11077.60	>100	
0.45	2.05	ø8/20	2	21	SLV	0.30	0.26	685.17	2.50	11077.60	14740.00	11077.60	0.30	0.26	279.15	2.50	11077.60	14740.00	11077.60	16.168	
0.45	2.05	ø8/20	2	23	SLV	0.30	0.26	1705.42	2.50	11077.60	14722.70	11077.60	0.30	0.26	212.80	2.50	11077.60	14722.70	11077.60	6.496	
2.05	2.50	ø8/20	2	27	SLU	0.30	0.26	40.32	2.50	11077.60	15214.90	11077.60	0.30	0.26	33.94	2.50	11077.60	15214.90	11077.60	>100	
2.05	2.50	ø8/20	2	21	SLV	0.30	0.26	685.17	2.50	11077.60	14692.30	11077.60	0.30	0.26	279.15	2.50	11077.60	14692.30	11077.60	16.168	
2.05	2.50	ø8/20	2	23	SLV	0.30	0.26	1705.42	2.50	11077.60	14675.00	11077.60	0.30	0.26	212.80	2.50	11077.60	14675.00	11077.60	6.496	
2.90	3.80	ø8/20	2	27	SLU	0.30	0.26	11.07	2.50	11077.60	14977.10	11077.60	0.30	0.26	3719.47	2.50	11077.60	14977.10	11077.60	2.978	
2.90	3.80	ø8/20	2	26	SLU	0.30	0.26	11.16	2.50	11077.60	14825.60	11077.60	0.30	0.26	3330.54	2.50	11077.60	14825.60	11077.60	3.326	
2.90	3.80	ø8/20	2	21	SLV	0.30	0.26	1267.93	2.50	11077.60	14472.00	11077.60	0.30	0.26	3624.59	2.50	11077.60	14472.00	11077.60	3.056	
2.90	3.80	ø8/20	2	23	SLV	0.30	0.26	3433.25	2.50	11077.60	14464.70	11077.60	0.30	0.26	3307.50	2.50	11077.60	14464.70	11077.60	3.227	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm²>	σ _{ncR} <daN/cm²>	σ _{nt} <daN/cm²>	σ _{ntR} <daN/cm²>
-645	1	SLV	6571.56	3433.25	0.00	-3624.59	-1639.92	6285.08	11.53	56.86	4.23	10.12
141	1	SLV	0.00	0.00	0.00	0.00	8287.18	8287.18	9.21	56.86	9.21	10.12

Pilastrata n. 8

Nodi: 42 -646 142

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm²>	Fctm <daN/cm²>	Fcd <daN/cm²>	Fcd (Tag) <daN/cm²>	Fctd <daN/cm²>	Fym <daN/cm²>	Fyd <daN/cm²>	Fyd (Tag) <daN/cm²>
2R		20.00	35.00	4.00	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.003		SLV	1	2	0.00	-7312.17	-3035.16	-3035.16	-165.59	-165.59	-7312.17	-4873.05	-233.06	185.62	13.31	1.605
0.003		SLV	1	2	0.00	-7312.17	-3035.16	-3035.16	-165.59	-165.59	-7312.17	-4873.05	-233.06	185.62	13.31	1.605
2.503(e)		SLV	1	2	250.00	-9195.80	124.98	183.92	184.62	184.62	-77607.80	2453.82	2432.81	75.94	5.26	8.439
2.903		SLV	2	2	0.00	-7000.24	-1353.97	-1353.97	-751.26	-751.26	-7000.24	-3506.83	-1960.08	246.09	5.09	2.592
3.801		SLV	2	2	90.00	-6905.75	383.29	383.29	1272.95	1272.95	-6905.75	703.49	2462.84	87.19	8.24	1.927

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cm²>	AfC <cm²>	σ _c <daN/cm²>	σ _ε <daN/cm²>
0.0010		SLE R	1	2	0.00	-9840.05	-15.44	-10.61	0.00	6.16	13.21	193.85
0.008		SLE R	1	2	0.00	-8763.37	-14.95	-11.64	0.00	6.16	11.85	173.54
0.0014		SLE Q	1	2	0.00	-8472.74	-14.96	-10.14	0.00	6.16	11.46	167.70
0.0010		SLE R	1	2	0.00	-9840.05	-15.44	-10.61	0.00	6.16	13.21	193.85
0.008		SLE R	1	2	0.00	-8763.37	-14.95	-11.64	0.00	6.16	11.85	173.54
0.0014		SLE Q	1	2	0.00	-8472.74	-14.96	-10.14	0.00	6.16	11.46	167.70
2.5010		SLE R	1	2	250.00	-9402.55	23.31	8.44	0.00	6.16	12.91	187.70
2.508		SLE R	1	2	250.00	-8325.87	22.96	8.38	0.00	6.16	11.54	167.18
2.5014		SLE Q	1	2	250.00	-8035.24	23.06	8.65	0.00	6.16	11.18	161.78
2.9010		SLE R	2	2	0.00	-8801.58	-438.58	20.99	3.08	3.08	29.41	324.83
2.909		SLE R	2	2	0.00	-7960.11	-400.98	20.64	3.08	3.08	26.88	296.06
2.9014		SLE Q	2	2	0.00	-7348.84	-373.08	20.31	3.08	3.08	25.01	274.90
3.8010		SLE R	2	2	90.00	-8644.08	991.58	20.54	3.08	3.08	69.79	965.08
3.8014		SLE Q	2	2	90.00	-7191.34	828.10	21.04	3.08	3.08	58.45	811.39

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>	
0.00	0.45	ø8/20	2	25	SLU	0.35	0.16	19.66	2.50	6750.44	11020.10	6750.44	0.20	0.31	10.66	2.40	12715.20	12715.10	12715.10	>100	
0.00	0.45	ø8/20	2	27	SLU	0.35	0.16	20.16	2.50	6750.44	11215.60	6750.44	0.20	0.31	10.08	2.43	12846.80	12846.80	12846.80	>100	
0.00	0.45	ø8/20	2	23	SLV	0.35	0.16	139.17	2.50	6750.44	10800.00	6750.44	0.20	0.31	1201.68	2.37	12565.30	12565.30	12565.30	10.457	
0.00	0.45	ø8/20	2	21	SLV	0.35	0.16	163.26	2.50	6750.44	10769.90	6750.44	0.20	0.31	465.01	2.37	12544.60	12544.60	12544.60	26.977	
0.45	2.05	ø8/20	2	25	SLU	0.35	0.16	19.66	2.50	6750.44	11007.70	6750.44	0.20	0.31	10.66	2.40	12706.80	12706.80	12706.80	>100	
0.45	2.05	ø8/20	2	27	SLU	0.35	0.16	20.16	2.50	6750.44	11203.20	6750.44	0.20	0.31	10.08	2.42	12838.50	12838.50	12838.50	>100	
0.45	2.05	ø8/20	2	23	SLV	0.35	0.16	139.17	2.50	6750.44	10790.50	6750.44	0.20	0.31	1201.68	2.37	12558.70	12558.70	12558.70	10.451	
0.45	2.05	ø8/20	2	21	SLV	0.35	0.16	163.26	2.50	6750.44	10760.40	6750.44	0.20	0.31	465.01	2.37	12538.10	12538.10	12538.10	26.963	
2.05	2.50	ø8/20	2	25	SLU	0.35	0.16	19.66	2.50	6750.44	10963.70	6750.44	0.20	0.31	10.66	2.39	12676.90	12676.90	12676.90	>100	
2.05	2.50	ø8/20	2	27	SLU	0.35	0.16	20.16	2.50	6750.44	11159.10	6750.44	0.20	0.31	10.08	2.42	12808.90	12808.90	12808.90	>100	
2.05	2.50	ø8/20	2	23	SLV	0.35	0.16	139.17	2.50	6750.44	10756.60	6750.44	0.20	0.31	1201.68	2.37	12535.50	12535.50	12535.50	10.432	
2.05	2.50	ø8/20	2	21	SLV	0.35	0.16	163.26	2.50	6750.44	10726.50	6750.44	0.20	0.31	465.01	2.36	12514.80	12514.80	12514.80	26.913	
2.90	3.80	ø8/20	2	25	SLU	0.35	0.16	1812.22	2.50	6750.44	10846.20	6750.44	0.20	0.31	1.37	2.38	12596.80	12596.80	12596.80	3.725	
2.90	3.80	ø8/20	2	27	SLU	0.35	0.16	2115.97	2.50	6750.44	11054.20	6750.44	0.20	0.31	0.78	2.41	12738.20	12738.20	12738.20	3.190	
2.90	3.80	ø8/20	2	23	SLV	0.35	0.16	2147.75	2.50	6750.44	10565.70	6750.44	0.20	0.31	2607.17	2.34	12403.70	12403.70	12403.70	3.143	
2.90	3.80	ø8/20	2	21	SLV	0.35	0.16	2366.40	2.50	6750.44	10558.10	6750.44	0.20	0.31	950.55	2.34	12398.40	12398.40	12398.40	2.853	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm²>	σ _{ncR} <daN/cm²>	σ _{nt} <daN/cm²>	σ _{ntR} <daN/cm²>
-646	3	SLV	7697.45	2366.40	2097.98	2607.17	0.00	5169.91	14.71	56.86	3.71	10.12
142	3	SLV	0.00	0.00	-5306.06	0.00	0.00	5306.06	7.58	56.86	7.58	10.12

Pilastrata n. 11

Nodi: 36 136

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm²>	Fctm <daN/cm²>	Fcd <daN/cm²>	Fcd (Tag) <daN/cm²>	Fctd <daN/cm²>	Fym <daN/cm²>	Fyd <daN/cm²>	Fyd (Tag) <daN/cm²>
1R		30.00	30.00	4.00	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.003		SLV	1	1	0.00	-5236.18	422.26	422.26	1092.14	1092.14	-5236.18	1415.37	3842.92	78.75	10.57	3.497
0.003		SLV	1	1	0.00	-5236.18	422.26	422.26	1092.14	1092.14	-5236.18	1415.37	3842.92	78.75	10.57	3.497
3.403		SLV	1	1	340.00	-4471.18	-496.43	-496.43	-1018.20	-1018.20	-4471.18	-1792.10	-3699.61	254.53	9.51	3.629

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cm²>	AfC <cm²>	σ _c <daN/cm²>	σ _ε <daN/cm²>
0.0010		SLE R	1	1	0.00	-8047.68	167.89	177.16	0.00	6.16	14.71	193.53
0.008		SLE R	1	1	0.00	-7443.34	158.34	151.77	0.00	6.16	13.43	177.12

0.00	14	SLE Q	1	1	0.00	-7326.75	154.00	145.39	0.00	6.16	13.11	173.12
0.00	10	SLE R	1	1	0.00	-8047.68	167.89	177.16	0.00	6.16	14.71	193.53
0.00	8	SLE R	1	1	0.00	-7443.34	158.34	151.77	0.00	6.16	13.43	177.12
0.00	14	SLE Q	1	1	0.00	-7326.75	154.00	145.39	0.00	6.16	13.11	173.12
3.40	10	SLE R	1	1	340.00	-7282.68	-232.92	-308.52	1.54	4.62	17.87	224.72
3.40	14	SLE Q	1	1	340.00	-6561.75	-214.24	-253.19	1.54	4.62	15.66	197.67

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	d _{ry} <m>	Vsdu _{ry} <daN>	ctgθ _{ry}	VRsd _{ry} <daN>	VRcd _{ry} <daN>	Vrd _{ry} <daN>	bw _{rz} <m>	d _{rz} <m>	Vsdu _{rz} <daN>	ctgθ _{rz}	VRsd _{rz} <daN>	VRcd _{rz} <daN>	Vrd _{rz} <daN>	Sic.
0.00	0.57	ø8/20	2	27	SLU	0.30	0.26	155.65	2.50	11077.60	14955.30	11077.60	11077.60	0.30	0.26	190.78	2.50	11077.60	14955.30	11077.60	58.066
0.00	0.57	ø8/20	2	21	SLV	0.30	0.26	374.43	2.50	11077.60	14760.50	11077.60	11077.60	0.30	0.26	273.51	2.50	11077.60	14760.50	11077.60	29.585
0.00	0.57	ø8/20	2	23	SLV	0.30	0.26	620.39	2.50	11077.60	14798.20	11077.60	11077.60	0.30	0.26	269.95	2.50	11077.60	14798.20	11077.60	17.856
0.57	2.83	ø8/20	2	27	SLU	0.30	0.26	155.65	2.50	11077.60	14933.40	11077.60	11077.60	0.30	0.26	190.78	2.50	11077.60	14933.40	11077.60	58.066
0.57	2.83	ø8/20	2	21	SLV	0.30	0.26	374.43	2.50	11077.60	14743.60	11077.60	11077.60	0.30	0.26	273.51	2.50	11077.60	14743.60	11077.60	29.585
0.57	2.83	ø8/20	2	23	SLV	0.30	0.26	620.39	2.50	11077.60	14781.30	11077.60	11077.60	0.30	0.26	269.95	2.50	11077.60	14781.30	11077.60	17.856
2.83	3.40	ø8/20	2	27	SLU	0.30	0.26	155.65	2.50	11077.60	14845.60	11077.60	11077.60	0.30	0.26	190.78	2.50	11077.60	14845.60	11077.60	58.066
2.83	3.40	ø8/20	2	21	SLV	0.30	0.26	374.43	2.50	11077.60	14676.10	11077.60	11077.60	0.30	0.26	273.51	2.50	11077.60	14676.10	11077.60	29.585
2.83	3.40	ø8/20	2	23	SLV	0.30	0.26	620.39	2.50	11077.60	14713.80	11077.60	11077.60	0.30	0.26	269.95	2.50	11077.60	14713.80	11077.60	17.856

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
136	3	SLV	0.00	0.00	5408.41	0.00	-1255.77	5552.28	6.17	56.86	6.17	10.12

Pilastrata n. 12

Nodi: 34 -634 134

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>
2	R	20.00	35.00	4.00	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	1	SLV	1	2	0.00	-5378.32	1024.39	1024.39	228.63	228.63	-5378.32	4405.51	1049.57	33.75	7.54	4.315
0.00	1	SLV	1	2	0.00	-5378.32	1024.39	1024.39	228.63	228.63	-5378.32	4405.51	1049.57	33.75	7.54	4.315
2.50	1(e)	SLV	1	2	250.00	-4940.82	-737.56	-737.56	31.82	98.82	-4940.82	-4505.99	601.55	163.12	10.64	6.109
2.90	1	SLV	2	2	0.00	-3952.07	-1150.65	-1150.65	-152.54	-152.54	-3952.07	-4374.27	-607.24	196.88	10.98	3.805
3.80	3	SLV	2	2	90.00	-3678.12	-319.49	-319.49	1175.40	1175.40	-3678.12	-599.70	2249.02	92.46	9.29	1.911

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 _f <daN/cmq>
0.00	10	SLE R	1	2	0.00	-6297.36	6.06	27.85	0.00	6.16	8.73	127.59
0.00	8	SLE R	1	2	0.00	-5718.67	3.02	26.78	0.00	6.16	7.86	115.38
0.00	14	SLE Q	1	2	0.00	-5675.34	4.15	26.79	0.00	6.16	7.85	114.94
0.00	10	SLE R	1	2	0.00	-6297.36	6.06	27.85	0.00	6.16	8.73	127.59
0.00	8	SLE R	1	2	0.00	-5718.67	3.02	26.78	0.00	6.16	7.86	115.38
0.00	14	SLE Q	1	2	0.00	-5675.34	4.15	26.79	0.00	6.16	7.85	114.94
2.50	10	SLE R	1	2	250.00	-5859.86	-27.28	-3.01	0.00	6.16	8.48	120.71
2.50	8	SLE R	1	2	250.00	-5281.17	-22.56	-5.69	0.00	6.16	7.63	108.80
2.50	14	SLE Q	1	2	250.00	-5237.84	-22.28	-6.77	0.00	6.16	7.58	108.13
2.90	10	SLE R	2	2	0.00	-4871.11	-60.74	-11.48	0.00	6.16	8.66	115.08
2.90	8	SLE R	2	2	0.00	-4292.42	-54.78	-14.39	0.00	6.16	7.77	102.81
2.90	14	SLE Q	2	2	0.00	-4249.09	-54.63	-15.54	0.00	6.16	7.73	102.20
3.80	10	SLE R	2	2	90.00	-4713.61	214.54	-16.63	0.00	6.16	14.78	167.01
3.80	8	SLE R	2	2	90.00	-4134.92	189.50	-18.70	0.00	6.16	13.13	148.13
3.80	14	SLE Q	2	2	90.00	-4091.59	185.86	-19.40	0.00	6.16	12.92	146.14

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	d _{ry} <m>	Vsdu _y <daN>	ctgθ _{ry}	VRsd _{ry} <daN>	VRcd _{ry} <daN>	Vrd _{ry} <daN>	bw _{rz} <m>	d _{rz} <m>	Vsdu _{rz} <daN>	ctgθ _{rz}	VRsd _{rz} <daN>	VRcd _{rz} <daN>	Vrd _{rz} <daN>	Sic.
0.00	0.45	ø8/20	2	25	SLU	0.35	0.16	13.09	2.50	6750.44	10534.90	6750.44	0.20	0.31	16.75	2.34	12382.30	12382.30	12382.30	>100	
0.00	0.45	ø8/20	2	27	SLU	0.35	0.16	17.75	2.50	6750.44	10640.00	6750.44	0.20	0.31	15.78	2.35	12455.10	12455.10	12455.10	>100	
0.00	0.45	ø8/20	2	21	SLV	0.35	0.16	121.34	2.50	6750.44	10356.90	6750.44	0.20	0.31	385.08	2.31	12258.00	12258.00	12258.00	31.832	
0.00	0.45	ø8/20	2	23	SLV	0.35	0.16	255.21	2.50	6750.44	10371.00	6750.44	0.20	0.31	191.86	2.32	12267.90	12267.90	12267.90	26.451	
0.45	2.05	ø8/20	2	25	SLU	0.35	0.16	13.09	2.50	6750.44	10522.50	6750.44	0.20	0.31	16.75	2.34	12373.70	12373.70	12373.70	>100	
0.45	2.05	ø8/20	2	27	SLU	0.35	0.16	17.75	2.50	6750.44	10627.60	6750.44	0.20	0.31	15.78	2.35	12446.60	12446.60	12446.60	>100	
0.45	2.05	ø8/20	2	21	SLV	0.35	0.16	121.34	2.50	6750.44	10347.40	6750.44	0.20	0.31	385.08	2.31	12251.30	12251.30	12251.30	31.815	
0.45	2.05	ø8/20	2	23	SLV	0.35	0.16	255.21	2.50	6750.44	10361.50	6750.44	0.20	0.31	191.86	2.31	12261.20	12261.20	12261.20	26.451	
2.05	2.50	ø8/20	2	25	SLU	0.35	0.16	13.09	2.50	6750.44	10478.50	6750.44	0.20	0.31	16.75	2.33	12343.00	12343.00	12343.00	>100	
2.05	2.50	ø8/20	2	27	SLU	0.35	0.16	17.75	2.50	6750.44	10583.50	6750.44	0.20	0.31	15.78	2.34	12416.10	12416.10	12416.10	>100	
2.05	2.50	ø8/20	2	21	SLV	0.35	0.16	121.34	2.50	6750.44	10313.50	6750.44	0.20	0.31	385.08	2.31	12227.40	12227.40	12227.40	31.753	
2.05	2.50	ø8/20	2	23	SLV	0.35	0.16	255.21	2.50	6750.44	10327.60	6750.44	0.20	0.31	191.86	2.31	12237.30	12237.30	12237.30	26.451	
2.90	3.80	ø8/20	2	27	SLU	0.35	0.16	405.92	2.50	6750.44	10415.60	6750.44	0.20	0.31	7.77	2.32	12299.10	12299.10	12299.10	16.630	
2.90	3.80	ø8/20	2	21	SLV	0.35	0.16	618.03	2.50	6750.44	10184.30	6750.44	0.20	0.31	661.49	2.29	12136.10	12136.10	12136.10	10.923	
2.90	3.80	ø8/20	2	23	SLV	0.35	0.16	1157.00	2.50	6750.44	10198.40	6750.44	0.20	0.31	336.30	2.29	12146.10	12146.10	12146.10	5.834	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
-634	3	SLV	3835.62	1157.00	0.00	-661.49	0.00	1332.74	6.08	56.86	0.60	10.12
	3	SLV	4662.56	1157.00	0.00	-661.49	0.00	1332.74	7.17	56.86	0.51	10.12
134	3	SLV	0.00	0.00	-3100.07	0.00	0.00	3100.07	4.43	56.86	4.43	10.12

Pilastrata n. 13

Nodi: 32 -633 132 50

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>
1	R	30.00	30.00	4.30	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.003	SLV	1	1	1	0.00	-8805.92	446.91	446.91	-1609.94	-1609.94	-8805.92	1971.95	-7139.22	282.66	7.18	4.433
0.003	SLV	1	1	1	0.00	-8805.92	446.91	446.91	-1609.94	-1609.94	-8805.92	1971.95	-7139.22	282.66	7.18	4.433
2.501	SLV	1	1	250.00	-9223.30	-1323.05	-1323.05	-205.69	-205.69	-205.69	-9223.30	-7276.89	-1026.09	185.62	8.95	5.489
2.901	SLV	2	1	0.00	-8465.80	-1834.81	-1834.81	361.22	361.22	361.22	-8465.80	-7173.41	1432.83	171.56	8.21	3.912
3.641	SLV	2	1	74.00	-8299.30	-3132.15	-3132.15	761.29	761.29	761.29	-8299.30	-7113.17	1796.18	168.75	7.55	2.276
4.221(e)	SLV	3	1	42.50	-7150.43	4751.14	4751.14	56.49	143.01	143.01	-7150.43	7052.13	102.19	0.70	11.34	1.484
4.221(e)	SLV	3	1	42.50	-7150.43	4751.14	4751.14	56.49	143.01	143.01	-7150.43	7052.13	102.19	0.70	11.34	1.484
5.473	SLV	3	1	167.48	-11760.90	243.16	243.16	385.80	385.80	385.80	-99781.50	4056.80	6642.16	56.25	4.67	8.484

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>
0.0010	SLE	R	1	1	0.00	-12739.30	-43.33	47.47	0.00	12.57	13.24	191.83
0.008	SLE	R	1	1	0.00	-11796.00	-43.37	47.22	0.00	12.57	12.37	178.80
0.0014	SLE	Q	1	1	0.00	-11459.10	-38.87	47.25	0.00	12.57	11.98	173.35
0.0010	SLE	R	1	1	0.00	-12739.30	-43.33	47.47	0.00	12.57	13.24	191.83
0.008	SLE	R	1	1	0.00	-11796.00	-43.37	47.22	0.00	12.57	12.37	178.80
0.0014	SLE	Q	1	1	0.00	-11459.10	-38.87	47.25	0.00	12.57	11.98	173.35
2.5010	SLE	R	1	1	250.00	-12176.80	3.88	-27.11	0.00	12.57	11.71	173.36
2.508	SLE	R	1	1	250.00	-11233.50	4.55	-30.00	0.00	12.57	10.90	161.00
2.5014	SLE	Q	1	1	250.00	-10896.60	3.87	-30.99	0.00	12.57	10.60	156.41
2.9010	SLE	R	2	1	0.00	-11419.30	11.44	-50.26	0.00	12.57	11.53	168.43
2.908	SLE	R	2	1	0.00	-10476.00	12.22	-52.83	0.00	12.57	10.72	156.03
2.9014	SLE	Q	2	1	0.00	-10139.10	10.71	-53.71	0.00	12.57	10.40	151.27
3.6410	SLE	R	2	1	74.00	-11252.80	63.76	-91.48	0.00	12.57	12.96	182.90
3.648	SLE	R	2	1	74.00	-10309.50	62.59	-96.61	0.00	12.57	12.16	170.61
3.6414	SLE	Q	2	1	74.00	-9972.60	56.36	-98.45	0.00	12.57	11.78	165.18
4.2210	SLE	R	3	1	42.50	-10250.60	-2.91	119.14	0.00	12.57	11.48	163.14
4.228	SLE	R	3	1	42.50	-9453.61	-2.38	113.73	0.00	12.57	10.65	151.09
4.2214	SLE	Q	3	1	42.50	-9066.16	-2.41	111.86	0.00	12.57	10.26	145.42
4.2210	SLE	R	3	1	42.50	-10250.60	-2.91	119.14	0.00	12.57	11.48	163.14
4.228	SLE	R	3	1	42.50	-9453.61	-2.38	113.73	0.00	12.57	10.65	151.09
4.2214	SLE	Q	3	1	42.50	-9066.16	-2.41	111.86	0.00	12.57	10.26	145.42
5.4710	SLE	R	3	1	167.48	-9969.41	46.35	-35.65	0.00	12.57	10.55	152.09
5.478	SLE	R	3	1	167.48	-9172.42	42.88	-32.02	0.00	12.57	9.69	139.83
5.4714	SLE	Q	3	1	167.48	-8784.96	40.25	-30.70	0.00	12.57	9.27	133.78

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{y,z}	d _{y,z}	Vsdu _{y,z}	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>	
0.00	0.45	ø8/20	2	25	SLU	0.30	0.26	25.80	2.50	11077.60	15590.80	11077.60	0.30	0.26	40.06	2.50	11077.60	15590.80	11077.60	>100	
0.00	0.45	ø8/20	2	21	SLV	0.30	0.26	371.16	2.50	11077.60	15290.10	11077.60	0.30	0.26	700.68	2.50	11077.60	15290.10	11077.60	15.810	
0.00	0.45	ø8/20	2	23	SLV	0.30	0.26	819.06	2.50	11077.60	15419.90	11077.60	0.30	0.26	320.85	2.50	11077.60	15419.90	11077.60	13.525	
0.45	2.05	ø8/20	2	25	SLU	0.30	0.26	25.80	2.50	11077.60	15573.30	11077.60	0.30	0.26	40.06	2.50	11077.60	15573.30	11077.60	>100	
0.45	2.05	ø8/20	2	21	SLV	0.30	0.26	371.16	2.50	11077.60	15276.70	11077.60	0.30	0.26	700.68	2.50	11077.60	15276.70	11077.60	15.810	
0.45	2.05	ø8/20	2	23	SLV	0.30	0.26	819.06	2.50	11077.60	15406.50	11077.60	0.30	0.26	320.85	2.50	11077.60	15406.50	11077.60	13.525	
2.05	2.50	ø8/20	2	25	SLU	0.30	0.26	25.80	2.50	11077.60	15511.40	11077.60	0.30	0.26	40.06	2.50	11077.60	15511.40	11077.60	>100	
2.05	2.50	ø8/20	2	21	SLV	0.30	0.26	371.16	2.50	11077.60	15229.10	11077.60	0.30	0.26	700.68	2.50	11077.60	15229.10	11077.60	15.810	
2.05	2.50	ø8/20	2	23	SLV	0.30	0.26	819.06	2.50	11077.60	15358.80	11077.60	0.30	0.26	320.85	2.50	11077.60	15358.80	11077.60	13.525	
2.90	3.64	ø8/20	2	25	SLU	0.30	0.26	90.80	2.50	11077.60	15363.50	11077.60	0.30	0.26	76.62	2.50	11077.60	15363.50	11077.60	>100	
2.90	3.64	ø8/20	2	27	SLU	0.30	0.26	94.75	2.50	11077.60	15550.90	11077.60	0.30	0.26	71.42	2.50	11077.60	15550.90	11077.60	>100	
2.90	3.64	ø8/20	2	21	SLV	0.30	0.26	595.40	2.50	11077.60	15115.40	11077.60	0.30	0.26	1799.69	2.50	11077.60	15115.40	11077.60	6.155	
2.90	3.64	ø8/20	2	23	SLV	0.30	0.26	1410.93	2.50	11077.60	15245.10	11077.60	0.30	0.26	795.29	2.50	11077.60	15245.10	11077.60	7.851	
4.22	5.47	ø8/20	2	27	SLU	0.30	0.26	52.44	2.50	11077.60	15347.20	11077.60	0.30	0.26	163.04	2.50	11077.60	15347.20	11077.60	67.945	
4.22	5.47	ø8/20	2	21	SLV	0.30	0.26	109.35	2.50	11077.60	15005.40	11077.60	0.30	0.26	3840.80	2.50	11077.60	15005.40	11077.60	2.884	
4.22	5.47	ø8/20	2	23	SLV	0.30	0.26	242.86	2.50	11077.60	15145.80	11077.60	0.30	0.26	1676.96	2.50	11077.60	15145.80	11077.60	6.606	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
-633	3	SLV	7485.92	1410.92	-0.00	-1799.69	0.00	2286.83	9.03	56.86	0.71	10.12
	3	SLV	12792.30	1410.92	-0.00	-1799.69	0.00	2286.83	14.65	56.86	0.44	10.12
132	3	SLV	6090.20	242.86	-5373.39	-3840.80	1666.06	5572.42	10.44	56.86	3.67	10.12
	3	SLV	12042.10	242.86	4928.44	-3840.80	5113.18	5325.53	15.62	56.86	2.24	10.12
50	1	SLV	0.00	0.00	-1387.79	0.00	0.00	1387.79	1.54	56.86	1.54	10.12

Pilastrata n. 14

Nodi: 33 133 51

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>
1	R	30.00	30.00	4.30	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.001	SLV	1	1	1	0.00	-13128.50	-1969.89	-1969.89	305.38	305.38	-13128.50	-7655.81	1167.87	172.97	7.80	3.885
0.001	SLV	1	1	1	0.00	-13128.50	-1969.89	-1969.89	305.38	305.38	-13128.50	-7655.81	1167.87	172.97	7.80	3.885
3.581	SLV	1	1	357.50	-12324.20	2001.26	2001.26	-328.69	-328.69	-328.69	-12324.20	7573.83	-1176.98	352.97	7.94	3.779
4.131	SLV	2	1	33.50	-8132.84	-2676.86	-2676.86	473.62	473.62	473.62	-8132.84	-7146.61	1222.34	172.97	8.67	2.667
4.131	SLV	2	1	33.50	-8132.84	-2676.86	-2676.86	473.62	473.62	473.62	-8132.84	-7146.61	1222.34	172.97	8.67	2.667
5.471	SLV	2	1	167.48	-7831.39	1825.32	1825.32	-909.03	-909.03	-909.03	-7831.39	6759.16	-3267.85	334.69	5.55	3.682

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>
0.00	10	SLE R	1	1	0.00	-16232.70	9.57	-43.06	0.00	12.57	15.80	233.13
0.00	8	SLE R	1	1	0.00	-14672.00	8.18	-45.83	0.00	12.57	14.39	211.87
0.00	14	SLE Q	1	1	0.00	-14226.90	8.15	-46.48	0.00	12.57	13.99	205.85
0.00	10	SLE R	1	1	0.00	-16232.70	9.57	-43.06	0.00	12.57	15.80	233.13
0.00	8	SLE R	1	1	0.00	-14672.00	8.18	-45.83	0.00	12.57	14.39	211.87
0.00	14	SLE Q	1	1	0.00	-14226.90	8.15	-46.48	0.00	12.57	13.99	205.85
3.58	10	SLE R	1	1	357.50	-15428.30	-4.54	107.20	0.00	12.57	16.06	232.64
3.58	8	SLE R	1	1	357.50	-13867.60	-3.21	108.64	0.00	12.57	14.63	211.16
3.58	14	SLE Q	1	1	357.50	-13422.50	-3.60	108.74	0.00	12.57	14.23	205.11
4.13	10	SLE R	2	1	33.50	-10902.70	236.53	-76.54	0.00	12.57	15.31	206.38
4.13	8	SLE R	2	1	33.50	-9988.79	213.20	-74.02	0.00	12.57	14.03	189.15
4.13	14	SLE Q	2	1	33.50	-9489.46	203.50	-73.68	0.00	12.57	13.41	180.47
4.13	10	SLE R	2	1	33.50	-10902.70	236.53	-76.54	0.00	12.57	15.31	206.38
4.13	8	SLE R	2	1	33.50	-9988.79	213.20	-74.02	0.00	12.57	14.03	189.15
4.13	14	SLE Q	2	1	33.50	-9489.46	203.50	-73.68	0.00	12.57	13.41	180.47
5.47	10	SLE R	2	1	167.48	-10601.20	-717.22	14.03	0.00	12.57	22.34	279.10
5.47	14	SLE Q	2	1	167.48	-9188.00	-617.65	12.74	0.00	12.57	19.30	241.20

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	d _{r,y} <m>	V _{edu,y} <daN>	ctgθ _{r,y}	V _{Rsd,y} <daN>	V _{Rcd,y} <daN>	V _{rd,y} <daN>	b _{w,z} <m>	d _{r,z} <m>	V _{edu,z} <daN>	ctgθ _{r,z}	V _{Rsd,z} <daN>	V _{Rcd,z} <daN>	V _{rd,z} <daN>	Sic.
0.00	0.60	ø8/20	2	25	SLU	0.30	0.26	4.21	2.50	11077.60	16088.60	11077.60	0.30	0.26	56.17	2.50	11077.60	16088.60	11077.60	>100	
0.00	0.60	ø8/20	2	27	SLU	0.30	0.26	5.35	2.50	11077.60	16398.60	11077.60	0.30	0.26	54.40	2.50	11077.60	16398.60	11077.60	>100	
0.00	0.60	ø8/20	2	21	SLV	0.30	0.26	177.36	2.50	11077.60	15580.50	11077.60	0.30	0.26	1086.39	2.50	11077.60	15580.50	11077.60	10.197	
0.00	0.60	ø8/20	2	23	SLV	0.30	0.26	366.62	2.50	11077.60	15712.80	11077.60	0.30	0.26	483.22	2.50	11077.60	15712.80	11077.60	22.924	
0.60	2.98	ø8/20	2	25	SLU	0.30	0.26	4.21	2.50	11077.60	16065.50	11077.60	0.30	0.26	56.17	2.50	11077.60	16065.50	11077.60	>100	
0.60	2.98	ø8/20	2	27	SLU	0.30	0.26	5.35	2.50	11077.60	16375.50	11077.60	0.30	0.26	54.40	2.50	11077.60	16375.50	11077.60	>100	
0.60	2.98	ø8/20	2	21	SLV	0.30	0.26	177.36	2.50	11077.60	15562.80	11077.60	0.30	0.26	1086.39	2.50	11077.60	15562.80	11077.60	10.197	
0.60	2.98	ø8/20	2	23	SLV	0.30	0.26	366.62	2.50	11077.60	15695.10	11077.60	0.30	0.26	483.22	2.50	11077.60	15695.10	11077.60	22.924	
2.98	3.58	ø8/20	2	25	SLU	0.30	0.26	4.21	2.50	11077.60	15973.20	11077.60	0.30	0.26	56.17	2.50	11077.60	15973.20	11077.60	>100	
2.98	3.58	ø8/20	2	27	SLU	0.30	0.26	5.35	2.50	11077.60	16283.20	11077.60	0.30	0.26	54.40	2.50	11077.60	16283.20	11077.60	>100	
2.98	3.58	ø8/20	2	21	SLV	0.30	0.26	177.36	2.50	11077.60	15491.70	11077.60	0.30	0.26	1086.39	2.50	11077.60	15491.70	11077.60	10.197	
2.98	3.58	ø8/20	2	23	SLV	0.30	0.26	366.62	2.50	11077.60	15624.10	11077.60	0.30	0.26	483.22	2.50	11077.60	15624.10	11077.60	22.924	
4.13	4.58	ø8/20	2	27	SLU	0.30	0.26	945.37	2.50	11077.60	15465.40	11077.60	0.30	0.26	88.40	2.50	11077.60	15465.40	11077.60	11.718	
4.13	4.58	ø8/20	2	21	SLV	0.30	0.26	1029.15	2.50	11077.60	14987.40	11077.60	0.30	0.26	2545.92	2.50	11077.60	14987.40	11077.60	4.351	
4.13	4.58	ø8/20	2	23	SLV	0.30	0.26	1393.12	2.50	11077.60	15165.80	11077.60	0.30	0.26	1170.92	2.50	11077.60	15165.80	11077.60	7.952	
4.58	5.02	ø8/20	2	27	SLU	0.30	0.26	945.37	2.50	11077.60	15447.90	11077.60	0.30	0.26	88.40	2.50	11077.60	15447.90	11077.60	11.718	
4.58	5.02	ø8/20	2	21	SLV	0.30	0.26	1029.15	2.50	11077.60	14974.00	11077.60	0.30	0.26	2545.92	2.50	11077.60	14974.00	11077.60	4.351	
4.58	5.02	ø8/20	2	23	SLV	0.30	0.26	1393.12	2.50	11077.60	15152.40	11077.60	0.30	0.26	1170.92	2.50	11077.60	15152.40	11077.60	7.952	
5.02	5.47	ø8/20	2	27	SLU	0.30	0.26	945.37	2.50	11077.60	15430.90	11077.60	0.30	0.26	88.40	2.50	11077.60	15430.90	11077.60	11.718	
5.02	5.47	ø8/20	2	21	SLV	0.30	0.26	1029.15	2.50	11077.60	14960.90	11077.60	0.30	0.26	2545.92	2.50	11077.60	14960.90	11077.60	4.351	
5.02	5.47	ø8/20	2	23	SLV	0.30	0.26	1393.12	2.50	11077.60	15139.30	11077.60	0.30	0.26	1170.92	2.50	11077.60	15139.30	11077.60	7.952	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	V _c <daN>	V _t <daN>	V _c <daN>	V _t <daN>	V _n <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
133	3	SLV	6785.56	-1393.12	-2051.13	2545.92	-4441.18	3931.27	9.54	56.86	2.00	10.12
	3	SLV	12193.40	-1393.12	3621.89	2545.92	-2057.70	2281.61	14.01	56.86	0.46	10.12
51	3	SLV	0.00	0.00	4416.93	0.00	0.00	4416.93	4.91	56.86	4.91	10.12

Pilastrata n. 15

Nodi: 27 -615 127

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	F _{cm} <daN/cm>	F _{ctm} <daN/cm>	F _{cd} <daN/cm>	F _{cd} (Tag) <daN/cm>	F _{ctd} <daN/cm>	F _{ym} <daN/cm>	F _{yd} <daN/cm>	F _{yd} (Tag) <daN/cm>
2R		20.00	35.00	4.00	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>	MR _{dy} <daNm>	MR _{dz} <daNm>	α <grad>	ε _y	Sic.
0.00	3	SLV	1	2	0.00	-5490.66	428.24	428.24	-550.85	-550.85	-5490.66	1747.64	-2298.37	278.44	6.86	4.104
0.00	3	SLV	1	2	0.00	-5490.66	428.24	428.24	-550.85	-550.85	-5490.66	1747.64	-2298.37	278.44	6.86	4.104
2.50	1(e)	SLV	1	2	250.00	-4922.40	-792.75	-792.75	76.62	98.45	-4922.40	-4503.54	601.65	163.12	10.65	5.688
2.90	1	SLV	2	2	0.00	-3933.65	-1151.30	-1151.30	156.33	156.33	-3933.65	-4371.81	607.35	163.12	10.99	3.799
3.80	3	SLV	2	2	90.00	-3906.91	-338.18	-338.18	-997.51	-997.51	-3906.91	-732.97	-2271.68	267.19	9.16	2.266

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cm>	AfC <cm>	σ _c <daN/cm>	σ _ε <daN/cm>
0.00	10	SLE R	1	2	0.00	-6251.25	-31.86	37.01	0.00	6.16	9.83	137.41
0.00	8	SLE R	1	2	0.00	-5678.22	-29.10	35.70	0.00	6.16	8.97	125.34
0.00	14	SLE Q	1	2	0.00	-5635.65	-27.40	35.05	0.00	6.16	8.84	123.82
0.00	10	SLE R	1	2	0.00	-6251.25	-31.86	37.01	0.00	6.16	9.83	137.41
0.00	8	SLE R	1	2	0.00	-5678.22	-29.10	35.70	0.00	6.16	8.97	125.34
0.00	14	SLE Q	1	2	0.00	-5635.65	-27.40	35.05	0.00	6.16	8.84	123.82
2.50	10	SLE R	1	2	250.00	-5813.75	22.95	-7.52	0.00	6.16	8.35	119.42
2.50	8	SLE R	1	2	250.00	-5240.72	19.11	-10.11	0.00	6.16	7.53	107.89
2.50	14	SLE Q	1	2	250.00	-5198.15	18.84	-10.81	0.00	6.16	7.49	107.16
2.90	10	SLE R	2	2	0.00	-4825.00	59.84	-14.44	0.00	6.16	8.63	114.59
2.90	8	SLE R	2	2	0.00	-4251.97	54.94	-17.40	0.00	6.16	7.78	102.78
2.90	14	SLE Q	2	2	0.00	-4209.40	54.37	-18.26	0.00	6.16	7.72	101.98
3.80	10	SLE R	2	2	90.00	-4667.50	-120.12	-15.26	0.00	6.16	10.72	131.89
3.80	8	SLE R	2	2	90.00	-4094.47	-98.75	-17.53	0.00	6.16	9.24	114.43
3.80	14	SLE Q	2	2	90.00	-4051.90	-102.97	-18.30	0.00	6.16	9.36	115.21

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <cm>	d _y <cm>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	Vrd _y <daN>	bw _z <cm>	d _z <cm>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Vrd _z <daN>	Sic.
0.00	0.45	ø8/20	2	25	SLU	0.35	0.16	25.36	2.50	6750.44	10528.60	6750.44	0.20	0.31	23.85	2.34	12377.90	12377.90	12377.90	>100	
0.00	0.45	ø8/20	2	27	SLU	0.35	0.16	29.32	2.50	6750.44	10632.60	6750.44	0.20	0.31	23.08	2.35	12450.00	12450.00	12450.00	>100	
0.00	0.45	ø8/20	2	21	SLV	0.35	0.16	130.62	2.50	6750.44	10349.60	6750.44	0.20	0.31	388.58	2.31	12252.80	12252.80	12252.80	31.532	
0.00	0.45	ø8/20	2	23	SLV	0.35	0.16	275.01	2.50	6750.44	10333.70	6750.44	0.20	0.31	190.18	2.31	12241.70	12241.70	12241.70	24.546	
0.45	2.05	ø8/20	2	25	SLU	0.35	0.16	25.36	2.50	6750.44	10516.20	6750.44	0.20	0.31	23.85	2.34	12369.30	12369.30	12369.30	>100	
0.45	2.05	ø8/20	2	27	SLU	0.35	0.16	29.32	2.50	6750.44	10620.20	6750.44	0.20	0.31	23.08	2.35	12441.50	12441.50	12441.50	>100	
0.45	2.05	ø8/20	2	21	SLV	0.35	0.16	130.62	2.50	6750.44	10340.00	6750.44	0.20	0.31	388.58	2.31	12246.10	12246.10	12246.10	31.515	
0.45	2.05	ø8/20	2	23	SLV	0.35	0.16	275.01	2.50	6750.44	10324.20	6750.44	0.20	0.31	190.18	2.31	12235.00	12234.90	12234.90	24.546	
2.05	2.50	ø8/20	2	25	SLU	0.35	0.16	25.36	2.50	6750.44	10472.10	6750.44	0.20	0.31	23.85	2.33	12338.60	12338.60	12338.60	>100	
2.05	2.50	ø8/20	2	27	SLU	0.35	0.16	29.32	2.50	6750.44	10576.10	6750.44	0.20	0.31	23.08	2.34	12410.90	12410.90	12410.90	>100	
2.05	2.50	ø8/20	2	21	SLV	0.35	0.16	130.62	2.50	6750.44	10306.10	6750.44	0.20	0.31	388.58	2.31	12222.20	12222.20	12222.20	31.453	
2.05	2.50	ø8/20	2	23	SLV	0.35	0.16	275.01	2.50	6750.44	10290.30	6750.44	0.20	0.31	190.18	2.31	12211.10	12211.10	12211.10	24.546	
2.90	3.80	ø8/20	2	27	SLU	0.35	0.16	264.33	2.50	6750.44	10408.20	6750.44	0.20	0.31	1.31	2.32	12293.90	12293.90	12293.90	25.538	
2.90	3.80	ø8/20	2	21	SLV	0.35	0.16	505.57	2.50	6750.44	10176.90	6750.44	0.20	0.31	581.58	2.29	12130.90	12130.90	12130.90	13.352	
2.90	3.80	ø8/20	2	23	SLV	0.35	0.16	930.60	2.50	6750.44	10161.10	6750.44	0.20	0.31	279.71	2.29	12119.70	12119.70	12119.70	7.254	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm²>	σ _{ncR} <daN/cm²>	σ _{nt} <daN/cm²>	σ _{ntR} <daN/cm²>
-615	1	SLV	3933.65	-930.60	-0.00	-581.58	0.00	1097.39	6.03	56.86	0.41	10.12
	1	SLV	4485.14	-930.60	-0.00	-581.58	0.00	1097.39	6.77	56.86	0.36	10.12
127	3	SLV	0.00	0.00	2780.44	0.00	0.00	2780.44	3.97	56.86	3.97	10.12

Pilastrata n. 17

Nodi: 128 48

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm²>	Fctm <daN/cm²>	Fcd <daN/cm²>	Fcd (Tag) <daN/cm²>	Fctd <daN/cm²>	Fym <daN/cm²>	Fyd <daN/cm²>	Fyd (Tag) <daN/cm²>
1R		30.00	30.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>		
3.963		SLV	1	1	16.00	-6228.57	-660.75	-660.75	2514.67	2514.67	-6228.57	-1514.74	5843.40	99.84	8.95	2.322
3.963		SLV	1	1	16.00	-6228.57	-660.75	-660.75	2514.67	2514.67	-6228.57	-1514.74	5843.40	99.84	8.95	2.322
5.521		SLV	1	1	171.97	-4791.58	1792.85	1792.85	361.23	361.23	-4791.58	5716.85	1165.37	7.03	10.19	3.190

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/cm²>	σ _f <daN/cm²>
3.9610	SLE	R	1	1	16.00	-7985.09	367.00	-110.47	0.00	10.18	16.02	204.03
3.969	SLE	R	1	1	16.00	-7624.38	353.93	-105.75	0.00	10.18	15.37	195.54
3.9614	SLE	Q	1	1	16.00	-6964.39	329.90	-89.91	0.00	10.18	14.03	178.61
3.9610	SLE	R	1	1	16.00	-7985.09	367.00	-110.47	0.00	10.18	16.02	204.03
3.969	SLE	R	1	1	16.00	-7624.38	353.93	-105.75	0.00	10.18	15.37	195.54
3.9614	SLE	Q	1	1	16.00	-6964.39	329.90	-89.91	0.00	10.18	14.03	178.61
5.5210	SLE	R	1	1	171.97	-7634.15	203.38	425.11	2.54	7.63	18.69	230.75
5.528	SLE	R	1	1	171.97	-6944.81	202.84	384.01	2.54	7.63	17.32	213.24
5.5214	SLE	Q	1	1	171.97	-6613.45	187.49	364.08	2.54	7.63	16.34	201.44

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _y	d	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>	
3.96	4.41	ø8/20	2	27	SLU	0.30	0.26	136.05	2.50	11077.60	14952.90	11077.60	0.30	0.26	456.10	2.50	11077.60	14952.90	11077.60	24.288	
3.96	4.41	ø8/20	2	21	SLV	0.30	0.26	699.23	2.50	11077.60	14714.70	11077.60	0.30	0.26	2101.75	2.50	11077.60	14714.70	11077.60	5.271	
3.96	4.41	ø8/20	2	23	SLV	0.30	0.26	1745.23	2.50	11077.60	14570.80	11077.60	0.30	0.26	1036.28	2.50	11077.60	14570.80	11077.60	6.347	
4.41	5.07	ø8/20	2	27	SLU	0.30	0.26	136.05	2.50	11077.60	14935.40	11077.60	0.30	0.26	456.10	2.50	11077.60	14935.40	11077.60	24.288	
4.41	5.07	ø8/20	2	21	SLV	0.30	0.26	699.23	2.50	11077.60	14701.20	11077.60	0.30	0.26	2101.75	2.50	11077.60	14701.20	11077.60	5.271	
4.41	5.07	ø8/20	2	23	SLV	0.30	0.26	1745.23	2.50	11077.60	14557.40	11077.60	0.30	0.26	1036.27	2.50	11077.60	14557.40	11077.60	6.347	
5.07	5.52	ø8/20	2	27	SLU	0.30	0.26	136.05	2.50	11077.60	14909.90	11077.60	0.30	0.26	456.09	2.50	11077.60	14909.90	11077.60	24.288	
5.07	5.52	ø8/20	2	21	SLV	0.30	0.26	699.23	2.50	11077.60	14681.60	11077.60	0.30	0.26	2101.75	2.50	11077.60	14681.60	11077.60	5.271	
5.07	5.52	ø8/20	2	23	SLV	0.30	0.26	1745.23	2.50	11077.60	14537.80	11077.60	0.30	0.26	1036.27	2.50	11077.60	14537.80	11077.60	6.347	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm²>	σ _{ncR} <daN/cm²>	σ _{nt} <daN/cm²>	σ _{ntR} <daN/cm²>
48	1	SLV	0.00	0.00	0.00	0.00	-5818.88	5818.88	6.47	56.86	6.47	10.12

Pilastrata n. 19

Nodi: 130 49

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm²>	Fctm <daN/cm²>	Fcd <daN/cm²>	Fcd (Tag) <daN/cm²>	Fctd <daN/cm²>	Fym <daN/cm²>	Fyd <daN/cm²>	Fyd (Tag) <daN/cm²>
1R		30.00	30.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
3.963		SLV	1	1	16.00	-5131.61	-1199.18	-1199.18	3690.32	3690.32	-5131.61	-1869.08	5685.09	102.66	8.41	1.542
3.963		SLV	1	1	16.00	-5131.61	-1199.18	-1199.18	3690.32	3690.32	-5131.61	-1869.08	5685.09	102.66	8.41	1.542
5.521(e)		SLV	1	1	171.97	-4790.27	2252.59	2252.59	12.34	-95.81	-4790.27	5720.64	-199.28	358.94	13.01	2.539

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>
3.96	8	SLE R	1	1	16.00	-5719.44	1651.13	-759.15	5.09	5.09	73.82	1248.98
3.96	14	SLE Q	1	1	16.00	-5476.12	1452.19	-719.30	5.09	5.09	66.46	1084.02
3.96	8	SLE R	1	1	16.00	-5719.44	1651.13	-759.15	5.09	5.09	73.82	1248.98
3.96	14	SLE Q	1	1	16.00	-5476.12	1452.19	-719.30	5.09	5.09	66.46	1084.02
5.52	10	SLE R	1	1	171.97	-5935.84	273.08	880.70	5.09	5.09	33.80	365.19
5.52	8	SLE R	1	1	171.97	-5368.50	314.94	827.62	5.09	5.09	33.63	383.34
5.52	14	SLE Q	1	1	171.97	-5125.17	266.73	787.27	5.09	5.09	30.98	349.07

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
<m>					<cm>	<daN>	<daNm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
3.96	14	SLE Q	1	1	16.00	-5476.12	-719.30	1452.19	34.00	214.00	0.50	18.00	125.06	2.54	80.67	1084.02	0.37	0.08
3.96	11	SLE F	1	1	16.00	-5470.12	-724.36	1499.31	34.00	214.00	0.50	18.00	126.27	2.54	82.38	1126.61	0.33	0.07
3.96	14	SLE Q	1	1	16.00	-5476.12	-719.30	1452.19	34.00	214.00	0.50	18.00	125.06	2.54	80.67	1084.02	0.37	0.08
3.96	11	SLE F	1	1	16.00	-5470.12	-724.36	1499.31	34.00	214.00	0.50	18.00	126.27	2.54	82.38	1126.61	0.33	0.07
5.52	14	SLE Q	1	1	171.97	-5125.17	787.27	266.73	34.00	214.00	0.50	18.00	117.03	2.54	69.32	349.07	0.10	0.02
5.52	11	SLE F	1	1	171.97	-5119.17	790.40	279.27	34.00	214.00	0.50	18.00	116.38	2.54	68.39	357.33	0.10	0.02

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _y	d _y	Vsdu _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>	
3.96	4.41	ø8/20	2	27	SLU	0.30	0.26	1084.21	2.50	11077.60	14653.90	11077.60	0.30	0.26	1427.03	2.50	11077.60	14653.90	11077.60	7.763
3.96	4.41	ø8/20	2	25	SLU	0.30	0.26	1159.60	2.50	11077.60	14541.30	11077.60	0.30	0.26	1339.10	2.50	11077.60	14541.30	11077.60	8.272
3.96	4.41	ø8/20	2	21	SLV	0.30	0.26	1486.47	2.50	11077.60	14320.70	11077.60	0.30	0.26	2636.04	2.50	11077.60	14320.70	11077.60	4.202
3.96	4.41	ø8/20	2	23	SLV	0.30	0.26	2592.19	2.50	11077.60	14322.00	11077.60	0.30	0.26	1636.71	2.50	11077.60	14322.00	11077.60	4.273
4.41	5.07	ø8/20	2	27	SLU	0.30	0.26	1084.21	2.50	11077.60	14636.50	11077.60	0.30	0.26	1427.03	2.50	11077.60	14636.50	11077.60	7.763
4.41	5.07	ø8/20	2	25	SLU	0.30	0.26	1159.60	2.50	11077.60	14523.80	11077.60	0.30	0.26	1339.10	2.50	11077.60	14523.80	11077.60	8.272
4.41	5.07	ø8/20	2	21	SLV	0.30	0.26	1486.47	2.50	11077.60	14307.30	11077.60	0.30	0.26	2636.03	2.50	11077.60	14307.30	11077.60	4.202
4.41	5.07	ø8/20	2	23	SLV	0.30	0.26	2592.19	2.50	11077.60	14308.60	11077.60	0.30	0.26	1636.71	2.50	11077.60	14308.60	11077.60	4.273
5.07	5.52	ø8/20	2	27	SLU	0.30	0.26	1084.21	2.50	11077.60	14611.00	11077.60	0.30	0.26	1427.02	2.50	11077.60	14611.00	11077.60	7.763
5.07	5.52	ø8/20	2	25	SLU	0.30	0.26	1159.60	2.50	11077.60	14498.30	11077.60	0.30	0.26	1339.10	2.50	11077.60	14498.30	11077.60	8.272
5.07	5.52	ø8/20	2	21	SLV	0.30	0.26	1486.47	2.50	11077.60	14287.60	11077.60	0.30	0.26	2636.03	2.50	11077.60	14287.60	11077.60	4.202
5.07	5.52	ø8/20	2	23	SLV	0.30	0.26	2592.19	2.50	11077.60	14288.90	11077.60	0.30	0.26	1636.71	2.50	11077.60	14288.90	11077.60	4.273

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{nc} R	σ _{nt}	σ _{nt} R
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
49	1	SLV	0.00	0.00	0.00	0.00	-7515.78	7515.78	8.35	56.86	8.35	10.12

Pilastrata n. 22

Nodi: 25 125

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	H	Cf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
6	R	20.00	40.00	4.00	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>		
0.00	3	SLV	1	6	0.00	-5150.07	231.47	231.47	369.43	369.43	-5150.07	1472.78	2382.89	85.78	8.51	6.426
0.00	3	SLV	1	6	0.00	-5150.07	231.47	231.47	369.43	369.43	-5150.07	1472.78	2382.89	85.78	8.51	6.426
3.40	3	SLV	1	6	340.00	-4470.07	-372.27	-372.27	353.23	353.23	-4470.07	-2334.91	2270.64	97.73	7.39	6.347

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>
0.00	10	SLE R	1	6	0.00	-7904.52	3.65	159.36	0.00	6.16	11.43	163.18
0.00	9	SLE R	1	6	0.00	-7766.86	3.30	153.51	0.00	6.16	11.18	159.69
0.00	14	SLE Q	1	6	0.00	-7461.39	2.90	142.86	0.00	6.16	10.66	152.49
0.00	10	SLE R	1	6	0.00	-7904.52	3.65	159.36	0.00	6.16	11.43	163.18
0.00	9	SLE R	1	6	0.00	-7766.86	3.30	153.51	0.00	6.16	11.18	159.69
0.00	14	SLE Q	1	6	0.00	-7461.39	2.90	142.86	0.00	6.16	10.66	152.49
3.40	10	SLE R	1	6	340.00	-7224.52	0.25	-276.26	0.00	6.16	12.35	172.19
3.40	9	SLE R	1	6	340.00	-7086.86	0.54	-266.53	0.00	6.16	12.06	168.18
3.40	14	SLE Q	1	6	340.00	-6781.39	0.85	-248.19	0.00	6.16	11.45	159.77

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _y	d _y	Vsdu _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>	
0.00	0.57	ø8/20	2	27	SLU	0.40	0.16	1.42	2.50	6750.44	12274.60	6750.44	0.20	0.36	169.09	2.36	14570.70	14570.70	14570.70	86.170
0.00	0.57	ø8/20	2	21	SLV	0.40	0.16	81.13	2.50	6750.44	12274.70	6750.44	0.20	0.36	172.77	2.36	14535.80	14535.80	14535.80	83.209
0.00	0.57	ø8/20	2	23	SLV	0.40	0.16	211.93	2.50	6750.44	12193.20	6750.44	0.20	0.36	159.85	2.36	14513.70	14513.70	14513.70	31.852
0.57	2.83	ø8/20	2	27	SLU	0.40	0.16	1.42	2.50	6750.44	12256.70	6750.44	0.20	0.36	169.09	2.36	14558.20	14558.20	14558.20	86.096
0.57	2.83	ø8/20	2	21	SLV	0.40	0.16	81.13	2.50	6750.44	12211.00	6750.44	0.20	0.36	172.77	2.36	14526.10	14526.10	14526.10	83.209
0.57	2.83	ø8/20	2	23	SLV	0.40	0.16	211.93	2.50	6750.44	12179.50	6750.44	0.20	0.36	159.85	2.35	14504.00	14504.00	14504.00	31.852
2.83	3.40	ø8/20	2	27	SLU	0.40	0.16	1.42	2.50	6750.44	12185.40	6750.44	0.20	0.36	169.09	2.35	14508.20	14508.20	14508.20	85.800
2.83	3.40	ø8/20	2	21	SLV	0.40	0.16	81.13	2.50	6750.44	12156.10	6750.44	0.20	0.36	172.77	2.35	14487.60	14487.60	14487.60	83.209
2.83	3.40	ø8/20	2	23	SLV	0.40	0.16	211.93	2.50	6750.44	12124.60	6750.44	0.20	0.36	159.85	2.35	14465.40	14465.40	14465.40	31.852

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{nc} R	σ _{nt}	σ _{nt} R
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
125	3	SLV	0.00	0.00	-2469.66	0.00	0.00	2469.66	3.09	56.86	3.09	10.12

Pilastrata n. 23

Nodi: 24 124 224 324

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>
5R		30.00	45.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>		
0.00	3	SLV	1	5	0.00	-8875.17	552.61	552.61	1244.13	1244.13	-8875.17	3821.49	8650.65	81.56	8.42	6.947
0.00	3	SLV	1	5	0.00	-8875.17	552.61	552.61	1244.13	1244.13	-8875.17	3821.49	8650.65	81.56	8.42	6.947
3.40	3	SLV	1	5	340.00	-7727.67	-959.52	-959.52	-1065.62	-1065.62	-7727.67	-7213.82	-7972.46	247.50	5.99	7.491
3.80	3	SLV	2	5	0.00	-5504.42	-1234.83	-1234.83	-1301.90	-1301.90	-5504.42	-7202.02	-7757.65	247.50	6.19	5.899
3.80	3	SLV	2	5	0.00	-5504.42	-1234.83	-1234.83	-1301.90	-1301.90	-5504.42	-7202.02	-7757.65	247.50	6.19	5.899
6.10	3	SLV	2	5	230.00	-4728.17	1765.48	1765.48	1342.55	1342.55	-4728.17	9053.54	6734.59	57.66	5.81	5.087
6.60	1	SLV	3	5	0.00	-3445.47	3136.58	3136.58	99.82	99.82	-3445.47	13161.90	413.91	2.81	13.12	4.196
6.60	1	SLV	3	5	0.00	-3445.47	3136.58	3136.58	99.82	99.82	-3445.47	13161.90	413.91	2.81	13.12	4.196
7.00	1	SLV	3	5	39.50	-3312.15	4125.70	4125.70	75.12	75.12	-3312.15	13139.20	414.52	2.81	13.16	3.186

Stato limite d'esercizio - Verifiche tensionali

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	Mz <daNm>	My <daNm>	AfT <cm>	AfC <cm>	σ _c <daN/cm>	σ _ε <daN/cm>
0.009	10	SLE R	1	5	0.00	-12093.00	29.93	411.76	0.00	15.27	11.34	159.03
0.009	9	SLE R	1	5	0.00	-11883.60	28.63	396.29	0.00	15.27	11.07	155.35
0.0014	14	SLE Q	1	5	0.00	-11417.60	26.79	368.55	0.00	15.27	10.52	147.98
0.0010	10	SLE R	1	5	0.00	-12093.00	29.93	411.76	0.00	15.27	11.34	159.03
0.009	9	SLE R	1	5	0.00	-11883.60	28.63	396.29	0.00	15.27	11.07	155.35
0.0014	14	SLE Q	1	5	0.00	-11417.60	26.79	368.55	0.00	15.27	10.52	147.98
3.4010	10	SLE R	1	5	340.00	-10945.50	-27.09	-715.98	0.00	15.27	13.04	177.60
3.4014	14	SLE Q	1	5	340.00	-10270.10	-24.28	-641.41	0.00	15.27	11.97	163.52
3.8010	10	SLE R	2	5	0.00	-8461.27	-155.32	-935.47	5.09	10.18	15.53	199.75
3.8014	14	SLE Q	2	5	0.00	-7873.88	-141.23	-837.77	2.54	12.72	14.02	180.93
3.8010	10	SLE R	2	5	0.00	-8461.27	-155.32	-935.47	5.09	10.18	15.53	199.75
3.8014	14	SLE Q	2	5	0.00	-7873.88	-141.23	-837.77	2.54	12.72	14.02	180.93
6.1010	10	SLE R	2	5	230.00	-7685.02	153.47	1642.55	7.63	7.63	25.45	304.84
6.1014	14	SLE Q	2	5	230.00	-7097.63	139.54	1471.89	7.63	7.63	22.80	274.15
6.6010	10	SLE R	3	5	0.00	-7004.30	44.63	2314.56	10.18	5.09	32.85	599.69
6.6014	14	SLE Q	3	5	0.00	-6387.74	40.85	2072.91	10.18	5.09	29.44	530.31
6.6010	10	SLE R	3	5	0.00	-7004.30	44.63	2314.56	10.18	5.09	32.85	599.69
6.6014	14	SLE Q	3	5	0.00	-6387.74	40.85	2072.91	10.18	5.09	29.44	530.31
7.0010	10	SLE R	3	5	39.50	-6870.99	4.23	3327.35	10.18	5.09	45.81	1049.22
7.0014	14	SLE Q	3	5	39.50	-6254.43	3.61	2979.17	10.18	5.09	41.02	932.71

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 <cm>	A _{c eff} <cm>	σ _s <daN/cm>	ε _{sm}	Wk <mm>
6.1014	14	SLE Q	2	5	230.00	-7097.63	1471.89	139.54	34.00	214.00	0.50	18.00	179.97	2.54	158.30	260.25	0.08	0.02
6.1012	12	SLE F	2	5	230.00	-7173.36	1494.29	141.06	34.00	214.00	0.50	18.00	180.65	2.54	159.26	265.68	0.08	0.02
6.6014	14	SLE Q	3	5	0.00	-6387.74	2072.91	40.85	34.00	214.00	0.50	18.00	158.08	5.09	254.70	530.31	0.15	0.04
6.6012	12	SLE F	3	5	0.00	-6468.01	2104.67	41.28	34.00	214.00	0.50	18.00	158.17	5.09	254.96	539.46	0.16	0.04
6.6014	14	SLE Q	3	5	0.00	-6387.74	2072.91	40.85	34.00	214.00	0.50	18.00	158.08	5.09	254.70	530.31	0.15	0.04
6.6012	12	SLE F	3	5	0.00	-6468.01	2104.67	41.28	34.00	214.00	0.50	18.00	158.17	5.09	254.96	539.46	0.16	0.04
7.0014	14	SLE Q	3	5	39.50	-6254.43	2979.17	3.61	34.00	214.00	0.50	18.00	169.73	5.09	287.64	932.71	0.27	0.08
7.0012	12	SLE F	3	5	39.50	-6334.69	3024.96	3.66	34.00	214.00	0.50	18.00	169.77	5.09	287.76	948.08	0.28	0.08

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{y,z}	d _{y,z}	Vsdu _{y,z}	ctgθ _{y,z}	VRsd _{y,z}	VRcd _{y,z}	Vrd _{y,z}	bw _{z,z}	d _{z,z}	Vsdu _{z,z}	ctgθ _{z,z}	VRsd _{z,z}	VRcd _{z,z}	Vrd _{z,z}	Sic.
<m>	<m>						<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	
0.00	0.57	ø8/20	2	27	SLU	0.45	0.26	23.02	2.50	11077.60	22439.80	11077.60	0.30	0.41	437.70	2.50	17568.40	23725.40	17568.40	40.138	
0.00	0.57	ø8/20	2	25	SLU	0.45	0.26	24.94	2.50	11077.60	22410.60	11077.60	0.30	0.41	400.66	2.50	17568.40	23694.50	17568.40	43.848	
0.00	0.57	ø8/20	2	21	SLV	0.45	0.26	292.29	2.50	11077.60	22167.20	11077.60	0.30	0.41	447.97	2.50	17568.40	23437.20	17568.40	37.900	
0.00	0.57	ø8/20	2	23	SLV	0.45	0.26	679.28	2.50	11077.60	22175.30	11077.60	0.30	0.41	410.65	2.50	17568.40	23445.80	17568.40	16.308	
0.57	2.83	ø8/20	2	27	SLU	0.45	0.26	23.02	2.50	11077.60	22406.90	11077.60	0.30	0.41	437.70	2.50	17568.40	23690.60	17568.40	40.138	
0.57	2.83	ø8/20	2	25	SLU	0.45	0.26	24.94	2.50	11077.60	22377.60	11077.60	0.30	0.41	400.66	2.50	17568.40	23659.70	17568.40	43.848	
0.57	2.83	ø8/20	2	21	SLV	0.45	0.26	292.29	2.50	11077.60	22141.90	11077.60	0.30	0.41	447.97	2.50	17568.40	23410.50	17568.40	37.900	
0.57	2.83	ø8/20	2	23	SLV	0.45	0.26	679.28	2.50	11077.60	22150.00	11077.60	0.30	0.41	410.65	2.50	17568.40	23419.00	17568.40	16.308	
2.83	3.40	ø8/20	2	27	SLU	0.45	0.26	23.02	2.50	11077.60	22275.20	11077.60	0.30	0.41	437.70	2.50	17568.40	23551.40	17568.40	40.138	
2.83	3.40	ø8/20	2	25	SLU	0.45	0.26	24.94	2.50	11077.60	22246.00	11077.60	0.30	0.41	400.66	2.50	17568.40	23520.50	17568.40	43.848	
2.83	3.40	ø8/20	2	21	SLV	0.45	0.26	292.29	2.50	11077.60	22040.60	11077.60	0.30	0.41	447.97	2.50	17568.40	23303.40	17568.40	37.900	
2.83	3.40	ø8/20	2	23	SLV	0.45	0.26	679.28	2.50	11077.60	22048.70	11077.60	0.30	0.41	410.65	2.50	17568.40	23311.90	17568.40	16.308	
3.80	4.27	ø8/20	2	27	SLU	0.45	0.26	179.15	2.50	11077.60	21798.90	11077.60	0.30	0.41	1478.99	2.50	17568.40	23047.80	17568.40	11.879	
3.80	4.27	ø8/20	2	21	SLV	0.45	0.26	575.61	2.50	11077.60	21727.50	11077.60	0.30	0.41	1581.93	2.50	17568.40	22972.30	17568.40	11.106	
3.80	4.27	ø8/20	2	23	SLV	0.45	0.26	1149.37	2.50	11077.60	21683.20	11077.60	0.30	0.41	1301.89	2.50	17568.40	22925.50	17568.40	9.638	
4.27	6.13	ø8/20	2	27	SLU	0.45	0.26	179.15	2.50	11077.60	21771.80	11077.60	0.30	0.41	1478.99	2.50	17568.40	23019.10	17568.40	11.879	
4.27	6.13	ø8/20	2	21	SLV	0.45	0.26	575.61	2.50	11077.60	21706.70	11077.60	0.30	0.41	1581.93	2.50	17568.40	22950.30	17568.40	11.106	
4.27	6.13	ø8/20	2	23	SLV	0.45	0.26	1149.37	2.50	11077.60	21662.30	11077.60	0.30	0.41	1301.89	2.50	17568.40	22903.40	17568.40	9.638	
6.13	6.10	ø8/20	2	27	SLU	0.45	0.26	179.15	2.50	11077.60	21665.30	11077.60	0.30	0.41	1478.99	2.50	17568.40	22906.50	17568.40	11.879	
6.13	6.10	ø8/20	2	21	SLV	0.45	0.26	575.61	2.50	11077.60	21624.70	11077.60	0.30	0.41	1581.93	2.50	17568.40	22863.60	17568.40	11.106	
6.13	6.10	ø8/20	2	23	SLV	0.45	0.26	1149.37	2.50	11077.60	21580.40	11077.60	0.30	0.41	1301.89	2.50	17568.40	22816.80	17568.40	9.638	
6.60	7.00	ø8/20	2	27	SLU	0.45	0.26	133.56	2.50	11077.60	21548.00	11077.60	0.30	0.41	1382.56	2.50	17568.40	22782.50	17568.40	5.194	
6.60	7.00	ø8/20	2	23	SLV	0.45	0.26	744.59	2.50	11077.60	21522.60	11077.60	0.30	0.41	2705.91	2.50	17568.40	22755.70	17568.40	6.493	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn
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	4	SLV	8929.12	1149.37	5641.82	1581.93	0.00	6973.00	9.44	56.86	2.83	10.12
224	3	SLV	3745.06	-744.59	-4035.16	2705.91	0.00	5492.54	5.69	56.86	2.91	10.12
	3	SLV	9030.43	-744.59	3351.47	2705.91	0.00	3757.36	7.70	56.86	1.01	10.12
324	1	SLV	0.00	0.00	-775.23	0.00	-12844.90	12868.30	9.53	56.86	9.53	10.12

Pilastrata n. 26

Nodi: 123 323

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>
3	R	25.00	60.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
4.30	3	SLV	1	3	50.00	-9630.27	2095.95	2095.95	519.00	519.00	-9630.27	16304.90	3998.59	53.44	6.38	7.775
4.30	3	SLV	1	3	50.00	-9630.27	2095.95	2095.95	519.00	519.00	-9630.27	16304.90	3998.59	53.44	6.38	7.775
6.87	3	SLV	1	3	306.71	-8667.61	-2249.57	-2249.57	-1002.96	-1002.96	-8667.61	-13139.20	-5692.24	250.31	5.73	5.814

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>
4.30	10	SLE R	1	3	50.00	-13257.30	137.56	549.54	0.00	15.27	12.50	171.56
4.30	8	SLE R	1	3	50.00	-12475.90	124.70	530.72	0.00	15.27	11.77	161.78
4.30	14	SLE Q	1	3	50.00	-12143.60	118.47	496.14	0.00	15.27	11.31	155.65
4.30	10	SLE R	1	3	50.00	-13257.30	137.56	549.54	0.00	15.27	12.50	171.56
4.30	8	SLE R	1	3	50.00	-12475.90	124.70	530.72	0.00	15.27	11.77	161.78
4.30	14	SLE Q	1	3	50.00	-12143.60	118.47	496.14	0.00	15.27	11.31	155.65
6.87	10	SLE R	1	3	306.71	-12294.70	-925.03	-809.21	5.09	10.18	27.35	315.45
6.87	14	SLE Q	1	3	306.71	-11181.00	-826.58	-737.38	5.09	10.18	24.53	283.91

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <cm>	d _y <cm>	Vsdu _y <daN>	VRsd _y <daN>	VRcd _y <daN>	Vrd _y <daN>	bw _z <cm>	d _z <cm>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Vrd _z <daN>	Sic.
4.30	4.90	ø8/20	2	27	SLU	0.60	0.21	546.66	2.50	8914.04	24040.00	8914.04	0.25	0.56	701.19	2.50	24059.30	27035.30	24059.30	16.306
4.30	4.90	ø8/20	2	23	SLV	0.60	0.21	588.29	2.50	8914.04	23683.10	8914.04	0.25	0.56	1585.74	2.50	24059.30	26633.90	24059.30	15.152
4.30	4.90	ø8/20	2	21	SLV	0.60	0.21	619.76	2.50	8914.04	23623.10	8914.04	0.25	0.56	1207.37	2.50	24059.30	26566.40	24059.30	14.383
4.90	6.27	ø8/20	2	27	SLU	0.60	0.21	546.66	2.50	8914.04	24002.60	8914.04	0.25	0.56	701.19	2.50	24059.30	26993.20	24059.30	16.306
4.90	6.27	ø8/20	2	23	SLV	0.60	0.21	588.29	2.50	8914.04	23654.30	8914.04	0.25	0.56	1585.74	2.50	24059.30	26601.50	24059.30	15.152
4.90	6.27	ø8/20	2	21	SLV	0.60	0.21	619.76	2.50	8914.04	23594.30	8914.04	0.25	0.56	1207.37	2.50	24059.30	26534.10	24059.30	14.383
6.27	6.87	ø8/20	2	27	SLV	0.60	0.21	546.66	2.50	8914.04	23917.40	8914.04	0.25	0.56	701.19	2.50	24059.30	26897.40	24059.30	16.306
6.27	6.87	ø8/20	2	23	SLV	0.60	0.21	588.29	2.50	8914.04	23588.80	8914.04	0.25	0.56	1585.74	2.50	24059.30	26527.80	24059.30	15.152
6.27	6.87	ø8/20	2	21	SLV	0.60	0.21	619.76	2.50	8914.04	23528.80	8914.04	0.25	0.56	1207.37	2.50	24059.30	26460.40	24059.30	14.383

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{nc} R <daN/cmq>	σ _{nt} <daN/cmq>	σ _{nt} R <daN/cmq>
323	3	SLV	0.00	0.00	0.00	0.00	7052.01	7052.01	4.70	56.86	4.70	10.12

Pilastrata n. 27

Nodi: 20 120

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>
6	R	20.00	40.00	4.00	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	3	SLV	1	6	0.00	-5210.74	222.62	222.62	400.98	400.98	-5210.74	1348.11	2387.25	86.13	8.68	5.978
0.00	3	SLV	1	6	0.00	-5210.74	222.62	222.62	400.98	400.98	-5210.74	1348.11	2387.25	86.13	8.68	5.978
3.40	3	SLV	1	6	340.00	-4530.74	-334.87	-334.87	-405.09	-405.09	-4530.74	-1854.84	-2314.22	264.38	8.16	5.643

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>
0.00	10	SLE R	1	6	0.00	-6737.47	5.35	129.87	0.00	6.16	9.73	138.66
0.00	9	SLE R	1	6	0.00	-6643.49	5.22	124.95	0.00	6.16	9.54	136.14
0.00	14	SLE Q	1	6	0.00	-6407.30	5.09	116.19	0.00	6.16	9.14	130.52
0.00	10	SLE R	1	6	0.00	-6737.47	5.35	129.87	0.00	6.16	9.73	138.66
0.00	9	SLE R	1	6	0.00	-6643.49	5.22	124.95	0.00	6.16	9.54	136.14
0.00	14	SLE Q	1	6	0.00	-6407.30	5.09	116.19	0.00	6.16	9.14	130.52
3.40	10	SLE R	1	6	340.00	-6057.47	-2.69	-220.97	0.00	6.16	10.28	143.15
3.40	9	SLE R	1	6	340.00	-5963.49	-2.76	-212.78	0.00	6.16	10.05	140.09
3.40	14	SLE Q	1	6	340.00	-5727.30	-2.95	-197.70	0.00	6.16	9.56	133.41

Stato limite ultimo - Verifiche a taglio

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <cm>	d _y <cm>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	Vrd _y <daN>	bw _z <cm>	d _z <cm>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Vrd _z <daN>	Sic.
0.00	0.57	ø8/20	2	27	SLU	0.40	0.16	3.37	2.50	6750.44	12087.30	6750.44	0.20	0.36	136.18	2.34	14439.10	14439.10	14439.10	>100	
0.00	0.57	ø8/20	2	25	SLU	0.40	0.16	4.65	2.50	6750.44	12087.50	6750.44	0.20	0.36	124.53	2.34	14439.20	14439.20	14439.20	>100	
0.00	0.57	ø8/20	2	21	SLV	0.40	0.16	105.61	2.50	6750.44	12069.50	6750.44	0.20	0.36	141.20	2.34	14426.50	14426.50	14426.50	63.916	
0.00	0.57	ø8/20	2	23	SLV	0.40	0.16	237.06	2.50	6750.44	11930.70	6750.44	0.20	0.36	137.79	2.33	14328.10	14328.10	14328.10	28.476	
0.57	2.83	ø8/20	2	27	SLU	0.40	0.16	3.37	2.50	6750.44	12069.50	6750.44	0.20	0.36	136.18	2.34	14426.50	14426.50	14426.50	>100	
0.57	2.83	ø8/20	2	25	SLU	0.40	0.16	4.65	2.50	6750.44	12069.70	6750.44	0.20	0.36	124.53	2.34	14426.60	14426.60	14426.60	>100	
0.57	2.83	ø8/20	2	21	SLV	0.40	0.16	105.61	2.50	6750.44	12055.80	6750.44	0.20	0.36	141.20	2.34	14416.80	14416.80	14416.80	63.916	

0.57	2.83	ø8/20	2	23	SLV	0.40	0.16	237.06	2.50	6750.44	11917.00	6750.44	0.20	0.36	137.79	2.32	14318.30	14318.30	14318.30	28.476
2.83	3.40	ø8/20	2	27	SLU	0.40	0.16	3.37	2.50	6750.44	11998.20	6750.44	0.20	0.36	136.18	2.33	14376.00	14376.00	14376.00	>100
2.83	3.40	ø8/20	2	25	SLU	0.40	0.16	4.65	2.50	6750.44	11998.30	6750.44	0.20	0.36	124.53	2.33	14376.10	14376.10	14376.10	>100
2.83	3.40	ø8/20	2	21	SLV	0.40	0.16	105.61	2.50	6750.44	12000.90	6750.44	0.20	0.36	141.20	2.33	14378.00	14378.00	14378.00	63.916
2.83	3.40	ø8/20	2	23	SLV	0.40	0.16	237.06	2.50	6750.44	11862.10	6750.44	0.20	0.36	137.79	2.32	14279.20	14279.20	14279.20	28.476

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
120	3	SLV	0.00	0.00	-2800.37	0.00	0.00	2800.37	3.50	56.86	3.50	10.12

Pilastrata n. 29

Nodi: 115 215

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>
1R		30.00	30.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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>		
3.96	1	SLV	1	1	16.00	-5047.70	1724.59	1724.59	-726.10	-726.10	-5047.70	5600.82	-2293.54	343.12	7.53	3.234
3.96	1	SLV	1	1	16.00	-5047.70	1724.59	1724.59	-726.10	-726.10	-5047.70	5600.82	-2293.54	343.12	7.53	3.234
6.10	1	SLV	1	1	230.00	-4566.20	-1890.21	-1890.21	522.05	522.05	-4566.20	-5668.32	1534.78	170.16	9.25	2.995

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 _f <daN/cmq>
3.9610	SLE	R	1	1	16.00	-6080.24	-264.54	504.50	2.54	7.63	21.62	252.10
3.968	SLE	R	1	1	16.00	-5627.32	-259.62	483.52	2.54	7.63	20.89	242.07
3.9614	SLE	Q	1	1	16.00	-5411.82	-243.15	457.73	2.54	7.63	19.70	228.94
3.9610	SLE	R	1	1	16.00	-6080.24	-264.54	504.50	2.54	7.63	21.62	252.10
3.968	SLE	R	1	1	16.00	-5627.32	-259.62	483.52	2.54	7.63	20.89	242.07
3.9614	SLE	Q	1	1	16.00	-5411.82	-243.15	457.73	2.54	7.63	19.70	228.94
6.1010	SLE	R	1	1	230.00	-5598.74	362.36	-460.56	2.54	7.63	23.07	263.79
6.1014	SLE	Q	1	1	230.00	-4930.32	323.79	-417.28	2.54	7.63	20.81	237.10

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	b _{w,y}	d _y	Vsdu _y	ctgθ _y	VRsd _y	VRcd _y	Vrd _y	b _{w,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>	
3.96	4.41	ø8/20	2	27	SLU	0.30	0.26	386.78	2.50	11077.60	14615.50	11077.60	0.30	0.26	597.78	2.50	11077.60	14615.50	11077.60	18.531	
3.96	4.41	ø8/20	2	21	SLV	0.30	0.26	581.11	2.50	11077.60	14316.00	11077.60	0.30	0.26	1688.98	2.50	11077.60	14316.00	11077.60	6.559	
3.96	4.41	ø8/20	2	23	SLV	0.30	0.26	916.77	2.50	11077.60	14294.80	11077.60	0.30	0.26	1104.83	2.50	11077.60	14294.80	11077.60	10.027	
4.41	5.65	ø8/20	2	27	SLU	0.30	0.26	386.78	2.50	11077.60	14598.00	11077.60	0.30	0.26	597.78	2.50	11077.60	14598.00	11077.60	18.531	
4.41	5.65	ø8/20	2	21	SLV	0.30	0.26	581.11	2.50	11077.60	14302.60	11077.60	0.30	0.26	1688.98	2.50	11077.60	14302.60	11077.60	6.559	
4.41	5.65	ø8/20	2	23	SLV	0.30	0.26	916.77	2.50	11077.60	14281.40	11077.60	0.30	0.26	1104.83	2.50	11077.60	14281.40	11077.60	10.027	
5.65	6.10	ø8/20	2	27	SLU	0.30	0.26	386.78	2.50	11077.60	14550.00	11077.60	0.30	0.26	597.78	2.50	11077.60	14550.00	11077.60	18.531	
5.65	6.10	ø8/20	2	21	SLV	0.30	0.26	581.11	2.50	11077.60	14265.70	11077.60	0.30	0.26	1688.98	2.50	11077.60	14265.70	11077.60	6.559	
5.65	6.10	ø8/20	2	23	SLV	0.30	0.26	916.77	2.50	11077.60	14244.50	11077.60	0.30	0.26	1104.83	2.50	11077.60	14244.50	11077.60	10.027	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
215	1	SLV	0.00	0.00	0.00	0.00	5696.72	5696.72	6.33	56.86	6.33	10.12

Pilastrata n. 34

Nodi: 1 101

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>
1R		30.00	30.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	1	SLV	1	1	0.00	-404.53	-3987.08	-3987.08	137.00	137.00	-404.53	-5252.18	102.63	179.30	14.62	1.317
0.00	1	SLV	1	1	0.00	-404.53	-3987.08	-3987.08	137.00	137.00	-404.53	-5252.18	102.63	179.30	14.62	1.317
3.46	1	SLV	1	1	346.00	373.97	-3267.57	-3267.57	360.54	360.54	373.97	-5181.66	552.43	177.19	13.62	1.585

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 _f <daN/cmq>
0.0010	SLE	R	1	1	0.00	-4961.79	-81.30	1.07	0.00	10.18	6.17	86.26
0.008	SLE	R	1	1	0.00	-4715.59	-79.35	-0.17	0.00	10.18	5.88	82.21
0.0014	SLE	Q	1	1	0.00	-4660.84	-82.82	-1.15	0.00	10.18	5.91	82.27
0.0010	SLE	R	1	1	0.00	-4961.79	-81.30	1.07	0.00	10.18	6.17	86.26
0.008	SLE	R	1	1	0.00	-4715.59	-79.35	-0.17	0.00	10.18	5.88	82.21
0.0014	SLE	Q	1	1	0.00	-4660.84	-82.82	-1.15	0.00	10.18	5.91	82.27
3.4610	SLE	R	1	1	346.00	-4183.29	176.87	-40.84	0.00	10.18	7.82	100.73
3.468	SLE	R	1	1	346.00	-3937.09	175.51	-34.22	0.00	10.18	7.44	95.71
3.4614	SLE	Q	1	1	346.00	-3882.34	177.83	-32.17	0.00	10.18	7.39	94.98

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	b _{w,y}	d _y	Vsdu _y	ctgθ _y	VRsd _y	VRcd _y	Vrd _y	b _{w,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>	
0.00	0.58	ø8/20	2	27	SLU	0.30	0.26	96.34	2.50	11077.60	14413.10	11077.60	0.30	0.26	16.59	2.50	11077.60	14413.10	11077.60	>100	

0.00	0.58	ø8/20	2	26	SLV	0.30	0.26	96.93	2.50	11077.60	14376.70	11077.60	0.30	0.26	12.60	2.50	11077.60	14376.70	11077.60	>100
0.00	0.58	ø8/20	2	21	SLV	0.30	0.26	190.64	2.50	11077.60	14732.00	11077.60	0.30	0.26	2095.72	2.50	11077.60	14732.00	11077.60	5.286
0.00	0.58	ø8/20	2	23	SLV	0.30	0.26	281.27	2.50	11077.60	15026.80	11077.60	0.30	0.26	705.83	2.50	11077.60	15026.80	11077.60	15.694
0.58	2.88	ø8/20	2	27	SLU	0.30	0.26	96.34	2.50	11077.60	14390.80	11077.60	0.30	0.26	16.59	2.50	11077.60	14390.80	11077.60	>100
0.58	2.88	ø8/20	2	26	SLU	0.30	0.26	96.93	2.50	11077.60	14354.40	11077.60	0.30	0.26	12.60	2.50	11077.60	14354.40	11077.60	>100
0.58	2.88	ø8/20	2	21	SLV	0.30	0.26	190.64	2.50	11077.60	14714.80	11077.60	0.30	0.26	2095.72	2.50	11077.60	14714.80	11077.60	5.286
0.58	2.88	ø8/20	2	23	SLV	0.30	0.26	281.27	2.50	11077.60	15009.60	11077.60	0.30	0.26	705.83	2.50	11077.60	15009.60	11077.60	15.694
2.88	3.46	ø8/20	2	27	SLU	0.30	0.26	96.34	2.50	11077.60	14301.40	11077.60	0.30	0.26	16.59	2.50	11077.60	14301.40	11077.60	>100
2.88	3.46	ø8/20	2	26	SLU	0.30	0.26	96.93	2.50	11077.60	14265.10	11077.60	0.30	0.26	12.60	2.50	11077.60	14265.10	11077.60	>100
2.88	3.46	ø8/20	2	21	SLV	0.30	0.26	190.64	2.50	11077.60	14646.10	11077.60	0.30	0.26	2095.72	2.50	11077.60	14646.10	11077.60	5.286
2.88	3.46	ø8/20	2	23	SLV	0.30	0.26	281.27	2.50	11077.60	14940.90	11077.60	0.30	0.26	705.83	2.50	11077.60	14940.90	11077.60	15.694

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
101	3	SLV	0.00	0.00	-4594.46	0.00	-2842.09	5402.46	6.00	56.86	6.00	10.12

Pilastrate n. 36 39 41

36 (a) Nodi: 3 103

39 (b) Nodi: 7 107

41 (c) Nodi: 8 108

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>
7	R	20.00	30.00	3.90	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	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 _y	Sic.
0.00	1	SLV	b	1	7	0.00	-3732.95	-813.99	-813.99	-1222.89	-1222.89	-3732.95	-1475.28	-2278.14	255.94	5.75	1.848
0.00	1	SLV	b	1	7	0.00	-3732.95	-813.99	-813.99	-1222.89	-1222.89	-3732.95	-1475.28	-2278.14	255.94	5.75	1.848
3.80	1	SLV	c	1	7	380.00	-2627.49	-587.09	-587.09	1215.37	1215.37	-2627.49	-1060.86	2267.27	99.14	6.82	1.855

Stato limite d'esercizio - Verifiche tensionali

Xg	CC	TCC	In	El	Sez.	X	N	Mz	My	AfT	AfC	σ _c	σ _f	
<m>						<cm>	<daN>	<daNm>	<daNm>	<cmq>	<cmq>	<daN/cmq>	<daN/cmq>	
0.00	10	SLE	R	a	1	7	0.00	-5716.69	-9.57	-16.25	0.00	6.79	9.01	130.87
0.00	8	SLE	R	c	1	7	0.00	-3842.09	-9.75	14.53	0.00	6.79	6.30	90.33
0.00	14	SLE	Q	a	1	7	0.00	-5050.66	-8.71	-11.74	0.00	6.79	7.90	114.91
0.00	10	SLE	R	a	1	7	0.00	-5716.69	-9.57	-16.25	0.00	6.79	9.01	130.87
0.00	8	SLE	R	c	1	7	0.00	-3842.09	-9.75	14.53	0.00	6.79	6.30	90.33
0.00	14	SLE	Q	a	1	7	0.00	-5050.66	-8.71	-11.74	0.00	6.79	7.90	114.91
3.80	10	SLE	R	a	1	7	380.00	-5146.69	6.56	-46.52	0.00	6.79	8.92	126.93
3.80	8	SLE	R	c	1	7	380.00	-3272.09	8.15	-69.68	0.00	6.79	6.97	94.64
3.80	14	SLE	Q	a	1	7	380.00	-4480.66	6.39	-49.80	0.00	6.79	8.06	113.64

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	In	b _{w,y}	d _{r,y}	Vsdu _{r,y}	ctgθ _{r,y}	VRsd _{r,y}	VRcd _{r,y}	Vrd _{r,y}	b _{w,z}	d _{r,z}	Vsdu _{r,z}	ctgθ _{z,z}	VRsd _{r,z}	VRcd _{r,z}	Vrd _{r,z}	Sic.
<m>	<cm>						<cm>	<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	
0.00	0.63	ø8/20	2	26	SLU	c	0.30	0.16	6.74	2.50	6750.44	8881.04	6750.44	0.20	0.26	29.23	2.31	10257.50	10257.50	10257.50	>100	
0.00	0.63	ø8/20	2	27	SLU	b	0.30	0.16	13.23	2.50	6750.44	8963.77	6750.44	0.20	0.26	12.40	2.33	10314.10	10314.10	10314.10	>100	
0.00	0.63	ø8/20	2	23	SLV	b	0.30	0.16	211.89	2.50	6750.44	8759.17	6750.44	0.20	0.26	599.45	2.30	10173.70	10173.70	10173.70	16.972	
0.00	0.63	ø8/20	2	21	SLV	b	0.30	0.16	644.87	2.50	6750.44	8747.12	6750.44	0.20	0.26	371.11	2.29	10165.40	10165.40	10165.40	10.468	
0.63	3.17	ø8/20	2	26	SLU	c	0.30	0.16	6.74	2.50	6750.44	8866.09	6750.44	0.20	0.26	29.23	2.31	10247.30	10247.30	10247.30	>100	
0.63	3.17	ø8/20	2	27	SLU	b	0.30	0.16	13.23	2.50	6750.44	8948.83	6750.44	0.20	0.26	12.40	2.33	10303.90	10303.90	10303.90	>100	
0.63	3.17	ø8/20	2	23	SLV	b	0.30	0.16	211.89	2.50	6750.44	8747.67	6750.44	0.20	0.26	599.45	2.29	10165.70	10165.70	10165.70	16.958	
0.63	3.17	ø8/20	2	21	SLV	b	0.30	0.16	644.87	2.50	6750.44	8735.62	6750.44	0.20	0.26	371.11	2.29	10157.40	10157.40	10157.40	10.468	
3.17	3.80	ø8/20	2	26	SLU	c	0.30	0.16	6.74	2.50	6750.44	8806.30	6750.44	0.20	0.26	29.23	2.30	10206.20	10206.20	10206.20	>100	
3.17	3.80	ø8/20	2	27	SLU	b	0.30	0.16	13.23	2.50	6750.44	8889.04	6750.44	0.20	0.26	12.40	2.32	10263.00	10263.00	10263.00	>100	
3.17	3.80	ø8/20	2	23	SLV	b	0.30	0.16	211.89	2.50	6750.44	8701.68	6750.44	0.20	0.26	599.45	2.29	10133.90	10133.90	10133.90	16.905	
3.17	3.80	ø8/20	2	21	SLV	b	0.30	0.16	644.87	2.50	6750.44	8689.63	6750.44	0.20	0.26	371.11	2.29	10125.50	10125.50	10125.50	10.468	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
103	1	SLV	0.00	0.00	2238.90	0.00	0.00	2238.90	3.73	56.86	3.73	10.12
107	1	SLV	0.00	0.00	1969.61	0.00	0.00	1969.61	3.28	56.86	3.28	10.12
108	1	SLV	0.00	0.00	-2213.51	0.00	0.00	2213.51	3.69	56.86	3.69	10.12

Pilastrata n. 38

Nodi: 5 105

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>
1	R	30.00	30.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	1	SLV	1	1	0.00	-6389.65	-4035.51	-4035.51	1011.38	1011.38	-6389.65	-5860.26	1512.86	170.16	8.93	1.455
0.00	1	SLV	1	1	0.00	-6389.65	-4035.51	-4035.51	1011.38	1011.38	-6389.65	-5860.26	1512.86	170.16	8.93	1.455
3.80	1	SLV	1	1	380.00	-5534.65	3996.66	3996.66	-601.46	-601.46	-5534.65	5827.83	-776.98	355.78	11.19	1.455

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 _f <daN/cmq>
0.00	10	SLE R	1	1	0.00	-7522.61	52.47	-48.83	0.00	10.18	8.93	126.32

0.00	8	SLE R	1	1	0.00	-6788.35	49.24	-43.37	0.00	10.18	8.08	114.22
0.00	14	SLE Q	1	1	0.00	-6611.09	46.52	-42.86	0.00	10.18	7.86	111.09
0.00	10	SLE R	1	1	0.00	-7522.61	52.47	-48.83	0.00	10.18	8.93	126.32
0.00	8	SLE R	1	1	0.00	-6788.35	49.24	-43.37	0.00	10.18	8.08	114.22
0.00	14	SLE Q	1	1	0.00	-6611.09	46.52	-42.86	0.00	10.18	7.86	111.09
3.80	10	SLE R	1	1	380.00	-6667.61	28.40	55.58	0.00	10.18	7.82	110.87
3.80	8	SLE R	1	1	380.00	-5933.35	30.43	49.44	0.00	10.18	7.05	99.63
3.80	14	SLE Q	1	1	380.00	-5756.09	31.96	48.79	0.00	10.18	6.89	97.27

Stato limite ultimo - Verifiche a taglio

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{r,y}	d _{r,y}	Vsdu _{r,y}	ctgθ _{r,y}	VRsd _{r,y}	VRcd _{r,y}	Vrd _{r,y}	bw _{r,z}	d _{r,z}	Vsdu _{r,z}	ctgθ _{r,z}	VRsd _{r,z}	VRcd _{r,z}	Vrd _{r,z}	Sic.
<m>	<m>						<m>	<m>	<daN>		<daN>	<daN>	<daN>	<m>	<m>	<daN>		<daN>	<daN>	<daN>	
0.00	0.63	ø8/20	2	27	SLV	0.30	0.26	8.88	2.50	11077.60	14870.40	11077.60	0.30	0.26	36.16	2.50	11077.60	14870.40	11077.60	>100	
0.00	0.63	ø8/20	2	21	SLV	0.30	0.26	423.88	2.50	11077.60	14455.90	11077.60	0.30	0.26	2113.73	2.50	11077.60	14455.90	11077.60	5.241	
0.00	0.63	ø8/20	2	23	SLV	0.30	0.26	1110.47	2.50	11077.60	14478.10	11077.60	0.30	0.26	691.68	2.50	11077.60	14478.10	11077.60	9.976	
0.63	3.17	ø8/20	2	27	SLV	0.30	0.26	8.88	2.50	11077.60	14845.80	11077.60	0.30	0.26	36.16	2.50	11077.60	14845.80	11077.60	>100	
0.63	3.17	ø8/20	2	21	SLV	0.30	0.26	423.88	2.50	11077.60	14437.10	11077.60	0.30	0.26	2113.73	2.50	11077.60	14437.10	11077.60	5.241	
0.63	3.17	ø8/20	2	23	SLV	0.30	0.26	1110.47	2.50	11077.60	14459.20	11077.60	0.30	0.26	691.68	2.50	11077.60	14459.20	11077.60	9.976	
3.17	3.80	ø8/20	2	27	SLV	0.30	0.26	8.88	2.50	11077.60	14747.70	11077.60	0.30	0.26	36.16	2.50	11077.60	14747.70	11077.60	>100	
3.17	3.80	ø8/20	2	21	SLV	0.30	0.26	423.88	2.50	11077.60	14361.60	11077.60	0.30	0.26	2113.73	2.50	11077.60	14361.60	11077.60	5.241	
3.17	3.80	ø8/20	2	23	SLV	0.30	0.26	1110.47	2.50	11077.60	14383.70	11077.60	0.30	0.26	691.68	2.50	11077.60	14383.70	11077.60	9.976	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
105	1	SLV	0.00	0.00	0.00	0.00	-5941.08	5941.08	6.60	56.86	6.60	10.12

Pilastrata n. 43

Nodi: 10 110

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>
1	R	30.00	30.00	4.20	270.90	21.43	170.57	113.71	10.58	4400.00	4400.00	3826.09

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.
0.00	1	SLV	1	1	0.00	-3719.76	-4022.16	-4022.16	117.92	117.92	-3719.76	-5606.72	96.82	179.30	13.60	1.394
0.00	1	SLV	1	1	0.00	-3719.76	-4022.16	-4022.16	117.92	117.92	-3719.76	-5606.72	96.82	179.30	13.60	1.394
3.46	1(e)	SLV	1	1	346.00	-2941.26	3264.86	3264.86	36.35	58.83	-2941.26	5523.29	98.22	0.70	13.85	1.692

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>
0.00	10	SLE R	1	1	0.00	-6365.48	-115.36	-54.06	0.00	10.18	9.04	122.70
0.00	8	SLE R	1	1	0.00	-5991.54	-110.65	-46.55	0.00	10.18	8.47	115.07
0.00	14	SLE Q	1	1	0.00	-5936.56	-114.83	-45.23	0.00	10.18	8.46	114.82
0.00	10	SLE R	1	1	0.00	-6365.48	-115.36	-54.06	0.00	10.18	9.04	122.70
0.00	8	SLE R	1	1	0.00	-5991.54	-110.65	-46.55	0.00	10.18	8.47	115.07
0.00	14	SLE Q	1	1	0.00	-5936.56	-114.83	-45.23	0.00	10.18	8.46	114.82
3.46	10	SLE R	1	1	346.00	-5586.98	200.27	54.65	0.00	10.18	9.81	127.76
3.46	8	SLE R	1	1	346.00	-5213.04	195.66	46.02	0.00	10.18	9.22	119.93
3.46	14	SLE Q	1	1	346.00	-5158.06	200.09	44.06	0.00	10.18	9.21	119.61

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.
0.00	0.58	ø8/20	2	27	SLV	0.30	0.26	117.77	2.50	11077.60	14656.30	11077.60	0.30	0.26	41.85	2.50	11077.60	14656.30	11077.60	94.063	
0.00	0.58	ø8/20	2	21	SLV	0.30	0.26	203.21	2.50	11077.60	14630.80	11077.60	0.30	0.26	2105.55	2.50	11077.60	14630.80	11077.60	5.261	
0.00	0.58	ø8/20	2	23	SLV	0.30	0.26	366.36	2.50	11077.60	14960.10	11077.60	0.30	0.26	703.52	2.50	11077.60	14960.10	11077.60	15.746	
0.58	2.88	ø8/20	2	27	SLV	0.30	0.26	117.77	2.50	11077.60	14634.00	11077.60	0.30	0.26	41.85	2.50	11077.60	14634.00	11077.60	94.063	
0.58	2.88	ø8/20	2	21	SLV	0.30	0.26	203.21	2.50	11077.60	14613.70	11077.60	0.30	0.26	2105.55	2.50	11077.60	14613.70	11077.60	5.261	
0.58	2.88	ø8/20	2	23	SLV	0.30	0.26	366.36	2.50	11077.60	14942.90	11077.60	0.30	0.26	703.52	2.50	11077.60	14942.90	11077.60	15.746	
2.88	3.46	ø8/20	2	27	SLV	0.30	0.26	117.77	2.50	11077.60	14544.60	11077.60	0.30	0.26	41.85	2.50	11077.60	14544.60	11077.60	94.063	
2.88	3.46	ø8/20	2	21	SLV	0.30	0.26	203.21	2.50	11077.60	14544.90	11077.60	0.30	0.26	2105.55	2.50	11077.60	14544.90	11077.60	5.261	
2.88	3.46	ø8/20	2	23	SLV	0.30	0.26	366.36	2.50	11077.60	14874.20	11077.60	0.30	0.26	703.52	2.50	11077.60	14874.20	11077.60	15.746	

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
110	3	SLV	0.00	0.00	-5260.92	0.00	-3496.39	6316.80	7.02	56.86	7.02	10.12

Pilastrata n. 917

Nodi: 120 220 320

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Cl _s	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
31	R	20.00	40.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
31	R	20.00	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 _y	Sic.
3.80	7(e)	SLU	1	31	0.00	-4740.48	-375.26	-375.26	-89.62	94.81	-4740.48	-4768.06	1122.16	140.62	7.14	12.655
3.80	7(e)	SLU	1	31	0.00	-4740.48	-375.26	-375.26	-89.62	94.81	-4740.48	-4768.06	1122.16	140.62	7.14	12.655
6.10	7	SLU	1	31	230.05	-4142.35	715.37	715.37	91.68	91.68	-4142.35	5020.79	657.86	22.50	9.49	7.021

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	M'ydy	M'ydz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.80	3	SND	1	31	0.00	-2312.25	-447.76	-447.76	-554.99	-554.99	-2312.25	-1284.51	-1564.61	263.67	8.33	2.839
3.80	3	SND	1	31	0.00	-2312.25	-447.76	-447.76	-554.99	-554.99	-2312.25	-1284.51	-1564.61	263.67	8.33	2.839
6.10	3	SND	1	31	230.05	-1852.16	704.49	704.49	491.80	491.80	-1852.16	1924.93	1301.12	75.94	6.71	2.704

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>	
3.80	10	SLE	R	1	31	0.00	-3628.05	-67.36	-284.34	1.13	5.65	11.25	139.30
3.80	14	SLE	Q	1	31	0.00	-3367.23	-60.87	-254.63	1.13	5.65	10.17	126.33
3.80	10	SLE	R	1	31	0.00	-3628.05	-67.36	-284.34	1.13	5.65	11.25	139.30
3.80	14	SLE	Q	1	31	0.00	-3367.23	-60.87	-254.63	1.13	5.65	10.17	126.33
6.10	10	SLE	R	1	31	230.05	-3167.96	68.90	542.11	3.39	3.39	19.35	220.48
6.10	14	SLE	Q	1	31	230.05	-2907.13	62.95	485.50	3.39	3.39	17.33	198.07

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
<m>					<cm>	<daN>	<daNm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
6.10	14	SLE Q	1	31	230.05	-2907.13	485.50	62.95	34.00	120.00	0.50	12.00	135.46	1.13	63.58	188.14	0.05	0.01
6.10	12	SLE F	1	31	230.05	-2944.22	492.93	63.62	34.00	120.00	0.50	12.00	135.85	1.13	63.94	191.57	0.06	0.01

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 _z	VRsd _z	VRcd _z	Vrd _z	Sic.
<m>	<m>						<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	<cm>	<cm>	<daN>		<daN>	<daN>	<daN>	
3.80	4.25	ø8/10	2	27	SLU	0.40	0.16	78.81	2.50	13807.70	16513.20	13807.70	0.20	0.36	474.09	1.83	23018.30	23018.30	23018.30	48.553	
3.80	4.25	ø8/10	2	21	SND	0.40	0.16	224.44	2.50	13807.70	16548.50	13807.70	0.20	0.36	548.54	1.83	23050.30	23050.30	23050.30	42.021	
3.80	4.25	ø8/10	2	23	SND	0.40	0.16	455.01	2.50	13807.70	16474.70	13807.70	0.20	0.36	496.57	1.82	22983.40	22983.40	22983.40	30.346	
4.25	5.65	ø8/10	2	27	SLU	0.40	0.16	78.81	2.50	13807.70	16499.00	13807.70	0.20	0.36	474.09	1.83	23005.50	23005.50	23005.50	48.526	
4.25	5.65	ø8/10	2	21	SND	0.40	0.16	224.44	2.50	13807.70	16537.60	13807.70	0.20	0.36	548.54	1.83	23040.40	23040.40	23040.40	42.003	
4.25	5.65	ø8/10	2	23	SND	0.40	0.16	455.01	2.50	13807.70	16463.80	13807.70	0.20	0.36	496.57	1.82	22973.50	22973.50	22973.50	30.346	
5.65	6.10	ø8/10	2	27	SLU	0.40	0.16	78.81	2.50	13807.70	16455.00	13807.70	0.20	0.36	474.09	1.82	22965.50	22965.50	22965.50	48.441	
5.65	6.10	ø8/10	2	21	SND	0.40	0.16	224.44	2.50	13807.70	16503.70	13807.70	0.20	0.36	548.54	1.83	23009.70	23009.70	23009.70	41.947	
5.65	6.10	ø8/10	2	23	SND	0.40	0.16	455.01	2.50	13807.70	16429.90	13807.70	0.20	0.36	496.57	1.82	22942.70	22942.70	22942.70	30.346	

Pilastrata n. 918

Nodi: 125 225 325

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>
31	R	20.00	40.00	3.90	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04
31	R	20.00	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 _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.80	7(e)	SLU	1	31	0.00	-6236.92	-476.16	-476.16	-56.60	124.74	-6236.92	-4734.73	1313.59	135.00	6.45	9.959
3.80	7(e)	SLU	1	31	0.00	-6236.92	-476.16	-476.16	-56.60	124.74	-6236.92	-4734.73	1313.59	135.00	6.45	9.959
6.10	7(e)	SLU	1	31	230.00	-5638.92	749.71	749.71	48.12	112.78	-5638.92	5178.39	799.36	28.12	8.14	6.911
6.60	7(e)	SLU	2	31	0.00	-4504.56	1383.87	1383.87	7.95	90.09	-4504.56	5168.21	354.56	11.25	12.01	3.735
6.60	7(e)	SLU	2	31	0.00	-4504.56	1383.87	1383.87	7.95	90.09	-4504.56	5168.21	354.56	11.25	12.01	3.735
6.60	7(e)	SLU	2	31	0.16	-4504.15	1382.91	1382.91	6.88	-90.08	-4504.15	5168.15	-354.56	348.75	12.01	3.738

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	M'ydy	M'ydz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.80	3	SND	1	31	0.00	-1620.56	-528.95	-528.95	-473.17	-473.17	-1620.56	-1557.35	-1390.45	260.86	7.61	2.942
3.80	3	SND	1	31	0.00	-1620.56	-528.95	-528.95	-473.17	-473.17	-1620.56	-1557.35	-1390.45	260.86	7.61	2.942
6.10	3	SND	1	31	230.00	-1160.56	896.58	896.58	429.64	429.64	-1160.56	2404.87	1123.56	61.88	6.49	2.670
6.60	1	SND	2	31	0.00	-1364.83	1363.26	1363.26	153.05	153.05	-1364.83	3375.97	379.85	16.88	11.79	2.476
6.60	1	SND	2	31	0.00	-1364.83	1363.26	1363.26	153.05	153.05	-1364.83	3375.97	379.85	16.88	11.79	2.476
6.60	1	SND	2	31	0.16	-1364.51	1362.20	1362.20	149.61	149.61	-1364.51	3375.97	379.85	16.88	11.79	2.479

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>	
3.80	10	SLE	R	1	31	0.00	-4760.70	-42.16	-360.75	1.13	5.65	12.64	162.94
3.80	8	SLE	R	1	31	0.00	-4437.02	-43.07	-335.76	1.13	5.65	11.91	153.06
3.80	14	SLE	Q	1	31	0.00	-4396.75	-38.67	-324.23	1.13	5.65	11.49	148.40
3.80	10	SLE	R	1	31	0.00	-4760.70	-42.16	-360.75	1.13	5.65	12.64	162.94
3.80	8	SLE	R	1	31	0.00	-4437.02	-43.07	-335.76	1.13	5.65	11.91	153.06
3.80	14	SLE	Q	1	31	0.00	-4396.75	-38.67	-324.23	1.13	5.65	11.49	148.40
6.10	10	SLE	R	1	31	230.00	-4300.70	35.94	568.05	2.26	4.52	17.51	214.48
6.10	14	SLE	Q	1	31	230.00	-3936.74	32.40	511.75	2.26	4.52	15.75	193.47
6.60	10	SLE	R	2	31	0.00	-3428.03	6.08	1048.76	4.52	2.26	31.27	670.41
6.60	14	SLE	Q	2	31	0.00	-3103.91	5.88	940.87	4.52	2.26	28.08	597.71
6.60	10	SLE	R	2	31	0.00	-3428.03	6.08	1048.76	4.52	2.26	31.27	670.41
6.60	14	SLE	Q	2	31	0.00	-3103.91	5.88	940.87	4.52	2.26	28.08	597.71
6.60	10	SLE	R	2	31	0.16	-3427.71	5.26	1048.04	4.52	2.26	31.19	669.11
6.60	14	SLE	Q	2	31	0.16	-3103.59	5.13	940.23	4.52	2.26	28.00	596.54

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	
<m>					<cm>	<daN>	<daNm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>	
6.10	14	SLE	Q	1	31	230.00	-3936.74	511.75	32.40	34.00	120.00	0.50	12.00	130.93	1.13	59.31	102.13	0.03	0.01

6.10	12	SLE F	1	31	230.00	-3985.90	519.07	32.76	34.00	120.00	0.50	12.00	131.34	1.13	59.70	104.02	0.03	0.01
6.60	14	SLE Q	2	31	0.00	-3103.91	940.87	5.88	34.00	120.00	0.50	12.00	155.47	2.26	164.89	597.71	0.17	0.05
6.60	12	SLE F	2	31	0.00	-3147.21	955.01	5.91	34.00	120.00	0.50	12.00	155.51	2.26	164.96	607.12	0.18	0.05
6.60	14	SLE Q	2	31	0.00	-3103.91	940.87	5.88	34.00	120.00	0.50	12.00	155.47	2.26	164.89	597.71	0.17	0.05
6.60	12	SLE F	2	31	0.00	-3147.21	955.01	5.91	34.00	120.00	0.50	12.00	155.51	2.26	164.96	607.12	0.18	0.05
6.60	14	SLE Q	2	31	0.16	-3103.59	940.23	5.13	34.00	120.00	0.50	12.00	155.67	2.26	165.25	596.54	0.17	0.05
6.60	12	SLE F	2	31	0.16	-3146.89	954.35	5.16	34.00	120.00	0.50	12.00	155.71	2.26	165.32	605.94	0.18	0.05

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>						<m>	<m>	<daN>		<daN>	<daN>	<daN>	<m>	<m>	<daN>		<daN>	<daN>	<daN>	
3.80	4.25	ø8/10	2	27	SLU	0.40	0.16	45.53	2.50	13807.70	16694.30	13807.70	0.20	0.36	532.99	1.84	23181.80	23181.80	23181.80	43.494	
3.80	4.25	ø8/10	2	25	SLU	0.40	0.16	45.88	2.50	13807.70	16635.60	13807.70	0.20	0.36	491.89	1.84	23128.90	23128.90	23128.90	47.021	
3.80	4.25	ø8/10	2	23	SND	0.40	0.16	392.52	2.50	13807.70	16807.60	13807.70	0.20	0.36	612.35	1.85	23283.50	23283.50	23283.50	35.177	
4.25	5.65	ø8/10	2	27	SLU	0.40	0.16	45.53	2.50	13807.70	16680.20	13807.70	0.20	0.36	532.99	1.84	23169.10	23169.10	23169.10	43.470	
4.25	5.65	ø8/10	2	25	SLU	0.40	0.16	45.88	2.50	13807.70	16621.40	13807.70	0.20	0.36	491.89	1.83	23116.10	23116.10	23116.10	46.995	
4.25	5.65	ø8/10	2	23	SND	0.40	0.16	392.52	2.50	13807.70	16796.70	13807.70	0.20	0.36	612.35	1.85	23273.70	23273.70	23273.70	35.177	
5.65	6.10	ø8/10	2	27	SLU	0.40	0.16	45.53	2.50	13807.70	16636.10	13807.70	0.20	0.36	532.99	1.84	23129.40	23129.40	23129.40	43.396	
5.65	6.10	ø8/10	2	25	SLU	0.40	0.16	45.88	2.50	13807.70	16577.30	13807.70	0.20	0.36	491.89	1.83	23076.30	23076.30	23076.30	46.914	
5.65	6.10	ø8/10	2	23	SND	0.40	0.16	392.52	2.50	13807.70	16762.80	13807.70	0.20	0.36	612.35	1.84	23243.40	23243.40	23243.40	35.177	

Verifiche aste in acciaio

Simbologia

Φ _{LT}	=	Coefficiente Φ per stabilità laterale membrane 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
α _{my} , α _{mz} , α _{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 membrane 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)
δ	<cm>	=Spostamento relativo asta
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 membrane inflesse
λ _{LT,0}	=	Coefficiente di imperfezione di confronto per stabilità laterale membrane inflesse
λ _y	=	Snellezza per inflessione intorno all'asse y(c)
λ _z	=	Snellezza per inflessione intorno all'asse z(e)
σ _{ID,max}	<daN/cmq>	=Tensione ideale massima
σ _M	<daN/cmq>	=Tensione normale per momento flettente
σ _N	<daN/cmq>	=Tensione normale per sforzo normale
τ	<daN/cmq>	=Tensione tangenziale per taglio e/o torsione
τ,Ed	<daN/cmq>	=Tensione tangenziale
τ,Rd	<daN/cmq>	=Resistenza tangenziale in termini tensionali
ψ	=	Coeff. di correzione momento critico per stabilità laterale membrane inflesse
A _{eff}	<cmq>	=Area effettiva per trazione
A _{net}	<cmq>	=Area netta per compressione
A _{area}	<cmq>	=Area
A _{tag,y}	<cmq>	=Area resistente a taglio in dir. Y
A _{tag,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
F _{yk}	<daN/cmq>	=Tensione caratteristica di snervamento dell'acciaio
F _{yt}	<daN/cmq>	=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 _θ	<cm6>	=Costante di ingobbamento
J _y	<cm4>	=Momento d'inerzia rispetto all'asse Y
J _z	<cm4>	=Momento d'inerzia rispetto all'asse Z
K _{yy} , K _{yz} , K _{zy} , K _{zz}	=	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 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,c,Rd}	<daNm>	=Resistenza di calcolo a flessione 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
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)
Sez.	=	Numero della sezione
Tipo	=	Tipologia
	2Cdx =	Doppia C lato costola
	L =	Sezione a L
	R =	Rettangolare
	T =	Sezione a T
	Cs =	C stondata
	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 <cmc>	Wzmin <cmc>	TP	Fyk <daN/cm>	Fyt <daN/cm>
36	HEB160	Is	--	54.25	54.25	54.25	2492.05	889.24	6.78	4.05	311.51	111.16	S235 UNI EN 10025-2	2350.00	3600.00
37	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
38	2UPN160	2Cdx	1.00	48.03	48.03	48.03	1849.50	432.99	6.21	3.00	231.19	61.86	S235 UNI EN 10025-2	2350.00	3600.00
39	UPN160	Cs	--	24.01	24.01	24.01	924.75	85.05	6.21	1.88	115.59	18.25	S235 UNI EN 10025-2	2350.00	3600.00

Caratteristiche profilati utilizzati

Sez.	Cod.	Wy,plas <cmc>	Wz,plas <cmc>	Atag,y <cmq>	Atag,z <cmq>	J _ω <cm6>
36	HEB160	355.07	170.13	45.93	17.59	47943.20
37	IPE240	368.53	74.08	27.31	19.14	37391.20
38	2UPN160	275.41	0.00	30.33	24.51	
39	UPN160	137.70	38.70	15.16	12.25	

Asta n. 909 (-1117 -1110) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio e torsione Dir. Y [4.2.24] - CC 7 SLU Xl=0.92 - Classe 1
Sollecitazioni: T_y=-108.73 M_x=-8.85
V,Ed=-108.73 Vc,Rd,Red=40456.20 V,Ed/Vc,Rd,Red=0.00

- Verifica a taglio e torsione Dir. Z [4.2.24] - CC 7 SLU Xl=0.92 - Classe 1
Sollecitazioni: T_z=-2494.78 M_x=-8.85
V,Ed=-2494.78 Vc,Rd,Red=28358.10 V,Ed/Vc,Rd,Red=0.09

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU Xl=0.00 - Classe 1
Sollecitazioni: N=6.18 T_x=-2461.93 M_y=-2252.37 T_y=-108.73 M_z=30.43 M_x=-8.85
N,Ed=6.18 Nc,Rd=102450.00 n=N,Ed/Nc,Rd=0.00
Pressoflessione retta YY [4.2.33]:
M_y,Ed=-2252.37 M_y,V,c,Rd=9652.05 M_{Ny},c,Rd=9652.05 M_y,Ed/M_{Ny},c,Rd=0.23
Pressoflessione retta ZZ [4.2.34]:
M_z,Ed=30.43 M_z,V,c,Rd=1940.16 M_{Nz},c,Rd=1940.16 M_z,Ed/M_{Nz},c,Rd=0.02
 $\alpha=2.00 \beta=1.00 (M_{y,Ed}/M_{Ny,c,Rd})^2 + (M_{z,Ed}/M_{Nz,c,Rd})^1 = 0.23$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: N,Ed=-5.98 M_y,Ed=-2252.37 M_z,Ed=-69.93 L=1.00
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
L_{cr}=1.00 Curva b: $\alpha_{imp}=0.34 k_c=0.94 \psi=1.77 M_{cr}=126550.00 \lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40 \Phi_{LT}=0.51 \beta_{LT}=0.75 f=0.99 \chi_{LT}=1.00$
 $\lambda_y=10.01 N_{cr,y}=8097980.00 \lambda^*_{y}=0.12$ Curva a: $\Phi_y=0.50 \chi_y=1.00$
 $\lambda_z=37.06 N_{cr,z}=590188.00 \lambda^*_{z}=0.43$ Curva b: $\Phi_z=0.63 \chi_z=0.92$
K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.57, 0.57, 0.95
Verifica YY: 0.00+0.22+0.02=0.24
Verifica ZZ: 0.00+0.13+0.03=0.17

Asta n. 909 (-1116 -1117) - Sez. 37 (IPE240)- Crit. 2

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU Xl=1.00 - Classe 1
Sollecitazioni: T_y=10.31
V,Ed=10.31 Vc,Rd=41300.90 V,Ed/Vc,Rd=0.00

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU Xl=1.00 - Classe 1
Sollecitazioni: T_z=-882.53
V,Ed=-882.53 Vc,Rd=28950.20 V,Ed/Vc,Rd=0.03

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU Xl=0.00 - Classe 1
Sollecitazioni: N=6.58 T_x=-847.01 M_y=-3115.93 T_y=10.31 M_z=-2.10
N,Ed=6.58 Nc,Rd=102450.00 n=N,Ed/Nc,Rd=0.00
Pressoflessione retta YY [4.2.33]:
M_y,Ed=-3115.93 M_y,V,c,Rd=9652.05 M_{Ny},c,Rd=9652.05 M_y,Ed/M_{Ny},c,Rd=0.32
Pressoflessione retta ZZ [4.2.34]:
M_z,Ed=-2.10 M_z,V,c,Rd=1940.16 M_{Nz},c,Rd=1940.16 M_z,Ed/M_{Nz},c,Rd=0.00
 $\alpha=2.00 \beta=1.00 (M_{y,Ed}/M_{Ny,c,Rd})^2 + (M_{z,Ed}/M_{Nz,c,Rd})^1 = 0.32$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: N,Ed=-6.57 M_y,Ed=-3115.93 M_z,Ed=8.19 L=1.00
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
L_{cr}=1.00 Curva b: $\alpha_{imp}=0.34 k_c=0.94 \psi=1.15 M_{cr}=82218.90 \lambda_{LT}=0.35$
 $\lambda_{LT,0}=0.40 \Phi_{LT}=0.54 \beta_{LT}=0.75 f=0.98 \chi_{LT}=1.00$

$\lambda_y=10.01$ Ncr,y=8097980.00 $\lambda^*_y=0.12$ Curva a: $\Phi_y=0.50$ $\chi_y=1.00$
 $\lambda_z=37.06$ Ncr,z=590189.00 $\lambda^*_z=0.43$ Curva b: $\Phi_z=0.63$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz=0.95, 0.57, 0.57, 0.95
Verifica YY: 0.00+0.31+0.00=0.31
Verifica ZZ: 0.00+0.18+0.00=0.19

Asta n. 909 (-1115 -1116) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU Xl=0.00 - Classe 1
Sollecitazioni: $T_y=-3.81$
V,Ed=-3.81 Vc,Rd=41300.90 V,Ed/Vc,Rd=0.00

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU Xl=0.00 - Classe 1
Sollecitazioni: $T_z=770.08$
V,Ed=770.08 Vc,Rd=28950.20 V,Ed/Vc,Rd=0.03

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU Xl=1.00 - Classe 1
Sollecitazioni: N=-6.57 $T_z=734.57$ $M_y=-3115.93$ $T_y=-3.81$ $M_z=-2.51$
N,Ed=-6.57 Nc,Rd=102450.00 n=N,Ed/Nc,Rd=0.00
Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-3115.93$ $M_y,V,c,Rd=9652.05$ $MNy,c,Rd=9652.05$ $M_y,Ed/MNy,c,Rd=0.32$
Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=-2.51$ $M_z,V,c,Rd=1940.16$ $MNz,c,Rd=1940.16$ $M_z,Ed/MNz,c,Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/MNy,c,Rd)^2+(M_z,Ed/MNz,c,Rd)^1=0.32$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: N,Ed=-6.57 $M_y,Ed=-3115.93$ $M_z,Ed=-2.51$ L=1.00
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=1.00$ Curva b: $\alpha_{imp}=0.34$ $k_\sigma=0.94$ $\psi=1.13$ M,cr=80656.90 $\lambda_{LT}=0.35$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.54$ $\beta_{LT}=0.75$ f=0.98 $\chi_{LT}=1.00$
 $\lambda_y=10.01$ Ncr,y=8097980.00 $\lambda^*_y=0.12$ Curva a: $\Phi_y=0.50$ $\chi_y=1.00$
 $\lambda_z=37.06$ Ncr,z=590189.00 $\lambda^*_z=0.43$ Curva b: $\Phi_z=0.63$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz=0.95, 0.57, 0.57, 0.95
Verifica YY: 0.00+0.31+0.00=0.31
Verifica ZZ: 0.00+0.18+0.00=0.19

Asta n. 909 (-749 -1115) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU Xl=0.00 - Classe 1
Sollecitazioni: $T_y=7.67$
V,Ed=7.67 Vc,Rd=41300.90 V,Ed/Vc,Rd=0.00

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU Xl=0.00 - Classe 1
Sollecitazioni: $T_z=2387.00$
V,Ed=2387.00 Vc,Rd=28950.20 V,Ed/Vc,Rd=0.08

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU Xl=1.00 - Classe 1
Sollecitazioni: N=-6.57 $T_z=2351.48$ $M_y=-2364.58$ $T_y=7.67$ $M_z=2.45$
N,Ed=-6.57 Nc,Rd=102450.00 n=N,Ed/Nc,Rd=0.00
Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-2364.58$ $M_y,V,c,Rd=9652.05$ $MNy,c,Rd=9652.05$ $M_y,Ed/MNy,c,Rd=0.24$
Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=2.45$ $M_z,V,c,Rd=1940.16$ $MNz,c,Rd=1940.16$ $M_z,Ed/MNz,c,Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/MNy,c,Rd)^2+(M_z,Ed/MNz,c,Rd)^1=0.24$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: N,Ed=-6.57 $M_y,Ed=-2364.58$ $M_z,Ed=-5.20$ L=1.00
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=1.00$ Curva b: $\alpha_{imp}=0.34$ $k_\sigma=0.94$ $\psi=1.75$ M,cr=125371.00 $\lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ f=0.99 $\chi_{LT}=1.00$
 $\lambda_y=10.01$ Ncr,y=8097980.00 $\lambda^*_y=0.12$ Curva a: $\Phi_y=0.50$ $\chi_y=1.00$
 $\lambda_z=37.06$ Ncr,z=590189.00 $\lambda^*_z=0.43$ Curva b: $\Phi_z=0.63$ $\chi_z=0.92$
Kyy, Kyz, Kzy, Kzz=0.95, 0.57, 0.57, 0.95
Verifica YY: 0.00+0.23+0.00=0.23
Verifica ZZ: 0.00+0.14+0.00=0.14

Asta n. 910 (-1114 -1111) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio e torsione Dir. Y [4.2.24] - CC 7 SLU Xl=0.92 - Classe 1
Sollecitazioni: $T_y=24.44$ $M_x=1.45$
V,Ed=24.44 Vc,Rd=41164.10 V,Ed/Vc,Rd,Red=0.00

- Verifica a taglio e torsione Dir. Z [4.2.24] - CC 7 SLU Xl=0.92 - Classe 1
Sollecitazioni: $T_z=-4396.11$ $M_x=1.45$
V,Ed=-4396.11 Vc,Rd,Red=28854.30 V,Ed/Vc,Rd,Red=0.15

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU Xl=0.00 - Classe 1
Sollecitazioni: N=6.17 $T_z=-4363.26$ $M_y=-3972.13$ $T_y=24.44$ $M_z=-6.39$ $M_x=1.45$
N,Ed=6.17 Nc,Rd=102450.00 n=N,Ed/Nc,Rd=0.00
Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-3972.13$ $M_y,V,c,Rd=9652.05$ $MNy,c,Rd=9652.05$ $M_y,Ed/MNy,c,Rd=0.41$
Pressoflessione retta ZZ [4.2.34]:

$M_z, Ed = -6.39$ $M_z, V, c, Rd = 1940.16$ $MN_z, c, Rd = 1940.16$ $M_z, Ed / MN_z, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed / MN_y, c, Rd)^2 + (M_z, Ed / MN_z, c, Rd)^1 = 0.41$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
 Sollecitazioni: $N, Ed = -5.99$ $M_y, Ed = -3972.13$ $M_z, Ed = 16.17$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.77$ $M, cr = 126709.00$ $\lambda_{LT} = 0.28$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.51$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 10.01$ $N_{cr,y} = 8097980.00$ $\lambda_y^* = 0.12$ Curva a: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 37.06$ $N_{cr,z} = 590188.00$ $\lambda_z^* = 0.43$ Curva b: $\Phi_z = 0.63$ $\chi_z = 0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.57, 0.57, 0.95$
 Verifica YY: $0.00 + 0.39 + 0.00 = 0.40$
 Verifica ZZ: $0.00 + 0.23 + 0.01 = 0.24$

Asta n. 910 (-1113 -1114) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l = 1.00$ - Classe 1
 Sollecitazioni: $T_y = -3.53$
 $V, Ed = -3.53$ $V_c, Rd = 41300.90$ $V, Ed / V_c, Rd = 0.00$

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l = 1.00$ - Classe 1
 Sollecitazioni: $T_z = -1542.72$
 $V, Ed = -1542.72$ $V_c, Rd = 28950.20$ $V, Ed / V_c, Rd = 0.05$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 7 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $N = 6.56$ $T_z = -1507.20$ $M_y = -5492.77$ $T_y = -3.53$
 $M_y, Ed = -5492.77$ $M_y, V, c, Rd = 9652.05$
 $N, Ed = 6.56$ $N_c, Rd = 102450.00$ YY $n = N, Ed / N_c, Rd = 0.00$ $MN_y, c, Rd = 9652.05$ $M_y, Ed / MN_y, c, Rd = 0.57$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
 Sollecitazioni: $N, Ed = -6.58$ $M_y, Ed = -5492.77$ $M_z, Ed = -2.69$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.15$ $M, cr = 82223.30$ $\lambda_{LT} = 0.35$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.54$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 10.01$ $N_{cr,y} = 8097980.00$ $\lambda_y^* = 0.12$ Curva a: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 37.06$ $N_{cr,z} = 590189.00$ $\lambda_z^* = 0.43$ Curva b: $\Phi_z = 0.63$ $\chi_z = 0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.57, 0.57, 0.95$
 Verifica YY: $0.00 + 0.54 + 0.00 = 0.54$
 Verifica ZZ: $0.00 + 0.32 + 0.00 = 0.33$

Asta n. 910 (-1112 -1113) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $T_y = 1.10$
 $V, Ed = 1.10$ $V_c, Rd = 41300.90$ $V, Ed / V_c, Rd = 0.00$

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $T_z = 1344.22$
 $V, Ed = 1344.22$ $V_c, Rd = 28950.20$ $V, Ed / V_c, Rd = 0.05$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 7 SLU $X_l = 1.00$ - Classe 1
 Sollecitazioni: $N = -6.57$ $T_z = 1308.70$ $M_y = -5492.76$ $T_y = 1.10$
 $M_y, Ed = -5492.76$ $M_y, V, c, Rd = 9652.05$
 $N, Ed = -6.57$ $N_c, Rd = 102450.00$ YY $n = N, Ed / N_c, Rd = 0.00$ $MN_y, c, Rd = 9652.05$ $M_y, Ed / MN_y, c, Rd = 0.57$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
 Sollecitazioni: $N, Ed = -6.57$ $M_y, Ed = -5492.76$ $M_z, Ed = 0.67$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.13$ $M, cr = 80659.00$ $\lambda_{LT} = 0.35$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.54$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 10.01$ $N_{cr,y} = 8097980.00$ $\lambda_y^* = 0.12$ Curva a: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 37.06$ $N_{cr,z} = 590189.00$ $\lambda_z^* = 0.43$ Curva b: $\Phi_z = 0.63$ $\chi_z = 0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.57, 0.57, 0.95$
 Verifica YY: $0.00 + 0.54 + 0.00 = 0.54$
 Verifica ZZ: $0.00 + 0.32 + 0.00 = 0.32$

Asta n. 910 (-750 -1112) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $T_y = -2.29$
 $V, Ed = -2.29$ $V_c, Rd = 41300.90$ $V, Ed / V_c, Rd = 0.00$

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $T_z = 4196.22$
 $V, Ed = 4196.22$ $V_c, Rd = 28950.20$ $V, Ed / V_c, Rd = 0.14$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 7 SLU $X_l = 1.00$ - Classe 1
 Sollecitazioni: $N = -6.57$ $T_z = 4160.70$ $M_y = -4170.23$ $T_y = -2.29$
 $M_y, Ed = -4170.23$ $M_y, V, c, Rd = 9652.05$
 $N, Ed = -6.57$ $N_c, Rd = 102450.00$ YY $n = N, Ed / N_c, Rd = 0.00$ $MN_y, c, Rd = 9652.05$ $M_y, Ed / MN_y, c, Rd = 0.43$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
 Sollecitazioni: $N, Ed = -6.57$ $M_y, Ed = -4170.23$ $M_z, Ed = 1.61$ $L = 1.00$

α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=1.00$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=125371.00$ $\lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=10.01$ $N_{cr,y}=8097980.00$ $\lambda^*_y=0.12$ Curva a: $\Phi_y=0.50$ $\chi_y=1.00$
 $\lambda_z=37.06$ $N_{cr,z}=590189.00$ $\lambda^*_z=0.43$ Curva b: $\Phi_z=0.63$ $\chi_z=0.92$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.57 , 0.57 , 0.95
 Verifica YY: $0.00+0.41+0.00=0.41$
 Verifica ZZ: $0.00+0.25+0.00=0.25$

Asta n. 912 (-749 -750) - Sez. 38 (2UPN160) - Crit. 1

L'asta accoppiata è stata considerata come due aste separate
 - Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l=6.00$ - Classe 1
 Sollecitazioni: $T_z=-916.30$
 $V, Ed=-916.30$ $V_c, Rd=31670.70$ $V, Ed/V_c, Rd=0.03$
 - Verifica a flessione YY [4.2.12] - CC 7 SLU $X_l=3.00$ - Classe 1
 Sollecitazioni: $M_y=-1374.45$
 $M_y, Ed=-1374.45$ $M_y, c, Rd=6163.90$ $M_y, Ed/M_y, c, Rd=0.22$
 - Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.15$ (L/3987)
 - Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=1.00$ (L/601)

Asta n. 912 (-750 -1099) - Sez. 38 (2UPN160) - Crit. 1

L'asta accoppiata è stata considerata come due aste separate
 - Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l=4.70$ - Classe 1
 Sollecitazioni: $T_y=-1.89$
 $V, Ed=-1.89$ $V_c, Rd=39191.30$ $V, Ed/V_c, Rd=0.00$
 - Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l=4.70$ - Classe 1
 Sollecitazioni: $T_z=-717.77$
 $V, Ed=-717.77$ $V_c, Rd=31670.70$ $V, Ed/V_c, Rd=0.02$
 - Verifica a flessione YY [4.2.12] - CC 7 SLU $X_l=2.35$ - Classe 1
 Sollecitazioni: $M_y=-843.38$ $T_y=-1.89$
 $M_y, Ed=-843.38$ $M_y, c, Rd=6163.90$ $M_y, Ed/M_y, c, Rd=0.14$
 - Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,G}=0.06$ (L/8293)
 - Verifica freccia massima carichi totali - CC 10
 $f_{z,G}=0.38$ (L/1251)

Asta n. 913 (-1111 -1110) - Sez. 38 (2UPN160) - Crit. 1

L'asta accoppiata è stata considerata come due aste separate
 - Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l=5.92$ - Classe 1
 Sollecitazioni: $T_y=49.49$
 $V, Ed=49.49$ $V_c, Rd=39191.30$ $V, Ed/V_c, Rd=0.00$
 - Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l=5.92$ - Classe 1
 Sollecitazioni: $T_z=-1266.80$
 $V, Ed=-1266.80$ $V_c, Rd=31670.70$ $V, Ed/V_c, Rd=0.04$
 - Verifica a flessione YY [4.2.12] - CC 7 SLU $X_l=3.00$ - Classe 1
 Sollecitazioni: $M_y=-1849.52$ $T_y=49.49$ $M_z=66.60$
 $M_y, Ed=-1849.52$ $M_y, c, Rd=6163.90$ $M_y, Ed/M_y, c, Rd=0.30$
 - Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.21$ (L/2797)
 - Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=1.31$ (L/446)

Asta n. 913 (-1109 -1111) - Sez. 38 (2UPN160) - Crit. 1

L'asta accoppiata è stata considerata come due aste separate
 - Verifica a taglio e torsione Dir. Y [4.2.26] - CC 7 SLU $X_l=0.08$
 Sollecitazioni: $T_z=984.80$ $T_y=-66.28$ $M_z=174.18$ $M_x=1.15$
 $V, Ed=-66.28$
 $\tau, Ed=55.49$ $\tau, Rd=1292.20$ $\tau, Ed/\tau, Rd=0.04$
 - Verifica a flessione YY [4.2.12] - CC 7 SLU $X_l=2.35$ - Classe 1
 Sollecitazioni: $M_y=-1117.75$ $T_y=-66.28$ $M_z=23.73$ $M_x=1.15$
 $M_y, Ed=-1117.75$ $M_y, c, Rd=6163.90$ $M_y, Ed/M_y, c, Rd=0.18$
 - Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,G}=0.08$ (L/5988)
 - Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=0.47$ (L/955)

Asta n. 914 (-1117 -1114) - Sez. 38 (2UPN160) - Crit. 1

L'asta accoppiata è stata considerata come due aste separate

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l=6.00$ - Classe 1
Sollecitazioni: $T_y=3.05$
 $V,Ed=3.05$ $V_c,Rd=39191.30$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l=6.00$ - Classe 1
Sollecitazioni: $T_z=-1685.19$
 $V,Ed=-1685.19$ $V_c,Rd=31670.70$ $V,Ed/V_c,Rd=0.05$
- Verifica a flessione YY [4.2.12] - CC 7 SLU $X_l=3.00$ - Classe 1
Sollecitazioni: $M_y=-2527.78$ $T_y=3.05$ $M_z=-14.56$
 $M_y,Ed=-2527.78$ $M_y,c,Rd=6163.90$ $M_y,Ed/M_y,c,Rd=0.41$

- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.30$ (L/1993)
- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=1.83$ (L/327)

Asta n. 914 (-1114 -1120) - Sez. 38 (2UPN160) - Crit. 1

L'asta accoppiata è stata considerata come due aste separate

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l=4.70$ - Classe 1
Sollecitazioni: $T_y=-2.43$
 $V,Ed=-2.43$ $V_c,Rd=39191.30$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l=4.70$ - Classe 1
Sollecitazioni: $T_z=-1320.07$
 $V,Ed=-1320.07$ $V_c,Rd=31670.70$ $V,Ed/V_c,Rd=0.04$
- Verifica a flessione YY [4.2.12] - CC 7 SLU $X_l=2.35$ - Classe 1
Sollecitazioni: $M_y=-1551.07$ $T_y=-2.43$ $M_z=-7.16$
 $M_y,Ed=-1551.07$ $M_y,c,Rd=6163.90$ $M_y,Ed/M_y,c,Rd=0.25$
- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.11$ (L/4147)
- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=0.69$ (L/681)

Asta n. 915 (-1116 -1113) - Sez. 38 (2UPN160) - Crit. 1

L'asta accoppiata è stata considerata come due aste separate

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l=6.00$ - Classe 1
Sollecitazioni: $T_y=-3.04$
 $V,Ed=-3.04$ $V_c,Rd=39191.30$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l=6.00$ - Classe 1
Sollecitazioni: $T_z=-1685.19$
 $V,Ed=-1685.19$ $V_c,Rd=31670.70$ $V,Ed/V_c,Rd=0.05$
- Verifica a flessione YY [4.2.12] - CC 7 SLU $X_l=3.00$ - Classe 1
Sollecitazioni: $M_y=-2527.78$ $T_y=-3.04$ $M_z=-9.56$
 $M_y,Ed=-2527.78$ $M_y,c,Rd=6163.90$ $M_y,Ed/M_y,c,Rd=0.41$
- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.30$ (L/1993)
- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=1.83$ (L/327)

Asta n. 915 (-1113 -1119) - Sez. 38 (2UPN160) - Crit. 1

L'asta accoppiata è stata considerata come due aste separate

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l=4.70$ - Classe 1
Sollecitazioni: $T_y=4.42$
 $V,Ed=4.42$ $V_c,Rd=39191.30$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l=4.70$ - Classe 1
Sollecitazioni: $T_z=-1320.07$
 $V,Ed=-1320.07$ $V_c,Rd=31670.70$ $V,Ed/V_c,Rd=0.04$
- Verifica a flessione YY [4.2.12] - CC 7 SLU $X_l=2.35$ - Classe 1
Sollecitazioni: $M_y=-1551.07$ $T_y=4.42$ $M_z=-8.47$
 $M_y,Ed=-1551.07$ $M_y,c,Rd=6163.90$ $M_y,Ed/M_y,c,Rd=0.25$
- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.11$ (L/4148)
- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=0.69$ (L/681)

Asta n. 916 (-1115 -1112) - Sez. 38 (2UPN160) - Crit. 1

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L'asta accoppiata è stata considerata come due aste separate
- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU Xl=6.00 - Classe 1
  Sollecitazioni:  $T_y = -2.48$ 
   $V, Ed = -2.48$   $V_c, Rd = 39191.30$   $V, Ed/V_c, Rd = 0.00$ 

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU Xl=6.00 - Classe 1
  Sollecitazioni:  $T_z = -1685.19$ 
   $V, Ed = -1685.19$   $V_c, Rd = 31670.70$   $V, Ed/V_c, Rd = 0.05$ 

- Verifica a flessione YY [4.2.12] - CC 7 SLU Xl=3.00 - Classe 1
  Sollecitazioni:  $M_y = -2527.78$   $T_y = -2.48$   $M_z = -6.20$ 
   $M_y, Ed = -2527.78$   $M_y, c, Rd = 6163.90$   $M_y, Ed/M_y, c, Rd = 0.41$ 

- Verifica freccia massima per soli carichi accidentali - CC 10
   $f_{z,L} = 0.30$  (L/1993)

- Verifica freccia massima carichi totali - CC 10
   $f_{z,L} = 1.83$  (L/327)

Asta n. 916 (-1112 -1118) - Sez. 38 (2UPN160) - Crit. 1
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L'asta accoppiata è stata considerata come due aste separate
- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU Xl=4.70 - Classe 1
  Sollecitazioni:  $T_y = 3.22$ 
   $V, Ed = 3.22$   $V_c, Rd = 39191.30$   $V, Ed/V_c, Rd = 0.00$ 

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU Xl=4.70 - Classe 1
  Sollecitazioni:  $T_z = -1320.07$ 
   $V, Ed = -1320.07$   $V_c, Rd = 31670.70$   $V, Ed/V_c, Rd = 0.04$ 

- Verifica a flessione YY [4.2.12] - CC 7 SLU Xl=2.35 - Classe 1
  Sollecitazioni:  $M_y = -1551.07$   $T_y = 3.22$   $M_z = -6.34$ 
   $M_y, Ed = -1551.07$   $M_y, c, Rd = 6163.90$   $M_y, Ed/M_y, c, Rd = 0.25$ 

- Verifica freccia massima per soli carichi accidentali - CC 10
   $f_{z,L} = 0.11$  (L/4147)

- Verifica freccia massima carichi totali - CC 10
   $f_{z,L} = 0.69$  (L/681)

Asta n. 917 (-1125 -1124) - Sez. 39 (UPN160) - Crit. 1
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- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU Xl=0.00 - Classe 1
  Sollecitazioni:  $T_y = 6.52$ 
   $V, Ed = 6.52$   $V_c, Rd = 19595.60$   $V, Ed/V_c, Rd = 0.00$ 

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU Xl=0.00 - Classe 1
  Sollecitazioni:  $T_z = 458.91$ 
   $V, Ed = 458.91$   $V_c, Rd = 15835.30$   $V, Ed/V_c, Rd = 0.03$ 

- Verifica in termini tensionali [4.2.4] - CC 7 SLU Xl=3.27 - Classe 3
  Sollecitazioni:  $T_z = -41.72$   $M_y = -682.67$   $T_y = 6.52$   $M_z = 10.12$ 
  Tensioni:  $\sigma_N = 0.00$   $\sigma_{m,d} = 646.04$   $\tau = 0.00$   $\sigma_{max} = 646.04$  (sfrut=0.29)
  Tensioni:  $\sigma_N = 0.00$   $\sigma_{m,d} = -12.97$   $\tau = 4.21$   $\tau_{max} = 4.21$  (sfrut=0.00)
  Tensioni:  $\sigma_N = 0.00$   $\sigma_{m,d} = 646.04$   $\tau = 0.00$   $\sigma_{ID,max} = 646.04$  (sfrut=0.29)

- Verifica freccia massima per soli carichi accidentali - CC 10
   $f_{z,L} = 0.15$  (L/3980)

- Verifica freccia massima carichi totali - CC 10
   $f_{z,L} = 1.00$  (L/600)

Asta n. 917 (-1126 -1125) - Sez. 39 (UPN160) - Crit. 1
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- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU Xl=0.00 - Classe 1
  Sollecitazioni:  $T_y = -7.94$ 
   $V, Ed = -7.94$   $V_c, Rd = 19595.60$   $V, Ed/V_c, Rd = 0.00$ 

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU Xl=0.00 - Classe 1
  Sollecitazioni:  $T_z = 359.48$ 
   $V, Ed = 359.48$   $V_c, Rd = 15835.30$   $V, Ed/V_c, Rd = 0.02$ 

- Verifica in termini tensionali [4.2.4] - CC 7 SLU Xl=2.14 - Classe 3
  Sollecitazioni:  $T_z = 32.68$   $M_y = -418.90$   $T_y = -7.94$   $M_z = 3.71$ 
  Tensioni:  $\sigma_N = 0.00$   $\sigma_{m,d} = 382.71$   $\tau = 0.00$   $\sigma_{max} = 382.71$  (sfrut=0.17)
  Tensioni:  $\sigma_N = 0.00$   $\sigma_{m,d} = -4.75$   $\tau = 3.30$   $\tau_{max} = 3.30$  (sfrut=0.00)
  Tensioni:  $\sigma_N = 0.00$   $\sigma_{m,d} = 382.71$   $\tau = 0.00$   $\sigma_{ID,max} = 382.71$  (sfrut=0.17)

- Verifica freccia massima per soli carichi accidentali - CC 10
   $f_{z,g} = 0.06$  (L/8279)

- Verifica freccia massima carichi totali - CC 10
   $f_{z,L} = 0.38$  (L/1249)

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Asta n. 9141 (334 -1110) - Sez. 36 (HEB160) - Crit. 1

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- Verifica a taglio Dir. Y [4.2.16] - CC 3 SLV $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=-68.82$
 $V, Ed=-68.82$ $V_c, Rd=59354.10$ $V, Ed/V_c, Rd=0.00$
 - Verifica a taglio Dir. Z [4.2.16] - CC 3 SLV $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=-284.48$
 $V, Ed=-284.48$ $V_c, Rd=22733.10$ $V, Ed/V_c, Rd=0.01$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 3 SLV $X_l=0.00$ - Classe 1
Sollecitazioni: $N=-2364.28$ $T_z=-284.48$ $M_y=-645.03$ $T_y=-68.82$ $M_z=156.05$
 $N, Ed=-2364.28$ $N_c, Rd=121422.00$ $n=N, Ed/N_c, Rd=0.02$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed=-645.03$ $M_y, V, c, Rd=7946.90$ $MN_y, c, Rd=7946.90$ $M_y, Ed/MN_y, c, Rd=0.08$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed=156.05$ $M_z, V, c, Rd=3807.78$ $MN_z, c, Rd=3807.78$ $M_z, Ed/MN_z, c, Rd=0.04$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^1 = 0.08$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLV - Classe 1
Sollecitazioni: $N, Ed=-3451.76$ $M_y, Ed=-645.03$ $M_z, Ed=156.05$ $L=2.35$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=2.35$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=64410.70$ $\lambda_{LT}=0.36$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.54$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=34.64$ $N_{cr,y}=937343.00$ $\lambda_y^*=0.37$ Curva b: $\Phi_y=0.60$ $\chi_y=0.94$
 $\lambda_z=57.98$ $N_{cr,z}=334472.00$ $\lambda_z^*=0.62$ Curva c: $\Phi_z=0.79$ $\chi_z=0.78$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.58, 0.57, 0.97$
Verifica YY: $0.03+0.08+0.02=0.13$
Verifica ZZ: $0.03+0.05+0.04=0.11$
 - Verifica Spostamento relativo massimo per singola asta - CC 10
 $\delta=0.08$ (L/2988)

Asta n. 9142 (335 -1111) - Sez. 36 (HEB160) - Crit. 1

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- Verifica a taglio Dir. Y [4.2.16] - CC 3 SLV $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=-39.49$
 $V, Ed=-39.49$ $V_c, Rd=59354.10$ $V, Ed/V_c, Rd=0.00$
 - Verifica a taglio Dir. Z [4.2.16] - CC 3 SLV $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=-146.30$
 $V, Ed=-146.30$ $V_c, Rd=22733.10$ $V, Ed/V_c, Rd=0.01$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $N=-8053.06$ $T_z=-83.84$ $M_y=-190.10$ $T_y=5.57$ $M_z=-12.62$
 $N, Ed=-8053.06$ $N_c, Rd=121422.00$ $n=N, Ed/N_c, Rd=0.07$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed=-190.10$ $M_y, V, c, Rd=7946.90$ $MN_y, c, Rd=7946.90$ $M_y, Ed/MN_y, c, Rd=0.02$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed=-12.62$ $M_z, V, c, Rd=3807.78$ $MN_z, c, Rd=3807.78$ $M_z, Ed/MN_z, c, Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^1 = 0.07$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLV - Classe 1
Sollecitazioni: $N, Ed=-5623.28$ $M_y, Ed=-331.72$ $M_z, Ed=-105.50$ $L=2.35$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=2.35$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=64410.70$ $\lambda_{LT}=0.36$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.54$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=34.64$ $N_{cr,y}=937343.00$ $\lambda_y^*=0.37$ Curva b: $\Phi_y=0.60$ $\chi_y=0.94$
 $\lambda_z=57.98$ $N_{cr,z}=334472.00$ $\lambda_z^*=0.62$ Curva c: $\Phi_z=0.79$ $\chi_z=0.78$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.96, 0.59, 0.57, 0.99$
Verifica YY: $0.05+0.04+0.02=0.10$
Verifica ZZ: $0.05+0.02+0.03=0.10$
 - Verifica Spostamento relativo massimo per singola asta - CC 10
 $\delta=0.05$ (L/4576)

Asta n. 9143 (336 -1109) - Sez. 36 (HEB160) - Crit. 1

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- Verifica a taglio Dir. Y [4.2.16] - CC 3 SLV $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=-29.71$
 $V, Ed=-29.71$ $V_c, Rd=59354.10$ $V, Ed/V_c, Rd=0.00$
 - Verifica a taglio Dir. Z [4.2.16] - CC 3 SLV $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=-82.93$
 $V, Ed=-82.93$ $V_c, Rd=22733.10$ $V, Ed/V_c, Rd=0.00$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 3 SLV $X_l=0.00$ - Classe 1
Sollecitazioni: $N=-2089.26$ $T_z=-82.93$ $M_y=-188.03$ $T_y=54.63$ $M_z=-123.88$
 $N, Ed=-2089.26$ $N_c, Rd=121422.00$ $n=N, Ed/N_c, Rd=0.02$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed=-188.03$ $M_y, V, c, Rd=7946.90$ $MN_y, c, Rd=7946.90$ $M_y, Ed/MN_y, c, Rd=0.02$
Pressoflessione retta ZZ [4.2.34]:

$M_z, Ed = -123.88$ $M_z, V, c, Rd = 3807.78$ $MNz, c, Rd = 3807.78$ $M_z, Ed / MNz, c, Rd = 0.03$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed / MNy, c, Rd)^2 + (M_z, Ed / MNz, c, Rd)^1 = 0.03$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 3 SLV - Classe 1
Sollecitazioni: $N, Ed = -2517.92$ $M_y, Ed = -188.03$ $M_z, Ed = -123.88$ $L = 2.35$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 2.35$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ $M, cr = 64410.70$ $\lambda_{LT} = 0.36$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.54$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 34.64$ $N_{cr,y} = 937343.00$ $\lambda_y^* = 0.37$ Curva b: $\Phi_y = 0.60$ $\chi_y = 0.94$
 $\lambda_z = 57.98$ $N_{cr,z} = 334472.00$ $\lambda_z^* = 0.62$ Curva c: $\Phi_z = 0.79$ $\chi_z = 0.78$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.58, 0.57, 0.97$
Verifica YY: $0.02 + 0.02 + 0.02 = 0.06$
Verifica ZZ: $0.02 + 0.01 + 0.03 = 0.07$

- Verifica Spostamento relativo massimo per singola asta - CC 10
 $\delta = 0.04$ (L/5665)

Asta n. 9152 (-1120 -1109) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio e torsione Dir. Y [4.2.24] - CC 7 SLU $X_l = 0.92$ - Classe 1
Sollecitazioni: $T_y = 86.23$ $M_x = 4.26$
 $V, Ed = 86.23$ $V_c, Rd, Red = 40896.60$ $V, Ed / V_c, Rd, Red = 0.00$

- Verifica a taglio e torsione Dir. Z [4.2.24] - CC 7 SLU $X_l = 0.92$ - Classe 1
Sollecitazioni: $T_z = -1969.08$ $M_x = 4.26$
 $V, Ed = -1969.08$ $V_c, Rd, Red = 28666.90$ $V, Ed / V_c, Rd, Red = 0.07$

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $N = 6.18$ $T_z = -1936.23$ $M_y = -1777.62$ $T_y = 86.23$ $M_z = -22.19$ $M_x = 4.26$
 $N, Ed = 6.18$ $N_c, Rd = 102450.00$ $n = N, Ed / N_c, Rd = 0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -1777.62$ $M_y, V, c, Rd = 9652.05$ $MN_y, c, Rd = 9652.05$ $M_y, Ed / MN_y, c, Rd = 0.18$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = -22.19$ $M_z, V, c, Rd = 1940.16$ $MN_z, c, Rd = 1940.16$ $M_z, Ed / MN_z, c, Rd = 0.01$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed / MN_y, c, Rd)^2 + (M_z, Ed / MN_z, c, Rd)^1 = 0.18$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: $N, Ed = -5.97$ $M_y, Ed = -1777.62$ $M_z, Ed = 57.41$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.76$ $M, cr = 126420.00$ $\lambda_{LT} = 0.28$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.51$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 10.01$ $N_{cr,y} = 8097980.00$ $\lambda_y^* = 0.12$ Curva a: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 37.06$ $N_{cr,z} = 590188.00$ $\lambda_z^* = 0.43$ Curva b: $\Phi_z = 0.63$ $\chi_z = 0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.57, 0.57, 0.95$
Verifica YY: $0.00 + 0.17 + 0.02 = 0.19$
Verifica ZZ: $0.00 + 0.10 + 0.03 = 0.13$

Asta n. 9152 (-1119 -1120) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l = 1.00$ - Classe 1
Sollecitazioni: $T_y = -13.32$
 $V, Ed = -13.32$ $V_c, Rd = 41300.90$ $V, Ed / V_c, Rd = 0.00$

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l = 1.00$ - Classe 1
Sollecitazioni: $T_z = -699.07$
 $V, Ed = -699.07$ $V_c, Rd = 28950.20$ $V, Ed / V_c, Rd = 0.02$

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $N = 6.58$ $T_z = -663.55$ $M_y = -2458.39$ $T_y = -13.32$ $M_z = 3.18$
 $N, Ed = 6.58$ $N_c, Rd = 102450.00$ $n = N, Ed / N_c, Rd = 0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -2458.39$ $M_y, V, c, Rd = 9652.05$ $MN_y, c, Rd = 9652.05$ $M_y, Ed / MN_y, c, Rd = 0.25$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 3.18$ $M_z, V, c, Rd = 1940.16$ $MN_z, c, Rd = 1940.16$ $M_z, Ed / MN_z, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed / MN_y, c, Rd)^2 + (M_z, Ed / MN_z, c, Rd)^1 = 0.25$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: $N, Ed = -6.56$ $M_y, Ed = -2458.39$ $M_z, Ed = -10.12$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.15$ $M, cr = 82201.50$ $\lambda_{LT} = 0.35$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.54$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 10.01$ $N_{cr,y} = 8097980.00$ $\lambda_y^* = 0.12$ Curva a: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 37.06$ $N_{cr,z} = 590189.00$ $\lambda_z^* = 0.43$ Curva b: $\Phi_z = 0.63$ $\chi_z = 0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.57, 0.57, 0.95$
Verifica YY: $0.00 + 0.24 + 0.00 = 0.24$
Verifica ZZ: $0.00 + 0.15 + 0.00 = 0.15$

Asta n. 9152 (-1118 -1119) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l = 0.00$ - Classe 1

Sollecitazioni: $T_z=611.59$
 $V, Ed=611.59$ $V_c, Rd=28950.20$ $V, Ed/V_c, Rd=0.02$

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU $X_l=1.00$ - Classe 1
Sollecitazioni: $N=-6.57$ $T_z=576.07$ $M_y=-2458.38$ $M_z=1.37$
 $N, Ed=-6.57$ $N_c, Rd=102450.00$ $n=N, Ed/N_c, Rd=0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed=-2458.38$ $M_y, V, c, Rd=9652.05$ $M_{Ny}, c, Rd=9652.05$ $M_y, Ed/M_{Ny}, c, Rd=0.25$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed=1.37$ $M_z, c, Rd=1940.16$ $M_{Nz}, c, Rd=1940.16$ $M_z, Ed/M_{Nz}, c, Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/M_{Ny}, c, Rd)^2 + (M_z, Ed/M_{Nz}, c, Rd)^1 = 0.25$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: $N, Ed=-6.57$ $M_y, Ed=-2458.38$ $M_z, Ed=1.37$ $L=1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=1.00$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.13$ $M, cr=80661.50$ $\lambda_{LT}=0.35$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.54$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=10.01$ $N_{cr,y}=8097980.00$ $\lambda^*_y=0.12$ Curva a: $\Phi_y=0.50$ $\chi_y=1.00$
 $\lambda_z=37.06$ $N_{cr,z}=590189.00$ $\lambda^*_z=0.43$ Curva b: $\Phi_z=0.63$ $\chi_z=0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.57, 0.57, 0.95$
Verifica YY: $0.00+0.24+0.00=0.24$
Verifica ZZ: $0.00+0.15+0.00=0.15$

Asta n. 9152 (-1099 -1118) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio Dir. Y [4.2.16] - CC 7 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=1.74$
 $V, Ed=1.74$ $V_c, Rd=41300.90$ $V, Ed/V_c, Rd=0.00$

- Verifica a taglio Dir. Z [4.2.16] - CC 7 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=1886.34$
 $V, Ed=1886.34$ $V_c, Rd=28950.20$ $V, Ed/V_c, Rd=0.07$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 7 SLU $X_l=1.00$ - Classe 1
Sollecitazioni: $N=-6.57$ $T_z=1850.82$ $M_y=-1864.90$ $T_y=1.74$
 $M_y, Ed=-1864.90$ $M_y, V, c, Rd=9652.05$
 $N, Ed=-6.57$ $N_c, Rd=102450.00$ YY $n=N, Ed/N_c, Rd=0.00$ $M_{Ny}, c, Rd=9652.05$ $M_y, Ed/M_{Ny}, c, Rd=0.19$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: $N, Ed=-6.57$ $M_y, Ed=-1864.90$ $M_z, Ed=-2.13$ $L=1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=1.00$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=125371.00$ $\lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=10.01$ $N_{cr,y}=8097980.00$ $\lambda^*_y=0.12$ Curva a: $\Phi_y=0.50$ $\chi_y=1.00$
 $\lambda_z=37.06$ $N_{cr,z}=590189.00$ $\lambda^*_z=0.43$ Curva b: $\Phi_z=0.63$ $\chi_z=0.92$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.57, 0.57, 0.95$
Verifica YY: $0.00+0.18+0.00=0.18$
Verifica ZZ: $0.00+0.11+0.00=0.11$

Asta n. 90911 (-1110 -1124) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio e torsione Dir. Y [4.2.24] - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $T_y=-368.47$ $M_x=9.68$
 $V, Ed=-368.47$ $V_c, Rd, Red=40376.60$ $V, Ed/V_c, Rd, Red=0.01$

- Verifica a taglio e torsione Dir. Z [4.2.24] - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $T_z=443.19$ $M_x=9.68$
 $V, Ed=443.19$ $V_c, Rd, Red=28302.40$ $V, Ed/V_c, Rd, Red=0.02$

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $N=2.70$ $T_z=443.19$ $M_y=184.79$ $T_y=-368.47$ $M_z=130.43$ $M_x=9.68$
 $N, Ed=2.70$ $N_c, Rd=102450.00$ $n=N, Ed/N_c, Rd=0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed=184.79$ $M_y, V, c, Rd=9652.05$ $M_{Ny}, c, Rd=9652.05$ $M_y, Ed/M_{Ny}, c, Rd=0.02$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed=130.43$ $M_z, V, c, Rd=1940.16$ $M_{Nz}, c, Rd=1940.16$ $M_z, Ed/M_{Nz}, c, Rd=0.07$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/M_{Ny}, c, Rd)^2 + (M_z, Ed/M_{Nz}, c, Rd)^1 = 0.07$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: $N, Ed=-2.89$ $M_y, Ed=184.79$ $M_z, Ed=130.43$ $L=0.50$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.50$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M, cr=479933.00$ $\lambda_{LT}=0.15$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.46$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=5.01$ $N_{cr,y}=32264500.00$ $\lambda^*_y=0.06$ Curva a: $\Phi_y=0.49$ $\chi_y=1.00$
 $\lambda_z=18.57$ $N_{cr,z}=2351470.00$ $\lambda^*_z=0.21$ Curva b: $\Phi_z=0.53$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.57, 0.57, 0.95$
Verifica YY: $0.00+0.02+0.04=0.06$
Verifica ZZ: $0.00+0.01+0.06=0.07$

- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.00$

- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=0.00$

Asta n. 91011 (-1111 -1125) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio e torsione Dir. Y [4.2.24] - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $T_y=83.64$ $M_x=-1.89$
 $V,Ed=83.64$ $V_c,Rd,Red=41122.20$ $V,Ed/V_c,Rd,Red=0.00$

- Verifica a taglio e torsione Dir. Z [4.2.24] - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $T_z=787.84$ $M_x=-1.89$
 $V,Ed=787.84$ $V_c,Rd,Red=28825.00$ $V,Ed/V_c,Rd,Red=0.03$

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $N=2.70$ $T_z=787.84$ $M_y=332.49$ $T_y=83.64$ $M_z=-30.44$ $M_x=-1.89$
 $N,Ed=2.70$ $N_c,Rd=102450.00$ $n=N,Ed/N_c,Rd=0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=332.49$ $M_y,V,c,Rd=9652.05$ $M_{Ny,c,Rd}=9652.05$ $M_y,Ed/M_{Ny,c,Rd}=0.03$
Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=-30.44$ $M_z,V,c,Rd=1940.16$ $M_{Nz,c,Rd}=1940.16$ $M_z,Ed/M_{Nz,c,Rd}=0.02$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.03$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: $N,Ed=-2.89$ $M_y,Ed=332.49$ $M_z,Ed=-30.44$ $L=0.50$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.50$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=478634.00$ $\lambda_{LT}=0.15$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.46$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=5.01$ $N_{cr,y}=32264500.00$ $\lambda^*_y=0.06$ Curva a: $\Phi_y=0.49$ $\chi_y=1.00$
 $\lambda_z=18.57$ $N_{cr,z}=2351470.00$ $\lambda^*_z=0.21$ Curva b: $\Phi_z=0.53$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.57, 0.57, 0.95$
Verifica YY: $0.00+0.03+0.01=0.04$
Verifica ZZ: $0.00+0.02+0.01=0.03$

- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.00$

- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=0.00$ (L/35296)

Asta n. 91521 (-1109 -1126) - Sez. 37 (IPE240) - Crit. 2

- Verifica a taglio e torsione Dir. Y [4.2.24] - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $T_y=302.23$ $M_x=-7.17$
 $V,Ed=302.23$ $V_c,Rd,Red=40617.90$ $V,Ed/V_c,Rd,Red=0.01$

- Verifica a taglio e torsione Dir. Z [4.2.24] - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $T_z=349.43$ $M_x=-7.17$
 $V,Ed=349.43$ $V_c,Rd,Red=28471.50$ $V,Ed/V_c,Rd,Red=0.01$

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 7 SLU $X_l=0.08$ - Classe 1
Sollecitazioni: $N=2.70$ $T_z=349.43$ $M_y=144.73$ $T_y=302.23$ $M_z=-109.05$ $M_x=-7.17$
 $N,Ed=2.70$ $N_c,Rd=102450.00$ $n=N,Ed/N_c,Rd=0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=144.73$ $M_y,V,c,Rd=9652.05$ $M_{Ny,c,Rd}=9652.05$ $M_y,Ed/M_{Ny,c,Rd}=0.01$
Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=-109.05$ $M_z,V,c,Rd=1940.16$ $M_{Nz,c,Rd}=1940.16$ $M_z,Ed/M_{Nz,c,Rd}=0.06$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.06$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: $N,Ed=-2.89$ $M_y,Ed=144.73$ $M_z,Ed=-109.05$ $L=0.50$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.50$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=480499.00$ $\lambda_{LT}=0.15$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.46$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=5.01$ $N_{cr,y}=32264500.00$ $\lambda^*_y=0.06$ Curva a: $\Phi_y=0.49$ $\chi_y=1.00$
 $\lambda_z=18.57$ $N_{cr,z}=2351470.00$ $\lambda^*_z=0.21$ Curva b: $\Phi_z=0.53$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.57, 0.57, 0.95$
Verifica YY: $0.00+0.01+0.03=0.05$
Verifica ZZ: $0.00+0.01+0.05=0.06$

- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,g}=0.00$

- Verifica freccia massima carichi totali - CC 9
 $f_{z,L}=0.00$

Membratura

Asta n. 909 (-1110 -1117 -1116 -1115 -749) - Sez. 37 (IPE240) - Crit. 2

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: $N,Ed=-6.57$ $M_y,Ed=3115.93$ $M_z,Ed=69.93$ $L=3.99$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=3.99$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.02$ $M_{cr}=7349.88$ $\lambda_{LT}=1.17$

$\lambda_{LT,0}=0.40$ $\Phi_{LT}=1.15$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.61$
 $\lambda_y=40.02$ Ncr,y=506124.00 $\lambda_y^*=0.46$ Curva a: $\Phi_y=0.63$ $\chi_y=0.94$
 $\lambda_z=148.25$ Ncr,z=36886.80 $\lambda_z^*=1.71$ Curva b: $\Phi_z=2.21$ $\chi_z=0.28$
Kyy, Kyz, Kzy, Kzz=0.95, 0.57, 0.57, 0.95
Verifica YY: 0.00+0.50+0.02=0.53
Verifica ZZ: 0.00+0.30+0.03=0.34

- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.08$ (L/5285)

- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=0.47$ (L/852)

Membratura

Asta n. 910 (-1111 -1114 -1113 -1112 -750) - Sez. 37 (IPE240) - Crit. 2

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: N,Ed=-6.58 My,Ed=5492.77 Mz,Ed=16.17 L=3.99
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=3.99$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.02$ M,cr=7350.05 $\lambda_{LT}=1.17$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=1.15$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.61$
 $\lambda_y=40.02$ Ncr,y=506124.00 $\lambda_y^*=0.46$ Curva a: $\Phi_y=0.63$ $\chi_y=0.94$
 $\lambda_z=148.25$ Ncr,z=36886.80 $\lambda_z^*=1.71$ Curva b: $\Phi_z=2.21$ $\chi_z=0.28$
Kyy, Kyz, Kzy, Kzz=0.95, 0.57, 0.57, 0.95
Verifica YY: 0.00+0.89+0.00=0.89
Verifica ZZ: 0.00+0.53+0.01=0.54

- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.13$ (L/2968)

- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=0.83$ (L/483) $f_{z,G}=0.82$ (L/484)

Membratura

Asta n. 9152 (-1109 -1120 -1119 -1118 -1099) - Sez. 37 (IPE240) - Crit. 2

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SLU - Classe 1
Sollecitazioni: N,Ed=-6.57 My,Ed=2458.39 Mz,Ed=57.41 L=3.99
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=3.99$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.02$ M,cr=7347.64 $\lambda_{LT}=1.17$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=1.15$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.61$
 $\lambda_y=40.02$ Ncr,y=506124.00 $\lambda_y^*=0.46$ Curva a: $\Phi_y=0.63$ $\chi_y=0.94$
 $\lambda_z=148.25$ Ncr,z=36886.80 $\lambda_z^*=1.71$ Curva b: $\Phi_z=2.21$ $\chi_z=0.28$
Kyy, Kyz, Kzy, Kzz=0.95, 0.57, 0.57, 0.95
Verifica YY: 0.00+0.40+0.02=0.42
Verifica ZZ: 0.00+0.24+0.03=0.27

- Verifica freccia massima per soli carichi accidentali - CC 10
 $f_{z,L}=0.06$ (L/6758)

- Verifica freccia massima carichi totali - CC 10
 $f_{z,L}=0.37$ (L/1081)

Verifiche collegamenti strutture intelaiate

Simbologia

Σ_T	<daN/cm<math>q>	=Somma tensioni nel cordone di saldatura
α		=Coefficiente α
σ	<daN/cm<math>q>	=Tensione normale
σ_{TD}	<daN/cm<math>q>	=Tensione ideale nel cordone di saldatura
σ_o	<daN/cm<math>q>	=Tensione normale ortogonale all'asse del cordone di saldatura
σ_c	<daN/cm<math>q>	=Tensione nel calcestruzzo
τ	<daN/cm<math>q>	=Tensione tangenziale
τ_o	<daN/cm<math>q>	=Tensione tangenziale ortogonale all'asse del cordone di saldatura
τ_p	<daN/cm<math>q>	=Tensione tangenziale parallela all'asse del cordone di saldatura
Bb,Rd,p	<daN>	=Resistenza a punzonamento lato piastra
Bnetta	<mm>	=Larghezza sezione al netto di eventuali fori
Bp,Ed,p	<daN>	=Azione di punzonamento di progetto lato piastra
CB		=Classe del bullone
D0	<mm>	=Diametro nominale del foro di alloggiamento del bullone
Fb,Ed,p	<daN>	=Azione di rifollamento di progetto lato piastra
Fb,Rd,p	<daN>	=Resistenza a rifollamento lato piastra
Ft,Ed	<daN>	=Trazione nei bulloni
Ft,Rd	<daN>	=Resistenza a trazione del bullone
Ftb	<daN/cm<math>q>	=Tensione di rottura dei bulloni
Fv,Ed	<daN>	=Taglio nei bulloni
Fv,Rd	<daN>	=Resistenza a taglio del bullone
Fyb	<daN/cm<math>q>	=Tensione di snervamento dei bulloni
Fyk	<daN/cm<math>q>	=Tensione caratteristica di snervamento dell'acciaio
Fyt	<daN/cm<math>q>	=Tensione caratteristica di rottura
Hnetta	<mm>	=Altezza sezione al netto di eventuali fori
Int. V-T		=Controllo interazione taglio/trazione [4.2.71]
K		=Coefficiente K

LT <m> =Lunghezza tirafondi
 Mx₁ <daNm> =Momento flettente intorno all'asse X locale
 My <daNm> =Momento flettente intorno all'asse Y del collegamento
 My₁ <daNm> =Momento flettente intorno all'asse Y locale
 Mz <daNm> =Momento flettente intorno all'asse Z del collegamento
 N <daN> =Sforzo normale agente sul collegamento
 N₁ <daN> =Sforzo normale in direzione Z locale
 NO <daN> =Azione che genera tensione normale ortogonale
 RT <daN> =Resistenza tirafondi
 TO <daN> =Azione che genera tensione tangenziale ortogonale
 TP <daN> =Azione che genera tensione tangenziale parallela
 Tp =Tipo di acciaio
 Tx₁ <daN> =Taglio in direzione X locale
 Ty <daN> =Taglio in direzione Y agente sul collegamento
 Ty₁ <daN> =Taglio in direzione Y locale
 Tz <daN> =Taglio in direzione Z agente sul collegamento
 e1 <mm> =Distanza e1
 e2 <mm> =Distanza e2

Collegamenti -1099_-1118 -749_-1115 -750_-1112

Piastra 220.00 x 300.00 s=10.00 - 4 Tirafondi ϕ 16 - Profondità di infissione: 300.00
 2 righe ad interasse 200.00
 2 colonne ad interasse 160.00
 Altezza di gola saldature: anima 7.07 - ala 7.07

Caratteristiche meccaniche

TP	Fyk <daN/cm ² >	Fyt <daN/cm ² >	CB	Fyb <daN/cm ² >	Ftb <daN/cm ² >
S275 UNI EN 10025-2	2750.00	4300.00	6.8	4800.00	6000.00

Tirafondi e calcestruzzo

CC 5 SLU Asta n. 909 (-749 -1115)
 Azioni sul collegamento: N=6.57 Tz=-2096.85
 Sollecitazioni agenti localmente: Ty₁=-2096.85 N₁=6.57
 Taglio nei bulloni: Fv,Ed=524.21 Fv,Rd=5790.58
 Rifollamento lato piastra: e1=50.00 e2=190.00 e2=30.00 D0=17.00 α =0.00 K=0.00 Fb,Ed,p=524.21 Fb,Rd,p=13490.20
 Trazione nei bulloni: Ft,Ed=1.64 Ft,Rd=6782.40
 Punzonamento lato piastra: Bp,Ed,p=1.64 Bb,Rd,p=20749.60
 Int. V-T=0.09
 Tirafondi:LT=0.39 (0.30) RT=3142.17
 Compressione nel calcestruzzo: σ_c =0.00
 CC 7 SLU Asta n. 910 (-750 -1112)
 Azioni sul collegamento: N=6.57 Tz=-4196.22
 Sollecitazioni agenti localmente: Ty₁=-4196.22 N₁=6.57
 Taglio nei bulloni: Fv,Ed=1049.05 Fv,Rd=5790.58
 Rifollamento lato piastra: e1=50.00 e2=190.00 e2=30.00 D0=17.00 α =0.00 K=0.00 Fb,Ed,p=1049.05 Fb,Rd,p=13490.20
 Trazione nei bulloni: Ft,Ed=1.64 Ft,Rd=6782.40
 Punzonamento lato piastra: Bp,Ed,p=1.64 Bb,Rd,p=20749.60
 Int. V-T=0.18
 Tirafondi:LT=0.39 (0.30) RT=3142.17
 Compressione nel calcestruzzo: σ_c =0.00

Saldatura profilo-piastra

CC 5 SLU Asta n. 909 (-749 -1115)
 Azioni sul collegamento: N=6.57 Tz=-2096.85
 Sollecitazioni agenti localmente: Ty₁=-2096.85 N₁=6.57
 Azioni sul cordone: TP=0.00 TO=-296.00 NO=0.93
 Tensioni nel cordone: τ_p =0.00 τ_o =41.87 σ_o =0.13 σ_{ID} =41.87 Σ_T =42.00
 CC 7 SLU Asta n. 910 (-750 -1112)
 Azioni sul collegamento: N=6.57 Tz=-4196.22
 Sollecitazioni agenti localmente: Ty₁=-4196.22 N₁=6.57
 Azioni sul cordone: TP=0.00 TO=-592.35 NO=0.93
 Tensioni nel cordone: τ_p =0.00 τ_o =83.78 σ_o =0.13 σ_{ID} =83.78 Σ_T =83.91

Flessione attacco destro piastra

Bnetta=266.00 Hnetta=10.00
 CC 5 SLU Asta n. 909 (-749 -1115)
 Azioni sul collegamento: N=6.57 Tz=-2096.85
 Sollecitazioni agenti localmente: Ty₁=3.29 My₁=0.07
 Tensioni nella sezione: σ =1.48 τ =0.12

Flessione attacco sinistro piastra

Bnetta=266.00 Hnetta=10.00
 CC 5 SLU Asta n. 909 (-749 -1115)
 Azioni sul collegamento: N=6.57 Tz=-2096.85
 Sollecitazioni agenti localmente: Ty₁=3.29 My₁=0.07
 Tensioni nella sezione: σ =1.48 τ =0.12

Collegamenti 0334_-1110 0335_-1111 0336_-1109

Piastra 250.00 x 250.00 s=10.00 - 4 Tirafondi ϕ 16 - Profondità di infissione: 300.00
 2 righe ad interasse 190.00

2 colonne ad interasse 190.00
Altezza di gola saldature: anima 7.07 - ala 7.07

Caratteristiche meccaniche

Tip	Fyk <daN/cm²>	Fyt <daN/cm²>	CB	Fyb <daN/cm²>	Ftb <daN/cm²>
S235 UNI EN 10025-2	2350.00	3600.00	6.8	4800.00	6000.00

Tirafondi e calcestruzzo

CC 3 SND Asta n. 9141 (334 -1110)
Azioni sul collegamento: N=-2363.05 Ty=68.82 Tz=284.48 My=636.50 Mz=153.98
Sollecitazioni agenti localmente: Tx₁=68.82 Ty₁=284.48 N₁=-2363.05 Mx₁=636.50 My₁=153.98
Taglio nei bulloni: Fv,Ed=73.17 Fv,Rd=5790.58
Rifollamento lato piastra: e1=30.87 e2=30.87 e2=226.35 D0=17.00 α=0.00 K=0.00 Fb,Ed,p=73.17 Fb,Rd,p=6971.95
Trazione nei bulloni: Ft,Ed=1398.77 Ft,Rd=6782.40
Punzonamento lato piastra: Bp,Ed,p=1398.77 Bb,Rd,p=17371.80
Int. V-T=0.16
Tirafondi:LT=0.39 (0.30) RT=4488.81
Compressione nel calcestruzzo: σ_c=45.10
CC 3 SND Asta n. 9141 (334 -1110)
Azioni sul collegamento: N=-3450.53 Ty=68.82 Tz=284.48 My=636.50 Mz=153.98
Sollecitazioni agenti localmente: Tx₁=68.82 Ty₁=284.48 N₁=-3450.53 Mx₁=636.50 My₁=153.98
Taglio nei bulloni: Fv,Ed=73.17 Fv,Rd=5790.58
Rifollamento lato piastra: e1=30.87 e2=30.87 e2=226.35 D0=17.00 α=0.00 K=0.00 Fb,Ed,p=73.17 Fb,Rd,p=6971.95
Trazione nei bulloni: Ft,Ed=1176.02 Ft,Rd=6782.40
Punzonamento lato piastra: Bp,Ed,p=1176.02 Bb,Rd,p=17371.80
Int. V-T=0.14
Tirafondi:LT=0.39 (0.30) RT=4488.81
Compressione nel calcestruzzo: σ_c=45.37

Saldatura profilo-piastra

CC 3 SND Asta n. 9141 (334 -1110)
Azioni sul collegamento: N=-2363.05 Ty=68.82 Tz=284.48 My=636.50 Mz=153.98
Sollecitazioni agenti localmente: Tx₁=68.82 Ty₁=284.48 N₁=-2363.05 Mx₁=-636.50 My₁=-153.98
Azioni sul cordone: TP=13.92 TO=57.55 NO=-478.07
Tensioni nel cordone: τ_p=1.41 τ_o=5.81 σ_o=457.25 σ_{ID}=457.29 Σ_T=463.06
CC 3 SND Asta n. 9141 (334 -1110)
Azioni sul collegamento: N=-3450.53 Ty=68.82 Tz=284.48 My=636.50 Mz=153.98
Sollecitazioni agenti localmente: Tx₁=68.82 Ty₁=284.48 N₁=-3450.53 Mx₁=-636.50 My₁=-153.98
Azioni sul cordone: TP=13.92 TO=57.55 NO=-698.08
Tensioni nel cordone: τ_p=1.41 τ_o=5.81 σ_o=479.48 σ_{ID}=479.51 Σ_T=485.29

Flessione attacco superiore piastra

Bnetta=250.00 Hnetta=10.00
CC 3 SND Asta n. 9141 (334 -1110)
Azioni sul collegamento: N=-3450.53 Ty=-15.06 Tz=284.48 My=636.50 Mz=-33.70
Sollecitazioni agenti localmente: Ty₁=-3293.74 Mx₁=-79.93
Tensioni nella sezione: σ=1918.33 τ=131.75

Flessione attacco inferiore piastra

Bnetta=216.00 Hnetta=10.00
CC 3 SND Asta n. 9141 (334 -1110)
Azioni sul collegamento: N=-2363.05 Ty=68.82 Tz=284.48 My=636.50 Mz=153.98
Sollecitazioni agenti localmente: Ty₁=2334.29 Mx₁=35.01
Tensioni nella sezione: σ=972.62 τ=108.07
CC 3 SND Asta n. 9141 (334 -1110)
Azioni sul collegamento: N=-3450.53 Ty=-15.06 Tz=-204.35 My=-457.21 Mz=-33.70
Sollecitazioni agenti localmente: Ty₁=-2499.17 Mx₁=-60.01
Tensioni nella sezione: σ=1440.20 τ=99.97

Flessione attacco destro piastra

Bnetta=250.00 Hnetta=10.00
CC 7 SLU Asta n. 9142 (335 -1111)
Azioni sul collegamento: N=-8053.06 Ty=-5.57 Tz=83.84 My=190.10 Mz=-12.62
Sollecitazioni agenti localmente: Ty₁=-1374.08 My₁=-31.52
Tensioni nella sezione: σ=756.48 τ=54.96

Flessione attacco sinistro piastra

Bnetta=250.00 Hnetta=10.00
CC 7 SLU Asta n. 9142 (335 -1111)
Azioni sul collegamento: N=-8053.06 Ty=-5.57 Tz=83.84 My=190.10 Mz=-12.62
Sollecitazioni agenti localmente: Ty₁=-1462.00 My₁=-33.68
Tensioni nella sezione: σ=808.29 τ=58.48

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
 C_f =Copriferro
 Cl_s =Tipo di calcestruzzo
 F_{cd} =Resistenza di calcolo a compressione del calcestruzzo
 $F_{cd}\ (Tag)$ =Resistenza di calcolo a compressione del calcestruzzo per verifica a taglio
 F_{ck} =Resistenza caratteristica cilindrica a compressione del calcestruzzo
 F_{cm} =Resistenza media
 F_{ctd} =Resistenza di calcolo a trazione del calcestruzzo
 F_{ctk} =Resistenza caratteristica a trazione del calcestruzzo
 F_{ctm} =Resistenza media a trazione
 F_{yd} =Resistenza di calcolo dell'acciaio
 $F_{yd}\ (Tag)$ =Resistenza di calcolo dell'acciaio per verifica a taglio
 F_{yk} =Tensione caratteristica di snervamento dell'acciaio
 F_{ym} =Tensione media di snervamento
 K_2 =Coefficiente per distribuzione deformazioni
 M'_{ydy} =Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
 M'_{ydz} =Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Z
 MR_{dy} =Momento resistente allo stato limite ultimo intorno all'asse Y
 MR_{dz} =Momento resistente allo stato limite ultimo intorno all'asse Z
 M_y =Momento flettente intorno all'asse Y
 M_z =Momento flettente intorno all'asse Z
 N =Sforzo normale
 N_u =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
 SLV = Stato limite di salvaguardia della vita
 SND = Stato limite di salvaguardia della vita (non dissipativo)
 Tp =Tipo di acciaio
 T_y =Taglio in dir. Y
 T_z =Taglio in dir. Z
 VR_{cd} =Taglio ultimo lato calcestruzzo
 VR_{sd} =Taglio ultimo lato armatura
 VR_{du} =Taglio ultimo resistente
 VS_{du} =Taglio agente nella direzione del momento ultimo
 W_k =Ampiezza caratteristica delle fessure
 X_f =Coordinata X finale
 X_i =Coordinata X iniziale
 X_v =Coordinata X di verifica
 $Zona$ =Zona di verifica
 Z_v =Coordinata Z di verifica
 c =Ricoprimento dell'armatura
 $ctg\theta$ =Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo
 s =Distanza massima tra le barre

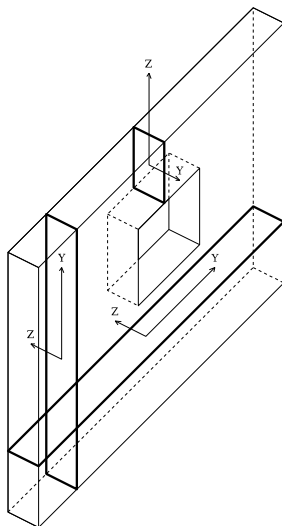


Figura numero 3: Riferimenti sezione

Parete n. 16

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	C_f	F_{cm}	F_{ctm}	F_{cd}	$F_{cd}\ (Tag)$	F_{ctd}	F_{ym}	F_{yd}	$F_{yd}\ (Tag)$
	<cm>	<cm>	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >
Oriz.	30.00	4.00	270.90	21.43	170.57	113.71	10.58	4300.00	4300.00	3739.13
A-A	30.00	4.30	270.90	21.43	170.57	113.71	10.58	4300.00	4300.00	3739.13

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.
7	SLU	Diff.	0.00	0.00	1.90	-35140.30	281.84	-1079220.00	17970.90	30.712
7	SLU	Diff.	1.32	0.00	1.90	-35659.60	111.36	-1079220.00	18029.70	30.265
7	SLU	Diff.	2.64	0.00	1.90	-36749.00	-76.06	-1079220.00	-18153.10	29.367
7	SLU	Diff.	3.96	0.00	1.90	-29673.10	-521.14	-29673.10	-17349.20	33.291
7	SLU	Diff.	5.28	0.00	1.90	-27540.00	889.82	-27540.00	17105.80	19.224
7	SLU	Diff.	6.60	0.00	1.90	-10189.30	-2094.99	-10189.30	-15120.50	7.217
7	SLU	Sez.A-A	3.96	1.60	1.90	-8757.29	-505.69	-8757.29	-7171.94	14.182

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	Nu <daN>	M'ydy <daNm>	Sic.
3	SND	Diff.	0.00	0.00	1.90	13330.90	3395.59	13330.90	10988.50	3.236
3	SND	Diff.	1.32	0.00	1.90	5135.99	1438.64	5135.99	11979.40	8.327
3	SND	Diff.	2.64	0.00	1.90	-8704.69	-751.32	-8704.69	-13624.00	18.134
3	SND	Diff.	3.96	0.00	1.90	-16979.80	-1159.86	-16979.80	-14586.70	12.576
3	SND	Diff.	5.28	0.00	1.90	-15338.90	1855.00	-15338.90	14397.40	7.761
3	SND	Diff.	6.60	0.00	1.90	-5570.18	-2610.90	-5570.18	-13254.10	5.076
1	SND	Sez.A-A	0.00	1.60	1.90	-23974.80	-252.00	-153510.00	-8352.41	6.403

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	My <daNm>	σ _c <daN/cmq>	σ _ε <daN/cmq>
10	SLE R	Diff.	0.00	0.00	1.90	-26658.00	208.07	5.30	76.61
8	SLE R	Diff.	0.00	0.00	1.90	-25064.60	220.60	5.06	72.91
14	SLE Q	Diff.	0.00	0.00	1.90	-24417.80	190.96	4.85	70.19
10	SLE R	Diff.	1.32	0.00	1.90	-27033.30	82.68	4.96	73.20
8	SLE R	Diff.	1.32	0.00	1.90	-25285.90	86.76	4.67	68.80
14	SLE Q	Diff.	1.32	0.00	1.90	-24597.40	77.03	4.52	66.67
10	SLE R	Diff.	2.64	0.00	1.90	-27840.20	-54.72	5.01	74.32
8	SLE R	Diff.	2.64	0.00	1.90	-25887.20	-63.54	4.70	69.55
14	SLE Q	Diff.	2.64	0.00	1.90	-25144.40	-49.07	4.53	67.11
10	SLE R	Diff.	3.96	0.00	1.90	-22493.70	-397.69	5.18	72.42
8	SLE R	Diff.	3.96	0.00	1.90	-21027.30	-367.87	4.83	67.56
14	SLE Q	Diff.	3.96	0.00	1.90	-20326.70	-370.12	4.71	65.82
10	SLE R	Diff.	5.28	0.00	1.90	-20852.80	677.37	5.78	77.94
8	SLE R	Diff.	5.28	0.00	1.90	-19386.40	643.66	5.42	72.95
14	SLE Q	Diff.	5.28	0.00	1.90	-18685.80	626.61	5.24	70.53
10	SLE R	Diff.	6.60	0.00	1.90	-7735.40	-1588.59	11.04	263.56
14	SLE Q	Diff.	6.60	0.00	1.90	-7061.28	-1433.85	9.94	234.90
10	SLE R	Sez.A-A	3.96	1.60	1.90	-6635.43	-383.48	12.56	160.60
10	SLE R	Sez.A-A	6.60	1.60	1.90	48.57	-25.39	0.59	21.85
14	SLE Q	Sez.A-A	3.96	1.60	1.90	-5926.45	-348.01	11.32	144.47

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	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>
14	SLE Q	Diff.	6.60	0.00	1.90	-7061.28	-1433.85	33.00	450.00	0.50	16.50	222.79	12.44	1182.18	234.90	0.07	0.03
12	SLE F	Diff.	6.60	0.00	1.90	-7149.22	-1454.40	33.00	450.00	0.50	16.50	222.85	12.44	1182.59	238.77	0.07	0.03
14	SLE Q	Sez.A-A	6.60	1.60	1.90	42.43	-22.73	33.00	214.00	0.50	20.00	137.83	6.28	225.65	19.48	0.01	0.00
12	SLE F	Sez.A-A	6.60	1.60	1.90	43.32	-23.05	33.00	214.00	0.50	20.00	137.85	6.28	225.74	19.78	0.01	0.00

Parete n. 120

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	1.52	-21747.50	-795.70	0.00	-823930.00	-64127.90	0.00	37.886
5	SLU	Diff. tras.	0.00	0.00	1.52	-20909.00	0.00	335.63	-20909.00	0.00	11878.60	35.392
7	SLU	Diff. long.	1.27	0.00	1.52	-17262.60	860.65	0.00	-823930.00	61295.10	0.00	47.729
7	SLU	Diff. tras.	1.27	0.00	1.52	-17262.60	0.00	90.82	-823930.00	0.00	11453.60	47.729
7	SLU	Diff. long.	2.53	0.00	1.52	-11414.80	-164.98	0.00	-823930.00	-57559.20	0.00	72.181
7	SLU	Diff. tras.	2.53	0.00	1.52	-11414.80	0.00	-202.28	-11414.80	0.00	-10773.30	53.259
7	SLU	Diff. long.	3.80	0.00	1.52	-6859.20	-2028.33	0.00	-6859.20	-54624.40	0.00	26.931
7	SLU	Diff. tras.	3.80	0.00	1.52	-6859.20	0.00	-650.16	-6859.20	0.00	-10241.40	15.752

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'yz <daNm>	M'ydy <daNm>	Sic.
2	SND	Diff. long.	0.00	0.00	1.52	29360.80	-14725.40	0.00	29360.80	-16807.00	0.00	1.141
1	SND	Diff. long.	1.27	0.00	1.52	30472.70	8835.54	0.00	30472.70	16124.40	0.00	1.825
1	SND	Diff. tras.	2.53	0.00	1.52	12778.10	0.00	-547.39	12778.10	0.00	-6945.17	12.688
1	SND	Diff. long.	3.80	0.00	1.52	1116.99	-16247.20	0.00	1116.99	-33949.40	0.00	2.090

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cmq>	σ _ε <daN/cmq>
10	SLE R	Diff. tras.	0.00	0.00	1.52	-16492.10	0.00	237.76	4.35	61.56

8	SLE R	Diff. tras.	0.00	0.00	1.52	-15933.10	0.00	247.66	4.27	60.26
14	SLE Q	Diff. tras.	0.00	0.00	1.52	-15429.80	0.00	221.38	4.07	57.54
10	SLE R	Diff. long.	1.27	0.00	1.52	-13066.30	654.52	0.00	3.22	47.85
9	SLE R	Diff. long.	1.27	0.00	1.52	-12521.50	618.24	0.00	3.08	45.75
14	SLE Q	Diff. long.	1.27	0.00	1.52	-12199.70	570.84	0.00	2.97	44.22
10	SLE R	Diff. tras.	2.53	0.00	1.52	-8599.05	0.00	-150.27	2.37	33.26
9	SLE R	Diff. tras.	2.53	0.00	1.52	-8138.09	0.00	-138.22	2.23	31.30
14	SLE Q	Diff. tras.	2.53	0.00	1.52	-7992.37	0.00	-136.67	2.19	30.78
10	SLE R	Diff. tras.	3.80	0.00	1.52	-5121.04	0.00	-484.30	3.38	40.36
14	SLE Q	Diff. tras.	3.80	0.00	1.52	-4705.71	0.00	-439.78	3.07	36.72

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	1.52	SND	-17930.00	0.00	17930.00	2.50	43842.40	113875.00	43842.40	2.445
1	Diff. tras.	0.00	0.00	1.52	SND	0.00	1819.46	1819.46				19283.40	10.598
1	Diff. long.	1.27	0.00	1.52	SND	17161.40	0.00	17161.40	2.50	43842.40	113875.00	43842.40	2.555
3	Diff. tras.	1.27	0.00	1.52	SND	0.00	-988.75	988.75				19283.40	19.503
1	Diff. long.	2.53	0.00	1.52	SND	-20414.20	0.00	20414.20	2.50	43842.40	113875.00	43842.40	2.148
3	Diff. tras.	2.53	0.00	1.52	SND	0.00	-744.37	744.37				19283.40	25.906
1	Diff. long.	3.80	0.00	1.52	SND	-26043.90	0.00	26043.90	2.50	43842.40	113875.00	43842.40	1.683
3	Diff. tras.	3.80	0.00	1.52	SND	0.00	1482.25	1482.25				19510.30	13.163

Parete n. 121

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess.	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	1.52	-27135.90	485.12	0.00	-815079.00	61751.80	0.00	30.037
7	SLU	Diff. tras.	0.00	0.00	1.52	-27135.90	0.00	360.23	-815079.00	0.00	11589.20	30.037
7	SLU	Diff. long.	1.32	0.00	1.52	-24713.80	1851.08	0.00	-24713.80	60236.00	0.00	32.541
7	SLU	Diff. tras.	1.32	0.00	1.52	-24713.80	0.00	103.20	-815079.00	0.00	11306.30	32.981
7	SLU	Diff. long.	2.64	0.00	1.52	-18709.80	3475.57	0.00	-18709.80	56449.00	0.00	16.242
7	SLU	Diff. tras.	2.64	0.00	1.52	-18709.80	0.00	-200.26	-815079.00	0.00	-10605.10	43.564
7	SLU	Diff. long.	3.96	0.00	1.52	-10053.70	4845.04	0.00	-10053.70	50930.80	0.00	10.512
7	SLU	Diff. tras.	3.96	0.00	1.52	-10053.70	0.00	301.12	-10053.70	0.00	9590.43	31.849
7	SLU	Diff. long.	5.28	0.00	1.52	-11486.50	1946.04	0.00	-11486.50	51849.20	0.00	26.643
7	SLU	Diff. tras.	5.28	0.00	1.52	-11486.50	0.00	166.61	-11486.50	0.00	9758.67	58.573
7	SLU	Diff. long.	6.60	0.00	1.52	-12151.10	-2230.79	0.00	-12151.10	-52274.30	0.00	23.433
5	SLU	Diff. tras.	6.60	0.00	1.52	-11235.30	0.00	-188.73	-11235.30	0.00	-9728.97	51.551
7	SLU	Loc.	0.00	0.00	0.30	-4827.49	0.00	57.50	-165857.00	0.00	2849.02	34.357

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
1	SND	Diff. long.	0.00	0.00	1.52	-8958.12	19252.60	0.00	-8958.12	36366.00	0.00	1.889
1	SND	Diff. long.	1.32	0.00	1.52	-9875.72	12957.60	0.00	-9875.72	36901.50	0.00	2.848
1	SND	Diff. long.	2.64	0.00	1.52	-8428.96	10644.70	0.00	-8428.96	36060.60	0.00	3.388
1	SND	Diff. long.	3.96	0.00	1.52	1184.77	12498.10	0.00	1184.77	30373.60	0.00	2.430
1	SND	Diff. long.	5.28	0.00	1.52	-3459.29	5705.02	0.00	-3459.29	33139.40	0.00	5.809
1	SND	Diff. long.	6.60	0.00	1.52	-6087.62	-4870.55	0.00	-6087.62	-34686.90	0.00	7.122
1	SND	Loc.	0.00	0.00	0.30	7190.70	0.00	365.18	7190.70	0.00	1221.41	3.345

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cm ² >	σ _t <daN/cm ² >
10	SLE R	Diff. tras.	0.00	0.00	1.52	-20657.90	0.00	271.25	5.39	76.52
8	SLE R	Diff. tras.	0.00	0.00	1.52	-20189.00	0.00	276.94	5.31	75.31
14	SLE Q	Diff. tras.	0.00	0.00	1.52	-19684.10	0.00	258.56	5.13	72.91
10	SLE R	Diff. long.	1.32	0.00	1.52	-18798.20	1401.39	0.00	5.03	74.56
9	SLE R	Diff. long.	1.32	0.00	1.52	-18336.20	1348.85	0.00	4.89	72.52
14	SLE Q	Diff. long.	1.32	0.00	1.52	-17866.30	1259.24	0.00	4.72	70.03
10	SLE R	Diff. long.	2.64	0.00	1.52	-14281.20	2633.12	0.00	5.07	74.51
9	SLE R	Diff. long.	2.64	0.00	1.52	-13833.00	2568.34	0.00	4.93	72.37
14	SLE Q	Diff. long.	2.64	0.00	1.52	-13517.50	2396.74	0.00	4.73	69.43
10	SLE R	Diff. long.	3.96	0.00	1.52	-7685.00	3663.98	0.00	5.19	74.73
14	SLE Q	Diff. long.	3.96	0.00	1.52	-7351.43	3285.64	0.00	4.62	66.65
10	SLE R	Diff. long.	5.28	0.00	1.52	-8741.20	1479.27	0.00	3.00	44.10
8	SLE R	Diff. long.	5.28	0.00	1.52	-8333.67	1420.90	0.00	2.87	42.16
14	SLE Q	Diff. long.	5.28	0.00	1.52	-8130.22	1383.91	0.00	2.80	41.11
10	SLE R	Diff. long.	6.60	0.00	1.52	-9205.66	-1664.70	0.00	3.25	47.66
14	SLE Q	Diff. long.	6.60	0.00	1.52	-8295.93	-1347.77	0.00	2.80	41.21
10	SLE R	Loc.	3.96	0.00	0.30	1160.37	0.00	23.52	5.37	490.56
14	SLE Q	Loc.	0.00	0.00	0.30	-3533.57	0.00	40.92	4.72	64.15

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cmq>	A _{c eff} <cmq>	σ _s <daN/cm ² >	ε _{sm}	W _k <mm>
14	SLE Q	Diff. long.	3.96	0.00	1.52	-7351.43	3285.64	0.00	33.00	222.00	0.50	12.00	378.13	2.26	292.50	31.58	0.01	0.01

12	SLE F	Diff. long.	3.96	0.00	1.52	-7396.85	3329.73	0.00	33.00	222.00	0.50	12.00	383.68	2.26	292.50	32.77	0.01	0.01
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Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	1.52	SND	-7220.06	0.00	7220.06	2.50	43842.40	115229.00	43842.40	6.072
1	Diff. tras.	0.00	0.00	1.52	SND	0.00	2314.65	2314.65				20452.50	8.836
1	Diff. long.	1.32	0.00	1.52	SND	7295.78	0.00	7295.78	2.50	43842.40	115368.00	43842.40	6.009
1	Diff. tras.	1.32	0.00	1.52	SND	0.00	-1593.25	1593.25				20572.20	12.912
1	Diff. long.	2.64	0.00	1.52	SND	6838.09	0.00	6838.09	2.50	43842.40	115149.00	43842.40	6.412
3	Diff. tras.	2.64	0.00	1.52	SND	0.00	-1214.99	1214.99				20599.90	16.955
1	Diff. long.	3.96	0.00	1.52	SND	-12319.20	0.00	12319.20	2.50	43842.40	113875.00	43842.40	3.559
3	Diff. tras.	3.96	0.00	1.52	SND	0.00	812.95	812.95				19541.10	24.037
1	Diff. long.	5.28	0.00	1.52	SND	-13015.90	0.00	13015.90	2.50	43842.40	114398.00	43842.40	3.368
3	Diff. tras.	5.28	0.00	1.52	SND	0.00	-880.82	880.82				19898.00	22.590
1	Diff. long.	6.60	0.00	1.52	SND	7759.47	0.00	7759.47	2.50	43842.40	114795.00	43842.40	5.650
3	Diff. tras.	6.60	0.00	1.52	SND	0.00	570.87	570.87				20067.20	35.152

Parete n. 122

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <m>	Cf <m>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	2.10	-59167.40	-635.34	0.00	-1116740.00	-131173.00	0.00	18.874
5	SLU	Diff. tras.	0.00	0.00	2.10	-58094.30	0.00	-1006.37	-58094.30	0.00	-17724.80	17.613
7	SLU	Diff. long.	1.32	0.00	2.10	-57099.60	2749.96	0.00	-1116740.00	129436.00	0.00	19.558
7	SLU	Diff. tras.	1.32	0.00	2.10	-57099.60	0.00	43.43	-1116740.00	0.00	17609.40	19.558
5	SLU	Diff. long.	2.64	0.00	2.10	-52058.50	6466.38	0.00	-52058.50	125178.00	0.00	19.358
5	SLU	Diff. tras.	2.64	0.00	2.10	-52058.50	0.00	1283.28	-52058.50	0.00	17023.30	13.265
7	SLU	Diff. long.	3.96	0.00	2.10	-36967.60	4636.94	0.00	-36967.60	112158.00	0.00	24.188
5	SLU	Diff. tras.	3.96	0.00	2.10	-35229.00	0.00	-6061.74	-35229.00	0.00	-15058.40	2.484
7	SLU	Diff. long.	5.28	0.00	2.10	-28846.30	8709.70	0.00	-28846.30	104987.00	0.00	12.054
7	SLU	Diff. tras.	5.28	0.00	2.10	-28846.30	0.00	1458.86	-28846.30	0.00	14311.40	9.810
7	SLU	Diff. long.	6.60	0.00	2.10	-17545.20	14158.00	0.00	-17545.20	94843.70	0.00	6.699
7	SLU	Diff. tras.	6.60	0.00	2.10	-17545.20	0.00	7407.19	-17545.20	0.00	12982.80	1.753

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
1	SND	Diff. long.	0.00	0.00	2.10	-36931.50	-42469.40	0.00	-36931.50	-83255.50	0.00	1.960
1	SND	Diff. long.	1.32	0.00	2.10	-35541.10	33817.30	0.00	-35541.10	82190.00	0.00	2.430
1	SND	Diff. long.	2.64	0.00	2.10	-33686.10	28607.10	0.00	-33686.10	80756.30	0.00	2.823
3	SND	Diff. tras.	3.96	0.00	2.10	-21477.10	0.00	-5342.41	-21477.10	0.00	-12236.60	2.290
1	SND	Diff. long.	5.28	0.00	2.10	-17676.40	13626.30	0.00	-17676.40	68169.40	0.00	5.003
3	SND	Diff. tras.	6.60	0.00	2.10	-9851.05	0.00	6474.80	-9851.05	0.00	10850.00	1.676

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cm²>	σ _t <daN/cm²>
8	SLE R	Diff. tras.	0.00	0.00	2.10	-44093.90	0.00	-689.12	8.70	122.62
14	SLE Q	Diff. tras.	0.00	0.00	2.10	-42167.30	0.00	-487.30	7.82	111.66
10	SLE R	Diff. long.	1.32	0.00	2.10	-43214.80	2060.41	0.00	7.42	110.78
9	SLE R	Diff. long.	1.32	0.00	2.10	-42161.70	1987.07	0.00	7.23	107.94
14	SLE Q	Diff. long.	1.32	0.00	2.10	-40556.00	1891.69	0.00	6.94	103.71
8	SLE R	Diff. tras.	2.64	0.00	2.10	-39472.60	0.00	888.14	8.59	118.63
8	SLE R	Diff. long.	2.64	0.00	2.10	-39472.60	4834.68	0.00	8.03	119.32
14	SLE Q	Diff. tras.	2.64	0.00	2.10	-37601.90	0.00	651.12	7.61	106.64
8	SLE R	Diff. tras.	3.96	0.00	2.10	-26890.90	0.00	-4502.19	27.69	617.32
14	SLE Q	Diff. tras.	3.96	0.00	2.10	-25973.10	0.00	-4045.18	24.39	490.96
10	SLE R	Diff. tras.	5.28	0.00	2.10	-21904.90	0.00	1134.20	6.65	86.76
10	SLE R	Diff. long.	5.28	0.00	2.10	-21904.90	6608.90	0.00	6.13	90.32
14	SLE Q	Diff. tras.	5.28	0.00	2.10	-20128.80	0.00	933.74	5.79	76.19
10	SLE R	Diff. tras.	6.60	0.00	2.10	-13297.40	0.00	5594.60	38.25	1625.35
14	SLE Q	Diff. tras.	6.60	0.00	2.10	-12055.20	0.00	5023.40	34.33	1453.97

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cm²>	A _{c eff} <cm²>	σ _s <daN/cm²>	ε _{sm}	Wk <mm>
14	SLE Q	Diff. tras.	3.96	0.00	2.10	-25973.10	0.00	-4045.18	33.00	300.00	0.50	12.00	221.59	10.18	1319.80	490.96	0.14	0.05
11	SLE F	Diff. tras.	3.96	0.00	2.10	-26045.80	0.00	-4143.09	33.00	300.00	0.50	12.00	223.24	10.18	1333.77	521.93	0.15	0.06
14	SLE Q	Diff. tras.	6.60	0.00	2.10	-12055.20	0.00	5023.40	33.00	300.00	0.50	12.00	257.24	10.18	1622.15	1453.97	0.42	0.19
12	SLE F	Diff. tras.	6.60	0.00	2.10	-12214.90	0.00	5095.32	33.00	300.00	0.50	12.00	257.25	10.18	1622.29	1475.39	0.43	0.19

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	2.10	SND	-15608.10	0.00	15608.10	2.50	60807.00	163563.00	60807.00	3.896
3	Diff. tras.	0.00	0.00	2.10	SND	0.00	-2729.14	2729.14				31361.60	11.491
1	Diff. long.	1.32	0.00	2.10	SND	16462.50	0.00	16462.50	2.50	60807.00	163351.00	60807.00	3.694

3	Diff. tras.	1.32	0.00	2.10	SND	0.00	1912.99	1912.99				31178.50	16.298
1	Diff. long.	2.64	0.00	2.10	SND	16196.80	0.00	16196.80	2.50	60807.00	163068.00	60807.00	3.754
3	Diff. tras.	2.64	0.00	2.10	SND	0.00	1518.45	1518.45				30891.50	20.344
1	Diff. long.	3.96	0.00	2.10	SND	23718.60	0.00	23718.60	2.50	60807.00	161288.00	60807.00	2.564
3	Diff. tras.	3.96	0.00	2.10	SND	0.00	4503.94	4503.94				29357.00	6.518
1	Diff. long.	5.28	0.00	2.10	SND	26125.00	0.00	26125.00	2.50	60807.00	160630.00	60807.00	2.328
7	Diff. tras.	5.28	0.00	2.10	SLU	0.00	6317.26	6317.26				30318.70	4.799
1	Diff. long.	6.60	0.00	2.10	SND	-20930.40	0.00	20930.40	2.50	60807.00	159374.00	60807.00	2.905
1	Diff. tras.	6.60	0.00	2.10	SND	0.00	-5195.40	5195.40				27784.30	5.348

Parete n. 123

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	1.52	-32131.70	4099.99	0.00	-32131.70	64859.20	0.00	15.819
5	SLU	Diff. tras.	0.00	0.00	1.52	-31085.90	0.00	730.07	-31085.90	0.00	12049.90	16.505
7	SLU	Diff. long.	1.20	0.00	1.52	-27671.60	-1071.83	0.00	-815079.00	-62086.20	0.00	29.455
7	SLU	Diff. tras.	1.20	0.00	1.52	-27671.60	0.00	70.67	-815079.00	0.00	11652.00	29.455
7	SLU	Diff. long.	2.41	0.00	1.52	-21472.60	-5276.07	0.00	-21472.60	-58196.60	0.00	11.030
5	SLU	Diff. tras.	2.41	0.00	1.52	-20928.60	0.00	-544.64	-20928.60	0.00	-10864.80	19.949
7	SLU	Diff. long.	3.61	0.00	1.52	-12261.10	-5827.54	0.00	-12261.10	-52344.40	0.00	8.982
5	SLU	Diff. tras.	3.61	0.00	1.52	-12129.30	0.00	-1252.22	-12129.30	0.00	-9834.14	7.853
7	SLU	Diff. long.	4.82	0.00	1.52	-8945.44	-7085.66	0.00	-8945.44	-50220.60	0.00	7.088
5	SLU	Diff. tras.	4.82	0.00	1.52	-8667.25	0.00	661.80	-8667.25	0.00	9427.55	14.245
7	SLU	Diff. long.	6.02	0.00	1.52	-6576.95	1237.28	0.00	-6576.95	48699.30	0.00	39.360
5	SLU	Diff. tras.	6.02	0.00	1.52	-6257.38	0.00	762.51	-6257.38	0.00	9143.32	11.991
5	SLU	Loc.	3.61	1.23	1.52	1324.17	0.00	-378.19	1324.17	0.00	-2105.92	5.568

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
1	SND	Diff. long.	0.00	0.00	1.52	-17201.50	19050.80	0.00	-17201.50	41129.20	0.00	2.159
1	SND	Diff. long.	1.20	0.00	1.52	-16132.70	-11456.70	0.00	-16132.70	-40517.00	0.00	3.537
1	SND	Diff. long.	2.41	0.00	1.52	-12151.00	-13023.80	0.00	-12151.00	-38225.80	0.00	2.935
3	SND	Diff. long.	3.61	0.00	1.52	-6.10	-9833.61	0.00	-6.10	-31081.20	0.00	3.161
1	SND	Diff. long.	4.82	0.00	1.52	273.84	-12483.40	0.00	273.84	-30917.30	0.00	2.477
3	SND	Diff. tras.	6.02	0.00	1.52	-177.06	0.00	1225.17	-177.06	0.00	7510.35	6.130
3	SND	Loc.	3.61	1.23	1.52	6810.77	0.00	-465.64	6810.77	0.00	-1271.24	2.730

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cmq>	σ _t <daN/cmq>
10	SLE R	Diff. long.	0.00	0.00	1.52	-24428.90	3110.42	0.00	7.57	111.57
9	SLE R	Diff. long.	0.00	0.00	1.52	-23815.90	3001.37	0.00	7.35	108.42
14	SLE Q	Diff. long.	0.00	0.00	1.52	-23060.80	2793.37	0.00	7.03	103.70
10	SLE R	Diff. long.	1.20	0.00	1.52	-21027.00	-812.17	0.00	5.02	74.79
9	SLE R	Diff. long.	1.20	0.00	1.52	-20474.80	-802.37	0.00	4.90	72.96
14	SLE Q	Diff. long.	1.20	0.00	1.52	-19851.60	-760.53	0.00	4.73	70.54
10	SLE R	Diff. long.	2.41	0.00	1.52	-16306.40	-4000.78	0.00	6.59	96.40
9	SLE R	Diff. long.	2.41	0.00	1.52	-15853.90	-3897.09	0.00	6.41	93.81
14	SLE Q	Diff. long.	2.41	0.00	1.52	-15442.10	-3649.74	0.00	6.13	89.71
8	SLE R	Diff. tras.	3.61	0.00	1.52	-9218.96	0.00	-928.15	6.66	77.89
10	SLE R	Diff. long.	3.61	0.00	1.52	-9306.83	-4422.81	0.00	6.27	90.17
14	SLE Q	Diff. tras.	3.61	0.00	1.52	-8920.99	0.00	-837.51	5.94	70.85
10	SLE R	Diff. long.	4.82	0.00	1.52	-6797.19	-5379.51	0.00	8.92	218.85
14	SLE Q	Diff. long.	4.82	0.00	1.52	-6392.47	-4889.46	0.00	8.02	187.68
8	SLE R	Diff. tras.	6.02	0.00	1.52	-4758.29	0.00	582.78	4.41	54.71
14	SLE Q	Diff. tras.	6.02	0.00	1.52	-4535.22	0.00	571.12	4.36	57.63
10	SLE R	Loc.	3.61	1.23	1.52	1226.26	0.00	-246.56	19.84	857.50
10	SLE R	Loc.	4.82	1.23	1.52	2002.14	0.00	96.32	14.47	933.39
14	SLE Q	Loc.	3.61	1.23	1.52	1010.08	0.00	-238.82	17.93	765.58

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	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>
14	SLE Q	Diff. long.	3.61	0.00	1.52	-8920.99	-3994.97	0.00	33.00	222.00	0.50	12.00	379.65	2.26	292.49	38.64	0.01	0.01
12	SLE F	Diff. long.	3.61	0.00	1.52	-8926.75	-4057.65	0.00	33.00	222.00	0.50	12.00	391.19	2.26	292.50	41.23	0.01	0.01
14	SLE Q	Diff. long.	4.82	0.00	1.52	-6392.47	-4889.46	0.00	33.00	222.00	0.50	12.00	708.26	2.26	292.50	187.68	0.05	0.07
12	SLE F	Diff. long.	4.82	0.00	1.52	-6442.65	-4952.50	0.00	33.00	222.00	0.50	12.00	710.16	2.26	292.50	191.76	0.06	0.07
14	SLE Q	Diff. tras.	6.02	0.00	1.52	-4535.22	0.00	571.12	33.00	300.00	0.50	12.00	190.20	7.92	819.41	57.63	0.02	0.01
13	SLE F	Diff. tras.	6.02	0.00	1.52	-4535.22	0.00	571.12	33.00	300.00	0.50	12.00	190.20	7.92	819.41	57.63	0.02	0.01
14	SLE Q	Loc.	3.61	1.23	1.52	1010.08	0.00	-238.82	33.00	123.50	0.50	12.00	222.41	1.13	147.41	765.58	0.22	0.08
11	SLE F	Loc.	3.61	1.23	1.52	989.40	0.00	-248.37	33.00	123.50	0.50	12.00	227.45	1.13	152.17	774.72	0.23	0.09

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	Diff. long.	0.00	0.00	1.52	SND	11740.90	0.00	11740.90	2.50	43842.40	116654.00	43842.40	3.734

3	Diff. tras.	0.00	0.00	1.52	SND	0.00	2587.19	2587.19				21681.50	8.380
3	Diff. long.	1.20	0.00	1.52	SND	-11678.80	0.00	11678.80	2.50	43842.40	116567.00	43842.40	3.754
3	Diff. tras.	1.20	0.00	1.52	SND	0.00	-2160.20	2160.20				21606.70	10.002
3	Diff. long.	2.41	0.00	1.52	SND	11127.30	0.00	11127.30	2.50	43842.40	115470.00	43842.40	3.940
3	Diff. tras.	2.41	0.00	1.52	SND	0.00	1933.98	1933.98				20660.00	10.683
3	Diff. long.	3.61	0.00	1.52	SND	-9280.45	0.00	9280.45	2.50	43842.40	113876.00	43842.40	4.724
3	Diff. tras.	3.61	0.00	1.52	SND	0.00	-2713.09	2713.09				19284.20	7.108
1	Diff. long.	4.82	0.00	1.52	SND	15984.60	0.00	15984.60	2.50	43842.40	113875.00	43842.40	2.743
3	Diff. tras.	4.82	0.00	1.52	SND	0.00	1076.72	1076.72				19379.40	17.999
1	Diff. long.	6.02	0.00	1.52	SND	-17114.50	0.00	17114.50	2.50	43842.40	114087.00	43842.40	2.562
3	Diff. tras.	6.02	0.00	1.52	SND	0.00	762.69	762.69				19306.50	25.314

Parete n. 124

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	Mz	My	Nu	MRdz	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
7	SLU	Diff. long.	0.00	0.00	1.52	-24502.00	2191.45	0.00	-24502.00	60103.60	0.00	27.426
5	SLU	Diff. tras.	0.00	0.00	1.52	-24382.00	0.00	-429.12	-24382.00	0.00	-11267.70	26.258
5	SLU	Diff. long.	1.32	0.00	1.52	-21539.80	-168.70	0.00	-815079.00	-58237.70	0.00	37.841
5	SLU	Diff. tras.	1.32	0.00	1.52	-21539.80	0.00	24.95	-815079.00	0.00	10935.80	37.841
7	SLU	Diff. long.	2.64	0.00	1.52	-17379.30	-2400.44	0.00	-17379.30	-55604.90	0.00	23.165
5	SLU	Diff. tras.	2.64	0.00	1.52	-17562.90	0.00	553.63	-17562.90	0.00	10471.00	18.913
7	SLU	Diff. long.	3.96	0.00	1.52	-9172.48	-3831.45	0.00	-9172.48	-50366.50	0.00	13.146
5	SLU	Diff. tras.	3.96	0.00	1.52	-9213.18	0.00	-1733.80	-9213.18	0.00	-9491.27	5.474
7	SLU	Diff. long.	5.28	0.00	1.52	-9209.23	-1952.20	0.00	-9209.23	-50389.60	0.00	25.812
5	SLU	Diff. tras.	5.28	0.00	1.52	-9056.08	0.00	-426.40	-9056.08	0.00	-9472.93	22.216
7	SLU	Diff. long.	6.60	0.00	1.52	-8837.22	-555.63	0.00	-8837.22	-50151.10	0.00	90.260
5	SLU	Diff. tras.	6.60	0.00	1.52	-8418.49	0.00	808.99	-8418.49	0.00	9397.88	11.617
5	SLU	Loc.	3.96	1.23	1.52	799.19	0.00	-437.20	799.19	0.00	-2170.13	4.964

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	Mz	My	Nu	M'yz	M'ydy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1	SND	Diff. long.	0.00	0.00	1.52	-5784.39	19779.40	0.00	-5784.39	34507.90	0.00	1.745
1	SND	Diff. long.	1.32	0.00	1.52	-5893.45	-12580.00	0.00	-5893.45	-34573.00	0.00	2.748
1	SND	Diff. long.	2.64	0.00	1.52	-5942.79	-10375.20	0.00	-5942.79	-34601.50	0.00	3.335
1	SND	Diff. long.	3.96	0.00	1.52	635.44	-11610.50	0.00	635.44	-30698.60	0.00	2.644
1	SND	Diff. long.	5.28	0.00	1.52	-3226.87	-5231.51	0.00	-3226.87	-32999.20	0.00	6.308
3	SND	Diff. tras.	6.60	0.00	1.52	-6040.86	0.00	1660.43	-6040.86	0.00	8219.54	4.950
3	SND	Loc.	0.00	1.23	1.52	5365.44	0.00	-557.26	5365.44	0.00	-1454.46	2.610

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	Mz	My	σ _c	σ _t
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN/cmq>	<daN/cmq>
10	SLE R	Diff. long.	0.00	0.00	1.52	-18676.80	1661.73	0.00	5.21	77.14
14	SLE Q	Diff. long.	0.00	0.00	1.52	-18087.40	1492.86	0.00	4.95	73.38
10	SLE R	Diff. long.	1.32	0.00	1.52	-16410.50	-154.73	0.00	3.53	52.91
9	SLE R	Diff. long.	1.32	0.00	1.52	-16267.90	-150.96	0.00	3.50	52.42
14	SLE Q	Diff. long.	1.32	0.00	1.52	-15921.50	-132.28	0.00	3.41	51.13
8	SLE R	Diff. tras.	2.64	0.00	1.52	-13353.80	0.00	410.93	4.43	60.00
10	SLE R	Diff. long.	2.64	0.00	1.52	-13231.40	-1822.58	0.00	4.21	62.00
14	SLE Q	Diff. tras.	2.64	0.00	1.52	-12902.90	0.00	373.26	4.18	56.91
8	SLE R	Diff. tras.	3.96	0.00	1.52	-7033.00	0.00	-1292.21	10.93	264.14
14	SLE Q	Diff. tras.	3.96	0.00	1.52	-6873.96	0.00	-1179.91	9.84	219.27
8	SLE R	Diff. tras.	5.28	0.00	1.52	-6923.39	0.00	-314.54	2.71	35.64
10	SLE R	Diff. long.	5.28	0.00	1.52	-7025.49	-1477.75	0.00	2.64	38.73
14	SLE Q	Diff. tras.	5.28	0.00	1.52	-6765.91	0.00	-280.76	2.54	33.64
8	SLE R	Diff. tras.	6.60	0.00	1.52	-6439.84	0.00	608.50	4.32	51.43
14	SLE Q	Diff. tras.	6.60	0.00	1.52	-6258.34	0.00	565.73	4.00	48.12
8	SLE R	Loc.	3.96	1.23	1.52	613.11	0.00	-320.89	19.82	795.13
14	SLE Q	Loc.	3.96	1.23	1.52	568.23	0.00	-280.36	17.45	703.78

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	Mz	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>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
14	SLE Q	Diff. tras.	3.96	0.00	1.52	-6873.96	0.00	-1179.91	33.00	300.00	0.50	12.00	216.26	7.92	991.30	219.27	0.06	0.02
11	SLE F	Diff. tras.	3.96	0.00	1.52	-6906.02	0.00	-1206.14	33.00	300.00	0.50	12.00	217.29	7.92	998.13	229.90	0.07	0.02
14	SLE Q	Loc.	3.96	1.23	1.52	568.23	0.00	-280.36	33.00	123.50	0.50	12.00	258.40	1.13	181.34	703.78	0.20	0.09
11	SLE F	Loc.	3.96	1.23	1.52	562.54	0.00	-290.31	33.00	123.50	0.50	12.00	259.01	1.13	181.91	721.54	0.21	0.09

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv	Xi	Xf	TCC	Ty	Tz	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
		<m>	<m>	<m>		<daN>	<daN>	<daN>		<daN>	<daN>	<daN>	
3	Diff. long.	0.00	0.00	1.52	SND	8438.67	0.00	8438.67	2.50	43842.40	114939.00	43842.40	5.195
3	Diff. tras.	0.00	0.00	1.52	SND	0.00	-2244.47	2244.47				20201.50	9.001
3	Diff. long.	1.32	0.00	1.52	SND	-8618.96	0.00	8618.96	2.50	43842.40	115032.00	43842.40	5.087
3	Diff. tras.	1.32	0.00	1.52	SND	0.00	1747.88	1747.88				20282.30	11.604
3	Diff. long.	2.64	0.00	1.52	SND	-8502.41	0.00	8502.41	2.50	43842.40	115156.00	43842.40	5.156
3	Diff. tras.	2.64	0.00	1.52	SND	0.00	1519.86	1519.86				20389.30	13.415

1	Diff. long.	3.96	0.00	1.52	SND	9584.11	0.00	9584.11	2.50	43842.40	113875.00	43842.40	4.574
3	Diff. tras.	3.96	0.00	1.52	SND	0.00	1946.32	1946.32				19621.90	10.082
1	Diff. long.	5.28	0.00	1.52	SND	9941.11	0.00	9941.11	2.50	43842.40	114363.00	43842.40	4.410
3	Diff. tras.	5.28	0.00	1.52	SND	0.00	1679.49	1679.49				19895.60	11.846
1	Diff. long.	6.60	0.00	1.52	SND	7174.84	0.00	7174.84	2.50	43842.40	114765.00	43842.40	6.111
3	Diff. tras.	6.60	0.00	1.52	SND	0.00	-957.06	957.06				20071.80	20.972

Parete n. 125

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	4.10	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	Mz	My	Nu	MRdz	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
5	SLU	Diff. long.	0.00	0.00	1.32	-18342.00	1758.42	0.00	-18342.00	57837.70	0.00	32.892
5	SLU	Diff. tras.	0.00	0.00	1.32	-18342.00	0.00	-3568.62	-18342.00	0.00	-12247.50	3.432
5	SLU	Diff. long.	1.27	0.00	1.32	-17835.90	-47.19	0.00	-733027.00	-57570.90	0.00	41.098
5	SLU	Diff. tras.	1.27	0.00	1.32	-17835.90	0.00	-101.20	-733027.00	0.00	-12189.90	41.098
5	SLU	Diff. long.	2.53	0.00	1.32	-17512.70	-1717.05	0.00	-17512.70	-57402.30	0.00	33.431
5	SLU	Diff. tras.	2.53	0.00	1.32	-17512.70	0.00	3789.82	-17512.70	0.00	12153.40	3.207
5	SLU	Diff. long.	3.80	0.00	1.32	-16777.60	-3882.43	0.00	-16777.60	-57011.50	0.00	14.684
5	SLU	Diff. tras.	3.80	0.00	1.32	-16777.60	0.00	7952.52	-16777.60	0.00	12069.40	1.518
5	SLU	Loc.	3.80	0.00	0.57	-10678.00	0.00	4741.66	-10678.00	0.00	5325.17	1.123

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	Mz	My	Nu	M'ydz	M'ydy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1	SND	Diff. long.	0.00	0.00	1.32	-4518.18	15979.50	0.00	-4518.18	34244.10	0.00	2.143
1	SND	Diff. long.	1.27	0.00	1.32	-7085.22	-7278.50	0.00	-7085.22	-35487.20	0.00	4.876
3	SND	Diff. tras.	2.53	0.00	1.32	-10987.20	0.00	2773.62	-10987.20	0.00	10556.50	3.806
3	SND	Diff. tras.	3.80	0.00	1.32	-9131.15	0.00	6193.74	-9131.15	0.00	10343.90	1.670
3	SND	Loc.	3.80	0.00	0.57	-4258.76	0.00	3713.64	-4258.76	0.00	4224.36	1.138

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	Mz	My	σ_c	σ_f
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN/cmq>	<daN/cmq>
8	SLE R	Diff. tras.	0.00	0.00	1.32	-13621.50	0.00	-2599.78	22.64	472.50
14	SLE Q	Diff. tras.	0.00	0.00	1.32	-12356.10	0.00	-2223.80	19.23	376.85
8	SLE R	Diff. tras.	1.27	0.00	1.32	-13195.50	0.00	-73.69	3.42	49.89
9	SLE R	Diff. tras.	1.27	0.00	1.32	-12166.20	0.00	-65.22	3.14	45.87
14	SLE Q	Diff. tras.	1.27	0.00	1.32	-11835.10	0.00	-63.02	3.05	44.60
8	SLE R	Diff. tras.	2.53	0.00	1.32	-12892.80	0.00	2760.68	24.34	565.20
14	SLE Q	Diff. tras.	2.53	0.00	1.32	-11392.10	0.00	2360.64	20.74	468.19
8	SLE R	Diff. tras.	3.80	0.00	1.32	-12292.20	0.00	5802.08	52.75	1848.86
14	SLE Q	Diff. tras.	3.80	0.00	1.32	-10699.70	0.00	4983.78	45.30	1581.43
8	SLE R	Loc.	3.80	0.00	0.57	-7831.94	0.00	3459.90	87.41	2783.62
14	SLE Q	Loc.	3.80	0.00	0.57	-6842.73	0.00	2973.09	74.98	2377.58

Stato limite d'esercizio - Verifiche a fessurazione

	TCC	Zona	Zv	Xi	Xf	N	Mz	My	c	s	K ₂	Φ _{eq}	Δ _{sm}	A _s	A _c off	σ _s	ε _{sm}	Wk
			<m>	<m>	<m>	<daN>	<daNm>	<daNmm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmqr>		<mm>
14	SLE Q	Diff. tras.	0.00	0.00	1.32	-12356.10	0.00	-2223.80	33.00	300.00	0.50	16.00	197.95	10.05	829.07	376.85	0.11	0.04
11	SLE F	Diff. tras.	0.00	0.00	1.32	-12673.60	0.00	-2318.56	33.00	300.00	0.50	16.00	198.76	10.05	834.14	400.92	0.12	0.04
14	SLE Q	Diff. tras.	2.53	0.00	1.32	-11392.10	0.00	2360.64	33.00	300.00	0.50	16.00	204.19	10.05	868.29	468.19	0.14	0.05
11	SLE F	Diff. tras.	2.53	0.00	1.32	-11768.70	0.00	2461.41	33.00	300.00	0.50	16.00	204.55	10.05	870.55	492.67	0.14	0.05
14	SLE Q	Diff. tras.	3.80	0.00	1.32	-10699.70	0.00	4983.78	33.00	300.00	0.50	16.00	222.16	10.05	981.18	1581.43	0.46	0.17
11	SLE F	Diff. tras.	3.80	0.00	1.32	-11099.10	0.00	5188.91	33.00	300.00	0.50	16.00	222.20	10.05	981.46	1648.46	0.48	0.18
14	SLE Q	Loc.	3.80	0.00	0.57	-6842.73	0.00	2973.09	33.00	300.00	0.50	16.00	217.90	4.02	381.76	2377.58	0.69	0.26
11	SLE F	Loc.	3.80	0.00	0.57	-7091.57	0.00	3095.12	33.00	300.00	0.50	16.00	217.92	4.02	381.82	2479.25	0.72	0.27

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv	Xi	Xf	TCC	Ty	Tz	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
		<m>	<m>	<m>		<daN>	<daN>	<daN>		<daN>	<daN>	<daN>	
1	Diff. long.	0.00	0.00	1.32	SND	7851.12	0.00	7851.12	2.50	37882.70	99074.70	37882.70	4.825
3	Diff. tras.	0.00	0.00	1.32	SND	0.00	-3761.79	3761.79				17639.00	4.689
1	Diff. long.	1.27	0.00	1.32	SND	-8073.82	0.00	8073.82	2.50	37882.70	99460.70	37882.70	4.692
3	Diff. tras.	1.27	0.00	1.32	SND	0.00	3117.15	3117.15				17823.30	5.718
1	Diff. long.	2.53	0.00	1.32	SND	-8119.35	0.00	8119.35	2.50	37882.70	100047.00	37882.70	4.666
5	Diff. tras.	2.53	0.00	1.32	SLU	0.00	3126.26	3126.26				18938.80	6.058
1	Diff. long.	3.80	0.00	1.32	SND	7743.32	0.00	7743.32	2.50	37882.70	99681.90	37882.70	4.892
5	Diff. tras.	3.80	0.00	1.32	SLU	0.00	-3991.92	3991.92				18843.60	4.720

Parete n. 126

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.	25.00	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	Mz	My	Nu	MRdz	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
7	SLU	Diff. long.	0.00	0.00	1.52	-12851.40	2896.47	0.00	-12851.40	52064.10	0.00	17.975

7	SLU	Diff. tras.	0.00	0.00	1.52	-12851.40	0.00	31.77	-689559.00	0.00	8048.50	53.656
7	SLU	Diff. long.	1.27	0.00	1.52	-11279.80	2791.95	0.00	-11279.80	51077.60	0.00	18.295
7	SLU	Diff. tras.	1.27	0.00	1.52	-11279.80	0.00	3.83	-689559.00	0.00	7903.53	61.132
7	SLU	Diff. long.	2.53	0.00	1.52	-7425.41	1742.16	0.00	-7425.41	48639.20	0.00	27.919
7	SLU	Diff. tras.	2.53	0.00	1.52	-7425.41	0.00	-172.27	-7425.41	0.00	-7546.52	43.807
7	SLU	Diff. long.	3.80	0.00	1.52	-5556.84	1786.81	0.00	-5556.84	47454.10	0.00	26.558
7	SLU	Diff. tras.	3.80	0.00	1.52	-5556.84	0.00	-1610.15	-5556.84	0.00	-7373.07	4.579
7	SLU	Loc.	2.53	0.00	0.25	-166.34	0.00	-55.91	-166.34	0.00	-1818.37	32.524

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
3	SND	Diff. tras.	0.00	0.00	1.52	-1886.33	0.00	5114.96	-1886.33	0.00	6186.29	1.209
1	SND	Diff. long.	1.27	0.00	1.52	-386.24	10471.80	0.00	-386.24	30953.00	0.00	2.956
1	SND	Diff. long.	2.53	0.00	1.52	-29.11	4678.73	0.00	-29.11	30740.90	0.00	6.570
3	SND	Diff. tras.	3.80	0.00	1.52	-1200.89	0.00	-3191.61	-1200.89	0.00	-6119.47	1.917
3	SND	Loc.	0.00	0.00	0.25	5342.64	0.00	776.93	5342.64	0.00	1149.61	1.480

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cm²>	σ _t <daN/cm²>
10	SLE R	Diff. long.	0.00	0.00	1.52	-9799.52	2179.82	0.00	4.48	65.68
14	SLE Q	Diff. long.	0.00	0.00	1.52	-9229.26	1876.17	0.00	4.06	59.48
10	SLE R	Diff. long.	1.27	0.00	1.52	-8591.89	2102.03	0.00	4.11	60.16
14	SLE Q	Diff. long.	1.27	0.00	1.52	-8032.28	1810.72	0.00	3.70	54.16
10	SLE R	Diff. long.	2.53	0.00	1.52	-5652.34	1306.97	0.00	2.63	38.56
14	SLE Q	Diff. long.	2.53	0.00	1.52	-5260.90	1092.81	0.00	2.33	34.22
10	SLE R	Diff. tras.	3.80	0.00	1.52	-4215.74	0.00	-1217.00	15.57	529.12
14	SLE Q	Diff. tras.	3.80	0.00	1.52	-3831.30	0.00	-1071.47	13.69	458.63
10	SLE R	Loc.	2.53	0.00	0.25	-137.70	0.00	-42.25	2.90	71.49
14	SLE Q	Loc.	2.53	0.00	0.25	-199.51	0.00	-36.99	2.39	46.04

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cm²>	A _{c eff} <cm²>	σ _s <daN/cm²>	ε _{sm}	W _k <mm>
14	SLE Q	Diff. tras.	3.80	0.00	1.52	-3831.30	0.00	-1071.47	33.00	300.00	0.50	12.00	208.36	7.92	939.18	458.63	0.13	0.05
12	SLE F	Diff. tras.	3.80	0.00	1.52	-3866.03	0.00	-1085.69	33.00	300.00	0.50	12.00	208.42	7.92	939.61	465.69	0.14	0.05
14	SLE Q	Loc.	2.53	0.00	0.25	-199.51	0.00	-36.99	33.00	123.50	0.50	12.00	132.30	2.26	124.97	46.04	0.01	0.00
12	SLE F	Loc.	2.53	0.00	0.25	-193.96	0.00	-37.48	33.00	123.50	0.50	12.00	132.76	2.26	125.84	48.30	0.01	0.00

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	1.52	SND	-6243.46	0.00	6243.46	2.50	43842.40	94895.80	43842.40	7.022
3	Diff. tras.	0.00	0.00	1.52	SND	0.00	3194.73	3194.73				17068.50	5.343
1	Diff. long.	1.27	0.00	1.52	SND	6423.74	0.00	6423.74	2.50	43842.40	94954.20	43842.40	6.825
3	Diff. tras.	1.27	0.00	1.52	SND	0.00	-2637.65	2637.65				17154.60	6.504
1	Diff. long.	2.53	0.00	1.52	SND	6034.25	0.00	6034.25	2.50	43842.40	94900.20	43842.40	7.266
3	Diff. tras.	2.53	0.00	1.52	SND	0.00	-1735.95	1735.95				17075.40	9.836
1	Diff. long.	3.80	0.00	1.52	SND	-6960.91	0.00	6960.91	2.50	43842.40	94895.80	43842.40	6.298
1	Diff. tras.	3.80	0.00	1.52	SND	0.00	2954.99	2954.99				16829.70	5.695

Parete n. 127

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	1.52	-17331.00	3292.75	0.00	-17331.00	61616.70	0.00	18.713
7	SLU	Diff. tras.	0.00	0.00	1.52	-17331.00	0.00	-607.86	-17331.00	0.00	-11461.70	18.856
7	SLU	Diff. long.	1.27	0.00	1.52	-15208.30	3660.18	0.00	-15208.30	60250.40	0.00	16.461
7	SLU	Diff. tras.	1.27	0.00	1.52	-15208.30	0.00	-233.36	-15208.30	0.00	-11214.80	48.057
7	SLU	Diff. long.	2.53	0.00	1.52	-9978.41	2768.26	0.00	-9978.41	56849.80	0.00	20.536
7	SLU	Diff. tras.	2.53	0.00	1.52	-9978.41	0.00	345.64	-9978.41	0.00	10605.50	30.683
7	SLU	Diff. long.	3.80	0.00	1.52	-7594.11	3440.00	0.00	-7594.11	55288.80	0.00	16.072
7	SLU	Diff. tras.	3.80	0.00	1.52	-7594.11	0.00	2177.93	-7594.11	0.00	10327.20	4.742

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
1	SND	Diff. long.	0.00	0.00	1.52	5327.79	30531.10	0.00	5327.79	32104.30	0.00	1.052
1	SND	Diff. long.	1.27	0.00	1.52	2454.35	19262.80	0.00	2454.35	33812.90	0.00	1.755
1	SND	Diff. long.	2.53	0.00	1.52	1660.99	8061.57	0.00	1660.99	34280.60	0.00	4.252
3	SND	Diff. tras.	3.80	0.00	1.52	-1498.17	0.00	3696.30	-1498.17	0.00	8692.30	2.352

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cm²>	σ _t <daN/cm²>
10	SLE R	Diff. long.	0.00	0.00	1.52	-13178.70	2485.76	0.00	4.69	68.82
14	SLE Q	Diff. long.	0.00	0.00	1.52	-12200.50	2166.94	0.00	4.23	62.20

10	SLE R	Diff. long.	1.27	0.00	1.52	-11552.50	2760.04	0.00	4.57	66.88
14	SLE Q	Diff. long.	1.27	0.00	1.52	-10615.50	2393.44	0.00	4.09	59.85
10	SLE R	Diff. long.	2.53	0.00	1.52	-7573.53	2081.16	0.00	3.21	46.94
14	SLE Q	Diff. long.	2.53	0.00	1.52	-6917.56	1766.71	0.00	2.83	41.33
10	SLE R	Diff. tras.	3.80	0.00	1.52	-5746.42	0.00	1644.48	13.98	451.08
14	SLE Q	Diff. tras.	3.80	0.00	1.52	-5132.96	0.00	1451.86	12.33	395.28

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	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>
14	SLE Q	Diff. tras.	3.80	0.00	1.52	-5132.96	0.00	1451.86	33.00	260.00	0.50	12.00	212.17	9.05	1102.12	395.28	0.12	0.04
12	SLE F	Diff. tras.	3.80	0.00	1.52	-5195.71	0.00	1470.77	33.00	260.00	0.50	12.00	212.19	9.05	1102.25	400.63	0.12	0.04

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	1.52	SND	-11121.30	0.00	11121.30	2.50	43842.40	113875.00	43842.40	3.942
3	Diff. tras.	0.00	0.00	1.52	SND	0.00	-4808.36	4808.36				19714.60	4.100
1	Diff. long.	1.27	0.00	1.52	SND	11526.80	0.00	11526.80	2.50	43842.40	113875.00	43842.40	3.804
3	Diff. tras.	1.27	0.00	1.52	SND	0.00	4199.27	4199.27				19755.80	4.705
1	Diff. long.	2.53	0.00	1.52	SND	11759.40	0.00	11759.40	2.50	43842.40	113875.00	43842.40	3.728
3	Diff. tras.	2.53	0.00	1.52	SND	0.00	2480.54	2480.54				19585.90	7.896
1	Diff. long.	3.80	0.00	1.52	SND	-12266.30	0.00	12266.30	2.50	43842.40	113875.00	43842.40	3.574
1	Diff. tras.	3.80	0.00	1.52	SND	0.00	-3328.21	3328.21				19283.40	5.794

Parete n. 128

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	TP	Fyk <daN/cmq>	Fyd <daN/cmq>
Oriz.	25.00	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/presoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	3.00	-28431.40	-4131.51	0.00	-28431.40	-186139.00	0.00	45.054
7	SLU	Diff. tras.	0.00	0.00	3.00	-28431.40	0.00	-710.75	-28431.40	0.00	-14692.80	20.672
7	SLU	Diff. long.	1.13	0.00	3.00	-24047.20	-2111.56	0.00	-1340840.00	-180721.00	0.00	55.758
7	SLU	Diff. tras.	1.13	0.00	3.00	-24047.20	0.00	-139.84	-1340840.00	0.00	-14283.90	55.758
7	SLU	Diff. long.	2.27	0.00	3.00	-18678.80	-1017.53	0.00	-1340840.00	-173884.00	0.00	71.784
7	SLU	Diff. tras.	2.27	0.00	3.00	-18678.80	0.00	196.70	-18678.80	0.00	13782.20	70.066
7	SLU	Diff. long.	3.40	0.00	3.00	-9015.42	-6788.98	0.00	-9015.42	-161417.00	0.00	23.776
7	SLU	Diff. tras.	3.40	0.00	3.00	-9015.42	0.00	331.35	-9015.42	0.00	12885.30	38.887
7	SLU	Loc.	0.00	0.00	0.60	-6919.48	0.00	-68.41	-273478.00	0.00	-3534.77	39.523

Stato limite elastico - Verifiche a flessione/presoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
3	SND	Diff. long.	0.00	0.00	3.00	4274.11	-39228.00	0.00	4274.11	-93499.60	0.00	2.383
3	SND	Diff. long.	1.13	0.00	3.00	-77.28	-22768.00	0.00	-77.28	-98555.70	0.00	4.329
1	SND	Diff. long.	2.27	0.00	3.00	-6763.80	-12596.00	0.00	-6763.80	-106240.00	0.00	8.434
3	SND	Diff. tras.	3.40	0.00	3.00	-2021.84	0.00	1311.90	-2021.84	0.00	10553.20	8.044
3	SND	Loc.	0.00	0.00	0.60	9525.14	0.00	-450.30	9525.14	0.00	-1591.22	3.534

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cmq>	σ _ε <daN/cmq>
10	SLE R	Diff. tras.	0.00	0.00	3.00	-21581.20	0.00	-536.18	4.32	57.38
8	SLE R	Diff. tras.	0.00	0.00	3.00	-20148.40	0.00	-497.88	4.03	53.49
14	SLE Q	Diff. tras.	0.00	0.00	3.00	-19738.00	0.00	-479.17	3.92	52.13
10	SLE R	Diff. long.	1.13	0.00	3.00	-18233.50	-1606.66	0.00	2.71	40.44
8	SLE R	Diff. long.	1.13	0.00	3.00	-16934.40	-1506.75	0.00	2.52	37.61
14	SLE Q	Diff. long.	1.13	0.00	3.00	-16543.20	-1507.69	0.00	2.47	36.87
10	SLE R	Diff. tras.	2.27	0.00	3.00	-14150.70	0.00	149.11	2.23	31.42
8	SLE R	Diff. tras.	2.27	0.00	3.00	-13094.60	0.00	137.27	2.06	29.05
14	SLE Q	Diff. tras.	2.27	0.00	3.00	-12754.10	0.00	134.59	2.01	28.32
10	SLE R	Diff. long.	3.40	0.00	3.00	-6824.10	-5137.53	0.00	2.25	33.23
14	SLE Q	Diff. long.	3.40	0.00	3.00	-6105.82	-4573.28	0.00	2.01	29.60
10	SLE R	Loc.	0.00	0.00	0.60	-5247.94	0.00	-51.51	4.21	58.29
8	SLE R	Loc.	2.27	0.00	0.60	-3267.41	0.00	6.90	2.25	32.50
14	SLE Q	Loc.	0.00	0.00	0.60	-4778.84	0.00	-45.11	3.81	52.81

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	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>
14	SLE Q	Diff. long.	3.40	0.00	3.00	-6105.82	-4573.28	0.00	33.00	172.00	0.50	12.00	195.31	2.26	243.75	8.34	0.00	0.00
12	SLE F	Diff. long.	3.40	0.00	3.00	-6183.47	-4631.64	0.00	33.00	172.00	0.50	12.00	195.31	2.26	243.75	8.45	0.00	0.00

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	3.00	SND	-20600.50	0.00	20600.50	2.50	87360.30	189854.00	87360.30	4.241
3	Diff. tras.	0.00	0.00	3.00	SND	0.00	-2550.23	2550.23				33107.70	12.982
1	Diff. long.	1.13	0.00	3.00	SND	21398.70	0.00	21398.70	2.50	87360.30	190035.00	87360.30	4.082
3	Diff. tras.	1.13	0.00	3.00	SND	0.00	1413.65	1413.65				33117.40	23.427

1	Diff. long.	2.27	0.00	3.00	SND	20962.70	0.00	20962.70	2.50	87360.30	190125.00	87360.30	4.167
3	Diff. tras.	2.27	0.00	3.00	SND	0.00	1464.20	1464.20				33699.90	23.016
1	Diff. long.	3.40	0.00	3.00	SND	-17508.10	0.00	17508.10	2.50	87360.30	189312.00	87360.30	4.990
3	Diff. tras.	3.40	0.00	3.00	SND	0.00	1598.32	1598.32				33363.60	20.874

Parete n. 129

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	1.32	-22211.60	2821.78	0.00	-22211.60	50244.00	0.00	17.806
7	SLU	Diff. tras.	0.00	0.00	1.32	-22211.60	0.00	93.34	-716309.00	0.00	10840.20	32.249
7	SLU	Diff. long.	1.27	0.00	1.32	-19089.90	-4.83	0.00	-716309.00	-48585.30	0.00	37.523
7	SLU	Diff. tras.	1.27	0.00	1.32	-19089.90	0.00	62.34	-716309.00	0.00	10477.60	37.523
7	SLU	Diff. long.	2.53	0.00	1.32	-12255.00	-2539.82	0.00	-12255.00	-44918.70	0.00	17.686
7	SLU	Diff. tras.	2.53	0.00	1.32	-12255.00	0.00	35.75	-716309.00	0.00	9682.38	58.450
6	SLU	Diff. long.	3.80	0.00	1.32	-4426.50	-1716.76	0.00	-4426.50	-40677.90	0.00	23.695
7	SLU	Diff. tras.	3.80	0.00	1.32	-4867.14	0.00	-23.57	-716309.00	0.00	-8820.93	>100
7	SLU	Loc.	0.00	1.02	1.32	-6573.23	0.00	23.63	-165857.00	0.00	3048.73	25.232

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
1	SND	Diff. long.	0.00	0.00	1.32	-5023.99	18861.40	0.00	-5023.99	28864.90	0.00	1.530
1	SND	Diff. long.	1.27	0.00	1.32	-7159.28	-7116.40	0.00	-7159.28	-29933.70	0.00	4.206
3	SND	Diff. tras.	2.53	0.00	1.32	-7199.66	0.00	720.07	-7199.66	0.00	8305.06	11.534
1	SND	Diff. long.	3.80	0.00	1.32	3438.98	-8510.26	0.00	3438.98	-24567.20	0.00	2.887
1	SND	Loc.	0.00	1.02	1.32	8832.01	0.00	274.06	8832.01	0.00	1008.31	3.679

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cm²>	σ _t <daN/cm²>
10	SLE R	Diff. long.	0.00	0.00	1.32	-16757.70	2117.83	0.00	6.21	91.15
9	SLE R	Diff. long.	0.00	0.00	1.32	-16126.90	2033.66	0.00	5.97	87.66
14	SLE Q	Diff. long.	0.00	0.00	1.32	-15589.50	1930.82	0.00	5.73	84.21
10	SLE R	Diff. tras.	1.27	0.00	1.32	-14387.00	0.00	46.39	3.63	53.59
9	SLE R	Diff. tras.	1.27	0.00	1.32	-13802.90	0.00	44.99	3.48	51.44
14	SLE Q	Diff. tras.	1.27	0.00	1.32	-13326.70	0.00	43.18	3.36	49.65
10	SLE R	Diff. long.	2.53	0.00	1.32	-9260.79	-1901.36	0.00	4.20	61.24
8	SLE R	Diff. long.	2.53	0.00	1.32	-8777.70	-1883.43	0.00	4.07	59.25
14	SLE Q	Diff. long.	2.53	0.00	1.32	-8464.81	-1734.13	0.00	3.84	55.92
10	SLE R	Diff. long.	3.80	0.00	1.32	-3684.19	-1290.55	0.00	2.38	34.28
8	SLE R	Diff. long.	3.80	0.00	1.32	-3332.47	-1280.23	0.00	2.36	33.88
14	SLE Q	Diff. long.	3.80	0.00	1.32	-3285.93	-1159.14	0.00	2.14	30.77
10	SLE R	Loc.	0.00	1.02	1.32	-4952.14	0.00	18.20	5.84	81.32
9	SLE R	Loc.	3.80	1.02	1.32	-205.76	0.00	-12.22	0.47	5.91
14	SLE Q	Loc.	0.00	1.02	1.32	-4581.53	0.00	15.60	5.38	74.96

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cm²>	A _{c eff} <cm²>	σ _s <daN/cm²>	ε _{sm}	W _k <mm>
14	SLE Q	Diff. long.	3.80	0.00	1.32	-3285.93	-1159.14	0.00	33.00	222.00	0.50	12.00	262.94	2.26	292.50	10.25	0.00	0.00
11	SLE F	Diff. long.	3.80	0.00	1.32	-3284.30	-1175.63	0.00	33.00	222.00	0.50	12.00	272.57	2.26	292.50	10.96	0.00	0.00

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	1.32	SND	11572.40	0.00	11572.40	2.50	37941.70	99305.20	37941.70	3.279
1	Diff. tras.	0.00	0.00	1.32	SND	0.00	1477.12	1477.12				17410.10	11.787
1	Diff. long.	1.27	0.00	1.32	SND	-11910.80	0.00	11910.80	2.50	37941.70	99626.80	37941.70	3.186
1	Diff. tras.	1.27	0.00	1.32	SND	0.00	-838.88	838.88				17688.70	21.086
1	Diff. long.	2.53	0.00	1.32	SND	-12013.50	0.00	12013.50	2.50	37941.70	99525.80	37941.70	3.158
3	Diff. tras.	2.53	0.00	1.32	SND	0.00	-607.39	607.39				17694.00	29.131
1	Diff. long.	3.80	0.00	1.32	SND	6914.11	0.00	6914.11	2.50	37941.70	98548.60	37941.70	5.488
3	Diff. tras.	3.80	0.00	1.32	SND	0.00	920.90	920.90				16754.50	18.194

Parete n. 130

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
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>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	2.00	-28032.90	-2341.79	0.00	-738127.00	-96929.10	0.00	26.331
7	SLU	Diff. tras.	0.00	0.00	2.00	-28032.90	0.00	185.76	-738127.00	0.00	8748.53	26.331
7	SLU	Diff. long.	1.27	0.00	2.00	-25537.10	-2715.67	0.00	-738127.00	-95100.10	0.00	28.904

7	SLU	Diff. tras.	1.27	0.00	2.00	-25537.10	0.00	-32.61	-738127.00	0.00	-8581.31	28.904
7	SLU	Diff. long.	2.53	0.00	2.00	-22892.70	-3397.62	0.00	-22892.70	-93054.80	0.00	27.388
7	SLU	Diff. tras.	2.53	0.00	2.00	-22892.70	0.00	-279.58	-22892.70	0.00	-8403.76	30.059
7	SLU	Diff. long.	3.80	0.00	2.00	-18384.50	-4033.60	0.00	-18384.50	-89458.90	0.00	22.178
7	SLU	Diff. tras.	3.80	0.00	2.00	-18384.50	0.00	-301.79	-18384.50	0.00	-8100.40	26.842
7	SLU	Loc.	0.00	0.00	0.20	-3336.07	0.00	19.42	-83548.90	0.00	1524.06	25.044
7	SLU	Loc.	0.00	1.80	2.00	-2249.29	0.00	7.86	-83548.90	0.00	1455.24	37.145

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'yz <daNm>	M'ydy <daNm>	Sic.
3	SND	Diff. long.	0.00	0.00	2.00	-12290.30	-39742.90	0.00	-12290.30	-60115.90	0.00	1.513
3	SND	Diff. long.	1.27	0.00	2.00	-10469.60	-22891.20	0.00	-10469.60	-58789.80	0.00	2.568
3	SND	Diff. long.	2.53	0.00	2.00	-8690.19	-7507.87	0.00	-8690.19	-57497.10	0.00	7.658
3	SND	Diff. long.	3.80	0.00	2.00	-6954.36	-11233.30	0.00	-6954.36	-56221.50	0.00	5.005
3	SND	Loc.	0.00	0.00	0.20	-10463.90	0.00	-25.48	-65846.70	0.00	-1886.87	6.293
3	SND	Loc.	0.00	1.80	2.00	-9515.14	0.00	-53.50	-65846.70	0.00	-1832.12	6.920

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ_c <daN/cm ² >	σ_t <daN/cm ² >
10	SLE R	Diff. long.	0.00	0.00	2.00	-21251.30	-1732.73	0.00	6.11	90.90
8	SLE R	Diff. long.	0.00	0.00	2.00	-20373.80	-1991.45	0.00	6.08	90.36
14	SLE Q	Diff. long.	0.00	0.00	2.00	-19662.60	-1716.69	0.00	5.73	85.21
10	SLE R	Diff. long.	1.27	0.00	2.00	-19355.30	-2018.00	0.00	5.86	87.07
8	SLE R	Diff. long.	1.27	0.00	2.00	-18424.50	-2132.76	0.00	5.72	84.94
14	SLE Q	Diff. long.	1.27	0.00	2.00	-17798.90	-1901.67	0.00	5.42	80.51
10	SLE R	Diff. long.	2.53	0.00	2.00	-17326.70	-2533.20	0.00	5.73	85.01
8	SLE R	Diff. long.	2.53	0.00	2.00	-16435.60	-2496.41	0.00	5.50	81.55
14	SLE Q	Diff. long.	2.53	0.00	2.00	-15824.80	-2292.90	0.00	5.22	77.44
10	SLE R	Diff. long.	3.80	0.00	2.00	-13881.20	-3011.47	0.00	5.26	77.66
8	SLE R	Diff. long.	3.80	0.00	2.00	-13179.50	-2852.08	0.00	4.99	73.67
14	SLE Q	Diff. long.	3.80	0.00	2.00	-12606.80	-2671.35	0.00	4.73	69.91
10	SLE R	Loc.	0.00	0.00	0.20	-2519.35	0.00	14.77	7.12	89.80
9	SLE R	Loc.	2.53	0.00	0.20	-2171.81	0.00	-19.79	6.58	81.49
14	SLE Q	Loc.	0.00	0.00	0.20	-2351.15	0.00	13.54	6.63	83.67
10	SLE R	Loc.	0.00	1.80	2.00	-1714.49	0.00	6.04	4.59	58.80
9	SLE R	Loc.	3.80	1.80	2.00	-568.03	0.00	-12.50	2.18	25.54
14	SLE Q	Loc.	0.00	1.80	2.00	-1561.73	0.00	6.00	4.21	53.85

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctg θ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	Diff. long.	0.00	0.00	2.00	SND	-11830.40	0.00	11830.40	2.50	57856.70	102053.00	57856.70	4.890
3	Diff. tras.	0.00	0.00	2.00	SND	0.00	-1283.16	1283.16				18664.90	14.546
3	Diff. long.	1.27	0.00	2.00	SND	12725.20	0.00	12725.20	2.50	57856.70	101776.00	57856.70	4.547
1	Diff. tras.	1.27	0.00	2.00	SND	0.00	617.13	617.13				18818.00	30.493
3	Diff. long.	2.53	0.00	2.00	SND	12540.10	0.00	12540.10	2.50	57856.70	101506.00	57856.70	4.614
1	Diff. tras.	2.53	0.00	2.00	SND	0.00	497.97	497.97				18551.90	37.255
3	Diff. long.	3.80	0.00	2.00	SND	-10886.60	0.00	10886.60	2.50	57856.70	101242.00	57856.70	5.314
1	Diff. tras.	3.80	0.00	2.00	SND	0.00	-566.06	566.06				18240.60	32.224

Parete n. 131

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	4.10	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>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
5	SLU	Diff. long.	0.00	0.00	2.00	-23891.90	625.58	0.00	-738127.00	93806.80	0.00	30.894
5	SLU	Diff. tras.	0.00	0.00	2.00	-23891.90	0.00	169.62	-738127.00	0.00	8460.63	30.894
5	SLU	Diff. long.	1.27	0.00	2.00	-23963.00	-3350.79	0.00	-23963.00	-93864.70	0.00	28.013
5	SLU	Diff. tras.	1.27	0.00	2.00	-23963.00	0.00	41.97	-738127.00	0.00	8465.42	30.803
5	SLU	Diff. long.	2.53	0.00	2.00	-22473.90	-9322.64	0.00	-22473.90	-92689.30	0.00	9.942
5	SLU	Diff. tras.	2.53	0.00	2.00	-22473.90	0.00	-241.93	-738127.00	0.00	-8367.77	32.844
5	SLU	Diff. long.	3.80	0.00	2.00	-17805.30	-17289.20	0.00	-17805.30	-88960.10	0.00	5.145
5	SLU	Diff. tras.	3.80	0.00	2.00	-17805.30	0.00	-850.46	-17805.30	0.00	-8060.95	9.478
5	SLU	Loc.	3.80	0.00	0.20	-8353.04	0.00	-372.56	-8353.04	0.00	-1805.68	4.847

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'yz <daNm>	M'ydy <daNm>	Sic.
3	SND	Diff. long.	0.00	0.00	2.00	7767.17	31519.90	0.00	7767.17	45226.90	0.00	1.435
3	SND	Diff. long.	1.27	0.00	2.00	2030.40	-19271.40	0.00	2030.40	-49571.20	0.00	2.572
3	SND	Diff. long.	2.53	0.00	2.00	-8878.37	-14440.20	0.00	-8878.37	-57652.80	0.00	3.993
3	SND	Diff. long.	3.80	0.00	2.00	-10635.60	-11922.50	0.00	-10635.60	-58935.10	0.00	4.943
1	SND	Loc.	3.80	0.00	0.20	-4933.78	0.00	-358.90	-4933.78	0.00	-1532.58	4.270

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ_c <daN/cm ² >	σ_t <daN/cm ² >
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8	SLE R	Diff. tras.	0.00	0.00	2.00	-17644.30	0.00	123.79	4.96	69.08
9	SLE R	Diff. tras.	0.00	0.00	2.00	-16195.20	0.00	110.74	4.53	63.23
14	SLE Q	Diff. tras.	0.00	0.00	2.00	-15743.80	0.00	106.40	4.40	61.39
8	SLE R	Diff. long.	1.27	0.00	2.00	-17636.30	-2452.73	0.00	5.75	85.26
10	SLE R	Diff. long.	1.27	0.00	2.00	-16068.30	-2224.81	0.00	5.23	77.59
14	SLE Q	Diff. long.	1.27	0.00	2.00	-15573.10	-2130.61	0.00	5.06	74.95
8	SLE R	Diff. long.	2.53	0.00	2.00	-16477.00	-6813.89	0.00	8.50	124.61
14	SLE Q	Diff. long.	2.53	0.00	2.00	-14377.20	-5888.95	0.00	7.37	108.08
8	SLE R	Diff. long.	3.80	0.00	2.00	-13012.70	-12635.80	0.00	16.09	309.24
14	SLE Q	Diff. long.	3.80	0.00	2.00	-11242.50	-10917.60	0.00	13.90	267.22
8	SLE R	Loc.	3.80	0.00	0.20	-6104.73	0.00	-272.00	33.14	353.62
10	SLE R	Loc.	3.80	0.00	0.20	-5463.82	0.00	-243.13	29.63	316.29
14	SLE Q	Loc.	3.80	0.00	0.20	-5274.36	0.00	-234.26	28.57	305.04

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	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>
14	SLE Q	Diff. long.	2.53	0.00	2.00	-14377.20	-5888.95	0.00	35.00	131.93	0.50	12.00	136.02	2.26	124.45	8.88	0.00	0.00
11	SLE F	Diff. long.	2.53	0.00	2.00	-14905.40	-6121.95	0.00	35.00	131.93	0.50	12.00	137.12	2.26	126.52	9.44	0.00	0.00
14	SLE Q	Diff. long.	3.80	0.00	2.00	-11242.50	-10917.60	0.00	35.00	131.93	0.50	12.00	124.38	4.52	205.00	267.22	0.08	0.02
11	SLE F	Diff. long.	3.80	0.00	2.00	-11688.10	-11350.10	0.00	35.00	131.93	0.50	12.00	124.38	4.52	205.00	277.79	0.08	0.02

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	Diff. long.	0.00	0.00	2.00	SND	17243.10	0.00	17243.10	2.50	90308.80	100081.00	90308.80	5.237
3	Diff. tras.	0.00	0.00	2.00	SND	0.00	841.64	841.64				16967.40	20.160
3	Diff. long.	1.27	0.00	2.00	SND	-17827.70	0.00	17827.70	2.50	90308.80	100081.00	90308.80	5.066
3	Diff. tras.	1.27	0.00	2.00	SND	0.00	-204.64	204.64				16967.40	82.912
3	Diff. long.	2.53	0.00	2.00	SND	-17839.70	0.00	17839.70	2.50	90308.80	101431.00	90308.80	5.062
1	Diff. tras.	2.53	0.00	2.00	SND	0.00	-334.85	334.85				18400.40	54.952
3	Diff. long.	3.80	0.00	2.00	SND	17623.90	0.00	17623.90	2.50	90308.80	101698.00	90308.80	5.124
1	Diff. tras.	3.80	0.00	2.00	SND	0.00	1054.15	1054.15				18272.20	17.334

Parete n. 132

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
Oriz.	20.00	4.10	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>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
5	SLU	Diff. long.	0.00	0.00	1.90	-8520.02	-3421.49	0.00	-8520.02	-61722.80	0.00	18.040
5	SLU	Diff. tras.	0.00	0.00	1.90	-8520.02	0.00	-101.62	-8520.02	0.00	-6193.43	60.946
5	SLU	Diff. long.	1.27	0.00	1.90	-6058.96	-1622.96	0.00	-6058.96	-59779.60	0.00	36.834
5	SLU	Diff. tras.	1.27	0.00	1.90	-6058.96	0.00	41.88	-687502.00	0.00	6030.56	>100
5	SLU	Diff. long.	2.53	0.00	1.90	35.20	225.16	0.00	35.20	54549.10	0.00	>100
5	SLU	Diff. tras.	2.53	0.00	1.90	35.20	0.00	44.40	35.20	0.00	5519.16	>100
5	SLU	Diff. long.	3.80	0.00	1.90	309.85	181.77	0.00	309.85	54333.10	0.00	>100
5	SLU	Diff. tras.	3.80	0.00	1.90	309.85	0.00	-25.09	309.85	0.00	-5498.74	>100

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
3	SND	Diff. tras.	0.00	0.00	1.90	38271.40	0.00	-949.83	38271.40	0.00	-1404.52	1.479
3	SND	Diff. long.	1.27	0.00	1.90	29427.70	-2609.25	0.00	29427.70	-13567.40	0.00	5.200
3	SND	Diff. tras.	2.53	0.00	1.90	-12526.20	0.00	1.96	-625543.00	0.00	5506.12	49.939
3	SND	Diff. tras.	3.80	0.00	1.90	1557.06	0.00	-52.34	1557.06	0.00	-4422.29	84.486

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cmq>	σ _ε <daN/cmq>
8	SLE R	Diff. long.	0.00	0.00	1.90	-6403.03	-2493.99	0.00	3.55	51.70
14	SLE Q	Diff. long.	0.00	0.00	1.90	-6005.32	-2138.23	0.00	3.15	45.93
8	SLE R	Diff. long.	1.27	0.00	1.90	-4542.40	-1183.07	0.00	2.04	29.87
14	SLE Q	Diff. long.	1.27	0.00	1.90	-4230.46	-1014.53	0.00	1.83	26.86
8	SLE R	Diff. tras.	2.53	0.00	1.90	-26.94	0.00	32.54	0.61	26.24
14	SLE Q	Diff. tras.	2.53	0.00	1.90	-165.75	0.00	28.36	0.49	13.67
8	SLE R	Diff. tras.	3.80	0.00	1.90	226.66	0.00	-18.28	0.31	31.65
8	SLE R	Diff. long.	3.80	0.00	1.90	226.66	132.55	0.00	0.18	33.33
14	SLE Q	Diff. tras.	3.80	0.00	1.90	196.42	0.00	-15.58	0.27	27.21

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	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>
14	SLE Q	Diff. tras.	2.53	0.00	1.90	-165.75	0.00	28.36	35.00	300.00	0.50	12.00	208.63	7.92	914.60	13.67	0.00	0.00
11	SLE F	Diff. tras.	2.53	0.00	1.90	-130.37	0.00	29.41	35.00	300.00	0.50	12.00	213.38	7.92	945.94	16.76	0.00	0.00
14	SLE Q	Diff. long.	3.80	0.00	1.90	196.42	113.79	0.00	35.00	118.00	1.00	12.00	287.51	2.26	205.00	28.77	0.01	0.00
11	SLE F	Diff. long.	3.80	0.00	1.90	204.04	118.54	0.00	35.00	118.00	1.00	12.00	287.51	2.26	205.00	29.92	0.01	0.00

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	Diff. long.	0.00	0.00	1.90	SND	6117.14	0.00	6117.14	2.50	85698.90	94972.40	85698.90	14.010
3	Diff. tras.	0.00	0.00	1.90	SND	0.00	-1656.37	1656.37				16118.90	9.731
3	Diff. long.	1.27	0.00	1.90	SND	-5478.58	0.00	5478.58	2.50	85699.00	94972.50	85699.00	15.643
3	Diff. tras.	1.27	0.00	1.90	SND	0.00	292.37	292.37				16118.90	55.132
1	Diff. long.	2.53	0.00	1.90	SND	-1612.03	0.00	1612.03	2.50	85698.90	94972.40	85698.90	53.162
3	Diff. tras.	2.53	0.00	1.90	SND	0.00	-481.34	481.34				16118.90	33.488
1	Diff. long.	3.80	0.00	1.90	SND	-568.21	0.00	568.21	2.50	85698.90	94972.40	85698.90	>100
3	Diff. tras.	3.80	0.00	1.90	SND	0.00	148.91	148.91				16118.90	>100

Parete n. 133

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
Oriz.	20.00	4.10	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>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
5	SLU	Diff. long.	0.00	0.00	2.00	-6373.54	3258.61	0.00	-6373.54	86334.60	0.00	26.494
5	SLU	Diff. tras.	0.00	0.00	2.00	-6373.54	0.00	93.19	-6373.54	0.00	7880.41	84.563
5	SLU	Diff. long.	1.27	0.00	2.00	-2841.08	1313.78	0.00	-2841.08	83428.40	0.00	63.503
7	SLU	Diff. tras.	1.27	0.00	2.00	-3079.69	0.00	8.95	-746978.00	0.00	7663.90	>100
5	SLU	Diff. long.	2.53	0.00	2.00	750.38	-345.11	0.00	750.38	-80020.20	0.00	>100
5	SLU	Diff. tras.	2.53	0.00	2.00	750.38	0.00	-71.49	750.38	0.00	-7393.79	>100
5	SLU	Diff. long.	3.80	0.00	2.00	2756.01	-2865.45	0.00	2756.01	-78380.50	0.00	27.354
5	SLU	Diff. tras.	3.80	0.00	2.00	2756.01	0.00	-122.88	2756.01	0.00	-7254.37	59.036
5	SLU	Loc.	3.80	1.80	2.00	1110.14	0.00	-50.09	1110.14	0.00	-1229.67	24.547

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
3	SND	Diff. long.	0.00	0.00	2.00	16418.50	31586.30	0.00	16418.50	41946.30	0.00	1.328
3	SND	Diff. long.	1.27	0.00	2.00	13685.50	16953.70	0.00	13685.50	44012.60	0.00	2.596
3	SND	Diff. long.	2.53	0.00	2.00	5926.77	-7896.47	0.00	5926.77	-49814.50	0.00	6.308
3	SND	Diff. long.	3.80	0.00	2.00	2170.98	-2795.03	0.00	2170.98	-52578.40	0.00	18.811
3	SND	Loc.	0.00	1.80	2.00	-9078.10	0.00	-39.07	-65846.70	0.00	-1783.70	7.253

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cm²>	σ _ε <daN/cm²>
8	SLE R	Diff. long.	0.00	0.00	2.00	-4878.01	2380.72	0.00	2.83	41.34
14	SLE Q	Diff. long.	0.00	0.00	2.00	-4811.44	2059.42	0.00	2.53	37.05
8	SLE R	Diff. long.	1.27	0.00	2.00	-2238.19	968.54	0.00	1.19	17.36
14	SLE Q	Diff. long.	1.27	0.00	2.00	-2371.55	861.12	0.00	1.13	16.55
8	SLE R	Diff. tras.	2.53	0.00	2.00	453.43	0.00	-52.37	0.78	54.11
14	SLE Q	Diff. tras.	2.53	0.00	2.00	137.67	0.00	-45.53	0.71	34.55
8	SLE R	Diff. long.	3.80	0.00	2.00	1977.23	-2057.58	0.00	2.43	257.37
14	SLE Q	Diff. long.	3.80	0.00	2.00	1612.80	-1683.09	0.00	1.99	210.28
8	SLE R	Loc.	3.80	1.80	2.00	794.81	0.00	-36.83	7.41	358.52
14	SLE Q	Loc.	3.80	1.80	2.00	643.80	0.00	-32.36	6.37	297.01

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ _{eq}	Δ _{sm} <mm>	A _s <cm²>	A _{c eff} <cm²>	σ _s <daN/cm²>	ε _{sm}	W _k <mm>
14	SLE Q	Diff. long.	0.00	0.00	2.00	-4811.44	2059.42	0.00	35.00	118.00	0.50	12.00	156.16	2.26	162.40	4.38	0.00	0.00
11	SLE F	Diff. long.	0.00	0.00	2.00	-4827.12	2142.26	0.00	35.00	118.00	0.50	12.00	171.30	2.26	190.94	5.59	0.00	0.00
14	SLE Q	Diff. tras.	2.53	0.00	2.00	137.67	0.00	-45.53	35.00	250.00	0.50	12.00	185.03	11.31	1084.11	34.55	0.01	0.00
11	SLE F	Diff. tras.	2.53	0.00	2.00	219.15	0.00	-47.24	35.00	250.00	0.50	12.00	187.09	11.31	1103.57	39.53	0.01	0.00
14	SLE Q	Diff. long.	3.80	0.00	2.00	1612.80	-1683.09	0.00	35.00	118.00	1.00	12.00	287.51	2.26	205.00	210.28	0.06	0.03
11	SLE F	Diff. long.	3.80	0.00	2.00	1706.75	-1779.50	0.00	35.00	118.00	1.00	12.00	287.51	2.26	205.00	222.41	0.06	0.03
14	SLE Q	Loc.	3.80	1.80	2.00	643.80	0.00	-32.36	35.00	84.00	0.50	12.00	139.64	1.13	65.63	297.01	0.09	0.02
11	SLE F	Loc.	3.80	1.80	2.00	682.71	0.00	-33.46	35.00	84.00	0.50	12.00	139.23	1.13	65.25	312.72	0.09	0.02

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	Diff. long.	0.00	0.00	2.00	SND	14853.80	0.00	14853.80	2.50	90308.80	100081.00	90308.80	6.080
3	Diff. tras.	0.00	0.00	2.00	SND	0.00	1305.45	1305.45				16967.40	12.997
3	Diff. long.	1.27	0.00	2.00	SND	-15097.90	0.00	15097.90	2.50	90308.80	100081.00	90308.80	5.982
3	Diff. tras.	1.27	0.00	2.00	SND	0.00	-146.85	146.85				16967.40	>100
3	Diff. long.	2.53	0.00	2.00	SND	-14707.50	0.00	14707.50	2.50	90308.80	100081.00	90308.80	6.140
1	Diff. tras.	2.53	0.00	2.00	SND	0.00	-161.34	161.34				16967.40	>100
3	Diff. long.	3.80	0.00	2.00	SND	14903.50	0.00	14903.50	2.50	90308.80	100081.00	90308.80	6.060
1	Diff. tras.	3.80	0.00	2.00	SND	0.00	473.17	473.17				16967.40	35.859

Parete n. 134

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	TP	Fyk <daN/cm²>	Fyd <daN/cm²>
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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
5	SLU	Diff. long.	0.00	0.00	1.32	-31044.10	-3653.60	0.00	-31044.10	-54883.50	0.00	15.022
5	SLU	Diff. tras.	0.00	0.00	1.32	-31044.10	0.00	3569.55	-31044.10	0.00	11863.40	3.323
5	SLU	Diff. long.	1.27	0.00	1.32	-27027.30	556.55	0.00	-716310.00	52786.90	0.00	26.503
5	SLU	Diff. tras.	1.27	0.00	1.32	-27027.30	0.00	204.22	-716310.00	0.00	11398.80	26.503
5	SLU	Diff. long.	2.53	0.00	1.32	-21261.40	4342.83	0.00	-21261.40	49740.30	0.00	11.453
5	SLU	Diff. tras.	2.53	0.00	1.32	-21261.40	0.00	-3848.60	-21261.40	0.00	-10730.30	2.788
5	SLU	Diff. long.	3.80	0.00	1.32	-14813.00	7301.18	0.00	-14813.00	46294.90	0.00	6.341
5	SLU	Diff. tras.	3.80	0.00	1.32	-14813.00	0.00	-5851.62	-14813.00	0.00	-9979.77	1.705
5	SLU	Loc.	2.53	0.00	0.30	-1153.65	0.00	-838.78	-1153.65	0.00	-2424.75	2.891

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'yz <daNm>	M'ydy <daNm>	Sic.
1	SND	Diff. long.	0.00	0.00	1.32	-15760.80	-17473.60	0.00	-15760.80	-34173.90	0.00	1.956
1	SND	Diff. long.	1.27	0.00	1.32	-17421.60	6316.91	0.00	-17421.60	34980.80	0.00	5.538
3	SND	Diff. tras.	2.53	0.00	1.32	-12142.80	0.00	-2912.10	-12142.80	0.00	-8884.76	3.051
3	SND	Diff. tras.	3.80	0.00	1.32	-5791.92	0.00	-4629.25	-5791.92	0.00	-8137.51	1.758
3	SND	Loc.	0.00	0.00	0.30	292.33	0.00	784.93	292.33	0.00	2072.61	2.640

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ_c <daN/cm ² >	σ_ϵ <daN/cm ² >
8	SLE R	Diff. tras.	0.00	0.00	1.32	-23279.80	0.00	2598.93	21.49	244.29
14	SLE Q	Diff. tras.	0.00	0.00	1.32	-21590.40	0.00	2219.90	18.04	210.45
8	SLE R	Diff. tras.	1.27	0.00	1.32	-20248.30	0.00	148.77	5.49	79.67
9	SLE R	Diff. tras.	1.27	0.00	1.32	-19442.10	0.00	132.50	5.22	75.97
14	SLE Q	Diff. tras.	1.27	0.00	1.32	-18723.50	0.00	127.15	5.03	73.14
8	SLE R	Diff. tras.	2.53	0.00	1.32	-15905.10	0.00	-2801.89	25.83	555.70
14	SLE Q	Diff. tras.	2.53	0.00	1.32	-14640.60	0.00	-2392.99	21.74	425.36
8	SLE R	Diff. tras.	3.80	0.00	1.32	-11051.60	0.00	-4260.82	42.12	1560.04
14	SLE Q	Diff. tras.	3.80	0.00	1.32	-10083.10	0.00	-3640.72	35.91	1295.15
8	SLE R	Loc.	2.53	0.00	0.30	-868.91	0.00	-610.67	30.88	992.38
14	SLE Q	Loc.	2.53	0.00	0.30	-821.07	0.00	-521.59	26.15	828.96

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ_{eq}	Δ_{sm} <mm>	A_s <cm ² >	$A_{c\ eff}$ <cm ² >	σ_s <daN/cm ² >	ϵ_{sm}	Wk <mm>
14	SLE Q	Diff. tras.	0.00	0.00	1.32	-21590.40	0.00	2219.90	33.00	250.00	0.50	12.00	149.38	7.92	550.10	131.95	0.04	0.01
11	SLE F	Diff. tras.	0.00	0.00	1.32	-21959.10	0.00	2315.84	33.00	250.00	0.50	12.00	152.44	7.92	570.27	149.60	0.04	0.01
14	SLE Q	Diff. tras.	2.53	0.00	1.32	-14640.60	0.00	-2392.99	33.00	250.00	0.50	12.00	191.01	7.92	824.73	425.36	0.12	0.04
11	SLE F	Diff. tras.	2.53	0.00	1.32	-14917.20	0.00	-2496.63	33.00	250.00	0.50	12.00	192.35	7.92	833.58	460.13	0.13	0.04
14	SLE Q	Diff. tras.	3.80	0.00	1.32	-10083.10	0.00	-3640.72	33.00	250.00	0.50	12.00	215.51	7.92	986.38	1295.15	0.38	0.14
11	SLE F	Diff. tras.	3.80	0.00	1.32	-10293.30	0.00	-3797.83	33.00	250.00	0.50	12.00	215.84	7.92	988.53	1364.32	0.40	0.15
14	SLE Q	Loc.	2.53	0.00	0.30	-821.07	0.00	-521.59	33.00	123.50	0.50	12.00	166.69	2.26	189.80	828.96	0.24	0.07
11	SLE F	Loc.	2.53	0.00	0.30	-833.15	0.00	-544.17	33.00	123.50	0.50	12.00	166.70	2.26	189.82	870.38	0.25	0.07

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctg θ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	1.32	SND	-11949.40	0.00	11949.40	2.50	37941.70	100922.00	37941.70	3.175
3	Diff. tras.	0.00	0.00	1.32	SND	0.00	3032.57	3032.57				19019.30	6.272
1	Diff. long.	1.27	0.00	1.32	SND	12307.40	0.00	12307.40	2.50	37941.70	101172.00	37941.70	3.083
5	Diff. tras.	1.27	0.00	1.32	SLU	0.00	-2821.42	2821.42				20281.50	7.188
1	Diff. long.	2.53	0.00	1.32	SND	12204.90	0.00	12204.90	2.50	37941.70	99882.30	37941.70	3.109
5	Diff. tras.	2.53	0.00	1.32	SLU	0.00	-2788.29	2788.29				19529.00	7.004
1	Diff. long.	3.80	0.00	1.32	SND	-11035.70	0.00	11035.70	2.50	37941.70	98754.70	37941.70	3.438
3	Diff. tras.	3.80	0.00	1.32	SND	0.00	1610.05	1610.05				17510.30	10.876

Parete n. 135

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.	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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	1.32	-56806.40	1751.23	0.00	-698607.00	58617.30	0.00	12.298
5	SLU	Diff. tras.	0.00	0.00	1.32	-55248.10	0.00	1163.25	-55248.10	0.00	12641.80	10.868
7	SLU	Diff. long.	1.20	0.00	1.32	-54158.60	-236.81	0.00	-698607.00	-57315.20	0.00	12.899
7	SLU	Diff. tras.	1.20	0.00	1.32	-54158.60	0.00	82.09	-698607.00	0.00	12517.30	12.899
7	SLU	Diff. long.	2.41	0.00	1.32	-50695.60	-1772.65	0.00	-698607.00	-55591.30	0.00	13.780
5	SLU	Diff. tras.	2.41	0.00	1.32	-49116.40	0.00	-1020.54	-49116.40	0.00	-11939.00	11.699
7	SLU	Diff. long.	3.61	0.00	1.32	-46265.00	-1744.13	0.00	-698607.00	-53347.00	0.00	15.100
5	SLU	Diff. tras.	3.61	0.00	1.32	-44689.70	0.00	-1111.51	-44689.70	0.00	-11430.40	10.284
7	SLU	Diff. long.	4.82	0.00	1.32	-25997.50	-3538.61	0.00	-25997.50	-42551.00	0.00	12.025
5	SLU	Diff. tras.	4.82	0.00	1.32	-24244.10	0.00	2859.09	-24244.10	0.00	9044.79	3.164
7	SLU	Diff. long.	6.02	0.00	1.32	-17012.90	-7951.04	0.00	-17012.90	-37462.80	0.00	4.712
7	SLU	Diff. tras.	6.02	0.00	1.32	-17012.90	0.00	-3440.52	-17012.90	0.00	-8192.34	2.381
5	SLU	Loc.	4.82	1.02	1.32	-2907.89	0.00	626.62	-2907.89	0.00	1605.66	2.562

Stato limite elastico - Verifiche a flessione/pressoflessione

CC\TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
1SND	Diff. long.	0.00	0.00	1.32	-32453.70	11994.00	0.00	-32453.70	35050.50	0.00	2.922
1SND	Diff. long.	1.20	0.00	1.32	-32294.20	-6732.40	0.00	-32294.20	-34972.20	0.00	5.195
1SND	Diff. long.	2.41	0.00	1.32	-31525.70	-7543.50	0.00	-31525.70	-34608.00	0.00	4.588
3SND	Diff. tras.	3.61	0.00	1.32	-28358.50	0.00	-1984.83	-28358.50	0.00	-8756.86	4.412
3SND	Diff. tras.	4.82	0.00	1.32	-15235.10	0.00	2658.43	-15235.10	0.00	7233.16	2.721
3SND	Diff. tras.	6.02	0.00	1.32	-10198.50	0.00	-3380.77	-10198.50	0.00	-6633.62	1.962
1SND	Loc.	4.82	1.02	1.32	1884.10	0.00	489.05	1884.10	0.00	842.73	1.723

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ_c <daN/cm ² >	σ_t <daN/cm ² >
8SLE	R	Diff. tras.	0.00	0.00	1.32	-41826.50	0.00	798.50	13.85	193.05
14SLE	Q	Diff. tras.	0.00	0.00	1.32	-39633.70	0.00	571.57	12.25	173.27
10SLE	R	Diff. tras.	1.20	0.00	1.32	-40849.80	0.00	59.21	10.13	150.93
9SLE	R	Diff. tras.	1.20	0.00	1.32	-39492.70	0.00	60.03	9.81	146.06
14SLE	Q	Diff. tras.	1.20	0.00	1.32	-37673.70	0.00	59.20	9.37	139.44
8SLE	R	Diff. tras.	2.41	0.00	1.32	-37169.20	0.00	-700.33	12.26	171.07
14SLE	Q	Diff. tras.	2.41	0.00	1.32	-35143.80	0.00	-500.78	10.83	153.33
8SLE	R	Diff. tras.	3.61	0.00	1.32	-33824.80	0.00	-718.54	11.54	159.92
14SLE	Q	Diff. tras.	3.61	0.00	1.32	-31963.20	0.00	-406.33	9.62	136.89
8SLE	R	Diff. tras.	4.82	0.00	1.32	-18514.10	0.00	2096.54	18.46	205.44
14SLE	Q	Diff. tras.	4.82	0.00	1.32	-17808.80	0.00	1825.93	15.56	179.75
10SLE	R	Diff. tras.	6.02	0.00	1.32	-12879.40	0.00	-2611.14	27.74	816.88
14SLE	Q	Diff. tras.	6.02	0.00	1.32	-11611.70	0.00	-2347.30	24.92	731.85
8SLE	R	Loc.	4.82	1.02	1.32	-2201.03	0.00	460.01	27.06	730.76
14SLE	Q	Loc.	4.82	1.02	1.32	-2081.48	0.00	401.83	22.62	578.46

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	c <mm>	s <mm>	K ₂	Φ_{eq}	Δ_{sm} <mm>	A _s <cm ² >	A _{c eff} <cm ² >	σ_s <daN/cm ² >	δ_{sm}	Wk <mm>
14SLE	Q	Diff. tras.	4.82	0.00	1.32	-17808.80	0.00	1825.93	33.00	300.00	0.50	12.00	188.01	5.65	574.97	125.29	0.04	0.01
11SLE	F	Diff. tras.	4.82	0.00	1.32	-17837.70	0.00	1892.15	33.00	300.00	0.50	12.00	194.18	5.65	604.02	146.30	0.04	0.01
14SLE	Q	Diff. tras.	6.02	0.00	1.32	-11611.70	0.00	-2347.30	33.00	300.00	0.50	12.00	264.46	5.65	935.25	731.85	0.21	0.10
12SLE	F	Diff. tras.	6.02	0.00	1.32	-11774.10	0.00	-2382.33	33.00	300.00	0.50	12.00	264.51	5.65	935.48	743.58	0.22	0.10
14SLE	Q	Loc.	4.82	1.02	1.32	-2081.48	0.00	401.83	33.00	0.00	0.50	12.00	265.75	1.13	188.25	578.46	0.17	0.08
11SLE	F	Loc.	4.82	1.02	1.32	-2100.34	0.00	415.96	33.00	0.00	0.50	12.00	266.28	1.13	188.76	619.02	0.18	0.08

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctg θ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	Diff. long.	0.00	0.00	1.32	SND	6448.14	0.00	6448.14	2.50	37941.70	103651.00	37941.70	5.884
1	Diff. tras.	0.00	0.00	1.32	SND	0.00	1640.58	1640.58				20989.60	12.794
3	Diff. long.	1.20	0.00	1.32	SND	-6098.90	0.00	6098.90	2.50	37941.70	103725.00	37941.70	6.221
3	Diff. tras.	1.20	0.00	1.32	SND	0.00	-1202.19	1202.19				21239.60	17.668
3	Diff. long.	2.41	0.00	1.32	SND	5618.39	0.00	5618.39	2.50	37941.70	103513.00	37941.70	6.753
3	Diff. tras.	2.41	0.00	1.32	SND	0.00	1130.97	1130.97				21056.20	18.618
3	Diff. long.	3.61	0.00	1.32	SND	-4202.84	0.00	4202.84	2.50	37941.70	102819.00	37941.70	9.028
3	Diff. tras.	3.61	0.00	1.32	SND	0.00	1456.62	1456.62				20455.20	14.043
1	Diff. long.	4.82	0.00	1.32	SND	-15534.90	0.00	15534.90	2.50	37941.70	100634.00	37941.70	2.442
3	Diff. tras.	4.82	0.00	1.32	SND	0.00	-6466.20	6466.20				18742.60	2.899
1	Diff. long.	6.02	0.00	1.32	SND	14526.20	0.00	14526.20	2.50	37941.70	100124.00	37941.70	2.612
5	Diff. tras.	6.02	0.00	1.32	SLU	0.00	5119.52	5119.52				18816.40	3.675

Parete n. 136

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.	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 <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7SLU	Diff. long.	0.00	0.00	1.32	-24315.60	2202.03	0.00	-24315.60	41608.20	0.00	18.895
7SLU	Diff. tras.	0.00	0.00	1.32	-24315.60	0.00	-36.45	-698607.00	0.00	-9053.30	28.731
7SLU	Diff. long.	1.27	0.00	1.32	-21330.70	-289.09	0.00	-698607.00	-39926.30	0.00	32.751
7SLU	Diff. tras.	1.27	0.00	1.32	-21330.70	0.00	52.75	-698607.00	0.00	8702.13	32.751
7SLU	Diff. long.	2.53	0.00	1.32	-17122.60	-2492.43	0.00	-17122.60	-37527.60	0.00	15.057
7SLU	Diff. tras.	2.53	0.00	1.32	-17122.60	0.00	165.50	-698607.00	0.00	8205.46	40.800
7SLU	Diff. long.	3.80	0.00	1.32	-9088.42	-384.05	0.00	-698607.00	-32868.10	0.00	76.868
7SLU	Diff. tras.	3.80	0.00	1.32	-9088.42	0.00	18.46	-698607.00	0.00	7253.36	76.868
7SLU	Loc.	0.00	1.02	1.32	-6526.69	0.00	0.06	-157006.00	0.00	2034.96	24.056

Stato limite elastico - Verifiche a flessione/pressoflessione

CC\TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
1SND	Diff. long.	0.00	0.00	1.32	-5405.31	16907.30	0.00	-5405.31	21599.00	0.00	1.277
1SND	Diff. long.	1.27	0.00	1.32	-8074.87	-6098.36	0.00	-8074.87	-22977.30	0.00	3.768
3SND	Diff. tras.	2.53	0.00	1.32	-10522.60	0.00	1190.96	-10522.60	0.00	6672.96	5.603
1SND	Diff. long.	3.80	0.00	1.32	-62.27	-7342.58	0.00	-62.27	-18809.80	0.00	2.562
1SND	Loc.	0.00	1.02	1.32	7276.52	0.00	197.81	7276.52	0.00	229.57	1.161

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cmq>	σ _ε <daN/cmq>
10	SLE R	Diff. long.	0.00	0.00	1.32	-18336.20	1655.94	0.00	6.22	90.71
9	SLE R	Diff. long.	0.00	0.00	1.32	-17559.00	1566.93	0.00	5.93	86.59
14	SLE Q	Diff. long.	0.00	0.00	1.32	-16813.30	1448.86	0.00	5.62	82.15
10	SLE R	Diff. long.	1.27	0.00	1.32	-16065.20	-216.73	0.00	4.11	61.33
9	SLE R	Diff. long.	1.27	0.00	1.32	-15339.20	-214.78	0.00	3.93	58.67
14	SLE Q	Diff. long.	1.27	0.00	1.32	-14667.90	-204.64	0.00	3.76	56.09
10	SLE R	Diff. long.	2.53	0.00	1.32	-12869.20	-1872.72	0.00	5.13	74.11
9	SLE R	Diff. long.	2.53	0.00	1.32	-12226.50	-1791.61	0.00	4.89	70.59
14	SLE Q	Diff. long.	2.53	0.00	1.32	-11675.80	-1668.54	0.00	4.62	66.79
10	SLE R	Diff. long.	3.80	0.00	1.32	-6810.09	-295.42	0.00	1.96	28.99
9	SLE R	Diff. long.	3.80	0.00	1.32	-6410.51	-303.83	0.00	1.88	27.67
14	SLE Q	Diff. long.	3.80	0.00	1.32	-6137.21	-212.86	0.00	1.71	25.34
10	SLE R	Loc.	0.00	1.02	1.32	-4918.54	0.00	-1.09	5.63	76.43
9	SLE R	Loc.	2.53	1.02	1.32	-1274.46	0.00	24.46	1.97	25.42
14	SLE Q	Loc.	0.00	1.02	1.32	-4468.57	0.00	1.34	5.12	69.52

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
1	Diff. long.	0.00	0.00	1.32	SND	11106.70	0.00	11106.70	2.50	37941.70	99362.70	37941.70	3.416
1	Diff. tras.	0.00	0.00	1.32	SND	0.00	-1244.01	1244.01				17459.80	14.035
1	Diff. long.	1.27	0.00	1.32	SND	-11433.10	0.00	11433.10	2.50	37941.70	99764.70	37941.70	3.319
3	Diff. tras.	1.27	0.00	1.32	SND	0.00	794.90	794.90				18233.80	22.939
1	Diff. long.	2.53	0.00	1.32	SND	-11397.00	0.00	11397.00	2.50	37941.70	100153.00	37941.70	3.329
3	Diff. tras.	2.53	0.00	1.32	SND	0.00	795.48	795.48				18127.60	22.788
1	Diff. long.	3.80	0.00	1.32	SND	-5928.66	0.00	5928.66	2.50	37941.70	98558.00	37941.70	6.400
3	Diff. tras.	3.80	0.00	1.32	SND	0.00	1796.26	1796.26				17047.20	9.490

Parete n. 137

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Spess. <cm>	Cf <cm>	Cls	Fck <daN/cmq>	Fctk <daN/cmq>	Fcd <daN/cmq>	Fctd <daN/cmq>	Tp	Fyk <daN/cmq>	Fyd <daN/cmq>
Oriz.	25.00	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>	Mz <daNm>	My <daNm>	Nu <daN>	MRdz <daNm>	MRdy <daNm>	Sic.
7	SLU	Diff. long.	0.00	0.00	0.85	-8255.69	730.60	0.00	-8255.69	19965.80	0.00	27.328
7	SLU	Diff. tras.	0.00	0.00	0.85	-8255.69	0.00	-10.82	-394066.00	0.00	-5460.96	47.733
7	SLU	Diff. long.	1.27	0.00	0.85	-7562.24	98.08	0.00	-394065.00	19739.00	0.00	52.110
7	SLU	Diff. tras.	1.27	0.00	0.85	-7562.24	0.00	-0.20	-394065.00	0.00	-5397.82	52.110
7	SLU	Diff. long.	2.53	0.00	0.85	-8045.83	-41.65	0.00	-394066.00	-19898.30	0.00	48.978
7	SLU	Diff. tras.	2.53	0.00	0.85	-8045.83	0.00	-11.26	-394066.00	0.00	-5442.08	48.978
6	SLU	Diff. long.	3.80	0.00	0.85	-5069.55	354.26	0.00	-5069.55	18920.70	0.00	53.410
7	SLU	Diff. tras.	3.80	0.00	0.85	-5496.60	0.00	-61.40	-394065.00	0.00	-5209.72	71.692
7	SLU	Loc.	0.00	0.60	0.85	-2877.02	0.00	-2.36	-120588.00	0.00	-2061.90	41.914

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'ydz <daNm>	M'ydy <daNm>	Sic.
3	SND	Diff. long.	0.00	0.00	0.85	3897.26	6820.67	0.00	3897.26	11730.90	0.00	1.720
3	SND	Diff. long.	1.27	0.00	0.85	2330.07	1761.41	0.00	2330.07	12243.20	0.00	6.951
1	SND	Diff. tras.	2.53	0.00	0.85	-10387.40	0.00	-93.07	-349811.00	0.00	-5216.03	33.676
3	SND	Diff. long.	3.80	0.00	0.85	-829.43	2806.22	0.00	-829.43	13263.60	0.00	4.727
1	SND	Loc.	3.80	0.60	0.85	609.69	0.00	-320.90	609.69	0.00	-1610.32	5.018

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ _c <daN/cmq>	σ _ε <daN/cmq>
10	SLE R	Diff. long.	0.00	0.00	0.85	-6277.52	549.70	0.00	4.36	63.11
8	SLE R	Diff. long.	0.00	0.00	0.85	-5878.91	488.21	0.00	4.00	58.04
14	SLE Q	Diff. long.	0.00	0.00	0.85	-5798.98	476.57	0.00	3.93	57.05
10	SLE R	Diff. long.	1.27	0.00	0.85	-5741.69	73.68	0.00	2.72	40.49
8	SLE R	Diff. long.	1.27	0.00	0.85	-5327.94	67.98	0.00	2.52	37.56
14	SLE Q	Diff. long.	1.27	0.00	0.85	-5246.83	64.34	0.00	2.48	36.88
10	SLE R	Diff. long.	2.53	0.00	0.85	-6090.28	-31.33	0.00	2.75	41.07
8	SLE R	Diff. long.	2.53	0.00	0.85	-5553.90	-22.79	0.00	2.49	37.22
14	SLE Q	Diff. long.	2.53	0.00	0.85	-5444.55	-26.61	0.00	2.45	36.66
10	SLE R	Diff. long.	3.80	0.00	0.85	-4154.66	258.89	0.00	2.57	37.56
9	SLE R	Diff. long.	3.80	0.00	0.85	-3869.96	267.73	0.00	2.48	36.05
14	SLE Q	Diff. long.	3.80	0.00	0.85	-3674.28	233.80	0.00	2.29	33.41
10	SLE R	Loc.	0.00	0.60	0.85	-2183.22	0.00	-1.82	3.55	48.06
8	SLE R	Loc.	3.80	0.60	0.85	-1359.51	0.00	-19.59	2.83	36.26
14	SLE Q	Loc.	0.00	0.60	0.85	-1993.65	0.00	-1.76	3.25	43.92

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	Diff. long.	0.00	0.00	0.85	SND	7879.60	0.00	7879.60	2.50	23927.50	51790.40	23927.50	3.037
1	Diff. tras.	0.00	0.00	0.85	SND	0.00	-895.76	895.76				9380.51	10.472

3	Diff. long.	1.27	0.00	0.85	SND	-8939.14	0.00	8939.14	2.50	23927.40	51790.30	23927.40	2.677
1	Diff. tras.	1.27	0.00	0.85	SND	0.00	114.52	114.52				9380.49	81.909
3	Diff. long.	2.53	0.00	0.85	SND	-8335.12	0.00	8335.12	2.50	23927.50	52057.00	23927.50	2.871
1	Diff. tras.	2.53	0.00	0.85	SND	0.00	198.03	198.03				9444.02	47.690
3	Diff. long.	3.80	0.00	0.85	SND	-4933.48	0.00	4933.48	2.50	23927.40	51913.10	23927.40	4.850
1	Diff. tras.	3.80	0.00	0.85	SND	0.00	1338.08	1338.08				9385.59	7.014

Parete n. 138

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	Mz	My	Nu	MRdz	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
7	SLU	Diff. long.	0.00	0.00	2.70	-36845.00	-5861.03	0.00	-1510420.00	-254644.00	0.00	40.994
7	SLU	Diff. tras.	0.00	0.00	2.70	-36845.00	0.00	-508.27	-1510420.00	0.00	-26883.00	40.994
7	SLU	Diff. long.	1.27	0.00	2.70	-33797.40	-5571.90	0.00	-1510420.00	-251556.00	0.00	44.690
7	SLU	Diff. tras.	1.27	0.00	2.70	-33797.40	0.00	-253.32	-1510420.00	0.00	-26533.60	44.690
6	SLU	Diff. long.	2.53	0.00	2.70	-25927.00	-5894.79	0.00	-25927.00	-243550.00	0.00	41.316
7	SLU	Diff. tras.	2.53	0.00	2.70	-28204.70	0.00	38.30	-1510420.00	0.00	25891.30	53.552
7	SLU	Diff. long.	3.80	0.00	2.70	-22959.10	-15167.40	0.00	-22959.10	-240516.00	0.00	15.857
7	SLU	Diff. tras.	3.80	0.00	2.70	-22959.10	0.00	248.88	-1510420.00	0.00	25288.40	65.787

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv	Xi	Xf	N	Mz	My	Nu	M'ydz	M'ydy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
3	SND	Diff. long.	0.00	0.00	2.70	-10918.10	-128315.00	0.00	-10918.10	-147645.00	0.00	1.151
3	SND	Diff. long.	1.27	0.00	2.70	-9052.74	-87053.90	0.00	-9052.74	-145850.00	0.00	1.675
3	SND	Diff. long.	2.53	0.00	2.70	-9219.59	-45150.60	0.00	-9219.59	-146010.00	0.00	3.234
3	SND	Diff. long.	3.80	0.00	2.70	-8851.18	-16466.00	0.00	-8851.18	-145656.00	0.00	8.846

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv	Xi	Xf	N	Mz	My	σ _c	σ _f
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN/cmq>	<daN/cmq>
10	SLE R	Diff. long.	0.00	0.00	2.70	-27916.80	-4437.92	0.00	4.29	63.84
9	SLE R	Diff. long.	0.00	0.00	2.70	-26285.80	-4341.34	0.00	4.08	60.70
14	SLE Q	Diff. long.	0.00	0.00	2.70	-25132.60	-3835.81	0.00	3.82	56.89
10	SLE R	Diff. long.	1.27	0.00	2.70	-25572.10	-4215.97	0.00	3.97	59.03
9	SLE R	Diff. long.	1.27	0.00	2.70	-23939.00	-4184.77	0.00	3.77	56.12
14	SLE Q	Diff. long.	1.27	0.00	2.70	-22786.20	-3663.13	0.00	3.51	52.26
10	SLE R	Diff. long.	2.53	0.00	2.70	-21297.40	-4437.95	0.00	3.53	52.53
9	SLE R	Diff. long.	2.53	0.00	2.70	-19778.90	-4453.22	0.00	3.36	49.99
14	SLE Q	Diff. long.	2.53	0.00	2.70	-18694.80	-3876.06	0.00	3.10	46.04
10	SLE R	Diff. long.	3.80	0.00	2.70	-17294.70	-11436.20	0.00	5.03	74.06
9	SLE R	Diff. long.	3.80	0.00	2.70	-16014.20	-10957.40	0.00	4.80	70.59
14	SLE Q	Diff. long.	3.80	0.00	2.70	-14906.60	-9925.64	0.00	4.36	64.20

Stato limite d'esercizio - Verifiche a fessurazione

CC	TCC	Zona	Zv	Xi	Xf	N	Mz	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>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		
14	SLE Q	Diff. long.	3.80	0.00	2.70	-14906.60	-9925.64	0.00	33.00	224.90	0.50	12.00	438.51	4.52	292.50	16.87	0.00	0.00
12	SLE F	Diff. long.	3.80	0.00	2.70	-15128.40	-10132.30	0.00	33.00	224.90	0.50	12.00	445.98	4.52	292.50	17.61	0.01	0.00

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv	Xi	Xf	TCC	Ty	Tz	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.
		<m>	<m>	<m>		<daN>	<daN>	<daN>		<daN>	<daN>	<daN>	
3	Diff. long.	0.00	0.00	2.70	SND	49376.30	0.00	49376.30	2.50	78509.20	205587.00	78509.20	1.590
1	Diff. tras.	0.00	0.00	2.70	SND	0.00	-2549.77	2549.77				36675.60	14.384
3	Diff. long.	1.27	0.00	2.70	SND	-51018.60	0.00	51018.60	2.50	78509.20	205302.00	78509.20	1.539
1	Diff. tras.	1.27	0.00	2.70	SND	0.00	2025.63	2025.63				36394.00	17.967
3	Diff. long.	2.53	0.00	2.70	SND	-50236.60	0.00	50236.60	2.50	78509.20	205327.00	78509.20	1.563
1	Diff. tras.	2.53	0.00	2.70	SND	0.00	1736.13	1736.13				36081.10	20.782
3	Diff. long.	3.80	0.00	2.70	SND	47543.00	0.00	47543.00	2.50	78509.20	205271.00	78509.20	1.651
1	Diff. tras.	3.80	0.00	2.70	SND	0.00	-1166.08	1166.08				35769.80	30.675

Parete n. 140

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.	25.00	4.10	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	Mz	My	Nu	MRdz	MRdy	Sic.
			<m>	<m>	<m>	<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
5	SLU	Diff. long.	0.00	0.00	2.00	-11687.40	2668.83	0.00	-11687.40	148818.00	0.00	55.762
7	SLU	Diff. tras.	0.00	0.00	2.00	-12135.50	0.00	205.59	-980436.00	0.00	16788.40	80.791
7	SLU	Diff. long.	1.27	0.00	2.00	-10458.70	1753.69	0.00	-10458.70	147935.00	0.00	84.356
7	SLU	Diff. tras.	1.27	0.00	2.00	-10458.70	0.00	-31.61	-980437.00	0.00	-16641.70	93.744
7	SLU	Diff. long.	2.53	0.00	2.00	-7569.24	218.30	0.00	-980436.00	145849.00	0.00	>100
7	SLU	Diff. tras.	2.53	0.00	2.00	-7569.24	0.00	-148.76	-7569.24	0.00	-16388.30	>100

7	SLU	Diff. long.	3.80	0.00	2.00	-6637.34	694.44	0.00	-980436.00	145175.00	0.00	>100
7	SLU	Diff. tras.	3.80	0.00	2.00	-6637.34	0.00	-153.21	-6637.34	0.00	-16306.90	>100
7	SLU	Loc.	3.80	0.00	0.25	-942.05	0.00	-0.09	-134356.00	0.00	-3054.85	>100

Stato limite elastico - Verifiche a flessione/pressoflessione

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	Nu <daN>	M'yz <daNm>	M'yd <daNm>	Sic.
3	SND	Diff. long.	0.00	0.00	2.00	15861.70	78811.20	0.00	15861.70	82487.90	0.00	1.047
3	SND	Diff. long.	1.27	0.00	2.00	8075.64	46153.00	0.00	8075.64	87981.80	0.00	1.906
3	SND	Diff. long.	2.53	0.00	2.00	1299.16	14625.80	0.00	1299.16	92710.40	0.00	6.339
3	SND	Diff. tras.	3.80	0.00	2.00	563.65	0.00	-963.97	563.65	0.00	-14519.20	15.062
3	SND	Loc.	0.00	0.00	0.25	22810.70	0.00	348.14	22810.70	0.00	928.33	2.667

Stato limite d'esercizio - Verifiche tensionali

CC	TCC	Zona	Zv <m>	Xi <m>	Xf <m>	N <daN>	Mz <daNm>	My <daNm>	σ_c <daN/cm ² >	σ_f <daN/cm ² >
10	SLE R	Diff. long.	0.00	0.00	2.00	-9318.83	1984.53	0.00	2.69	39.69
8	SLE R	Diff. long.	0.00	0.00	2.00	-9020.09	1982.65	0.00	2.63	38.88
14	SLE Q	Diff. long.	0.00	0.00	2.00	-9059.26	1778.44	0.00	2.54	37.47
10	SLE R	Diff. long.	1.27	0.00	2.00	-8024.04	1298.79	0.00	2.10	31.13
8	SLE R	Diff. long.	1.27	0.00	2.00	-7743.33	1249.96	0.00	2.03	30.02
14	SLE Q	Diff. long.	1.27	0.00	2.00	-7762.79	1118.84	0.00	1.96	29.09
10	SLE R	Diff. tras.	2.53	0.00	2.00	-5804.85	0.00	-111.42	1.50	20.17
14	SLE Q	Diff. tras.	2.53	0.00	2.00	-5615.78	0.00	-92.49	1.38	18.88
10	SLE R	Diff. tras.	3.80	0.00	2.00	-5082.20	0.00	-114.30	1.38	18.36
14	SLE Q	Diff. tras.	3.80	0.00	2.00	-4899.11	0.00	-91.46	1.25	16.92
10	SLE R	Loc.	2.53	0.00	0.25	-644.76	0.00	-10.98	1.36	16.46
8	SLE R	Loc.	0.00	0.00	0.25	-572.59	0.00	9.13	1.19	14.43
14	SLE Q	Loc.	2.53	0.00	0.25	-656.13	0.00	-9.03	1.32	16.09

Stato limite ultimo - Verifiche a taglio

CC	Zona	Zv <m>	Xi <m>	Xf <m>	TCC	Ty <daN>	Tz <daN>	Vsdu <daN>	ctg θ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.
3	Diff. long.	0.00	0.00	2.00	SND	29393.70	0.00	29393.70	2.50	57797.70	125102.00	57797.70	1.966
3	Diff. tras.	0.00	0.00	2.00	SND	0.00	2024.40	2024.40				23900.00	11.806
3	Diff. long.	1.27	0.00	2.00	SND	-30264.70	0.00	30264.70	2.50	57797.70	125102.00	57797.70	1.910
3	Diff. tras.	1.27	0.00	2.00	SND	0.00	-1624.31	1624.31				23900.00	14.714
3	Diff. long.	2.53	0.00	2.00	SND	-31236.30	0.00	31236.30	2.50	57797.70	125102.00	57797.70	1.850
3	Diff. tras.	2.53	0.00	2.00	SND	0.00	1624.22	1624.22				23900.00	14.715
3	Diff. long.	3.80	0.00	2.00	SND	-25782.30	0.00	25782.30	2.50	57797.70	125102.00	57797.70	2.242
3	Diff. tras.	3.80	0.00	2.00	SND	0.00	767.22	767.22				23900.00	31.152

Indici di sicurezza in analisi lineare

Le verifiche risultano tutte soddisfatte allo S.L.U. e allo S.L.V., per cui gli indici di sicurezza risultano superiori all'unità.

Fascicolo dei calcoli - edificio B - Fondazioni

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)
AfE St. ala	=Area di ferro effettiva della staffatura d'ala
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
AfT St. ala	=Area di ferro teorica della staffatura d'ala
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
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
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 SLV = Stato limite di salvaguardia della vita SND = Stato limite di salvaguardia della vita (non dissipativo)
Tipo	=Tipologia 2Cdx = Doppia C lato costola L = Sezione a L R = Rettangolare T = Sezione a T Cs = C stondata 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
b	=Base inferiore
bw	=Larghezza membratura resistente al taglio
c	=Ricoprimento dell'armatura
ctgθ	=Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo
h	=Altezza parte inf.
s	=Distanza massima tra le barre

Travata n. 501

Nodi: 44 -79 -80 -81 -82 45

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cm²>	<daN/cm²>	<daN/cm²>	<daN/cm²>	<daN/cm²>	<daN/cm²>	<daN/cm²>	<daN/cm²>
28	T	45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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>	
1.52	7	SLU	5	0.00	8.04	6.16	8.04	6.16	-6481.53	-26902.60	4.151
2.80	7	SLU	5	127.86	8.04	6.16	8.04	6.16	-8586.50	-26902.60	3.133
6.00	7	SLU	5	447.50	8.04	6.16	8.04	6.16	-4107.70	-26902.60	6.549

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
1.52	1	SLV(E)	5	0.00	8.04	6.16	8.04	6.16	-4851.63	-25648.40	5.287
2.80	1	SLV(E)	5	127.86	8.04	6.16	8.04	6.16	-6533.70	-25648.40	3.926
6.00	1	SLV(E)	5	447.50	8.04	6.16	8.04	6.16	-3160.75	-25648.40	8.115

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>
1.52	10	SLE R	5	0.00	8.04	6.16	-4909.43	845.34	-89.24	9.51
1.52	14	SLE Q	5	0.00	8.04	6.16	-4410.57	759.44	-80.17	8.54
2.80	10	SLE R	5	127.86	8.04	6.16	-6516.59	1122.07	-118.45	12.62
2.80	14	SLE Q	5	127.86	8.04	6.16	-5939.73	1022.75	-107.96	11.50
6.00	10	SLE R	5	447.50	8.04	6.16	-3121.50	537.48	-56.74	6.04
6.00	14	SLE Q	5	447.50	8.04	6.16	-2873.41	494.76	-52.23	5.56

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}	W _k
	<m>					<cm>	<daNm>	<mm>	<mm>			<mm>	<cmq>	<cmq>	<daN/cmq>		<mm>
15	1.52	14	SLE Q	5	28	0.00	-4410.57	33.00	122.67	0.50	16.00	157.76	8.04	461.25	759.44	0.22	0.06
17	1.52	12	SLE F	5	28	0.00	-4449.15	33.00	122.67	0.50	16.00	157.76	8.04	461.25	766.09	0.22	0.06
33	2.80	14	SLE Q	5	28	127.86	-5939.73	33.00	122.67	0.50	16.00	157.76	8.04	461.25	1022.75	0.30	0.08
35	2.80	12	SLE F	5	28	127.86	-5984.72	33.00	122.67	0.50	16.00	157.76	8.04	461.25	1030.49	0.30	0.08
65	6.00	14	SLE Q	5	28	447.50	1546.14	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	352.08	0.10	0.09
69	6.00	12	SLE F	5	28	447.50	1559.77	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	355.18	0.10	0.09

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>	
7 SLU	1.52	2.33	0.80	ø8/20 2 br.	5.03	0.45	6068.32	2.50	32843.50	63958.80	32843.50	5.412
7 SLU	2.33	5.20	2.87	ø8/20 2 br.	5.03	0.45	5499.92	2.50	32843.50	63958.80	32843.50	5.972
7 SLU	5.20	6.00	0.80	ø8/20 2 br.	5.03	0.45	8901.62	2.50	32843.50	63958.80	32843.50	3.690

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0	X1	Lung.	Staff.	AfE St. ala	AfT St. ala
	<m>	<m>	<m>		<cmq/m>	<cmq/m>
7 SLU	1.52	2.33	0.80	ø8/20 2 br.	5.03	1.13
7 SLU	2.33	5.20	2.87	ø8/20 2 br.	5.03	1.13
7 SLU	5.20	6.00	0.80	ø8/20 2 br.	5.03	1.13

Travata n. 502

Nodi: 21 27 32 34 44

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
28	T	45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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	7	SLU	1	390.00	6.16	4.52	6.16	4.52	-4523.16	-20834.00	4.606
1.27	7	SLU	1	263.33	6.16	4.52	6.16	4.52	-7237.64	-20834.00	2.879
3.80	7	SLU	1	10.00	6.16	4.52	6.16	4.52	-4925.39	-20834.00	4.230
4.00	7	SLU	2	207.50	6.16	4.52	6.16	4.52	1909.19	14917.10	7.813
5.92	7	SLU	2	15.00	6.16	4.52	6.16	4.52	7701.13	14917.10	1.937
6.22	7	SLU	3	202.50	6.16	4.52	6.16	4.52	7823.39	14917.10	1.907
8.15	7	SLU	3	10.00	6.16	4.52	6.16	4.52	2323.92	14917.10	6.419
8.35	7	SLU	4	380.00	6.16	4.52	6.16	4.52	-4080.00	-20834.00	5.106
9.62	7	SLU	4	253.33	6.16	4.52	6.16	4.52	-6563.56	-20834.00	3.174
12.15	7	SLU	4	0.00	6.16	4.52	6.16	4.52	-4497.32	-20834.00	4.633

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.00	1	SLV(E)	1	390.00	6.16	4.52	6.16	4.52	-3385.38	-19739.90	5.831
1.27	1	SLV(E)	1	263.33	6.16	4.52	6.16	4.52	-5474.55	-19739.90	3.606
3.80	1	SLV(E)	1	10.00	6.16	4.52	6.16	4.52	-3747.21	-19739.90	5.268
4.00	1	SLV(E)	2	207.50	6.16	4.52	6.16	4.52	1409.31	14323.80	10.164
5.92	1	SLV(E)	2	15.00	6.16	4.52	6.16	4.52	5778.51	14323.80	2.479
6.22	1	SLV(E)	3	202.50	6.16	4.52	6.16	4.52	5881.70	14323.80	2.435
8.15	1	SLV(E)	3	10.00	6.16	4.52	6.16	4.52	1703.72	14323.80	8.407
8.35	1	SLV(E)	4	380.00	6.16	4.52	6.16	4.52	-3179.99	-19739.90	6.208
9.62	1	SLV(E)	4	253.33	6.16	4.52	6.16	4.52	-5061.98	-19739.90	3.900
12.15	1	SLV(E)	4	0.00	6.16	4.52	6.16	4.52	-3468.58	-19739.90	5.691

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>
0.00	10	SLE R	1	390.00	6.16	4.52	-3427.64	766.84	-65.71	7.55
0.00	14	SLE Q	1	390.00	6.16	4.52	-3077.61	688.53	-59.00	6.78
1.27	10	SLE R	1	263.33	6.16	4.52	-5490.74	1228.40	-105.26	12.09
1.27	14	SLE Q	1	263.33	6.16	4.52	-4976.86	1113.44	-95.41	10.96
3.80	10	SLE R	1	10.00	6.16	4.52	-3739.45	836.60	-71.69	8.24
3.80	14	SLE Q	1	10.00	6.16	4.52	-3406.55	762.12	-65.31	7.50
4.00	10	SLE R	2	207.50	6.16	4.52	1443.19	-59.03	444.67	5.85
4.00	14	SLE Q	2	207.50	6.16	4.52	1281.19	-52.41	394.76	5.20
5.92	10	SLE R	2	15.00	6.16	4.52	5834.89	-238.68	1797.84	23.66
5.92	14	SLE Q	2	15.00	6.16	4.52	5253.19	-214.88	1618.61	21.31
6.22	10	SLE R	3	202.50	6.16	4.52	5928.56	-242.51	1826.70	24.04
6.22	14	SLE Q	3	202.50	6.16	4.52	5347.00	-218.72	1647.51	21.69
8.15	10	SLE R	3	10.00	6.16	4.52	1755.91	-71.83	541.03	7.12
8.15	14	SLE Q	3	10.00	6.16	4.52	1548.84	-63.36	477.23	6.28
8.35	10	SLE R	4	380.00	6.16	4.52	-3104.97	694.65	-59.53	6.84
8.35	14	SLE Q	4	380.00	6.16	4.52	-2890.90	646.76	-55.42	6.37
9.62	10	SLE R	4	253.33	6.16	4.52	-4988.40	1116.02	-95.63	10.99
9.62	14	SLE Q	4	253.33	6.16	4.52	-4601.80	1029.53	-88.22	10.14
12.15	10	SLE R	4	0.00	6.16	4.52	-3417.51	764.57	-65.52	7.53
12.15	14	SLE Q	4	0.00	6.16	4.52	-3153.25	705.46	-60.45	6.95

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>
29	0.00	14	SLE Q	1	28	390.00	1140.15	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	351.30	0.10	0.09
33	0.00	12	SLE F	1	28	390.00	1145.53	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	352.96	0.10	0.09
51	1.27	14	SLE Q	1	28	263.33	-4976.86	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1113.44	0.32	0.10
53	1.27	12	SLE F	1	28	263.33	-5031.82	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1125.73	0.33	0.10
83	3.80	14	SLE Q	1	28	10.00	-3406.55	34.00	123.33	0.50	14.00	172.87	6.16	461.25	762.12	0.22	0.07
87	3.80	12	SLE F	1	28	10.00	-3452.46	34.00	123.33	0.50	14.00	172.87	6.16	461.25	772.39	0.22	0.07
105	4.00	14	SLE Q	2	28	207.50	1281.19	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	394.76	0.11	0.10
107	4.00	12	SLE F	2	28	207.50	1291.88	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	398.05	0.12	0.10
123	5.92	14	SLE Q	2	28	15.00	5253.19	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	1618.61	0.47	0.41
125	5.92	12	SLE F	2	28	15.00	5319.57	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	1639.06	0.48	0.41
141	6.22	14	SLE Q	3	28	202.50	5347.00	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	1647.51	0.48	0.41
143	6.22	12	SLE F	3	28	202.50	5412.71	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	1667.76	0.49	0.42
159	8.15	14	SLE Q	3	28	10.00	1548.84	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	477.23	0.14	0.12
161	8.15	12	SLE F	3	28	10.00	1565.42	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	482.34	0.14	0.12
191	8.35	14	SLE Q	4	28	380.00	848.31	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	261.38	0.08	0.07
197	8.35	13	SLE F	4	28	380.00	848.31	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	261.38	0.08	0.07
213	9.62	14	SLE Q	4	28	253.33	-4601.80	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1029.53	0.30	0.09
215	9.62	12	SLE F	4	28	253.33	-4636.80	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1037.36	0.30	0.09
245	12.15	14	SLE Q	4	28	0.00	-3153.25	34.00	123.33	0.50	14.00	172.87	6.16	461.25	705.46	0.21	0.06
249	12.15	12	SLE F	4	28	0.00	-3173.11	34.00	123.33	0.50	14.00	172.87	6.16	461.25	709.90	0.21	0.06

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.
7 SLU	0.00	0.80	0.80	ø8/20 2 br.	5.03	0.45	8732.61	2.50	32843.50	63958.80	32843.50	3.761
7 SLU	0.80	3.00	2.20	ø8/20 2 br.	5.03	0.45	4883.99	2.50	32843.50	63958.80	32843.50	6.725
7 SLU	3.00	3.80	0.80	ø8/20 2 br.	5.03	0.45	7841.50	2.50	32843.50	63958.80	32843.50	4.188
7 SLU	4.00	5.92	1.93	ø8/20 2 br.	5.03	0.45	8052.70	2.50	32843.50	63958.80	32843.50	4.079
7 SLU	6.22	8.15	1.93	ø8/20 2 br.	5.03	0.45	7767.80	2.50	32843.50	63958.80	32843.50	4.228
7 SLU	8.35	9.15	0.80	ø8/20 2 br.	5.03	0.45	7684.08	2.50	32843.50	63958.80	32843.50	4.274
7 SLU	9.15	11.35	2.20	ø8/20 2 br.	5.03	0.45	4378.18	2.50	32843.50	63958.80	32843.50	7.502
7 SLU	11.35	12.15	0.80	ø8/20 2 br.	5.03	0.45	7304.46	2.50	32843.50	63958.80	32843.50	4.496

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	0.00	0.80	0.80	ø8/20 2 br.	5.03	1.21
7 SLU	0.80	3.00	2.20	ø8/20 2 br.	5.03	1.21
7 SLU	3.00	3.80	0.80	ø8/20 2 br.	5.03	1.21
7 SLU	4.00	5.92	1.93	ø8/20 2 br.	5.03	1.19
7 SLU	6.22	8.15	1.93	ø8/20 2 br.	5.03	1.19
7 SLU	8.35	9.15	0.80	ø8/20 2 br.	5.03	1.08
7 SLU	9.15	11.35	2.20	ø8/20 2 br.	5.03	1.08
7 SLU	11.35	12.15	0.80	ø8/20 2 br.	5.03	1.08

Travata n. 503

Nodi: 21 -33 -34 -35 -36 22 23

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
28T		45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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.
1.52	7	SLU	5	0.00	6.16	4.52	6.16	4.52	-5138.94	-20834.00	4.054
2.48	7	SLU	5	95.89	6.16	4.52	6.16	4.52	-6904.08	-20834.00	3.018

6.00	7	SLU	5	447.50	6.16	4.52	6.16	4.52	10231.90	14917.10	1.458
6.30	7	SLU	6	30.00	6.16	4.52	6.16	4.52	4924.43	14917.10	3.029
7.84	7	SLU	6	183.57	6.16	4.52	6.16	4.52	-11228.80	-20834.00	1.855
10.60	7	SLU	6	460.00	6.16	4.52	6.16	4.52	-6680.35	-20834.00	3.119

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
1.52	1	SLV(E)	5	0.00	6.16	4.52	6.16	4.52	-3796.61	-19739.90	5.199
2.48	1	SLV(E)	5	95.89	6.16	4.52	6.16	4.52	-5237.62	-19739.90	3.769
6.00	1	SLV(E)	5	447.50	6.16	4.52	6.16	4.52	7376.59	14323.80	1.942
6.30	1	SLV(E)	6	30.00	6.16	4.52	6.16	4.52	3367.84	14323.80	4.253
7.84	1	SLV(E)	6	183.57	6.16	4.52	6.16	4.52	-8759.00	-19739.90	2.254
10.60	1	SLV(E)	6	460.00	6.16	4.52	6.16	4.52	-5111.22	-19739.90	3.862

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>
1.52	10	SLE R	5	0.00	6.16	4.52	-3883.48	868.82	-74.45	8.55
1.52	14	SLE Q	5	0.00	6.16	4.52	-3451.46	772.17	-66.17	7.60
2.48	10	SLE R	5	95.89	6.16	4.52	-5228.13	1169.65	-100.23	11.52
2.48	14	SLE Q	5	95.89	6.16	4.52	-4761.48	1065.25	-91.28	10.49
6.00	10	SLE R	5	447.50	6.16	4.52	7752.79	-317.13	2388.78	31.44
6.00	14	SLE Q	5	447.50	6.16	4.52	6705.99	-274.31	2066.24	27.20
6.30	10	SLE R	6	30.00	6.16	4.52	3737.35	-152.88	1151.55	15.16
6.30	14	SLE Q	6	30.00	6.16	4.52	3061.68	-125.24	943.36	12.42
7.84	10	SLE R	6	183.57	6.16	4.52	-8503.23	1902.37	-163.02	18.73
7.84	14	SLE Q	6	183.57	6.16	4.52	-7962.73	1781.44	-152.65	17.54
10.60	8	SLE R	6	460.00	6.16	4.52	2756.62	-112.76	849.37	11.18
10.60	10	SLE R	6	460.00	6.16	4.52	-5068.98	1134.05	-97.18	11.17
10.60	14	SLE Q	6	460.00	6.16	4.52	-4646.57	1039.54	-89.08	10.24

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>
29	1.52	14	SLE Q	5	28	0.00	-3451.46	34.00	123.33	0.50	14.00	172.87	6.16	461.25	772.17	0.22	0.07
33	1.52	12	SLE F	5	28	0.00	-3488.73	34.00	123.33	0.50	14.00	172.87	6.16	461.25	780.51	0.23	0.07
51	2.48	14	SLE Q	5	28	95.89	-4761.48	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1065.25	0.31	0.09
53	2.48	12	SLE F	5	28	95.89	-4803.58	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1074.67	0.31	0.09
69	6.00	14	SLE Q	5	28	447.50	6705.99	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	2066.24	0.60	0.52
71	6.00	12	SLE F	5	28	447.50	6797.88	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	2094.56	0.61	0.52
102	6.30	14	SLE Q	6	28	30.00	3061.68	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	943.36	0.27	0.24
106	6.30	12	SLE F	6	28	30.00	3120.80	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	961.58	0.28	0.24
123	7.84	14	SLE Q	6	28	183.57	-7962.73	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1781.44	0.52	0.15
124	7.84	11	SLE F	6	28	183.57	-8018.55	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1793.93	0.52	0.15
155	10.60	14	SLE Q	6	28	460.00	2505.29	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	771.93	0.22	0.19
157	10.60	11	SLE F	6	28	460.00	2570.83	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	792.12	0.23	0.20

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.
7 SLU	1.52	2.33	0.80	ø8/20 2 br.	5.03	0.45	7382.41	2.50	32843.50	63958.80	32843.50	4.449
7 SLU	2.33	5.20	2.87	ø8/20 2 br.	5.03	0.45	8561.02	2.50	32843.50	63958.80	32843.50	3.836
7 SLU	5.20	6.00	0.80	ø8/20 2 br.	5.03	0.45	12596.40	2.50	32843.50	63958.80	32843.50	2.607
7 SLU	6.30	7.10	0.80	ø8/20 2 br.	5.03	0.45	12764.50	2.50	32843.50	63958.80	32843.50	2.573
7 SLU	7.10	9.80	2.70	ø8/20 2 br.	5.03	0.45	8524.56	2.50	32843.50	63958.80	32843.50	3.853
7 SLU	9.80	10.60	0.80	ø8/20 2 br.	5.03	0.45	14652.30	2.50	32843.50	63958.80	32843.50	2.242

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	1.52	2.33	0.80	ø8/20 2 br.	5.03	1.23
7 SLU	2.33	5.20	2.87	ø8/20 2 br.	5.03	1.23
7 SLU	5.20	6.00	0.80	ø8/20 2 br.	5.03	1.23
7 SLU	6.30	7.10	0.80	ø8/20 2 br.	5.03	2.01
7 SLU	7.10	9.80	2.70	ø8/20 2 br.	5.03	2.01
7 SLU	9.80	10.60	0.80	ø8/20 2 br.	5.03	2.01

Travata n. 504

Nodi: 22 -39 -43 -47 -48 -49 26 33 35 -72 -73 45

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
28T		45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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.
2.70	7	SLU	7	337.50	4.52	4.52	4.52	4.52	2044.25	14912.20	7.295
2.85	7	SLU	7	322.50	4.52	4.52	4.52	4.52	-2154.35	-15547.90	7.217
3.46	7	SLU	7	261.00	4.52	4.52	4.52	4.52	-2677.82	-15547.90	5.806
5.92	7	SLU	7	15.00	4.52	4.52	4.52	4.52	6801.80	14912.20	2.192
6.22	7	SLU	8	307.50	4.52	4.52	4.52	4.52	6871.78	14912.20	2.170
7.46	7	SLU	8	184.50	4.52	4.52	4.52	4.52	3343.01	14912.20	4.461

9.30	7	SLU	8	0.00	4.52	4.52	4.52	4.52	-2619.96	-15547.90	5.934
10.15	7	SLU	11	200.00	4.52	4.52	4.52	4.52	9207.08	14912.20	1.620
10.28	7	SLU	11	187.50	4.52	4.52	4.52	4.52	9207.08	14912.20	1.620
11.53	7	SLU	11	62.50	4.52	4.52	4.52	4.52	5549.82	14912.20	2.687
12.15	7	SLU	11	0.00	4.52	4.52	4.52	4.52	1473.83	14912.20	10.118

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
2.70	1	SLV(E)	7	337.50	4.52	4.52	4.52	4.52	1565.72	14311.20	9.140
2.85	1	SLV(E)	7	322.50	4.52	4.52	4.52	4.52	-1658.97	-14581.10	8.789
3.46	1	SLV(E)	7	261.00	4.52	4.52	4.52	4.52	-2092.73	-14581.10	6.968
5.92	1	SLV(E)	7	15.00	4.52	4.52	4.52	4.52	4844.46	14311.20	2.954
6.22	1	SLV(E)	8	307.50	4.52	4.52	4.52	4.52	4894.48	14311.20	2.924
7.46	1	SLV(E)	8	184.50	4.52	4.52	4.52	4.52	2314.84	14311.20	6.182
9.30	1	SLV(E)	8	0.00	4.52	4.52	4.52	4.52	-1775.84	-14581.10	8.211
10.15	1	SLV(E)	11	200.00	4.52	4.52	4.52	4.52	7077.23	14311.20	2.022
10.28	1	SLV(E)	11	187.50	4.52	4.52	4.52	4.52	7077.23	14311.20	2.022
11.53	1	SLV(E)	11	62.50	4.52	4.52	4.52	4.52	4275.73	14311.20	3.347
12.15	1	SLV(E)	11	0.00	4.52	4.52	4.52	4.52	1147.27	14311.20	12.474

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>
2.70	10	SLE R	7	337.50	4.52	4.52	1554.85	-66.20	479.66	6.49
2.70	14	SLE Q	7	337.50	4.52	4.52	1423.38	-60.60	439.10	5.94
2.85	10	SLE R	7	322.50	4.52	4.52	1554.85	-66.20	479.66	6.49
2.85	10	SLE R	7	322.50	4.52	4.52	-1635.51	495.23	-31.92	4.14
2.85	14	SLE Q	7	322.50	4.52	4.52	1423.38	-60.60	439.10	5.94
3.46	10	SLE R	7	261.00	4.52	4.52	1554.85	-66.20	479.66	6.49
3.46	10	SLE R	7	261.00	4.52	4.52	-2037.34	616.91	-39.77	5.15
3.46	14	SLE Q	7	261.00	4.52	4.52	1423.38	-60.60	439.10	5.94
5.92	10	SLE R	7	15.00	4.52	4.52	5121.18	-218.03	1579.85	21.38
5.92	14	SLE Q	7	15.00	4.52	4.52	4404.05	-187.50	1358.62	18.39
6.22	10	SLE R	8	307.50	4.52	4.52	5173.86	-220.27	1596.10	21.60
6.22	14	SLE Q	8	307.50	4.52	4.52	4449.52	-189.43	1372.65	18.58
7.46	10	SLE R	8	184.50	4.52	4.52	2508.67	-106.80	773.91	10.47
7.46	14	SLE Q	8	184.50	4.52	4.52	2104.40	-89.59	649.19	8.79
9.30	8	SLE R	8	0.00	4.52	4.52	1234.41	-52.55	380.81	5.15
9.30	10	SLE R	8	0.00	4.52	4.52	-1962.57	594.27	-38.31	4.96
9.30	14	SLE Q	8	0.00	4.52	4.52	1266.37	-53.91	390.67	5.29
10.15	10	SLE R	11	200.00	4.52	4.52	6997.40	-297.90	2158.65	29.21
10.15	14	SLE Q	11	200.00	4.52	4.52	6433.84	-273.91	1984.80	26.86
10.28	10	SLE R	11	187.50	4.52	4.52	6997.40	-297.90	2158.65	29.21
10.28	14	SLE Q	11	187.50	4.52	4.52	6433.84	-273.91	1984.80	26.86
11.53	10	SLE R	11	62.50	4.52	4.52	4219.20	-179.63	1301.60	17.61
11.53	14	SLE Q	11	62.50	4.52	4.52	3887.02	-165.49	1199.12	16.23
12.15	10	SLE R	11	0.00	4.52	4.52	1122.12	-47.77	346.17	4.68
12.15	14	SLE Q	11	0.00	4.52	4.52	1042.98	-44.40	321.75	4.35

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>
15	2.70	14	SLE Q	7	28	337.50	1423.38	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	439.10	0.13	0.11
18	2.70	13	SLE F	7	28	337.50	1423.38	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	439.10	0.13	0.11
47	2.85	14	SLE Q	7	28	322.50	1423.38	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	439.10	0.13	0.11
53	2.85	13	SLE F	7	28	322.50	1423.38	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	439.10	0.13	0.11
83	3.46	14	SLE Q	7	28	261.00	1423.38	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	439.10	0.13	0.11
89	3.46	13	SLE F	7	28	261.00	1423.38	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	439.10	0.13	0.11
117	5.92	14	SLE Q	7	28	15.00	4404.05	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1358.62	0.40	0.34
121	5.92	12	SLE F	7	28	15.00	4472.46	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1379.72	0.40	0.34
149	6.22	14	SLE Q	8	28	307.50	4449.52	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1372.65	0.40	0.34
153	6.22	12	SLE F	8	28	307.50	4518.39	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1393.89	0.41	0.35
185	7.46	14	SLE Q	8	28	184.50	2104.40	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	649.19	0.19	0.16
189	7.46	12	SLE F	8	28	184.50	2145.86	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	661.98	0.19	0.17
222	9.30	14	SLE Q	8	28	0.00	1266.37	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	390.67	0.11	0.10
224	9.30	11	SLE F	8	28	0.00	1266.97	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	390.85	0.11	0.10
243	10.15	14	SLE Q	11	28	200.00	6433.84	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1984.80	0.58	0.50
245	10.15	12	SLE F	11	28	200.00	6474.49	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1997.34	0.58	0.50
261	10.28	14	SLE Q	11	28	187.50	6433.84	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1984.80	0.58	0.50
263	10.28	12	SLE F	11	28	187.50	6474.49	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1997.34	0.58	0.50
293	11.53	14	SLE Q	11	28	62.50	3887.02	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1199.12	0.35	0.30
297	11.53	12	SLE F	11	28	62.50	3910.19	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	1206.27	0.35	0.30
329	12.15	14	SLE Q	11	28	0.00	1042.98	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	321.75	0.09	0.08
333	12.15	12	SLE F	11	28	0.00	1047.43	35.00	374.00	0.50	12.00	503.95	4.52	1230.00	323.12	0.09	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.
7 SLU	2.85	3.65	0.80	ø8/20 2 br.	5.03	0.45	7076.23	2.50	32843.50	63958.80	32843.50	4.641
7 SLU	3.65	5.12	1.47	ø8/20 2 br.	5.03	0.45	5681.98	2.50	32843.50	63958.80	32843.50	5.780
7 SLU	5.12	5.92	0.80	ø8/20 2 br.	5.03	0.45	10284.70	2.50	32843.50	63958.80	32843.50	3.193
7 SLU	6.22	7.03	0.80	ø8/20 2 br.	5.03	0.45	10466.20	2.50	32843.50	63958.80	32843.50	3.138
7 SLU	7.03	8.50	1.47	ø8/20 2 br.	5.03	0.45	5881.92	2.50	32843.50	63958.80	32843.50	5.584
7 SLU	8.50	9.30	0.80	ø8/20 2 br.	5.03	0.45	6705.84	2.50	32843.50	63958.80	32843.50	4.898
7 SLU	10.28	12.15	1.88	ø8/20 2 br.	5.03	0.45	10307.20	2.50	32843.50	63958.80	32843.50	3.186

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	2.85	3.65	0.80	ø8/20 2 br.	5.03	1.34
7 SLU	3.65	5.12	1.47	ø8/20 2 br.	5.03	1.34
7 SLU	5.12	5.92	0.80	ø8/20 2 br.	5.03	1.34
7 SLU	6.22	7.03	0.80	ø8/20 2 br.	5.03	1.34
7 SLU	7.03	8.50	1.47	ø8/20 2 br.	5.03	1.34
7 SLU	8.50	9.30	0.80	ø8/20 2 br.	5.03	1.34
7 SLU	10.28	12.15	1.88	ø8/20 2 br.	5.03	1.29

Travata n. 505

Nodi: 35 36

Caratteristiche delle sezioni e dei materiali utilizzati

Sez. Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
28T	45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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.
0.30	7	SLU	1	30.00	6.16	4.52	6.16	4.52	-2887.12	-20834.00	7.216
0.90	7	SLU	1	90.00	6.16	4.52	6.16	4.52	-3296.34	-20834.00	6.320
3.00	7	SLU	1	300.00	6.16	4.52	6.16	4.52	2046.79	14917.10	7.288

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
0.30	1	SLV(E)	1	30.00	6.16	4.52	6.16	4.52	-2172.88	-19739.90	9.085
0.90	1	SLV(E)	1	90.00	6.16	4.52	6.16	4.52	-2467.32	-19739.90	8.001
3.00	1	SLV(E)	1	300.00	6.16	4.52	6.16	4.52	1668.76	14323.80	8.584

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/cm>	σ _f inf <daN/cm>	σ _c <daN/cm>
0.30	10	SLE R	1	30.00	6.16	4.52	-2187.96	489.50	-41.95	4.82
0.30	14	SLE Q	1	30.00	6.16	4.52	-1975.34	441.93	-37.87	4.35
0.90	10	SLE R	1	90.00	6.16	4.52	-2496.26	558.47	-47.86	5.50
0.90	14	SLE Q	1	90.00	6.16	4.52	-2243.02	501.81	-43.00	4.94
3.00	10	SLE R	1	300.00	6.16	4.52	1567.10	-64.10	482.85	6.36
3.00	14	SLE Q	1	300.00	6.16	4.52	1517.05	-62.06	467.43	6.15

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/cm>	ε _{sm}	Wk <mm>
30	0.30	14	SLE Q	1	28	30.00	605.31	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	186.51	0.05	0.05
34	0.30	12	SLE F	1	28	30.00	610.79	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	188.20	0.05	0.05
66	0.90	14	SLE Q	1	28	90.00	605.31	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	186.51	0.05	0.05
70	0.90	12	SLE F	1	28	90.00	610.79	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	188.20	0.05	0.05
101	3.00	14	SLE Q	1	28	300.00	1517.05	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	467.43	0.14	0.12
105	3.00	12	SLE F	1	28	300.00	1521.14	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	468.69	0.14	0.12

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.
7 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.45	6353.91	2.50	32843.50	63958.80	32843.50	5.169
7 SLU	1.10	2.20	1.10	ø8/20 2 br.	5.03	0.45	3143.02	2.50	32843.50	63958.80	32843.50	10.450
7 SLU	2.20	3.00	0.80	ø8/20 2 br.	5.03	0.45	6850.46	2.50	32843.50	63958.80	32843.50	4.794

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	1.29
7 SLU	1.10	2.20	1.10	ø8/20 2 br.	5.03	1.29
7 SLU	2.20	3.00	0.80	ø8/20 2 br.	5.03	1.29

Travata n. 506

Nodi: -50 36 37

Caratteristiche delle sezioni e dei materiali utilizzati

Sez. Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
28T	45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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.
0.00	7	SLU	1	515.00	10.05	8.04	10.05	8.04	5708.75	26066.90	4.566
2.12	7	SLU	1	302.94	10.05	8.04	10.05	8.04	-13726.20	-33340.70	2.429
5.15	7	SLU	1	0.00	10.05	8.04	10.05	8.04	-8395.72	-33340.70	3.971
5.45	7	SLU	2	55.00	10.05	8.04	10.05	8.04	-1347.88	-33340.70	24.736
6.00	7	SLU	2	0.00	10.05	8.04	10.05	8.04	-1347.88	-33340.70	24.736

Stato limite elastico - 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>	M' ydy <daNm>	Sic.
0.001	SLV(E)	1	515.00	10.05	8.04	10.05	8.04	4333.56	25160.00	5.806	
2.121	SLV(E)	1	302.94	10.05	8.04	10.05	8.04	-10520.50	-31912.00	3.033	
5.151	SLV(E)	1	0.00	10.05	8.04	10.05	8.04	-6434.91	-31912.00	4.959	
5.451	SLV(E)	2	55.00	10.05	8.04	10.05	8.04	-1029.38	-31912.00	31.001	
6.001	SLV(E)	2	0.00	10.05	8.04	10.05	8.04	-1029.38	-31912.00	31.001	

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>
0.0010	SLE R	1	515.00	10.05	8.04	4316.54	-145.27	756.50	13.12	
0.0014	SLE Q	1	515.00	10.05	8.04	3939.60	-132.58	690.44	11.97	
2.1210	SLE R	1	302.94	10.05	8.04	-10401.50	1439.37	-178.58	18.06	
2.1214	SLE Q	1	302.94	10.05	8.04	-9564.09	1323.49	-164.21	16.61	
5.1510	SLE R	1	0.00	10.05	8.04	-6359.56	880.04	-109.19	11.04	
5.1514	SLE Q	1	0.00	10.05	8.04	-5849.92	809.52	-100.44	10.16	
5.4510	SLE R	2	55.00	10.05	8.04	-1016.47	140.66	-17.45	1.77	
5.4514	SLE Q	2	55.00	10.05	8.04	-935.80	129.50	-16.07	1.63	
6.0010	SLE R	2	0.00	10.05	8.04	-1016.47	140.66	-17.45	1.77	
6.0014	SLE Q	2	0.00	10.05	8.04	-935.80	129.50	-16.07	1.63	

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/cm q>	ε _{sm}	W _k <mm>
29	0.00	14	SLE Q	1	28	515.00	3939.60	33.00	372.67	0.50	16.00	482.50	8.04	1230.00	690.44	0.20	0.16
33	0.00	12	SLE F	1	28	515.00	3971.73	33.00	372.67	0.50	16.00	482.50	8.04	1230.00	696.07	0.20	0.17
51	2.12	14	SLE Q	1	28	302.94	-9564.09	33.00	92.00	0.50	16.00	139.41	10.05	461.25	1323.49	0.41	0.10
53	2.12	12	SLE F	1	28	302.94	-9636.12	33.00	92.00	0.50	16.00	139.41	10.05	461.25	1333.46	0.39	0.09
69	5.15	14	SLE Q	1	28	0.00	-5849.92	33.00	92.00	0.50	16.00	139.41	10.05	461.25	809.52	0.24	0.06
71	5.15	12	SLE F	1	28	0.00	-5895.82	33.00	92.00	0.50	16.00	139.41	10.05	461.25	815.87	0.24	0.06
101	5.45	14	SLE Q	2	28	55.00	-935.80	33.00	92.00	0.50	16.00	139.41	10.05	461.25	129.50	0.04	0.01
105	5.45	12	SLE F	2	28	55.00	-946.36	33.00	92.00	0.50	16.00	139.41	10.05	461.25	130.96	0.04	0.01
137	6.00	14	SLE Q	2	28	0.00	-935.80	33.00	92.00	0.50	16.00	139.41	10.05	461.25	129.50	0.04	0.01
141	6.00	12	SLE F	2	28	0.00	-946.36	33.00	92.00	0.50	16.00	139.41	10.05	461.25	130.96	0.04	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.
7 SLU	0.00	0.80	0.80	ø8/20 2 br.	5.03	0.45	15296.90	2.50	32843.50	63958.80	32843.50	2.147
7 SLU	0.80	4.35	3.55	ø8/20 2 br.	5.03	0.45	9544.13	2.50	32843.50	63958.80	32843.50	3.441
7 SLU	4.35	5.15	0.80	ø8/20 2 br.	5.03	0.45	9725.17	2.50	32843.50	63958.80	32843.50	3.377
7 SLU	5.45	6.00	0.55	ø8/20 2 br.	5.03	0.45	3939.38	2.50	32843.50	63958.80	32843.50	8.337

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	0.00	0.80	0.80	ø8/20 2 br.	5.03	1.73
7 SLU	0.80	4.35	3.55	ø8/20 2 br.	5.03	1.73
7 SLU	4.35	5.15	0.80	ø8/20 2 br.	5.03	1.73
7 SLU	5.45	6.00	0.55	ø8/20 2 br.	5.03	1.24

Travata n. 507

Nodi: 1 13 14 -21 -22 -23 -24 -30 23 -40 -44 -54

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
28T		45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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.
0.007	SLU	1	0.00	6.16	6.16	6.16	6.16	6.16	-5666.07	-20881.80	3.685
1.597	SLU	1	158.54	6.16	6.16	6.16	6.16	6.16	-9233.88	-20881.80	2.261
4.787	SLU	2	97.00	6.16	6.16	6.16	6.16	6.16	7104.86	20099.70	2.829
5.087	SLU	3	15.00	6.16	6.16	6.16	6.16	6.16	6353.51	20099.70	3.164
6.455	SLU	6	38.12	6.16	6.16	6.16	6.16	6.16	11596.50	20099.70	1.733
8.455	SLU	11	0.00	6.16	6.16	6.16	6.16	6.16	7048.28	20099.70	2.852
9.407	SLU	11	95.00	6.16	6.16	6.16	6.16	6.16	-7128.79	-20881.80	2.929
11.307	SLU	11	285.00	6.16	6.16	6.16	6.16	6.16	-6815.60	-20881.80	3.064

Stato limite elastico - 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>	M' ydy <daNm>	Sic.
0.001	SLV(E)	1	0.00	6.16	6.16	6.16	6.16	6.16	-4457.37	-19741.70	4.429
1.591	SLV(E)	1	158.54	6.16	6.16	6.16	6.16	6.16	-7223.79	-19741.70	2.733
4.781	SLV(E)	2	97.00	6.16	6.16	6.16	6.16	6.16	5676.86	19346.70	3.408
5.081	SLV(E)	3	15.00	6.16	6.16	6.16	6.16	6.16	5057.02	19346.70	3.826
6.451	SLV(E)	6	38.12	6.16	6.16	6.16	6.16	6.16	8981.03	19346.70	2.154
8.451	SLV(E)	11	0.00	6.16	6.16	6.16	6.16	6.16	5307.97	19346.70	3.645
9.401	SLV(E)	11	95.00	6.16	6.16	6.16	6.16	6.16	-5531.56	-19741.70	3.569
11.301	SLV(E)	11	285.00	6.16	6.16	6.16	6.16	6.16	-5308.82	-19741.70	3.719

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>
0.00	10	SLE R	1	0.00	6.16	6.16	-4299.71	961.76	-80.79	9.36
0.00	14	SLE Q	1	0.00	6.16	6.16	-4052.15	906.39	-76.14	8.82
1.59	10	SLE R	1	158.54	6.16	6.16	-6994.02	1564.43	-131.42	15.22
1.59	14	SLE Q	1	158.54	6.16	6.16	-6567.08	1468.93	-123.40	14.29
4.78	10	SLE R	2	97.00	6.16	6.16	5424.31	-209.01	1237.30	19.44
4.78	14	SLE Q	2	97.00	6.16	6.16	5160.78	-198.85	1177.19	18.50
5.08	10	SLE R	3	15.00	6.16	6.16	4856.02	-187.11	1107.67	17.40
5.08	14	SLE Q	3	15.00	6.16	6.16	4597.29	-177.14	1048.66	16.48
6.45	8	SLE R	6	38.12	6.16	6.16	8723.45	-336.13	1989.84	31.26
6.45	14	SLE Q	6	38.12	6.16	6.16	8164.57	-314.60	1862.36	29.26
8.45	8	SLE R	11	0.00	6.16	6.16	5261.05	-202.72	1200.06	18.85
8.45	14	SLE Q	11	0.00	6.16	6.16	4825.43	-185.93	1100.70	17.29
9.40	8	SLE R	11	95.00	6.16	6.16	4180.78	-161.09	953.65	14.98
9.40	10	SLE R	11	95.00	6.16	6.16	-5394.30	1206.60	-101.36	11.74
9.40	14	SLE Q	11	95.00	6.16	6.16	3804.44	-146.59	867.80	13.63
11.30	10	SLE R	11	285.00	6.16	6.16	-5152.00	1152.40	-96.81	11.21
11.30	14	SLE Q	11	285.00	6.16	6.16	-4826.20	1079.53	-90.69	10.50

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>
15	0.00	14	SLE Q	1	28	0.00	-4052.15	34.00	123.33	0.50	14.00	172.87	6.16	461.25	906.39	0.26	0.08
16	0.00	11	SLE F	1	28	0.00	-4074.60	34.00	123.33	0.50	14.00	172.87	6.16	461.25	911.41	0.27	0.08
33	1.59	14	SLE Q	1	28	158.54	-6567.08	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1468.93	0.43	0.13
34	1.59	11	SLE F	1	28	158.54	-6613.93	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1479.41	0.43	0.13
65	4.78	14	SLE Q	2	28	97.00	5160.78	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	1177.19	0.34	0.29
69	4.78	12	SLE F	2	28	97.00	5184.21	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	1182.53	0.34	0.29
87	5.08	14	SLE Q	3	28	15.00	4597.29	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	1048.66	0.31	0.26
89	5.08	12	SLE F	3	28	15.00	4619.45	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	1053.71	0.31	0.26
105	6.45	14	SLE Q	6	28	38.12	8164.57	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	1862.36	0.54	0.45
106	6.45	11	SLE F	6	28	38.12	8284.76	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	1889.78	0.55	0.46
138	8.45	14	SLE Q	11	28	0.00	4825.43	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	1100.70	0.32	0.27
140	8.45	11	SLE F	11	28	0.00	4926.92	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	1123.85	0.33	0.27
174	9.40	14	SLE Q	11	28	95.00	3804.44	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	867.80	0.25	0.21
176	9.40	11	SLE F	11	28	95.00	3894.23	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	888.28	0.26	0.22
195	11.30	14	SLE Q	11	28	285.00	-4826.20	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1079.53	0.31	0.09
196	11.30	11	SLE F	11	28	285.00	-4870.23	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1089.38	0.32	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.
7 SLU	0.00	0.80	0.80	ø8/20 2 br.	5.03	0.45	7269.75	2.50	32843.50	63958.80	32843.50	4.518
7 SLU	0.80	3.97	3.17	ø8/20 2 br.	5.03	0.45	8356.33	2.50	32843.50	63958.80	32843.50	3.930
7 SLU	3.97	4.78	0.80	ø8/20 2 br.	5.03	0.45	13600.80	2.50	32843.50	63958.80	32843.50	2.415
5 SLU	5.08	6.45	1.38	ø8/20 2 br.	5.03	0.45	9943.15	2.50	32843.50	63958.80	32843.50	3.303
7 SLU	8.45	9.25	0.80	ø8/20 2 br.	5.03	0.45	15359.50	2.50	32843.50	63958.80	32843.50	2.138
5 SLU	9.25	10.50	1.25	ø8/20 2 br.	5.03	0.45	8194.27	2.50	32843.50	63958.80	32843.50	4.008
7 SLU	10.50	11.30	0.80	ø8/20 2 br.	5.03	0.45	9415.11	2.50	32843.50	63958.80	32843.50	3.488

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	0.00	0.80	0.80	ø8/20 2 br.	5.03	1.32
7 SLU	0.80	3.97	3.17	ø8/20 2 br.	5.03	1.63
7 SLU	3.97	4.78	0.80	ø8/20 2 br.	5.03	1.63
7 SLU	5.08	6.45	1.38	ø8/20 2 br.	5.03	1.94
7 SLU	8.45	9.25	0.80	ø8/20 2 br.	5.03	1.98
7 SLU	9.25	10.50	1.25	ø8/20 2 br.	5.03	1.98
7 SLU	10.50	11.30	0.80	ø8/20 2 br.	5.03	1.98

Travata n. 508

Nodi: 1 2 3 4 5 6 7 8 9 10

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <cm>	h <cm>	Cf sup <cm>	Cf inf <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>
28T		45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CCTCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfE P S <cmq>	AfE P I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.00	5	SLU	1	0.00	6.16	6.16	6.16	-200.90	-20881.80	>100
0.38	5	SLU	1	38.33	6.16	6.16	6.16	-200.90	-20881.80	>100
1.15	5	SLU	1	115.00	6.16	6.16	6.16	-200.90	-20881.80	>100
1.15	5	SLU	2	0.00	6.16	6.16	6.16	-123.06	-20881.80	>100
2.05	5	SLU	2	90.00	6.16	6.16	6.16	-123.06	-20881.80	>100
2.25	5	SLU	3	10.00	6.16	6.16	6.16	-123.06	-20881.80	>100
3.15	5	SLU	3	100.00	6.16	6.16	6.16	-123.06	-20881.80	>100
3.15	5	SLU	4	0.00	6.16	6.16	6.16	-319.28	-20881.80	65.402
3.88	5	SLU	4	72.50	6.16	6.16	6.16	-319.29	-20881.80	65.402
4.60	5	SLU	4	145.00	6.16	6.16	6.16	-319.29	-20881.80	65.402
4.90	5	SLU	5	15.00	6.16	6.16	6.16	-319.28	-20881.80	65.402

5.62	5	SLU	5	87.50	6.16	6.16	6.16	6.16	-319.29	-20881.80	65.402
6.35	5	SLU	5	160.00	6.16	6.16	6.16	6.16	-319.29	-20881.80	65.402
6.35	5	SLU	6	0.00	6.16	6.16	6.16	6.16	-123.06	-20881.80	>100
7.25	5	SLU	6	90.00	6.16	6.16	6.16	6.16	-123.06	-20881.80	>100
7.45	5	SLU	7	10.00	6.16	6.16	6.16	6.16	-97.24	-20881.80	>100
8.25	5	SLU	7	90.00	6.16	6.16	6.16	6.16	-97.24	-20881.80	>100
8.45	5	SLU	8	10.00	6.16	6.16	6.16	6.16	-123.06	-20881.80	>100
9.35	5	SLU	8	100.00	6.16	6.16	6.16	6.16	-123.06	-20881.80	>100
9.35	5	SLU	9	0.00	6.16	6.16	6.16	6.16	-137.11	-20881.80	>100
9.67	5	SLU	9	31.67	6.16	6.16	6.16	6.16	-137.11	-20881.80	>100
10.30	5	SLU	9	95.00	6.16	6.16	6.16	6.16	-137.11	-20881.80	>100

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
0.00	1	SLV(E)	1	0.00	6.16	6.16	6.16	6.16	-169.99	-19741.70	>100
0.38	1	SLV(E)	1	38.33	6.16	6.16	6.16	6.16	-169.99	-19741.70	>100
1.15	1	SLV(E)	1	115.00	6.16	6.16	6.16	6.16	-169.99	-19741.70	>100
1.15	1	SLV(E)	2	0.00	6.16	6.16	6.16	6.16	-104.13	-19741.70	>100
2.05	1	SLV(E)	2	90.00	6.16	6.16	6.16	6.16	-104.13	-19741.70	>100
2.25	1	SLV(E)	3	10.00	6.16	6.16	6.16	6.16	-104.13	-19741.70	>100
3.15	1	SLV(E)	3	100.00	6.16	6.16	6.16	6.16	-104.13	-19741.70	>100
3.15	1	SLV(E)	4	0.00	6.16	6.16	6.16	6.16	-270.16	-19741.70	73.073
3.88	1	SLV(E)	4	72.50	6.16	6.16	6.16	6.16	-270.16	-19741.70	73.073
4.60	1	SLV(E)	4	145.00	6.16	6.16	6.16	6.16	-270.16	-19741.70	73.073
4.90	1	SLV(E)	5	15.00	6.16	6.16	6.16	6.16	-270.16	-19741.70	73.073
5.62	1	SLV(E)	5	87.50	6.16	6.16	6.16	6.16	-270.16	-19741.70	73.073
6.35	1	SLV(E)	5	160.00	6.16	6.16	6.16	6.16	-270.16	-19741.70	73.073
6.35	1	SLV(E)	6	0.00	6.16	6.16	6.16	6.16	-104.13	-19741.70	>100
7.25	1	SLV(E)	6	90.00	6.16	6.16	6.16	6.16	-104.13	-19741.70	>100
7.45	1	SLV(E)	7	10.00	6.16	6.16	6.16	6.16	-82.28	-19741.70	>100
8.25	1	SLV(E)	7	90.00	6.16	6.16	6.16	6.16	-82.28	-19741.70	>100
8.45	1	SLV(E)	8	10.00	6.16	6.16	6.16	6.16	-104.13	-19741.70	>100
9.35	1	SLV(E)	8	100.00	6.16	6.16	6.16	6.16	-104.13	-19741.70	>100
9.35	1	SLV(E)	9	0.00	6.16	6.16	6.16	6.16	-116.02	-19741.70	>100
9.67	1	SLV(E)	9	31.67	6.16	6.16	6.16	6.16	-116.02	-19741.70	>100
10.30	1	SLV(E)	9	95.00	6.16	6.16	6.16	6.16	-116.02	-19741.70	>100

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>
0.00	8	SLE R	1	0.00	6.16	6.16	-154.54	34.57	-2.90	0.34
0.00	14	SLE Q	1	0.00	6.16	6.16	-154.54	34.57	-2.90	0.34
0.38	8	SLE R	1	38.33	6.16	6.16	-154.54	34.57	-2.90	0.34
0.38	14	SLE Q	1	38.33	6.16	6.16	-154.54	34.57	-2.90	0.34
1.15	8	SLE R	1	115.00	6.16	6.16	-154.54	34.57	-2.90	0.34
1.15	14	SLE Q	1	115.00	6.16	6.16	-154.54	34.57	-2.90	0.34
1.15	8	SLE R	2	0.00	6.16	6.16	-94.66	21.17	-1.78	0.21
1.15	14	SLE Q	2	0.00	6.16	6.16	-94.66	21.17	-1.78	0.21
2.05	8	SLE R	2	90.00	6.16	6.16	-94.66	21.17	-1.78	0.21
2.05	14	SLE Q	2	90.00	6.16	6.16	-94.66	21.17	-1.78	0.21
2.25	8	SLE R	3	10.00	6.16	6.16	-94.66	21.17	-1.78	0.21
2.25	14	SLE Q	3	10.00	6.16	6.16	-94.66	21.17	-1.78	0.21
3.15	8	SLE R	3	100.00	6.16	6.16	-94.66	21.17	-1.78	0.21
3.15	14	SLE Q	3	100.00	6.16	6.16	-94.66	21.17	-1.78	0.21
3.15	8	SLE R	4	0.00	6.16	6.16	-245.60	54.94	-4.62	0.53
3.15	14	SLE Q	4	0.00	6.16	6.16	-245.60	54.94	-4.62	0.53
3.88	8	SLE R	4	72.50	6.16	6.16	-245.60	54.94	-4.62	0.53
3.88	14	SLE Q	4	72.50	6.16	6.16	-245.60	54.94	-4.62	0.53
4.60	8	SLE R	4	145.00	6.16	6.16	-245.60	54.94	-4.62	0.53
4.60	14	SLE Q	4	145.00	6.16	6.16	-245.60	54.94	-4.62	0.53
4.90	8	SLE R	5	15.00	6.16	6.16	-245.60	54.94	-4.62	0.53
4.90	14	SLE Q	5	15.00	6.16	6.16	-245.60	54.94	-4.62	0.53
5.62	8	SLE R	5	87.50	6.16	6.16	-245.60	54.94	-4.62	0.53
5.62	14	SLE Q	5	87.50	6.16	6.16	-245.60	54.94	-4.62	0.53
6.35	8	SLE R	5	160.00	6.16	6.16	-245.60	54.94	-4.62	0.53
6.35	14	SLE Q	5	160.00	6.16	6.16	-245.60	54.94	-4.62	0.53
6.35	8	SLE R	6	0.00	6.16	6.16	-94.66	21.17	-1.78	0.21
6.35	14	SLE Q	6	0.00	6.16	6.16	-94.66	21.17	-1.78	0.21
7.25	8	SLE R	6	90.00	6.16	6.16	-94.66	21.17	-1.78	0.21
7.25	14	SLE Q	6	90.00	6.16	6.16	-94.66	21.17	-1.78	0.21
7.45	8	SLE R	7	10.00	6.16	6.16	-74.80	16.73	-1.41	0.16
7.45	14	SLE Q	7	10.00	6.16	6.16	-74.80	16.73	-1.41	0.16
8.25	8	SLE R	7	90.00	6.16	6.16	-74.80	16.73	-1.41	0.16
8.25	14	SLE Q	7	90.00	6.16	6.16	-74.80	16.73	-1.41	0.16
8.45	8	SLE R	8	10.00	6.16	6.16	-94.66	21.17	-1.78	0.21
8.45	14	SLE Q	8	10.00	6.16	6.16	-94.66	21.17	-1.78	0.21
9.35	8	SLE R	8	100.00	6.16	6.16	-94.66	21.17	-1.78	0.21
9.35	14	SLE Q	8	100.00	6.16	6.16	-94.66	21.17	-1.78	0.21
9.35	8	SLE R	9	0.00	6.16	6.16	-105.47	23.59	-1.98	0.23
9.35	14	SLE Q	9	0.00	6.16	6.16	-105.47	23.59	-1.98	0.23
9.67	8	SLE R	9	31.67	6.16	6.16	-105.47	23.59	-1.98	0.23
9.67	14	SLE Q	9	31.67	6.16	6.16	-105.47	23.59	-1.98	0.23
10.30	8	SLE R	9	95.00	6.16	6.16	-105.47	23.59	-1.98	0.23
10.30	14	SLE Q	9	95.00	6.16	6.16	-105.47	23.59	-1.98	0.23

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	0.00	14	SLE Q	1	28	0.00	70.24	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	16.02	0.00	0.00
31	0.00	11	SLE F	1	28	0.00	70.24	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	16.02	0.00	0.00
51	0.38	14	SLE Q	1	28	38.33	-154.54	34.00	123.33	0.50	14.00	172.87	6.16	461.25	34.57	0.01	0.00
52	0.38	11	SLE F	1	28	38.33	-154.54	34.00	123.33	0.50	14.00	172.87	6.16	461.25	34.57	0.01	0.00
84	1.15	14	SLE Q	1	28	115.00	70.24	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	16.02	0.00	0.00
86	1.15	11	SLE F	1	28	115.00	70.24	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	16.02	0.00	0.00
105	1.15	14	SLE Q	2	28	0.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
106	1.15	11	SLE F	2	28	0.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
123	2.05	14	SLE Q	2	28	90.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
124	2.05	11	SLE F	2	28	90.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
141	2.25	14	SLE Q	3	28	10.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
142	2.25	11	SLE F	3	28	10.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
159	3.15	14	SLE Q	3	28	100.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
160	3.15	11	SLE F	3	28	100.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
191	3.15	14	SLE Q	4	28	0.00	111.63	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	25.46	0.01	0.01
193	3.15	11	SLE F	4	28	0.00	111.63	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	25.46	0.01	0.01
213	3.88	14	SLE Q	4	28	72.50	-245.60	34.00	123.33	0.50	14.00	172.87	6.16	461.25	54.94	0.02	0.00
214	3.88	11	SLE F	4	28	72.50	-245.60	34.00	123.33	0.50	14.00	172.87	6.16	461.25	54.94	0.02	0.00
246	4.60	14	SLE Q	4	28	145.00	111.63	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	25.46	0.01	0.01
248	4.60	11	SLE F	4	28	145.00	111.63	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	25.46	0.01	0.01
281	4.90	14	SLE Q	5	28	15.00	111.63	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	25.46	0.01	0.01
283	4.90	11	SLE F	5	28	15.00	111.63	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	25.46	0.01	0.01
303	5.62	14	SLE Q	5	28	87.50	-245.60	34.00	123.33	0.50	14.00	172.87	6.16	461.25	54.94	0.02	0.00
304	5.62	11	SLE F	5	28	87.50	-245.60	34.00	123.33	0.50	14.00	172.87	6.16	461.25	54.94	0.02	0.00
336	6.35	14	SLE Q	5	28	160.00	111.63	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	25.46	0.01	0.01
338	6.35	11	SLE F	5	28	160.00	111.63	34.00	373.33	0.50	14.00	491.43	6.16	1230.00	25.46	0.01	0.01
357	6.35	14	SLE Q	6	28	0.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
358	6.35	11	SLE F	6	28	0.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
375	7.25	14	SLE Q	6	28	90.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
376	7.25	11	SLE F	6	28	90.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
393	7.45	14	SLE Q	7	28	10.00	-74.80	34.00	123.33	0.50	14.00	172.87	6.16	461.25	16.73	0.00	0.00
394	7.45	11	SLE F	7	28	10.00	-74.80	34.00	123.33	0.50	14.00	172.87	6.16	461.25	16.73	0.00	0.00
411	8.25	14	SLE Q	7	28	90.00	-74.80	34.00	123.33	0.50	14.00	172.87	6.16	461.25	16.73	0.00	0.00
412	8.25	11	SLE F	7	28	90.00	-74.80	34.00	123.33	0.50	14.00	172.87	6.16	461.25	16.73	0.00	0.00
429	8.45	14	SLE Q	8	28	10.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
430	8.45	11	SLE F	8	28	10.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
447	9.35	14	SLE Q	8	28	100.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
448	9.35	11	SLE F	8	28	100.00	-94.66	34.00	123.33	0.50	14.00	172.87	6.16	461.25	21.17	0.01	0.00
465	9.35	14	SLE Q	9	28	0.00	-105.47	34.00	123.33	0.50	14.00	172.87	6.16	461.25	23.59	0.01	0.00
466	9.35	11	SLE F	9	28	0.00	-105.47	34.00	123.33	0.50	14.00	172.87	6.16	461.25	23.59	0.01	0.00
483	9.67	14	SLE Q	9	28	31.67	-105.47	34.00	123.33	0.50	14.00	172.87	6.16	461.25	23.59	0.01	0.00
484	9.67	11	SLE F	9	28	31.67	-105.47	34.00	123.33	0.50	14.00	172.87	6.16	461.25	23.59	0.01	0.00
501	10.30	14	SLE Q	9	28	95.00	-105.47	34.00	123.33	0.50	14.00	172.87	6.16	461.25	23.59	0.01	0.00
502	10.30	11	SLE F	9	28	95.00	-105.47	34.00	123.33	0.50	14.00	172.87	6.16	461.25	23.59	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>	
5 SLU	0.00	1.05	1.05	ø8/20 2 br.	5.03	0.45	952.91	2.50	32843.50	63958.80	32843.50	34.467
5 SLU	1.25	2.05	0.80	ø8/20 2 br.	5.03	0.45	745.83	2.50	32843.50	63958.80	32843.50	44.036
5 SLU	2.25	3.05	0.80	ø8/20 2 br.	5.03	0.45	745.83	2.50	32843.50	63958.80	32843.50	44.036
5 SLU	3.25	4.60	1.35	ø8/20 2 br.	5.03	0.45	1201.21	2.50	32843.50	63958.80	32843.50	27.342
5 SLU	4.90	6.25	1.35	ø8/20 2 br.	5.03	0.45	1201.21	2.50	32843.50	63958.80	32843.50	27.342
5 SLU	6.45	7.25	0.80	ø8/20 2 br.	5.03	0.45	745.83	2.50	32843.50	63958.80	32843.50	44.036
5 SLU	7.45	8.25	0.80	ø8/20 2 br.	5.03	0.45	662.98	2.50	32843.50	63958.80	32843.50	49.539
5 SLU	8.45	9.25	0.80	ø8/20 2 br.	5.03	0.45	745.83	2.50	32843.50	63958.80	32843.50	44.036
5 SLU	9.45	10.30	0.85	ø8/20 2 br.	5.03	0.45	787.25	2.50	32843.50	63958.80	32843.50	41.719

Travata n. 509

Nodi: 10 17

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B	b	H	h	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
28T		45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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>	
0.017	SLU	1		0.91	8.04	28.15	8.04	28.15	-7793.82	-27054.20	3.471
1.607	SLU	1		159.70	8.04	28.15	8.04	28.15	-12865.30	-27054.20	2.103
4.777	SLU	1		477.28	8.04	28.15	8.04	28.15	-4412.28	-27054.20	6.132

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.011	SLV(E)	1		0.91	8.04	28.15	8.04	28.15	-6131.66	-25691.60	4.190
1.601	SLV(E)	1		159.70	8.04	28.15	8.04	28.15	-10080.70	-25691.60	2.549
4.771	SLV(E)	1		477.28	8.04	28.15	8.04	28.15	-3387.12	-25691.60	7.585

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>
0.01	10	SLE R	1	0.91	8.04	28.15	-5914.07	1015.49	-85.67	9.90
0.01	14	SLE Q	1	0.91	8.04	28.15	-5574.23	957.13	-80.75	9.33
1.60	10	SLE R	1	159.70	8.04	28.15	-9767.12	1677.08	-141.49	16.36
1.60	14	SLE Q	1	159.70	8.04	28.15	-9164.30	1573.57	-132.75	15.35
4.77	8	SLE R	1	477.28	8.04	28.15	6439.97	-167.73	339.68	13.11
4.77	10	SLE R	1	477.28	8.04	28.15	-3386.11	581.42	-49.05	5.67
4.77	14	SLE Q	1	477.28	8.04	28.15	5869.21	-152.86	309.58	11.95

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>
15	0.01	14	SLE Q	1	28	0.91	-5574.23	33.00	122.67	0.50	16.00	157.76	8.04	461.25	957.13	0.28	0.07
16	0.01	11	SLE F	1	28	0.91	-5605.54	33.00	122.67	0.50	16.00	157.76	8.04	461.25	962.51	0.28	0.08
33	1.60	14	SLE Q	1	28	159.70	-9164.30	33.00	122.67	0.50	16.00	157.76	8.04	461.25	1573.57	0.48	0.13
35	1.60	12	SLE F	1	28	159.70	-9220.52	33.00	122.67	0.50	16.00	157.76	8.04	461.25	1583.23	0.46	0.12
66	4.77	14	SLE Q	1	28	477.28	-3079.20	33.00	122.67	0.50	16.00	157.76	8.04	461.25	528.72	0.15	0.04
70	4.77	12	SLE F	1	28	477.28	-3112.84	33.00	122.67	0.50	16.00	157.76	8.04	461.25	534.50	0.16	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.
7 SLU	0.01	0.81	0.80	ø8/20 2 br.	5.03	0.45	9141.07	2.50	32843.50	63958.80	32843.50	3.593
5 SLU	0.81	3.97	3.16	ø8/20 2 br.	5.03	0.45	10880.00	2.50	32843.50	63958.80	32843.50	3.019
5 SLU	3.97	4.77	0.80	ø8/20 2 br.	5.03	0.45	18257.10	2.50	32843.50	63958.80	32843.50	1.799

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	0.01	0.81	0.80	ø8/20 2 br.	5.03	2.20
7 SLU	0.81	3.97	3.16	ø8/20 2 br.	5.03	2.20
7 SLU	3.97	4.77	0.80	ø8/20 2 br.	5.03	2.20

Travata n. 510

Nodi: -50 -51 -52 -53 -54 -55 -56 -57 -58 -59 -60 -61 28 -62 -63 -64 29 30 -65 -66 -67 -68 -69 -70 -71 31

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
29	T	45.00	130.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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.
3.42	7	SLU	9	0.00	7.70	7.70	7.70	7.70	-4016.63	-25923.90	6.454
5.03	7	SLU	9	160.00	7.70	7.70	7.70	7.70	-3862.85	-25923.90	6.711
6.50	7	SLU	13	15.00	7.70	7.70	7.70	7.70	-7273.47	-25923.90	3.564
8.93	7	SLU	13	257.50	7.70	7.70	7.70	7.70	13321.60	24975.10	1.875
10.25	7	SLU	17	0.00	7.70	9.71	7.70	9.71	25655.40	31332.80	1.221
10.43	7	SLU	17	17.50	7.70	9.71	7.70	9.71	25655.40	31332.80	1.221
12.31	7	SLU	17	205.58	7.70	7.70	7.70	7.70	-13932.00	-25923.90	1.861
14.50	7	SLU	17	425.00	7.70	7.70	7.70	7.70	-12608.70	-25923.90	2.056
15.97	5	SLU	21	0.00	7.70	7.70	7.70	7.70	6064.37	24975.10	4.118
16.60	5	SLU	21	62.50	7.70	7.70	7.70	7.70	6064.37	24975.10	4.118
17.23	5	SLU	21	125.00	7.70	7.70	7.70	7.70	2054.20	24975.10	12.158

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
3.42	1	SLV(E)	9	0.00	7.70	7.70	7.70	7.70	-3016.05	-24611.10	8.160
5.03	1	SLV(E)	9	160.00	7.70	7.70	7.70	7.70	-2945.24	-24611.10	8.356
6.50	1	SLV(E)	13	15.00	7.70	7.70	7.70	7.70	-5535.10	-24611.10	4.446
8.93	1	SLV(E)	13	257.50	7.70	7.70	7.70	7.70	10135.70	24061.10	2.374
10.25	1	SLV(E)	17	0.00	7.70	9.71	7.70	9.71	19846.20	30120.10	1.518
10.43	1	SLV(E)	17	17.50	7.70	9.71	7.70	9.71	19846.20	30120.10	1.518
12.31	1	SLV(E)	17	205.58	7.70	7.70	7.70	7.70	-10808.70	-24611.10	2.277
14.50	1	SLV(E)	17	425.00	7.70	7.70	7.70	7.70	-9784.98	-24611.10	2.515
15.97	1	SLV(E)	21	0.00	7.70	7.70	7.70	7.70	4403.10	24061.10	5.465
16.60	1	SLV(E)	21	62.50	7.70	7.70	7.70	7.70	4403.10	24061.10	5.465
17.23	1	SLV(E)	21	125.00	7.70	7.70	7.70	7.70	1476.69	24061.10	16.294

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>
3.42	10	SLE R	9	0.00	7.70	7.70	-3024.66	542.69	-51.07	5.67
3.42	14	SLE Q	9	0.00	7.70	7.70	-2741.86	491.95	-46.30	5.14
5.03	10	SLE R	9	160.00	7.70	7.70	-2915.90	523.18	-49.24	5.46
5.03	14	SLE Q	9	160.00	7.70	7.70	-2677.49	480.40	-45.21	5.01
6.50	10	SLE R	13	15.00	7.70	7.70	-5489.39	984.92	-92.69	10.28
6.50	14	SLE Q	13	15.00	7.70	7.70	-5031.91	902.84	-84.97	9.42
8.93	10	SLE R	13	257.50	7.70	7.70	10042.10	-357.27	1841.01	32.19
8.93	14	SLE Q	13	257.50	7.70	7.70	9214.29	-327.82	1689.26	29.53
10.25	10	SLE R	17	0.00	7.70	9.71	19356.70	-653.96	2833.71	56.87

10.25	14	SLE Q	17	0.00	7.70	9.71	18042.00	-609.54	2641.25	53.01
10.43	10	SLE R	17	17.50	7.70	9.71	19356.70	-653.96	2833.71	56.87
10.43	14	SLE Q	17	17.50	7.70	9.71	18042.00	-609.54	2641.25	53.01
12.31	10	SLE R	17	205.58	7.70	7.70	-10522.00	1887.88	-177.67	19.71
12.31	14	SLE Q	17	205.58	7.70	7.70	-9826.05	1763.02	-165.92	18.40
14.50	10	SLE R	17	425.00	7.70	7.70	-9520.37	1708.17	-160.75	17.83
14.50	14	SLE Q	17	425.00	7.70	7.70	-8895.44	1596.05	-150.20	16.66
15.97	8	SLE R	21	0.00	7.70	7.70	4485.14	-159.57	822.26	14.38
15.97	14	SLE Q	21	0.00	7.70	7.70	4002.82	-142.41	733.84	12.83
16.60	8	SLE R	21	62.50	7.70	7.70	4485.14	-159.57	822.26	14.38
16.60	14	SLE Q	21	62.50	7.70	7.70	4002.82	-142.41	733.84	12.83
17.23	8	SLE R	21	125.00	7.70	7.70	1516.05	-53.94	277.94	4.86
17.23	14	SLE Q	21	125.00	7.70	7.70	1342.44	-47.76	246.11	4.30

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>
15	3.42	14	SLE Q	9	29	0.00	-2741.86	34.00	92.50	0.50	14.00	151.90	7.70	461.25	491.95	0.14	0.04
17	3.42	12	SLE F	9	29	0.00	-2766.64	34.00	92.50	0.50	14.00	151.90	7.70	461.25	496.40	0.14	0.04
47	5.03	14	SLE Q	9	29	160.00	926.20	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	169.80	0.05	0.04
51	5.03	12	SLE F	9	29	160.00	947.25	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	173.66	0.05	0.04
69	6.50	14	SLE Q	13	29	15.00	-5031.91	34.00	92.50	0.50	14.00	151.90	7.70	461.25	902.84	0.26	0.07
71	6.50	12	SLE F	13	29	15.00	-5078.40	34.00	92.50	0.50	14.00	151.90	7.70	461.25	911.18	0.27	0.07
101	8.93	14	SLE Q	13	29	257.50	9214.29	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1689.26	0.49	0.40
103	8.93	11	SLE F	13	29	257.50	9298.73	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1704.74	0.50	0.41
123	10.25	14	SLE Q	17	29	0.00	18042.00	33.83	244.00	0.50	14.37	468.28	9.71	1332.50	2641.25	0.77	0.61
124	10.25	11	SLE F	17	29	0.00	18232.60	33.83	244.00	0.50	14.37	468.28	9.71	1332.50	2669.15	0.78	0.62
141	10.43	14	SLE Q	17	29	17.50	18042.00	33.83	244.00	0.50	14.37	468.28	9.71	1332.50	2641.25	0.77	0.61
142	10.43	11	SLE F	17	29	17.50	18232.60	33.83	244.00	0.50	14.37	468.28	9.71	1332.50	2669.15	0.78	0.62
173	12.31	14	SLE Q	17	29	205.58	-9826.05	34.00	92.50	0.50	14.00	151.90	7.70	461.25	1763.02	0.56	0.15
175	12.31	11	SLE F	17	29	205.58	-9921.30	34.00	92.50	0.50	14.00	151.90	7.70	461.25	1780.11	0.52	0.13
195	14.50	14	SLE Q	17	29	425.00	-8895.44	34.00	92.50	0.50	14.00	151.90	7.70	461.25	1596.05	0.48	0.12
196	14.50	11	SLE F	17	29	425.00	-8984.79	34.00	92.50	0.50	14.00	151.90	7.70	461.25	1612.08	0.47	0.12
228	15.97	14	SLE Q	21	29	0.00	4002.82	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	733.84	0.21	0.18
230	15.97	11	SLE F	21	29	0.00	4117.18	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	754.80	0.22	0.18
264	16.60	14	SLE Q	21	29	62.50	4002.82	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	733.84	0.21	0.18
266	16.60	11	SLE F	21	29	62.50	4117.18	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	754.80	0.22	0.18
300	17.23	14	SLE Q	21	29	125.00	1342.44	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	246.11	0.07	0.06
302	17.23	11	SLE F	21	29	125.00	1382.95	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	253.54	0.07	0.06

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.
7 SLU	3.42	5.03	1.60	ø8/20 2 br.	5.03	0.45	10377.40	2.50	32843.50	63958.80	32843.50	3.165
7 SLU	6.50	8.93	2.42	ø8/20 2 br.	5.03	0.45	22465.10	2.50	32843.50	63958.80	32843.50	1.462
7 SLU	10.43	11.22	0.80	ø8/20 2 br.	5.03	0.45	30084.00	2.50	32843.50	63958.80	32843.50	1.092
7 SLU	11.22	13.70	2.47	ø8/20 2 br.	5.03	0.45	20049.10	2.50	32843.50	63958.80	32843.50	1.638
7 SLU	13.70	14.50	0.80	ø8/20 2 br.	5.03	0.45	12377.90	2.50	32843.50	63958.80	32843.50	2.653
5 SLU	15.97	17.23	1.25	ø8/20 2 br.	5.03	0.45	11907.60	2.50	32843.50	63958.80	32843.50	2.758

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	3.42	5.03	1.60	ø8/20 2 br.	5.03	2.61
7 SLU	6.50	8.93	2.42	ø8/20 2 br.	5.03	3.22
7 SLU	10.43	11.22	0.80	ø8/20 2 br.	5.03	3.21
7 SLU	11.22	13.70	2.47	ø8/20 2 br.	5.03	3.21
7 SLU	13.70	14.50	0.80	ø8/20 2 br.	5.03	3.21
7 SLU	15.97	17.23	1.25	ø8/20 2 br.	5.03	2.34

Travata n. 511

Nodi: 14 -1 -2 -3 -4 -5 -6 -7 -8 -9 15 16 -10 -11 -12 -13 17 18 -14 -15 -16 -17 -18 -19 -20 19

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
29	T	45.00	130.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CCTCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
1.525	7	SLU	4	0.00	7.70	7.70	7.70	2084.90	24975.10	11.979
2.387	7	SLU	6	0.00	7.70	7.70	7.70	-2910.69	-25923.90	8.906
3.425	7	SLU	7	57.50	7.70	7.70	7.70	-2609.08	-25923.90	9.936
4.907	7	SLU	11	15.00	7.70	7.70	7.70	-8218.58	-25923.90	3.154
5.557	7	SLU	11	80.50	7.70	7.70	7.70	-8810.98	-25923.90	2.942
8.187	7	SLU	11	342.50	7.70	7.70	7.70	12855.20	24975.10	1.943
8.357	7	SLU	11	360.00	7.70	7.70	7.70	12855.20	24975.10	1.943
10.457	7	SLU	17	0.00	7.70	7.70	7.70	8213.38	24975.10	3.041
10.607	7	SLU	17	15.00	7.70	7.70	7.70	8213.38	24975.10	3.041
10.987	7	SLU	17	53.33	7.70	7.70	7.70	8213.38	24975.10	3.041
11.757	7	SLU	17	130.00	7.70	7.70	7.70	-4201.17	-25923.90	6.171
11.857	7	SLU	17	140.00	7.70	7.70	7.70	2406.16	24975.10	10.380
13.187	7	SLU	21	0.00	7.70	7.70	7.70	-6613.58	-25923.90	3.920
13.795	7	SLU	21	61.43	7.70	7.70	7.70	-7474.53	-25923.90	3.468
15.325	7	SLU	21	215.00	7.70	7.70	7.70	-7472.37	-25923.90	3.469

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
1.521	SLV(E)		4	0.00	7.70	7.70	7.70	7.70	1675.61	24061.10	14.360
2.381	SLV(E)		6	0.00	7.70	7.70	7.70	7.70	-2318.09	-24611.10	10.617
3.421	SLV(E)		7	57.50	7.70	7.70	7.70	7.70	-2091.61	-24611.10	11.767
4.901	SLV(E)		11	15.00	7.70	7.70	7.70	7.70	-6441.92	-24611.10	3.820
5.551	SLV(E)		11	80.50	7.70	7.70	7.70	7.70	-6926.92	-24611.10	3.553
8.181	SLV(E)		11	342.50	7.70	7.70	7.70	7.70	10014.80	24061.10	2.403
8.351	SLV(E)		11	360.00	7.70	7.70	7.70	7.70	10014.80	24061.10	2.403
10.451	SLV(E)		17	0.00	7.70	7.70	7.70	7.70	6314.85	24061.10	3.810
10.601	SLV(E)		17	15.00	7.70	7.70	7.70	7.70	6314.85	24061.10	3.810
10.981	SLV(E)		17	53.33	7.70	7.70	7.70	7.70	6314.85	24061.10	3.810
11.751	SLV(E)		17	130.00	7.70	7.70	7.70	7.70	-3193.51	-24611.10	7.707
11.851	SLV(E)		17	140.00	7.70	7.70	7.70	7.70	1823.29	24061.10	13.197
13.181	SLV(E)		21	0.00	7.70	7.70	7.70	7.70	-5282.50	-24611.10	4.659
13.791	SLV(E)		21	61.43	7.70	7.70	7.70	7.70	-5834.99	-24611.10	4.218
15.321	SLV(E)		21	215.00	7.70	7.70	7.70	7.70	-5805.42	-24611.10	4.239

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/cm ² >	σ _f inf <daN/cm ² >	σ _c <daN/cm ² >
1.528	SLE R		4	0.00	7.70	7.70	1579.39	-56.19	289.55	5.06
1.5214	SLE Q		4	0.00	7.70	7.70	1523.28	-54.20	279.26	4.88
2.3810	SLE R		6	0.00	7.70	7.70	-2207.64	396.10	-37.28	4.13
2.3814	SLE Q		6	0.00	7.70	7.70	-2107.36	378.11	-35.58	3.95
3.428	SLE R		7	57.50	7.70	7.70	-1980.26	355.30	-33.44	3.71
3.4214	SLE Q		7	57.50	7.70	7.70	-1901.47	341.17	-32.11	3.56
4.9010	SLE R		11	15.00	7.70	7.70	-6227.35	1117.33	-105.15	11.66
4.9014	SLE Q		11	15.00	7.70	7.70	-5856.29	1050.75	-98.89	10.97
5.5510	SLE R		11	80.50	7.70	7.70	-6671.21	1196.97	-112.65	12.50
5.5514	SLE Q		11	80.50	7.70	7.70	-6297.20	1129.86	-106.33	11.79
8.1810	SLE R		11	342.50	7.70	7.70	9750.84	-346.91	1787.62	31.25
8.1814	SLE Q		11	342.50	7.70	7.70	9104.40	-323.92	1669.11	29.18
8.3510	SLE R		11	360.00	7.70	7.70	9750.84	-346.91	1787.62	31.25
8.3514	SLE Q		11	360.00	7.70	7.70	9104.40	-323.92	1669.11	29.18
10.4510	SLE R		17	0.00	7.70	7.70	6227.82	-221.57	1141.75	19.96
10.4514	SLE Q		17	0.00	7.70	7.70	5740.77	-204.24	1052.46	18.40
10.6010	SLE R		17	15.00	7.70	7.70	6227.82	-221.57	1141.75	19.96
10.6014	SLE Q		17	15.00	7.70	7.70	5740.77	-204.24	1052.46	18.40
10.9810	SLE R		17	53.33	7.70	7.70	6227.82	-221.57	1141.75	19.96
10.9814	SLE Q		17	53.33	7.70	7.70	5740.77	-204.24	1052.46	18.40
11.7510	SLE R		17	130.00	7.70	7.70	2800.14	-99.62	513.35	8.98
11.7510	SLE R		17	130.00	7.70	7.70	-3235.65	580.55	-54.64	6.06
11.7514	SLE Q		17	130.00	7.70	7.70	2568.08	-91.37	470.81	8.23
11.8510	SLE R		17	140.00	7.70	7.70	1811.83	-64.46	332.16	5.81
11.8514	SLE Q		17	140.00	7.70	7.70	1657.53	-58.97	303.88	5.31
13.1810	SLE R		21	0.00	7.70	7.70	-5029.65	902.43	-84.93	9.42
13.1814	SLE Q		21	0.00	7.70	7.70	-4802.27	861.64	-81.09	8.99
13.798	SLE R		21	61.43	7.70	7.70	-5630.89	1010.31	-95.08	10.55
13.7914	SLE Q		21	61.43	7.70	7.70	-5304.54	951.76	-89.57	9.94
15.328	SLE R		21	215.00	7.70	7.70	-5625.11	1009.27	-94.98	10.54
15.3214	SLE Q		21	215.00	7.70	7.70	-5277.66	946.93	-89.11	9.89

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/cm ² >	ε _{sm}	Wk <mm>
30	1.5214	SLE Q		4	29	0.00	1523.28	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	279.26	0.08	0.07
32	1.5211	SLE F		4	29	0.00	1540.34	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	282.39	0.08	0.07
51	2.3814	SLE Q		6	29	0.00	-2107.36	34.00	92.50	0.50	14.00	151.90	7.70	461.25	378.11	0.11	0.03
52	2.3811	SLE F		6	29	0.00	-2124.08	34.00	92.50	0.50	14.00	151.90	7.70	461.25	381.11	0.11	0.03
84	3.4214	SLE Q		7	29	57.50	-1901.47	34.00	92.50	0.50	14.00	151.90	7.70	461.25	341.17	0.10	0.03
86	3.4211	SLE F		7	29	57.50	-1917.29	34.00	92.50	0.50	14.00	151.90	7.70	461.25	344.01	0.10	0.03
105	4.9014	SLE Q		11	29	15.00	-5856.29	34.00	92.50	0.50	14.00	151.90	7.70	461.25	1050.75	0.31	0.08
106	4.9011	SLE F		11	29	15.00	-5896.97	34.00	92.50	0.50	14.00	151.90	7.70	461.25	1058.05	0.31	0.08
123	5.5514	SLE Q		11	29	80.50	-6297.20	34.00	92.50	0.50	14.00	151.90	7.70	461.25	1129.86	0.33	0.08
124	5.5511	SLE F		11	29	80.50	-6350.41	34.00	92.50	0.50	14.00	151.90	7.70	461.25	1139.41	0.33	0.09
155	8.1814	SLE Q		11	29	342.50	9104.40	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1669.11	0.49	0.40
159	8.1812	SLE F		11	29	342.50	9177.66	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1682.54	0.49	0.40
177	8.3514	SLE Q		11	29	360.00	9104.40	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1669.11	0.49	0.40
179	8.3512	SLE F		11	29	360.00	9177.66	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1682.54	0.49	0.40
195	10.4514	SLE Q		17	29	0.00	5740.77	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1052.46	0.31	0.25
197	10.4512	SLE F		17	29	0.00	5790.52	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1061.58	0.31	0.25
228	10.6014	SLE Q		17	29	15.00	5740.77	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1052.46	0.31	0.25
232	10.6012	SLE F		17	29	15.00	5790.52	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1061.58	0.31	0.25
264	10.9814	SLE Q		17	29	53.33	5740.77	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1052.46	0.31	0.25
268	10.9812	SLE F		17	29	53.33	5790.52	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	1061.58	0.31	0.25
300	11.7514	SLE Q		17	29	130.00	2590.60	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	474.94	0.14	0.11
304	11.7512	SLE F		17	29	130.00	2590.60	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	474.94	0.14	0.11
321	11.8514	SLE Q		17	29	140.00	1657.53	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	303.88	0.09	0.07
322	11.8511	SLE F		17	29	140.00	1674.14	34.00	305.00	0.50	14.00	481.73	7.70	1332.50	306.92	0.09	0.07
353	13.1814	SLE Q		21	29	0.00	-4802.27	34.00	92.50	0.50	14.00	151.90	7.70	461.25	861.64	0.25	0.06
355	13.1811	SLE F		21	29	0.00	-4826.91	34.00	92.50	0.50	14.00	151.90	7.70	461.25	866.06	0.25	0.07
389	13.7914	SLE Q		21	29	61.43	-5304.54	34.00	92.50	0.50	14.00	151.90	7.70	461.25	951.76	0.28	0.07

391	13.79	11	SLE F	21	29	61.43	-5372.13	34.00	92.50	0.50	14.00	151.90	7.70	461.25	963.88	0.28	0.07
411	15.32	14	SLE Q	21	29	215.00	-5277.66	34.00	92.50	0.50	14.00	151.90	7.70	461.25	946.93	0.28	0.07
412	15.32	11	SLE F	21	29	215.00	-5352.85	34.00	92.50	0.50	14.00	151.90	7.70	461.25	960.42	0.28	0.07

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 SLU	1.52	3.42	1.90	ø8/20 2 br.	5.03	0.45	8793.59	2.50	32843.50	63958.80	32843.50	3.735
5 SLU	4.90	5.70	0.80	ø8/20 2 br.	5.03	0.45	10676.00	2.50	32843.50	63958.80	32843.50	3.076
7 SLU	5.70	7.37	1.67	ø8/20 2 br.	5.03	0.45	12276.60	2.50	32843.50	63958.80	32843.50	2.675
7 SLU	7.37	8.18	0.80	ø8/20 2 br.	5.03	0.45	20802.70	2.50	32843.50	63958.80	32843.50	1.579
7 SLU	10.60	11.75	1.15	ø8/20 2 br.	5.03	0.45	16906.60	2.50	32843.50	63958.80	32843.50	1.943
5 SLU	13.18	15.32	2.15	ø8/20 2 br.	5.03	0.45	12758.30	2.50	32843.50	63958.80	32843.50	2.574

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	1.52	3.42	1.90	ø8/20 2 br.	5.03	2.19
7 SLU	4.90	5.70	0.80	ø8/20 2 br.	5.03	2.77
7 SLU	5.70	7.37	1.67	ø8/20 2 br.	5.03	2.77
7 SLU	7.37	8.18	0.80	ø8/20 2 br.	5.03	2.77
7 SLU	10.60	11.75	1.15	ø8/20 2 br.	5.03	2.84
5 SLU	13.18	15.32	2.15	ø8/20 2 br.	5.03	2.58

Travata n. 512

Nodi: 19 20 24 25 31 -1051 -1055 -1054 -1053 43

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
28T		45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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.
0.155	5	SLU	1	15.00	8.04	6.16	8.04	6.16	-3162.73	-26902.60	8.506
1.575	5	SLU	1	157.50	8.04	6.16	8.04	6.16	-3162.73	-26902.60	8.506
1.777	7	SLU	2	10.00	8.04	6.16	8.04	6.16	495.33	20099.60	40.578
3.087	7	SLU	2	140.00	8.04	6.16	8.04	6.16	3500.53	20099.60	5.742
3.387	7	SLU	3	15.00	8.04	6.16	8.04	6.16	4182.14	20099.60	4.806
4.677	7	SLU	3	145.00	8.04	6.16	8.04	6.16	3998.31	20099.60	5.027
4.887	7	SLU	4	10.00	8.04	6.16	8.04	6.16	4268.31	20099.60	4.709
6.387	7	SLU	4	160.00	8.04	6.16	8.04	6.16	7767.56	20099.60	2.588
6.675	5	SLU	5	0.00	8.04	6.16	8.04	6.16	15080.70	20099.60	1.333
8.837	7	SLU	5	215.38	8.04	6.16	8.04	6.16	-9999.64	-26902.60	2.690
10.687	7	SLU	5	400.00	8.04	6.16	8.04	6.16	-9866.88	-26902.60	2.727

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
0.151	1	SLV(E)	1	15.00	8.04	6.16	8.04	6.16	-2474.40	-25648.40	10.366
1.571	1	SLV(E)	1	157.50	8.04	6.16	8.04	6.16	-2474.40	-25648.40	10.366
1.771	1	SLV(E)	2	10.00	8.04	6.16	8.04	6.16	296.96	19373.70	65.241
3.081	1	SLV(E)	2	140.00	8.04	6.16	8.04	6.16	2675.73	19373.70	7.241
3.381	1	SLV(E)	3	15.00	8.04	6.16	8.04	6.16	3219.19	19373.70	6.018
4.671	1	SLV(E)	3	145.00	8.04	6.16	8.04	6.16	3050.06	19373.70	6.352
4.881	1	SLV(E)	4	10.00	8.04	6.16	8.04	6.16	3261.08	19373.70	5.941
6.381	1	SLV(E)	4	160.00	8.04	6.16	8.04	6.16	5987.80	19373.70	3.236
6.671	1	SLV(E)	5	0.00	8.04	6.16	8.04	6.16	11685.80	19373.70	1.658
8.831	1	SLV(E)	5	215.38	8.04	6.16	8.04	6.16	-7785.04	-25648.40	3.295
10.681	1	SLV(E)	5	400.00	8.04	6.16	8.04	6.16	-7658.45	-25648.40	3.349

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>
0.158	14	SLE R	1	15.00	8.04	6.16	-2383.09	410.34	-43.32	4.61
0.1514	14	SLE Q	1	15.00	8.04	6.16	-2249.46	387.33	-40.89	4.36
1.578	14	SLE R	1	157.50	8.04	6.16	-2383.09	410.34	-43.32	4.61
1.5714	14	SLE Q	1	157.50	8.04	6.16	-2249.46	387.33	-40.89	4.36
1.7710	14	SLE R	2	10.00	8.04	6.16	375.06	-13.87	85.41	1.30
1.7714	14	SLE Q	2	10.00	8.04	6.16	269.96	-9.99	61.47	0.94
3.0810	14	SLE R	2	140.00	8.04	6.16	2653.22	-98.14	604.18	9.22
3.0814	14	SLE Q	2	140.00	8.04	6.16	2432.48	-89.98	553.91	8.45
3.3810	14	SLE R	3	15.00	8.04	6.16	3167.96	-117.19	721.39	11.00
3.3814	14	SLE Q	3	15.00	8.04	6.16	2926.53	-108.25	666.42	10.17
4.6710	14	SLE R	3	145.00	8.04	6.16	3015.68	-111.55	686.72	10.48
4.6714	14	SLE Q	3	145.00	8.04	6.16	2772.79	-102.57	631.40	9.63
4.8810	14	SLE R	4	10.00	8.04	6.16	3218.40	-119.05	732.88	11.18
4.8814	14	SLE Q	4	10.00	8.04	6.16	2964.62	-109.66	675.09	10.30
6.3810	14	SLE R	4	160.00	8.04	6.16	5853.97	-216.54	1333.04	20.34
6.3814	14	SLE Q	4	160.00	8.04	6.16	5443.46	-201.36	1239.56	18.91
6.678	14	SLE R	5	0.00	8.04	6.16	11347.50	-419.75	2584.00	39.42
6.6714	14	SLE Q	5	0.00	8.04	6.16	10623.50	-392.97	2419.13	36.90
8.8310	14	SLE R	5	215.38	8.04	6.16	-7549.01	1299.84	-137.21	14.62
8.8314	14	SLE Q	5	215.38	8.04	6.16	-7077.31	1218.62	-128.64	13.70

10.68	10	SLE R	5	400.00	8.04	6.16	-7438.67	1280.84	-135.21	14.40
10.68	14	SLE Q	5	400.00	8.04	6.16	-6962.23	1198.81	-126.55	13.48

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>
15	0.15	14	SLE Q	1	28	15.00	-2249.46	33.00	122.67	0.50	16.00	157.76	8.04	461.25	387.33	0.11	0.03
16	0.15	11	SLE F	1	28	15.00	-2281.10	33.00	122.67	0.50	16.00	157.76	8.04	461.25	392.78	0.11	0.03
33	1.57	14	SLE Q	1	28	157.50	-2249.46	33.00	122.67	0.50	16.00	157.76	8.04	461.25	387.33	0.11	0.03
34	1.57	11	SLE F	1	28	157.50	-2281.10	33.00	122.67	0.50	16.00	157.76	8.04	461.25	392.78	0.11	0.03
65	1.77	14	SLE Q	2	28	10.00	269.96	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	61.47	0.02	0.02
69	1.77	12	SLE F	2	28	10.00	288.08	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	65.60	0.02	0.02
101	3.08	14	SLE Q	2	28	140.00	2432.48	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	553.91	0.16	0.14
105	3.08	12	SLE F	2	28	140.00	2462.99	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	560.86	0.16	0.14
123	3.38	14	SLE Q	3	28	15.00	2926.53	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	666.42	0.19	0.16
125	3.38	12	SLE F	3	28	15.00	2958.62	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	673.72	0.20	0.16
141	4.67	14	SLE Q	3	28	145.00	2772.79	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	631.40	0.18	0.15
143	4.67	12	SLE F	3	28	145.00	2799.74	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	637.54	0.19	0.16
159	4.88	14	SLE Q	4	28	10.00	2964.62	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	675.09	0.20	0.17
160	4.88	11	SLE F	4	28	10.00	2992.65	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	681.47	0.20	0.17
177	6.38	14	SLE Q	4	28	160.00	5443.46	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	1239.56	0.36	0.30
178	6.38	11	SLE F	4	28	160.00	5506.21	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	1253.85	0.37	0.31
195	6.67	14	SLE Q	5	28	0.00	10623.50	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	2419.13	0.70	0.59
196	6.67	11	SLE F	5	28	0.00	10776.90	34.00	373.33	0.50	14.00	494.00	6.16	1230.00	2454.07	0.71	0.60
213	8.83	14	SLE Q	5	28	215.38	-7077.31	33.00	122.67	0.50	16.00	157.76	8.04	461.25	1218.62	0.35	0.10
214	8.83	11	SLE F	5	28	215.38	-7153.09	33.00	122.67	0.50	16.00	157.76	8.04	461.25	1231.67	0.36	0.10
231	10.68	14	SLE Q	5	28	400.00	-6962.23	33.00	122.67	0.50	16.00	157.76	8.04	461.25	1198.81	0.35	0.09
232	10.68	11	SLE F	5	28	400.00	-7046.66	33.00	122.67	0.50	16.00	157.76	8.04	461.25	1213.35	0.35	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.
5 SLU	0.15	1.57	1.43	ø8/20 2 br.	5.03	0.45	6859.74	2.50	32843.50	63958.80	32843.50	4.788
7 SLU	1.77	3.08	1.30	ø8/20 2 br.	5.03	0.45	8767.03	2.50	32843.50	63958.80	32843.50	3.746
7 SLU	3.38	4.67	1.30	ø8/20 2 br.	5.03	0.45	6012.27	2.50	32843.50	63958.80	32843.50	5.463
7 SLU	4.88	6.38	1.50	ø8/20 2 br.	5.03	0.45	8611.43	2.50	32843.50	63958.80	32843.50	3.814
7 SLU	6.67	7.48	0.80	ø8/20 2 br.	5.03	0.45	18125.00	2.50	32843.50	63958.80	32843.50	1.812
7 SLU	7.48	9.87	2.40	ø8/20 2 br.	5.03	0.45	12173.40	2.50	32843.50	63958.80	32843.50	2.698
7 SLU	9.87	10.68	0.80	ø8/20 2 br.	5.03	0.45	4968.29	2.50	32843.50	63958.80	32843.50	6.611

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
5 SLU	0.15	1.57	1.43	ø8/20 2 br.	5.03	2.01
5 SLU	1.77	3.08	1.30	ø8/20 2 br.	5.03	1.95
7 SLU	3.38	4.67	1.30	ø8/20 2 br.	5.03	1.94
7 SLU	4.88	6.38	1.50	ø8/20 2 br.	5.03	1.89
7 SLU	6.67	7.48	0.80	ø8/20 2 br.	5.03	1.72
7 SLU	7.48	9.87	2.40	ø8/20 2 br.	5.03	1.72
7 SLU	9.87	10.68	0.80	ø8/20 2 br.	5.03	1.72

Travata n. 513

Nodi: 37 38 39 40 41 42 43

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
28T		45.00	120.00	60.00	20.00	4.10	4.10	287.50	22.65	181.02	120.68	11.19	4400.00	4400.00	3826.09

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.
0.30	7	SLU	1	30.00	6.16	4.52	6.16	4.52	-4770.39	-20834.00	4.367
1.26	7	SLU	1	125.62	6.16	4.52	6.16	4.52	-6607.53	-20834.00	3.153
4.12	7	SLU	1	412.50	6.16	4.52	6.16	4.52	3378.76	14917.10	4.415
4.33	7	SLU	2	10.00	6.16	4.52	6.16	4.52	3800.87	14917.10	3.925
6.20	7	SLU	2	197.50	6.16	4.52	6.16	4.52	4688.94	14917.10	3.181
6.50	7	SLU	3	15.00	6.16	4.52	6.16	4.52	4121.58	14917.10	3.619
7.78	7	SLU	3	142.50	6.16	4.52	6.16	4.52	-4355.97	-20834.00	4.783
10.32	7	SLU	3	397.50	6.16	4.52	6.16	4.52	4301.54	14917.10	3.468
10.53	7	SLU	4	10.00	6.16	4.52	6.16	4.52	4649.58	14917.10	3.208
12.40	7	SLU	4	197.50	6.16	4.52	6.16	4.52	4925.59	14917.10	3.028
12.70	7	SLU	5	15.00	6.16	4.52	6.16	4.52	4359.85	14917.10	3.421
13.97	7	SLU	5	142.50	6.16	4.52	6.16	4.52	-4877.81	-20834.00	4.271
16.52	7	SLU	5	397.50	6.16	4.52	6.16	4.52	2652.22	14917.10	5.624
16.73	7	SLU	6	10.00	6.16	4.52	6.16	4.52	2787.87	14917.10	5.351
17.06	7	SLU	6	43.75	6.16	4.52	6.16	4.52	2787.87	14917.10	5.351
18.75	5	SLU	6	212.50	6.16	4.52	6.16	4.52	-1053.06	-20834.00	19.784

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
0.30	1	SLV(E)	1	30.00	6.16	4.52	6.16	4.52	-3463.57	-19739.90	5.699
1.26	1	SLV(E)	1	125.62	6.16	4.52	6.16	4.52	-4941.03	-19739.90	3.995
4.12	1	SLV(E)	1	412.50	6.16	4.52	6.16	4.52	2217.00	14323.80	6.461

4.33	1	SLV(E)	2	10.00	6.16	4.52	6.16	4.52	2540.83	14323.80	5.637
6.20	1	SLV(E)	2	197.50	6.16	4.52	6.16	4.52	3278.56	14323.80	4.369
6.50	1	SLV(E)	3	15.00	6.16	4.52	6.16	4.52	2881.26	14323.80	4.971
7.78	1	SLV(E)	3	142.50	6.16	4.52	6.16	4.52	-3161.30	-19739.90	6.244
10.32	1	SLV(E)	3	397.50	6.16	4.52	6.16	4.52	3070.74	14323.80	4.665
10.53	1	SLV(E)	4	10.00	6.16	4.52	6.16	4.52	3320.93	14323.80	4.313
12.40	1	SLV(E)	4	197.50	6.16	4.52	6.16	4.52	3440.43	14323.80	4.163
12.70	1	SLV(E)	5	15.00	6.16	4.52	6.16	4.52	2999.65	14323.80	4.775
13.97	1	SLV(E)	5	142.50	6.16	4.52	6.16	4.52	-3805.16	-19739.90	5.188
16.52	1	SLV(E)	5	397.50	6.16	4.52	6.16	4.52	1651.40	14323.80	8.674
16.73	1	SLV(E)	6	10.00	6.16	4.52	6.16	4.52	1741.94	14323.80	8.223
17.06	1	SLV(E)	6	43.75	6.16	4.52	6.16	4.52	1741.94	14323.80	8.223
18.75	1	SLV(E)	6	212.50	6.16	4.52	6.16	4.52	-861.16	-19739.90	22.922

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>
0.30	10	SLE R	1	30.00	6.16	4.52	-3601.35	805.71	-69.04	7.93
0.30	14	SLE Q	1	30.00	6.16	4.52	-3148.70	704.44	-60.36	6.94
1.26	10	SLE R	1	125.62	6.16	4.52	-5004.40	1119.60	-95.94	11.02
1.26	14	SLE Q	1	125.62	6.16	4.52	-4491.84	1004.93	-86.11	9.89
4.12	10	SLE R	1	412.50	6.16	4.52	2521.26	-103.13	776.85	10.23
4.12	14	SLE Q	1	412.50	6.16	4.52	2015.46	-82.44	621.00	8.17
4.33	10	SLE R	2	10.00	6.16	4.52	2841.81	-116.25	875.62	11.53
4.33	14	SLE Q	2	10.00	6.16	4.52	2309.85	-94.48	711.71	9.37
6.20	10	SLE R	2	197.50	6.16	4.52	3523.13	-144.11	1085.54	14.29
6.20	14	SLE Q	2	197.50	6.16	4.52	2980.51	-121.92	918.35	12.09
6.50	10	SLE R	3	15.00	6.16	4.52	3096.46	-126.66	954.08	12.56
6.50	14	SLE Q	3	15.00	6.16	4.52	2619.33	-107.14	807.07	10.62
7.78	10	SLE R	3	142.50	6.16	4.52	-3287.12	735.40	-63.02	7.24
7.78	14	SLE Q	3	142.50	6.16	4.52	-2873.91	642.96	-55.10	6.33
10.32	10	SLE R	3	397.50	6.16	4.52	3241.74	-132.60	998.84	13.15
10.32	14	SLE Q	3	397.50	6.16	4.52	2791.58	-114.19	860.14	11.32
10.53	10	SLE R	4	10.00	6.16	4.52	3504.19	-143.34	1079.71	14.21
10.53	14	SLE Q	4	10.00	6.16	4.52	3019.03	-123.49	930.22	12.24
12.40	10	SLE R	4	197.50	6.16	4.52	3704.59	-151.54	1141.45	15.02
12.40	14	SLE Q	4	197.50	6.16	4.52	3127.66	-127.94	963.69	12.68
12.70	10	SLE R	5	15.00	6.16	4.52	3274.51	-133.94	1008.94	13.28
12.70	14	SLE Q	5	15.00	6.16	4.52	2726.95	-111.55	840.23	11.06
13.97	10	SLE R	5	142.50	6.16	4.52	-3704.59	828.80	-71.02	8.16
13.97	14	SLE Q	5	142.50	6.16	4.52	-3459.24	773.91	-66.32	7.62
16.52	10	SLE R	5	397.50	6.16	4.52	1974.91	-80.78	608.51	8.01
16.52	14	SLE Q	5	397.50	6.16	4.52	1501.27	-61.41	462.57	6.09
16.73	10	SLE R	6	10.00	6.16	4.52	2076.58	-84.94	639.83	8.42
16.73	14	SLE Q	6	10.00	6.16	4.52	1583.58	-64.78	487.93	6.42
17.06	10	SLE R	6	43.75	6.16	4.52	2076.58	-84.94	639.83	8.42
17.06	14	SLE Q	6	43.75	6.16	4.52	1583.58	-64.78	487.93	6.42
18.75	8	SLE R	6	212.50	6.16	4.52	500.16	-20.46	154.11	2.03
18.75	8	SLE R	6	212.50	6.16	4.52	-802.66	179.57	-15.39	1.77
18.75	14	SLE Q	6	212.50	6.16	4.52	500.28	-20.46	154.15	2.03

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>
29	0.30	14	SLE Q	1	28	30.00	-3148.70	34.00	123.33	0.50	14.00	172.87	6.16	461.25	704.44	0.21	0.06
33	0.30	12	SLE F	1	28	30.00	-3186.26	34.00	123.33	0.50	14.00	172.87	6.16	461.25	712.84	0.21	0.06
63	1.26	14	SLE Q	1	28	125.62	-4491.84	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1004.93	0.29	0.09
67	1.26	12	SLE F	1	28	125.62	-4534.39	34.00	123.33	0.50	14.00	172.87	6.16	461.25	1014.45	0.30	0.09
99	4.12	14	SLE Q	1	28	412.50	2015.46	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	621.00	0.18	0.16
103	4.12	12	SLE F	1	28	412.50	2058.15	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	634.15	0.18	0.16
121	4.33	14	SLE Q	2	28	10.00	2309.85	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	711.71	0.21	0.18
123	4.33	12	SLE F	2	28	10.00	2354.85	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	725.57	0.21	0.18
139	6.20	14	SLE Q	2	28	197.50	2980.51	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	918.35	0.27	0.23
141	6.20	12	SLE F	2	28	197.50	3026.29	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	932.46	0.27	0.23
172	6.50	14	SLE Q	3	28	15.00	2619.33	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	807.07	0.24	0.20
176	6.50	12	SLE F	3	28	15.00	2659.89	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	819.56	0.24	0.21
207	7.78	14	SLE Q	3	28	142.50	-2873.91	34.00	123.33	0.50	14.00	172.87	6.16	461.25	642.96	0.19	0.06
211	7.78	12	SLE F	3	28	142.50	-2908.65	34.00	123.33	0.50	14.00	172.87	6.16	461.25	650.73	0.19	0.06
243	10.32	14	SLE Q	3	28	397.50	2791.58	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	860.14	0.25	0.22
247	10.32	12	SLE F	3	28	397.50	2829.46	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	871.81	0.25	0.22
265	10.53	14	SLE Q	4	28	10.00	3019.03	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	930.22	0.27	0.23
267	10.53	12	SLE F	4	28	10.00	3060.01	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	942.85	0.27	0.24
283	12.40	14	SLE Q	4	28	197.50	3127.66	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	963.69	0.28	0.24
285	12.40	12	SLE F	4	28	197.50	3176.61	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	978.77	0.29	0.25
316	12.70	14	SLE Q	5	28	15.00	2726.95	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	840.23	0.24	0.21
320	12.70	12	SLE F	5	28	15.00	2773.81	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	854.66	0.25	0.21
351	13.97	14	SLE Q	5	28	142.50	-3459.24	34.00	123.33	0.50	14.00	172.87	6.16	461.25	773.91	0.23	0.07
355	13.97	12	SLE F	5	28	142.50	-3479.22	34.00	123.33	0.50	14.00	172.87	6.16	461.25	778.38	0.23	0.07
387	16.52	14	SLE Q	5	28	397.50	1501.27	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	462.57	0.13	0.12
391	16.52	12	SLE F	5	28	397.50	1541.09	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	474.84	0.14	0.12
424	16.73	14	SLE Q	6	28	10.00	1583.58	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	487.93	0.14	0.12
428	16.73	12	SLE F	6	28	10.00	1625.15	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	500.74	0.15	0.13
460	17.06	14	SLE Q	6	28	43.75	1583.58	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	487.93	0.14	0.12
464	17.06	12	SLE F	6	28	43.75	1625.15	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	500.74	0.15	0.13

495	18.75	14	SLE Q	6	28	212.50	500.28	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	154.15	0.04	0.04
497	18.75	11	SLE F	6	28	212.50	506.27	35.00	374.00	0.50	12.00	506.14	4.52	1230.00	155.99	0.05	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.
7 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.45	7953.75	2.50	32843.50	63958.80	32843.50	4.129
7 SLU	1.10	3.32	2.22	ø8/20 2 br.	5.03	0.45	5517.40	2.50	32843.50	63958.80	32843.50	5.953
7 SLU	3.32	4.12	0.80	ø8/20 2 br.	5.03	0.45	9073.11	2.50	32843.50	63958.80	32843.50	3.620
7 SLU	4.33	6.20	1.88	ø8/20 2 br.	5.03	0.45	4887.92	2.50	32843.50	63958.80	32843.50	6.719
7 SLU	6.50	7.30	0.80	ø8/20 2 br.	5.03	0.45	8570.53	2.50	32843.50	63958.80	32843.50	3.832
7 SLU	7.30	9.52	2.22	ø8/20 2 br.	5.03	0.45	4997.69	2.50	32843.50	63958.80	32843.50	6.572
7 SLU	9.52	10.32	0.80	ø8/20 2 br.	5.03	0.45	8739.33	2.50	32843.50	63958.80	32843.50	3.758
7 SLU	10.53	12.40	1.88	ø8/20 2 br.	5.03	0.45	4684.63	2.50	32843.50	63958.80	32843.50	7.011
7 SLU	12.70	13.50	0.80	ø8/20 2 br.	5.03	0.45	8913.70	2.50	32843.50	63958.80	32843.50	3.685
7 SLU	13.50	15.72	2.22	ø8/20 2 br.	5.03	0.45	5242.16	2.50	32843.50	63958.80	32843.50	6.265
7 SLU	15.72	16.52	0.80	ø8/20 2 br.	5.03	0.45	7907.81	2.50	32843.50	63958.80	32843.50	4.153
7 SLU	16.73	18.75	2.02	ø8/20 2 br.	5.03	0.45	5903.54	2.50	32843.50	63958.80	32843.50	5.563

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	1.24
7 SLU	1.10	3.32	2.22	ø8/20 2 br.	5.03	1.24
7 SLU	3.32	4.12	0.80	ø8/20 2 br.	5.03	1.24
7 SLU	4.33	6.20	1.88	ø8/20 2 br.	5.03	1.14
7 SLU	6.50	7.30	0.80	ø8/20 2 br.	5.03	1.16
7 SLU	7.30	9.52	2.22	ø8/20 2 br.	5.03	1.16
7 SLU	9.52	10.32	0.80	ø8/20 2 br.	5.03	1.16
7 SLU	10.53	12.40	1.88	ø8/20 2 br.	5.03	1.16
7 SLU	12.70	13.50	0.80	ø8/20 2 br.	5.03	1.15
7 SLU	13.50	15.72	2.22	ø8/20 2 br.	5.03	1.15
7 SLU	15.72	16.52	0.80	ø8/20 2 br.	5.03	1.15
7 SLU	16.73	18.75	2.02	ø8/20 2 br.	5.03	1.20

Travata n. 514

Nodi: 334 335 336

Caratteristiche delle sezioni e dei materiali utilizzati

Sez.	Tipo	B <cm>	b <cm>	H <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>
40T		30.00	90.00	65.00	30.00	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.
0.087	SLU	1	8.00	8.04	8.04	8.04	8.04	8.04	-4322.61	-28422.40	6.575
1.627	SLU	1	161.68	8.04	8.04	8.04	8.04	8.04	-5894.28	-28422.40	4.822
5.927	SLU	1	592.00	8.04	8.04	8.04	8.04	8.04	2091.16	27719.40	13.255
6.087	SLU	2	8.00	8.04	8.04	8.04	8.04	8.04	2099.14	27719.40	13.205
7.907	SLU	2	189.60	8.04	8.04	8.04	8.04	8.04	-3843.68	-28422.40	7.395
10.627	SLU	2	462.00	8.04	8.04	8.04	8.04	8.04	-3197.10	-28422.40	8.890

Stato limite elastico - 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>	M'ydy <daNm>	Sic.
0.081	SLV(E)	1	8.00	8.04	8.04	8.04	8.04	8.04	-3041.91	-27253.00	8.959
1.621	SLV(E)	1	161.68	8.04	8.04	8.04	8.04	8.04	-4148.78	-27253.00	6.569
5.921	SLV(E)	1	592.00	8.04	8.04	8.04	8.04	8.04	1447.46	26641.80	18.406
6.081	SLV(E)	2	8.00	8.04	8.04	8.04	8.04	8.04	1450.11	26641.80	18.372
7.901	SLV(E)	2	189.60	8.04	8.04	8.04	8.04	8.04	-2716.88	-27253.00	10.031
10.621	SLV(E)	2	462.00	8.04	8.04	8.04	8.04	8.04	-2256.80	-27253.00	12.076

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>
0.0810	SLE R	1	8.00	8.04	8.04	8.04	-3250.41	467.51	-56.79	5.44
0.0814	SLE Q	1	8.00	8.04	8.04	8.04	-2765.37	397.75	-48.31	4.63
1.6210	SLE R	1	161.68	8.04	8.04	8.04	-4432.39	637.52	-77.44	7.41
1.6214	SLE Q	1	161.68	8.04	8.04	8.04	-3771.62	542.48	-65.89	6.31
5.9210	SLE R	1	592.00	8.04	8.04	8.04	1569.51	-54.70	230.53	4.54
5.9214	SLE Q	1	592.00	8.04	8.04	8.04	1315.88	-45.86	193.28	3.81
6.0810	SLE R	2	8.00	8.04	8.04	8.04	1575.24	-54.90	231.37	4.56
6.0814	SLE Q	2	8.00	8.04	8.04	8.04	1318.28	-45.94	193.63	3.82
7.9010	SLE R	2	189.60	8.04	8.04	8.04	-2891.79	415.93	-50.52	4.84
7.9014	SLE Q	2	189.60	8.04	8.04	8.04	-2469.89	355.25	-43.15	4.13
10.6210	SLE R	2	462.00	8.04	8.04	8.04	-2405.00	345.92	-42.02	4.02
10.6214	SLE Q	2	462.00	8.04	8.04	8.04	-2051.64	295.09	-35.84	3.43

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>
15	0.0814	SLE Q	1	40		8.00	-2765.37	33.00	72.67	0.50	16.00	127.17	8.04	307.50	397.75	0.12	0.03
17	0.0812	SLE F	1	40		8.00	-2828.23	33.00	72.67	0.50	16.00	127.17	8.04	307.50	406.79	0.12	0.03
33	1.6214	SLE Q	1	40		161.68	-3771.62	33.00	72.67	0.50	16.00	127.17	8.04	307.50	542.48	0.16	0.03

35	1.62	12	SLE F	1	40	161.68	-3857.30	33.00	72.67	0.50	16.00	127.17	8.04	307.50	554.80	0.16	0.03
65	5.92	14	SLE Q	1	40	592.00	1315.88	33.00	272.67	0.50	16.00	556.91	8.04	922.50	193.28	0.06	0.05
69	5.92	12	SLE F	1	40	592.00	1348.74	33.00	272.67	0.50	16.00	556.91	8.04	922.50	198.10	0.06	0.05
102	6.08	14	SLE Q	2	40	8.00	1318.28	33.00	272.67	0.50	16.00	556.91	8.04	922.50	193.63	0.06	0.05
106	6.08	12	SLE F	2	40	8.00	1351.64	33.00	272.67	0.50	16.00	556.91	8.04	922.50	198.53	0.06	0.05
123	7.90	14	SLE Q	2	40	189.60	-2469.89	33.00	72.67	0.50	16.00	127.17	8.04	307.50	355.25	0.10	0.02
125	7.90	12	SLE F	2	40	189.60	-2524.67	33.00	72.67	0.50	16.00	127.17	8.04	307.50	363.13	0.11	0.02
141	10.62	14	SLE Q	2	40	462.00	-2051.64	33.00	72.67	0.50	16.00	127.17	8.04	307.50	295.09	0.09	0.02
143	10.62	12	SLE F	2	40	462.00	-2097.54	33.00	72.67	0.50	16.00	127.17	8.04	307.50	301.69	0.09	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.
7 SLU	0.08	1.03	0.95	ø8/20 2 br.	5.03	0.30	4658.62	2.50	40228.20	69658.40	40228.20	8.635
7 SLU	1.03	4.97	3.94	ø8/20 2 br.	5.03	0.30	3075.09	2.50	40228.20	69658.40	40228.20	13.082
7 SLU	4.97	5.92	0.95	ø8/20 2 br.	5.03	0.30	4286.46	2.50	40228.20	69658.40	40228.20	9.385
7 SLU	6.08	7.03	0.95	ø8/20 2 br.	5.03	0.30	3989.16	2.50	40228.20	69658.40	40228.20	10.084
7 SLU	7.03	9.67	2.64	ø8/20 2 br.	5.03	0.30	2678.49	2.50	40228.20	69658.40	40228.20	15.019
7 SLU	9.67	10.62	0.95	ø8/20 2 br.	5.03	0.30	3712.63	2.50	40228.20	69658.40	40228.20	10.835

Staffatura ala, ferri di suola e ferri di fianco - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. ala <cmq/m>	AfT St. ala <cmq/m>
7 SLU	0.08	1.03	0.95	ø8/20 2 br.	5.03	0.40
7 SLU	1.03	4.97	3.94	ø8/20 2 br.	5.03	0.40
7 SLU	4.97	5.92	0.95	ø8/20 2 br.	5.03	0.40
7 SLU	6.08	7.03	0.95	ø8/20 2 br.	5.03	0.37
7 SLU	7.03	9.67	2.64	ø8/20 2 br.	5.03	0.37
7 SLU	9.67	10.62	0.95	ø8/20 2 br.	5.03	0.37

Geotecnica

Elenco unità geotecniche

1 TERRENO:

Classificazione: Coesivo

Pesi:

- Peso specifico del terreno naturale: γ = 1963.00 daN/mc

- Peso specifico del terreno saturo: γ_{sat} = 2063.00 daN/mc

Parametri plastici:

- Angolo di attrito efficace: ϕ' = 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: κ_0 = 0.61

calcolato utilizzando le seguenti opzioni:

-Calcolo di k_0 Jaky(1936)

-Calcolo di α Kulhawy (1989)

Parametri elastici:

- Modulo elastico normale: E = 492000.00 daN/mq

- Modulo elastico tangenziale: G = 178475.00 daN/mq

- Esponente del parametro tensionale: k_j = 1.00

- Coeff. di Poisson: ν = 0.38

- Modulo edometrico: E_{ed} = 912000.00 daN/mq

- Modulo elastico non drenato: E_u = 535425.00 daN/mq

Elenco colonne stratigrafiche

Colonna stratigrafica numero 1

Posizione: X=0.00 <m> Y=0.00 <m> Z=0.40 <m>

Falda non presente

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
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 TERRENO	Coes.	1963.00	2063.00			23.00	1970.00	6639.00	1.00	0.61	1

Simbologia
 ν =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	ν	E_{ed} <daN/mq>	E_u <daN/mq>	Crit.
1	0.00	492000.00	178475.00	1.00	0.38	912000.00	535425.00	1

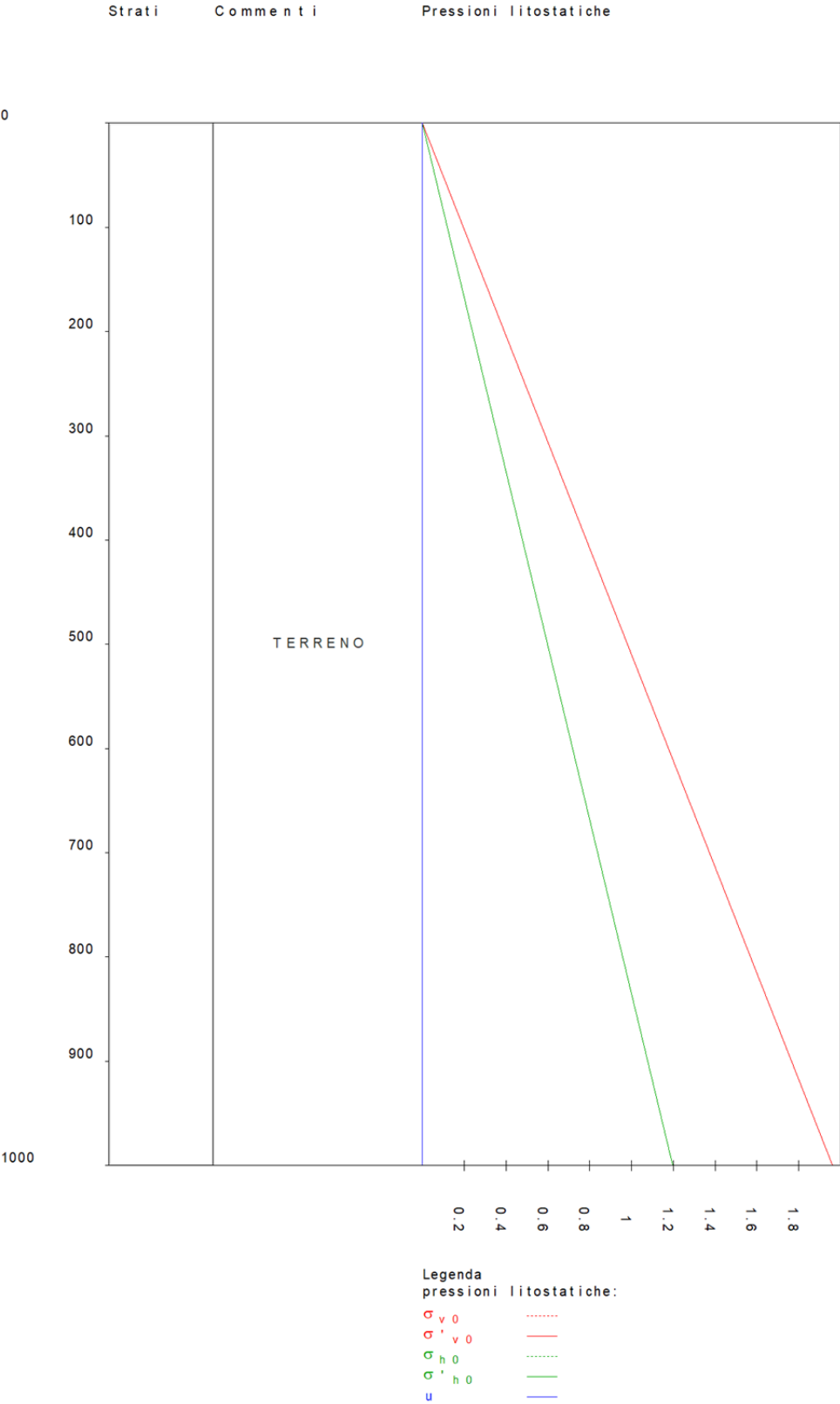


Figura numero 1: Colonna stratigrafica numero 1 STRATIGRAFIA

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_r =Peso specifico rappresentativo del terreno di fondazione
 η =Inclinazione del piano di posa della fondazione
 ϕ'_r =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
 M_x =Momento intorno all'asse X
 M_y =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
 T_x =Taglio in dir. X
 T_y =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'_r =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 501

$B=1.20$ <m> $L=6.00$ <m> $D=1.20$ <m> $\beta=0.00$ <grad> $\eta=0.00$ <grad> $\gamma_r=1963.00$ <daN/mc>
 $\sigma_{v0,f}=2355.60$ <daN/mq>

Verifiche in condizioni drenate

$\phi'_r=23.00$ <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	29341.80	-988.64	-160.90	10.24	-8.73	1.20	6.00	1.05	1.09	0.95	1.25	1.28	1.00	1.00	1.00	85491.00	267442.00	9.11
6	29710.70	-1011.74	-151.71	7.64	-56.88	1.20	6.00	1.05	1.09	0.95	1.25	1.28	1.00	1.00	1.00	85494.20	267349.00	9.00
7	30825.90	-1069.75	-171.74	1.86	-227.34	1.20	5.99	1.05	1.09	0.95	1.25	1.28	1.00	1.00	1.00	85504.40	266981.00	8.66

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	29341.80	-988.64	-160.90	10.24	-8.73	1.20	6.00	1.04	1.31	1.00	1.00	49012.10	153325.00	5.23
6	29710.70	-1011.74	-151.71	7.64	-56.88	1.20	6.00	1.04	1.31	1.00	1.00	49012.30	153266.00	5.16
7	30825.90	-1069.75	-171.74	1.86	-227.34	1.20	5.99	1.04	1.31	1.00	1.00	49013.80	153042.00	4.96

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 502

B=1.20 <m> L=12.15 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>

σ_{v0,f}=2355.60 <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	68924.30	527.02	-369.34	-518.01	6646.10	1.18	11.96	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83039.60	511554.00	7.42
6	69999.80	525.40	-349.54	-531.39	7164.03	1.18	11.95	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83041.70	510996.00	7.30
7	73352.40	512.05	-353.20	-566.39	7610.34	1.18	11.94	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83041.90	510764.00	6.96

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	68924.30	527.02	-369.34	-518.01	6646.10	1.18	11.96	1.02	1.32	1.00	1.00	48191.40	296877.00	4.31
6	69999.80	525.40	-349.54	-531.39	7164.03	1.18	11.95	1.02	1.32	1.00	1.00	48193.10	296555.00	4.24
7	73352.40	512.05	-353.20	-566.39	7610.34	1.18	11.94	1.02	1.32	1.00	1.00	48194.60	296430.00	4.04

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 503

B=1.20 <m> L=10.90 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>

σ_{v0,f}=2355.60 <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	73551.20	991.77	5379.81	12.93	-39052.70	1.20	9.84	1.03	1.06	0.97	1.25	1.28	1.00	1.00	1.00	83589.90	428934.00	5.83
6	74275.40	736.54	5200.28	7.06	-36634.90	1.20	9.91	1.03	1.06	0.97	1.25	1.28	1.00	1.00	1.00	83567.60	432167.00	5.82
7	77183.40	617.90	5418.12	27.46	-36840.50	1.20	9.95	1.03	1.06	0.97	1.25	1.28	1.00	1.00	1.00	83557.10	433312.00	5.61

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	73551.20	991.77	5379.81	12.93	-39052.70	1.20	9.84	1.02	1.31	1.00	1.00	48310.60	247901.00	3.37
6	74275.40	736.54	5200.28	7.06	-36634.90	1.20	9.91	1.02	1.31	1.00	1.00	48301.50	249789.00	3.36
7	77183.40	617.90	5418.12	27.46	-36840.50	1.20	9.95	1.02	1.31	1.00	1.00	48300.60	250478.00	3.25

Verifiche di capacità portante per rottura generale in condizioni statiche

Metodo utilizzato: Brinch Hansen

Travata 504

B=1.20 <m> L=12.15 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>

σ_{v0,f}=2355.60 <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	81204.60	2150.75	434.97	-106.12	3126.38	1.20	12.07	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83035.90	521900.00	6.43
6	82688.30	2202.08	355.50	-124.02	3418.86	1.20	12.07	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83036.40	521489.00	6.31
7	86968.10	2387.75	327.80	-143.85	4202.35	1.20	12.05	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83038.70	520767.00	5.99

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	81204.60	2150.75	434.97	-106.12	3126.38	1.20	12.07	1.02	1.31	1.00	1.00	48119.50	302443.00	3.72
6	82688.30	2202.08	355.50	-124.02	3418.86	1.20	12.07	1.02	1.31	1.00	1.00	48121.90	302218.00	3.65
7	86968.10	2387.75	327.80	-143.85	4202.35	1.20	12.05	1.02	1.31	1.00	1.00	48124.50	301807.00	3.47

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 505
B=1.20 <m> L=3.00 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	18657.90	-384.43	-19.27	134.13	-637.63	1.19	2.93	1.09	1.18	0.91	1.25	1.28	1.00	1.00	1.00	90504.00	136772.00	7.33
6	18953.60	-386.94	-22.96	137.64	-658.77	1.19	2.93	1.09	1.18	0.91	1.25	1.28	1.00	1.00	1.00	90507.00	136706.00	7.21
7	19812.20	-396.45	-112.35	146.50	-709.63	1.19	2.93	1.09	1.18	0.91	1.25	1.28	1.00	1.00	1.00	90512.50	136585.00	6.89

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	18657.90	-384.43	-19.27	134.13	-637.63	1.19	2.93	1.08	1.32	1.00	1.00	50931.90	76969.80	4.13
6	18953.60	-386.94	-22.96	137.64	-658.77	1.19	2.93	1.08	1.32	1.00	1.00	50933.80	76932.60	4.06
7	19812.20	-396.45	-112.35	146.50	-709.63	1.19	2.93	1.08	1.32	1.00	1.00	50937.20	76865.00	3.88

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 506
B=1.20 <m> L=6.00 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	37329.60	-1807.43	-1052.28	46.03	7550.16	1.20	5.60	1.05	1.10	0.95	1.25	1.28	1.00	1.00	1.00	85836.80	250076.00	6.70
6	37667.60	-1853.74	-1039.14	37.46	7344.22	1.20	5.61	1.05	1.10	0.95	1.25	1.28	1.00	1.00	1.00	85824.90	250792.00	6.66
7	39186.60	-1852.11	-1095.98	33.83	7535.32	1.20	5.62	1.05	1.10	0.95	1.25	1.28	1.00	1.00	1.00	85820.80	251074.00	6.41

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	37329.60	-1807.43	-1052.28	46.03	7550.16	1.20	5.60	1.04	1.31	1.00	1.00	49149.30	143191.00	3.84
6	37667.60	-1853.74	-1039.14	37.46	7344.22	1.20	5.61	1.04	1.31	1.00	1.00	49142.20	143600.00	3.81
7	39186.60	-1852.11	-1095.98	33.83	7535.32	1.20	5.62	1.04	1.31	1.00	1.00	49139.30	143760.00	3.67

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 507
B=1.20 <m> L=11.60 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	98094.60	3794.23	10617.10	-784.91	-78721.50	1.18	9.99	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83513.50	429696.00	4.38
6	97350.90	3428.94	10045.10	-764.75	-77524.80	1.18	10.01	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83510.50	430317.00	4.42
7	99960.20	3427.81	10154.10	-784.01	-80333.20	1.18	9.99	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83514.80	429719.00	4.30

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	98094.60	3794.23	10617.10	-784.91	-78721.50	1.18	9.99	1.02	1.32	1.00	1.00	48371.10	248881.00	2.54
6	97350.90	3428.94	10045.10	-764.75	-77524.80	1.18	10.01	1.02	1.32	1.00	1.00	48368.40	249235.00	2.56
7	99960.20	3427.81	10154.10	-784.01	-80333.20	1.18	9.99	1.02	1.32	1.00	1.00	48369.80	248883.00	2.49

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 508
B=1.20 <m> L=10.30 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0, f}=2355.60 <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>	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	51966.40	-292.29	687.52	216.72	-3304.34	1.19	10.17	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83477.00	439980.00	8.47
6	52789.90	-282.71	659.82	178.01	-3705.06	1.19	10.16	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83483.70	440033.00	8.34
7	55355.00	-282.47	635.22	167.06	-4006.06	1.19	10.16	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83486.30	440118.00	7.95

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>	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	51966.40	-292.29	687.52	216.72	-3304.34	1.19	10.17	1.02	1.32	1.00	1.00	48314.20	254648.00	4.90
6	52789.90	-282.71	659.82	178.01	-3705.06	1.19	10.16	1.02	1.32	1.00	1.00	48307.70	254624.00	4.82
7	55355.00	-282.47	635.22	167.06	-4006.06	1.19	10.16	1.02	1.32	1.00	1.00	48304.60	254649.00	4.60

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 509
B=1.20 <m> L=4.93 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0, f}=2355.60 <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>	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	36819.80	-7165.06	1587.80	157.46	-14993.20	1.19	4.11	1.07	1.13	0.93	1.25	1.28	1.00	1.00	1.00	87690.70	186830.00	5.07
6	36404.60	-7158.13	1504.65	167.44	-14378.90	1.19	4.14	1.07	1.13	0.93	1.25	1.28	1.00	1.00	1.00	87646.00	187743.00	5.16
7	37170.50	-7415.74	1500.88	189.21	-14492.00	1.19	4.15	1.07	1.13	0.93	1.25	1.28	1.00	1.00	1.00	87624.30	188004.00	5.06

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>	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	36819.80	-7165.06	1587.80	157.46	-14993.20	1.19	4.11	1.06	1.32	1.00	1.00	49865.20	106240.00	2.89
6	36404.60	-7158.13	1504.65	167.44	-14378.90	1.19	4.14	1.06	1.32	1.00	1.00	49852.30	106787.00	2.93
7	37170.50	-7415.74	1500.88	189.21	-14492.00	1.19	4.15	1.06	1.32	1.00	1.00	49849.80	106956.00	2.88

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 510
B=1.30 <m> L=18.75 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0, f}=2355.60 <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>	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	220818.00	-9093.04	-7419.71	1988.40	13131.70	1.28	18.63	1.02	1.03	0.98	1.29	1.33	1.00	1.00	1.00	85896.20	892008.00	4.04
6	218804.00	-8179.91	-6654.06	1658.37	18197.60	1.28	18.58	1.02	1.03	0.98	1.29	1.33	1.00	1.00	1.00	85886.40	891615.00	4.07
7	225836.00	-8092.10	-6687.28	1675.62	23276.40	1.29	18.54	1.02	1.03	0.98	1.29	1.33	1.00	1.00	1.00	85888.60	889949.00	3.94

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>	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	220818.00	-9093.04	-7419.71	1988.40	13131.70	1.28	18.63	1.01	1.37	1.00	1.00	49917.10	518375.00	2.35
6	218804.00	-8179.91	-6654.06	1658.37	18197.60	1.28	18.58	1.01	1.37	1.00	1.00	49891.40	517939.00	2.37
7	225836.00	-8092.10	-6687.28	1675.62	23276.40	1.29	18.54	1.01	1.37	1.00	1.00	49889.80	516941.00	2.29

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 511
B=1.30 <m> L=16.85 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	193075.00	-13084.80	8373.17	1632.30	-67373.00	1.28	16.15	1.02	1.04	0.98	1.29	1.33	1.00	1.00	1.00	86158.20	776347.00	4.02
6	189907.00	-12102.40	7574.37	1722.77	-63141.80	1.28	16.18	1.02	1.04	0.98	1.30	1.33	1.00	1.00	1.00	86160.20	777198.00	4.09
7	193492.00	-12102.10	7543.25	1818.28	-59860.80	1.28	16.23	1.02	1.04	0.98	1.30	1.33	1.00	1.00	1.00	86157.70	778999.00	4.03

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	193075.00	-13084.80	8373.17	1632.30	-67373.00	1.28	16.15	1.02	1.37	1.00	1.00	50005.70	450587.00	2.33
6	189907.00	-12102.40	7574.37	1722.77	-63141.80	1.28	16.18	1.02	1.37	1.00	1.00	50015.90	451163.00	2.38
7	193492.00	-12102.10	7543.25	1818.28	-59860.80	1.28	16.23	1.02	1.37	1.00	1.00	50020.00	452259.00	2.34

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 512
B=1.20 <m> L=12.68 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	112079.00	-901.12	-3517.48	-10.30	86422.50	1.20	11.13	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83244.50	483446.00	4.31
6	110851.00	-829.33	-3199.65	17.86	83065.70	1.20	11.18	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83234.00	485217.00	4.38
7	112997.00	-901.13	-3174.89	53.24	82476.60	1.20	11.22	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83223.80	486594.00	4.31

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	112079.00	-901.12	-3517.48	-10.30	86422.50	1.20	11.13	1.02	1.31	1.00	1.00	48182.50	279822.00	2.50
6	110851.00	-829.33	-3199.65	17.86	83065.70	1.20	11.18	1.02	1.31	1.00	1.00	48179.40	280865.00	2.53
7	112997.00	-901.13	-3174.89	53.24	82476.60	1.20	11.22	1.02	1.31	1.00	1.00	48179.20	281695.00	2.49

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 513
B=1.20 <m> L=18.75 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	107932.00	-3087.72	-289.91	1108.53	-3752.33	1.18	18.68	1.01	1.03	0.99	1.25	1.28	1.00	1.00	1.00	82162.10	787071.00	7.29
6	110265.00	-3161.21	-275.45	1119.69	-2644.96	1.18	18.70	1.01	1.03	0.99	1.25	1.28	1.00	1.00	1.00	82160.50	788120.00	7.15
7	116971.00	-3291.24	-254.83	1188.48	-1670.84	1.18	18.72	1.01	1.03	0.99	1.25	1.28	1.00	1.00	1.00	82158.90	788914.00	6.74

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	107932.00	-3087.72	-289.91	1108.53	-3752.33	1.18	18.68	1.01	1.32	1.00	1.00	47900.40	458861.00	4.25
6	110265.00	-3161.21	-275.45	1119.69	-2644.96	1.18	18.70	1.01	1.32	1.00	1.00	47898.40	459463.00	4.17
7	116971.00	-3291.24	-254.83	1188.48	-1670.84	1.18	18.72	1.01	1.32	1.00	1.00	47897.90	459930.00	3.93

Verifiche di capacità portante per rottura generale in condizioni statiche
Metodo utilizzato: Brinch Hansen

Travata 514
B=0.90 <m> L=10.70 <m> D=1.35 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0, f}=2650.05 <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	31492.20	42.83	-0.00	-697.77	-234.05	0.86	10.69	1.02	1.04	0.98	1.32	1.36	1.00	1.00	1.00	87606.50	348260.00	11.06
6	32440.70	43.03	-0.00	-732.12	-227.16	0.85	10.69	1.02	1.04	0.98	1.32	1.36	1.00	1.00	1.00	87606.70	347954.00	10.73
7	33468.70	44.72	-0.00	-771.07	-216.83	0.85	10.69	1.02	1.04	0.98	1.32	1.36	1.00	1.00	1.00	87606.80	347605.00	10.39

Verifiche in condizioni non drenate
c_{ur}=6639.00 <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	31492.20	42.83	-0.00	-697.77	-234.05	0.86	10.69	1.02	1.40	1.00	1.00	51285.90	203875.00	6.47
6	32440.70	43.03	-0.00	-732.12	-227.16	0.85	10.69	1.02	1.40	1.00	1.00	51291.10	203717.00	6.28
7	33468.70	44.72	-0.00	-771.07	-216.83	0.85	10.69	1.02	1.40	1.00	1.00	51297.10	203536.00	6.08

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

Travata 501
B=1.20 <m> L=6.00 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0, f}=2355.60 <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	24521.00	-8358.33	-2769.09	9.37	-4.60	1.20	6.00	1.05	1.09	0.95	1.25	1.28	1.00	1.00	1.00	85490.60	267436.00	10.91
2	24521.00	-6194.60	481.54	9.37	-4.60	1.20	6.00	1.05	1.09	0.95	1.25	1.28	1.00	1.00	1.00	85490.60	267436.00	10.91
3	24521.00	-6360.35	-5856.52	9.37	-4.60	1.20	6.00	1.05	1.09	0.95	1.25	1.28	1.00	1.00	1.00	85490.60	267436.00	10.91
4	24521.00	-2484.06	-5252.27	9.37	-4.60	1.20	6.00	1.05	1.09	0.95	1.25	1.28	1.00	1.00	1.00	85490.60	267436.00	10.91

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	24521.00	-8358.33	-2769.09	9.37	-4.60	1.20	6.00	1.04	1.31	1.00	1.00	49012.40	153323.00	6.25
2	24521.00	-6194.60	481.54	9.37	-4.60	1.20	6.00	1.04	1.31	1.00	1.00	49012.40	153323.00	6.25
3	24521.00	-6360.35	-5856.52	9.37	-4.60	1.20	6.00	1.04	1.31	1.00	1.00	49012.40	153323.00	6.25
4	24521.00	-2484.06	-5252.27	9.37	-4.60	1.20	6.00	1.04	1.31	1.00	1.00	49012.40	153323.00	6.25

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

Travata 502
B=1.20 <m> L=12.15 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0, f}=2355.60 <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	57442.50	4458.11	-3084.55	-427.39	5350.49	1.19	11.96	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83038.50	511894.00	8.91
2	57442.50	3812.16	389.70	-427.39	5350.49	1.19	11.96	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83038.50	511894.00	8.91
3	57442.50	2631.02	-6413.73	-427.39	5350.49	1.19	11.96	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83038.50	511894.00	8.91
4	57442.50	419.00	-5793.06	-427.39	5350.49	1.19	11.96	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83038.50	511894.00	8.91

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	57442.50	4458.11	-3084.55	-427.39	5350.49	1.19	11.96	1.02	1.32	1.00	1.00	48190.10	297070.00	5.17
2	57442.50	3812.16	389.70	-427.39	5350.49	1.19	11.96	1.02	1.32	1.00	1.00	48190.10	297070.00	5.17
3	57442.50	2631.02	-6413.73	-427.39	5350.49	1.19	11.96	1.02	1.32	1.00	1.00	48190.10	297070.00	5.17
4	57442.50	419.00	-5793.06	-427.39	5350.49	1.19	11.96	1.02	1.32	1.00	1.00	48190.10	297070.00	5.17

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

Travata 503
B=1.20 <m> L=10.90 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	60449.70	12361.80	13827.00	14.19	-29625.60	1.20	9.92	1.03	1.06	0.97	1.25	1.28	1.00	1.00	1.00	83565.20	432328.00	7.15
2	60449.70	10549.50	5353.13	14.19	-29625.60	1.20	9.92	1.03	1.06	0.97	1.25	1.28	1.00	1.00	1.00	83565.20	432328.00	7.15
3	60449.70	6907.73	19929.40	14.19	-29625.60	1.20	9.92	1.03	1.06	0.97	1.25	1.28	1.00	1.00	1.00	83565.20	432328.00	7.15
4	60449.70	420.42	16686.20	14.19	-29625.60	1.20	9.92	1.03	1.06	0.97	1.25	1.28	1.00	1.00	1.00	83565.20	432328.00	7.15

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	60449.70	12361.80	13827.00	14.19	-29625.60	1.20	9.92	1.02	1.31	1.00	1.00	48302.20	249893.00	4.13
2	60449.70	10549.50	5353.13	14.19	-29625.60	1.20	9.92	1.02	1.31	1.00	1.00	48302.20	249893.00	4.13
3	60449.70	6907.73	19929.40	14.19	-29625.60	1.20	9.92	1.02	1.31	1.00	1.00	48302.20	249893.00	4.13
4	60449.70	420.42	16686.20	14.19	-29625.60	1.20	9.92	1.02	1.31	1.00	1.00	48302.20	249893.00	4.13

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

Travata 504
B=1.20 <m> L=12.15 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	67439.10	9093.88	40033.40	-96.57	2142.74	1.20	12.09	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83032.80	522353.00	7.75
2	67439.10	6409.88	-2274.75	-96.57	2142.74	1.20	12.09	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83032.80	522353.00	7.75
3	67439.10	8040.02	76464.70	-96.57	2142.74	1.20	12.09	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83032.80	522353.00	7.75
4	67439.10	4452.71	65383.30	-96.57	2142.74	1.20	12.09	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83032.80	522353.00	7.75

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	67439.10	9093.88	40033.40	-96.57	2142.74	1.20	12.09	1.02	1.31	1.00	1.00	48119.80	302718.00	4.49
2	67439.10	6409.88	-2274.75	-96.57	2142.74	1.20	12.09	1.02	1.31	1.00	1.00	48119.80	302718.00	4.49
3	67439.10	8040.02	76464.70	-96.57	2142.74	1.20	12.09	1.02	1.31	1.00	1.00	48119.80	302718.00	4.49
4	67439.10	4452.71	65383.30	-96.57	2142.74	1.20	12.09	1.02	1.31	1.00	1.00	48119.80	302718.00	4.49

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

Travata 505
B=1.20 <m> L=3.00 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	15526.90	-1363.42	-2627.54	112.97	-533.20	1.19	2.93	1.09	1.18	0.91	1.25	1.28	1.00	1.00	1.00	90504.00	136737.00	8.81
2	15526.90	-605.59	-499.24	112.97	-533.20	1.19	2.93	1.09	1.18	0.91	1.25	1.28	1.00	1.00	1.00	90504.00	136737.00	8.81
3	15526.90	-1776.89	-4017.63	112.97	-533.20	1.19	2.93	1.09	1.18	0.91	1.25	1.28	1.00	1.00	1.00	90504.00	136737.00	8.81
4	15526.90	-1373.45	-3080.83	112.97	-533.20	1.19	2.93	1.09	1.18	0.91	1.25	1.28	1.00	1.00	1.00	90504.00	136737.00	8.81

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	15526.90	-1363.42	-2627.54	112.97	-533.20	1.19	2.93	1.08	1.32	1.00	1.00	50932.80	76951.20	4.96
2	15526.90	-605.59	-499.24	112.97	-533.20	1.19	2.93	1.08	1.32	1.00	1.00	50932.80	76951.20	4.96
3	15526.90	-1776.89	-4017.63	112.97	-533.20	1.19	2.93	1.08	1.32	1.00	1.00	50932.80	76951.20	4.96
4	15526.90	-1373.45	-3080.83	112.97	-533.20	1.19	2.93	1.08	1.32	1.00	1.00	50932.80	76951.20	4.96

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

Travata 506
B=1.20 <m> L=6.00 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	30775.70	-8150.89	-3758.16	28.41	5819.92	1.20	5.62	1.05	1.10	0.95	1.25	1.28	1.00	1.00	1.00	85814.50	251316.00	8.17
2	30775.70	-6651.87	-1112.01	28.41	5819.92	1.20	5.62	1.05	1.10	0.95	1.25	1.28	1.00	1.00	1.00	85814.50	251316.00	8.17
3	30775.70	-5801.85	-5712.58	28.41	5819.92	1.20	5.62	1.05	1.10	0.95	1.25	1.28	1.00	1.00	1.00	85814.50	251316.00	8.17
4	30775.70	-2289.35	-4741.65	28.41	5819.92	1.20	5.62	1.05	1.10	0.95	1.25	1.28	1.00	1.00	1.00	85814.50	251316.00	8.17

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	30775.70	-8150.89	-3758.16	28.41	5819.92	1.20	5.62	1.04	1.31	1.00	1.00	49137.60	143904.00	4.68
2	30775.70	-6651.87	-1112.01	28.41	5819.92	1.20	5.62	1.04	1.31	1.00	1.00	49137.60	143904.00	4.68
3	30775.70	-5801.85	-5712.58	28.41	5819.92	1.20	5.62	1.04	1.31	1.00	1.00	49137.60	143904.00	4.68
4	30775.70	-2289.35	-4741.65	28.41	5819.92	1.20	5.62	1.04	1.31	1.00	1.00	49137.60	143904.00	4.68

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

Travata 507
B=1.20 <m> L=11.60 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	79386.00	11352.70	30930.10	-615.58	-61914.30	1.18	10.04	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83501.40	431757.00	5.44
2	79386.00	9169.86	4221.57	-615.58	-61914.30	1.18	10.04	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83501.40	431757.00	5.44
3	79386.00	8701.68	55456.90	-615.58	-61914.30	1.18	10.04	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83501.40	431757.00	5.44
4	79386.00	4246.60	49771.40	-615.58	-61914.30	1.18	10.04	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83501.40	431757.00	5.44

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	79386.00	11352.70	30930.10	-615.58	-61914.30	1.18	10.04	1.02	1.32	1.00	1.00	48363.90	250073.00	3.15
2	79386.00	9169.86	4221.57	-615.58	-61914.30	1.18	10.04	1.02	1.32	1.00	1.00	48363.90	250073.00	3.15
3	79386.00	8701.68	55456.90	-615.58	-61914.30	1.18	10.04	1.02	1.32	1.00	1.00	48363.90	250073.00	3.15
4	79386.00	4246.60	49771.40	-615.58	-61914.30	1.18	10.04	1.02	1.32	1.00	1.00	48363.90	250073.00	3.15

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

Travata 508
B=1.20 <m> L=10.30 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	43224.90	-9227.46	2064.47	133.22	-2918.79	1.19	10.16	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83483.30	440475.00	10.19
2	43224.90	-8873.37	-290.16	133.22	-2918.79	1.19	10.16	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83483.30	440475.00	10.19
3	43224.90	-3463.79	4575.27	133.22	-2918.79	1.19	10.16	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83483.30	440475.00	10.19
4	43224.90	1830.59	4372.77	133.22	-2918.79	1.19	10.16	1.03	1.05	0.97	1.25	1.28	1.00	1.00	1.00	83483.30	440475.00	10.19

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	43224.90	-9227.46	2064.47	133.22	-2918.79	1.19	10.16	1.02	1.32	1.00	1.00	48304.20	254863.00	5.90
2	43224.90	-8873.37	-290.16	133.22	-2918.79	1.19	10.16	1.02	1.32	1.00	1.00	48304.20	254863.00	5.90
3	43224.90	-3463.79	4575.27	133.22	-2918.79	1.19	10.16	1.02	1.32	1.00	1.00	48304.20	254863.00	5.90
4	43224.90	1830.59	4372.77	133.22	-2918.79	1.19	10.16	1.02	1.32	1.00	1.00	48304.20	254863.00	5.90

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

Travata 509
B=1.20 <m> L=4.93 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	29723.60	-9745.26	1875.69	130.81	-11570.30	1.19	4.15	1.07	1.13	0.93	1.25	1.28	1.00	1.00	1.00	87628.40	188286.00	6.33
2	29723.60	-8942.68	1170.75	130.81	-11570.30	1.19	4.15	1.07	1.13	0.93	1.25	1.28	1.00	1.00	1.00	87628.40	188286.00	6.33
3	29723.60	-8158.05	2483.53	130.81	-11570.30	1.19	4.15	1.07	1.13	0.93	1.25	1.28	1.00	1.00	1.00	87628.40	188286.00	6.33
4	29723.60	-5995.01	2299.61	130.81	-11570.30	1.19	4.15	1.07	1.13	0.93	1.25	1.28	1.00	1.00	1.00	87628.40	188286.00	6.33

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	29723.60	-9745.26	1875.69	130.81	-11570.30	1.19	4.15	1.06	1.32	1.00	1.00	49843.70	107099.00	3.60
2	29723.60	-8942.68	1170.75	130.81	-11570.30	1.19	4.15	1.06	1.32	1.00	1.00	49843.70	107099.00	3.60
3	29723.60	-8158.05	2483.53	130.81	-11570.30	1.19	4.15	1.06	1.32	1.00	1.00	49843.70	107099.00	3.60
4	29723.60	-5995.01	2299.61	130.81	-11570.30	1.19	4.15	1.06	1.32	1.00	1.00	49843.70	107099.00	3.60

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

Travata 510
B=1.30 <m> L=18.75 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	177129.00	-78466.70	-16409.60	1291.95	14034.20	1.29	18.59	1.02	1.03	0.98	1.29	1.33	1.00	1.00	1.00	85882.80	892352.00	5.04
2	177129.00	-52935.80	-8016.66	1291.95	14034.20	1.29	18.59	1.02	1.03	0.98	1.29	1.33	1.00	1.00	1.00	85882.80	892352.00	5.04
3	177129.00	-66899.90	-21340.10	1291.95	14034.20	1.29	18.59	1.02	1.03	0.98	1.29	1.33	1.00	1.00	1.00	85882.80	892352.00	5.04
4	177129.00	-31454.60	-17173.20	1291.95	14034.20	1.29	18.59	1.02	1.03	0.98	1.29	1.33	1.00	1.00	1.00	85882.80	892352.00	5.04

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	177129.00	-78466.70	-16409.60	1291.95	14034.20	1.29	18.59	1.01	1.37	1.00	1.00	49885.70	518330.00	2.93
2	177129.00	-52935.80	-8016.66	1291.95	14034.20	1.29	18.59	1.01	1.37	1.00	1.00	49885.70	518330.00	2.93
3	177129.00	-66899.90	-21340.10	1291.95	14034.20	1.29	18.59	1.01	1.37	1.00	1.00	49885.70	518330.00	2.93
4	177129.00	-31454.60	-17173.20	1291.95	14034.20	1.29	18.59	1.01	1.37	1.00	1.00	49885.70	518330.00	2.93

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

Travata 511
B=1.30 <m> L=16.85 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_r=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <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	154738.00	-60438.90	18223.30	1393.99	-51640.40	1.28	16.18	1.02	1.04	0.98	1.29	1.33	1.00	1.00	1.00	86159.90	777152.00	5.02
2	154738.00	-47246.10	9151.79	1393.99	-51640.40	1.28	16.18	1.02	1.04	0.98	1.29	1.33	1.00	1.00	1.00	86159.90	777152.00	5.02
3	154738.00	-44914.30	23433.10	1393.99	-51640.40	1.28	16.18	1.02	1.04	0.98	1.29	1.33	1.00	1.00	1.00	86159.90	777152.00	5.02
4	154738.00	-18414.80	18827.10	1393.99	-51640.40	1.28	16.18	1.02	1.04	0.98	1.29	1.33	1.00	1.00	1.00	86159.90	777152.00	5.02

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	154738.00	-60438.90	18223.30	1393.99	-51640.40	1.28	16.18	1.02	1.37	1.00	1.00	50014.90	451128.00	2.92
2	154738.00	-47246.10	9151.79	1393.99	-51640.40	1.28	16.18	1.02	1.37	1.00	1.00	50014.90	451128.00	2.92
3	154738.00	-44914.30	23433.10	1393.99	-51640.40	1.28	16.18	1.02	1.37	1.00	1.00	50014.90	451128.00	2.92
4	154738.00	-18414.80	18827.10	1393.99	-51640.40	1.28	16.18	1.02	1.37	1.00	1.00	50014.90	451128.00	2.92

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

Travata 512
B=1.20 <m> L=12.68 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_x=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <daN/mq>

Verifiche in condizioni drenate
φ'_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.
1	90623.00	-4983.68	-20678.00	-1.61	67026.30	1.20	11.20	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83229.90	486154.00	5.36
2	90623.00	-3487.15	7664.47	-1.61	67026.30	1.20	11.20	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83229.90	486154.00	5.36
3	90623.00	-4240.99	-50988.20	-1.61	67026.30	1.20	11.20	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83229.90	486154.00	5.36
4	90623.00	-2107.87	-48626.00	-1.61	67026.30	1.20	11.20	1.02	1.05	0.98	1.25	1.28	1.00	1.00	1.00	83229.90	486154.00	5.36

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	90623.00	-4983.68	-20678.00	-1.61	67026.30	1.20	11.20	1.02	1.31	1.00	1.00	48176.30	281403.00	3.11
2	90623.00	-3487.15	7664.47	-1.61	67026.30	1.20	11.20	1.02	1.31	1.00	1.00	48176.30	281403.00	3.11
3	90623.00	-4240.99	-50988.20	-1.61	67026.30	1.20	11.20	1.02	1.31	1.00	1.00	48176.30	281403.00	3.11
4	90623.00	-2107.87	-48626.00	-1.61	67026.30	1.20	11.20	1.02	1.31	1.00	1.00	48176.30	281403.00	3.11

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

Travata 513
B=1.20 <m> L=18.75 <m> D=1.20 <m> β=0.00 <grad> η=0.00 <grad> γ_x=1963.00 <daN/mc>
σ_{v0,f}=2355.60 <daN/mq>

Verifiche in condizioni drenate
φ'_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.
1	89133.50	-8784.80	-6169.03	902.42	-2324.39	1.18	18.70	1.01	1.03	0.99	1.25	1.28	1.00	1.00	1.00	82160.90	787988.00	8.84
2	89133.50	-7259.72	2523.66	902.42	-2324.39	1.18	18.70	1.01	1.03	0.99	1.25	1.28	1.00	1.00	1.00	82160.90	787988.00	8.84
3	89133.50	-6744.09	-15200.90	902.42	-2324.39	1.18	18.70	1.01	1.03	0.99	1.25	1.28	1.00	1.00	1.00	82160.90	787988.00	8.84
4	89133.50	-3469.82	-14249.80	902.42	-2324.39	1.18	18.70	1.01	1.03	0.99	1.25	1.28	1.00	1.00	1.00	82160.90	787988.00	8.84

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	89133.50	-8784.80	-6169.03	902.42	-2324.39	1.18	18.70	1.01	1.32	1.00	1.00	47898.30	459382.00	5.15
2	89133.50	-7259.72	2523.66	902.42	-2324.39	1.18	18.70	1.01	1.32	1.00	1.00	47898.30	459382.00	5.15
3	89133.50	-6744.09	-15200.90	902.42	-2324.39	1.18	18.70	1.01	1.32	1.00	1.00	47898.30	459382.00	5.15
4	89133.50	-3469.82	-14249.80	902.42	-2324.39	1.18	18.70	1.01	1.32	1.00	1.00	47898.30	459382.00	5.15

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

Travata 514
B=0.90 <m> L=10.70 <m> D=1.35 <m> β=0.00 <grad> η=0.00 <grad> γ_x=1963.00 <daN/mc>
σ_{v0,f}=2650.05 <daN/mq>

Verifiche in condizioni drenate
φ'_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.
1	25844.70	173.62	-184.16	-556.96	-201.75	0.86	10.68	1.02	1.04	0.98	1.32	1.36	1.00	1.00	1.00	87606.30	348728.00	13.49
2	25844.70	32.98	49.35	-556.96	-201.75	0.86	10.68	1.02	1.04	0.98	1.32	1.36	1.00	1.00	1.00	87606.30	348728.00	13.49
3	25844.70	289.66	-409.40	-556.96	-201.75	0.86	10.68	1.02	1.04	0.98	1.32	1.36	1.00	1.00	1.00	87606.30	348728.00	13.49
4	25844.70	248.49	-368.96	-556.96	-201.75	0.86	10.68	1.02	1.04	0.98	1.32	1.36	1.00	1.00	1.00	87606.30	348728.00	13.49

Verifiche in condizioni non drenate

c_{ur}=6639.00 <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	25844.70	173.62	-184.16	-556.96	-201.75	0.86	10.68	1.02	1.40	1.00	1.00	51278.10	204119.00	7.90
2	25844.70	32.98	49.35	-556.96	-201.75	0.86	10.68	1.02	1.40	1.00	1.00	51278.10	204119.00	7.90
3	25844.70	289.66	-409.40	-556.96	-201.75	0.86	10.68	1.02	1.40	1.00	1.00	51278.10	204119.00	7.90
4	25844.70	248.49	-368.96	-556.96	-201.75	0.86	10.68	1.02	1.40	1.00	1.00	51278.10	204119.00	7.90

Cedimenti

Metodo utilizzato: Metodo edometrico

Simbologia

B =Base della fondazione

CC =Numero della combinazione delle condizioni di carico elementari

Ced=Cedimento calcolato

L =Lunghezza della fondazione (L>B)

N =Sforzo normale

q_{es} =Pressione di esercizio

Travata 501

B=1.20 <m> L=6.00 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	24521.00	3405.69	0.69
1	22291.80	3096.08	0.49
2	24521.00	3405.69	0.69
2	22291.80	3096.08	0.49
3	24521.00	3405.69	0.69
3	22291.80	3096.08	0.49
4	24521.00	3405.69	0.69
4	22291.80	3096.08	0.49
5	29341.80	4075.25	1.14
6	29710.70	4126.48	1.17
7	30825.90	4281.38	1.27
8	22533.90	3129.70	0.51
9	22779.80	3163.86	0.53
10	23523.30	3267.13	0.60
11	22291.20	3096.00	0.49
12	22389.50	3109.65	0.50
13	22291.80	3096.08	0.49
14	22291.80	3096.08	0.49

Travata 502

B=1.20 <m> L=12.15 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	57442.50	3939.82	1.09
1	52220.50	3581.65	0.84
2	57442.50	3939.82	1.09
2	52220.50	3581.65	0.84
3	57442.50	3939.82	1.09
3	52220.50	3581.65	0.84
4	57442.50	3939.82	1.09
4	52220.50	3581.65	0.84
5	68924.30	4727.32	1.63
6	69999.80	4801.08	1.68
7	73352.40	5031.03	1.84
8	52914.80	3629.28	0.88
9	53631.90	3678.45	0.91
10	55866.90	3831.75	1.01
11	52217.20	3581.43	0.84
12	52503.40	3601.06	0.86
13	52220.50	3581.65	0.84
14	52220.50	3581.65	0.84

Travata 503

B=1.20 <m> L=10.90 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	60449.70	4621.54	1.55
1	54954.30	4201.40	1.26

2	60449.70	4621.54	1.55
2	54954.30	4201.40	1.26
3	60449.70	4621.54	1.55
3	54954.30	4201.40	1.26
4	60449.70	4621.54	1.55
4	54954.30	4201.40	1.26
5	73551.20	5623.18	2.24
6	74275.40	5678.55	2.28
7	77183.40	5900.87	2.43
8	56266.60	4301.73	1.33
9	56749.40	4338.64	1.36
10	58688.00	4486.85	1.46
11	55072.80	4210.46	1.27
12	55289.60	4227.04	1.28
13	54954.30	4201.40	1.26
14	54954.30	4201.40	1.26

Travata 504
B=1.20 <m> L=12.15 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	67439.10	4625.45	1.56
1	61308.20	4204.95	1.27
2	67439.10	4625.45	1.56
2	61308.20	4204.95	1.27
3	67439.10	4625.45	1.56
3	61308.20	4204.95	1.27
4	67439.10	4625.45	1.56
4	61308.20	4204.95	1.27
5	81204.60	5569.59	2.21
6	82688.30	5671.35	2.28
7	86968.10	5964.89	2.48
8	62309.50	4273.63	1.32
9	63298.60	4341.47	1.36
10	66151.80	4537.16	1.50
11	61310.00	4205.07	1.27
12	61706.00	4232.23	1.29
13	61308.20	4204.95	1.27
14	61308.20	4204.95	1.27

Travata 505
B=1.20 <m> L=3.00 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	15526.90	4313.03	1.18
1	14115.40	3920.94	0.95
2	15526.90	4313.03	1.18
2	14115.40	3920.94	0.95
3	15526.90	4313.03	1.18
3	14115.40	3920.94	0.95
4	15526.90	4313.03	1.18
4	14115.40	3920.94	0.95
5	18657.90	5182.75	1.71
6	18953.60	5264.88	1.76
7	19812.20	5503.38	1.90
8	14319.80	3977.72	0.98
9	14516.90	4032.48	1.01
10	15089.30	4191.48	1.11
11	14116.40	3921.23	0.95
12	14195.50	3943.19	0.96
13	14115.40	3920.94	0.95
14	14115.40	3920.94	0.95

Travata 506
B=1.20 <m> L=6.00 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	30775.70	4274.41	1.27
1	27977.90	3885.82	1.01
2	30775.70	4274.41	1.27
2	27977.90	3885.82	1.01
3	30775.70	4274.41	1.27
3	27977.90	3885.82	1.01
4	30775.70	4274.41	1.27
4	27977.90	3885.82	1.01
5	37329.60	5184.67	1.87
6	37667.60	5231.61	1.90
7	39186.60	5442.59	2.04
8	28574.40	3968.67	1.07
9	28799.70	3999.96	1.09
10	29812.40	4140.61	1.18

11	28031.00	3893.19	1.02
12	28131.70	3907.18	1.02
13	27977.90	3885.82	1.01
14	27977.90	3885.82	1.01

Travata 507
B=1.20 <m> L=11.60 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	79386.00	5703.02	2.30
1	72169.10	5184.56	1.94
2	79386.00	5703.02	2.30
2	72169.10	5184.56	1.94
3	79386.00	5703.02	2.30
3	72169.10	5184.56	1.94
4	79386.00	5703.02	2.30
4	72169.10	5184.56	1.94
5	98094.60	7047.03	3.22
6	97350.90	6993.60	3.18
7	99960.20	7181.05	3.31
8	74675.80	5364.64	2.06
9	74180.00	5329.02	2.04
10	75919.50	5453.99	2.13
11	72598.10	5215.38	1.96
12	72485.50	5207.29	1.96
13	72169.10	5184.56	1.94
14	72169.10	5184.56	1.94

Travata 508
B=1.20 <m> L=10.30 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	43224.90	3497.16	0.78
1	39295.40	3179.24	0.56
2	43224.90	3497.16	0.78
2	39295.40	3179.24	0.56
3	43224.90	3497.16	0.78
3	39295.40	3179.24	0.56
4	43224.90	3497.16	0.78
4	39295.40	3179.24	0.56
5	51966.40	4204.40	1.26
6	52789.90	4271.03	1.31
7	55355.00	4478.56	1.45
8	39879.60	3226.51	0.60
9	40428.60	3270.92	0.63
10	42138.70	3409.28	0.72
11	39300.40	3179.65	0.56
12	39521.00	3197.49	0.58
13	39295.40	3179.24	0.56
14	39295.40	3179.24	0.56

Travata 509
B=1.20 <m> L=4.93 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	29723.60	5027.04	1.73
1	27021.40	4570.03	1.43
2	29723.60	5027.04	1.73
2	27021.40	4570.03	1.43
3	29723.60	5027.04	1.73
3	27021.40	4570.03	1.43
4	29723.60	5027.04	1.73
4	27021.40	4570.03	1.43
5	36819.80	6227.20	2.51
6	36404.60	6156.97	2.46
7	37170.50	6286.50	2.55
8	28005.30	4736.44	1.54
9	27728.50	4689.61	1.51
10	28239.10	4775.97	1.57
11	27201.50	4600.49	1.45
12	27126.80	4587.86	1.45
13	27021.40	4570.03	1.43
14	27021.40	4570.03	1.43

Travata 510
B=1.30 <m> L=18.75 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	177129.00	7266.82	3.54
1	161026.00	6606.20	3.07

2	177129.00	7266.82	3.54
2	161026.00	6606.20	3.07
3	177129.00	7266.82	3.54
3	161026.00	6606.20	3.07
4	177129.00	7266.82	3.54
4	161026.00	6606.20	3.07
5	220818.00	9059.21	4.84
6	218804.00	8976.56	4.78
7	225836.00	9265.06	4.98
8	167759.00	6882.44	3.27
9	166416.00	6827.33	3.23
10	171104.00	7019.67	3.36
11	162180.00	6653.53	3.10
12	161873.00	6640.96	3.09
13	161026.00	6606.20	3.07
14	161026.00	6606.20	3.07

Travata 511

B=1.30 <m> L=16.85 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	154738.00	7064.04	3.39
1	140671.00	6421.85	2.93
2	154738.00	7064.04	3.39
2	140671.00	6421.85	2.93
3	154738.00	7064.04	3.39
3	140671.00	6421.85	2.93
4	154738.00	7064.04	3.39
4	140671.00	6421.85	2.93
5	193075.00	8814.18	4.65
6	189907.00	8669.59	4.55
7	193492.00	8833.23	4.67
8	146558.00	6690.63	3.12
9	144447.00	6594.24	3.05
10	146837.00	6703.33	3.13
11	141813.00	6474.02	2.97
12	141197.00	6445.90	2.95
13	140671.00	6421.85	2.93
14	140671.00	6421.85	2.93

Travata 512

B=1.20 <m> L=12.68 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	90623.00	5958.12	2.48
1	82384.50	5416.47	2.11
2	90623.00	5958.12	2.48
2	82384.50	5416.47	2.11
3	90623.00	5958.12	2.48
3	82384.50	5416.47	2.11
4	90623.00	5958.12	2.48
4	82384.50	5416.47	2.11
5	112079.00	7368.78	3.45
6	110851.00	7288.05	3.39
7	112997.00	7429.14	3.49
8	85279.60	5606.81	2.24
9	84461.00	5552.99	2.20
10	85891.70	5647.05	2.26
11	82915.10	5451.35	2.13
12	82693.70	5436.80	2.12
13	82384.50	5416.47	2.11
14	82384.50	5416.47	2.11

Travata 513

B=1.20 <m> L=18.75 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	89133.50	3961.49	1.11
1	81030.40	3601.35	0.86
2	89133.50	3961.49	1.11
2	81030.40	3601.35	0.86
3	89133.50	3961.49	1.11
3	81030.40	3601.35	0.86
4	89133.50	3961.49	1.11
4	81030.40	3601.35	0.86
5	107932.00	4796.97	1.69
6	110265.00	4900.65	1.76
7	116971.00	5198.73	1.97
8	82740.80	3677.37	0.92
9	84296.00	3746.49	0.96
10	88767.30	3945.21	1.10

11	81052.60	3602.34	0.86
12	81679.10	3630.18	0.88
13	81030.40	3601.35	0.86
14	81030.40	3601.35	0.86

Travata 514
B=0.90 <m> L=10.70 <m>

CC	N <daN>	q _{es} <daN/mq>	Ced <cm>
1	25844.70	2683.77	0.02
1	23495.10	2439.79	0.00
2	25844.70	2683.77	0.02
2	23495.10	2439.79	0.00
3	25844.70	2683.77	0.02
3	23495.10	2439.79	0.00
4	25844.70	2683.77	0.02
4	23495.10	2439.79	0.00
5	31492.20	3270.22	0.36
6	32440.70	3368.71	0.41
7	33468.70	3475.46	0.48
8	24127.50	2505.45	0.00
9	24759.80	2571.11	0.00
10	25445.10	2642.28	0.00
11	23495.10	2439.79	0.00
12	23748.10	2466.05	0.00
13	23495.10	2439.79	0.00
14	23495.10	2439.79	0.00