

PROGETTO ESECUTIVO

LAVORI DI ADEGUAMENTO STATICO E FUNZIONALE DEL PLESSO SCOLASTICO "SILVIO PELLICO"

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FASCICOLO DEI CALCOLI POST OPERAM

ELABORATO

R.4

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FASCICOLO DEI CALCOLI

DIMOSTRAZIONE NUMERICA DELLA SICUREZZA DELL'OPERA E DEL RAGGIUNGIMENTO DELLE PRESTAZIONI ATTESE

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Il Progettista

MODELLAZIONE

La struttura è costituita da diversi elementi distinti, in base alla loro funzione, in

[lista elementi del modello]

I livelli di sicurezza scelti dal Committente e dal Progettista in funzione del tipo e dell'uso della struttura, nonché in funzione delle conseguenze del danno, con riguardo a persone, beni, e possibile turbativa sociale, compreso il costo delle opere necessarie per la riduzione del rischio di danno o di collasso, hanno indirizzato al progetto di una struttura con i seguenti requisiti:

- sicurezza nei confronti degli Stati Limite Ultimi (SLU)
- sicurezza nei confronti degli Stati Limite di Esercizio (SLE)
- sicurezza nei confronti di deformazioni permanenti inaccettabili: Stato Limite di Danno (SLD).

La struttura è stata schematizzata con un modello spaziale agli elementi finiti che tengono conto dell'effettivo stato deformativo e di sollecitazione, secondo l'effettiva realizzazione. I vincoli esterni della struttura sono stati caratterizzati, a seconda degli elementi in fondazione se presenti, con: travi winkler, plinti diretti, plinti su pali, platee; ovvero con vincoli perfetti di incastro, appoggio, carrello, ecc. I vincoli interni sono stati schematizzati secondo le sollecitazioni mutuamente scambiate tra gli elementi strutturali, inserendo, ove opportuno, il rilascio di alcune caratteristiche della sollecitazione per schematizzare il comportamento di vincoli interni non iperstatici (cerniere, carrelli, ecc.). Il modello agli elementi finiti è stato calcolato tenendo conto dell'interazione tra strutture in fondazione e strutture in elevazione, consentendo un'accurata distribuzione delle azioni statiche e sismiche; il calcolo viene eseguito considerando il comportamento elastico lineare della struttura. I solai sono schematizzati come aree di carico, sulle quali vengono definiti i carichi permanenti (QP Solai), carichi fissi (QFissi Solai) e variabili (QV solai); tali carichi vengono assegnati alle aste in modo automatico in relazione all'influenza delle diverse aree di carico. Le masse corrispondenti ai carichi variabili sui solai nelle combinazioni sismiche vengono trattate in maniera automatica mediante un coefficiente moltiplicativo definito insieme alla tipologia del solaio.

Il modello utilizzato è stato valutato alla luce dei diversi scenari di carico a cui viene sottoposta la struttura durante la sua costruzione e la sua vita, atto a garantire la sicurezza e la durabilità della stessa. Per la tipologia strutturale affrontata non è stato necessario definire scenari di contingenza, quindi non è stata schematizzata la struttura durante le fasi costruttive, e si ritiene che non ci siano variazioni del modello di calcolo e degli schemi di vincolo, durante la vita dell'opera. Per il dettaglio degli scenari di calcolo si faccia riferimento alla "Relazione di Calcolo"

Il progetto e la verifica degli elementi strutturali è stato effettuato seguendo la teoria degli Stati limite. I parametri relativi alle verifiche effettuate sono riportati nella Relazione di Calcolo.

Il solutore agli elementi finiti impiegato nell'analisi è SpaceSolver, per il calcolo di strutture piane e spaziali schematizzabili da un insieme di elementi finiti tipo

- BEAM,
- PLATE-SHELL,
- WINK,
- BOUNDARY,

interagenti tra loro attraverso i nodi, con la possibilità di tenere in conto tutti i possibili disassamenti, mediante l'introduzione di concetti rigidi e traslazioni degli elementi bidimensionali. Il solutore lavora in campo elastico lineare, si basa sulle routines di Matlab ed è stato sviluppato in collaborazione con l'Università di Roma – Tor Vergata. Il solutore offre la possibilità di risolvere anche travi su suolo alla Winkler con molle spalmate sull'intera suola, anziché sul solo asse, plinti diretti e su pali, pali singoli,

platee, piastre sottili e spesse con controllo delle rotazioni attorno all'asse normale alla piastra (drilling). Inoltre, per gli elementi BEAM considera il centro di taglio e non il baricentro.

L'affidabilità del solutore è stata testata su una serie di esempi campioni calcolati con altri procedimenti o con formule note, di cui si rende disponibile la documentazione.

AFFIDABILITA' DEI CODICI UTILIZZATI

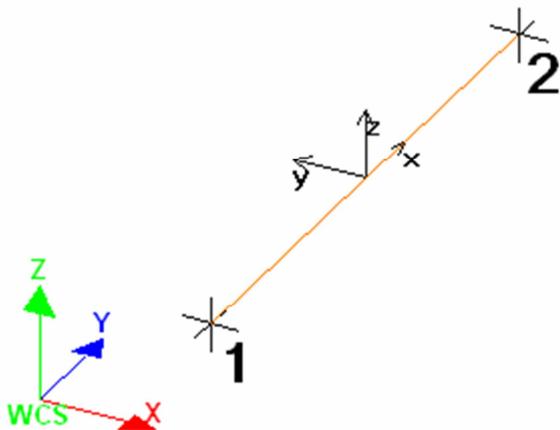
Il programma è dotato di una serie di filtri di auto diagnostica che segnalano i seguenti eventi:

- labilità della struttura
- assenza di masse
- nodi collegati ad aste nulle
- mancanza di terreno sugli elementi in fondazione
- controllo sull'assegnazione dei nodi all'impalcato
- correttezza degli spettri di progetto
- fattori di partecipazione modali
- assegnazione dei criteri di verifica agli elementi
- numerazione degli elementi strutturali
- congruenza delle connessioni tra elementi shell
- congruenza delle aree di carico
- definizione delle caratteristiche d'inerzia delle sezioni
- presenza del magrone sotto la travi tipo wink
- elementi non verificati per semi progetto allo SLU, con inserimento automatico delle armature secondo i criteri di verifica.
- elementi non verificati allo SLU per armature già inserite nell'elemento strutturale
- elementi non verificati allo SLE per armature già inserite nell'elemento strutturale

PRESENTAZIONE DEI RISULTATI

I disegni dello schema statico adottato sono riportati nel fascicolo allegato alla presente relazione

E' stato impiegato il Sistema Internazionale per le unità di misura, con riferimento al daN per le forze.



Il sistema di riferimento globale rispetto al quale è stata riferita l'intera struttura è una terna di assi cartesiani sinistrorsa OXYZ (X,Y, e Z sono disposti e orientati rispettivamente secondo il pollice, l'indice ed il medio della mano destra, una volta posizionati questi ultimi a 90° tra loro).

La terna di riferimento locale per un'asta è pure una terna sinistrorsa O'xyz che ha l'asse x orientato dal nodo iniziale I dell'asta verso il nodo finale J e gli assi y e z diretti secondo gli assi geometrici della sezione con l'asse y orizzontale e orientato in modo da portarsi a coincidere con l'asse x a mezzo di una rotazione oraria di 90° e l'asse z di conseguenza.

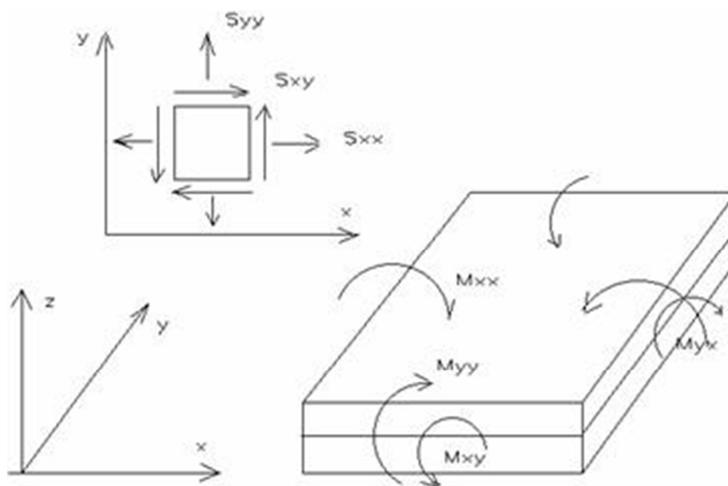
Per un'asta comunque disposta nello spazio la sua terna locale è orientata in modo tale da portarsi a coincidere con la terna globale a mezzo di rotazioni orarie degli assi locali inferiori a 180°.

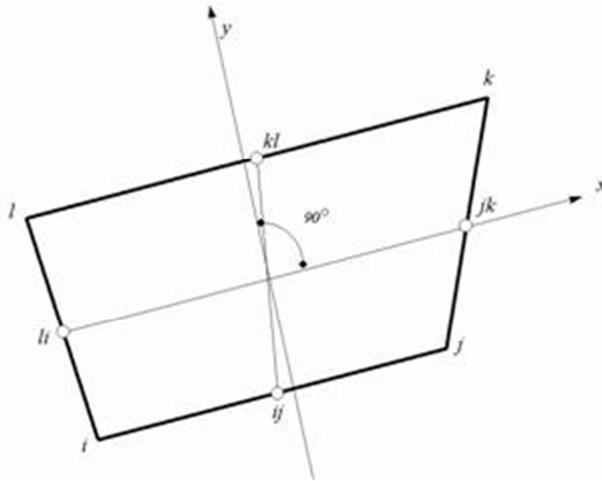
- Le forze, sia sulle aste che sulle pareti o lastre, sono positive se opposte agli assi locali;
- Le forze nodali sono positive se opposte agli assi globali;
- Le coppie sono positive se sinistrorse.

Le caratteristiche di sollecitazione sono positive se sulla faccia di normale positiva sono rappresentate da vettori equiversi agli assi di riferimento locali; in particolare il vettore momento positivo rappresenta una coppia che ruota come le dita della mano destra che si chiudono quando il pollice è equi verso all'asse locale.

- Le traslazioni sono positive se concorde con gli assi globali;
- Le rotazioni sono positive se sinistrorse.

Il sistema di riferimento locale per gli elementi bidimensionali è quello riportato in figura





La terna locale per l'elemento shell è costituita dall'asse x locale che va dal nodo li al nodo jk, l'asse y è diretto secondo il piano dell'elemento e orientato verso il nodo l e l'asse z di conseguenza in modo da formare la solita terna sinistrorsa. L'asse z locale rappresenta la normale positiva all'elemento. Le sollecitazioni dell'elemento sono:

a) sforzi membranali.

$$S_{xx} = s_x$$

$$S_{yy} = s_y$$

$$S_{xy} = t_{xy}$$

b) sforzi flessionali:

M_{xx} momento flettente che genera s_x , cioè intorno ad y.

M_{yy} momento flettente che genera s_y , cioè intorno ad x

M_{xy} momento torcente che genera t_{xy} .

Le sollecitazioni principali dell'elemento sono:

$$M_{1,2} = \frac{M_{xx} + M_{yy}}{2} \pm \sqrt{\left(\frac{M_{xx} - M_{yy}}{2}\right)^2 + M_{xy}^2}$$

$$S_{1,2} = \frac{S_{xx} + S_{yy}}{2} \pm \sqrt{\left(\frac{S_{xx} - S_{yy}}{2}\right)^2 + S_{xy}^2}$$

$$\tan 2\theta = \frac{M_{xy}}{M_{xx} - M_{yy}}$$

dove θ è l'angolo formato dagli assi principali di M_1 e M_2 con quelli di riferimento e

$$\tan 2\psi = \frac{S_{xy}}{S_{xx} - S_{yy}}$$

dove ψ è l'angolo formato dagli assi principali di S_1 e S_2 con quelli di riferimento

L'elemento shell usato come piastra dà i momenti flettenti e non i tagli in direzione ortogonale all'elemento che possono ottenersi come derivazione dei momenti flettenti;

$$T_{zx} = M_{xx,x} + M_{xy,y}$$

$$T_{zy} = M_{xy,y} + M_{yy,y}$$

quando invece viene usato come lastra ci restituisce una 's' costante ed una 't' costante non adatti a rappresentare momenti flettenti, ma solo sforzi normali e tagli nel piano della lastra.

I tabulati di calcolo contengono due sezioni principali: la descrizione del modello di calcolo e la presentazione dei risultati.

La descrizione del modello di calcolo contiene:

- i dati generali (dimensioni)
- le coordinate nodali;
- i vincoli dei nodi e i vincoli interni delle aste, con le eventuali sconessioni;
- le caratteristiche sezionali;
- le caratteristiche dei solai;
- le caratteristiche delle aste;
- i carichi sulle aste, sui nodi e sui muri (inclusa la distribuzione delle distorsioni impresse, e delle variazioni e dei gradienti di temperatura);
- configurazione di sistemi che introducono stati coattivi;
- le caratteristiche dei materiali;
- legami costitutivi e criteri di verifica;
- le condizioni di carico;

La stampa dei risultati contiene:

- le combinazioni dei carichi;
- le forze sismiche agenti sulla struttura;
- gli spostamenti d'impalcato, se l'impalcato è rigido;
- gli spostamenti nodali;
- le sollecitazioni sulle membrature per ogni combinazione di carico;
- la sollecitazione sul terreno sotto travi di fondazione o platee;
- deformate;
- diagrammi sollecitazioni;

TABULATI DI VERIFICA

L'esito di ogni elaborazione viene sintetizzato nei disegni e schemi grafici allegati, che evidenziano i valori numerici nei punti e/o nelle sezioni significative, ai fini della valutazione del comportamento complessivo della struttura, e quelli necessari ai fini delle verifiche di misura della sicurezza.

Di seguito si riportano le tabelle relative a:

- Baricentri rigidezze e masse
- Spostamenti Relativi dei nodi (SLD)
- Fattori di partecipazione e masse modali

Centri di rigidezza e Centri di massa

Scenario di calcolo : Set_NT_SLV_SLD_A2_(STR/GEO)_2018

Centri rigidezze

Piano	Kx kg/cm	Ky kg/cm	Kxy kg/cm	K ϕ kg*cm/rad	X cm	Y cm	r ² /ls ² >=1
1	2.632640E06	2.186038E06	7.611074E04	4.092873E12	1388	1825	1.713
2	3.914511E05	4.099088E05	1.202200E04	5.379512E11	1337	1757	1.446
3	2.508060E05	2.678759E05	7.635431E03	3.234695E11	1332	1720	1.330
4	1.684126E05	1.689132E05	3.715760E03	1.826839E11	1342	1685	4.104

Ellissi delle rigidezze

Piano	K ξ kg/cm	K η kg/cm	alfa °	r ξ cm	r η cm
1	2.645254E06	2.173423E06	9	1372	1244
2	3.855241E05	4.158358E05	-26	1137	1181
3	2.478891E05	2.707928E05	-21	1093	1142
4	1.649387E05	1.723871E05	-43	1029	1052

Baricentri masse per posizione masse

Piano	Pos.Masse	X cm	Y cm	Peso Sism. kg
0	1	0	0	0
1	1	1386	1686	534982
2	1	1430	1699	82365
3	1	1369	1621	152333
4	1	1422	1672	88054

Verifica Degli Spostamenti Relativi

Scenario di calcolo : Set_NT_SLV_SLD_A2_(STR/GEO)_2018

Interp.	Comb.	η Xv mm	η Xh mm	η Yv mm	η Yh mm	Nodo1	Nodo2	η mm	η Amm mm	Cs

Interp.	Comb.	ηX_v	ηX_h	ηY_v	ηY_h	Nodo1	Nodo2	η	ηA_{mm}	Cs
0-1	(10+11)-II-2	0.02	0.16	0.02	1.13	0	0	1.15	15.00	13
0-1	(10+11)-II-2	0.03	0.19	0.03	1.08	0	0	1.11	15.00	13
0-1	(10+11)-II-2	0.02	0.16	0.03	1.12	0	0	1.15	15.00	13
0-1	(10+11)-II-2	0.02	0.16	0.00	1.17	0	0	1.17	15.00	13
0-1	(10+11)-II-2	0.02	0.16	0.01	1.15	0	0	1.16	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.01	1.17	0	0	1.18	15.00	13
0-1	(10+11)-II-2	0.02	0.16	0.04	1.11	1	101	1.15	15.00	13
0-1	(10+11)-II-2	0.02	0.16	0.02	1.14	2	102	1.16	15.00	13
0-1	(10+11)-II-2	0.02	0.16	0.01	1.15	3	103	1.16	15.00	13
0-1	(10+11)-II-2	0.02	0.16	0.01	1.17	4	104	1.18	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.04	1.11	5	105	1.15	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.03	1.13	6	106	1.15	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.02	1.14	7	107	1.16	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.01	1.15	8	108	1.16	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.00	1.16	9	109	1.16	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.01	1.17	10	110	1.18	15.00	13
0-1	(10+11)-II-2	0.00	0.15	0.04	1.11	11	111	1.15	15.00	13
0-1	(10+11)-II-2	0.00	0.15	0.03	1.12	12	112	1.15	15.00	13
0-1	(10+11)-II-2	0.00	0.15	0.00	1.16	13	113	1.16	15.00	13
0-1	(10+11)-II-2	0.00	0.15	0.01	1.17	14	114	1.18	15.00	13
0-1	(10+11)-II-2	0.01	0.16	0.04	1.11	15	115	1.15	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.03	1.12	16	116	1.15	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.00	1.16	17	117	1.16	15.00	13
0-1	(10+11)-II-2	0.01	0.16	0.01	1.17	18	118	1.18	15.00	13
0-1	(10+11)-II-2	0.02	0.16	0.04	1.11	19	119	1.15	15.00	13
0-1	(10+11)-II-2	0.02	0.17	0.03	1.13	20	120	1.15	15.00	13
0-1	(10+11)-II-2	0.02	0.17	0.02	1.14	21	121	1.16	15.00	13
0-1	(10+11)-II-2	0.02	0.17	0.01	1.15	22	122	1.16	15.00	13
0-1	(10+11)-II-2	0.02	0.17	0.00	1.16	23	123	1.16	15.00	13
0-1	(10+11)-II-2	0.03	0.18	0.04	1.11	24	124	1.15	15.00	13
0-1	(10+11)-II-2	0.04	0.20	0.04	1.11	25	125	1.15	15.00	13
0-1	(10+11)-II-2	0.03	0.19	0.03	1.13	26	126	1.15	15.00	13
0-1	(10+11)-II-2	0.03	0.19	0.02	1.14	27	127	1.16	15.00	13
0-1	(10+11)-II-2	0.03	0.18	0.01	1.15	28	128	1.16	15.00	13
0-1	(10+11)-II-2	0.02	0.17	0.00	1.16	29	129	1.16	15.00	13
0-1	(10+11)-II-2	0.02	0.17	0.01	1.17	30	130	1.18	15.00	13
0-1	(10+11)-II-2	0.01	0.16	0.01	1.15	31	131	1.16	15.00	13
0-1	(10+11)-II-2	0.00	0.15	0.01	1.15	32	132	1.16	15.00	13
0-1	(10+11)-II-2	0.00	0.15	0.02	1.14	33	133	1.16	15.00	13
0-1	(10+11)-II-2	0.01	0.16	0.02	1.14	34	134	1.16	15.00	13
0-1	(10+11)-II-2	0.01	0.15	0.04	1.11	60	0	1.15	15.00	13
1-2	(10+11)-II-2	0.03	0.55	0.18	2.11	101	201	2.29	13.50	5.9
1-2	(10+11)-II-2	0.10	0.55	0.18	2.34	102	202	2.51	13.50	5.4
1-2	(10+11)-II-2	0.03	0.58	0.18	2.47	103	203	2.65	13.50	5.1
1-2	(10+11)-II-2	0.10	0.59	0.14	2.66	104	204	2.80	13.50	4.8
1-2	(10+11)-I-3	0.19	2.65	0.02	0.61	105	205	2.84	13.50	4.8
1-2	(10+11)-I-3	0.02	2.79	0.00	0.44	106	206	2.81	13.50	4.8
1-2	(10+11)-I-3	0.02	2.78	0.02	0.43	107	207	2.80	13.50	4.8
1-2	(10+11)-I-3	0.02	2.81	0.03	0.45	108	208	2.83	13.50	4.8
1-2	(10+11)-I-3	0.02	2.82	0.03	0.45	109	209	2.84	13.50	4.8
1-2	(10+11)-I-3	0.22	2.70	0.07	0.52	110	210	2.91	13.50	4.6
1-2	(10+11)-I-3	0.18	2.85	0.07	0.58	111	211	3.03	13.50	4.5
1-2	(10+11)-I-3	0.00	2.88	0.00	0.45	112	212	2.88	13.50	4.7
1-2	(10+11)-I-3	0.03	2.91	0.03	0.46	113	213	2.94	13.50	4.6
1-2	(10+11)-I-3	0.17	2.89	0.01	0.50	114	214	3.06	13.50	4.4
1-2	(10+11)-I-3	0.18	2.90	0.09	0.39	115	215	3.08	13.50	4.4
1-2	(10+11)-I-3	0.00	2.92	0.01	0.43	116	216	2.93	13.50	4.6
1-2	(10+11)-I-3	0.02	2.96	0.04	0.46	117	217	2.98	13.50	4.5
1-2	(10+11)-I-3	0.12	2.95	0.04	0.48	118	218	3.07	13.50	4.4
1-2	(10+11)-I-3	0.19	2.86	0.03	0.41	119	219	3.05	13.50	4.4
1-2	(10+11)-I-3	0.01	2.94	0.01	0.43	120	220	2.94	13.50	4.6
1-4	(10+11)-I-3	0.02	4.89	0.02	0.84	121	421	4.91	27.50	5.6
1-2	(10+11)-I-3	0.01	2.94	0.01	0.44	121	221	2.94	13.50	4.6
1-4	(10+11)-I-3	0.00	4.89	0.03	0.84	122	422	4.89	27.50	5.6
1-2	(10+11)-I-3	0.01	2.97	0.04	0.43	122	222	2.98	13.50	4.5

Interp.	Comb.	ηX_v	ηX_h	ηY_v	ηY_h	Nodo1	Nodo2	η	η_{Amm}	Cs
1-2	(10+11)-I-3	0.01	2.97	0.04	0.46	123	223	2.98	13.50	4.5
1-2	(10+11)-I-3	0.10	2.53	0.11	0.39	124	224	2.63	13.50	5.1
1-2	(10+11)-I-3	0.11	2.58	0.21	0.36	125	225	2.69	13.50	5.0
1-2	(10+11)-I-3	0.04	2.57	0.12	0.34	126	226	2.61	13.50	5.2
1-2	(10+11)-II-2	0.09	0.60	0.58	2.30	127	227	2.88	13.50	4.7
1-2	(10+11)-I-3	0.03	2.68	0.10	0.44	128	228	2.71	13.50	5.0
1-2	(10+11)-II-2	0.02	0.63	0.11	2.84	129	229	2.95	13.50	4.6
1-2	(10+11)-I-3	0.18	2.88	0.08	0.47	130	230	3.06	13.50	4.4
2-3	(10+11)-I-3	0.07	1.12	0.03	0.25	201	301	1.19	5.50	4.6
2-3	(10+11)-I-3	0.06	1.13	0.08	0.15	202	302	1.19	5.50	4.6
2-3	(10+11)-I-3	0.09	1.15	0.10	0.16	203	303	1.24	5.50	4.4
2-3	(10+11)-I-3	0.04	1.14	0.06	0.21	204	304	1.18	5.50	4.7
2-3	(10+11)-I-3	0.18	0.95	0.15	0.24	205	305	1.13	5.50	4.9
2-3	(10+11)-I-3	0.01	0.97	0.02	0.18	206	306	0.98	5.50	5.6
2-3	(10+11)-II-2	0.02	0.18	0.05	0.95	207	307	1.00	5.50	5.5
2-3	(10+11)-II-2	0.01	0.19	0.04	0.98	208	308	1.03	5.50	5.4
2-3	(10+11)-II-2	0.04	0.21	0.01	1.05	209	309	1.06	5.50	5.2
2-3	(10+11)-II-2	0.14	0.21	0.12	1.03	210	310	1.14	5.50	4.8
2-3	(10+11)-I-3	0.04	1.01	0.06	0.27	211	311	1.05	5.50	5.2
2-3	(10+11)-I-3	0.12	1.08	0.02	0.22	212	312	1.20	5.50	4.6
2-3	(10+11)-I-3	0.13	1.09	0.04	0.19	213	313	1.22	5.50	4.5
2-3	(10+11)-II-2	0.02	0.21	0.04	1.19	214	314	1.23	5.50	4.5
2-3	(10+11)-I-3	0.04	1.02	0.06	0.17	215	315	1.06	5.50	5.2
2-3	(10+11)-I-3	0.13	1.09	0.00	0.17	216	316	1.22	5.50	4.5
2-3	(10+11)-II-2	0.03	0.20	0.04	1.05	217	317	1.09	5.50	5.0
2-3	(10+11)-II-2	0.08	0.21	0.05	1.21	218	318	1.25	5.50	4.4
2-3	(10+11)-I-3	0.17	0.97	0.18	0.14	219	319	1.15	5.50	4.8
2-3	(10+11)-I-3	0.02	1.05	0.02	0.19	220	320	1.07	5.50	5.1
2-3	(10+11)-II-2	0.01	0.19	0.06	0.96	221	321	1.03	5.50	5.4
2-3	(10+11)-II-2	0.03	0.21	0.04	1.02	222	322	1.06	5.50	5.2
2-3	(10+11)-II-2	0.03	0.21	0.04	1.05	223	323	1.09	5.50	5.0
2-3	(10+11)-I-3	0.07	1.22	0.04	0.15	224	324	1.29	5.50	4.3
2-3	(10+11)-I-3	0.05	1.07	0.05	0.18	225	325	1.12	5.50	4.9
2-3	(10+11)-I-3	0.01	1.11	0.06	0.21	226	326	1.12	5.50	4.9
2-3	(10+11)-I-3	0.13	1.17	0.36	0.17	227	327	1.29	5.50	4.3
2-3	(10+11)-I-3	0.07	1.25	0.03	0.16	228	328	1.32	5.50	4.2
2-3	(10+11)-I-3	0.01	1.14	0.03	0.15	229	329	1.15	5.50	4.8
2-3	(10+11)-I-3	0.14	1.08	0.01	0.22	230	330	1.22	5.50	4.5
3-4	(10+11)-II-2	0.07	0.21	0.07	1.23	306	406	1.30	8.50	6.6
3-4	(10+11)-II-2	0.01	0.23	0.09	1.29	307	407	1.38	8.50	6.2
3-4	(10+11)-II-2	0.04	0.20	0.10	1.27	308	408	1.37	8.50	6.2
3-4	(10+11)-II-2	0.01	0.18	0.10	1.26	309	409	1.36	8.50	6.3
3-4	(10+11)-II-2	0.20	0.17	0.01	1.09	312	412	1.09	8.50	7.8
3-4	(10+11)-II-2	0.15	0.16	0.02	1.15	313	413	1.17	8.50	7.2
3-4	(10+11)-II-2	0.18	0.16	0.01	1.09	316	416	1.10	8.50	7.7
3-4	(10+11)-II-2	0.05	0.17	0.02	1.18	317	417	1.20	8.50	7.1
3-4	(10+11)-II-2	0.02	0.20	0.04	1.23	320	420	1.27	8.50	6.7
3-4	(10+11)-II-2	0.04	0.22	0.05	1.34	321	421	1.39	8.50	6.1
3-4	(10+11)-II-2	0.04	0.20	0.04	1.29	322	422	1.33	8.50	6.4
3-4	(10+11)-II-2	0.08	0.20	0.00	1.25	323	423	1.25	8.50	6.8
Minimo										
2-3	(10+11)-I-3	0.07	1.25	0.03	0.16	228	328	1.32	5.50	4.2

Periodi di vibrazione e Masse modali

Scenario di calcolo : Set_NT_SLV_SLD_A2_(STR/GEO)_2018

Posizione masse 1

Numero di Frequenze calcolate =30, filtrate=27

N	T(s)	Coeff. Partecipazione		Masse Modali		Percentuali	
		Dir=0°	Dir=90°	Dir=0°	Dir=90°	Dir=0°	Dir=90°
				kgm*g			
1(1)	0.2563	190.918	-121.597	357449	144999	41.67	16.90
2(2)	0.2485	-111.580	-203.500	122095	406114	14.23	47.35
3(3)	0.1930	11.406	25.694	1276	6474	0.15	0.75
4(5)	0.1034	47.113	-4.796	21767	226	2.54	0.03
5(6)	0.1008	17.596	-19.068	3036	3566	0.35	0.42
6(7)	0.0986	76.088	0.810	56775	6	6.62	0.00
7(8)	0.0955	4.039	37.578	160	13848	0.02	1.61
8(9)	0.0902	-26.265	9.587	6765	901	0.79	0.11
9(10)	0.0866	-106.810	17.132	111879	2878	13.04	0.34
10(11)	0.0828	41.485	73.421	16877	52864	1.97	6.16
11(12)	0.0797	-1.153	14.644	13	2103	0.00	0.25
12(13)	0.0772	-38.351	41.663	14423	17022	1.68	1.98
13(14)	0.0740	4.461	-105.149	195	108425	0.02	12.64
14(15)	0.0729	37.915	6.075	14098	362	1.64	0.04
15(16)	0.0704	-38.071	-30.960	14214	9400	1.66	1.10
16(17)	0.0697	8.215	32.055	662	10077	0.08	1.17
17(18)	0.0677	-3.042	46.145	91	20882	0.01	2.43
18(19)	0.0658	-0.154	-12.118	0	1440	0.00	0.17
19(20)	0.0644	6.399	21.218	402	4415	0.05	0.51
20(21)	0.0642	45.978	16.026	20731	2519	2.42	0.29
21(22)	0.0630	39.458	-13.819	15268	1873	1.78	0.22
22(23)	0.0613	-44.114	10.368	19084	1054	2.22	0.12
23(24)	0.0611	-37.086	-5.299	13488	275	1.57	0.03
24(25)	0.0604	-8.778	27.282	756	7299	0.09	0.85
25(26)	0.0582	-31.704	-14.832	9857	2157	1.15	0.25
26(27)	0.0567	16.081	-17.201	2536	2902	0.30	0.34
27(29)	0.0549	-9.661	8.244	915	666	0.11	0.08
Somma delle Masse Modali [kgm*g]				824812	824748		
Masse strutturali libere [kgm*g]				857734	857734		
Percentuale				96.16	96.15	96.16	96.15

Masse e coefficienti di partecipazione rotazionali:

N	T(s)	Coeff. Partecipazione	Masse	Percentuali
			Modali	
			kgm*g	
1	0.2563	-130.943	168146	0.20
2	0.2485	-372.613	1361563	1.66
3	0.1930	-1992.620	38937658	47.47
4	0.1715	-2.587	66	0.00
5	0.1034	132.481	172118	0.21
6	0.1008	-17.218	2907	0.00
7	0.0986	86.450	73291	0.09
8	0.0955	63.078	39019	0.05
9	0.0902	-10.452	1071	0.00
10	0.0866	-97.734	93673	0.11
11	0.0828	264.323	685158	0.84
12	0.0797	-262.214	674267	0.82
13	0.0772	-96.273	90892	0.11
14	0.0740	-386.808	1467277	1.79
15	0.0729	685.493	4608150	5.62
16	0.0704	-222.773	486683	0.59
17	0.0697	227.567	507855	0.62
18	0.0677	-578.378	3280531	4.00
19	0.0658	577.939	3275555	3.99
20	0.0644	-348.314	1189767	1.45
21	0.0642	-236.223	547223	0.67
22	0.0630	-544.005	2902194	3.54
23	0.0613	192.924	365002	0.44
24	0.0611	522.896	2681339	3.27
25	0.0604	162.401	258641	0.32
26	0.0582	211.785	439855	0.54

N	T(s)	Coeff. Partecipazione	Masse Modali	Percentuali
27	0.0567	105.779	109728	0.13
28	0.0561	137.113	184366	0.22
29	0.0549	-17.470	2993	0.00
30	0.0540	176.663	306065	0.37

VERIFICHE STATO LIMITE ULTIMO

Verifica dei Pilastrini

Scenario di calcolo : Set_NT_SLV_SLD_A2_(STR/GEO)_2018

Pilastro : 1 [1 , 101]

Sez. R rinf.: $B_y = 48.0 \text{ cm}$, $B_z = 28.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s.lat. = 5.0 cm, h lat. = 28.0 cm $L = 300.0 \text{ cm}$
 $L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cm}^2]$, $f_{ym} = 4500 \text{ [kg/cm}^2]$,
 $FC = 1.20$ $q_d = 2$, $q_f = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N / (f_{cd} * A) = 0.102 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	15929	-817	3404	20444	33661	20663	33661	5.1
Testa	(3+4)-I-1(+)	250	2274	5778	22708	37324	23001	37324	5.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	9845	0	--	29243	28019	28019	6.90	2.500	2.8
Z	(3+4)-II-1	--	--	2199	9742	14949	--	--	24691	6.90	2.500	11

Pilastro : 1 [101 , 201]

Sez. R rinf.: $B_y = 48.0 \text{ cm}$, $B_z = 28.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s.lat. = 5.0 cm, h lat. = 28.0 cm $L = 270.0 \text{ cm}$
 $L_n = 270.0 \text{ cm}$

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cm}^2]$, $f_{ym} = 4500 \text{ [kg/cm}^2]$,
 $FC = 1.20$ $q_d = 2$, $q_f = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.047 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-12036	-4669	-16430	24453	40112	24798	40112	2.2
Testa	(3+4)-II-1(+)	-10070	2906	1397	24176	39671	24512	39671	11

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	8267	0	--	27193	41541	27193	10.25	2.500	3.3
Z	(3+4)-II-1	--	--	4493	10022	16574	--	--	26596	10.25	2.500	5.9

Pilastro : 1 [201 , 301]

Sez. R rinf.: $B_y = 48.0 \text{ cm}$, $B_z = 28.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s. lat. = 5.0 cm, h lat. = 28.0 cm $L = 110.0 \text{ cm}$

$L_n = 110.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$,

$FC = 1.20$ $q_d = 2$, $q_f = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	1Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.04 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-9943	3338	1958	24158	39643	24494	39643	8.7
Testa	(3+4)-II-1(+)	-9243	6838	4218	24059	39485	24392	39485	3.6

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	8051	0	--	26909	41541	26909	10.25	2.500	3.3
Z	(3+4)-II-1	--	--	4236	9978	16320	--	--	26298	10.25	2.500	6.2

Pilastro : 2 [2 , 102]

Sez. R rinf.: $B_y = 48.0 \text{ cm}$, $B_z = 28.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s. lat. = 5.0 cm, h lat. = 28.0 cm $L = 300.0 \text{ cm}$

$L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$,

$FC = 1.20$ $q_d = 2$, $q_f = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	1Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.206 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	14793	664	-4943	20610	33930	20834	33930	4.3
Testa	(3+4)-I-1(+)	-26346	-116	6478	26447	43024	26843	43024	8.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
-----	----	-------	-------	---	-------	-------	------	------	-----	-------	--------	----

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	7354	0	--	29299	28019	28019	6.90	2.500	3.8
Z	(3+4)-II-2	--	--	1446	10002	16455	--	--	26457	6.90	2.500	18

Pilastro : 2 [102 , 202]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 28.0 \text{ cm}, s. \text{ inf.} = 5.0 \text{ cm}, s. \text{ sup.} = 4.0 \text{ cm}, s. \text{ lat.} = 5.0 \text{ cm}, h \text{ lat.} = 28.0 \text{ cm}$ $L = 270.0 \text{ cm}$
 $Ln = 270.0 \text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}$,
 $FC = 1.20$ $q_d = 2, q_f = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N/(f_{cd} * A) = 0.043 \leq 0.65$ [Comb. (3+4)-II-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-9988	-924	15995	24165	39653	24500	39653	2.6
Testa	(3+4)-II-1(+)	-9353	3189	-1834	24075	39510	24408	39510	9.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	7955	0	--	26892	41541	26892	10.25	2.500	3.4
Z	(3+4)-II-1	--	--	3815	10005	16475	--	--	26480	10.25	2.500	6.9

Pilastro : 2 [202 , 302]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 28.0 \text{ cm}, s. \text{ inf.} = 5.0 \text{ cm}, s. \text{ sup.} = 4.0 \text{ cm}, s. \text{ lat.} = 5.0 \text{ cm}, h \text{ lat.} = 28.0 \text{ cm}$ $L = 110.0 \text{ cm}$
 $Ln = 110.0 \text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}$,
 $FC = 1.20$ $q_d = 2, q_f = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N/(f_{cd} * A) = 0.036 \leq 0.65$ [Comb. (3+4)-II-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-9277	3534	-1846	24064	39493	24397	39493	8.3
Testa	(3+4)-II-1(+)	-8576	6327	-1437	23965	39335	24295	39335	4.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	7688	0	--	26633	41541	26633	10.25	2.500	3.5
Z	(3+4)-II-1	--	--	3486	9963	16228	--	--	26190	10.25	2.500	7.5

Pilastro : 3 [3 , 103]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 28.0 \text{ cm}, s. \text{ inf.} = 5.0 \text{ cm}, s. \text{ sup.} = 4.0 \text{ cm}, s. \text{ lat.} = 5.0 \text{ cm}, h \text{ lat.} = 28.0 \text{ cm}$ $L = 300.0 \text{ cm}$
 $Ln = 300.0 \text{ cm}$

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.197 <= 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	17788	1904	5266	20173	33220	20383	33220	3.8
Testa	(3+4)-I-3(+)	-26169	-1082	-6629	26423	42990	26818	42990	7.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	7576	0	--	29273	28019	28019	6.90	2.500	3.7
Z	(3+4)-II-2	--	--	1602	9940	16098	--	--	26039	6.90	2.500	16

Pilastro : 3 [103 , 203]

Sez. R rinf.: By= 48.0 cm,Bz=28.0 cm,s. inf.=5.0 cm,s. sup.=4.0 cm,s.lat.=5.0 cm,h lat.=28.0 cm L=270.0 cm
Ln=270.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.046 <= 0.65$ [Comb. (3+4)-II-1(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-10112	-2422	-16087	24182	39681	24518	39681	2.5
Testa	(3+4)-II-1(+)	-9958	3582	1324	24160	39646	24496	39646	8.7

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	8017	0	--	26910	41541	26910	10.25	2.500	3.4
Z	(3+4)-II-1	--	--	4274	10020	16559	--	--	26578	10.25	2.500	6.2

Pilastro : 3 [203 , 303]

Sez. R rinf.: By= 48.0 cm,Bz=28.0 cm,s. inf.=5.0 cm,s. sup.=4.0 cm,s.lat.=5.0 cm,h lat.=28.0 cm L=110.0 cm
Ln=110.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.039 \leq 0.65 \quad [\text{Comb. (3+4)-II-1(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-9874	3966	1962	24148	39627	24484	39627	7.4
Testa	(3+4)-II-1(+)	-9174	7082	3976	24049	39470	24382	39470	3.5

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	7723	0	--	26654	41541	26654	10.25	2.500	3.5
Z	(3+4)-II-1	--	--	3903	9977	16310	--	--	26287	10.25	2.500	6.7

Pilastro : 4 [4 , 104]

Sez. R rinf.: By= 48.0 cm, Bz=28.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=28.0 cm L=300.0 cm

Ln=300.0 cm

Criterio : CLS_Pilastri- Esist Rinforzati - Verifica a presso-flessione deviata: rcm=200 [kg/cmq], fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.099 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	8571	-3828	-2631	21512	35394	21766	35394	4.4
Testa	(3+4)-I-3(+)	3062	2191	-5694	22305	36675	22585	36675	5.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	10158	0	--	29135	28019	28019	6.90	2.500	2.8
Z	(3+4)-II-1	--	--	2023	9742	14949	--	--	24691	6.90	2.500	12

Pilastro : 4 [104 , 204]

Sez. R rinf.: By= 48.0 cm, Bz=28.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=28.0 cm L=270.0 cm

Ln=270.0 cm

Criterio : CLS_Pilastri- Esist Rinforzati - Verifica a presso-flessione deviata: rcm=200 [kg/cmq], fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.047 \leq 0.65 \quad [\text{Comb. (3+4)-II-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-11998	-4389	16714	24448	40103	24792	40103	2.2
Testa	(3+4)-II-1(+)	-10348	3172	-1635	24215	39734	24553	39734	9.6

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	8326	0	--	27188	41541	27188	10.25	2.500	3.3
Z	(3+4)-II-1	--	--	5418	10029	16612	--	--	26641	10.25	2.500	4.9

Pilastro : 4 [204 , 304]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 28.0 \text{ cm}, s. \text{ inf.} = 5.0 \text{ cm}, s. \text{ sup.} = 4.0 \text{ cm}, s. \text{ lat.} = 5.0 \text{ cm}, h \text{ lat.} = 28.0 \text{ cm} \quad L = 110.0 \text{ cm}$
 $Ln = 110.0 \text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}$,
 $FC = 1.20 \text{ qd} = 2, \text{ qf} = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N / (f_{cd} * A) = 0.04 \leq 0.65$ [Comb. (3+4)-II-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-10137	3665	-1351	24186	39686	24522	39686	8.5
Testa	(3+4)-II-1(+)	-9436	7662	-1120	24087	39529	24420	39529	3.5

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	7978	0	--	26892	41541	26892	10.25	2.500	3.4
Z	(3+4)-II-1	--	--	4933	9983	16346	--	--	26329	10.25	2.500	5.3

Pilastro : 5 [28 , 128]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 28.0 \text{ cm}, s. \text{ inf.} = 5.0 \text{ cm}, s. \text{ sup.} = 4.0 \text{ cm}, s. \text{ lat.} = 5.0 \text{ cm}, h \text{ lat.} = 28.0 \text{ cm} \quad L = 300.0 \text{ cm}$
 $Ln = 300.0 \text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}$,
 $FC = 1.20 \text{ qd} = 2, \text{ qf} = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N / (f_{cd} * A) = 0.098 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-24755	5044	-6927	26228	42721	26619	42721	4.4
Testa	(3+4)-II-2(+)	-22845	-4318	5425	25964	42354	26348	42354	5.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-II-2	--	--	4934	0	--	29065	28019	28019	6.90	2.500	5.7
Z	(3+4)-II-2	--	--	4005	10330	18361	--	--	28692	6.90	2.500	7.2

Pilastro : 5 [128 , 228]

Sez. R: $B_y = 50.0 \text{ cm} \quad B_z = 30.0 \text{ cm} \quad L = 270.0 \text{ cm} \quad Ln = 270.0 \text{ cm}$

Criteria : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
FC=1.20 qd=2, qf=1.5 :Verificato

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

$v_{max}=N/(fcd*A)=0.042 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-6708	-659	-9542	8355	13552	8355	13552	1.4
Testa	(3+4)-II-2(+)	-6527	-1347	1984	8334	13527	8334	13527	5.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	5278	--	18129	34667	18129	10.05	2.500	3.4
Z	(3+4)-II-2	--	--	2464	--	17474	19915	17474	10.05	2.500	7.1

Pilastro : 5 [228 , 328]

Sez. R: By= 50.0 cm Bz=30.0 cm L=110.0 cm Ln=110.0 cm

Criteria : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
FC=1.20 qd=2, qf=1.5 :Verificato

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

$v_{max}=N/(fcd*A)=0.036 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-6505	-1564	2611	8332	13524	8332	13524	4.2
Testa	(3+4)-II-2(+)	-6092	-3309	5260	8283	13468	8283	13468	1.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	5103	--	17982	34667	17982	10.05	2.500	3.5
Z	(3+4)-II-2	--	--	2279	--	17330	19915	17330	10.05	2.500	7.6

Pilastro : 6 [27 , 127]

Sez. R rinf.: By= 48.0 cm,Bz=28.0 cm,s. inf.=5.0 cm,s. sup.=4.0 cm,s.lat.=5.0 cm,h lat.=28.0 cm L=300.0 cm
Ln=300.0 cm

Criteria : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
FC=1.20 qd=2, qf=1.5 :Verificato

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 8.04	Afz = 2.01
Testa	AfSpigolo = 2.01	Afy = 8.04	Afz = 2.01

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	2Ø14
Testa		4Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.116 \leq 0.65$ [Comb. (3+4)-I-1(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-21925	-4495	7985	31918	50346	31969	50346	4.7
Testa	2(+)	-36548	-2459	-4731	33669	52338	33760	52338	7.7

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	5835	0	--	29757	28019	28019	6.90	2.500	4.8
Z	(3+4)-II-2	--	--	4221	10394	21798	--	--	32193	6.90	2.500	7.6

Pilastro : 6 [127 , 227]

Sez. R: By= 50.0 cm Bz=30.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 8.04	Afz = 2.01
Testa	AfSpigolo = 2.01	Afy = 8.04	Afz = 2.01

 $v_{max}=N/(fcd*A)=0.066 \leq 0.65$ [Comb. (3+4)-I-1(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-11652	3494	7653	14285	21495	14285	21495	2.2
Testa	2(+)	-15119	-3227	594	14670	21810	14670	21810	5.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	4149	--	18851	34667	18851	10.05	2.500	4.5
Z	(3+4)-II-2	--	--	3439	--	17920	19915	17920	10.05	2.500	5.2

Pilastro : 6 [227 , 327]

Sez. R: By= 50.0 cm Bz=30.0 cm L=110.0 cm Ln=110.0 cm

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 8.04	Afz = 2.01
Testa	AfSpigolo = 2.01	Afy = 8.04	Afz = 2.01

 $v_{max}=N/(fcd*A)=0.06 \leq 0.65$ [Comb. (3+4)-I-1(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-9689	-3208	1654	14066	21314	14066	21314	4.5
Testa	(3+4)-II-2(+)	-9277	-6005	3204	14020	21276	14020	21276	2.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	4006	--	18702	34667	18702	10.05	2.500	4.7
Z	(3+4)-II-2	--	--	3298	--	17774	19915	17774	10.05	2.500	5.4

Pilastro : 7 [26 , 126]

Sez. R rinf.: By= 48.0 cm, Bz=28.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s. lat.=5.0 cm, h lat.=28.0 cm L=300.0 cm Ln=300.0 cm

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	2Ø14

 $v_{max}=N/(fcd*A)=0.115 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-27123	2096	9550	26554	43171	26953	43171	4.9
Testa	(3+4)-I-1(+)	-25213	-4317	-5528	26291	42808	26683	42808	5.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6420	0	--	29413	28019	28019	6.90	2.500	4.4
Z	(3+4)-II-2	--	--	2469	10437	18979	--	--	29415	6.90	2.500	12

Pilastro : 7 [126 , 226]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 270.0 \text{ cm}$ $L_n = 270.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

$v_{max} = N/(fcd \cdot A) = 0.029 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-4304	2639	9535	8073	13221	8073	13221	1.3
Testa	(3+4)-I-3(+)	-3957	-452	2410	8032	13173	8032	13173	6.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	5886	--	17876	34667	17876	10.05	2.500	3.0
Z	(3+4)-II-2	--	--	1323	--	17144	19915	17144	10.05	2.500	13

Pilastro : 7 [226 , 326]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 110.0 \text{ cm}$ $L_n = 110.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

$v_{max} = N/(fcd \cdot A) = 0.023 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(+)	-3949	-488	3327	8032	13172	8032	13172	4.3
Testa	(3+4)-I-1(+)	-2886	-1285	-7101	7906	13022	7906	13022	1.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	5783	--	17727	34667	17727	10.05	2.500	3.1
Z	(3+4)-II-2	--	--	1237	--	16999	19915	16999	10.05	2.500	14

Pilastro : 8 [29 , 129]

Sez. R rinf.: $B_y = 48.0 \text{ cm}$, $B_z = 28.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s. lat. = 5.0 cm, h lat. = 28.0 cm $L = 300.0 \text{ cm}$

$L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	1Ø14

$v_{max} = N/(fcd \cdot A) = 0.109 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
Piede	(3+4)-I-3(-)	-19938	-1056	-8593	25560	41788	25934	41788	5.8
Testa	(3+4)-II-1(+)	-14173	-2060	-4116	24754	40588	25106	40588	8.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	5230	0	--	28921	28019	28019	6.90	2.500	5.4
Z	(3+4)-II-2	--	--	741	10399	18757	--	--	29156	6.90	2.500	39

Pilastro : 8 [129 , 229]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 270.0 \text{ cm}$ $L_n = 270.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

$v_{max} = N/(fcd \cdot A) = 0.069 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-9478	1649	10410	8678	13921	8678	13921	1.3
Testa	(3+4)-II-2(+)	-11324	-1697	1942	8891	14160	8891	14160	5.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6284	--	18533	34667	18533	10.05	2.500	2.9
Z	(3+4)-II-2	--	--	2291	--	18144	19915	18144	10.05	2.500	7.9

Pilastro : 8 [229 , 329]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 110.0 \text{ cm}$ $L_n = 110.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

$v_{max} = N/(fcd \cdot A) = 0.063 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-11278	-1888	2471	8885	14154	8885	14154	4.2
Testa	(3+4)-I-1(+)	-8008	-1547	-7431	8507	13726	8507	13726	1.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6048	--	18379	34667	18379	10.05	2.500	3.0
Z	(3+4)-II-2	--	--	2032	--	17996	19915	17996	10.05	2.500	8.9

Pilastro : 9 [5 , 105]

Sez. R rinf.: $B_y = 28.0 \text{ cm}$, $B_z = 48.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s. lat. = 5.0 cm, h lat. = 48.0 cm $L = 300.0 \text{ cm}$

$L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
				2Ø14

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{\max} = N / (fcd \cdot A) = 0.231 \leq 0.65 \quad [\text{Comb. (3+4)-II-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	33491	8999	-1315	29140	18567	29285	18567	2.2
Testa	2(+)	-37586	-3289	5019	44334	29089	44054	29089	5.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2768	0	19041	--	--	19041	6.90	2.500	6.9
Z	(3+4)-II-2	--	--	8994	13938	13975	--	--	27913	6.90	2.500	3.1

Pilastro : 9 [105 , 205]

Sez. R: $B_y = 30.0 \text{ cm}$ $B_z = 50.0 \text{ cm}$ $L = 270.0 \text{ cm}$ $L_n = 270.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$$v_{\max} = N / (fcd \cdot A) = 0.067 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-11931	-1207	-5632	14237	8960	14237	8960	1.8
Testa	(3+4)-II-2(+)	-9681	-3665	569	13947	8701	13947	8701	4.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	3594	--	18087	19915	18087	10.05	2.500	5.0
Z	(3+4)-II-2	--	--	5202	--	18711	34667	18711	10.05	2.500	3.6

Pilastro : 9 [205 , 305]

Sez. R: $B_y = 30.0 \text{ cm}$ $B_z = 50.0 \text{ cm}$ $L = 110.0 \text{ cm}$ $L_n = 110.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$$v_{\max} = N / (fcd \cdot A) = 0.061 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-9639	-4492	639	13942	8696	13942	8696	3.5
Testa	(3+4)-II-2(+)	-9227	-7980	1190	13888	8649	13888	8649	1.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	3368	--	17937	19915	17937	10.05	2.500	5.3
Z	(3+4)-II-2	--	--	4972	--	18557	34667	18557	10.05	2.500	3.7

Pilastro : 10 [10 , 110]

Sez. R rinf.: $B_y = 28.0 \text{ cm}$, $B_z = 48.0 \text{ cm}$, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm $L = 300.0 \text{ cm}$

$L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
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Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
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Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{max}=N/(fcd*A)=0.261 \leq 0.65 \quad [\text{Comb. (3+4)-II-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	28470	9062	914	30327	19338	30484	19338	2.3
Testa	2(+)	-33902	-3066	-4514	43795	28571	43502	28571	6.5

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs	
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m			
Y	(3+4)-I-1	--	--	1982	0	18884	--	--	18884	6.90	2.500	9.5
Z	(3+4)-II-2	--	--	10054	13938	13975	--	--	27913	6.90	2.500	2.8

Pilastro : 10 [110 , 210]

Sez. R: By= 30.0 cm Bz=50.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$$v_{max}=N/(fcd*A)=0.071 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-8281	10333	2578	13763	8539	13763	8539	1.2
Testa	(3+4)-II-2(+)	-7268	-4141	-1238	13627	8421	13627	8421	3.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	3680	--	17241	19915	17241	10.05	2.500	4.7
Z	(3+4)-II-2	--	--	6859	--	18359	34667	18359	10.05	2.500	2.7

Pilastro : 10 [210 , 310]

Sez. R: By= 30.0 cm Bz=50.0 cm L=110.0 cm Ln=110.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$$v_{max}=N/(fcd*A)=0.065 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-7311	-5192	-1397	13633	8426	13633	8426	2.5
Testa	(3+4)-II-2(+)	-6898	-9624	-2685	13577	8378	13577	8378	1.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	3285	--	17121	19915	17121	10.05	2.500	5.2
Z	(3+4)-II-2	--	--	6395	--	18217	34667	18217	10.05	2.500	2.8

Pilastro : 11 [14 , 114]

Sez. R rinf.: By= 28.0 cm, Bz=48.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm L=300.0 cm

Ln=300.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.09 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-22025	13419	-2250	41640	26876	41575	26876	3.4
Testa	(3+4)-II-1(+)	-11801	4575	-1587	39491	25388	39578	25388	9.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	1307	0	--	26525	17830	17830	6.90	2.500	14
Z	(3+4)-II-2	--	--	7943	14762	17105	--	--	31866	6.90	2.500	4.0

Pilastro : 11 [114 , 214]

Sez. R: By= 30.0 cm Bz=50.0 cm L=270.0 cm Ln=270.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max}=N/(fcd*A)=0.033 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-5981	-1692	5068	13453	8270	13453	8270	1.7
Testa	(3+4)-I-1(+)	-4968	39	-1828	13313	8151	13313	8151	6.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	3252	--	17256	19915	17256	10.05	2.500	5.3
Z	(3+4)-II-2	--	--	4280	--	17986	34667	17986	10.05	2.500	4.2

Pilastro : 11 [214 , 314]

Sez. R: By= 30.0 cm Bz=50.0 cm L=110.0 cm Ln=110.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max}=N/(fcd*A)=0.027 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(+)	-4888	156	-2103	13302	8142	13302	8142	4.9
Testa	(3+4)-I-1(+)	-4475	656	-4321	13245	8094	13245	8094	2.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	2877	--	17104	19915	17104	10.05	2.500	5.9
Z	(3+4)-II-2	--	--	3876	--	17833	34667	17833	10.05	2.500	4.6

Pilastro : 12 [18 , 118]

Sez. R rinf.: $B_y=28.0\text{ cm}$, $B_z=48.0\text{ cm}$, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm $L=300.0\text{ cm}$
 $L_n=300.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: $r_{cm}=200\text{ [kg/cmq]}$, $f_{ym}=4500\text{ [kg/cmq]}$,

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	2Ø14

$$v_{\max} = N/(f_{cd} \cdot A) = 0.111 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-20086	13323	-1490	41270	26595	41207	26595	3.5
Testa	(3+4)-II-1(+)	-25007	4876	-1465	42204	27305	42133	27305	8.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	1744	0	19077	--	--	19077	6.90	2.500	11
Z	(3+4)-II-1	--	--	7909	14945	17803	--	--	32748	6.90	2.500	4.1

Pilastro : 12 [118 , 218]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=50.0\text{ cm}$ $L=270.0\text{ cm}$ $L_n=270.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: $r_{cm}=200\text{ [kg/cmq]}$, $f_{ym}=4500\text{ [kg/cmq]}$,

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$$v_{\max} = N/(f_{cd} \cdot A) = 0.043 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-7611	485	5240	13673	8461	13673	8461	1.7
Testa	(3+4)-I-1(+)	-6598	191	-2000	13537	8343	13537	8343	5.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	3388	--	17484	19915	17484	10.05	2.500	5.2
Z	(3+4)-II-1	--	--	4287	--	18181	34667	18181	10.05	2.500	4.2

Pilastro : 12 [218 , 318]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=50.0\text{ cm}$ $L=110.0\text{ cm}$ $L_n=110.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: $r_{cm}=200\text{ [kg/cmq]}$, $f_{ym}=4500\text{ [kg/cmq]}$,

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$$v_{\max} = N/(f_{cd} \cdot A) = 0.037 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(+)	-6544	190	-2293	13529	8336	13529	8336	4.8
Testa	(3+4)-I-1(+)	-6131	157	-4649	13473	8288	13473	8288	1.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
-----	----	-------	-------	---	-------	------	------	-----	-------	--------	----

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	3032	--	17335	19915	17335	10.05	2.500	5.7
Z	(3+4)-II-1	--	--	3914	--	18026	34667	18026	10.05	2.500	4.6

Pilastro : 13 [30 , 130]

Sez. R rinf.: $B_y=28.0\text{ cm}, B_z=48.0\text{ cm}, s.\text{ inf.}=5.0\text{ cm}, s.\text{ sup.}=4.0\text{ cm}, s.\text{ lat.}=5.0\text{ cm}, h.\text{ lat.}=48.0\text{ cm}$ $L=300.0\text{ cm}$
 $L_n=300.0\text{ cm}$

Criterio : CLS_Pilastrini-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
 FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.14 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	28807	-4947	2829	30247	19287	30404	19287	3.0
Testa	(3+4)-II-1(+)	4082	-1655	-2707	35960	23034	36161	23034	6.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-II-1	--	--	2541	0	--	24692	17830	17830	6.90	2.500	7.0
Z	(3+4)-II-2	--	--	3561	14485	16051	--	--	30536	6.90	2.500	8.6

Pilastro : 13 [130 , 230]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=50.0\text{ cm}$ $L=270.0\text{ cm}$ $L_n=270.0\text{ cm}$

Criterio : CLS_Pilastrini-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
 FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max}=N/(fcd*A)=0.044 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-4390	-7346	2333	13233	8084	13233	8084	1.6
Testa	(3+4)-I-1(+)	-6908	407	-2062	13579	8379	13579	8379	5.5

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	3496	--	17527	19915	17527	10.05	2.500	5.0
Z	(3+4)-II-2	--	--	4866	--	18140	34667	18140	10.05	2.500	3.7

Pilastro : 13 [230 , 330]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=50.0\text{ cm}$ $L=110.0\text{ cm}$ $L_n=110.0\text{ cm}$

Criterio : CLS_Pilastrini-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
 FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max}=N/(fcd*A)=0.038 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
Piede	(3+4)-I-1(+)	-6856	433	-2370	13572	8373	13572	8373	4.6
Testa	(3+4)-I-1(+)	-6443	665	-4852	13516	8324	13516	8324	1.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	3195	--	17379	19915	17379	10.05	2.500	5.4
Z	(3+4)-II-2	--	--	4546	--	17975	34667	17975	10.05	2.500	4.0

Pilastro : 14 [25 , 125]

Sez. R rinf.: By= 28.0 cm, Bz=48.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm L=300.0 cm
Ln=300.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.116 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	13815	-3984	-996	33739	21570	33927	21570	5.0
Testa	(3+4)-I-3(+)	-10890	-480	2654	39292	25254	39389	25254	14

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2428	0	--	25212	17830	17830	6.90	2.500	7.3
Z	(3+4)-II-1	--	--	4174	13938	13975	--	--	27913	6.90	2.500	6.7

Pilastro : 14 [125 , 225]

Sez. R: By= 30.0 cm Bz=50.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max}=N/(fcd*A)=0.039 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-6595	2947	-4253	13536	8342	13536	8342	2.0
Testa	(3+4)-I-3(+)	-5583	-1582	1199	13398	8224	13398	8224	6.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2561	--	17342	19915	17342	10.05	2.500	6.8
Z	(3+4)-II-2	--	--	3636	--	18155	34667	18155	10.05	2.500	5.0

Pilastro : 14 [225 , 325]

Sez. R: By= 30.0 cm Bz=50.0 cm L=110.0 cm Ln=110.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
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Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
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$$v_{max} = N / (fcd * A) = 0.033 \leq 0.65 \quad [\text{Comb. (3+4)-II-2(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(+)	-5577	-1901	1437	13397	8223	13397	8223	5.2
Testa	(3+4)-I-3(+)	-5165	-3299	3357	13341	8175	13341	8175	2.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2495	--	17200	19915	17200	10.05	2.500	6.9
Z	(3+4)-II-2	--	--	3581	--	18006	34667	18006	10.05	2.500	5.0

Pilastro : 15 [24 , 124]

Sez. R rinf.: By= 28.0 cm, Bz=48.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm L=300.0 cm

Ln=300.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	2Ø14

$$v_{max} = N / (fcd * A) = 0.114 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-27883	-11271	-885	42740	27717	42588	27717	4.5
Testa	2(+)	-39765	1846	5715	44652	29394	44378	29394	6.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2617	0	18380	--	--	18380	6.90	2.500	7.0
Z	(3+4)-II-1	--	--	6212	14981	17937	--	--	32918	6.90	2.500	5.3

Pilastro : 15 [124 , 224]

Sez. R: By= 30.0 cm Bz=50.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$$v_{max} = N / (fcd * A) = 0.069 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-10465	5901	-2314	14049	8792	14049	8792	2.1
Testa	(3+4)-II-2(+)	-9452	-2437	804	13917	8675	13917	8675	6.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2423	--	17818	19915	17818	10.05	2.500	7.4
Z	(3+4)-II-2	--	--	4050	--	18677	34667	18677	10.05	2.500	4.6

Pilastro : 15 [224 , 324]

Sez. R: $B_y = 30.0 \text{ cm}$ $B_z = 50.0 \text{ cm}$ $L = 110.0 \text{ cm}$ $L_n = 110.0 \text{ cm}$

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max} = N/(fcd \cdot A) = 0.063 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-9475	-3072	930	13920	8677	13920	8677	4.8
Testa	(3+4)-II-2(+)	-9063	-5747	1986	13866	8629	13866	8629	2.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2328	--	17681	19915	17681	10.05	2.500	7.6
Z	(3+4)-II-2	--	--	3956	--	18533	34667	18533	10.05	2.500	4.7

Pilastro : 16 [19 , 119]

Sez. R rinf.: $B_y = 28.0 \text{ cm}$, $B_z = 48.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s. lat. = 5.0 cm, h lat. = 48.0 cm $L = 300.0 \text{ cm}$

$L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	1Ø14

$v_{max} = N/(fcd \cdot A) = 0.142 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-29210	-14763	-727	42985	27906	42791	27906	3.4
Testa	2(+)	-45989	1149	7567	45548	30256	45291	30256	4.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	4975	0	19919	--	--	19919	6.90	2.500	4.0
Z	(3+4)-II-1	--	--	7546	15030	18126	--	--	33156	6.90	2.500	4.4

Pilastro : 16 [119 , 219]

Sez. R: $B_y = 30.0 \text{ cm}$ $B_z = 50.0 \text{ cm}$ $L = 270.0 \text{ cm}$ $L_n = 270.0 \text{ cm}$

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max} = N/(fcd \cdot A) = 0.063 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-11239	1223	-6509	14149	8881	14149	8881	1.4
Testa	(3+4)-I-3(+)	-10226	1786	2627	14018	8764	14018	8764	3.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	4113	--	17991	19915	17991	10.05	2.500	4.4

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
Z	(3+4)-II-1	--	--	4665	--	18347	34667	18347	10.05	2.500	3.9

Pilastro : 16 [219 , 319]

Sez. R: $B_y = 30.0 \text{ cm}$ $B_z = 50.0 \text{ cm}$ $L = 110.0 \text{ cm}$ $L_n = 110.0 \text{ cm}$

Criteria : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max} = N/(fcd \cdot A) = 0.057 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-7203	4629	735	13619	8413	13619	8413	3.2
Testa	(3+4)-I-3(+)	-9787	3140	6224	13961	8713	13961	8713	1.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	3969	--	17846	19915	17846	10.05	2.500	4.5
Z	(3+4)-II-1	--	--	4530	--	18202	34667	18202	10.05	2.500	4.0

Pilastro : 17 [15 , 115]

Sez. R rinf.: $B_y = 28.0 \text{ cm}$, $B_z = 48.0 \text{ cm}$, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm $L = 300.0 \text{ cm}$
 $L_n = 300.0 \text{ cm}$

Criteria : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N/(fcd \cdot A) = 0.103 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-23891	-14847	-2048	41994	27144	41925	27144	3.1
Testa	(3+4)-II-1(+)	-21958	6432	2500	41628	26866	41562	26866	6.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2933	0	18784	--	--	18784	6.90	2.500	6.4
Z	(3+4)-II-1	--	--	8964	14831	17370	--	--	32201	6.90	2.500	3.6

Pilastro : 17 [115 , 215]

Sez. R: $B_y = 30.0 \text{ cm}$ $B_z = 50.0 \text{ cm}$ $L = 270.0 \text{ cm}$ $L_n = 270.0 \text{ cm}$

Criteria : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max} = N/(fcd \cdot A) = 0.035 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-6309	917	-5212	13498	8309	13498	8309	1.7
Testa	(3+4)-I-3(+)	-5297	558	1982	13359	8190	13359	8190	5.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	3348	--	17302	19915	17302	10.05	2.500	5.2
Z	(3+4)-II-1	--	--	3178	--	18018	34667	18018	10.05	2.500	5.7

Pilastro : 17 [215 , 315]

Sez. R: By= 30.0 cm Bz=50.0 cm L=110.0 cm Ln=110.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 :Verificato

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max}=N/(fcd*A)=0.029 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(+)	-5288	608	2288	13358	8189	13358	8189	4.4
Testa	(3+4)-I-3(+)	-4876	1211	4757	13301	8141	13301	8141	1.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	3167	--	17160	19915	17160	10.05	2.500	5.4
Z	(3+4)-II-1	--	--	3017	--	17871	34667	17871	10.05	2.500	5.9

Pilastro : 18 [11 , 111]

Sez. R rinf.: By= 28.0 cm,Bz=48.0 cm,s. inf.=5.0 cm,s. sup.=4.0 cm,s.lat.=5.0 cm,h lat.=48.0 cm L=300.0 cm

Ln=300.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 :Verificato

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.091 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-17445	-11514	-2017	40713	26212	40701	26212	3.8
Testa	(3+4)-II-1(+)	-15512	4287	2544	40297	25931	40327	25931	8.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2479	0	18366	--	--	18366	6.90	2.500	7.4
Z	(3+4)-II-2	--	--	7853	14772	17145	--	--	31917	6.90	2.500	4.1

Pilastro : 18 [111 , 211]

Sez. R: By= 30.0 cm Bz=50.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 :Verificato

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max}=N/(fcd*A)=0.032 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-5762	-1801	-5085	13423	8245	13423	8245	1.7
Testa	(3+4)-I-3(+)	-4749	58	1900	13283	8126	13283	8126	5.6

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	3257	--	17226	19915	17226	10.05	2.500	5.3
Z	(3+4)-II-2	--	--	3012	--	17952	34667	17952	10.05	2.500	6.0

Pilastro : 18 [211 , 311]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=50.0\text{ cm}$ $L=110.0\text{ cm}$ $L_n=110.0\text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

$v_{max}=N/(fcd*A)=0.026 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(+)	-4735	192	2194	13281	8124	13281	8124	4.6
Testa	(3+4)-I-3(+)	-4322	764	4570	13224	8075	13224	8075	1.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	3052	--	17082	19915	17082	10.05	2.500	5.6
Z	(3+4)-II-2	--	--	2825	--	17802	34667	17802	10.05	2.500	6.3

Pilastro : 19 [33 , 133]

Sez. R rinf.: $B_y=28.0\text{ cm}$, $B_z=48.0\text{ cm}$, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm $L=300.0\text{ cm}$

$L_n=300.0\text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.053 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-12019	11321	2524	39538	25420	39623	25420	3.5
Testa	(3+4)-I-1(+)	-9710	-889	-6061	39033	25081	39144	25081	5.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	5189	0	--	26357	17830	17830	6.90	2.500	3.4
Z	(3+4)-II-2	--	--	5104	14387	15683	--	--	30070	6.90	2.500	5.9

Pilastro : 20 [32 , 132]

Sez. R rinf.: $B_y=28.0\text{ cm}$, $B_z=48.0\text{ cm}$, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm $L=300.0\text{ cm}$

$L_n=300.0\text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N/(fcd \cdot A) = 0.055 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-12443	11474	-459	39631	25482	39710	25482	4.0
Testa	(3+4)-I-3(+)	-10292	-934	6177	39161	25166	39265	25166	4.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	5209	0	--	26440	17830	17830	6.90	2.500	3.4
Z	(3+4)-II-2	--	--	5135	14403	15743	--	--	30146	6.90	2.500	5.9

Pilastro : 21 [34 , 134]

Sez. R rinf.: By= 28.0 cm, Bz=48.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm L=300.0 cm

Ln=300.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq], fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N/(fcd \cdot A) = 0.054 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-13510	-12837	434	39863	25638	39930	25638	3.5
Testa	(3+4)-I-1(+)	-10249	821	-5708	39151	25160	39256	25160	5.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	4813	0	--	26434	17830	17830	6.90	2.500	3.7
Z	(3+4)-II-1	--	--	5631	14443	15895	--	--	30338	6.90	2.500	5.4

Pilastro : 22 [31 , 131]

Sez. R rinf.: By= 28.0 cm, Bz=48.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm L=300.0 cm

Ln=300.0 cm

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq], fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.055 \leq 0.65 \quad [\text{Comb. (3+4)-II-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-14222	-12829	-2285	40017	25742	40076	25742	3.2
Testa	(3+4)-I-3(+)	-10722	791	5872	39255	25229	39354	25229	5.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	4881	0	--	26501	17830	17830	6.90	2.500	3.7
Z	(3+4)-II-1	--	--	5592	14470	15996	--	--	30466	6.90	2.500	5.4

Pilastro : 23 [6 , 106]

Sez. R rinf.: By= 28.0 cm, Bz=88.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=88.0 cm L=300.0 cm

Ln=300.0 cm

Criterio : CLS_Pilastris-Exist Rinforzati - Verifica a presso-flessione deviata: rcm=200 [kg/cmq], fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	1Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.094 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-28200	26173	81	99554	38273	99316	38273	4.7
Testa	(3+4)-II-1(+)	-36397	-27766	-4017	102216	39478	101854	39478	4.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	3968	0	31521	--	--	31521	10.25	2.500	7.9
Z	(3+4)-II-2	--	--	8393	19833	--	47690	70998	47690	10.25	2.500	5.7

Pilastro : 23 [106 , 206]

Sez. R rinf.: By= 28.0 cm, Bz=88.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=88.0 cm L=270.0 cm

Ln=270.0 cm

Criterio : CLS_Pilastris-Exist Rinforzati - Verifica a presso-flessione deviata: rcm=200 [kg/cmq], fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	1Ø14

$$v_{\max} = N / (f_{cd} \cdot A) = 0.046 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-10670	5731	19515	93634	35667	93467	35667	1.9
Testa	(3+4)-I-1(+)	-7770	-1944	-10629	92603	35232	92471	35232	3.6

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
-----	----	-------	-------	---	-------	-------	------	------	-----	-------	--------	----

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	14493	0	27366	--	--	27366	10.25	2.500	1.9
Z	(3+4)-II-2	--	--	15072	19167	--	45069	70998	45069	10.25	2.500	3.0

Pilastro : 23 [206 , 306]

Sez. R rinf.: $B_y=28.0\text{ cm}, B_z=88.0\text{ cm}, s.\text{ inf.}=5.0\text{ cm}, s.\text{ sup.}=4.0\text{ cm}, s.\text{ lat.}=5.0\text{ cm}, h.\text{ lat.}=88.0\text{ cm}$ $L=110.0\text{ cm}$
 $L_n=110.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
 FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.026 \leq 0.65$ [Comb. (3+4)-II-1(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(+)	-6187	-4128	-4815	92039	34995	91925	34995	8.1
Testa	(3+4)-I-1(+)	-5006	-2671	-7368	91617	34817	91505	34817	5.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-II-1	--	--	3703	0	27481	--	--	27481	10.25	2.500	7.4
Z	(3+4)-II-1	--	--	7189	19195	--	45179	70998	45179	10.25	2.500	6.3

Pilastro : 23 [306 , 406]

Sez. R rinf.: $B_y=28.0\text{ cm}, B_z=48.0\text{ cm}, s.\text{ inf.}=5.0\text{ cm}, s.\text{ sup.}=4.0\text{ cm}, s.\text{ lat.}=5.0\text{ cm}, h.\text{ lat.}=48.0\text{ cm}$ $L=170.0\text{ cm}$
 $L_n=170.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
 FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.028 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(+)	-7210	2731	3808	38483	24712	38622	24712	6.9
Testa	(3+4)-II-1(+)	-6050	12666	-1714	38227	24541	38379	24541	3.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	4979	0	--	24926	26435	24926	10.25	2.500	5.0
Z	(3+4)-II-1	--	--	6894	14205	14990	--	--	29195	10.25	2.500	4.2

Pilastro : 24 [8 , 108]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=90.0\text{ cm}$ $L=300.0\text{ cm}$ $L_n=300.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.118 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-37534	20487	367	47520	17583	47520	17583	2.7
Testa	(3+4)-II-2(-)	-35509	17674	-200	47055	17356	47055	17356	3.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	1253	26631	--	--	26631	10.05	2.500	21
Z	(3+4)-II-2	--	--	5351	--	37378	64170	37378	10.05	2.500	7.0

Pilastro : 24 [108 , 208]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=90.0\text{ cm}$ $L=270.0\text{ cm}$ $L_n=270.0\text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.073 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-19145	-4857	-9897	43119	15496	43119	15496	1.7
Testa	(3+4)-I-3(+)	-17322	-3283	7924	42660	15285	42660	15285	2.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	8827	24812	--	--	24812	10.05	2.500	2.8
Z	(3+4)-II-1	--	--	10994	--	34469	64170	34469	10.05	2.500	3.1

Pilastro : 24 [208 , 308]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=90.0\text{ cm}$ $L=110.0\text{ cm}$ $L_n=110.0\text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.051 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-15735	-3433	2758	42256	15101	42256	15101	6.6
Testa	(3+4)-II-1(+)	-11883	8186	977	41264	14652	41264	14652	5.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	5470	23613	--	--	23613	10.05	2.500	4.3
Z	(3+4)-II-1	--	--	6334	--	33641	64170	33641	10.05	2.500	5.3

Pilastro : 24 [308 , 408]

Sez. R rinf.: $B_y=28.0\text{ cm}$, $B_z=48.0\text{ cm}$, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm $L=170.0\text{ cm}$

$L_n=170.0\text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{max} = N / (fcd * A) = 0.047 \leq 0.65 \quad [\text{Comb. (3+4)-II-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-12001	5184	241	39534	25417	39619	25417	10
Testa	(3+4)-I-3(+)	-10293	6291	10683	39161	25166	39265	25166	2.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	7898	0	--	26320	26435	26320	10.25	2.500	3.3
Z	(3+4)-II-2	--	--	5472	14272	15243	--	--	29514	10.25	2.500	5.4

Pilastro : 25 [9 , 109]

Sez. R: By= 30.0 cm Bz=90.0 cm L=300.0 cm Ln=300.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$$v_{max} = N / (fcd * A) = 0.123 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-25916	14737	-156	44788	16272	44788	16272	3.8
Testa	(3+4)-II-1(+)	-34964	-19746	2280	46929	17295	46929	17295	2.5

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2072	27089	--	--	27089	10.05	2.500	13
Z	(3+4)-II-1	--	--	6512	--	37296	64170	37296	10.05	2.500	5.7

Pilastro : 25 [109 , 209]

Sez. R: By= 30.0 cm Bz=90.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 10.05	Afz = 2.01
Testa	AfSpigolo = 2.01	Afy = 10.05	Afz = 2.01

$$v_{max} = N / (fcd * A) = 0.059 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-18886	-3193	-10227	57871	15366	57871	15366	1.6
Testa	(3+4)-I-3(+)	-17064	1549	5830	57180	15226	57180	15226	2.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	7675	25346	--	--	25346	10.05	2.500	3.3
Z	(3+4)-II-2	--	--	13215	--	33143	64170	33143	10.05	2.500	2.5

Pilastro : 25 [209 , 309]

Sez. R: By= 30.0 cm Bz=90.0 cm L=110.0 cm Ln=110.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 :Verificato

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.035 \leq 0.65$ [Comb. (3+4)-II-1(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-4831	-5705	1507	39395	13821	39395	13821	6.2
Testa	(3+4)-I-3(+)	-10018	-1795	5426	40776	14433	40776	14433	3.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	6756	23257	--	--	23257	10.05	2.500	3.4
Z	(3+4)-II-1	--	--	5496	--	33435	64170	33435	10.05	2.500	6.1

Pilastro : 25 [309 , 409]

Sez. R rinf.: By= 28.0 cm,Bz=48.0 cm,s. inf.=5.0 cm,s. sup.=4.0 cm,s.lat.=5.0 cm,h lat.=48.0 cm L=170.0 cm
Ln=170.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 :Verificato

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.029 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-7107	7053	-1833	38460	24697	38601	24697	5.5
Testa	(3+4)-II-1(+)	-6012	12732	2302	38218	24535	38371	24535	3.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	6376	0	--	24965	26435	24965	10.25	2.500	3.9
Z	(3+4)-II-1	--	--	5178	14204	14985	--	--	29188	10.25	2.500	5.6

Pilastro : 26 [20 , 120]

Sez. R rinf.: By= 28.0 cm,Bz=88.0 cm,s. inf.=5.0 cm,s. sup.=4.0 cm,s.lat.=5.0 cm,h lat.=88.0 cm L=300.0 cm
Ln=300.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 :Verificato

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.101 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-31066	-35786	-263	100492	38695	100212	38695	3.3

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
Testa	(3+4)-II-2(+)	-40355	29028	-3549	103478	40057	103051	40057	4.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	4056	0	30123	--	--	30123	10.25	2.500	7.4
Z	(3+4)-II-1	--	--	11125	19943	--	48121	70998	48121	10.25	2.500	4.3

Pilastro : 26 [120 , 220]

Sez. R rinf.: By= 28.0 cm, Bz=88.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=88.0 cm L=270.0 cm
Ln=270.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.048 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-10074	8197	19910	93422	35577	93263	35577	1.8
Testa	(3+4)-I-1(+)	-7174	-1999	-8705	92391	35143	92265	35143	4.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	13725	0	27284	--	--	27284	10.25	2.500	2.0
Z	(3+4)-II-2	--	--	15156	19562	--	46621	70998	46621	10.25	2.500	3.1

Pilastro : 26 [220 , 320]

Sez. R: By= 30.0 cm Bz=90.0 cm L=110.0 cm Ln=110.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.039 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-3301	4935	-910	38981	13640	38981	13640	7.8
Testa	(3+4)-I-1(+)	-5353	-1665	-6388	39536	13883	39536	13883	2.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6537	22627	--	--	22627	10.05	2.500	3.5
Z	(3+4)-II-2	--	--	8970	--	33617	64170	33617	10.05	2.500	3.7

Pilastro : 26 [320 , 420]

Sez. R rinf.: By= 28.0 cm, Bz=48.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm L=170.0 cm
Ln=170.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{max}=N/(fcd*A)=0.035 \leq 0.65 \quad [\text{Comb. (3+4)-II-2(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-167	2878	2010	36916	23668	37122	23668	8.8
Testa	(3+4)-II-2(+)	-7870	-14076	-855	38629	24810	38761	24810	2.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6132	0	--	24872	26435	24872	10.25	2.500	4.1
Z	(3+4)-II-2	--	--	9045	14273	15249	--	--	29522	10.25	2.500	3.3

Pilastro : 27 [21 , 121]

Sez. R: By= 30.0 cm Bz=90.0 cm L=300.0 cm Ln=300.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$$v_{max}=N/(fcd*A)=0.224 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-43431	-23897	-595	48800	18237	48800	18237	2.3
Testa	(3+4)-II-2(+)	-34780	13345	-636	46887	17274	46887	17274	4.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	4445	21804	--	--	21804	10.05	2.500	4.9
Z	(3+4)-II-1	--	--	7685	--	38262	64170	38262	10.05	2.500	5.0

Pilastro : 27 [121 , 221]

Sez. R: By= 30.0 cm Bz=90.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$$v_{max}=N/(fcd*A)=0.088 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-15953	-5367	-10852	42312	15126	42312	15126	1.5
Testa	(3+4)-I-3(+)	-14130	2766	8410	41845	14914	41845	14914	1.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	9721	25585	--	--	25585	10.05	2.500	2.6
Z	(3+4)-II-1	--	--	11360	--	35365	64170	35365	10.05	2.500	3.1

Pilastro : 27 [221 , 321]

Sez. R: By= 30.0 cm Bz=90.0 cm L=110.0 cm Ln=110.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 :**Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.065 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-20949	4413	3147	43569	15704	43569	15704	5.6
Testa	(3+4)-II-1(+)	-16947	8638	-301	42565	15242	42565	15242	6.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6577	24632	--	--	24632	10.05	2.500	3.7
Z	(3+4)-I-1	--	--	4637	--	34890	64170	34890	10.05	2.500	7.5

Pilastro : 27 [321 , 421]

Sez. R rinf.: By= 28.0 cm, Bz=48.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=48.0 cm L=170.0 cm
Ln=170.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 :**Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.059 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(+)	-15221	-4661	-1507	40234	25888	40271	25888	9.2
Testa	(3+4)-I-1(+)	-14126	-7151	-8987	39997	25728	40057	25728	2.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6426	0	--	26868	26435	26435	10.25	2.500	4.1
Z	(3+4)-II-2	--	--	4879	14357	15569	--	--	29926	10.25	2.500	6.1

Pilastro : 28 [22 , 122]

Sez. R: By= 30.0 cm Bz=90.0 cm L=300.0 cm Ln=300.0 cm

Criteria : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 :**Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.252 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-51551	-22580	899	50373	19129	50373	19129	2.5
Testa	(3+4)-II-2(+)	-39347	14181	643	47932	17785	47932	17785	3.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	4678	27518	--	--	27518	10.05	2.500	5.9
Z	(3+4)-II-1	--	--	6870	--	39480	64170	39480	10.05	2.500	5.7

Pilastro : 28 [122 , 222]

Sez. R: By= 30.0 cm Bz=90.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

 $v_{max}=N/(fcd*A)=0.088 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-18320	3571	10065	42912	15401	42912	15401	1.7
Testa	(3+4)-I-1(+)	-16498	-1514	-6665	42451	15190	42451	15190	2.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	8953	25594	--	--	25594	10.05	2.500	2.9
Z	(3+4)-II-1	--	--	12124	--	35544	64170	35544	10.05	2.500	2.9

Pilastro : 28 [222 , 322]

Sez. R: By= 30.0 cm Bz=90.0 cm L=110.0 cm Ln=110.0 cm

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

 $v_{max}=N/(fcd*A)=0.068 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-3(-)	-21831	3397	-3045	43788	15805	43788	15805	6.3
Testa	(3+4)-I-1(+)	-9738	2407	-4472	40703	14400	40703	14400	3.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	9817	24751	--	--	24751	10.05	2.500	2.5
Z	(3+4)-II-2	--	--	8067	--	33894	64170	33894	10.05	2.500	4.2

Pilastro : 28 [322 , 422]

Sez. R rinf.: By= 28.0 cm, Bz=48.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s. lat.=5.0 cm, h lat.=48.0 cm L=170.0 cm Ln=170.0 cm

Criterio : CLS_Pilastrini-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	2Ø14

 $v_{max}=N/(fcd*A)=0.06 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-7272	2951	-3435	38497	24721	38635	24721	7.3
Testa	(3+4)-I-3(+)	-14199	-6884	10069	40013	25739	40071	25739	2.5

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	8367	0	--	26878	26435	26435	10.25	2.500	3.2
Z	(3+4)-II-1	--	--	7008	14306	15374	--	--	29681	10.25	2.500	4.2

Pilastro : 29 [23 , 123]

Sez. R: By= 30.0 cm Bz=90.0 cm L=300.0 cm Ln=300.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.116 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-36265	-17932	565	47229	17441	47229	17441	3.1
Testa	(3+4)-II-2(+)	-22824	20850	-121	44033	15919	44033	15919	2.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	1737	26816	--	--	26816	10.05	2.500	15
Z	(3+4)-II-1	--	--	7435	--	37187	64170	37187	10.05	2.500	5.0

Pilastro : 29 [123 , 223]

Sez. R: By= 30.0 cm Bz=90.0 cm L=270.0 cm Ln=270.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.065 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-20808	5859	9402	43534	15688	43534	15688	1.8
Testa	(3+4)-I-3(+)	-7078	-2293	4632	39998	14087	39998	14087	3.4

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	7257	24613	--	--	24613	10.05	2.500	3.4
Z	(3+4)-II-2	--	--	14569	--	34660	64170	34660	10.05	2.500	2.4

Pilastro : 29 [223 , 323]

Sez. R: By= 30.0 cm Bz=90.0 cm L=110.0 cm Ln=110.0 cm

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.042 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-6850	7342	712	39937	14060	39937	14060	6.2
Testa	(3+4)-I-1(+)	-12754	-4721	-5768	41490	14754	41490	14754	2.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	7617	23626	--	--	23626	10.05	2.500	3.1

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
Z	(3+4)-II-2	--	--	13560	--	33657	64170	33657	10.05	2.500	2.5

Pilastro : 29 [323 , 423]

Sez. R rinf.: $B_y = 28.0 \text{ cm}$, $B_z = 48.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s. lat. = 5.0 cm, h lat. = 48.0 cm $L = 170.0 \text{ cm}$
 $L_n = 170.0 \text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: rcm=200 [kg/cm²], fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max} = N/(fcd \cdot A) = 0.033 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-699	2885	734	37035	23747	37242	23747	12
Testa	(3+4)-II-2(+)	-7460	-14107	-331	38538	24749	38675	24749	2.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cm ² /m		
Y	(3+4)-I-1	--	--	6794	0	--	25764	26435	25764	10.25	2.500	3.8
Z	(3+4)-II-2	--	--	9452	14258	15191	--	--	29448	10.25	2.500	3.1

Pilastro : 30 [7 , 107]

Sez. R: $B_y = 30.0 \text{ cm}$ $B_z = 90.0 \text{ cm}$ $L = 300.0 \text{ cm}$ $L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: rcm=200 [kg/cm²], fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max} = N/(fcd \cdot A) = 0.117 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-37170	20476	-133	47437	17542	47437	17542	2.7
Testa	(3+4)-II-2(-)	-35145	16093	218	46971	17315	46971	17315	3.5

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cm ² /m		
Y	(3+4)-I-1	--	--	1448	26634	--	--	26634	10.05	2.500	18
Z	(3+4)-II-2	--	--	4952	--	37323	64170	37323	10.05	2.500	7.5

Pilastro : 30 [107 , 207]

Sez. R: $B_y = 30.0 \text{ cm}$ $B_z = 90.0 \text{ cm}$ $L = 270.0 \text{ cm}$ $L_n = 270.0 \text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata: rcm=200 [kg/cm²], fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max} = N/(fcd \cdot A) = 0.071 \leq 0.65$ [Comb. (3+4)-II-2(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-18641	961	10320	42992	15438	42992	15438	1.6
Testa	(3+4)-I-1(+)	-16819	-2419	-8209	42532	15227	42532	15227	2.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	9114	24320	--	--	24320	10.05	2.500	2.7
Z	(3+4)-II-1	--	--	9410	--	34434	64170	34434	10.05	2.500	3.7

Pilastro : 30 [207 , 307]

Sez. R: $B_y=30.0\text{ cm}$ $B_z=90.0\text{ cm}$ $L=110.0\text{ cm}$ $L_n=110.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 10.05

$v_{max}=N/(fcd*A)=0.05 \leq 0.65$ [Comb. (3+4)-II-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-I-1(-)	-12981	-3580	3413	41549	14780	41549	14780	5.3
Testa	(3+4)-II-1(+)	-15188	6236	-903	42117	15038	42117	15038	7.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	5463	23556	--	--	23556	10.05	2.500	4.3
Z	(3+4)-II-1	--	--	5573	--	34137	64170	34137	10.05	2.500	6.1

Pilastro : 30 [307 , 407]

Sez. R rinf.: $B_y=28.0\text{ cm}$, $B_z=48.0\text{ cm}$, s. inf.=5.0 cm, s. sup.=4.0 cm, s. lat.=5.0 cm, h lat.=48.0 cm $L=170.0\text{ cm}$

$L_n=170.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02
Testa	AfSpigolo = 2.01	Afy = 0.00	Afz = 4.02

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.044 \leq 0.65$ [Comb. (3+4)-II-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-11300	4287	-114	39381	25314	39474	25314	13
Testa	(3+4)-I-1(+)	-8022	5577	-11220	38662	24832	38792	24832	2.2

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	8448	0	--	25996	26435	25996	10.25	2.500	3.1
Z	(3+4)-II-2	--	--	4968	14266	15222	--	--	29488	10.25	2.500	5.9

Pilastro : 31 [16 , 116]

Sez. R: $B_y=90.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=300.0\text{ cm}$ $L_n=300.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 3.14	Afy = 2.01	Afz = 2.01
Testa	AfSpigolo = 3.14	Afy = 2.01	Afz = 2.01

$v_{max}=N/(fcd*A)=0.106 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	2(+)	-48172	-963	2163	15093	48999	15093	48999	6.7
Testa	2(+)	-47295	958	2128	15013	48760	15013	48760	6.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	926	--	36306	64170	36306	10.05	2.500	39
Z	(3+4)-II-1	--	--	582	24167	--	--	24167	10.05	2.500	42

Pilastro : 31 [116 , 216]

Sez. R: $B_y=90.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=270.0\text{ cm}$ $L_n=270.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00

$v_{max}=N/(fcd*A)=0.063 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-19721	-1934	-885	11876	34898	11876	34898	9.3
Testa	(3+4)-II-1(+)	-19114	2245	542	11805	34724	11805	34724	8.6

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2460	--	34782	64170	34782	10.05	2.500	14
Z	(3+4)-II-1	--	--	1921	22125	--	--	22125	10.05	2.500	12

Pilastro : 31 [216 , 316]

Sez. R: $B_y=90.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=110.0\text{ cm}$ $L_n=110.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00

$v_{max}=N/(fcd*A)=0.044 \leq 0.65$ [Comb. (3+4)-II-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-14215	-4715	-2161	11230	33302	11230	33302	3.0
Testa	(3+4)-II-1(+)	-13967	2042	2176	11201	33229	11201	33229	8.1

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	6866	--	33865	64170	33865	10.05	2.500	4.9
Z	(3+4)-II-1	--	--	8001	21382	--	--	21382	10.05	2.500	2.7

Pilastro : 31 [316 , 416]

Sez. R rinf.: $B_y=48.0\text{ cm}$, $B_z=28.0\text{ cm}$, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=28.0 cm $L=170.0\text{ cm}$

$L_n=170.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
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Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$$v_{\max} = N/(fcd \cdot A) = 0.049 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(+)	-11710	1401	2643	24408	40039	24750	40039	14
Testa	(3+4)-II-1(+)	-10628	12614	9442	24255	39796	24593	39796	1.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	7189	0	--	27262	41541	27262	10.25	2.500	3.8
Z	(3+4)-II-1	--	--	9250	10020	16563	--	--	26584	10.25	2.500	2.9

Pilastro : 32 [13 , 113]

Sez. R: $B_y = 90.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 300.0 \text{ cm}$ $L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 3.14	Afy = 2.01	Afz = 2.01
Testa	AfSpigolo = 3.14	Afy = 2.01	Afz = 2.01

$$v_{\max} = N/(fcd \cdot A) = 0.116 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	2(-)	-47535	951	-2139	15035	48825	15035	48825	6.8
Testa	2(+)	-46657	-932	2094	14954	48584	14954	48584	6.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	908	--	37299	64170	37299	10.05	2.500	41
Z	(3+4)-II-2	--	--	510	24328	--	--	24328	10.05	2.500	48

Pilastro : 32 [113 , 213]

Sez. R: $B_y = 90.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 270.0 \text{ cm}$ $L_n = 270.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00

$$v_{\max} = N/(fcd \cdot A) = 0.067 \leq 0.65 \quad [\text{Comb. (3+4)-I-3(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-19906	2485	854	11897	34950	11897	34950	7.8
Testa	(3+4)-II-2(+)	-19298	-2701	-718	11827	34777	11827	34777	7.3

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	2426	--	33950	64170	33950	10.05	2.500	14
Z	(3+4)-II-2	--	--	2435	22150	--	--	22150	10.05	2.500	9.1

Pilastro : 32 [213 , 313]

Sez. R: $B_y = 90.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 110.0 \text{ cm}$ $L_n = 110.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00

$$v_{\max} = N / (f_{cd} * A) = 0.046 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-13459	4885	2108	11140	33078	11140	33078	2.8
Testa	(3+4)-II-2(+)	-13212	-2486	-2045	11111	33005	11111	33005	6.7

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	7008	--	33971	64170	33971	10.05	2.500	4.8
Z	(3+4)-II-2	--	--	8762	21280	--	--	21280	10.05	2.500	2.4

Pilastro : 32 [313 , 413]

Sez. R rinf.: $B_y = 48.0 \text{ cm}$, $B_z = 28.0 \text{ cm}$, s. inf. = 5.0 cm, s. sup. = 4.0 cm, s. lat. = 5.0 cm, h lat. = 28.0 cm $L = 170.0 \text{ cm}$

$L_n = 170.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$,

$FC = 1.20$ $q_d = 2$, $q_f = 1.5$: **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	1Ø14

$$v_{\max} = N / (f_{cd} * A) = 0.048 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(+)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-9244	-1823	-3233	24059	39485	24392	39485	11
Testa	(3+4)-II-2(+)	-8161	-12053	-10237	23906	39241	24235	39241	1.8

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6074	0	--	27234	41541	27234	10.25	2.500	4.5
Z	(3+4)-II-2	--	--	8506	9962	16223	--	--	26185	10.25	2.500	3.1

Pilastro : 33 [12 , 112]

Sez. R: $B_y = 90.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 300.0 \text{ cm}$ $L_n = 300.0 \text{ cm}$

Criterio : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata: $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$,

$FC = 1.20$ $q_d = 2$, $q_f = 1.5$: **Verificato**

Piede	AfSpigolo = 3.14	Afy = 2.01	Afz = 2.01
Testa	AfSpigolo = 3.14	Afy = 2.01	Afz = 2.01

$$v_{\max} = N / (f_{cd} * A) = 0.107 \leq 0.65 \quad [\text{Comb. (3+4)-I-1(-)}]$$

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	2(+)	-46951	938	2108	14982	48665	14982	48665	6.9
Testa	2(-)	-46073	-922	-2078	14893	48422	14893	48422	7.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	884	--	36845	64170	36845	10.05	2.500	42
Z	(3+4)-II-2	--	--	529	24123	--	--	24123	10.05	2.500	46

Pilastro : 33 [112 , 212]

Sez. R: $B_y = 90.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 270.0 \text{ cm}$ $L_n = 270.0 \text{ cm}$

Criteria : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 10.05	Afz = 2.01
Testa	AfSpigolo = 2.01	Afy = 10.05	Afz = 2.01

$v_{max}=N/(fcd*A)=0.063 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-19385	1944	531	17245	49596	17245	49596	11
Testa	(3+4)-II-2(+)	-18778	-2115	531	17177	49444	17177	49444	10

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	2354	--	34759	64170	34759	10.05	2.500	15
Z	(3+4)-II-2	--	--	1877	25413	--	--	25413	10.05	2.500	14

Pilastro : 33 [212 , 312]

Sez. R: By= 90.0 cm Bz=30.0 cm L=110.0 cm Ln=110.0 cm

Criteria : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00

$v_{max}=N/(fcd*A)=0.044 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-13553	4664	-1880	11151	33106	11151	33106	3.0
Testa	(3+4)-II-2(+)	-13305	-2282	458	11122	33033	11122	33033	8.6

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	6547	--	33843	64170	33843	10.05	2.500	5.2
Z	(3+4)-II-2	--	--	8246	21292	--	--	21292	10.05	2.500	2.6

Pilastro : 33 [312 , 412]

Sez. R rinf.: By= 48.0 cm, Bz=28.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=28.0 cm L=170.0 cm
Ln=170.0 cm

Criteria : CLS_Pilastri-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cm²],fym=4500 [kg/cm²],
FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede		4Ø14	1Ø14	1Ø14
Testa		4Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.047 \leq 0.65$ [Comb. (3+4)-I-3(-)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(+)	-9778	-1604	2337	24135	39606	24470	39606	14
Testa	(3+4)-II-2(+)	-8696	-11320	9318	23982	39362	24312	39362	2.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	6226	0	--	27203	41541	27203	10.25	2.500	4.4
Z	(3+4)-II-2	--	--	8068	9974	16297	--	--	26271	10.25	2.500	3.3

Pilastro : 34 [17 , 117]Sez. R: $B_y=90.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=300.0\text{ cm}$ $L_n=300.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 3.14	Afy = 2.01	Afz = 2.01
Testa	AfSpigolo = 3.14	Afy = 2.01	Afz = 2.01

 $v_{\max}=N/(fcd*A)=0.127 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	2(-)	-54517	-1090	-2453	15648	50668	15648	50668	5.9
Testa	2(-)	-53640	1074	2419	15573	50444	15573	50444	6.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-3	--	--	937	--	36511	64170	36511	10.05	2.500	39
Z	(3+4)-II-1	--	--	529	25062	--	--	25062	10.05	2.500	47

Pilastro : 34 [117 , 217]Sez. R: $B_y=90.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=270.0\text{ cm}$ $L_n=270.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00

 $v_{\max}=N/(fcd*A)=0.079 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-24847	-2474	-426	12469	36329	12469	36329	7.5
Testa	(3+4)-II-1(+)	-24239	2832	-87	12399	36162	12399	36162	7.0

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	2580	--	35511	64170	35511	10.05	2.500	14
Z	(3+4)-II-1	--	--	2482	22817	--	--	22817	10.05	2.500	9.2

Pilastro : 34 [217 , 317]Sez. R: $B_y=90.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=110.0\text{ cm}$ $L_n=110.0\text{ cm}$

Criterio : CLS_Pilastri-Exist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],

FC=1.20 qd=2, qf=1.5 : **Verificato**

Piede	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 5.99	Afz = 0.00

 $v_{\max}=N/(fcd*A)=0.06 \leq 0.65$ [Comb. (3+4)-II-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-2(-)	-13639	4426	600	11162	33132	11162	33132	3.3
Testa	(3+4)-II-1(+)	-18938	2513	487	11785	34674	11785	34674	7.9

Verifica a taglio

Dir	C.	MrSup	MrInf	T	Vrdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	3449	--	34508	64170	34508	10.05	2.500	10
Z	(3+4)-II-1	--	--	8669	22053	--	--	22053	10.05	2.500	2.5

Pilastro : 34 [317 , 417]

Sez. R rinf.: By= 48.0 cm, Bz=28.0 cm, s. inf.=5.0 cm, s. sup.=4.0 cm, s.lat.=5.0 cm, h lat.=28.0 cm L=170.0 cm
Ln=170.0 cm

Criterio : CLS_Pilastris-Esist Rinforzati - Verifica a presso-flessione deviata:rcm=200 [kg/cmq],fym=4500 [kg/cmq],
FC=1.20 qd=2, qf=1.5 : **Verificato**

Armatura interna

Piede	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00
Testa	AfSpigolo = 2.01	Afy = 4.02	Afz = 0.00

Armatura rinforzo

Zona	Afspig	Afinf(Ay)	Afsup(Ay)	Aflat(Az)
Piede	4Ø14	1Ø14	1Ø14	2Ø14
Testa	4Ø14	1Ø14	1Ø14	2Ø14

$v_{max}=N/(fcd*A)=0.05 \leq 0.65$ [Comb. (3+4)-I-1(+)]

Zona	C.	N	My	Mz	Mry+	Mrz+	Mry-	Mrz-	CS
		kg	kg*m	kg*m	kg*m	kg*m	kg*m	kg*m	
Piede	(3+4)-II-1(-)	-12226	-3230	138	24480	40154	24825	40154	12
Testa	(3+4)-II-1(+)	-11144	15269	-8530	24328	39912	24668	39912	1.5

Verifica a taglio

Dir	C.	MrSup	MrInf	T	VRd,f	VRdns	Vrcd	Vrsd	Vrd	Ast/m	cot(θ)	Cs
		kg*m	kg*m	kg	kg	kg	kg	kg	kg	cmq/m		
Y	(3+4)-I-1	--	--	6569	0	--	27311	41541	27311	10.25	2.500	4.2
Z	(3+4)-II-1	--	--	14023	10033	16634	--	--	26667	10.25	2.500	1.9

Verifica delle travi

Scenario di calcolo : Set_NT_SLV_SLD_A2_(STR/GEO)_2018

Trave : 217 [101 , 0] Pilastrate [1 , -]

Sez. R rinf.: By= 43.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=165.0 cm Ln=165.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20
qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	2269	2209	--	--	12.06	12.06	19393	21043	(5+6)-I-3	(3+4)-I-1	8.5
16.5	1680	1697	--	--	12.06	12.06	19393	21043	(5+6)-I-3	(3+4)-I-1	12
CAMP	1207	1127	--	--	12.06	12.06	19393	21043	2	(3+4)-I-1	16
148.5	1626	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	12
FLN	2154	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	9.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.5	31.0	0.274	17.1	29.9	0.573	19393	21043	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
16.5	8.5	31.0	0.274	17.1	29.9	0.573	19393	21043	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	8.5	31.0	0.273	17.1	29.9	0.572	19393	21043	2	(3+4)-I-1	Parz.	Parz.
148.5	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-1	Parz.	--
FLN	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-1	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-1

Sez	Td	VRd,f	VRdns	Vrcd	Vrsd	Vrd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5636	532	--	17406	19915	17406	0	21043	165.0	10.05	3.1
Des								19393			

Trave : 217 [0 , 0] Pilastrate [- , -]

Sez. R rinf.: By= 43.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=510.0 cm Ln=510.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7698	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	2.5
51.0	3458	--	--	--	12.06	12.06	19393	21043	(3+4)-I-3	(5+6)-I-1	5.6
CAMP	--	4907	--	--	12.06	12.06	19393	21043	(5+6)-II-2	2	4.3
459.0	4159	--	--	--	12.06	12.06	19393	21043	(3+4)-I-1	(5+6)-I-3	4.7
FLN	8986	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-3	2.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.280	--	--	--	19393	21043	2	(5+6)-I-1	Parz.	--
51.0	8.5	31.0	0.275	--	--	--	19393	21043	(3+4)-I-3	(5+6)-I-1	Parz.	--
CAMP	--	--	--	17.2	29.9	0.577	19393	21043	(5+6)-II-2	2	--	Parz.
459.0	8.6	31.0	0.276	--	--	--	19393	21043	(3+4)-I-1	(5+6)-I-3	Parz.	--
FLN	8.7	31.0	0.281	--	--	--	19393	21043	2	(5+6)-I-3	Parz.	--

Verifica a taglio: cot(θ) = 2.500

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10609	532	--	17406	13277	13809	0	21043	510.0	6.70	1.3
Des								19393			

Trave : 217 [0 , 102] Pilastrate [- , 2]

Sez. R rinf.: By= 43.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=160.0 cm Ln=160.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	2363	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	8.2
16.0	1810	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-3	11
CAMP	1362	--	--	--	12.06	12.06	19393	21043	2	(5+6)-II-2	14
144.0	1818	1188	--	--	12.06	12.06	19393	21043	(3+4)-I-1	(5+6)-I-3	11
FLN	2518	1549	--	--	12.06	12.06	19393	21043	(3+4)-I-1	(5+6)-I-3	7.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-1	Parz.	--
16.0	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-3	Parz.	--
CAMP	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-II-2	Parz.	--
144.0	8.5	31.0	0.274	17.1	29.9	0.572	19393	21043	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	8.5	31.0	0.275	17.1	29.9	0.572	19393	21043	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb =(3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5670	532	--	17406	13277	13809	0	21043	160.0	6.70	2.4
Des								19393			

Trave : 217 [102 , 103] Pilastrate [2 , 3]

Sez. R rinf.: By= 43.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=330.0 cm Ln=330.0 cm

Critério : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6147	1591	--	--	12.06	12.06	19393	21043	(3+4)-I-3	(5+6)-I-1	3.2
33.0	4041	2033	--	--	12.06	12.06	19393	21043	(3+4)-I-3	(5+6)-I-1	4.8
CAMP	2327	2054	--	--	12.06	12.06	19393	21043	(3+4)-I-1	2	8.3
297.0	4152	1938	--	--	12.06	12.06	19393	21043	(3+4)-I-1	(5+6)-I-3	4.7
FLN	6283	1469	--	--	12.06	12.06	19393	21043	(3+4)-I-1	(5+6)-I-3	3.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.6	31.0	0.278	17.1	29.9	0.572	19393	21043	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
33.0	8.6	31.0	0.276	17.1	29.9	0.573	19393	21043	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	8.5	31.0	0.274	17.1	29.9	0.573	19393	21043	(3+4)-I-1	2	Parz.	Parz.
297.0	8.6	31.0	0.276	17.1	29.9	0.573	19393	21043	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	8.6	31.0	0.278	17.1	29.9	0.572	19393	21043	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7669	532	--	17406	19915	17406	0	21043	330.0	10.05	2.3
Des								19393			

Trave : 217 [103 , 0] Pilastrate [3 , -]

Sez. R rinf.: $B_y = 43.0$ cm, $B_z = 29.0$ cm, s. inf. = 4.0 cm, s. lat. = 4.0 cm, h lat. = 4.0 cm $L = 160.0$ cm $L_n = 160.0$ cm

Critério : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	2529	1657	--	--	12.06	12.06	19393	21043	(3+4)-I-3	(5+6)-I-1	7.7
16.0	1827	1265	--	--	12.06	12.06	19393	21043	(3+4)-I-3	(5+6)-I-1	11
CAMP	1327	815	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	15
144.0	1769	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	11
FLN	2318	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	8.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.5	31.0	0.275	17.1	29.9	0.573	19393	21043	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
16.0	8.5	31.0	0.274	17.1	29.9	0.572	19393	21043	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	8.5	31.0	0.273	17.1	29.9	0.572	19393	21043	2	(5+6)-I-1	Parz.	Parz.
144.0	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-1	Parz.	--
FLN	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-1	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-3

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5702	532	--	17406	19915	17406	0	21043	160.0	10.05	3.1
Des								19393			

Trave : 217 [0 , 0] Pilastrate [- , -]

Sez. R rinf.: $B_y = 43.0$ cm, $B_z = 29.0$ cm, s. inf. = 4.0 cm, s. lat. = 4.0 cm, h lat. = 4.0 cm $L = 510.0$ cm $L_n = 510.0$ cm

Critério : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
ILN	8683	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	2.2
51.0	4042	--	--	--	12.06	12.06	19393	21043	(3+4)-I-3	(5+6)-I-1	4.8
CAMP	--	4811	--	--	12.06	12.06	19393	21043	(5+6)-II-2	2	4.4
459.0	3543	--	--	--	12.06	12.06	19393	21043	(3+4)-I-1	(5+6)-I-3	5.5
FLN	7785	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-3	2.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.281	--	--	--	19393	21043	2	(5+6)-I-1	Parz.	--
51.0	8.6	31.0	0.276	--	--	--	19393	21043	(3+4)-I-3	(5+6)-I-1	Parz.	--
CAMP	--	--	--	17.2	29.9	0.577	19393	21043	(5+6)-II-2	2	--	Parz.
459.0	8.5	31.0	0.275	--	--	--	19393	21043	(3+4)-I-1	(5+6)-I-3	Parz.	--
FLN	8.7	31.0	0.280	--	--	--	19393	21043	2	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10414	532	--	17406	13277	13809	0	21043	510.0	6.70	1.3
Des								19393			

Trave : 217 [0 , 104] Pilastrate [- , 4]

Sez. R rinf.: $B_y = 43.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 165.0 \text{ cm}$ $L_n = 165.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	2295	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-3	8.4
16.5	1713	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-3	11
CAMP	1243	1164	--	--	12.06	12.06	19393	21043	2	(3+4)-I-3	16
148.5	1661	1785	--	--	12.06	12.06	19393	21043	(5+6)-I-1	(3+4)-I-3	12
FLN	2231	2345	--	--	12.06	12.06	19393	21043	(5+6)-I-1	(3+4)-I-3	8.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-3	Parz.	--
16.5	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-3	Parz.	--
CAMP	8.5	31.0	0.273	17.1	29.9	0.572	19393	21043	2	(3+4)-I-3	Parz.	Parz.
148.5	8.5	31.0	0.274	17.1	29.9	0.573	19393	21043	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	8.5	31.0	0.274	17.1	29.9	0.573	19393	21043	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-3

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6436	532	--	17406	13277	13809	0	21043	165.0	6.70	2.1
Des								19393			

Trave : 218 [115 , 116] Pilastrate [17 , 31]

Sez. R rinf.: $B_y = 58.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 395.1 \text{ cm}$ $L_n = 395.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6125	1648	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	4.7
39.5	3749	2433	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	7.7
CAMP	1913	3319	--	--	18.10	18.10	28765	30291	(5+6)-I-3	(3+4)-I-1	9.1

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
355.5	4252	222	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	6.8
FLN	7092	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-3	4.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.294	16.7	29.8	0.562	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
39.5	9.1	31.0	0.292	16.8	29.8	0.562	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.0	31.0	0.291	16.8	29.8	0.563	28765	30291	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
355.5	9.1	31.0	0.292	16.7	29.8	0.561	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.294	--	--	--	28765	30291	2	(5+6)-I-3	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9718	532	--	22333	19915	20447	0	30291	395.0	10.05	2.1
Des								28765			

Trave : 218 [116 , 134] Pilastrate [31 , 21]

Sez. R rinf.: By= 58.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=4.0 cm L=460.1 cm Ln=460.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 ::**Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7526	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-1	3.8
46.0	3197	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-1	9.0
CAMP	--	4445	--	--	18.10	18.10	28765	30291	(5+6)-II-2	2	6.8
414.0	3506	--	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	8.2
FLN	7871	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-3	3.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.295	--	--	--	28765	30291	2	(5+6)-I-1	Parz.	--
46.0	9.0	31.0	0.292	--	--	--	28765	30291	2	(5+6)-I-1	Parz.	--
CAMP	--	--	--	16.8	29.8	0.564	28765	30291	(5+6)-II-2	2	--	Parz.
414.0	9.0	31.0	0.292	--	--	--	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	--
FLN	9.1	31.0	0.295	--	--	--	28765	30291	2	(5+6)-I-3	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10638	532	--	22333	19915	20447	0	30291	460.0	10.05	1.9
Des								28765			

Trave : 218 [134 , 131] Pilastrate [21 , 22]

Sez. R rinf.: By= 58.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=4.0 cm L=310.0 cm Ln=310.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 ::**Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4665	--	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	6.2
31.0	3080	213	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	9.3
CAMP	1954	--	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-II-1	15
279.0	3322	22	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	8.7
FLN	4967	--	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	5.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.293	--	--	--	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	--
31.0	9.0	31.0	0.292	16.7	29.8	0.561	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.0	31.0	0.291	--	--	--	28765	30291	(3+4)-I-1	(5+6)-II-1	Parz.	--
279.0	9.0	31.0	0.292	16.7	29.8	0.560	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.293	--	--	--	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7242	532	--	22333	19915	20447	0	30291	310.0	10.05	2.8
Des								28765			

Trave : 218 [131 , 117] Pilastrate [22 , 34]

Sez. R rinf.: By= 58.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm h lat.=4.0 cm L=480.1 cm Ln=480.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 ::Verificato

X	M-	M+	Δ M-	Δ M+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8638	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-1	3.3
48.0	3842	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-1	7.5
CAMP	--	4798	--	--	18.10	18.10	28765	30291	(5+6)-II-2	2	6.3
432.0	3438	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-3	8.4
FLN	8134	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-3	3.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.2	31.0	0.296	--	--	--	28765	30291	2	(5+6)-I-1	Parz.	--
48.0	9.1	31.0	0.292	--	--	--	28765	30291	2	(5+6)-I-1	Parz.	--
CAMP	--	--	--	16.8	29.8	0.565	28765	30291	(5+6)-II-2	2	--	Parz.
432.0	9.0	31.0	0.292	--	--	--	28765	30291	2	(5+6)-I-3	Parz.	--
FLN	9.2	31.0	0.295	--	--	--	28765	30291	2	(5+6)-I-3	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	11092	532	--	22333	19915	20447	0	30291	480.0	10.05	1.8
Des								28765			

Trave : 218 [117 , 118] Pilastrate [34 , 12]

Sez. R rinf.: By= 58.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm h lat.=4.0 cm L=375.1 cm Ln=375.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 ::Verificato

X	M-	M+	Δ M-	Δ M+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7792	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-1	3.7
37.5	4657	--	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	6.2
CAMP	1326	3455	--	--	18.10	18.10	28765	30291	(5+6)-I-1	(3+4)-I-3	8.8
337.5	2809	2967	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	10
FLN	4836	2427	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	5.9

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.295	--	--	--	28765	30291	2	(5+6)-I-1	Parz.	--

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
37.5	9.1	31.0	0.293	--	--	--	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	--
CAMP	9.0	31.0	0.290	16.8	29.8	0.563	28765	30291	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
337.5	9.0	31.0	0.291	16.8	29.8	0.563	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.293	16.8	29.8	0.562	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10041	532	--	22333	19915	20447	0	30291	375.0	10.05	2.0
Des								28765			

Trave : 219 [111 , 112] Pilastrate [18 , 33]

Sez. R rinf.: By= 58.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=4.0 cm L=395.1 cm Ln=395.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 ::Verificato

X	M-	M+	Δ M-	Δ M+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5911	1447	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	4.9
39.5	3567	2259	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	8.1
CAMP	1760	3265	--	--	18.10	18.10	28765	30291	(5+6)-I-3		2 9.3
355.5	4117	130	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	7.0
FLN	7014	--	--	--	18.10	18.10	28765	30291		2 (5+6)-I-3	4.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.294	16.7	29.8	0.562	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
39.5	9.1	31.0	0.292	16.8	29.8	0.562	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.0	31.0	0.291	16.8	29.8	0.563	28765	30291	(5+6)-I-3		2 Parz.	Parz.
355.5	9.1	31.0	0.292	16.7	29.8	0.560	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.294	--	--	--	28765	30291		2 (5+6)-I-3	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9593	532	--	22333	19915	20447	0	30291	395.0	10.05	2.1
Des								28765			

Trave : 219 [112 , 133] Pilastrate [33 , 19]

Sez. R rinf.: By= 58.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=4.0 cm L=460.1 cm Ln=460.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 ::Verificato

X	M-	M+	Δ M-	Δ M+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7274	--	--	--	18.10	18.10	28765	30291		2 (5+6)-I-1	4.0
46.0	3088	--	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	9.3
CAMP	--	4328	--	--	18.10	18.10	28765	30291	(5+6)-II-2		2 7.0
414.0	3494	--	--	--	18.10	18.10	28765	30291		2 (5+6)-I-3	8.2
FLN	7795	--	--	--	18.10	18.10	28765	30291		2 (5+6)-I-3	3.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.295	--	--	--	28765	30291		2 (5+6)-I-1	Parz.	--
46.0	9.0	31.0	0.292	--	--	--	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	--
CAMP	--	--	--	16.8	29.8	0.564	28765	30291	(5+6)-II-2		2 --	Parz.
414.0	9.0	31.0	0.292	--	--	--	28765	30291		2 (5+6)-I-3	Parz.	--

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
FLN	9.1	31.0	0.295	--	--	--	28765	30291	2	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10358	532	--	22333	19915	20447	0	30291	460.0	10.05	2.0
Des								28765			

Trave : 219 [133 , 132] Pilastrate [19 , 20]

Sez. R rinf.: $B_y = 58.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 310.0 \text{ cm}$ $L_n = 310.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4924	61	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	5.8
31.0	3317	553	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	8.7
CAMP	2181	--	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-II-1	13
279.0	3591	322	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	8.0
FLN	5265	--	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	5.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.293	16.7	29.8	0.560	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
31.0	9.0	31.0	0.292	16.7	29.8	0.561	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.0	31.0	0.291	--	--	--	28765	30291	(3+4)-I-1	(5+6)-II-1	Parz.	--
279.0	9.1	31.0	0.292	16.7	29.8	0.561	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.293	--	--	--	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6955	532	--	22333	19915	20447	0	30291	310.0	10.05	2.9
Des								28765			

Trave : 219 [132 , 113] Pilastrate [20 , 32]

Sez. R rinf.: $B_y = 58.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 479.6 \text{ cm}$ $L_n = 479.5 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8558	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-1	3.4
48.0	3861	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-1	7.5
CAMP	--	4714	--	--	18.10	18.10	28765	30291	(5+6)-II-2	2	6.4
431.6	3353	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-3	8.6
FLN	7976	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-3	3.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.2	31.0	0.296	--	--	--	28765	30291	2	(5+6)-I-1	Parz.	--
48.0	9.1	31.0	0.292	--	--	--	28765	30291	2	(5+6)-I-1	Parz.	--
CAMP	--	--	--	16.8	29.8	0.564	28765	30291	(5+6)-II-2	2	--	Parz.
431.6	9.0	31.0	0.292	--	--	--	28765	30291	2	(5+6)-I-3	Parz.	--
FLN	9.1	31.0	0.295	--	--	--	28765	30291	2	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10848	532	--	22333	19915	20447	0	30291	479.5	10.05	1.9
Des								28765			

Trave : 219 [113 , 114 | Pilastrate [32 , 11]

Sez. R rinf.: $B_y = 58.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 375.6 \text{ cm}$ $L_n = 375.5 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5 :: \text{Verificato}$

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7789	--	--	--	18.10	18.10	28765	30291	2	(5+6)-I-1	3.7
37.5	4593	--	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	6.3
CAMP	1199	3381	--	--	18.10	18.10	28765	30291	(5+6)-I-1	(3+4)-I-3	9.0
337.9	2608	2933	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	10
FLN	4544	2424	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	6.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.295	--	--	--	28765	30291	2	(5+6)-I-1	Parz.	--
37.5	9.1	31.0	0.293	--	--	--	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	--
CAMP	9.0	31.0	0.290	16.8	29.8	0.563	28765	30291	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
337.9	9.0	31.0	0.291	16.8	29.8	0.563	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.293	16.8	29.8	0.562	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9920	532	--	22333	19915	20447	0	30291	375.5	10.05	2.1
Des								28765			

Trave : 220 [119 , 120 | Pilastrate [16 , 26]

Sez. R rinf.: $B_y = 78.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 510.2 \text{ cm}$ $L_n = 511.2 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5 :: \text{Verificato}$

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	12215	441	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	2.9
51.1	6696	2633	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	5.3
CAMP	--	8532	--	--	22.12	22.12	35324	37678	(5+6)-II-1	2	4.4
460.1	9783	1844	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	3.6
FLN	16340	--	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	2.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.0	31.0	0.290	16.6	29.9	0.554	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
51.1	8.9	31.0	0.287	16.6	29.9	0.556	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	--	--	--	16.7	29.9	0.559	35324	37678	(5+6)-II-1	2	--	Parz.
460.1	8.9	31.0	0.288	16.6	29.9	0.555	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.292	--	--	--	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
Sin	18689	532	--	28901	19915	20447	0	37678	511.2	10.05	1.1
Des								35324			

Trave : 220 [120 , 121] Pilastrate [26 , 27]

Sez. R rinf.: By= 58.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=345.0 cm Ln=345.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	11118	2364	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	2.6
34.5	7657	3090	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	3.8
CAMP	4696	3513	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(3+4)-I-1	6.1
310.5	5407	2830	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	5.3
FLN	8518	2405	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	3.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.2	31.0	0.297	16.8	29.8	0.562	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
34.5	9.1	31.0	0.295	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.1	31.0	0.293	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(3+4)-I-1	Parz.	Parz.
310.5	9.1	31.0	0.293	16.8	29.8	0.563	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.2	31.0	0.295	16.8	29.8	0.562	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	12033	532	--	22333	19915	20447	0	30291	345.0	10.05	1.7
Des								28765			

Trave : 220 [121 , 122] Pilastrate [27 , 28]

Sez. R rinf.: By= 78.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=310.0 cm Ln=310.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	2467	960	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	14
31.0	1445	887	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	24
CAMP	986	156	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(3+4)-II-2	36
279.0	1788	656	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	20
FLN	2939	633	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	12

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.8	31.0	0.284	16.6	29.9	0.554	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
31.0	8.8	31.0	0.284	16.6	29.9	0.554	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	8.8	31.0	0.284	16.5	29.9	0.554	35324	37678	(3+4)-I-3	(3+4)-II-2	Parz.	Parz.
279.0	8.8	31.0	0.284	16.6	29.9	0.554	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	8.8	31.0	0.285	16.6	29.9	0.554	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = (3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4593	532	--	28901	19915	20447	0	37678	310.0	10.05	4.5
Des								35324			

Trave : 220 [122 , 123] Pilastrate [28 , 29]

Sez. R rinf.: By= 78.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=480.0 cm Ln=480.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	10724	--	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	3.3
48.0	6276	1116	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	5.6
CAMP	--	5330	--	--	22.12	22.12	35324	37678	(5+6)-II-1	2	7.1
432.0	6380	1654	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	5.5
FLN	10562	--	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	3.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.0	31.0	0.289	--	--	--	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	--
48.0	8.9	31.0	0.286	16.6	29.9	0.554	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	--	--	--	16.7	29.9	0.557	35324	37678	(5+6)-II-1	2	--	Parz.
432.0	8.9	31.0	0.286	16.6	29.9	0.555	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.0	31.0	0.289	--	--	--	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio: cot(θ) = 2.500

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	13085	532	--	28901	19915	20447	0	37678	480.0	10.05	1.6
Des								35324			

Trave : 220 [123 , 155] Pilastrate [29 , -]

Sez. R rinf.: By= 58.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=375.0 cm Ln=375.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8994	231	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	3.2
37.5	6179	1204	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	4.7
CAMP	3760	3096	--	--	18.10	18.10	28765	30291	(3+4)-I-3	2	7.6
337.5	1995	2718	--	--	18.10	18.10	28765	30291	(5+6)-I-1	(3+4)-I-3	11
FLN	3883	2496	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	7.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.2	31.0	0.296	16.7	29.8	0.561	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
37.5	9.1	31.0	0.294	16.7	29.8	0.561	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.1	31.0	0.292	16.8	29.8	0.563	28765	30291	(3+4)-I-3	2	Parz.	Parz.
337.5	9.0	31.0	0.291	16.8	29.8	0.563	28765	30291	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.292	16.8	29.8	0.562	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9762	532	--	22333	9957	10490	0	30291	375.0	5.03	1.1
Des								28765			

Trave : 221 [125 , 0] Pilastrate [14 , -]

Sez. R rinf.: By= 43.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=150.0 cm Ln=150.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	907	849	--	--	12.06	12.06	19393	21043	(5+6)-II-2	(3+4)-II-1	21
15.0	649	672	--	--	12.06	12.06	19393	21043	(5+6)-II-2	(3+4)-II-1	30
CAMP	422	464	--	--	12.06	12.06	19393	21043	(5+6)-II-2	(3+4)-II-1	45
135.0	370	245	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	52
FLN	475	199	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	41

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.5	31.0	0.273	17.1	29.9	0.572	19393	21043	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
15.0	8.5	31.0	0.273	17.1	29.9	0.571	19393	21043	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	8.5	31.0	0.273	17.1	29.9	0.571	19393	21043	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
135.0	8.5	31.0	0.273	17.0	29.9	0.571	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	8.5	31.0	0.273	17.0	29.9	0.571	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = (3+4)-II-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	2385	532	--	17406	19915	17406	0	21043	150.0	10.05	7.3
Des								19393			

Trave : 221 [0 , 124] Pilastrate [- , 15]

Sez. R: By= 45.0 cm Bz=30.0 cm L=300.0 cm Ln=300.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	2476	2015	--	--	12.06	12.06	16125	16125	(3+4)-II-2	(5+6)-II-1	6.5
30.0	1801	1720	--	--	12.06	12.06	16125	16125	(3+4)-II-2	(5+6)-II-1	9.0
CAMP	1622	1492	--	--	12.06	12.06	16125	16125	(5+6)-II-1	(3+4)-II-2	9.9
270.0	2252	1795	--	--	12.06	12.06	16125	16125	(5+6)-II-1	(3+4)-II-2	7.2
FLN	2915	2065	--	--	12.06	12.06	16125	16125	(5+6)-II-1	(3+4)-II-2	5.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.0	27.0	0.370	10.0	27.0	0.369	16125	16125	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
30.0	10.0	27.0	0.369	10.0	27.0	0.369	16125	16125	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.0	27.0	0.369	10.0	27.0	0.369	16125	16125	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
270.0	10.0	27.0	0.370	10.0	27.0	0.369	16125	16125	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.0	27.0	0.371	10.0	27.0	0.370	16125	16125	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = (3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	2870	--	14779	19915	14779	0	16125	300.0	10.05	5.2
Des							16125			

Trave : 221 [124 , 119] Pilastrate [15 , 16]

Sez. R rinf.: By= 43.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s. lat.=4.0 cm, h lat.=4.0 cm L=470.0 cm Ln=470.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6810	892	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.8

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
47.0	4219	1829	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	4.6
CAMP	2817	2692	--	--	12.06	12.06	19393	21043	(3+4)-II-1	2	6.9
423.0	5213	993	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	3.7
FLN	8008	--	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	2.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.6	31.0	0.279	17.1	29.9	0.572	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
47.0	8.6	31.0	0.276	17.1	29.9	0.573	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	8.5	31.0	0.275	17.1	29.9	0.574	19393	21043	(3+4)-II-1	2	Parz.	Parz.
423.0	8.6	31.0	0.277	17.1	29.9	0.572	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.7	31.0	0.280	--	--	--	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7194	532	--	17406	19915	17406	0	21043	470.0	10.05	2.4
Des								19393			

Trave : 221 [119 , 115] Pilastrate [16 , 17]

Sez. R rinf.: $B_y = 43.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 450.0 \text{ cm}$ $L_n = 450.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8516	385	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.3
45.0	5178	1766	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	3.7
CAMP	--	3981	--	--	12.06	12.06	19393	21043	(5+6)-I-1	2	5.3
405.0	5725	989	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	3.4
FLN	9250	--	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	2.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.280	17.1	29.9	0.571	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
45.0	8.6	31.0	0.277	17.1	29.9	0.573	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	--	--	--	17.2	29.9	0.576	19393	21043	(5+6)-I-1	2	--	Parz.
405.0	8.6	31.0	0.278	17.1	29.9	0.572	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.7	31.0	0.281	--	--	--	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10249	532	--	17406	19915	17406	0	21043	450.0	10.05	1.7
Des								19393			

Trave : 221 [115 , 111] Pilastrate [17 , 18]

Sez. R rinf.: $B_y = 43.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}$ $L = 330.0 \text{ cm}$ $L_n = 330.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8005	2469	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.4
33.0	5578	2727	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	3.5
CAMP	3420	1893	--	--	12.06	12.06	19393	21043	(3+4)-II-2	2	5.7
297.0	5061	2921	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	3.8

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
FLN	7393	2746	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	2.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.280	17.1	29.9	0.574	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
33.0	8.6	31.0	0.277	17.1	29.9	0.574	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	8.5	31.0	0.275	17.1	29.9	0.573	19393	21043	(3+4)-II-2	2	Parz.	Parz.
297.0	8.6	31.0	0.277	17.1	29.9	0.574	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.7	31.0	0.279	17.1	29.9	0.574	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8592	532	--	17406	19915	17406	0	21043	330.0	10.05	2.0
Des								19393			

Trave : 221 [111 , 0] Pilastrate [18 , -]

Sez. R rinf.: $B_y = 43.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 260.0 \text{ cm}$ $L_n = 260.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7586	3083	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.6
26.0	5568	2980	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	3.5
CAMP	3711	2740	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	5.2
234.0	3788	3821	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	5.1
FLN	5510	4199	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	3.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.279	17.2	29.9	0.574	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
26.0	8.6	31.0	0.277	17.1	29.9	0.574	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	8.5	31.0	0.276	17.1	29.9	0.574	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
234.0	8.5	31.0	0.276	17.2	29.9	0.575	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.6	31.0	0.277	17.2	29.9	0.576	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9343	532	--	17406	19915	17406	0	21043	260.0	10.05	1.9
Des								19393			

Trave : 221 [0 , 105] Pilastrate [- , 9]

Sez. R: $B_y = 45.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 180.0 \text{ cm}$ $L_n = 180.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	737	165	--	--	12.06	12.06	16125	16125	(3+4)-II-1	(5+6)-II-2	22
18.0	529	245	--	--	12.06	12.06	16125	16125	(3+4)-II-1	(5+6)-II-2	30
CAMP	685	--	--	--	12.06	12.06	16125	16125	(3+4)-II-2	(5+6)-I-1	24
162.0	699	466	--	--	12.06	12.06	16125	16125	(3+4)-II-1	(5+6)-II-2	23
FLN	1018	664	--	--	12.06	12.06	16125	16125	(3+4)-II-1	(5+6)-II-2	16

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.9	27.0	0.367	9.9	27.0	0.367	16125	16125	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
18.0	9.9	27.0	0.367	9.9	27.0	0.367	16125	16125	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
CAMP	9.9	27.0	0.367	--	--	--	16125	16125	(3+4)-II-2	(5+6)-I-1	Parz.	--
162.0	9.9	27.0	0.367	9.9	27.0	0.367	16125	16125	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	9.9	27.0	0.368	9.9	27.0	0.367	16125	16125	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	2681	--	14779	19915	14779	0	16125	180.0	10.05	5.5
Des							16125			

Trave : 221 [105 , 101] Pilastrate [9 , 1]

Sez. R rinf.: By= 43.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm h lat.=4.0 cm L=470.1 cm Ln=470.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cm²],fym=4500 [kg/cm²], FC=1.20

qd=2, qf=1.5 ::Verificato

X	M-	M+	Δ M-	Δ M+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	9422	--	--	--	12.06	12.06	19393	21043	2	(5+6)-II-1	2.1
47.0	5678	--	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	3.4
CAMP	--	4504	--	--	12.06	12.06	19393	21043	(5+6)-I-1	2	4.7
423.0	4354	1663	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	4.5
FLN	7718	28	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	2.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.281	--	--	--	19393	21043	2	(5+6)-II-1	Parz.	--
47.0	8.6	31.0	0.278	--	--	--	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	--
CAMP	--	--	--	17.2	29.9	0.576	19393	21043	(5+6)-I-1	2	--	Parz.
423.0	8.6	31.0	0.276	17.1	29.9	0.573	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.7	31.0	0.280	17.0	29.9	0.571	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10486	532	--	17406	19915	17406	0	21043	470.0	10.05	1.7
Des								19393			

Trave : 222 [130 , 155] Pilastrate [13 , -]

Sez. R rinf.: By= 43.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm h lat.=4.0 cm L=135.0 cm Ln=135.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cm²],fym=4500 [kg/cm²], FC=1.20

qd=2, qf=1.5 ::Verificato

X	M-	M+	Δ M-	Δ M+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1451	1568	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	13
13.5	1119	1119	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	17
CAMP	1109	655	--	--	12.06	12.06	19393	21043	2	(5+6)-II-1	17
121.5	1403	--	--	--	12.06	12.06	19393	21043	2	(5+6)-II-1	14
FLN	1727	--	--	--	12.06	12.06	19393	21043	2	(5+6)-I-1	11

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.5	31.0	0.274	17.1	29.9	0.572	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
13.5	8.5	31.0	0.273	17.1	29.9	0.572	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
CAMP	8.5	31.0	0.273	17.1	29.9	0.571	19393	21043	2	(5+6)-II-1	Parz.	Parz.
121.5	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-II-1	Parz.	--
FLN	8.5	31.0	0.274	--	--	--	19393	21043	2	(5+6)-I-1	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4808	532	--	17406	9957	10490	0	21043	135.0	5.03	2.2
Des								19393			

Trave : 222 [155 , 118] Pilastrate [- , 12]

Sez. R rinf.: $B_y = 43.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 465.0 \text{ cm}$ $L_n = 465.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8206	--	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.4
46.5	4729	966	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	4.1
CAMP	--	4446	--	--	12.06	12.06	19393	21043	(5+6)-I-3	2	4.7
418.5	5491	880	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	3.5
FLN	9077	--	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	2.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.280	--	--	--	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	--
46.5	8.6	31.0	0.277	17.1	29.9	0.572	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	--	--	--	17.2	29.9	0.576	19393	21043	(5+6)-I-3	2	--	Parz.
418.5	8.6	31.0	0.277	17.1	29.9	0.572	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.7	31.0	0.281	--	--	--	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10493	532	--	17406	19915	17406	0	21043	465.0	10.05	1.7
Des								19393			

Trave : 222 [118 , 114] Pilastrate [12 , 11]

Sez. R rinf.: $B_y = 43.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 330.0 \text{ cm}$ $L_n = 330.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	9237	3208	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.1
33.0	6574	3334	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.9
CAMP	4179	1907	--	--	12.06	12.06	19393	21043	(3+4)-II-2	2	4.6
297.0	5465	3768	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	3.5
FLN	7917	3818	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	2.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.281	17.2	29.9	0.575	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
33.0	8.6	31.0	0.278	17.2	29.9	0.575	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	8.6	31.0	0.276	17.1	29.9	0.573	19393	21043	(3+4)-II-2	2	Parz.	Parz.
297.0	8.6	31.0	0.277	17.2	29.9	0.575	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.7	31.0	0.280	17.2	29.9	0.575	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9489	532	--	17406	19915	17406	0	21043	330.0	10.05	1.8
Des								19393			

Trave : 222 [114 , 0] Pilastrate [11 , -]

Sez. R rinf.: $B_y = 43.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 220.0 \text{ cm}$ $L_n = 220.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8135	5013	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.4
22.0	6203	4408	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	3.1
CAMP	4382	3710	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	4.4
198.0	4603	4488	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	4.2
FLN	6353	5253	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	3.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.280	17.2	29.9	0.576	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
22.0	8.6	31.0	0.278	17.2	29.9	0.576	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	8.6	31.0	0.276	17.2	29.9	0.575	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
198.0	8.6	31.0	0.276	17.2	29.9	0.576	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.6	31.0	0.278	17.1	29.8	0.575	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10892	532	--	17406	19915	17406	0	21043	220.0	10.05	1.6
Des								19393			

Trave : 222 [0 , 110] Pilastrate [- , 10]

Sez. R: $B_y = 45.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 220.0 \text{ cm}$ $L_n = 220.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	692	160	--	--	12.06	12.06	16125	16125	(3+4)-II-1	(5+6)-II-2	23
22.0	440	273	--	--	12.06	12.06	16125	16125	(3+4)-II-1	(5+6)-II-2	37
CAMP	747	--	--	--	12.06	12.06	16125	16125	(3+4)-II-2	(5+6)-I-3	22
198.0	824	526	--	--	12.06	12.06	16125	16125	(3+4)-II-1	(5+6)-II-2	20
FLN	1268	701	--	--	12.06	12.06	16125	16125	(3+4)-II-1	(5+6)-II-2	13

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.9	27.0	0.367	9.9	27.0	0.367	16125	16125	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
22.0	9.9	27.0	0.367	9.9	27.0	0.367	16125	16125	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
CAMP	9.9	27.0	0.367	--	--	--	16125	16125	(3+4)-II-2	(5+6)-I-3	Parz.	--
198.0	9.9	27.0	0.368	9.9	27.0	0.367	16125	16125	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	9.9	27.0	0.368	9.9	27.0	0.367	16125	16125	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	2689	--	14779	19915	14779	0	16125	220.0	10.05	5.5
Des							16125			

Trave : 222 [110 , 104] Pilastrate [10 , 4]

Sez. R rinf.: $B_y=43.0\text{ cm}, B_z=29.0\text{ cm}, s.\text{ inf.}=4.0\text{ cm}, s.\text{ lat.}=4.0\text{ cm}, h.\text{ lat.}=4.0\text{ cm}$ $L=470.1\text{ cm}$ $L_n=470.0\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200\text{ [kg/cmq]}, f_{ym}=4500\text{ [kg/cmq]}, FC=1.20$

$q_d=2, q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	9622	--	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	2.0
47.0	5846	452	--	--	12.06	12.06	19393	21043	(3+4)-II-2	(5+6)-II-1	3.3
CAMP	--	4494	--	--	12.06	12.06	19393	21043	(5+6)-I-3	2	4.7
423.0	5125	1998	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	3.8
FLN	8660	430	--	--	12.06	12.06	19393	21043	(3+4)-II-1	(5+6)-II-2	2.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.7	31.0	0.282	--	--	--	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	--
47.0	8.6	31.0	0.278	17.1	29.9	0.571	19393	21043	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	--	--	--	17.2	29.9	0.576	19393	21043	(5+6)-I-3	2	--	Parz.
423.0	8.6	31.0	0.277	17.1	29.9	0.573	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	8.7	31.0	0.280	17.1	29.9	0.571	19393	21043	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta)=2.500$

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10380	532	--	17406	19915	17406	0	21043	470.0	10.05	1.7
Des								19393			

Trave : 223 [129 , 128] Pilastrate [8 , 5]

Sez. R rinf.: $B_y=28.0\text{ cm}, B_z=49.0\text{ cm}, s.\text{ inf.}=4.0\text{ cm}, s.\text{ lat.}=4.0\text{ cm}, h.\text{ lat.}=24.0\text{ cm}$ $L=517.0\text{ cm}$ $L_n=516.4\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200\text{ [kg/cmq]}, f_{ym}=4500\text{ [kg/cmq]}, FC=1.20$

$q_d=2, q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	11507	1367	--	--	12.06	12.06	33407	38066	(3+4)-I-1	(5+6)-I-3	2.9
51.6	7221	2753	--	--	12.06	12.06	33407	38066	(3+4)-I-1	(5+6)-I-3	4.6
CAMP	3855	4949	--	--	12.06	12.06	33407	38066	(5+6)-I-3	2	7.7
464.7	7430	3741	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	4.5
FLN	11772	2323	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	2.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	14.7	46.3	0.317	27.6	47.6	0.580	33407	38066	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
51.6	14.6	46.2	0.316	27.7	47.6	0.581	33407	38066	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	14.5	46.2	0.315	27.7	47.6	0.582	33407	38066	(5+6)-I-3	2	Parz.	Parz.
464.7	14.6	46.2	0.316	27.7	47.6	0.582	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	14.7	46.4	0.316	27.7	47.6	0.581	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta)=2.500$

Comb =2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10123	1650	--	21725	34667	21725	0	38066	516.4	10.05	2.1
Des								33407			

Trave : 223 [130 , 129] Pilastrate [13 , 8]

Sez. R rinf.: By= 28.0 cm,Bz=49.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=24.0 cm L=395.2 cm Ln=395.2 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6957	4487	--	--	12.06	12.06	33407	38066	(5+6)-I-1	(3+4)-I-3	4.8
39.5	4678	4511	--	--	12.06	12.06	33407	38066	(5+6)-I-1	(3+4)-I-3	7.1
CAMP	4486	2886	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	7.4
355.7	7150	2710	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	4.7
FLN	10176	2208	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	3.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	14.6	46.2	0.316	27.7	47.6	0.582	33407	38066	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
39.5	14.5	46.2	0.315	27.7	47.6	0.582	33407	38066	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
CAMP	14.5	46.2	0.315	27.7	47.6	0.581	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
355.7	14.6	46.2	0.316	27.7	47.6	0.581	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	14.7	46.3	0.317	27.7	47.6	0.581	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-3

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9088	1650	--	21725	34667	21725	0	38066	395.2	10.05	2.4
Des								33407			

Trave : 224 [126 , 125] Pilastrate [7 , 14]

Sez. R rinf.: By= 28.0 cm,Bz=49.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=24.0 cm L=444.9 cm Ln=442.9 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8643	1909	--	--	12.06	12.06	33407	38066	(3+4)-I-1	(5+6)-I-3	3.9
44.3	5824	2510	--	--	12.06	12.06	33407	38066	(3+4)-I-1	(5+6)-I-3	5.7
CAMP	--	4067	--	--	12.06	12.06	33407	38066	(5+6)-II-2	(3+4)-I-1	9.4
398.7	4893	3867	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	6.8
FLN	7771	3295	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	4.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	14.6	46.2	0.317	27.6	47.6	0.581	33407	38066	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
44.3	14.6	46.2	0.315	27.7	47.6	0.581	33407	38066	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	--	--	--	27.7	47.6	0.582	33407	38066	(5+6)-II-2	(3+4)-I-1	--	Parz.
398.7	14.5	46.2	0.315	27.7	47.6	0.582	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	14.6	46.2	0.316	27.7	47.6	0.581	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-3

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7737	1650	--	21725	34667	21725	0	38066	442.9	10.05	2.8
Des								33407			

Trave : 224 [127 , 126] Pilastrate [6 , 7]

Sez. R rinf.: By= 28.0 cm,Bz=49.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=24.0 cm L=450.0 cm Ln=448.4 cm

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cm²], $f_{ym}=4500$ [kg/cm²], FC=1.20
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	12316	2328	--	--	12.06	12.06	33407	38066	(3+4)-I-1	(5+6)-I-3	2.7
44.8	7970	3621	--	--	12.06	12.06	33407	38066	(3+4)-I-1	(5+6)-I-3	4.2
CAMP	4299	4790	--	--	12.06	12.06	33407	38066	(5+6)-I-1	2	7.8
403.6	7530	2607	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	4.4
FLN	11983	1231	--	--	12.06	12.06	33407	38066	(3+4)-I-3	(5+6)-I-1	2.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	14.7	46.4	0.316	27.7	47.6	0.581	33407	38066	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
44.8	14.6	46.2	0.316	27.7	47.6	0.582	33407	38066	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	14.5	46.2	0.315	27.7	47.6	0.582	33407	38066	(5+6)-I-1	2	Parz.	Parz.
403.6	14.6	46.2	0.316	27.7	47.6	0.581	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	14.7	46.4	0.316	27.6	47.6	0.580	33407	38066	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	12046	1650	--	21725	34667	21725	0	38066	448.4	10.05	1.8
Des								33407			

Trave : 225 [127 , 121] Pilastrate [6 , 27]

Sez. R rinf.: $B_y = 28.0$ cm, $B_z = 49.0$ cm, s. inf. = 4.0 cm, s. lat. = 4.0 cm, h lat. = 24.0 cm $L = 598.6$ cm $L_n = 598.7$ cm

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cm²], $f_{ym}=4500$ [kg/cm²], FC=1.20
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	10884	2384	--	--	12.06	12.06	33407	38066	(3+4)-II-2	(5+6)-II-1	3.1
59.9	6500	3632	--	--	12.06	12.06	33407	38066	(3+4)-II-2	(5+6)-II-1	5.1
CAMP	5704	5177	--	--	12.06	12.06	33407	38066	(3+4)-II-1	(3+4)-II-2	5.9
538.8	9870	3588	--	--	12.06	12.06	33407	38066	(3+4)-II-1	(5+6)-II-2	3.4
FLN	14730	1900	--	--	12.06	12.06	33407	38066	(3+4)-II-1	(5+6)-II-2	2.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	14.7	46.3	0.317	27.7	47.6	0.581	33407	38066	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
59.9	14.6	46.2	0.316	27.7	47.6	0.582	33407	38066	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	14.6	46.2	0.315	27.8	47.6	0.583	33407	38066	(3+4)-II-1	(3+4)-II-2	Parz.	Parz.
538.8	14.7	46.2	0.317	27.7	47.6	0.582	33407	38066	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	14.6	46.7	0.314	27.6	47.6	0.581	33407	38066	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9458	1650	--	21725	34667	21725	0	38066	598.7	10.05	2.3
Des								33407			

Trave : 226 [128 , 122] Pilastrate [5 , 28]

Sez. R rinf.: $B_y = 28.0$ cm, $B_z = 49.0$ cm, s. inf. = 4.0 cm, s. lat. = 4.0 cm, h lat. = 24.0 cm $L = 472.3$ cm $L_n = 472.4$ cm

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cm²], $f_{ym}=4500$ [kg/cm²], FC=1.20
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
ILN	8968	5670	--	--	12.06	12.06	33407	38066	(3+4)-II-2	(5+6)-II-1	3.7
47.2	5817	5387	--	--	12.06	12.06	33407	38066	(3+4)-II-2	(5+6)-II-1	5.7
CAMP	6568	5852	--	--	12.06	12.06	33407	38066	(5+6)-II-1	(3+4)-II-2	5.1
425.1	9927	5840	--	--	12.06	12.06	33407	38066	(3+4)-II-1	(5+6)-II-2	3.4
FLN	13778	5478	--	--	12.06	12.06	33407	38066	(3+4)-II-1	(5+6)-II-2	2.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	14.6	46.2	0.317	27.8	47.6	0.583	33407	38066	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
47.2	14.6	46.2	0.315	27.8	47.6	0.583	33407	38066	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	14.6	46.2	0.316	27.8	47.6	0.583	33407	38066	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
425.1	14.7	46.2	0.317	27.8	47.6	0.583	33407	38066	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	14.7	46.6	0.315	27.8	47.6	0.583	33407	38066	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9763	1650	--	21725	34667	21725	0	38066	472.4	10.05	2.2
Des								33407			

Trave : 227 [105 , 106] Pilastrate [9 , 23]

Sez. R rinf.: $B_y = 78.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 510.1 \text{ cm}$ $L_n = 510.7 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	10315	--	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	3.4
51.1	5518	1812	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	6.4
CAMP	--	6914	--	--	22.12	22.12	35324	37678	(5+6)-II-2	2	5.4
459.6	8184	1276	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	4.3
FLN	13464	--	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	2.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.0	31.0	0.289	--	--	--	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	--
51.1	8.9	31.0	0.286	16.6	29.9	0.555	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	--	--	--	16.7	29.9	0.559	35324	37678	(5+6)-II-2	2	--	Parz.
459.6	8.9	31.0	0.287	16.6	29.9	0.555	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.0	31.0	0.291	--	--	--	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	14898	532	--	28901	19915	20447	0	37678	510.7	10.05	1.4
Des								35324			

Trave : 227 [106 , 107] Pilastrate [23 , 30]

Sez. R rinf.: $B_y = 58.0 \text{ cm}, B_z = 29.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 4.0 \text{ cm}$ $L = 347.3 \text{ cm}$ $L_n = 338.7 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	9861	3244	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	2.9
33.9	6894	3564	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	4.2
CAMP	4320	3570	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	6.7

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
304.8	5464	2958	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	5.3
FLN	8326	2719	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	3.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.2	31.0	0.297	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
33.9	9.1	31.0	0.294	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.1	31.0	0.292	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
304.8	9.1	31.0	0.293	16.8	29.8	0.563	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.2	31.0	0.295	16.8	29.8	0.563	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-I-3

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10433	532	--	22333	19915	20447	0	30291	338.7	10.05	2.0
Des								28765			

Trave : 227 [107 , 108] Pilastrate [30 , 24]

Sez. R rinf.: $B_y = 58.0$ cm, $B_z = 29.0$ cm, s. inf. = 4.0 cm, s. lat. = 4.0 cm, h lat. = 4.0 cm $L = 310.0$ cm $L_n = 310.0$ cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7583	2704	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	3.8
31.0	5152	2872	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	5.6
CAMP	3183	2083	--	--	18.10	18.10	28765	30291	(3+4)-I-1	2	9.0
279.0	5301	2932	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	5.4
FLN	7741	2751	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	3.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.295	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
31.0	9.1	31.0	0.293	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.0	31.0	0.292	16.8	29.8	0.562	28765	30291	(3+4)-I-1	2	Parz.	Parz.
279.0	9.1	31.0	0.293	16.8	29.8	0.563	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.1	31.0	0.295	16.8	29.8	0.563	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9449	532	--	22333	19915	20447	0	30291	310.0	10.05	2.2
Des								28765			

Trave : 227 [108 , 109] Pilastrate [24 , 25]

Sez. R rinf.: $B_y = 58.0$ cm, $B_z = 29.0$ cm, s. inf. = 4.0 cm, s. lat. = 4.0 cm, h lat. = 4.0 cm $L = 347.3$ cm $L_n = 339.2$ cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7433	2564	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	3.9
33.9	4904	2882	--	--	18.10	18.10	28765	30291	(3+4)-I-3	(5+6)-I-1	5.9
CAMP	3823	2093	--	--	18.10	18.10	28765	30291	(3+4)-I-1	2	7.5
305.3	6329	1612	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	4.5
FLN	9203	992	--	--	18.10	18.10	28765	30291	(3+4)-I-1	(5+6)-I-3	3.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.1	31.0	0.295	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
33.9	9.1	31.0	0.293	16.8	29.8	0.563	28765	30291	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	9.1	31.0	0.292	16.8	29.8	0.562	28765	30291	(3+4)-I-1	2	Parz.	Parz.
305.3	9.1	31.0	0.294	16.7	29.8	0.562	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	9.2	31.0	0.296	16.7	29.8	0.561	28765	30291	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9657	532	--	22333	19915	20447	0	30291	339.2	10.05	2.1
Des								28765			

Trave : 227 [109 , 110] Pilastrate [25 , 10]

Sez. R rinf.: $B_y = 78.0 \text{ cm}$, $B_z = 29.0 \text{ cm}$, $s. \text{ inf.} = 4.0 \text{ cm}$, $s. \text{ lat.} = 4.0 \text{ cm}$, $h \text{ lat.} = 4.0 \text{ cm}$ $L = 510.1 \text{ cm}$ $L_n = 509.3 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	12604	--	--	--	22.12	22.12	35324	37678	2	(5+6)-I-1	2.8
50.9	6699	149	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	5.3
CAMP	--	7225	--	--	22.12	22.12	35324	37678	(5+6)-II-2	2	5.2
458.4	4852	1625	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	7.3
FLN	9434	--	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	3.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.0	31.0	0.290	--	--	--	35324	37678	2	(5+6)-I-1	Parz.	--
50.9	8.9	31.0	0.287	16.5	29.9	0.554	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	--	--	--	16.7	29.9	0.559	35324	37678	(5+6)-II-2	2	--	Parz.
458.4	8.9	31.0	0.286	16.6	29.9	0.555	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	8.9	31.0	0.288	--	--	--	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	14827	532	--	28901	19915	20447	0	37678	509.3	10.05	1.4
Des								35324			

Trave : 228 [1 , 206] Pilastrate [- , 23]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 145.0 \text{ cm}$ $L_n = 145.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	11	11	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	>100
14.5	19	12	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	>100
CAMP	328	--	--	--	14.07	14.07	18798	18798	1	(5+6)-I-1	57
130.5	415	--	--	--	14.07	14.07	18798	18798	1	(5+6)-I-1	45
FLN	512	--	--	--	14.07	14.07	18798	18798	1	(5+6)-I-1	37

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.0	27.0	0.371	10.0	27.0	0.371	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
14.5	10.0	27.0	0.371	10.0	27.0	0.371	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.0	27.0	0.371	--	--	--	18798	18798	1	(5+6)-I-1	Parz.	--
130.5	10.0	27.0	0.371	--	--	--	18798	18798	1	(5+6)-I-1	Parz.	--
FLN	10.0	27.0	0.372	--	--	--	18798	18798	1	(5+6)-I-1	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	707	--	16421	19915	16421	0	18798	145.0	10.05	23
Des							18798			

Trave : 228 [206 , 207] Pilastrate [23 , 30]

Sez. R: $B_y=50.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=347.3\text{ cm}$ $L_n=344.4\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200\text{ [kg/cmq]}$, $f_{ym}=4500\text{ [kg/cmq]}$, $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6850	5743	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	2.7
34.4	5331	4904	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	3.5
CAMP	3873	4005	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	4.7
310.0	4893	3732	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.8
FLN	6664	4318	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	2.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.381	10.2	27.0	0.379	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
34.4	10.2	27.0	0.378	10.2	27.0	0.378	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.2	27.0	0.376	10.2	27.0	0.376	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
310.0	10.2	27.0	0.378	10.2	27.0	0.376	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.380	10.2	27.0	0.377	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6500	--	16421	19915	16421	0	18798	344.4	10.05	2.5
Des							18798			

Trave : 228 [207 , 254] Pilastrate [30 , -]

Sez. R: $B_y=50.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=100.0\text{ cm}$ $L_n=100.0\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200\text{ [kg/cmq]}$, $f_{ym}=4500\text{ [kg/cmq]}$, $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6456	4767	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	2.9
10.0	5904	4637	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	3.2
CAMP	5363	4496	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	3.5
90.0	1917	3225	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	5.8
FLN	1479	3006	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	6.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.380	10.2	27.0	0.377	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
10.0	10.2	27.0	0.379	10.2	27.0	0.377	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.2	27.0	0.378	10.2	27.0	0.377	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
90.0	10.1	27.0	0.373	10.1	27.0	0.375	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
FLN	10.1	27.0	0.373	10.1	27.0	0.375	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6692	--	16421	19915	16421	0	18798	100.0	10.05	2.5
Des							18798			

Trave : 228 | 254 , 255 | Pilastrate [- , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 110.0 \text{ cm}$ $L_n = 110.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1470	1479	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	13
11.0	1058	1143	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	16
CAMP	1624	1667	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	11
99.0	2044	2000	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	9.2
FLN	2475	2322	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	7.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.373	10.1	27.0	0.373	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
11.0	10.1	27.0	0.372	10.1	27.0	0.372	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.1	27.0	0.373	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
99.0	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5233	--	16421	19915	16421	0	18798	110.0	10.05	3.1
Des							18798			

Trave : 228 | 255 , 208 | Pilastrate [- , 24]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 100.0 \text{ cm}$ $L_n = 100.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1148	2520	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	7.5
10.0	1593	2728	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	6.9
CAMP	5127	3878	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.7
90.0	5687	3996	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.3
FLN	6251	4110	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.372	10.1	27.0	0.374	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
10.0	10.1	27.0	0.373	10.1	27.0	0.375	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
CAMP	10.2	27.0	0.378	10.2	27.0	0.376	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
90.0	10.2	27.0	0.379	10.2	27.0	0.376	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.380	10.2	27.0	0.376	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6772	--	16421	19915	16421	0	18798	100.0	10.05	2.4
Des							18798			

Trave : 228 [208 , 209] Pilastrate [24 , 25]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 347.3 \text{ cm}$ $L_n = 344.4 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6693	4425	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	2.8
34.4	4916	3856	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	3.8
CAMP	3761	3889	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	4.8
310.0	5233	4763	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	3.6
FLN	6767	5576	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	2.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.380	10.2	27.0	0.377	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
34.4	10.2	27.0	0.378	10.2	27.0	0.376	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.2	27.0	0.376	10.2	27.0	0.376	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
310.0	10.2	27.0	0.378	10.2	27.0	0.377	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.380	10.2	27.0	0.379	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6517	--	16421	19915	16421	0	18798	344.4	10.05	2.5
Des							18798			

Trave : 228 [209 , 2] Pilastrate [25 , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 115.0 \text{ cm}$ $L_n = 115.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	322	--	--	--	14.07	14.07	18798	18798	2	(3+4)-I-1	58
11.5	265	--	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	71
CAMP	217	--	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	87
103.5	18	13	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	>100
FLN	13	13	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	>100

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.0	27.0	0.371	--	--	--	18798	18798	2	(3+4)-I-1	Parz.	--
11.5	10.0	27.0	0.371	--	--	--	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	--
CAMP	10.0	27.0	0.371	--	--	--	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	--
103.5	10.0	27.0	0.371	10.0	27.0	0.371	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.0	27.0	0.371	10.0	27.0	0.371	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
Sin	561	--	16421	19915	16421	0	18798	115.0	10.05	29
Des							18798			

Trave : 229 [220 , 216] Pilastrate [26 , 31]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 488.7 \text{ cm}$ $L_n = 488.7 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5706	1712	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	3.3
48.9	3852	2101	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.9
CAMP	2292	2324	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	8.1
439.9	3159	1186	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	6.0
FLN	5006	697	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	3.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.1	27.0	0.373	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
48.9	10.2	27.0	0.376	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
439.9	10.1	27.0	0.375	10.1	27.0	0.372	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.378	10.0	27.0	0.372	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4639	--	16421	19915	16421	0	18798	488.7	10.05	3.5
Des							18798			

Trave : 229 [216 , 252] Pilastrate [31 , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 100.0 \text{ cm}$ $L_n = 100.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4742	2366	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.0
10.0	4279	2378	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.4
CAMP	3820	2390	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.9
90.0	920	2135	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	8.8
FLN	574	2054	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	9.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
10.0	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.2	27.0	0.376	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
90.0	10.0	27.0	0.372	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	10.0	27.0	0.372	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5380	--	16421	19915	16421	0	18798	100.0	10.05	3.1
Des							18798			

Trave : 229 [252 , 253] Pilastrate [- , -]

Sez. R: By= 50.0 cm Bz=30.0 cm L=110.0 cm Ln=110.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1485	986	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	13
11.0	1188	796	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	16
CAMP	976	130	--	--	14.07	14.07	18798	18798	(5+6)-I-3	2	19
99.0	1216	956	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	15
FLN	1498	1162	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	13

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.373	10.0	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
11.0	10.1	27.0	0.372	10.0	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.0	27.0	0.372	10.0	27.0	0.371	18798	18798	(5+6)-I-3	2	Parz.	Parz.
99.0	10.1	27.0	0.372	10.0	27.0	0.372	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.1	27.0	0.373	10.1	27.0	0.372	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	3650	--	16421	19915	16421	0	18798	110.0	10.05	4.5
Des							18798			

Trave : 229 [253 , 212] Pilastrate [- , 33]

Sez. R: By= 50.0 cm Bz=30.0 cm L=100.0 cm Ln=100.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	565	2120	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	8.9
10.0	899	2212	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	8.5
CAMP	3710	2536	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	5.1
90.0	4167	2529	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	4.5
FLN	4636	2510	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	4.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.0	27.0	0.372	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
10.0	10.0	27.0	0.372	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
CAMP	10.1	27.0	0.376	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
90.0	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5488	--	16421	19915	16421	0	18798	100.0	10.05	3.0
Des							18798			

Trave : 229 [212 , 206] Pilastrate [33 , 23]

Sez. R: By= 50.0 cm Bz=30.0 cm L=454.8 cm Ln=454.9 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4651	1030	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.0
45.5	2994	1326	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	6.3
CAMP	2369	2297	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	7.9
409.4	3821	2222	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	4.9
FLN	5537	1967	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	3.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.377	10.0	27.0	0.372	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
45.5	10.1	27.0	0.375	10.1	27.0	0.373	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
409.4	10.2	27.0	0.376	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.379	10.1	27.0	0.373	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb =(3+4)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4518	--	16421	19915	16421	0	18798	454.9	10.05	3.6
Des							18798			

Trave : 230 [223 , 217] Pilastrate [29 , 34]

Sez. R: By= 50.0 cm Bz=30.0 cm L=475.0 cm Ln=475.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5602	2778	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	3.4
47.5	4158	2744	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	4.5
CAMP	2821	2603	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	6.7
427.5	3178	1745	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	5.9
FLN	4949	1452	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	3.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.1	27.0	0.375	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
47.5	10.2	27.0	0.377	10.1	27.0	0.375	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.375	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
427.5	10.1	27.0	0.375	10.1	27.0	0.373	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.378	10.1	27.0	0.373	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb =(3+4)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4555	--	16421	19915	16421	0	18798	475.0	10.05	3.6
Des							18798			

Trave : 230 [217 , 257] Pilastrate [34 , -]

Sez. R: By= 50.0 cm Bz=30.0 cm L=87.0 cm Ln=87.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4996	2657	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	3.8

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
8.7	4547	2666	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.1
CAMP	4108	2666	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.6
78.3	1371	2403	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	7.8
FLN	1034	2332	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	8.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.378	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
8.7	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.2	27.0	0.376	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
78.3	10.1	27.0	0.373	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
FLN	10.1	27.0	0.372	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6055	--	16421	19915	16421	0	18798	87.0	10.05	2.7
Des							18798			

Trave : 230 [257 , 256] Pilastrate [- , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 136.0 \text{ cm}$ $L_n = 136.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	2102	1639	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	8.9
13.6	1685	1382	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	11
CAMP	1284	1109	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	15
122.4	1408	1264	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	13
FLN	1804	1539	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	10

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.374	10.1	27.0	0.373	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
13.6	10.1	27.0	0.373	10.1	27.0	0.373	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.373	10.1	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
122.4	10.1	27.0	0.373	10.1	27.0	0.373	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.1	27.0	0.373	10.1	27.0	0.373	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4127	--	16421	19915	16421	0	18798	136.0	10.05	4.0
Des							18798			

Trave : 230 [256 , 213] Pilastrate [- , 32]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 87.0 \text{ cm}$ $L_n = 87.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1172	2734	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	6.9
8.7	1501	2814	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	6.7
CAMP	4185	3160	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	4.5
78.3	4613	3172	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	4.1

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
FLN	5050	3175	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	3.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.372	10.1	27.0	0.375	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
8.7	10.1	27.0	0.373	10.1	27.0	0.375	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
CAMP	10.2	27.0	0.377	10.1	27.0	0.375	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
78.3	10.2	27.0	0.377	10.1	27.0	0.375	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.378	10.1	27.0	0.375	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5919	--	16421	19915	16421	0	18798	87.0	10.05	2.8
Des							18798			

Trave : 231 [213 , 209] Pilastrate [32 , 25]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 460.1 \text{ cm}$ $L_n = 460.2 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4856	1518	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	3.9
46.0	3187	1675	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	5.9
CAMP	2712	2587	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	6.9
414.2	4166	2643	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	4.5
FLN	5854	2542	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	3.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.378	10.1	27.0	0.373	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
46.0	10.1	27.0	0.375	10.1	27.0	0.373	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
414.2	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.379	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4426	--	16421	19915	16421	0	18798	460.2	10.05	3.7
Des							18798			

Trave : 232 [3 , 220] Pilastrate [- , 26]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 145.0 \text{ cm}$ $L_n = 145.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8	8	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	>100
14.5	16	8	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	>100
CAMP	328	--	--	--	14.07	14.07	18798	18798	1	(3+4)-I-1	57
130.5	415	--	--	--	14.07	14.07	18798	18798	1	(3+4)-I-1	45
FLN	512	--	--	--	14.07	14.07	18798	18798	1	(3+4)-I-1	37

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.0	27.0	0.371	10.0	27.0	0.371	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
14.5	10.0	27.0	0.371	10.0	27.0	0.371	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.0	27.0	0.371	--	--	--	18798	18798	1	(3+4)-I-1	Parz.	--
130.5	10.0	27.0	0.371	--	--	--	18798	18798	1	(3+4)-I-1	Parz.	--
FLN	10.0	27.0	0.372	--	--	--	18798	18798	1	(3+4)-I-1	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	707	--	16421	19915	16421	0	18798	145.0	10.05	23
Des							18798			

Trave : 232 [220 , 221] Pilastrate [26 , 27]

Sez. R: $B_y=50.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=345.0\text{ cm}$ $L_n=345.0\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7689	6707	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	2.4
34.5	6033	5664	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	3.1
CAMP	4430	4569	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	4.1
310.5	5455	4440	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.4
FLN	7352	5242	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	2.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.382	10.3	27.0	0.380	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
34.5	10.2	27.0	0.379	10.2	27.0	0.379	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.2	27.0	0.377	10.2	27.0	0.377	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
310.5	10.2	27.0	0.378	10.2	27.0	0.377	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.381	10.2	27.0	0.378	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7005	--	16421	19915	16421	0	18798	345.0	10.05	2.3
Des							18798			

Trave : 232 [221 , 251] Pilastrate [27 , -]

Sez. R: $B_y=50.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=92.0\text{ cm}$ $L_n=92.0\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5723	4147	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	3.3
9.2	5231	4087	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	3.6
CAMP	4750	4015	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	4.0
82.8	1735	3222	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	5.8
FLN	1361	3068	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	6.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.2	27.0	0.377	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
9.2	10.2	27.0	0.378	10.2	27.0	0.376	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
CAMP	10.2	27.0	0.377	10.2	27.0	0.376	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
82.8	10.1	27.0	0.373	10.1	27.0	0.375	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
FLN	10.1	27.0	0.373	10.1	27.0	0.375	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6384	--	16421	19915	16421	0	18798	92.0	10.05	2.6
Des							18798			

Trave : 232 [251 , 250] Pilastrate [- , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 126.0 \text{ cm}$ $L_n = 126.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1529	1408	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	12
12.6	1114	1080	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	17
CAMP	1823	1655	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	10
113.4	2266	1971	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	8.3
FLN	2721	2273	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	6.9

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.373	10.1	27.0	0.373	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
12.6	10.1	27.0	0.372	10.1	27.0	0.372	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.1	27.0	0.373	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
113.4	10.1	27.0	0.374	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.1	27.0	0.375	10.1	27.0	0.374	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4849	--	16421	19915	16421	0	18798	126.0	10.05	3.4
Des							18798			

Trave : 232 [250 , 222] Pilastrate [- , 28]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 92.0 \text{ cm}$ $L_n = 92.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1486	2776	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	6.8
9.2	1872	2916	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	6.4
CAMP	4984	3606	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.8
82.8	5481	3660	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.4
FLN	5989	3703	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.373	10.1	27.0	0.375	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
9.2	10.1	27.0	0.373	10.1	27.0	0.375	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
CAMP	10.2	27.0	0.378	10.1	27.0	0.376	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
82.8	10.2	27.0	0.378	10.1	27.0	0.376	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.2	27.0	0.379	10.1	27.0	0.376	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6565	--	16421	19915	16421	0	18798	92.0	10.05	2.5
Des							18798			

Trave : 232 [222 , 223] Pilastrate [28 , 29]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 480.0 \text{ cm}$ $L_n = 480.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6736	3122	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	2.8
48.0	4654	3187	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	4.0
CAMP	3251	3020	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	5.8
432.0	4894	3393	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	3.8
FLN	6652	3651	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	2.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.380	10.1	27.0	0.375	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
48.0	10.2	27.0	0.377	10.1	27.0	0.375	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.1	27.0	0.375	10.1	27.0	0.375	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
432.0	10.2	27.0	0.378	10.1	27.0	0.375	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.380	10.1	27.0	0.376	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5353	--	16421	19915	16421	0	18798	480.0	10.05	3.1
Des							18798			

Trave : 233 [253 , 254] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 806.2 \text{ cm}$ $L_n = 792.1 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1415	--	--	--	6.03	6.03	8048	8048	(5+6)-I-3	(3+4)-I-1	5.7
79.2	883	185	--	--	6.03	6.03	8048	8048	(5+6)-I-3	(3+4)-I-1	9.1
CAMP	447	697	--	--	6.03	6.03	8048	8048	(5+6)-I-3	(3+4)-I-1	12
712.9	791	33	--	--	6.03	6.03	8048	8048	(3+4)-II-1	(5+6)-II-2	10
FLN	1335	--	--	--	6.03	6.03	8048	8048	(3+4)-II-1	(5+6)-II-2	6.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.382	--	--	--	8048	8048	(5+6)-I-3	(3+4)-I-1	Parz.	--
79.2	10.3	27.0	0.380	10.2	27.0	0.378	8048	8048	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.2	27.0	0.379	10.2	27.0	0.379	8048	8048	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
712.9	10.3	27.0	0.380	10.2	27.0	0.377	8048	8048	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.3	27.0	0.381	--	--	--	8048	8048	(3+4)-II-1	(5+6)-II-2	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	936	--	6568	9957	6568	0	8048	792.1	5.03	7.0
Des							8048			

Trave : 234 | 251 , 252 | Pilastrate [- , -]

Sez. R: $B_y=20.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=797.1\text{ cm}$ $L_n=790.2\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1411	--	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	5.7
79.0	828	60	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	9.7
CAMP	478	683	--	--	6.03	6.03	8048	8048	(5+6)-I-3	2	12
711.2	959	204	--	--	6.03	6.03	8048	8048	(5+6)-I-3	(3+4)-I-1	8.4
FLN	1537	--	--	--	6.03	6.03	8048	8048	(5+6)-I-3	(3+4)-I-1	5.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.382	--	--	--	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	--
79.0	10.3	27.0	0.380	10.2	27.0	0.377	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.2	27.0	0.379	10.2	27.0	0.379	8048	8048	(5+6)-I-3	2	Parz.	Parz.
711.2	10.3	27.0	0.380	10.2	27.0	0.378	8048	8048	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
FLN	10.3	27.0	0.382	--	--	--	8048	8048	(5+6)-I-3	(3+4)-I-1	Parz.	--

Verifica a taglio: $\cot(\theta)=2.500$

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	1032	--	6568	9957	6568	0	8048	790.2	5.03	6.4
Des							8048			

Trave : 235 | 250 , 257 | Pilastrate [- , -]

Sez. R: $B_y=20.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=801.8\text{ cm}$ $L_n=794.7\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1317	--	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	6.1
79.5	812	94	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	9.9
CAMP	455	629	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	13
715.2	892	269	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	9.0
FLN	1425	--	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	5.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.381	--	--	--	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	--
79.5	10.3	27.0	0.380	10.2	27.0	0.378	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.2	27.0	0.379	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
715.2	10.3	27.0	0.380	10.2	27.0	0.378	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.382	--	--	--	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta)=2.500$

Comb =(3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	793	--	6568	9957	6568	0	8048	794.7	5.03	8.3
Des							8048			

Trave : 236 [256 , 255] Pilastrate [- , -]

Sez. R: By= 20.0 cm Bz=30.0 cm L=810.8 cm Ln=796.7 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1438	--	--	--	6.03	6.03	8048	8048	(5+6)-I-1	(3+4)-I-3	5.6
79.7	886	214	--	--	6.03	6.03	8048	8048	(5+6)-I-1	(3+4)-I-3	9.1
CAMP	439	668	--	--	6.03	6.03	8048	8048	(5+6)-I-1	(5+6)-I-3	12
717.0	793	31	--	--	6.03	6.03	8048	8048	(3+4)-II-1	(5+6)-II-2	10
FLN	1304	--	--	--	6.03	6.03	8048	8048	(3+4)-II-1	(5+6)-II-2	6.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.382	--	--	--	8048	8048	(5+6)-I-1	(3+4)-I-3	Parz.	--
79.7	10.3	27.0	0.380	10.2	27.0	0.378	8048	8048	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
CAMP	10.2	27.0	0.379	10.2	27.0	0.379	8048	8048	(5+6)-I-1	(5+6)-I-3	Parz.	Parz.
717.0	10.3	27.0	0.380	10.2	27.0	0.377	8048	8048	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.3	27.0	0.381	--	--	--	8048	8048	(3+4)-II-1	(5+6)-II-2	Parz.	--

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	855	--	6568	9957	6568	0	8048	796.7	5.03	7.7
Des							8048			

Trave : 237 [301 , 302] Pilastrate [1 , 2]

Sez. R rinf.: By= 48.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=4.0 cm L=835.0 cm Ln=835.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6512	1996	--	--	14.07	14.07	22522	24127	(5+6)-I-3	(3+4)-I-1	3.5
83.5	4299	2500	--	--	14.07	14.07	22522	24127	(5+6)-I-3	(3+4)-I-1	5.2
CAMP	--	2694	--	--	14.07	14.07	22522	24127	(3+4)-II-1	(3+4)-I-1	9.0
751.5	4612	2261	--	--	14.07	14.07	22522	24127	(3+4)-I-1	(5+6)-I-3	4.9
FLN	6894	1688	--	--	14.07	14.07	22522	24127	(3+4)-I-1	(5+6)-I-3	3.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.8	31.0	0.285	17.0	29.8	0.569	22522	24127	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
83.5	8.8	31.0	0.283	17.0	29.8	0.569	22522	24127	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	--	--	--	17.0	29.8	0.569	22522	24127	(3+4)-II-1	(3+4)-I-1	--	Parz.
751.5	8.8	31.0	0.283	17.0	29.8	0.569	22522	24127	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	8.8	31.0	0.285	17.0	29.8	0.568	22522	24127	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	3259	532	--	19049	19915	19049	0	24127	835.0	10.05	5.8
Des								22522			

Trave : 238 [303 , 304] Pilastrate [3 , 4]

Sez. R rinf.: By= 48.0 cm,Bz=29.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=4.0 cm L=835.0 cm Ln=835.0 cm

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6893	1879	--	--	14.07	14.07	22522	24127	(3+4)-I-3	(5+6)-I-1	3.3
83.5	4612	2411	--	--	14.07	14.07	22522	24127	(3+4)-I-3	(5+6)-I-1	4.9
CAMP	--	2687	--	--	14.07	14.07	22522	24127	(3+4)-II-2	(3+4)-I-3	9.0
751.5	4476	2491	--	--	14.07	14.07	22522	24127	(5+6)-I-1	(3+4)-I-3	5.0
FLN	6730	1986	--	--	14.07	14.07	22522	24127	(5+6)-I-1	(3+4)-I-3	3.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.8	31.0	0.285	17.0	29.8	0.568	22522	24127	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
83.5	8.8	31.0	0.283	17.0	29.8	0.569	22522	24127	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	--	--	--	17.0	29.8	0.569	22522	24127	(3+4)-II-2	(3+4)-I-3	--	Parz.
751.5	8.8	31.0	0.283	17.0	29.8	0.569	22522	24127	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	8.8	31.0	0.285	17.0	29.8	0.569	22522	24127	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-3

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	3266	532	--	19049	19915	19049	0	24127	835.0	10.05	5.8
Des								22522			

Trave : 239 [325 , 324] Pilastrate [14 , 15]

Sez. R: $B_y = 60.0$ cm $B_z = 30.0$ cm $L = 450.0$ cm $L_n = 450.0$ cm

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4938	708	--	--	18.10	18.10	24144	24144	(3+4)-II-2	(5+6)-II-1	4.9
45.0	3221	1399	--	--	18.10	18.10	24144	24144	(3+4)-II-2	(5+6)-II-1	7.5
CAMP	--	2956	--	--	18.10	18.10	24144	24144	(3+4)-I-1	2	8.2
405.0	3318	270	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	7.3
FLN	6128	--	--	--	18.10	18.10	24144	24144	2	(3+4)-II-2	3.9

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.383	10.2	27.0	0.378	24144	24144	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
45.0	10.3	27.0	0.381	10.2	27.0	0.379	24144	24144	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	--	--	--	10.3	27.0	0.380	24144	24144	(3+4)-I-1	2	--	Parz.
405.0	10.3	27.0	0.381	10.2	27.0	0.378	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.4	27.0	0.384	--	--	--	24144	24144	2	(3+4)-II-2	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8485	--	19705	19915	19705	0	24144	450.0	10.05	2.3
Des							24144			

Trave : 239 [324 , 0] Pilastrate [15 , -]

Sez. R: $B_y = 60.0$ cm $B_z = 30.0$ cm $L = 315.0$ cm $L_n = 315.0$ cm

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
ILN	6890	--	--	--	18.10	18.10	24144	24144	(5+6)-II-2	(3+4)-II-1	3.5
31.5	4993	401	--	--	18.10	18.10	24144	24144	(5+6)-II-2	(3+4)-II-1	4.8
CAMP	3313	3383	--	--	18.10	18.10	24144	24144	(5+6)-II-2		7.1
283.5	--	2806	--	--	18.10	18.10	24144	24144	(5+6)-II-1		8.6
FLN	136	2461	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	9.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.4	27.0	0.385	--	--	--	24144	24144	(5+6)-II-2	(3+4)-II-1	Parz.	--
31.5	10.3	27.0	0.383	10.2	27.0	0.378	24144	24144	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.3	27.0	0.381	10.3	27.0	0.381	24144	24144	(5+6)-II-2		2	Parz.
283.5	--	--	--	10.3	27.0	0.380	24144	24144	(5+6)-II-1		2	--
FLN	10.2	27.0	0.377	10.3	27.0	0.380	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8833	--	19705	19915	19705	0	24144	315.0	10.05	2.2
Des							24144			

Trave : 239 [0 , 319] Pilastrate [- , 16]

Sez. R: $B_y = 60.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 155.0 \text{ cm}$ $L_n = 155.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	--	2359	--	--	18.10	18.10	24144	24144	(5+6)-II-1		2
15.5	--	2116	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	11
CAMP	3869	1951	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	6.2
139.5	4476	568	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	5.4
FLN	5096	331	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	4.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	--	--	--	10.3	27.0	0.380	24144	24144	(5+6)-II-1		2	--
15.5	--	--	--	10.2	27.0	0.379	24144	24144	(5+6)-II-1	(3+4)-II-2	--	Parz.
CAMP	10.3	27.0	0.381	10.2	27.0	0.379	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
139.5	10.3	27.0	0.382	10.2	27.0	0.378	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.3	27.0	0.383	10.2	27.0	0.378	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4567	--	19705	19915	19705	0	24144	155.0	10.05	4.3
Des							24144			

Trave : 239 [319 , 315] Pilastrate [16 , 17]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 450.0 \text{ cm}$ $L_n = 450.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4074	1825	--	--	18.10	18.10	24093	24093	(5+6)-II-2	(3+4)-II-1	5.9
45.0	3025	1605	--	--	18.10	18.10	24093	24093	(5+6)-II-2	(3+4)-II-1	8.0
CAMP	2064	2188	--	--	18.10	18.10	24093	24093	(3+4)-II-1	(5+6)-II-2	11

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
405.0	2892	2629	--	--	18.10	18.10	24093	24093	(3+4)-II-1	(5+6)-II-2	8.3
FLN	3795	2994	--	--	18.10	18.10	24093	24093	(3+4)-II-1	(5+6)-II-2	6.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.8	27.0	0.398	10.7	27.0	0.396	24093	24093	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
45.0	10.7	27.0	0.397	10.7	27.0	0.395	24093	24093	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.7	27.0	0.396	10.7	27.0	0.396	24093	24093	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
405.0	10.7	27.0	0.397	10.7	27.0	0.397	24093	24093	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.7	27.0	0.398	10.7	27.0	0.397	24093	24093	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	2883	--	16421	19915	16421	0	24093	450.0	10.05	5.7
Des							24093			

Trave : 240 [311 , 305] Pilastrate [18 , 9]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 440.0 \text{ cm}$ $L_n = 440.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	3143	2626	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	6.0
44.0	2384	2328	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	7.9
CAMP	1697	1956	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	9.6
396.0	2677	1082	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	7.0
FLN	3629	1188	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	5.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.375	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
44.0	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.373	10.1	27.0	0.373	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
396.0	10.1	27.0	0.374	10.1	27.0	0.372	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.1	27.0	0.376	10.1	27.0	0.372	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	2646	--	16421	19915	16421	0	18798	440.0	10.05	6.2
Des							18798			

Trave : 240 [305 , 0] Pilastrate [9 , -]

Sez. R: $B_y = 60.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 155.0 \text{ cm}$ $L_n = 155.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5769	27	--	--	14.07	14.07	18858	18858	(5+6)-II-2	(3+4)-II-1	3.3
15.5	5082	292	--	--	14.07	14.07	18858	18858	(5+6)-II-2	(3+4)-II-1	3.7
CAMP	4407	1904	--	--	14.07	14.07	18858	18858	(5+6)-II-2	(5+6)-II-1	4.3
139.5	62	2113	--	--	14.07	14.07	18858	18858	(3+4)-II-2	(5+6)-II-1	8.9
FLN	--	2358	--	--	14.07	14.07	18858	18858	(3+4)-II-2		2 8.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.8	27.0	0.361	9.6	27.0	0.354	18858	18858	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
15.5	9.7	27.0	0.360	9.6	27.0	0.354	18858	18858	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	9.7	27.0	0.360	9.6	27.0	0.356	18858	18858	(5+6)-II-2	(5+6)-II-1	Parz.	Parz.
139.5	9.6	27.0	0.354	9.6	27.0	0.356	18858	18858	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	--	--	--	9.6	27.0	0.357	18858	18858	(3+4)-II-2	2	--	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5112	--	19705	19915	19705	0	18858	155.0	10.05	3.9
Des							18858			

Trave : 240 | 0 , 301 | Pilastrate [- , 1]

Sez. R: $B_y=60.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=315.1\text{ cm}$ $L_n=314.6\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	375	2636	--	--	14.07	14.07	18858	18858	(3+4)-II-2	(5+6)-II-1	7.2
31.5	--	2894	--	--	14.07	14.07	18858	18858	(3+4)-II-2	2	6.5
CAMP	3065	3771	--	--	14.07	14.07	18858	18858	(3+4)-II-1	2	5.0
283.2	4736	1575	--	--	14.07	14.07	18858	18858	(3+4)-II-1	(5+6)-II-2	4.0
FLN	6625	712	--	--	14.07	14.07	18858	18858	(3+4)-II-1	(5+6)-II-2	2.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	9.6	27.0	0.354	9.6	27.0	0.357	18858	18858	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
31.5	--	--	--	9.7	27.0	0.357	18858	18858	(3+4)-II-2	2	--	Parz.
CAMP	9.7	27.0	0.358	9.7	27.0	0.359	18858	18858	(3+4)-II-1	2	Parz.	Parz.
283.2	9.7	27.0	0.360	9.6	27.0	0.356	18858	18858	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	9.8	27.0	0.363	9.6	27.0	0.355	18858	18858	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8393	--	19705	19915	19705	0	18858	314.6	10.05	2.3
Des							18858			

Trave : 241 | 330 , 318 | Pilastrate [13 , 12]

Sez. R: $B_y=50.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=600.0\text{ cm}$ $L_n=600.0\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4722	2455	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.0
60.0	3373	2351	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	5.6
CAMP	2163	2289	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	8.2
540.0	3348	2558	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	5.6
FLN	4668	2692	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	4.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
60.0	10.1	27.0	0.375	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
540.0	10.1	27.0	0.375	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	2764	--	16421	19915	16421	0	18798	600.0	10.05	5.9
Des							18798			

Trave : 242 [314 , 310] Pilastrate [11 , 10]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 440.0 \text{ cm}$ $L_n = 440.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4038	3599	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.7
44.0	3105	3116	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	6.0
CAMP	2244	2561	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	7.3
396.0	3362	1752	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	5.6
FLN	4498	2033	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	4.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.376	10.1	27.0	0.376	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
44.0	10.1	27.0	0.375	10.1	27.0	0.375	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
396.0	10.1	27.0	0.375	10.1	27.0	0.373	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (5+6)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	3200	--	16421	19915	16421	0	18798	440.0	10.05	5.1
Des							18798			

Trave : 242 [310 , 0] Pilastrate [10 , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 155.1 \text{ cm}$ $L_n = 155.2 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6134	697	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	3.1
15.5	5441	895	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	3.5
CAMP	4758	2076	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	4.0
139.7	300	2229	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	8.4
FLN	--	2388	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	7.9

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.0	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
15.5	10.2	27.0	0.378	10.0	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
139.7	10.0	27.0	0.371	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
FLN	--	--	--	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	--	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5072	--	16421	19915	16421	0	18798	155.2	10.05	3.2
Des							18798			

Trave : 242 [0 , 304] Pilastrate [- , 4]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 315.1 \text{ cm}$ $L_n = 314.7 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	739	2844	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	6.6
31.5	--	2764	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	6.8
CAMP	3635	3573	--	--	14.07	14.07	18798	18798	(3+4)-II-1		2
283.3	5375	2074	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	3.5
FLN	7327	1341	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	2.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.0	27.0	0.372	10.1	27.0	0.375	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
31.5	--	--	--	10.1	27.0	0.375	18798	18798	(3+4)-II-2	(5+6)-II-1	--	Parz.
CAMP	10.1	27.0	0.376	10.1	27.0	0.376	18798	18798	(3+4)-II-1	2	Parz.	Parz.
283.3	10.2	27.0	0.378	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.3	27.0	0.381	10.1	27.0	0.373	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8266	--	16421	19915	16421	0	18798	314.7	10.05	2.0
Des							18798			

Trave : 243 [325 , 326] Pilastrate [14 , 7]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 444.9 \text{ cm}$ $L_n = 453.7 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	3661	3124	--	--	18.10	18.10	24093	24093	(3+4)-I-3	(5+6)-I-1	6.6
45.4	2625	2810	--	--	18.10	18.10	24093	24093	(3+4)-I-3	(5+6)-I-1	8.6
CAMP	--	2411	--	--	18.10	18.10	24093	24093	(5+6)-II-2	(5+6)-I-1	10.0
408.4	3290	2076	--	--	18.10	18.10	24093	24093	(5+6)-I-1	(3+4)-I-3	7.3
FLN	4593	2123	--	--	18.10	18.10	24093	24093	(5+6)-I-1	(3+4)-I-3	5.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.7	27.0	0.398	10.7	27.0	0.397	24093	24093	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
45.4	10.7	27.0	0.397	10.7	27.0	0.397	24093	24093	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	--	--	--	10.7	27.0	0.396	24093	24093	(5+6)-II-2	(5+6)-I-1	--	Parz.
408.4	10.7	27.0	0.397	10.7	27.0	0.396	24093	24093	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.8	27.0	0.399	10.7	27.0	0.396	24093	24093	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (5+6)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	3517	--	16421	19915	16421	0	24093	453.7	10.05	4.7
Des							24093			

Trave : 243 [326 , 327] Pilastrate [7 , 6]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 450.0 \text{ cm}$ $L_n = 450.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5085	2562	--	--	18.10	18.10	24093	24093	(5+6)-I-3	(3+4)-I-1	4.7
45.0	3595	2452	--	--	18.10	18.10	24093	24093	(5+6)-I-3	(3+4)-I-1	6.7
CAMP	2733	2421	--	--	18.10	18.10	24093	24093	(3+4)-I-1	(5+6)-I-3	8.8
405.0	4177	2578	--	--	18.10	18.10	24093	24093	(3+4)-I-1	(5+6)-I-3	5.8
FLN	5814	2540	--	--	18.10	18.10	24093	24093	(3+4)-I-1	(5+6)-I-3	4.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.8	27.0	0.399	10.7	27.0	0.396	24093	24093	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
45.0	10.7	27.0	0.398	10.7	27.0	0.396	24093	24093	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.7	27.0	0.397	10.7	27.0	0.396	24093	24093	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
405.0	10.8	27.0	0.398	10.7	27.0	0.397	24093	24093	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.8	27.0	0.400	10.7	27.0	0.396	24093	24093	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4449	--	16421	19915	16421	0	24093	450.0	10.05	3.7
Des							24093			

Trave : 244 [328 , 329] Pilastrate [5 , 8]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 517.0 \text{ cm}$ $L_n = 517.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6228	1987	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	3.0
51.7	4100	2546	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	4.6
CAMP	2306	2772	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	6.8
465.3	4235	1669	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	4.4
FLN	6348	1124	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	3.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.380	10.1	27.0	0.374	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
51.7	10.2	27.0	0.376	10.1	27.0	0.374	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.375	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
465.3	10.2	27.0	0.377	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.380	10.1	27.0	0.372	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
Sin	5048	--	16421	19915	16421	0	18798	517.0	10.05	3.3
Des							18798			

Trave : 244 [329 , 330] Pilastrate [8 , 13]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 395.2 \text{ cm}$ $L_n = 386.1 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6614	1268	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	2.8
38.6	4527	1851	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	4.2
CAMP	2712	2415	--	--	14.07	14.07	18798	18798	(3+4)-I-3	2	6.9
347.5	2931	2721	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	6.4
FLN	4650	2505	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	4.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.380	10.1	27.0	0.373	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
38.6	10.2	27.0	0.377	10.1	27.0	0.373	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(3+4)-I-3	2	Parz.	Parz.
347.5	10.1	27.0	0.375	10.1	27.0	0.375	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6829	--	16421	19915	16421	0	18798	386.1	10.05	2.4
Des							18798			

Trave : 245 [0 , 307] Pilastrate [-, 30]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 125.1 \text{ cm}$ $L_n = 125.6 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1286	2510	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	7.5
12.6	1845	2320	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	8.1
CAMP	6062	2131	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	3.1
113.0	6698	758	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	2.8
FLN	7342	547	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	2.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.373	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
12.6	10.1	27.0	0.373	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.2	27.0	0.379	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
113.0	10.3	27.0	0.380	10.0	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
FLN	10.3	27.0	0.381	10.0	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (5+6)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5833	--	16421	19915	16421	0	18798	125.6	10.05	2.8
Des							18798			

Trave : 245 [302 , 0] Pilastrate [2 , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 315.1 \text{ cm}$ $L_n = 314.8 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6147	1588	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	3.1
31.5	4335	2191	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	4.3
CAMP	2734	3248	--	--	14.07	14.07	18798	18798	(3+4)-II-1	2	5.8
283.3	503	2672	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	7.0
FLN	1758	2623	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	7.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.1	27.0	0.373	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
31.5	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
CAMP	10.1	27.0	0.375	10.1	27.0	0.375	18798	18798	(3+4)-II-1	2	Parz.	Parz.
283.3	10.0	27.0	0.372	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	10.1	27.0	0.373	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7512	--	16421	19915	16421	0	18798	314.8	10.05	2.2
Des							18798			

Trave : 246 [0 , 308] Pilastrate [- , 24]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 125.0 \text{ cm}$ $L_n = 118.8 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1584	2446	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	7.7
11.9	2146	2310	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	8.1
CAMP	6338	2175	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	3.0
106.9	6966	1161	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	2.7
FLN	7599	1001	--	--	14.07	14.07	18798	18798	(5+6)-II-2	(3+4)-II-1	2.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.373	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
11.9	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.1	27.0	0.374	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
106.9	10.3	27.0	0.381	10.1	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
FLN	10.3	27.0	0.382	10.0	27.0	0.372	18798	18798	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (5+6)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6104	--	16421	19915	16421	0	18798	118.8	10.05	2.7
Des							18798			

Trave : 246 [303 , 0] Pilastrate [3 , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 315.1 \text{ cm}$ $L_n = 299.7 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6093	2401	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	3.1
30.0	4350	2809	--	--	14.07	14.07	18798	18798	(3+4)-II-1	(5+6)-II-2	4.3
CAMP	2799	3131	--	--	14.07	14.07	18798	18798	(3+4)-II-1	2	6.0
269.7	740	2797	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	6.7
FLN	2018	2850	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	6.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.1	27.0	0.374	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
30.0	10.2	27.0	0.377	10.1	27.0	0.375	18798	18798	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
CAMP	10.1	27.0	0.375	10.1	27.0	0.375	18798	18798	(3+4)-II-1	2	Parz.	Parz.
269.7	10.0	27.0	0.372	10.1	27.0	0.375	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	10.1	27.0	0.374	10.1	27.0	0.375	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7041	--	16421	19915	16421	0	18798	299.7	10.05	2.3
Des							18798			

Trave : 247 [305, 0] Pilastrate [9, -]

Sez. R: By= 60.0 cm Bz=30.0 cm L=253.0 cm Ln=252.4 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5338	1543	--	--	18.10	18.10	24144	24144	(3+4)-I-3	(5+6)-I-1	4.5
25.2	4089	2071	--	--	18.10	18.10	24144	24144	(3+4)-I-3	(5+6)-I-1	5.9
CAMP	2952	3431	--	--	18.10	18.10	24144	24144	(3+4)-I-3	2	7.0
227.1	--	3380	--	--	18.10	18.10	24144	24144	(3+4)-I-3	2	7.1
FLN	--	3134	--	--	18.10	18.10	24144	24144	(3+4)-I-3	2	7.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.383	10.2	27.0	0.379	24144	24144	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
25.2	10.3	27.0	0.382	10.2	27.0	0.379	24144	24144	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.3	27.0	0.381	24144	24144	(3+4)-I-3	2	Parz.	Parz.
227.1	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-I-3	2	--	Parz.
FLN	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-I-3	2	--	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6322	--	19705	19915	19705	0	24144	252.4	10.05	3.1
Des							24144			

Trave : 247 [0, 306] Pilastrate [-, 23]

Sez. R: By= 60.0 cm Bz=30.0 cm L=257.1 cm Ln=256.3 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	--	3507	--	--	14.07	14.07	18858	18858	(3+4)-I-3	2	5.4

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
25.6	--	2908	--	--	14.07	14.07	18858	18858	(3+4)-I-1	(5+6)-I-3	6.5
CAMP	5101	2633	--	--	14.07	14.07	18858	18858	(5+6)-I-1	(5+6)-I-3	3.7
230.6	6140	1281	--	--	14.07	14.07	18858	18858	(5+6)-I-1	(3+4)-I-3	3.1
FLN	7212	1016	--	--	14.07	14.07	18858	18858	(5+6)-I-1	(3+4)-I-3	2.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	--	--	--	9.7	27.0	0.358	18858	18858	(3+4)-I-3	2	--	Parz.
25.6	--	--	--	9.7	27.0	0.358	18858	18858	(3+4)-I-1	(5+6)-I-3	--	Parz.
CAMP	9.7	27.0	0.360	9.6	27.0	0.357	18858	18858	(5+6)-I-1	(5+6)-I-3	Parz.	Parz.
230.6	9.8	27.0	0.362	9.6	27.0	0.355	18858	18858	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	9.8	27.0	0.363	9.6	27.0	0.355	18858	18858	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4843	--	19705	19915	19705	0	18858	256.3	10.05	4.1
Des							18858			

Trave : 248 [0 , 309] Pilastrate [- , 25]

Sez. R: $B_y = 60.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 257.1 \text{ cm}$ $L_n = 256.3 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	--	3864	--	--	18.10	18.10	24144	24144	(3+4)-I-1	(5+6)-I-3	6.2
25.6	--	3250	--	--	18.10	18.10	24144	24144	(3+4)-I-1	(5+6)-I-3	7.4
CAMP	4895	2375	--	--	18.10	18.10	24144	24144	(3+4)-I-3	(5+6)-I-1	4.9
230.6	5960	1186	--	--	18.10	18.10	24144	24144	(3+4)-I-3	(5+6)-I-1	4.1
FLN	7064	967	--	--	18.10	18.10	24144	24144	(3+4)-I-3	(5+6)-I-1	3.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-I-1	(5+6)-I-3	--	Parz.
25.6	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-I-1	(5+6)-I-3	--	Parz.
CAMP	10.3	27.0	0.382	10.3	27.0	0.380	24144	24144	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
230.6	10.4	27.0	0.384	10.2	27.0	0.378	24144	24144	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	10.4	27.0	0.385	10.2	27.0	0.378	24144	24144	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5099	--	19705	19915	19705	0	24144	256.3	10.05	3.9
Des							24144			

Trave : 248 [310 , 0] Pilastrate [10 , -]

Sez. R: $B_y = 60.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 253.0 \text{ cm}$ $L_n = 252.4 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5309	1472	--	--	18.10	18.10	24144	24144	(3+4)-I-1	(5+6)-I-3	4.5
25.2	4029	1978	--	--	18.10	18.10	24144	24144	(3+4)-I-1	(5+6)-I-3	6.0
CAMP	2867	3469	--	--	18.10	18.10	24144	24144	(3+4)-I-1	2	7.0
227.1	--	3485	--	--	18.10	18.10	24144	24144	(3+4)-I-1	(5+6)-I-3	6.9

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
FLN	--	3617	--	--	18.10	18.10	24144	24144	(3+4)-I-1	(5+6)-I-3	6.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.383	10.2	27.0	0.379	24144	24144	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
25.2	10.3	27.0	0.382	10.2	27.0	0.379	24144	24144	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.3	27.0	0.381	24144	24144	(3+4)-I-1	2	Parz.	Parz.
227.1	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-I-1	(5+6)-I-3	--	Parz.
FLN	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-I-1	(5+6)-I-3	--	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6363	--	19705	19915	19705	0	24144	252.4	10.05	3.1
Des							24144			

Trave : 249 [0 , 313] Pilastrate [- , 32]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 122.6 \text{ cm}$ $L_n = 122.6 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	661	1475	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	13
12.3	1050	1445	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	13
CAMP	4119	1421	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	4.6
110.3	4590	1222	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	4.1
FLN	5067	1178	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	3.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.0	27.0	0.372	10.1	27.0	0.373	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
12.3	10.1	27.0	0.372	10.1	27.0	0.373	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.2	27.0	0.376	10.1	27.0	0.373	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
110.3	10.2	27.0	0.377	10.1	27.0	0.372	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	10.2	27.0	0.378	10.1	27.0	0.372	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4568	--	16421	19915	16421	0	18798	122.6	10.05	3.6
Des							18798			

Trave : 249 [314 , 0] Pilastrate [11 , -]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 253.0 \text{ cm}$ $L_n = 252.4 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	3935	2926	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	4.8
25.2	3045	2894	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	6.2
CAMP	2235	2783	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	6.8
227.2	291	1254	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	15
FLN	1033	1414	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	13

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.376	10.1	27.0	0.375	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
25.2	10.1	27.0	0.375	10.1	27.0	0.375	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.375	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
227.2	10.0	27.0	0.371	10.1	27.0	0.373	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	10.1	27.0	0.372	10.1	27.0	0.373	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(5+6)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4302	--	16421	19915	16421	0	18798	252.4	10.05	3.8
Des							18798			

Trave : 250 [318 , 317] Pilastrate [12 , 34]

Sez. R: $B_y=50.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=375.1\text{ cm}$ $L_n=375.0\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cm²], $f_{ym}=4500$ [kg/cm²], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4503	2607	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	4.2
37.5	2868	2860	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	6.6
CAMP	--	2873	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-I-3	6.5
337.5	4116	1238	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	4.6
FLN	6171	566	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	3.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
37.5	10.1	27.0	0.375	10.1	27.0	0.375	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	--	--	--	10.1	27.0	0.375	18798	18798	(3+4)-II-2	(5+6)-I-3	--	Parz.
337.5	10.2	27.0	0.376	10.1	27.0	0.372	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	10.2	27.0	0.380	10.0	27.0	0.372	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7101	--	16421	19915	16421	0	18798	375.0	10.05	2.3
Des							18798			

Trave : 251 [323 , 329] Pilastrate [29 , 8]

Sez. R: $B_y=50.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=288.5\text{ cm}$ $L_n=288.5\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cm²], $f_{ym}=4500$ [kg/cm²], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6023	4643	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	3.1
28.8	4831	3981	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	3.9
CAMP	3675	3283	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	5.1
259.6	2618	3405	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	5.5
FLN	3605	4272	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.2	27.0	0.377	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
28.8	10.2	27.0	0.378	10.2	27.0	0.376	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
CAMP	10.1	27.0	0.376	10.1	27.0	0.375	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
259.6	10.1	27.0	0.374	10.1	27.0	0.375	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	10.1	27.0	0.376	10.2	27.0	0.377	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5262	--	16421	19915	16421	0	18798	288.5	10.05	3.1
Des							18798			

Trave : 251 [317 , 323] Pilastrate [34 , 29]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 475.0 \text{ cm}$ $L_n = 475.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5342	3892	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	3.5
47.5	4037	3360	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	4.7
CAMP	2816	2743	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	6.7
427.5	3945	3359	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	4.8
FLN	5238	3903	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	3.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.378	10.2	27.0	0.376	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
47.5	10.2	27.0	0.376	10.1	27.0	0.375	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
CAMP	10.1	27.0	0.375	10.1	27.0	0.375	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
427.5	10.2	27.0	0.376	10.1	27.0	0.375	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	10.2	27.0	0.378	10.2	27.0	0.376	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	3481	--	16421	19915	16421	0	18798	475.0	10.05	4.7
Des							18798			

Trave : 252 [328 , 322] Pilastrate [5 , 28]

Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 472.3 \text{ cm}$ $L_n = 481.1 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	3395	2652	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	5.5
48.1	2375	2337	--	--	14.07	14.07	18798	18798	(3+4)-II-2	(5+6)-II-1	7.9
CAMP	2381	2248	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	7.9
433.0	3409	2555	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	5.5
FLN	4524	2774	--	--	14.07	14.07	18798	18798	(5+6)-II-1	(3+4)-II-2	4.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.1	27.0	0.375	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
48.1	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
433.0	10.1	27.0	0.375	10.1	27.0	0.374	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.2	27.0	0.377	10.1	27.0	0.375	18798	18798	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (5+6)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	2869	--	16421	19915	16421	0	18798	481.1	10.05	5.7
Des							18798			

Trave : 253 [327 , 0] Pilastrate [6 , -]

Sez. R: $B_y = 60.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 458.5 \text{ cm}$ $L_n = 449.2 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6932	--	--	--	18.10	18.10	24144	24144	(3+4)-II-2	(5+6)-II-1	3.5
44.9	4024	1074	--	--	18.10	18.10	24144	24144	(3+4)-II-2	(5+6)-II-1	6.0
CAMP	--	6576	--	--	18.10	18.10	24144	24144	(3+4)-I-1	2	3.7
404.3	229	3326	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	7.3
FLN	2340	2292	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	10

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.4	27.0	0.385	--	--	--	24144	24144	(3+4)-II-2	(5+6)-II-1	Parz.	--
44.9	10.3	27.0	0.382	10.2	27.0	0.378	24144	24144	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	--	--	--	10.4	27.0	0.384	24144	24144	(3+4)-I-1	2	--	Parz.
404.3	10.2	27.0	0.377	10.3	27.0	0.381	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.3	27.0	0.380	10.2	27.0	0.380	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	10296	--	19705	19915	19705	0	24144	449.2	10.05	1.9
Des							24144			

Trave : 253 [0 , 321] Pilastrate [- , 27]

Sez. R: $B_y = 60.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 140.0 \text{ cm}$ $L_n = 137.9 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cm²], $f_{ym} = 4500$ [kg/cm²], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1968	2494	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	9.7
13.8	2682	1958	--	--	18.10	18.10	24144	24144	(5+6)-II-1	(3+4)-II-2	9.0
CAMP	8745	--	--	--	18.10	18.10	24144	24144	2	(3+4)-II-2	2.8
124.1	9925	--	--	--	18.10	18.10	24144	24144	2	(3+4)-II-2	2.4
FLN	11116	--	--	--	18.10	18.10	24144	24144	2	(3+4)-II-2	2.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.3	27.0	0.380	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
13.8	10.3	27.0	0.380	10.2	27.0	0.379	24144	24144	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
CAMP	10.4	27.0	0.387	--	--	--	24144	24144	2	(3+4)-II-2	Parz.	--
124.1	10.5	27.0	0.389	--	--	--	24144	24144	2	(3+4)-II-2	Parz.	--
FLN	10.5	27.0	0.390	--	--	--	24144	24144	2	(3+4)-II-2	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8679	--	19705	19915	19705	0	24144	137.9	10.05	2.3
Des							24144			

Trave : 254 | 319 , 0 | Pilastrate [16 , -]

Sez. R: $B_y=60.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=253.0\text{ cm}$ $L_n=238.9\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5368	2088	--	--	18.10	18.10	24144	24144	(3+4)-I-3	(5+6)-I-1	4.5
23.9	4183	2544	--	--	18.10	18.10	24144	24144	(3+4)-I-3	(5+6)-I-1	5.8
CAMP	3097	3451	--	--	18.10	18.10	24144	24144	(3+4)-I-3	2	7.0
215.0	--	3426	--	--	18.10	18.10	24144	24144	(3+4)-I-3	2	7.0
FLN	--	3225	--	--	18.10	18.10	24144	24144	(3+4)-II-2	2	7.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.383	10.2	27.0	0.379	24144	24144	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
23.9	10.3	27.0	0.382	10.3	27.0	0.380	24144	24144	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.3	27.0	0.381	24144	24144	(3+4)-I-3	2	Parz.	Parz.
215.0	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-I-3	2	--	Parz.
FLN	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-II-2	2	--	Parz.

Verifica a taglio: $\cot(\theta)=2.500$

Comb =2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	6137	--	19705	19915	19705	0	24144	238.9	10.05	3.2
Des							24144			

Trave : 254 | 0 , 320 | Pilastrate [- , 26]

Sez. R: $B_y=60.0\text{ cm}$ $B_z=30.0\text{ cm}$ $L=257.2\text{ cm}$ $L_n=249.6\text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

$q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	--	3474	--	--	18.10	18.10	24144	24144	(3+4)-II-2	2	7.0
25.0	--	2847	--	--	18.10	18.10	24144	24144	(3+4)-I-3	2	8.5
CAMP	5167	2427	--	--	18.10	18.10	24144	24144	(5+6)-I-1	(5+6)-I-3	4.7
224.6	6216	1855	--	--	18.10	18.10	24144	24144	(5+6)-I-1	(3+4)-I-3	3.9
FLN	7294	1673	--	--	18.10	18.10	24144	24144	(5+6)-I-1	(3+4)-I-3	3.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	--	--	--	10.3	27.0	0.381	24144	24144	(3+4)-II-2	2	--	Parz.
25.0	--	--	--	10.3	27.0	0.380	24144	24144	(3+4)-I-3	2	--	Parz.
CAMP	10.3	27.0	0.383	10.3	27.0	0.380	24144	24144	(5+6)-I-1	(5+6)-I-3	Parz.	Parz.
224.6	10.4	27.0	0.384	10.2	27.0	0.379	24144	24144	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.4	27.0	0.385	10.2	27.0	0.379	24144	24144	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta)=2.500$

Comb =(5+6)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4986	--	19705	19915	19705	0	24144	249.6	10.05	4.0
Des							24144			

Trave : 255 [315 , 0] Pilastrate [17 , -]Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 253.0 \text{ cm}$ $L_n = 252.4 \text{ cm}$ Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$ qd=2, qf=1.5 :: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4352	2654	--	--	18.10	18.10	24093	24093	(3+4)-I-3	(5+6)-I-1	5.5
25.2	3405	2706	--	--	18.10	18.10	24093	24093	(3+4)-I-3	(5+6)-I-1	7.1
CAMP	2538	2678	--	--	18.10	18.10	24093	24093	(3+4)-I-3	(5+6)-I-1	9.0
227.2	--	1285	--	--	18.10	18.10	24093	24093	(3+4)-I-1	(5+6)-I-3	19
FLN	481	1495	--	--	18.10	18.10	24093	24093	(3+4)-I-1	(5+6)-I-3	16

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.8	27.0	0.399	10.7	27.0	0.397	24093	24093	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
25.2	10.7	27.0	0.397	10.7	27.0	0.397	24093	24093	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.7	27.0	0.396	10.7	27.0	0.397	24093	24093	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
227.2	--	--	--	10.7	27.0	0.395	24093	24093	(3+4)-I-1	(5+6)-I-3	--	Parz.
FLN	10.6	27.0	0.394	10.7	27.0	0.395	24093	24093	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4505	--	16421	19915	16421	0	24093	252.4	10.05	3.6
Des							24093			

Trave : 255 [0 , 316] Pilastrate [- , 31]Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 142.1 \text{ cm}$ $L_n = 142.1 \text{ cm}$ Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$ qd=2, qf=1.5 :: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	235	1719	--	--	18.10	18.10	24093	24093	(5+6)-I-1	(3+4)-I-3	14
14.2	660	1724	--	--	18.10	18.10	24093	24093	(5+6)-I-1	(3+4)-I-3	14
CAMP	3947	1732	--	--	18.10	18.10	24093	24093	(5+6)-I-1	(3+4)-I-3	6.1
127.9	4452	1620	--	--	18.10	18.10	24093	24093	(5+6)-I-1	(3+4)-I-3	5.4
FLN	4964	1578	--	--	18.10	18.10	24093	24093	(5+6)-I-1	(3+4)-I-3	4.9

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.6	27.0	0.394	10.7	27.0	0.396	24093	24093	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
14.2	10.6	27.0	0.394	10.7	27.0	0.396	24093	24093	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
CAMP	10.7	27.0	0.398	10.7	27.0	0.396	24093	24093	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
127.9	10.8	27.0	0.399	10.7	27.0	0.395	24093	24093	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.8	27.0	0.399	10.7	27.0	0.395	24093	24093	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4209	--	16421	19915	16421	0	24093	142.1	10.05	3.9
Des							24093			

Trave : 256 [311 , 0] Pilastrate [18 , -]Sez. R: $B_y = 50.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 253.0 \text{ cm}$ $L_n = 252.4 \text{ cm}$

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4240	2645	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	4.4
25.2	3317	2694	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	5.7
CAMP	2473	2663	--	--	14.07	14.07	18798	18798	(3+4)-I-3	(5+6)-I-1	7.1
227.2	--	1245	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	15
FLN	496	1431	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	13

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.377	10.1	27.0	0.374	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
25.2	10.1	27.0	0.375	10.1	27.0	0.374	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
227.2	--	--	--	10.1	27.0	0.373	18798	18798	(3+4)-I-1	(5+6)-I-3	--	Parz.
FLN	10.0	27.0	0.372	10.1	27.0	0.373	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4396	--	16421	19915	16421	0	18798	252.4	10.05	3.7
Des							18798			

Trave : 256 [0 , 312] Pilastrate [- , 33]

Sez. R: $B_y = 50.0$ cm $B_z = 30.0$ cm $L = 142.1$ cm $L_n = 142.1$ cm

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	178	1540	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	12
14.2	613	1558	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	12
CAMP	3979	1603	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	4.7
127.9	4495	1550	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	4.2
FLN	5018	1519	--	--	14.07	14.07	18798	18798	(5+6)-I-1	(3+4)-I-3	3.7

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.0	27.0	0.371	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
14.2	10.0	27.0	0.372	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
CAMP	10.2	27.0	0.376	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
127.9	10.2	27.0	0.377	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	10.2	27.0	0.378	10.1	27.0	0.373	18798	18798	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (5+6)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4303	--	16832	19915	16832	0	18798	142.1	10.05	3.9
Des							18798			

Trave : 257 [322 , 323] Pilastrate [28 , 29]

Sez. R: $B_y = 50.0$ cm $B_z = 30.0$ cm $L = 480.0$ cm $L_n = 465.0$ cm

Criteria : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$
 $q_d=2$, $q_f=1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
ILN	6104	1950	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	3.1
46.5	4117	2339	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	4.6
CAMP	2413	2445	--	--	14.07	14.07	18798	18798	(5+6)-I-3	(3+4)-I-1	7.7
418.5	4106	2221	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	4.6
FLN	5991	1933	--	--	14.07	14.07	18798	18798	(3+4)-I-1	(5+6)-I-3	3.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.1	27.0	0.373	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
46.5	10.2	27.0	0.376	10.1	27.0	0.374	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	10.1	27.0	0.374	10.1	27.0	0.374	18798	18798	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
418.5	10.2	27.0	0.376	10.1	27.0	0.374	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.2	27.0	0.379	10.1	27.0	0.373	18798	18798	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (5+6)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	5157	--	16421	19915	16421	0	18798	465.0	10.05	3.2
Des							18798			

Trave : 258 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 253.0 \text{ cm}$ $L_n = 253.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1164	765	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	6.9
25.3	988	753	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	8.1
CAMP	823	733	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	9.8
227.7	54	444	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	18
FLN	54	435	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	19

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.381	10.3	27.0	0.380	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
25.3	10.3	27.0	0.380	10.2	27.0	0.380	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.2	27.0	0.380	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
227.7	10.2	27.0	0.377	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.2	27.0	0.377	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	854	--	6568	9957	6568	0	8048	253.0	5.03	7.7
Des							8048			

Trave : 258 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 592.2 \text{ cm}$ $L_n = 592.2 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	178	218	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	37
59.2	--	349	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	23
CAMP	598	592	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	13

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
533.0	921	135	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	8.7
FLN	1296	--	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	6.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.378	10.2	27.0	0.378	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
59.2	--	--	--	10.2	27.0	0.378	8048	8048	(3+4)-I-1	(5+6)-I-3	--	Parz.
CAMP	10.2	27.0	0.379	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
533.0	10.3	27.0	0.380	10.2	27.0	0.378	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.381	--	--	--	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = 2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	744	--	6568	9957	6568	0	8048	592.2	5.03	8.8
Des							8048			

Trave : 259 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 441.4 \text{ cm}$ $L_n = 431.4 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1446	762	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	5.6
43.1	1101	698	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	7.3
CAMP	784	607	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	10
388.3	821	654	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	9.8
FLN	1137	747	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	7.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.382	10.2	27.0	0.380	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
43.1	10.3	27.0	0.381	10.2	27.0	0.379	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.2	27.0	0.379	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
388.3	10.3	27.0	0.380	10.2	27.0	0.379	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.3	27.0	0.381	10.2	27.0	0.380	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	990	--	6568	9957	6568	0	8048	431.4	5.03	6.6
Des							8048			

Trave : 259 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 160.0 \text{ cm}$ $L_n = 160.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1406	--	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	5.7
16.0	1293	--	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	6.2
CAMP	1185	230	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	6.8
144.0	570	284	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	14
FLN	503	336	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	16

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.382	--	--	--	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	--
16.0	10.3	27.0	0.381	--	--	--	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	--
CAMP	10.3	27.0	0.381	10.2	27.0	0.378	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
144.0	10.2	27.0	0.379	10.2	27.0	0.378	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
FLN	10.2	27.0	0.379	10.2	27.0	0.378	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(5+6)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	953	--	6568	9957	6568	0	8048	160.0	5.03	6.9
Des							8048			

Trave : 260 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 597.8 \text{ cm}$ $L_n = 597.8 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1345	--	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	6.0
59.8	953	156	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	8.4
CAMP	617	588	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	13
538.0	80	425	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	19
FLN	308	312	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	26

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.382	--	--	--	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	--
59.8	10.3	27.0	0.380	10.2	27.0	0.378	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.2	27.0	0.379	10.2	27.0	0.379	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
538.0	10.2	27.0	0.377	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.2	27.0	0.378	10.2	27.0	0.378	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	755	--	6568	9957	6568	0	8048	597.8	5.03	8.7
Des							8048			

Trave : 260 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 247.6 \text{ cm}$ $L_n = 247.6 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	200	572	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	14
24.8	161	542	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	15
CAMP	781	709	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	10
222.8	945	733	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	8.5
FLN	1120	751	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	7.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.378	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
24.8	10.2	27.0	0.378	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
222.8	10.3	27.0	0.380	10.2	27.0	0.380	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.381	10.2	27.0	0.380	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	900	--	6568	9957	6568	0	8048	247.6	5.03	7.3
Des							8048			

Trave : 261 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 441.8 \text{ cm}$ $L_n = 431.8 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1685	920	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	4.8
43.2	1294	826	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	6.2
CAMP	930	703	--	--	6.03	6.03	8048	8048	(3+4)-II-2	(5+6)-II-1	8.7
388.6	937	832	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	8.6
FLN	1284	972	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	6.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.383	10.3	27.0	0.380	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
43.2	10.3	27.0	0.381	10.3	27.0	0.380	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.2	27.0	0.379	8048	8048	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
388.6	10.3	27.0	0.380	10.3	27.0	0.380	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	10.3	27.0	0.381	10.3	27.0	0.380	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	1126	--	6568	9957	6568	0	8048	431.8	5.03	5.8
Des							8048			

Trave : 261 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 159.9 \text{ cm}$ $L_n = 159.9 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}$, $f_{ym} = 4500 \text{ [kg/cmq]}$, $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1525	--	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	5.3
16.0	1423	--	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	5.7
CAMP	1326	380	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	6.1
143.9	767	443	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	10
FLN	705	503	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	11

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.382	--	--	--	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	--
16.0	10.3	27.0	0.382	--	--	--	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	--
CAMP	10.3	27.0	0.381	10.2	27.0	0.378	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
143.9	10.3	27.0	0.380	10.2	27.0	0.379	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
FLN	10.2	27.0	0.379	10.2	27.0	0.379	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(5+6)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	1031	--	6568	9957	6568	0	8048	159.9	5.03	6.4
Des							8048			

Trave : 262 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 253.0 \text{ cm}$ $L_n = 238.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1204	907	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	6.7
23.8	1043	882	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	7.7
CAMP	891	850	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	9.0
214.2	74	397	--	--	6.03	6.03	8048	8048	(3+4)-I-3	(5+6)-I-1	20
FLN	19	325	--	--	6.03	6.03	8048	8048	(3+4)-II-1	(5+6)-II-2	25

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.381	10.3	27.0	0.380	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
23.8	10.3	27.0	0.381	10.3	27.0	0.380	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.3	27.0	0.380	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
214.2	10.2	27.0	0.377	10.2	27.0	0.378	8048	8048	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	10.2	27.0	0.377	10.2	27.0	0.378	8048	8048	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-I-3

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	827	--	6568	9957	6568	0	8048	238.0	5.03	7.9
Des							8048			

Trave : 262 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 598.5 \text{ cm}$ $L_n = 587.9 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	162	82	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	50
58.8	--	242	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	33
CAMP	600	636	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	13
529.1	914	308	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	8.8
FLN	1279	98	--	--	6.03	6.03	8048	8048	(3+4)-I-1	(5+6)-I-3	6.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.378	10.2	27.0	0.377	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
58.8	--	--	--	10.2	27.0	0.378	8048	8048	(5+6)-II-1	(3+4)-II-2	--	Parz.
CAMP	10.2	27.0	0.379	10.2	27.0	0.379	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
529.1	10.3	27.0	0.380	10.2	27.0	0.378	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	10.3	27.0	0.381	10.2	27.0	0.378	8048	8048	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	711	--	6568	9957	6568	0	8048	587.9	5.03	9.2
Des							8048			

Trave : 263 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 147.6 \text{ cm}$ $L_n = 142.5 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	562	202	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	14
14.2	634	158	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	13
CAMP	1241	--	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	6.5
128.2	1341	--	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	6.0
FLN	1445	--	--	--	6.03	6.03	8048	8048	(5+6)-II-1	(3+4)-II-2	5.6

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.2	27.0	0.379	10.2	27.0	0.378	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
14.2	10.2	27.0	0.379	10.2	27.0	0.378	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
CAMP	10.3	27.0	0.381	--	--	--	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	--
128.2	10.3	27.0	0.382	--	--	--	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	--
FLN	10.3	27.0	0.382	--	--	--	8048	8048	(5+6)-II-1	(3+4)-II-2	Parz.	--

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (5+6)-I-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	970	--	6568	9957	6568	0	8048	142.5	5.03	6.8
Des							8048			

Trave : 263 [0 , 0] Pilastrate [- , -]

Sez. R: $B_y = 20.0 \text{ cm}$ $B_z = 30.0 \text{ cm}$ $L = 463.8 \text{ cm}$ $L_n = 463.8 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200$ [kg/cmq], $f_{ym} = 4500$ [kg/cmq], $FC = 1.20$

$q_d = 2$, $q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	1226	749	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	6.6
46.4	883	669	--	--	6.03	6.03	8048	8048	(5+6)-II-2	(3+4)-II-1	9.1
CAMP	796	614	--	--	6.03	6.03	8048	8048	(3+4)-II-1	(5+6)-II-2	10
417.4	1134	699	--	--	6.03	6.03	8048	8048	(3+4)-II-1	(5+6)-II-2	7.1
FLN	1505	751	--	--	6.03	6.03	8048	8048	(3+4)-II-1	(5+6)-II-2	5.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	10.3	27.0	0.381	10.2	27.0	0.380	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
46.4	10.3	27.0	0.380	10.2	27.0	0.379	8048	8048	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	10.3	27.0	0.380	10.2	27.0	0.379	8048	8048	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
417.4	10.3	27.0	0.381	10.2	27.0	0.379	8048	8048	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	10.3	27.0	0.382	10.2	27.0	0.380	8048	8048	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-1

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin										
Des										

Sez	Td	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
Sin	986	--	6568	9957	6568	0	8048	463.8	5.03	6.7
Des							8048			

Trave : 264 [126 , 124] Pilastrate [7 , 15]

Sez. R rinf.: By= 78.0 cm, Bz=29.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=4.0 cm L=518.2 cm Ln=510.3 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	9365	--	--	--	22.12	22.12	35324	37678	2	(5+6)-I-3	3.8
51.0	4425	201	--	--	22.12	22.12	35324	37678	(3+4)-I-1	(5+6)-I-3	8.0
CAMP	--	6763	--	--	22.12	22.12	35324	37678	(5+6)-I-3	2	5.6
459.2	4587	699	--	--	22.12	22.12	35324	37678	(3+4)-I-3	(5+6)-I-1	7.7
FLN	9163	--	--	--	22.12	22.12	35324	37678	2	(5+6)-I-1	3.9

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	8.9	31.0	0.288	--	--	--	35324	37678	2	(5+6)-I-3	Parz.	--
51.0	8.8	31.0	0.285	16.5	29.9	0.554	35324	37678	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	--	--	--	16.7	29.9	0.558	35324	37678	(5+6)-I-3	2	--	Parz.
459.2	8.9	31.0	0.285	16.6	29.9	0.554	35324	37678	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
FLN	8.9	31.0	0.288	--	--	--	35324	37678	2	(5+6)-I-1	Parz.	--

Verifica a taglio: cot(θ) = 2.500

Comb = 2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	12663	532	--	28901	19915	20447	0	37678	510.3	10.05	1.6
Des								35324			

Trave : 265 [417 , 423] Pilastrate [34 , 29]

Sez. R rinf.: By= 48.0 cm, Bz=44.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=19.0 cm L=475.0 cm Ln=460.4 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8916	2581	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	5.4
46.0	5385	2340	--	--	20.11	20.11	48528	53610	(3+4)-II-1	(5+6)-II-2	9.0
CAMP	4483	6367	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	8.4
414.4	6951	7669	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	7.0
FLN	9565	8832	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	5.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.4	44.2	0.302	24.0	43.4	0.554	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
46.0	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
CAMP	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
414.4	13.3	44.2	0.302	24.1	43.4	0.556	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	13.4	44.2	0.303	24.1	43.4	0.556	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = (5+6)-II-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9210	1453	--	29631	30979	29631	0	53610	460.4	10.05	3.2
Des								48528			

Trave : 265 [413 , 417] Pilastrate [32 , 34]Sez. R rinf.: $B_y=48.0\text{ cm}, B_z=44.0\text{ cm}, s.\text{ inf.}=4.0\text{ cm}, s.\text{ lat.}=4.0\text{ cm}, h.\text{ lat.}=19.0\text{ cm}$ $L=310.0\text{ cm}$ $L_n=310.0\text{ cm}$ Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$ qd=2, qf=1.5 :: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6921	2874	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	7.0
31.0	4825	2656	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	10
CAMP	2793	1046	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(5+6)-I-3	17
279.0	4874	1907	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	10.0
FLN	7096	2067	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	6.8

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.3	44.2	0.302	24.0	43.4	0.554	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
31.0	13.3	44.2	0.301	24.0	43.4	0.554	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
CAMP	13.3	44.2	0.300	24.0	43.4	0.553	48528	53610	(5+6)-II-1	(5+6)-I-3	Parz.	Parz.
279.0	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
FLN	13.3	44.2	0.302	24.0	43.4	0.553	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta)=2.500$

Comb =(3+4)-II-2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8554	1453	--	29631	30979	29631	0	53610	310.0	10.05	3.5
Des								48528			

Trave : 266 [421 , 420] Pilastrate [27 , 26]Sez. R rinf.: $B_y=48.0\text{ cm}, B_z=44.0\text{ cm}, s.\text{ inf.}=4.0\text{ cm}, s.\text{ lat.}=4.0\text{ cm}, h.\text{ lat.}=19.0\text{ cm}$ $L=345.0\text{ cm}$ $L_n=345.0\text{ cm}$ Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$ qd=2, qf=1.5 :: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8357	4309	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	5.8
34.5	5865	3824	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	8.3
CAMP	--	4399	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(3+4)-I-1	12
310.5	3272	5396	--	--	20.11	20.11	48528	53610	(5+6)-I-3	(3+4)-I-1	9.9
FLN	5030	6322	--	--	20.11	20.11	48528	53610	(5+6)-I-3	(3+4)-I-1	8.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.4	44.2	0.302	24.0	43.4	0.554	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
34.5	13.3	44.2	0.301	24.0	43.4	0.554	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
CAMP	--	--	--	24.0	43.4	0.554	48528	53610	(3+4)-II-2	(3+4)-I-1	--	Parz.
310.5	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
FLN	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.

Verifica a taglio: $\cot(\theta)=2.500$

Comb =(3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8808	1453	--	29631	30979	29631	0	53610	345.0	10.05	3.4
Des								48528			

Trave : 266 [422 , 421] Pilastrate [28 , 27]Sez. R rinf.: $B_y=48.0\text{ cm}, B_z=44.0\text{ cm}, s.\text{ inf.}=4.0\text{ cm}, s.\text{ lat.}=4.0\text{ cm}, h.\text{ lat.}=19.0\text{ cm}$ $L=310.0\text{ cm}$ $L_n=325.0\text{ cm}$ Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm}=200$ [kg/cmq], $f_{ym}=4500$ [kg/cmq], $FC=1.20$

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4133	--	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-I-1	12
32.5	2825	92	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-I-1	17
CAMP	1599	927	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-II-1	30
292.5	2362	367	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	21
FLN	3751	--	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	13

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.3	44.2	0.301	--	--	--	48528	53610	(3+4)-I-3	(5+6)-I-1	Parz.	--
32.5	13.3	44.2	0.300	23.9	43.3	0.552	48528	53610	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	13.3	44.2	0.300	24.0	43.3	0.553	48528	53610	(3+4)-I-3	(5+6)-II-1	Parz.	Parz.
292.5	13.3	44.2	0.300	24.0	43.3	0.552	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	13.3	44.2	0.301	--	--	--	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	--

Verifica a taglio: cot(θ) = 2.500

Comb = (3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	4841	1453	--	29631	30979	29631	0	53610	325.0	10.05	6.1
Des								48528			

Trave : 266 [422 , 423] Pilastrate [28 , 29]

Sez. R rinf.: By= 48.0 cm, Bz=44.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=19.0 cm L=480.0 cm Ln=465.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	8644	2771	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-I-1	5.6
46.5	5342	2862	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-I-1	9.1
CAMP	--	4239	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-I-3	13
418.5	3749	4723	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	11
FLN	5755	5069	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	8.4

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.4	44.2	0.302	24.0	43.4	0.554	48528	53610	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
46.5	13.3	44.2	0.301	24.0	43.4	0.554	48528	53610	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	--	--	--	24.0	43.4	0.554	48528	53610	(3+4)-II-2	(5+6)-I-3	--	Parz.
418.5	13.3	44.2	0.301	24.0	43.4	0.555	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: cot(θ) = 2.500

Comb = (5+6)-I-3

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8445	1453	--	29631	30979	29631	0	53610	465.0	10.05	3.5
Des								48528			

Trave : 267 [420 , 416] Pilastrate [26 , 31]

Sez. R rinf.: By= 48.0 cm, Bz=44.0 cm, s. inf.=4.0 cm, s.lat.=4.0 cm, h lat.=19.0 cm L=488.7 cm Ln=469.7 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq], fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 :: **Verificato**

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	9955	7813	--	--	20.11	20.11	48528	53610	(5+6)-II-2	(3+4)-II-1	4.9

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
47.0	6929	7232	--	--	20.11	20.11	48528	53610	(5+6)-II-2	(3+4)-II-1	7.0
CAMP	4131	6424	--	--	20.11	20.11	48528	53610	(5+6)-II-2	(3+4)-II-1	8.3
422.7	5012	1959	--	--	20.11	20.11	48528	53610	(3+4)-II-1	(5+6)-II-2	9.7
FLN	8896	1643	--	--	20.11	20.11	48528	53610	(3+4)-II-1	(5+6)-II-2	5.5

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.4	44.2	0.303	24.1	43.4	0.556	48528	53610	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
47.0	13.3	44.2	0.302	24.1	43.4	0.556	48528	53610	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
CAMP	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-II-2	(3+4)-II-1	Parz.	Parz.
422.7	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	13.4	44.2	0.302	24.0	43.4	0.553	48528	53610	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	9701	1453	--	29631	30979	29631	0	53610	469.7	10.05	3.1
Des								48528			

Trave : 267 [416 , 412] Pilastrate [31 , 33]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 44.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 19.0 \text{ cm} \quad L = 310.0 \text{ cm} \quad L_n = 310.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5 :: \text{Verificato}$

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6334	1541	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	7.7
31.0	4257	1504	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	11
CAMP	2724	1198	--	--	20.11	20.11	48528	53610	(3+4)-II-1	(5+6)-I-1	18
279.0	4690	2135	--	--	20.11	20.11	48528	53610	(3+4)-II-1	(5+6)-II-2	10
FLN	6721	2181	--	--	20.11	20.11	48528	53610	(3+4)-II-1	(5+6)-II-2	7.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.3	44.2	0.302	24.0	43.4	0.553	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
31.0	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	13.3	44.2	0.300	24.0	43.4	0.553	48528	53610	(3+4)-II-1	(5+6)-I-1	Parz.	Parz.
279.0	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.
FLN	13.3	44.2	0.302	24.0	43.4	0.553	48528	53610	(3+4)-II-1	(5+6)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7947	1453	--	29631	30979	29631	0	53610	310.0	10.05	3.7
Des								48528			

Trave : 267 [412 , 406] Pilastrate [33 , 23]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 44.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 19.0 \text{ cm} \quad L = 454.8 \text{ cm} \quad L_n = 469.7 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5 :: \text{Verificato}$

X	M-	M+	ΔM-	ΔM+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7358	763	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	6.6
47.0	3809	1313	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	13
CAMP	3783	5913	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	9.1
422.7	5617	5772	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	8.6

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
FLN	7678	5408	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	6.3

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.3	44.2	0.302	24.0	43.3	0.553	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
47.0	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
CAMP	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
422.7	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	13.4	44.2	0.302	24.1	43.4	0.555	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-II-2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8794	1453	--	29631	30979	29631	0	53610	469.7	10.05	3.4
Des								48528			

Trave : 268 [406 , 407] Pilastrate [23 , 30]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 44.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 19.0 \text{ cm}$ $L = 347.3 \text{ cm}$ $L_n = 360.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	4216	6782	--	--	20.11	20.11	48528	53610	(5+6)-I-3	(3+4)-I-1	7.9
36.0	2907	5874	--	--	20.11	20.11	48528	53610	(5+6)-I-3	(3+4)-I-1	9.1
CAMP	--	4881	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(3+4)-I-1	11
324.0	4501	1563	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	11
FLN	6860	1384	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	7.1

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.3	44.2	0.301	24.1	43.4	0.556	48528	53610	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
36.0	13.3	44.2	0.300	24.1	43.4	0.555	48528	53610	(5+6)-I-3	(3+4)-I-1	Parz.	Parz.
CAMP	--	--	--	24.0	43.4	0.555	48528	53610	(3+4)-I-3	(3+4)-I-1	--	Parz.
324.0	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	13.3	44.2	0.302	24.0	43.4	0.553	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb = (3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7703	1453	--	29631	30979	29631	0	53610	360.0	10.05	3.8
Des								48528			

Trave : 268 [407 , 408] Pilastrate [30 , 24]

Sez. R rinf.: $B_y = 48.0 \text{ cm}, B_z = 44.0 \text{ cm}, s. \text{ inf.} = 4.0 \text{ cm}, s. \text{ lat.} = 4.0 \text{ cm}, h \text{ lat.} = 19.0 \text{ cm}$ $L = 310.0 \text{ cm}$ $L_n = 310.0 \text{ cm}$

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione $r_{cm} = 200 \text{ [kg/cmq]}, f_{ym} = 4500 \text{ [kg/cmq]}, FC = 1.20$

$q_d = 2, q_f = 1.5$:: **Verificato**

X	M-	M+	$\Delta M-$	$\Delta M+$	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	5879	2152	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-I-1	8.3
31.0	3985	2107	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-I-1	12
CAMP	2158	1489	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-II-2	22
279.0	4078	1407	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	12
FLN	6081	1315	--	--	20.11	20.11	48528	53610	(3+4)-I-1	(5+6)-I-3	8.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
31.0	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	13.3	44.2	0.300	24.0	43.4	0.553	48528	53610	(3+4)-I-3	(5+6)-II-2	Parz.	Parz.
279.0	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.
FLN	13.3	44.2	0.302	24.0	43.4	0.553	48528	53610	(3+4)-I-1	(5+6)-I-3	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-1

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	7606	1453	--	29631	30979	29631	0	53610	310.0	10.05	3.9
Des								48528			

Trave : 268 [408 , 409] Pilastrate [24 , 25]

Sez. R rinf.: By= 48.0 cm,Bz=44.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=19.0 cm L=347.3 cm Ln=345.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 ::**Verificato**

X	M-	M+	Δ M-	Δ M+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	6821	1724	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-I-1	7.1
34.5	4312	1750	--	--	20.11	20.11	48528	53610	(3+4)-I-3	(5+6)-I-1	11
CAMP	1950	4867	--	--	20.11	20.11	48528	53610	(5+6)-I-1	(3+4)-I-3	11
310.5	3220	5811	--	--	20.11	20.11	48528	53610	(5+6)-I-1	(3+4)-I-3	9.2
FLN	4572	6677	--	--	20.11	20.11	48528	53610	(5+6)-I-1	(3+4)-I-3	8.0

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.3	44.2	0.302	24.0	43.4	0.553	48528	53610	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
34.5	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-I-3	(5+6)-I-1	Parz.	Parz.
CAMP	13.3	44.2	0.300	24.0	43.4	0.555	48528	53610	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
310.5	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.
FLN	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-I-1	(3+4)-I-3	Parz.	Parz.

Verifica a taglio:cot(θ) =2.500

Comb =(3+4)-I-3

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8597	1453	--	29631	30979	29631	0	53610	345.0	10.05	3.4
Des								48528			

Trave : 269 [413 , 409] Pilastrate [32 , 25]

Sez. R rinf.: By= 48.0 cm,Bz=44.0 cm,s. inf.=4.0 cm,s.lat.=4.0 cm,h lat.=19.0 cm L=460.1 cm Ln=474.0 cm

Criterio : CLS_TraviSpessore_Esist rinforzate - Verifica a flessione rcm=200 [kg/cmq],fym=4500 [kg/cmq], FC=1.20

qd=2, qf=1.5 ::**Verificato**

X	M-	M+	Δ M-	Δ M+	Afs	Afi	Mr-	Mr+	C-	C+	CS
cm	kg*m	kg*m	kg*m	kg*m	cmq	cmq	kg*m	kg*m			
ILN	7492	854	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	6.5
47.4	3840	1439	--	--	20.11	20.11	48528	53610	(3+4)-II-2	(5+6)-II-1	13
CAMP	3743	5961	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	9.0
426.6	5674	5780	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	8.6
FLN	7840	5375	--	--	20.11	20.11	48528	53610	(5+6)-II-1	(3+4)-II-2	6.2

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
cm	cm	cm		cm	cm		kg*m	kg*m				
ILN	13.3	44.2	0.302	24.0	43.3	0.553	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.
47.4	13.3	44.2	0.301	24.0	43.4	0.553	48528	53610	(3+4)-II-2	(5+6)-II-1	Parz.	Parz.

X	x-	d-	x-/d-	x+	d+	x+/d+	Mr-	Mr+	C-	C+	Stato-	Stato+
CAMP	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
426.6	13.3	44.2	0.301	24.1	43.4	0.555	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.
FLN	13.4	44.2	0.302	24.1	43.4	0.555	48528	53610	(5+6)-II-1	(3+4)-II-2	Parz.	Parz.

Verifica a taglio: $\cot(\theta) = 2.500$

Comb =(3+4)-II-2

Sez	Td	VRd,f	VRdns	VRcd	VRsd	VRd	Tpl	Mr	Dx	Staffe	CS
	kg	kg	kg	kg	kg	kg	kg	kg*m	cm	cmq/m	
Sin	8966	1453	--	29631	30979	29631	0	53610	474.0	10.05	3.3
Des								48528			

Verifica dei Muri in calcestruzzo

Scenario di calcolo : Set_NT_SLV_SLD_A2_(STR/GEO)_2018

Muro :1 - Nodi : [2 - 0 - 0 - 102]: **Verificato**

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	-2233	-1747	-2861	123	1218	-2	10.26	12.32	(3+4)-II-2	4.3
2	-2228	-4076	-4603	44	917	-20	10.26	12.32	(3+4)-II-2	5.8
3	-6019	669	4612	-124	-542	157	10.26	12.32	(3+4)-II-1	7.2
4	-2262	-2133	1301	98	1201	-48	10.26	12.32	(3+4)-II-2	4.2
5	1037	-6042	-2558	19	937	-22	10.26	12.32	(3+4)-II-2	5.9
6	-20064	-8490	-9014	44	730	81	10.26	12.32	(3+4)-II-2	7.3
Massimi/minimi										
1							10.26			
1								12.32		
4										4.2

Muro :2 - Nodi : [0 - 1 - 101 - 0]: **Verificato**

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	-2746	-17789	-1628	106	1284	48	10.26	12.32	(3+4)-II-2	5.1
2	890	-16853	-192	25	1076	39	10.26	12.32	(3+4)-II-2	6.0
3	-27647	-23117	2915	82	1089	-184	10.26	12.32	2	5.7
4	-987	-908	743	133	1305	2	10.26	12.32	(3+4)-II-2	4.0
5	-884	-2319	-623	55	1056	22	10.26	12.32	(3+4)-II-2	4.9
6	-7566	2389	-13235	41	820	-78	10.26	12.32	2	5.4
Massimi/minimi										
1							10.26			
1								12.32		
4										4.0

Muro :3 - Nodi : [4 - 0 - 0 - 104]: **Verificato**

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	-850	-8911	-1090	141	1314	14	10.26	12.32	(3+4)-II-2	4.5
2	-1974	-6837	-226	83	1083	-23	10.26	12.32	(3+4)-II-2	5.2
3	-8775	1321	4137	87	899	-34	10.26	12.32	(3+4)-II-2	5.3
4	-1154	-12714	629	105	1280	-31	10.26	12.32	(3+4)-II-2	4.8
5	887	-12890	-766	24	1089	-27	10.26	12.32	(3+4)-II-2	5.6
6	-20076	-10371	-5821	52	896	48	10.26	12.32	(3+4)-II-2	6.4
Massimi/minimi										
1							10.26			
1								12.32		
1										4.5

Muro :4 - Nodi : [21 - 22 - 122 - 121]:Verificato

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	-2228	-1946	-1791	133	1131	30	10.26	12.32	(3+4)-II-1	4.6
2	-1951	-3346	-1163	68	704	-48	10.26	12.32	(3+4)-II-1	7.2
3	-2900	2048	4161	-62	-615	40	10.26	12.32	(3+4)-II-2	7.5
4	-2812	-815	2626	132	1108	-29	10.26	12.32	(3+4)-II-1	4.6
5	-2980	-3159	-2362	74	714	41	10.26	12.32	(3+4)-II-1	7.2
6	-3151	4192	3690	-63	-623	-46	10.26	12.32	(3+4)-II-2	7.0
Massimi/minimi										
1							10.26			
1								12.32		
4										4.6

Muro :5 - Nodi : [30 - 55 - 155 - 130]:Verificato

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	-285	-4522	-1475	79	949	-31	10.26	12.32	(3+4)-I-3	5.6
2	-682	-5406	-1960	13	464	13	10.26	12.32	(3+4)-I-3	12
3	-8017	-1741	7937	-49	675	150	10.26	12.32	(3+4)-I-1	6.4
4	1076	-12636	-654	101	1089	-88	10.26	12.32	(3+4)-I-3	5.3
5	489	1419	-5620	3	336	-125	10.26	12.32	(3+4)-II-2	11
6	-15834	-19767	-3162	113	1242	293	10.26	12.32	(3+4)-I-1	4.5
Massimi/minimi										
1							10.26			
1								12.32		
6										4.5

Muro :6 - Nodi : [0 - 25 - 125 - 0]:Verificato

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	384	-2998	527	64	766	55	10.26	12.32	(3+4)-I-1	6.6
2	144	-2767	374	11	516	9	10.26	12.32	(3+4)-I-1	10
3	-2258	-5583	-175	40	594	-68	10.26	12.32	2	8.5
4	-285	-4240	-115	66	736	21	10.26	12.32	(3+4)-I-1	7.3
5	-275	-1900	300	8	498	19	10.26	12.32	(3+4)-I-1	10

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
6	-1337	-1985	-2078	48	576	-9	10.26	12.32	2	9.0
Massimi/minimi										
1							10.26			
1								12.32		
1										6.6

Muro :7 - Nodi : [5 - 60 - 0 - 105]:Verificato

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	667	-8102	5005	-32	-719	108	10.26	12.32	(3+4)-I-3	7.1
2	-1157	-3727	2874	130	674	27	10.26	12.32	(3+4)-I-1	7.8
3	-8449	842	8428	207	1303	-231	10.26	12.32	2	3.3
4	7000	17865	-4781	-69	-556	178	10.26	12.32	(3+4)-II-1	4.7
5	-24	-8803	893	2	613	-27	10.26	12.32	(3+4)-I-1	9.3
6	-6570	-11228	388	54	1050	-115	10.26	12.32	2	5.3
Massimi/minimi										
1							10.26			
1								12.32		
3										3.3

Muro :8 - Nodi : [0 - 3 - 103 - 0]:Verificato

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	-4028	-21073	-2725	103	1242	34	10.26	12.32	(3+4)-II-2	5.5
2	931	-19204	-816	21	966	4	10.26	12.32	(3+4)-II-2	7.1
3	-18518	-14429	3608	46	755	-84	10.26	12.32	(3+4)-II-2	7.7
4	-2039	-1354	459	123	1241	-5	10.26	12.32	(3+4)-II-2	4.2
5	-1181	-3847	-1349	48	946	7	10.26	12.32	(3+4)-II-2	5.7
6	-11439	2835	-464	-130	-620	-155	10.26	12.32	(3+4)-II-1	6.2
Massimi/minimi										
1							10.26			
1								12.32		
4										4.2

Muro :9 - Nodi : [0 - 10 - 110 - 0]:Verificato

Pann.X=2 Pann.Y=3 Spess.= 25 cm Criterio CLS_Muri Materiale: C25/30

Armatura a maglia doppia

Pannello	Nx	Ny	Nxy	Mx	My	Mxy	Ax	Ay	C	Cs
	kg	kg	kg	kg*m	kg*m	kg*m	cmq	cmq		
1	-4605	-2696	-372	72	836	-11	10.26	12.32	(3+4)-I-3	6.3
2	-553	-2953	1145	11	759	-41	10.26	12.32	(3+4)-I-3	6.7
3	-5207	-6567	1717	16	692	68	10.26	12.32	2	7.5
4	-2978	-3801	1047	87	780	-55	10.26	12.32	(3+4)-I-3	6.5
5	-2784	-9953	-4203	111	808	-121	10.26	12.32	2	6.5
6	-8015	-4386	-4845	158	1136	182	10.26	12.32	2	4.2
Massimi/minimi										
1							10.26			
1								12.32		
6										4.2