

B.F. PROGETTI Studio Associato

INGEGNERIA, ARCHITETTURA E GEOLOGIA

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I TECNICI :

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ING. GIACOMO MARTINELLI

COMUNE DI SAN CASCIANO VAL DI PESA

MIGLIORAMENTO / ADEGUAMENTO SISMICO E
ADEGUAMENTO ALLA PREVENZIONE INCENDI DELLA
SCUOLA SECONDARIA DI PRIMO GRADO "I. NIEVO" – 1°
STRALCIO

PROGETTO ESECUTIVO

ALLEGATO 1 alla Relazione Strutture

REV.	DESCRIZIONE	DATA

NUMERO DI PROTOCOLLO-UFFICIO COMPETENTE

CONSULENZA IMPIANTI:

Studio Tecnico Associato

Mannelli - Ginanni - Andreini

servizi di progettazione, ingegneria e
consulenza tecnica

Via Dino Campana, 162 - 51100 Pistoia (PT)

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Studio tecnico operante con sistema qualità
certificato ISO 9001

COMMITTENTE:

**COMUNE DI SAN CASCIANO
IN VAL DI PESA**

Via Machiavelli, 56

**CITTÀ METROPOLITANA DI
FIRENZE (FI)**

TAVOLA N.

3.RS.A1

DATA: MAGGIO 2019

ELENCO ALLEGATI DI CALCOLO

- ALLEGATO DI CALCOLO 01 – Confronto sollecitazioni modelli con solai controventati US01-02
- ALLEGATO DI CALCOLO 02 – Verifiche collegamenti controventi metallici US01-02
- ALLEGATO DI CALCOLO 03 – Verifiche collegamenti bullonati profili di acciaio vano scale US01-02
- ALLEGATO DI CALCOLO 04 – Verifiche nuove aste di acciaio US01-02
- ALLEGATO DI CALCOLO 05 – Parametri di calcolo e verifiche elementi in c.a. US01-02
- ALLEGATO DI CALCOLO 06 – Reazioni vincolari plinti US01-02
- ALLEGATO DI CALCOLO 07 – Verifica Ribaltamento Elementi Secondari US01-02
- ALLEGATO DI CALCOLO 08 – Verifica pilatri consolidati con FRP US01-02
- ALLEGATO DI CALCOLO 09 – Relazioni analisi statica e sismica US03-04

ALLEGATO DI CALCOLO 01 – CONFRONTO SOLLECITAZIONI MODELLI CON SOLAI CONTROVENTATI

Si riporta il confronto tra le sollecitazioni dei due modelli di calcolo.

SOLLECITAZIONI MODELLO CON SOLAI CONTROVENTATI

Asta	CC	TCC	X	N	Ty	Mz	Tz	My	Mx
			<cm>	<daN>	<daN>	<daNcm>	<daN>	<daNcm>	<daNcm>
(N1 N2)						>		>	>
19									
(11 42)		1 SND	0	-15035.6	-291.773	59077.4	-625.726	179037	1472.81
		1 SND	0	-15890.3	-438.597	34216	-1274.36	56744.1	-1395.6
		1 SND	332	-14516.9	-291.773	-61844	-625.725	-150969	1472.81
		1 SND	332	-15371.5	-438.597	-87345.5	-1274.36	-244078	-1395.6
		2 SND	0	-15305	-377.083	45014.8	-642.851	175875	1350.3
		2 SND	0	-15620.8	-353.288	48278.6	-1257.24	59906.1	-1273.08
		2 SND	332	-14786.3	-377.083	-76188.7	-642.851	-153497	1350.3
		2 SND	332	-15102.1	-353.288	-73000.8	-1257.24	-241550	-1273.08
		3 SND	0	-14926.1	-213.775	71704.1	-826.775	141030	654.686
		3 SND	0	-15999.8	-516.595	21589.2	-1073.31	94750.9	-577.47
		3 SND	332	-14407.3	-213.775	-49013.4	-826.775	-179723	654.686
		3 SND	332	-15481	-516.595	-100176	-1073.31	-215324	-577.47
		4 SND	0	-15101.7	-232.229	68464.5	-1016.23	105291	-169.082
		4 SND	0	-15824.2	-498.141	24828.9	-883.859	130490	246.297
		4 SND	332	-14582.9	-232.229	-52360.5	-1016.23	-206898	-169.082
		4 SND	332	-15305.5	-498.141	-96829	-883.859	-188150	246.297
6									
(2 38)		1 SND	0	-34044	6640.23	-478004	529.741	-7379.87	6475.71
						-			
		1 SND	0	-58882.9	3010.41	1180390	32.481	-111034	-6239.93
		1 SND	349.08	-32735	6640.23	1137900	529.741	76183.7	6475.71
		1 SND	349.08	-57573.9	3010.41	572596	32.481	1666.14	-6239.93
		2 SND	0	-43653.6	5570.02	-690806	479.225	-17273.5	5921.84
		2 SND	0	-49273.4	4080.62	-967588	82.998	-101140	-5686.07
		2 SND	349.08	-42344.6	5570.02	976907	479.225	68416.4	5921.84
		2 SND	349.08	-47964.3	4080.62	733590	82.998	9433.51	-5686.07
		3 SND	0	-28163.1	6992.95	-401089	432.317	-28653.3	2865.26
						-			
		3 SND	0	-64763.9	2657.69	1257300	129.906	-89760.1	-2629.49
		3 SND	349.08	-26854	6992.95	1184220	432.317	61883.1	2865.26
		3 SND	349.08	-63454.8	2657.69	526280	129.906	15966.8	-2629.49
		4 SND	0	-32731.9	6225.07	-547965	298.294	-56781.4	-783.27
						-			
		4 SND	0	-60195.1	3425.57	1110430	263.929	-61632.1	1019.05
		4 SND	349.08	-31422.8	6225.07	1062920	298.294	41858	-783.27
		4 SND	349.08	-58886	3425.58	647573	263.929	35991.9	1019.05
48									
(14 65)		1 SND	0	-15197.1	281.415	43887.3	1327.7	8125.18	3556.36
		1 SND	0	-17555.4	-254.983	-49615.8	-13.429	-210178	-3574.49
		1 SND	312	-14709.6	281.415	38203.5	1327.7	204064	3556.36

ALLEGATO DI CALCOLO 01-02

	1	SND	312	-17067.9	-254.983	-35685.1	-13.429	3934.12	-3574.49
	2	SND	0	-15982.5	111.716	14591.3	1289.56	1875.94	3390.97
	2	SND	0	-16770	-85.284	-20319.7	24.71	-203929	-3409.1
	2	SND	312	-15495	111.716	14550.3	1289.56	198414	3390.97
	2	SND	312	-16282.5	-85.284	-12031.9	24.71	9584.78	-3409.1
	3	SND	0	-14831.4	351.052	55593.6	916.147	-58802.9	1311.41
	3	SND	0	-17921.1	-324.62	-61322.1	398.12	-143250	-1329.53
	3	SND	312	-14343.9	351.052	48216.5	916.147	142589	1311.41
	3	SND	312	-17433.6	-324.62	-45698.1	398.12	65409.6	-1329.53
	4	SND	0	-15303.3	241.043	36331.5	525.251	-122419	-778.23
	4	SND	0	-17449.2	-214.61	-42060	789.016	-79633.7	760.103
	4	SND	312	-14815.8	241.043	33145.9	525.251	84245.1	-778.23
	4	SND	312	-16961.7	-214.61	-30627.5	789.017	123753	760.103
6									
(38 75)	1	SND	0	-19932.2	6401.56	-853651	1226.14	-91111.8	4758.13
						-			
	1	SND	0	-25870.3	5033.67	1034120	609.776	-135721	-4490.87
	1	SND	349.08	-18623.1	6401.56	1203340	1226.14	293096	4758.13
	1	SND	349.08	-24561.3	5033.67	900747	609.777	120961	-4490.87
	2	SND	0	-22624	5947.81	-915306	1207.25	-92215.9	4400.75
	2	SND	0	-23178.5	5487.43	-972467	628.666	-134617	-4133.49
	2	SND	349.08	-21315	5947.8	1105390	1207.25	287452	4400.75
	2	SND	349.08	-21869.4	5487.43	998704	628.666	126604	-4133.49
	3	SND	0	-17927.9	6610.99	-823306	1039.06	-105051	2063
						-			
	3	SND	0	-27874.6	4824.24	1064470	796.854	-121782	-1795.74
	3	SND	349.08	-16618.8	6610.99	1246000	1039.06	241408	2063
	3	SND	349.08	-26565.6	4824.24	858089	796.854	172648	-1795.74
	4	SND	0	-18901.8	6336.75	-858951	859.818	-118102	-604.484
						-			
	4	SND	0	-26900.7	5098.48	1028820	976.096	-108731	871.747
	4	SND	349.08	-17592.7	6336.75	1184610	859.819	191461	-604.484
	4	SND	349.08	-25591.7	5098.48	919481	976.096	222596	871.747
19									
(42 79)	1	SND	0	-4939.8	-453.358	97076.7	-1312.88	288636	1013.38
	1	SND	0	-5169.04	-529.665	84580.7	-1665.71	231997	-971.324
	1	SND	336	-4414.8	-453.358	-67592.3	-1312.88	-209073	1013.38
	1	SND	336	-4644.04	-529.665	-81046	-1665.71	-271099	-971.324
	2	SND	0	-5011.97	-499.66	89910.7	-1321.89	287182	936.894
	2	SND	0	-5096.87	-483.363	91746.6	-1656.69	233452	-894.833
	2	SND	336	-4486.97	-499.66	-76067.3	-1321.89	-210653	936.894
	2	SND	336	-4571.87	-483.363	-72571.1	-1656.69	-269518	-894.833
	3	SND	0	-4910.57	-409.841	103571	-1422.7	271019	434.748
	3	SND	0	-5198.26	-573.182	78085.9	-1555.88	249615	-392.688
	3	SND	336	-4385.57	-409.841	-59447.5	-1422.7	-228385	434.748
	3	SND	336	-4673.26	-573.182	-89190.8	-1555.88	-251786	-392.688
	4	SND	0	-4957.7	-418.843	101972	-1525.84	254463	-137.717
	4	SND	0	-5151.14	-564.18	79684.9	-1452.74	266170	179.778

ALLEGATO DI CALCOLO 01-02

	4	SND	336	-4432.7	-418.843	-60941.1	-1525.84	-246519	-137.717
	4	SND	336	-4626.14	-564.18	-87697.2	-1452.74	-233653	179.778
34									
-28 120	1	SND	0	-7041.64	768.003	44988	2419.53	-143394	8282.71
	1	SND	0	-27300.7	-265.304	-184471	1242.03	-372492	-7036.01
	1	SND	445.44	-5259.9	768.003	158076	2419.53	705785	8282.71
	1	SND	445.44	-25518.9	-265.304	-73639.2	1242.04	409323	-7036.01
	2	SND	0	-8424.97	419.11	-36588.6	2396.99	-147776	7940.85
	2	SND	0	-25917.3	83.589	-102894	1264.57	-368109	-6694.15
	2	SND	445.44	-6643.23	419.11	84049.5	2396.99	700040	7940.85
	2	SND	445.44	-24135.6	83.589	387.75	1264.57	415069	-6694.15
	3	SND	0	-12034.3	935.499	88402	2041.59	-216932	3439.65
	3	SND	0	-22308.1	-432.801	-227885	1619.98	-298954	-2192.94
	3	SND	445.44	-10252.5	935.5	189250	2041.59	610738	3439.65
	3	SND	445.44	-20526.3	-432.801	-104813	1619.98	504370	-2192.94
	4	SND	0	-17697	730.175	44037.3	1695.1	-284347	-1053.41
	4	SND	0	-16645.4	-227.477	-183520	1966.46	-231539	2300.11
	4	SND	445.44	-15915.2	730.175	141944	1695.11	523523	-1053.41
	4	SND	445.44	-14863.6	-227.477	-57506.3	1966.46	591585	2300.11
6									
(92 2)	1	SND	0	-41510	6271.47	-309530	1710.9	27403.5	2207.77
	1	SND	0	-87141.8	5026.15	-593606	-570.001	-124538	-2110.7
	1	SND	233	-40636.3	6271.47	936518	1710.9	274477	2207.77
	1	SND	233	-86268	5026.16	792693	-570.001	-105782	-2110.7
	2	SND	0	-55805.5	6104.71	-350872	1627.63	21125.7	2070.82
	2	SND	0	-72846.3	5192.91	-552265	-486.734	-118260	-1973.75
	2	SND	233	-54931.7	6104.71	879056	1627.63	261279	2070.82
	2	SND	233	-71972.6	5192.92	850155	-486.734	-92584.2	-1973.75
	3	SND	0	-35799.7	6088.53	-346256	1038.87	-16254.7	904.017
	3	SND	0	-92852.1	5209.1	-556881	102.024	-80879.9	-806.941
	3	SND	233	-34926	6088.53	973329	1038.87	161403	904.017
	3	SND	233	-91978.3	5209.1	755881	102.025	7292.08	-806.941
	4	SND	0	-45200.6	5764.96	-419076	379.584	-59953.8	-350.44
	4	SND	0	-83451.2	5532.66	-484060	761.314	-37180.8	447.515
	4	SND	233	-44326.9	5764.96	947421	379.584	51284.4	-350.44
	4	SND	233	-82577.4	5532.66	781790	761.314	117410	447.515
48									
(97 14)	1	SND	0	-23800.7	328.546	-2785.93	2221.21	-50039.6	711.065
	1	SND	0	-27215	62.748	-18114.7	1173.38	-137060	-657.494
	1	SND	138	-23585.1	328.546	28670.3	2221.21	169475	711.065
	1	SND	138	-26999.4	62.748	4427.64	1173.38	111878	-657.494
	2	SND	0	-24713.5	278.982	-8766.98	2187.75	-52820	674.354
	2	SND	0	-26302.3	112.312	-12133.6	1206.84	-134280	-620.783
	2	SND	138	-24497.8	278.982	26490.2	2187.75	167637	674.354
	2	SND	138	-26086.7	112.312	6607.76	1206.84	113716	-620.783
	3	SND	0	-23611.4	310.689	920.274	1905.21	-76280	287.748
	3	SND	0	-27404.3	80.606	-21820.9	1489.38	-110820	-234.176

	3	SND	138	-23395.8	310.689	23491.9	1905.21	152103	287.748
	3	SND	138	-27188.7	80.606	9606.06	1489.38	129250	-234.176
	4	SND	0	-24361.9	245.818	-1884.04	1600.9	-101552	-111.807
	4	SND	0	-26653.9	145.476	-19016.6	1793.69	-85547.9	165.378
	4	SND	138	-24146.3	245.818	16873.1	1600.9	135375	-111.807
	4	SND	138	-26438.2	145.476	16224.8	1793.69	145978	165.378
4									
						-			
(-29 -52)	1	SND	0	-21291.4	7174.21	1004580	1389.83	33602.5	4730.95
						-			
	1	SND	0	-27617.3	6225.68	1136780	-197.139	-196829	-4506.68
	1	SND	349.08	-19982.3	7174.21	1368520	1389.83	288376	4730.95
	1	SND	349.08	-26308.2	6225.68	1167810	-197.14	-35253.1	-4506.68
						-			
	2	SND	0	-23987.3	6666.96	1073710	1316.15	21539.3	4374.18
						-			
	2	SND	0	-24921.4	6732.93	1067650	-123.46	-184766	-4149.91
	2	SND	349.08	-22678.2	6666.96	1259290	1316.15	274679	4374.18
	2	SND	349.08	-23612.4	6732.93	1277050	-123.461	-21556	-4149.91
	3	SND	0	-19416.7	7611.55	-946002	946.137	-28752.6	2038.88
						-			
	3	SND	0	-29492	5788.33	1195360	246.552	-134474	-1814.61
	3	SND	349.08	-18107.7	7611.55	1463950	946.136	195880	2038.88
	3	SND	349.08	-28182.9	5788.33	1072390	246.552	57243.2	-1814.61
	4	SND	0	-20505.7	7479.17	-964925	492.15	-94263	-625.383
						-			
	4	SND	0	-28403	5920.72	1176440	700.539	-68963.2	849.653
	4	SND	349.08	-19196.7	7479.17	1436510	492.15	102900	-625.383
	4	SND	349.08	-27093.9	5920.72	1099830	700.539	150223	849.653

SOLLECITAZIONI MODELLO CON SOLAI NON CONTROVENTATI

Asta	CC	TCC	X	N	Ty	Mz	Tz	My	Mx	
(N1 N2)			<cm>	<daN>	<daN>	<daNcm	<daN>	<daNcm	<daNcm	
19						>		>	>	
(11 42)		1 SND		0	-14937	-314.292	60554	-643.205	185238	1402.04
		1 SND		0	-15893.2	-448.544	36519.7	-1318.27	57527	-1354.72
		1 SND		332	-14418.3	-314.292	-67072.6	-643.205	-155981	1402.04
		1 SND		332	-15374.5	-448.544	-89115.2	-1318.27	-252462	-1354.72
		2 SND		0	-15247.1	-394.152	46948.9	-664.865	181325	1280.14
		2 SND		0	-15583.1	-368.684	50124.8	-1296.61	61440	-1232.81
		2 SND		332	-14728.4	-394.151	-80070.2	-664.865	-159279	1280.14
		2 SND		332	-15064.3	-368.684	-76117.5	-1296.61	-249164	-1232.81
		3 SND		0	-14801.3	-240.159	72776.4	-846.626	146474	622.063
		3 SND		0	-16028.9	-522.676	24297.3	-1114.84	96291.1	-574.734
		3 SND		332	-14282.6	-240.159	-55074.5	-846.626	-184748	622.063
		3 SND		332	-15510.1	-522.676	-101113	-1114.84	-223695	-574.734
		4 SND		0	-14995.2	-256.477	69647.6	-1042.65	109334	-168.394

ALLEGATO DI CALCOLO 01-02

	4	SND	0	-15835.1	-506.359	27426	-918.824	133430	215.723
	4	SND	332	-14476.4	-256.477	-57788	-1042.65	-212703	-168.394
	4	SND	332	-15316.3	-506.358	-98399.8	-918.824	-195740	215.723
6									
(2 38)	1	SND	0	-34791.3	6637.18	-491555	512.437	-12132.8	6134.54
						-			
	1	SND	0	-57759	3085.83	1173680	80.73	-109291	-6045.91
	1	SND	349.08	-33482.2	6637.18	1143550	512.437	74725.7	6134.54
	1	SND	349.08	-56449.9	3085.83	585367	80.73	10915.8	-6045.91
	2	SND	0	-44140.3	5504.31	-713924	472.313	-20781.2	5577.4
	2	SND	0	-48410	4218.7	-951315	120.854	-100643	-5488.77
	2	SND	349.08	-42831.2	5504.31	970295	472.313	69287.9	5577.4
	2	SND	349.08	-47100.9	4218.7	758621	120.854	16353.6	-5488.77
	3	SND	0	-28650.6	7112.4	-393041	422.194	-33021.5	2716.37
						-			
	3	SND	0	-63899.6	2610.61	1272200	170.972	-88402.4	-2627.75
	3	SND	349.08	-27341.6	7112.4	1210950	422.194	60639.5	2716.37
	3	SND	349.08	-62590.6	2610.62	517962	170.972	25001.9	-2627.75
	4	SND	0	-32736.2	6386.85	-530969	304.719	-59574.5	-770.619
						-			
	4	SND	0	-59814	3336.16	1134270	288.447	-61849.4	859.245
	4	SND	349.08	-31427.2	6386.85	1095480	304.719	43127.9	-770.619
	4	SND	349.08	-58505	3336.16	633440	288.447	42513.5	859.245
48									
(14 65)	1	SND	0	-15388.8	315.859	47425.5	1370.88	13308.4	3870.45
	1	SND	0	-17183.9	-275.214	-54933.1	-44.081	-216710	-3900.45
	1	SND	312	-14901.3	315.859	43630.3	1370.89	211007	3870.45
	1	SND	312	-16696.4	-275.214	-38456.9	-44.081	-445.715	-3900.45
	2	SND	0	-16131	151.579	19027.3	1326.1	5989.37	3665.36
	2	SND	0	-16441.6	-110.935	-26534.9	0.7	-209391	-3695.36
	2	SND	312	-15643.5	151.579	20769.4	1326.1	204354	3665.36
	2	SND	312	-15954.1	-110.935	-15596	0.7	6207.43	-3695.36
	3	SND	0	-14891.3	358.14	54670.6	943.565	-56097.4	1461.69
	3	SND	0	-17681.3	-317.496	-62178.3	383.24	-147304	-1491.69
	3	SND	312	-14403.8	358.14	49572.3	943.565	147089	1461.69
	3	SND	312	-17193.8	-317.496	-44398.9	383.239	63472.3	-1491.69
	4	SND	0	-15207.2	230.102	32482.5	532.509	-122907	-808.05
	4	SND	0	-17365.4	-189.458	-39990.1	794.295	-80494.1	778.054
	4	SND	312	-14719.7	230.102	31804.4	532.509	85649.4	-808.05
	4	SND	312	-16877.9	-189.458	-26631	794.295	124912	778.054
6									
(38 75)	1	SND	0	-20363.5	6211.83	-855289	1205.27	-65398.8	3939.37
						-			
	1	SND	0	-25154.7	5036.48	1011470	375.45	-134659	-5104.39
	1	SND	349.08	-19054.4	6211.83	1160400	1205.27	286746	3939.37
	1	SND	349.08	-23845.6	5036.48	899462	375.45	65001.7	-5104.39
	2	SND	0	-22798.2	5829.99	-903862	1180.85	-67210	2051.91
	2	SND	0	-22720	5418.32	-962893	399.871	-132848	-3216.93

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	2	SND	349.08	-21489.2	5829.99	1073920	1180.85	279731	2051.91
	2	SND	349.08	-21410.9	5418.32	985939	399.871	72016.9	-3216.93
	3	SND	0	-18347.7	6379.58	-836281	951.874	-86893.1	3636.7
						-			
	3	SND	0	-27170.5	4868.73	1030470	628.849	-113165	-4801.72
	3	SND	349.08	-17038.7	6379.58	1200230	951.874	219775	3636.7
	3	SND	349.08	-25861.4	4868.73	859633	628.849	131973	-4801.72
	4	SND	0	-19054.7	6141.53	-868563	710.253	-107128	1489.81
	4	SND	0	-26463.5	5106.78	-998192	870.47	-92930.2	-2654.83
	4	SND	349.08	-17745.6	6141.53	1147890	710.253	155357	1489.81
	4	SND	349.08	-25154.5	5106.78	911971	870.47	196392	-2654.83
19									
(42 79)	1	SND	0	-4876.57	-375.086	93802.5	-1137.57	277696	1077.34
	1	SND	0	-5167.76	-486.593	76656.1	-1538.82	214325	-888.782
	1	SND	348	-4332.82	-375.086	-53741.3	-1137.57	-181448	1077.34
	1	SND	348	-4624.01	-486.593	-75664.5	-1538.82	-257914	-888.782
	2	SND	0	-4974.16	-441.52	83809.6	-1151.13	275842	992.019
	2	SND	0	-5070.17	-420.16	86649	-1525.26	216179	-803.457
	2	SND	348	-4430.41	-441.52	-66919.7	-1151.13	-184420	992.019
	2	SND	348	-4526.42	-420.16	-62486.1	-1525.26	-254943	-803.457
	3	SND	0	-4830.48	-313.356	102957	-1257.44	258328	518.609
	3	SND	0	-5213.85	-548.323	67501.4	-1418.95	233693	-330.047
	3	SND	348	-4286.73	-313.356	-41427.1	-1257.44	-203704	518.609
	3	SND	348	-4670.1	-548.323	-87978.6	-1418.94	-235658	-330.047
	4	SND	0	-4888.56	-326.878	100811	-1373.75	239873	-45.631
	4	SND	0	-5155.77	-534.801	69647.4	-1302.64	252148	234.193
	4	SND	348	-4344.81	-326.878	-44050.6	-1373.75	-225752	-45.631
	4	SND	348	-4612.02	-534.801	-85355.2	-1302.64	-213610	234.193
34									
-28 120	1	SND	0	-6974.34	772.839	45487.3	2397.76	-142322	7674.36
	1	SND	0	-27274.7	-276.139	-186615	1247.6	-370826	-6254.72
	1	SND	446	-5190.35	772.839	158581	2397.76	699200	7674.36
	1	SND	446	-25490.7	-276.139	-78180.5	1247.6	413485	-6254.72
	2	SND	0	-8266.61	419.692	-36193.3	2386.79	-144880	7028.42
	2	SND	0	-25982.4	77.009	-104935	1258.57	-368268	-5608.78
	2	SND	446	-6482.61	419.692	82572.7	2386.79	696801	7028.42
	2	SND	446	-24198.4	77.008	-2172.14	1258.57	415884	-5608.78
	3	SND	0	-12119.5	941.304	88133.6	2011.85	-218419	3778.86
	3	SND	0	-22129.5	-444.604	-229261	1633.52	-294729	-2359.22
	3	SND	446	-10335.5	941.304	190994	2011.85	602838	3778.86
	3	SND	446	-20345.5	-444.604	-110593	1633.52	509847	-2359.22
	4	SND	0	-17822	732.555	43007	1670.09	-286202	-206.084
	4	SND	0	-16427.1	-235.855	-184135	1975.27	-226945	1625.72
	4	SND	446	-16038	732.555	142768	1670.09	517843	-206.084
	4	SND	446	-14643.1	-235.854	-62367.4	1975.27	594842	1625.72
6									
(92 2)	1	SND	0	-42460.1	6284.04	-309601	1724.35	28905.7	2165.29

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	1	SND	0	-85887.4	5003.45	-593438	-591.734	-125072	-2114.62
	1	SND	233	-41586.3	6284.04	934485	1724.35	277052	2165.29
	1	SND	233	-85013.6	5003.45	792460	-591.734	-109319	-2114.62
	2	SND	0	-56657.9	6111.84	-351350	1633.07	22239	2010.05
	2	SND	0	-71689.6	5175.64	-551689	-500.458	-118405	-1959.38
	2	SND	233	-55784.1	6111.84	874401	1633.07	262388	2010.05
	2	SND	233	-70815.9	5175.64	852544	-500.458	-94656	-1959.38
	3	SND	0	-36126.4	6096.99	-345624	1052.15	-14875.3	902.78
	3	SND	0	-92221.1	5190.49	-557415	80.459	-81291.2	-852.111
	3	SND	233	-35252.6	6096.99	975903	1052.15	164061	902.78
	3	SND	233	-91347.4	5190.49	751042	80.459	3671.24	-852.111
	4	SND	0	-44895.2	5764.48	-418250	384.712	-59068.7	-334.622
	4	SND	0	-83452.3	5523.01	-484789	747.901	-37097.8	385.291
	4	SND	233	-44021.5	5764.48	951321	384.712	52548.8	-334.622
	4	SND	233	-82578.5	5523.01	775624	747.901	115184	385.291
48									
(97 14)	1	SND	0	-24005.9	330.463	-2588.41	2224.05	-49401.3	768.871
	1	SND	0	-26835.2	55.231	-18043.9	1167.27	-137501	-719.028
	1	SND	138	-23790.2	330.463	29155.9	2224.05	169427	768.871
	1	SND	138	-26619.6	55.231	3437.55	1167.27	111672	-719.028
	2	SND	0	-24869.4	280.768	-8468.09	2187.23	-52479.8	726.557
	2	SND	0	-25971.7	104.925	-12164.2	1204.09	-134422	-676.714
	2	SND	138	-24653.8	280.768	26911.6	2187.23	167424	726.557
	2	SND	138	-25756.1	104.925	5681.86	1204.09	113675	-676.714
	3	SND	0	-23686.5	309.502	919.688	1910.02	-75567	312.283
	3	SND	0	-27154.6	76.192	-21552	1481.3	-111335	-262.44
	3	SND	138	-23470.8	309.501	23558.3	1910.02	152252	312.283
	3	SND	138	-26939	76.192	9035.1	1481.3	128847	-262.44
	4	SND	0	-24276.2	241.84	-1953.05	1604.03	-101073	-121.393
	4	SND	0	-26564.9	143.853	-18679.2	1787.29	-85828.8	171.236
	4	SND	138	-24060.6	241.84	16516.1	1604.03	135526	-121.393
	4	SND	138	-26349.2	143.853	16077.3	1787.28	145573	171.236
4									
(-29 -52)	1	SND	0	-20176.3	7042.2	-997144	1423.62	57604	5068.34
						-			
	1	SND	0	-28303.4	6175.2	1117570	-384.393	-205396	-4314.08
	1	SND	349.08	-18867.2	7042.2	1342080	1423.62	291612	5068.34
	1	SND	349.08	-26994.4	6175.2	1157200	-384.393	-76626	-4314.08
						-			
	2	SND	0	-22973.7	6480.31	1078480	1339.61	44034.1	4540.07
						-			
	2	SND	0	-25506	6737.1	1036230	-300.389	-191826	-3785.82
	2	SND	349.08	-21664.6	6480.31	1226150	1339.61	275804	4540.07
	2	SND	349.08	-24197	6737.1	1273130	-300.389	-60818.3	-3785.82
	3	SND	0	-18778.1	7590.96	-915930	918.221	-13864.9	2585.7
						-			
	3	SND	0	-29701.6	5626.44	1198780	121.004	-133927	-1831.44
	3	SND	349.08	-17469	7590.96	1453210	918.221	186704	2585.7

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3	SND	349.08	-28392.6	5626.44	1046080	121.004	28282.4	-1831.44
4	SND	0	-20377	7499.43	-927655	401.019	-88693.8	-70.552
-								
4	SND	0	-28102.7	5717.97	1187050	638.206	-59097.9	824.809
4	SND	349.08	-19068	7499.43	1432520	401.019	80974.4	-70.552
4	SND	349.08	-26793.6	5717.97	1066760	638.206	134011	824.809

CONFRONTO PERCENTUALE

Asta (N1 N2)	X <cm>	N <daN>	Ty <daN>	Mz <daNcm>	Tz <daN>	My <daNcm>
19						
(11 42)	DIFF.	-29.1	-6.081	-937	-43.91	-8384
	VAR. PERC.	0%	1%	1%	3%	3%
6						
(2 38)	DIFF.	864.3	-119.45	-14900	17.304	1743
	VAR. PERC.	1%	2%	1%	3%	2%
48						
(14 65)	DIFF.	239.8	-7.088	-856.2	-43.19	-6532
	VAR. PERC.	1%	2%	1%	3%	3%
6						
(38 75)	DIFF.	704.1	231.41	45770	20.87	6350
	VAR. PERC.	3%	4%	4%	2%	2%
19						
(42 79)	DIFF.	-15.59	24.859	614	126.89	10940
	VAR. PERC.	0%	5%	1%	8%	4%
34						
-28 120	DIFF.	26	-5.805	-1376	21.77	1666
	VAR. PERC.	0%	1%	1%	1%	0%
6						
(92 2)	DIFF.	631	-12.57	-2574	-13.45	-2575
	VAR. PERC.	1%	0%	0%	1%	1%
48						
(97 14)	DIFF.	249.7	-1.917	-485.6	-2.84	48
	VAR. PERC.	1%	1%	2%	0%	0%
4						
(-29 -52)	DIFF.	-209.6	20.59	-3420	-33.79	-8567
	VAR. PERC.	1%	0%	0%	2%	4%

ALLEGATO DI CALCOLO 02 – VERIFICHE COLLEGAMENTI CONTROVENTI METALLICI

CALCOLO ANCORAGGIO CLS CONTROVENTI UPN 300 (PART. 03)

Gli sforzi massimi sui controventi UPN 300 sono quelli corrispondenti alle aste 1027 e 1028, riportati di seguito.

Asta 1027	Compressione =	23118 daN
	Trazione =	18731 daN
Asta 1028	Compressione =	26823 daN
	Trazione =	15224 daN

L'ancoraggio avviene mediante n.6 barre metalliche filettate M20 cl. 8.8, inghisate con ancorante per carichi sismici di tipo HIT-RE 500 V3 o qualsiasi altro prodotto avente caratteristiche simili.

Nella combinazione di compressione abbiamo che lo sforzo normale può essere scomposto come un'azione tagliante sulle barre (la componente longitudinale si trascura in quanto passerà tramite contatto tra la piastra di ancoraggio ed il cls).

Controvento inclinato di $58^\circ \Rightarrow$ sforzo tagliante $V_{ed,tot} = 26283 \times \cos 58^\circ = 13928$ daN

Sforzo sulla singola barra $\Rightarrow V_{ed} = 13928/6 = 2321$ daN

Ipotizzando di utilizzare una barra M20 con l'ancorante specificato precedentemente si ottiene uno sforzo resistente raccomandato pari a:

$V_{rd} = 3490/1.2 = 2908$ daN (1.2 = F.C.)

VERIFICA SODDISFATTA

Nella combinazione di trazione lo sforzo viene scomposto come un'azione di taglio ed una di trazione sulle barre, successivamente combinati tra loro per svolgere la verifica. Si riporta la verifica effettuata con un programma di calcolo scaricabile gratuitamente dal web.

Sforzo tagliante $V_{ed,tot} = 18731 \times \cos 58^\circ = 9925$ daN

Sforzo di trazione $V_{ed,tot} = 18731 \times \sin 58^\circ = 15884$ daN

Si riportano nelle pagine seguenti gli output del programma di calcolo, che dimostrano l'esito positivo delle verifiche.

1 Dati da inserire

Tipo e dimensione dell'ancorante: HIT-RE 500 V3 + HIT-V (8.8) M20

Riempimento spazio con Set di riempimento sismico Hilti M20 mm

Profondità di posa effettiva: $h_{ef,eff} = 323 \text{ mm}$ ($h_{ef,inst} = 400 \text{ mm}$)

Materiale: 8.8

Certificazione No.: Dati Tecnici Hilti

Emesso / Valido: - / -

Prova: metodo di calcolo Extended ETAG BOND (EOTA TR 029)

Fissaggio distanziato: $a_y = 0 \text{ mm}$ (Senza distanziamento); $t = 10 \text{ mm}$

Piastra d'ancoraggio: $l_x \times l_y \times t = 300 \text{ mm} \times 500 \text{ mm} \times 10 \text{ mm}$; (Spessore della piastra raccomandato: non calcolato)

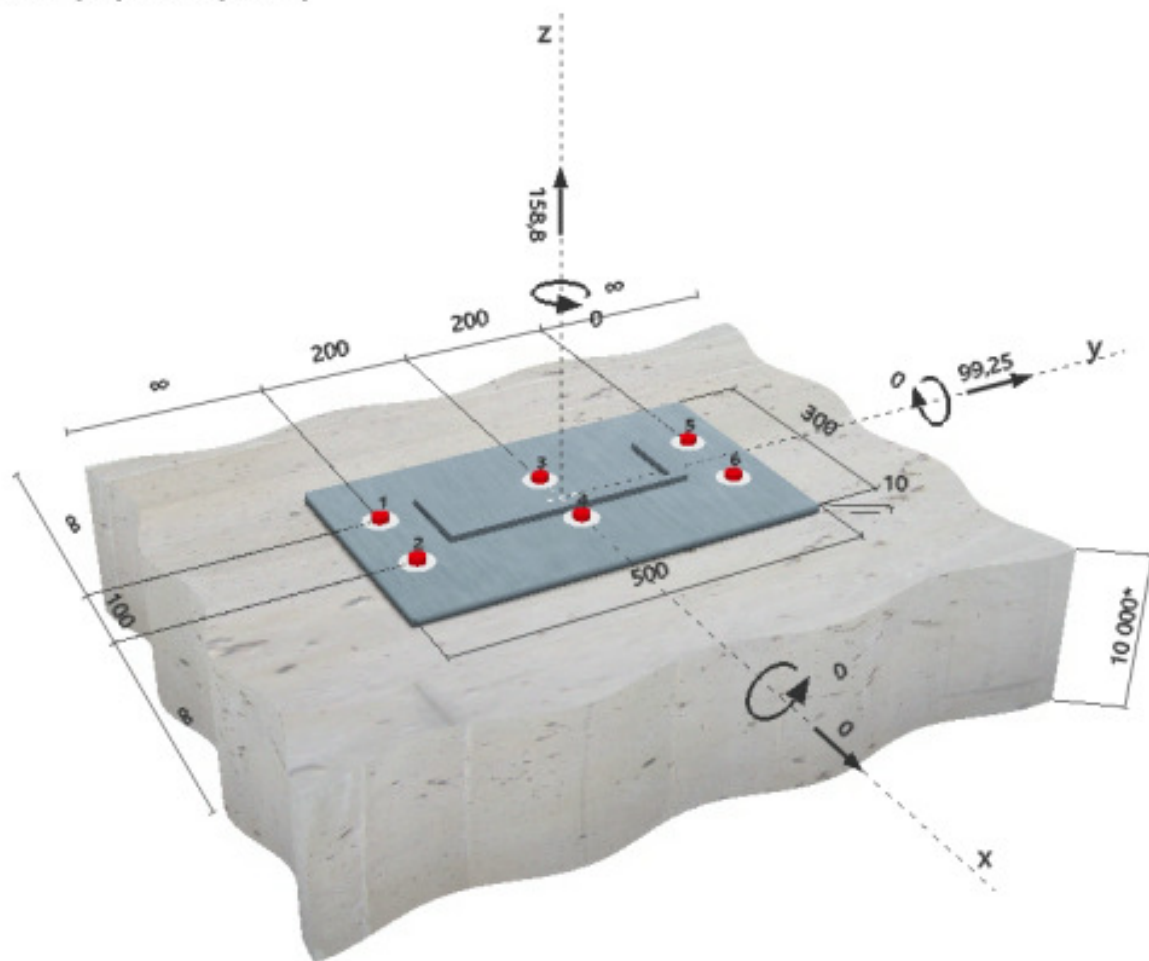
Profilo: Profilo a U; ($L \times W \times T \times FT$) = $300 \text{ mm} \times 100 \text{ mm} \times 10 \text{ mm} \times 16 \text{ mm}$

Materiale base: fessurato calcestruzzo, $f_{c,cube} = 16,00 \text{ N/mm}^2$; $h = 10000 \text{ mm}$, Temp. Breve/Lungo: 0/0 °C

Installazione: Foro eseguito con perforatore, Condizioni di installazione: asciutto

Armatura: nessuna armatura o interasse tra le armature $\geq 150 \text{ mm}$ (qualunque \emptyset) o $\geq 100 \text{ mm}$ ($\emptyset \leq 10 \text{ mm}$)
senza armatura di bordo longitudinale

Geometria [mm] & Carichi [kN, kNm]



2 Condizione di carico/Carichi risultanti sull'ancorante

Condizione di carico: Carichi di progetto

Carichi sull'ancorante [kN]

Trazione: (+ Trazione, - Compressione)

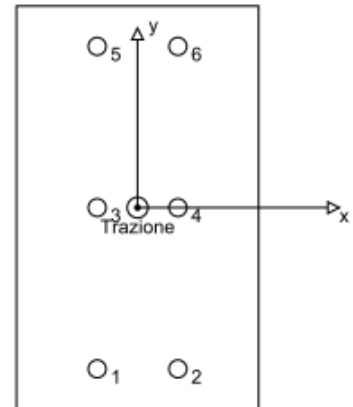
Ancorante	Trazione	Taglio	Taglio in dir. x	Taglio in dir. y
1	26,467	16,542	0,000	16,542
2	26,467	16,542	0,000	16,542
3	26,467	16,542	0,000	16,542
4	26,467	16,542	0,000	16,542
5	26,467	16,542	0,000	16,542
6	26,467	16,542	0,000	16,542

Compressione max. nel calcestruzzo: - [‰]

Max. sforzo di compressione nel calcestruzzo: - [N/mm²]

risultante delle forze di trazione nel (x/y)=(0/0): 158,800 [kN]

risultante delle forze di compressione (x/y)=(0/0): 0,000 [kN]



3 Carico di trazione (EOTA TR 029, Sezione 5.2.2)

	Carico [kN]	Resistenza [kN]	Utilizzo β_N [%]	Stato
Rottura dell'acciaio*	26,467	130,667	21	OK
Rottura combinata conica del calcestruzzo e per sfilamento**	158,800	223,990	71	OK
Rottura conica del calcestruzzo**	158,800	173,716	92	OK
Fessurazione**	N/A	N/A	N/A	N/A

*ancorante più sollecitato **gruppo di ancoranti (ancoranti sollecitati)

3.1 Rottura dell'acciaio

$N_{Rk,s}$ [kN]	$\gamma_{M,s}$	$N_{Rd,s}$ [kN]	N_{sd} [kN]
196,000	1,500	130,667	26,467

3.2 Rottura combinata conica del calcestruzzo e per sfilamento

$A_{p,N}$ [mm ²]	$A_{p,N}^0$ [mm ²]	$\tau_{Rk,ucr,2S}$ [N/mm ²]	$s_{cr,Np}$ [mm]	$c_{cr,Np}$ [mm]	c_{min} [mm]
642843	320000	15,00	566	283	∞
ψ_c	$\tau_{Rk,cr}$ [N/mm ²]	k	$\psi_{g,Np}^0$	$\psi_{g,Np}$	
0,956	7,65	2,300	1,159	1,077	
$e_{c1,N}$ [mm]	$\psi_{ec1,Np}$	$e_{c2,N}$ [mm]	$\psi_{ec2,Np}$	$\psi_{s,Np}$	$\psi_{re,Np}$
0	1,000	0	1,000	1,000	1,000
$N_{Rk,p}^0$ [kN]	$N_{Rk,p}$ [kN]	$\gamma_{M,p}$	$N_{Rd,p}$ [kN]	N_{sd} [kN]	
155,271	335,985	1,500	223,990	158,800	

3.3 Rottura conica del calcestruzzo

$A_{c,N}$ [mm ²]	$A_{c,N}^0$ [mm ²]	$c_{cr,N}$ [mm]	$s_{cr,N}$ [mm]		
1463461	938961	485	969		
$e_{c1,N}$ [mm]	$\psi_{ec1,N}$	$e_{c2,N}$ [mm]	$\psi_{ec2,N}$	$\psi_{s,N}$	$\psi_{re,N}$
0	1,000	0	1,000	1,000	1,000
k ₁	$N_{Rk,c}^0$ [kN]	$\gamma_{M,c}$	$N_{Rd,c}$ [kN]	N_{sd} [kN]	
7,200	167,185	1,500	173,716	158,800	

4 Carico di taglio (EOTA TR 029, Sezione 5.2.3)

	Carico [kN]	Resistenza [kN]	Utilizzo β_v [%]	Stato
Rottura dell'acciaio (senza braccio di leva)*	16,542	78,400	22	OK
Rottura dell'acciaio (con braccio di leva)*	N/A	N/A	N/A	N/A
Rottura per pryout**	99,250	347,431	29	OK
Rottura del bordo del calcestruzzo in direzione **	N/A	N/A	N/A	N/A

*ancorante più sollecitato **gruppo di ancoranti (ancoranti specifici)

4.1 Rottura dell'acciaio (senza braccio di leva)

$V_{Rk,s}$ [kN]	$\gamma_{M,s}$	$V_{Rd,s}$ [kN]	V_{Sd} [kN]
98,000	1,250	78,400	16,542

4.2 Rottura per pryout (cono del calcestruzzo)

$A_{c,N}$ [mm ²]	$A_{c,N}^0$ [mm ²]	$c_{cr,N}$ [mm]	$s_{cr,N}$ [mm]	k-factor	k_1
1463461	938961	485	969	2,000	7,200
$e_{c1,V}$ [mm]	$\psi_{ec1,N}$	$e_{c2,V}$ [mm]	$\psi_{ec2,N}$	$\psi_{s,N}$	$\psi_{re,N}$
0	1,000	0	1,000	1,000	1,000
$N_{Rk,c}^0$ [kN]	$\gamma_{M,c,p}$	$V_{Rd,cp}$ [kN]	V_{Sd} [kN]		
167,185	1,500	347,431	99,250		

5 Carichi combinati di trazione e di taglio (EOTA TR 029, Sezione 5.2.4)

β_N	β_V	α	Utilizzo $\beta_{N,V}$ [%]	Stato
0,914	0,286	1,000	100	OK

$$(\beta_N + \beta_V) / 1.2 \leq 1,0$$

6 Spostamenti (ancorante più sollecitato)

Carichi a breve termine:

N_{Sk} = 19,605 [kN]	δ_N = 0,097 [mm]
V_{Sk} = 12,253 [kN]	δ_V = 0,490 [mm]
	δ_{NV} = 0,500 [mm]

Carichi a lungo termine:

N_{Sk} = 19,605 [kN]	δ_N = 0,155 [mm]
V_{Sk} = 12,253 [kN]	δ_V = 0,735 [mm]
	δ_{NV} = 0,751 [mm]

L'ancoraggio risulta verificato!

CALCOLO UNIONE D'ANIMA A TAGLIO UPN 300 (PART. 03)

Lo sforzo normale massimo sui controventi UPN 300 è quello dell'asta 1028

Asta 1028 Compressione = 26823 daN

Con tale azione si calcola l'unione a taglio tra profilo metallico e piastra di collegamento, dello spessore di 10 mm. Il collegamento è effettuato mediante n. 9 bulloni M16; abbiamo quindi che lo sforzo tagliente sul singolo bullone risulta essere pari a:

$$V_{ed,b} = 26283/9 = 2920 \text{ daN.}$$

Si riporta di seguito la verifica a taglio e rifollamento, effettuata con l'ausilio di un foglio di calcolo.

Sollecitazioni		Caratteristiche resistenti bulloni		
$F_{v,Ed}$ (N)	29203	Classe	f_{yb} (N/mm ²)	f_{tb} (N/mm ²)
$F_{t,Ed}$ (N)	0	4.6	240	400

Bulloni	
Classe	8.8
d (mm)	16
γ_{M2}	1.25
f_{yb} (N/mm ²)	640
f_{tb} (N/mm ²)	800
A_n (mm ²)	201
A_{res} (mm ²)	157

Piastra di collegamento	
Acciaio	S275
t (mm)	10
γ_{M2}	1.25
d_0 (mm)	17
f_{tk} (N/mm ²)	430

5.6	300	500
6.8	480	600
8.8	640	800
10.9	900	1000

Caratteristiche geometriche bulloni		
d (mm)	A_n (mm ²)	A_{res} (mm ²)
12	113	84
14	153	115
16	201	157
18	254	192
20	314	245
22	380	303
24	452	353
27	572	459
30	706	561

Verifica di resistenza con formula 4.2.65

$$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1.4F_{t,Rd}} \leq 1 \quad \frac{F_{t,Ed}}{F_{t,Rd}} \leq 1$$


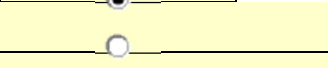
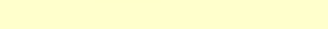
$$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1.4F_{t,Rd}} = 0.484$$

$F_{v,Rd}$ (N)	60288
$F_{t,Rd}$ (N)	90432

$$\frac{F_{t,Ed}}{F_{t,Rd}} = 0.000$$

Verifica a rifollamento con formula 4.2.61

$$\frac{F_{v,Ed}}{F_{b,Rd}} \leq 1 \text{ con } F_{b,Rd} = \frac{k \cdot \alpha \cdot f_{tk} \cdot d \cdot t}{\gamma_{M2}}$$

Tipo di unione	
	Esposta a fenomeni corrosivi o ambientali
	Non esposta a fenomeni corrosivi o ambientali
	Elementi resistenti alla corrosione (EN10025-5)

e_1 (mm)	60
e_2 (mm)	80
p_1 (mm)	140

$$20.4 \leq e_1 \leq \dots$$

$$20.4 \leq e_2 \leq \dots$$

$$37.4 \leq p_1 \leq 140$$

p_2 (mm)	140	40.8	$\leq p_2 \leq$	140
------------	-----	------	-----------------	-----

$\alpha = \min \{e_1/(3d_0) ; f_{tb}/f_{tk} ; 1\}$ per bulloni di bordo // al carico applicato

$\alpha = \min \{p_1/(3d_0)-0,25 ; f_{tb}/f_{tk} ; 1\}$ per bulloni interni // al carico applicato

$k = \min \{2,8e_2/d_0-1,7 ; 2,5\}$ per bulloni di bordo _|_ al carico applicato

$k = \min \{1,4p_2/d_0-1,7 ; 2,5\}$ per bulloni interni _|_ al carico applicato

α_{MIN}	1.000
k_{MIN}	2.500

$F_{b,Rd}$ (N)	137600
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$\frac{F_{v, Ed}}{F_{b, Rd}}$	0.212
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VERIFICA SODDISFATTA

CALCOLO ANCORAGGIO CLS CONTROVENTI UPN 300 TRA PILASTRI 25-26 (PART. 13)

Si riportano gli sforzi massimi sui controventi a croce tra i pilastri 25-26

Asta 1031 Compressione = 14997 daN

L'ancoraggio avviene mediante n.4 barre metalliche filettate M24 cl. 8.8, inghisate con ancorante per carichi sismici di tipo HIT-RE 500 V3 o qualsiasi altro prodotto avente caratteristiche simili.

Sforzo sulla singola barra => $V_{ed} = 14997/4 = 3749$ daN

Ipotizzando di utilizzare una barra M24 con l'ancorante specificato precedentemente si ottiene uno sforzo resistente raccomandato pari a:

$V_{rd} = 5030/1.2 = 4192$ daN (1.2 = F.C.)

VERIFICA SODDISFATTA

CALCOLO ANCORAGGIO CLS CONTROVENTI UPN 300 (PART. 04)

Riprendendo lo sforzo sul profilo UPN300 descritto nell'allegato di calcolo 02 si va a dimensionare l'ancoraggio posto nel nodo opposto, all'incrocio trave-pilastro.

Gli sforzi massimi sui controventi UPN 300 sono quelli corrispondenti alle aste 1027 e 1028, riportati di seguito.

Asta 1027	Compressione =	23118 daN
	Trazione =	18731 daN
Asta 1028	Compressione =	26823 daN
	Trazione =	15224 daN

Nella combinazione di compressione abbiamo che lo sforzo normale viene trasmesso per il semplice contatto tra la piastra di acciaio di ancoraggio e la superficie di cls stessa. Lo sforzo di trazione viene invece scomposto secondo le due direzioni ortogonali e si trasmetterà per taglio agli ancoraggi rispettivamente sulla trave e sul pilastro

Controvento inclinato di $58^\circ \Rightarrow$ sforzo tagliante su trave $V_{ed,tot} = 18731 \times \cos 58^\circ = 9926 \text{ daN}$

\Rightarrow sforzo tagliante su pilastro $V_{ed,tot} = 18731 \times \sin 58^\circ = 15884 \text{ daN}$

L'ancoraggio avviene mediante n.6 barre metalliche filettate M20 cl. 8.8, inghisate con ancorante per carichi sismici di tipo HIT-RE 500 V3 o qualsiasi altro prodotto avente caratteristiche simili.

Sforzo massimo sulla singola barra $\Rightarrow V_{ed} = 15884/6 = 2597 \text{ daN}$

Ipotizzando di utilizzare una barra M20 con l'ancorante specificato precedentemente si ottiene uno sforzo resistente raccomandato pari a:

$V_{rd} = 3490/1.2 = 2908 \text{ daN}$ ($1.2 = \text{F.C.}$)

VERIFICA SODDISFATTA

Tale schema di ancoraggio viene utilizzato anche per tutti gli altri controventi meno sollecitati, così la verifica risulta automaticamente soddisfatta.

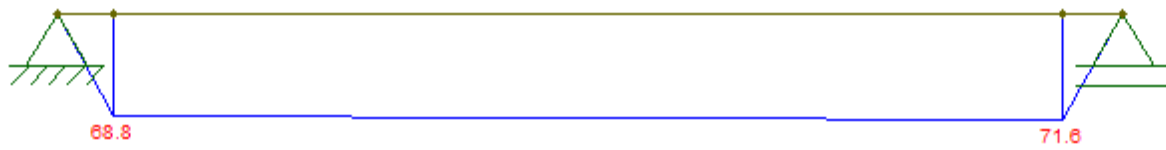
VERIFICHE STRUTTURE CONNESSE AGLI SHOCK TRANSMITTER

Si riporta di seguito il progetto e la verifica degli elementi costituenti la struttura ausiliaria agli shock transmitter, ovvero i profilati e le loro connessioni alla struttura principale in cls.a. tramite il quale è garantito il comportamento dinamico congiunto delle US01 e US02.

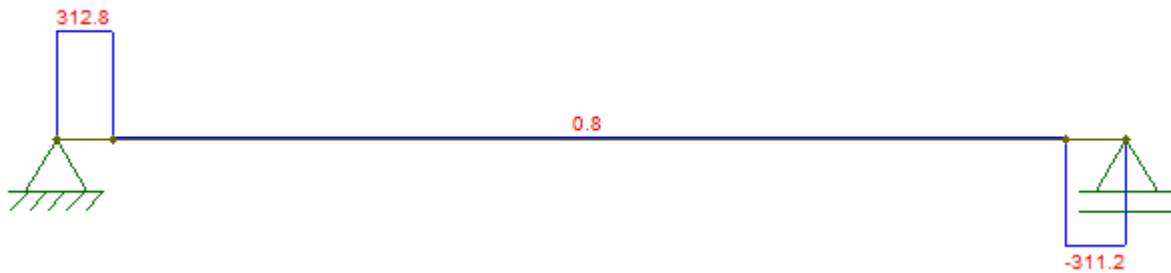
Per primo si riporta la verifica a flessione e taglio del profilo HEB300 su cui insistono gli shock transmitter. Prendendo cautelativamente il caso peggiore, ovvero quello del profilato lungo 412cm circa, su cui insistono entrambi gli shock transmitter con forze di taglio di 312kN (valori estratti dal modello di calcolo), si ottiene le seguenti sollecitazioni di verifica, calcolate per trave semplicemente appoggiata, con il software Ftool.



Schema statico



Momento flettente [kNm]



Taglio [kN]

- $M_{Ed}=68.8\text{kNm}$
- $V_{Ed}=312.8\text{kN}$

Si riporta di seguito la verifica a taglio flessione secondo quanto indicato al paragrafo 4.2.4.1.2.3

VERIFICA TRAVE HEB300			
Verifica allo stato limite ultimo SLU (Combinazione fondamentale)			
M (Msd),trave,singolo (kgm)		6880	
T(Vsd),trave,singolo (kg)		31280	
tipo trave		HEB300	
classe della sezione		1	
γ_{M0}		1.05	
f_{yk} (kg/cm ²)		2750	
$W_{plastico}$ (cm ³)		870	
A_v (area a taglio) (cm ²)		114	
E (kg/ cm ²)		2100000	
Mrd (momento resistente)	NTC 4.2.12	22786	
Vrd (taglio resistente)	NTC 4.2.17	172380	
Vsd<50%Vrd si trascura interazione Taglio-Momento			
Verifica di resistenza			
Msd/Mrd<1	0.30	verificato	

La verifica risulta soddisfatta.

Il profilato HEB300 di lunghezza 412cm circa, poggia su un lato su di un profilo HEB200, il quale assorbe la reazione di appoggio di taglio dell'HEB300 e può quindi instabilizzarsi per compressione.

Si riporta quindi la verifica ad instabilità per aste compresse per il profilo HEB200.

VERIFICA STABILITA' MEMBRATURE IN ACCIAIO					
HEB200		classe		1	
parametri sezione					
A=	78.1	cm ²	area lorda della sezione		
J _y =	5696	cm ⁴	momento d'inerzia rispetto all'asse y		
J _z =	2003	cm ⁴	momento d'inerzia rispetto all'asse z		
L=	510	cm	lunghezza libera d'inflessione profilato		
α _y =	0.34		fattore d'imperfezione (vedi Tab. 4.2.VIII NTC 18)		
α _z =	0.49		fattore d'imperfezione (vedi Tab. 4.2.VIII NTC 18)		
f _{yk} =	2750	kg/cm ²	tensione caratteristica di snervamento		
γ _{M1} =	1.05		coefficiente di sicurezza TAB. 4.2.VII		
FC	1		fattore di conoscenza		
E=	210000	kg/cm ²			
N _{ed} =	31280	kg	azione complessiva di calcolo		
Asse Y			Asse Z		
N _{cr,y} =	453428	kg	N _{cr,z} =	159448	kg
λ _{segnato} =	0.69		λ _{segnato} =	1.16	formula 4.2.45/46 NTC08
Φ=	0.82		Φ=	1.41	
χ _y = 0.79		<1			χ _z = 0.45 <1
χ _{min} =		0.45			
Verifica di stabilità					
Formula 4.2.41					
=		0.34 verificato			

La verifica risulta soddisfatta.

Il profilo HEB300 si connette al profilo HEB200 tramite 4 bulloni M20 8.8 che lavorano quindi a taglio. Si riporta la verifica a taglio e a rifollamento della bullonatura e delle piastre di collegamento interessate.

ALLEGATO DI CALCOLO 01-02

Sollecitazioni	
$F_{v,Ed}$ (N)	78200
$F_{t,Ed}$ (N)	0

Bulloni	
Classe	8.8
d (mm)	20
γ_{M2}	1.25
f_{yb} (N/mm ²)	640
f_{tb} (N/mm ²)	800
A_n (mm ²)	314
A_{res} (mm ²)	245

Piastra di collegamento	
Acciaio	S275
t (mm)	15
γ_{M2}	1.25
d_0 (mm)	21
f_{tk} (N/mm ²)	430

Caratteristiche resistenti bulloni		
Classe	f_{yb} (N/mm ²)	f_{tb} (N/mm ²)
4.6	240	400
5.6	300	500
6.8	480	600
8.8	640	800
10.9	900	1000

Caratteristiche geometriche bulloni		
d (mm)	A_n (mm ²)	A_{res} (mm ²)
12	113	84
14	153	115
16	201	157
18	254	192
20	314	245
22	380	303
24	452	353
27	572	459
30	706	561

Caratteristiche piastra	
Acciaio	f_{tk} (N/mm ²)
S235	360
S275	430
S355	510
S450	550
S235 N/NL	390
S355 N/NL	490
S420 N/NL	520
S460 N/NL	540
S235 M/ML	370
S355 M/ML	470
S420 M/ML	520
S460 M/ML	540
S235 W	360
S355 W	510

Verifica di resistenza con formula 4.2.65

$$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1.4F_{t,Rd}} \leq 1 \quad \text{con} \quad \frac{F_{t,Ed}}{F_{t,Rd}} \leq 1$$




$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1.4F_{t,Rd}}$	0.831
--	-------

$F_{v,Rd}$ (N)	94080
$F_{t,Rd}$ (N)	141120

$\frac{F_{t,Ed}}{F_{t,Rd}}$	0.000
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Verifica a rifollamento con formula 4.2.61

$$\frac{F_{v,Ed}}{F_{b,Rd}} \leq 1 \quad \text{con} \quad F_{b,Rd} = \frac{k \cdot \alpha \cdot f_{tk} \cdot d \cdot t}{\gamma_{M2}}$$

Tipo di unione	
	Esposta a fenomeni corrosivi o ambientali
	Non esposta a fenomeni corrosivi o ambientali
	Elementi resistenti alla corrosione (EN10025-5)

e_1 (mm)	40	25.2	$\leq e_1 \leq$	—
e_2 (mm)	40	25.2	$\leq e_2 \leq$	—
p_1 (mm)	120	46.2	$\leq p_1 \leq$	200
p_2 (mm)	120	50.4	$\leq p_2 \leq$	200

$\alpha = \min \{e_1/(3d_0); f_{tb}/f_{tk}; 1\}$ per bulloni di bordo // al carico applicato

$\alpha = \min \{p_1/(3d_0)-0.25; f_{tb}/f_{tk}; 1\}$ per bulloni interni // al carico applicato

$k = \min \{2.8e_2/d_0-1.7; 2.5\}$ per bulloni di bordo \perp al carico applicato

$k = \min \{1.4p_2/d_0-1.7; 2.5\}$ per bulloni interni \perp al carico applicato

$e_1/(3d_0)$	0.635
$p_1/(3d_0)-0.25$	1.635
$2.8e_2/d_0-1.7$	3.633
$1.4p_2/d_0-1.7$	6.300

α_{MN}	0.635
k_{MN}	2.500

$F_{b,Rd}$ (N)	163810
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$\frac{F_{v,Ed}}{F_{b,Rd}}$	0.477
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ALLEGATO DI CALCOLO 01-02

Lo stesso profilo HEB200 è collegato ai pilastri 45-46 tramite una piastra di testa e una contropiastra sp.15mm con 4 barre M20 8.8. Il profilo stesso quando è compresso o teso agisce diversamente sui pilastri a cui è collegato, pertanto risulta necessario verificare lo schiacciamento del calcestruzzo a compressione nella zona delimitata dalla piastra di testa o contropiastra, e a trazione i bulloni.

Assumendo come azione di progetto lo sforzo normale che interessa il profilo HEB200 ($N_{Ed}=312800N$), e considerando la piastra di testa dello stesso profilo 200x200mm, si calcola la tensione di compressione sul calcestruzzo.

$$\sigma_c = N_{Ed} / (200 \times 200 \text{ mm}) = 7.82 \text{ N/mm}^2 < f_{cd} = 14.44 \text{ N/mm}^2$$

La verifica risulta soddisfatta.

Si riporta di seguito la verifica a trazione della bullonatura M20 8.8, considerando che i bulloni sono 4 e che l'azione sul singolo bullone è di 78200N.

Sollecitazioni	
$F_{v,Ed}$ (N)	0
$F_{t,Ed}$ (N)	78200

Bulloni	
Classe	8.8
d (mm)	20
γ_{M2}	1.25
f_{yb} (N/mm ²)	640
f_{tb} (N/mm ²)	800
A_n (mm ²)	314
A_{res} (mm ²)	245

Piastra di collegamento	
Acciaio	S275
t (mm)	15
γ_{M2}	1.25
d_0 (mm)	21
f_{tk} (N/mm ²)	430

Caratteristiche resistenti bulloni		
Classe	f_{yb} (N/mm ²)	f_{tb} (N/mm ²)
4.6	240	400
5.6	300	500
6.8	480	600
8.8	640	800
10.9	900	1000

Caratteristiche geometriche bulloni		
d (mm)	A_n (mm ²)	A_{res} (mm ²)
12	113	84
14	153	115
16	201	157
18	254	192
20	314	245
22	380	303
24	452	353
27	572	459
30	706	561

Caratteristiche piastra	
Acciaio	f_{tk} (N/mm ²)
S235	360
S275	430
S355	510
S450	550
S235 N/NL	390
S355 N/NL	490
S420 N/NL	520
S460 N/NL	540
S235 M/ML	370
S355 M/ML	470
S420 M/ML	520
S460 M/ML	540
S235 W	360
S355 W	510

Verifica di resistenza con formula 4.2.65

$$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1.4F_{t,Rd}} \leq 1 \quad \text{con} \quad \frac{F_{t,Ed}}{F_{t,Rd}} \leq 1$$

$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1.4F_{t,Rd}}$	0.396
--	-------

$F_{v,Rd}$ (N)	94080
$F_{t,Rd}$ (N)	141120

$\frac{F_{t,Ed}}{F_{t,Rd}}$	0.554
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La verifica risulta soddisfatta.

Nella zona del giunto strutturale compresa tra il pilastro 12 e il 45, è previsto l'inserimento di uno shock transmitter il quale collega la trave in acciaio HEB300 della US02 e la trave in cls.a. della US01. E' previsto l'inserimento di 4 bulloni M20 8.8 i quali sono soggetti a trazione allo stesso modo come i 4 bulloni verificati precedentemente, pertanto si esclude la verifica.

La contropiastra presente nell'aula della US01, quando compressa, tenderà a schiacciare il calcestruzzo, pertanto si richiederebbe la verifica a schiacciamento. Tuttavia, essendo in presenza della medesima azione dei casi precedenti ($N_{Ed}=312800N$) ed essendo l'area della piastra in esame maggiore di quella precedente (180x500mm) la verifica può essere esclusa.

Infine si riporta il calcolo della piastra rappresentato dal PART.12 negli elaborati grafici, che rappresenta l'ancoraggio del HEB300 alle strutture di calcestruzzo (calcolo effettuato con programma di calcolo scaricabile gratuitamente dal web)

1 Dati da inserire

Tipo e dimensione dell'ancorante: HIT-RE 500 V3 + HIT-V-F (8.8) M10

Hilti Seismic set o altro sistema per il riempimento dello spazio aulare tra piastra e ancoi

Profondità di posa effettiva: $h_{ef,opt} = 187 \text{ mm}$ ($h_{ef,limit} = 200 \text{ mm}$)

Materiale: 8.8

Certificazione No.: ETA 16/0143

Emesso / Validato: 12/07/2017 | -

Prova: Valutazione ingegneristica SOFA BOND dopo la campagna di test ETAG BOND

Fissaggio distanziato: $e_b = 0 \text{ mm}$ (Senza distanziamento); $t = 10 \text{ mm}$

Piastra d'ancoraggio: $l_x \times l_y \times t = 450 \text{ mm} \times 600 \text{ mm} \times 10 \text{ mm}$; (Spessore della piastra raccomandato: non calcolato)

Profilo: IPB / HEB; ($L \times W \times T \times FT$) = 300 mm x 300 mm x 11 mm x 19 mm

Materiale base: fessurato calcestruzzo, C20/25, $f_{c,cube} = 25,00 \text{ N/mm}^2$; $h = 250 \text{ mm}$, Temp. Breve/Lungo: 0/0 °C

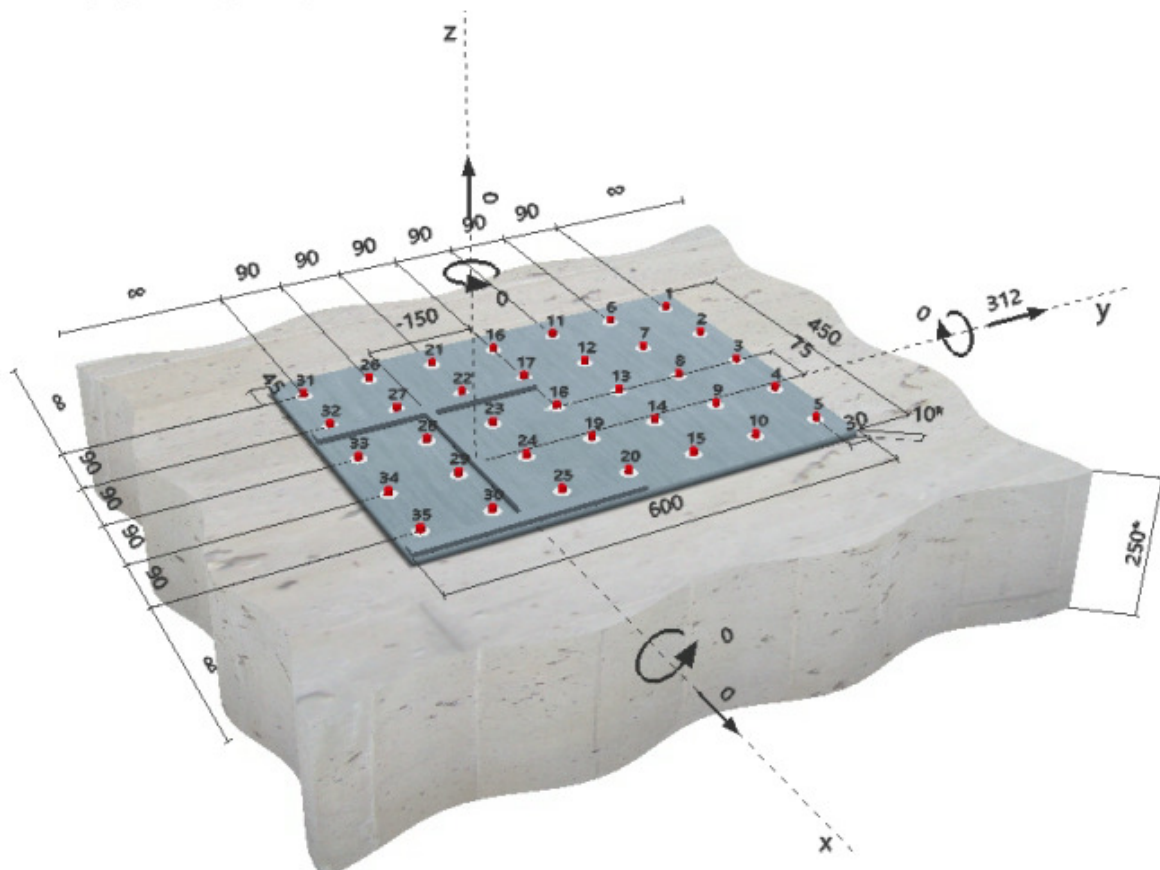
Installazione: **Foro eseguito con perforatore, Condizioni di installazione: asciutto**

Armatura: nessuna armatura o interasse tra le armature $\geq 150 \text{ mm}$ (qualunque \emptyset) o $\geq 100 \text{ mm}$ ($\emptyset \leq 10 \text{ mm}$)
senza armatura di bordo longitudinale



^R - Il calcolo dell'ancoraggio presuppone la presenza di una piastra di ancoraggio rigida.

Geometria [mm] & Carichi [kN, kNm]



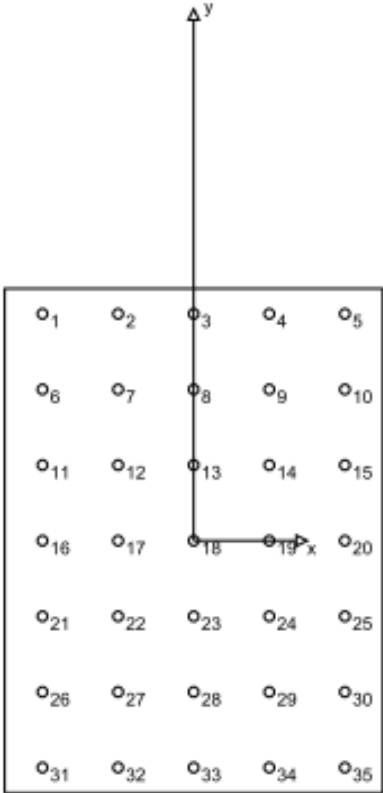
2 Condizione di carico/Carichi risultanti sull'ancorante

Condizione di carico: Carichi di progetto

Carichi sull'ancorante [kN]

Trazione: (+ Trazione, - Compressione)

Ancorante	Trazione	Taglio	Taglio in dir. x	Taglio in dir. y
1	0,000	7,433	-3,714	6,438
2	0,000	8,528	-3,714	7,676
3	0,000	9,657	-3,714	8,914
4	0,000	10,810	-3,714	10,152
5	0,000	11,981	-3,714	11,390
6	0,000	6,898	-2,476	6,438
7	0,000	8,066	-2,476	7,676
8	0,000	9,252	-2,476	8,914
9	0,000	10,450	-2,476	10,152
10	0,000	11,657	-2,476	11,390
11	0,000	6,556	-1,238	6,438
12	0,000	7,775	-1,238	7,676
13	0,000	9,000	-1,238	8,914
14	0,000	10,228	-1,238	10,152
15	0,000	11,458	-1,238	11,390
16	0,000	6,438	0,000	6,438
17	0,000	7,676	0,000	7,676
18	0,000	8,914	0,000	8,914
19	0,000	10,152	0,000	10,152
20	0,000	11,390	0,000	11,390
21	0,000	6,556	1,238	6,438
22	0,000	7,775	1,238	7,676
23	0,000	9,000	1,238	8,914
24	0,000	10,228	1,238	10,152
25	0,000	11,458	1,238	11,390
26	0,000	6,898	2,476	6,438
27	0,000	8,066	2,476	7,676
28	0,000	9,252	2,476	8,914
29	0,000	10,450	2,476	10,152
30	0,000	11,657	2,476	11,390
31	0,000	7,433	3,714	6,438
32	0,000	8,528	3,714	7,676
33	0,000	9,657	3,714	8,914
34	0,000	10,810	3,714	10,152
35	0,000	11,981	3,714	11,390



Compressione max. nel calcestruzzo: - [%]
Max. sforzo di compressione nel calcestruzzo: - [N/mm²]
risultante delle forze di trazione nel (x/y)=(0/0): 0,000 [kN]
risultante delle forze di compressione (x/y)=(0/0): 0,000 [kN]

Le forze di ancoraggio vengono calcolate presupponendo una piastra di ancoraggio rigida.

3 Carico di trazione (EOTA TR 029, Sezione 5.2.2)

	Carico [kN]	Resistenza [kN]	Utilizzo β_n [%]	Stato
Rottura dell'acciaio*	N/A	N/A	N/A	N/A
Rottura combinata conica del calcestruzzo e per sfilamento**	N/A	N/A	N/A	N/A
Rottura conica del calcestruzzo**	N/A	N/A	N/A	N/A
Fessurazione**	N/A	N/A	N/A	N/A

*ancorante più sollecitato **gruppo di ancoranti (ancoranti sollecitati)

4 Carico di taglio (EOTA TR 029, Sezione 5.2.3)

	Carico [kN]	Resistenza [kN]	Utilizzo β_v [%]	Stato
Rottura dell'acciaio (senza braccio di leva)*	11,981	18,560	65	OK
Rottura dell'acciaio (con braccio di leva)*	N/A	N/A	N/A	N/A
Rottura per pryout**	312,000	312,046	100	OK
Rottura del bordo del calcestruzzo in direzione **	N/A	N/A	N/A	N/A

*ancorante più sollecitato **gruppo di ancoranti (ancoranti specifici)

4.1 Rottura dell'acciaio (senza braccio di leva)

$V_{Rk,s}$ [kN]	$\gamma_{M,s}$	$V_{Ed,s}$ [kN]	V_{Sd} [kN]
23,200	1,250	18,560	11,981

4.2 Rottura per pryout (cono del calcestruzzo)

$A_{c,N}$ [mm ²]	$A_{c,N}^0$ [mm ²]	$c_{y,N}$ [mm]	$s_{y,N}$ [mm]	k-factor	
1 014 021	314 721	281	561	2,000	
$e_{c1,v}$ [mm]	$\psi_{sc1,N}$	$e_{c2,v}$ [mm]	$\psi_{sc2,N}$	$\psi_{s,N}$	$\psi_{ss,N}$
75	0,789	0	1,000	1,000	1,000
$N_{Rk,c}^0$ [kN]	$\gamma_{M,s,p}$	$V_{Rk,CP}$ [kN]	V_{Sd} [kN]		
92,059	1,500	312,046	312,000		

5 Spostamenti (ancorante più sollecitato)

Carichi a breve termine:

N_{Sk}	=	0,000 [kN]	δ_N	=	0,000 [mm]
V_{Sk}	=	8,875 [kN]	δ_V	=	0,532 [mm]
			δ_{MV}	=	0,532 [mm]

Carichi a lungo termine:

N_{Sk}	=	0,000 [kN]	δ_N	=	0,000 [mm]
V_{Sk}	=	8,875 [kN]	δ_V	=	0,710 [mm]
			δ_{MV}	=	0,710 [mm]

Gli ancoranti che cadono sull'aumento di sezione in cls sono 20, il 57% del totale.

Abbiamo quindi che lo sforzo totale che ricade sul ringrosso in cls è pari a:

$$31200 \times 0.57 = 17784 \text{ daN}$$

Tale forza si trasferisce alle staffe di acciaio contenute nell'aumento di sezione in cls, inghisate a loro volta al pilastro esistente.

Numero staffe : 14

Trazione singola staffa = 1270b daN

Ipotizzando ancorante di tipo Hilti HIT-RE 500 SD su barre di diametro 16 mm si ha che lo sforzo resistente è:

$$2090 / 1.2 = 1741 \text{ daN VERIFICA SODDISFATTA}$$

CALCOLO ANCORAGGIO CONTROVENTO TUBOLARE (PART. 06)

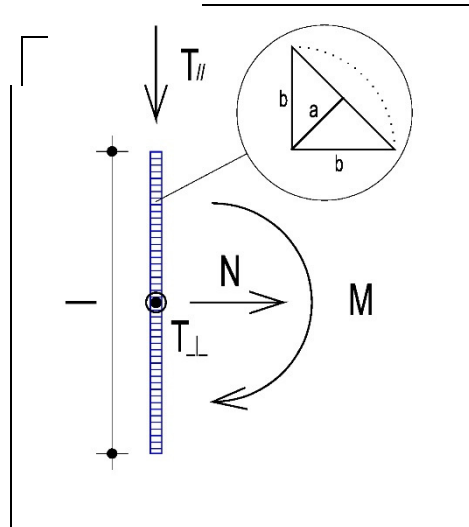
La sollecitazione massima di sforzo normale risulta essere pari a 18450 daN.

L'ancoraggio avviene mediante una piastra d'anima dello spessore di 12 mm, saldata a cordone d'angolo al profilo tubolare e assicurata alla piastra inghisata all'elemento di cls tramite n.4 bulloni M24.

Si riporta la verifica della saldatura.

Sollecitazioni	
N (N)	0
$T_{//}$ (N)	184500
T_{\perp} (N)	0
M (Nmm)	0

Dati saldatura	
Acciaio	S275
b (mm)	7
l (mm)	150
n° cordoni	4
γ_{M2}	1.25
a (mm)	4.95



f_{yk} (N/mm ²)	275
f_{tk} (N/mm ²)	430

Verifica con formula 4.2.76

$$F_{w,Ed}/F_{w,Rd} \leq 1 \text{ con } F_{w,Rd} = a \cdot f_{tk} / (\sqrt{3} \cdot \beta \cdot \gamma_{M2})$$

β_w	0.85
$f_{w,d}$ (N/mm ²)	233.657
$F_{T//}$ (N/mm)	307.500
$F_{T\perp}$ (N/mm)	0.000

$F_{T\text{TOT}}$ (N/mm)	307.500
$F_{\perp N}$ (N/mm)	0.000
$F_{\perp M}$ (N/mm)	0.000
$F_{\perp\text{TOT}}$ (N/mm)	0.000

$F_{w,Ed}$ (N/mm)	307.500
$F_{w,Rd}$ (N/mm)	1156.543

S/R	OK
0.266	

Verifica con formula 4.2.78 e 4.2.79

$$\sqrt{(n_{\perp}^2 + t_{\perp}^2 + t_{//}^2)} \leq \beta_1 \cdot f_{yk}$$

$$|n_{\perp}| + |t_{\perp}| \leq \beta_2 \cdot f_{yk}$$

β_1	0.7
β_2	0.85
$t_{//}$ (N/mm ²)	62.1244
t_{\perp} (N/mm ²)	0.0000

$n_{\perp N}$ (N/mm ²)	0.0000
$n_{\perp M}$ (N/mm ²)	0.0000
n_{\perp} (N/mm ²)	0.0000

$\sqrt{(n_{\perp}^2 + t_{\perp}^2 + t_{//}^2)}$	62.1244
---	---------

S/R	OK
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ALLEGATO DI CALCOLO 01-02

$\beta_1 \cdot f_{yk}$	192.5000	0.32	
$ n_{\perp} + t_{\perp} $	0.0000	S/R	OK
$\beta_2 \cdot f_{yk}$	233.7500	0.00	

Sul singolo bullone risulta essere presente il seguente sforzo tagliante: $V_{ed,b} = 18450/4 = 4612,5$ daN

Si riporta la verifica del giunto bullonato.

Sollecitazioni		Caratteristiche resistenti bulloni		
$F_{v,Ed}$ (N)	46125	Classe	f_{yb} (N/mm ²)	f_{tb} (N/mm ²)
$F_{t,Ed}$ (N)	0	4.6	240	400
		5.6	300	500
		6.8	480	600
		8.8	640	800
		10.9	900	1000

Bulloni		Caratteristiche geometriche bulloni		
Classe	8.8	d (mm)	A_n (mm ²)	A_{res} (mm ²)
d (mm)	24	12	113	84
γ_{M2}	1.25	14	153	115
f_{yb} (N/mm ²)	640	16	201	157
f_{tb} (N/mm ²)	800	18	254	192
A_n (mm ²)	452	20	314	245
A_{res} (mm ²)	353	22	380	303
		24	452	353
		27	572	459
		30	706	561

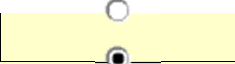

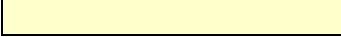
Piastra di collegamento	
Acciaio	S275
t (mm)	12
γ_{M2}	1.25
d_0 (mm)	25.5
f_{tk} (N/mm ²)	430

Verifica di resistenza con formula 4.2.65

$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1.4F_{t,Rd}} \leq 1$	$\frac{F_{t,Ed}}{F_{t,Rd}} \leq 1$	$\frac{F_{v,Ed}}{F_{v,Rd}} + \frac{F_{t,Ed}}{1.4F_{t,Rd}}$	0.340
$F_{v,Rd}$ (N)	135552	$\frac{F_{t,Ed}}{F_{t,Rd}}$	0.000
$F_{t,Rd}$ (N)	203328		

Verifica a rifollamento con formula 4.2.61

$$\frac{F_{v,Ed}}{F_{b,Rd}} \leq 1 \text{ con } F_{b,Rd} = \frac{k \cdot \alpha \cdot f_{tk} \cdot d \cdot t}{\gamma_{M2}}$$

Tipo di unione	
	Esposta a fenomeni corrosivi o ambientali
	Non esposta a fenomeni corrosivi o ambientali
	Elementi resistenti alla corrosione (EN10025-5)

e_1 (mm)	31	30.6	$\leq e_1 \leq$	---
e_2 (mm)	31	30.6	$\leq e_2 \leq$	---
p_1 (mm)	70	56.1	$\leq p_1 \leq$	168
p_2 (mm)	70	61.2	$\leq p_2 \leq$	168

$\alpha = \min \{e_1/(3d_0) ; f_{tb}/f_{tk} ; 1\}$ per bulloni di bordo // al carico applicato

$\alpha = \min \{p_1/(3d_0)-0,25 ; f_{tb}/f_{tk} ; 1\}$ per bulloni interni // al carico applicato

$k = \min \{2,8e_2/d_0-1,7 ; 2,5\}$ per bulloni di bordo _ _ al carico applicato

$k = \min \{1,4p_2/d_0-1,7 ; 2,5\}$ per bulloni interni _ _ al carico applicato

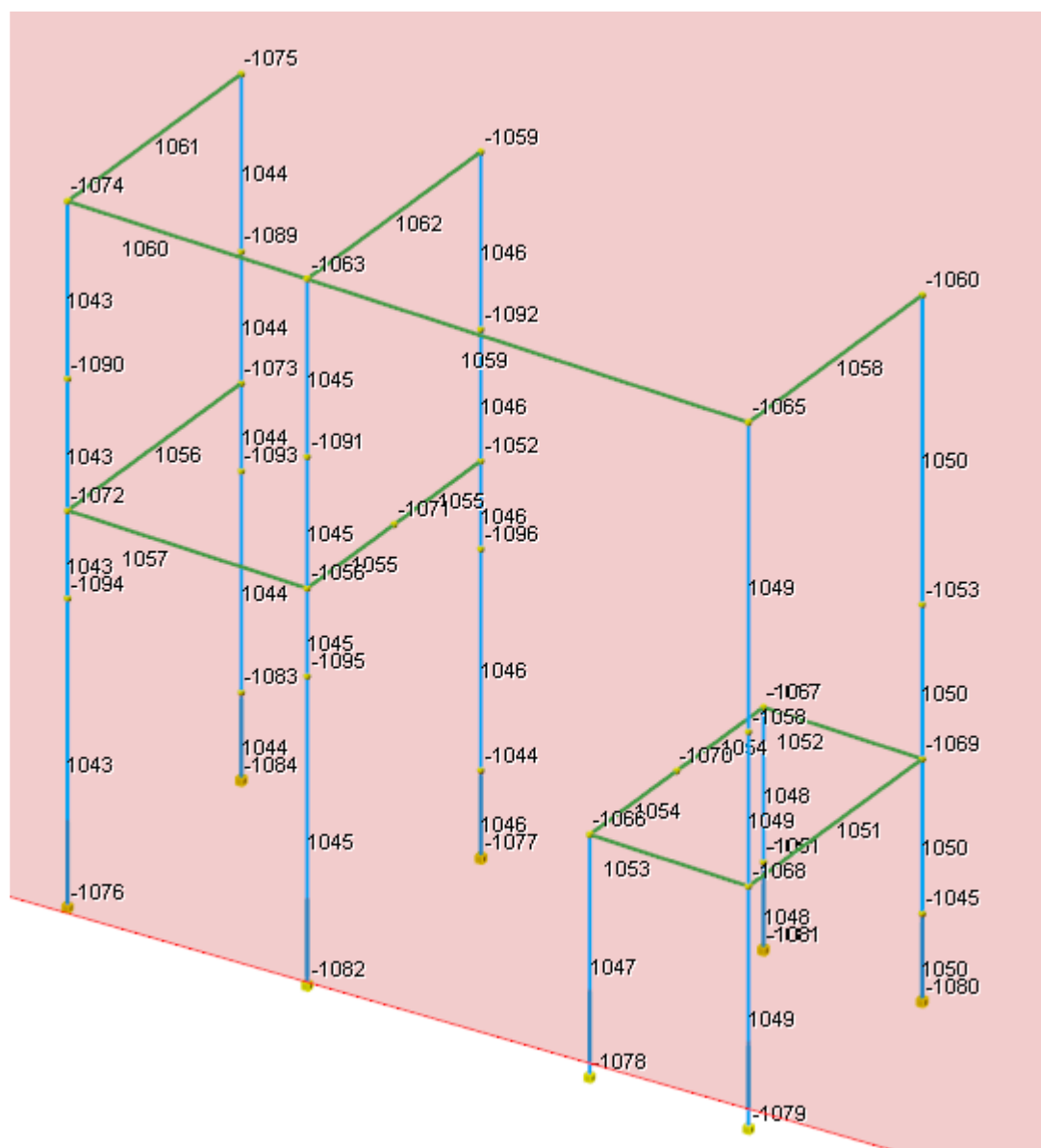
α_{MIN}	0.405
k_{MIN}	1.704

$F_{b,Rd}$ (N)	68407
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$\frac{F_{v, Ed}}{F_{b, Rd}}$	0.674
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ALLEGATO DI CALCOLO 03 – VERIFICA COLLEGAMENTI BULLONATI NUOVI PROFILI DI ACCIAIO VANO SCALE

Si riportano le verifiche dei collegamenti tra i profili in acciaio costituenti il la nuova struttura metallica del vano scala.



Numerazione aste e nodi utile per l'interpretazione dei risultati

Verifiche collegamenti strutture intelaiate**Simbologia**

N	<daN>	=Sforzo normale agente sul collegamento
Ty	<daN>	=Taglio in direzione Y agente sul collegamento
Tz	<daN>	=Taglio in direzione Z agente sul collegamento
Mx	<daNm>	=Momento torcente intorno all'asse X del collegamento
My	<daNm>	=Momento flettente intorno all'asse Y del collegamento
Mz	<daNm>	=Momento flettente intorno all'asse Z del collegamento
Tx ₁	<daN>	=Taglio in direzione X locale
Ty ₁	<daN>	=Taglio in direzione Y locale
N ₁	<daN>	=Sforzo normale in direzione Z locale
Mx ₁	<daNm>	=Momento flettente intorno all'asse X locale
My ₁	<daNm>	=Momento flettente intorno all'asse Y locale
Mz ₁	<daNm>	=Momento torcente intorno all'asse Z
Fv,Ed	<daN>	=Taglio nei bulloni
Fv,Rd	<daN>	=Resistenza a taglio del bullone
Fb,Ed,a	<daN>	=Azione di rifollamento di progetto lato asta
Fb,Rd,a	<daN>	=Rifollamento lato asta
Fb,Ed,p	<daN>	=Rifollamento lato piastra
Fb,Rd,p	<daN>	=Resistenza a rifollamento lato piastra
Ft,Ed	<daN>	=Trazione nei bulloni
Ft,Rd	<daN>	=Resistenza a trazione del bullone
Bp,Ed,a	<daN>	=Azione di punzonamento di lato asta
Bb,Rd,a	<daN>	=Punzonamento lato asta
Bp,Ed,p	<daN>	=Azione di punzonamento di progetto lato piastra
Bb,Rd,p	<daN>	=Punzonamento
Int. V-T		=Controllo interazione taglio/trazione [4.2.71]
LT	<m>	=Lunghezza tirafondi

RT	<daN>	=Resistenza tirafondi
σ_c	<daN/cm ² >	=Tensione nel calcestruzzo
TP	<daN>	=Azione che genera tensione tangenziale parallela
TO	<daN>	=Azione che genera tensione tangenziale ortogonale
NO	<daN>	=Azione che genera tensione normale ortogonale
τ_p	<daN/cm ² >	=Tensione tangenziale parallela all'asse del cordone di saldatura
τ_o	<daN/cm ² >	=Tensione tangenziale ortogonale all'asse del cordone di saldatura
σ_o	<daN/cm ² >	=Tensione normale ortogonale all'asse del cordone di saldatura
σ_{ID}	<daN/cm ² >	=Tensione ideale nel cordone di saldatura
Σ_T	<daN/cm ² >	=Somma tensioni nel cordone di saldatura
Bnetta	<mm>	=Larghezza sezione al netto di eventuali fori
Hnetta	<mm>	=Altezza sezione al netto di eventuali fori
W	<cm ³ >	=Modulo di resistenza della piastra irrigidita
σ	<daN/cm ² >	=Tensione normale
τ	<daN/cm ² >	=Tensione tangenziale
F	<daN>	=Forza trasmessa dall'ala della trave
b _{eff}	<cm>	=Larghezza efficace
t _w	<cm>	=Spessore dell'anima della colonna
Tp		=Tipo di acciaio
Fyk	<daN/cm ² >	=Tensione caratteristica di snervamento dell'acciaio
Fyt	<daN/cm ² >	=Tensione caratteristica di rottura
CB		=Classe del bullone
Fyb	<daN/cm ² >	=Tensione di snervamento dei bulloni
Ftb	<daN/cm ² >	=Tensione di rottura dei bulloni

Collegamento -1056_-1071

Piastra 160.00 x 195.00 s= 10.00 - 6 Bulloni ϕ 12
2 colonne superiori ad interasse 95.00
2 righe centrali ad interasse 56.00
2 colonne inferiori ad interasse 95.00
Altezza di gola saldature: anima 7.07 - ala 7.07

Caratteristiche meccaniche

TP	Fyk <daN/cm ² >	Fyt <daN/cm ² >	CB	Fyb <daN/cm ² >	Ftb <daN/cm ² >
S275 UNI EN 10025-2	2750.00	4300.00	8.8	5600.00	8000.00

Bullonatura flangia

CC 5 SND Asta n. 1055 (-1071 -1056)
Azioni sul collegamento: N=137.78 Ty=-0.00 Tz=-727.04 Mx=0.60 My=-0.00 Mz=-153.65
Sollecitazioni agenti localmente: Tx₁=-0.00 Ty₁=-727.04 N₁=137.78 Mx₁=-2.96 My₁=-153.65 Mz₁=0.96
Taglio nei bulloni: Fv,Ed=122.69 Fv,Rd=3225.60
Azione di rifollamento di progetto lato asta: Fb,Ed,a=122.67 Fb,Rd,a=1720.00
Rifollamento lato piastra: Fb,Ed,p=122.69 Fb,Rd,p=10189.30
Trazione nei bulloni: Ft,Ed=447.63 Ft,Rd=4838.40
Azione di punzonamento di lato asta: Bp,Ed,a=447.63 Bb,Rd,a=15562.20
Azione di punzonamento di progetto lato piastra: Bp,Ed,p=447.63 Bb,Rd,p=15562.20
Int. V-T=0.14
CC 11 SLU Asta n. 1055 (-1071 -1056)
Azioni sul collegamento: N=14.54 Ty=-0.00 Tz=-1102.81 Mx=0.16 Mz=-2.26
Sollecitazioni agenti localmente: Tx₁=-0.00 Ty₁=-1102.81 N₁=14.54 Mx₁=-0.31 My₁=-2.26 Mz₁=0.71
Taglio nei bulloni: Fv,Ed=184.92 Fv,Rd=3225.60
Azione di rifollamento di progetto lato asta: Fb,Ed,a=184.91 Fb,Rd,a=1720.00
Rifollamento lato piastra: Fb,Ed,p=184.92 Fb,Rd,p=10188.10
Trazione nei bulloni: Ft,Ed=9.24 Ft,Rd=4838.40
Azione di punzonamento di lato asta: Bp,Ed,a=9.24 Bb,Rd,a=15562.20
Azione di punzonamento di progetto lato piastra: Bp,Ed,p=9.24 Bb,Rd,p=15562.20
Int. V-T=0.11

Saldatura profilo-flangia

CC 5 SND Asta n. 1055 (-1071 -1056)
Azioni sul collegamento: N=137.78 Ty=-0.00 Tz=-727.04 Mx=0.60 My=-0.00 Mz=-153.65
Sollecitazioni agenti localmente: Tx₁=-0.00 Ty₁=-727.04 N₁=137.78 Mx₁=0.00 My₁=153.65 Mz₁=0.60
Azioni sul cordone: TP=2.62 TO=183.07 NO=34.69
Tensioni nel cordone: τ_p =0.26 τ_o =18.50 σ_o =224.63 σ_{ID} =225.40 Σ_T =243.13
CC 5 SND Asta n. 1055 (-1071 -1056)
Azioni sul collegamento: N=-116.97 Ty=0.00 Tz=-727.04 Mx=0.60 My=-0.00 Mz=-153.65
Sollecitazioni agenti localmente: Tx₁=0.00 Ty₁=-727.04 N₁=-116.97 Mx₁=0.00 My₁=153.65 Mz₁=0.60
Azioni sul cordone: TP=-1.36 TO=68.71 NO=-10.94
Tensioni nel cordone: τ_p =0.37 τ_o =18.69 σ_o =224.11 σ_{ID} =224.89 Σ_T =242.80
CC 11 SLU Asta n. 1055 (-1071 -1056)
Azioni sul collegamento: N=14.54 Ty=-0.00 Tz=-1102.81 Mx=0.16 Mz=-2.26
Sollecitazioni agenti localmente: Tx₁=-0.00 Ty₁=-1102.81 N₁=14.54 My₁=2.26 Mz₁=0.16
Azioni sul cordone: TP=0.70 TO=277.69 NO=3.66
Tensioni nel cordone: τ_p = 0.07 τ_o =28.05 σ_o =3.62 σ_{ID} =28.29 Σ_T =31.67

Flessione attacco inferiore flangia

Bnetta=134.00 Hnetta=10.00
 CC 5 SND Asta n. 1055 (-1071 -1056)
 Azioni sul collegamento: N=137.78 Ty=-0.00 Tz=-727.04 Mx=0.60 My=-0.00 Mz=-153.65
 Sollecitazioni agenti localmente: Ty₁=475.79 Mx₁=3.48
 Tensioni nella sezione: σ=155.63 τ=35.51

Flessione locale destra
 Bullone in x=-48.00 y=28.00
 Bnetta=78.00 Hnetta=10.00
 CC 5 SND Asta n. 1055 (-1071 -1056)
 Azioni sul collegamento: N=137.78 Ty=-0.00 Tz=-727.04 Mx=0.60 My=-0.00 Mz=150.08
 Sollecitazioni agenti localmente: Mx₁=16.90
 Tensioni nella sezione: σ=1300.34 τ=0.00

Flessione locale sinistra
 Bullone in x=47.00 y=28.00
 Bnetta=78.00 Hnetta=10.00
 CC 5 SND Asta n. 1055 (-1071 -1056)
 Azioni sul collegamento: N=137.78 Ty=-0.00 Tz=-727.04 Mx=0.60 My=-0.00 Mz=-153.65
 Sollecitazioni agenti localmente: Mx₁=17.46
 Tensioni nella sezione: σ=1342.90 τ=0.00

Verifica lato anima della colonna
 CC 1 SND Asta n. 1055 (-1071 -1056)
 Azioni sul collegamento: N=156.62 Ty=-0.00 Tz=-727.04 Mx=0.54 Mz=-149.62
 Zona tesa: F=61.22 b_{eff}=23.70 t_w=0.60 σ=4.31
 Zona tesa: F=61.22 b_{eff}=23.70 t_w=0.60 σ=4.31
 CC 1 SND Asta n. 1055 (-1071 -1056)
 Azioni sul collegamento: N=-135.81 Ty=0.00 Tz=-727.04 Mx=0.54 Mz=-149.62
 Zona compressa: F=-53.08 b_{eff}=14.00 t_w=0.60 σ=6.32
 Zona compressa: F=-53.08 b_{eff}=16.90 t_w=0.60 σ=5.24

Collegamento -1058_-1068

Piastre anima 246.00 x 130.00 s= 6.00 - 4+4 bulloni φ 20
 2 righe ad interasse 50.00
 2 colonne ad interasse 64.00
 Piastre ala 246.00 x 200.00 s= 15.00 - 4+4 bulloni φ 20
 2 righe ad interasse 50.00
 2 colonne ad interasse 120.00
 Piastre inferiori ala 246.00 x 79.00 s= 15.00

Caratteristiche meccaniche

<div>Tp</div>	<div>Fyk</div> <div><daN/cm<sup>q> </div>	<div>Fyt</div> <div><daN/cm<sup>q> </div>	<div>CB</div>	<div>Fyb</div> <div><daN/cm<sup>q> </div>	<div>Ftb</div> <div><daN/cm<sup>q> </div>
S275 UNI EN 10025-2	2750.00	4300.00	8.8	5600.00	8000.00

Bullonatura sull'anima
 CC 5 SND Asta n. 1049 (-1068 -1058)
 Azioni sul collegamento: N=-250.17 Tz=-166.78 Mx=-1.79 My=-443.31 Mz=-229.20
 Sollecitazioni agenti localmente: Tx₁=-50.83 Ty₁=-166.78 Mz₁=-41.25
 Taglio nei bulloni: Fv,Ed=145.36 Fv,Rd=9408.00
 Azione di rifollamento di progetto lato asta: Fb,Ed,a=290.71 Fb,Rd,a=6742.40
 Rifollamento lato piastra: Fb,Ed,p=136.33 Fb,Rd,p=4862.44

Piastra di anima
 Bnetta=12.00 Hnetta=130.00
 CC 5 SND Asta n. 1049 (-1068 -1058)
 Azioni sul collegamento: N=-250.17 Tz=-166.78 Mx=-1.79 My=-443.31 Mz=-229.20
 Sollecitazioni agenti localmente: Tx₁=-50.83 Ty₁=-166.78 Mz₁=-41.25
 Tensioni nella sezione: σ=125.30 τ=10.69

Verifica a taglio anima forata
 Bnetta=6.00 Hnetta=128.00
 CC 5 SND Asta n. 1049 (-1068 -1058)
 Azioni sul collegamento: N=-250.17 Tz=-166.78 Mx=-1.79 My=-443.31 Mz=-229.20
 Sollecitazioni agenti localmente: Ty₁=-83.39
 Tensioni nella sezione: σ=0.00 τ=10.86

Bullonatura ali superiori
 CC 5 SND Asta n. 1049 (-1068 -1058)
 Azioni sul collegamento: N=-250.17 Tz=164.61 Mx=-1.79 My=442.76 Mz=-229.20
 Sollecitazioni agenti localmente: Tx₁=-2386.10 Ty₁=9.95 Mz₁=-114.00
 Taglio nei bulloni: Fv,Ed=507.90 Fv,Rd=9408.00
 Azione di rifollamento di progetto lato asta: Fb,Ed,a=1014.96 Fb,Rd,a=9350.79
 Rifollamento lato piastra: Fb,Ed,p=507.90 Fb,Rd,p=14026.20

Bullonatura ali inferiori

ALLEGATO DI CALCOLO 03

CC 5 SND Asta n. 1049 (-1068 -1058)
Azioni sul collegamento: N=-250.17 Tz=-166.78 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-2388.93 Ty₁=-9.95 Mz₁=-115.20
Taglio nei bulloni: Fv,Ed=510.48 Fv,Rd=9408.00
Azione di rifollamento di progetto lato asta: Fb,Ed,a=1020.97 Fb,Rd,a=9350.79
Rifollamento lato piastra: Fb,Ed,p=510.07 Fb,Rd,p=14026.20

Piastre esterne sulle ali

Bnetta=15.00 Hnetta=200.00
CC 5 SND Asta n. 1049 (-1068 -1058)
Azioni sul collegamento: N=-250.17 Tz=164.61 Mx=-1.79 My=442.76 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-1333.02 Ty₁=5.56 Mz₁=-114.60
Tensioni nella sezione: σ =159.03 τ =0.19
CC 5 SND Asta n. 1049 (-1068 -1058)
Azioni sul collegamento: N=-250.17 Tz=-166.78 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-1334.60 Ty₁=-5.56 Mz₁=-114.60
Tensioni nella sezione: σ =159.09 τ =0.19

Piastre interne sulle ali

Bnetta=15.00 Hnetta=79.00
CC 5 SND Asta n. 1049 (-1068 -1058)
Azioni sul collegamento: N=-250.17 Tz=164.61 Mx=-1.79 My=442.76 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-526.54 Ty₁=2.20
Tensioni nella sezione: σ =44.43 τ =0.19
CC 5 SND Asta n. 1049 (-1068 -1058)
Azioni sul collegamento: N=-250.17 Tz=-166.78 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-527.17 Ty₁=-2.20
Tensioni nella sezione: σ =44.49 τ =0.19

Bullonatura sull'anima

CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=-127.08 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-50.83 Ty₁=-127.08 Mz₁=-38.87
Taglio nei bulloni: Fv,Ed=134.70 Fv,Rd=9408.00
Azione di rifollamento di progetto lato asta: Fb,Ed,a=269.41 Fb,Rd,a=6742.40
Rifollamento lato piastra: Fb,Ed,p=125.49 Fb,Rd,p=4949.77

Piastra di anima

Bnetta=12.00 Hnetta=130.00
CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=-127.08 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-50.83 Ty₁=-127.08 Mz₁=-38.87
Tensioni nella sezione: σ =118.25 τ =8.15

Verifica a taglio anima forata

Bnetta=6.00 Hnetta=128.00
CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=-127.08 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Ty₁=-63.54
Tensioni nella sezione: σ =0.00 τ =8.27

Bullonatura ali superiori

CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=124.91 Mx=-1.79 My=442.76 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-2386.10 Ty₁=9.95 Mz₁=-114.00
Taglio nei bulloni: Fv,Ed=507.90 Fv,Rd=9408.00
Azione di rifollamento di progetto lato asta: Fb,Ed,a=1014.96 Fb,Rd,a=9350.79
Rifollamento lato piastra: Fb,Ed,p=507.90 Fb,Rd,p=14026.20

Bullonatura ali inferiori

CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=-127.08 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-2388.93 Ty₁=-9.95 Mz₁=-115.20
Taglio nei bulloni: Fv,Ed=510.48 Fv,Rd=9408.00
Azione di rifollamento di progetto lato asta: Fb,Ed,a=1020.97 Fb,Rd,a=9350.79
Rifollamento lato piastra: Fb,Ed,p=510.07 Fb,Rd,p=14026.20

Piastre esterne sulle ali

Bnetta=15.00 Hnetta=200.00
CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=124.91 Mx=-1.79 My=442.76 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-1333.02 Ty₁=5.56 Mz₁=-114.60
Tensioni nella sezione: σ =159.03 τ =0.19
CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=-127.08 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-1334.60 Ty₁=-5.56 Mz₁=-114.60
Tensioni nella sezione: σ =159.09 τ =0.19

Piastre interne sulle ali

Bnetta=15.00 Hnetta=79.00

CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=124.91 Mx=-1.79 My=442.76 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-526.54 Ty₁=2.20
Tensioni nella sezione: σ=44.43 τ=0.19
CC 5 SND Asta n. 1049 (-1058 -1065)
Azioni sul collegamento: N=-250.17 Tz=-127.08 Mx=-1.79 My=-443.31 Mz=-229.20
Sollecitazioni agenti localmente: Tx₁=-527.17 Ty₁=-2.20
Tensioni nella sezione: σ=44.49 τ=0.19

Collegamento -1063_-1065

Piastra 140.00 x 174.00 s= 15.00 - 6 Bulloni φ 12
2 colonne superiori ad interasse 81.00
2 righe centrali ad interasse 50.00
2 colonne inferiori ad interasse 81.00
Altezza di gola saldature: anima 5.66 - ala 5.66

Caratteristiche meccaniche

TP	Fyk <daN/cm²>	Fyt <daN/cm²>	CB	Fyb <daN/cm²>	Ftb <daN/cm²>
S275 UNI EN 10025-2	2750.00	4300.00	8.8	5600.00	8000.00

Bullonatura flangia

CC 5 SND Asta n. 1059 (-1065 -1063)
Azioni sul collegamento: N=166.81 Ty=-0.46 Tz=-64.98 Mx=-0.48 My=0.00 Mz=-319.42
Sollecitazioni agenti localmente: Tx₁=-0.46 Ty₁=-64.98 N₁=166.81 Mx₁=-3.42 My₁=-319.42 Mz₁=-0.46
Taglio nei bulloni: Fv,Ed=11.69 Fv,Rd=3225.60
Azione di rifollamento di progetto lato asta: Fb,Ed,a=11.63 Fb,Rd,a=714.55
Rifollamento lato piastra: Fb,Ed,p=11.68 Fb,Rd,p=14953.70
Trazione nei bulloni: Ft,Ed=1040.46 Ft,Rd=4838.40
Azione di punzonamento di lato asta: Bp,Ed,a=1040.46 Bb,Rd,a=9337.32
Azione di punzonamento di progetto lato piastra: Bp,Ed,p=1040.46 Bb,Rd,p=23343.30
Int. V-T=0.16
CC 10 SLU Asta n. 1059 (-1065 -1063)
Azioni sul collegamento: N=-2.25 Ty=0.01 Tz=-84.47 Mx=-0.01 My=0.00 Mz=-1.66
Sollecitazioni agenti localmente: Tx₁=0.01 Ty₁=-84.47 N₁=-2.25 Mx₁=0.05 My₁=-1.66 Mz₁=0.04
Taglio nei bulloni: Fv,Ed=14.14 Fv,Rd=3225.60
Azione di rifollamento di progetto lato asta: Fb,Ed,a=14.14 Fb,Rd,a=714.46
Rifollamento lato piastra: Fb,Ed,p=14.14 Fb,Rd,p=14884.90
Trazione nei bulloni: Ft,Ed=4.78 Ft,Rd=4838.40
Azione di punzonamento di lato asta: Bp,Ed,a=4.78 Bb,Rd,a=9337.32
Azione di punzonamento di progetto lato piastra: Bp,Ed,p=4.78 Bb,Rd,p=23343.30
Int. V-T=0.02

Saldatura profilo-flangia

CC 1 SND Asta n. 1059 (-1065 -1063)
Azioni sul collegamento: N=-174.51 Ty=0.48 Tz=-64.98 Mx=-0.50 My=0.00 Mz=-310.68
Sollecitazioni agenti localmente: Tx₁=0.48 Ty₁=-64.98 N₁=-174.51 Mx₁=-0.00 My₁=310.68 Mz₁=-0.50
Azioni sul cordone: TP=1.26 TO=5.49 NO=-16.59
Tensioni nel cordone: τ_p=0.47 τ_o=2.05 σ_o=718.27 σ_{ID}=718.28 Σ_T=720.33
CC 5 SND Asta n. 1059 (-1065 -1063)
Azioni sul collegamento: N=-170.32 Ty=0.47 Tz=-64.98 Mx=-0.48 My=0.00 Mz=-319.42
Sollecitazioni agenti localmente: Tx₁=0.47 Ty₁=-64.98 N₁=-170.32 Mx₁=-0.00 My₁=319.42 Mz₁=-0.48
Azioni sul cordone: TP=1.21 TO=5.51 NO=-16.19
Tensioni nel cordone: τ_p=0.45 τ_o=2.06 σ_o=738.15 σ_{ID}=738.15 Σ_T=740.21
CC 9 SLU Asta n. 1059 (-1065 -1063)
Azioni sul collegamento: N=-2.24 Ty=0.01 Tz=-84.47 Mx=-0.01 My=0.00 Mz=-1.66
Sollecitazioni agenti localmente: Tx₁=0.01 Ty₁=-84.47 N₁=-2.24 Mx₁=-0.00 My₁=1.66 Mz₁=-0.01
Azioni sul cordone: TP=-0.03 TO=21.08 NO=-0.56
Tensioni nel cordone: τ_p=4.24E-03 τ_o=3.01 σ_o=3.89 σ_{ID}=4.91 Σ_T=6.89

Flessione attacco inferiore flangia

Bnetta=114.00 Hnetta=15.00
CC 5 SND Asta n. 1059 (-1065 -1063)
Azioni sul collegamento: N=166.81 Ty=-0.46 Tz=-64.98 Mx=-0.48 My=0.00 Mz=-319.42
Sollecitazioni agenti localmente: Ty₁=1110.57 Mx₁=7.75
Tensioni nella sezione: σ=181.31 τ=64.95

Flessione locale destra

Bullone in x=-41.00 y=25.00
Bnetta=66.00 Hnetta=15.00
CC 5 SND Asta n. 1059 (-1065 -1063)
Azioni sul collegamento: N=166.81 Ty=-0.46 Tz=-64.98 Mx=-0.48 My=0.00 Mz=317.01
Sollecitazioni agenti localmente: Mx₁=33.69
Tensioni nella sezione: σ=1361.05 τ=0.00

Flessione locale sinistra

Bullone in x=40.00 y=25.00
Bnetta=66.00 Hnetta=15.00

CC 5 SND Asta n. 1059 (-1065 -1063)
Azioni sul collegamento: N=166.81 Ty=-0.46 Tz=-64.98 Mx=-0.48 My=0.00 Mz=-319.42
Sollecitazioni agenti localmente: Mx1=34.34
Tensioni nella sezione: σ =1387.28 τ =0.00

Collegamento -1066_-1070

Piastra 140.00 x 174.00 s= 10.00 - 6 Bulloni ϕ 12
2 colonne superiori ad interasse 84.00
2 righe centrali ad interasse 48.00
2 colonne inferiori ad interasse 84.00
Altezza di gola saldature: anima 5.66 - ala 5.66

Caratteristiche meccaniche

TP	Fyk <daN/cm ² >	Fyt <daN/cm ² >	CB	Fyb <daN/cm ² >	Ftb <daN/cm ² >
S275 UNI EN 10025-2	2750.00	4300.00	8.8	5600.00	8000.00

Bullonatura flangia

CC 5 SND Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=111.38 Ty=-0.00 Tz=-2780.42 Mx=-0.38 Mz=-228.33
Sollecitazioni agenti localmente: Tx1=-0.00 Ty1=-2780.42 N1=111.38 Mx1=-2.28 My1=-228.33 Mz1=-0.38
Taglio nei bulloni: Fv,Ed=464.08 Fv,Rd=3225.60
Azione di rifollamento di progetto lato asta: Fb,Ed,a=464.08 Fb,Rd,a=926.15
Rifollamento lato piastra: Fb,Ed,p=464.08 Fb,Rd,p=9923.10
Trazione nei bulloni: Ft,Ed=735.34 Ft,Rd=4838.40
Azione di punzonamento di lato asta: Bp,Ed,a=735.34 Bb,Rd,a=15562.20
Azione di punzonamento di progetto lato piastra: Bp,Ed,p=735.34 Bb,Rd,p=15562.20
Int. V-T=0.61
CC 11 SLU Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=-218.49 Ty=0.00 Tz=-4248.51 Mx=-0.01 Mz=-0.82
Sollecitazioni agenti localmente: Tx1=0.00 Ty1=-4248.51 N1=-218.49 Mx1=4.48 My1=-0.82 Mz1=-0.01
Taglio nei bulloni: Fv,Ed=708.10 Fv,Rd=3225.60
Azione di rifollamento di progetto lato asta: Fb,Ed,a=708.10 Fb,Rd,a=926.15
Rifollamento lato piastra: Fb,Ed,p=708.10 Fb,Rd,p=9923.08

Saldatura profilo-flangia

CC 5 SND Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=111.38 Ty=-0.00 Tz=-2780.42 Mx=-0.38 Mz=-228.33
Sollecitazioni agenti localmente: Tx1=-0.00 Ty1=-2780.42 N1=111.38 My1=228.33 Mz1=-0.38
Azioni sul cordone: TP=1.01 TO=264.87 NO=10.59
Tensioni nel cordone: τ_p =0.38 τ_o =99.11 σ_o =526.93 σ_{ID} =536.17 Σ_T =626.04
CC 5 SND Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=-397.35 Ty=0.01 Tz=-2780.42 Mx=-0.38 Mz=-228.33
Sollecitazioni agenti localmente: Tx1=0.01 Ty1=-2780.42 N1=-397.35 My1=228.33 Mz1=-0.38
Azioni sul cordone: TP=-1.90 TO=693.71 NO=-99.14
Tensioni nel cordone: τ_p =0.27 τ_o =98.91 σ_o =537.11 σ_{ID} =546.14 Σ_T =636.02
CC 11 SLU Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=-218.49 Ty=0.00 Tz=-4248.51 Mx=-0.01 Mz=-0.82
Sollecitazioni agenti localmente: Tx1=0.00 Ty1=-4248.51 N1=-218.49 My1=0.82 Mz1=-0.01
Azioni sul cordone: TP=-0.05 TO=1059.99 NO=-54.51
Tensioni nel cordone: τ_p =6.87E-03 τ_o =151.14 σ_o =9.66 σ_{ID} =151.44 Σ_T =160.79

Flessione attacco inferiore flangia

Bnetta=114.00 Hnetta=10.00
CC 5 SND Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=111.38 Ty=-0.00 Tz=-2780.42 Mx=-0.38 Mz=-228.33
Sollecitazioni agenti localmente: Ty1=772.98 Mx1=4.65
Tensioni nella sezione: σ =244.84 τ =67.81

Flessione locale destra

Bullone in x=-42.00 y=24.00
Bnetta=68.00 Hnetta=10.00
CC 5 SND Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=111.38 Ty=-0.00 Tz=-2780.42 Mx=-0.38 Mz=226.97
Sollecitazioni agenti localmente: Mx1=24.86
Tensioni nella sezione: σ =2193.27 τ =0.00

Flessione locale sinistra

Bullone in x=42.00 y=24.00
Bnetta=68.00 Hnetta=10.00
CC 5 SND Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=111.38 Ty=-0.00 Tz=-2780.42 Mx=-0.38 Mz=-228.33
Sollecitazioni agenti localmente: Mx1=25.00
Tensioni nella sezione: σ =2206.02 τ =0.00

Verifica lato anima della colonna

CC 1 SND Asta n. 1054 (-1070 -1066)
Azioni sul collegamento: N=183.26 Ty=-0.00 Tz=-2780.42 Mx=-0.36 Mz=-210.02

Zona tesa: $F=72.26$ $b_{eff}=21.95$ $t_w=0.60$ $\sigma=5.49$
 Zona tesa: $F=72.26$ $b_{eff}=21.95$ $t_w=0.60$ $\sigma=5.49$
 CC 1 SND Asta n. 1054 (-1070 -1066)
 Azioni sul collegamento: $N=-469.24$ $T_y=0.01$ $T_z=-2780.42$ $M_x=-0.36$ $M_z=-210.02$
 Zona compressa: $F=-185.02$ $b_{eff}=14.00$ $t_w=0.60$ $\sigma=22.03$
 Zona compressa: $F=-185.02$ $b_{eff}=16.85$ $t_w=0.60$ $\sigma=18.30$

Collegamenti -1076_-1094 -1084_-1083 -1082_-1095 -1077_-1044 -1078_-1066 -1081_-1051 -1079_-1068 -1080_-1045

Piastra 318.00 x 318.00 s=25.00 - 4 Tirafondi ϕ 12 - Profondità di infissione: 400.00
 2 righe ad interasse 286.00
 2 colonne ad interasse 286.00
 Altezza di gola saldature: anima 7.07 - ala 7.07
 Irrigidimenti:
 Laterali parallele all'anima s=10.00
 Trasversali s=10.00

Caratteristiche meccaniche

<div>Tp</div>	<div>Fyk</div> <div><daN/cm²></div>	<div>Fyt</div> <div><daN/cm²></div>	<div>CB</div>	<div>Fyb</div> <div><daN/cm²></div>	<div>Ftb</div> <div><daN/cm²></div>
S275 UNI EN 10025-2	2750.00	4300.00	8.8	5600.00	8000.00

Tirafondi e calcestruzzo
 CC 1 SND Asta n. 1047 (-1078 -1066)
 Azioni sul collegamento: $N=-3098.63$ $T_y=-0.00$ $T_z=721.54$ $M_x=1.31$ $M_y=1718.38$ $M_z=-374.14$
 Sollecitazioni agenti localmente: $T_{x1}=-0.00$ $T_{y1}=721.54$ $N_1=-3098.63$ $M_{x1}=1718.38$ $M_{y1}=-374.14$ $M_{z1}=1.31$
 Taglio nei bulloni: $F_v,Ed=181.53$ $F_v,Rd=4342.94$
 Rifollamento lato piastra: $F_b,Ed,p=181.53$ $F_b,Rd,p=7393.39$
 Trazione nei bulloni: $F_t,Ed=2628.56$ $F_t,Rd=4838.40$
 Azione di punzonamento di progetto lato piastra: $B_p,Ed,p=2628.56$ $B_b,Rd,p=38905.50$
 Int. V-T=0.43
 Tirafondi:LT=0.64 (0.51) RT=4030.59
 Compressione nel calcestruzzo: $\sigma_c=66.60$
 CC 1 SND Asta n. 1050 (-1080 -1045)
 Azioni sul collegamento: $N=-11689.50$ $T_y=0.00$ $T_z=2023.82$ $M_x=0.06$ $M_y=696.01$ $M_z=1054.11$
 Sollecitazioni agenti localmente: $T_{x1}=0.00$ $T_{y1}=2023.82$ $N_1=-11689.50$ $M_{x1}=696.01$ $M_{y1}=1054.11$ $M_{z1}=0.06$
 Taglio nei bulloni: $F_v,Ed=506.01$ $F_v,Rd=4342.94$
 Rifollamento lato piastra: $F_b,Ed,p=506.01$ $F_b,Rd,p=7392.96$
 Trazione nei bulloni: $F_t,Ed=454.77$ $F_t,Rd=4838.40$
 Azione di punzonamento di progetto lato piastra: $B_p,Ed,p=454.77$ $B_b,Rd,p=38905.50$
 Int. V-T=0.18
 Tirafondi:LT=0.64 (0.51) RT=4030.59
 Compressione nel calcestruzzo: $\sigma_c=45.98$
 CC 1 SND Asta n. 1050 (-1080 -1045)
 Azioni sul collegamento: $N=-11689.50$ $T_y=0.00$ $T_z=2023.82$ $M_x=0.06$ $M_y=696.01$ $M_z=-1728.34$
 Sollecitazioni agenti localmente: $T_{x1}=0.00$ $T_{y1}=2023.82$ $N_1=-11689.50$ $M_{x1}=696.01$ $M_{y1}=-1728.34$ $M_{z1}=0.06$
 Taglio nei bulloni: $F_v,Ed=506.01$ $F_v,Rd=4342.94$
 Rifollamento lato piastra: $F_b,Ed,p=506.01$ $F_b,Rd,p=7392.96$
 Trazione nei bulloni: $F_t,Ed=1216.26$ $F_t,Rd=4838.40$
 Azione di punzonamento di progetto lato piastra: $B_p,Ed,p=1216.26$ $B_b,Rd,p=38905.50$
 Int. V-T=0.30
 Tirafondi:LT=0.64 (0.51) RT=4030.59
 Compressione nel calcestruzzo: $\sigma_c=69.94$

Saldatura profilo-piastra
 CC 1 SND Asta n. 1047 (-1078 -1066)
 Azioni sul collegamento: $N=-3098.63$ $T_y=0.00$ $T_z=-437.13$ $M_x=1.31$ $M_y=-1478.62$ $M_z=369.57$
 Sollecitazioni agenti localmente: $T_{x1}=0.00$ $T_{y1}=-437.13$ $N_1=-3098.63$ $M_{x1}=1478.62$ $M_{y1}=-369.57$ $M_{z1}=1.31$
 Azioni sul cordone: TP=3.76 TO=87.04 NO=-616.98
 Tensioni nel cordone: $\tau_p=0.30$ $\tau_o=6.84$ $\sigma_o=637.16$ $\sigma_{ID}=637.20$ $\Sigma_T=644.00$
 CC 1 SND Asta n. 1050 (-1080 -1045)
 Azioni sul collegamento: $N=-11689.50$ $T_y=0.00$ $T_z=2023.82$ $M_x=0.06$ $M_y=696.01$ $M_z=1054.11$
 Sollecitazioni agenti localmente: $T_{x1}=0.00$ $T_{y1}=2023.82$ $N_1=-11689.50$ $M_{x1}=-696.01$ $M_{y1}=-1054.11$ $M_{z1}=0.06$
 Azioni sul cordone: TP=0.18 TO=402.97 NO=-2327.55
 Tensioni nel cordone: $\tau_p=0.01$ $\tau_o=31.67$ $\sigma_o=1036.28$ $\sigma_{ID}=1036.76$ $\Sigma_T=1067.95$
 CC 1 SND Asta n. 1050 (-1080 -1045)
 Azioni sul collegamento: $N=-19191.00$ $T_y=0.00$ $T_z=2023.82$ $M_x=0.06$ $M_y=696.01$ $M_z=-1728.34$
 Sollecitazioni agenti localmente: $T_{x1}=0.00$ $T_{y1}=2023.82$ $N_1=-19191.00$ $M_{x1}=-696.01$ $M_{y1}=1728.34$ $M_{z1}=0.06$
 Azioni sul cordone: TP=0.18 TO=402.97 NO=-3821.20
 Tensioni nel cordone: $\tau_p=0.01$ $\tau_o=31.67$ $\sigma_o=1595.10$ $\sigma_{ID}=1595.42$ $\Sigma_T=1626.77$

Flessione attacco superiore piastra
 Bnetta=25.00 Hnetta=318.00 irrigidita (W=39.70)
 CC 1 SND Asta n. 1047 (-1078 -1066)
 Azioni sul collegamento: $N=-3098.63$ $T_y=-0.00$ $T_z=721.54$ $M_x=1.31$ $M_y=1718.38$ $M_z=369.57$
 Sollecitazioni agenti localmente: $T_{y1}=-7379.26$ $M_{x1}=-300.92$
 Tensioni nella sezione: $\sigma=757.90$ $\tau=614.94$

Verifica superiore come trave su due appoggi

Hnetta=25.00
 CC 1 SND Asta n. 1047 (-1078 -1066)
 Azioni sul collegamento: N=-3098.63 Ty=-0.00 Tz=721.54 Mx=1.31 My=1718.38 Mz=369.57
 Sollecitazioni agenti localmente: Ty₁=28167.90 My₁=730.74
 Tensioni nella sezione: σ =701.51 τ =112.67

Verifica rinforzi piastra

Bnetta=25.00 Hnetta=318.00 irrigidita (W=39.70)
 CC 1 SND Asta n. 1048 (-1081 -1051)
 Azioni sul collegamento: N=-3098.63 Ty=0.00 Tz=-725.01 Mx=0.73 My=-1723.42 Mz=-353.18
 Sollecitazioni agenti localmente: Ty₁=-7410.02 Mx₁=-302.21
 Tensioni nella sezione: σ =761.15 τ =617.50

Verifica inferiore come trave su due appoggi

Hnetta=25.00
 CC 1 SND Asta n. 1048 (-1081 -1051)
 Azioni sul collegamento: N=-3098.63 Ty=0.00 Tz=-725.01 Mx=0.73 My=-1723.42 Mz=-353.18
 Sollecitazioni agenti localmente: Ty₁=28284.70 My₁=733.77
 Tensioni nella sezione: σ =704.41 τ =113.14

Flessione attacco destro piastra

Bnetta=25.00 Hnetta=318.00 irrigidita (W=39.70)
 CC 1 SND Asta n. 1050 (-1080 -1045)
 Azioni sul collegamento: N=-19191.00 Ty=0.00 Tz=2023.82 Mx=0.06 My=696.01 Mz=1054.11
 Sollecitazioni agenti localmente: Ty₁=-7013.97 My₁=-230.87
 Tensioni nella sezione: σ =581.45 τ =584.50

Verifica destra come trave su due appoggi

Hnetta=25.00
 CC 1 SND Asta n. 1050 (-1080 -1045)
 Azioni sul collegamento: N=-19191.00 Ty=0.00 Tz=2023.82 Mx=0.06 My=696.01 Mz=1054.11
 Sollecitazioni agenti localmente: Ty₁=28219.40 My₁=523.47
 Tensioni nella sezione: σ =502.53 τ =112.88

Flessione attacco sinistro piastra

Bnetta=25.00 Hnetta=318.00 irrigidita (W=39.70)
 CC 1 SND Asta n. 1050 (-1080 -1045)
 Azioni sul collegamento: N=-19191.00 Ty=0.00 Tz=2023.82 Mx=0.06 My=696.01 Mz=-1728.34
 Sollecitazioni agenti localmente: Ty₁=-9391.29 My₁=-312.83
 Tensioni nella sezione: σ =787.89 τ =782.61

Verifica sinistra come trave su due appoggi

Hnetta=25.00
 CC 1 SND Asta n. 1050 (-1080 -1045)
 Azioni sul collegamento: N=-19191.00 Ty=0.00 Tz=2023.82 Mx=0.06 My=696.01 Mz=-1728.34
 Sollecitazioni agenti localmente: Ty₁=37666.60 My₁=698.72
 Tensioni nella sezione: σ =670.77 τ =150.67

Flessione locale angolo superiore sinistro

Bullone in x=-143.00 y=143.00
 Bnetta=66.00 Hnetta=25.00
 CC 1 SND Asta n. 1048 (-1081 -1051)
 Azioni sul collegamento: N=-3098.63 Ty=0.00 Tz=-725.01 Mx=0.73 My=-1723.42 Mz=361.69
 Sollecitazioni agenti localmente: My₁=86.71
 Tensioni nella sezione: σ =1261.19 τ =0.00

Flessione locale angolo superiore destro

Bullone in x=143.00 y=143.00
 Bnetta=66.00 Hnetta=25.00
 CC 1 SND Asta n. 1048 (-1081 -1051)
 Azioni sul collegamento: N=-3098.63 Ty=0.00 Tz=-725.01 Mx=0.73 My=-1723.42 Mz=-353.18
 Sollecitazioni agenti localmente: My₁=86.48
 Tensioni nella sezione: σ =1257.93 τ =0.00

Flessione locale angolo inferiore sinistro

Bullone in x=-143.00 y=-143.00
 Bnetta=66.00 Hnetta=25.00
 CC 1 SND Asta n. 1047 (-1078 -1066)
 Azioni sul collegamento: N=-3098.63 Ty=-0.00 Tz=721.54 Mx=1.31 My=1718.38 Mz=369.57
 Sollecitazioni agenti localmente: My₁=86.62
 Tensioni nella sezione: σ =1259.95 τ =0.00

Flessione locale angolo inferiore destro

Bullone in x=143.00 y=-143.00
 Bnetta=66.00 Hnetta=25.00
 CC 1 SND Asta n. 1047 (-1078 -1066)
 Azioni sul collegamento: N=-3098.63 Ty=-0.00 Tz=721.54 Mx=1.31 My=1718.38 Mz=-374.14
 Sollecitazioni agenti localmente: My₁=86.74

Tensioni nella sezione: $\sigma=1261.71$ $\tau=0.00$

ALLEGATO 04 - Verifiche nuove aste in acciaio**Simbologia**

Sez.		= Numero della sezione
Cod.		= Codice
Tipo		= Tipologia
		2C = Doppia C lato labbri
		2Cdx = Doppia C lato costola
		2I = Doppia I
		2L = Doppia L lato labbri
		2Ldx = Doppia L lato costole
		C = Sezione a C
		Cdx = C destra
		Cir. = Circolare
		Cir.c = Circolare cava
		I = Sezione a I
		L = Sezione a L
		Ldx = L destra
		Om. = Omega
		Pg = Pi greco
		Pr = Poligono regolare
		Prc = Poligono regolare cavo
		Pc = Per coordinate
		Ia = Inerzie assegnate
		R = Rettangolare
		Rc = Rettangolare cava
		T = Sezione a T
		U = Sezione a U
		Ur = U rovescia
		V = Sezione a V
		Vr = V rovescia
		Z = Sezione a Z
		Zdx = Z destra
		Ts = T stondata
		Ls = L stondata
		Cs = C stondata
		Is = I stondata
		Dis. = Disegnata
D	<cm>	= Distanza
Area	<cmq>	= Area
Anet	<cmq>	= Area netta per compressione
Aeff	<cmq>	= Area effettiva per trazione
Jy	<cm4>	= Momento d'inerzia rispetto all'asse Y
Jz	<cm4>	= Momento d'inerzia rispetto all'asse Z
Iy	<cm>	= Raggio giratorio d'inerzia rispetto all'asse Y
Iz	<cm>	= Raggio giratorio d'inerzia rispetto all'asse Z
Wymin	<cmc>	= Modulo di resistenza minimo rispetto all'asse Y
Wzmin	<cmc>	= Modulo di resistenza minimo rispetto all'asse Z
Tp		= Tipo di acciaio
Fyk	<daN/cm²>	= Tensione caratteristica di snervamento dell'acciaio
Fyt	<daN/cm²>	= Tensione caratteristica di rottura
Wy,plas	<cmc>	= Modulo di resistenza plastico intorno all'asse Y
Wz,plas	<cmc>	= Modulo di resistenza plastico intorno all'asse Z
Atag,y	<cmq>	= Area resistente a taglio in dir. Y
Atag,z	<cmq>	= Area resistente a taglio in dir. Z
J ₀	<cm6>	= Costante di ingobbamento
CC		= Numero della combinazione delle condizioni di carico elementari
Xl	<m>	= Coordinata progressiva (dal nodo iniziale dell'asta) in cui viene effettuato il progetto/verifica
Tz	<daN>	= Taglio in dir. Z
My	<daNm>	= Momento flettente intorno all'asse Y
Ty	<daN>	= Taglio in dir. Y
Mz	<daNm>	= Momento flettente intorno all'asse Z
Mx	<daNm>	= Momento torcente intorno all'asse X
σ _N	<daN/cm²>	= Tensione normale per sforzo normale
σ _M	<daN/cm²>	= Tensione normale per momento flettente
τ	<daN/cm²>	= Tensione tangenziale per taglio e/o torsione
σ _{ID,max}	<daN/cm²>	= Tensione ideale massima
V,Ed	<daN>	= Forza di taglio di calcolo
Vc,Rd,Red	<daN>	= Resistenza a taglio ridotta
My,Ed	<daNm>	= Momento flettente di calcolo intorno all'asse Y
My,V,c,Rd	<daNm>	= Resistenza di calcolo a flessione ridotta per taglio intorno all'asse Y
Mz,Ed	<daNm>	= Momento flettente di calcolo intorno all'asse Z
Mz,V,c,Rd	<daNm>	= Resistenza di calcolo a flessione ridotta per taglio intorno all'asse Z
N,Ed	<daN>	= Forza assiale di calcolo
Nc,Rd	<daN>	= Resistenza a compressione
α		= Esponente sfruttamento per flessione retta intorno all'asse y
β		= Esponente sfruttamento per flessione retta intorno all'asse z
L _{cr}	<m>	= Lunghezza di libera inflessione laterale fra ritegni torsionali
α _{imp}		= Coefficiente di imperfezione
k _c		= Coeff. di correzione momento flettente per stabilità laterale membrature inflesse
ψ		= Coeff. di correzione momento critico per stabilità laterale membrature inflesse
M,cr	<daNm>	= Momento critico per instabilità flessa torsionale
λ _{LT}		= Coefficiente di imperfezione per stabilità laterale membrature inflesse
λ _{LT,0}		= Coefficiente di imperfezione di confronto per stabilità laterale membrature inflesse
β _{LT}		= Coefficiente per calcolo Φ _{LT}
Φ _{LT}		= Coefficiente Φ per stabilità laterale membrature inflesse
f		= Fattore di modifica per il coefficiente di riduzione
χ _{LT}		= Coefficiente di riduzione per stabilità laterale membrature inflesse
My,b,Rd	<daNm>	= Resistenza di calcolo a flessione ridotta per stabilità laterale membrature inflesse
L	<m>	= Lunghezza dell'asta
α _{my} , α _{mz} , α _{LT}		= Coefficienti correttivi per il momento flettente
λ _y		= Snellezza per inflessione intorno all'asse y(c)
Ncr,y	<daN>	= Sforzo normale critico euleriano per inflessione intorno all'asse y(c)
λ _y		= Snellezza adimensionale per inflessione intorno all'asse y(c)
Curva		= Curva di instabilità adottata
Φ _y		= Coefficiente Φ per inflessione intorno all'asse y(c)
χ _y		= Coefficiente χ di riduzione per instabilità intorno all'asse y(c)
λ _z		= Snellezza per inflessione intorno all'asse z(e)
Ncr,z	<daN>	= Sforzo normale critico euleriano per inflessione intorno all'asse z(e)
λ _z		= Snellezza adimensionale per inflessione intorno all'asse z(e)
Φ _z		= Coefficiente Φ per inflessione intorno all'asse z(e)
χ _z		= Coefficiente χ di riduzione per instabilità intorno all'asse z(e)
Kyy, Kyz, Kzy, Kzz		= Coefficienti di interazione
Vc,Rd	<daN>	= Resistenza a taglio
N	<daN>	= Sforzo normale
Myeq,Ed	<daNm>	= Valore equivalente del momento flettente intorno all'asse Y
Mzeq,Ed	<daNm>	= Valore equivalente del momento flettente intorno all'asse Z
T	<daN>	= Taglio agente
M	<daNm>	= Momento agente

M,Ed	<daNm>	= Momento flettente di calcolo
M,V,c,Rd	<daNm>	= Resistenza di calcolo a flessione ridotta per taglio
MN,c,Rd	<daNm>	= Resistenza di calcolo a pressoflessione
λ		= Snellezza per inflessione
Ncr	<daN>	= Sforzo normale critico euleriano
λ^*		= Snellezza adimensionale
Φ		= Coefficiente Φ
χ_{min}		= Coefficiente χ di riduzione per instabilità
MNy,c,Rd	<daNm>	= Resistenza di calcolo a pressoflessione intorno all'asse Y
MNz,c,Rd	<daNm>	= Resistenza di calcolo a pressoflessione intorno all'asse Z
My,c,Rd	<daNm>	= Resistenza di calcolo a flessione intorno all'asse Y
Mz,c,Rd	<daNm>	= Resistenza di calcolo a flessione intorno all'asse Z

Caratteristiche profilati utilizzati

Sez.	Cod.	Tipo	D <cm>	Area <cmq>	Anet <cmq>	Aeff <cmq>	Jy <cm4>	Jz <cm4>	Iy <cm>	Iz <cm>	Wymin <cm>	Wzmin <cm>	TP	Fyk <daN/cm>	Fyt <daN/cm>
30	HEB240	Is	--	105.99	105.99	105.99	11259.50	3922.67	10.31	6.08	938.29	326.89	S235 UNI EN 10025-2	2350.00	3600.00
32	UPN300	Cs	--	59.62	59.62	59.62	8199.81	553.92	11.73	3.05	546.65	77.89	S235 UNI EN 10025-2	2350.00	3600.00
33	CHS168.3x10	Cir.c	--	49.73	49.73	49.73	1563.98	1563.98	5.61	5.61	185.86	185.86	S235H UNI EN 10210-1	2350.00	3600.00
34	HEA200	Is	--	52.98	52.98	52.98	3671.80	1335.33	8.32	5.02	386.50	133.53	S235 UNI EN 10025-2	2350.00	3600.00
35	HEA140	Is	--	31.42	31.42	31.42	1033.15	389.32	5.73	3.52	155.36	55.62	S235 UNI EN 10025-2	2350.00	3600.00
36	HEA160	Is	--	38.77	38.77	38.77	1673.02	615.58	6.57	3.98	220.13	76.95	S235 UNI EN 10025-2	2350.00	3600.00

Caratteristiche profilati utilizzati

Sez.	Cod.	Wy,plas <cm>	Wz,plas <cm>	Atag,y <cmq>	Atag,z <cmq>	J ϕ <cm6>
30	HEB240	1056.51	498.87	89.59	33.23	486946.00
32	UPN300	645.52	157.93	36.02	31.78	
33	CHS168.3x10	244.78	244.78	31.66	31.66	
34	HEA200	427.91	203.73	44.94	17.18	108000.00
35	HEA140	174.11	84.93	26.36	10.12	15063.70
36	HEA160	246.26	117.79	32.53	13.21	31409.70

Asta n. 217 (66 -413) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.64$ - Classe 3
Sollecitazioni: $T_z=-1215.34$ $M_y=76.75$ $T_y=2192.29$ $M_z=1237.23$ $M_x=4.37$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-386.67$ $\tau=8.02$ $\sigma_{max}=-386.67$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-10.18$ $\tau=61.69$ $\tau_{max}=61.69$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-386.67$ $\tau=8.02$ $\sigma_{ID,max}=386.92$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_l=0.64$ - Classe 1
Sollecitazioni: $T_y=300.67$ $M_x=1.64$
 $V,Ed=300.67$ $V_c,Rd,Red=115658.00$ $V,Ed/V_c,Rd,Red=0.00$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_l=0.64$ - Classe 1
Sollecitazioni: $T_z=-1410.38$ $M_x=1.64$
 $V,Ed=-1410.38$ $V_c,Rd,Red=42897.20$ $V,Ed/V_c,Rd,Red=0.03$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.64$ - Classe 1
Sollecitazioni: $T_z=-1410.38$ $M_y=31.87$ $T_y=300.67$ $M_z=169.68$ $M_x=1.64$
 $N,Ed=0.00$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 $M_y,Ed=31.87$ $M_y,V,c,Rd=23645.80$ $M_y,Ed/M_y,V,c,Rd=0.00$ $M_y,Ed/M_y,V,c,Rd=0.00$
 $M_z,Ed=169.68$ $M_z,V,c,Rd=11165.10$ $M_z,Ed/M_z,V,c,Rd=0.02$ $M_z,Ed/M_z,V,c,Rd=0.02$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_y,V,c,Rd)^2+(M_z,Ed/M_z,V,c,Rd)^1=0.02$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 11 SLU - Classe 1
 $L_{cr}=0.64$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.19$ $M_{cr}=4986670.00$ $\lambda_{LT}=0.07$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\phi_{LT}=0.45$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-182.83$ $M_y,b,Rd=23645.80$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SND - Classe 3
Sollecitazioni: $N,Ed=-0.02$ $M_y,Ed=-125.74$ $M_z,Ed=-105.59$ $L=0.64$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.64$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.45$ $M_{cr}=5583790.00$ $\lambda_{LT}=0.06$
 $\lambda_{LT,0}=0.40$ $\phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=6.16$ $N_{cr,y}=57875000.00$ $\lambda^*_y=0.07$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=10.44$ $N_{cr,z}=20162900.00$ $\lambda^*_z=0.11$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.01+0.01=0.02$
Verifica ZZ: $0.00+0.00+0.01=0.02$

Asta n. 217 (-413 -657) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
Sollecitazioni: $T_z=226.52$ $M_y=75.85$ $T_y=12938.70$ $M_z=-2363.72$ $M_x=-12.99$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-731.18$ $\tau=23.86$ $\sigma_{max}=-731.18$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-163.61$ $\tau=226.89$ $\tau_{max}=226.89$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-731.18$ $\tau=23.86$ $\sigma_{ID,max}=732.35$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=1773.57$ $M_x=-6.14$
 $V,Ed=1773.57$ $V_c,Rd,Red=115361.00$ $V,Ed/V_c,Rd,Red=0.02$

- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=175.02$ $M_x=-6.14$
 $V, Ed=175.02$ $V_c, Rd, Red=42786.90$ $V, Ed/V_c, Rd, Red=0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=175.02$ $M_y=48.83$ $T_y=1773.57$ $M_z=-324.29$ $M_x=-6.14$
 $N, Ed=0.00$ $N_c, Rd=237211.00$ $n=N, Ed/N_c, Rd=0.00$
 $M_y, Ed=48.83$ $M_y, V, c, Rd=23645.80$ $M_y, Ed/M_y, V, c, Rd=0.00$ $M_y, Ed/M_y, V, c, Rd=0.00$
 $M_z, Ed=-324.29$ $M_z, V, c, Rd=11165.10$ $M_z, Ed/M_z, V, c, Rd=0.03$ $M_z, Ed/M_z, V, c, Rd=0.03$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/M_y, V, c, Rd)^2 + (M_z, Ed/M_z, V, c, Rd)^1 = 0.03$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.11$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.08$ $M_{cr}=77933300.00$ $\lambda_{LT}=0.02$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.43$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $M_y, Ed=92.79$ $M_y, b, Rd=20999.90$ $M_y, Ed/M_y, b, Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SND - Classe 3
Sollecitazioni: $N, Ed=-0.01$ $M_y, Ed=77.50$ $M_z, Ed=202.68$ $L=0.11$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.11$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.13$ $M_{cr}=81456900.00$ $\lambda_{LT}=0.02$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.43$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $\lambda_y=1.09$ $N_{cr,y}=1855310000.00$ $\lambda^*_y=0.01$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=1.84$ $N_{cr,z}=646365000.00$ $\lambda^*_z=0.02$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.00+0.03=0.03$
Verifica ZZ: $0.00+0.00+0.03=0.03$

Asta n. 217 (-657 -654) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
Sollecitazioni: $T_z=648.45$ $M_y=55.95$ $T_y=1717.69$ $M_z=-576.78$ $M_x=-1.05$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-182.41$ $\tau=1.94$ $\sigma_{max}=-182.41$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-11.43$ $\tau=33.94$ $\tau_{max}=33.94$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-182.41$ $\tau=1.94$ $\sigma_{ID,max}=182.44$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.32$ - Classe 1
Sollecitazioni: $T_y=233.90$
 $V, Ed=233.90$ $V_c, Rd=115766.00$ $V, Ed/V_c, Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.32$ - Classe 1
Sollecitazioni: $T_z=-771.40$
 $V, Ed=-771.40$ $V_c, Rd=42937.10$ $V, Ed/V_c, Rd=0.02$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=728.91$ $M_y=52.09$ $T_y=233.90$ $M_z=-78.92$
 $N, Ed=0.00$ $N_c, Rd=237211.00$ $n=N, Ed/N_c, Rd=0.00$
 $M_y, Ed=52.09$ $M_y, V, c, Rd=23645.80$ $M_y, Ed/M_y, V, c, Rd=0.00$ $M_y, Ed/M_y, V, c, Rd=0.00$
 $M_z, Ed=-78.92$ $M_z, V, c, Rd=11165.10$ $M_z, Ed/M_z, V, c, Rd=0.01$ $M_z, Ed/M_z, V, c, Rd=0.01$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/M_y, V, c, Rd)^2 + (M_z, Ed/M_z, V, c, Rd)^1 = 0.01$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.32$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.22$ $M_{cr}=10554800.00$ $\lambda_{LT}=0.05$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y, Ed=119.82$ $M_y, b, Rd=20999.90$ $M_y, Ed/M_y, b, Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SND - Classe 3
Sollecitazioni: $N, Ed=-0.00$ $M_y, Ed=90.96$ $M_z, Ed=50.54$ $L=0.32$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.32$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.14$ $M_{cr}=9851290.00$ $\lambda_{LT}=0.05$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=3.15$ $N_{cr,y}=221346000.00$ $\lambda^*_y=0.03$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=5.34$ $N_{cr,z}=77114000.00$ $\lambda^*_z=0.06$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.00+0.01=0.01$
Verifica ZZ: $0.00+0.00+0.01=0.01$

Asta n. 217 (-654 67) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.12$ - Classe 3
Sollecitazioni: $T_z=-554.41$ $M_y=80.21$ $T_y=-413.49$ $M_z=56.06$ $M_x=-1.57$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-25.70$ $\tau=2.88$ $\sigma_{max}=-25.70$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-0.71$ $\tau=27.39$ $\tau_{max}=27.39$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-0.71$ $\tau=27.39$ $\sigma_{ID,max}=47.44$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.12$ - Classe 1
Sollecitazioni: $T_y=-55.98$
 $V, Ed=-55.98$ $V_c, Rd=115766.00$ $V, Ed/V_c, Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.12$ - Classe 1
Sollecitazioni: $T_z=-428.81$
 $V, Ed=-428.81$ $V_c, Rd=42937.10$ $V, Ed/V_c, Rd=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.12$ - Classe 1
Sollecitazioni: $T_z=-428.81$ $M_y=73.99$ $T_y=-55.98$ $M_z=8.20$
 $N, Ed=0.00$ $N_c, Rd=237211.00$ $n=N, Ed/N_c, Rd=0.00$
 $M_y, Ed=73.99$ $M_y, V, c, Rd=23645.80$ $M_y, Ed/M_y, V, c, Rd=0.00$ $M_y, Ed/M_y, V, c, Rd=0.00$
 $M_z, Ed=8.20$ $M_z, V, c, Rd=11165.10$ $M_z, Ed/M_z, V, c, Rd=0.00$ $M_z, Ed/M_z, V, c, Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/M_y, V, c, Rd)^2 + (M_z, Ed/M_z, V, c, Rd)^1 = 0.00$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 7 SND - Classe 3
 $L_{cr}=0.25$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.09$ $M_{cr}=15874100.00$ $\lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y, Ed=74.19$ $M_y, b, Rd=20999.90$ $M_y, Ed/M_y, b, Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: $N, Ed=-0.02$ $M_y, Ed=95.25$ $M_z, Ed=107.56$ $L=0.25$
 $\alpha_m, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.25$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.08$ $M_{cr}=15668300.00$ $\lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=2.43$ $N_{cr,y}=373387000.00$ $\lambda^*_y=0.03$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=4.11$ $N_{cr,z}=130083000.00$ $\lambda^*_z=0.04$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.00+0.01=0.02$
Verifica ZZ: $0.00+0.00+0.01=0.02$
- Asta n. 317 (88 -779) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.21$ - Classe 3
Sollecitazioni: $T_z=-652.74$ $M_y=-79.27$ $T_y=273.91$ $M_z=18.08$ $M_x=5.69$
Tensioni: $\sigma_N=0.00$ $\sigma_M=13.98$ $\tau=10.44$ $\sigma_{max}=13.98$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-0.23$ $\tau=33.80$ $\tau_{max}=33.80$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-0.23$ $\tau=33.80$ $\sigma_{ID,max}=58.54$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 9 SLU $X_l=0.21$ - Classe 1
Sollecitazioni: $T_y=43.82$ $M_x=1.51$
 $V, Ed=43.82$ $V_c, Rd, Red=115666.00$ $V, Ed/V_c, Rd, Red=0.00$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 9 SLU $X_l=0.21$ - Classe 1
Sollecitazioni: $T_z=-137.53$ $M_x=1.51$
 $V, Ed=-137.53$ $V_c, Rd, Red=42900.20$ $V, Ed/V_c, Rd, Red=0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_l=0.16$ - Classe 1
Sollecitazioni: $T_z=1.73$ $M_y=-17.21$ $T_y=43.82$ $M_z=4.26$ $M_x=1.51$
 $N, Ed=0.00$ $N_c, Rd=237211.00$ $n=N, Ed/N_c, Rd=0.00$
 $M_y, Ed=-17.21$ $M_y, V, c, Rd=23645.80$ $M_y, Ed/M_y, V, c, Rd=0.00$ $M_y, Ed/M_y, V, c, Rd=0.00$
 $M_z, Ed=4.26$ $M_z, V, c, Rd=11165.10$ $M_z, Ed/M_z, V, c, Rd=0.00$ $M_z, Ed/M_z, V, c, Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/M_y, V, c, Rd)^2 + (M_z, Ed/M_z, V, c, Rd)^1 = 0.00$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.21$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.38$ $M_{cr}=28153700.00$ $\lambda_{LT}=0.03$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $M_y, Ed=-79.27$ $M_y, b, Rd=20999.90$ $M_y, Ed/M_y, b, Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SND - Classe 3
Sollecitazioni: $N, Ed=-0.01$ $M_y, Ed=-53.55$ $M_z, Ed=14.21$ $L=0.21$
 $\alpha_m, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.21$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.36$ $M_{cr}=27643400.00$ $\lambda_{LT}=0.03$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $\lambda_y=2.05$ $N_{cr,y}=523050000.00$ $\lambda^*_y=0.02$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=3.47$ $N_{cr,z}=182224000.00$ $\lambda^*_z=0.04$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.00+0.00=0.00$
Verifica ZZ: $0.00+0.00+0.00=0.00$
- Asta n. 317 (-779 -780) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.21$ - Classe 3
Sollecitazioni: $T_z=-252.41$ $M_y=-61.52$ $T_y=374.84$ $M_z=99.56$
Tensioni: $\sigma_N=0.00$ $\sigma_M=37.01$ $\tau=0.00$ $\sigma_{max}=37.01$
Tensioni: $\sigma_N=0.00$ $\sigma_M=1.27$ $\tau=12.38$ $\tau_{max}=12.38$
Tensioni: $\sigma_N=0.00$ $\sigma_M=37.01$ $\tau=0.00$ $\sigma_{ID,max}=37.01$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.21$ - Classe 1
Sollecitazioni: $T_y=120.29$
 $V, Ed=120.29$ $V_c, Rd=115766.00$ $V, Ed/V_c, Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.21$ - Classe 1
Sollecitazioni: $T_z=-317.03$
 $V, Ed=-317.03$ $V_c, Rd=42937.10$ $V, Ed/V_c, Rd=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.21$ - Classe 1
Sollecitazioni: $T_z=-292.96$ $M_y=-10.11$ $T_y=123.65$ $M_z=26.28$
 $N, Ed=0.00$ $N_c, Rd=237211.00$ $n=N, Ed/N_c, Rd=0.00$
 $M_y, Ed=-10.11$ $M_y, V, c, Rd=23645.80$ $M_y, Ed/M_y, V, c, Rd=0.00$ $M_y, Ed/M_y, V, c, Rd=0.00$
 $M_z, Ed=26.28$ $M_z, V, c, Rd=11165.10$ $M_z, Ed/M_z, V, c, Rd=0.00$ $M_z, Ed/M_z, V, c, Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/M_y, V, c, Rd)^2 + (M_z, Ed/M_z, V, c, Rd)^1 = 0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: $N, Ed=-0.01$ $M_y, Ed=-76.78$ $M_z, Ed=99.56$ $L=0.21$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.21$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=21435700.00$ $\lambda_{LT}=0.03$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $\lambda_y=2.05$ $N_{cr,y}=523050000.00$ $\lambda^*_y=0.02$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=3.47$ $N_{cr,z}=182224000.00$ $\lambda^*_z=0.04$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.00+0.01=0.02$
Verifica ZZ: $0.00+0.00+0.01=0.02$
- Asta n. 317 (-780 -421) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.21$ - Classe 3
Sollecitazioni: $T_z=-255.98$ $M_y=-48.52$ $T_y=8366.81$ $M_z=2063.89$ $M_x=12.45$
Tensioni: $\sigma_N=0.00$ $\sigma_M=636.54$ $\tau=22.87$ $\sigma_{max}=636.54$
Tensioni: $\sigma_N=0.00$ $\sigma_M=141.24$ $\tau=147.18$ $\tau_{max}=147.18$
Tensioni: $\sigma_N=0.00$ $\sigma_M=636.54$ $\tau=22.87$ $\sigma_{ID,max}=637.78$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=1204.87$ $M_x=6.00$
 $V, Ed=1204.87$ $V_c, Rd, Red=115370.00$ $V, Ed/V_c, Rd, Red=0.01$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=312.39$ $M_x=6.00$
 $V, Ed=312.39$ $V_c, Rd, Red=42790.40$ $V, Ed/V_c, Rd, Red=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.21$ - Classe 1
Sollecitazioni: $T_z=-270.74$ $M_y=-15.56$ $T_y=1204.87$ $M_z=281.71$ $M_x=6.00$
 $N, Ed=0.00$ $N_c, Rd=237211.00$ $n=N, Ed/N_c, Rd=0.00$
 $M_y, Ed=-15.56$ $M_y, V, c, Rd=23645.80$ $M_y, Ed/M_y, V, c, Rd=0.00$ $M_y, Ed/M_y, V, c, Rd=0.00$
 $M_z, Ed=281.71$ $M_z, V, c, Rd=11165.10$ $M_z, Ed/M_z, V, c, Rd=0.03$ $M_z, Ed/M_z, V, c, Rd=0.03$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/M_y, V, c, Rd)^2 + (M_z, Ed/M_z, V, c, Rd)^1 = 0.03$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=0.21$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=21134300.00$ $\lambda_{LT}=0.03$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $M_y, Ed=-62.70$ $M_y, b, Rd=20999.90$ $M_y, Ed/M_y, b, Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SND - Classe 3
Sollecitazioni: $N, Ed=-0.00$ $M_y, Ed=-36.92$ $M_z, Ed=-55.07$ $L=0.21$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.21$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.32$ $M_{cr}=26515200.00$ $\lambda_{LT}=0.03$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $\lambda_y=2.06$ $N_{cr,y}=516565000.00$ $\lambda^*_y=0.02$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=3.49$ $N_{cr,z}=179964000.00$ $\lambda^*_z=0.04$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.00+0.01=0.01$
Verifica ZZ: $0.00+0.00+0.01=0.01$
- Asta n. 317 (-421 -781) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
Sollecitazioni: $T_z=148.77$ $M_y=40.68$ $T_y=12789.20$ $M_z=-2268.52$ $M_x=-21.44$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-698.31$ $\tau=39.37$ $\sigma_{max}=-698.31$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-154.08$ $\tau=225.04$ $\tau_{max}=225.04$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-698.31$ $\tau=39.37$ $\sigma_{ID,max}=701.63$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=1678.96$ $M_x=-9.33$
 $V, Ed=1678.96$ $V_c, Rd, Red=115150.00$ $V, Ed/V_c, Rd, Red=0.01$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=48.28$ $M_x=-9.33$
 $V, Ed=48.28$ $V_c, Rd, Red=42708.90$ $V, Ed/V_c, Rd, Red=0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1

- Sollecitazioni: $T_z=48.28$ $M_y=4.21$ $T_y=1678.96$ $M_z=-327.71$ $M_x=-9.33$
 $N,Ed=0.00$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 $My,Ed=4.21$ $My,V,c,Rd=23645.80$ $My,Ed/My,V,c,Rd=0.00$ $My,Ed/My,V,c,Rd=0.00$
 $Mz,Ed=-327.71$ $Mz,V,c,Rd=11165.10$ $Mz,Ed/Mz,V,c,Rd=0.03$ $Mz,Ed/Mz,V,c,Rd=0.03$
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/My,V,c,Rd)^2+(Mz,Ed/Mz,V,c,Rd)^1=0.03$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=0.11$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.19$ $M_{cr}=85409400.00$ $\lambda_{LT}=0.02$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.43$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $My,Ed=61.32$ $My,b,Rd=20999.90$ $My,Ed/My,b,Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SND - Classe 3
Sollecitazioni: $N,Ed=-0.00$ $My,Ed=17.46$ $Mz,Ed=-42.23$ $L=0.11$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.11$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.28$ $M_{cr}=92443700.00$ $\lambda_{LT}=0.02$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.43$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $\lambda_y=1.09$ $N_{cr,y}=1855310000.00$ $\lambda^*_y=0.01$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=1.84$ $N_{cr,z}=646365000.00$ $\lambda^*_z=0.02$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.00+0.01=0.01$
Verifica ZZ: $0.00+0.00+0.01=0.01$
- Asta n. 317 (-781 -782) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $Xl=0.00$ - Classe 3
Sollecitazioni: $T_z=422.58$ $M_y=57.96$ $T_y=1801.80$ $M_z=-596.62$ $M_x=-2.22$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-188.69$ $\tau=4.08$ $\sigma_{max}=-188.69$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-44.85$ $\tau=32.03$ $\tau_{max}=32.03$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-188.69$ $\tau=4.08$ $\sigma_{ID,max}=188.82$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 9 SLU $Xl=0.32$ - Classe 1
Sollecitazioni: $T_y=134.99$ $M_x=-1.21$
 $V,Ed=134.99$ $V_c,Rd,Red=115686.00$ $V,Ed/V_c,Rd,Red=0.00$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 9 SLU $Xl=0.32$ - Classe 1
Sollecitazioni: $T_z=-589.64$ $M_x=-1.21$
 $V,Ed=-589.64$ $V_c,Rd,Red=42907.70$ $V,Ed/V_c,Rd,Red=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $Xl=0.00$ - Classe 1
Sollecitazioni: $T_z=334.95$ $M_y=17.47$ $T_y=160.05$ $M_z=-65.65$ $M_x=-1.19$
 $N,Ed=0.00$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 $My,Ed=17.47$ $My,V,c,Rd=23645.80$ $My,Ed/My,V,c,Rd=0.00$ $My,Ed/My,V,c,Rd=0.00$
 $Mz,Ed=-65.65$ $Mz,V,c,Rd=11165.10$ $Mz,Ed/Mz,V,c,Rd=0.01$ $Mz,Ed/Mz,V,c,Rd=0.01$
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/My,V,c,Rd)^2+(Mz,Ed/Mz,V,c,Rd)^1=0.01$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=0.32$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.36$ $M_{cr}=11768200.00$ $\lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $My,Ed=139.02$ $My,b,Rd=20999.90$ $My,Ed/My,b,Rd=0.01$
- Asta n. 317 (-782 87) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $Xl=0.12$ - Classe 3
Sollecitazioni: $T_z=-814.10$ $M_y=223.27$ $T_y=-485.97$ $M_z=42.90$ $M_x=-1.23$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-36.92$ $\tau=2.25$ $\sigma_{max}=-36.92$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-0.55$ $\tau=39.95$ $\tau_{max}=39.95$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-0.55$ $\tau=39.95$ $\sigma_{ID,max}=69.19$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $Xl=0.12$ - Classe 1
Sollecitazioni: $T_y=-105.85$
 $V,Ed=-105.85$ $V_c,Rd=115766.00$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $Xl=0.12$ - Classe 1
Sollecitazioni: $T_z=-416.83$
 $V,Ed=-416.83$ $V_c,Rd=42937.10$ $V,Ed/V_c,Rd=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $Xl=0.12$ - Classe 1
Sollecitazioni: $T_z=-416.83$ $M_y=85.95$ $T_y=-105.85$ $M_z=13.67$
 $N,Ed=0.00$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 $My,Ed=85.95$ $My,V,c,Rd=23645.80$ $My,Ed/My,V,c,Rd=0.00$ $My,Ed/My,V,c,Rd=0.00$
 $Mz,Ed=13.67$ $Mz,V,c,Rd=11165.10$ $Mz,Ed/Mz,V,c,Rd=0.00$ $Mz,Ed/Mz,V,c,Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/My,V,c,Rd)^2+(Mz,Ed/Mz,V,c,Rd)^1=0.00$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=0.25$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.21$ $M_{cr}=17609000.00$ $\lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.01$ $\chi_{LT}=1.00$
 $My,Ed=223.27$ $My,b,Rd=20999.90$ $My,Ed/My,b,Rd=0.01$
- Asta n. 1001 (1 -1034) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_1=3.91$ - Classe 3
 Sollecitazioni: $N=-23259.30$ $T_z=-76.08$ $T_y=8.31$ $M_z=-16.08$
 Tensioni: $\sigma_N=-390.10$ $\sigma_M=-20.65$ $\tau=0.00$ $\sigma_{max}=-410.74$
 Tensioni: $\sigma_N=-390.10$ $\sigma_M=5.48$ $\tau=3.05$ $\tau_{max}=3.05$
 Tensioni: $\sigma_N=-390.10$ $\sigma_M=-20.65$ $\tau=0.11$ $\sigma_{ID,max}=410.74$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_1=0.27$ - Classe 1
 Sollecitazioni: $T_y=-1.41$
 $V,Ed=-1.41$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_1=0.27$ - Classe 1
 Sollecitazioni: $T_z=98.90$
 $V,Ed=98.90$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_1=1.92$ - Classe 3
 Sollecitazioni: $N=-2490.64$ $T_z=8.99$ $M_y=-89.27$ $T_y=-1.41$ $M_z=3.40$
 Tensioni: $\sigma_N=-41.77$ $\sigma_M=-18.10$ $\tau=0.00$ $\sigma_{max}=-59.88$
 Tensioni: $\sigma_N=-41.77$ $\sigma_M=-1.16$ $\tau=0.36$ $\tau_{max}=0.36$
 Tensioni: $\sigma_N=-41.77$ $\sigma_M=-18.10$ $\tau=0.00$ $\sigma_{ID,max}=59.88$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-69.24$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-23336.00$ $M_{y,eq,Ed}=-51.93$ $M_{z,eq,Ed}=22.37$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.30$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.48+0.00+0.02=0.51$

Asta n. 1002 (-1034 -21) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_1=0.69$ - Classe 3
 Sollecitazioni: $N=-22918.50$ $T_z=50.48$ $M_y=-44.80$ $T_y=-8.92$ $M_z=-10.75$
 Tensioni: $\sigma_N=-384.38$ $\sigma_M=-22.00$ $\tau=0.00$ $\sigma_{max}=-406.38$
 Tensioni: $\sigma_N=-384.38$ $\sigma_M=3.66$ $\tau=2.03$ $\tau_{max}=2.03$
 Tensioni: $\sigma_N=-384.38$ $\sigma_M=-22.00$ $\tau=0.00$ $\sigma_{ID,max}=406.38$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_1=3.80$ - Classe 1
 Sollecitazioni: $T_z=-103.13$
 $V,Ed=-103.13$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 10 SLU $X_1=2.07$ - Classe 3
 Sollecitazioni: $N=-1962.00$ $T_z=-9.38$ $M_y=-97.07$ $M_z=-1.00$
 Tensioni: $\sigma_N=-32.91$ $\sigma_M=-19.04$ $\tau=0.00$ $\sigma_{max}=-51.95$
 Tensioni: $\sigma_N=-32.91$ $\sigma_M=0.34$ $\tau=0.38$ $\tau_{max}=0.38$
 Tensioni: $\sigma_N=-32.91$ $\sigma_M=-19.04$ $\tau=0.00$ $\sigma_{ID,max}=51.95$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-75.29$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-22933.00$ $M_{y,eq,Ed}=-56.47$ $M_{z,eq,Ed}=-17.26$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.30$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.47+0.00+0.01=0.49$

Asta n. 1003 (-1 -1034) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_1=0.46$ - Classe 3
 Sollecitazioni: $N=-24101.80$ $T_z=64.90$ $M_y=-24.89$ $T_y=9.68$ $M_z=-18.47$
 Tensioni: $\sigma_N=-404.23$ $\sigma_M=-28.26$ $\tau=0.00$ $\sigma_{max}=-432.49$
 Tensioni: $\sigma_N=-404.23$ $\sigma_M=6.29$ $\tau=2.61$ $\tau_{max}=2.61$
 Tensioni: $\sigma_N=-404.23$ $\sigma_M=-28.26$ $\tau=0.00$ $\sigma_{ID,max}=432.49$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_1=0.11$ - Classe 1
 Sollecitazioni: $T_y=1.34$
 $V,Ed=1.34$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_1=0.11$ - Classe 1

Sollecitazioni: $T_z=103.13$
 $V,Ed=103.13$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.84$ - Classe 3
Sollecitazioni: $N=-4168.12$ $T_z=9.38$ $M_y=-97.07$ $T_y=1.34$ $M_z=-3.82$
Tensioni: $\sigma_N=-69.91$ $\sigma_M=-22.67$ $\tau=0.00$ $\sigma_{max}=-92.57$
Tensioni: $\sigma_N=-69.91$ $\sigma_M=1.30$ $\tau=0.38$ $\tau_{max}=0.38$
Tensioni: $\sigma_N=-69.91$ $\sigma_M=-22.67$ $\tau=0.00$ $\sigma_{ID,max}=92.57$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-75.29$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.01$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
Sollecitazioni: $N,Ed=-24109.10$ $M_{yeq,Ed}=-56.47$ $M_{zeq,Ed}=-21.78$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.30$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
Verifica: $0.50+0.00+0.02=0.52$

Asta n. 1004 (-1034 37) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-23702.80$ $T_z=76.08$ $T_y=10.38$ $M_z=-16.98$
Tensioni: $\sigma_N=-397.54$ $\sigma_M=-21.80$ $\tau=0.00$ $\sigma_{max}=-419.33$
Tensioni: $\sigma_N=-397.54$ $\sigma_M=5.79$ $\tau=3.05$ $\tau_{max}=3.05$
Tensioni: $\sigma_N=-397.54$ $\sigma_M=-21.80$ $\tau=0.11$ $\sigma_{ID,max}=419.33$

- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=1.83$
 $V,Ed=1.83$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=98.90$
 $V,Ed=98.90$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.82$ - Classe 3
Sollecitazioni: $N=-3660.89$ $M_y=-90.01$ $T_y=1.82$ $M_z=2.28$
Tensioni: $\sigma_N=-61.40$ $\sigma_M=-17.65$ $\tau=0.00$ $\sigma_{max}=-79.05$
Tensioni: $\sigma_N=-61.40$ $\sigma_M=16.47$ $\tau=0.08$ $\tau_{max}=0.08$
Tensioni: $\sigma_N=-61.40$ $\sigma_M=-17.65$ $\tau=0.00$ $\sigma_{ID,max}=79.05$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-69.24$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.01$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
Sollecitazioni: $N,Ed=-23702.80$ $M_{yeq,Ed}=-51.93$ $M_{zeq,Ed}=20.94$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.30$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
Verifica: $0.49+0.00+0.02=0.51$

Asta n. 1009 (-5 -1037) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.27$ - Classe 3
Sollecitazioni: $N=-17545.70$ $T_z=76.08$ $T_y=11.54$ $M_z=-26.22$
Tensioni: $\sigma_N=-294.27$ $\sigma_M=-33.67$ $\tau=0.00$ $\sigma_{max}=-327.94$
Tensioni: $\sigma_N=-294.27$ $\sigma_M=8.94$ $\tau=3.05$ $\tau_{max}=3.05$
Tensioni: $\sigma_N=-294.27$ $\sigma_M=-33.67$ $\tau=0.11$ $\sigma_{ID,max}=327.94$

- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.27$ - Classe 1
Sollecitazioni: $T_y=3.39$
 $V,Ed=3.39$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.27$ - Classe 1
Sollecitazioni: $T_z=98.90$
 $V,Ed=98.90$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.59$ - Classe 3
Sollecitazioni: $N=-644.16$ $T_z=26.97$ $M_y=-83.33$ $T_y=3.36$ $M_z=-6.80$
Tensioni: $\sigma_N=-10.80$ $\sigma_M=-23.97$ $\tau=0.00$ $\sigma_{max}=-34.78$
Tensioni: $\sigma_N=-10.80$ $\sigma_M=2.32$ $\tau=1.08$ $\tau_{max}=1.08$
Tensioni: $\sigma_N=-10.80$ $\sigma_M=-23.97$ $\tau=0.00$ $\sigma_{ID,max}=34.78$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-69.25$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
Sollecitazioni: $N_{Ed}=-17545.70$ $M_{y,eq,Ed}=-51.94$ $M_{z,eq,Ed}=-26.22$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.70$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
Verifica: $0.36+0.00+0.02=0.39$
- Asta n. 1010 (-1037 -34) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=3.45$ - Classe 3
Sollecitazioni: $N=16971.70$ $T_z=-64.92$ $M_y=-24.90$ $T_y=8.84$ $M_z=16.62$
Tensioni: $\sigma_N=284.64$ $\sigma_M=25.89$ $\tau=0.00$ $\sigma_{max}=310.54$
Tensioni: $\sigma_N=284.64$ $\sigma_M=-5.66$ $\tau=2.61$ $\tau_{max}=2.61$
Tensioni: $\sigma_N=284.64$ $\sigma_M=25.89$ $\tau=0.00$ $\sigma_{ID,max}=310.54$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=3.80$ - Classe 1
Sollecitazioni: $T_y=2.10$
 $V_{Ed}=2.10$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=3.80$ - Classe 1
Sollecitazioni: $T_z=-103.15$
 $V_{Ed}=-103.15$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=2.07$ - Classe 3
Sollecitazioni: $N=160.37$ $T_z=-9.38$ $M_y=-97.10$ $T_y=2.10$ $M_z=4.50$
Tensioni: $\sigma_N=2.69$ $\sigma_M=23.54$ $\tau=0.00$ $\sigma_{max}=26.23$
Tensioni: $\sigma_N=2.69$ $\sigma_M=-1.53$ $\tau=0.38$ $\tau_{max}=0.38$
Tensioni: $\sigma_N=2.69$ $\sigma_M=23.54$ $\tau=0.00$ $\sigma_{ID,max}=26.23$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 11 SLU - Classe 1
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-97.91$ $M_{y,b,Rd}=14447.40$ $M_{y,Ed}/M_{y,b,Rd}=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
Sollecitazioni: $N_{Ed}=-17145.60$ $M_{y,eq,Ed}=-56.49$ $M_{z,eq,Ed}=19.55$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.70$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
Verifica: $0.35+0.00+0.01=0.37$
- Asta n. 1011 (-9 -1037) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.80$ - Classe 3
Sollecitazioni: $N=-22270.70$ $T_z=50.49$ $M_y=-44.82$ $T_y=7.81$ $M_z=-9.44$
Tensioni: $\sigma_N=-373.52$ $\sigma_M=-20.32$ $\tau=0.00$ $\sigma_{max}=-393.83$
Tensioni: $\sigma_N=-373.52$ $\sigma_M=3.22$ $\tau=2.03$ $\tau_{max}=2.03$
Tensioni: $\sigma_N=-373.52$ $\sigma_M=-20.32$ $\tau=0.00$ $\sigma_{ID,max}=393.83$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.11$ - Classe 1
Sollecitazioni: $T_y=-1.60$
 $V_{Ed}=-1.60$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.11$ - Classe 1
Sollecitazioni: $T_z=103.15$
 $V_{Ed}=103.15$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.84$ - Classe 3
Sollecitazioni: $N=-7988.98$ $T_z=9.38$ $M_y=-97.10$ $T_y=-1.60$ $M_z=4.30$
Tensioni: $\sigma_N=-133.99$ $\sigma_M=-20.01$ $\tau=0.00$ $\sigma_{max}=-154.00$
Tensioni: $\sigma_N=-133.99$ $\sigma_M=-1.47$ $\tau=0.38$ $\tau_{max}=0.38$
Tensioni: $\sigma_N=-133.99$ $\sigma_M=-20.01$ $\tau=0.00$ $\sigma_{ID,max}=154.00$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-75.32$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
Sollecitazioni: $N_{Ed}=-22285.30$ $M_{y,eq,Ed}=-56.49$ $M_{z,eq,Ed}=24.38$

$L=3.91$
 $\lambda_y=33.33$ Ncr,y=1112320.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ Ncr,z=75140.70 $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{\min}=0.36$
 Verifica: $0.46+0.00+0.02=0.49$

Asta n. 1012 (-1037 -29) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=3.64$ - Classe 3
 Sollecitazioni: $N=-21805.20$ $T_z=-76.08$ $T_y=-10.43$ $M_z=-22.08$
 Tensioni: $\sigma_N=-365.71$ $\sigma_M=-28.35$ $\tau=0.00$ $\sigma_{\max}=-394.06$
 Tensioni: $\sigma_N=-365.71$ $\sigma_M=7.53$ $\tau=3.05$ $\tau_{\max}=3.05$
 Tensioni: $\sigma_N=-365.71$ $\sigma_M=-28.35$ $\tau=0.11$ $\sigma_{ID,\max}=394.06$
 - Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-2.85$
 $V,Ed=-2.85$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=98.90$
 $V,Ed=98.90$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.99$ - Classe 3
 Sollecitazioni: $N=-7477.16$ $T_z=-8.99$ $M_y=-89.28$ $T_y=-2.89$ $M_z=-3.88$
 Tensioni: $\sigma_N=-125.40$ $\sigma_M=-21.32$ $\tau=0.00$ $\sigma_{\max}=-146.72$
 Tensioni: $\sigma_N=-125.40$ $\sigma_M=1.32$ $\tau=0.36$ $\tau_{\max}=0.36$
 Tensioni: $\sigma_N=-125.40$ $\sigma_M=-21.32$ $\tau=0.00$ $\sigma_{ID,\max}=146.72$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-69.25$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.01$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-21881.90$ $M_{yeq,Ed}=-51.94$ $M_{zeq,Ed}=-22.08$
 $L=3.91$
 $\lambda_y=33.33$ Ncr,y=1112320.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ Ncr,z=75140.70 $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{\min}=0.36$
 Verifica: $0.45+0.00+0.02=0.47$

Asta n. 1013 (2 -1038) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.27$ - Classe 3
 Sollecitazioni: $N=-18704.50$ $T_z=76.08$ $T_y=10.87$ $M_z=-24.67$
 Tensioni: $\sigma_N=-313.70$ $\sigma_M=-31.68$ $\tau=0.00$ $\sigma_{\max}=-345.38$
 Tensioni: $\sigma_N=-313.70$ $\sigma_M=8.41$ $\tau=3.05$ $\tau_{\max}=3.05$
 Tensioni: $\sigma_N=-313.70$ $\sigma_M=-31.68$ $\tau=0.11$ $\sigma_{ID,\max}=345.38$
 - Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.27$ - Classe 1
 Sollecitazioni: $T_y=2.70$
 $V,Ed=2.70$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.27$ - Classe 1
 Sollecitazioni: $T_z=98.90$
 $V,Ed=98.90$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.59$ - Classe 3
 Sollecitazioni: $N=-469.49$ $T_z=26.97$ $M_y=-83.32$ $T_y=2.70$ $M_z=-7.09$
 Tensioni: $\sigma_N=-7.87$ $\sigma_M=-24.35$ $\tau=0.00$ $\sigma_{\max}=-32.22$
 Tensioni: $\sigma_N=-7.87$ $\sigma_M=2.42$ $\tau=1.08$ $\tau_{\max}=1.08$
 Tensioni: $\sigma_N=-7.87$ $\sigma_M=-24.35$ $\tau=0.00$ $\sigma_{ID,\max}=32.22$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-69.25$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.01$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-18704.50$ $M_{yeq,Ed}=-51.93$ $M_{zeq,Ed}=-24.67$
 $L=3.91$
 $\lambda_y=33.33$ Ncr,y=1112320.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ Ncr,z=75140.60 $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{\min}=0.36$
 Verifica: $0.39+0.00+0.02=0.41$

Asta n. 1014 (-1038 40) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=3.80$ - Classe 3
 Sollecitazioni: $N=18399.80$ $T_z=-79.34$ $T_y=10.21$ $M_z=22.84$
 Tensioni: $\sigma_N=308.59$ $\sigma_M=29.33$ $\tau=0.00$ $\sigma_{max}=337.93$
 Tensioni: $\sigma_N=308.59$ $\sigma_M=-7.79$ $\tau=3.18$ $\tau_{max}=3.18$
 Tensioni: $\sigma_N=308.59$ $\sigma_M=29.33$ $\tau=0.11$ $\sigma_{ID,max}=337.93$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=3.53$
 $V,Ed=3.53$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=103.14$
 $V,Ed=103.14$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=2.42$ - Classe 3
 Sollecitazioni: $N=365.89$ $T_z=-28.13$ $M_y=-90.62$ $T_y=3.53$ $M_z=7.01$
 Tensioni: $\sigma_N=6.14$ $\sigma_M=25.57$ $\tau=0.00$ $\sigma_{max}=31.71$
 Tensioni: $\sigma_N=6.14$ $\sigma_M=-2.39$ $\tau=1.13$ $\tau_{max}=1.13$
 Tensioni: $\sigma_N=6.14$ $\sigma_M=25.57$ $\tau=0.00$ $\sigma_{ID,max}=31.71$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 10 SLU - Classe 1
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-97.90$ $M_y,b,Rd=14447.40$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-18303.20$ $M_{yeq,Ed}=-56.48$ $M_{zeq,Ed}=22.84$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.60$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.38+0.00+0.02=0.40$

Asta n. 1015 (5 -1038) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.11$ - Classe 3
 Sollecitazioni: $N=-21482.80$ $T_z=79.34$ $T_y=24.17$ $M_z=-48.19$
 Tensioni: $\sigma_N=-360.30$ $\sigma_M=-61.87$ $\tau=0.00$ $\sigma_{max}=-422.17$
 Tensioni: $\sigma_N=-360.30$ $\sigma_M=16.42$ $\tau=3.19$ $\tau_{max}=3.19$
 Tensioni: $\sigma_N=-360.30$ $\sigma_M=-61.87$ $\tau=0.11$ $\sigma_{ID,max}=422.17$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.11$ - Classe 1
 Sollecitazioni: $T_y=-2.61$
 $V,Ed=-2.61$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.11$ - Classe 1
 Sollecitazioni: $T_z=103.14$
 $V,Ed=103.14$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.84$ - Classe 3
 Sollecitazioni: $N=-7480.33$ $T_z=9.38$ $M_y=-97.09$ $T_y=-2.61$ $M_z=5.49$
 Tensioni: $\sigma_N=-125.46$ $\sigma_M=-20.62$ $\tau=0.00$ $\sigma_{max}=-146.08$
 Tensioni: $\sigma_N=-125.46$ $\sigma_M=-1.87$ $\tau=0.38$ $\tau_{max}=0.38$
 Tensioni: $\sigma_N=-125.46$ $\sigma_M=-20.62$ $\tau=0.00$ $\sigma_{ID,max}=146.08$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-75.31$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-23524.00$ $M_{yeq,Ed}=-56.48$ $M_{zeq,Ed}=26.61$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.60$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.49+0.00+0.02=0.51$

Asta n. 1016 (-1038 38) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.64$ - Classe 3
 Sollecitazioni: $N=-21005.20$ $T_z=-76.08$ $T_y=-26.05$ $M_z=-49.58$
 Tensioni: $\sigma_N=-352.29$ $\sigma_M=-63.66$ $\tau=0.00$ $\sigma_{max}=-415.95$
 Tensioni: $\sigma_N=-352.29$ $\sigma_M=16.90$ $\tau=3.05$ $\tau_{max}=3.05$
 Tensioni: $\sigma_N=-352.29$ $\sigma_M=-63.66$ $\tau=0.11$ $\sigma_{ID,max}=415.95$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=3.64$ - Classe 1
 Sollecitazioni: $T_y=-1.77$

V,Ed=-1.77 Vc,Rd=46551.10 V,Ed/Vc,Rd=0.00

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU Xl=3.64 - Classe 1
Sollecitazioni: T_z=-98.90
V,Ed=-98.90 Vc,Rd=41072.10 V,Ed/Vc,Rd=0.00

- Verifica in termini tensionali [4.2.4] - CC 11 SLU Xl=1.99 - Classe 3
Sollecitazioni: N=-6968.53 T_z=-8.99 M_y=-89.28 T_y=-1.75 M_z=-2.81
Tensioni: $\sigma_N=-116.87$ $\sigma_M=-19.94$ $\tau=0.00$ $\sigma_{max}=-136.81$
Tensioni: $\sigma_N=-116.87$ $\sigma_M=0.96$ $\tau=0.36$ $\tau_{max}=0.36$
Tensioni: $\sigma_N=-116.87$ $\sigma_M=-19.94$ $\tau=0.00$ $\sigma_{ID,max}=136.81$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
L_{cr}=3.91 Curva d: $\alpha_{imp}=0.76$ k_c=0.94 $\psi=1.75$ M_{cr}=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ f=0.00 $\chi_{LT}=1.00$
M_{y,Ed}=-69.25 M_{y,b,Rd}=12234.60 M_{y,Ed}/M_{y,b,Rd}=0.01

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
Sollecitazioni: N,Ed=-23119.50 M_{yeq},Ed=-51.93 M_zeq,Ed=-20.84
L=3.91
 $\lambda_y=33.33$ N_{cr,y}=1112320.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ N_{cr,z}=75140.60 $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
Verifica: 0.48+0.00+0.02=0.50

Asta n. 1017 (37 -483) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND Xl=0.04 - Classe 3
Sollecitazioni: N=12611.30 T=84.21 M=158.76 M_x=9.69
Tensioni: $\sigma_N=253.59$ $\sigma_M=85.42$ $\tau=2.61$ $\sigma_{max}=339.01$
Tensioni: $\sigma_N=253.59$ $\sigma_M=-0.00$ $\tau=5.98$ $\tau_{max}=5.98$
Tensioni: $\sigma_N=253.59$ $\sigma_M=85.42$ $\tau=2.61$ $\sigma_{ID,max}=339.04$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU Xl=3.75 - Classe 1
Sollecitazioni: T=71.54 M_x=10.57
V,Ed=71.54 Vc,Rd,Red=40821.10 V,Ed/Vc,Rd,Red=0.00

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU Xl=0.04 - Classe 1
Sollecitazioni: N=11071.70 T=71.54 M=154.46 M_x=10.57
M,Ed=154.46 M_{V,c,Rd}=5478.45
N,Ed=11071.70 N_{c,Rd}=111304.00 YY n=N,Ed/N_{c,Rd}=0.10 MN_{c,Rd}=4933.49 M,Ed/MN_{c,Rd}=0.03

Asta n. 1018 (-28 -482) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND Xl=3.75 - Classe 3
Sollecitazioni: N=11831.50 T=99.73 M=182.88 M_x=5.28
Tensioni: $\sigma_N=237.91$ $\sigma_M=98.40$ $\tau=1.42$ $\sigma_{max}=336.31$
Tensioni: $\sigma_N=237.91$ $\sigma_M=-0.00$ $\tau=5.42$ $\tau_{max}=5.42$
Tensioni: $\sigma_N=237.91$ $\sigma_M=98.40$ $\tau=1.42$ $\sigma_{ID,max}=336.32$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU Xl=0.04 - Classe 1
Sollecitazioni: T=126.30 M_x=2.05
V,Ed=126.30 Vc,Rd,Red=40893.70 V,Ed/Vc,Rd,Red=0.00

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU Xl=0.04 - Classe 1
Sollecitazioni: N=7629.94 T=126.30 M=232.32 M_x=2.05
M,Ed=232.32 M_{V,c,Rd}=5478.45
N,Ed=7629.94 N_{c,Rd}=111304.00 YY n=N,Ed/N_{c,Rd}=0.07 MN_{c,Rd}=5102.90 M,Ed/MN_{c,Rd}=0.05

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: N,Ed=-132.46 M,Ed=184.35 L=3.75
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, ----, ----
 $\lambda=66.91$ N_{cr}=230216.00 $\lambda^*=0.71$
Curva a: $\Phi=0.81$ $\chi_{min}=0.84$
K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, ----, ----, ----
Verifica: 0.00+0.01=0.01

Asta n. 1019 (-479 -29) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND Xl=3.71 - Classe 3
Sollecitazioni: N=12936.40 T=119.07 M=219.19 M_x=-7.11
Tensioni: $\sigma_N=260.13$ $\sigma_M=117.93$ $\tau=1.91$ $\sigma_{max}=378.06$
Tensioni: $\sigma_N=260.13$ $\sigma_M=-0.00$ $\tau=6.69$ $\tau_{max}=6.69$
Tensioni: $\sigma_N=260.13$ $\sigma_M=117.93$ $\tau=1.91$ $\sigma_{ID,max}=378.07$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU Xl=0.00 - Classe 1
Sollecitazioni: T=155.27 M_x=-4.29
V,Ed=155.27 Vc,Rd,Red=40874.60 V,Ed/Vc,Rd,Red=0.00

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU $X_l=3.71$ - Classe 1
 Sollecitazioni: $N=8851.99$ $T=155.27$ $M=298.26$ $M_x=-4.29$
 $M, Ed=298.26$ $M, V, c, Rd=5478.45$
 $N, Ed=8851.99$ $Nc, Rd=111304.00$ YY $n=N, Ed/Nc, Rd=0.08$ $MN, c, Rd=5042.75$ $M, Ed/MN, c, Rd=0.06$

Asta n. 1020 (-477 38) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.71$ - Classe 3
 Sollecitazioni: $N=12670.40$ $T=131.65$ $M=237.83$ $M_x=-5.70$
 Tensioni: $\sigma_N=254.78$ $\sigma_M=127.96$ $\tau=1.53$ $\sigma_{max}=382.74$
 Tensioni: $\sigma_N=254.78$ $\sigma_M=-0.00$ $\tau=6.81$ $\tau_{max}=6.81$
 Tensioni: $\sigma_N=254.78$ $\sigma_M=127.96$ $\tau=1.53$ $\sigma_{ID, max}=382.75$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T=143.05$ $M_x=-3.31$
 $V, Ed=143.05$ $Vc, Rd, Red=40883.00$ $V, Ed/Vc, Rd, Red=0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU $X_l=3.71$ - Classe 1
 Sollecitazioni: $N=11715.20$ $T=143.05$ $M=271.43$ $M_x=-3.31$
 $M, Ed=271.43$ $M, V, c, Rd=5478.45$
 $N, Ed=11715.20$ $Nc, Rd=111304.00$ YY $n=N, Ed/Nc, Rd=0.11$ $MN, c, Rd=4901.82$ $M, Ed/MN, c, Rd=0.06$

Asta n. 1021 (-1 -447) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.83$ - Classe 3
 Sollecitazioni: $N=-23026.60$ $T_z=-34.46$ $T_y=-51.27$ $M_z=-102.89$
 Tensioni: $\sigma_N=-386.19$ $\sigma_M=-132.10$ $\tau=0.00$ $\sigma_{max}=-518.29$
 Tensioni: $\sigma_N=-386.19$ $\sigma_M=5.35$ $\tau=2.24$ $\tau_{max}=2.24$
 Tensioni: $\sigma_N=-386.19$ $\sigma_M=-132.10$ $\tau=0.00$ $\sigma_{ID, max}=518.29$

- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $T_y=-37.01$
 $V, Ed=-37.01$ $Vc, Rd=46551.10$ $V, Ed/Vc, Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $T_z=-44.80$
 $V, Ed=-44.80$ $Vc, Rd=41072.10$ $V, Ed/Vc, Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $N=-15577.60$ $T_z=-44.80$ $T_y=-37.01$ $M_z=-78.77$
 Tensioni: $\sigma_N=-261.26$ $\sigma_M=-101.13$ $\tau=0.00$ $\sigma_{max}=-362.39$
 Tensioni: $\sigma_N=-261.26$ $\sigma_M=26.85$ $\tau=1.80$ $\tau_{max}=1.80$
 Tensioni: $\sigma_N=-261.26$ $\sigma_M=-101.13$ $\tau=0.00$ $\sigma_{ID, max}=362.39$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.83$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M, cr=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT, 0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $My, Ed=-32.24$ $My, b, Rd=12234.60$ $My, Ed/My, b, Rd=0.00$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed=-23187.60$ $Myeq, Ed=-24.18$ $Mzeq, Ed=-102.89$
 $L=3.83$
 $\lambda_y=32.65$ $Ncr, y=1159260.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=125.62$ $Ncr, z=78311.60$ $\lambda^*_z=1.34$ Curva c: $\Phi_z=1.67$ $\chi_z=0.37$
 $\chi, min=0.37$
 Verifica: $0.47+0.00+0.08=0.55$

Asta n. 1022 (-451 -448) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-11090.80$ $T_z=35.26$ $T_y=49.55$ $M_z=-100.21$
 Tensioni: $\sigma_N=-186.01$ $\sigma_M=-128.67$ $\tau=0.00$ $\sigma_{max}=-314.68$
 Tensioni: $\sigma_N=-186.01$ $\sigma_M=5.21$ $\tau=2.17$ $\tau_{max}=2.17$
 Tensioni: $\sigma_N=-186.01$ $\sigma_M=-128.67$ $\tau=0.05$ $\sigma_{ID, max}=314.68$

- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=49.17$
 $V, Ed=49.17$ $Vc, Rd=46551.10$ $V, Ed/Vc, Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=45.84$
 $V, Ed=45.84$ $Vc, Rd=41072.10$ $V, Ed/Vc, Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=82.29$ $T_z=45.84$ $T_y=49.17$ $M_z=-100.01$
 Tensioni: $\sigma_N=1.38$ $\sigma_M=-128.41$ $\tau=0.00$ $\sigma_{max}=-127.03$
 Tensioni: $\sigma_N=1.38$ $\sigma_M=5.20$ $\tau=2.17$ $\tau_{max}=2.17$
 Tensioni: $\sigma_N=1.38$ $\sigma_M=-128.41$ $\tau=0.07$ $\sigma_{ID, max}=127.03$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 11 SLU - Classe 1
 $L_{cr}=3.83$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-43.88$ $M_{y,b,Rd}=14447.40$ $M_{y,Ed}/M_{y,b,Rd}=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-11090.80$ $M_{yEq,Ed}=-25.31$ $M_{zEq,Ed}=-100.21$
 $L=3.83$
 $\lambda_y=32.65$ $N_{cr,y}=1159260.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=125.62$ $N_{cr,z}=78311.60$ $\lambda^*_z=1.34$ Curva c: $\Phi_z=1.67$ $\chi_z=0.37$
 $\chi_{min}=0.37$
Verifica: $0.22+0.00+0.07=0.29$

Asta n. 1023 (-8 -443) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.78$ - Classe 3
Sollecitazioni: $N=-22668.40$ $T_x=-31.36$ $T_y=-68.42$ $M_z=-128.22$
Tensioni: $\sigma_N=-380.19$ $\sigma_M=-164.62$ $\tau=0.00$ $\sigma_{max}=-544.81$
Tensioni: $\sigma_N=-380.19$ $\sigma_M=0.00$ $\tau=2.97$ $\tau_{max}=2.97$
Tensioni: $\sigma_N=-380.19$ $\sigma_M=-164.62$ $\tau=0.00$ $\sigma_{ID,max}=544.81$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.11$ - Classe 1
Sollecitazioni: $T_y=-88.33$
 $V_{Ed}=-88.33$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.11$ - Classe 1
Sollecitazioni: $T_z=40.77$
 $V_{Ed}=40.77$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=3.78$ - Classe 1
Sollecitazioni: $N=-15278.30$ $T_x=-40.77$ $T_y=-88.33$ $M_z=-164.50$
Tensioni: $\sigma_N=-256.24$ $\sigma_M=-211.21$ $\tau=0.00$ $\sigma_{max}=-467.45$
Tensioni: $\sigma_N=-256.24$ $\sigma_M=0.00$ $\tau=3.83$ $\tau_{max}=3.83$
Tensioni: $\sigma_N=-256.24$ $\sigma_M=-211.21$ $\tau=0.00$ $\sigma_{ID,max}=467.45$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.78$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-28.78$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-22828.40$ $M_{yEq,Ed}=-21.59$ $M_{zEq,Ed}=-128.22$
 $L=3.78$
 $\lambda_y=32.24$ $N_{cr,y}=1188900.00$ $\lambda^*_y=0.34$ Curva c: $\Phi_y=0.59$ $\chi_y=0.93$
 $\lambda_z=124.05$ $N_{cr,z}=80313.60$ $\lambda^*_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
 $\chi_{min}=0.38$
Verifica: $0.45+0.00+0.10=0.55$

Asta n. 1024 (-441 -444) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
Sollecitazioni: $N=-11271.40$ $T_x=32.30$ $T_y=58.94$ $M_z=-108.85$
Tensioni: $\sigma_N=-189.04$ $\sigma_M=-139.75$ $\tau=0.00$ $\sigma_{max}=-328.79$
Tensioni: $\sigma_N=-189.04$ $\sigma_M=0.00$ $\tau=2.56$ $\tau_{max}=2.56$
Tensioni: $\sigma_N=-189.04$ $\sigma_M=-139.75$ $\tau=0.05$ $\sigma_{ID,max}=328.79$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=79.29$
 $V_{Ed}=79.29$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=41.98$
 $V_{Ed}=41.98$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=3.78$ - Classe 1
Sollecitazioni: $N=-223.80$ $T_x=-41.98$ $T_y=79.29$ $M_z=155.10$
Tensioni: $\sigma_N=-3.75$ $\sigma_M=199.15$ $\tau=0.00$ $\sigma_{max}=195.39$
Tensioni: $\sigma_N=-3.75$ $\sigma_M=0.00$ $\tau=3.45$ $\tau_{max}=3.45$
Tensioni: $\sigma_N=-3.75$ $\sigma_M=199.15$ $\tau=0.06$ $\sigma_{ID,max}=195.39$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.78$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-30.53$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-11271.40$ $M_{yEq,Ed}=-22.90$ $M_{zEq,Ed}=114.31$
 $L=3.78$

$\lambda_y=32.24$ Ncr,y=1188900.00 $\lambda^*_y=0.34$ Curva c: $\Phi_y=0.59$ $\chi_y=0.93$
 $\lambda_z=124.05$ Ncr,z=80313.60 $\lambda^*_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
 $\chi_{\min}=0.38$
 Verifica: $0.22+0.00+0.08=0.30$

Asta n. 1025 (36 -457) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.83$ - Classe 3
 Sollecitazioni: $N=-24339.90$ $T_z=-34.03$ $T_y=-71.54$ $M_z=-134.67$
 Tensioni: $\sigma_N=-408.22$ $\sigma_M=-172.91$ $\tau=0.00$ $\sigma_{\max}=-581.12$
 Tensioni: $\sigma_N=-408.22$ $\sigma_M=-0.00$ $\tau=3.11$ $\tau_{\max}=3.11$
 Tensioni: $\sigma_N=-408.22$ $\sigma_M=-172.91$ $\tau=0.00$ $\sigma_{ID,\max}=581.12$
 - Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $T_y=-87.50$
 $V,Ed=-87.50$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $T_z=-44.23$
 $V,Ed=-44.23$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $N=-15768.80$ $T_z=-44.23$ $T_y=-87.50$ $M_z=-165.52$
 Tensioni: $\sigma_N=-264.47$ $\sigma_M=-212.52$ $\tau=0.00$ $\sigma_{\max}=-476.99$
 Tensioni: $\sigma_N=-264.47$ $\sigma_M=-0.00$ $\tau=3.80$ $\tau_{\max}=3.80$
 Tensioni: $\sigma_N=-264.47$ $\sigma_M=-212.52$ $\tau=0.00$ $\sigma_{ID,\max}=476.99$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.83$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-31.55$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-24499.60$ $M_{yeq,Ed}=-23.66$ $M_{zeq,Ed}=-134.67$
 $L=3.83$
 $\lambda_y=32.63$ Ncr,y=1160830.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=125.53$ Ncr,z=78417.70 $\lambda^*_z=1.34$ Curva c: $\Phi_z=1.67$ $\chi_z=0.37$
 $\chi_{\min}=0.37$
 Verifica: $0.49+0.00+0.11=0.61$

Asta n. 1026 (-455 -458) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-12080.20$ $T_z=35.10$ $T_y=67.96$ $M_z=-125.77$
 Tensioni: $\sigma_N=-202.60$ $\sigma_M=-161.48$ $\tau=0.00$ $\sigma_{\max}=-364.08$
 Tensioni: $\sigma_N=-202.60$ $\sigma_M=-0.00$ $\tau=2.95$ $\tau_{\max}=2.95$
 Tensioni: $\sigma_N=-202.60$ $\sigma_M=-161.48$ $\tau=0.00$ $\sigma_{ID,\max}=364.08$
 - Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $T_y=76.44$
 $V,Ed=76.44$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $T_z=-45.64$
 $V,Ed=-45.64$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=-623.76$ $T_z=45.63$ $T_y=76.44$ $M_z=-142.04$
 Tensioni: $\sigma_N=-10.46$ $\sigma_M=-182.38$ $\tau=0.00$ $\sigma_{\max}=-192.84$
 Tensioni: $\sigma_N=-10.46$ $\sigma_M=7.38$ $\tau=3.33$ $\tau_{\max}=3.33$
 Tensioni: $\sigma_N=-10.46$ $\sigma_M=-182.38$ $\tau=0.07$ $\sigma_{ID,\max}=192.84$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.83$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-33.58$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-12080.20$ $M_{yeq,Ed}=-25.18$ $M_{zeq,Ed}=134.28$
 $L=3.83$
 $\lambda_y=32.63$ Ncr,y=1160830.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=125.53$ Ncr,z=78417.70 $\lambda^*_z=1.34$ Curva c: $\Phi_z=1.67$ $\chi_z=0.37$
 $\chi_{\min}=0.37$
 Verifica: $0.24+0.00+0.09=0.34$

Asta n. 1027 (-11 -439) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=1.54$ - Classe 3

- Sollecitazioni: $N=-23059.50$ $T_z=13.45$ $M_y=-46.25$ $T_y=1.92$ $M_z=-2.19$
Tensioni: $\sigma_N=-386.75$ $\sigma_M=-11.27$ $\tau=0.00$ $\sigma_{max}=-398.02$
Tensioni: $\sigma_N=-386.75$ $\sigma_M=0.75$ $\tau=0.54$ $\tau_{max}=0.54$
Tensioni: $\sigma_N=-386.75$ $\sigma_M=-11.27$ $\tau=0.00$ $\sigma_{ID,max}=398.02$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.06$ - Classe 1
Sollecitazioni: $T_z=64.08$
 $V,Ed=64.08$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.91$ - Classe 3
Sollecitazioni: $N=-3348.52$ $T_z=5.83$ $M_y=-64.42$ $M_z=1.68$
Tensioni: $\sigma_N=-56.16$ $\sigma_M=-12.66$ $\tau=0.00$ $\sigma_{max}=-68.82$
Tensioni: $\sigma_N=-56.16$ $\sigma_M=-0.57$ $\tau=0.23$ $\tau_{max}=0.23$
Tensioni: $\sigma_N=-56.16$ $\sigma_M=-12.66$ $\tau=0.00$ $\sigma_{ID,max}=68.82$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=4.12$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-49.97$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: $N,Ed=-23118.50$ $M_{yeq,Ed}=-37.48$ $M_{zeq,Ed}=7.71$
 $L=4.12$
 $\lambda_y=35.13$ $N_{cr,y}=1001480.00$ $\lambda^*_y=0.37$ Curva c: $\Phi_y=0.61$ $\chi_y=0.91$
 $\lambda_z=135.15$ $N_{cr,z}=67652.70$ $\lambda^*_z=1.44$ Curva c: $\Phi_z=1.84$ $\chi_z=0.34$
 $\chi_{min}=0.34$
Verifica: $0.52+0.00+0.01=0.53$
- Asta n. 1028 (-12 -438) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=1.54$ - Classe 3
Sollecitazioni: $N=-26763.40$ $T_z=-13.44$ $M_y=46.25$ $T_y=1.40$ $M_z=-2.64$
Tensioni: $\sigma_N=-448.87$ $\sigma_M=-11.85$ $\tau=0.00$ $\sigma_{max}=-460.72$
Tensioni: $\sigma_N=-448.87$ $\sigma_M=0.90$ $\tau=0.54$ $\tau_{max}=0.54$
Tensioni: $\sigma_N=-448.87$ $\sigma_M=-11.85$ $\tau=0.00$ $\sigma_{ID,max}=460.72$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.06$ - Classe 1
Sollecitazioni: $T_z=-64.08$
 $V,Ed=-64.08$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.91$ - Classe 3
Sollecitazioni: $N=-8636.25$ $T_z=-5.82$ $M_y=64.42$ $M_z=1.45$
Tensioni: $\sigma_N=-144.84$ $\sigma_M=-12.54$ $\tau=0.00$ $\sigma_{max}=-157.38$
Tensioni: $\sigma_N=-144.84$ $\sigma_M=-0.49$ $\tau=0.23$ $\tau_{max}=0.23$
Tensioni: $\sigma_N=-144.84$ $\sigma_M=-12.54$ $\tau=0.00$ $\sigma_{ID,max}=157.38$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=4.12$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=49.96$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: $N,Ed=-26822.30$ $M_{yeq,Ed}=37.47$ $M_{zeq,Ed}=7.79$
 $L=4.12$
 $\lambda_y=35.13$ $N_{cr,y}=1001480.00$ $\lambda^*_y=0.37$ Curva c: $\Phi_y=0.61$ $\chi_y=0.91$
 $\lambda_z=135.15$ $N_{cr,z}=67652.70$ $\lambda^*_z=1.44$ Curva c: $\Phi_z=1.84$ $\chi_z=0.34$
 $\chi_{min}=0.34$
Verifica: $0.60+0.00+0.01=0.61$
- Asta n. 1029 (-81 -1042) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.18$ - Classe 3
Sollecitazioni: $N=-13043.50$ $T_z=55.07$ $T_y=-11.46$ $M_z=-23.66$
Tensioni: $\sigma_N=-218.76$ $\sigma_M=-30.38$ $\tau=0.00$ $\sigma_{max}=-249.15$
Tensioni: $\sigma_N=-218.76$ $\sigma_M=8.07$ $\tau=2.21$ $\tau_{max}=2.21$
Tensioni: $\sigma_N=-218.76$ $\sigma_M=-30.38$ $\tau=0.08$ $\sigma_{ID,max}=249.15$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.42$ - Classe 1
Sollecitazioni: $T_z=58.58$
 $V,Ed=58.58$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.51$ - Classe 1
Sollecitazioni: $N=-2706.77$ $M_y=-47.59$
Tensioni: $\sigma_N=-45.40$ $\sigma_M=-8.71$ $\tau=0.00$ $\sigma_{max}=-54.10$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
Tensioni: $\sigma_N=-45.40$ $\sigma_M=-8.71$ $\tau=0.00$ $\sigma_{ID,max}=54.10$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3

$L_{cr}=2.84$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-36.61$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.00$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-13043.50$ $M_{yEq,Ed}=-27.46$ $M_{zEq,Ed}=21.88$
 $L=2.84$
 $\lambda_y=24.18$ $N_{cr,y}=2113160.00$ $\lambda^*_y=0.26$ Curva c: $\Phi_y=0.55$ $\chi_y=0.97$
 $\lambda_z=93.04$ $N_{cr,z}=142750.00$ $\lambda^*_z=0.99$ Curva c: $\Phi_z=1.18$ $\chi_z=0.55$
 $\chi_{min}=0.55$
 Verifica: $0.18+0.00+0.01=0.20$

Asta n. 1030 (-1042 72) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=2.42$ - Classe 3
 Sollecitazioni: $N=-12716.30$ $T_z=-45.06$ $M_y=-12.10$ $T_y=8.57$ $M_z=-18.35$
 Tensioni: $\sigma_N=-213.27$ $\sigma_M=-25.77$ $\tau=0.00$ $\sigma_{max}=-239.04$
 Tensioni: $\sigma_N=-213.27$ $\sigma_M=6.25$ $\tau=1.81$ $\tau_{max}=1.81$
 Tensioni: $\sigma_N=-213.27$ $\sigma_M=-25.77$ $\tau=0.00$ $\sigma_{ID,max}=239.04$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.24$ - Classe 1
 Sollecitazioni: $T_z=58.58$
 $V_{Ed}=58.58$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$

- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.33$ - Classe 1
 Sollecitazioni: $N=-2359.30$ $M_y=-47.59$
 Tensioni: $\sigma_N=-39.57$ $\sigma_M=-8.71$ $\tau=0.00$ $\sigma_{max}=-48.28$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
 Tensioni: $\sigma_N=-39.57$ $\sigma_M=-8.71$ $\tau=0.00$ $\sigma_{ID,max}=48.28$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=2.84$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-36.61$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.00$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-12769.00$ $M_{yEq,Ed}=-27.46$ $M_{zEq,Ed}=20.26$
 $L=2.84$
 $\lambda_y=24.18$ $N_{cr,y}=2113150.00$ $\lambda^*_y=0.26$ Curva c: $\Phi_y=0.55$ $\chi_y=0.97$
 $\lambda_z=93.04$ $N_{cr,z}=142750.00$ $\lambda^*_z=0.99$ Curva c: $\Phi_z=1.18$ $\chi_z=0.55$
 $\chi_{min}=0.55$
 Verifica: $0.18+0.00+0.01=0.19$

Asta n. 1031 (-82 -1042) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.18$ - Classe 3
 Sollecitazioni: $N=-14996.10$ $T_z=55.07$ $T_y=-8.08$ $M_z=-21.63$
 Tensioni: $\sigma_N=-251.51$ $\sigma_M=-27.77$ $\tau=0.00$ $\sigma_{max}=-279.28$
 Tensioni: $\sigma_N=-251.51$ $\sigma_M=7.37$ $\tau=2.21$ $\tau_{max}=2.21$
 Tensioni: $\sigma_N=-251.51$ $\sigma_M=-27.77$ $\tau=0.08$ $\sigma_{ID,max}=279.28$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=2.59$ - Classe 1
 Sollecitazioni: $T_z=-58.58$
 $V_{Ed}=-58.58$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$

- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.50$ - Classe 1
 Sollecitazioni: $N=-5443.57$ $M_y=-47.59$
 Tensioni: $\sigma_N=-91.30$ $\sigma_M=-8.71$ $\tau=0.00$ $\sigma_{max}=-100.00$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
 Tensioni: $\sigma_N=-91.30$ $\sigma_M=-8.71$ $\tau=0.00$ $\sigma_{ID,max}=100.00$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=2.84$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-36.61$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.00$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-14996.10$ $M_{yEq,Ed}=-27.46$ $M_{zEq,Ed}=19.50$
 $L=2.84$
 $\lambda_y=24.18$ $N_{cr,y}=2113150.00$ $\lambda^*_y=0.26$ Curva c: $\Phi_y=0.55$ $\chi_y=0.97$
 $\lambda_z=93.04$ $N_{cr,z}=142750.00$ $\lambda^*_z=0.99$ Curva c: $\Phi_z=1.18$ $\chi_z=0.55$
 $\chi_{min}=0.55$
 Verifica: $0.21+0.00+0.01=0.22$

Asta n. 1032 (-1042 71) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=1.93$ - Classe 3
 Sollecitazioni: $N=-14679.40$ $T_z=-25.03$ $M_y=-29.05$ $T_y=5.73$ $M_z=-14.61$

Tensioni: $\sigma_N = -246.20$ $\sigma_M = -24.07$ $\tau = 0.00$ $\sigma_{max} = -270.26$
 Tensioni: $\sigma_N = -246.20$ $\sigma_M = 4.98$ $\tau = 1.00$ $\tau_{max} = 1.00$
 Tensioni: $\sigma_N = -246.20$ $\sigma_M = -24.07$ $\tau = 0.00$ $\sigma_{ID, max} = 270.26$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l = 0.24$ - Classe 1
 Sollecitazioni: $T_z = 58.58$
 $V, Ed = 58.58$ $V_c, Rd = 41072.10$ $V, Ed/V_c, Rd = 0.00$

- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l = 1.33$ - Classe 1
 Sollecitazioni: $N = -5095.86$ $M_y = -47.59$
 Tensioni: $\sigma_N = -85.47$ $\sigma_M = -8.71$ $\tau = 0.00$ $\sigma_{max} = -94.17$
 Tensioni: $\sigma_N = 0.00$ $\sigma_M = 0.00$ $\tau = 0.00$ $\tau_{max} = 0.00$
 Tensioni: $\sigma_N = -85.47$ $\sigma_M = -8.71$ $\tau = 0.00$ $\sigma_{ID, max} = 94.17$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr} = 2.84$ Curva d: $\alpha_{imp} = 0.76$ $k_c = 0.94$ $\psi = 1.75$ $M_{cr} = 0.00$ $\lambda_{LT} = 0.00$
 $\lambda_{LT, 0} = 0.20$ $\beta_{LT} = 1.00$ $\Phi_{LT} = 0.00$ $\beta_{LT} = 1.00$ $f = 0.00$ $\chi_{LT} = 1.00$
 $M_y, Ed = -36.61$ $M_y, b, Rd = 12234.60$ $M_y, Ed/M_y, b, Rd = 0.00$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed = -14721.50$ $M_{yeq}, Ed = -27.46$ $M_{zeq}, Ed = 16.57$
 $L = 2.84$
 $\lambda_y = 24.18$ $N_{cr, y} = 2113160.00$ $\lambda^*_y = 0.26$ Curva c: $\Phi_y = 0.55$ $\chi_y = 0.97$
 $\lambda_z = 93.04$ $N_{cr, z} = 142750.00$ $\lambda^*_z = 0.99$ Curva c: $\Phi_z = 1.18$ $\chi_z = 0.55$
 $\chi_{min} = 0.55$
 Verifica: $0.20 + 0.00 + 0.01 = 0.22$

Asta n. 1033 (-106 119) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l = 0.07$ - Classe 3
 Sollecitazioni: $N = -11823.10$ $T = 62.21$ $M = 98.04$ $M_x = -6.01$
 Tensioni: $\sigma_N = -237.74$ $\sigma_M = -52.75$ $\tau = 1.62$ $\sigma_{max} = -290.49$
 Tensioni: $\sigma_N = -237.74$ $\sigma_M = -0.00$ $\tau = 4.11$ $\tau_{max} = 4.11$
 Tensioni: $\sigma_N = -237.74$ $\sigma_M = -52.75$ $\tau = 1.62$ $\sigma_{ID, max} = 290.50$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU $X_l = 5.17$ - Classe 1
 Sollecitazioni: $T = 69.91$ $M_x = -1.60$
 $V, Ed = 69.91$ $V_c, Rd, Red = 40897.50$ $V, Ed/V_c, Rd, Red = 0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l = 2.61$ - Classe 1
 Sollecitazioni: $N = -2891.60$ $T = 15.14$ $M = 86.87$
 $M, Ed = 86.87$ $M, V, c, Rd = 5478.45$
 $N, Ed = -2891.60$ $N_c, Rd = -111304.00$ YY $n = N, Ed/N_c, Rd = 0.03$ $MN, c, Rd = 5336.12$ $M, Ed/MN, c, Rd = 0.02$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed = -11823.10$ $M, Ed = 118.64$ $L = 5.29$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 94.25$ $N_{cr} = 116032.00$ $\lambda^* = 1.00$
 Curva a: $\Phi = 1.09$ $\chi_{min} = 0.66$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.04, \text{----}, \text{----}, \text{----}$
 Verifica: $0.16 + 0.02 = 0.18$

Asta n. 1034 (-104 120) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l = 0.07$ - Classe 3
 Sollecitazioni: $N = -11982.60$ $T = 63.49$ $M = 94.88$ $M_x = 5.71$
 Tensioni: $\sigma_N = -240.95$ $\sigma_M = -51.05$ $\tau = 1.53$ $\sigma_{max} = -292.00$
 Tensioni: $\sigma_N = -240.95$ $\sigma_M = -0.00$ $\tau = 4.08$ $\tau_{max} = 4.08$
 Tensioni: $\sigma_N = -240.95$ $\sigma_M = -51.05$ $\tau = 1.53$ $\sigma_{ID, max} = 292.01$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.07$ - Classe 1
 Sollecitazioni: $T = 73.29$
 $V, Ed = 73.29$ $V_c, Rd = 40911.10$ $V, Ed/V_c, Rd = 0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l = 2.65$ - Classe 1
 Sollecitazioni: $N = -2745.11$ $T = 16.29$ $M = 92.09$
 $M, Ed = 92.09$ $M, V, c, Rd = 5478.45$
 $N, Ed = -2745.11$ $N_c, Rd = -111304.00$ YY $n = N, Ed/N_c, Rd = 0.02$ $MN, c, Rd = 5343.33$ $M, Ed/MN, c, Rd = 0.02$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed = -11982.60$ $M, Ed = 118.39$ $L = 5.36$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 95.51$ $N_{cr} = 112986.00$ $\lambda^* = 1.02$
 Curva a: $\Phi = 1.10$ $\chi_{min} = 0.65$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.04, \text{----}, \text{----}, \text{----}$
 Verifica: $0.16 + 0.02 = 0.18$

Asta n. 1035 (27 -469) Sez. 33 CHS168.3x10 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=2.87$ - Classe 3
 Sollecitazioni: $N=-18361.30$ $T=18.14$ $M=88.51$ $M_x=-4.95$
 Tensioni: $\sigma_N=-369.21$ $\sigma_M=-47.62$ $\tau=1.33$ $\sigma_{max}=-416.83$
 Tensioni: $\sigma_N=-369.21$ $\sigma_M=-0.00$ $\tau=2.06$ $\tau_{max}=2.06$
 Tensioni: $\sigma_N=-369.21$ $\sigma_M=-47.62$ $\tau=1.33$ $\sigma_{TD,max}=416.84$
- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU $X_l=0.12$ - Classe 1
 Sollecitazioni: $T=84.04$ $M_x=-2.82$
 $V,Ed=84.04$ $V_c,Rd,Red=40887.10$ $V,Ed/V_c,Rd,Red=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=2.87$ - Classe 1
 Sollecitazioni: $N=-16819.10$ $T=12.42$ $M=114.05$ $M_x=-2.28$
 $M,Ed=114.05$ $M,V,c,Rd=5478.45$
 $N,Ed=-16819.10$ $N_c,Rd=-111304.00$ YY $n=N,Ed/N_c,Rd=0.15$ $MN,c,Rd=4650.60$ $M,Ed/MN,c,Rd=0.02$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-18447.20$ $M,Ed=102.59$ $L=5.61$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, ----, ----$
 $\lambda=100.03$ $N_{cr}=103005.00$ $\lambda^*=1.07$
 Curva a: $\Phi=1.16$ $\chi_{min}=0.62$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.10, ----, ----, ----$
 Verifica: $0.27+0.02=0.29$

Asta n. 1036 (31 -472) Sez. 33 CHS168.3x10 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=2.62$ - Classe 3
 Sollecitazioni: $N=-16405.90$ $T=16.28$ $M=88.27$ $M_x=5.67$
 Tensioni: $\sigma_N=-329.89$ $\sigma_M=-47.50$ $\tau=1.53$ $\sigma_{max}=-377.39$
 Tensioni: $\sigma_N=-329.89$ $\sigma_M=-0.00$ $\tau=2.18$ $\tau_{max}=2.18$
 Tensioni: $\sigma_N=-329.89$ $\sigma_M=-47.50$ $\tau=1.53$ $\sigma_{TD,max}=377.40$
- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU $X_l=5.61$ - Classe 1
 Sollecitazioni: $T=84.43$ $M_x=4.26$
 $V,Ed=84.43$ $V_c,Rd,Red=40874.80$ $V,Ed/V_c,Rd,Red=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=2.86$ - Classe 1
 Sollecitazioni: $N=-13897.10$ $T=14.08$ $M=114.10$ $M_x=3.23$
 $M,Ed=114.10$ $M,V,c,Rd=5478.45$
 $N,Ed=-13897.10$ $N_c,Rd=-111304.00$ YY $n=N,Ed/N_c,Rd=0.12$ $MN,c,Rd=4794.42$ $M,Ed/MN,c,Rd=0.02$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-16484.00$ $M,Ed=102.50$ $L=5.61$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, ----, ----$
 $\lambda=100.03$ $N_{cr}=103005.00$ $\lambda^*=1.07$
 Curva a: $\Phi=1.16$ $\chi_{min}=0.62$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.09, ----, ----, ----$
 Verifica: $0.24+0.02=0.26$

Asta n. 1037 (31 -470) Sez. 33 CHS168.3x10 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=2.62$ - Classe 3
 Sollecitazioni: $N=-16521.30$ $T=15.68$ $M=88.67$ $M_x=-5.98$
 Tensioni: $\sigma_N=-332.21$ $\sigma_M=-47.71$ $\tau=1.61$ $\sigma_{max}=-379.92$
 Tensioni: $\sigma_N=-332.21$ $\sigma_M=-0.00$ $\tau=2.24$ $\tau_{max}=2.24$
 Tensioni: $\sigma_N=-332.21$ $\sigma_M=-47.71$ $\tau=1.61$ $\sigma_{TD,max}=379.93$
- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU $X_l=0.13$ - Classe 1
 Sollecitazioni: $T=84.80$ $M_x=-4.23$
 $V,Ed=84.80$ $V_c,Rd,Red=40875.10$ $V,Ed/V_c,Rd,Red=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=2.87$ - Classe 1
 Sollecitazioni: $N=-13951.80$ $T=14.12$ $M=114.79$ $M_x=-3.21$
 $M,Ed=114.79$ $M,V,c,Rd=5478.45$
 $N,Ed=-13951.80$ $N_c,Rd=-111304.00$ YY $n=N,Ed/N_c,Rd=0.13$ $MN,c,Rd=4791.73$ $M,Ed/MN,c,Rd=0.02$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-16599.40$ $M,Ed=101.77$ $L=5.62$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, ----, ----$
 $\lambda=100.19$ $N_{cr}=102677.00$ $\lambda^*=1.07$
 Curva a: $\Phi=1.16$ $\chi_{min}=0.62$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.09, ----, ----, ----$
 Verifica: $0.24+0.02=0.26$

Asta n. 1038 (29 -471) Sez. 33 CHS168.3x10 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=2.86$ - Classe 3
 Sollecitazioni: $N=-18506.70$ $T=16.71$ $M=89.04$ $M_x=4.34$
 Tensioni: $\sigma_N=-372.13$ $\sigma_M=-47.91$ $\tau=1.17$ $\sigma_{max}=-420.04$

Tensioni: $\sigma_N = -372.13$ $\sigma_M = -0.00$ $\tau = 1.84$ $\tau_{max} = 1.84$
Tensioni: $\sigma_N = -372.13$ $\sigma_M = -47.91$ $\tau = 1.17$ $\sigma_{TD, max} = 420.04$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU $X_l = 5.62$ - Classe 1
Sollecitazioni: $T = 84.30$ $M_k = 2.53$
 $V, Ed = 84.30$ $V_c, Rd, Red = 40889.60$ $V, Ed/V_c, Rd, Red = 0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l = 2.87$ - Classe 1
Sollecitazioni: $N = -16896.10$ $T = 11.78$ $M = 114.71$ $M_k = 2.01$
 $M, Ed = 114.71$ $M, V, c, Rd = 5478.45$
 $N, Ed = -16896.10$ $N_c, Rd = -111304.00$ YY $n = N, Ed/N_c, Rd = 0.15$ $MN, c, Rd = 4646.81$ $M, Ed/MN, c, Rd = 0.02$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: $N, Ed = -18592.30$ $M, Ed = 100.87$ $L = 5.62$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 100.19$ $N_{cr} = 102676.00$ $\lambda^* = 1.07$
Curva a: $\Phi = 1.16$ $\chi_{min} = 0.62$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.10, \text{----}, \text{----}, \text{----}$
Verifica: $0.27 + 0.02 = 0.29$

Asta n. 1039 (26 -466) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 5.48$ - Classe 3
Sollecitazioni: $N = -15006.50$ $T = 71.95$ $M = 146.34$ $M_k = 20.18$
Tensioni: $\sigma_N = -301.75$ $\sigma_M = -78.74$ $\tau = 5.43$ $\sigma_{max} = -380.49$
Tensioni: $\sigma_N = -301.75$ $\sigma_M = -0.00$ $\tau = 8.32$ $\tau_{max} = 8.32$
Tensioni: $\sigma_N = -301.75$ $\sigma_M = -78.74$ $\tau = 5.43$ $\sigma_{TD, max} = 380.61$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l = 5.48$ - Classe 1
Sollecitazioni: $T = 92.74$ $M_k = 27.95$
 $V, Ed = 92.74$ $V_c, Rd, Red = 40673.10$ $V, Ed/V_c, Rd, Red = 0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l = 5.48$ - Classe 1
Sollecitazioni: $N = -3255.30$ $T = 92.74$ $M = 189.36$ $M_k = 27.95$
 $M, Ed = 189.36$ $M, V, c, Rd = 5478.45$
 $N, Ed = -3255.30$ $N_c, Rd = -111304.00$ YY $n = N, Ed/N_c, Rd = 0.03$ $MN, c, Rd = 5318.22$ $M, Ed/MN, c, Rd = 0.04$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -15178.50$ $M, Ed = 166.83$ $L = 5.48$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 97.70$ $N_{cr} = 107995.00$ $\lambda^* = 1.04$
Curva a: $\Phi = 1.13$ $\chi_{min} = 0.64$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.07, \text{----}, \text{----}, \text{----}$
Verifica: $0.21 + 0.02 = 0.23$

Asta n. 1040 (27 -465) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 5.48$ - Classe 3
Sollecitazioni: $N = -15359.20$ $T = 68.25$ $M = 117.63$ $M_k = -16.54$
Tensioni: $\sigma_N = -308.84$ $\sigma_M = -63.29$ $\tau = 4.45$ $\sigma_{max} = -372.13$
Tensioni: $\sigma_N = -308.84$ $\sigma_M = -0.00$ $\tau = 7.19$ $\tau_{max} = 7.19$
Tensioni: $\sigma_N = -308.84$ $\sigma_M = -63.29$ $\tau = 4.45$ $\sigma_{TD, max} = 372.21$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l = 5.48$ - Classe 1
Sollecitazioni: $T = 89.11$ $M_k = -21.56$
 $V, Ed = 89.11$ $V_c, Rd, Red = 40727.50$ $V, Ed/V_c, Rd, Red = 0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l = 5.48$ - Classe 1
Sollecitazioni: $N = -4024.07$ $T = 89.11$ $M = 158.38$ $M_k = -21.56$
 $M, Ed = 158.38$ $M, V, c, Rd = 5478.45$
 $N, Ed = -4024.07$ $N_c, Rd = -111304.00$ YY $n = N, Ed/N_c, Rd = 0.04$ $MN, c, Rd = 5280.38$ $M, Ed/MN, c, Rd = 0.03$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -15531.20$ $M, Ed = 142.31$ $L = 5.48$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, \text{----}, \text{----}$
 $\lambda = 97.70$ $N_{cr} = 107995.00$ $\lambda^* = 1.04$
Curva a: $\Phi = 1.13$ $\chi_{min} = 0.64$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 1.07, \text{----}, \text{----}, \text{----}$
Verifica: $0.22 + 0.02 = 0.24$

Asta n. 1041 (28 -468) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 5.46$ - Classe 3
Sollecitazioni: $N = -14903.10$ $T = 71.75$ $M = 148.02$ $M_k = -20.16$
Tensioni: $\sigma_N = -299.67$ $\sigma_M = -79.64$ $\tau = 5.42$ $\sigma_{max} = -379.31$
Tensioni: $\sigma_N = -299.67$ $\sigma_M = -0.00$ $\tau = 8.30$ $\tau_{max} = 8.30$
Tensioni: $\sigma_N = -299.67$ $\sigma_M = -79.64$ $\tau = 5.42$ $\sigma_{TD, max} = 379.43$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l = 5.46$ - Classe 1

- Sollecitazioni: $T=92.45$ $M_x=-27.96$
 $V, Ed=92.45$ $V_c, Rd, Red=40673.00$ $V, Ed/V_c, Rd, Red=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=5.46$ - Classe 1
 Sollecitazioni: $N=-3104.12$ $T=92.45$ $M=191.21$ $M_x=-27.96$
 $M, Ed=191.21$ $M, V, c, Rd=5478.45$
 $N, Ed=-3104.12$ $N_c, Rd=-111304.00$ YY $n=N, Ed/N_c, Rd=0.03$ $MN, c, Rd=5325.66$ $M, Ed/MN, c, Rd=0.04$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N, Ed=-15075.10$ $M, Ed=167.91$ $L=5.46$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, \text{----}, \text{----}$
 $\lambda=97.44$ $N_{cr}=108558.00$ $\lambda^*=1.04$
 Curva a: $\Phi=1.13$ $\chi_{min}=0.64$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.07, \text{----}, \text{----}, \text{----}$
 Verifica: $0.21+0.02=0.23$
- Asta n. 1042 (29 -467) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=5.46$ - Classe 3
 Sollecitazioni: $N=-15437.80$ $T=68.18$ $M=119.20$ $M_x=16.52$
 Tensioni: $\sigma_N=-310.42$ $\sigma_M=-64.14$ $\tau=4.45$ $\sigma_{max}=-374.56$
 Tensioni: $\sigma_N=-310.42$ $\sigma_M=-0.00$ $\tau=7.18$ $\tau_{max}=7.18$
 Tensioni: $\sigma_N=-310.42$ $\sigma_M=-64.14$ $\tau=4.45$ $\sigma_{ID, max}=374.64$
- Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l=5.46$ - Classe 1
 Sollecitazioni: $T=89.14$ $M_x=21.44$
 $V, Ed=89.14$ $V_c, Rd, Red=40728.50$ $V, Ed/V_c, Rd, Red=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=5.46$ - Classe 1
 Sollecitazioni: $N=-4095.59$ $T=89.14$ $M=161.09$ $M_x=21.44$
 $M, Ed=161.09$ $M, V, c, Rd=5478.45$
 $N, Ed=-4095.59$ $N_c, Rd=-111304.00$ YY $n=N, Ed/N_c, Rd=0.04$ $MN, c, Rd=5276.86$ $M, Ed/MN, c, Rd=0.03$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N, Ed=-15609.80$ $M, Ed=143.15$ $L=5.46$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, \text{----}, \text{----}$
 $\lambda=97.44$ $N_{cr}=108558.00$ $\lambda^*=1.04$
 Curva a: $\Phi=1.13$ $\chi_{min}=0.64$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.08, \text{----}, \text{----}, \text{----}$
 Verifica: $0.22+0.02=0.24$
- Asta n. 1043 (-1076 -1094) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-482.15$ $T_z=35.43$ $M_y=116.55$ $T_y=-106.71$ $M_z=331.44$
 Tensioni: $\sigma_N=-9.10$ $\sigma_M=-278.36$ $\tau=0.00$ $\sigma_{max}=-287.46$
 Tensioni: $\sigma_N=-9.10$ $\sigma_M=25.14$ $\tau=3.84$ $\tau_{max}=3.84$
 Tensioni: $\sigma_N=-9.10$ $\sigma_M=-278.36$ $\tau=0.00$ $\sigma_{ID, max}=287.46$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=3.52$ - Classe 1
 Sollecitazioni: $T_z=9.05$
 $V, Ed=9.05$ $V_c, Rd=22203.90$ $V, Ed/V_c, Rd=0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=-626.79$ $T_z=8.60$ $M_y=28.42$ $M_z=1.01$
 $N, Ed=-626.79$ $N_c, Rd=118581.00$ $n=N, Ed/N_c, Rd=0.01$
 Pressoflessione retta YY [4.2.33]:
 $M_y, Ed=28.42$ $M_y, V, c, Rd=9576.98$ $MN_y, c, Rd=9576.98$ $M_y, Ed/MN_y, c, Rd=0.00$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed=1.01$ $M_z, c, Rd=4559.71$ $MN_z, c, Rd=4559.71$ $M_z, Ed/MN_z, c, Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^2 = 0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N, Ed=-482.15$ $M_y, Ed=116.55$ $M_z, Ed=331.44$ $L=3.52$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=3.52$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.85$ $M, cr=49903.80$ $\lambda_{LT}=0.43$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.57$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=42.28$ $N_{cr,y}=614204.00$ $\lambda^*_y=0.45$ Curva b: $\Phi_y=0.64$ $\chi_y=0.91$
 $\lambda_z=70.12$ $N_{cr,z}=223368.00$ $\lambda^*_z=0.75$ Curva c: $\Phi_z=0.91$ $\chi_z=0.70$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.00+0.01+0.11=0.12$
 Verifica ZZ: $0.00+0.01+0.11=0.12$
- Asta n. 1043 (-1094 -1072) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.93$ - Classe 3
 Sollecitazioni: $N=-296.92$ $T_z=32.33$ $M_y=-39.04$ $T_y=-62.31$ $M_z=-113.34$
 Tensioni: $\sigma_N=-5.60$ $\sigma_M=-94.98$ $\tau=0.00$ $\sigma_{max}=-100.58$
 Tensioni: $\sigma_N=-5.60$ $\sigma_M=-2.55$ $\tau=3.34$ $\tau_{max}=3.34$

- Tensioni: $\sigma_N = -5.60$ $\sigma_M = -94.98$ $\tau = 0.00$ $\sigma_{ID, \max} = 100.58$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $T_z = 9.05$
 $V, Ed = 9.05$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU $X_l = 0.93$ - Classe 1
Sollecitazioni: $N = -386.00$ $T_z = 9.05$ $M_y = -10.18$
 $M_y, Ed = -10.18$ $M_y, V, c, Rd = 9576.98$
 $N, Ed = -386.00$ $N_c, Rd = -118581.00$ YY $n = N, Ed/N_c, Rd = 0.00$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -335.75$ $M_y, Ed = -39.04$ $M_z, Ed = -113.34$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.48$ $M, cr = 379646.00$ $\lambda_{LT} = 0.15$
 $\lambda_{LT, 0} = 0.40$ $\Phi_{LT} = 0.47$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 12.01$ $N_{cr, y} = 7610230.00$ $\lambda'_y = 0.13$ Curva b: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 19.92$ $N_{cr, z} = 2767620.00$ $\lambda'_z = 0.21$ Curva c: $\Phi_z = 0.53$ $\chi_z = 0.99$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00 + 0.00 + 0.04 = 0.04$
Verifica ZZ: $0.00 + 0.00 + 0.04 = 0.04$
- Asta n. 1043 (-1072 -1090) Sez. 34 HEA200 Crit. 1
- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 0.07$ - Classe 3
Sollecitazioni: $N = -217.51$ $T_z = -11.37$ $M_y = -43.95$ $T_y = -27.41$ $M_z = 118.05$
Tensioni: $\sigma_N = -4.11$ $\sigma_M = -99.78$ $\tau = 0.00$ $\sigma_{\max} = -103.88$
Tensioni: $\sigma_N = -4.11$ $\sigma_M = 2.65$ $\tau = 1.18$ $\tau_{\max} = 1.18$
Tensioni: $\sigma_N = -4.11$ $\sigma_M = -99.78$ $\tau = 0.00$ $\sigma_{ID, \max} = 103.88$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l = 0.07$ - Classe 1
Sollecitazioni: $T_y = -2.21$
 $V, Ed = -2.21$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.07$ - Classe 1
Sollecitazioni: $T_z = -5.68$
 $V, Ed = -5.68$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_l = 0.07$ - Classe 1
Sollecitazioni: $N = -282.77$ $T_z = -5.59$ $M_y = -14.72$ $T_y = -2.24$ $M_z = 3.33$
 $N, Ed = -282.77$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -14.72$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.00$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 3.33$ $M_z, V, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed/MN_z, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^2 = 0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -217.51$ $M_y, Ed = -43.95$ $M_z, Ed = 118.05$ $L = 1.50$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.50$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.21$ $M, cr = 142881.00$ $\lambda_{LT} = 0.25$
 $\lambda_{LT, 0} = 0.40$ $\Phi_{LT} = 0.50$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 18.02$ $N_{cr, y} = 3382320.00$ $\lambda'_y = 0.19$ Curva b: $\Phi_y = 0.52$ $\chi_y = 1.00$
 $\lambda_z = 29.88$ $N_{cr, z} = 1230060.00$ $\lambda'_z = 0.32$ Curva c: $\Phi_z = 0.58$ $\chi_z = 0.94$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00 + 0.00 + 0.04 = 0.04$
Verifica ZZ: $0.00 + 0.00 + 0.04 = 0.04$
- Asta n. 1043 (-1090 -1074) Sez. 34 HEA200 Crit. 1
- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 0.00$ - Classe 3
Sollecitazioni: $N = -157.89$ $T_z = -15.48$ $M_y = -27.73$ $T_y = -59.20$ $M_z = -116.30$
Tensioni: $\sigma_N = -2.98$ $\sigma_M = -94.27$ $\tau = 0.00$ $\sigma_{\max} = -97.25$
Tensioni: $\sigma_N = -2.98$ $\sigma_M = -11.87$ $\tau = 2.13$ $\tau_{\max} = 2.13$
Tensioni: $\sigma_N = -2.98$ $\sigma_M = -94.27$ $\tau = 0.00$ $\sigma_{ID, \max} = 97.25$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $T_y = -2.21$
 $V, Ed = -2.21$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $T_z = -5.68$
 $V, Ed = -5.68$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_l = 0.53$ - Classe 1
Sollecitazioni: $N = -176.45$ $T_z = -5.59$ $M_y = -3.72$ $T_y = -2.24$ $M_z = -1.07$
 $N, Ed = -176.45$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -3.72$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.00$

Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = -1.07$ $M_z, V, c, Rd = 4559.71$ $MNz, c, Rd = 4559.71$ $M_z, Ed / MNz, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed / MNy, c, Rd)^2 + (M_z, Ed / MNz, c, Rd)^2 = 0.00$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -157.89$ $M_y, Ed = -27.73$ $M_z, Ed = -116.30$ $L = 2.02$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 2.02$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.91$ $M, cr = 130849.00$ $\lambda_{LT} = 0.26$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.50$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 24.27$ $N_{cr,y} = 1865070.00$ $\lambda^*_y = 0.26$ Curva b: $\Phi_y = 0.54$ $\chi_y = 0.98$
 $\lambda_z = 40.24$ $N_{cr,z} = 678273.00$ $\lambda^*_z = 0.43$ Curva c: $\Phi_z = 0.65$ $\chi_z = 0.88$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00 + 0.00 + 0.04 = 0.04$
Verifica ZZ: $0.00 + 0.00 + 0.04 = 0.04$

Asta n. 1044 (-1084 -1083) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $Xl = 0.00$ - Classe 3
Sollecitazioni: $N = -10175.00$ $T_z = -483.43$ $M_y = -269.23$ $T_y = 1644.68$ $M_z = -606.42$
Tensioni: $\sigma_N = -192.04$ $\sigma_M = -523.79$ $\tau = 0.00$ $\sigma_{max} = -715.84$
Tensioni: $\sigma_N = -192.04$ $\sigma_M = -33.04$ $\tau = 59.14$ $\tau_{max} = 59.14$
Tensioni: $\sigma_N = -192.04$ $\sigma_M = -523.79$ $\tau = 0.00$ $\sigma_{ID,max} = 715.84$

- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $Xl = 0.00$ - Classe 1
Sollecitazioni: $T_y = 352.44$
 $V, Ed = 352.44$ $Vc, Rd = 58075.50$ $V, Ed / Vc, Rd = 0.01$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $Xl = 0.00$ - Classe 1
Sollecitazioni: $T_z = -538.44$
 $V, Ed = -538.44$ $Vc, Rd = 22203.90$ $V, Ed / Vc, Rd = 0.02$

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $Xl = 0.00$ - Classe 1
Sollecitazioni: $N = -6912.84$ $T_z = -538.44$ $M_y = -66.86$ $T_y = 352.44$ $M_z = -113.99$
 $N, Ed = -6912.84$ $Nc, Rd = 118581.00$ $n = N, Ed / Nc, Rd = 0.06$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -66.86$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed / MN_y, c, Rd = 0.01$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = -113.99$ $M_z, V, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed / MN_z, c, Rd = 0.03$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed / MN_y, c, Rd)^2 + (M_z, Ed / MN_z, c, Rd)^2 = 0.06$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 2.71$ $M, cr = 696259.00$ $\lambda_{LT} = 0.11$
 $\lambda_{LT,0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.46$ $\beta_{LT} = 0.75$ $f = 1.00$ $\chi_{LT} = 1.00$
 $M_y, Ed = 357.40$ $M_y, b, Rd = 8650.35$ $M_y, Ed / M_y, b, Rd = 0.04$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: $N, Ed = -10175.00$ $M_y, Ed = 357.40$ $M_z, Ed = -606.42$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 2.71$ $M, cr = 696259.00$ $\lambda_{LT} = 0.11$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.46$ $\beta_{LT} = 0.75$ $f = 1.00$ $\chi_{LT} = 1.00$
 $\lambda_y = 12.01$ $N_{cr,y} = 7610230.00$ $\lambda^*_y = 0.13$ Curva b: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 19.92$ $N_{cr,z} = 2767620.00$ $\lambda^*_z = 0.21$ Curva c: $\Phi_z = 0.53$ $\chi_z = 0.99$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.96, 0.77, 0.96$
Verifica YY: $0.09 + 0.04 + 0.19 = 0.32$
Verifica ZZ: $0.09 + 0.03 + 0.19 = 0.31$

Asta n. 1044 (-1083 -1093) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $Xl = 0.00$ - Classe 3
Sollecitazioni: $N = -3889.76$ $T_z = -332.14$ $M_y = -532.50$ $T_y = 99.30$ $M_z = -157.85$
Tensioni: $\sigma_N = -73.42$ $\sigma_M = -255.99$ $\tau = 0.00$ $\sigma_{max} = -329.40$
Tensioni: $\sigma_N = -73.42$ $\sigma_M = -3.55$ $\tau = 34.27$ $\tau_{max} = 34.27$
Tensioni: $\sigma_N = -73.42$ $\sigma_M = -255.99$ $\tau = 0.00$ $\sigma_{ID,max} = 329.40$

- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $Xl = 0.00$ - Classe 1
Sollecitazioni: $T_y = 27.00$
 $V, Ed = 27.00$ $Vc, Rd = 58075.50$ $V, Ed / Vc, Rd = 0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $Xl = 0.00$ - Classe 1
Sollecitazioni: $T_z = -269.85$
 $V, Ed = -269.85$ $Vc, Rd = 22203.90$ $V, Ed / Vc, Rd = 0.01$

- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $Xl = 2.52$ - Classe 1
Sollecitazioni: $N = -3962.64$ $T_z = -269.85$ $M_y = 358.07$ $T_y = 27.00$ $M_z = 35.05$
 $N, Ed = -3962.64$ $Nc, Rd = 118581.00$ $n = N, Ed / Nc, Rd = 0.03$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = 358.07$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed / MN_y, c, Rd = 0.04$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 35.05$ $M_z, V, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed / MN_z, c, Rd = 0.01$

$$\alpha=2.00 \quad \beta=1.00 \quad (M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^1 = 0.04$$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed = -3889.76$ $M_y, Ed = -532.50$ $M_z, Ed = -157.85$ $L = 2.52$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 2.52$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 2.45$ $M, cr = 114128.00$ $\lambda_{LT} = 0.28$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.51$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 30.27$ $N_{cr,y} = 1198390.00$ $\lambda^*_y = 0.32$ Curva b: $\Phi_y = 0.57$ $\chi_y = 0.96$
 $\lambda_z = 50.20$ $N_{cr,z} = 435819.00$ $\lambda^*_z = 0.53$ Curva c: $\Phi_z = 0.72$ $\chi_z = 0.82$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.96, 0.77, 0.96$
 Verifica YY: $0.03 + 0.06 + 0.05 = 0.14$
 Verifica ZZ: $0.03 + 0.05 + 0.05 = 0.13$

Asta n. 1044 (-1093 -1073) Sez. 34 HEA200 Crit. 1

- - Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l = 0.93$ - Classe 3
 Sollecitazioni: $N = -3746.13$ $T_z = -326.42$ $M_y = 609.58$ $T_y = 92.06$ $M_z = 178.30$
 Tensioni: $\sigma_N = -70.70$ $\sigma_M = -291.24$ $\tau = 0.00$ $\sigma_{max} = -361.94$
 Tensioni: $\sigma_N = -70.70$ $\sigma_M = 4.01$ $\tau = 33.68$ $\tau_{max} = 33.68$
 Tensioni: $\sigma_N = -70.70$ $\sigma_M = -291.24$ $\tau = 0.00$ $\sigma_{ID,max} = 361.94$
 - Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $T_y = 27.00$
 $V, Ed = 27.00$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $T_z = -269.85$
 $V, Ed = -269.85$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.01$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l = 0.93$ - Classe 1
 Sollecitazioni: $N = -3912.17$ $T_z = -269.85$ $M_y = 609.97$ $T_y = 27.00$ $M_z = 60.26$
 $N, Ed = -3912.17$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.03$
 Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = 609.97$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.06$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 60.26$ $M_z, V, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed/MN_z, c, Rd = 0.01$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^1 = 0.06$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed = -3784.95$ $M_y, Ed = 609.58$ $M_z, Ed = 178.30$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.30$ $M, cr = 333502.00$ $\lambda_{LT} = 0.17$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.47$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 12.01$ $N_{cr,y} = 7610230.00$ $\lambda^*_y = 0.13$ Curva b: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 19.92$ $N_{cr,z} = 2767620.00$ $\lambda^*_z = 0.21$ Curva c: $\Phi_z = 0.53$ $\chi_z = 0.99$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.03 + 0.07 + 0.06 = 0.16$
 Verifica ZZ: $0.03 + 0.05 + 0.06 = 0.14$

Asta n. 1044 (-1073 -1089) Sez. 34 HEA200 Crit. 1

- - Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 0.00$ - Classe 3
 Sollecitazioni: $N = -1963.22$ $T_z = -362.87$ $M_y = -630.14$ $T_y = 123.05$ $M_z = -196.17$
 Tensioni: $\sigma_N = -37.05$ $\sigma_M = -309.95$ $\tau = 0.00$ $\sigma_{max} = -347.00$
 Tensioni: $\sigma_N = -37.05$ $\sigma_M = -4.41$ $\tau = 37.44$ $\tau_{max} = 37.44$
 Tensioni: $\sigma_N = -37.05$ $\sigma_M = -309.95$ $\tau = 0.00$ $\sigma_{ID,max} = 347.00$
 - Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $T_y = 50.08$
 $V, Ed = 50.08$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $T_z = -504.78$
 $V, Ed = -504.78$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.02$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l = 0.00$ - Classe 1
 Sollecitazioni: $N = -1776.86$ $T_z = -494.81$ $M_y = -872.57$ $T_y = 49.74$ $M_z = -82.94$
 $N, Ed = -1776.86$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.01$
 Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -872.57$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.09$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = -82.94$ $M_z, V, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed/MN_z, c, Rd = 0.02$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^1 = 0.09$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N, Ed = -1963.22$ $M_y, Ed = -630.14$ $M_z, Ed = -196.17$ $L = 1.50$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.50$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.59$ $M, cr = 187861.00$ $\lambda_{LT} = 0.22$

$\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=18.02$ Ncr,y=3382320.00 $\lambda^*_y=0.19$ Curva b: $\Phi_y=0.52$ $\chi_y=1.00$
 $\lambda_z=29.88$ Ncr,z=1230060.00 $\lambda^*_z=0.32$ Curva c: $\Phi_z=0.58$ $\chi_z=0.94$
 Kyy, Kyz, Kzy, Kzz=0.95, 0.95, 0.76, 0.95
 Verifica YY: 0.02+0.07+0.06=0.15
 Verifica ZZ: 0.02+0.06+0.06=0.13

Asta n. 1044 (-1089 -1075) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=1.95 - Classe 3
 Sollecitazioni: N=-1819.58 Tz=-360.59 My=628.88 Ty=108.21 Mz=199.70
 Tensioni: $\sigma_N=-34.34$ $\sigma_M=-312.26$ $\tau=0.00$ $\sigma_{max}=-346.60$
 Tensioni: $\sigma_N=-34.34$ $\sigma_M=4.49$ $\tau=37.20$ $\tau_{max}=37.20$
 Tensioni: $\sigma_N=-34.34$ $\sigma_M=-312.26$ $\tau=0.00$ $\sigma_{TD,max}=346.60$
 - Verifica a taglio dir. Y [4.2.16] - CC 9 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Ty=50.08
 V,Ed=50.08 Vc,Rd=58075.50 V,Ed/Vc,Rd=0.00
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Tz=-504.78
 V,Ed=-504.78 Vc,Rd=22203.90 V,Ed/Vc,Rd=0.02
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU Xl=1.95 - Classe 1
 Sollecitazioni: N=-1464.63 Tz=-504.78 My=886.80 Ty=50.08 Mz=91.85
 N,Ed=-1464.63 Nc,Rd=118581.00 n=N,Ed/Nc,Rd=0.01
 Pressoflessione retta YY [4.2.33]:
 My,Ed=886.80 My,V,c,Rd=9576.98 MNy,c,Rd=9576.98 My,Ed/MNy,c,Rd=0.09
 Pressoflessione retta ZZ [4.2.34]:
 Mz,Ed=91.85 Mz,V,c,Rd=4559.71 MNz,c,Rd=4559.71 Mz,Ed/MNz,c,Rd=0.02
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/MNy,c,Rd)^2+(Mz,Ed/MNz,c,Rd)^2=0.09$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: N,Ed=-1900.83 My,Ed=628.88 Mz,Ed=199.70 L=2.02
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 Lcr=2.02 Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.93$ M,cr=132294.00 $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=24.27$ Ncr,y=1865070.00 $\lambda^*_y=0.26$ Curva b: $\Phi_y=0.54$ $\chi_y=0.98$
 $\lambda_z=40.24$ Ncr,z=678273.00 $\lambda^*_z=0.43$ Curva c: $\Phi_z=0.65$ $\chi_z=0.88$
 Kyy, Kyz, Kzy, Kzz=0.95, 0.95, 0.76, 0.95
 Verifica YY: 0.02+0.07+0.06=0.15
 Verifica ZZ: 0.02+0.06+0.06=0.14

Asta n. 1045 (-1082 -1095) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=0.00 - Classe 3
 Sollecitazioni: N=-1238.60 Tz=-36.27 My=111.08 Ty=107.28 Mz=-332.16
 Tensioni: $\sigma_N=-23.38$ $\sigma_M=-277.49$ $\tau=0.00$ $\sigma_{max}=-300.86$
 Tensioni: $\sigma_N=-23.38$ $\sigma_M=-77.95$ $\tau=3.86$ $\tau_{max}=3.86$
 Tensioni: $\sigma_N=-23.38$ $\sigma_M=-277.49$ $\tau=0.00$ $\sigma_{TD,max}=300.86$
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Tz=-7.00
 V,Ed=-7.00 Vc,Rd=22203.90 V,Ed/Vc,Rd=0.00
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU Xl=0.00 - Classe 1
 Sollecitazioni: N=-1669.30 Tz=-5.94 My=8.15 Ty=1.01 Mz=-1.16
 N,Ed=-1669.30 Nc,Rd=118581.00 n=N,Ed/Nc,Rd=0.01
 Pressoflessione retta YY [4.2.33]:
 My,Ed=8.15 My,V,c,Rd=9576.98 MNy,c,Rd=9576.98 My,Ed/MNy,c,Rd=0.00
 Pressoflessione retta ZZ [4.2.34]:
 Mz,Ed=-1.16 Mz,V,c,Rd=4559.71 MNz,c,Rd=4559.71 Mz,Ed/MNz,c,Rd=0.00
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/MNy,c,Rd)^2+(Mz,Ed/MNz,c,Rd)^2=0.01$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: N,Ed=-1238.60 My,Ed=111.08 Mz,Ed=-332.16 L=3.52
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 Lcr=3.52 Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.48$ M,cr=39839.30 $\lambda_{LT}=0.48$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=42.28$ Ncr,y=614204.00 $\lambda^*_y=0.45$ Curva b: $\Phi_y=0.64$ $\chi_y=0.91$
 $\lambda_z=70.12$ Ncr,z=223368.00 $\lambda^*_z=0.75$ Curva c: $\Phi_z=0.91$ $\chi_z=0.70$
 Kyy, Kyz, Kzy, Kzz=0.95, 0.96, 0.76, 0.96
 Verifica YY: 0.01+0.01+0.11=0.13
 Verifica ZZ: 0.01+0.01+0.11=0.13

Asta n. 1045 (-1095 -1056) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=0.93 - Classe 3
 Sollecitazioni: N=-1053.37 Tz=-33.06 My=60.09 Ty=62.86 Mz=115.19

- Tensioni: $\sigma_N = -19.88$ $\sigma_M = -101.81$ $\tau = 0.00$ $\sigma_{\max} = -121.69$
Tensioni: $\sigma_N = -19.88$ $\sigma_M = 2.59$ $\tau = 3.42$ $\tau_{\max} = 3.42$
Tensioni: $\sigma_N = -19.88$ $\sigma_M = -101.81$ $\tau = 0.00$ $\sigma_{ID, \max} = 121.69$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $T_z = -7.00$
 $V, Ed = -7.00$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $N = -1577.51$ $T_z = -7.00$ $M_y = 32.35$ $M_z = 2.41$
 $N, Ed = -1577.51$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.01$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = 32.35$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.00$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 2.41$ $M_z, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed/MN_z, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^2 = 0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -1092.20$ $M_y, Ed = 60.09$ $M_z, Ed = 115.19$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.28$ $M, cr = 329954.00$ $\lambda_{LT} = 0.17$
 $\lambda_{LT, 0} = 0.40$ $\Phi_{LT} = 0.47$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 12.01$ $N_{cr, y} = 7610230.00$ $\lambda^*_y = 0.13$ Curva b: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 19.92$ $N_{cr, z} = 2767620.00$ $\lambda^*_z = 0.21$ Curva c: $\Phi_z = 0.53$ $\chi_z = 0.99$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.01 + 0.01 + 0.04 = 0.05$
Verifica ZZ: $0.01 + 0.01 + 0.04 = 0.05$
- Asta n. 1045 (-1056 -1091) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 0.07$ - Classe 3
Sollecitazioni: $N = -282.56$ $T_z = -21.47$ $M_y = -79.19$ $T_y = -26.40$ $M_z = -116.83$
Tensioni: $\sigma_N = -5.33$ $\sigma_M = -107.98$ $\tau = 0.00$ $\sigma_{\max} = -113.31$
Tensioni: $\sigma_N = -5.33$ $\sigma_M = -2.62$ $\tau = 2.22$ $\tau_{\max} = 2.22$
Tensioni: $\sigma_N = -5.33$ $\sigma_M = -107.98$ $\tau = 0.00$ $\sigma_{ID, \max} = 113.31$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.07$ - Classe 1
Sollecitazioni: $T_z = -19.95$
 $V, Ed = -19.95$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l = 0.07$ - Classe 1
Sollecitazioni: $N = -367.33$ $T_z = -19.95$ $M_y = -64.27$ $M_z = -1.03$
 $N, Ed = -367.33$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -64.27$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.01$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = -1.03$ $M_z, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed/MN_z, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^2 = 0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -282.56$ $M_y, Ed = -79.19$ $M_z, Ed = -118.22$ $L = 1.50$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.50$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.22$ $M, cr = 144396.00$ $\lambda_{LT} = 0.25$
 $\lambda_{LT, 0} = 0.40$ $\Phi_{LT} = 0.50$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 18.02$ $N_{cr, y} = 3382320.00$ $\lambda^*_y = 0.19$ Curva b: $\Phi_y = 0.52$ $\chi_y = 1.00$
 $\lambda_z = 29.88$ $N_{cr, z} = 1230060.00$ $\lambda^*_z = 0.32$ Curva c: $\Phi_z = 0.58$ $\chi_z = 0.94$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00 + 0.01 + 0.04 = 0.05$
Verifica ZZ: $0.00 + 0.01 + 0.04 = 0.05$
- Asta n. 1045 (-1091 -1063) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 0.00$ - Classe 3
Sollecitazioni: $N = -222.94$ $T_z = -25.78$ $M_y = -48.47$ $T_y = -58.21$ $M_z = -118.22$
Tensioni: $\sigma_N = -4.21$ $\sigma_M = -101.08$ $\tau = 0.00$ $\sigma_{\max} = -105.28$
Tensioni: $\sigma_N = -4.21$ $\sigma_M = -2.66$ $\tau = 2.67$ $\tau_{\max} = 2.67$
Tensioni: $\sigma_N = -4.21$ $\sigma_M = -101.08$ $\tau = 0.00$ $\sigma_{ID, \max} = 105.28$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $T_z = -19.95$
 $V, Ed = -19.95$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $N = -289.82$ $T_z = -19.95$ $M_y = -35.68$ $M_z = -2.27$
 $N, Ed = -289.82$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -35.68$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.00$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = -2.27$ $M_z, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed/MN_z, c, Rd = 0.00$

$$\alpha=2.00 \quad \beta=1.00 \quad (M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^1 = 0.00$$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N, Ed = -222.94$ $M_y, Ed = -48.47$ $M_z, Ed = -118.22$ $L = 2.02$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 2.02$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.83$ $M, cr = 125583.00$ $\lambda_{LT} = 0.27$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.50$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 24.27$ $N_{cr,y} = 1865070.00$ $\lambda^*_y = 0.26$ Curva b: $\Phi_y = 0.54$ $\chi_y = 0.98$
 $\lambda_z = 40.24$ $N_{cr,z} = 678273.00$ $\lambda^*_z = 0.43$ Curva c: $\Phi_z = 0.65$ $\chi_z = 0.88$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.00 + 0.01 + 0.04 = 0.04$
 Verifica ZZ: $0.00 + 0.00 + 0.04 = 0.04$

Asta n. 1046 (-1077 -1044) Sez. 34 HEA200 Crit. 1

- - Verifica in termini tensionali [4.2.4] - CC 1 SND $X_1 = 0.60$ - Classe 3
 Sollecitazioni: $N = -19428.70$ $T_x = -975.31$ $M_y = 700.82$ $T_y = -2476.36$ $M_z = -683.35$
 Tensioni: $\sigma_N = -366.70$ $\sigma_M = -693.07$ $\tau = 0.00$ $\sigma_{max} = -1059.77$
 Tensioni: $\sigma_N = -366.70$ $\sigma_M = -15.35$ $\tau = 101.11$ $\tau_{max} = 101.11$
 Tensioni: $\sigma_N = -366.70$ $\sigma_M = -693.07$ $\tau = 0.00$ $\sigma_{ID,max} = 1059.77$

 - Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_1 = 0.00$ - Classe 1
 Sollecitazioni: $T_y = -754.51$
 $V, Ed = -754.51$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.01$

 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_1 = 0.00$ - Classe 1
 Sollecitazioni: $T_z = -980.75$
 $V, Ed = -980.75$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.04$

 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_1 = 0.00$ - Classe 1
 Sollecitazioni: $N = -13591.70$ $T_x = -929.44$ $M_y = -127.06$ $T_y = -681.89$ $M_z = 164.25$
 $N, Ed = -13591.70$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.11$
 Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -127.06$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.01$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 164.25$ $M_z, V, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed/MN_z, c, Rd = 0.04$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^1 = 0.11$

 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed = -19453.60$ $M_y, Ed = 700.82$ $M_z, Ed = 802.47$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 2.34$ $M, cr = 600179.00$ $\lambda_{LT} = 0.12$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.46$ $\beta_{LT} = 0.75$ $f = 1.00$ $\chi_{LT} = 1.00$
 $\lambda_y = 12.01$ $N_{cr,y} = 7610230.00$ $\lambda^*_y = 0.13$ Curva b: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 19.92$ $N_{cr,z} = 2767620.00$ $\lambda^*_z = 0.21$ Curva c: $\Phi_z = 0.53$ $\chi_z = 0.99$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
 Verifica YY: $0.16 + 0.08 + 0.26 = 0.50$
 Verifica ZZ: $0.16 + 0.06 + 0.26 = 0.49$

Asta n. 1046 (-1044 -1096) Sez. 34 HEA200 Crit. 1

- - Verifica in termini tensionali [4.2.4] - CC 1 SND $X_1 = 0.00$ - Classe 3
 Sollecitazioni: $N = -8190.53$ $T_x = -145.68$ $M_y = -309.27$ $T_y = -176.92$ $M_z = 283.61$
 Tensioni: $\sigma_N = -154.59$ $\sigma_M = -292.41$ $\tau = 0.00$ $\sigma_{max} = -447.00$
 Tensioni: $\sigma_N = -154.59$ $\sigma_M = 6.37$ $\tau = 15.05$ $\tau_{max} = 15.05$
 Tensioni: $\sigma_N = -154.59$ $\sigma_M = -292.41$ $\tau = 0.00$ $\sigma_{ID,max} = 447.00$

 - Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_1 = 0.00$ - Classe 1
 Sollecitazioni: $T_y = -102.78$
 $V, Ed = -102.78$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.00$

 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_1 = 0.00$ - Classe 1
 Sollecitazioni: $T_z = -40.27$
 $V, Ed = -40.27$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$

 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_1 = 0.00$ - Classe 1
 Sollecitazioni: $N = -6747.96$ $T_x = -37.17$ $M_y = -84.22$ $T_y = -93.51$ $M_z = 136.28$
 $N, Ed = -6747.96$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.06$
 Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -84.22$ $M_y, V, c, Rd = 9576.98$ $MN_y, c, Rd = 9576.98$ $M_y, Ed/MN_y, c, Rd = 0.01$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 136.28$ $M_z, V, c, Rd = 4559.71$ $MN_z, c, Rd = 4559.71$ $M_z, Ed/MN_z, c, Rd = 0.03$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MN_y, c, Rd)^2 + (M_z, Ed/MN_z, c, Rd)^1 = 0.06$

 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed = -8190.53$ $M_y, Ed = -309.27$ $M_z, Ed = 283.61$ $L = 2.52$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 2.52$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.97$ $M, cr = 91505.00$ $\lambda_{LT} = 0.32$

$\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.52$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=30.27$ Ncr,y=1198390.00 $\lambda^*_y=0.32$ Curva b: $\Phi_y=0.57$ $\chi_y=0.96$
 $\lambda_z=50.20$ Ncr,z=435819.00 $\lambda^*_z=0.53$ Curva c: $\Phi_z=0.72$ $\chi_z=0.82$
 Kyy, Kyz, Kzy, Kzz=0.96, 0.98, 0.77, 0.98
 Verifica YY: $0.07+0.03+0.09=0.20$
 Verifica ZZ: $0.07+0.03+0.09=0.19$

Asta n. 1046 (-1096 -1052) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.92$ - Classe 3
 Sollecitazioni: $N=-8296.86$ $T_z=-84.00$ $M_y=123.25$ $T_y=-185.48$ $M_z=-349.08$
 Tensioni: $\sigma_N=-156.59$ $\sigma_M=-293.31$ $\tau=0.00$ $\sigma_{max}=-449.90$
 Tensioni: $\sigma_N=-156.59$ $\sigma_M=-7.84$ $\tau=8.70$ $\tau_{max}=8.70$
 Tensioni: $\sigma_N=-156.59$ $\sigma_M=-293.31$ $\tau=0.00$ $\sigma_{ID,max}=449.90$
 - Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-102.78$
 $V,Ed=-102.78$ $V_c,Rd=58075.50$ $V,Ed/V_c,Rd=0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=-40.27$
 $V,Ed=-40.27$ $V_c,Rd=22203.90$ $V,Ed/V_c,Rd=0.00$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=-6611.71$ $T_z=-37.17$ $M_y=9.46$ $T_y=-93.51$ $M_z=-99.36$
 $N,Ed=-6611.71$ $N_c,Rd=118581.00$ $n=N,Ed/N_c,Rd=0.06$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=9.46$ $M_y,V,c,Rd=9576.98$ $M_{Ny,c,Rd}=9576.98$ $M_y,Ed/M_{Ny,c,Rd}=0.00$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=-99.36$ $M_z,V,c,Rd=4559.71$ $M_{Nz,c,Rd}=4559.71$ $M_z,Ed/M_{Nz,c,Rd}=0.02$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.06$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-8335.29$ $M_y,Ed=123.25$ $M_z,Ed=-349.08$ $L=1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=1.00$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.40$ $M_{cr}=358962.00$ $\lambda_{LT}=0.16$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.47$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=12.01$ Ncr,y=7610230.00 $\lambda^*_y=0.13$ Curva b: $\Phi_y=0.50$ $\chi_y=1.00$
 $\lambda_z=19.92$ Ncr,z=2767620.00 $\lambda^*_z=0.21$ Curva c: $\Phi_z=0.53$ $\chi_z=0.99$
 Kyy, Kyz, Kzy, Kzz=0.96, 0.96, 0.76, 0.96
 Verifica YY: $0.07+0.01+0.11=0.20$
 Verifica ZZ: $0.07+0.01+0.11=0.19$

Asta n. 1046 (-1052 -1092) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-2206.44$ $T_z=-61.99$ $M_y=-101.23$ $T_y=-226.75$ $M_z=374.22$
 Tensioni: $\sigma_N=-41.64$ $\sigma_M=-306.44$ $\tau=0.00$ $\sigma_{max}=-348.08$
 Tensioni: $\sigma_N=-41.64$ $\sigma_M=82.29$ $\tau=8.15$ $\tau_{max}=8.15$
 Tensioni: $\sigma_N=-41.64$ $\sigma_M=-306.44$ $\tau=0.00$ $\sigma_{ID,max}=348.08$
 - Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-177.48$
 $V,Ed=-177.48$ $V_c,Rd=58075.50$ $V,Ed/V_c,Rd=0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=-47.11$
 $V,Ed=-47.11$ $V_c,Rd=22203.90$ $V,Ed/V_c,Rd=0.00$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=-2130.94$ $T_z=-47.11$ $M_y=-68.23$ $T_y=-177.48$ $M_z=295.75$
 $N,Ed=-2130.94$ $N_c,Rd=118581.00$ $n=N,Ed/N_c,Rd=0.02$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-68.23$ $M_y,V,c,Rd=9576.98$ $M_{Ny,c,Rd}=9576.98$ $M_y,Ed/M_{Ny,c,Rd}=0.01$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=295.75$ $M_z,V,c,Rd=4559.71$ $M_{Nz,c,Rd}=4559.71$ $M_z,Ed/M_{Nz,c,Rd}=0.06$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.06$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=1.50$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.03$ $M_{cr}=240439.00$ $\lambda_{LT}=0.19$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $M_y,Ed=-101.23$ $M_y,b,Rd=8650.35$ $M_y,Ed/M_y,b,Rd=0.01$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-2206.44$ $M_y,Ed=-101.23$ $M_z,Ed=374.22$ $L=1.50$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=1.50$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.03$ $M_{cr}=240439.00$ $\lambda_{LT}=0.19$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.48$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$

$\lambda_y=18.02$ Ncr,y=3382320.00 $\lambda^*_y=0.19$ Curva b: $\Phi_y=0.52$ $\chi_y=1.00$
 $\lambda_z=29.88$ Ncr,z=1230060.00 $\lambda^*_z=0.32$ Curva c: $\Phi_z=0.58$ $\chi_z=0.94$
 Kyy, Kyz, Kzy, Kzz=0.95, 0.95, 0.76, 0.95
 Verifica YY: 0.02+0.01+0.12=0.15
 Verifica ZZ: 0.02+0.01+0.12=0.15

Asta n. 1046 (-1092 -1059) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=1.95 - Classe 3
 Sollecitazioni: N=-2062.80 Tz=-59.63 My=122.51 Ty=-212.02 Mz=-380.04
 Tensioni: $\sigma_N=-38.93$ $\sigma_M=-316.30$ $\tau=0.00$ $\sigma_{max}=-355.23$
 Tensioni: $\sigma_N=-38.93$ $\sigma_M=-88.13$ $\tau=7.62$ $\tau_{max}=7.62$
 Tensioni: $\sigma_N=-38.93$ $\sigma_M=-316.30$ $\tau=0.00$ $\sigma_{TD,max}=355.23$
 - Verifica a taglio dir. Y [4.2.16] - CC 11 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Ty=-177.48
 V,Ed=-177.48 Vc,Rd=58075.50 V,Ed/Vc,Rd=0.00
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Tz=-47.11
 V,Ed=-47.11 Vc,Rd=22203.90 V,Ed/Vc,Rd=0.00
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU Xl=1.95 - Classe 1
 Sollecitazioni: N=-1203.97 Tz=-47.09 My=96.61 Ty=-176.63 Mz=-322.00
 N,Ed=-1203.97 Nc,Rd=118581.00 n=N,Ed/Nc,Rd=0.01
 Pressoflessione retta YY [4.2.33]:
 My,Ed=96.61 My,V,c,Rd=9576.98 MNy,c,Rd=9576.98 My,Ed/MNy,c,Rd=0.01
 Pressoflessione retta ZZ [4.2.34]:
 Mz,Ed=-322.00 Mz,V,c,Rd=4559.71 MNz,c,Rd=4559.71 Mz,Ed/MNz,c,Rd=0.07
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/MNy,c,Rd)^2 + (Mz,Ed/MNz,c,Rd)^2 = 0.07$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 Lcr=2.02 Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.55$ M,cr=106007.00 $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ f=0.99 $\chi_{LT}=1.00$
 My,Ed=122.51 My,b,Rd=8650.35 My,Ed/My,b,Rd=0.01
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: N,Ed=-2144.05 My,Ed=122.51 Mz,Ed=-380.04 L=2.02
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 Lcr=2.02 Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.55$ M,cr=106007.00 $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ f=0.99 $\chi_{LT}=1.00$
 $\lambda_y=24.27$ Ncr,y=1865070.00 $\lambda^*_y=0.26$ Curva b: $\Phi_y=0.54$ $\chi_y=0.98$
 $\lambda_z=40.24$ Ncr,z=678273.00 $\lambda^*_z=0.43$ Curva c: $\Phi_z=0.65$ $\chi_z=0.88$
 Kyy, Kyz, Kzy, Kzz=0.95, 0.96, 0.76, 0.96
 Verifica YY: 0.02+0.01+0.12=0.15
 Verifica ZZ: 0.02+0.01+0.12=0.15

Asta n. 1047 (-1078 -1066) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND Xl=0.00 - Classe 3
 Sollecitazioni: N=-3098.63 Tz=-723.36 My=-1723.40 Ty=-133.04 Mz=-369.22 Mx=1.31
 Tensioni: $\sigma_N=-58.48$ $\sigma_M=-722.39$ $\tau=7.32$ $\sigma_{max}=-780.88$
 Tensioni: $\sigma_N=-58.48$ $\sigma_M=-8.29$ $\tau=75.03$ $\tau_{max}=75.03$
 Tensioni: $\sigma_N=-58.48$ $\sigma_M=-722.39$ $\tau=7.32$ $\sigma_{TD,max}=780.98$
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Tz=-217.53
 V,Ed=-217.53 Vc,Rd=22203.90 V,Ed/Vc,Rd=0.01
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU Xl=2.69 - Classe 1
 Sollecitazioni: N=-4557.58 Tz=-217.53 My=402.09 Mz=-2.88
 N,Ed=-4557.58 Nc,Rd=118581.00 n=N,Ed/Nc,Rd=0.04
 Pressoflessione retta YY [4.2.33]:
 My,Ed=402.09 My,V,c,Rd=9576.98 MNy,c,Rd=9576.98 My,Ed/MNy,c,Rd=0.04
 Pressoflessione retta ZZ [4.2.34]:
 Mz,Ed=-2.88 Mz,c,Rd=4559.71 MNz,c,Rd=4559.71 Mz,Ed/MNz,c,Rd=0.00
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/MNy,c,Rd)^2 + (Mz,Ed/MNz,c,Rd)^2 = 0.04$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: N,Ed=-3098.63 My,Ed=-1723.40 Mz,Ed=-369.22 L=2.76
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 Lcr=2.76 Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.94$ M,cr=77534.30 $\lambda_{LT}=0.34$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.53$ $\beta_{LT}=0.75$ f=0.98 $\chi_{LT}=1.00$
 $\lambda_y=33.15$ Ncr,y=999032.00 $\lambda^*_y=0.35$ Curva b: $\Phi_y=0.59$ $\chi_y=0.94$
 $\lambda_z=54.98$ Ncr,z=363320.00 $\lambda^*_z=0.59$ Curva c: $\Phi_z=0.77$ $\chi_z=0.79$
 Kyy, Kyz, Kzy, Kzz=0.96, 0.96, 0.76, 0.96
 Verifica YY: 0.03+0.19+0.12=0.34
 Verifica ZZ: 0.03+0.15+0.12=0.30

Asta n. 1048 (-1081 -1051) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-3098.63$ $T_z=726.86$ $M_y=1728.51$ $T_y=-132.58$ $M_z=360.65$
 Tensioni: $\sigma_N=-58.48$ $\sigma_M=-717.30$ $\tau=0.00$ $\sigma_{max}=-775.78$
 Tensioni: $\sigma_N=-58.48$ $\sigma_M=8.10$ $\tau=74.99$ $\tau_{max}=74.99$
 Tensioni: $\sigma_N=-58.48$ $\sigma_M=-717.30$ $\tau=0.00$ $\sigma_{ID,max}=775.78$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-3.80$
 $V,Ed=-3.80$ $V_c,Rd=58075.50$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=219.73$
 $V,Ed=219.73$ $V_c,Rd=22203.90$ $V,Ed/V_c,Rd=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=-4703.22$ $T_z=219.73$ $M_y=189.91$ $T_y=-3.80$ $M_z=7.60$
 $N,Ed=-4703.22$ $N_c,Rd=118581.00$ $n=N,Ed/N_c,Rd=0.04$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=189.91$ $M_y,V,c,Rd=9576.98$ $MN_y,c,Rd=9576.98$ $M_y,Ed/MN_y,c,Rd=0.02$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=7.60$ $M_z,V,c,Rd=4559.71$ $MN_z,c,Rd=4559.71$ $M_z,Ed/MN_z,c,Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/MN_y,c,Rd)^2+(M_z,Ed/MN_z,c,Rd)^1=0.04$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-3098.63$ $M_y,Ed=1728.51$ $M_z,Ed=360.65$ $L=1.00$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=1.00$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.49$ $M_{cr}=639575.00$ $\lambda_{LT}=0.12$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.46$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=12.01$ Ncr,y=7610230.00 $\lambda^*_y=0.13$ Curva b: $\Phi_y=0.50$ $\chi_y=1.00$
 $\lambda_z=19.92$ Ncr,z=2767620.00 $\lambda^*_z=0.21$ Curva c: $\Phi_z=0.53$ $\chi_z=0.99$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: $0.03+0.19+0.12=0.33$
 Verifica ZZ: $0.03+0.15+0.12=0.29$

Asta n. 1048 (-1051 -1067) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-3057.04$ $T_z=724.21$ $M_y=-1040.12$ $T_y=-130.96$ $M_z=228.09$
 Tensioni: $\sigma_N=-57.70$ $\sigma_M=-439.92$ $\tau=0.00$ $\sigma_{max}=-497.62$
 Tensioni: $\sigma_N=-57.70$ $\sigma_M=5.12$ $\tau=74.71$ $\tau_{max}=74.71$
 Tensioni: $\sigma_N=-57.70$ $\sigma_M=-439.92$ $\tau=0.00$ $\sigma_{ID,max}=497.62$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-3.80$
 $V,Ed=-3.80$ $V_c,Rd=58075.50$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=219.73$
 $V,Ed=219.73$ $V_c,Rd=22203.90$ $V,Ed/V_c,Rd=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=1.69$ - Classe 1
 Sollecitazioni: $N=-4557.58$ $T_z=219.73$ $M_y=-401.93$ $T_y=-3.80$ $M_z=-2.64$
 $N,Ed=-4557.58$ $N_c,Rd=118581.00$ $n=N,Ed/N_c,Rd=0.04$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-401.93$ $M_y,V,c,Rd=9576.98$ $MN_y,c,Rd=9576.98$ $M_y,Ed/MN_y,c,Rd=0.04$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=-2.64$ $M_z,V,c,Rd=4559.71$ $MN_z,c,Rd=4559.71$ $M_z,Ed/MN_z,c,Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/MN_y,c,Rd)^2+(M_z,Ed/MN_z,c,Rd)^1=0.04$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-3057.04$ $M_y,Ed=-1040.12$ $M_z,Ed=228.09$ $L=1.76$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=1.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.47$ $M_{cr}=129483.00$ $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=21.14$ Ncr,y=2456810.00 $\lambda^*_y=0.23$ Curva b: $\Phi_y=0.53$ $\chi_y=0.99$
 $\lambda_z=35.06$ Ncr,z=893474.00 $\lambda^*_z=0.37$ Curva c: $\Phi_z=0.61$ $\chi_z=0.91$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.96 , 0.76 , 0.96
 Verifica YY: $0.03+0.11+0.07=0.21$
 Verifica ZZ: $0.03+0.09+0.07=0.19$

Asta n. 1049 (-1079 -1068) Sez. 34 HEA200 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-500.01$ $T_z=173.66$ $M_y=402.95$ $T_y=321.10$ $M_z=-585.87$
 Tensioni: $\sigma_N=-9.44$ $\sigma_M=-543.00$ $\tau=0.00$ $\sigma_{max}=-552.44$
 Tensioni: $\sigma_N=-9.44$ $\sigma_M=-13.16$ $\tau=17.96$ $\tau_{max}=17.96$

- Tensioni: $\sigma_N = -9.44$ $\sigma_M = -543.00$ $\tau = 0.00$ $\sigma_{ID,max} = 552.44$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $T_y = 3.04$
 $V, Ed = 3.04$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $T_z = 7.21$
 $V, Ed = 7.21$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $N = -650.01$ $T_z = 6.94$ $M_y = 21.61$ $T_y = 3.07$ $M_z = -5.53$
 $N, Ed = -650.01$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.01$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = 21.61$ $M_y, V, c, Rd = 9576.98$ $M_{Ny}, c, Rd = 9576.98$ $M_y, Ed/M_{Ny}, c, Rd = 0.00$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = -5.53$ $M_z, V, c, Rd = 4559.71$ $M_{Nz}, c, Rd = 4559.71$ $M_z, Ed/M_{Nz}, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/M_{Ny}, c, Rd)^2 + (M_z, Ed/M_{Nz}, c, Rd)^2 = 0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -500.01$ $M_y, Ed = 713.82$ $M_z, Ed = -585.87$ $L = 2.76$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 2.76$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.25$ $M, cr = 50001.00$ $\lambda_{LT} = 0.43$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.57$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 33.15$ $N_{cr,y} = 999032.00$ $\lambda^*_y = 0.35$ Curva b: $\Phi_y = 0.59$ $\chi_y = 0.94$
 $\lambda_z = 54.98$ $N_{cr,z} = 363320.00$ $\lambda^*_z = 0.59$ Curva c: $\Phi_z = 0.77$ $\chi_z = 0.79$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00 + 0.08 + 0.19 = 0.27$
Verifica ZZ: $0.00 + 0.06 + 0.19 = 0.25$
- Asta n. 1049 (-1068 -1058) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 0.07$ - Classe 3
Sollecitazioni: $N = -320.49$ $T_z = -165.66$ $M_y = -717.51$ $T_y = 69.14$ $M_z = -320.57$ $M_x = -1.79$
Tensioni: $\sigma_N = -6.05$ $\sigma_M = -425.71$ $\tau = 9.99$ $\sigma_{max} = -431.76$
Tensioni: $\sigma_N = -6.05$ $\sigma_M = -7.20$ $\tau = 19.94$ $\tau_{max} = 19.94$
Tensioni: $\sigma_N = -6.05$ $\sigma_M = -425.71$ $\tau = 9.99$ $\sigma_{ID,max} = 432.11$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l = 0.07$ - Classe 1
Sollecitazioni: $T_y = 1.50$
 $V, Ed = 1.50$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l = 0.07$ - Classe 1
Sollecitazioni: $T_z = -1.39$
 $V, Ed = -1.39$ $V_c, Rd = 22203.90$ $V, Ed/V_c, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l = 0.53$ - Classe 1
Sollecitazioni: $N = -391.66$ $T_z = -1.35$ $M_y = -1.34$ $T_y = 1.47$ $M_z = 1.08$
 $N, Ed = -391.66$ $N_c, Rd = 118581.00$ $n = N, Ed/N_c, Rd = 0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -1.34$ $M_y, V, c, Rd = 9576.98$ $M_{Ny}, c, Rd = 9576.98$ $M_y, Ed/M_{Ny}, c, Rd = 0.00$
Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 1.08$ $M_z, V, c, Rd = 4559.71$ $M_{Nz}, c, Rd = 4559.71$ $M_z, Ed/M_{Nz}, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/M_{Ny}, c, Rd)^2 + (M_z, Ed/M_{Nz}, c, Rd)^2 = 0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -320.49$ $M_y, Ed = -717.51$ $M_z, Ed = -320.57$ $L = 1.76$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.76$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 2.51$ $M, cr = 220680.00$ $\lambda_{LT} = 0.20$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.48$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 21.14$ $N_{cr,y} = 2456810.00$ $\lambda^*_y = 0.23$ Curva b: $\Phi_y = 0.53$ $\chi_y = 0.99$
 $\lambda_z = 35.06$ $N_{cr,z} = 893474.00$ $\lambda^*_z = 0.37$ Curva c: $\Phi_z = 0.61$ $\chi_z = 0.91$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00 + 0.08 + 0.10 = 0.18$
Verifica ZZ: $0.00 + 0.06 + 0.10 = 0.17$
- Asta n. 1049 (-1058 -1065) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l = 0.00$ - Classe 3
Sollecitazioni: $N = -250.05$ $T_z = -125.44$ $M_y = 437.53$ $T_y = 67.24$ $M_z = 233.59$ $M_x = -1.79$
Tensioni: $\sigma_N = -4.72$ $\sigma_M = -288.13$ $\tau = 9.99$ $\sigma_{max} = -292.85$
Tensioni: $\sigma_N = -4.72$ $\sigma_M = 5.25$ $\tau = 16.52$ $\tau_{max} = 16.52$
Tensioni: $\sigma_N = -4.72$ $\sigma_M = -288.13$ $\tau = 9.99$ $\sigma_{ID,max} = 293.36$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $T_y = 1.57$
 $V, Ed = 1.57$ $V_c, Rd = 58075.50$ $V, Ed/V_c, Rd = 0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l = 0.00$ - Classe 1

- Sollecitazioni: $T_z = -1.30$
 $V, Ed = -1.30$ $Vc, Rd = 22203.90$ $V, Ed/Vc, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $Xl = 0.94$ - Classe 1
 Sollecitazioni: $N = -274.14$ $T_z = -1.30$ $M_y = 1.27$ $T_y = 1.57$ $M_z = 4.28$
 $N, Ed = -274.14$ $Nc, Rd = 118581.00$ $n = N, Ed/Nc, Rd = 0.00$
 Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = 1.27$ $M_y, V, c, Rd = 9576.98$ $MNy, c, Rd = 9576.98$ $M_y, Ed/MNy, c, Rd = 0.00$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = 4.28$ $M_z, V, c, Rd = 4559.71$ $MNz, c, Rd = 4559.71$ $M_z, Ed/MNz, c, Rd = 0.00$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MNy, c, Rd)^2 + (M_z, Ed/MNz, c, Rd)^2 = 0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N, Ed = -250.05$ $M_y, Ed = 437.53$ $M_z, Ed = 233.59$ $L = 3.52$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 3.52$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.72$ $M, cr = 46439.60$ $\lambda_{LT} = 0.44$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.58$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 42.28$ $Ncr, y = 614204.00$ $\lambda_y^* = 0.45$ Curva b: $\Phi_y = 0.64$ $\chi_y = 0.91$
 $\lambda_z = 70.12$ $Ncr, z = 223368.00$ $\lambda_z^* = 0.75$ Curva c: $\Phi_z = 0.91$ $\chi_z = 0.70$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.00 + 0.05 + 0.07 = 0.12$
 Verifica ZZ: $0.00 + 0.04 + 0.07 = 0.11$
- Asta n. 1050 (-1080 -1045) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $Xl = 0.00$ - Classe 3
 Sollecitazioni: $N = -19191.70$ $T_z = -2017.62$ $M_y = -695.79$ $T_y = 9461.93$ $M_z = -1728.57$
 Tensioni: $\sigma_N = -362.22$ $\sigma_M = -1474.51$ $\tau = 0.00$ $\sigma_{max} = -1836.74$
 Tensioni: $\sigma_N = -362.22$ $\sigma_M = -110.77$ $\tau = 339.49$ $\tau_{max} = 339.49$
 Tensioni: $\sigma_N = -362.22$ $\sigma_M = -1474.51$ $\tau = 0.00$ $\sigma_{ID, max} = 1836.74$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $Xl = 0.00$ - Classe 1
 Sollecitazioni: $T_y = 3306.76$
 $V, Ed = 3306.76$ $Vc, Rd = 58075.50$ $V, Ed/Vc, Rd = 0.06$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $Xl = 0.00$ - Classe 1
 Sollecitazioni: $T_z = -714.30$
 $V, Ed = -714.30$ $Vc, Rd = 22203.90$ $V, Ed/Vc, Rd = 0.03$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $Xl = 0.00$ - Classe 1
 Sollecitazioni: $N = -23728.40$ $T_z = -714.30$ $M_y = -18.56$ $T_y = 3306.76$ $M_z = -545.85$
 $N, Ed = -23728.40$ $Nc, Rd = 118581.00$ $n = N, Ed/Nc, Rd = 0.20$
 Pressoflessione retta YY [4.2.33]:
 $M_y, Ed = -18.56$ $M_y, V, c, Rd = 9576.98$ $MNy, c, Rd = 8730.23$ $M_y, Ed/MNy, c, Rd = 0.00$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z, Ed = -545.85$ $M_z, V, c, Rd = 4559.71$ $MNz, c, Rd = 4559.71$ $M_z, Ed/MNz, c, Rd = 0.12$
 $\alpha = 2.00$ $\beta = 1.00$ $(M_y, Ed/MNy, c, Rd)^2 + (M_z, Ed/MNz, c, Rd)^2 = 0.20$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N, Ed = -19191.70$ $M_y, Ed = -695.79$ $M_z, Ed = -1728.57$ $L = 1.00$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.00$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 3.09$ $M, cr = 792728.00$ $\lambda_{LT} = 0.11$
 $\lambda_{LT,0} = 0.40$ $\Phi_{LT} = 0.45$ $\beta_{LT} = 0.75$ $f = 1.00$ $\chi_{LT} = 1.00$
 $\lambda_y = 12.01$ $Ncr, y = 7610230.00$ $\lambda_y^* = 0.13$ Curva b: $\Phi_y = 0.50$ $\chi_y = 1.00$
 $\lambda_z = 19.92$ $Ncr, z = 2767620.00$ $\lambda_z^* = 0.21$ Curva c: $\Phi_z = 0.53$ $\chi_z = 0.99$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.96, 0.97, 0.77, 0.97$
 Verifica YY: $0.16 + 0.08 + 0.56 = 0.80$
 Verifica ZZ: $0.16 + 0.06 + 0.56 = 0.78$
- Asta n. 1050 (-1045 -1069) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $Xl = 0.00$ - Classe 3
 Sollecitazioni: $N = -393.30$ $T_z = -699.85$ $M_y = -1664.84$ $T_y = 662.59$ $M_z = -950.32$ $M_x = 1.54$
 Tensioni: $\sigma_N = -7.42$ $\sigma_M = -1142.42$ $\tau = 8.59$ $\sigma_{max} = -1149.84$
 Tensioni: $\sigma_N = -7.42$ $\sigma_M = 21.35$ $\tau = 73.07$ $\tau_{max} = 73.07$
 Tensioni: $\sigma_N = -7.42$ $\sigma_M = -1142.42$ $\tau = 8.59$ $\sigma_{ID, max} = 1149.94$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $Xl = 0.00$ - Classe 1
 Sollecitazioni: $T_y = 3.18$
 $V, Ed = 3.18$ $Vc, Rd = 58075.50$ $V, Ed/Vc, Rd = 0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $Xl = 0.00$ - Classe 1
 Sollecitazioni: $T_z = -8.66$
 $V, Ed = -8.66$ $Vc, Rd = 22203.90$ $V, Ed/Vc, Rd = 0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $Xl = 0.00$ - Classe 1
 Sollecitazioni: $N = -511.30$ $T_z = -8.64$ $M_y = -14.10$ $T_y = 2.52$ $M_z = -4.74$
 $N, Ed = -511.30$ $Nc, Rd = 118581.00$ $n = N, Ed/Nc, Rd = 0.00$
 Pressoflessione retta YY [4.2.33]:

- My,Ed=-14.10 My,V,c,Rd=9576.98 MNy,c,Rd=9576.98 My,Ed/MNy,c,Rd=0.00
 Pressoflessione retta ZZ [4.2.34]:
 Mz,Ed=-4.74 Mz,V,c,Rd=4559.71 MNz,c,Rd=4559.71 Mz,Ed/MNz,c,Rd=0.00
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/MNy,c,Rd)^2 + (Mz,Ed/MNz,c,Rd)^1 = 0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: N,Ed=-393.30 My,Ed=-1664.84 Mz,Ed=-950.32 L=1.76
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=1.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.15$ $M_{cr}=189304.00$ $\lambda_{LT}=0.22$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.49$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=21.14$ Ncr,y=2456810.00 $\lambda^*_y=0.23$ Curva b: $\Phi_y=0.53$ $\chi_y=0.99$
 $\lambda_z=35.06$ Ncr,z=893474.00 $\lambda^*_z=0.37$ Curva c: $\Phi_z=0.61$ $\chi_z=0.91$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95, 0.76, 0.95
 Verifica YY: 0.00+0.18+0.30=0.49
 Verifica ZZ: 0.00+0.15+0.30=0.45
- Asta n. 1050 (-1069 -1053) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=0.07 - Classe 3
 Sollecitazioni: N=-255.37 Tz=143.02 My=592.51 Ty=117.00 Mz=-424.44 Mx=3.38
 Tensioni: $\sigma_N=-4.82$ $\sigma_M=-471.16$ $\tau=18.88$ $\sigma_{max}=-475.98$
 Tensioni: $\sigma_N=-4.82$ $\sigma_M=117.65$ $\tau=24.75$ $\tau_{max}=24.75$
 Tensioni: $\sigma_N=-4.82$ $\sigma_M=-471.16$ $\tau=18.88$ $\sigma_{TD,max}=477.10$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU Xl=0.07 - Classe 1
 Sollecitazioni: Tz=2.02
 V,Ed=2.02 Vc,Rd=22203.90 V,Ed/Vc,Rd=0.00
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU Xl=0.07 - Classe 1
 Sollecitazioni: N=-331.99 Tz=1.98 My=5.70 Mz=-3.15
 N,Ed=-331.99 Nc,Rd=118581.00 $n=N,Ed/Nc,Rd=0.00$
 Pressoflessione retta YY [4.2.33]:
 My,Ed=5.70 My,V,c,Rd=9576.98 MNy,c,Rd=9576.98 My,Ed/MNy,c,Rd=0.00
 Pressoflessione retta ZZ [4.2.34]:
 Mz,Ed=-3.15 Mz,c,Rd=4559.71 MNz,c,Rd=4559.71 Mz,Ed/MNz,c,Rd=0.00
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/MNy,c,Rd)^2 + (Mz,Ed/MNz,c,Rd)^1 = 0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: N,Ed=-255.37 My,Ed=592.51 Mz,Ed=-424.44 L=1.76
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=1.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.23$ $M_{cr}=107931.00$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=21.14$ Ncr,y=2456810.00 $\lambda^*_y=0.23$ Curva b: $\Phi_y=0.53$ $\chi_y=0.99$
 $\lambda_z=35.06$ Ncr,z=893474.00 $\lambda^*_z=0.37$ Curva c: $\Phi_z=0.61$ $\chi_z=0.91$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95, 0.76, 0.95
 Verifica YY: 0.00+0.07+0.13=0.20
 Verifica ZZ: 0.00+0.05+0.13=0.19
- Asta n. 1050 (-1053 -1060) Sez. 34 HEA200 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND Xl=0.00 - Classe 3
 Sollecitazioni: N=-184.94 Tz=94.00 My=327.34 Ty=78.52 Mz=-275.92 Mx=2.23
 Tensioni: $\sigma_N=-3.49$ $\sigma_M=-291.32$ $\tau=12.44$ $\sigma_{max}=-294.81$
 Tensioni: $\sigma_N=-3.49$ $\sigma_M=65.93$ $\tau=16.31$ $\tau_{max}=16.31$
 Tensioni: $\sigma_N=-3.49$ $\sigma_M=-291.32$ $\tau=12.44$ $\sigma_{TD,max}=295.60$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Tz=2.02
 V,Ed=2.02 Vc,Rd=22203.90 V,Ed/Vc,Rd=0.00
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU Xl=0.00 - Classe 1
 Sollecitazioni: N=-240.42 Tz=1.98 My=2.35 Mz=-2.12
 N,Ed=-240.42 Nc,Rd=118581.00 $n=N,Ed/Nc,Rd=0.00$
 Pressoflessione retta YY [4.2.33]:
 My,Ed=2.35 My,V,c,Rd=9576.98 MNy,c,Rd=9576.98 My,Ed/MNy,c,Rd=0.00
 Pressoflessione retta ZZ [4.2.34]:
 Mz,Ed=-2.12 Mz,c,Rd=4559.71 MNz,c,Rd=4559.71 Mz,Ed/MNz,c,Rd=0.00
 $\alpha=2.00$ $\beta=1.00$ $(My,Ed/MNy,c,Rd)^2 + (Mz,Ed/MNz,c,Rd)^1 = 0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: N,Ed=-184.94 My,Ed=327.34 Mz,Ed=-275.92 L=3.52
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95, 0.95
 $L_{cr}=3.52$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.78$ $M_{cr}=48002.00$ $\lambda_{LT}=0.43$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.58$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=42.28$ Ncr,y=614204.00 $\lambda^*_y=0.45$ Curva b: $\Phi_y=0.64$ $\chi_y=0.91$
 $\lambda_z=70.12$ Ncr,z=223368.00 $\lambda^*_z=0.75$ Curva c: $\Phi_z=0.91$ $\chi_z=0.70$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95, 0.76, 0.95
 Verifica YY: 0.00+0.04+0.09=0.13

Verifica ZZ: 0.00+0.03+0.09=0.12

Asta n. 1051 (-1069 -1068) Sez. 35 HEA140 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.10$ - Classe 3
 Sollecitazioni: $N=334.37$ $T_z=36.19$ $T_y=154.54$ $M_z=-248.11$
 Tensioni: $\sigma_N=10.64$ $\sigma_M=446.10$ $\tau=0.00$ $\sigma_{max}=456.75$
 Tensioni: $\sigma_N=10.64$ $\sigma_M=-94.00$ $\tau=9.34$ $\tau_{max}=9.34$
 Tensioni: $\sigma_N=10.64$ $\sigma_M=446.10$ $\tau=0.19$ $\sigma_{ID,max}=456.75$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.10$ - Classe 1
 Sollecitazioni: $T_z=47.05$
 $V,Ed=47.05$ $V_c,Rd=13082.80$ $V,Ed/V_c,Rd=0.00$
 - Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=1.56$ - Classe 1
 Sollecitazioni: $N=9.30$ $M_y=-34.52$
 $M_y,Ed=-34.52$ $M_y,c,Rd=3896.83$
 $N,Ed=9.30$ $N_c,Rd=70314.00$ YY $n=N,Ed/N_c,Rd=0.00$ $MNy,c,Rd=3896.83$ $M_y,Ed/MNy,c,Rd=0.01$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=15182.90$ $\lambda_{LT}=0.52$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.62$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.98$
 $M_y,Ed=-34.52$ $M_y,b,Rd=3806.90$ $M_y,Ed/M_y,b,Rd=0.01$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-320.66$ $M_y,Ed=-26.56$ $M_z,Ed=-248.11$ $L=3.13$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=15182.90$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=54.49$ $N_{cr,y}=219272.00$ $\lambda^*_y=0.58$ Curva b: $\Phi_y=0.73$ $\chi_y=0.85$
 $\lambda_z=88.77$ $N_{cr,z}=82628.10$ $\lambda^*_z=0.95$ Curva c: $\Phi_z=1.13$ $\chi_z=0.57$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: 0.00+0.01+0.19=0.20
 Verifica ZZ: 0.00+0.01+0.19=0.20

Asta n. 1052 (-1069 -1067) Sez. 35 HEA140 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=1.80$ - Classe 3
 Sollecitazioni: $N=-590.72$ $T_z=-20.96$ $T_y=-354.46$ $M_z=-385.80$
 Tensioni: $\sigma_N=-18.80$ $\sigma_M=-693.67$ $\tau=0.00$ $\sigma_{max}=-712.48$
 Tensioni: $\sigma_N=-18.80$ $\sigma_M=-146.17$ $\tau=21.32$ $\tau_{max}=21.32$
 Tensioni: $\sigma_N=-18.80$ $\sigma_M=-693.67$ $\tau=0.00$ $\sigma_{ID,max}=712.48$
 - Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.10$ - Classe 1
 Sollecitazioni: $T_y=-1.31$
 $V,Ed=-1.31$ $V_c,Rd=34058.40$ $V,Ed/V_c,Rd=0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.10$ - Classe 1
 Sollecitazioni: $T_z=27.24$
 $V,Ed=27.24$ $V_c,Rd=13082.80$ $V,Ed/V_c,Rd=0.00$
 - Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=0.95$ - Classe 1
 Sollecitazioni: $N=-2.62$ $M_y=-11.57$ $T_y=-1.31$
 $M_y,Ed=-11.57$ $M_y,c,Rd=3896.83$
 $N,Ed=-2.62$ $N_c,Rd=-70314.00$ YY $n=N,Ed/N_c,Rd=0.00$ $MNy,c,Rd=3896.83$ $M_y,Ed/MNy,c,Rd=0.00$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=1.90$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=31571.70$ $\lambda_{LT}=0.34$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.53$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $M_y,Ed=-8.90$ $M_y,b,Rd=3477.13$ $M_y,Ed/M_y,b,Rd=0.00$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-590.72$ $M_y,Ed=-8.90$ $M_z,Ed=-385.80$ $L=1.90$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=1.90$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=31571.70$ $\lambda_{LT}=0.34$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.53$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=33.13$ $N_{cr,y}=593166.00$ $\lambda^*_y=0.35$ Curva b: $\Phi_y=0.59$ $\chi_y=0.94$
 $\lambda_z=53.97$ $N_{cr,z}=223522.00$ $\lambda^*_z=0.57$ Curva c: $\Phi_z=0.76$ $\chi_z=0.80$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: 0.01+0.00+0.30=0.31
 Verifica ZZ: 0.01+0.00+0.30=0.31

Asta n. 1053 (-1066 -1068) Sez. 35 HEA140 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.10$ - Classe 3
 Sollecitazioni: $N=-373.90$ $T_z=20.96$ $T_y=-225.46$ $M_z=233.32$
 Tensioni: $\sigma_N=-11.90$ $\sigma_M=-419.50$ $\tau=0.00$ $\sigma_{max}=-431.41$
 Tensioni: $\sigma_N=-11.90$ $\sigma_M=88.40$ $\tau=13.57$ $\tau_{max}=13.57$

Tensioni: $\sigma_N = -11.90$ $\sigma_M = -419.50$ $\tau = 0.11$ $\sigma_{ID, \max} = 431.41$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.10$ - Classe 1
Sollecitazioni: $T_z = 27.24$
 $V, Ed = 27.24$ $V_c, Rd = 13082.80$ $V, Ed/V_c, Rd = 0.00$

- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l = 0.10$ - Classe 1
Sollecitazioni: $T_z = 27.24$
Tensioni: $\sigma_N = 0.00$ $\sigma_M = 0.00$ $\tau = 0.00$ $\sigma_{\max} = 0.00$
Tensioni: $\sigma_N = 0.00$ $\sigma_M = 0.00$ $\tau = 4.37$ $\tau_{\max} = 4.37$
Tensioni: $\sigma_N = 0.00$ $\sigma_M = 0.00$ $\tau = 4.37$ $\sigma_{ID, \max} = 7.57$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr} = 1.90$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ $M, cr = 31571.70$ $\lambda_{LT} = 0.34$
 $\lambda_{LT, 0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.53$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $M_y, Ed = -8.90$ $M_y, b, Rd = 3477.13$ $M_y, Ed/M_y, b, Rd = 0.00$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed = -373.90$ $M_z, Ed = -8.90$ $M_z, Ed = 233.32$ $L = 1.90$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.90$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ $M, cr = 31571.70$ $\lambda_{LT} = 0.34$
 $\lambda_{LT, 0} = 0.40$ $\Phi_{LT} = 0.53$ $\beta_{LT} = 0.75$ $f = 0.98$ $\chi_{LT} = 1.00$
 $\lambda_y = 33.13$ $N_{cr, y} = 593166.00$ $\lambda_y^* = 0.35$ Curva b: $\Phi_y = 0.59$ $\chi_y = 0.94$
 $\lambda_z = 53.97$ $N_{cr, z} = 223522.00$ $\lambda_z^* = 0.57$ Curva c: $\Phi_z = 0.76$ $\chi_z = 0.80$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.01 + 0.00 + 0.18 = 0.19$
Verifica ZZ: $0.01 + 0.00 + 0.18 = 0.19$

Asta n. 1054 (-1070 -1066) Sez. 35 HEA140 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l = 0.00$ - Classe 3
Sollecitazioni: $N = -470.84$ $M_y = -2040.12$ $T_y = 333.37$ $M_z = -365.34$
Tensioni: $\sigma_N = -14.99$ $\sigma_M = -1970.03$ $\tau = 0.00$ $\sigma_{\max} = -1985.02$
Tensioni: $\sigma_N = -14.99$ $\sigma_M = 1451.56$ $\tau = 20.05$ $\tau_{\max} = 20.05$
Tensioni: $\sigma_N = -14.99$ $\sigma_M = -1970.03$ $\tau = 0.00$ $\sigma_{ID, \max} = 1985.02$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 1.47$ - Classe 1
Sollecitazioni: $T_z = -4248.50$
 $V, Ed = -4248.50$ $V_c, Rd = 13082.80$ $V, Ed/V_c, Rd = 0.32$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU $X_l = 0.00$ - Classe 1
Sollecitazioni: $N = -218.49$ $M_y = -3117.33$
 $M_y, Ed = -3117.33$ $M_y, c, Rd = 3896.83$
 $N, Ed = -218.49$ $N_c, Rd = -70314.00$ YY $n = N, Ed/N_c, Rd = 0.00$ $MN_y, c, Rd = 3896.83$ $M_y, Ed/MN_y, c, Rd = 0.80$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr} = 1.56$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ $M, cr = 43507.50$ $\lambda_{LT} = 0.29$
 $\lambda_{LT, 0} = 0.40$ $\beta_{LT} = 0.75$ $\Phi_{LT} = 0.51$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $M_y, Ed = -2040.12$ $M_y, b, Rd = 3477.13$ $M_y, Ed/M_y, b, Rd = 0.59$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: $N, Ed = -470.84$ $M_y, Ed = -2040.12$ $M_z, Ed = -365.34$ $L = 1.56$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT} = 0.95, 0.95, 0.95$
 $L_{cr} = 1.56$ Curva b: $\alpha_{imp} = 0.34$ $k_c = 0.94$ $\psi = 1.75$ $M, cr = 43507.50$ $\lambda_{LT} = 0.29$
 $\lambda_{LT, 0} = 0.40$ $\Phi_{LT} = 0.51$ $\beta_{LT} = 0.75$ $f = 0.99$ $\chi_{LT} = 1.00$
 $\lambda_y = 27.25$ $N_{cr, y} = 877088.00$ $\lambda_y^* = 0.29$ Curva b: $\Phi_y = 0.56$ $\chi_y = 0.97$
 $\lambda_z = 44.39$ $N_{cr, z} = 330512.00$ $\lambda_z^* = 0.47$ Curva c: $\Phi_z = 0.68$ $\chi_z = 0.86$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz} = 0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.01 + 0.56 + 0.28 = 0.84$
Verifica ZZ: $0.01 + 0.45 + 0.28 = 0.73$

Asta n. 1054 (-1067 -1070) Sez. 35 HEA140 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l = 1.56$ - Classe 3
Sollecitazioni: $N = -632.31$ $M_y = -2040.12$ $T_y = 486.90$ $M_z = -365.34$
Tensioni: $\sigma_N = -20.13$ $\sigma_M = -1970.03$ $\tau = 0.00$ $\sigma_{\max} = -1990.15$
Tensioni: $\sigma_N = -20.13$ $\sigma_M = 1451.56$ $\tau = 29.28$ $\tau_{\max} = 29.28$
Tensioni: $\sigma_N = -20.13$ $\sigma_M = -1970.03$ $\tau = 0.00$ $\sigma_{ID, \max} = 1990.15$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l = 0.10$ - Classe 1
Sollecitazioni: $T_z = 4248.49$
 $V, Ed = 4248.49$ $V_c, Rd = 13082.80$ $V, Ed/V_c, Rd = 0.32$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU $X_l = 1.56$ - Classe 1
Sollecitazioni: $N = -218.49$ $M_y = -3117.33$
 $M_y, Ed = -3117.33$ $M_y, c, Rd = 3896.83$
 $N, Ed = -218.49$ $N_c, Rd = -70314.00$ YY $n = N, Ed/N_c, Rd = 0.00$ $MN_y, c, Rd = 3896.83$ $M_y, Ed/MN_y, c, Rd = 0.80$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=1.56$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=43507.40$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-2040.12$ $M_{y,b,Rd}=3477.13$ $M_{y,Ed}/M_{y,b,Rd}=0.59$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-632.31$ $M_{y,Ed}=-2040.12$ $M_{z,Ed}=-376.29$ $L=1.56$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=1.56$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=43507.40$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=27.25$ $N_{cr,y}=877088.00$ $\lambda^*_y=0.29$ Curva b: $\Phi_y=0.56$ $\chi_y=0.97$
 $\lambda_z=44.39$ $N_{cr,z}=330512.00$ $\lambda^*_z=0.47$ Curva c: $\Phi_z=0.68$ $\chi_z=0.86$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
Verifica YY: $0.01+0.56+0.29=0.86$
Verifica ZZ: $0.01+0.45+0.29=0.74$
- Asta n. 1055 (-1071 -1056) Sez. 36 HEA160 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.00$ - Classe 3
Sollecitazioni: $N=138.30$ $T_z=-682.38$ $M_y=-1034.16$ $T_y=124.81$ $M_z=-247.98$
Tensioni: $\sigma_N=3.57$ $\sigma_M=792.06$ $\tau=0.00$ $\sigma_{max}=795.63$
Tensioni: $\sigma_N=3.57$ $\sigma_M=-12.09$ $\tau=88.63$ $\tau_{max}=88.63$
Tensioni: $\sigma_N=3.57$ $\sigma_M=792.06$ $\tau=0.00$ $\sigma_{ID,max}=795.63$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=1.47$ - Classe 1
Sollecitazioni: $T_y=1.92$
 $V_{Ed}=1.92$ $V_{c,Rd}=42038.70$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=1.47$ - Classe 1
Sollecitazioni: $T_z=-1102.81$
 $V_{Ed}=-1102.81$ $V_{c,Rd}=17073.30$ $V_{Ed}/V_{c,Rd}=0.06$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $N=14.54$ $T_z=-1044.75$ $M_y=-1575.78$ $T_y=1.92$
 $M_{y,Ed}=-1575.78$ $M_{y,V,c,Rd}=5511.45$
 $N_{Ed}=14.54$ $N_{c,Rd}=86776.70$ YY $n=N_{Ed}/N_{c,Rd}=0.00$ $M_{Ny,c,Rd}=5511.45$ $M_{y,Ed}/M_{Ny,c,Rd}=0.29$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 11 SLU - Classe 1
 $L_{cr}=1.56$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=75264.50$ $\lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-1575.78$ $M_{y,b,Rd}=5511.45$ $M_{y,Ed}/M_{y,b,Rd}=0.29$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N_{Ed}=-117.50$ $M_{y,Ed}=-1034.16$ $M_{z,Ed}=-247.98$ $L=1.56$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=1.56$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=75264.50$ $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.79$ $N_{cr,y}=1420300.00$ $\lambda^*_y=0.25$ Curva b: $\Phi_y=0.54$ $\chi_y=0.98$
 $\lambda_z=39.21$ $N_{cr,z}=522588.00$ $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
Verifica YY: $0.00+0.20+0.14=0.34$
Verifica ZZ: $0.00+0.16+0.14=0.30$
- Asta n. 1055 (-1052 -1071) Sez. 36 HEA160 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.23$ - Classe 3
Sollecitazioni: $N=139.85$ $T_z=1844.10$ $M_y=-261.95$ $T_y=620.77$ $M_z=-587.90$
Tensioni: $\sigma_N=3.61$ $\sigma_M=883.03$ $\tau=0.00$ $\sigma_{max}=886.64$
Tensioni: $\sigma_N=3.61$ $\sigma_M=-28.65$ $\tau=239.55$ $\tau_{max}=239.55$
Tensioni: $\sigma_N=3.61$ $\sigma_M=883.03$ $\tau=0.00$ $\sigma_{ID,max}=886.64$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.10$ - Classe 1
Sollecitazioni: $T_y=1.92$
 $V_{Ed}=1.92$ $V_{c,Rd}=42038.70$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.10$ - Classe 1
Sollecitazioni: $T_z=3199.86$
 $V_{Ed}=3199.86$ $V_{c,Rd}=17073.30$ $V_{Ed}/V_{c,Rd}=0.19$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=1.19$ - Classe 1
Sollecitazioni: $N=14.54$ $T_z=38.59$ $M_y=-1763.54$ $T_y=1.92$ $M_z=-1.29$
 $N_{Ed}=14.54$ $N_{c,Rd}=86776.70$ $n=N_{Ed}/N_{c,Rd}=0.00$
Pressoflessione retta YY [4.2.33]:
 $M_{y,Ed}=-1763.54$ $M_{y,V,c,Rd}=5511.45$ $M_{Ny,c,Rd}=5511.45$ $M_{y,Ed}/M_{Ny,c,Rd}=0.32$
Pressoflessione retta ZZ [4.2.34]:
 $M_{z,Ed}=-1.29$ $M_{z,V,c,Rd}=2636.16$ $M_{Nz,c,Rd}=2636.16$ $M_{z,Ed}/M_{Nz,c,Rd}=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_{y,Ed}/M_{Ny,c,Rd})^2 + (M_{z,Ed}/M_{Nz,c,Rd})^1 = 0.32$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 11 SLU - Classe 1

$L_{cr}=1.56$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=75264.60$ $\lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-1763.54$ $M_{y,b,Rd}=5511.45$ $M_{y,Ed}/M_{y,b,Rd}=0.32$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-119.05$ $M_{y,Ed}=-1156.50$ $M_{z,Ed}=-670.07$ $L=1.56$

α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=1.56$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=75264.60$ $\lambda_{LT}=0.26$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=23.79$ $N_{cr,y}=1420300.00$ $\lambda^*_y=0.25$ Curva b: $\Phi_y=0.54$ $\chi_y=0.98$
 $\lambda_z=39.21$ $N_{cr,z}=522589.00$ $\lambda^*_z=0.42$ Curva c: $\Phi_z=0.64$ $\chi_z=0.89$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: $0.00+0.22+0.37=0.59$
 Verifica ZZ: $0.00+0.18+0.37=0.55$

Asta n. 1056 (-1073 -1072) Sez. 35 HEA140 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.10$ - Classe 3

Sollecitazioni: $N=130.48$ $T_z=36.19$ $T_y=136.62$ $M_z=-230.38$
 Tensioni: $\sigma_N=4.15$ $\sigma_M=414.22$ $\tau=0.00$ $\sigma_{max}=418.37$
 Tensioni: $\sigma_N=4.15$ $\sigma_M=-87.28$ $\tau=8.26$ $\tau_{max}=8.26$
 Tensioni: $\sigma_N=4.15$ $\sigma_M=414.22$ $\tau=0.19$ $\sigma_{ID,max}=418.37$

- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.10$ - Classe 1

Sollecitazioni: $T_y=1.63$
 $V_{Ed}=1.63$ $V_{c,Rd}=34058.40$ $V_{Ed}/V_{c,Rd}=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.10$ - Classe 1

Sollecitazioni: $T_z=47.05$
 $V_{Ed}=47.05$ $V_{c,Rd}=13082.80$ $V_{Ed}/V_{c,Rd}=0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=1.56$ - Classe 1

Sollecitazioni: $N=12.49$ $M_{y,Ed}=-34.52$ $T_y=1.63$
 $M_{y,Ed}=-34.52$ $M_{y,c,Rd}=3896.83$
 $N_{Ed}=12.49$ $N_{c,Rd}=70314.00$ YY $n=N_{Ed}/N_{c,Rd}=0.00$ $M_{Ny,c,Rd}=3896.83$ $M_{y,Ed}/M_{Ny,c,Rd}=0.01$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1

$L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=15182.90$ $\lambda_{LT}=0.52$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.62$ $\beta_{LT}=0.75$ $f=0.97$ $\chi_{LT}=0.98$
 $M_{y,Ed}=-34.52$ $M_{y,b,Rd}=3806.90$ $M_{y,Ed}/M_{y,b,Rd}=0.01$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3

Sollecitazioni: $N_{Ed}=-112.39$ $M_{y,Ed}=-26.56$ $M_{z,Ed}=-230.38$ $L=3.13$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=15182.90$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=54.49$ $N_{cr,y}=219272.00$ $\lambda^*_y=0.58$ Curva b: $\Phi_y=0.73$ $\chi_y=0.85$
 $\lambda_z=88.77$ $N_{cr,z}=82628.10$ $\lambda^*_z=0.95$ Curva c: $\Phi_z=1.13$ $\chi_z=0.57$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: $0.00+0.01+0.18=0.19$
 Verifica ZZ: $0.00+0.01+0.18=0.18$

Asta n. 1057 (-1072 -1056) Sez. 35 HEA140 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.10$ - Classe 3

Sollecitazioni: $N=100.09$ $T_z=32.87$ $T_y=-116.81$ $M_z=172.01$
 Tensioni: $\sigma_N=3.19$ $\sigma_M=309.28$ $\tau=0.00$ $\sigma_{max}=312.47$
 Tensioni: $\sigma_N=3.19$ $\sigma_M=65.17$ $\tau=7.07$ $\tau_{max}=7.07$
 Tensioni: $\sigma_N=3.19$ $\sigma_M=309.28$ $\tau=0.17$ $\sigma_{ID,max}=312.47$

- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=2.77$ - Classe 1

Sollecitazioni: $T_y=-1.71$
 $V_{Ed}=-1.71$ $V_{c,Rd}=34058.40$ $V_{Ed}/V_{c,Rd}=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=2.77$ - Classe 1

Sollecitazioni: $T_z=-42.73$
 $V_{Ed}=-42.73$ $V_{c,Rd}=13082.80$ $V_{Ed}/V_{c,Rd}=0.00$

- Verifica a flessione YY [4.2.12] - CC 9 SLU $X_l=1.43$ - Classe 1

Sollecitazioni: $M_{y,Ed}=-28.47$ $T_y=-1.71$
 $M_{y,Ed}=-28.47$ $M_{y,c,Rd}=3896.83$ $M_{y,Ed}/M_{y,c,Rd}=0.01$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1

$L_{cr}=2.87$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=17095.00$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.60$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $M_{y,Ed}=-28.47$ $M_{y,b,Rd}=3852.15$ $M_{y,Ed}/M_{y,b,Rd}=0.01$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3

Sollecitazioni: N,Ed=-99.84 My,Ed=-21.90 Mz,Ed=172.01 L=2.87
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=2.87$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=17095.00 $\lambda_{LT}=0.46$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ f=0.98 $\chi_{LT}=1.00$
 $\lambda_y=49.98$ Ncr,y=260695.00 $\lambda_y^*=0.53$ Curva b: $\Phi_y=0.70$ $\chi_y=0.87$
 $\lambda_z=81.41$ Ncr,z=98237.50 $\lambda_z^*=0.87$ Curva c: $\Phi_z=1.04$ $\chi_z=0.62$
Kyy, Kyz, Kzy, Kzz=0.95, 0.95, 0.76, 0.95
Verifica YY: 0.00+0.01+0.13=0.14
Verifica ZZ: 0.00+0.00+0.13=0.14

Asta n. 1058 (-1060 -1065) Sez. 35 HEA140 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=3.03 - Classe 3
Sollecitazioni: N=-46.26 Tz=-36.19 Ty=-136.95 Mz=-411.84 Mx=1.37
Tensioni: $\sigma_N=-1.47$ $\sigma_M=-740.49$ $\tau=15.85$ $\sigma_{max}=-741.96$
Tensioni: $\sigma_N=-1.47$ $\sigma_M=-29.09$ $\tau=20.25$ $\tau_{max}=20.25$
Tensioni: $\sigma_N=-1.47$ $\sigma_M=-740.49$ $\tau=15.85$ $\sigma_{ID,max}=742.47$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU Xl=0.10 - Classe 1
Sollecitazioni: Tz=47.05
V,Ed=47.05 Vc,Rd=13082.80 V,Ed/Vc,Rd=0.00
 - Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU Xl=1.56 - Classe 1
Sollecitazioni: N=-1.98 My=-34.52
My,Ed=-34.52 My,c,Rd=3896.83
N,Ed=-1.98 Nc,Rd=-70314.00 YY n=N,Ed/Nc,Rd=0.00 MNy,c,Rd=3896.83 My,Ed/MNy,c,Rd=0.01
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=15182.90 $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ f=0.98 $\chi_{LT}=0.99$
My,Ed=-26.56 My,b,Rd=3435.75 My,Ed/My,b,Rd=0.01
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: N,Ed=-46.26 My,Ed=-26.56 Mz,Ed=-411.84 L=3.13
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=15182.90 $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ f=0.98 $\chi_{LT}=0.99$
 $\lambda_y=54.49$ Ncr,y=219272.00 $\lambda_y^*=0.58$ Curva b: $\Phi_y=0.73$ $\chi_y=0.85$
 $\lambda_z=88.77$ Ncr,z=82628.10 $\lambda_z^*=0.95$ Curva c: $\Phi_z=1.13$ $\chi_z=0.57$
Kyy, Kyz, Kzy, Kzz=0.95, 0.95, 0.76, 0.95
Verifica YY: 0.00+0.01+0.31=0.32
Verifica ZZ: 0.00+0.01+0.31=0.32

Asta n. 1059 (-1065 -1063) Sez. 35 HEA140 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=0.10 - Classe 3
Sollecitazioni: N=-169.90 Tz=62.64 Ty=136.60 Mz=-410.31
Tensioni: $\sigma_N=-5.41$ $\sigma_M=-737.74$ $\tau=0.00$ $\sigma_{max}=-743.15$
Tensioni: $\sigma_N=-5.41$ $\sigma_M=-28.98$ $\tau=10.11$ $\tau_{max}=10.11$
Tensioni: $\sigma_N=-5.41$ $\sigma_M=-737.74$ $\tau=0.32$ $\sigma_{ID,max}=743.15$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU Xl=0.10 - Classe 1
Sollecitazioni: Tz=81.43
V,Ed=81.43 Vc,Rd=13082.80 V,Ed/Vc,Rd=0.01
 - Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU Xl=2.64 - Classe 1
Sollecitazioni: N=-2.17 My=-103.42
My,Ed=-103.42 My,c,Rd=3896.83
N,Ed=-2.17 Nc,Rd=-70314.00 YY n=N,Ed/Nc,Rd=0.00 MNy,c,Rd=3896.83 My,Ed/MNy,c,Rd=0.03
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=5.28$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=7894.80 $\lambda_{LT}=0.68$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ f=0.97 $\chi_{LT}=0.91$
My,Ed=-79.55 My,b,Rd=3149.92 My,Ed/My,b,Rd=0.03
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: N,Ed=-169.90 My,Ed=-79.55 Mz,Ed=-410.31 L=5.28
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=5.28$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ M,cr=7894.80 $\lambda_{LT}=0.68$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.72$ $\beta_{LT}=0.75$ f=0.97 $\chi_{LT}=0.91$
 $\lambda_y=92.08$ Ncr,y=76798.90 $\lambda_y^*=0.98$ Curva b: $\Phi_y=1.11$ $\chi_y=0.61$
 $\lambda_z=150.00$ Ncr,z=28940.10 $\lambda_z^*=1.60$ Curva c: $\Phi_z=2.12$ $\chi_z=0.29$
Kyy, Kyz, Kzy, Kzz=0.95, 0.95, 0.76, 0.95
Verifica YY: 0.00+0.02+0.31=0.34
Verifica ZZ: 0.00+0.02+0.31=0.34

Asta n. 1060 (-1063 -1074) Sez. 35 HEA140 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.10$ - Classe 3
 Sollecitazioni: $N=-124.22$ $T_z=32.87$ $T_y=-220.70$ $M_z=300.29$
 Tensioni: $\sigma_N=-3.95$ $\sigma_M=-539.91$ $\tau=0.00$ $\sigma_{max}=-543.87$
 Tensioni: $\sigma_N=-3.95$ $\sigma_M=113.77$ $\tau=13.30$ $\tau_{max}=13.30$
 Tensioni: $\sigma_N=-3.95$ $\sigma_M=-539.91$ $\tau=0.17$ $\sigma_{ID,max}=543.87$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=2.77$ - Classe 1
 Sollecitazioni: $T_z=-42.73$
 $V,Ed=-42.73$ $V_c,Rd=13082.80$ $V,Ed/V_c,Rd=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=1.43$ - Classe 1
 Sollecitazioni: $N=-2.04$ $M_y=-28.47$
 $M_y,Ed=-28.47$ $M_y,c,Rd=3896.83$
 $N,Ed=-2.04$ $N_c,Rd=-70314.00$ YY $n=N,Ed/N_c,Rd=0.00$ $MN_y,c,Rd=3896.83$ $M_y,Ed/MN_y,c,Rd=0.01$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=2.87$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=17095.00$ $\lambda_{LT}=0.46$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $M_y,Ed=-21.90$ $M_y,b,Rd=3472.59$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-124.22$ $M_y,Ed=-21.90$ $M_z,Ed=300.29$ $L=2.87$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=2.87$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=17095.00$ $\lambda_{LT}=0.46$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.59$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=49.98$ $N_{cr,y}=260695.00$ $\lambda_y^*=0.53$ Curva b: $\Phi_y=0.70$ $\chi_y=0.87$
 $\lambda_z=81.41$ $N_{cr,z}=98237.50$ $\lambda_z^*=0.87$ Curva c: $\Phi_z=1.04$ $\chi_z=0.62$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: $0.00+0.01+0.23=0.24$
 Verifica ZZ: $0.00+0.00+0.23=0.24$
- Asta n. 1061 (-1075 -1074) Sez. 35 HEA140 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.10$ - Classe 3
 Sollecitazioni: $N=-210.72$ $T_z=36.19$ $T_y=-230.17$ $M_z=387.09$
 Tensioni: $\sigma_N=-6.71$ $\sigma_M=-695.98$ $\tau=0.00$ $\sigma_{max}=-702.69$
 Tensioni: $\sigma_N=-6.71$ $\sigma_M=146.65$ $\tau=13.87$ $\tau_{max}=13.87$
 Tensioni: $\sigma_N=-6.71$ $\sigma_M=-695.98$ $\tau=0.19$ $\sigma_{ID,max}=702.69$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.10$ - Classe 1
 Sollecitazioni: $T_z=47.05$
 $V,Ed=47.05$ $V_c,Rd=13082.80$ $V,Ed/V_c,Rd=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=1.56$ - Classe 1
 Sollecitazioni: $N=-5.67$ $M_y=-34.52$
 $M_y,Ed=-34.52$ $M_y,c,Rd=3896.83$
 $N,Ed=-5.67$ $N_c,Rd=-70314.00$ YY $n=N,Ed/N_c,Rd=0.00$ $MN_y,c,Rd=3896.83$ $M_y,Ed/MN_y,c,Rd=0.01$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=15182.90$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $M_y,Ed=-26.56$ $M_y,b,Rd=3435.75$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-210.72$ $M_y,Ed=-26.56$ $M_z,Ed=387.09$ $L=3.13$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=15182.90$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=54.49$ $N_{cr,y}=219272.00$ $\lambda_y^*=0.58$ Curva b: $\Phi_y=0.73$ $\chi_y=0.85$
 $\lambda_z=88.77$ $N_{cr,z}=82628.10$ $\lambda_z^*=0.95$ Curva c: $\Phi_z=1.13$ $\chi_z=0.57$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: $0.00+0.01+0.30=0.31$
 Verifica ZZ: $0.00+0.01+0.30=0.31$
- Asta n. 1062 (-1059 -1063) Sez. 35 HEA140 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.10$ - Classe 3
 Sollecitazioni: $N=-220.69$ $T_z=36.13$ $T_y=-296.35$ $M_z=451.38$
 Tensioni: $\sigma_N=-7.02$ $\sigma_M=-811.58$ $\tau=0.00$ $\sigma_{max}=-818.61$
 Tensioni: $\sigma_N=-7.02$ $\sigma_M=171.01$ $\tau=17.84$ $\tau_{max}=17.84$
 Tensioni: $\sigma_N=-7.02$ $\sigma_M=-811.58$ $\tau=0.19$ $\sigma_{ID,max}=818.61$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.10$ - Classe 1
 Sollecitazioni: $T_z=46.97$
 $V,Ed=46.97$ $V_c,Rd=13082.80$ $V,Ed/V_c,Rd=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=1.57$ - Classe 1
 Sollecitazioni: $N=-17.77$ $M_y=-34.40$

My,Ed=-34.40 My,c,Rd=3896.83
 N,Ed=-17.77 Nc,Rd=-70314.00 YY n=N,Ed/Nc,Rd=0.00 MNY,c,Rd=3896.83 My,Ed/MNY,c,Rd=0.01

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=15182.90$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 My,Ed=-26.46 My,b,Rd=3435.75 My,Ed/My,b,Rd=0.01
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: N,Ed=-220.69 My,Ed=-26.46 Mz,Ed=451.38 L=3.13
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=3.13$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=15182.90$ $\lambda_{LT}=0.49$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.61$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=0.99$
 $\lambda_y=54.49$ Ncr,y=219272.00 $\lambda_y^*=0.58$ Curva b: $\Phi_y=0.73$ $\chi_y=0.85$
 $\lambda_z=88.77$ Ncr,z=82628.10 $\lambda_z^*=0.95$ Curva c: $\Phi_z=1.13$ $\chi_z=0.57$
 Kyy, Kyz, Kzy, Kzz=0.95, 0.95, 0.76, 0.95
 Verifica YY: 0.00+0.01+0.35=0.36
 Verifica ZZ: 0.00+0.01+0.35=0.35

Asta n. 2001 (37 -1033) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=0.27 - Classe 3
 Sollecitazioni: N=14231.40 Tz=76.08 Ty=-14.07 Mz=26.64
 Tensioni: $\sigma_N=238.68$ $\sigma_M=34.20$ $\tau=0.00$ $\sigma_{max}=272.88$
 Tensioni: $\sigma_N=238.68$ $\sigma_M=-9.08$ $\tau=3.05$ $\tau_{max}=3.05$
 Tensioni: $\sigma_N=238.68$ $\sigma_M=34.20$ $\tau=0.11$ $\sigma_{ID,max}=272.88$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU Xl=0.27 - Classe 1
 Sollecitazioni: Ty=-7.71
 V,Ed=-7.71 Vc,Rd=46551.10 V,Ed/Vc,Rd=0.00
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU Xl=0.27 - Classe 1
 Sollecitazioni: Tz=98.90
 V,Ed=98.90 Vc,Rd=41072.10 V,Ed/Vc,Rd=0.00
- Verifica in termini tensionali [4.2.4] - CC 11 SLU Xl=1.26 - Classe 3
 Sollecitazioni: N=1243.39 Tz=44.95 My=-71.42 Ty=-7.38 Mz=8.54
 Tensioni: $\sigma_N=20.85$ $\sigma_M=24.03$ $\tau=0.00$ $\sigma_{max}=44.88$
 Tensioni: $\sigma_N=20.85$ $\sigma_M=-2.91$ $\tau=1.80$ $\tau_{max}=1.80$
 Tensioni: $\sigma_N=20.85$ $\sigma_M=24.03$ $\tau=0.00$ $\sigma_{ID,max}=44.88$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 My,Ed=-90.01 My,b,Rd=14447.40 My,Ed/My,b,Rd=0.01
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: N,Ed=-12732.00 Myeq,Ed=-51.93 Mzeq,Ed=26.64
 L=3.91
 $\lambda_y=33.33$ Ncr,y=1112320.00 $\lambda_y^*=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ Ncr,z=75140.30 $\lambda_z^*=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: 0.26+0.00+0.02=0.29

Asta n. 2002 (-1033 -45) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=3.80 - Classe 3
 Sollecitazioni: N=14653.40 Tz=-79.33 Ty=11.38 Mz=18.67
 Tensioni: $\sigma_N=245.76$ $\sigma_M=23.98$ $\tau=0.00$ $\sigma_{max}=269.74$
 Tensioni: $\sigma_N=245.76$ $\sigma_M=-6.36$ $\tau=3.18$ $\tau_{max}=3.18$
 Tensioni: $\sigma_N=245.76$ $\sigma_M=23.98$ $\tau=0.11$ $\sigma_{ID,max}=269.74$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Ty=4.89
 V,Ed=4.89 Vc,Rd=46551.10 V,Ed/Vc,Rd=0.00
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU Xl=0.00 - Classe 1
 Sollecitazioni: Tz=103.13
 V,Ed=103.13 Vc,Rd=41072.10 V,Ed/Vc,Rd=0.00
- Verifica in termini tensionali [4.2.4] - CC 11 SLU Xl=1.73 - Classe 3
 Sollecitazioni: N=1763.83 Tz=9.38 My=-97.07 Ty=4.55 Mz=-3.00
 Tensioni: $\sigma_N=29.58$ $\sigma_M=19.32$ $\tau=0.00$ $\sigma_{max}=48.90$
 Tensioni: $\sigma_N=29.58$ $\sigma_M=1.02$ $\tau=0.38$ $\tau_{max}=0.38$
 Tensioni: $\sigma_N=29.58$ $\sigma_M=19.32$ $\tau=0.00$ $\sigma_{ID,max}=48.90$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$

$\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-97.87$ $M_{y,b,Rd}=14447.40$ $M_{y,Ed}/M_{y,b,Rd}=0.01$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-12304.20$ $M_{y,Ed}=-56.47$ $M_{z,Ed}=-24.56$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.30$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.25+0.00+0.02=0.28$

Asta n. 2003 (-21 -1033) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.46$ - Classe 3
 Sollecitazioni: $N=-16620.10$ $T_z=64.90$ $M_y=-24.89$ $T_y=8.13$ $M_z=-16.34$
 Tensioni: $\sigma_N=-278.75$ $\sigma_M=-25.54$ $\tau=0.00$ $\sigma_{max}=-304.29$
 Tensioni: $\sigma_N=-278.75$ $\sigma_M=5.57$ $\tau=2.60$ $\tau_{max}=2.60$
 Tensioni: $\sigma_N=-278.75$ $\sigma_M=-25.54$ $\tau=0.00$ $\sigma_{ID,max}=304.29$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.11$ - Classe 1
 Sollecitazioni: $T_z=103.13$
 $V_{Ed}=103.13$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=2.01$ - Classe 3
 Sollecitazioni: $N=-4616.97$ $M_y=-97.87$ $M_z=-4.84$
 Tensioni: $\sigma_N=-77.43$ $\sigma_M=-24.12$ $\tau=0.00$ $\sigma_{max}=-101.56$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
 Tensioni: $\sigma_N=-77.43$ $\sigma_M=-24.12$ $\tau=0.00$ $\sigma_{ID,max}=101.56$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-75.29$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-16627.40$ $M_{y,Ed}=-56.47$ $M_{z,Ed}=-19.15$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.30$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.34+0.00+0.01=0.36$

Asta n. 2004 (-1033 74) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-16196.30$ $T_z=76.08$ $T_y=16.67$ $M_z=-18.17$
 Tensioni: $\sigma_N=-271.64$ $\sigma_M=-23.33$ $\tau=0.00$ $\sigma_{max}=-294.97$
 Tensioni: $\sigma_N=-271.64$ $\sigma_M=6.19$ $\tau=3.05$ $\tau_{max}=3.05$
 Tensioni: $\sigma_N=-271.64$ $\sigma_M=-23.33$ $\tau=0.11$ $\sigma_{ID,max}=294.97$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=12.76$
 $V_{Ed}=12.76$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=98.90$
 $V_{Ed}=98.90$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=2.32$ - Classe 3
 Sollecitazioni: $N=-4100.86$ $T_z=-26.97$ $M_y=-83.32$ $T_y=12.76$ $M_z=25.15$
 Tensioni: $\sigma_N=-68.78$ $\sigma_M=-28.36$ $\tau=0.00$ $\sigma_{max}=-97.13$
 Tensioni: $\sigma_N=-68.78$ $\sigma_M=-8.57$ $\tau=1.08$ $\tau_{max}=1.08$
 Tensioni: $\sigma_N=-68.78$ $\sigma_M=-28.36$ $\tau=0.00$ $\sigma_{ID,max}=97.13$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-69.24$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-16196.30$ $M_{y,Ed}=-51.93$ $M_{z,Ed}=39.48$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.30$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.34+0.00+0.03=0.37$

Asta n. 2009 (-29 -1040) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=3.91$ - Classe 3
 Sollecitazioni: $N=13214.90$ $T_z=-76.08$ $T_y=12.03$ $M_z=18.55$
 Tensioni: $\sigma_N=221.64$ $\sigma_M=23.81$ $\tau=0.00$ $\sigma_{max}=245.45$
 Tensioni: $\sigma_N=221.64$ $\sigma_M=-6.32$ $\tau=3.05$ $\tau_{max}=3.05$
 Tensioni: $\sigma_N=221.64$ $\sigma_M=23.81$ $\tau=0.11$ $\sigma_{ID,max}=245.45$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.27$ - Classe 1
 Sollecitazioni: $T_y=4.30$
 $V,Ed=4.30$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.27$ - Classe 1
 Sollecitazioni: $T_z=98.90$
 $V,Ed=98.90$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.92$ - Classe 3
 Sollecitazioni: $N=2838.28$ $T_z=8.99$ $M_y=-89.28$ $T_y=4.17$ $M_z=-4.05$
 Tensioni: $\sigma_N=47.60$ $\sigma_M=18.45$ $\tau=0.00$ $\sigma_{max}=66.05$
 Tensioni: $\sigma_N=47.60$ $\sigma_M=1.38$ $\tau=0.36$ $\tau_{max}=0.36$
 Tensioni: $\sigma_N=47.60$ $\sigma_M=18.45$ $\tau=0.00$ $\sigma_{ID,max}=66.05$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-90.03$ $M_y,b,Rd=14447.40$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-9457.24$ $M_{y,Ed}=-51.94$ $M_{z,Ed}=-25.45$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.70$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.20+0.00+0.02=0.22$

Asta n. 2010 (-1040 -57) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.69$ - Classe 3
 Sollecitazioni: $N=13501.40$ $T_z=50.49$ $M_y=-44.82$ $T_y=6.92$ $M_z=12.53$
 Tensioni: $\sigma_N=226.44$ $\sigma_M=24.29$ $\tau=0.00$ $\sigma_{max}=250.73$
 Tensioni: $\sigma_N=226.44$ $\sigma_M=-4.27$ $\tau=2.03$ $\tau_{max}=2.03$
 Tensioni: $\sigma_N=226.44$ $\sigma_M=24.29$ $\tau=0.00$ $\sigma_{ID,max}=250.73$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=3.80$ - Classe 1
 Sollecitazioni: $T_z=-103.15$
 $V,Ed=-103.15$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.89$ - Classe 3
 Sollecitazioni: $N=3345.20$ $M_y=-97.91$ $M_z=3.31$
 Tensioni: $\sigma_N=56.10$ $\sigma_M=22.16$ $\tau=0.00$ $\sigma_{max}=78.27$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
 Tensioni: $\sigma_N=56.10$ $\sigma_M=22.16$ $\tau=0.00$ $\sigma_{ID,max}=78.27$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-97.91$ $M_y,b,Rd=14447.40$ $M_y,Ed/M_y,b,Rd=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-9035.98$ $M_{y,Ed}=-56.49$ $M_{z,Ed}=17.07$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.70$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.19+0.00+0.01=0.20$

Asta n. 2011 (-34 -1040) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=1.15$ - Classe 3
 Sollecitazioni: $N=-15972.80$ $T_z=36.07$ $M_y=-59.76$ $T_y=-10.89$ $M_z=14.97$
 Tensioni: $\sigma_N=-267.89$ $\sigma_M=-18.74$ $\tau=0.00$ $\sigma_{max}=-286.63$
 Tensioni: $\sigma_N=-267.89$ $\sigma_M=-5.10$ $\tau=1.45$ $\tau_{max}=1.45$
 Tensioni: $\sigma_N=-267.89$ $\sigma_M=-18.74$ $\tau=0.00$ $\sigma_{ID,max}=286.63$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.11$ - Classe 1
 Sollecitazioni: $T_y=-2.76$
 $V,Ed=-2.76$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.11$ - Classe 1

Sollecitazioni: $T_z=103.15$
 $V, Ed=103.15$ $V_c, Rd=41072.10$ $V, Ed/V_c, Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.84$ - Classe 3
Sollecitazioni: $N=-6769.88$ $T_z=9.38$ $M_y=-97.10$ $T_y=-2.76$ $M_z=4.83$
Tensioni: $\sigma_N=-113.54$ $\sigma_M=-20.28$ $\tau=0.00$ $\sigma_{max}=-133.82$
Tensioni: $\sigma_N=-113.54$ $\sigma_M=-1.65$ $\tau=0.38$ $\tau_{max}=0.38$
Tensioni: $\sigma_N=-113.54$ $\sigma_M=-20.28$ $\tau=0.00$ $\sigma_{ID, max}=133.82$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y, Ed=-75.32$ $M_y, b, Rd=12234.60$ $M_y, Ed/M_y, b, Rd=0.01$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed=-15994.60$ $M_{yeq, Ed}=-56.49$ $M_{zeq, Ed}=26.24$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr, y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr, z}=75140.70$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
Verifica: $0.33+0.00+0.02=0.35$

Asta n. 2012 (-1040 -52) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=3.64$ - Classe 3
Sollecitazioni: $N=-15493.40$ $T_z=-76.08$ $T_y=-11.86$ $M_z=-29.05$
Tensioni: $\sigma_N=-259.85$ $\sigma_M=-37.29$ $\tau=0.00$ $\sigma_{max}=-297.14$
Tensioni: $\sigma_N=-259.85$ $\sigma_M=9.90$ $\tau=3.05$ $\tau_{max}=3.05$
Tensioni: $\sigma_N=-259.85$ $\sigma_M=-37.29$ $\tau=0.11$ $\sigma_{ID, max}=297.14$

- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=3.64$ - Classe 1
Sollecitazioni: $T_y=-6.89$
 $V, Ed=-6.89$ $V_c, Rd=46551.10$ $V, Ed/V_c, Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=3.64$ - Classe 1
Sollecitazioni: $T_z=-98.90$
 $V, Ed=-98.90$ $V_c, Rd=41072.10$ $V, Ed/V_c, Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=2.65$ - Classe 3
Sollecitazioni: $N=-6239.93$ $T_z=-44.96$ $M_y=-71.43$ $T_y=-6.89$ $M_z=-17.77$
Tensioni: $\sigma_N=-104.65$ $\sigma_M=-35.88$ $\tau=0.00$ $\sigma_{max}=-140.53$
Tensioni: $\sigma_N=-104.65$ $\sigma_M=6.06$ $\tau=1.80$ $\tau_{max}=1.80$
Tensioni: $\sigma_N=-104.65$ $\sigma_M=-35.88$ $\tau=0.00$ $\sigma_{ID, max}=140.53$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y, Ed=-69.25$ $M_y, b, Rd=12234.60$ $M_y, Ed/M_y, b, Rd=0.01$

- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
Sollecitazioni: $N, Ed=-15570.10$ $M_{yeq, Ed}=-51.94$ $M_{zeq, Ed}=-28.36$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr, y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr, z}=75140.70$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
Verifica: $0.32+0.00+0.02=0.35$

Asta n. 2013 (38 -1039) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.91$ - Classe 3
Sollecitazioni: $N=11837.00$ $T_z=-76.08$ $T_y=27.11$ $M_z=50.20$
Tensioni: $\sigma_N=198.53$ $\sigma_M=64.45$ $\tau=0.00$ $\sigma_{max}=262.98$
Tensioni: $\sigma_N=198.53$ $\sigma_M=-17.11$ $\tau=3.05$ $\tau_{max}=3.05$
Tensioni: $\sigma_N=198.53$ $\sigma_M=64.45$ $\tau=0.11$ $\sigma_{ID, max}=262.98$

- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.27$ - Classe 1
Sollecitazioni: $T_y=6.64$
 $V, Ed=6.64$ $V_c, Rd=46551.10$ $V, Ed/V_c, Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.27$ - Classe 1
Sollecitazioni: $T_z=98.90$
 $V, Ed=98.90$ $V_c, Rd=41072.10$ $V, Ed/V_c, Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.92$ - Classe 3
Sollecitazioni: $N=2719.91$ $T_z=8.99$ $M_y=-89.28$ $T_y=6.30$ $M_z=-3.04$
Tensioni: $\sigma_N=45.62$ $\sigma_M=17.92$ $\tau=0.00$ $\sigma_{max}=63.54$
Tensioni: $\sigma_N=45.62$ $\sigma_M=1.04$ $\tau=0.36$ $\tau_{max}=0.36$
Tensioni: $\sigma_N=45.62$ $\sigma_M=17.92$ $\tau=0.00$ $\sigma_{ID, max}=63.54$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-90.02$ $M_{y,b,Rd}=14447.40$ $M_{y,Ed}/M_{y,b,Rd}=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-10244.90$ $M_{y,eq,Ed}=-51.93$ $M_{z,eq,Ed}=-24.18$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.60$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.21+0.00+0.02=0.23$

Asta n. 2014 (-1039 77) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.35$ - Classe 3
 Sollecitazioni: $N=14196.00$ $T_z=64.91$ $M_y=-24.89$ $T_y=-9.50$ $M_z=19.00$
 Tensioni: $\sigma_N=238.09$ $\sigma_M=28.95$ $\tau=0.00$ $\sigma_{max}=267.04$
 Tensioni: $\sigma_N=238.09$ $\sigma_M=-6.48$ $\tau=2.61$ $\tau_{max}=2.61$
 Tensioni: $\sigma_N=238.09$ $\sigma_M=28.95$ $\tau=0.00$ $\sigma_{ID,max}=267.04$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-2.33$
 $V_{Ed}=-2.33$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=103.14$
 $V_{Ed}=103.14$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=1.73$ - Classe 3
 Sollecitazioni: $N=3222.25$ $T_z=9.38$ $M_y=-97.09$ $T_y=-2.06$ $M_z=5.08$
 Tensioni: $\sigma_N=54.04$ $\sigma_M=24.28$ $\tau=0.00$ $\sigma_{max}=78.33$
 Tensioni: $\sigma_N=54.04$ $\sigma_M=-1.73$ $\tau=0.38$ $\tau_{max}=0.38$
 Tensioni: $\sigma_N=54.04$ $\sigma_M=24.28$ $\tau=0.00$ $\sigma_{ID,max}=78.33$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-97.90$ $M_{y,b,Rd}=14447.40$ $M_{y,Ed}/M_{y,b,Rd}=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-9820.64$ $M_{y,eq,Ed}=-56.48$ $M_{z,eq,Ed}=22.28$
 $L=3.91$
 $\lambda_y=33.33$ $N_{cr,y}=1112320.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ $N_{cr,z}=75140.50$ $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{min}=0.36$
 Verifica: $0.20+0.00+0.01=0.22$

Asta n. 2015 (40 -1039) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=1.15$ - Classe 3
 Sollecitazioni: $N=-16549.20$ $T_z=36.06$ $M_y=-59.75$ $T_y=-10.54$ $M_z=15.76$
 Tensioni: $\sigma_N=-277.56$ $\sigma_M=-19.15$ $\tau=0.00$ $\sigma_{max}=-296.70$
 Tensioni: $\sigma_N=-277.56$ $\sigma_M=-5.37$ $\tau=1.45$ $\tau_{max}=1.45$
 Tensioni: $\sigma_N=-277.56$ $\sigma_M=-19.15$ $\tau=0.00$ $\sigma_{ID,max}=296.70$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.11$ - Classe 1
 Sollecitazioni: $T_y=-3.12$
 $V_{Ed}=-3.12$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.11$ - Classe 1
 Sollecitazioni: $T_z=103.14$
 $V_{Ed}=103.14$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.84$ - Classe 3
 Sollecitazioni: $N=-6389.15$ $T_z=9.38$ $M_y=-97.09$ $T_y=-3.02$ $M_z=8.07$
 Tensioni: $\sigma_N=-107.16$ $\sigma_M=-21.97$ $\tau=0.00$ $\sigma_{max}=-129.13$
 Tensioni: $\sigma_N=-107.16$ $\sigma_M=-2.75$ $\tau=0.38$ $\tau_{max}=0.38$
 Tensioni: $\sigma_N=-107.16$ $\sigma_M=-21.97$ $\tau=0.00$ $\sigma_{ID,max}=129.13$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-75.31$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.01$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N_{Ed}=-16571.10$ $M_{y,eq,Ed}=-56.48$ $M_{z,eq,Ed}=26.65$

$L=3.91$
 $\lambda_y=33.33$ Ncr,y=1112320.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ Ncr,z=75140.60 $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{\min}=0.36$
 Verifica: $0.34+0.00+0.02=0.37$

Asta n. 2016 (-1039 75) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=3.64$ - Classe 3
 Sollecitazioni: $N=-16066.80$ $T_x=-76.08$ $T_y=-15.81$ $M_z=-41.27$
 Tensioni: $\sigma_N=-269.47$ $\sigma_M=-52.99$ $\tau=0.00$ $\sigma_{\max}=-322.46$
 Tensioni: $\sigma_N=-269.47$ $\sigma_M=14.07$ $\tau=3.05$ $\tau_{\max}=3.05$
 Tensioni: $\sigma_N=-269.47$ $\sigma_M=-52.99$ $\tau=0.11$ $\sigma_{ID,\max}=322.46$
 - Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-11.99$
 $V,Ed=-11.99$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=98.90$
 $V,Ed=98.90$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=3.31$ - Classe 3
 Sollecitazioni: $N=-5841.08$ $T_x=-80.92$ $M_y=-29.76$ $T_y=-11.99$ $M_z=-37.31$
 Tensioni: $\sigma_N=-97.96$ $\sigma_M=-53.34$ $\tau=0.00$ $\sigma_{\max}=-151.31$
 Tensioni: $\sigma_N=-97.96$ $\sigma_M=12.72$ $\tau=3.25$ $\tau_{\max}=3.25$
 Tensioni: $\sigma_N=-97.96$ $\sigma_M=-53.34$ $\tau=0.00$ $\sigma_{ID,\max}=151.31$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.91$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-69.25$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.01$
 - Verifica di stabilità aste presso-inflesse (4.2.4.1.3.3.1) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-16143.50$ $M_{yeq,Ed}=-51.93$ $M_{zeq,Ed}=-37.50$
 $L=3.91$
 $\lambda_y=33.33$ Ncr,y=1112320.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=128.24$ Ncr,z=75140.50 $\lambda^*_z=1.37$ Curva c: $\Phi_z=1.72$ $\chi_z=0.36$
 $\chi_{\min}=0.36$
 Verifica: $0.33+0.00+0.03=0.37$

Asta n. 2017 (74 -484) Sez. 33 CHS168.3x10 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.04$ - Classe 3
 Sollecitazioni: $N=10492.20$ $T=111.88$ $M=234.14$ $M_x=12.77$
 Tensioni: $\sigma_N=210.98$ $\sigma_M=125.98$ $\tau=3.44$ $\sigma_{\max}=336.96$
 Tensioni: $\sigma_N=210.98$ $\sigma_M=-0.00$ $\tau=7.92$ $\tau_{\max}=7.92$
 Tensioni: $\sigma_N=210.98$ $\sigma_M=125.98$ $\tau=3.44$ $\sigma_{ID,\max}=337.01$
 - Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l=3.75$ - Classe 1
 Sollecitazioni: $T=141.40$ $M_x=11.18$
 $V,Ed=141.40$ $V_c,Rd,Red=40815.90$ $V,Ed/V_c,Rd,Red=0.00$
 - Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=0.04$ - Classe 1
 Sollecitazioni: $N=11980.80$ $T=141.40$ $M=293.77$ $M_x=11.18$
 $M,Ed=293.77$ $M,V,c,Rd=5478.45$
 $N,Ed=11980.80$ $N_c,Rd=111304.00$ YY $n=N,Ed/N_c,Rd=0.11$ $MN,c,Rd=4888.74$ $M,Ed/MN,c,Rd=0.06$

Asta n. 2018 (-51 -481) Sez. 33 CHS168.3x10 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.04$ - Classe 3
 Sollecitazioni: $N=10424.80$ $T=130.45$ $M=268.47$ $M_x=12.46$
 Tensioni: $\sigma_N=209.62$ $\sigma_M=144.45$ $\tau=3.35$ $\sigma_{\max}=354.07$
 Tensioni: $\sigma_N=209.62$ $\sigma_M=-0.00$ $\tau=8.59$ $\tau_{\max}=8.59$
 Tensioni: $\sigma_N=209.62$ $\sigma_M=144.45$ $\tau=3.35$ $\sigma_{ID,\max}=354.12$
 - Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l=0.04$ - Classe 1
 Sollecitazioni: $T=168.32$ $M_x=12.02$
 $V,Ed=168.32$ $V_c,Rd,Red=40808.70$ $V,Ed/V_c,Rd,Red=0.00$
 - Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=0.04$ - Classe 1
 Sollecitazioni: $N=8909.37$ $T=168.32$ $M=348.03$ $M_x=12.02$
 $M,Ed=348.03$ $M,V,c,Rd=5478.45$
 $N,Ed=8909.37$ $N_c,Rd=111304.00$ YY $n=N,Ed/N_c,Rd=0.08$ $MN,c,Rd=5039.92$ $M,Ed/MN,c,Rd=0.07$

Asta n. 2019 (-480 -52) Sez. 33 CHS168.3x10 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.71$ - Classe 3
 Sollecitazioni: $N=10772.10$ $T=141.43$ $M=284.85$ $M_x=-10.73$

Tensioni: $\sigma_N=216.61$ $\sigma_M=153.26$ $\tau=2.89$ $\sigma_{max}=369.87$
 Tensioni: $\sigma_N=216.61$ $\sigma_M=-0.00$ $\tau=8.56$ $\tau_{max}=8.56$
 Tensioni: $\sigma_N=216.61$ $\sigma_M=153.26$ $\tau=2.89$ $\sigma_{ID,max}=369.90$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T=189.49$ $M_x=-10.59$
 $V,Ed=189.49$ $V_c,Rd,Red=40820.90$ $V,Ed/V_c,Rd,Red=0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=3.71$ - Classe 1
 Sollecitazioni: $N=9367.47$ $T=189.49$ $M=384.86$ $M_x=-10.59$
 $M,Ed=384.86$ $M,V,c,Rd=5478.45$
 $N,Ed=9367.47$ $N_c,Rd=111304.00$ YY $n=N,Ed/N_c,Rd=0.08$ $MN,c,Rd=5017.37$ $M,Ed/MN,c,Rd=0.08$

Asta n. 2020 (-478 75) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.71$ - Classe 3
 Sollecitazioni: $N=10538.10$ $T=127.51$ $M=251.87$ $M_x=-8.93$
 Tensioni: $\sigma_N=211.90$ $\sigma_M=135.52$ $\tau=2.40$ $\sigma_{max}=347.42$
 Tensioni: $\sigma_N=211.90$ $\sigma_M=-0.00$ $\tau=7.52$ $\tau_{max}=7.52$
 Tensioni: $\sigma_N=211.90$ $\sigma_M=135.52$ $\tau=2.40$ $\sigma_{ID,max}=347.44$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T=163.14$ $M_x=-7.15$
 $V,Ed=163.14$ $V_c,Rd,Red=40850.20$ $V,Ed/V_c,Rd,Red=0.00$

- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=3.71$ - Classe 1
 Sollecitazioni: $N=11816.90$ $T=163.14$ $M=322.48$ $M_x=-7.15$
 $M,Ed=322.48$ $M,V,c,Rd=5478.45$
 $N,Ed=11816.90$ $N_c,Rd=111304.00$ YY $n=N,Ed/N_c,Rd=0.11$ $MN,c,Rd=4896.81$ $M,Ed/MN,c,Rd=0.07$

Asta n. 2021 (-21 -452) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.83$ - Classe 3
 Sollecitazioni: $N=-18808.60$ $T_z=-34.46$ $T_y=-67.30$ $M_z=-127.47$
 Tensioni: $\sigma_N=-315.45$ $\sigma_M=-163.67$ $\tau=0.00$ $\sigma_{max}=-479.12$
 Tensioni: $\sigma_N=-315.45$ $\sigma_M=-0.00$ $\tau=2.92$ $\tau_{max}=2.92$
 Tensioni: $\sigma_N=-315.45$ $\sigma_M=-163.67$ $\tau=0.00$ $\sigma_{ID,max}=479.12$

- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $T_y=-68.11$
 $V,Ed=-68.11$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $T_z=-44.80$
 $V,Ed=-44.80$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=3.83$ - Classe 1
 Sollecitazioni: $N=-10312.30$ $T_z=-44.80$ $T_y=-67.20$ $M_z=-129.69$
 Tensioni: $\sigma_N=-172.95$ $\sigma_M=-166.51$ $\tau=0.00$ $\sigma_{max}=-339.46$
 Tensioni: $\sigma_N=-172.95$ $\sigma_M=6.74$ $\tau=2.93$ $\tau_{max}=2.93$
 Tensioni: $\sigma_N=-172.95$ $\sigma_M=-166.51$ $\tau=0.06$ $\sigma_{ID,max}=339.46$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.83$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $My,Ed=-32.24$ $My,b,Rd=12234.60$ $My,Ed/My,b,Rd=0.00$

- Verifica di stabilità aste presso-inflesse (4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-18969.60$ $Myeq,Ed=-24.18$ $Mzeq,Ed=-127.47$
 $L=3.83$
 $\lambda_y=32.65$ $N_{cr,y}=1159260.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=125.62$ $N_{cr,z}=78311.60$ $\lambda^*_z=1.34$ Curva c: $\Phi_z=1.67$ $\chi_z=0.37$
 $\chi_{min}=0.37$
 Verifica: $0.38+0.00+0.10=0.48$

Asta n. 2022 (-454 -453) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.83$ - Classe 3
 Sollecitazioni: $N=8506.98$ $T_z=-35.26$ $T_y=40.19$ $M_z=83.18$
 Tensioni: $\sigma_N=142.68$ $\sigma_M=106.80$ $\tau=0.00$ $\sigma_{max}=249.47$
 Tensioni: $\sigma_N=142.68$ $\sigma_M=-4.32$ $\tau=1.77$ $\tau_{max}=1.77$
 Tensioni: $\sigma_N=142.68$ $\sigma_M=106.80$ $\tau=0.00$ $\sigma_{ID,max}=249.47$

- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=43.87$
 $V,Ed=43.87$ $V_c,Rd=46551.10$ $V,Ed/V_c,Rd=0.00$

- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=45.84$

V,Ed=45.84 Vc,Rd=41072.10 V,Ed/Vc,Rd=0.00

- Verifica in termini tensionali [4.2.4] - CC 11 SLU Xl=3.83 - Classe 1
Sollecitazioni: N=1063.50 T_z=-45.84 T_y=43.87 M_z=90.05
Tensioni: $\sigma_N=17.84$ $\sigma_M=115.62$ $\tau=0.00$ $\sigma_{max}=133.46$
Tensioni: $\sigma_N=17.84$ $\sigma_M=-4.68$ $\tau=1.95$ $\tau_{max}=1.95$
Tensioni: $\sigma_N=17.84$ $\sigma_M=115.62$ $\tau=0.07$ $\sigma_{ID,max}=133.46$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 9 SLU - Classe 1
L_{cr}=3.83 Curva d: $\alpha_{imp}=0.76$ k_c=0.94 $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ f=0.00 $\chi_{LT}=1.00$
M_y,Ed=-43.88 M_y,b,Rd=14447.40 M_y,Ed/M_y,b,Rd=0.00
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: N,Ed=-7596.30 M_{yeq},Ed=-25.31 M_{zeq},Ed=83.18
L=3.83
 $\lambda_y=32.65$ Ncr,y=1159260.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=125.62$ Ncr,z=78311.60 $\lambda^*_z=1.34$ Curva c: $\Phi_z=1.67$ $\chi_z=0.37$
 $\chi_{min}=0.37$
Verifica: 0.15+0.00+0.05=0.21

Asta n. 2023 (-33 -445) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND Xl=3.78 - Classe 3
Sollecitazioni: N=-18217.00 T_z=-31.36 T_y=-80.55 M_z=-154.55
Tensioni: $\sigma_N=-305.53$ $\sigma_M=-198.43$ $\tau=0.00$ $\sigma_{max}=-503.96$
Tensioni: $\sigma_N=-305.53$ $\sigma_M=-0.00$ $\tau=3.49$ $\tau_{max}=3.49$
Tensioni: $\sigma_N=-305.53$ $\sigma_M=-198.43$ $\tau=0.00$ $\sigma_{ID,max}=503.96$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU Xl=0.11 - Classe 1
Sollecitazioni: T_y=-102.29
V,Ed=-102.29 Vc,Rd=46551.10 V,Ed/Vc,Rd=0.00
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU Xl=0.11 - Classe 1
Sollecitazioni: T_z=40.77
V,Ed=40.77 Vc,Rd=41072.10 V,Ed/Vc,Rd=0.00
- Verifica in termini tensionali [4.2.4] - CC 9 SLU Xl=3.78 - Classe 1
Sollecitazioni: N=-8860.33 T_z=-40.77 T_y=-100.57 M_z=-194.42
Tensioni: $\sigma_N=-148.60$ $\sigma_M=-249.63$ $\tau=0.00$ $\sigma_{max}=-398.23$
Tensioni: $\sigma_N=-148.60$ $\sigma_M=-0.00$ $\tau=4.36$ $\tau_{max}=4.36$
Tensioni: $\sigma_N=-148.60$ $\sigma_M=-249.63$ $\tau=0.00$ $\sigma_{ID,max}=398.23$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
L_{cr}=3.78 Curva d: $\alpha_{imp}=0.76$ k_c=0.94 $\psi=1.75$ M,cr=0.00 $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ f=0.00 $\chi_{LT}=1.00$
M_y,Ed=-28.78 M_y,b,Rd=12234.60 M_y,Ed/M_y,b,Rd=0.00
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: N,Ed=-18377.00 M_{yeq},Ed=-21.59 M_{zeq},Ed=-154.55
L=3.78
 $\lambda_y=32.24$ Ncr,y=1188900.00 $\lambda^*_y=0.34$ Curva c: $\Phi_y=0.59$ $\chi_y=0.93$
 $\lambda_z=124.05$ Ncr,z=80313.60 $\lambda^*_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
 $\chi_{min}=0.38$
Verifica: 0.36+0.00+0.11=0.48

Asta n. 2024 (-442 -446) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND Xl=3.78 - Classe 3
Sollecitazioni: N=8857.09 T_z=-32.30 T_y=74.17 M_z=144.64
Tensioni: $\sigma_N=148.55$ $\sigma_M=185.71$ $\tau=0.00$ $\sigma_{max}=334.25$
Tensioni: $\sigma_N=148.55$ $\sigma_M=0.00$ $\tau=3.22$ $\tau_{max}=3.22$
Tensioni: $\sigma_N=148.55$ $\sigma_M=185.71$ $\tau=0.05$ $\sigma_{ID,max}=334.25$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU Xl=0.00 - Classe 1
Sollecitazioni: T_y=98.12
V,Ed=98.12 Vc,Rd=46551.10 V,Ed/Vc,Rd=0.00
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU Xl=0.00 - Classe 1
Sollecitazioni: T_z=41.98
V,Ed=41.98 Vc,Rd=41072.10 V,Ed/Vc,Rd=0.00
- Verifica in termini tensionali [4.2.4] - CC 11 SLU Xl=3.78 - Classe 1
Sollecitazioni: N=735.18 T_z=-41.98 T_y=98.12 M_z=186.90
Tensioni: $\sigma_N=12.33$ $\sigma_M=239.97$ $\tau=0.00$ $\sigma_{max}=252.30$
Tensioni: $\sigma_N=12.33$ $\sigma_M=0.00$ $\tau=4.26$ $\tau_{max}=4.26$
Tensioni: $\sigma_N=12.33$ $\sigma_M=239.97$ $\tau=0.06$ $\sigma_{ID,max}=252.30$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 11 SLU - Classe 1
 $L_{cr}=3.78$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-39.69$ $M_{y,b,Rd}=14447.40$ $M_{y,Ed}/M_{y,b,Rd}=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-8417.53$ $M_{y,Ed}=-22.90$ $M_{z,Ed}=144.64$
 $L=3.78$
 $\lambda_y=32.24$ $N_{cr,y}=1188900.00$ $\lambda^*_y=0.34$ Curva c: $\Phi_y=0.59$ $\chi_y=0.93$
 $\lambda_z=124.05$ $N_{cr,z}=80313.60$ $\lambda^*_z=1.32$ Curva c: $\Phi_z=1.65$ $\chi_z=0.38$
 $\chi_{min}=0.38$
Verifica: $0.17+0.00+0.09=0.26$

Asta n. 2025 (63 -459) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.83$ - Classe 3
Sollecitazioni: $N=-19265.90$ $T_z=-34.03$ $T_y=-83.42$ $M_z=-157.97$
Tensioni: $\sigma_N=-323.12$ $\sigma_M=-202.83$ $\tau=0.00$ $\sigma_{max}=-525.95$
Tensioni: $\sigma_N=-323.12$ $\sigma_M=0.00$ $\tau=3.62$ $\tau_{max}=3.62$
Tensioni: $\sigma_N=-323.12$ $\sigma_M=-202.83$ $\tau=0.00$ $\sigma_{ID,max}=525.95$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
Sollecitazioni: $T_y=-103.47$
 $V_{Ed}=-103.47$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
Sollecitazioni: $T_z=-44.23$
 $V_{Ed}=-44.23$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=3.83$ - Classe 1
Sollecitazioni: $N=-8848.41$ $T_z=-44.23$ $T_y=-101.45$ $M_z=-195.78$
Tensioni: $\sigma_N=-148.40$ $\sigma_M=-251.38$ $\tau=0.00$ $\sigma_{max}=-399.78$
Tensioni: $\sigma_N=-148.40$ $\sigma_M=0.00$ $\tau=4.40$ $\tau_{max}=4.40$
Tensioni: $\sigma_N=-148.40$ $\sigma_M=-251.38$ $\tau=0.06$ $\sigma_{ID,max}=399.78$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.83$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-31.55$ $M_{y,b,Rd}=12234.60$ $M_{y,Ed}/M_{y,b,Rd}=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-19425.50$ $M_{y,Ed}=-23.66$ $M_{z,Ed}=-157.97$
 $L=3.83$
 $\lambda_y=32.63$ $N_{cr,y}=1160830.00$ $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=125.53$ $N_{cr,z}=78417.70$ $\lambda^*_z=1.34$ Curva c: $\Phi_z=1.67$ $\chi_z=0.37$
 $\chi_{min}=0.37$
Verifica: $0.39+0.00+0.12=0.51$

Asta n. 2026 (-456 -460) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=3.83$ - Classe 3
Sollecitazioni: $N=9590.90$ $T_z=-35.10$ $T_y=75.63$ $M_z=148.93$
Tensioni: $\sigma_N=160.85$ $\sigma_M=191.21$ $\tau=0.00$ $\sigma_{max}=352.07$
Tensioni: $\sigma_N=160.85$ $\sigma_M=0.00$ $\tau=3.28$ $\tau_{max}=3.28$
Tensioni: $\sigma_N=160.85$ $\sigma_M=191.21$ $\tau=0.05$ $\sigma_{ID,max}=352.07$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
Sollecitazioni: $T_y=88.61$
 $V_{Ed}=88.61$ $V_{c,Rd}=46551.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=3.83$ - Classe 1
Sollecitazioni: $T_z=-45.64$
 $V_{Ed}=-45.64$ $V_{c,Rd}=41072.10$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica in termini tensionali [4.2.4] - CC 11 SLU $X_l=3.83$ - Classe 1
Sollecitazioni: $N=389.51$ $T_z=-45.64$ $T_y=88.61$ $M_z=171.02$
Tensioni: $\sigma_N=6.53$ $\sigma_M=219.58$ $\tau=0.00$ $\sigma_{max}=226.12$
Tensioni: $\sigma_N=6.53$ $\sigma_M=0.00$ $\tau=3.85$ $\tau_{max}=3.85$
Tensioni: $\sigma_N=6.53$ $\sigma_M=219.58$ $\tau=0.07$ $\sigma_{ID,max}=226.12$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 11 SLU - Classe 1
 $L_{cr}=3.83$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-43.65$ $M_{y,b,Rd}=14447.40$ $M_{y,Ed}/M_{y,b,Rd}=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-9656.78$ $M_{y,Ed}=-25.18$ $M_{z,Ed}=148.93$
 $L=3.83$

$\lambda_y=32.63$ Ncr,y=1160830.00 $\lambda^*_y=0.35$ Curva c: $\Phi_y=0.60$ $\chi_y=0.92$
 $\lambda_z=125.53$ Ncr,z=78417.70 $\lambda^*_z=1.34$ Curva c: $\Phi_z=1.67$ $\chi_z=0.37$
 $\chi_{\min}=0.37$
 Verifica: $0.19+0.00+0.10=0.29$

Asta n. 2027 (-24 -440) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=1.54$ - Classe 3
 Sollecitazioni: $N=-16130.70$ $T_z=13.45$ $M_y=-46.25$ $T_y=1.03$ $M_z=-3.36$
 Tensioni: $\sigma_N=-270.54$ $\sigma_M=-12.78$ $\tau=0.00$ $\sigma_{\max}=-283.31$
 Tensioni: $\sigma_N=-270.54$ $\sigma_M=1.15$ $\tau=0.54$ $\tau_{\max}=0.54$
 Tensioni: $\sigma_N=-270.54$ $\sigma_M=-12.78$ $\tau=0.00$ $\sigma_{ID,\max}=283.31$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.43$ - Classe 1
 Sollecitazioni: $T_z=52.43$
 $V,Ed=52.43$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.91$ - Classe 1
 Sollecitazioni: $N=-2612.51$ $T_z=5.83$ $M_y=-64.42$
 Tensioni: $\sigma_N=-43.82$ $\sigma_M=-11.78$ $\tau=0.00$ $\sigma_{\max}=-55.60$
 Tensioni: $\sigma_N=-43.82$ $\sigma_M=0.00$ $\tau=0.23$ $\tau_{\max}=0.23$
 Tensioni: $\sigma_N=-43.82$ $\sigma_M=-11.78$ $\tau=0.00$ $\sigma_{ID,\max}=55.60$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=4.12$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-49.97$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-16189.70$ $M_{y,eq,Ed}=-37.48$ $M_{z,eq,Ed}=4.72$
 $L=4.12$
 $\lambda_y=35.13$ Ncr,y=1001480.00 $\lambda^*_y=0.37$ Curva c: $\Phi_y=0.61$ $\chi_y=0.91$
 $\lambda_z=135.15$ Ncr,z=67652.70 $\lambda^*_z=1.44$ Curva c: $\Phi_z=1.84$ $\chi_z=0.34$
 $\chi_{\min}=0.34$
 Verifica: $0.36+0.00+0.00=0.37$

Asta n. 2028 (-23 -437) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=1.91$ - Classe 3
 Sollecitazioni: $N=-18257.60$ $T_z=-4.48$ $M_y=49.55$ $M_z=-2.71$
 Tensioni: $\sigma_N=-306.21$ $\sigma_M=-12.54$ $\tau=0.00$ $\sigma_{\max}=-318.75$
 Tensioni: $\sigma_N=-306.21$ $\sigma_M=0.92$ $\tau=0.18$ $\tau_{\max}=0.18$
 Tensioni: $\sigma_N=-306.21$ $\sigma_M=-12.54$ $\tau=0.00$ $\sigma_{ID,\max}=318.75$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=3.75$ - Classe 1
 Sollecitazioni: $T_z=52.43$
 $V,Ed=52.43$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.91$ - Classe 1
 Sollecitazioni: $N=-5502.09$ $T_z=-5.82$ $M_y=64.42$
 Tensioni: $\sigma_N=-92.28$ $\sigma_M=-11.78$ $\tau=0.00$ $\sigma_{\max}=-104.06$
 Tensioni: $\sigma_N=-92.28$ $\sigma_M=-0.00$ $\tau=0.23$ $\tau_{\max}=0.23$
 Tensioni: $\sigma_N=-92.28$ $\sigma_M=-11.78$ $\tau=0.00$ $\sigma_{ID,\max}=104.06$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=4.12$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=49.96$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-18331.30$ $M_{y,eq,Ed}=37.47$ $M_{z,eq,Ed}=3.78$
 $L=4.12$
 $\lambda_y=35.13$ Ncr,y=1001480.00 $\lambda^*_y=0.37$ Curva c: $\Phi_y=0.61$ $\chi_y=0.91$
 $\lambda_z=135.15$ Ncr,z=67652.70 $\lambda^*_z=1.44$ Curva c: $\Phi_z=1.84$ $\chi_z=0.34$
 $\chi_{\min}=0.34$
 Verifica: $0.41+0.00+0.00=0.42$

Asta n. 2029 (71 -1043) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.16$ - Classe 3
 Sollecitazioni: $N=-11057.90$ $T_z=55.60$ $T_y=10.70$ $M_z=-30.02$
 Tensioni: $\sigma_N=-185.46$ $\sigma_M=-38.54$ $\tau=0.00$ $\sigma_{\max}=-224.00$
 Tensioni: $\sigma_N=-185.46$ $\sigma_M=10.23$ $\tau=2.23$ $\tau_{\max}=2.23$
 Tensioni: $\sigma_N=-185.46$ $\sigma_M=-38.54$ $\tau=0.08$ $\sigma_{ID,\max}=224.00$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.43$ - Classe 1
 Sollecitazioni: $T_z=59.14$
 $V,Ed=59.14$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$

- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.61$ - Classe 1
 Sollecitazioni: $N=-1048.05$ $M_y=-52.44$
 Tensioni: $\sigma_N=-17.58$ $\sigma_M=-9.59$ $\tau=0.00$ $\sigma_{max}=-27.17$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
 Tensioni: $\sigma_N=-17.58$ $\sigma_M=-9.59$ $\tau=0.00$ $\sigma_{ID,max}=27.17$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.07$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-40.34$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-11057.90$ $M_{yeq,Ed}=-30.25$ $M_{zeq,Ed}=23.96$
 $L=3.07$
 $\lambda_y=26.14$ $N_{cr,y}=1808430.00$ $\lambda^*_y=0.28$ Curva c: $\Phi_y=0.56$ $\chi_y=0.96$
 $\lambda_z=100.58$ $N_{cr,z}=122165.00$ $\lambda^*_z=1.07$ Curva c: $\Phi_z=1.29$ $\chi_z=0.50$
 $\chi_{min}=0.50$
 Verifica: $0.17+0.00+0.02=0.18$

Asta n. 2030 (-1043 82) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=2.90$ - Classe 3
 Sollecitazioni: $N=-10725.60$ $T_z=-55.60$ $T_y=11.10$ $M_z=-29.06$
 Tensioni: $\sigma_N=-179.88$ $\sigma_M=-37.31$ $\tau=0.00$ $\sigma_{max}=-217.20$
 Tensioni: $\sigma_N=-179.88$ $\sigma_M=9.90$ $\tau=2.23$ $\tau_{max}=2.23$
 Tensioni: $\sigma_N=-179.88$ $\sigma_M=-37.31$ $\tau=0.08$ $\sigma_{ID,max}=217.20$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=2.64$ - Classe 1
 Sollecitazioni: $T_z=-59.14$
 $V,Ed=-59.14$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.45$ - Classe 1
 Sollecitazioni: $N=-740.67$ $M_y=-52.44$
 Tensioni: $\sigma_N=-12.42$ $\sigma_M=-9.59$ $\tau=0.00$ $\sigma_{max}=-22.01$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
 Tensioni: $\sigma_N=-12.42$ $\sigma_M=-9.59$ $\tau=0.00$ $\sigma_{ID,max}=22.01$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.07$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-40.34$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-10803.50$ $M_{yeq,Ed}=-30.25$ $M_{zeq,Ed}=23.79$
 $L=3.07$
 $\lambda_y=26.14$ $N_{cr,y}=1808430.00$ $\lambda^*_y=0.28$ Curva c: $\Phi_y=0.56$ $\chi_y=0.96$
 $\lambda_z=100.58$ $N_{cr,z}=122165.00$ $\lambda^*_z=1.07$ Curva c: $\Phi_z=1.29$ $\chi_z=0.50$
 $\chi_{min}=0.50$
 Verifica: $0.16+0.00+0.01=0.18$

Asta n. 2031 (72 -1043) Sez. 32 UPN300 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.16$ - Classe 3
 Sollecitazioni: $N=-13096.30$ $T_z=55.60$ $T_y=11.38$ $M_z=-36.77$
 Tensioni: $\sigma_N=-219.65$ $\sigma_M=-47.22$ $\tau=0.00$ $\sigma_{max}=-266.86$
 Tensioni: $\sigma_N=-219.65$ $\sigma_M=12.53$ $\tau=2.23$ $\tau_{max}=2.23$
 Tensioni: $\sigma_N=-219.65$ $\sigma_M=-47.22$ $\tau=0.08$ $\sigma_{ID,max}=266.86$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=2.80$ - Classe 1
 Sollecitazioni: $T_z=-59.14$
 $V,Ed=-59.14$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
- Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_l=1.61$ - Classe 1
 Sollecitazioni: $N=-3810.48$ $M_y=-52.44$
 Tensioni: $\sigma_N=-63.91$ $\sigma_M=-9.59$ $\tau=0.00$ $\sigma_{max}=-73.50$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{max}=0.00$
 Tensioni: $\sigma_N=-63.91$ $\sigma_M=-9.59$ $\tau=0.00$ $\sigma_{ID,max}=73.50$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.07$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-40.34$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-13096.30$ $M_{yeq,Ed}=-30.25$ $M_{zeq,Ed}=28.23$
 $L=3.07$
 $\lambda_y=26.14$ $N_{cr,y}=1808430.00$ $\lambda^*_y=0.28$ Curva c: $\Phi_y=0.56$ $\chi_y=0.96$

$\lambda_z=100.58$ Ncr,z=122165.00 $\lambda^*_z=1.07$ Curva c: $\Phi_z=1.29$ $\chi_z=0.50$
 $\chi_{\min}=0.50$
 Verifica: $0.20+0.00+0.02=0.22$

Asta n. 2032 (-1043 83) Sez. 32 UPN300 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_1=2.90$ - Classe 3
 Sollecitazioni: $N=-12763.90$ $T_z=-55.60$ $T_y=10.84$ $M_z=-33.55$
 Tensioni: $\sigma_N=-214.07$ $\sigma_M=-43.07$ $\tau=0.00$ $\sigma_{\max}=-257.15$
 Tensioni: $\sigma_N=-214.07$ $\sigma_M=11.43$ $\tau=2.23$ $\tau_{\max}=2.23$
 Tensioni: $\sigma_N=-214.07$ $\sigma_M=-43.07$ $\tau=0.08$ $\sigma_{ID,\max}=257.15$
 - Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_1=0.26$ - Classe 1
 Sollecitazioni: $T_z=59.14$
 $V,Ed=59.14$ $V_c,Rd=41072.10$ $V,Ed/V_c,Rd=0.00$
 - Verifica in termini tensionali [4.2.4] - CC 9 SLU $X_1=1.45$ - Classe 1
 Sollecitazioni: $N=-3502.78$ $M_y=-52.44$
 Tensioni: $\sigma_N=-58.75$ $\sigma_M=-9.59$ $\tau=0.00$ $\sigma_{\max}=-68.34$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=0.00$ $\tau=0.00$ $\tau_{\max}=0.00$
 Tensioni: $\sigma_N=-58.75$ $\sigma_M=-9.59$ $\tau=0.00$ $\sigma_{ID,\max}=68.34$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.07$ Curva d: $\alpha_{imp}=0.76$ $k_c=0.94$ $\psi=1.75$ $M_{cr}=0.00$ $\lambda_{LT}=0.00$
 $\lambda_{LT,0}=0.20$ $\beta_{LT}=1.00$ $\Phi_{LT}=0.00$ $\beta_{LT}=1.00$ $f=0.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-40.34$ $M_y,b,Rd=12234.60$ $M_y,Ed/M_y,b,Rd=0.00$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.1) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-12841.90$ $M_{y,Ed}=-30.25$ $M_{z,Ed}=26.35$
 $L=3.07$
 $\lambda_y=26.14$ Ncr,y=1808430.00 $\lambda^*_y=0.28$ Curva c: $\Phi_y=0.56$ $\chi_y=0.96$
 $\lambda_z=100.58$ Ncr,z=122165.00 $\lambda^*_z=1.07$ Curva c: $\Phi_z=1.29$ $\chi_z=0.50$
 $\chi_{\min}=0.50$
 Verifica: $0.19+0.00+0.02=0.21$

Asta n. 3001 (-407 -427) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_1=0.00$ - Classe 3
 Sollecitazioni: $N=-125.02$ $T_z=224.75$ $M_y=-325.63$ $T_y=-3223.02$ $M_z=853.83$ $M_x=-14.53$
 Tensioni: $\sigma_N=-1.18$ $\sigma_M=-295.90$ $\tau=26.68$ $\sigma_{\max}=-297.08$
 Tensioni: $\sigma_N=-1.18$ $\sigma_M=86.38$ $\tau=59.02$ $\tau_{\max}=59.02$
 Tensioni: $\sigma_N=-1.18$ $\sigma_M=-295.90$ $\tau=26.68$ $\sigma_{ID,\max}=300.66$
 - Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $T_y=-1122.40$ $M_x=-19.12$
 $V,Ed=-1122.40$ $V_c,Rd,Red=114500.00$ $V,Ed/V_c,Rd,Red=0.01$
 - Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $T_z=109.58$ $M_x=-19.12$
 $V,Ed=109.58$ $V_c,Rd,Red=42467.90$ $V,Ed/V_c,Rd,Red=0.00$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $N=-42.89$ $T_z=109.58$ $M_y=-129.30$ $T_y=-1122.40$ $M_z=298.72$ $M_x=-19.12$
 $N,Ed=-42.89$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-129.30$ $M_y,V,c,Rd=23645.80$ $M_{Ny,c,Rd}=23645.80$ $M_y,Ed/M_{Ny,c,Rd}=0.01$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=298.72$ $M_z,V,c,Rd=11165.10$ $M_{Nz,c,Rd}=11165.10$ $M_z,Ed/M_{Nz,c,Rd}=0.03$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.03$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.03$ $M_{cr}=10393900.00$ $\lambda_{LT}=0.05$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-391.05$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.02$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-125.02$ $M_y,Ed=-325.63$ $M_z,Ed=853.83$ $L=0.30$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.02$ $M_{cr}=10308900.00$ $\lambda_{LT}=0.05$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=2.91$ Ncr,y=259296000.00 $\lambda^*_y=0.03$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=4.93$ Ncr,z=90335300.00 $\lambda^*_z=0.05$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.00+0.01+0.11=0.13$
 Verifica ZZ: $0.00+0.01+0.11=0.12$

Asta n. 3001 (-411 -427) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=10.75$ $T_z=374.55$ $M_y=510.13$ $T_y=57.00$ $M_z=139.86$
 Tensioni: $\sigma_N=0.10$ $\sigma_M=97.15$ $\tau=0.00$ $\sigma_{\max}=97.25$
 Tensioni: $\sigma_N=0.10$ $\sigma_M=1.78$ $\tau=18.31$ $\tau_{\max}=18.31$
 Tensioni: $\sigma_N=0.10$ $\sigma_M=97.15$ $\tau=0.00$ $\sigma_{ID,\max}=97.25$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=6.27$
 $V,Ed=6.27$ $V_c,Rd=115766.00$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=330.06$
 $V,Ed=330.06$ $V_c,Rd=42937.10$ $V,Ed/V_c,Rd=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=3.79$ $T_z=330.06$ $M_y=319.60$ $T_y=6.27$ $M_z=14.41$
 $N,Ed=3.79$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=319.60$ $M_y,V,c,Rd=23645.80$ $M_{Ny,c,Rd}=23645.80$ $M_y,Ed/M_{Ny,c,Rd}=0.01$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=14.41$ $M_z,V,c,Rd=11165.10$ $M_{Nz,c,Rd}=11165.10$ $M_z,Ed/M_{Nz,c,Rd}=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.01$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=3.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.54$ $M_{cr}=232149.00$ $\lambda_{LT}=0.31$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.52$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $M_y,Ed=577.06$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.03$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-5.61$ $M_y,Ed=510.13$ $M_z,Ed=139.86$ $L=3.76$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=3.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.50$ $M_{cr}=228772.00$ $\lambda_{LT}=0.31$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.52$ $\beta_{LT}=0.75$ $f=0.98$ $\chi_{LT}=1.00$
 $\lambda_y=36.53$ $N_{cr,y}=1646580.00$ $\lambda^*_y=0.39$ Curva b: $\Phi_y=0.61$ $\chi_y=0.93$
 $\lambda_z=61.88$ $N_{cr,z}=573647.00$ $\lambda^*_z=0.66$ Curva c: $\Phi_z=0.83$ $\chi_z=0.75$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: $0.00+0.02+0.02=0.04$
 Verifica ZZ: $0.00+0.02+0.02=0.04$
- Asta n. 3001 (-408 -411) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-32.87$ $T_z=399.51$ $M_y=626.23$ $T_y=4118.98$ $M_z=-1105.83$ $M_x=2.63$
 Tensioni: $\sigma_N=-0.31$ $\sigma_M=-405.03$ $\tau=4.83$ $\sigma_{\max}=-405.34$
 Tensioni: $\sigma_N=-0.31$ $\sigma_M=-16.01$ $\tau=72.30$ $\tau_{\max}=72.30$
 Tensioni: $\sigma_N=-0.31$ $\sigma_M=-405.03$ $\tau=4.83$ $\sigma_{ID,\max}=405.43$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=920.74$ $M_x=2.84$
 $V,Ed=920.74$ $V_c,Rd,Red=115579.00$ $V,Ed/V_c,Rd,Red=0.01$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=362.51$ $M_x=2.84$
 $V,Ed=362.51$ $V_c,Rd,Red=42867.80$ $V,Ed/V_c,Rd,Red=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=-4.30$ $T_z=362.51$ $M_y=423.48$ $T_y=920.74$ $M_z=-261.84$ $M_x=2.84$
 $N,Ed=-4.30$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=423.48$ $M_y,V,c,Rd=23645.80$ $M_{Ny,c,Rd}=23645.80$ $M_y,Ed/M_{Ny,c,Rd}=0.02$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=-261.84$ $M_z,V,c,Rd=11165.10$ $M_{Nz,c,Rd}=11165.10$ $M_z,Ed/M_{Nz,c,Rd}=0.02$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.02$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.09$ $M_{cr}=11009300.00$ $\lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y,Ed=702.94$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.03$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-32.87$ $M_y,Ed=626.23$ $M_z,Ed=-1105.83$ $L=0.30$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.09$ $M_{cr}=11045000.00$ $\lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=2.91$ $N_{cr,y}=259297000.00$ $\lambda^*_y=0.03$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=4.93$ $N_{cr,z}=90335600.00$ $\lambda^*_z=0.05$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: $0.00+0.03+0.14=0.17$

Verifica ZZ: $0.00+0.02+0.14=0.17$

Asta n. 3002 (-412 5) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=2.93$ - Classe 3
Sollecitazioni: $T_z=-1502.07$ $M_y=2318.25$ $T_y=1.90$ $M_z=3.81$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-248.24$ $\tau=0.00$ $\sigma_{max}=-248.24$
Tensioni: $\sigma_N=0.00$ $\sigma_M=0.05$ $\tau=73.41$ $\tau_{max}=73.41$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-248.24$ $\tau=0.00$ $\sigma_{ID,max}=248.24$
 - Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=2.93$ - Classe 1
Sollecitazioni: $T_z=-1332.91$
 $V,Ed=-1332.91$ $V_c,Rd=42937.10$ $V,Ed/V_c,Rd=0.03$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=2.93$ - Classe 1
Sollecitazioni: $T_z=-1332.91$ $M_y=2234.61$ $M_z=1.44$
 $N,Ed=0.00$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 $M_y,Ed=2234.61$ $M_y,V,c,Rd=23645.80$ $M_y,Ed/M_y,V,c,Rd=0.09$ $M_y,Ed/M_y,V,c,Rd=0.09$
 $M_z,Ed=1.44$ $M_z,c,Rd=11165.10$ $M_z,Ed/M_z,c,Rd=0.00$ $M_z,Ed/M_z,c,Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_y,V,c,Rd)^2+(M_z,Ed/M_z,c,Rd)^1=0.09$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=3.07$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.45$ $M_{cr}=307330.00$ $\lambda_{LT}=0.27$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.50$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $M_y,Ed=2318.25$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.11$

Asta n. 3002 (10 -412) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.46$ - Classe 3
Sollecitazioni: $T_z=-1027.48$ $M_y=-1483.03$ $T_y=50.07$ $M_z=-6.98$ $M_x=-2.15$
Tensioni: $\sigma_N=0.00$ $\sigma_M=160.19$ $\tau=3.95$ $\sigma_{max}=160.19$
Tensioni: $\sigma_N=0.00$ $\sigma_M=-0.09$ $\tau=50.38$ $\tau_{max}=50.38$
Tensioni: $\sigma_N=0.00$ $\sigma_M=160.19$ $\tau=3.95$ $\sigma_{ID,max}=160.34$
 - Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_l=0.60$ - Classe 1
Sollecitazioni: $T_y=8.21$ $M_x=-2.50$
 $V,Ed=8.21$ $V_c,Rd,Red=115601.00$ $V,Ed/V_c,Rd,Red=0.00$
 - Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_l=0.60$ - Classe 1
Sollecitazioni: $T_z=-659.91$ $M_x=-2.50$
 $V,Ed=-659.91$ $V_c,Rd,Red=42876.00$ $V,Ed/V_c,Rd,Red=0.02$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.46$ - Classe 1
Sollecitazioni: $T_z=-639.84$ $M_y=-654.92$ $T_y=8.21$ $M_z=-1.72$ $M_x=-2.50$
 $N,Ed=0.00$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 $M_y,Ed=-654.92$ $M_y,V,c,Rd=23645.80$ $M_y,Ed/M_y,V,c,Rd=0.03$ $M_y,Ed/M_y,V,c,Rd=0.03$
 $M_z,Ed=-1.72$ $M_z,V,c,Rd=11165.10$ $M_z,Ed/M_z,V,c,Rd=0.00$ $M_z,Ed/M_z,V,c,Rd=0.00$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_y,V,c,Rd)^2+(M_z,Ed/M_z,V,c,Rd)^1=0.03$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 1 SND - Classe 3
 $L_{cr}=0.60$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=2672740.00$ $\lambda_{LT}=0.09$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.45$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-1483.03$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.07$

Asta n. 3003 (-414 -430) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
Sollecitazioni: $N=329.08$ $T_z=464.32$ $M_y=-1240.05$ $T_y=8995.72$ $M_z=-2574.96$ $M_x=-24.35$
Tensioni: $\sigma_N=3.10$ $\sigma_M=919.88$ $\tau=44.72$ $\sigma_{max}=922.98$
Tensioni: $\sigma_N=3.10$ $\sigma_M=-57.23$ $\tau=160.18$ $\tau_{max}=160.18$
Tensioni: $\sigma_N=3.10$ $\sigma_M=919.88$ $\tau=44.72$ $\sigma_{ID,max}=926.23$
 - Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_y=1025.44$ $M_x=-26.50$
 $V,Ed=1025.44$ $V_c,Rd,Red=114009.00$ $V,Ed/V_c,Rd,Red=0.01$
 - Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $T_z=-7.78$ $M_x=-26.50$
 $V,Ed=-7.78$ $V_c,Rd,Red=42285.50$ $V,Ed/V_c,Rd,Red=0.00$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1
Sollecitazioni: $N=36.14$ $T_z=-7.78$ $M_y=-401.75$ $T_y=1025.44$ $M_z=-320.45$ $M_x=-26.50$
 $N,Ed=36.14$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-401.75$ $M_y,V,c,Rd=23645.80$ $M_Ny,c,Rd=23645.80$ $M_y,Ed/M_Ny,c,Rd=0.02$
Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=-320.45$ $M_z,V,c,Rd=11165.10$ $M_Nz,c,Rd=11165.10$ $M_z,Ed/M_Nz,c,Rd=0.03$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_Ny,c,Rd)^2+(M_z,Ed/M_Nz,c,Rd)^1=0.03$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=10649600.00$ $\lambda_{LT}=0.05$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_{y,Ed}=-1390.49$ $M_{y,b,Rd}=20999.90$ $M_{y,Ed}/M_{y,b,Rd}=0.07$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-280.36$ $M_{y,Ed}=-1240.05$ $M_{z,Ed}=-2574.96$ $L=0.30$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=10632300.00$ $\lambda_{LT}=0.05$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=2.91$ $N_{cr,y}=259296000.00$ $\lambda^*_y=0.03$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=4.93$ $N_{cr,z}=90335300.00$ $\lambda^*_z=0.05$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
Verifica YY: $0.00+0.06+0.33=0.39$
Verifica ZZ: $0.00+0.04+0.33=0.38$
- Asta n. 3003 (-430 -415) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $Xl=3.76$ - Classe 3
Sollecitazioni: $N=-35.60$ $T_z=-778.36$ $M_y=1237.39$ $T_y=327.52$ $M_z=957.42$
Tensioni: $\sigma_N=-0.34$ $\sigma_M=-424.77$ $\tau=0.00$ $\sigma_{max}=-425.10$
Tensioni: $\sigma_N=-0.34$ $\sigma_M=12.20$ $\tau=38.05$ $\tau_{max}=38.05$
Tensioni: $\sigma_N=-0.34$ $\sigma_M=-424.77$ $\tau=0.00$ $\sigma_{ID,max}=425.10$
- Verifica a taglio dir. Y [4.2.16] - CC 11 SLU $Xl=3.76$ - Classe 1
Sollecitazioni: $T_y=36.15$
 $V_{Ed}=36.15$ $V_{c,Rd}=115766.00$ $V_{Ed}/V_{c,Rd}=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $Xl=3.76$ - Classe 1
Sollecitazioni: $T_z=-447.41$
 $V_{Ed}=-447.41$ $V_{c,Rd}=42937.10$ $V_{Ed}/V_{c,Rd}=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $Xl=3.76$ - Classe 1
Sollecitazioni: $N=-4.78$ $T_z=-447.41$ $M_y=524.41$ $T_y=36.15$ $M_z=123.27$
 $N_{Ed}=-4.78$ $N_{c,Rd}=237211.00$ $n=N_{Ed}/N_{c,Rd}=0.00$
Pressoflessione retta YY [4.2.33]:
 $M_{y,Ed}=524.41$ $M_{y,V,c,Rd}=23645.80$ $M_{Ny,c,Rd}=23645.80$ $M_{y,Ed}/M_{Ny,c,Rd}=0.02$
Pressoflessione retta ZZ [4.2.34]:
 $M_{z,Ed}=123.27$ $M_{z,V,c,Rd}=11165.10$ $M_{Nz,c,Rd}=11165.10$ $M_{z,Ed}/M_{Nz,c,Rd}=0.01$
 $\alpha=2.00$ $\beta=1.00$ $(M_{y,Ed}/M_{Ny,c,Rd})^2+(M_{z,Ed}/M_{Nz,c,Rd})^1=0.02$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=3.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.94$ $M_{cr}=268628.00$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $M_{y,Ed}=1372.28$ $M_{y,b,Rd}=20999.90$ $M_{y,Ed}/M_{y,b,Rd}=0.07$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
Sollecitazioni: $N_{Ed}=-35.60$ $M_{y,Ed}=1237.39$ $M_{z,Ed}=957.42$ $L=3.76$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=3.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.92$ $M_{cr}=267646.00$ $\lambda_{LT}=0.29$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=36.53$ $N_{cr,y}=1646580.00$ $\lambda^*_y=0.39$ Curva b: $\Phi_y=0.61$ $\chi_y=0.93$
 $\lambda_z=61.88$ $N_{cr,z}=573647.00$ $\lambda^*_z=0.66$ Curva c: $\Phi_z=0.83$ $\chi_z=0.75$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
Verifica YY: $0.00+0.06+0.12=0.18$
Verifica ZZ: $0.00+0.04+0.12=0.17$
- Asta n. 3003 (-413 -415) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 1 SND $Xl=0.00$ - Classe 3
Sollecitazioni: $N=190.07$ $T_z=803.32$ $M_y=1474.56$ $T_y=-22869.80$ $M_z=5917.48$ $M_x=11.00$
Tensioni: $\sigma_N=1.79$ $\sigma_M=1967.40$ $\tau=20.20$ $\sigma_{max}=1969.19$
Tensioni: $\sigma_N=1.79$ $\sigma_M=527.11$ $\tau=400.48$ $\tau_{max}=400.48$
Tensioni: $\sigma_N=1.79$ $\sigma_M=1967.40$ $\tau=20.20$ $\sigma_{ID,max}=1969.50$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $Xl=0.00$ - Classe 1
Sollecitazioni: $T_y=-3115.58$ $M_x=15.26$
 $V_{Ed}=-3115.58$ $V_{c,Rd,Red}=114757.00$ $V_{Ed}/V_{c,Rd,Red}=0.03$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $Xl=0.00$ - Classe 1
Sollecitazioni: $T_z=479.87$ $M_x=15.26$
 $V_{Ed}=479.87$ $V_{c,Rd,Red}=42563.20$ $V_{Ed}/V_{c,Rd,Red}=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $Xl=0.00$ - Classe 1
Sollecitazioni: $N=23.10$ $T_z=479.87$ $M_y=663.38$ $T_y=-3115.58$ $M_z=811.50$ $M_x=15.26$
 $N_{Ed}=23.10$ $N_{c,Rd}=237211.00$ $n=N_{Ed}/N_{c,Rd}=0.00$
Pressoflessione retta YY [4.2.33]:
 $M_{y,Ed}=663.38$ $M_{y,V,c,Rd}=23645.80$ $M_{Ny,c,Rd}=23645.80$ $M_{y,Ed}/M_{Ny,c,Rd}=0.03$
Pressoflessione retta ZZ [4.2.34]:

Mz,Ed=811.50 Mz,V,c,Rd=11165.10 MNz,c,Rd=11165.10 Mz,Ed/MNz,c,Rd=0.07
 $\alpha=2.00 \quad \beta=1.00 \quad (M_y,Ed/MN_y,c,Rd)^2 + (M_z,Ed/MN_z,c,Rd)^2 = 0.07$

- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34 \quad k_c=0.94 \quad \psi=1.08 \quad M_{cr}=10894400.00 \quad \lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40 \quad \beta_{LT}=0.75 \quad \Phi_{LT}=0.44 \quad \beta_{LT}=0.75 \quad f=1.00 \quad \chi_{LT}=1.00$
 $M_y,Ed=1630.52 \quad M_y,b,Rd=20999.90 \quad M_y,Ed/M_y,b,Rd=0.08$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: N,Ed=-158.05 My,Ed=1474.56 Mz,Ed=5917.48 L=0.30
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34 \quad k_c=0.94 \quad \psi=1.08 \quad M_{cr}=10908000.00 \quad \lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40 \quad \Phi_{LT}=0.44 \quad \beta_{LT}=0.75 \quad f=1.00 \quad \chi_{LT}=1.00$
 $\lambda_y=2.91 \quad N_{cr,y}=259297000.00 \quad \lambda^*_y=0.03$ Curva b: $\Phi_y=0.00 \quad \chi_y=1.00$
 $\lambda_z=4.93 \quad N_{cr,z}=90335600.00 \quad \lambda^*_z=0.05$ Curva c: $\Phi_z=0.00 \quad \chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.00+0.07+0.77=0.84$
 Verifica ZZ: $0.00+0.05+0.77=0.82$

Asta n. 3004 (40 -416) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=0.14 - Classe 3
 Sollecitazioni: Tz=1691.14 My=2632.46 Mz=-1.40
 Tensioni: $\sigma_N=0.00 \quad \sigma_M=-280.99 \quad \tau=0.00 \quad \sigma_{max}=-280.99$
 Tensioni: $\sigma_N=0.00 \quad \sigma_M=-0.02 \quad \tau=82.65 \quad \tau_{max}=82.65$
 Tensioni: $\sigma_N=0.00 \quad \sigma_M=-280.99 \quad \tau=0.00 \quad \sigma_{ID,max}=280.99$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU Xl=0.14 - Classe 1
 Sollecitazioni: Tz=1340.42 Mx=-1.19
 $V,Ed=1340.42 \quad V_c,Rd,Red=42908.00 \quad V,Ed/V_c,Rd,Red=0.03$
- Verifica a flessione e taglio YY[4.2.32] - CC 11 SLU Xl=0.14 - Classe 1
 Sollecitazioni: Tz=1340.42 My=2455.18 Mx=-1.19
 $M_y,Ed=2455.18 \quad M_y,V,c,Rd=23645.80 \quad M_y,Ed/M_y,V,c,Rd=0.10$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: N,Ed=-0.00 My,Ed=2632.46 Mz,Ed=-1.40 L=3.07
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=3.07$ Curva b: $\alpha_{imp}=0.34 \quad k_c=0.94 \quad \psi=2.48 \quad M_{cr}=311264.00 \quad \lambda_{LT}=0.27$
 $\lambda_{LT,0}=0.40 \quad \Phi_{LT}=0.50 \quad \beta_{LT}=0.75 \quad f=0.99 \quad \chi_{LT}=1.00$
 $\lambda_y=29.78 \quad N_{cr,y}=2476510.00 \quad \lambda^*_y=0.32$ Curva b: $\Phi_y=0.57 \quad \chi_y=0.96$
 $\lambda_z=50.46 \quad N_{cr,z}=862781.00 \quad \lambda^*_z=0.54$ Curva c: $\Phi_z=0.73 \quad \chi_z=0.82$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.00+0.12+0.00=0.12$
 Verifica ZZ: $0.00+0.10+0.00=0.10$

Asta n. 3004 (41 -416) Sez. 30 HEB240 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND Xl=0.46 - Classe 3
 Sollecitazioni: Tz=-1216.56 My=-1750.34 Ty=-7.92 Mz=-1.00 Mx=-12.44
 Tensioni: $\sigma_N=0.00 \quad \sigma_M=186.85 \quad \tau=22.85 \quad \sigma_{max}=186.85$
 Tensioni: $\sigma_N=0.00 \quad \sigma_M=0.01 \quad \tau=63.70 \quad \tau_{max}=63.70$
 Tensioni: $\sigma_N=0.00 \quad \sigma_M=186.85 \quad \tau=22.85 \quad \sigma_{ID,max}=191.00$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU Xl=0.60 - Classe 1
 Sollecitazioni: Ty=-1.59 Mx=-17.30
 $V,Ed=-1.59 \quad V_c,Rd,Red=114622.00 \quad V,Ed/V_c,Rd,Red=0.00$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU Xl=0.60 - Classe 1
 Sollecitazioni: Tz=-667.43 Mx=-17.30
 $V,Ed=-667.43 \quad V_c,Rd,Red=42512.80 \quad V,Ed/V_c,Rd,Red=0.02$
- Verifica a flessione e taglio YY[4.2.32] - CC 11 SLU Xl=0.46 - Classe 1
 Sollecitazioni: Tz=-647.35 My=-457.88 Ty=-1.59 Mx=-17.30
 $M_y,Ed=-457.88 \quad M_y,V,c,Rd=23645.80 \quad M_y,Ed/M_y,V,c,Rd=0.02$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: N,Ed=-0.01 My,Ed=-1750.34 Mz,Ed=-1.00 L=0.60
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.60$ Curva b: $\alpha_{imp}=0.34 \quad k_c=0.94 \quad \psi=1.05 \quad M_{cr}=2673020.00 \quad \lambda_{LT}=0.09$
 $\lambda_{LT,0}=0.40 \quad \Phi_{LT}=0.45 \quad \beta_{LT}=0.75 \quad f=1.00 \quad \chi_{LT}=1.00$
 $\lambda_y=5.82 \quad N_{cr,y}=64824200.00 \quad \lambda^*_y=0.06$ Curva b: $\Phi_y=0.00 \quad \chi_y=1.00$
 $\lambda_z=9.86 \quad N_{cr,z}=22583900.00 \quad \lambda^*_z=0.11$ Curva c: $\Phi_z=0.00 \quad \chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.00+0.08+0.00=0.08$
 Verifica ZZ: $0.00+0.06+0.00=0.06$

Asta n. 3005 (-422 -432) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=-896.07$ $T_z=395.03$ $M_y=-1017.77$ $T_y=-21509.80$ $M_z=4928.81$ $M_x=-24.31$
 Tensioni: $\sigma_N=-8.45$ $\sigma_M=-1616.26$ $\tau=44.64$ $\sigma_{max}=-1624.72$
 Tensioni: $\sigma_N=-8.45$ $\sigma_M=419.79$ $\tau=377.42$ $\tau_{max}=377.42$
 Tensioni: $\sigma_N=-8.45$ $\sigma_M=-1616.26$ $\tau=44.64$ $\sigma_{ID,max}=1626.56$
- Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=-1063.94$ $M_x=-24.91$
 $V,Ed=-1063.94$ $V_c,Rd,Rd=114114.00$ $V,Ed/V_c,Rd,Rd=0.01$
- Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=39.52$ $M_x=-24.91$
 $V,Ed=39.52$ $V_c,Rd,Rd=42324.70$ $V,Ed/V_c,Rd,Rd=0.00$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=-46.08$ $T_z=39.52$ $M_y=-332.98$ $T_y=-1063.94$ $M_z=202.27$ $M_x=-24.91$
 $N,Ed=-46.08$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=-332.98$ $M_y,V,c,Rd=23645.80$ $M_{Ny,c,Rd}=23645.80$ $M_y,Ed/M_{Ny,c,Rd}=0.01$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=202.27$ $M_z,V,c,Rd=11165.10$ $M_{Nz,c,Rd}=11165.10$ $M_z,Ed/M_{Nz,c,Rd}=0.02$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.02$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=10595200.00$ $\lambda_{LT}=0.05$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-1249.02$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.06$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-896.07$ $M_y,Ed=-1017.77$ $M_z,Ed=4928.81$ $L=0.30$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=10562000.00$ $\lambda_{LT}=0.05$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=2.91$ $N_{cr,y}=259296000.00$ $\lambda^*_y=0.03$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=4.93$ $N_{cr,z}=90335300.00$ $\lambda^*_z=0.05$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95
 Verifica YY: $0.00+0.05+0.64=0.69$
 Verifica ZZ: $0.00+0.04+0.64=0.68$
- Asta n. 3005 (-424 -432) Sez. 30 HEB240 Crit. 1
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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_l=0.00$ - Classe 3
 Sollecitazioni: $N=48.05$ $T_z=651.04$ $M_y=942.17$ $T_y=824.18$ $M_z=-1577.01$
 Tensioni: $\sigma_N=0.45$ $\sigma_M=582.84$ $\tau=0.00$ $\sigma_{max}=583.30$
 Tensioni: $\sigma_N=0.45$ $\sigma_M=-20.10$ $\tau=31.89$ $\tau_{max}=31.89$
 Tensioni: $\sigma_N=0.45$ $\sigma_M=582.84$ $\tau=0.00$ $\sigma_{ID,max}=583.30$
- Verifica a taglio dir. Y [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_y=70.62$
 $V,Ed=70.62$ $V_c,Rd=115766.00$ $V,Ed/V_c,Rd=0.00$
- Verifica a taglio dir. Z [4.2.16] - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $T_z=405.16$
 $V,Ed=405.16$ $V_c,Rd=42937.10$ $V,Ed/V_c,Rd=0.01$
- Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 9 SLU $X_l=0.00$ - Classe 1
 Sollecitazioni: $N=1.09$ $T_z=405.16$ $M_y=410.18$ $T_y=70.62$ $M_z=-158.09$
 $N,Ed=1.09$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=410.18$ $M_y,V,c,Rd=23645.80$ $M_{Ny,c,Rd}=23645.80$ $M_y,Ed/M_{Ny,c,Rd}=0.02$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=-158.09$ $M_z,V,c,Rd=11165.10$ $M_{Nz,c,Rd}=11165.10$ $M_z,Ed/M_{Nz,c,Rd}=0.01$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/M_{Ny,c,Rd})^2+(M_z,Ed/M_{Nz,c,Rd})^1=0.02$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=3.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=3.10$ $M_{cr}=283667.00$ $\lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $M_y,Ed=1120.54$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.05$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-46.43$ $M_y,Ed=942.17$ $M_z,Ed=-1577.01$ $L=3.76$
 α_{my} , α_{mz} , $\alpha_{LT}=0.95$, 0.95 , 0.95
 $L_{cr}=3.76$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=3.06$ $M_{cr}=280022.00$ $\lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $\lambda_y=36.53$ $N_{cr,y}=1646580.00$ $\lambda^*_y=0.39$ Curva b: $\Phi_y=0.61$ $\chi_y=0.93$
 $\lambda_z=61.88$ $N_{cr,z}=573647.00$ $\lambda^*_z=0.66$ Curva c: $\Phi_z=0.83$ $\chi_z=0.75$
 K_{yy} , K_{yz} , K_{zy} , $K_{zz}=0.95$, 0.95 , 0.76 , 0.95

Verifica YY: $0.00+0.04+0.20=0.25$
 Verifica ZZ: $0.00+0.03+0.20=0.24$

Asta n. 3005 (-421 -424) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 1 SND $X_1=0.00$ - Classe 3
 Sollecitazioni: $N=292.01$ $T_z=676.00$ $M_y=1141.15$ $T_y=-24181.60$ $M_z=5682.25$ $M_x=13.09$
 Tensioni: $\sigma_N=2.76$ $\sigma_M=1859.90$ $\tau=24.03$ $\sigma_{max}=1862.66$
 Tensioni: $\sigma_N=2.76$ $\sigma_M=481.02$ $\tau=423.46$ $\tau_{max}=423.46$
 Tensioni: $\sigma_N=2.76$ $\sigma_M=1859.90$ $\tau=24.03$ $\sigma_{ID,max}=1863.12$
 - Verifica a taglio e torsione dir. Y [4.2.24] - CC 11 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $T_y=-3237.54$ $M_x=15.37$
 $V,Ed=-3237.54$ $V_c,Rd,Red=114750.00$ $V,Ed/V_c,Rd,Red=0.03$
 - Verifica a taglio e torsione dir. Z [4.2.24] - CC 11 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $T_z=432.57$ $M_x=15.37$
 $V,Ed=432.57$ $V_c,Rd,Red=42560.30$ $V,Ed/V_c,Rd,Red=0.01$
 - Verifica a presso o tenso flessione biassiale (EC3 6.41) - CC 11 SLU $X_1=0.00$ - Classe 1
 Sollecitazioni: $N=30.43$ $T_z=432.57$ $M_y=525.66$ $T_y=-3237.54$ $M_z=798.30$ $M_x=15.37$
 $N,Ed=30.43$ $N_c,Rd=237211.00$ $n=N,Ed/N_c,Rd=0.00$
 Pressoflessione retta YY [4.2.33]:
 $M_y,Ed=525.66$ $M_y,V,c,Rd=23645.80$ $MN_y,c,Rd=23645.80$ $M_y,Ed/MN_y,c,Rd=0.02$
 Pressoflessione retta ZZ [4.2.34]:
 $M_z,Ed=798.30$ $M_z,V,c,Rd=11165.10$ $MN_z,c,Rd=11165.10$ $M_z,Ed/MN_z,c,Rd=0.07$
 $\alpha=2.00$ $\beta=1.00$ $(M_y,Ed/MN_y,c,Rd)^2+(M_z,Ed/MN_z,c,Rd)^1=0.07$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.09$ $M_{cr}=10957800.00$ $\lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y,Ed=1349.76$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.06$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 1 SND - Classe 3
 Sollecitazioni: $N,Ed=-250.39$ $M_y,Ed=1141.15$ $M_z,Ed=5682.25$ $L=0.30$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.30$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.09$ $M_{cr}=10983200.00$ $\lambda_{LT}=0.04$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.44$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=2.91$ $N_{cr,y}=259297000.00$ $\lambda^*_y=0.03$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=4.93$ $N_{cr,z}=90335600.00$ $\lambda^*_z=0.05$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
 Verifica YY: $0.00+0.05+0.74=0.79$
 Verifica ZZ: $0.00+0.04+0.74=0.78$

Asta n. 3006 (-420 77) Sez. 30 HEB240 Crit. 1

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- Verifica a flessione YY [4.2.13] - CC 5 SND $X_1=2.93$ - Classe 3
 Sollecitazioni: $T_z=-1465.10$ $M_y=2392.12$
 $M_y,Ed=2392.12$ $M_y,c,Rd=20999.90$ $M_y,Ed/M_y,c,Rd=0.11$
 - Verifica a taglio e torsione dir. Z [4.2.24] - CC 9 SLU $X_1=2.93$ - Classe 1
 Sollecitazioni: $T_z=-1242.73$ $M_x=-1.25$
 $V,Ed=-1242.73$ $V_c,Rd,Red=42906.60$ $V,Ed/V_c,Rd,Red=0.03$
 - Verifica a flessione e taglio YY[4.2.32] - CC 9 SLU $X_1=2.93$ - Classe 1
 Sollecitazioni: $T_z=-1242.73$ $M_y=2321.05$ $M_x=-1.25$
 $M_y,Ed=2321.05$ $M_y,V,c,Rd=23645.80$ $M_y,Ed/M_y,V,c,Rd=0.10$
 - Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=3.07$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=2.32$ $M_{cr}=290874.00$ $\lambda_{LT}=0.28$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.51$ $\beta_{LT}=0.75$ $f=0.99$ $\chi_{LT}=1.00$
 $M_y,Ed=2392.12$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.11$

Asta n. 3006 (78 -420) Sez. 30 HEB240 Crit. 1

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- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_1=0.46$ - Classe 3
 Sollecitazioni: $T_z=-987.35$ $M_y=-1290.07$ $T_y=-15.86$ $M_z=2.07$ $M_x=-13.42$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=138.12$ $\tau=24.64$ $\sigma_{max}=138.12$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=-0.03$ $\tau=54.20$ $\tau_{max}=54.20$
 Tensioni: $\sigma_N=0.00$ $\sigma_M=138.12$ $\tau=24.64$ $\sigma_{ID,max}=144.56$
 - Verifica a taglio e torsione dir. Y [4.2.24] - CC 9 SLU $X_1=0.60$ - Classe 1
 Sollecitazioni: $T_y=-3.34$ $M_x=-19.16$
 $V,Ed=-3.34$ $V_c,Rd,Red=114498.00$ $V,Ed/V_c,Rd,Red=0.00$
 - Verifica a taglio e torsione dir. Z [4.2.24] - CC 9 SLU $X_1=0.60$ - Classe 1
 Sollecitazioni: $T_z=-598.55$ $M_x=-19.16$
 $V,Ed=-598.55$ $V_c,Rd,Red=42467.00$ $V,Ed/V_c,Rd,Red=0.01$

- Verifica a flessione e taglio YY[4.2.32] - CC 9 SLU $X_l=0.46$ - Classe 1
Sollecitazioni: $T_z=-578.84$ $M_y=-348.17$ $T_y=-3.34$ $M_x=-19.16$
 $M_y,Ed=-348.17$ $M_y,V,c,Rd=23645.80$ $M_y,Ed/M_y,V,c,Rd=0.01$
- Verifica di stabilità aste inflesse (4.2.4.1.3.2) CC 5 SND - Classe 3
 $L_{cr}=0.60$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.05$ $M_{cr}=2686560.00$ $\lambda_{LT}=0.09$
 $\lambda_{LT,0}=0.40$ $\beta_{LT}=0.75$ $\Phi_{LT}=0.45$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $M_y,Ed=-1290.07$ $M_y,b,Rd=20999.90$ $M_y,Ed/M_y,b,Rd=0.06$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 7 SND - Classe 3
Sollecitazioni: $N,Ed=-0.00$ $M_y,Ed=-857.16$ $M_z,Ed=-0.51$ $L=0.60$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, 0.95, 0.95$
 $L_{cr}=0.60$ Curva b: $\alpha_{imp}=0.34$ $k_c=0.94$ $\psi=1.06$ $M_{cr}=2704460.00$ $\lambda_{LT}=0.09$
 $\lambda_{LT,0}=0.40$ $\Phi_{LT}=0.45$ $\beta_{LT}=0.75$ $f=1.00$ $\chi_{LT}=1.00$
 $\lambda_y=5.82$ $N_{cr,y}=64824200.00$ $\lambda'_y=0.06$ Curva b: $\Phi_y=0.00$ $\chi_y=1.00$
 $\lambda_z=9.86$ $N_{cr,z}=22583900.00$ $\lambda'_z=0.11$ Curva c: $\Phi_z=0.00$ $\chi_z=1.00$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=0.95, 0.95, 0.76, 0.95$
Verifica YY: $0.00+0.04+0.00=0.04$
Verifica ZZ: $0.00+0.03+0.00=0.03$
- Asta n. 5001 (-7 -1086) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.07$ - Classe 3
Sollecitazioni: $N=-27112.40$ $T=78.91$ $M=141.48$ $M_x=2.46$
Tensioni: $\sigma_N=-545.18$ $\sigma_M=-76.12$ $\tau=0.66$ $\sigma_{max}=-621.30$
Tensioni: $\sigma_N=-545.18$ $\sigma_M=-0.00$ $\tau=3.83$ $\tau_{max}=3.83$
Tensioni: $\sigma_N=-545.18$ $\sigma_M=-76.12$ $\tau=0.66$ $\sigma_{ID,max}=621.30$
- Verifica a taglio dir. Z [4.2.16] - CC 11 SLU $X_l=4.22$ - Classe 1
Sollecitazioni: $T=73.87$
 $V,Ed=73.87$ $V_c,Rd=47874.70$ $V,Ed/V_c,Rd=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU $X_l=0.07$ - Classe 1
Sollecitazioni: $N=-20940.20$ $T=73.87$ $M=95.91$
 $M,Ed=95.91$ $M,V,c,Rd=6410.95$
 $N,Ed=-20940.20$ $N_c,Rd=-130249.00$ YY $n=N,Ed/N_c,Rd=0.16$ $MN,c,Rd=5380.25$ $M,Ed/MN,c,Rd=0.02$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N,Ed=-27112.40$ $M,Ed=148.88$ $L=4.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, ----, ----$
 $\lambda=75.24$ $N_{cr}=182065.00$ $\lambda'=0.87$
Curva a: $\Phi=0.95$ $\chi_{min}=0.76$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.09, ----, ----, ----$
Verifica: $0.28+0.01=0.29$
- Asta n. 5002 (-3 -1085) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.17$ - Classe 3
Sollecitazioni: $N=-22638.20$ $T=120.43$ $M=244.19$ $M_x=9.97$
Tensioni: $\sigma_N=-455.21$ $\sigma_M=-131.39$ $\tau=2.68$ $\sigma_{max}=-586.60$
Tensioni: $\sigma_N=-455.21$ $\sigma_M=-0.00$ $\tau=7.51$ $\tau_{max}=7.51$
Tensioni: $\sigma_N=-455.21$ $\sigma_M=-131.39$ $\tau=2.68$ $\sigma_{ID,max}=586.62$
- Verifica a taglio e torsione dir. Z [4.2.25] - CC 11 SLU $X_l=4.22$ - Classe 1
Sollecitazioni: $T=112.70$ $M_x=8.43$
 $V,Ed=112.70$ $V_c,Rd,Red=47803.00$ $V,Ed/V_c,Rd,Red=0.00$
- Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 11 SLU $X_l=0.17$ - Classe 1
Sollecitazioni: $N=-15898.90$ $T=112.70$ $M=214.79$ $M_x=8.43$
 $M,Ed=214.79$ $M,V,c,Rd=6410.95$
 $N,Ed=-15898.90$ $N_c,Rd=-130249.00$ YY $n=N,Ed/N_c,Rd=0.12$ $MN,c,Rd=5628.39$ $M,Ed/MN,c,Rd=0.04$
- Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
Sollecitazioni: $N,Ed=-22638.20$ $M,Ed=248.17$ $L=4.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, ----, ----$
 $\lambda=75.24$ $N_{cr}=182065.00$ $\lambda'=0.87$
Curva a: $\Phi=0.95$ $\chi_{min}=0.76$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.06, ----, ----, ----$
Verifica: $0.23+0.01=0.24$
- Asta n. 5003 (-32 -1088) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.07$ - Classe 3
Sollecitazioni: $N=-21114.00$ $T=59.99$ $M=83.32$ $M_x=2.67$
Tensioni: $\sigma_N=-424.56$ $\sigma_M=-44.83$ $\tau=0.72$ $\sigma_{max}=-469.39$
Tensioni: $\sigma_N=-424.56$ $\sigma_M=-0.00$ $\tau=3.12$ $\tau_{max}=3.12$
Tensioni: $\sigma_N=-424.56$ $\sigma_M=-44.83$ $\tau=0.72$ $\sigma_{ID,max}=469.39$

- Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l=4.22$ - Classe 1
 Sollecitazioni: $T=67.09$ $M_x=2.72$
 $V,Ed=67.09$ $V_c,Rd,Red=47851.60$ $V,Ed/V_c,Rd,Red=0.00$
 - Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=4.22$ - Classe 1
 Sollecitazioni: $N=-17115.00$ $T=67.09$ $M=73.87$ $M_x=2.72$
 $M,Ed=73.87$ $M,V,c,Rd=6410.95$
 $N,Ed=-17115.00$ $N_c,Rd=-130249.00$ YY $n=N,Ed/N_c,Rd=0.13$ $MN,c,Rd=5568.53$ $M,Ed/MN,c,Rd=0.01$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-21114.00$ $M,Ed=95.34$ $L=4.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, ----, ----$
 $\lambda=75.24$ $N_{cr}=182065.00$ $\lambda'=0.87$
 Curva a: $\Phi=0.95$ $\chi_{min}=0.76$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.06, ----, ----, ----$
 Verifica: $0.21+0.01=0.22$
- Asta n. 5004 (-27 -1087) Sez. 33 CHS168.3x10 Crit. 1

- Verifica in termini tensionali [4.2.4] - CC 5 SND $X_l=0.17$ - Classe 3
 Sollecitazioni: $N=-17432.00$ $T=93.55$ $M=176.80$ $M_x=5.66$
 Tensioni: $\sigma_N=-350.52$ $\sigma_M=-95.13$ $\tau=1.52$ $\sigma_{max}=-445.65$
 Tensioni: $\sigma_N=-350.52$ $\sigma_M=-0.00$ $\tau=5.27$ $\tau_{max}=5.27$
 Tensioni: $\sigma_N=-350.52$ $\sigma_M=-95.13$ $\tau=1.52$ $\sigma_{TD,max}=445.66$
 - Verifica a taglio e torsione dir. Z [4.2.25] - CC 9 SLU $X_l=4.22$ - Classe 1
 Sollecitazioni: $T=99.65$ $M_x=4.53$
 $V,Ed=99.65$ $V_c,Rd,Red=47836.20$ $V,Ed/V_c,Rd,Red=0.00$
 - Verifica a presso o tenso-flessione retta YY (4.2.4.1.2.7) - CC 9 SLU $X_l=0.17$ - Classe 1
 Sollecitazioni: $N=-12638.90$ $T=99.65$ $M=175.71$ $M_x=4.53$
 $M,Ed=175.71$ $M,V,c,Rd=6410.95$
 $N,Ed=-12638.90$ $N_c,Rd=-130249.00$ YY $n=N,Ed/N_c,Rd=0.10$ $MN,c,Rd=5788.85$ $M,Ed/MN,c,Rd=0.03$
 - Verifica di stabilità aste presso-inflesse (C4.2.4.1.3.3.2) - CC 5 SND - Classe 3
 Sollecitazioni: $N,Ed=-17432.00$ $M,Ed=182.24$ $L=4.22$
 $\alpha_{my}, \alpha_{mz}, \alpha_{LT}=0.95, ----, ----$
 $\lambda=75.24$ $N_{cr}=182065.00$ $\lambda'=0.87$
 Curva a: $\Phi=0.95$ $\chi_{min}=0.76$
 $K_{yy}, K_{yz}, K_{zy}, K_{zz}=1.04, ----, ----, ----$
 Verifica: $0.18+0.01=0.19$

Parametri di calcolo

La modellazione della struttura e la rielaborazione dei risultati del calcolo sono stati effettuati con: ModeSt ver. 8.19, prodotto da Tecnisoft s.a.s. - Prato

La struttura è stata calcolata utilizzando come solutore agli elementi finiti: Xfinest ver. 2015, prodotto da Ce.A.S. S.r.l. - Milano

Tipo di normativa: stati limite D.M. 18

Tipo di calcolo: analisi sismica dinamica

Vincoli esterni: Considera sempre vincoli assegnati in modellazione

Schematizzazione piani rigidi:

Imp.1: impalcato non rigido

Imp.2: impalcato non rigido

Imp.3: impalcato non rigido

Imp.4: impalcato non rigido

Selezione solai controventati: 702 703 704 705 706 700 701 400 401 402 403 404 405 406 102 103 104 105 106 101 100 707 407 107 300 301 302 303 200

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

Generazione combinazioni

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

Opzioni di calcolo

- Sono state considerate infinitamente rigide le zone di connessione fra travi, pilastri ed elementi bidimensionali con una riduzione del 20%
- Calcolo con offset rigidi dai nodi: No
- Uniformare i carichi variabili: No
- Massimizzare i carichi variabili: No
- Minimo carico da considerare: 0.00 <daN/m>
- Recupero carichi zone rigide: taglio e momento flettente
- Modalità di combinazione momento torcente: disaccoppiare le azioni

Opzioni del solutore

- Tipo di elemento bidimensionale: QF46
- Calcolo sforzo nei nodi: No
- Trascura deformabilità a taglio delle aste: No
- Analisi dinamica con metodo di Lanczos: Sì
- Check sequenza di Sturm: Sì
- Soluzione matrice con metodo ver. 5.1: No
- Analisi non lineare con Newton modificato: No
- Usa formulazione secante per buckling: No
- Trascura buckling torsionale: No

Dati struttura

- Sito di costruzione: via della liberta' 55 san casciano LON. 11.18800 LAT. 43.66140
- Contenuto tra ID reticolo: 20502 20501 20724 20723

Simbologia

TCC=Tipo di combinazione di carico

SLU = Stato limite ultimo

SLU S = Stato limite ultimo (azione sismica)

SLE R = Stato limite d'esercizio, combinazione rara

SLE F = Stato limite d'esercizio, combinazione frequente

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

SLD = Stato limite di danno

SLV = Stato limite di salvaguardia della vita

SLC = Stato limite di prevenzione del collasso

SLO = Stato limite di operatività

SLU I = Stato limite di resistenza al fuoco

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

T_R = Periodo di ritorno <anni>

A_g = Accelerazione orizzontale massima al sito

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

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

S_s = Coefficiente di amplificazione stratigrafica

C_c = Coefficiente funzione della categoria del suolo

TCC	T _R	Ag <g>	Fo	Tc*	S _s	C _c
SLO	45	0.0499	2.60	0.26	1.20	1.44
SLV	202	0.0852	2.61	0.29	1.20	1.41

- Edificio esistente: Sì
- Tipo di opera: Opera ordinaria
- Vita nominale V_N: 50.00
- Classe d'uso: Classe III
- SL Esercizio: SLOPvr 81.00, SLDPvr No

- SL Ultimi: SLVPvr 31.00, SLCPvr No
- Struttura dissipativa: No
- Quota di riferimento: -2.60 <m>
- Altezza della struttura: 9.64 <m>
- Numero piani edificio: 2
- Coefficiente θ : 0.00
- Edificio regolare in altezza: No
- Edificio regolare in pianta: No
- Forze orizzontali convenzionali per stati limite non sismici: No
- Genera stati limite per verifiche di resistenza al fuoco: No

Dati di piano**Simbologia**

Imp. = Numero dell'impalcato
 Lx = Dimensione del piano in dir. X
 Ly = Dimensione del piano in dir. Y
 Ex = Eccentricità in dir. X
 Ey = Eccentricità in dir. Y
 Ea = Eccentricità complessiva

Imp.	Lx <m>	Ly <m>	Ex <m>	Ey <m>	Ea <m>
1	40.84	14.07	2.04	0.70	2.16
2	16.61	8.70	0.83	0.43	0.94
3	16.61	8.70	0.83	0.43	0.94
4	40.84	14.07	2.04	0.70	2.16

Dati di calcolo

- Categoria del suolo di fondazione: B
- Tipologia strutturale: c.a. o prefabbricata a telaio a più piani e più campate

Periodo T_1	0.28525
Coeff. λ SLO	1.00
Coeff. λ SLV	1.00
Rapporto di sovraresistenza (α_u/α_1)	1.15
Valore di riferimento del fattore di struttura (q_0)	3.45
Fattore riduttivo (K_w)	1.00
Fattore riduttivo regolarità in altezza (KR)	0.80
Fattore di comportamento dissipativo (q)	1.50
Fattore di comportamento non dissipativo (qND)	1.50
Fattore di comportamento per SLD (qD)	1.50

- Categoria topografica: T1 - Superficie pianeggiante, pendii e rilievi isolati con inclinazione media $i \leq 15^\circ$
- Coeff. amplificazione topografica S_T : 1.00
- Fattore di comportamento per sisma verticale (qv): 1.50
- Modalità di calcolo modi di vibrare: Autovalori
- Numero modi: 100
- Modi da considerare: Tutti i modi calcolati
- Smorzamento spettro: 5.00%

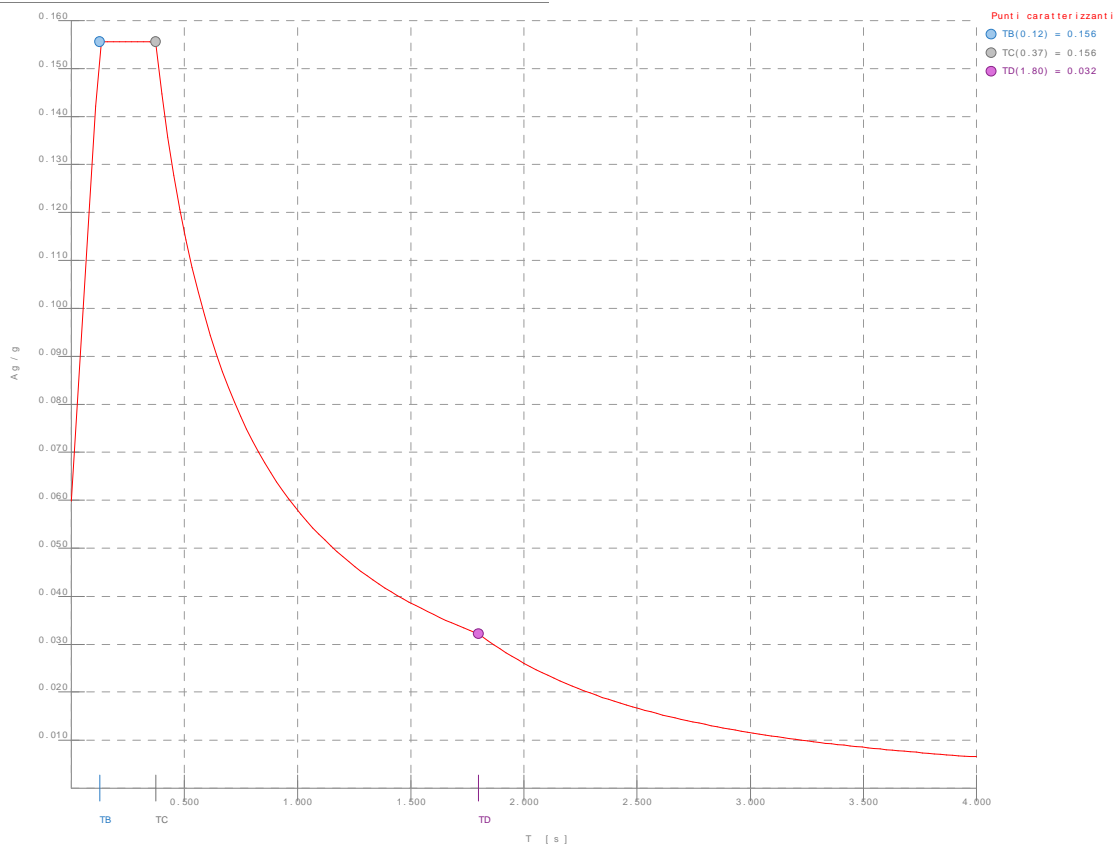


Figura numero 1: Spettro SLO

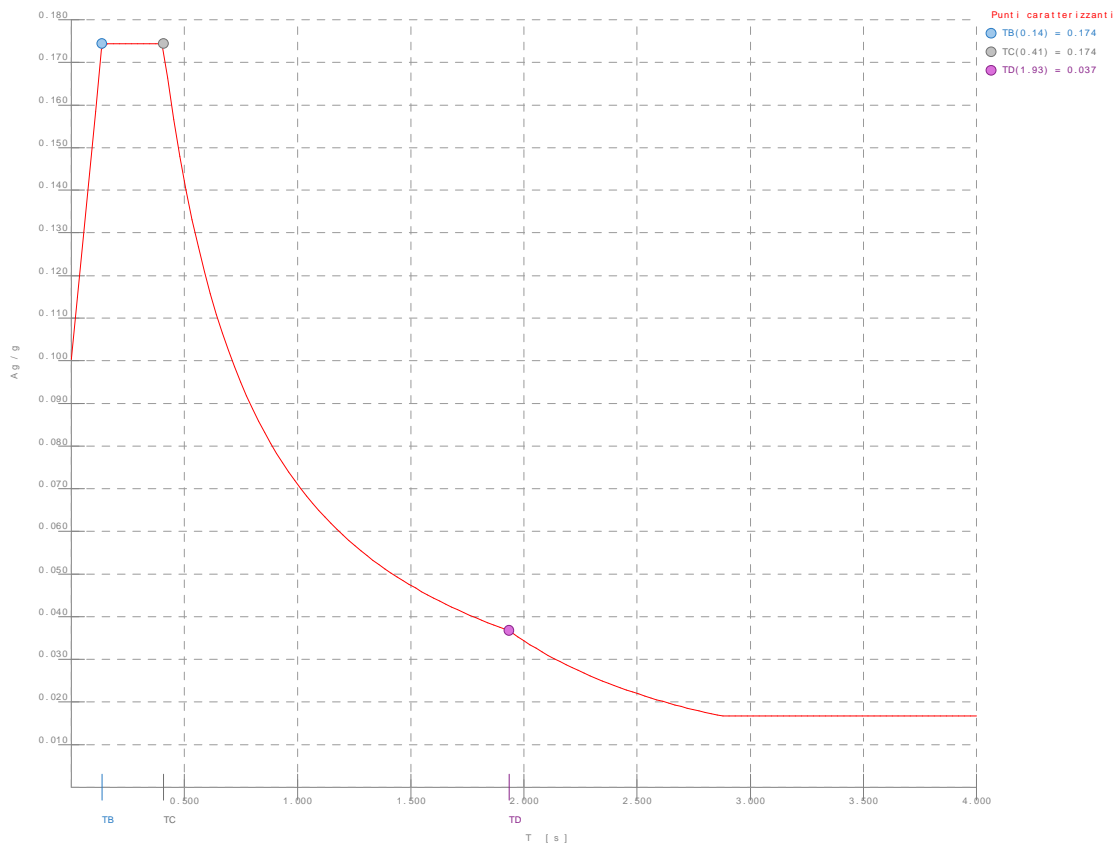


Figura numero 2: Spettro SND

- Angolo di ingresso del sisma: 0.00 <grad>

Ambienti di carico
Simbologia

N = Numero
 Comm. = Commento
 1 = G1
 2 = G2
 3 = Qk folla
 4 = Neve
 5 = Manutenzione
 F = azioni orizzontali convenzionali
 SLU = Stato limite ultimo
 SLR = Stato limite per combinazioni rare
 SLF = Stato limite per combinazioni frequenti
 SLQ/D = Stato limite per combinazioni quasi permanenti o di danno
 S = Sì
 N = No

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

Elenco combinazioni di carico simboliche

Simbologia

CC = Numero della combinazione delle condizioni di carico elementari
 Comm. = Commento
 TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)

CC	Comm.	TCC	1	2	3	4	5	±S
1	Amb. 1 (Sisma)	SLU S	1	1	Ψ_2	Ψ_2	Ψ_2	1
2	Amb. 2 (SLU)	SLU	γ_{\max}	γ_{\max}	$\Psi_0 \cdot \gamma_{\max}$	$\Psi_0 \cdot \gamma_{\max}$	γ_{\max}	-----
3	Amb. 2 (SLU)	SLU	γ_{\max}	γ_{\max}	$\Psi_0 \cdot \gamma_{\max}$	γ_{\max}	$\Psi_0 \cdot \gamma_{\max}$	-----
4	Amb. 2 (SLU)	SLU	γ_{\max}	γ_{\max}	γ_{\max}	$\Psi_0 \cdot \gamma_{\max}$	$\Psi_0 \cdot \gamma_{\max}$	-----

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

Considera sollecitazioni dinamiche con segno dei modi principali: No

Combinazioni delle CCE

Simbologia

CC = Numero della combinazione delle condizioni di carico elementari
 Comm. = Commento
 TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)

An. = Tipo di analisi
 L = Lineare
 NL = Non lineare

Bk = Buckling
 S = Sì
 N = No

CC	Comm.	TCC	An.	Bk	1	2	3	4	5	±S X	±S Y
1	Amb. 1 (SLU S) S +X+0.3Y	SND	L	N	1.00	1.00	0.60	0.00	0.00	1.00	0.30
2	Amb. 1 (SLE) S +X+0.3Y	SLO	L	N	1.00	1.00	0.60	0.00	0.00	1.00	0.30
3	Amb. 1 (SLU S) S +X-0.3Y	SND	L	N	1.00	1.00	0.60	0.00	0.00	1.00	-0.30
4	Amb. 1 (SLE) S +X-0.3Y	SLO	L	N	1.00	1.00	0.60	0.00	0.00	1.00	-0.30
5	Amb. 1 (SLU S) S +0.3X+Y	SND	L	N	1.00	1.00	0.60	0.00	0.00	0.30	1.00
6	Amb. 1 (SLE) S +0.3X+Y	SLO	L	N	1.00	1.00	0.60	0.00	0.00	0.30	1.00
7	Amb. 1 (SLU S) S -0.3X+Y	SND	L	N	1.00	1.00	0.60	0.00	0.00	-0.30	1.00
8	Amb. 1 (SLE) S -0.3X+Y	SLO	L	N	1.00	1.00	0.60	0.00	0.00	-0.30	1.00

9	Amb. 2 (SLU)	SLU	L	N	1.30	1.50	1.05	0.75	1.50	0.00	0.00
10	Amb. 2 (SLU)	SLU	L	N	1.30	1.50	1.05	1.50	0.00	0.00	0.00
11	Amb. 2 (SLU)	SLU	L	N	1.30	1.50	1.50	0.75	0.00	0.00	0.00

Elenco masse nodi

Simbologia

Nodo = Numero del nodo

Mo = Massa orizzontale

Nodo	Mo <kg>	Nodo	Mo <kg>	Nodo	Mo <kg>	Nodo	Mo <kg>	Nodo	Mo <kg>	Nodo	Mo <kg>	Nodo	Mo <kg>
-1094	6277.23	-1093	11628.00	-1092	8666.66	-1091	11688.00	-1090	11664.90	-1089	8648.06	-1088	5540.28
-1087	5540.28	-1086	7895.73	-1085	7895.73	-1083	673.10	-1075	1061.85	-1074	149.93	-1073	765.80
-1072	245.74	-1071	1537.71	-1070	3017.75	-1069	137.78	-1068	158.98	-1067	1570.07	-1066	1591.26
-1065	180.27	-1063	216.30	-1060	113.90	-1059	1022.34	-1058	111.93	-1056	230.70	-1053	111.93
-1052	2201.04	-1051	58.51	-1045	6353.13	-1044	634.15	-1043	292.53	-1042	270.62	-1040	372.99
-1039	372.99	-1038	372.99	-1037	372.99	-1034	373.00	-1033	373.00	-1032	59.30	-1031	59.30
-1030	59.30	-1029	59.30	-1028	59.30	-1027	59.28	-1026	59.28	-1025	59.28	-1024	59.28
-1023	59.28	-1022	59.28	-1021	59.28	-1020	59.28	-1019	59.28	-1018	59.28	-1017	59.28
-1016	59.28	-1015	59.28	-1014	59.28	-1013	59.28	-1012	66.04	-1011	66.04	-1010	66.04
-1009	66.04	-1008	66.04	-1007	66.04	-1006	66.04	-1005	66.04	-1004	66.04	-1003	66.04
-1002	66.04	-1001	66.04	-1000	66.04	-999	66.04	-998	66.04	-997	66.04	-996	66.04
-995	66.04	-994	66.04	-993	66.04	-992	51.36	-991	36.69	-990	51.36	-989	36.69
-988	51.36	-987	36.69	-986	51.36	-985	51.36	-984	36.69	-983	36.69	-982	46.11
-981	32.93	-980	46.11	-979	32.93	-978	46.11	-977	32.93	-976	46.11	-975	46.11
-974	32.93	-973	32.93	-972	45.03	-971	45.03	-970	45.03	-969	45.03	-968	45.03
-967	40.42	-966	40.42	-965	40.42	-964	40.42	-963	40.42	-962	40.42	-961	40.42
-960	40.42	-959	40.42	-958	40.42	-957	45.03	-956	45.03	-955	45.03	-954	45.03
-953	45.03	-952	32.94	-951	32.94	-950	32.94	-949	32.94	-948	32.94	-947	36.69
-946	36.69	-945	36.69	-944	36.69	-943	36.69	-942	55.03	-941	55.03	-940	55.03
-939	55.03	-938	55.03	-937	55.03	-936	55.03	-935	55.03	-934	55.03	-933	55.03
-932	55.03	-931	55.03	-930	55.03	-929	55.03	-928	55.03	-927	55.03	-926	55.03
-925	55.03	-924	55.03	-923	55.03	-922	55.03	-921	55.03	-920	55.03	-919	55.03
-918	55.03	-917	55.03	-916	55.03	-915	55.03	-914	55.03	-913	55.03	-912	49.41
-911	49.41	-910	49.41	-909	49.41	-908	49.41	-907	49.41	-906	49.41	-905	49.41
-904	49.41	-903	49.41	-902	49.41	-901	49.41	-900	49.41	-899	49.41	-898	49.41
-897	49.41	-896	49.41	-895	49.41	-894	49.41	-893	49.41	-892	49.41	-891	49.41
-890	49.41	-889	49.41	-888	49.41	-887	49.41	-886	49.41	-885	49.41	-884	49.41
-883	49.41	-882	49.41	-881	49.41	-880	49.41	-879	49.41	-878	49.41	-877	55.03
-876	55.03	-875	55.03	-874	55.03	-873	55.03	-872	176.10	-871	174.75	-870	173.40
-869	172.05	-868	170.71	-867	508.73	-866	507.72	-865	506.71	-864	505.71	-863	504.70
-862	803.10	-861	802.16	-860	801.21	-859	800.28	-858	799.33	-857	529.34	-856	528.08
-855	526.82	-854	525.56	-853	524.30	-847	785.42	-846	784.47	-845	783.53	-844	782.59
-843	781.65	-842	509.65	-841	508.39	-840	507.13	-839	505.87	-838	504.61	-832	77.55
-831	77.55	-830	100.06	-829	100.06	-828	79.85	-827	79.85	-826	65.06	-825	65.07
-824	94.79	-823	94.78	-822	94.78	-821	94.78	-820	94.78	-819	94.79	-818	94.79
-817	122.30	-816	122.30	-815	122.30	-814	122.30	-813	122.30	-812	122.30	-811	122.30
-810	97.60	-809	97.60	-808	97.60	-807	97.60	-806	97.60	-805	97.60	-804	97.60
-803	113.75	-802	113.74	-801	113.74	-800	113.74	-799	146.76	-798	146.76	-797	146.76
-796	146.76	-795	117.12	-794	117.12	-793	117.12	-792	117.12	-791	63.19	-790	63.19
-789	81.53	-788	81.53	-787	88.47	-786	114.15	-785	137.19	-784	151.84	-783	165.10
-782	598.80	-781	456.21	-780	444.29	-779	443.83	-778	15.12	-777	15.20	-776	15.20
-775	15.20	-774	30.24	-773	30.41	-772	30.41	-771	30.41	-770	33.71	-769	33.89
-768	33.89	-767	33.89	-766	37.23	-765	37.43	-764	37.43	-763	37.43	-762	42.10
-761	42.33	-760	42.33	-759	42.33	-758	42.77	-757	43.00	-756	43.00	-755	43.00
-754	32.51	-753	32.69	-752	32.69	-751	32.69	-750	24.16	-749	24.29	-748	24.29
-747	24.29	-746	31.53	-745	31.71	-744	31.71	-743	31.71	-742	15.72	-741	31.44
-740	15.80	-739	31.61	-738	15.80	-737	31.61	-736	15.80	-735	31.61	-734	15.80
-733	15.80	-732	15.80	-731	15.80	-730	15.80	-729	15.80	-728	15.80	-727	31.61
-726	31.61	-725	31.61	-724	31.61	-723	31.61	-722	31.61	-721	31.61	-720	31.71
-719	31.71	-718	31.71	-717	31.71	-716	31.71	-715	31.71	-714	31.71	-713	24.29
-712	24.29	-711	24.29	-710	24.29	-709	24.29	-708	24.29	-707	24.29	-706	32.69
-705	32.69	-704	32.69	-703	32.69	-702	32.69	-701	32.69	-700	32.69	-699	43.00
-698	43.00	-697	43.00	-696	43.00	-695	43.00	-694	43.00	-693	43.00	-692	42.33
-691	42.33	-690	42.33	-689	42.33	-688	42.33	-687	42.33	-686	42.33	-685	37.43
-684	37.43	-683	37.43	-682	37.43	-681	37.43	-680	37.43	-679	37.43	-678	33.89
-677	33.89	-676	33.89	-675	33.89	-674	33.89	-673	33.89	-672	33.89	-671	30.41
-670	15.20	-669	30.41	-668	15.20	-667	30.41	-666	15.20	-665	30.41	-664	15.20
-663	30.41	-662	15.20	-661	30.41	-660	15.20	-659	30.41	-658	15.20	-657	735.35
-656	31.71	-655	31.61	-654	966.11	-653	417.77	-652	464.62	-651	510.71	-650	32.67
-649	24.28	-648	31.69	-647	15.80	-646	31.59	-645	32.65	-644	24.27	-643	31.68
-642	15.79	-641	31.58	-640	15.79	-639	31.58	-638	31.68	-637	24.27	-636	32.65
-635	42.98	-634	42.96	-633	42.96	-632	42.96	-631	32.65	-630	24.27	-629	31.68
-628	15.79	-627	31.58	-626	15.79	-625	31.58	-624	31.68	-623	24.27	-622	32.65
-621	42.96	-620	42.96	-619	32.65	-618	24.27	-617	31.68	-616	15.79	-615	31.58
-614	15.79	-613	31.58	-612	31.68	-611	24.27	-610	32.65	-609	42.96	-608	42.96
-607	32.65	-606	24.27	-605	31.68	-604	15.79	-603	31.58	-602	15.20	-601	30.39
-600	33.87	-599	37.41	-598	42.31	-597	15.19	-596	30.38	-595	33.86	-594	37.39

-593	42.29	-592	15.19	-591	30.38	-590	33.86	-589	37.39	-588	42.29	-587	15.19
-586	30.38	-585	33.86	-584	37.39	-583	42.29	-582	15.19	-581	30.38	-580	33.86
-579	37.39	-578	42.29	-577	15.19	-576	30.38	-575	33.86	-574	37.39	-573	42.29
-572	15.19	-571	30.38	-570	33.86	-569	37.39	-568	42.29	-567	15.19	-566	30.38
-565	33.86	-564	37.39	-563	42.29	-562	37.39	-561	33.86	-560	30.38	-559	37.40
-558	33.86	-557	30.38	-556	37.40	-555	33.86	-554	30.38	-553	42.98	-552	42.98
-551	32.67	-550	32.67	-549	31.69	-548	31.69	-547	31.59	-546	31.59	-545	24.28
-544	24.28	-543	61.91	-542	61.91	-541	89.02	-540	89.02	-539	62.51	-538	62.51
-537	368.85	-536	356.69	-535	357.81	-534	485.24	-533	274.16	-532	411.96	-528	468.30
-512	33.10	-511	33.10	-509	778.38	-508	755.21	-507	756.70	-506	1022.72	-505	44.53
-504	43.06	-503	43.20	-502	85.24	-501	44.53	-500	43.06	-499	43.20	-498	85.24
-497	517.48	-496	470.75	-495	423.27	-494	84.42	-493	41.43	-492	46.17	-491	50.99
-490	121.38	-489	121.38	-488	50.99	-487	46.17	-486	84.42	-485	41.43	-484	11970.70
-483	11970.70	-482	9562.57	-481	9562.57	-480	9562.57	-479	9562.57	-478	11898.20	-477	11898.20
-476	280.33	-475	280.33	-474	280.33	-473	280.33	-472	7361.33	-471	7382.83	-470	7382.78
-469	7361.31	-468	11200.00	-467	11200.00	-466	11240.90	-465	11240.90	-460	6277.27	-459	4684.85
-457	11628.10	-452	8642.17	-447	11659.00	-445	8666.75	-443	11688.00	-440	3598.10	-439	5642.73
-438	5642.69	-437	3598.06	-434	6582.52	-433	1109.35	-432	172.37	-431	11645.20	-430	172.37
-429	11645.20	-427	172.37	-424	172.37	-422	7176.51	-421	352.54	-420	252.11	-416	250.73
-415	172.37	-414	10340.20	-413	1241.38	-412	250.73	-411	172.37	-408	591.96	-407	10340.20
-406	8141.45	-112	4689.82	-111	4648.67	-109	17995.60	-108	18026.60	-106	19290.60	-104	19430.60
-82	10945.60	-81	11053.70	-80	6445.20	-79	6197.48	-63	4510.96	-62	12977.90	-61	13625.80
-60	3415.94	-59	3414.15	-58	7892.71	-57	14732.40	-56	14615.90	-55	9442.29	-54	7571.58
-53	18850.80	-52	18866.00	-51	18754.90	-50	13445.00	-49	6874.04	-48	6812.51	-47	6491.95
-46	9070.63	-45	10588.80	-44	19252.70	-43	18311.10	-42	19108.60	-41	18160.60	-40	8412.13
-39	7994.86	-38	8167.94	-37	7999.11	-36	8172.25	-35	12546.60	-34	20837.40	-33	16673.50
-32	12335.70	-31	12041.00	-30	22625.00	-29	19337.10	-28	15178.00	-27	18917.40	-25	12220.50
-24	10862.10	-23	10357.30	-22	15617.10	-21	10887.80	-20	7886.90	-19	10301.30	-18	7881.62
-17	9598.23	-16	9533.13	-15	12624.00	-14	12117.40	-13	13795.10	-12	15120.00	-11	15654.40
-10	11327.70	-9	31854.40	-8	27795.40	-7	28194.70	-6	22449.20	-5	18993.40	-4	14860.60
-3	22537.30	-2	3543.18	-1	20001.60	1	5194.25	2	13842.20	3	7987.76	5	17213.80
10	11095.90	11	11004.10	12	11009.50	13	1420.80	14	10860.90	15	578.10	16	824.38
17	694.43	18	1128.71	21	21635.80	22	3603.02	23	8917.54	24	8817.55	26	10671.00
27	11395.10	28	10979.80	29	11691.70	31	23659.40	33	37.37	34	42.30	36	28056.10
37	10091.80	38	14191.70	39	8377.14	40	6171.69	41	12837.00	42	11232.70	43	11227.60
63	17006.70	64	1588.04	65	10999.50	66	1676.48	67	1230.83	68	738.16	69	1162.61
70	8984.93	71	20875.60	72	20659.90	73	575.72	74	15813.90	75	14636.20	76	4842.73
77	4272.34	78	7380.89	79	5806.60	80	5804.40	81	14887.70	82	12140.10	83	12275.70
84	4872.21	85	1479.39	86	371.96	87	642.48	88	657.61	89	8123.26	90	918.43
118	13186.00	119	20629.50	120	20628.30	121	13160.70	122	24912.50	123	10751.30	152	50.96
153	57.69	154	57.69	155	50.96	156	518.34	157	583.38	158	58.58	159	58.58
160	37.37	161	42.30	162	37.37	163	42.30	164	42.30	165	37.36	166	42.30
167	37.36	168	42.30	169	37.36	170	42.30	171	37.36	172	42.30	173	37.36
174	42.30	175	37.36	176	42.30	177	37.36	178	42.32	179	37.38	180	511.58
181	37.40	182	37.40	183	37.40	184	37.40	185	37.40	186	37.40	187	37.40
188	42.34	189	42.34	190	42.34	191	42.34	192	42.34	193	42.34	194	42.34
195	42.34	196	42.34	197	42.34	198	42.11	199	37.40	200	37.40	201	37.40
202	37.20	203	184.61	204	166.31								

Totali masse nodi

Mo
<kg>
2053590.00

Elenco modi di vibrare, masse partecipanti e coefficienti di partecipazione

Simbologia

Modo =Numero del modo di vibrare
 C =* indica che il modo è stato considerato
 T =Periodo
 Diff.=Minima differenza percentuale dagli altri periodi
 Φ_x =Coefficiente di partecipazione in dir. X
 Φ_y =Coefficiente di partecipazione in dir. Y
 Φ_z =Coefficiente di partecipazione in dir. Z
 %Mx =Percentuale massa partecipante in dir. X
 %My =Percentuale massa partecipante in dir. Y
 %Mz =Percentuale massa partecipante in dir. Z
 %Jpz =Percentuale momento d'inerzia polare partecipante intorno all'asse Z

Modo	C	T	Diff.	Φ_x	Φ_y	Φ_z	%Mx	%My	%Mz	%Jpz
1	*	0.36	16.76	5.41	21.33	0.00	0.01	0.22	0.00	0.00
2	*	0.31	3.56	-2.43	-14.57	0.00	0.00	0.10	0.00	0.00
3	*	0.30	3.56	-68.71	19.53	0.00	2.30	0.19	0.00	0.00
4	*	0.29	5.02	297.02	-19.61	0.00	42.96	0.19	0.00	0.00
5	*	0.23	5.70	-17.06	-13.56	0.00	0.14	0.09	0.00	0.00
6	*	0.21	4.16	-14.84	-178.62	0.00	0.11	15.54	0.00	0.00
7	*	0.20	4.16	-22.89	-283.32	0.00	0.26	39.09	0.00	0.00
8	*	0.18	2.53	31.13	-40.60	0.00	0.47	0.80	0.00	0.00

9*	0.18	2.53	0.13	117.42	0.00	0.00	6.71	0.00	0.00
10*	0.17	0.75	-156.19	5.06	0.00	11.88	0.01	0.00	0.00
11*	0.17	0.75	-19.05	3.50	0.00	0.18	0.01	0.00	0.00
12*	0.15	6.46	-2.20	-1.36	0.00	0.00	0.00	0.00	0.00
13*	0.14	3.26	-0.77	-3.53	0.00	0.00	0.01	0.00	0.00
14*	0.14	3.26	-94.33	-1.85	0.00	4.33	0.00	0.00	0.00
15*	0.13	4.84	-2.93	4.72	0.00	0.00	0.01	0.00	0.00
16*	0.12	0.17	0.50	-7.48	0.00	0.00	0.03	0.00	0.00
17*	0.12	0.16	0.32	-6.94	0.00	0.00	0.02	0.00	0.00
18*	0.12	0.02	14.31	-0.29	0.00	0.10	0.00	0.00	0.00
19*	0.12	0.02	0.34	-0.08	0.00	0.00	0.00	0.00	0.00
20*	0.12	0.03	5.41	-0.08	0.00	0.01	0.00	0.00	0.00
21*	0.12	0.03	1.90	-0.13	0.00	0.00	0.00	0.00	0.00
22*	0.12	0.01	-1.91	0.12	0.00	0.00	0.00	0.00	0.00
23*	0.12	0.01	2.76	-0.05	0.00	0.00	0.00	0.00	0.00
24*	0.11	6.95	-73.87	-0.72	0.00	2.66	0.00	0.00	0.00
25*	0.09	19.85	-101.40	7.84	0.00	5.01	0.03	0.00	0.00
26*	0.07	4.31	-10.13	-97.50	0.00	0.05	4.63	0.00	0.00
27*	0.07	4.31	-0.41	19.99	0.00	0.00	0.19	0.00	0.00
28*	0.07	1.37	1.27	92.43	0.00	0.00	4.16	0.00	0.00
29*	0.06	1.37	-15.20	5.24	0.00	0.11	0.01	0.00	0.00
30*	0.06	5.82	-89.43	-4.41	0.00	3.89	0.01	0.00	0.00
31*	0.06	0.35	-2.41	55.97	0.00	0.00	1.53	0.00	0.00
32*	0.06	0.35	8.07	4.60	0.00	0.03	0.01	0.00	0.00
33*	0.05	0.99	13.65	-17.14	0.00	0.09	0.14	0.00	0.00
34*	0.05	0.99	10.53	55.84	0.00	0.05	1.52	0.00	0.00
35*	0.05	1.50	58.55	1.70	0.00	1.67	0.00	0.00	0.00
36*	0.05	1.50	-15.38	1.75	0.00	0.12	0.00	0.00	0.00
37*	0.05	6.33	37.42	-13.86	0.00	0.68	0.09	0.00	0.00
38*	0.04	2.64	161.65	-17.28	0.00	12.73	0.15	0.00	0.00
39*	0.04	2.64	-0.42	1.40	0.00	0.00	0.00	0.00	0.00
40*	0.04	2.89	40.73	-25.93	0.00	0.81	0.33	0.00	0.00
41*	0.04	0.69	-16.35	-99.05	0.00	0.13	4.78	0.00	0.00
42*	0.04	0.69	-6.43	54.99	0.00	0.02	1.47	0.00	0.00
43*	0.04	1.65	-9.98	-8.93	0.00	0.05	0.04	0.00	0.00
44*	0.03	10.49	-13.94	-177.43	0.00	0.09	15.33	0.00	0.00
45*	0.03	2.79	72.24	-2.97	0.00	2.54	0.00	0.00	0.00
46*	0.03	2.79	100.45	-7.70	0.00	4.91	0.03	0.00	0.00
47*	0.03	5.40	-4.21	0.22	0.00	0.01	0.00	0.00	0.00
48*	0.02	6.98	-1.73	-14.31	0.00	0.00	0.10	0.00	0.00
49*	0.02	6.98	-33.48	6.39	0.00	0.55	0.02	0.00	0.00
50*	0.02	4.01	-9.98	-64.50	0.00	0.05	2.03	0.00	0.00
51*	0.02	1.94	-0.05	0.01	0.00	0.00	0.00	0.00	0.00
52*	0.02	1.94	-0.09	-0.01	0.00	0.00	0.00	0.00	0.00
53*	0.02	1.09	-2.71	0.21	0.00	0.00	0.00	0.00	0.00
54*	0.02	1.09	0.01	0.05	0.00	0.00	0.00	0.00	0.00
55*	0.02	0.97	0.59	7.74	0.00	0.00	0.03	0.00	0.00
56*	0.02	0.97	-26.24	19.98	0.00	0.34	0.19	0.00	0.00
57*	0.02	1.31	0.88	0.02	0.00	0.00	0.00	0.00	0.00
58*	0.02	0.32	-0.03	0.00	0.00	0.00	0.00	0.00	0.00
59*	0.02	0.32	-0.06	-0.01	0.00	0.00	0.00	0.00	0.00
60*	0.02	1.87	-5.01	0.08	0.00	0.01	0.00	0.00	0.00
61*	0.02	2.16	18.64	3.63	0.00	0.17	0.01	0.00	0.00
62*	0.01	2.62	-13.87	4.64	0.00	0.09	0.01	0.00	0.00
63*	0.01	3.22	22.17	6.94	0.00	0.24	0.02	0.00	0.00
64*	0.01	3.22	9.82	6.51	0.00	0.05	0.02	0.00	0.00
65*	0.01	8.42	-3.23	4.81	0.00	0.01	0.01	0.00	0.00
66*	0.01	0.47	0.08	-0.00	0.00	0.00	0.00	0.00	0.00
67*	0.01	0.47	-2.41	3.24	0.00	0.00	0.01	0.00	0.00
68*	0.01	0.75	0.24	0.14	0.00	0.00	0.00	0.00	0.00
69*	0.01	0.24	1.07	0.01	0.00	0.00	0.00	0.00	0.00
70*	0.01	0.24	0.05	-0.00	0.00	0.00	0.00	0.00	0.00
71*	0.01	0.69	-0.05	0.27	0.00	0.00	0.00	0.00	0.00
72*	0.01	0.69	-0.31	-0.23	0.00	0.00	0.00	0.00	0.00
73*	0.01	4.65	-0.11	-2.00	0.00	0.00	0.00	0.00	0.00
74*	0.01	6.80	0.90	-2.41	0.00	0.00	0.00	0.00	0.00
75*	0.01	6.31	-0.41	-1.97	0.00	0.00	0.00	0.00	0.00
76*	0.01	0.40	0.20	-0.01	0.00	0.00	0.00	0.00	0.00
77*	0.01	0.40	-0.67	4.08	0.00	0.00	0.01	0.00	0.00
78*	0.01	0.68	0.91	4.42	0.00	0.00	0.01	0.00	0.00
79*	0.01	0.68	-0.54	2.48	0.00	0.00	0.00	0.00	0.00
80*	0.01	2.29	-1.97	0.10	0.00	0.00	0.00	0.00	0.00
81*	0.01	2.53	0.21	0.42	0.00	0.00	0.00	0.00	0.00
82*	0.01	1.55	-0.21	0.48	0.00	0.00	0.00	0.00	0.00
83*	0.01	1.49	0.02	-0.00	0.00	0.00	0.00	0.00	0.00
84*	0.01	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85*	0.01	0.09	0.93	-0.24	0.00	0.00	0.00	0.00	0.00
86*	0.01	0.09	-3.17	0.53	0.00	0.00	0.00	0.00	0.00
87*	0.01	0.16	-0.01	-0.00	0.00	0.00	0.00	0.00	0.00
88*	0.01	0.16	-1.30	1.17	0.00	0.00	0.00	0.00	0.00

89*	0.01	2.57	1.86	-0.03	0.00	0.00	0.00	0.00	0.00
90*	0.01	2.21	-1.54	-0.02	0.00	0.00	0.00	0.00	0.00
91*	0.01	1.36	0.36	-0.37	0.00	0.00	0.00	0.00	0.00
92*	0.01	1.36	0.48	-0.17	0.00	0.00	0.00	0.00	0.00
93*	0.01	2.61	0.73	-0.19	0.00	0.00	0.00	0.00	0.00
94*	0.01	1.74	-0.03	1.09	0.00	0.00	0.00	0.00	0.00
95*	0.01	1.74	0.01	-0.00	0.00	0.00	0.00	0.00	0.00
96*	0.00	2.78	2.34	0.38	0.00	0.00	0.00	0.00	0.00
97*	0.00	3.19	-0.62	-0.30	0.00	0.00	0.00	0.00	0.00
98*	0.00	0.51	0.06	-0.11	0.00	0.00	0.00	0.00	0.00
99*	0.00	0.51	0.00	-0.00	0.00	0.00	0.00	0.00	0.00
100*	0.00	4.59	0.31	0.67	0.00	0.00	0.00	0.00	0.00
Tot.cons.						99.95	99.95	0.00	0.00

Elenco coefficienti di risposta**Simbologia**

Modo = Numero del modo di vibrare

Sx = Coefficiente di risposta (moltiplicato per 100) in dir. X

Sy = Coefficiente di risposta (moltiplicato per 100) in dir. Y

Stato limite di operatività

Modo	Sx	Sy
1	15.56	15.56
2	15.56	15.56
3	15.56	15.56
4	15.56	15.56
5	15.56	15.56
6	15.56	15.56
7	15.56	15.56
8	15.56	15.56
9	15.56	15.56
10	15.56	15.56
11	15.56	15.56
12	15.56	15.56
13	15.56	15.56
14	15.56	15.56
15	15.56	15.56
16	15.04	15.04
17	15.03	15.03
18	15.01	15.01
19	15.01	15.01
20	15.01	15.01
21	15.01	15.01
22	15.00	15.00
23	15.00	15.00
24	14.42	14.42
25	13.02	13.02
26	11.63	11.63
27	11.40	11.40
28	11.01	11.01
29	10.94	10.94
30	10.56	10.56
31	10.31	10.31
32	10.30	10.30
33	10.20	10.20
34	10.16	10.16
35	10.01	10.01
36	9.95	9.95
37	9.72	9.72
38	9.24	9.24
39	9.16	9.16
40	9.07	9.07
41	8.92	8.92
42	8.90	8.90
43	8.85	8.85
44	8.49	8.49
45	8.25	8.25
46	8.19	8.19
47	8.08	8.08
48	7.92	7.92
49	7.79	7.79
50	7.56	7.56
51	7.50	7.50
52	7.47	7.47
53	7.33	7.33
54	7.31	7.31
55	7.27	7.27

56	7.26	7.26
57	7.23	7.23
58	7.22	7.22
59	7.21	7.21
60	7.19	7.19
61	7.16	7.16
62	7.13	7.13
63	7.10	7.10
64	7.06	7.06
65	6.98	6.98
66	6.89	6.89
67	6.89	6.89
68	6.88	6.88
69	6.86	6.86
70	6.85	6.85
71	6.83	6.83
72	6.82	6.82
73	6.78	6.78
74	6.71	6.71
75	6.66	6.66
76	6.62	6.62
77	6.62	6.62
78	6.58	6.58
79	6.57	6.57
80	6.56	6.56
81	6.55	6.55
82	6.50	6.50
83	6.49	6.49
84	6.48	6.48
85	6.46	6.46
86	6.46	6.46
87	6.46	6.46
88	6.46	6.46
89	6.45	6.45
90	6.44	6.44
91	6.43	6.43
92	6.42	6.42
93	6.41	6.41
94	6.39	6.39
95	6.38	6.38
96	6.37	6.37
97	6.36	6.36
98	6.32	6.32
99	6.32	6.32
100	6.31	6.31

Stato limite di salvaguardia della vita

Modo	Sx	Sy
1	17.43	17.43
2	17.43	17.43
3	17.43	17.43
4	17.43	17.43
5	17.43	17.43
6	17.43	17.43
7	17.43	17.43
8	17.43	17.43
9	17.43	17.43
10	17.43	17.43
11	17.43	17.43
12	17.43	17.43
13	17.43	17.43
14	17.43	17.43
15	17.17	17.17
16	16.43	16.43
17	16.42	16.42
18	16.41	16.41
19	16.40	16.40
20	16.40	16.40
21	16.40	16.40
22	16.40	16.40
23	16.40	16.40
24	15.98	15.98
25	15.00	15.00
26	14.02	14.02
27	13.86	13.86
28	13.58	13.58
29	13.53	13.53
30	13.27	13.27
31	13.09	13.09
32	13.08	13.08

33	13.01	13.01
34	12.98	12.98
35	12.88	12.88
36	12.84	12.84
37	12.67	12.67
38	12.33	12.33
39	12.27	12.27
40	12.21	12.21
41	12.11	12.11
42	12.09	12.09
43	12.06	12.06
44	11.80	11.80
45	11.64	11.64
46	11.59	11.59
47	11.51	11.51
48	11.40	11.40
49	11.31	11.31
50	11.15	11.15
51	11.11	11.11
52	11.09	11.09
53	10.98	10.98
54	10.97	10.97
55	10.94	10.94
56	10.93	10.93
57	10.92	10.92
58	10.90	10.90
59	10.90	10.90
60	10.89	10.89
61	10.87	10.87
62	10.85	10.85
63	10.82	10.82
64	10.79	10.79
65	10.74	10.74
66	10.68	10.68
67	10.67	10.67
68	10.67	10.67
69	10.65	10.65
70	10.65	10.65
71	10.63	10.63
72	10.62	10.62
73	10.60	10.60
74	10.55	10.55
75	10.51	10.51
76	10.48	10.48
77	10.48	10.48
78	10.45	10.45
79	10.45	10.45
80	10.44	10.44
81	10.43	10.43
82	10.40	10.40
83	10.39	10.39
84	10.39	10.39
85	10.37	10.37
86	10.37	10.37
87	10.37	10.37
88	10.37	10.37
89	10.36	10.36
90	10.35	10.35
91	10.35	10.35
92	10.34	10.34
93	10.33	10.33
94	10.32	10.32
95	10.31	10.31
96	10.31	10.31
97	10.30	10.30
98	10.27	10.27
99	10.27	10.27
100	10.26	10.26

Domanda in duttilità di curvatura

Direzione X $\mu_{Edx}=9.81$

Direzione Y $\mu_{Edy}=13.19$

Verifiche e armature travi

(per le travi non verificate a taglio si è previsto l'intervento descritto e calcolato in relazione)
Simbologia

Xg	= Coordinata progressiva (dal primo nodo) in cui viene effettuato il progetto/verifica
CC	= Combinazione delle condizioni di carico elementari
	c = momento fittizio in campata
	a = momento fittizio agli appoggi
	TG = taglio da gerarchia delle resistenze
	TGND = taglio non dissipativo limitante la gerarchia
	T = momento traslato per taglio
	e = eccentricità aggiuntiva in caso di compressione o pressoflessione
TCC	= Tipo di combinazione di carico
	SLU = Stato limite ultimo
	SLU S = Stato limite ultimo (azione sismica)
	SLE R = Stato limite d'esercizio, combinazione rara
	SLE F = Stato limite d'esercizio, combinazione frequente
	SLE Q = Stato limite d'esercizio, combinazione quasi permanente
	SLD = Stato limite di danno
	SLV = Stato limite di salvaguardia della vita
	SLC = Stato limite di prevenzione del collasso
	SLO = Stato limite di operatività
	SLU I = Stato limite di resistenza al fuoco
	SND = Stato limite di salvaguardia della vita (non dissipativo)
El	= Elemento (asta) in cui viene effettuato il progetto/verifica (progressivo sul numero di aste)
X	= Coordinata progressiva rispetto al nodo iniziale
AfE S	= Area di ferro effettiva totale presente nel punto di verifica, superiore
AfE I	= Area di ferro effettiva totale presente nel punto di verifica, inferiore
AfEP S	= Area di ferro effettiva parziale presente nella CC considerata, per la sollecitazione indicata, superiore
AfEP I	= Area di ferro effettiva parziale presente nella CC considerata, per la sollecitazione indicata, inferiore
My	= Momento flettente intorno all'asse Y
M'ydy	= Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
MRdy	= Momento resistente allo stato limite ultimo intorno all'asse Y
Sic.	= Sicurezza a rottura
σ_f sup	= Tensione nel ferro - superiore
σ_f inf	= Tensione nel ferro - inferiore
σ_c	= Tensione nel calcestruzzo
X0	= Coordinata progressiva (dal nodo iniziale) dell'inizio del tratto
X1	= Coordinata progressiva (dal nodo iniziale) della fine del tratto
Lung.	= Lunghezza del tratto di progettazione
Staff.	= Staffatura adottata
AfE St.	= Area di ferro effettiva della staffatura (d'anima per travi a T o L)
bw	= Larghezza membratura resistente al taglio
Vsdu	= Taglio agente nella direzione del momento ultimo
ctg θ	= Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo
VRsd	= Taglio ultimo lato armatura
f_{fed}	= Resistenza efficace di calcolo a taglio
VRdf	= Taglio ultimo assorbito dalle fibre
VRcd	= Taglio ultimo lato calcestruzzo
Vrdu	= Taglio ultimo assorbibile dal solo calcestruzzo
Sic.T	= Sicurezza a rottura per taglio
Sez.	= Numero della sezione
Tipo	= Tipologia
	2C = Doppia C lato labbri
	2Cdx = Doppia C lato costola
	2I = Doppia I
	2L = Doppia L lato labbri
	2Ldx = Doppia L lato costole
	C = Sezione a C
	Cdx = C destra
	Cir. = Circolare
	Cir.c = Circolare cava
	I = Sezione a I
	L = Sezione a L
	Ldx = L destra
	Om. = Omega
	Pg = Pi greco
	Pr = Poligono regolare
	Prc = Poligono regolare cavo
	Pc = Per coordinate
	Ia = Inerzie assegnate
	R = Rettangolare
	Rc = Rettangolare cava
	T = Sezione a T
	U = Sezione a U
	Ur = U rovescia
	V = Sezione a V
	Vr = V rovescia
	Z = Sezione a Z
	Zdx = Z destra
	Ts = T stondata
	Ls = L stondata
	Cs = C stondata
	Is = I stondata
	Dis. = Disegnata
B	= Base
H	= Altezza
Cf sup	= Copriferro superiore
Cf inf	= Copriferro inferiore
Fcm	= Resistenza media
Fctm	= Resistenza media a trazione
Fcd	= Resistenza di calcolo a compressione del calcestruzzo
Fcd (Tag)	= Resistenza di calcolo a compressione del calcestruzzo per verifica a taglio
Fctd	= Resistenza di calcolo a trazione del calcestruzzo
Fym	= Tensione media di snervamento
Fyd	= Resistenza di calcolo dell'acciaio
Fyd (Tag)	= Resistenza di calcolo dell'acciaio per verifica a taglio
σ_{fda}	= Tensione di distacco della fibra di estremità (modo I)
$\Delta\%$	= Incremento percentuale sicurezza
TRL	= Tipo rinforzi longitudinali
	SSx = Superiore sinistra
	SDx = Superiore destra
	SCe = Superiore centrale
	ISx = Inferiore sinistra
	IDx = Inferiore destra
	ICE = Inferiore centrale
NS	= Numero strisce
ST	= Numero strati
Lst	= Larghezza striscia
f_{tk}	= Resistenza caratteristica del rinforzo
E_f	= Modulo elastico del rinforzo

ϵ_{fk}	=Deformazione caratteristica a rottura per trazione del rinforzo (*1000)
f_{dd}	=Resistenza di progetto al distacco del rinforzo (modo 1)
$f_{dd,2}$	=Resistenza di progetto al distacco del rinforzo (modo 2)
ϵ_{fd}	=Deformazione massima di progetto del rinforzo (*1000)
n	=Coefficiente di omogeneizzazione
T_z	=Taglio in dir. Z
ϵ_{0s}	=Deformazione iniziale superiore (*1000)
ϵ_{0i}	=Deformazione iniziale inferiore (*1000)
σ_{c0}	=Tensione nel calcestruzzo prima del rinforzo
σ_{c1}	=Tensione nel calcestruzzo per incremento sollecitazioni
σ_{f0}	=Tensione nel ferro prima del rinforzo
σ_{f1}	=Tensione nel ferro per incremento sollecitazioni
σ_f	=Tensione nel ferro
σ_{fbr}	=Tensione nelle fibre
TRT	=Tipo rinforzi trasversali
	Sx = Sinistra
	Dx = Destra
	U = Uniforme
Hr	=Altezza risvolti
a	=Angolo di inclinazione
p'_{ϵ}	=Distanza netta

N.B. = all'interno delle verifiche di ogni singolo elemento è riportata la seguente dicitura:

"Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi"

Questo perché non si sono effettuate le verifiche SLE obbligatorie per i nuovi edifici, per cui il programma non riesce a ricavare sollecitazioni agli SLE non avendo fatto girare le relative combinazioni di calcolo.

Travata n. 101

Nodi: 1 -483 -3 -4 -482 -479 -5 -6 -477 2

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
12	R	90.00	24.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CCTCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1 12.50	19.48	16.09	19.48	16.09	-2624.73	-14821.50	5.647
3.64	11	SLU	2 234.07	16.09	16.09	16.09	16.09	5333.57	12275.30	2.302
6.93	11	SLU	2 563.50	25.51	22.12	25.51	22.12	-7798.65	-19350.60	2.481
7.19	11	SLU	3 12.50	9.42	22.12	9.42	22.12	-3358.06	-7267.03	2.164
9.02	11	SLU	3 195.87	9.42	6.03	9.42	6.03	-808.99	-7266.20	8.982
9.23	11	SLU	3 217.50	25.51	22.12	25.51	22.12	-808.99	-19350.60	23.920
9.49	11	SLU	4 12.50	25.51	22.12	25.51	22.12	-2851.27	-19350.60	6.787
12.82	11	SLU	5 215.62	16.09	16.09	16.09	16.09	4208.77	12275.30	2.917
16.16	11	SLU	6 117.50	25.51	22.12	25.51	22.12	-2647.21	-19350.60	7.310
16.41	11	SLU	7 12.50	9.42	6.03	9.42	6.03	-691.07	-7266.20	10.514
18.48	11	SLU	7 218.50	9.42	6.03	9.42	6.03	-3458.34	-7266.20	2.101
18.73	11	SLU	8 12.50	25.51	22.12	25.51	22.12	-7966.13	-19350.60	2.429
21.52	11	SLU	8 292.03	16.09	16.09	16.09	16.09	5302.36	12275.30	2.315
25.49	11	SLU	9 117.50	19.48	16.09	19.48	16.09	-2332.72	-14821.50	6.354

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CCTCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1 12.50	19.48	16.09	19.48	16.09	-4002.03	-14128.70	3.530
3.64	1	SND	2 234.07	16.09	16.09	16.09	16.09	4621.35	11767.40	2.546
6.93	1	SND	2 563.50	25.51	22.12	25.51	22.12	-7330.32	-18455.30	2.518
7.19	1	SND	3 12.50	9.42	22.12	9.42	22.12	-4221.97	-7056.10	1.671
9.02	1	SND	3 195.87	9.42	6.03	9.42	6.03	2285.98	4525.86	1.980
9.23	1	SND	3 217.50	25.51	22.12	25.51	22.12	-3231.12	-18455.30	5.712
9.49	1	SND	4 12.50	25.51	22.12	25.51	22.12	-4553.11	-18455.30	4.053
12.82	1	SND	5 215.62	16.09	16.09	16.09	16.09	3517.79	11767.40	3.345
16.16	1	SND	6 117.50	25.51	22.12	25.51	22.12	-4456.47	-18455.30	4.141
16.41	1	SND	7 12.50	9.42	6.03	9.42	6.03	2314.22	4525.86	1.956
18.48	1	SND	7 218.50	9.42	6.03	9.42	6.03	-4232.54	-6931.53	1.638
18.73	1	SND	8 12.50	25.51	22.12	25.51	22.12	-7462.59	-18455.30	2.473
21.52	1	SND	8 292.03	16.09	16.09	16.09	16.09	4501.42	11767.40	2.614
25.49	1	SND	9 117.50	19.48	16.09	19.48	16.09	-3259.79	-14128.70	4.334

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.13	0.37	0.24	ø8/20 2 br.	5.03	0.90	4106.44	2.50	7929.11	37706.70	7929.11	1.93

11 SLU	0.37	6.69	6.33	ø8/20 2 br.	5.03	0.90	7623.37	2.50	7929.11	37706.70	7929.11	1.04
11 SLU	6.69	6.93	0.24	ø8/19 2 br.	5.43	0.90	8264.81	2.50	8572.01	37706.70	8572.01	1.04
1 SND	7.19	7.43	0.24	ø8/20 2 br.	5.03	0.90	5203.30	2.50	7929.11	37706.70	7929.11	1.52
1 SND	7.43	8.99	1.57	ø8/20 2 br.	5.03	0.90	4701.93	2.50	7929.11	37706.70	7929.11	1.69
1 SND	8.99	9.23	0.24	ø8/20 2 br.	5.03	0.90	3240.20	2.50	7929.11	37706.70	7929.11	2.45
1 SND	9.49	9.73	0.24	ø8/20 2 br.	5.03	0.90	5920.13	2.50	7929.11	37706.70	7929.11	1.34
1 SND	9.73	15.93	6.20	ø8/20 2 br.	5.03	0.90	5397.64	2.50	7929.11	37706.70	7929.11	1.47
1 SND	15.93	16.16	0.24	ø8/20 2 br.	5.03	0.90	5846.92	2.50	7929.11	37706.70	7929.11	1.36
1 SND	16.41	16.66	0.24	ø8/20 2 br.	5.03	0.90	3119.52	2.50	7929.11	37706.70	7929.11	2.54
1 SND	16.66	18.23	1.58	ø8/20 2 br.	5.03	0.90	4706.58	2.50	7929.11	37706.70	7929.11	1.68
1 SND	18.23	18.48	0.24	ø8/20 2 br.	5.03	0.90	5199.71	2.50	7929.11	37706.70	7929.11	1.52
11 SLU	18.73	18.96	0.24	ø8/19 2 br.	5.43	0.90	8533.79	2.50	8572.01	37706.70	8572.01	1.00
11 SLU	18.96	25.25	6.29	ø8/20 2 br.	5.03	0.90	7843.75	2.50	7929.11	37706.70	7929.11	1.01
1 SND	25.25	25.49	0.24	ø8/20 2 br.	5.03	0.90	3785.13	2.50	7929.11	37706.70	7929.11	2.09

Travata n. 102

Nodi: 1 -1045 -1 -1044 -1083 3

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94
15	R	30.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfeP S <cm>	AfeP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.03	10.05	6.03	10.05	6.03	-2319.94	-27716.60	11.947
2.00	11	SLU	1	199.97	4.02	10.05	4.02	10.05	-8270.83	-11144.30	1.347
2.20	11	SLU	2	10.03	4.02	10.05	4.02	10.05	-10607.80	-11144.30	1.051
4.06	11	SLU	2	196.19	4.02	10.05	4.02	10.05	7446.92	27528.20	3.697
6.85	11	SLU	2	475.43	12.31	6.03	12.31	6.03	4379.60	16691.80	3.811
7.11	11	SLU	3	12.56	12.31	2.26	12.31	2.26	-1572.71	-15633.20	9.940
7.28	11	SLU	3	29.49	8.29	2.26	8.29	2.26	-1572.71	-10875.00	6.915
7.49	11	SLU	4	10.51	2.26	2.26	2.26	2.26	-1333.78	-3057.14	2.292
9.81	11	SLU	4	243.32	2.26	2.26	2.26	2.26	125.80	3057.14	24.302
10.15	11	SLU	4	276.57	4.27	2.26	4.27	2.26	125.80	3056.69	24.299
10.35	11	SLU	5	10.03	4.27	2.26	4.27	2.26	914.41	3056.69	3.343
10.65	11	SLU	5	39.96	4.27	2.26	4.27	2.26	914.41	3056.69	3.343

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfeP S <cm>	AfeP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	30.03	10.05	6.03	10.05	6.03	6195.38	16132.10	2.604
2.00	1	SND	1	199.97	4.02	10.05	4.02	10.05	-8404.89	-10867.70	1.293
2.20	1	SND	2	10.03	4.02	10.05	4.02	10.05	-9243.66	-10867.70	1.176
4.06	5	SND	2	196.19	4.02	10.05	4.02	10.05	5138.15	25840.90	5.029
6.85	5	SND	2	475.43	12.31	6.03	12.31	6.03	4382.68	16206.90	3.698
7.11	1	SND	3	12.56	12.31	2.26	12.31	2.26	1224.22	2991.75	2.444
7.28	1	SND	3	29.49	8.29	2.26	8.29	2.26	1224.22	2980.92	2.435
7.28	1	SND	3	29.97	8.29	2.26	8.29	2.26	1224.22	2980.92	2.435
7.48	1	SND	4	10.03	2.26	2.26	2.26	2.26	18.40	2941.39	>100
7.49	1	SND	4	10.51	2.26	2.26	2.26	2.26	-1793.71	-2941.39	1.640
9.81	1	SND	4	243.32	2.26	2.26	2.26	2.26	1462.70	2941.39	2.011
10.15	1	SND	4	276.57	4.27	2.26	4.27	2.26	1462.70	2959.36	2.023

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.30	2.00	1.70	ø8/20 2 br.	5.03	0.25	10736.40	2.50	27663.80	36542.90	27663.80	2.58
11 SLU	2.20	3.00	0.80	ø8/20 2 br.	5.03	0.25	12911.10	2.50	27663.80	36542.90	27663.80	2.14
11 SLU	3.00	6.05	3.05	ø8/20 2 br.	5.03	0.25	9073.47	2.50	30225.40	36542.90	30225.40	3.33
11 SLU	6.05	6.85	0.80	ø8/20 2 br.	5.03	0.25	9065.19	2.46	36917.20	36917.20	36917.20	4.07
1 SND	7.11	7.28	0.17	ø6/20 2 br.	2.83	0.30	10914.00	2.50	7631.76	21506.80	7631.76	0.70
1 SND	7.48	7.88	0.40	ø6/20 2 br.	2.83	0.30	1608.43	2.50	7631.76	21506.80	7631.76	4.74
1 SND	7.88	9.75	1.87	ø6/20 2 br.	2.83	0.30	1484.56	2.50	7631.76	21506.80	7631.76	5.14
1 SND	9.75	10.15	0.40	ø6/20 2 br.	2.83	0.30	925.56	2.50	7631.76	21506.80	7631.76	8.25
1 SND	10.35	10.65	0.30	ø6/20 2 br.	2.83	0.30	8490.06	2.50	7631.76	21506.80	7631.76	0.90

Travata n. 103

Nodi: -3 -7

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
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14R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94
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Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.00	15.21	8.04	15.21	8.04	-17729.80	-41586.00	2.346
3.11	11	SLU	1	310.94	8.04	12.06	8.04	12.06	20974.80	33264.30	1.586
6.86	11	SLU	1	685.53	13.19	8.04	13.19	8.04	-10403.70	-36293.60	3.489

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	30.00	15.21	8.04	15.21	8.04	-14515.10	-38907.00	2.680
3.11	5	SND	1	310.94	8.04	12.06	8.04	12.06	13478.60	31237.80	2.318
6.86	5	SND	1	685.53	13.19	8.04	13.19	8.04	-9324.96	-34015.70	3.648

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <daN/cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	21250.00	2.16	40369.20	40369.20	40369.20	1.90
11 SLU	1.10	6.06	4.96	ø8/15 2 br.	6.70	0.25	16356.50	2.37	37958.60	37958.60	37958.60	2.32
11 SLU	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	19035.50	2.16	40369.20	40369.20	40369.20	2.12

Travata n. 104

Nodi: -4 -8

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14R		25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.01	15.21	8.04	15.21	8.04	-18483.50	-41586.00	2.250
3.11	11	SLU	1	310.94	8.04	12.06	8.04	12.06	19475.90	33264.30	1.708
6.86	11	SLU	1	685.51	15.21	8.04	15.21	8.04	-11552.30	-41586.00	3.600

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	30.01	15.21	8.04	15.21	8.04	-15247.40	-38907.00	2.552
3.11	5	SND	1	310.94	8.04	12.06	8.04	12.06	12459.30	31237.80	2.507
6.86	5	SND	1	685.51	15.21	8.04	15.21	8.04	-10570.80	-38907.00	3.681

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	20973.20	2.16	40369.20	40369.20	40369.20	1.92
11 SLU	1.10	6.06	4.96	ø8/15 2 br.	6.70	0.25	16111.30	2.37	37958.60	37958.60	37958.60	2.36
11 SLU	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	18545.60	2.16	40369.20	40369.20	40369.20	2.18

Travata n. 105

Nodi: -5 -9

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14R		25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.01	15.21	8.04	15.21	8.04	-22259.10	-41586.00	1.868
3.11	11	SLU	1	310.94	8.04	12.06	8.04	12.06	24108.90	33264.30	1.380
6.86	11	SLU	1	685.51	13.19	8.04	13.19	8.04	-14929.90	-36293.60	2.431

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
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0.30	5	SND	1	30.01	15.21	8.04	15.21	8.04	-17667.30	-38907.00	2.202
3.11	5	SND	1	310.94	8.04	12.06	8.04	12.06	16012.70	31237.80	1.951
6.86	5	SND	1	685.51	13.19	8.04	13.19	8.04	-12814.70	-34015.70	2.654

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	25763.50	2.16	40369.20	40369.20	40369.20	1.57
11 SLU	1.10	6.06	4.96	ø8/15 2 br.	6.70	0.25	19766.40	2.37	37958.60	37958.60	37958.60	1.92
11 SLU	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	23553.00	2.16	40369.20	40369.20	40369.20	1.71

Travata n. 106

Nodi: -6 36

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.01	15.21	8.04	15.21	8.04	-17734.40	-41586.00	2.345
3.11	11	SLU	1	310.94	8.04	12.06	8.04	12.06	19647.90	33264.30	1.693
6.86	11	SLU	1	685.50	13.19	8.04	13.19	8.04	-12526.60	-36293.60	2.897

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	30.01	15.21	8.04	15.21	8.04	-14760.80	-38907.00	2.636
3.11	5	SND	1	310.94	8.04	12.06	8.04	12.06	12686.00	31237.80	2.462
6.86	5	SND	1	685.50	13.19	8.04	13.19	8.04	-11445.60	-34015.70	2.972

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	20898.00	2.16	40369.20	40369.20	40369.20	1.93
11 SLU	1.10	6.06	4.95	ø8/15 2 br.	6.70	0.25	15990.80	2.37	37958.70	37958.70	37958.70	2.37
11 SLU	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	18987.20	2.16	40369.20	40369.20	40369.20	2.13

Travata n. 107

Nodi: 2 -429 5

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	593.01	12.06	6.03	12.06	6.03	-20251.90	-33075.90	1.633
3.11	11	SLU	1	312.11	6.03	10.05	6.03	10.05	21799.50	27716.60	1.271
6.85	11	SLU	2	12.55	12.06	6.03	12.06	6.03	-12693.40	-33075.90	2.606

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	593.01	12.06	6.03	12.06	6.03	-16708.60	-30995.10	1.855
3.11	5	SND	1	312.11	6.03	10.05	6.03	10.05	15082.80	26059.50	1.728
6.85	5	SND	2	12.55	12.06	6.03	12.06	6.03	-10791.50	-30995.10	2.872

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.25	23211.20	2.46	36917.20	36917.20	36917.20	1.59

11 SLU	1.10	6.05	4.95	ø8/20 2 br.	5.03	0.25	17847.90	2.50	30821.80	36542.90	30821.80	1.73
11 SLU	6.05	6.85	0.80	ø8/20 2 br.	5.03	0.25	20934.80	2.46	36917.20	36917.20	36917.20	1.76

Travata n. 108

Nodi: -1 -7 -8 -9 36 5

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
13	R	25.00	70.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.22	11	SLU	1	22.00	12.31	5.15	12.31	5.15	-12925.30	-29198.50	2.259
3.02	11	SLU	1	301.55	6.28	9.17	6.28	9.17	10136.60	22052.80	2.176
6.74	11	SLU	1	674.29	12.31	7.41	12.31	7.41	-13360.50	-29477.30	2.206
7.34	11	SLU	2	30.00	12.31	2.26	12.31	2.26	-5324.30	-28624.30	5.376
8.36	11	SLU	2	132.19	12.31	2.26	12.31	2.26	-5584.80	-28624.30	5.125
9.05	11	SLU	2	200.31	14.33	2.26	14.33	2.26	-5584.80	-32907.50	5.892
9.65	11	SLU	3	30.00	10.30	7.41	10.30	7.41	-12556.20	-24767.80	1.973
12.06	11	SLU	3	271.12	6.28	9.17	6.28	9.17	9315.77	22052.80	2.367
15.98	11	SLU	3	662.93	10.30	8.55	10.30	8.55	-12601.30	-24777.00	1.966
16.58	11	SLU	4	30.00	12.31	3.39	12.31	3.39	-4406.31	-28878.60	6.554
18.29	11	SLU	4	201.37	14.33	3.39	14.33	3.39	-6034.01	-33228.70	5.507
18.89	11	SLU	5	30.00	10.30	8.55	10.30	8.55	-13796.30	-24777.00	1.796
21.64	11	SLU	5	305.13	6.28	9.17	6.28	9.17	9979.98	22052.80	2.210
25.31	11	SLU	5	671.98	12.31	5.15	12.31	5.15	-11419.00	-29198.50	2.557

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.22	1	SND	1	22.00	12.31	5.15	12.31	5.15	-13033.60	-27341.70	2.098
3.02	1	SND	1	301.55	6.28	9.17	6.28	9.17	7624.57	20777.40	2.725
6.74	1	SND	1	674.29	12.31	7.41	12.31	7.41	-12562.20	-27625.40	2.199
7.34	1	SND	2	30.00	12.31	2.26	12.31	2.26	3077.52	5391.29	1.752
8.36	1	SND	2	132.19	12.31	2.26	12.31	2.26	3673.41	5391.29	1.468
9.05	1	SND	2	200.31	14.33	2.26	14.33	2.26	3673.41	5399.50	1.470
9.65	1	SND	3	30.00	10.30	7.41	10.30	7.41	-12079.20	-23317.90	1.930
12.06	1	SND	3	271.12	6.28	9.17	6.28	9.17	6649.04	20777.40	3.125
15.98	1	SND	3	662.93	10.30	8.55	10.30	8.55	-11990.50	-23415.90	1.953
16.58	1	SND	4	30.00	12.31	3.39	12.31	3.39	4836.21	8039.20	1.662
18.29	1	SND	4	201.37	14.33	3.39	14.33	3.39	3783.82	8057.59	2.129
18.89	1	SND	5	30.00	10.30	8.55	10.30	8.55	-13086.20	-23415.90	1.789
21.64	1	SND	5	305.13	6.28	9.17	6.28	9.17	7444.71	20777.40	2.791
25.31	1	SND	5	671.98	12.31	5.15	12.31	5.15	-11912.60	-27341.70	2.295

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.22	0.92	0.70	ø8/20 2 br.	5.03	0.25	13533.80	2.41	32708.90	32708.90	32708.90	2.42
1 SND	0.22	0.92	0.70	ø8/20 2 br.	5.03	0.25	10441.70	2.50	24139.70	31887.80	24139.70	2.31
11 SLU	0.92	6.04	5.12	ø8/20 2 br.	5.03	0.25	10881.30	2.50	26804.90	31887.80	26804.90	2.46
11 SLU	6.04	6.74	0.70	ø8/20 2 br.	5.03	0.25	13887.20	2.41	32708.90	32708.90	32708.90	2.36
1 SND	6.04	6.74	0.70	ø8/20 2 br.	5.03	0.25	10664.00	2.50	24139.70	31887.80	24139.70	2.26
1 SND	7.34	9.05	1.70	ø8/20 2 br.	5.03	0.25	10527.40	2.50	24139.70	31887.80	24139.70	2.29
11 SLU	9.65	10.35	0.70	ø8/20 2 br.	5.03	0.25	13190.80	2.41	32708.90	32708.90	32708.90	2.48
1 SND	9.65	10.35	0.70	ø8/20 2 br.	5.03	0.25	10124.00	2.50	24139.70	31887.80	24139.70	2.38
11 SLU	10.35	15.28	4.93	ø8/20 2 br.	5.03	0.25	10408.80	2.50	26909.60	31887.80	26909.60	2.59
11 SLU	15.28	15.98	0.70	ø8/20 2 br.	5.03	0.25	13412.10	2.41	32708.90	32708.90	32708.90	2.44
1 SND	15.28	15.98	0.70	ø8/20 2 br.	5.03	0.25	10255.00	2.50	24139.70	31887.80	24139.70	2.35
1 SND	16.58	18.29	1.71	ø8/20 2 br.	5.03	0.25	11862.50	2.50	24139.70	31887.80	24139.70	2.03
11 SLU	18.89	19.59	0.70	ø8/20 2 br.	5.03	0.25	13759.00	2.41	32708.90	32708.90	32708.90	2.38
1 SND	18.89	19.59	0.70	ø8/20 2 br.	5.03	0.25	10637.70	2.50	24139.70	31887.80	24139.70	2.27
11 SLU	19.59	24.61	5.02	ø8/20 2 br.	5.03	0.25	10878.10	2.50	26859.70	31887.80	26859.70	2.47
11 SLU	24.61	25.31	0.70	ø8/20 2 br.	5.03	0.25	13231.50	2.41	32708.90	32708.90	32708.90	2.47
1 SND	24.61	25.31	0.70	ø8/20 2 br.	5.03	0.25	10252.30	2.50	24139.70	31887.80	24139.70	2.35

Travata n. 109

Nodi: 3 -10

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
16	R	25.00	55.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	11	SLU	1	15.00	8.42	4.02	8.42	4.02	-5691.32	-15640.60	2.748
1.67	11	SLU	1	167.17	2.26	7.10	2.26	7.10	4810.22	13146.50	2.733
4.71	11	SLU	1	471.50	8.42	4.02	8.42	4.02	-9099.06	-15640.60	1.719

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.15	1	SND	1	15.00	8.42	4.02	8.42	4.02	-5977.66	-14677.70	2.455
1.67	1	SND	1	167.17	2.26	7.10	2.26	7.10	3621.91	12353.90	3.411
4.71	1	SND	1	471.50	8.42	4.02	8.42	4.02	-8386.61	-14677.70	1.750

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.15	0.70	0.55	ø6/20 2 br.	2.83	0.25	9510.87	2.50	18027.20	24905.10	18027.20	1.90
1 SND	0.15	0.70	0.55	ø6/20 2 br.	2.83	0.25	7498.12	2.50	10605.20	24905.10	10605.20	1.41
11 SLU	0.70	3.08	2.38	ø6/20 2 br.	2.83	0.25	7039.16	2.50	12323.60	24905.10	12323.60	1.75
11 SLU	3.08	4.71	1.64	ø6/20 2 br.	2.83	0.25	11003.80	2.50	15585.10	24905.10	15585.10	1.42
1 SND	3.08	4.71	1.64	ø6/20 2 br.	2.83	0.25	8534.47	2.50	10605.20	24905.10	10605.20	1.24

Travata n. 112

Nodi: 11 -37 -39 12

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
19	R	25.00	60.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	12.50	6.28	4.02	6.28	4.02	-5506.91	-12871.10	2.337
1.94	11	SLU	1	194.38	2.26	8.04	2.26	8.04	4949.23	16247.40	3.283
4.97	11	SLU	1	497.50	6.28	4.02	6.28	4.02	-8087.75	-12871.10	1.591
5.23	11	SLU	2	12.50	6.28	4.02	6.28	4.02	-1162.32	-12871.10	11.074
6.52	11	SLU	2	142.50	9.36	4.02	9.36	4.02	-2029.03	-18990.60	9.359
6.78	11	SLU	3	12.50	9.36	4.02	9.36	4.02	-8059.48	-18990.60	2.356
8.90	11	SLU	3	224.53	2.26	7.10	2.26	7.10	5102.98	14418.50	2.826
11.62	11	SLU	3	497.14	5.34	4.02	5.34	4.02	-5235.78	-10952.40	2.092

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	12.50	6.28	4.02	6.28	4.02	-5789.77	-12179.00	2.104
1.94	1	SND	1	194.38	2.26	8.04	2.26	8.04	3787.60	15260.30	4.029
4.97	1	SND	1	497.50	6.28	4.02	6.28	4.02	-7552.99	-12179.00	1.612
5.23	1	SND	2	12.50	6.28	4.02	6.28	4.02	3745.22	7986.71	2.133
6.52	1	SND	2	142.50	9.36	4.02	9.36	4.02	3112.06	8047.19	2.586
6.78	1	SND	3	12.50	9.36	4.02	9.36	4.02	-7408.23	-17806.20	2.404
8.90	1	SND	3	224.53	2.26	7.10	2.26	7.10	3785.01	13557.70	3.582
11.62	1	SND	3	497.14	5.34	4.02	5.34	4.02	-5305.32	-10420.70	1.964

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.13	0.73	0.60	ø8/20 2 br.	5.03	0.25	8754.27	2.50	20615.70	27232.60	20615.70	2.35
11 SLU	0.73	4.37	3.65	ø8/20 2 br.	5.03	0.25	7520.79	2.50	27004.90	27232.60	27004.90	3.59
1 SND	0.73	4.37	3.65	ø8/20 2 br.	5.03	0.25	6103.76	2.50	20615.70	27232.60	20615.70	3.38
11 SLU	4.37	4.97	0.60	ø8/20 2 br.	5.03	0.25	9818.45	2.50	20615.70	27232.60	20615.70	2.10
1 SND	5.23	6.52	1.30	ø8/20 2 br.	5.03	0.25	8769.16	2.50	20615.70	27232.60	20615.70	2.35
11 SLU	6.78	7.38	0.60	ø8/20 2 br.	5.03	0.25	9861.74	2.50	20615.70	27232.60	20615.70	2.09
11 SLU	7.38	11.02	3.65	ø8/20 2 br.	5.03	0.25	7564.12	2.50	25512.30	27232.60	25512.30	3.37
11 SLU	11.02	11.62	0.60	ø8/20 2 br.	5.03	0.25	8696.36	2.50	20615.70	27232.60	20615.70	2.37

Travata n. 113

Nodi: 13 -407 -41 -42 14

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
13	R	25.00	70.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	13.14	8.29	6.03	8.29	6.03	-7847.24	-19948.60	2.542
1.86	11	SLU	2	122.40	2.26	8.04	2.26	8.04	10127.30	19129.20	1.889
5.22	11	SLU	2	459.00	8.29	9.11	8.29	9.11	-11350.20	-19959.00	1.758
5.47	11	SLU	3	12.50	8.29	3.08	8.29	3.08	-8920.76	-19793.20	2.219
6.71	11	SLU	3	135.83	2.26	5.09	2.26	5.09	-4582.34	-5479.01	1.196
9.18	11	SLU	3	382.50	8.29	3.08	8.29	3.08	-9781.33	-19793.20	2.024
9.43	11	SLU	4	12.50	8.29	9.11	8.29	9.11	-12161.00	-19959.00	1.641
11.59	11	SLU	4	229.22	2.26	8.04	2.26	8.04	11306.10	19129.20	1.692
14.38	11	SLU	4	507.86	8.29	6.03	8.29	6.03	4822.90	14529.50	3.013

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	13.14	8.29	6.03	8.29	6.03	-7903.64	-18850.20	2.385
1.86	1	SND	2	122.40	2.26	8.04	2.26	8.04	7573.28	17986.90	2.375
5.22	1	SND	2	459.00	8.29	9.11	8.29	9.11	-9397.60	-19052.30	2.027
5.47	1	SND	3	12.50	8.29	3.08	8.29	3.08	-7281.90	-18601.30	2.554
6.71	1	SND	3	135.83	2.26	5.09	2.26	5.09	-4021.26	-5334.93	1.327
9.18	1	SND	3	382.50	8.29	3.08	8.29	3.08	-7950.52	-18601.30	2.340
9.43	1	SND	4	12.50	8.29	9.11	8.29	9.11	-9559.03	-19052.30	1.993
11.59	1	SND	4	229.22	2.26	8.04	2.26	8.04	8082.03	17986.90	2.226
14.38	1	SND	4	507.86	8.29	6.03	8.29	6.03	4546.34	13980.50	3.075

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.13	0.83	0.70	ø8/20 2 br.	5.03	0.25	13365.00	2.41	32708.90	32708.90	32708.90	2.45
1 SND	0.13	0.83	0.70	ø8/20 2 br.	5.03	0.25	9962.41	2.50	24139.70	31887.80	24139.70	2.42
11 SLU	0.83	4.52	3.69	ø8/20 2 br.	5.03	0.25	11467.10	2.50	24139.70	31887.80	24139.70	2.11
11 SLU	4.52	5.22	0.70	ø8/20 2 br.	5.03	0.25	15622.60	2.41	32708.90	32708.90	32708.90	2.09
11 SLU	5.47	6.18	0.70	ø8/20 2 br.	5.03	0.25	10749.50	2.41	32708.90	32708.90	32708.90	3.04
1 SND	5.47	6.18	0.70	ø8/20 2 br.	5.03	0.25	7979.73	2.50	24139.70	31887.80	24139.70	3.03
11 SLU	6.18	8.47	2.30	ø8/20 2 br.	5.03	0.25	7059.25	2.50	24139.70	31887.80	24139.70	3.42
11 SLU	8.47	9.18	0.70	ø8/20 2 br.	5.03	0.25	11214.70	2.41	32708.90	32708.90	32708.90	2.92
1 SND	8.47	9.18	0.70	ø8/20 2 br.	5.03	0.25	8298.22	2.50	24139.70	31887.80	24139.70	2.91
11 SLU	9.43	10.13	0.70	ø8/20 2 br.	5.03	0.25	16322.10	2.41	32708.90	32708.90	32708.90	2.00
11 SLU	10.13	13.68	3.55	ø8/20 2 br.	5.03	0.25	12166.70	2.50	24139.70	31887.80	24139.70	1.98
11 SLU	13.68	14.38	0.70	ø8/20 2 br.	5.03	0.25	11797.90	2.41	32708.90	32708.90	32708.90	2.77

Travata n. 114

Nodi: 14 18

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
18	R	25.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	12.50	4.52	3.08	4.52	3.08	187.15	4131.14	22.074
0.44	11	SLU	1	44.40	4.52	3.08	4.52	3.08	328.25	4131.14	12.585
4.27	11	SLU	1	427.10	4.52	3.08	4.52	3.08	-752.35	-6043.02	8.032

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	5	SND	1	12.50	4.52	3.08	4.52	3.08	608.14	3988.97	6.559
0.44	5	SND	1	44.40	4.52	3.08	4.52	3.08	615.79	3988.97	6.478
4.27	5	SND	1	427.10	4.52	3.08	4.52	3.08	-1179.27	-5742.03	4.869

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
5 SND	0.13	0.53	0.40	ø6/20 2 br.	2.83	0.25	749.70	2.50	7631.76	17922.30	7631.76	10.18
5 SND	0.53	3.87	3.35	ø6/20 2 br.	2.83	0.25	905.88	2.50	7631.76	17922.30	7631.76	8.42
5 SND	3.87	4.27	0.40	ø6/20 2 br.	2.83	0.25	1036.51	2.50	7631.76	17922.30	7631.76	7.36

Travata n. 119

Nodi: 26 -16 27

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
23R		25.00	50.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.20	11	SLU	1	20.00	5.40	4.02	5.40	4.02	-2546.14	-9144.04	3.591
1.49	11	SLU	1	149.27	2.26	5.15	2.26	5.15	2901.10	8707.32	3.001
3.75	11	SLU	1	375.50	5.40	4.02	5.40	4.02	-5140.55	-9144.04	1.779
4.00	11	SLU	2	12.50	5.40	4.02	5.40	4.02	-5487.79	-9144.04	1.666
5.52	11	SLU	2	164.38	2.26	5.15	2.26	5.15	3061.01	8707.32	2.845
7.65	11	SLU	2	377.00	5.40	4.02	5.40	4.02	-2956.29	-9144.04	3.093

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.20	1	SND	1	20.00	5.40	4.02	5.40	4.02	-3384.61	-8687.38	2.567
1.49	5	SND	1	149.27	2.26	5.15	2.26	5.15	2423.73	8220.62	3.392
3.75	1	SND	1	375.50	5.40	4.02	5.40	4.02	-5203.72	-8687.38	1.669
4.00	1	SND	2	12.50	5.40	4.02	5.40	4.02	-5602.12	-8687.38	1.551
5.52	5	SND	2	164.38	2.26	5.15	2.26	5.15	2601.58	8220.62	3.160
7.65	1	SND	2	377.00	5.40	4.02	5.40	4.02	-4140.44	-8687.38	2.098

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.20	0.70	0.50	ø8/20 2 br.	5.03	0.25	6459.13	2.50	22529.30	22577.50	22529.30	3.49
1 SND	0.20	0.70	0.50	ø8/20 2 br.	5.03	0.25	5433.21	2.50	17091.60	22577.50	17091.60	3.15
11 SLU	0.70	3.25	2.55	ø8/20 2 br.	5.03	0.25	5928.76	2.50	17091.60	22577.50	17091.60	2.88
11 SLU	3.25	3.75	0.50	ø8/20 2 br.	5.03	0.25	7983.66	2.50	22529.30	22577.50	22529.30	2.82
1 SND	3.25	3.75	0.50	ø8/20 2 br.	5.03	0.25	6512.75	2.50	17091.60	22577.50	17091.60	2.62
11 SLU	4.00	4.51	0.50	ø8/20 2 br.	5.03	0.25	8280.95	2.50	22529.30	22577.50	22529.30	2.72
1 SND	4.00	4.51	0.50	ø8/20 2 br.	5.03	0.25	6849.42	2.50	17091.60	22577.50	17091.60	2.50
11 SLU	4.51	7.15	2.64	ø8/20 2 br.	5.03	0.25	6214.48	2.50	17091.60	22577.50	17091.60	2.75
11 SLU	7.15	7.65	0.50	ø8/20 2 br.	5.03	0.25	6960.21	2.50	22529.30	22577.50	22529.30	3.24
1 SND	7.15	7.65	0.50	ø8/20 2 br.	5.03	0.25	5927.59	2.50	17091.60	22577.50	17091.60	2.88

Travata n. 120

Nodi: 27 -109 31

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
23R		25.00	50.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.21	9	SLU	1	299.02	3.39	2.26	3.39	2.26	-1237.68	-5761.67	4.655
3.07	9	SLU	1	12.51	4.52	2.26	4.52	2.26	-2514.95	-7658.49	3.045
3.32	11	SLU	2	497.47	4.52	2.26	4.52	2.26	-4455.52	-7658.49	1.719
5.23	11	SLU	2	306.85	2.26	3.39	2.26	3.39	2779.15	5761.67	2.073
8.09	11	SLU	2	20.92	4.52	2.26	4.52	2.26	-4349.29	-7658.49	1.761

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.21	1	SND	1	299.02	3.39	2.26	3.39	2.26	-3108.30	-5503.73	1.771
3.07	1	SND	1	12.51	4.52	2.26	4.52	2.26	-3923.11	-7258.08	1.850
3.32	1	SND	2	497.47	4.52	2.26	4.52	2.26	-4582.86	-7258.08	1.584
5.23	1	SND	2	306.85	2.26	3.39	2.26	3.39	2194.11	5503.73	2.508
8.09	1	SND	2	20.92	4.52	2.26	4.52	2.26	-4594.43	-7258.08	1.580

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.21	0.71	0.50	ø8/20 2 br.	5.03	0.25	3758.89	2.50	17091.60	22577.50	17091.60	4.55
1 SND	0.71	2.57	1.87	ø8/20 2 br.	5.03	0.25	3538.19	2.50	17091.60	22577.50	17091.60	4.83
1 SND	2.57	3.07	0.50	ø8/20 2 br.	5.03	0.25	4452.61	2.50	17091.60	22577.50	17091.60	3.84
11 SLU	3.32	3.82	0.50	ø8/20 2 br.	5.03	0.25	5890.37	2.50	22529.30	22577.50	22529.30	3.82
1 SND	3.32	3.82	0.50	ø8/20 2 br.	5.03	0.25	4998.54	2.50	17091.60	22577.50	17091.60	3.42
11 SLU	3.82	7.59	3.77	ø8/20 2 br.	5.03	0.25	4640.52	2.50	17091.60	22577.50	17091.60	3.68
11 SLU	7.59	8.09	0.50	ø8/20 2 br.	5.03	0.25	5741.31	2.50	22529.30	22577.50	22529.30	3.92
1 SND	7.59	8.09	0.50	ø8/20 2 br.	5.03	0.25	4919.95	2.50	17091.60	22577.50	17091.60	3.47

Travata n. 121

Nodi: 31 -108 29

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
23R		25.00	50.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.21	11	SLU	1	473.05	4.52	2.26	4.52	2.26	-4156.90	-7658.49	1.842
2.05	11	SLU	1	289.28	2.26	3.39	2.26	3.39	2573.30	5761.67	2.239
4.80	11	SLU	1	13.63	3.39	3.39	3.39	3.39	-4031.18	-5762.55	1.429
5.08	9	SLU	2	325.32	3.39	3.39	3.39	3.39	-2626.46	-5762.55	2.194
6.90	11	SLU	2	143.04	2.26	3.39	2.26	3.39	868.10	5761.67	6.637
8.12	9	SLU	2	20.91	3.39	2.26	3.39	2.26	-1469.30	-5761.67	3.921

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.21	1	SND	1	473.05	4.52	2.26	4.52	2.26	-4335.00	-7258.08	1.674
2.05	1	SND	1	289.28	2.26	3.39	2.26	3.39	2135.49	5503.73	2.577
4.80	1	SND	1	13.63	3.39	3.39	3.39	3.39	-3989.71	-5532.83	1.387
5.08	1	SND	2	325.32	3.39	3.39	3.39	3.39	-3506.08	-5532.83	1.578
6.90	1	SND	2	143.04	2.26	3.39	2.26	3.39	1538.11	5503.73	3.578
8.12	1	SND	2	20.91	3.39	2.26	3.39	2.26	-3069.95	-5503.73	1.793

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.21	0.71	0.50	ø8/20 2 br.	5.03	0.25	5579.82	2.50	17091.60	22577.50	17091.60	3.06
11 SLU	0.71	7.62	6.91	ø8/20 2 br.	5.03	0.25	4388.87	2.50	17878.50	22577.50	17878.50	4.07
1 SND	7.62	8.12	0.50	ø8/20 2 br.	5.03	0.25	3658.53	2.50	17091.60	22577.50	17091.60	4.67

Travata n. 122

Nodi: 28 -17 29

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
23R		25.00	50.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.20	11	SLU	1	20.00	5.40	4.02	5.40	4.02	-2494.61	-9144.04	3.666
1.49	11	SLU	1	149.27	2.26	5.15	2.26	5.15	2996.55	8707.32	2.906
3.75	11	SLU	1	375.50	5.40	4.02	5.40	4.02	-5313.60	-9144.04	1.721
4.00	11	SLU	2	12.50	5.40	4.02	5.40	4.02	-5436.08	-9144.04	1.682
5.64	11	SLU	2	175.91	2.26	5.15	2.26	5.15	3046.27	8707.32	2.858
7.60	11	SLU	2	372.00	5.40	4.02	5.40	4.02	-2982.71	-9144.04	3.066

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.20	5	SND	1	20.00	5.40	4.02	5.40	4.02	-3296.51	-8687.38	2.635

1.49	5	SND	1	149.27	2.26	5.15	2.26	5.15	2522.09	8220.62	3.259
3.75	5	SND	1	375.50	5.40	4.02	5.40	4.02	-5091.47	-8687.38	1.706
4.00	5	SND	2	12.50	5.40	4.02	5.40	4.02	-5463.78	-8687.38	1.590
5.64	5	SND	2	175.91	2.26	5.15	2.26	5.15	2773.19	8220.62	2.964
7.60	5	SND	2	372.00	5.40	4.02	5.40	4.02	-4247.96	-8687.38	2.045

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.20	0.70	0.50	ø8/20 2 br.	5.03	0.25	6546.62	2.50	22529.30	22577.50	22529.30	3.44
5 SND	0.20	0.70	0.50	ø8/20 2 br.	5.03	0.25	5408.41	2.50	17091.60	22577.50	17091.60	3.16
11 SLU	0.70	3.25	2.55	ø8/20 2 br.	5.03	0.25	6104.70	2.50	17091.60	22577.50	17091.60	2.80
11 SLU	3.25	3.75	0.50	ø8/20 2 br.	5.03	0.25	8206.54	2.50	22529.30	22577.50	22529.30	2.75
5 SND	3.25	3.75	0.50	ø8/20 2 br.	5.03	0.25	6572.85	2.50	17091.60	22577.50	17091.60	2.60
11 SLU	4.00	4.51	0.50	ø8/20 2 br.	5.03	0.25	8345.69	2.50	22529.30	22577.50	22529.30	2.70
5 SND	4.00	4.51	0.50	ø8/20 2 br.	5.03	0.25	6896.44	2.50	17091.60	22577.50	17091.60	2.48
11 SLU	4.51	7.10	2.59	ø8/20 2 br.	5.03	0.25	6230.68	2.50	17091.60	22577.50	17091.60	2.74
11 SLU	7.10	7.60	0.50	ø8/20 2 br.	5.03	0.25	7056.47	2.50	22529.30	22577.50	22529.30	3.19
5 SND	7.10	7.60	0.50	ø8/20 2 br.	5.03	0.25	5990.44	2.50	17091.60	22577.50	17091.60	2.85

Travata n. 123

Nodi: 21 -104 28

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
23	R	25.00	50.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.21	11	SLU	1	521.86	4.52	3.39	4.52	3.39	-4614.27	-7665.82	1.661
2.44	11	SLU	1	299.09	2.26	4.52	2.26	4.52	2850.20	7658.49	2.687
5.30	11	SLU	1	12.67	4.52	3.39	4.52	3.39	-3966.97	-7665.82	1.932
5.56	11	SLU	2	277.84	4.52	3.39	4.52	3.39	-2158.80	-7665.82	3.551
6.94	9	SLU	2	139.34	2.26	3.39	2.26	3.39	-405.89	-3858.23	9.506
8.12	9	SLU	2	21.19	3.39	2.26	3.39	2.26	-1849.82	-5761.67	3.115

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.21	11	SND	1	521.86	4.52	3.39	4.52	3.39	-4402.99	-7302.22	1.658
2.44	11	SND	1	299.09	2.26	4.52	2.26	4.52	2186.73	7258.08	3.319
5.30	11	SND	1	12.67	4.52	3.39	4.52	3.39	-3556.13	-7302.22	2.053
5.56	11	SND	2	277.84	4.52	3.39	4.52	3.39	-2474.57	-7302.22	2.951
6.94	11	SND	2	139.34	2.26	3.39	2.26	3.39	-1414.32	-3732.14	2.639
8.12	11	SND	2	21.19	3.39	2.26	3.39	2.26	-3260.90	-5503.73	1.688

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.21	0.71	0.50	ø8/20 2 br.	5.03	0.25	5370.19	2.50	22529.30	22577.50	22529.30	4.20
11 SLU	0.71	4.80	4.09	ø8/20 2 br.	5.03	0.25	4392.47	2.50	17091.60	22577.50	17091.60	3.89
11 SLU	4.80	5.30	0.50	ø8/20 2 br.	5.03	0.25	5426.28	2.50	22529.30	22577.50	22529.30	4.15
1 SND	5.56	6.06	0.50	ø8/20 2 br.	5.03	0.25	3543.12	2.50	17091.60	22577.50	17091.60	4.82
1 SND	6.06	7.62	1.57	ø8/20 2 br.	5.03	0.25	2627.71	2.50	17091.60	22577.50	17091.60	6.50
1 SND	7.62	8.12	0.50	ø8/20 2 br.	5.03	0.25	3500.97	2.50	17091.60	22577.50	17091.60	4.88

Travata n. 124

Nodi: 26 -106 21

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
23	R	25.00	50.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.21	9	SLU	1	256.17	3.68	2.26	3.68	2.26	-1684.15	-6237.41	3.704
1.20	9	SLU	1	157.21	2.26	3.39	2.26	3.39	-677.09	-3858.23	5.698

2.65	11	SLU	1	12.55	4.52	3.39	4.52	3.39	-2163.41	-7665.82	3.543
2.90	11	SLU	2	540.47	4.52	3.39	4.52	3.39	-4104.31	-7665.82	1.868
5.04	11	SLU	2	326.60	2.26	4.52	2.26	4.52	2940.50	7658.49	2.604
8.09	11	SLU	2	21.08	4.52	3.39	4.52	3.39	-4767.43	-7665.82	1.608

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.21	1	SND	1	256.17	3.68	2.26	3.68	2.26	-3342.21	-5945.35	1.779
1.20	1	SND	1	157.21	2.26	3.39	2.26	3.39	-1965.13	-3732.14	1.899
2.65	1	SND	1	12.55	4.52	3.39	4.52	3.39	-2589.85	-7302.22	2.820
2.90	1	SND	2	540.47	4.52	3.39	4.52	3.39	-3639.37	-7302.22	2.006
5.04	1	SND	2	326.60	2.26	4.52	2.26	4.52	2215.75	7258.08	3.276
8.09	1	SND	2	21.08	4.52	3.39	4.52	3.39	-4487.44	-7302.22	1.627

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.21	0.71	0.50	ø8/20 2 br.	5.03	0.25	3518.41	2.50	17091.60	22577.50	17091.60	4.86
1 SND	0.71	2.15	1.44	ø8/20 2 br.	5.03	0.25	2748.31	2.50	17091.60	22577.50	17091.60	6.22
1 SND	2.15	2.65	0.50	ø8/20 2 br.	5.03	0.25	3663.32	2.50	17091.60	22577.50	17091.60	4.67
11 SLU	2.90	3.40	0.50	ø8/20 2 br.	5.03	0.25	5486.05	2.50	22529.30	22577.50	22529.30	4.11
11 SLU	3.40	7.59	4.19	ø8/20 2 br.	5.03	0.25	4472.56	2.50	17091.60	22577.50	17091.60	3.82
11 SLU	7.59	8.09	0.50	ø8/20 2 br.	5.03	0.25	5448.89	2.50	22529.30	22577.50	22529.30	4.13

Travata n. 125

Nodi: -106 -18 -109

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
19	R	25.00	60.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	11	SLU	1	20.00	6.28	4.02	6.28	4.02	-3114.86	-12871.10	4.132
1.44	11	SLU	1	144.11	2.26	6.03	2.26	6.03	4379.00	12314.30	2.812
3.92	11	SLU	1	392.31	6.28	4.02	6.28	4.02	-7773.11	-12871.10	1.656
4.17	11	SLU	2	12.50	6.28	4.02	6.28	4.02	-8086.32	-12871.10	1.592
5.78	11	SLU	2	173.13	2.26	6.03	2.26	6.03	4724.18	12314.30	2.607
8.03	11	SLU	2	398.01	6.28	4.02	6.28	4.02	-3487.53	-12871.10	3.691

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.20	5	SND	1	20.00	6.28	4.02	6.28	4.02	-4105.07	-12179.00	2.967
1.44	5	SND	1	144.11	2.26	6.03	2.26	6.03	3382.32	11607.00	3.432
3.92	5	SND	1	392.31	6.28	4.02	6.28	4.02	-6708.23	-12179.00	1.816
4.17	5	SND	2	12.50	6.28	4.02	6.28	4.02	-6943.13	-12179.00	1.754
5.78	5	SND	2	173.13	2.26	6.03	2.26	6.03	3566.56	11607.00	3.254
8.03	5	SND	2	398.01	6.28	4.02	6.28	4.02	-4471.77	-12179.00	2.724

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.20	0.80	0.60	ø8/20 2 br.	5.03	0.25	8717.90	2.35	28477.90	28477.90	28477.90	3.27
5 SND	0.20	0.80	0.60	ø8/20 2 br.	5.03	0.25	6517.98	2.50	20615.70	27232.60	20615.70	3.16
11 SLU	0.80	3.32	2.52	ø8/20 2 br.	5.03	0.25	8007.05	2.50	20615.70	27232.60	20615.70	2.57
11 SLU	3.32	3.92	0.60	ø8/20 2 br.	5.03	0.25	11220.30	2.35	28477.90	28477.90	28477.90	2.54
11 SLU	4.17	4.77	0.60	ø8/20 2 br.	5.03	0.25	11515.60	2.35	28477.90	28477.90	28477.90	2.47
11 SLU	4.77	7.43	2.66	ø8/20 2 br.	5.03	0.25	8302.37	2.50	20615.70	27232.60	20615.70	2.48
11 SLU	7.43	8.03	0.60	ø8/20 2 br.	5.03	0.25	9128.61	2.35	28477.90	28477.90	28477.90	3.12
5 SND	7.43	8.03	0.60	ø8/20 2 br.	5.03	0.25	6793.32	2.50	20615.70	27232.60	20615.70	3.03

Travata n. 126

Nodi: -104 -20 -108

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
------	------	---	---	--------	--------	-----	------	-----	-----------	------	-----	-----	-----------

		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
19	R	25.00	60.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.20	11	SLU	1	20.09	6.28	4.02	6.28	4.02	-2968.47	-12871.10	4.336
1.44	11	SLU	1	144.38	2.26	6.03	2.26	6.03	4419.55	12314.30	2.786
3.93	11	SLU	1	392.96	6.28	4.02	6.28	4.02	-8004.54	-12871.10	1.608
4.18	11	SLU	2	12.59	6.28	4.02	6.28	4.02	-8346.73	-12871.10	1.542
5.78	11	SLU	2	172.72	2.26	6.03	2.26	6.03	4951.99	12314.30	2.487
8.02	11	SLU	2	396.90	6.28	4.02	6.28	4.02	2011.84	8262.26	4.107

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.20	5	SND	1	20.09	6.28	4.02	6.28	4.02	-3875.58	-12179.00	3.143
1.44	5	SND	1	144.38	2.26	6.03	2.26	6.03	3282.78	11607.00	3.536
3.93	5	SND	1	392.96	6.28	4.02	6.28	4.02	-7004.25	-12179.00	1.739
4.18	5	SND	2	12.59	6.28	4.02	6.28	4.02	-7149.96	-12179.00	1.703
5.78	5	SND	2	172.72	2.26	6.03	2.26	6.03	3478.79	11607.00	3.337
8.02	5	SND	2	396.90	6.28	4.02	6.28	4.02	2667.44	7986.71	2.994

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
11	SLU	0.20	0.80	0.60	ø8/20 2 br.	5.03	0.25	8662.94	2.35	28477.90	28477.90	3.29
5	SND	0.20	0.80	0.60	ø8/20 2 br.	5.03	0.25	6482.78	2.50	20615.70	27232.60	3.18
11	SLU	0.80	3.33	2.53	ø8/20 2 br.	5.03	0.25	8141.53	2.50	20615.70	27232.60	2.53
11	SLU	3.33	3.93	0.60	ø8/20 2 br.	5.03	0.25	11364.10	2.35	28477.90	28477.90	2.51
11	SLU	4.18	4.78	0.60	ø8/20 2 br.	5.03	0.25	11748.10	2.35	28477.90	28477.90	2.42
11	SLU	4.78	8.15	3.37	ø8/20 2 br.	5.03	0.25	8886.48	2.50	22345.90	27232.60	2.51

Travata n. 127

Nodi: 21 -19 31

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
13	R	25.00	70.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.20	11	SLU	1	20.00	6.47	5.15	6.47	5.15	-4999.74	-15579.70	3.116
1.44	11	SLU	1	144.31	2.26	6.28	2.26	6.28	6401.39	15063.20	2.353
4.24	11	SLU	1	424.00	6.47	5.15	6.47	5.15	-11857.80	-15579.70	1.314
4.49	11	SLU	2	12.50	6.47	5.15	6.47	5.15	-12154.60	-15579.70	1.282
6.34	11	SLU	2	197.58	2.26	6.28	2.26	6.28	6594.05	15063.20	2.284
8.50	11	SLU	2	413.50	6.47	5.15	6.47	5.15	3683.25	12417.50	3.371

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.20	5	SND	1	20.00	6.47	5.15	6.47	5.15	-5700.61	-14809.20	2.598
1.44	5	SND	1	144.31	2.26	6.28	2.26	6.28	-1965.57	-5348.17	2.721
4.24	5	SND	1	424.00	6.47	5.15	6.47	5.15	-10193.00	-14809.20	1.453
4.49	5	SND	2	12.50	6.47	5.15	6.47	5.15	-10401.40	-14809.20	1.424
6.34	5	SND	2	197.58	2.26	6.28	2.26	6.28	4849.56	14212.70	2.931
8.50	5	SND	2	413.50	6.47	5.15	6.47	5.15	4127.65	11939.40	2.893

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
11	SLU	0.20	0.90	0.70	ø8/20 2 br.	5.03	0.25	12141.40	2.50	29625.40	31887.80	2.44
11	SLU	0.90	3.54	2.64	ø8/20 2 br.	5.03	0.25	10761.50	2.50	24139.70	31887.80	2.24
11	SLU	3.54	4.24	0.70	ø8/20 2 br.	5.03	0.25	15498.60	2.50	29625.40	31887.80	1.91
11	SLU	4.49	5.19	0.70	ø8/20 2 br.	5.03	0.25	15567.20	2.50	29625.40	31887.80	1.90
11	SLU	5.19	7.80	2.61	ø8/20 2 br.	5.03	0.25	10874.00	2.50	24139.70	31887.80	2.22
11	SLU	7.80	8.50	0.70	ø8/20 2 br.	5.03	0.25	10864.70	2.50	29625.40	31887.80	2.73

Travata n. 128

Nodi: -79 -104

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
18	R	25.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.13	9	SLU	1	12.56	3.05	2.26	3.05	2.26	430.18	3047.80	7.085
2.17	11	SLU	1	216.56	3.05	2.26	3.05	2.26	-2002.70	-4088.31	2.041

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'yd	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.13	5	SND	1	12.56	3.05	2.26	3.05	2.26	2199.52	2940.67	1.337
2.17	5	SND	1	216.56	3.05	2.26	3.05	2.26	-3457.28	-3909.92	1.131

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
<m>	<m>	<m>	<m>		<cm>	<m>	<daN>		<daN>	<daN>	<daN>	
5	SND	0.13	0.53	0.40	ø6/20 2 br.	2.83	0.25	3225.42	2.50	7631.76	17922.30	7631.76 2.37
5	SND	0.53	1.77	1.24	ø6/20 2 br.	2.83	0.25	3780.65	2.50	7631.76	17922.30	7631.76 2.02
5	SND	1.77	2.17	0.40	ø6/20 2 br.	2.83	0.25	4500.84	2.50	7631.76	17922.30	7631.76 1.70

Travata n. 129

Nodi: -80 -106

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
18	R	25.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.13	9	SLU	1	12.53	3.05	2.26	3.05	2.26	441.85	3047.80	6.898
2.14	11	SLU	1	213.97	3.83	2.26	3.83	2.26	-2016.72	-5127.75	2.543

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'yd	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.13	5	SND	1	12.53	3.05	2.26	3.05	2.26	1996.97	2940.67	1.473
2.14	5	SND	1	213.97	3.83	2.26	3.83	2.26	-3520.69	-4874.47	1.385

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
<m>	<m>	<m>	<m>		<cm>	<m>	<daN>		<daN>	<daN>	<daN>	
5	SND	0.13	0.53	0.40	ø6/20 2 br.	2.83	0.25	3108.43	2.50	7631.76	17922.30	7631.76 2.46
5	SND	0.53	1.74	1.21	ø6/20 2 br.	2.83	0.25	3730.66	2.50	7631.76	17922.30	7631.76 2.05
5	SND	1.74	2.14	0.40	ø6/20 2 br.	2.83	0.25	4449.95	2.50	7631.76	17922.30	7631.76 1.72

Travata n. 130

Nodi: -80 -81 -82 -79

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
29	R	25.00	104.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.13	11	SLU	1	13.14	4.27	2.26	4.27	2.26	2707.23	8235.05	3.042
1.69	11	SLU	1	169.17	2.26	4.27	2.26	4.27	2802.97	15505.10	5.532
2.94	11	SLU	1	294.00	8.29	2.26	8.29	2.26	2643.75	8234.63	3.115
3.34	11	SLU	2	20.00	8.29	6.28	8.29	6.28	3999.63	22787.80	5.697
4.57	11	SLU	2	143.20	2.26	6.03	2.26	6.03	-2785.61	-8234.73	2.956

7.96	11	SLU	2	482.00	8.29	4.02	8.29	4.02	4078.83	14602.90	3.580
8.36	11	SLU	3	20.00	8.29	2.54	8.29	2.54	2627.08	9258.10	3.524
11.07	11	SLU	3	291.45	4.27	2.26	4.27	2.26	2642.31	8235.05	3.117

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	13.14	4.27	2.26	4.27	2.26	2911.50	8021.00	2.755
1.69	1	SND	1	169.17	2.26	4.27	2.26	4.27	-6665.56	-8021.00	1.203
2.94	1	SND	1	294.00	8.29	2.26	8.29	2.26	6056.76	8075.41	1.333
3.34	5	SND	2	20.00	8.29	6.28	8.29	6.28	4432.87	21926.70	4.946
4.57	5	SND	2	143.20	2.26	6.03	2.26	6.03	-3613.12	-8048.09	2.227
7.96	5	SND	2	482.00	8.29	4.02	8.29	4.02	4402.25	14200.10	3.226
8.36	1	SND	3	20.00	8.29	2.54	8.29	2.54	6647.37	9067.89	1.364
11.07	1	SND	3	291.45	4.27	2.26	4.27	2.26	3031.46	8021.00	2.646

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.13	2.94	2.81	ø6/20 2 br.	2.83	0.25	7151.58	2.50	20318.30	47715.30	20318.30	2.84
11 SLU	3.34	4.38	1.04	ø6/20 2 br.	2.83	0.25	8161.14	2.50	30140.50	47715.30	30140.50	3.69
1 SND	3.34	4.38	1.04	ø6/20 2 br.	2.83	0.25	6211.66	2.50	20318.30	47715.30	20318.30	3.27
11 SLU	4.38	6.92	2.54	ø6/20 2 br.	2.83	0.25	4479.46	2.50	20318.30	47715.30	20318.30	4.54
11 SLU	6.92	7.96	1.04	ø6/20 2 br.	2.83	0.25	8107.25	2.50	30140.50	47715.30	30140.50	3.72
1 SND	6.92	7.96	1.04	ø6/20 2 br.	2.83	0.25	6170.26	2.50	20318.30	47715.30	20318.30	3.29
1 SND	8.36	11.07	2.71	ø6/20 2 br.	2.83	0.25	7268.96	2.50	20318.30	47715.30	20318.30	2.80

Travata n. 131

Nodi: -10 -15 -11

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
17	R	25.00	65.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.25	11	SLU	1	25.00	8.29	4.62	8.29	4.62	-8784.49	-18425.10	2.097
1.91	11	SLU	2	31.65	2.26	6.63	2.26	6.63	5423.81	14681.80	2.707
4.75	11	SLU	2	316.50	8.29	4.62	8.29	4.62	-10760.10	-18425.10	1.712

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.25	1	SND	1	25.00	8.29	4.62	8.29	4.62	-9172.98	-17329.40	1.889
1.91	1	SND	2	31.65	2.26	6.63	2.26	6.63	4747.49	13828.90	2.913
4.75	1	SND	2	316.50	8.29	4.62	8.29	4.62	-10177.30	-17329.40	1.703

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.25	1.37	1.12	ø6/20 2 br.	2.83	0.25	12142.70	2.50	18221.30	29560.20	18221.30	1.50
1 SND	0.25	1.37	1.12	ø6/20 2 br.	2.83	0.25	9736.66	2.50	12587.50	29560.20	12587.50	1.29
11 SLU	1.37	2.78	1.41	ø6/20 2 br.	2.83	0.25	7003.54	2.50	12587.50	29560.20	12587.50	1.80
11 SLU	2.78	4.75	1.97	ø6/20 2 br.	2.83	0.25	13058.70	2.50	15795.80	29560.20	15795.80	1.21

Travata n. 132

Nodi: -11 -12

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
17	R	25.00	65.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	12.50	7.82	4.02	7.82	4.02	-11903.10	-17371.70	1.459
2.28	11	SLU	1	227.85	4.27	6.03	4.27	6.03	7568.06	13441.50	1.776

5.35	11	SLU	1	535.50	7.82	4.02	7.82	4.02	-11494.90	-17371.70	1.511
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Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	1	SND	1	12.50	7.82	4.02	7.82	4.02	-9568.48	-16342.20	1.708
2.28	1	SND	1	227.85	4.27	6.03	4.27	6.03	5132.60	12758.30	2.486
5.35	1	SND	1	535.50	7.82	4.02	7.82	4.02	-9213.24	-16342.20	1.774

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
<m>	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
11 SLU	0.13	0.78	0.65	ø8/20 2 br.	5.03	0.25	14287.50	2.50	22377.70	29560.20	22377.70	1.57
11 SLU	0.78	4.70	3.93	ø8/20 2 br.	5.03	0.25	10755.40	2.50	25598.30	29560.20	25598.30	2.38
11 SLU	4.70	5.35	0.65	ø8/20 2 br.	5.03	0.25	14131.20	2.50	22377.70	29560.20	22377.70	1.58

Travata n. 133

Nodi: -12 -14 -13

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
17	R	25.00	65.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	11	SLU	1	12.50	8.29	4.62	8.29	4.62	-9946.37	-18425.10	1.852
1.71	11	SLU	1	171.11	2.26	6.63	2.26	6.63	4733.15	14681.80	3.102
4.44	11	SLU	2	146.50	8.29	4.62	8.29	4.62	-9132.47	-18425.10	2.018

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	1	SND	1	12.50	8.29	4.62	8.29	4.62	-9407.39	-17329.40	1.842
1.71	1	SND	1	171.11	2.26	6.63	2.26	6.63	-2234.10	-4954.58	2.218
4.44	1	SND	2	146.50	8.29	4.62	8.29	4.62	-9367.78	-17329.40	1.850

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
<m>	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
11 SLU	0.13	0.78	0.65	ø6/20 2 br.	2.83	0.25	12443.90	2.50	22323.40	29560.20	22323.40	1.79
1 SND	0.13	0.78	0.65	ø6/20 2 br.	2.83	0.25	9814.20	2.50	12587.50	29560.20	12587.50	1.28
11 SLU	0.78	3.79	3.02	ø6/20 2 br.	2.83	0.25	8926.40	2.50	12587.50	29560.20	12587.50	1.41
11 SLU	3.79	4.44	0.65	ø6/20 2 br.	2.83	0.25	11900.00	2.50	22323.40	29560.20	22323.40	1.88
1 SND	3.79	4.44	0.65	ø6/20 2 br.	2.83	0.25	9609.44	2.50	12587.50	29560.20	12587.50	1.31

Travata n. 134

Nodi: -13 10

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
17	R	25.00	65.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	11	SLU	1	12.50	10.30	6.03	10.30	6.03	-13798.40	-22855.00	1.656
2.61	11	SLU	1	260.54	4.27	10.05	4.27	10.05	8124.66	22155.30	2.727
6.02	11	SLU	1	601.59	10.30	6.03	10.30	6.03	-11145.90	-22855.00	2.051

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	1	SND	1	12.50	10.30	6.03	10.30	6.03	-12239.40	-21444.40	1.752
2.61	1	SND	1	260.54	4.27	10.05	4.27	10.05	5879.80	20768.20	3.532
6.02	1	SND	1	601.59	10.30	6.03	10.30	6.03	-10427.50	-21444.40	2.057

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.13	0.78	0.65	ø8/20 2 br.	5.03	0.25	13922.20	2.38	30596.80	30596.80	30596.80	2.20
1 SND	0.13	0.78	0.65	ø8/20 2 br.	5.03	0.25	10584.50	2.50	22377.70	29560.20	22377.70	2.11
11 SLU	0.78	5.37	4.59	ø8/20 2 br.	5.03	0.25	10948.60	2.50	25134.70	29560.20	25134.70	2.30
11 SLU	5.37	6.02	0.65	ø8/20 2 br.	5.03	0.25	12848.00	2.38	30596.80	30596.80	30596.80	2.38
1 SND	5.37	6.02	0.65	ø8/20 2 br.	5.03	0.25	9851.07	2.50	22377.70	29560.20	22377.70	2.27

Travata n. 201

Nodi: 37 -484 -27 -28 -481 -480 -29 -30 -478 38

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
12	R	90.00	24.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	9	SLU	1	12.50	19.48	16.09	19.48	16.09	-2451.00	-14821.50	6.047
3.66	11	SLU	2	236.39	16.09	16.09	16.09	16.09	5180.41	12275.30	2.370
6.93	11	SLU	2	563.50	25.51	22.12	25.51	22.12	-7789.85	-19350.60	2.484
7.19	11	SLU	3	12.50	9.42	6.03	9.42	6.03	-3626.94	-7266.20	2.003
9.15	11	SLU	3	208.58	9.42	6.31	9.42	6.31	201.61	4924.40	24.425
9.23	11	SLU	3	217.50	25.51	22.40	25.51	22.40	182.86	17026.10	93.111
9.49	9	SLU	4	12.50	25.51	22.12	25.51	22.12	-2063.46	-19350.60	9.378
12.81	11	SLU	5	215.44	16.09	16.09	16.09	16.09	3894.81	12275.30	3.152
16.16	9	SLU	6	117.50	25.51	22.12	25.51	22.12	-2002.58	-19350.60	9.663
16.41	11	SLU	7	12.50	9.42	6.31	9.42	6.31	123.40	4924.40	39.906
18.48	11	SLU	7	218.50	25.51	6.03	25.51	6.03	-3491.42	-18696.30	5.355
18.73	11	SLU	8	12.50	25.51	22.12	25.51	22.12	-7848.68	-19350.60	2.465
21.52	11	SLU	8	292.03	16.09	16.09	16.09	16.09	5152.23	12275.30	2.383
25.49	9	SLU	9	117.50	19.48	16.09	19.48	16.09	-2457.27	-14821.50	6.032

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	12.50	19.48	16.09	19.48	16.09	-2609.48	-14128.70	5.414
3.66	1	SND	2	236.39	16.09	16.09	16.09	16.09	4244.90	11767.40	2.772
6.93	1	SND	2	563.50	25.51	22.12	25.51	22.12	-7410.05	-18455.30	2.491
7.19	1	SND	3	12.50	9.42	6.03	9.42	6.03	-5548.42	-6931.53	1.249
9.15	1	SND	3	208.58	9.42	6.31	9.42	6.31	3854.84	4732.77	1.228
9.23	1	SND	3	217.50	25.51	22.40	25.51	22.40	3854.84	16374.80	4.248
9.49	1	SND	4	12.50	25.51	22.12	25.51	22.12	-2691.01	-18455.30	6.858
12.81	1	SND	5	215.44	16.09	16.09	16.09	16.09	3212.54	11767.40	3.663
16.16	1	SND	6	117.50	25.51	22.12	25.51	22.12	-2630.86	-18455.30	7.015
16.41	1	SND	7	12.50	9.42	6.31	9.42	6.31	3764.75	4732.77	1.257
18.48	1	SND	7	218.50	25.51	6.03	25.51	6.03	-5514.81	-17711.90	3.212
18.73	1	SND	8	12.50	25.51	22.12	25.51	22.12	-7558.16	-18455.30	2.442
21.52	1	SND	8	292.03	16.09	16.09	16.09	16.09	4142.22	11767.40	2.841
25.49	1	SND	9	117.50	19.48	16.09	19.48	16.09	-2588.60	-14128.70	5.458

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.13	0.37	0.24	ø8/20 2 br.	5.03	0.90	1932.90	2.50	7929.11	37706.70	7929.11	4.10
11 SLU	0.37	6.69	6.33	ø8/20 2 br.	5.03	0.90	7574.60	2.50	7929.11	37706.70	7929.11	1.05
11 SLU	6.69	6.93	0.24	ø8/19 2 br.	5.43	0.90	8216.03	2.50	8572.01	37706.70	8572.01	1.04
1 SND	7.19	7.43	0.24	ø8/20 2 br.	5.03	0.90	6545.98	2.50	7929.11	37706.70	7929.11	1.21
1 SND	7.43	8.99	1.57	ø8/20 2 br.	5.03	0.90	6044.60	2.50	7929.11	37706.70	7929.11	1.31
1 SND	8.99	9.23	0.24	ø8/20 2 br.	5.03	0.90	3859.54	2.50	7929.11	37706.70	7929.11	2.05
1 SND	9.49	9.73	0.24	ø8/20 2 br.	5.03	0.90	3711.20	2.50	7929.11	37706.70	7929.11	2.14
1 SND	9.73	15.93	6.20	ø8/20 2 br.	5.03	0.90	3188.71	2.50	7929.11	37706.70	7929.11	2.49
1 SND	15.93	16.16	0.24	ø8/20 2 br.	5.03	0.90	3580.72	2.50	7929.11	37706.70	7929.11	2.21
1 SND	16.41	16.66	0.24	ø8/20 2 br.	5.03	0.90	3915.13	2.50	7929.11	37706.70	7929.11	2.03
1 SND	16.66	18.23	1.58	ø8/20 2 br.	5.03	0.90	5972.04	2.50	7929.11	37706.70	7929.11	1.33
1 SND	18.23	18.48	0.24	ø8/20 2 br.	5.03	0.90	6465.16	2.50	7929.11	37706.70	7929.11	1.23
11 SLU	18.73	18.96	0.24	ø8/19 2 br.	5.43	0.90	8449.09	2.50	8572.01	37706.70	8572.01	1.01
11 SLU	18.96	25.25	6.29	ø8/20 2 br.	5.03	0.90	7759.05	2.50	7929.11	37706.70	7929.11	1.02
1 SND	25.25	25.49	0.24	ø8/20 2 br.	5.03	0.90	1967.87	2.50	7929.11	37706.70	7929.11	4.03

Travata n. 202

Nodi: 37 -21 -1052 -1073 39

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94
15	R	30.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.03	10.05	6.03	10.05	6.03	-13200.40	-27716.60	2.100
3.11	11	SLU	1	310.92	4.02	10.05	4.02	10.05	16047.70	27528.20	1.715
6.85	11	SLU	1	685.43	12.31	6.03	12.31	6.03	-9169.59	-33738.00	3.679
7.11	11	SLU	2	12.56	12.31	2.26	12.31	2.26	-4108.39	-15633.20	3.805
7.28	11	SLU	2	29.49	8.29	2.26	8.29	2.26	-4108.39	-10875.00	2.647
7.49	11	SLU	3	10.51	4.27	2.26	4.27	2.26	-2901.36	-5720.25	1.972
9.81	11	SLU	3	243.31	2.26	2.26	2.26	2.26	-653.61	-3057.14	4.677
10.15	9	SLU	3	276.57	2.26	2.26	2.26	2.26	-428.39	-3057.14	7.136
10.35	11	SLU	4	10.03	4.27	2.26	4.27	2.26	711.74	3056.69	4.295
10.65	11	SLU	4	39.96	4.27	2.26	4.27	2.26	711.74	3056.69	4.295

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	30.03	10.05	6.03	10.05	6.03	-13373.90	-26059.50	1.949
3.11	5	SND	1	310.92	4.02	10.05	4.02	10.05	11767.30	25840.90	2.196
6.85	5	SND	1	685.43	12.31	6.03	12.31	6.03	-7631.77	-31607.60	4.142
7.11	5	SND	2	12.56	12.31	2.26	12.31	2.26	-3748.29	-14772.10	3.941
7.28	5	SND	2	29.49	8.29	2.26	8.29	2.26	-3748.29	-10215.40	2.725
7.49	5	SND	3	10.51	4.27	2.26	4.27	2.26	-2648.63	-5437.04	2.053
9.81	5	SND	3	243.31	2.26	2.26	2.26	2.26	-1329.89	-2941.39	2.212
10.15	5	SND	3	276.57	2.26	2.26	2.26	2.26	-1329.89	-2941.39	2.212
10.35	5	SND	4	10.03	4.27	2.26	4.27	2.26	1873.58	2959.36	1.580
10.65	5	SND	4	39.96	4.27	2.26	4.27	2.26	1873.58	2959.36	1.580

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.25	16331.00	2.46	36917.20	36917.20	36917.20	2.26
11 SLU	1.10	6.05	4.95	ø8/20 2 br.	5.03	0.25	12491.20	2.50	30822.20	36542.90	30822.20	2.47
11 SLU	6.05	6.85	0.80	ø8/20 2 br.	5.03	0.25	14762.80	2.46	36917.20	36917.20	36917.20	2.50
5 SND	7.11	7.28	0.17	ø6/20 2 br.	2.83	0.30	3604.16	2.50	7631.76	21506.80	7631.76	2.12
5 SND	7.49	7.89	0.40	ø6/20 2 br.	2.83	0.30	1788.22	2.50	7631.76	21506.80	7631.76	4.27
5 SND	7.89	9.75	1.86	ø6/20 2 br.	2.83	0.30	1662.82	2.50	7631.76	21506.80	7631.76	4.59
5 SND	9.75	10.15	0.40	ø6/20 2 br.	2.83	0.30	1039.25	2.50	7631.76	21506.80	7631.76	7.34
5 SND	10.35	10.65	0.30	ø6/20 2 br.	2.83	0.30	2738.06	2.50	7631.76	21506.80	7631.76	2.79

Travata n. 203

Nodi: -27 -1085 -1086 -32

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.00	14.33	12.06	14.33	12.06	-5117.07	-39559.70	7.731
1.31	11	SLU	1	131.34	8.29	14.07	8.29	14.07	-3795.02	-22932.30	6.043
6.86	11	SLU	3	220.17	12.31	12.06	12.31	12.06	3962.08	33327.90	8.412

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	30.00	14.33	12.06	14.33	12.06	7726.60	31818.70	4.118
1.31	5	SND	1	131.34	8.29	14.07	8.29	14.07	-7724.91	-22153.50	2.868
6.86	5	SND	3	220.17	12.31	12.06	12.31	12.06	7224.90	31657.20	4.382

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	10621.10	2.16	40369.20	40369.20	40369.20	3.80
5 SND	1.10	6.06	4.96	ø8/15 2 br.	6.70	0.25	5347.98	2.49	36686.10	36686.10	36686.10	6.86
5 SND	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	9328.25	2.49	36686.10	36686.10	36686.10	3.93

Travata n. 204

Nodi: -28 -33

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14R		25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.01	14.33	12.06	14.33	12.06	-18179.90	-39559.70	2.176
4.67	11	SLU	1	467.01	6.03	16.09	6.03	16.09	20087.30	43439.00	2.163
6.86	11	SLU	1	685.51	12.31	12.06	12.31	12.06	-10767.30	-34020.00	3.160

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	30.01	14.33	12.06	14.33	12.06	-16984.80	-37280.60	2.195
4.67	5	SND	1	467.01	6.03	16.09	6.03	16.09	13101.80	40671.30	3.104
6.86	5	SND	1	685.51	12.31	12.06	12.31	12.06	-10553.70	-32266.50	3.057

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.25	21046.70	2.46	36917.20	36917.20	36917.20	1.75
11 SLU	1.10	6.06	4.96	ø8/20 2 br.	5.03	0.25	16184.80	2.50	30821.50	36542.90	30821.50	1.90
11 SLU	6.06	6.86	0.80	ø8/20 2 br.	5.03	0.25	18472.20	2.46	36917.20	36917.20	36917.20	2.00

Travata n. 205

Nodi: -29 -34

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14R		25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.30	11	SLU	1	30.01	14.33	12.06	14.33	12.06	-23137.00	-39559.70	1.710
3.11	11	SLU	1	310.94	6.03	16.09	6.03	16.09	26261.40	43439.00	1.654
6.86	11	SLU	1	685.51	12.31	12.06	12.31	12.06	-10468.70	-34020.00	3.250

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.30	5	SND	1	30.01	14.33	12.06	14.33	12.06	-19496.70	-37280.60	1.912
3.11	5	SND	1	310.94	6.03	16.09	6.03	16.09	17919.20	40671.30	2.270
6.86	5	SND	1	685.51	12.31	12.06	12.31	12.06	-9318.59	-32266.50	3.463

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.25	26578.00	2.46	36917.20	36917.20	36917.20	1.39
11 SLU	1.10	6.06	4.96	ø8/20 2 br.	5.03	0.25	20580.90	2.50	30821.50	36542.90	30821.50	1.50
11 SLU	6.06	6.86	0.80	ø8/20 2 br.	5.03	0.25	22738.50	2.46	36917.20	36917.20	36917.20	1.62

Travata n. 206

Nodi: -30 63

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
------	------	---	---	--------	--------	-----	------	-----	-----------	------	-----	-----	-----------

		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	11	SLU	1	30.01	14.33	12.06	14.33	12.06	-19207.80	-39559.70	2.060
3.11	11	SLU	1	310.94	6.03	16.09	6.03	16.09	20532.60	43439.00	2.116
6.86	11	SLU	1	685.50	12.31	12.06	12.31	12.06	-9685.04	-34020.00	3.513

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	5	SND	1	30.01	14.33	12.06	14.33	12.06	-17496.90	-37280.60	2.131
3.11	5	SND	1	310.94	6.03	16.09	6.03	16.09	13737.60	40671.30	2.961
6.86	5	SND	1	685.50	12.31	12.06	12.31	12.06	-9428.52	-32266.50	3.422

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cm>	<m>	<daN/m>		<daN>	<daN>	<daN>	
11	SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.25	21556.30	2.46	36917.20	36917.20	1.71
11	SLU	1.10	6.06	4.95	ø8/20 2 br.	5.03	0.25	16649.10	2.50	30821.60	36542.90	1.85
11	SLU	6.06	6.86	0.80	ø8/20 2 br.	5.03	0.25	18329.00	2.46	36917.20	36917.20	2.01

Travata n. 207

Nodi: 38 -431 40

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	11	SLU	1	593.01	14.07	6.03	14.07	6.03	-20058.70	-38316.60	1.910
3.11	11	SLU	1	312.11	6.03	10.05	6.03	10.05	23158.30	27716.60	1.197
6.85	11	SLU	2	12.55	14.07	6.03	14.07	6.03	-10532.20	-38316.60	3.638

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	5	SND	1	593.01	14.07	6.03	14.07	6.03	-17782.90	-35864.20	2.017
3.11	5	SND	1	312.11	6.03	10.05	6.03	10.05	16710.70	26059.50	1.559
6.85	5	SND	2	12.55	14.07	6.03	14.07	6.03	-8919.50	-35864.20	4.021

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cm>	<m>	<daN>		<daN>	<daN>	<daN>	
11	SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.25	23511.50	2.46	36917.20	36917.20	1.57
11	SLU	1.10	6.05	4.95	ø8/20 2 br.	5.03	0.25	18148.10	2.50	30821.80	36542.90	1.70
11	SLU	6.05	6.85	0.80	ø8/20 2 br.	5.03	0.25	20634.50	2.46	36917.20	36917.20	1.79

Travata n. 208

Nodi: -21 -447 -1090 -32 -33 -443 -1091 -34 63 -457 -1093 40

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
13	R	25.00	70.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Caratteristiche rinforzi FRP longitudinali utilizzati

X0	X1	Lung.	TRL	NS	ST	Lst	f _{fk}	E _f	ε _{fk}	f _{fd}	f _{fd r 2}	ε _{fd}	n
<m>	<m>	<m>				<cm>	<daN/cm>	<daN/cm>		<daN/cm>	<daN/cm>		
3.48	3.48	0.00	ICe	1	2	25.0	53400.00	2560000.00	21.00	4452.50	9149.82	3.57	16.81
22.10	22.10	0.00	ICe	1	2	25.0	53400.00	2560000.00	21.00	4452.50	9149.82	3.57	16.81

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.	σ _{fd}	Δ%
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>		<daN/cm>	

0.22	11	SLU	1	22.00	14.58	5.15	14.58	5.15	-4117.28	-34201.00	8.307		---
0.37	11	SLU	1	37.05	14.58	5.15	14.58	5.15	-4117.28	-34201.00	8.307		---
0.86	11	SLU	1	86.33	12.57	5.15	12.57	5.15	-4117.28	-29762.10	7.229		---
6.59	11	SLU	3	105.61	12.57	7.41	12.57	7.41	-2882.45	-30056.80	10.428		---
6.74	11	SLU	3	120.66	14.58	7.41	14.58	7.41	-2797.50	-34629.00	12.379		---
7.34	9	SLU	4	30.00	8.29	8.55	8.29	8.55	1174.07	20559.20	17.511		---
9.05	9	SLU	4	200.31	8.29	13.70	8.29	13.70	-1575.24	-19960.20	12.671		---
9.65	11	SLU	5	30.00	6.28	7.41	6.28	7.41	-4890.35	-15132.40	3.094		---
13.93	11	SLU	6	320.72	8.55	9.17	8.55	9.17	5198.69	22065.80	4.245		---
15.98	11	SLU	7	108.00	14.58	13.70	14.58	13.70	-3273.62	-35035.30	10.702		---
16.58	11	SLU	8	30.00	8.29	8.55	8.29	8.55	1206.81	20559.20	17.036		---
18.29	11	SLU	8	201.36	8.58	13.70	8.58	13.70	-1764.18	-20638.80	11.699		---
18.89	11	SLU	9	30.00	8.29	7.41	8.29	7.41	-4657.01	-19954.00	4.285		---
19.04	11	SLU	9	45.05	14.58	7.41	14.58	7.41	-4657.01	-34629.00	7.436		---
24.11	11	SLU	11	0.00	8.55	7.16	8.55	7.16	-3557.85	-20555.30	5.777		---
25.16	11	SLU	11	104.95	14.58	5.15	14.58	5.15	-3812.31	-34201.00	8.971		---
25.31	11	SLU	11	120.00	14.58	5.15	14.58	5.15	-3812.31	-34201.00	8.971		---

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.	σ _{edd} <daN/cmq>	Δ%
0.22	1	SND	1	22.00	14.58	5.15	14.58	5.15	8043.66	14541.50	1.808	2308.27	19.73
0.37	1	SND	1	37.05	14.58	5.15	14.58	5.15	8841.93	14541.50	1.645	2537.34	19.73
0.86	1	SND	1	86.33	12.57	5.15	12.57	5.15	10491.80	14490.30	1.381		19.68
6.59	1	SND	3	105.61	12.57	7.41	12.57	7.41	7448.70	19594.30	2.631	1583.16	13.59
6.74	1	SND	3	120.66	14.58	7.41	14.58	7.41	5930.89	19678.70	3.318	1254.58	13.62
7.34	1	SND	4	30.00	8.29	8.55	8.29	8.55	14572.40	19556.10	1.342		---
9.05	1	SND	4	200.31	8.29	13.70	8.29	13.70	-15229.90	-19275.40	1.266		---
9.65	1	SND	5	30.00	6.28	7.41	6.28	7.41	-11125.20	-14506.10	1.304		---
13.93	1	SND	6	320.72	8.55	9.17	8.55	9.17	-11737.40	-19611.20	1.671		---
15.98	1	SND	7	108.00	14.58	13.70	14.58	13.70	-10148.70	-33146.30	3.266		---
16.58	1	SND	8	30.00	8.29	8.55	8.29	8.55	15781.10	19556.10	1.239		---
18.29	1	SND	8	201.36	8.58	13.70	8.58	13.70	-16293.20	-19910.60	1.222		---
18.89	1	SND	9	30.00	8.29	7.41	8.29	7.41	-10186.90	-18947.20	1.860		---
19.04	1	SND	9	45.05	14.58	7.41	14.58	7.41	7351.99	19678.70	2.677	1555.19	13.62
24.11	1	SND	11	0.00	8.55	7.16	8.55	7.16	-14649.40	-19479.70	1.330		---
25.16	1	SND	11	104.95	14.58	5.15	14.58	5.15	9574.27	14541.50	1.519	2747.50	19.73
25.31	1	SND	11	120.00	14.58	5.15	14.58	5.15	8814.80	14541.50	1.650	2529.56	19.73

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.22	0.92	0.70	ø8/20 2 br.	5.03	0.25	7280.97	2.50	24139.70	31887.80	24139.70	3.32
1 SND	0.92	6.04	5.12	ø8/20 2 br.	5.03	0.25	11184.80	2.50	24139.70	31887.80	24139.70	2.16
1 SND	6.04	6.74	0.70	ø8/20 2 br.	5.03	0.25	11655.30	2.50	24139.70	31887.80	24139.70	2.07
1 SND	7.34	9.05	1.70	ø8/20 2 br.	5.03	0.25	19137.80	2.50	24139.70	31887.80	24139.70	1.26
1 SND	9.65	10.35	0.70	ø8/20 2 br.	5.03	0.25	11015.00	2.50	24139.70	31887.80	24139.70	2.19
1 SND	10.35	15.28	4.93	ø8/20 2 br.	5.03	0.25	11579.10	2.50	24139.70	31887.80	24139.70	2.08
1 SND	15.28	15.98	0.70	ø8/20 2 br.	5.03	0.25	11579.10	2.50	24139.70	31887.80	24139.70	2.08
1 SND	16.58	18.29	1.71	ø8/20 2 br.	5.03	0.25	20311.70	2.50	24139.70	31887.80	24139.70	1.19
1 SND	18.89	19.59	0.70	ø8/20 2 br.	5.03	0.25	11498.90	2.50	24139.70	31887.80	24139.70	2.10
1 SND	19.59	24.61	5.02	ø8/20 2 br.	5.03	0.25	9521.89	2.50	24139.70	31887.80	24139.70	2.54
1 SND	24.61	25.31	0.70	ø8/20 2 br.	5.03	0.25	7137.07	2.50	24139.70	31887.80	24139.70	3.38

Travata n. 209

Nodi: 39 -25

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
20	R	80.00	20.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.15	11	SLU	1	15.00	17.47	14.07	17.47	14.07	-6118.64	-10784.50	1.763
2.15	11	SLU	1	215.01	14.07	14.07	14.07	14.07	4737.32	8726.04	1.842
4.71	11	SLU	1	471.50	15.21	14.07	15.21	14.07	-9158.29	-9413.82	1.028

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.15	1	SND	1	15.00	17.47	14.07	17.47	14.07	-5287.89	-10296.90	1.947
2.15	1	SND	1	215.01	14.07	14.07	14.07	14.07	3413.97	8378.08	2.454

4.71	1	SND	1	471.50	15.21	14.07	15.21	14.07	-7343.69	-9021.88	1.229
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Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.15	0.35	0.20	ø8/17 2 br.	5.91	0.80	9758.41	2.50	7669.99	27558.50	7669.99	0.79
11 SLU	0.35	4.51	4.16	ø8/17 2 br.	5.91	0.80	10176.70	2.50	7669.99	27558.50	7669.99	0.75
11 SLU	4.51	4.71	0.20	ø8/17 2 br.	5.91	0.80	11090.10	2.50	7669.99	27558.50	7669.99	0.69

Travata n. 210

Nodi: -35 42

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
22	R	40.00	20.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
2.30	11	SLU	1	12.52	4.02	4.02	4.02	4.02	-2270.13	-2528.18	1.114

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
2.30	5	SND	1	12.52	4.02	4.02	4.02	4.02	-2015.06	-2423.74	1.203

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.00	2.10	2.10	ø6/17 2 br.	3.33	0.40	3448.79	2.50	4314.37	13779.20	4314.37	1.25
11 SLU	2.10	2.30	0.20	ø6/17 2 br.	3.33	0.40	3906.17	2.50	4314.37	13779.20	4314.37	1.10

Travata n. 211

Nodi: -31 43

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
22	R	40.00	20.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
2.30	11	SLU	1	12.54	4.02	4.02	4.02	4.02	-1973.67	-2528.18	1.281

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
2.30	5	SND	1	12.54	4.02	4.02	4.02	4.02	-1789.83	-2423.74	1.354

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	-0.00	2.10	2.10	ø6/17 2 br.	3.33	0.40	3182.14	2.50	4314.37	13779.20	4314.37	1.36
11 SLU	2.10	2.30	0.20	ø6/17 2 br.	3.33	0.40	3628.02	2.50	4314.37	13779.20	4314.37	1.19

Travata n. 212

Nodi: 42 -36 -38 43

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
20	R	80.00	20.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	12.50	17.47	14.07	17.47	14.07	-5465.26	-10784.50	1.973
2.38	11	SLU	1	238.46	14.07	14.07	14.07	14.07	5568.75	8726.04	1.567
4.97	11	SLU	1	497.50	17.47	14.07	17.47	14.07	-7151.47	-10784.50	1.508
5.23	11	SLU	2	12.50	17.47	14.07	17.47	14.07	-3859.92	-10784.50	2.794
6.52	11	SLU	2	142.50	17.47	14.07	17.47	14.07	-3813.41	-10784.50	2.828
6.78	11	SLU	3	12.50	17.47	14.07	17.47	14.07	-7116.14	-10784.50	1.516
9.20	11	SLU	3	254.82	14.07	14.07	14.07	14.07	5541.03	8726.04	1.575
11.62	11	SLU	3	497.14	17.47	14.07	17.47	14.07	-5513.11	-10784.50	1.956

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	12.50	17.47	14.07	17.47	14.07	-4464.71	-10296.90	2.306
2.38	1	SND	1	238.46	14.07	14.07	14.07	14.07	4053.08	8378.08	2.067
4.97	1	SND	1	497.50	17.47	14.07	17.47	14.07	-5517.56	-10296.90	1.866
5.23	1	SND	2	12.50	17.47	14.07	17.47	14.07	-3512.43	-10296.90	2.932
6.52	1	SND	2	142.50	17.47	14.07	17.47	14.07	-3477.77	-10296.90	2.961
6.78	1	SND	3	12.50	17.47	14.07	17.47	14.07	-5494.10	-10296.90	1.874
9.20	1	SND	3	254.82	14.07	14.07	14.07	14.07	4034.69	8378.08	2.077
11.62	1	SND	3	497.14	17.47	14.07	17.47	14.07	-4497.85	-10296.90	2.289

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura (si riporta la verifica di calcolo effettuata su un modello di appoggio sul quale è stata allargata la sezione ed aggiunta una staffa, portando il numero totale dei bracci al valore di 4)

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
40	R	100.00	20.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.13	0.33	0.20	ø8/17 4 br.	11.83	1.00	9230.96	2.50	15340.00	34448.10	15340.00	1.66
11 SLU	0.33	4.77	4.45	ø8/17 4 br.	11.83	1.00	9331.50	2.50	15340.00	34448.10	15340.00	1.64
11 SLU	4.77	4.97	0.20	ø8/17 4 br.	11.83	1.00	10129.90	2.50	15340.00	34448.10	15340.00	1.51
1 SND	5.23	5.43	0.20	ø8/17 4 br.	11.83	1.00	2903.95	2.50	15340.00	34448.10	15340.00	5.28
1 SND	5.43	6.32	0.90	ø8/17 4 br.	11.83	1.00	2334.59	2.50	15340.00	34448.10	15340.00	6.57
1 SND	6.32	6.52	0.20	ø8/17 4 br.	11.83	1.00	2858.67	2.50	15340.00	34448.10	15340.00	5.37
11 SLU	6.78	6.98	0.20	ø8/17 4 br.	11.83	1.00	10099.90	2.50	15340.00	34448.10	15340.00	1.52
11 SLU	6.98	11.42	4.45	ø8/17 4 br.	11.83	1.00	9301.55	2.50	15340.00	34448.10	15340.00	1.65
11 SLU	11.42	11.62	0.20	ø8/17 4 br.	11.83	1.00	9245.69	2.50	15340.00	34448.10	15340.00	1.66

Travata n. 213

Nodi: 64 -414 -43 -44 65

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
13	R	25.00	70.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	13.14	8.29	6.03	8.29	6.03	3070.50	14529.50	4.732
1.86	11	SLU	2	122.40	2.26	8.04	2.26	8.04	13013.30	19129.20	1.470
5.22	11	SLU	2	459.00	8.29	6.03	8.29	6.03	-11436.10	-19948.60	1.744
5.47	11	SLU	3	12.50	11.44	9.11	11.44	9.11	-10582.80	-27488.10	2.597
8.25	11	SLU	3	290.00	7.41	5.09	7.41	5.09	-8464.92	-17837.00	2.107
9.18	11	SLU	3	382.50	8.29	3.08	8.29	3.08	-10068.10	-19793.20	1.966
9.43	11	SLU	4	12.50	8.29	9.11	8.29	9.11	-10924.30	-19959.00	1.827
11.59	11	SLU	4	229.22	2.26	8.04	2.26	8.04	12501.00	19129.20	1.530
14.38	11	SLU	4	507.86	8.29	6.03	8.29	6.03	5930.98	14529.50	2.450

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	13.14	8.29	6.03	8.29	6.03	4755.73	13980.50	2.940
1.86	1	SND	2	122.40	2.26	8.04	2.26	8.04	9864.93	17986.90	1.823
5.22	1	SND	2	459.00	8.29	6.03	8.29	6.03	-9620.19	-18850.20	1.959
5.47	1	SND	3	12.50	11.44	9.11	11.44	9.11	-8567.11	-25914.10	3.025
8.25	1	SND	3	290.00	7.41	5.09	7.41	5.09	-7090.48	-16867.90	2.379
9.18	1	SND	3	382.50	8.29	3.08	8.29	3.08	-8297.79	-18601.30	2.242
9.43	1	SND	4	12.50	8.29	9.11	8.29	9.11	-9178.37	-19052.30	2.076

11.59	1	SND	4	229.22	2.26	8.04	2.26	8.04	9263.21	17986.90	1.942
14.38	1	SND	4	507.86	8.29	6.03	8.29	6.03	6056.29	13980.50	2.308

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.13	0.83	0.70	ø8/20 2 br.	5.03	0.25	12230.40	2.41	32708.90	32708.90	32708.90	2.67
1 SND	0.13	0.83	0.70	ø8/20 2 br.	5.03	0.25	9099.88	2.50	24139.70	31887.80	24139.70	2.65
11 SLU	0.83	4.52	3.69	ø8/20 2 br.	5.03	0.25	12464.80	2.50	24139.70	31887.80	24139.70	1.94
11 SLU	4.52	5.22	0.70	ø8/20 2 br.	5.03	0.25	16620.20	2.41	32708.90	32708.90	32708.90	1.97
11 SLU	5.47	6.18	0.70	ø8/20 2 br.	5.03	0.25	11121.20	2.41	32708.90	32708.90	32708.90	2.94
1 SND	5.47	6.18	0.70	ø8/20 2 br.	5.03	0.25	8320.44	2.50	24139.70	31887.80	24139.70	2.90
11 SLU	6.18	8.47	2.30	ø8/20 2 br.	5.03	0.25	6965.77	2.50	24139.70	31887.80	24139.70	3.47
11 SLU	8.47	9.18	0.70	ø8/20 2 br.	5.03	0.25	10843.00	2.41	32708.90	32708.90	32708.90	3.02
1 SND	8.47	9.18	0.70	ø8/20 2 br.	5.03	0.25	8134.54	2.50	24139.70	31887.80	24139.70	2.97
11 SLU	9.43	10.13	0.70	ø8/20 2 br.	5.03	0.25	16267.30	2.41	32708.90	32708.90	32708.90	2.01
11 SLU	10.13	13.68	3.55	ø8/20 2 br.	5.03	0.25	12111.90	2.50	24139.70	31887.80	24139.70	1.99
11 SLU	13.68	14.38	0.70	ø8/20 2 br.	5.03	0.25	11852.70	2.41	32708.90	32708.90	32708.90	2.76
1 SND	13.68	14.38	0.70	ø8/20 2 br.	5.03	0.25	8980.13	2.50	24139.70	31887.80	24139.70	2.69

Travata n. 214

Nodi: 65 69

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
18	R	25.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	12.50	4.52	3.08	4.52	3.08	472.60	4131.14	8.741
4.27	11	SLU	1	427.10	4.52	3.08	4.52	3.08	-1204.18	-6043.02	5.018

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.13	5	SND	1	12.50	4.52	3.08	4.52	3.08	2013.31	3988.97	1.981
4.27	5	SND	1	427.10	4.52	3.08	4.52	3.08	-2791.70	-5742.03	2.057

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
5 SND	0.13	0.53	0.40	ø6/20 2 br.	2.83	0.25	1187.83	2.50	7631.76	17922.30	7631.76	6.42
5 SND	0.53	3.87	3.35	ø6/20 2 br.	2.83	0.25	1615.07	2.50	7631.76	17922.30	7631.76	4.73
5 SND	3.87	4.27	0.40	ø6/20 2 br.	2.83	0.25	1745.70	2.50	7631.76	17922.30	7631.76	4.37

Travata n. 216

Nodi: 68 -853 -854 -855 -856 -857 -40 -111

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
18	R	25.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
1.60	11	SLU	7	12.56	6.28	5.09	6.28	5.09	337.47	6795.58	20.137
3.64	9	SLU	7	216.56	6.28	5.09	6.28	5.09	-218.05	-8373.47	38.402

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
1.60	5	SND	7	12.56	6.28	5.09	6.28	5.09	5172.62	6530.36	1.262
3.64	5	SND	7	216.56	6.28	5.09	6.28	5.09	4558.24	6530.36	1.433

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
5 SND	1.60	2.00	0.40	ø6/20 2 br.	2.83	0.25	4729.92	2.50	7631.76	17922.30	7631.76	1.61
5 SND	2.00	3.24	1.24	ø6/20 2 br.	2.83	0.25	4809.89	2.50	7631.76	17922.30	7631.76	1.59
5 SND	3.24	3.64	0.40	ø6/20 2 br.	2.83	0.25	5016.01	2.50	7631.76	17922.30	7631.76	1.52

Travata n. 218

Nodi: 67 73 -651 180 -652 -653 70 -112

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
18	R	25.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
1.60	11	SLU	7	12.53	5.15	5.09	5.15	5.09	410.88	6795.07	16.538
3.61	9	SLU	7	213.97	5.15	5.09	5.15	5.09	-246.32	-6878.29	27.924

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
1.60	5	SND	7	12.53	5.15	5.09	5.15	5.09	5343.16	6498.64	1.216
3.61	5	SND	7	213.97	5.15	5.09	5.15	5.09	4876.85	6498.64	1.333

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
5 SND	1.60	2.00	0.40	ø6/20 2 br.	2.83	0.25	4926.00	2.50	7631.76	17922.30	7631.76	1.55
5 SND	2.00	3.21	1.21	ø6/20 2 br.	2.83	0.25	5101.43	2.50	7631.76	17922.30	7631.76	1.50
5 SND	3.21	3.61	0.40	ø6/20 2 br.	2.83	0.25	5306.57	2.50	7631.76	17922.30	7631.76	1.44

Travata n. 219

Nodi: 119 -466 -465 118

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
25	R	40.00	75.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.20	9	SLU	1	20.00	10.05	8.04	10.05	8.04	1188.56	20826.40	17.522
2.48	9	SLU	1	247.50	4.02	10.05	4.02	10.05	1530.91	25927.90	16.936
7.65	11	SLU	3	292.50	10.05	8.04	10.05	8.04	-972.25	-26005.40	26.748

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.20	5	SND	1	20.00	10.05	8.04	10.05	8.04	4625.59	20031.50	4.331
2.48	5	SND	1	247.50	4.02	10.05	4.02	10.05	-6870.76	-10193.50	1.484
7.65	5	SND	3	292.50	10.05	8.04	10.05	8.04	4537.07	20031.50	4.415

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
5 SND	0.20	0.95	0.75	ø8/15 2 br.	6.70	0.40	3140.83	2.50	34535.70	54744.60	34535.70	11.00
5 SND	0.95	6.90	5.95	ø8/15 2 br.	6.70	0.40	2411.83	2.50	34535.70	54744.60	34535.70	14.32
5 SND	6.90	7.65	0.75	ø8/15 2 br.	6.70	0.40	3050.76	2.50	34535.70	54744.60	34535.70	11.32

Travata n. 220

Nodi: 118 -469 -472 123 -470 -471 121

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
25	R	40.00	75.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.21	9	SLU	1	314.04	38.17	30.54	38.17	30.54	7112.35	78856.20	11.087
1.15	9	SLU	1	219.83	38.17	30.54	38.17	30.54	10306.90	78856.20	7.651
8.09	9	SLU	3	20.91	38.17	30.54	38.17	30.54	-16208.90	-98355.60	6.068
8.51	9	SLU	4	315.54	38.17	30.54	38.17	30.54	-16186.70	-98355.60	6.076
13.89	9	SLU	6	273.35	30.54	30.54	30.54	30.54	10324.50	78845.50	7.637
16.42	9	SLU	6	20.91	38.17	30.54	38.17	30.54	7092.14	78856.20	11.119

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.21	1	SND	1	314.04	38.17	30.54	38.17	30.54	6716.93	75446.10	11.232
1.15	1	SND	1	219.83	38.17	30.54	38.17	30.54	9810.92	75446.10	7.690
8.09	1	SND	3	20.91	38.17	30.54	38.17	30.54	-12045.60	-92377.00	7.669
8.51	1	SND	4	315.54	38.17	30.54	38.17	30.54	-12032.90	-92377.00	7.677
13.89	1	SND	6	273.35	30.54	30.54	30.54	30.54	9929.64	74710.60	7.524
16.42	1	SND	6	20.91	38.17	30.54	38.17	30.54	6689.68	75446.10	11.278

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.21	0.96	0.75	ø10/15 2 br.	10.47	0.40	11411.60	2.50	53962.00	54744.60	53962.00	4.73
9 SLU	0.96	7.34	6.38	ø10/15 2 br.	10.47	0.40	11335.20	2.50	53962.00	54744.60	53962.00	4.76
9 SLU	7.34	8.09	0.75	ø10/15 2 br.	10.47	0.40	16483.10	2.50	53962.00	54744.60	53962.00	3.27
9 SLU	8.51	9.26	0.75	ø10/15 2 br.	10.47	0.40	16489.70	2.50	53962.00	54744.60	53962.00	3.27
9 SLU	9.26	15.67	6.41	ø10/15 2 br.	10.47	0.40	11343.30	2.50	53962.00	54744.60	53962.00	4.76
9 SLU	15.67	16.42	0.75	ø10/15 2 br.	10.47	0.40	11410.20	2.50	53962.00	54744.60	53962.00	4.73

Travata n. 222

Nodi: 120 -468 -467 121

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
25	R	40.00	75.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.20	9	SLU	1	20.00	8.04	4.02	8.04	4.02	1119.29	10452.80	9.339
2.46	9	SLU	1	245.56	4.02	4.02	4.02	4.02	1474.89	10453.50	7.088
7.60	11	SLU	3	290.00	8.04	4.02	8.04	4.02	-958.23	-20809.00	21.716

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.20	5	SND	1	20.00	8.04	4.02	8.04	4.02	4588.06	10165.30	2.216
2.46	5	SND	1	245.56	4.02	4.02	4.02	4.02	7685.64	10093.50	1.313
7.60	5	SND	3	290.00	8.04	4.02	8.04	4.02	4513.50	10165.30	2.252

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <cm>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
5 SND	0.20	0.95	0.75	ø8/15 2 br.	6.70	0.40	3173.00	2.50	34535.70	54744.60	34535.70	10.88
5 SND	0.95	6.85	5.90	ø8/15 2 br.	6.70	0.40	2443.99	2.50	34535.70	54744.60	34535.70	14.13
5 SND	6.85	7.60	0.75	ø8/15 2 br.	6.70	0.40	3068.23	2.50	34535.70	54744.60	34535.70	11.26

Travata n. 223

Nodi: 119 122 120

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
25	R	40.00	75.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cmq>	AfE I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
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0.21	9	SLU	1	809.20	38.17	30.54	38.17	30.54	10209.40	78856.20	7.724
2.64	9	SLU	1	566.73	30.54	30.54	30.54	30.54	29863.50	78845.50	2.640
8.09	9	SLU	1	21.19	38.17	30.54	38.17	30.54	-47056.50	-98355.60	2.090
8.51	9	SLU	2	812.38	38.17	30.54	38.17	30.54	-47158.00	-98355.60	2.086
12.47	9	SLU	2	416.78	30.54	30.54	30.54	30.54	30051.00	78845.50	2.624
16.43	9	SLU	2	21.19	38.17	30.54	38.17	30.54	10164.30	78856.20	7.758

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.21	1	SND	1	809.20	38.17	30.54	38.17	30.54	8293.92	75446.10	9.097
2.64	1	SND	1	566.73	30.54	30.54	30.54	30.54	21216.40	74710.60	3.521
8.09	1	SND	1	21.19	38.17	30.54	38.17	30.54	-34816.20	-92377.00	2.653
8.51	1	SND	2	812.38	38.17	30.54	38.17	30.54	-34879.00	-92377.00	2.648
12.47	1	SND	2	416.78	30.54	30.54	30.54	30.54	21358.90	74710.60	3.498
16.43	1	SND	2	21.19	38.17	30.54	38.17	30.54	8273.54	75446.10	9.119

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.21	0.96	0.75	ø10/15 2 br.	10.47	0.40	20502.40	2.50	53962.00	54744.60	53962.00	2.63
9 SLU	0.96	7.34	6.38	ø10/15 2 br.	10.47	0.40	26583.20	2.50	53962.00	54744.60	53962.00	2.03
9 SLU	7.34	8.09	0.75	ø10/15 2 br.	10.47	0.40	31729.30	2.50	53962.00	54744.60	53962.00	1.70
9 SLU	8.51	9.26	0.75	ø10/15 2 br.	10.47	0.40	31767.50	2.50	53962.00	54744.60	53962.00	1.70
9 SLU	9.26	15.68	6.41	ø10/15 2 br.	10.47	0.40	26624.40	2.50	53962.00	54744.60	53962.00	2.03
9 SLU	15.68	16.43	0.75	ø10/15 2 br.	10.47	0.40	20534.80	2.50	53962.00	54744.60	53962.00	2.63

Travata n. 225

Nodi: -112 -406 -111

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
18	R	25.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.13	9	SLU	1	540.47	4.52	3.39	4.52	3.39	-2492.69	-6044.81	2.425
2.22	9	SLU	1	331.17	2.26	4.52	2.26	4.52	2985.42	6037.43	2.022
5.32	9	SLU	1	21.19	5.65	3.39	5.65	3.39	-4684.73	-7535.63	1.609
5.74	9	SLU	2	521.86	5.65	3.39	5.65	3.39	-4568.40	-7535.63	1.650
8.29	9	SLU	2	267.27	2.26	4.52	2.26	4.52	2886.34	6037.43	2.092
10.83	9	SLU	2	12.67	3.39	3.39	3.39	3.39	-2359.50	-4546.74	1.927

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	AfEP S <cmq>	AfEP I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	540.47	4.52	3.39	4.52	3.39	-2724.41	-5752.17	2.111
2.22	1	SND	1	331.17	2.26	4.52	2.26	4.52	2245.90	5712.27	2.543
5.32	1	SND	1	21.19	5.65	3.39	5.65	3.39	-4419.12	-7119.87	1.611
5.74	1	SND	2	521.86	5.65	3.39	5.65	3.39	-4354.05	-7119.87	1.635
8.29	1	SND	2	267.27	2.26	4.52	2.26	4.52	2179.18	5712.27	2.621
10.83	1	SND	2	12.67	3.39	3.39	3.39	3.39	-2645.39	-4362.03	1.649

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.13	0.53	0.40	ø6/20 2 br.	2.83	0.25	4459.96	2.50	13027.40	17922.30	13027.40	2.92
1 SND	0.13	0.53	0.40	ø6/20 2 br.	2.83	0.25	3548.07	2.50	7631.76	17922.30	7631.76	2.15
9 SLU	0.53	4.92	4.39	ø6/20 2 br.	2.83	0.25	4451.87	2.50	7631.76	17922.30	7631.76	1.71
9 SLU	4.92	5.32	0.40	ø6/20 2 br.	2.83	0.25	5163.00	2.50	13027.40	17922.30	13027.40	2.52
1 SND	4.92	5.32	0.40	ø6/20 2 br.	2.83	0.25	4057.71	2.50	7631.76	17922.30	7631.76	1.88
9 SLU	5.74	6.14	0.40	ø6/20 2 br.	2.83	0.25	5094.70	2.50	13027.40	17922.30	13027.40	2.56
1 SND	5.74	6.14	0.40	ø6/20 2 br.	2.83	0.25	4023.47	2.50	7631.76	17922.30	7631.76	1.90
9 SLU	6.14	10.43	4.29	ø6/20 2 br.	2.83	0.25	4383.19	2.50	7631.76	17922.30	7631.76	1.74
9 SLU	10.43	10.83	0.40	ø6/20 2 br.	2.83	0.25	4376.98	2.50	13027.40	17922.30	13027.40	2.98
1 SND	10.43	10.83	0.40	ø6/20 2 br.	2.83	0.25	3502.71	2.50	7631.76	17922.30	7631.76	2.18

Travata n. 227

Nodi: 70 71 72 -40

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
19	R	25.00	60.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	13.14	5.40	4.02	5.40	4.02	2239.31	8261.95	3.690
2.94	11	SLU	1	294.00	8.29	4.02	8.29	4.02	-6846.00	-16902.10	2.469
3.34	11	SLU	2	20.00	11.44	8.04	11.44	8.04	-10538.80	-23369.90	2.218
5.19	11	SLU	2	204.80	5.40	10.05	5.40	10.05	8867.52	20465.80	2.308
7.96	11	SLU	2	482.00	11.44	4.02	11.44	4.02	-10455.30	-22949.10	2.195
8.36	11	SLU	3	20.00	8.29	4.02	8.29	4.02	-6602.35	-16902.10	2.560
9.57	11	SLU	3	140.64	2.26	6.03	2.26	6.03	-1372.79	-4668.36	3.401
11.07	11	SLU	3	291.45	5.40	4.02	5.40	4.02	2289.97	8261.95	3.608

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	13.14	5.40	4.02	5.40	4.02	-4303.85	-10538.30	2.449
2.94	1	SND	1	294.00	8.29	4.02	8.29	4.02	-8389.70	-15872.80	1.892
3.34	5	SND	2	20.00	11.44	8.04	11.44	8.04	-7671.80	-21950.00	2.861
5.19	5	SND	2	204.80	5.40	10.05	5.40	10.05	6502.16	19189.60	2.951
7.96	5	SND	2	482.00	11.44	4.02	11.44	4.02	-7624.37	-21506.50	2.821
8.36	1	SND	3	20.00	8.29	4.02	8.29	4.02	-8451.65	-15872.80	1.878
9.57	1	SND	3	140.64	2.26	6.03	2.26	6.03	-3476.92	-4551.97	1.309
11.07	1	SND	3	291.45	5.40	4.02	5.40	4.02	3002.65	7964.69	2.653

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1	SND	0.13	0.73	0.60	ø8/20 2 br.	5.03	0.25	8006.69	2.50	20615.70	27232.60	2.57
1	SND	0.73	2.34	1.61	ø8/20 2 br.	5.03	0.25	7543.24	2.50	20615.70	27232.60	2.73
11	SLU	2.34	2.94	0.60	ø8/20 2 br.	5.03	0.25	11692.00	2.35	28477.90	28477.90	2.44
1	SND	2.34	2.94	0.60	ø8/20 2 br.	5.03	0.25	10432.40	2.50	20615.70	27232.60	1.98
11	SLU	3.34	3.94	0.60	ø8/20 2 br.	5.03	0.25	16110.70	2.35	28477.90	28477.90	1.77
11	SLU	3.94	7.36	3.42	ø8/20 2 br.	5.03	0.25	11916.00	2.50	20615.70	27232.60	1.73
11	SLU	7.36	7.96	0.60	ø8/20 2 br.	5.03	0.25	16080.10	2.35	28477.90	28477.90	1.77
11	SLU	8.36	8.96	0.60	ø8/20 2 br.	5.03	0.25	11463.80	2.35	28477.90	28477.90	2.48
1	SND	8.36	8.96	0.60	ø8/20 2 br.	5.03	0.25	10394.30	2.50	20615.70	27232.60	1.98
1	SND	8.96	10.47	1.51	ø8/20 2 br.	5.03	0.25	7501.12	2.50	20615.70	27232.60	2.75
1	SND	10.47	11.07	0.60	ø8/20 2 br.	5.03	0.25	7846.90	2.50	20615.70	27232.60	2.63

Travata n. 231

Nodi: -25 -35 -24

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
20	R	80.00	20.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.25	11	SLU	1	25.00	20.26	16.87	20.26	16.87	-8930.73	-12482.90	1.398
2.28	11	SLU	2	69.29	16.87	16.87	16.87	16.87	5562.99	10428.10	1.875
4.75	11	SLU	2	316.50	20.26	16.87	20.26	16.87	-9236.97	-12482.90	1.351

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.25	1	SND	1	25.00	20.26	16.87	20.26	16.87	-7239.20	-11923.50	1.647
2.28	1	SND	2	69.29	16.87	16.87	16.87	16.87	3935.28	10012.00	2.544
4.75	1	SND	2	316.50	20.26	16.87	20.26	16.87	-7414.73	-11923.50	1.608

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
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	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
11 SLU	0.25	0.45	0.20	ø8/17 2 br.	5.91	0.80	12036.90	2.50	7669.99	27558.50	7669.99	0.64
11 SLU	0.45	4.55	4.10	ø8/17 2 br.	5.91	0.80	11369.40	2.50	7669.99	27558.50	7669.99	0.67
11 SLU	4.55	4.75	0.20	ø8/17 2 br.	5.91	0.80	12454.60	2.50	7669.99	27558.50	7669.99	0.62

Travata n. 232

Nodi: -24 -439 -438 -23

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
17	R	25.00	65.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	Lung. <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cmq>	E _f <daN/cmq>	ε _{fk}	f _{edd} <daN/cmq>	f _{edd,r2} <daN/cmq>	ε _{fd}	n
2.74	2.74	0.00	ICe	1	3	25.0	53400.00	2560000.00	21.00	3635.45	7470.80	2.92	16.81

Caratteristiche rinforzi FRP trasversali utilizzati

X0 <m>	X1 <m>	Lung. <m>	TRT	TRT	Hr <cm>	a <grad>	NS	ST	Lst <cm>	p' _f <cm>	f _{fk} <daN/cmq>	E _f <daN/cmq>	ε _{fk}
0.13	5.35	5.22	U	U	45.0	90.00	15	2	10.0	26.6	53400.00	2560000.00	21.00

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	Afep S <cmq>	Afep I <cmq>	My <daNm>	MRdy <daNm>	Sic.	σ _{edd} <daN/cmq>	Δ%
0.13	11	SLU	1	12.50	12.35	4.02	12.35	4.02	-8445.94	-26860.80	3.180		---
0.31	11	SLU	1	30.94	10.34	4.02	10.34	4.02	-8445.94	-22717.50	2.690		---
2.73	11	SLU	2	59.25	6.79	8.04	6.79	8.04	1646.45	22676.80	13.773		26.63
5.17	11	SLU	3	183.06	10.34	4.02	10.34	4.02	-7671.96	-22717.50	2.961		---
5.35	11	SLU	3	201.50	12.35	4.02	12.35	4.02	-7671.96	-26860.80	3.501		---

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	Afep S <cmq>	Afep I <cmq>	My <daNm>	M'ydy <daNm>	Sic.	σ _{edd} <daN/cmq>	Δ%
0.13	1	SND	1	12.50	12.35	4.02	12.35	4.02	4551.70	12129.90	2.299	1581.60	18.98
0.31	1	SND	1	30.94	10.34	4.02	10.34	4.02	6507.86	12080.60	1.600	2271.60	18.83
2.73	1	SND	2	59.25	6.79	8.04	6.79	8.04	-13428.50	-14487.20	1.079		---
5.17	1	SND	3	183.06	10.34	4.02	10.34	4.02	6861.53	12080.60	1.518	2395.05	18.83
5.35	1	SND	3	201.50	12.35	4.02	12.35	4.02	4947.97	12129.90	2.115	1719.29	18.98

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Verifiche armatura con sistema di rinforzo

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	f _{fed} <daN/cm q>	VRdf <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.13	0.78	0.65	ø8/20 2 br.	5.03	0.25	12565.50	2.41	21534.80	4308.47	8848.01	30382.80	30382.80	2.42
1 SND	0.78	4.70	3.93	ø8/20 2 br.	5.03	0.25	10214.00	2.41	21534.80	4308.47	8848.01	30382.80	30382.80	2.97
1 SND	4.70	5.35	0.65	ø8/20 2 br.	5.03	0.25	12355.40	2.41	21534.80	4308.47	8848.01	30382.80	30382.80	2.46

Travata n. 233

Nodi: -23 -31 -22

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
20	R	80.00	20.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	Afep S <cmq>	Afep I <cmq>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	12.50	20.26	16.87	20.26	16.87	-8101.89	-12482.90	1.541
2.28	11	SLU	1	228.37	16.87	16.87	16.87	16.87	4993.14	10428.10	2.088
4.44	11	SLU	2	146.50	20.26	16.87	20.26	16.87	-9615.57	-12482.90	1.298

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cmq>	Afe I <cmq>	Afep S <cmq>	Afep I <cmq>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	12.50	20.26	16.87	20.26	16.87	-6689.30	-11923.50	1.782
2.28	1	SND	1	228.37	16.87	16.87	16.87	16.87	3557.17	10012.00	2.815
4.44	1	SND	2	146.50	20.26	16.87	20.26	16.87	-7719.16	-11923.50	1.545

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.13	0.33	0.20	ø8/17 2 br.	5.91	0.80	11711.90	2.50	7669.99	27558.50	7669.99	0.65
11 SLU	0.33	4.24	3.92	ø8/17 2 br.	5.91	0.80	11122.00	2.50	7669.99	27558.50	7669.99	0.69
11 SLU	4.24	4.44	0.20	ø8/17 2 br.	5.91	0.80	12035.30	2.50	7669.99	27558.50	7669.99	0.64

Travata n. 234

Nodi: -22 41

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
21	R	150.00	20.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	11	SLU	1	12.50	30.66	27.27	30.66	27.27	-14683.20	-18960.20	1.291
3.07	11	SLU	1	307.04	27.27	27.27	27.27	27.27	9085.91	16896.70	1.860
6.02	11	SLU	1	601.59	30.66	27.27	30.66	27.27	-12376.50	-18960.20	1.532

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	12.50	30.66	27.27	30.66	27.27	-11665.60	-18145.70	1.555
3.07	1	SND	1	307.04	27.27	27.27	27.27	27.27	6503.67	16223.70	2.495
6.02	1	SND	1	601.59	30.66	27.27	30.66	27.27	-10178.40	-18145.70	1.783

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
11 SLU	0.13	0.33	0.20	ø8/17 2 br.	5.91	1.50	15179.70	2.50	7669.99	51672.20	7669.99	0.51
11 SLU	0.33	5.82	5.49	ø8/17 2 br.	5.91	1.50	14175.40	2.50	7669.99	51672.20	7669.99	0.54
11 SLU	5.82	6.02	0.20	ø8/17 2 br.	5.91	1.50	14222.90	2.50	7669.99	51672.20	7669.99	0.54

Travata n. 301

Nodi: 74 -50 -51 -52 -53 75

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
12	R	90.00	24.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	9	SLU	1	12.50	16.09	16.09	16.09	16.09	-3029.40	-12275.30	4.052
3.03	9	SLU	1	303.32	16.09	16.09	16.09	16.09	3372.79	12275.30	3.639
6.93	9	SLU	1	693.50	22.12	22.12	22.12	22.12	-4556.71	-16812.10	3.690
7.19	9	SLU	2	12.50	6.03	6.03	6.03	6.03	-2276.61	-4711.45	2.070
9.23	9	SLU	2	217.50	22.12	22.12	22.12	22.12	-1884.10	-16812.10	8.923
9.49	9	SLU	3	12.50	22.12	22.12	22.12	22.12	-3748.76	-16812.10	4.485
12.78	9	SLU	3	341.67	16.09	16.09	16.09	16.09	3084.34	12275.30	3.980
16.16	9	SLU	3	680.50	22.12	22.12	22.12	22.12	-3759.21	-16812.10	4.472
16.41	9	SLU	4	12.50	22.12	22.12	22.12	22.12	-2041.67	-16812.10	8.234
18.48	9	SLU	4	218.50	22.12	22.12	22.12	22.12	-2119.56	-16812.10	7.932
18.73	9	SLU	5	12.50	22.12	22.12	22.12	22.12	-4476.24	-16812.10	3.756
22.50	9	SLU	5	389.78	16.09	16.09	16.09	16.09	3326.90	12275.30	3.690
25.49	9	SLU	5	689.06	16.09	16.09	16.09	16.09	-2964.38	-12275.30	4.141

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	12.50	16.09	16.09	16.09	16.09	-2919.46	-11767.40	4.031
3.03	1	SND	1	303.32	16.09	16.09	16.09	16.09	2515.63	11767.40	4.678
6.93	1	SND	1	693.50	22.12	22.12	22.12	22.12	-3926.38	-16104.80	4.102
7.19	1	SND	2	12.50	6.03	6.03	6.03	6.03	-3012.86	-4509.73	1.497
9.23	1	SND	2	217.50	22.12	22.12	22.12	22.12	-2540.10	-16104.80	6.340
9.49	1	SND	3	12.50	22.12	22.12	22.12	22.12	-3047.65	-16104.80	5.284
12.78	5	SND	3	341.67	16.09	16.09	16.09	16.09	2220.75	11767.40	5.299
16.16	1	SND	3	680.50	22.12	22.12	22.12	22.12	-3084.15	-16104.80	5.222
16.41	1	SND	4	12.50	22.12	22.12	22.12	22.12	-2606.03	-16104.80	6.180
18.48	1	SND	4	218.50	22.12	22.12	22.12	22.12	-2839.65	-16104.80	5.671

18.73	1	SND	5	12.50	22.12	22.12	22.12	22.12	-3924.51	-16104.80	4.104
22.50	1	SND	5	389.78	16.09	16.09	16.09	16.09	2466.62	11767.40	4.771
25.49	1	SND	5	689.06	16.09	16.09	16.09	16.09	-2889.88	-11767.40	4.072

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.13	0.37	0.24	ø8/20 2 br.	5.03	0.90	3900.68	2.50	7929.11	37706.70	7929.11	2.03
9 SLU	0.37	6.69	6.33	ø8/20 2 br.	5.03	0.90	3858.58	2.50	7929.11	37706.70	7929.11	2.05
9 SLU	6.69	6.93	0.24	ø8/20 2 br.	5.03	0.90	4117.53	2.50	7929.11	37706.70	7929.11	1.93
1 SND	7.19	7.43	0.24	ø8/20 2 br.	5.03	0.90	2215.97	2.50	7929.11	37706.70	7929.11	3.58
1 SND	7.43	8.99	1.57	ø8/20 2 br.	5.03	0.90	2023.07	2.50	7929.11	37706.70	7929.11	3.92
1 SND	8.99	9.23	0.24	ø8/20 2 br.	5.03	0.90	1955.31	2.50	7929.11	37706.70	7929.11	4.06
9 SLU	9.49	9.73	0.24	ø8/20 2 br.	5.03	0.90	4035.98	2.50	7929.11	37706.70	7929.11	1.96
9 SLU	9.73	15.93	6.20	ø8/20 2 br.	5.03	0.90	3730.70	2.50	7929.11	37706.70	7929.11	2.13
9 SLU	15.93	16.16	0.24	ø8/20 2 br.	5.03	0.90	3816.16	2.50	7929.11	37706.70	7929.11	2.08
1 SND	16.41	16.66	0.24	ø8/20 2 br.	5.03	0.90	2004.34	2.50	7929.11	37706.70	7929.11	3.96
1 SND	16.66	18.23	1.58	ø8/20 2 br.	5.03	0.90	1876.24	2.50	7929.11	37706.70	7929.11	4.23
1 SND	18.23	18.48	0.24	ø8/20 2 br.	5.03	0.90	2060.31	2.50	7929.11	37706.70	7929.11	3.85
9 SLU	18.73	18.96	0.24	ø8/20 2 br.	5.03	0.90	4318.56	2.50	7929.11	37706.70	7929.11	1.84
9 SLU	18.96	25.25	6.29	ø8/20 2 br.	5.03	0.90	4012.66	2.50	7929.11	37706.70	7929.11	1.98
9 SLU	25.25	25.49	0.24	ø8/20 2 br.	5.03	0.90	3642.92	2.50	7929.11	37706.70	7929.11	2.18

Travata n. 302

Nodi: 74 -45 -1059 -1075 76

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94
15	R	30.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	Lung. <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cm>	E _f <daN/cm>	ε _{fk}	f _{edd} <daN/cm>	f _{edd # 2} <daN/cm>	ε _{fd}	n
3.58	3.58	0.00	ICe	1	1	25.0	53400.00	2560000.00	21.00	6296.78	12939.80	5.05	16.81

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.	σ _{edd} <daN/cm>	Δ%
0.30	9	SLU	1	30.03	10.05	4.02	10.05	4.02	-9673.78	-27528.20	2.846		---
0.41	9	SLU	1	40.68	10.05	4.02	10.05	4.02	-9673.78	-27528.20	2.846		---
2.80	9	SLU	1	279.71	4.02	8.04	4.02	8.04	19902.10	25483.50	1.280		14.95
6.75	9	SLU	1	674.79	12.31	4.02	12.31	4.02	6036.66	15160.80	2.511	2035.67	36.04
6.85	9	SLU	1	685.43	12.31	4.02	12.31	4.02	4688.01	15160.80	3.234	1580.88	36.04
7.11	9	SLU	2	12.56	12.31	2.26	12.31	2.26	-5388.85	-15633.20	2.901		---
7.28	9	SLU	2	29.49	8.29	2.26	8.29	2.26	-5388.85	-10875.00	2.018		---
7.49	9	SLU	3	10.51	4.27	2.26	4.27	2.26	-4479.08	-5720.25	1.277		---
9.81	9	SLU	3	243.31	2.26	2.26	2.26	2.26	-792.51	-3057.14	3.858		---
10.15	11	SLU	3	276.57	2.26	2.26	2.26	2.26	-461.15	-3057.14	6.629		---
10.35	9	SLU	4	10.03	4.27	2.26	4.27	2.26	505.80	3056.69	6.043		---
10.65	9	SLU	4	39.96	4.27	2.26	4.27	2.26	505.80	3056.69	6.043		---

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.	σ _{edd} <daN/cm>	Δ%
0.30	5	SND	1	30.03	10.05	4.02	10.05	4.02	4195.23	12238.30	2.917	1420.97	12.61
0.41	5	SND	1	40.68	10.05	4.02	10.05	4.02	5116.08	12238.30	2.392	1732.87	12.61
2.80	5	SND	1	279.71	4.02	8.04	4.02	8.04	14558.30	22178.50	1.523		6.18
6.75	1	SND	1	674.79	12.31	4.02	12.31	4.02	4357.33	12285.70	2.820	1469.37	12.64
6.85	1	SND	1	685.43	12.31	4.02	12.31	4.02	3418.10	12285.70	3.594	1152.65	12.64
7.11	5	SND	2	12.56	12.31	2.26	12.31	2.26	-4664.65	-14772.10	3.167		---
7.28	5	SND	2	29.49	8.29	2.26	8.29	2.26	-4664.65	-10215.40	2.190		---
7.49	5	SND	3	10.51	4.27	2.26	4.27	2.26	-3736.17	-5437.04	1.455		---
9.81	5	SND	3	243.31	2.26	2.26	2.26	2.26	-912.18	-2941.39	3.225		---
10.15	5	SND	3	276.57	2.26	2.26	2.26	2.26	-875.35	-2941.39	3.360		---
10.35	5	SND	4	10.03	4.27	2.26	4.27	2.26	1034.54	2959.36	2.861		---
10.65	5	SND	4	39.96	4.27	2.26	4.27	2.26	1034.54	2959.36	2.861		---

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.25	16708.50	2.46	36917.20	36917.20	36917.20	2.21
9 SLU	1.10	6.05	4.95	ø8/20 2 br.	5.03	0.25	12686.00	2.50	30822.20	36542.90	30822.20	2.43
9 SLU	6.05	6.85	0.80	ø8/20 2 br.	5.03	0.25	15894.90	2.46	36917.20	36917.20	36917.20	2.32
1 SND	7.11	7.28	0.17	ø6/20 2 br.	2.83	0.30	2481.70	2.50	7631.76	21506.80	7631.76	3.08
9 SLU	7.49	7.89	0.40	ø6/20 2 br.	2.83	0.30	2696.42	2.50	7631.76	21506.80	7631.76	2.83
9 SLU	7.89	9.75	1.86	ø6/20 2 br.	2.83	0.30	2384.40	2.50	7631.76	21506.80	7631.76	3.20
5 SND	9.75	10.15	0.40	ø6/20 2 br.	2.83	0.30	1141.26	2.50	7631.76	21506.80	7631.76	6.69
11 SLU	10.35	10.65	0.30	ø6/20 2 br.	2.83	0.30	1767.34	2.50	7631.76	21506.80	7631.76	4.32

Travata n. 303

Nodi: -50 -1087 -1088 -55

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14R		25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.309	SLU	1		30.00	15.21	12.06	15.21	12.06	4119.68	33332.80	8.091
1.319	SLU	1		131.34	8.04	14.07	8.04	14.07	4733.33	38623.50	8.160
6.869	SLU	3		220.17	15.21	12.06	15.21	12.06	4826.56	33332.80	6.906

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.305	SND	1		30.00	15.21	12.06	15.21	12.06	7051.73	31882.60	4.521
1.315	SND	1		131.34	8.04	14.07	8.04	14.07	8958.67	36162.90	4.037
6.865	SND	3		220.17	15.21	12.06	15.21	12.06	6249.77	31882.60	5.101

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
5 SND	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	7380.88	2.49	36686.10	36686.10	36686.10	4.97
5 SND	1.10	6.06	4.96	ø8/15 2 br.	6.70	0.25	4117.31	2.49	36686.10	36686.10	36686.10	8.91
5 SND	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	6591.80	2.49	36686.10	36686.10	36686.10	5.57

Travata n. 304

Nodi: -51 -56

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
14R		25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.309	SLU	1		30.01	15.21	12.06	15.21	12.06	-12397.60	-41977.60	3.386
3.119	SLU	1		310.94	8.04	16.09	8.04	16.09	24963.90	43864.30	1.757
6.869	SLU	1		685.51	15.21	12.06	15.21	12.06	8976.02	33332.80	3.714

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.305	SND	1		30.01	15.21	12.06	15.21	12.06	-11201.00	-39457.50	3.523
3.115	SND	1		310.94	8.04	16.09	8.04	16.09	17748.50	41029.80	2.312
6.865	SND	1		685.51	15.21	12.06	15.21	12.06	7142.90	31882.60	4.464

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	20336.80	2.16	40369.20	40369.20	40369.20	1.99
9 SLU	1.10	6.06	4.96	ø8/15 2 br.	6.70	0.25	15622.60	2.37	37958.60	37958.60	37958.60	2.43
9 SLU	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	17982.80	2.16	40369.20	40369.20	40369.20	2.24

Travata n. 305

Nodi: -52 -57

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	9	SLU	1	30.01	15.21	12.06	15.21	12.06	-12713.40	-41977.60	3.302
3.11	9	SLU	1	310.94	8.04	16.09	8.04	16.09	25624.20	43864.30	1.712
6.86	9	SLU	1	685.51	15.21	12.06	15.21	12.06	10233.70	33332.80	3.257

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	5	SND	1	30.01	15.21	12.06	15.21	12.06	-10648.80	-39457.50	3.705
3.11	5	SND	1	310.94	8.04	16.09	8.04	16.09	18053.70	41029.80	2.273
6.86	5	SND	1	685.51	15.21	12.06	15.21	12.06	7530.15	31882.60	4.234

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cm>	<m>	<daN>		<daN>	<daN>	<daN>	
9	SLU	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	20587.70	2.16	40369.20	40369.20	1.96
9	SLU	1.10	6.06	4.96	ø8/15 2 br.	6.70	0.25	15892.00	2.37	37958.60	37958.60	2.39
9	SLU	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	18059.10	2.16	40369.20	40369.20	2.24

Travata n. 306

Nodi: -53 81

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	9	SLU	1	30.01	15.21	12.06	15.21	12.06	-13530.60	-41977.60	3.102
3.11	9	SLU	1	310.94	8.04	16.09	8.04	16.09	25590.50	43864.30	1.714
6.86	9	SLU	1	685.50	15.21	12.06	15.21	12.06	10399.10	33332.80	3.205

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	5	SND	1	30.01	15.21	12.06	15.21	12.06	-11912.20	-39457.50	3.312
3.11	5	SND	1	310.94	8.04	16.09	8.04	16.09	18198.60	41029.80	2.255
6.86	5	SND	1	685.50	15.21	12.06	15.21	12.06	7922.50	31882.60	4.024

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cm>	<m>	<daN>		<daN>	<daN>	<daN>	
9	SLU	0.30	1.10	0.80	ø8/15 2 br.	6.70	0.25	20921.40	2.16	40369.20	40369.20	1.93
9	SLU	1.10	6.06	4.95	ø8/15 2 br.	6.70	0.25	16163.40	2.37	37958.70	37958.70	2.35
9	SLU	6.06	6.86	0.80	ø8/15 2 br.	6.70	0.25	17752.10	2.16	40369.20	40369.20	2.27

Travata n. 307

Nodi: 75 -434 -433 77

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
14	R	25.00	80.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.30	9	SLU	1	563.01	12.06	6.03	12.06	6.03	-10401.20	-33075.90	3.180
3.12	9	SLU	1	281.51	6.03	10.05	6.03	10.05	20758.50	27716.60	1.335
6.85	9	SLU	3	12.55	12.06	6.03	12.06	6.03	3413.77	16691.80	4.890

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.30	5	SND	1	563.01	12.06	6.03	12.06	6.03	-9022.40	-30995.10	3.435
3.12	5	SND	1	281.51	6.03	10.05	6.03	10.05	14922.40	26059.50	1.746
6.85	5	SND	3	12.55	12.06	6.03	12.06	6.03	2441.94	16199.00	6.634

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
<m>	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLU	0.30	1.10	0.80	ø8/20 2 br.	5.03	0.25	17091.20	2.46	36917.20	36917.20	36917.20	2.16
9 SLU	1.10	6.05	4.95	ø8/20 2 br.	5.03	0.25	13114.00	2.50	30821.80	36542.90	30821.80	2.35
9 SLU	6.05	6.85	0.80	ø8/20 2 br.	5.03	0.25	15691.70	2.46	36917.20	36917.20	36917.20	2.35

Travata n. 308

Nodi: -45 -452 -1089 -55 -56 -445 -1092 -57 81 -459 -460 -1094 77

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
13	R	25.00	70.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.22	9	SLU	1	22.00	8.29	5.15	8.29	5.15	-4987.55	-19935.70	3.997
2.58	9	SLU	2	107.12	2.26	9.17	2.26	9.17	7777.97	21694.80	2.789
6.74	9	SLU	3	120.66	8.29	7.41	8.29	7.41	-8495.51	-19954.00	2.349
7.34	9	SLU	4	30.00	8.29	2.26	8.29	2.26	-6559.56	-19702.10	3.004
9.05	9	SLU	4	200.31	8.29	2.26	8.29	2.26	-5914.42	-19702.10	3.331
9.65	9	SLU	5	30.00	8.29	7.41	8.29	7.41	-7224.06	-19954.00	2.762
12.33	9	SLU	6	160.36	2.26	9.17	2.26	9.17	6706.27	21694.80	3.235
15.98	9	SLU	7	108.00	8.29	7.41	8.29	7.41	-6510.97	-19954.00	3.065
16.58	9	SLU	8	30.00	8.29	2.26	8.29	2.26	-5099.93	-19702.10	3.863
18.29	9	SLU	8	201.36	8.29	2.26	8.29	2.26	-7304.21	-19702.10	2.697
18.89	9	SLU	9	30.00	8.29	7.41	8.29	7.41	-8867.06	-19954.00	2.250
21.90	9	SLU	11	31.50	2.26	9.17	2.26	9.17	7610.87	21694.80	2.850
25.31	9	SLU	12	120.00	8.29	5.15	8.29	5.15	-4203.82	-19935.70	4.742

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.22	1	SND	1	22.00	8.29	5.15	8.29	5.15	-7840.33	-18782.60	2.396
2.58	1	SND	2	107.12	2.26	9.17	2.26	9.17	6407.28	20379.00	3.181
6.74	1	SND	3	120.66	8.29	7.41	8.29	7.41	-9733.31	-18947.20	1.947
7.34	1	SND	4	30.00	8.29	2.26	8.29	2.26	-7287.55	-18520.50	2.541
9.05	1	SND	4	200.31	8.29	2.26	8.29	2.26	-6631.69	-18520.50	2.793
9.65	1	SND	5	30.00	8.29	7.41	8.29	7.41	-8899.27	-18947.20	2.129
12.33	1	SND	6	160.36	2.26	9.17	2.26	9.17	5021.55	20379.00	4.058
15.98	1	SND	7	108.00	8.29	7.41	8.29	7.41	-8420.42	-18947.20	2.250
16.58	1	SND	8	30.00	8.29	2.26	8.29	2.26	-6486.08	-18520.50	2.855
18.29	1	SND	8	201.36	8.29	2.26	8.29	2.26	-8158.58	-18520.50	2.270
18.89	1	SND	9	30.00	8.29	7.41	8.29	7.41	-9815.85	-18947.20	1.930
21.90	1	SND	11	31.50	2.26	9.17	2.26	9.17	6265.74	20379.00	3.252
25.31	1	SND	12	120.00	8.29	5.15	8.29	5.15	-7033.36	-18782.60	2.671

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
<m>	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLU	0.22	0.92	0.70	ø8/20 2 br.	5.03	0.25	7798.29	2.41	32708.90	32708.90	32708.90	4.19
1 SND	0.22	0.92	0.70	ø8/20 2 br.	5.03	0.25	6666.56	2.50	24139.70	31887.80	24139.70	3.62
9 SLU	0.92	6.04	5.12	ø8/20 2 br.	5.03	0.25	7213.29	2.50	26804.90	31887.80	26804.90	3.72
9 SLU	6.04	6.74	0.70	ø8/20 2 br.	5.03	0.25	9086.34	2.41	32708.90	32708.90	32708.90	3.60
1 SND	6.04	6.74	0.70	ø8/20 2 br.	5.03	0.25	7543.35	2.50	24139.70	31887.80	24139.70	3.20
1 SND	7.34	9.05	1.70	ø8/20 2 br.	5.03	0.25	4790.06	2.50	24139.70	31887.80	24139.70	5.04
9 SLU	9.65	10.35	0.70	ø8/20 2 br.	5.03	0.25	8202.36	2.41	32708.90	32708.90	32708.90	3.99
1 SND	9.65	10.35	0.70	ø8/20 2 br.	5.03	0.25	6918.62	2.50	24139.70	31887.80	24139.70	3.49
9 SLU	10.35	15.28	4.93	ø8/20 2 br.	5.03	0.25	6449.89	2.50	26909.60	31887.80	26909.60	4.17
9 SLU	15.28	15.98	0.70	ø8/20 2 br.	5.03	0.25	8177.05	2.41	32708.90	32708.90	32708.90	4.00

1	SND	15.28	15.98	0.70	ø8/20 2 br.	5.03	0.25	6885.73	2.50	24139.70	31887.80	24139.70	3.51
1	SND	16.58	18.29	1.71	ø8/20 2 br.	5.03	0.25	6069.49	2.50	24139.70	31887.80	24139.70	3.98
9	SLU	18.89	19.59	0.70	ø8/20 2 br.	5.03	0.25	8933.85	2.50	24139.70	31887.80	24139.70	2.70
9	SLU	19.59	24.61	5.02	ø8/20 2 br.	5.03	0.25	7181.54	2.50	28219.60	31887.80	28219.60	3.93
1	SND	19.59	24.61	5.02	ø8/20 2 br.	5.03	0.25	6188.47	2.50	24139.70	31887.80	24139.70	3.90
9	SLU	24.61	25.31	0.70	ø8/20 2 br.	5.03	0.25	7686.90	2.41	32708.90	32708.90	32708.90	4.26
1	SND	24.61	25.31	0.70	ø8/20 2 br.	5.03	0.25	6525.54	2.50	24139.70	31887.80	24139.70	3.70

Travata n. 309

Nodi: 76 -49

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
26	R	80.00	16.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.15	9	SLU	1	15.00	14.07	14.07	14.07	14.07	-3731.96	-6708.71	1.798
2.22	9	SLU	1	221.74	14.07	14.07	14.07	14.07	2796.98	6708.71	2.399
4.71	9	SLU	1	471.50	14.07	14.07	14.07	14.07	-5297.81	-6708.71	1.266

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
0.15	1	SND	1	15.00	14.07	14.07	14.07	14.07	-2910.84	-6459.86	2.219
2.22	1	SND	1	221.74	14.07	14.07	14.07	14.07	1909.77	6459.86	3.383
4.71	1	SND	1	471.50	14.07	14.07	14.07	14.07	-3958.20	-6459.86	1.632

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.15	0.31	0.16	ø8/17 2 br.	5.91	0.80	5822.07	2.50	6011.61	21599.90	6011.61	1.03
9 SLU	0.31	4.55	4.24	ø8/17 2 br.	5.91	0.80	6075.86	2.50	6011.61	21599.90	6011.61	0.99
9 SLU	4.55	4.71	0.16	ø8/17 2 br.	5.91	0.80	6508.02	2.50	6011.61	21599.90	6011.61	0.92

Travata n. 310

Nodi: -58 79

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
28	R	40.00	16.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
2.30	9	SLU	1	12.52	2.54	2.26	2.54	2.26	-1145.26	-1261.66	1.102

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cm>	<cm>	<cm>	<cm>	<daNm>	<daNm>	
2.30	5	SND	1	12.52	2.54	2.26	2.54	2.26	-936.96	-1200.84	1.282

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.00	2.14	2.14	ø6/17 2 br.	3.33	0.40	1392.22	2.50	3381.53	10799.90	3381.53	2.43
9 SLU	2.14	2.30	0.16	ø6/17 2 br.	3.33	0.40	1494.12	2.50	3381.53	10799.90	3381.53	2.26

Travata n. 311

Nodi: -54 80

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
28	R	40.00	16.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
----	----	-----	----	---	-------	-------	--------	--------	----	------	------

<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
2.30	9	SLU	1	12.54	2.26	2.26	2.26	2.26	-958.34	-1128.90	1.178

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
2.30	5	SND	1	12.54	2.26	2.26	2.26	2.26	-801.34	-1071.51	1.337

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	AfE St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLU	-0.00	2.14	2.14	ø6/17 2 br.	3.33	0.40	1219.94	2.50	3381.53	10799.90	3381.53	2.77
9 SLU	2.14	2.30	0.16	ø6/17 2 br.	3.33	0.40	1313.21	2.50	3381.53	10799.90	3381.53	2.58

Travata n. 312

Nodi: 79 -60 -59 80

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
26	R	80.00	16.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	9	SLU	1	12.50	14.07	14.07	14.07	14.07	-3060.09	-6708.71	2.192
2.41	9	SLU	1	241.31	14.07	14.07	14.07	14.07	2866.95	6708.71	2.340
4.97	9	SLU	1	497.50	14.07	14.07	14.07	14.07	-3811.59	-6708.71	1.760
5.23	9	SLU	2	12.50	14.07	14.07	14.07	14.07	-1831.99	-6708.71	3.662
6.52	9	SLU	2	142.50	14.07	14.07	14.07	14.07	-1813.55	-6708.71	3.699
6.78	9	SLU	3	12.50	14.07	14.07	14.07	14.07	-3786.84	-6708.71	1.772
9.20	9	SLU	3	254.82	14.07	14.07	14.07	14.07	2851.63	6708.71	2.353
11.62	9	SLU	3	497.14	14.07	14.07	14.07	14.07	-3092.08	-6708.71	2.170

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	1	SND	1	12.50	14.07	14.07	14.07	14.07	-2343.07	-6459.86	2.757
2.41	1	SND	1	241.31	14.07	14.07	14.07	14.07	1964.28	6459.86	3.289
4.97	1	SND	1	497.50	14.07	14.07	14.07	14.07	-2782.46	-6459.86	2.322
5.23	1	SND	2	12.50	14.07	14.07	14.07	14.07	-1552.85	-6459.86	4.160
6.52	1	SND	2	142.50	14.07	14.07	14.07	14.07	-1541.02	-6459.86	4.192
6.78	1	SND	3	12.50	14.07	14.07	14.07	14.07	-2764.67	-6459.86	2.337
9.20	1	SND	3	254.82	14.07	14.07	14.07	14.07	1952.88	6459.86	3.308
11.62	1	SND	3	497.14	14.07	14.07	14.07	14.07	-2362.35	-6459.86	2.735

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.13	0.29	0.16	ø8/17 2 br.	5.91	0.80	4823.52	2.50	6011.61	21599.90	6011.61	1.25
9 SLU	0.29	4.81	4.53	ø8/17 2 br.	5.91	0.80	4804.86	2.50	6011.61	21599.90	6011.61	1.25
9 SLU	4.81	4.97	0.16	ø8/17 2 br.	5.91	0.80	5133.33	2.50	6011.61	21599.90	6011.61	1.17
1 SND	5.23	5.39	0.16	ø8/17 2 br.	5.91	0.80	1439.11	2.50	6011.61	21599.90	6011.61	4.18
1 SND	5.39	6.36	0.98	ø8/17 2 br.	5.91	0.80	1216.56	2.50	6011.61	21599.90	6011.61	4.94
1 SND	6.36	6.52	0.16	ø8/17 2 br.	5.91	0.80	1419.92	2.50	6011.61	21599.90	6011.61	4.23
9 SLU	6.78	6.94	0.16	ø8/17 2 br.	5.91	0.80	5117.76	2.50	6011.61	21599.90	6011.61	1.17
9 SLU	6.94	11.46	4.53	ø8/17 2 br.	5.91	0.80	4789.29	2.50	6011.61	21599.90	6011.61	1.26
9 SLU	11.46	11.62	0.16	ø8/17 2 br.	5.91	0.80	4830.96	2.50	6011.61	21599.90	6011.61	1.24

Travata n. 313

Nodi: 90 -422 -62 -61 89

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
13	R	25.00	70.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	AfE S	AfE I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	

0.13	9	SLU	1	13.14	8.29	6.03	8.29	6.03	2669.93	14529.50	5.442
1.86	9	SLU	2	122.40	2.26	8.04	2.26	8.04	9712.09	19129.20	1.970
5.22	9	SLU	2	459.00	8.29	5.09	8.29	5.09	-7596.41	-19933.40	2.624
5.47	9	SLU	3	12.50	8.29	5.09	8.29	5.09	-7309.53	-19933.40	2.727
7.02	9	SLU	3	166.67	2.26	7.10	2.26	7.10	-2488.90	-5478.79	2.201
9.18	9	SLU	3	382.50	8.29	5.09	8.29	5.09	-7081.48	-19933.40	2.815
9.43	9	SLU	4	12.50	8.29	5.09	8.29	5.09	-7350.61	-19933.40	2.712
11.59	9	SLU	4	229.22	2.26	8.04	2.26	8.04	9338.47	19129.20	2.048
14.38	9	SLU	4	507.86	8.29	6.03	8.29	6.03	4699.21	14529.50	3.092

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CCT	CC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	1	SND	1	13.14	8.29	6.03	8.29	6.03	3561.66	13980.50	3.925
1.86	1	SND	2	122.40	2.26	8.04	2.26	8.04	7316.00	17986.90	2.459
5.22	1	SND	2	459.00	8.29	5.09	8.29	5.09	-6309.24	-18777.60	2.976
5.47	1	SND	3	12.50	8.29	5.09	8.29	5.09	-5842.24	-18777.60	3.214
7.02	1	SND	3	166.67	2.26	7.10	2.26	7.10	-2173.33	-5356.32	2.465
9.18	1	SND	3	382.50	8.29	5.09	8.29	5.09	-5757.46	-18777.60	3.261
9.43	1	SND	4	12.50	8.29	5.09	8.29	5.09	-6066.74	-18777.60	3.095
11.59	1	SND	4	229.22	2.26	8.04	2.26	8.04	6836.42	17986.90	2.631
14.38	1	SND	4	507.86	8.29	6.03	8.29	6.03	4433.52	13980.50	3.153

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
9 SLU	0.13	0.83	0.70	ø8/20 2 br.	5.03	0.25	8458.56	2.41	32708.90	32708.90	32708.90	3.87
5 SND	0.13	0.83	0.70	ø8/20 2 br.	5.03	0.25	6250.44	2.50	24139.70	31887.80	24139.70	3.86
9 SLU	0.83	4.52	3.69	ø8/20 2 br.	5.03	0.25	8825.07	2.50	24139.70	31887.80	24139.70	2.74
9 SLU	4.52	5.22	0.70	ø8/20 2 br.	5.03	0.25	11784.10	2.41	32708.90	32708.90	32708.90	2.78
9 SLU	5.47	6.18	0.70	ø8/20 2 br.	5.03	0.25	7881.71	2.41	32708.90	32708.90	32708.90	4.15
1 SND	5.47	6.18	0.70	ø8/20 2 br.	5.03	0.25	5874.13	2.50	24139.70	31887.80	24139.70	4.11
9 SLU	6.18	8.47	2.30	ø8/20 2 br.	5.03	0.25	4922.73	2.50	24139.70	31887.80	24139.70	4.90
9 SLU	8.47	9.18	0.70	ø8/20 2 br.	5.03	0.25	7758.45	2.41	32708.90	32708.90	32708.90	4.22
1 SND	8.47	9.18	0.70	ø8/20 2 br.	5.03	0.25	5791.47	2.50	24139.70	31887.80	24139.70	4.17
9 SLU	9.43	10.13	0.70	ø8/20 2 br.	5.03	0.25	11572.20	2.41	32708.90	32708.90	32708.90	2.83
9 SLU	10.13	13.68	3.55	ø8/20 2 br.	5.03	0.25	8613.17	2.50	24139.70	31887.80	24139.70	2.80
9 SLU	13.68	14.38	0.70	ø8/20 2 br.	5.03	0.25	8124.91	2.41	32708.90	32708.90	32708.90	4.03
1 SND	13.68	14.38	0.70	ø8/20 2 br.	5.03	0.25	6090.39	2.50	24139.70	31887.80	24139.70	3.96

Travata n. 314

Nodi: 89 85

Sez.	Tipo	B	H	Cf sup	Cf inf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
18	R	25.00	40.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	9	SLU	1	12.50	4.52	2.26	4.52	2.26	600.05	3047.49	5.079
4.27	9	SLU	1	427.10	4.52	2.26	4.52	2.26	-1599.44	-6037.43	3.775

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	X	Afe S	Afe I	AfeP S	AfeP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	5	SND	1	12.50	4.52	2.26	4.52	2.26	1594.54	2955.13	1.853
4.27	5	SND	1	427.10	4.52	2.26	4.52	2.26	-2906.51	-5712.27	1.965

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>	
5 SND	0.13	0.53	0.40	ø6/20 2 br.	2.83	0.25	1510.76	2.50	7631.76	17922.30	7631.76	5.05
5 SND	0.53	3.87	3.35	ø6/20 2 br.	2.83	0.25	1928.03	2.50	7631.76	17922.30	7631.76	3.96
5 SND	3.87	4.27	0.40	ø6/20 2 br.	2.83	0.25	2149.59	2.50	7631.76	17922.30	7631.76	3.55

Travata n. 327

Nodi: 84 83 82 -63

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
19	R	25.00	60.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	9	SLU	1	13.14	5.40	4.02	5.40	4.02	1263.66	8261.95	6.538
1.30	9	SLU	1	130.41	2.26	6.03	2.26	6.03	1867.34	12314.30	6.595
2.94	9	SLU	1	294.00	8.29	4.02	8.29	4.02	-3850.05	-16902.10	4.390
3.34	9	SLU	2	20.00	8.29	6.03	8.29	6.03	-5605.30	-16976.80	3.029
5.19	9	SLU	2	204.80	2.26	8.04	2.26	8.04	6071.04	16247.40	2.676
7.96	9	SLU	2	482.00	8.29	4.02	8.29	4.02	-5479.13	-16902.10	3.085
8.36	9	SLU	3	20.00	8.29	4.02	8.29	4.02	-3638.05	-16902.10	4.646
9.94	9	SLU	3	177.77	2.26	6.03	2.26	6.03	1703.74	12314.30	7.228
11.07	9	SLU	3	291.45	5.40	4.02	5.40	4.02	1190.41	8261.95	6.940

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	13.14	5.40	4.02	5.40	4.02	-2701.00	-10538.30	3.902
1.30	1	SND	1	130.41	2.26	6.03	2.26	6.03	1920.94	11607.00	6.042
2.94	1	SND	1	294.00	8.29	4.02	8.29	4.02	-5383.43	-15872.80	2.948
3.34	1	SND	2	20.00	8.29	6.03	8.29	6.03	-4750.16	-16027.20	3.374
5.19	5	SND	2	204.80	2.26	8.04	2.26	8.04	4854.90	15260.30	3.143
7.96	1	SND	2	482.00	8.29	4.02	8.29	4.02	-4801.36	-15872.80	3.306
8.36	1	SND	3	20.00	8.29	4.02	8.29	4.02	-5463.47	-15872.80	2.905
9.94	1	SND	3	177.77	2.26	6.03	2.26	6.03	-907.76	-4551.97	5.014
11.07	1	SND	3	291.45	5.40	4.02	5.40	4.02	-2670.56	-10538.30	3.946

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
1 SND	0.13	0.73	0.60	ø8/17 2 br.	5.91	0.25	5011.84	2.50	24253.70	27232.60	24253.70	4.84
1 SND	0.73	2.34	1.61	ø8/17 2 br.	5.91	0.25	4571.15	2.50	24253.70	27232.60	24253.70	5.31
1 SND	2.34	2.94	0.60	ø8/17 2 br.	5.91	0.25	6266.86	2.50	24253.70	27232.60	24253.70	3.87
9 SLU	3.34	3.94	0.60	ø8/17 2 br.	5.91	0.25	9604.15	2.19	29807.50	29807.40	29807.40	3.10
9 SLU	3.94	7.36	3.42	ø8/17 2 br.	5.91	0.25	7116.63	2.50	24253.70	27232.60	24253.70	3.41
9 SLU	7.36	7.96	0.60	ø8/17 2 br.	5.91	0.25	9549.53	2.19	29807.50	29807.40	29807.40	3.12
1 SND	8.36	8.96	0.60	ø8/17 2 br.	5.91	0.25	6254.63	2.50	24253.70	27232.60	24253.70	3.88
1 SND	8.96	10.47	1.51	ø8/17 2 br.	5.91	0.25	4558.93	2.50	24253.70	27232.60	24253.70	5.32
1 SND	10.47	11.07	0.60	ø8/17 2 br.	5.91	0.25	5042.10	2.50	24253.70	27232.60	24253.70	4.81

Travata n. 331

Nodi: -49 -58 -48

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
26	R	80.00	16.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.25	9	SLU	1	25.00	16.87	16.87	16.87	16.87	-5023.87	-8010.02	1.594
2.45	9	SLU	2	85.85	16.87	16.87	16.87	16.87	3254.19	8010.02	2.461
4.75	9	SLU	2	316.50	16.87	16.87	16.87	16.87	-6117.93	-8010.02	1.309

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	AfE S <cm>	AfE I <cm>	AfEP S <cm>	AfEP I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.25	1	SND	1	25.00	16.87	16.87	16.87	16.87	-3769.15	-7715.24	2.047
2.45	1	SND	2	85.85	16.87	16.87	16.87	16.87	2288.02	7715.24	3.372
4.75	1	SND	2	316.50	16.87	16.87	16.87	16.87	-4443.16	-7715.24	1.736

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	AfE St. <cmq/m>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.25	0.41	0.16	ø8/17 2 br.	5.91	0.80	6753.27	2.50	6011.61	21599.90	6011.61	0.89

9 SLU	0.41	4.59	4.18	ø8/17 2 br.	5.91	0.80	7506.61	2.50	6011.61	21599.90	6011.61	0.80
9 SLU	4.59	4.75	0.16	ø8/17 2 br.	5.91	0.80	8082.39	2.50	6011.61	21599.90	6011.61	0.74

Travata n. 332

Nodi: -48 -440 -437 -47

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
17	R	25.00	65.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	Afep S <cm>	Afep I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	9	SLU	1	12.50	7.82	4.02	7.82	4.02	-6721.36	-17371.70	2.585
2.14	9	SLU	2	0.00	2.26	8.04	2.26	8.04	6867.95	17688.40	2.575
5.35	9	SLU	3	201.50	7.82	4.02	7.82	4.02	-6168.43	-17371.70	2.816

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	Afep S <cm>	Afep I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	12.50	7.82	4.02	7.82	4.02	-5987.38	-16342.20	2.729
2.14	1	SND	2	0.00	2.26	8.04	2.26	8.04	4789.22	16622.20	3.471
5.35	1	SND	3	201.50	7.82	4.02	7.82	4.02	-5612.57	-16342.20	2.912

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.13	0.78	0.65	ø8/20 2 br.	5.03	0.25	9809.16	2.38	30596.80	30596.80	30596.80	3.12
1 SND	0.13	0.78	0.65	ø8/20 2 br.	5.03	0.25	7250.18	2.50	22377.70	29560.20	22377.70	3.09
9 SLU	0.78	4.70	3.93	ø8/20 2 br.	5.03	0.25	7397.15	2.50	25598.30	29560.20	25598.30	3.46
9 SLU	4.70	5.35	0.65	ø8/20 2 br.	5.03	0.25	9597.51	2.38	30596.80	30596.80	30596.80	3.19
1 SND	4.70	5.35	0.65	ø8/20 2 br.	5.03	0.25	7107.78	2.50	22377.70	29560.20	22377.70	3.15

Travata n. 333

Nodi: -47 -54 -46

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
26	R	80.00	16.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	Afep S <cm>	Afep I <cm>	My <daNm>	MRdy <daNm>	Sic.
0.13	9	SLU	1	12.50	16.87	16.87	16.87	16.87	-5381.25	-8010.02	1.489
2.22	9	SLU	1	222.37	16.87	16.87	16.87	16.87	2854.76	8010.02	2.806
4.44	9	SLU	2	146.50	16.87	16.87	16.87	16.87	-5368.37	-8010.02	1.492

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	X <cm>	Afe S <cm>	Afe I <cm>	Afep S <cm>	Afep I <cm>	My <daNm>	M'ydy <daNm>	Sic.
0.13	1	SND	1	12.50	16.87	16.87	16.87	16.87	-3944.32	-7715.24	1.956
2.22	1	SND	1	222.37	16.87	16.87	16.87	16.87	2013.70	7715.24	3.831
4.44	1	SND	2	146.50	16.87	16.87	16.87	16.87	-3996.31	-7715.24	1.931

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura

CC	X0 <m>	X1 <m>	Lung. <m>	Staff.	Afe St. <cm>	bw <m>	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Vrdu <daN>	Sic.T
9 SLU	0.13	0.29	0.16	ø8/17 2 br.	5.91	0.80	7576.58	2.50	6011.61	21599.90	6011.61	0.79
9 SLU	0.29	4.28	4.00	ø8/17 2 br.	5.91	0.80	7000.84	2.50	6011.61	21599.90	6011.61	0.86
9 SLU	4.28	4.44	0.16	ø8/17 2 br.	5.91	0.80	6744.36	2.50	6011.61	21599.90	6011.61	0.89

Travata n. 334

Nodi: -46 78

Sez.	Tipo	B <cm>	H <cm>	Cf sup <cm>	Cf inf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
27	R	150.00	16.00	1.50	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione											
Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	MRdy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	9	SLU	1	12.50	30.66	27.27	30.66	27.27	-8826.44	-14565.30	1.650
3.07	9	SLU	1	307.04	27.27	27.27	27.27	27.27	5521.57	12988.20	2.352
6.02	9	SLU	1	601.59	30.66	27.27	30.66	27.27	-7718.40	-14565.30	1.887

Stato limite elastico - Verifiche a flessione/pressoflessione											
Xg	CC	TCC	El	X	Afe S	Afe I	AfEP S	AfEP I	My	M'ydy	Sic.
<m>				<cm>	<cmq>	<cmq>	<cmq>	<cmq>	<daNm>	<daNm>	
0.13	1	SND	1	12.50	30.66	27.27	30.66	27.27	-6609.00	-13985.20	2.116
3.07	1	SND	1	307.04	27.27	27.27	27.27	27.27	3809.30	12509.20	3.284
6.02	1	SND	1	601.59	30.66	27.27	30.66	27.27	-5901.59	-13985.20	2.370

Stato limite d'esercizio - Verifiche tensionali

Travata priva di sollecitazioni perché adiacente ad un muro o per altri motivi

Staffe - Verifiche armatura														
CC	X0	X1	Lung.	Staff.	Afe St.	bw	Vsdu	ctgθ	VRsd	VRcd	Vrdu	Sic.T		
	<m>	<m>	<m>		<cmq/m>	<m>	<daN>		<daN>	<daN>	<daN>			
9 SLU	0.13	0.29	0.16	ø8/17 2 br.	5.91	1.50	9212.27	2.50	6011.61	40499.80	6011.61	0.65		
9 SLU	0.29	5.86	5.57	ø8/17 2 br.	5.91	1.50	8721.92	2.50	6011.61	40499.80	6011.61	0.69		
9 SLU	5.86	6.02	0.16	ø8/17 2 br.	5.91	1.50	8676.47	2.50	6011.61	40499.80	6011.61	0.69		

Verifiche e armature pilastri

Simbologia

Xg = Coordinata progressiva (dal primo nodo) in cui viene effettuato il progetto/verifica
 CC = Combinazione delle condizioni di carico elementari
 e = eccentricità aggiuntiva in caso di compressione o pressoflessione
 α = amplificazione per gerarchia delle resistenze
 TG = taglio da gerarchia delle resistenze
 TCC = Tipo di combinazione di carico
 SLU = Stato limite ultimo
 SLU S = Stato limite ultimo (azione sismica)
 SLE R = Stato limite d'esercizio, combinazione rara
 SLE F = Stato limite d'esercizio, combinazione frequente
 SLE Q = Stato limite d'esercizio, combinazione quasi permanente
 SLD = Stato limite di danno
 SLV = Stato limite di salvaguardia della vita
 SLC = Stato limite di prevenzione del collasso
 SLO = Stato limite di operatività
 SLU I = Stato limite di resistenza al fuoco
 SND = Stato limite di salvaguardia della vita (non dissipativo)
 El = Elemento (asta) in cui viene effettuato il progetto/verifica (progressivo sul numero di aste)
 Sez. = Numero della sezione
 X = Coordinata progressiva rispetto al nodo iniziale
 N = Sforzo normale
 M = Momento flettente
 MRd = Momento resistente allo stato limite ultimo
 μΦ = Valore di progetto della duttilità di curvatura
 My = Momento flettente intorno all'asse Y
 My ver. = Momento flettente di verifica intorno all'asse Y
 Mz = Momento flettente intorno all'asse Z
 Mz ver. = Momento flettente di verifica intorno all'asse Z
 Nu = Sforzo normale ultimo
 M'ydy = Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Y
 M'ydz = Momento resistente massimo in campo sostanzialmente elastico intorno all'asse Z
 MRdy,s = Momento resistente allo stato limite ultimo (ridotto per stabilità) intorno all'asse Y
 M'ydy,s = Momento resistente massimo in campo sostanzialmente elastico (ridotto per stabilità) intorno all'asse Y
 MRdy = Momento resistente allo stato limite ultimo intorno all'asse Y
 MRdz,s = Momento resistente allo stato limite ultimo (ridotto per stabilità) intorno all'asse Z
 M'ydz,s = Momento resistente massimo in campo sostanzialmente elastico (ridotto per stabilità) intorno all'asse Z
 MRdz = Momento resistente allo stato limite ultimo intorno all'asse Z
 α = Angolo asse neutro a rottura
 ε_y = Deformazione nell'acciaio (*1000)
 Sic. = Sicurezza a rottura
 AfT = Area di ferro tesa
 AfC = Area di ferro compressa
 σ_{c0} = Tensione nel calcestruzzo prima del rinforzo
 σ_{c1} = Tensione nel calcestruzzo per incremento sollecitazioni
 σ_c = Tensione nel calcestruzzo
 σ_{f0} = Tensione nel ferro prima del rinforzo
 σ_{f1} = Tensione nel ferro per incremento sollecitazioni
 σ_f = Tensione nel ferro
 X0 = Coordinata progressiva (dal nodo iniziale) dell'inizio del tratto
 X1 = Coordinata progressiva (dal nodo iniziale) della fine del tratto
 Staff. = Staffatura adottata
 Br_y = Numero bracci in dir. Y locale
 Br_z = Numero bracci in dir. Z locale
 bw,_y = Larghezza membratura resistente al taglio in dir. Y
 Vsdu,_y = Taglio agente in dir. Y
 ctgθ,_y = Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo in dir. Y
 VRsd,_y = Taglio ultimo lato armatura in dir. Y
 VRcd,_y = Taglio ultimo lato calcestruzzo in dir. Y
 bw,_z = Larghezza membratura resistente al taglio in dir. Z
 Vsdu,_z = Taglio agente in dir. Z
 ctgθ,_z = Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo in dir. Z
 VRsd,_z = Taglio ultimo lato armatura in dir. Z
 VRcd,_z = Taglio ultimo lato calcestruzzo in dir. Z
 Sic.T = Sicurezza a rottura per taglio
 Nodo = Numero del nodo
 Vc_y = Taglio in dir. Y locale nel pilastro al di sopra del nodo
 Vt_y = Effetto armature travi in dir. Y locale del pilastro
 Vc_z = Taglio in dir. Z locale nel pilastro al di sopra del nodo

Vt _z	=Effetto armature travi in dir. Z locale del pilastro
Vn	=Taglio totale agente sul nodo in valore assoluto
σ _{nc}	=Azione agente di compressione diagonale (C8.7.2.2)
σ _{ncR}	=Resistenza a compressione diagonale (C8.7.2.2)
σ _{nt}	=Azione agente di trazione diagonale (C8.7.2.2)
σ _{ntR}	=Resistenza a trazione diagonale (C8.7.2.2)
Tipo	=Tipologia
	2C = Doppia C lato labbri
	2Cdx = Doppia C lato costola
	2I = Doppia I
	2L = Doppia L lato labbri
	2Ldx = Doppia L lato costole
	C = Sezione a C
	Cdx = C destra
	Cir. = Circolare
	Cir.c = Circolare cava
	I = Sezione a I
	L = Sezione a L
	Ldx = L destra
	Om. = Omega
	Pg = Pi greco
	Pr = Poligono regolare
	Prc = Poligono regolare cavo
	Pc = Per coordinate
	Ia = Inerzie assegnate
	R = Rettangolare
	Rc = Rettangolare cava
	T = Sezione a T
	U = Sezione a U
	Ur = U rovescia
	V = Sezione a V
	Vr = V rovescia
	Z = Sezione a Z
	Zdx = Z destra
	Ts = T stondata
	Ls = L stondata
	Cs = C stondata
	Is = I stondata
	Dis. = Disegnata
B	=Base
H	=Altezza
Cf	=Copriferro
Fcm	=Resistenza media
Fctm	=Resistenza media a trazione
Fcd	=Resistenza di calcolo a compressione del calcestruzzo
Fcd (Tag)	=Resistenza di calcolo a compressione del calcestruzzo per verifica a taglio
Fctd	=Resistenza di calcolo a trazione del calcestruzzo
Fym	=Tensione media di snervamento
Fyd	=Resistenza di calcolo dell'acciaio
Fyd (Tag)	=Resistenza di calcolo dell'acciaio per verifica a taglio
l ₀	=Lunghezza libera di inflessione
λ	=Snellezza massima
λ*	=Snellezza limite
μΦ _Y	=Valore di progetto della duttilità di curvatura in dir. Y locale
μΦ _Z	=Valore di progetto della duttilità di curvatura in dir. Z locale
esp.	=Esponente per verifiche secondo [4.1.19]
Δ%	=Incremento percentuale sicurezza
TRL	=Tipo rinforzi longitudinali
	N = Nessuno
	L _y = Lati paralleli a Y
	L _z = Lati paralleli a Z
	A = Angolo
NS	=Numero strisce
ST	=Numero strati
Lst	=Larghezza striscia
f _{fk}	=Resistenza caratteristica del rinforzo
E _f	=Modulo elastico del rinforzo
ε _{fk}	=Deformazione caratteristica a rottura per trazione del rinforzo (*1000)
f _{edd,y}	=Resistenza di progetto al distacco del rinforzo in dir. Y (modo 1)
f _{edd,y,2}	=Resistenza di progetto al distacco del rinforzo in dir. Y (modo 2)
f _{edd,z}	=Resistenza di progetto al distacco del rinforzo in dir. Z (modo 1)
f _{edd,z,2}	=Resistenza di progetto al distacco del rinforzo in dir. Z (modo 2)
ε _{fd}	=Deformazione massima di progetto del rinforzo (*1000)
n	=Coefficiente di omogeneizzazione
ε _{0s}	=Deformazione iniziale superiore (*1000)
ε _{0i}	=Deformazione iniziale inferiore (*1000)
σ _{fbr}	=Tensione nelle fibre
σ _{fbr}	=Tensione nelle fibre

N.B. = è stata riportata la verifica solo dei nodi non confinati; per i nodi che non risultano soddisfare la verifica di sicurezza si è ipotizzato il consolidamento descritto in relazione.

Pilastrata n. 1

Nodi: 91 1 37 74

Sez.	Tipo	B	H	Cf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
5R		60.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _r	Sic.
<cm>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
-1.80	11(e)	SLU	1	5	0.00	-62582.10	670.69	1251.64	494.56	1251.64	-325160.00	9588.00	9616.31	13.36	3.92	5.196
-1.80	11(e)	SLU	1	5	0.00	-62582.10	670.69	1251.64	494.56	1251.64	-325160.00	9588.00	9616.31	13.36	3.92	5.196
-0.80	11(e)	SLU	1	5	100.00	-62094.60	-537.46	-1241.89	-981.72	-1241.89	-325160.00	-9565.90	-9609.83	193.36	3.94	5.237
0.00	11(e)	SLU	2	5	0.00	-59987.10	643.52	1199.74	-1975.96	-1975.96	-325160.00	8038.29	-13485.80	340.31	3.84	5.420
2.72	11(e)	SLU	2	5	272.00	-58661.10	-232.15	1173.22	4487.52	4487.52	-58661.10	4964.72	19651.60	36.56	4.12	4.370
3.52	11	SLU	3	5	0.00	-32115.90	1629.38		-11438.60		-32115.90	2516.55	-19004.10	303.75	6.49	1.659
3.52	11	SLU	3	5	0.00	-32115.90	1629.38		-11438.60		-32115.90	2516.55	-19004.10	303.75	6.49	1.659

6.24	9	SLU	3	5	272.00	-31846.80	-2013.53		8570.30		-31846.80	-4282.20	17083.90	140.63	5.50	2.001
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Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
-1.80	1	SND	1	5	0.00	-15363.70	1090.33		4180.62		-15363.70	3001.66	11658.40	42.19	6.78	2.786
-1.80	1	SND	1	5	0.00	-15363.70	1090.33		4180.62		-15363.70	3001.66	11658.40	42.19	6.78	2.786
-0.80	5(e)	SND	1	5	100.00	-80567.40	79.09	1611.35	186.57	1611.35	-269999.00	13627.10	13259.70	13.36	3.26	3.351
0.00	5	SND	2	5	0.00	-22490.50	781.25		-6616.99		-22490.50	1476.06	-13573.10	298.13	7.68	2.049
2.72	5(e)	SND	2	5	272.00	-21470.50	-79.61	-429.41	4699.42	4699.42	-21470.50	-1129.93	13479.60	112.50	8.39	2.866
3.52	5	SND	3	5	0.00	-18213.00	1300.96		-8805.94		-18213.00	1880.53	-12695.20	303.75	7.60	1.442
3.52	5	SND	3	5	0.00	-18213.00	1300.96		-8805.94		-18213.00	1880.53	-12695.20	303.75	7.60	1.442
6.24	5	SND	3	5	272.00	-17193.00	-1646.25		7208.95		-17193.00	-2798.44	12134.80	135.00	6.83	1.684

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
-1.80	-0.80	ø6/12	2	2	11	SLU	0.25	1476.28	2.50	18699.50	31617.80	0.60	1208.15	2.50	7136.20	28958.80	5.91
-1.80	-0.80	ø6/12	2	2	1	SND	0.25	4443.97	2.50	18699.50	31617.80	0.60	2576.12	2.50	7136.20	28958.80	2.77
0.00	0.60	ø6/12	2	2	11	SLU	0.25	2376.28	2.50	18699.50	31617.80	0.60	321.94	2.50	7136.20	28958.80	7.87
0.00	0.60	ø6/12	2	2	1	SND	0.25	3604.13	2.50	18699.50	31617.80	0.60	539.84	2.50	7136.20	28958.80	5.19
0.00	0.60	ø6/12	2	2	5	SND	0.25	4157.72	2.50	18699.50	31617.80	0.60	381.86	2.50	7136.20	28958.80	4.50
0.60	2.12	ø6/12	2	2	11	SLU	0.25	2376.28	2.50	18699.50	31617.80	0.60	321.94	2.50	7136.20	28958.80	7.87
0.60	2.12	ø6/12	2	2	1	SND	0.25	3604.13	2.50	18699.50	31617.80	0.60	539.84	2.50	7136.20	28958.80	5.19
0.60	2.12	ø6/12	2	2	5	SND	0.25	4157.72	2.50	18699.50	31617.80	0.60	381.86	2.50	7136.20	28958.80	4.50
2.12	2.72	ø6/12	2	2	11	SLU	0.25	2376.28	2.50	18699.50	31617.80	0.60	321.94	2.50	7136.20	28958.80	7.87
2.12	2.72	ø6/12	2	2	1	SND	0.25	3604.13	2.50	18699.50	31617.80	0.60	539.84	2.50	7136.20	28958.80	5.19
2.12	2.72	ø6/12	2	2	5	SND	0.25	4157.72	2.50	18699.50	31617.80	0.60	381.86	2.50	7136.20	28958.80	4.50
3.52	4.12	ø6/12	2	2	9	SLU	0.25	7169.38	2.50	18699.50	31204.00	0.60	1362.31	2.50	7136.20	28579.70	2.61
3.52	4.12	ø6/12	2	2	11	SLU	0.25	7158.08	2.50	18699.50	31049.30	0.60	1305.41	2.50	7136.20	28438.10	2.61
3.52	4.12	ø6/12	2	2	3	SND	0.25	5243.50	2.50	18699.50	29939.00	0.60	1245.54	2.50	7136.20	27421.10	3.57
3.52	4.12	ø6/12	2	2	1	SND	0.25	5697.13	2.50	18699.50	30385.90	0.60	1258.50	2.50	7136.20	27830.50	3.28
3.52	4.12	ø6/12	2	2	5	SND	0.25	5862.88	2.50	18699.50	30690.10	0.60	1074.12	2.50	7136.20	28109.10	3.19
4.12	5.64	ø6/12	2	2	9	SLU	0.25	7169.38	2.50	18699.50	31161.10	0.60	1362.31	2.50	7136.20	28540.50	2.61
4.12	5.64	ø6/12	2	2	11	SLU	0.25	7158.08	2.50	18699.50	31006.40	0.60	1305.41	2.50	7136.20	28398.80	2.61
4.12	5.64	ø6/12	2	2	3	SND	0.25	5243.50	2.50	18699.50	29906.00	0.60	1245.54	2.50	7136.20	27391.00	3.57
4.12	5.64	ø6/12	2	2	1	SND	0.25	5697.13	2.50	18699.50	30353.00	0.60	1258.50	2.50	7136.20	27800.30	3.28
4.12	5.64	ø6/12	2	2	5	SND	0.25	5862.88	2.50	18699.50	30657.20	0.60	1074.12	2.50	7136.20	28079.00	3.19
5.64	6.24	ø6/12	2	2	9	SLU	0.25	7169.38	2.50	18699.50	31052.70	0.60	1362.31	2.50	7136.20	28441.20	2.61
5.64	6.24	ø6/12	2	2	11	SLU	0.25	7158.08	2.50	18699.50	30898.00	0.60	1305.41	2.50	7136.20	28299.50	2.61
5.64	6.24	ø6/12	2	2	3	SND	0.25	5243.50	2.50	18699.50	29822.60	0.60	1245.54	2.50	7136.20	27314.60	3.57
5.64	6.24	ø6/12	2	2	1	SND	0.25	5697.12	2.50	18699.50	30269.60	0.60	1258.50	2.50	7136.20	27723.90	3.28
5.64	6.24	ø6/12	2	2	5	SND	0.25	5862.88	2.50	18699.50	30573.80	0.60	1074.12	2.50	7136.20	28002.60	3.19

Pilastrata n. 2

Nodi: -64 -3 -27 -50

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
5	R	60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
-2.25	11(e)	SLU	1	5	0.00	-102262.00	-1212.78	2045.25	-6271.46	-6271.46	-102262.00	6712.76	-20037.00	331.88	2.65	3.203
-2.25	11(e)	SLU	1	5	0.00	-102262.00	-1212.78	2045.25	-6271.46	-6271.46	-102262.00	6712.76	-20037.00	331.88	2.65	3.203
-0.80	11(e)	SLU	1	5	145.00	-101556.00	1143.29	-2031.11	6788.99	6788.99	-101556.00	-6125.86	21162.40	149.06	2.71	3.109
0.00	11	SLU	2	5	0.00	-52445.80	-2112.31		-9555.55		-52445.80	-4413.69	-20354.30	219.38	4.46	2.128
2.72	11	SLU	2	5	272.00	-51119.80	1085.94		2562.49		-51119.80	6703.16	16220.70	25.31	4.14	6.306
3.52	11	SLU	3	5	0.00	-15696.60	-2027.62		-3457.63		-15696.60	-6493.90	-10856.30	196.88	6.16	3.156
3.52	11	SLU	3	5	0.00	-15696.60	-2027.62		-3457.63		-15696.60	-6493.90	-10856.30	196.88	6.16	3.156
6.24	9	SLU	3	5	272.00	-15011.60	1347.89		3346.53		-15011.60	5508.89	13029.90	25.31	6.08	3.921

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
-2.25	5(e)	SND	1	5	0.00	-84853.80	-659.44	-1697.08	-2676.18	-2676.18	-269999.00	-11576.70	-18115.40	198.28	3.03	3.182
-2.25	5(e)	SND	1	5	0.00	-84853.80	-659.44	-1697.08	-2676.18	-2676.18	-269999.00	-11576.70	-18115.40	198.28	3.03	3.182
-0.80	5(e)	SND	1	5	145.00	-84310.00	937.21	1686.20	5120.39	5120.39	-269999.00	7590.16	22070.10	28.13	3.11	3.202
0.00	5	SND	2	5	0.00	-34438.50	-2580.01		-10348.60		-34438.50	-3811.73	-15931.20	219.38	5.31	1.536
2.72	1	SND	2	5	272.00	-33321.60	2127.45		2464.28		-33321.60	9635.29	11097.90	12.66	5.41	4.514
3.52	1	SND	3	5	0.00	-9439.69	-3460.02		-2866.14		-9439.69	-7806.88	-6363.94	184.57	10.80	2.242
3.52	1	SND	3	5	0.00	-9439.69	-3460.02		-2866.14		-9439.69	-7806.88	-6363.94	184.57	10.80	2.242
6.24	1	SND	3	5	272.00	-8419.69	2222.23		2925.53		-8419.69	6408.27	8500.68	9.84	8.08	2.898

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
-2.25	-0.80	ø6/12	2	2	11	SLU	0.25	9007.21	2.50	18699.50	31617.80	0.60	1624.87	2.50	7136.20	28958.80	2.08
-2.25	-0.80	ø6/12	2	2	1	SND	0.25	6164.70	2.50	18699.50	31617.80	0.60	1754.94	2.50	7136.20	28958.80	3.03
0.00	0.60	ø6/12	2	2	11	SLU	0.25	4455.16	2.50	18699.50	31617.80	0.60	1175.83	2.50	7136.20	28958.80	4.20
0.00	0.60	ø6/12	2	2	1	SND	0.25	4018.58	2.50	18699.50	31617.80	0.60	2326.71	2.50	7136.20	28958.80	3.07
0.00	0.60	ø6/12	2	2	5	SND	0.25	4913.17	2.50	18699.50	31617.80	0.60	1433.95	2.50	7136.20	28958.80	3.81

0.60	2.12	ø6/12	2	2	11	SLU	0.25	4455.16	2.50	18699.50	31617.80	0.60	1175.83	2.50	7136.20	28958.80	4.20
0.60	2.12	ø6/12	2	2	1	SND	0.25	4018.58	2.50	18699.50	31617.80	0.60	2326.71	2.50	7136.20	28958.80	3.07
0.60	2.12	ø6/12	2	2	5	SND	0.25	4913.17	2.50	18699.50	31617.80	0.60	1433.95	2.50	7136.20	28958.80	3.81
2.12	2.72	ø6/12	2	2	11	SLU	0.25	4455.16	2.50	18699.50	31617.80	0.60	1175.83	2.50	7136.20	28958.80	4.20
2.12	2.72	ø6/12	2	2	1	SND	0.25	4018.58	2.50	18699.50	31617.80	0.60	2326.71	2.50	7136.20	28958.80	3.07
2.12	2.72	ø6/12	2	2	5	SND	0.25	4913.17	2.50	18699.50	31617.80	0.60	1433.95	2.50	7136.20	28958.80	3.81
3.52	4.12	ø6/12	2	2	9	SLU	0.25	2425.93	2.50	18699.50	28739.60	0.60	1256.85	2.50	7136.20	26322.70	5.68
3.52	4.12	ø6/12	2	2	11	SLU	0.25	2427.32	2.50	18699.50	28645.80	0.60	1217.72	2.50	7136.20	26236.70	5.86
3.52	4.12	ø6/12	2	2	1	SND	0.25	2105.64	2.50	18699.50	28334.20	0.60	2088.92	2.50	7136.20	25951.30	3.42
3.52	4.12	ø6/12	2	2	5	SND	0.25	2383.90	2.50	18699.50	28376.30	0.60	1354.86	2.50	7136.20	25989.90	5.27
4.12	5.64	ø6/12	2	2	9	SLU	0.25	2425.93	2.50	18699.50	28696.80	0.60	1256.85	2.50	7136.20	26283.50	5.68
4.12	5.64	ø6/12	2	2	11	SLU	0.25	2427.32	2.50	18699.50	28603.00	0.60	1217.72	2.50	7136.20	26197.50	5.86
4.12	5.64	ø6/12	2	2	1	SND	0.25	2105.64	2.50	18699.50	28301.30	0.60	2088.92	2.50	7136.20	25921.20	3.42
4.12	5.64	ø6/12	2	2	5	SND	0.25	2383.90	2.50	18699.50	28343.40	0.60	1354.86	2.50	7136.20	25959.80	5.27
5.64	6.24	ø6/12	2	2	9	SLU	0.25	2425.93	2.50	18699.50	28588.40	0.60	1256.85	2.50	7136.20	26184.10	5.68
5.64	6.24	ø6/12	2	2	11	SLU	0.25	2427.32	2.50	18699.50	28494.50	0.60	1217.72	2.50	7136.20	26098.20	5.86
5.64	6.24	ø6/12	2	2	1	SND	0.25	2105.64	2.50	18699.50	28217.90	0.60	2088.92	2.50	7136.20	25844.80	3.42
5.64	6.24	ø6/12	2	2	5	SND	0.25	2383.90	2.50	18699.50	28260.00	0.60	1354.86	2.50	7136.20	25883.30	5.27

Pilastrata n. 3

Nodi: -65 -4 -28 -51

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
5	R	60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
-2.25	11(e)	SLU	1	5	0.00	-98869.20	590.36	-1977.38	-6538.19	-6538.19	-98869.20	-6127.24	-21082.50	210.94	2.77	3.214
-2.25	11(e)	SLU	1	5	0.00	-98869.20	590.36	-1977.38	-6538.19	-6538.19	-98869.20	-6127.24	-21082.50	210.94	2.77	3.214
-0.80	11(e)	SLU	1	5	145.00	-98162.30	-613.09	-1963.25	7207.84	7207.84	-98162.30	-6127.47	21058.20	149.06	2.79	2.936
0.00	11(e)	SLU	2	5	0.00	-71013.80	789.25	1420.28	-10394.20	-10394.20	-71013.80	3054.64	-24074.70	309.38	4.05	2.313
2.72	11(e)	SLU	2	5	272.00	-69687.80	-348.05	-1393.76	5911.23	5911.23	-69687.80	-4896.21	21473.80	143.44	3.70	3.627
3.52	11	SLU	3	5	0.00	-36179.50	1219.13		-12880.20		-36179.50	1973.18	-21051.30	298.13	6.52	1.634
3.52	11	SLU	3	5	0.00	-36179.50	1219.13		-12880.20		-36179.50	1973.18	-21051.30	298.13	6.52	1.634
6.24	9	SLU	3	5	272.00	-36264.00	-1240.97		10256.70		-36264.00	-2446.61	20691.10	123.75	6.12	2.017

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _r	Sic.
-2.25	1(e)	SND	1	5	0.00	-74104.30	726.85	1482.09	-3368.85	-3368.85	-269999.00	8823.92	-20041.00	336.09	3.35	3.643
-2.25	1(e)	SND	1	5	0.00	-74104.30	726.85	1482.09	-3368.85	-3368.85	-269999.00	8823.92	-20041.00	336.09	3.35	3.643
-0.80	1(e)	SND	1	5	145.00	-73560.50	319.27	1471.21	4945.67	4945.67	-269999.00	6408.62	21315.50	30.94	3.47	3.670
0.00	5	SND	2	5	0.00	-47589.90	1071.44		-11078.40		-47589.90	2020.45	-18886.40	303.75	5.39	1.707
2.72	5(e)	SND	2	5	272.00	-46570.00	0.54	-931.40	5494.95	5494.95	-46570.00	-3269.96	18320.90	135.00	4.96	3.339
3.52	5	SND	3	5	0.00	-25169.80	1326.91		-10346.60		-25169.80	2029.33	-14938.40	303.75	6.95	1.445
3.52	5	SND	3	5	0.00	-25169.80	1326.91		-10346.60		-25169.80	2029.33	-14938.40	303.75	6.95	1.445
6.24	5	SND	3	5	272.00	-24149.80	-1256.95		8674.83		-24149.80	-2019.78	14703.10	123.75	7.03	1.693

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
-2.25	-0.80	ø6/12	2	2	11	SLU	0.25	9480.03	2.50	18699.50	31617.80	0.60	829.96	2.50	7136.20	28958.80	1.97
-2.25	-0.80	ø6/12	2	2	1	SND	0.25	6370.29	2.50	18699.50	31617.80	0.60	1307.10	2.50	7136.20	28958.80	2.94
-2.25	-0.80	ø6/12	2	2	5	SND	0.25	6435.61	2.50	18699.50	31617.80	0.60	860.51	2.50	7136.20	28958.80	2.91
0.00	0.60	ø6/12	2	2	11	SLU	0.25	5994.63	2.50	18699.50	31617.80	0.60	418.12	2.50	7136.20	28958.80	3.12
0.00	0.60	ø6/12	2	2	1	SND	0.25	4887.87	2.50	18699.50	31617.80	0.60	1052.25	2.50	7136.20	28958.80	3.83
0.00	0.60	ø6/12	2	2	5	SND	0.25	6091.49	2.50	18699.50	31617.80	0.60	583.02	2.50	7136.20	28958.80	3.07
0.60	2.12	ø6/12	2	2	11	SLU	0.25	5994.63	2.50	18699.50	31617.80	0.60	418.12	2.50	7136.20	28958.80	3.12
0.60	2.12	ø6/12	2	2	1	SND	0.25	4887.87	2.50	18699.50	31617.80	0.60	1052.25	2.50	7136.20	28958.80	3.83
0.60	2.12	ø6/12	2	2	5	SND	0.25	6091.49	2.50	18699.50	31617.80	0.60	583.02	2.50	7136.20	28958.80	3.07
2.12	2.72	ø6/12	2	2	11	SLU	0.25	5994.63	2.50	18699.50	31617.80	0.60	418.12	2.50	7136.20	28958.80	3.12
2.12	2.72	ø6/12	2	2	1	SND	0.25	4887.87	2.50	18699.50	31617.80	0.60	1052.25	2.50	7136.20	28958.80	3.83
2.12	2.72	ø6/12	2	2	5	SND	0.25	6091.49	2.50	18699.50	31617.80	0.60	583.02	2.50	7136.20	28958.80	3.07
3.52	4.12	ø6/12	2	2	9	SLU	0.25	8283.09	2.50	18699.50	31617.80	0.60	916.83	2.50	7136.20	28958.80	2.26
3.52	4.12	ø6/12	2	2	1	SND	0.25	6447.38	2.50	18699.50	30726.10	0.60	1463.06	2.50	7136.20	28142.10	2.90
3.52	4.12	ø6/12	2	2	5	SND	0.25	6986.45	2.50	18699.50	30529.80	0.60	949.55	2.50	7136.20	27962.30	2.68
4.12	5.64	ø6/12	2	2	9	SLU	0.25	8283.09	2.50	18699.50	31617.80	0.60	916.83	2.50	7136.20	28958.80	2.26
4.12	5.64	ø6/12	2	2	1	SND	0.25	6447.39	2.50	18699.50	30693.20	0.60	1463.06	2.50	7136.20	28111.90	2.90
4.12	5.64	ø6/12	2	2	5	SND	0.25	6986.45	2.50	18699.50	30496.90	0.60	949.55	2.50	7136.20	27932.10	2.68
5.64	6.24	ø6/12	2	2	9	SLU	0.25	8283.09	2.50	18699.50	31617.80	0.60	916.83	2.50	7136.20	28958.80	2.26
5.64	6.24	ø6/12	2	2	11	SLU	0.25	8255.92	2.50	18699.50	31492.80	0.60	886.30	2.50	7136.20	28844.30	2.26
5.64	6.24	ø6/12	2	2	1	SND	0.25	6447.39	2.50	18699.50	30609.80	0.60	1463.06	2.50	7136.20	28035.50	2.90
5.64	6.24	ø6/12	2	2	5	SND	0.25	6986.45	2.50	18699.50	30413.50	0.60	949.55	2.50	7136.20	27855.70	2.68

Pilastrata n. 4

Nodi: -66 -5 -29 -52

Sez.	Tipo	B	H	Cf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
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		<cm>	<cm>	<cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>	<daN/cm>
5R		60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
-2.60	11(e)	SLU	1	5	0.00	-100947.00	-565.38	-2018.94	-7270.12	-7270.12	-100947.00	-6126.50	-21145.20	210.94	2.72	2.918
-2.60	11(e)	SLU	1	5	0.00	-100947.00	-565.38	-2018.94	-7270.12	-7270.12	-100947.00	-6126.50	-21145.20	210.94	2.72	2.918
-0.80	11(e)	SLU	1	5	180.00	-100070.00	611.83	2001.39	8862.31	8862.31	-100070.00	5064.08	22973.50	36.56	2.82	2.589
0.00	11(e)	SLU	2	5	0.00	-68469.90	-774.92	-1369.40	-13636.90	-13636.90	-68469.90	-2447.63	-24484.40	236.25	4.34	1.795
2.72	11(e)	SLU	2	5	272.00	-67143.90	309.65	1342.88	8045.94	8045.94	-67143.90	3709.48	22907.20	45.00	4.04	2.845
3.52	11	SLU	3	5	0.00	-32777.10	-1081.32		-15809.00		-32777.10	-1547.43	-20867.20	247.50	7.26	1.321
3.52	11	SLU	3	5	0.00	-32777.10	-1081.32		-15809.00		-32777.10	-1547.43	-20867.20	247.50	7.26	1.321
6.24	9	SLU	3	5	272.00	-32807.80	1129.47		10941.40		-32807.80	2009.77	20528.90	61.88	6.79	1.875

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _r	Sic.
-2.60	5(e)	SND	1	5	0.00	-98288.70	-199.26	-1965.77	-3987.01	-3987.01	-269999.00	-9571.07	-20221.30	202.50	2.68	2.747
-2.60	5(e)	SND	1	5	0.00	-98288.70	-199.26	-1965.77	-3987.01	-3987.01	-269999.00	-9571.07	-20221.30	202.50	2.68	2.747
-0.80	5(e)	SND	1	5	180.00	-43200.10	823.88	-864.00	6648.62	6648.62	-43200.10	-2569.50	18016.20	129.38	5.38	2.714
0.00	5	SND	2	5	0.00	-32525.50	-1185.52		-13064.00		-32525.50	-1224.78	-16458.70	247.50	7.28	1.258
2.72	5(e)	SND	2	5	272.00	-31505.50	555.80	630.11	6728.59	6728.59	-31505.50	1618.16	16247.40	61.88	6.89	2.416
3.52	5	SND	3	5	0.00	-19433.80	-1344.35		-11940.00		-19433.80	-1583.93	-13973.90	241.88	8.04	1.170
3.52	5	SND	3	5	0.00	-19433.80	-1344.35		-11940.00		-19433.80	-1583.93	-13973.90	241.88	8.04	1.170
6.24	5	SND	3	5	272.00	-18413.80	1228.53		8766.90		-18413.80	1969.89	13689.90	56.25	7.61	1.562

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
-2.60	-0.80	ø6/12	2	2	11	SLU	0.25	8962.46	2.50	18699.50	31617.80	0.60	654.01	2.50	7136.20	28958.80	2.09
-2.60	-0.80	ø6/12	2	2	1	SND	0.25	6158.51	2.50	18699.50	31617.80	0.60	1145.23	2.50	7136.20	28958.80	3.04
-2.60	-0.80	ø6/12	2	2	5	SND	0.25	6213.51	2.50	18699.50	31617.80	0.60	804.81	2.50	7136.20	28958.80	3.01
0.00	0.60	ø6/12	2	2	11	SLU	0.25	7971.62	2.50	18699.50	31617.80	0.60	398.74	2.50	7136.20	28958.80	2.35
0.00	0.60	ø6/12	2	2	1	SND	0.25	6171.83	2.50	18699.50	31617.80	0.60	1035.01	2.50	7136.20	28958.80	3.03
0.00	0.60	ø6/12	2	2	5	SND	0.25	7274.60	2.50	18699.50	31617.80	0.60	639.91	2.50	7136.20	28958.80	2.57
0.60	2.12	ø6/12	2	2	11	SLU	0.25	7971.62	2.50	18699.50	31617.80	0.60	398.74	2.50	7136.20	28958.80	2.35
0.60	2.12	ø6/12	2	2	1	SND	0.25	6171.83	2.50	18699.50	31617.80	0.60	1035.01	2.50	7136.20	28958.80	3.03
0.60	2.12	ø6/12	2	2	5	SND	0.25	7274.60	2.50	18699.50	31617.80	0.60	639.91	2.50	7136.20	28958.80	2.57
2.12	2.72	ø6/12	2	2	11	SLU	0.25	7971.62	2.50	18699.50	31617.80	0.60	398.74	2.50	7136.20	28958.80	2.35
2.12	2.72	ø6/12	2	2	1	SND	0.25	6171.83	2.50	18699.50	31617.80	0.60	1035.01	2.50	7136.20	28958.80	3.03
2.12	2.72	ø6/12	2	2	5	SND	0.25	7274.60	2.50	18699.50	31617.80	0.60	639.91	2.50	7136.20	28958.80	2.57
3.52	4.12	ø6/12	2	2	9	SLU	0.25	9592.70	2.50	18699.50	31344.60	0.60	827.73	2.50	7136.20	28708.60	1.95
3.52	4.12	ø6/12	2	2	11	SLU	0.25	9562.33	2.50	18699.50	31146.00	0.60	794.18	2.50	7136.20	28526.70	1.96
3.52	4.12	ø6/12	2	2	1	SND	0.25	7171.08	2.50	18699.50	30388.70	0.60	1386.38	2.50	7136.20	27833.00	2.61
3.52	4.12	ø6/12	2	2	5	SND	0.25	7602.87	2.50	18699.50	30662.50	0.60	945.56	2.50	7136.20	28083.80	2.46
4.12	5.64	ø6/12	2	2	9	SLU	0.25	9592.70	2.50	18699.50	31301.80	0.60	827.73	2.50	7136.20	28669.40	1.95
4.12	5.64	ø6/12	2	2	11	SLU	0.25	9562.33	2.50	18699.50	31103.20	0.60	794.18	2.50	7136.20	28487.50	1.96
4.12	5.64	ø6/12	2	2	1	SND	0.25	7171.08	2.50	18699.50	30355.80	0.60	1386.38	2.50	7136.20	27802.90	2.61
4.12	5.64	ø6/12	2	2	5	SND	0.25	7602.87	2.50	18699.50	30629.60	0.60	945.56	2.50	7136.20	28053.70	2.46
5.64	6.24	ø6/12	2	2	9	SLU	0.25	9592.70	2.50	18699.50	31193.40	0.60	827.73	2.50	7136.20	28570.00	1.95
5.64	6.24	ø6/12	2	2	11	SLU	0.25	9562.33	2.50	18699.50	30994.80	0.60	794.18	2.50	7136.20	28388.10	1.96
5.64	6.24	ø6/12	2	2	1	SND	0.25	7171.08	2.50	18699.50	30272.30	0.60	1386.38	2.50	7136.20	27726.50	2.61
5.64	6.24	ø6/12	2	2	5	SND	0.25	7602.87	2.50	18699.50	30546.10	0.60	945.56	2.50	7136.20	27977.20	2.46

Pilastrata n. 5

Nodi: -67 -6 -30 -53

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
5R		60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
-2.60	11(e)	SLU	1	5	0.00	-104395.00	1232.53	2087.90	-5975.05	-5975.05	-327637.00	6708.17	-20090.70	331.88	2.60	3.138
-2.60	11(e)	SLU	1	5	0.00	-104395.00	1232.53	2087.90	-5975.05	-5975.05	-327637.00	6708.17	-20090.70	331.88	2.60	3.138
-0.80	11(e)	SLU	1	5	180.00	-103517.00	-1406.52	2070.35	7257.70	7257.70	-103517.00	6119.95	21214.80	30.94	2.66	2.926
0.00	11	SLU	2	5	0.00	-67129.70	2264.66		-11398.10		-67129.70	4440.23	-21961.40	320.63	3.86	1.928
2.72	11	SLU	2	5	272.00	-65803.70	-1348.71		7096.57		-65803.70	-4438.70	21826.70	140.63	3.91	3.083
3.52	11	SLU	3	5	0.00	-28534.20	2138.03		-13953.10		-28534.20	3019.53	-19047.70	309.38	6.25	1.366
3.52	11	SLU	3	5	0.00	-28534.20	2138.03		-13953.10		-28534.20	3019.53	-19047.70	309.38	6.25	1.366
6.24	9	SLU	3	5	272.00	-28795.80	-1479.68		12441.10		-28795.80	-2528.38	19513.20	123.75	6.66	1.570

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _r	Sic.
-2.60	5(e)	SND	1	5	0.00	-77897.10	1125.80	1557.94	-2869.43	-2869.43	-269999.00	10209.20	-19534.70	338.91	3.23	3.466
-2.60	5(e)	SND	1	5	0.00	-77897.10	1125.80	1557.94	-2869.43	-2869.43	-269999.00	10209.20	-19534.70	338.91	3.23	3.466
-0.80	5(e)	SND	1	5	180.00	-77222.10	-1003.00	-1544.44	5365.55	5365.55	-269999.00	-6534.52	21833.00	149.06	3.35	3.496
0.00	5	SND	2	5	0.00	-43763.90	2735.91		-11753.70		-43763.90	3982.64	-17542.10	320.63	4.85	1.491
2.72	5	SND	2	5	272.00	-42743.90	-1614.94		6383.11		-42743.90	-4388.60	17216.40	143.44	4.79	2.698
3.52	5	SND	3	5	0.00	-19764.20	2353.33		-10953.50		-19764.20	2814.30	-13580.50	315.00	6.52	1.238
3.52	5	SND	3	5	0.00	-19764.20	2353.33		-10953.50		-19764.20	2814.30	-13580.50	315.00	6.52	1.238
6.24	5	SND	3	5	272.00	-18744.20	-1573.97		10276.90		-18744.20	-1968.07	13714.70	123.75	7.58	1.333

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
-2.60	-0.80	ø6/12	2	2	11	SLU	0.25	7351.53	2.50	18699.50	31617.80	0.60	1466.14	2.50	7136.20	28958.80	2.54
-2.60	-0.80	ø6/12	2	2	1	SND	0.25	5062.03	2.50	18699.50	31617.80	0.60	1468.84	2.50	7136.20	28958.80	3.69
0.00	0.60	ø6/12	2	2	11	SLU	0.25	6799.53	2.50	18699.50	31617.80	0.60	1328.44	2.50	7136.20	28958.80	2.75
0.00	0.60	ø6/12	2	2	1	SND	0.25	5546.03	2.50	18699.50	31617.80	0.60	2587.69	2.50	7136.20	28958.80	2.76
0.00	0.60	ø6/12	2	2	5	SND	0.25	6666.46	2.50	18699.50	31617.80	0.60	1598.41	2.50	7136.20	28958.80	2.81
0.60	2.12	ø6/12	2	2	11	SLU	0.25	6799.53	2.50	18699.50	31617.80	0.60	1328.44	2.50	7136.20	28958.80	2.75
0.60	2.12	ø6/12	2	2	1	SND	0.25	5546.03	2.50	18699.50	31617.80	0.60	2587.69	2.50	7136.20	28958.80	2.76
0.60	2.12	ø6/12	2	2	5	SND	0.25	6666.46	2.50	18699.50	31617.80	0.60	1598.41	2.50	7136.20	28958.80	2.81
2.12	2.72	ø6/12	2	2	11	SLU	0.25	6799.53	2.50	18699.50	31617.80	0.60	1328.44	2.50	7136.20	28958.80	2.75
2.12	2.72	ø6/12	2	2	1	SND	0.25	5546.03	2.50	18699.50	31617.80	0.60	2587.69	2.50	7136.20	28958.80	2.76
2.12	2.72	ø6/12	2	2	5	SND	0.25	6666.46	2.50	18699.50	31617.80	0.60	1598.41	2.50	7136.20	28958.80	2.81
3.52	4.12	ø6/12	2	2	9	SLU	0.25	9506.97	2.50	18699.50	30757.40	0.60	1341.25	2.50	7136.20	28170.70	1.97
3.52	4.12	ø6/12	2	2	1	SND	0.25	7192.62	2.50	18699.50	29579.30	0.60	2116.01	2.50	7136.20	27091.70	2.60
3.52	4.12	ø6/12	2	2	5	SND	0.25	7796.20	2.50	18699.50	29600.00	0.60	1443.66	2.50	7136.20	27110.60	2.40
4.12	5.64	ø6/12	2	2	9	SLU	0.25	9506.97	2.50	18699.50	30714.60	0.60	1341.25	2.50	7136.20	28131.50	1.97
4.12	5.64	ø6/12	2	2	1	SND	0.25	7192.62	2.50	18699.50	29546.30	0.60	2116.01	2.50	7136.20	27061.50	2.60
4.12	5.64	ø6/12	2	2	5	SND	0.25	7796.20	2.50	18699.50	29567.00	0.60	1443.66	2.50	7136.20	27080.50	2.40
5.64	6.24	ø6/12	2	2	9	SLU	0.25	9506.97	2.50	18699.50	30606.10	0.60	1341.25	2.50	7136.20	28032.10	1.97
5.64	6.24	ø6/12	2	2	1	SND	0.25	7192.62	2.50	18699.50	29462.90	0.60	2116.01	2.50	7136.20	26985.10	2.60
5.64	6.24	ø6/12	2	2	5	SND	0.25	7796.20	2.50	18699.50	29483.60	0.60	1443.66	2.50	7136.20	27004.10	2.40

Pilastrata n. 6

Nodi: 92 2 38 75

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
5R		60.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <cm>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
-2.57	11(e)	SLU	1	5	0.00	-90047.20	-660.00	-1800.94	-6715.32	-6715.32	-90047.20	-5551.51	-20839.10	213.75	3.06	3.102
-2.57	11(e)	SLU	1	5	0.00	-90047.20	-660.00	-1800.94	-6715.32	-6715.32	-90047.20	-5551.51	-20839.10	213.75	3.06	3.102
-0.80	11(e)	SLU	1	5	177.00	-89184.30	711.04	1783.69	8157.76	8157.76	-89184.30	4605.63	22381.00	39.38	3.18	2.736
0.00	11(e)	SLU	2	5	0.00	-63856.80	-796.50	-1277.14	-12342.90	-12342.90	-63856.80	-2515.34	-23215.50	236.25	4.54	1.882
2.72	11(e)	SLU	2	5	272.00	-62530.80	224.41	1250.62	7306.26	7306.26	-62530.80	3816.28	21559.70	45.00	4.24	2.954
3.52	11	SLU	3	5	0.00	-30639.50	-1518.18		-13714.70		-30639.50	-1978.95	-19242.40	241.88	6.98	1.402
3.52	11	SLU	3	5	0.00	-30639.50	-1518.18		-13714.70		-30639.50	-1978.95	-19242.40	241.88	6.98	1.402
6.24	9	SLU	3	5	272.00	-30385.50	1923.33		8954.52		-30385.50	3634.32	17656.80	45.00	5.89	1.968

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <cm>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
-2.57	1	SND	1	5	0.00	-41224.60	-1244.13		-5941.36		-41224.60	-3509.33	-16305.50	222.19	5.12	2.748
-2.57	1	SND	1	5	0.00	-41224.60	-1244.13		-5941.36		-41224.60	-3509.33	-16305.50	222.19	5.12	2.748
-0.80	5	SND	1	5	177.00	-35192.90	1032.26		6477.16		-35192.90	2518.88	15578.90	50.63	5.91	2.406
0.00	5	SND	2	5	0.00	-28205.40	-895.31		-12579.10		-28205.40	-1108.30	-14752.00	247.50	7.64	1.173
2.72	5(e)	SND	2	5	272.00	-27185.40	289.22	543.71	6467.14	6467.14	-27185.40	1109.24	14528.80	67.50	7.75	2.245
3.52	5	SND	3	5	0.00	-17958.50	-1212.52		-10616.80		-17958.50	-1467.14	-12765.70	241.88	8.12	1.202
3.52	5	SND	3	5	0.00	-17958.50	-1212.52		-10616.80		-17958.50	-1467.14	-12765.70	241.88	8.12	1.202
6.24	5	SND	3	5	272.00	-16938.50	1603.70		7333.89		-16938.50	2804.40	12128.70	45.00	6.85	1.658

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
-2.57	-0.80	ø6/12	2	2	11	SLU	0.25	8402.87	2.50	18699.50	31617.80	0.60	774.60	2.50	7136.20	28958.80	2.23
-2.57	-0.80	ø6/12	2	2	1	SND	0.25	6270.93	2.50	18699.50	31617.80	0.60	1709.70	2.50	7136.20	28958.80	2.98
0.00	0.60	ø6/12	2	2	11	SLU	0.25	7223.96	2.50	18699.50	31617.80	0.60	375.33	2.50	7136.20	28958.80	2.59
0.00	0.60	ø6/12	2	2	1	SND	0.25	6666.48	2.50	18699.50	31617.80	0.60	531.43	2.50	7136.20	28958.80	2.81
0.00	0.60	ø6/12	2	2	5	SND	0.25	7000.07	2.50	18699.50	31617.80	0.60	431.27	2.50	7136.20	28958.80	2.67
0.60	2.12	ø6/12	2	2	11	SLU	0.25	7223.96	2.50	18699.50	31617.80	0.60	375.33	2.50	7136.20	28958.80	2.59
0.60	2.12	ø6/12	2	2	1	SND	0.25	6666.48	2.50	18699.50	31617.80	0.60	531.43	2.50	7136.20	28958.80	2.81
0.60	2.12	ø6/12	2	2	5	SND	0.25	7000.07	2.50	18699.50	31617.80	0.60	431.27	2.50	7136.20	28958.80	2.67
2.12	2.72	ø6/12	2	2	11	SLU	0.25	7223.96	2.50	18699.50	31617.80	0.60	375.33	2.50	7136.20	28958.80	2.59
2.12	2.72	ø6/12	2	2	1	SND	0.25	6666.48	2.50	18699.50	31617.80	0.60	531.43	2.50	7136.20	28958.80	2.81
2.12	2.72	ø6/12	2	2	5	SND	0.25	7000.07	2.50	18699.50	31617.80	0.60	431.27	2.50	7136.20	28958.80	2.67
3.52	4.12	ø6/12	2	2	9	SLU	0.25	8161.72	2.50	18699.50	30990.10	0.60	1288.42	2.50	7136.20	28383.80	2.29
3.52	4.12	ø6/12	2	2	1	SND	0.25	6395.26	2.50	18699.50	30143.40	0.60	1219.36	2.50	7136.20	27608.30	2.92
3.52	4.12	ø6/12	2	2	5	SND	0.25	6587.54	2.50	18699.50	30423.10	0.60	1033.35	2.50	7136.20	27864.50	2.84
4.12	5.64	ø6/12	2	2	9	SLU	0.25	8161.72	2.50	18699.50	30947.30	0.60	1288.42	2.50	7136.20	28344.60	2.29
4.12	5.64	ø6/12	2	2	1	SND	0.25	6395.26	2.50	18699.50	30110.40	0.60	1219.36	2.50	7136.20	27578.20	2.92
4.12	5.64	ø6/12	2	2	5	SND	0.25	6587.54	2.50	18699.50	30390.20	0.60	1033.35	2.50	7136.20	27834.40	2.84
5.64	6.24	ø6/12	2	2	9	SLU	0.25	8161.72	2.50	18699.50	30838.80	0.60	1288.42	2.50	7136.20	28245.30	2.29
5.64	6.24	ø6/12	2	2	1	SND	0.25	6395.26	2.50	18699.50	30027.00	0.60	1219.36	2.50	7136.20	27501.80	2.92
5.64	6.24	ø6/12	2	2	5	SND	0.25	6587.54	2.50	18699.50	30306.70	0.60	1033.35	2.50	7136.20	27758.00	2.84

Pilastrata n. 7

Nodi: -1 -21 -45

Sez.	Tipo	B	H	Cf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
5R		60.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _y	Sic.
<cm>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
0.00	11	SLU	1	5	0.00	-48564.90	1871.15		-3928.30		-48564.90	6898.24	-14762.10	336.09	4.29	3.745
0.00	11	SLU	1	5	0.00	-48564.90	1871.15		-3928.30		-48564.90	6898.24	-14762.10	336.09	4.29	3.745
2.72	11(e)	SLU	1	5	272.00	-47238.90	-1760.01	-1760.01	656.94	944.78	-47238.90	-9603.34	5111.28	173.67	5.93	5.446
3.52	11	SLU	2	5	0.00	-24424.80	3470.68		-3011.56		-24424.80	7645.49	-6643.43	352.27	7.41	2.204
3.52	11	SLU	2	5	0.00	-24424.80	3470.68		-3011.56		-24424.80	7645.49	-6643.43	352.27	7.41	2.204
6.24	9	SLU	2	5	272.00	-24972.10	-2381.97		4854.72		-24972.10	-6235.70	12721.40	157.50	5.45	2.620

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	M'ydy	M'ydz	α	ε _y	Sic.
<cm>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
0.00	1	SND	1	5	0.00	-20685.10	2651.98		-8708.61		-20685.10	3635.57	-12383.60	323.44	6.05	1.418
0.00	1	SND	1	5	0.00	-20685.10	2651.98		-8708.61		-20685.10	3635.57	-12383.60	323.44	6.05	1.418
2.72	5(e)	SND	1	5	272.00	-16499.00	-2348.85	-2348.85	-119.91	-329.98	-16499.00	-7029.83	-1035.20	180.62	14.85	2.996
3.52	1	SND	2	5	0.00	-11700.00	3407.03		-3488.15		-11700.00	7109.10	-7128.18	352.97	9.13	2.065
3.52	1	SND	2	5	0.00	-11700.00	3407.03		-3488.15		-11700.00	7109.10	-7128.18	352.97	9.13	2.065
6.24	1	SND	2	5	272.00	-10680.00	-2280.50		6485.02		-10680.00	-3506.05	10411.60	146.25	6.73	1.598

Staffe - Verifiche armatura

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _y	Vsdu _y	ctgθ _y	VRsd _y	VRcd _y	bw _z	Vsdu _z	ctgθ _z	VRsd _z	VRcd _z	Sic.T
<cm>	<cm>						<cm>	<daN>		<daN>	<daN>	<cm>	<daN>		<daN>	<daN>	
0.00	0.60	ø6/12	2	2	11	SLU	0.25	1685.75	2.50	18699.50	31617.80	0.60	1334.99	2.50	7136.20	28958.80	5.35
0.00	0.60	ø6/12	2	2	5	SND	0.25	2157.98	2.50	18699.50	31617.80	0.60	1975.15	2.50	7136.20	28958.80	3.61
0.00	0.60	ø6/12	2	2	1	SND	0.25	3819.37	2.50	18699.50	31617.80	0.60	1748.78	2.50	7136.20	28958.80	4.08
0.60	2.12	ø6/12	2	2	11	SLU	0.25	1685.75	2.50	18699.50	31617.80	0.60	1334.99	2.50	7136.20	28958.80	5.35
0.60	2.12	ø6/12	2	2	5	SND	0.25	2157.98	2.50	18699.50	31617.80	0.60	1975.15	2.50	7136.20	28958.80	3.61
0.60	2.12	ø6/12	2	2	1	SND	0.25	3819.37	2.50	18699.50	31617.80	0.60	1748.78	2.50	7136.20	28958.80	4.08
2.12	2.72	ø6/12	2	2	11	SLU	0.25	1685.75	2.50	18699.50	31617.80	0.60	1334.99	2.50	7136.20	28958.80	5.35
2.12	2.72	ø6/12	2	2	5	SND	0.25	2157.98	2.50	18699.50	31617.80	0.60	1975.15	2.50	7136.20	28958.80	3.61
2.12	2.72	ø6/12	2	2	1	SND	0.25	3819.37	2.50	18699.50	31617.80	0.60	1748.78	2.50	7136.20	28958.80	4.08
3.52	4.12	ø6/12	2	2	11	SLU	0.25	2790.47	2.50	18699.50	29923.40	0.60	2121.99	2.50	7136.20	27406.90	3.36
3.52	4.12	ø6/12	2	2	9	SLU	0.25	2949.00	2.50	18699.50	30197.70	0.60	2115.24	2.50	7136.20	27658.10	3.37
3.52	4.12	ø6/12	2	2	5	SND	0.25	2693.18	2.50	18699.50	29656.80	0.60	2226.62	2.50	7136.20	27162.70	3.20
3.52	4.12	ø6/12	2	2	1	SND	0.25	3603.35	2.50	18699.50	29985.60	0.60	2090.99	2.50	7136.20	27463.90	3.41
4.12	5.64	ø6/12	2	2	11	SLU	0.25	2790.47	2.50	18699.50	29880.60	0.60	2121.99	2.50	7136.20	27367.70	3.36
4.12	5.64	ø6/12	2	2	9	SLU	0.25	2949.00	2.50	18699.50	30154.80	0.60	2115.24	2.50	7136.20	27618.90	3.37
4.12	5.64	ø6/12	2	2	5	SND	0.25	2693.18	2.50	18699.50	29623.90	0.60	2226.62	2.50	7136.20	27132.50	3.20
4.12	5.64	ø6/12	2	2	1	SND	0.25	3603.35	2.50	18699.50	29952.70	0.60	2090.99	2.50	7136.20	27433.70	3.41
5.64	6.24	ø6/12	2	2	11	SLU	0.25	2790.47	2.50	18699.50	29772.20	0.60	2121.99	2.50	7136.20	27268.30	3.36
5.64	6.24	ø6/12	2	2	9	SLU	0.25	2949.00	2.50	18699.50	30046.40	0.60	2115.24	2.50	7136.20	27519.50	3.37
5.64	6.24	ø6/12	2	2	5	SND	0.25	2693.18	2.50	18699.50	29540.40	0.60	2226.62	2.50	7136.20	27056.10	3.20
5.64	6.24	ø6/12	2	2	1	SND	0.25	3603.35	2.50	18699.50	29869.20	0.60	2090.99	2.50	7136.20	27357.30	3.41

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{ncR}	σ _{nt}	σ _{ntR}
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
-21	1	SND	11700.00	3603.35	-13776.80	-2226.62	-4112.62	11986.90	12.79	60.00	4.99	10.39
	1	SND	24849.60	3603.35	4255.53	-2226.62	6058.77	8743.42	18.41	60.00	1.85	10.39
-45	1	SND	0.00	0.00	-12717.50	0.00	-5632.52	13909.00	9.27	60.00	9.27	10.39

Pilastrata n. 8

Nodi: -32 -55

Sez.	Tipo	B	H	Cf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
5R		60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _y	Sic.
<cm>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.52	11	SLU	1	5	0.00	-19162.40	1602.95		1776.53		-19162.40	7232.46	8208.11	9.84	7.03	4.572
3.52	11	SLU	1	5	0.00	-19162.40	1602.95		1776.53		-19162.40	7232.46	8208.11	9.84	7.03	4.572
6.24	9	SLU	1	5	272.00	-18587.80	-1035.14		-2665.81		-18587.80	-5315.60	-14057.40	208.13	5.89	5.255

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	M'ydy	M'ydz	α	ε _y	Sic.
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<m>				<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.52	1	SND	1	5	0.00	-6898.59	1256.54		7195.32		-6898.59	1813.96	11383.20	56.25	8.94
3.52	1	SND	1	5	0.00	-6898.59	1256.54		7195.32		-6898.59	1813.96	11383.20	56.25	8.94
6.24	1	SND	1	5	272.00	-5878.59	-892.71		-6487.84		-5878.59	-1427.43	-11338.40	241.88	9.78

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	b _{w,z} <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
3.52	4.12	ø6/12	2	2	11	SLU	0.25	1577.49	2.50	18699.50	29153.10	0.60	956.89	2.50	7136.20	26701.40	7.46
3.52	4.12	ø6/12	2	2	9	SLU	0.25	1667.74	2.50	18699.50	29263.10	0.60	945.91	2.50	7136.20	26802.10	7.54
3.52	4.12	ø6/12	2	2	5	SND	0.25	2589.91	2.50	18699.50	28969.50	0.60	912.91	2.50	7136.20	26533.20	7.22
3.52	4.12	ø6/12	2	2	1	SND	0.25	5029.55	2.50	18699.50	29431.50	0.60	780.70	2.50	7136.20	26956.40	3.72
4.12	5.64	ø6/12	2	2	11	SLU	0.25	1577.49	2.50	18699.50	29110.30	0.60	956.89	2.50	7136.20	26662.20	7.46
4.12	5.64	ø6/12	2	2	9	SLU	0.25	1667.74	2.50	18699.50	29220.30	0.60	945.91	2.50	7136.20	26762.90	7.54
4.12	5.64	ø6/12	2	2	5	SND	0.25	2589.91	2.50	18699.50	28936.50	0.60	912.91	2.50	7136.20	26503.00	7.22
4.12	5.64	ø6/12	2	2	1	SND	0.25	5029.55	2.50	18699.50	29398.60	0.60	780.70	2.50	7136.20	26926.20	3.72
5.64	6.24	ø6/12	2	2	11	SLU	0.25	1577.49	2.50	18699.50	29001.80	0.60	956.89	2.50	7136.20	26562.80	7.46
5.64	6.24	ø6/12	2	2	9	SLU	0.25	1667.74	2.50	18699.50	29111.80	0.60	945.91	2.50	7136.20	26663.60	7.54
5.64	6.24	ø6/12	2	2	5	SND	0.25	2589.91	2.50	18699.50	28853.10	0.60	912.91	2.50	7136.20	26426.60	7.22
5.64	6.24	ø6/12	2	2	1	SND	0.25	5029.55	2.50	18699.50	29315.20	0.60	780.70	2.50	7136.20	26849.80	3.72

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{nc} R <daN/cmq>	σ _{nt} <daN/cmq>	σ _{nt} R <daN/cmq>
-55	1	SND	0.00	0.00	12954.40	0.00	-1107.95	13001.70	8.67	60.00	8.67	10.39

Pilastrata n. 9

Nodi: -33 -56

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
5R		60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
3.52	11	SLU	1	5	0.00	-27129.20	4650.02		-1286.20		-27129.20	8371.61	-2373.39	358.24	10.97	1.804
3.52	11	SLU	1	5	0.00	-27129.20	4650.02		-1286.20		-27129.20	8371.61	-2373.39	358.24	10.97	1.804
6.24	9	SLU	1	5	272.00	-27050.50	-3294.41		2419.30		-27050.50	-8139.52	5968.29	173.67	7.55	2.469

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
3.52	1	SND	1	5	0.00	-14532.80	3674.78		-6192.25		-14532.80	6140.10	-10391.20	343.13	6.25	1.676
3.52	1	SND	1	5	0.00	-14532.80	3674.78		-6192.25		-14532.80	6140.10	-10391.20	343.13	6.25	1.676
6.24	1	SND	1	5	272.00	-13512.80	-2629.20		6292.19		-13512.80	-4784.28	11272.30	154.69	6.19	1.796

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	b _{w,z} <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
3.52	4.12	ø6/12	2	2	11	SLU	0.25	1314.46	2.50	18699.50	30319.30	0.60	2869.84	2.50	7136.20	27769.50	2.49
3.52	4.12	ø6/12	2	2	9	SLU	0.25	1387.86	2.50	18699.50	30501.90	0.60	2861.11	2.50	7136.20	27936.70	2.49
3.52	4.12	ø6/12	2	2	5	SND	0.25	2282.90	2.50	18699.50	29575.30	0.60	2596.66	2.50	7136.20	27088.10	2.75
3.52	4.12	ø6/12	2	2	1	SND	0.25	4585.54	2.50	18699.50	30032.90	0.60	2317.63	2.50	7136.20	27507.10	3.08
4.12	5.64	ø6/12	2	2	11	SLU	0.25	1314.46	2.50	18699.50	30276.50	0.60	2869.84	2.50	7136.20	27730.30	2.49
4.12	5.64	ø6/12	2	2	9	SLU	0.25	1387.86	2.50	18699.50	30459.10	0.60	2861.11	2.50	7136.20	27897.50	2.49
4.12	5.64	ø6/12	2	2	5	SND	0.25	2282.90	2.50	18699.50	29542.40	0.60	2596.66	2.50	7136.20	27057.90	2.75
4.12	5.64	ø6/12	2	2	1	SND	0.25	4585.54	2.50	18699.50	29999.90	0.60	2317.63	2.50	7136.20	27477.00	3.08
5.64	6.24	ø6/12	2	2	11	SLU	0.25	1314.46	2.50	18699.50	30168.00	0.60	2869.84	2.50	7136.20	27630.90	2.49
5.64	6.24	ø6/12	2	2	9	SLU	0.25	1387.86	2.50	18699.50	30350.60	0.60	2861.11	2.50	7136.20	27798.20	2.49
5.64	6.24	ø6/12	2	2	5	SND	0.25	2282.90	2.50	18699.50	29458.90	0.60	2596.66	2.50	7136.20	26981.50	2.75
5.64	6.24	ø6/12	2	2	1	SND	0.25	4585.54	2.50	18699.50	29916.50	0.60	2317.63	2.50	7136.20	27400.60	3.08

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
-56	1	SND	0.00	0.00	-11849.40	0.00	4377.98	12632.30	8.42	60.00	8.42	10.39

Pilastrata n. 10

Nodi: -34 -57

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
5R		60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.52	11	SLU	1	5	0.00	-27686.20	5803.49		1869.33		-27686.20	8412.09	2705.23	2.11	10.50	1.449
3.52	11	SLU	1	5	0.00	-27686.20	5803.49		1869.33		-27686.20	8412.09	2705.23	2.11	10.50	1.449
6.24	9	SLU	1	5	272.00	-27634.60	-3636.03		-2668.46		-27634.60	-8191.11	-5945.33	186.33	7.48	2.244

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	M'ydy	M'ydz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.52	1	SND	1	5	0.00	-12985.30	4420.04		7418.82		-12985.30	5916.23	10177.10	16.88	6.37	1.363
3.52	1	SND	1	5	0.00	-12985.30	4420.04		7418.82		-12985.30	5916.23	10177.10	16.88	6.37	1.363
6.24	1	SND	1	5	272.00	-11965.30	-2789.66		-6684.33		-11965.30	-4692.63	-11010.80	205.31	6.30	1.652

Staffe - Verifiche armatura

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{,y}	Vsdu _{,y}	ctgθ _{,y}	VRsd _{,y}	VRcd _{,y}	bw _{,z}	Vsdu _{,z}	ctgθ _{,z}	VRsd _{,z}	VRcd _{,z}	Sic.T
<m>	<m>						<m>	<daN>		<daN>	<daN>	<m>	<daN>		<daN>	<daN>	
3.52	4.12	ø6/12	2	2	11	SLU	0.25	1622.32	2.50	18699.50	30400.80	0.60	3414.68	2.50	7136.20	27844.20	2.09
3.52	4.12	ø6/12	2	2	9	SLU	0.25	1695.73	2.50	18699.50	30587.40	0.60	3398.53	2.50	7136.20	28015.00	2.10
3.52	4.12	ø6/12	2	2	5	SND	0.25	2771.39	2.50	18699.50	29999.00	0.60	2913.80	2.50	7136.20	27476.10	2.45
3.52	4.12	ø6/12	2	2	1	SND	0.25	5183.60	2.50	18699.50	30361.20	0.60	2650.62	2.50	7136.20	27807.90	2.69
4.12	5.64	ø6/12	2	2	11	SLU	0.25	1622.32	2.50	18699.50	30358.00	0.60	3414.68	2.50	7136.20	27804.90	2.09
4.12	5.64	ø6/12	2	2	9	SLU	0.25	1695.73	2.50	18699.50	30544.60	0.60	3398.53	2.50	7136.20	27975.80	2.10
4.12	5.64	ø6/12	2	2	5	SND	0.25	2771.39	2.50	18699.50	29966.10	0.60	2913.80	2.50	7136.20	27445.90	2.45
4.12	5.64	ø6/12	2	2	1	SND	0.25	5183.60	2.50	18699.50	30328.30	0.60	2650.62	2.50	7136.20	27777.70	2.69
5.64	6.24	ø6/12	2	2	11	SLU	0.25	1622.32	2.50	18699.50	30249.60	0.60	3414.68	2.50	7136.20	27705.60	2.09
5.64	6.24	ø6/12	2	2	9	SLU	0.25	1695.73	2.50	18699.50	30436.10	0.60	3398.53	2.50	7136.20	27876.50	2.10
5.64	6.24	ø6/12	2	2	5	SND	0.25	2771.39	2.50	18699.50	29882.60	0.60	2913.80	2.50	7136.20	27369.50	2.45
5.64	6.24	ø6/12	2	2	1	SND	0.25	5183.60	2.50	18699.50	30244.80	0.60	2650.62	2.50	7136.20	27701.30	2.69

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{ncR}	σ _{nt}	σ _{ntR}
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
-57	1	SND	0.00	0.00	13129.50	0.00	4982.73	14043.20	9.36	60.00	9.36	10.39

Pilastrata n. 11

Nodi: 63 81

Sez.	Tipo	B	H	Cf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
5R		60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.52	11	SLU	1	5	0.00	-29129.60	4971.62		-1138.23		-29129.60	8543.13	-2070.37	358.42	10.81	1.724
3.52	11	SLU	1	5	0.00	-29129.60	4971.62		-1138.23		-29129.60	8543.13	-2070.37	358.42	10.81	1.724
6.24	9	SLU	1	5	272.00	-29152.60	-3518.15		2344.36		-29152.60	-8366.62	5480.10	174.38	7.71	2.366

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	M'ydy	M'ydz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
3.52	1	SND	1	5	0.00	-15844.40	3876.76		-6274.94		-15844.40	6291.34	-10501.30	343.13	6.15	1.660
3.52	1	SND	1	5	0.00	-15844.40	3876.76		-6274.94		-15844.40	6291.34	-10501.30	343.13	6.15	1.660
6.24	1	SND	1	5	272.00	-14824.40	-2767.87		6366.47		-14824.40	-4853.85	11475.10	154.69	6.10	1.795

Staffe - Verifiche armatura

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{,y}	Vsdu _{,y}	ctgθ _{,y}	VRsd _{,y}	VRcd _{,y}	bw _{,z}	Vsdu _{,z}	ctgθ _{,z}	VRsd _{,z}	VRcd _{,z}	Sic.T
<m>	<m>						<m>	<daN>		<daN>	<daN>	<m>	<daN>		<daN>	<daN>	
3.52	4.12	ø6/12	2	2	11	SLU	0.25	1223.04	2.50	18699.50	30612.10	0.60	3065.21	2.50	7136.20	28037.70	2.33
3.52	4.12	ø6/12	2	2	9	SLU	0.25	1321.32	2.50	18699.50	30809.60	0.60	3058.93	2.50	7136.20	28218.50	2.33
3.52	4.12	ø6/12	2	2	5	SND	0.25	2453.28	2.50	18699.50	29870.80	0.60	2739.56	2.50	7136.20	27358.70	2.60
3.52	4.12	ø6/12	2	2	1	SND	0.25	4644.33	2.50	18699.50	30267.20	0.60	2442.87	2.50	7136.20	27721.70	2.92
4.12	5.64	ø6/12	2	2	11	SLU	0.25	1223.04	2.50	18699.50	30569.30	0.60	3065.21	2.50	7136.20	27998.50	2.33
4.12	5.64	ø6/12	2	2	9	SLU	0.25	1321.32	2.50	18699.50	30766.80	0.60	3058.93	2.50	7136.20	28179.30	2.33
4.12	5.64	ø6/12	2	2	5	SND	0.25	2453.28	2.50	18699.50	29837.90	0.60	2739.56	2.50	7136.20	27328.50	2.60
4.12	5.64	ø6/12	2	2	1	SND	0.25	4644.33	2.50	18699.50	30234.20	0.60	2442.87	2.50	7136.20	27691.60	2.92
5.64	6.24	ø6/12	2	2	11	SLU	0.25	1223.04	2.50	18699.50	30460.80	0.60	3065.21	2.50	7136.20	27899.10	2.33
5.64	6.24	ø6/12	2	2	9	SLU	0.25	1321.32	2.50	18699.50	30658.30	0.60	3058.93	2.50	7136.20	28080.00	2.33
5.64	6.24	ø6/12	2	2	5	SND	0.25	2453.28	2.50	18699.50	29754.40	0.60	2739.56	2.50	7136.20	27252.10	2.60
5.64	6.24	ø6/12	2	2	1	SND	0.25	4644.33	2.50	18699.50	30150.80	0.60	2442.87	2.50	7136.20	27615.10	2.92

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{ncR}	σ _{nt}	σ _{ntR}
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>
81	1	SND	0.00	0.00	-12670.20	0.00	3209.55	13070.40	8.71	60.00	8.71	10.39

Pilastrata n. 12

Nodi: 40 77

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
5	R	60.00	25.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
3.52	11	SLU	1	5	0.00	-25356.80	4781.38		2810.78		-25356.80	8111.66	4617.43	4.22	9.00	1.683
3.52	11	SLU	1	5	0.00	-25356.80	4781.38		2810.78		-25356.80	8111.66	4617.43	4.22	9.00	1.683
6.24	9	SLU	1	5	272.00	-25203.00	-2879.36		-4669.10		-25203.00	-7061.27	-11374.20	197.58	5.46	2.441

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
3.52	1	SND	1	5	0.00	-11419.30	4233.81		649.53		-11419.30	6975.36	1163.31	0.62	15.32	1.651
3.52	1	SND	1	5	0.00	-11419.30	4233.81		649.53		-11419.30	6975.36	1163.31	0.62	15.32	1.651
6.24	1	SND	1	5	272.00	-10399.30	-2534.33		-6429.39		-10399.30	-4214.47	-10935.90	208.13	6.50	1.696

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
3.52	4.12	ø6/12	2	2	11	SLU	0.25	2652.58	2.50	18699.50	30059.90	0.60	2771.89	2.50	7136.20	27531.90	2.57
3.52	4.12	ø6/12	2	2	9	SLU	0.25	2801.33	2.50	18699.50	30231.40	0.60	2771.39	2.50	7136.20	27689.00	2.57
3.52	4.12	ø6/12	2	2	5	SND	0.25	2606.86	2.50	18699.50	29736.40	0.60	2607.45	2.50	7136.20	27235.60	2.74
3.52	4.12	ø6/12	2	2	1	SND	0.25	3578.81	2.50	18699.50	30085.00	0.60	2488.28	2.50	7136.20	27554.90	2.87
4.12	5.64	ø6/12	2	2	11	SLU	0.25	2652.58	2.50	18699.50	30017.00	0.60	2771.89	2.50	7136.20	27492.60	2.57
4.12	5.64	ø6/12	2	2	9	SLU	0.25	2801.33	2.50	18699.50	30188.60	0.60	2771.39	2.50	7136.20	27649.80	2.57
4.12	5.64	ø6/12	2	2	5	SND	0.25	2606.86	2.50	18699.50	29703.50	0.60	2607.45	2.50	7136.20	27205.40	2.74
4.12	5.64	ø6/12	2	2	1	SND	0.25	3578.81	2.50	18699.50	30052.00	0.60	2488.28	2.50	7136.20	27524.70	2.87
5.64	6.24	ø6/12	2	2	11	SLU	0.25	2652.58	2.50	18699.50	29908.60	0.60	2771.89	2.50	7136.20	27393.30	2.57
5.64	6.24	ø6/12	2	2	9	SLU	0.25	2801.33	2.50	18699.50	30080.20	0.60	2771.39	2.50	7136.20	27550.50	2.57
5.64	6.24	ø6/12	2	2	5	SND	0.25	2606.86	2.50	18699.50	29620.00	0.60	2607.45	2.50	7136.20	27129.00	2.74
5.64	6.24	ø6/12	2	2	1	SND	0.25	3578.81	2.50	18699.50	29968.60	0.60	2488.28	2.50	7136.20	27448.30	2.87

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
77	1	SND	0.00	0.00	11408.50	0.00	5891.64	12840.00	8.56	60.00	8.56	10.39

Pilastrata n. 13

Nodi: 3 39 76

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
2	R	25.00	30.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11	(e)	SLU	1	2	0.00	-14146.90	1497.73	-99.96	-282.94	-14146.90	4428.64	-884.51	348.75	9.87	2.963
0.00	11	(e)	SLU	1	2	0.00	-14146.90	1497.73	-99.96	-282.94	-14146.90	4428.64	-884.51	348.75	9.87	2.963
3.12	11	(e)	SLU	1	2	312.00	-13386.40	-2027.54	209.63	267.73	-13386.40	-4391.48	540.53	174.38	12.62	2.163
3.52	11		SLU	2	2	0.00	-5152.49	2941.69	-327.46		-5152.49	3440.79	-361.20	357.19	19.12	1.169
3.52	11		SLU	2	2	0.00	-5152.49	2941.69	-327.46		-5152.49	3440.79	-361.20	357.19	19.12	1.169
6.64	9		SLU	2	2	312.00	-4889.34	-2558.25	323.37		-4889.34	-3399.43	397.67	176.48	18.43	1.327

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.00	1	SND	1	2	0.00	-9292.67	1943.87		-453.24		-9292.67	3335.54	-771.34	350.16	12.25	1.715
0.00	1	SND	1	2	0.00	-9292.67	1943.87		-453.24		-9292.67	3335.54	-771.34	350.16	12.25	1.715
3.12	1	SND	1	2	312.00	-8707.67	-1845.69		543.33		-8707.67	-3174.44	980.06	165.94	10.70	1.727
3.52	1	SND	2	2	0.00	-3744.39	2260.03		-606.21		-3744.39	2732.52	-722.45	351.56	15.30	1.208
3.52	1	SND	2	2	0.00	-3744.39	2260.03		-606.21		-3744.39	2732.52	-722.45	351.56	15.30	1.208
6.64	1	SND	2	2	312.00	-3159.39	-2038.61		589.50		-3159.39	-2659.31	725.35	171.56	15.60	1.299

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
0.00	0.52	ø6/12	2	2	11	SLU	0.30	99.23	2.50	7136.20	13962.80	0.25	1129.89	2.50	8788.09	14329.10	7.78
0.00	0.52	ø6/12	2	2	1	SND	0.30	318.59	2.50	7136.20	13522.50	0.25	1214.14	2.50	8788.09	13877.20	7.24
0.00	0.52	ø6/12	2	2	5	SND	0.30	414.82	2.50	7136.20	13532.50	0.25	942.27	2.50	8788.09	13887.50	9.33

0.52	2.60	ø6/12	2	2	11	SLU	0.30	99.23	2.50	7136.20	13945.80	0.25	1129.89	2.50	8788.09	14311.70	7.78
0.52	2.60	ø6/12	2	2	1	SND	0.30	318.59	2.50	7136.20	13509.40	0.25	1214.14	2.50	8788.09	13863.80	7.24
0.52	2.60	ø6/12	2	2	5	SND	0.30	414.82	2.50	7136.20	13519.40	0.25	942.27	2.50	8788.09	13874.10	9.33
2.60	3.12	ø6/12	2	2	11	SLU	0.30	99.23	2.50	7136.20	13877.80	0.25	1129.89	2.50	8788.09	14241.90	7.78
2.60	3.12	ø6/12	2	2	1	SND	0.30	318.59	2.50	7136.20	13457.10	0.25	1214.14	2.50	8788.09	13810.20	7.24
2.60	3.12	ø6/12	2	2	5	SND	0.30	414.82	2.50	7136.20	13467.10	0.25	942.27	2.50	8788.09	13820.40	9.33
3.52	4.04	ø6/12	2	2	9	SLU	0.30	206.79	2.50	7136.20	12823.60	0.25	1750.13	2.50	8788.09	13160.00	5.02
3.52	4.04	ø6/12	2	2	1	SND	0.30	383.20	2.50	7136.20	12601.90	0.25	1374.75	2.50	8788.09	12932.50	6.39
3.52	4.04	ø6/12	2	2	5	SND	0.30	436.15	2.50	7136.20	12610.70	0.25	1280.39	2.50	8788.09	12941.50	6.86
4.04	6.12	ø6/12	2	2	9	SLU	0.30	206.79	2.50	7136.20	12806.60	0.25	1750.13	2.50	8788.09	13142.60	5.02
4.04	6.12	ø6/12	2	2	1	SND	0.30	383.20	2.50	7136.20	12588.90	0.25	1374.75	2.50	8788.09	12919.10	6.39
4.04	6.12	ø6/12	2	2	5	SND	0.30	436.15	2.50	7136.20	12597.60	0.25	1280.39	2.50	8788.09	12928.10	6.86
6.12	6.64	ø6/12	2	2	9	SLU	0.30	206.79	2.50	7136.20	12738.70	0.25	1750.13	2.50	8788.09	13072.80	5.02
6.12	6.64	ø6/12	2	2	1	SND	0.30	383.20	2.50	7136.20	12536.60	0.25	1374.75	2.50	8788.09	12865.50	6.39
6.12	6.64	ø6/12	2	2	5	SND	0.30	436.15	2.50	7136.20	12545.30	0.25	1280.39	2.50	8788.09	12874.50	6.86

Pilastrata n. 14

Nodi: -10 -25 -49

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
4R		90.00	25.00	2.70	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11(e)	SLU	1	4	0.00	-42409.10	791.91	-848.18	1368.79	1368.79	-42409.10	-8049.01	13008.10	174.38	7.80	9.500
0.00	11(e)	SLU	1	4	0.00	-42409.10	791.91	-848.18	1368.79	1368.79	-42409.10	-8049.01	13008.10	174.38	7.80	9.500
3.32	11(e)	SLU	1	4	332.00	-39981.30	-1275.07	-1275.07	258.80	799.63	-39981.30	-8264.29	5116.95	178.33	12.01	6.458
3.52	11	SLU	2	4	0.00	-15566.20	1524.81		611.46		-15566.20	5974.90	2411.30	0.46	20.00	3.922
3.52	11	SLU	2	4	0.00	-15566.20	1524.81		611.46		-15566.20	5974.90	2411.30	0.46	20.00	3.922
6.88	9	SLU	2	4	336.00	-14053.70	-1362.90		-345.38		-14053.70	-5785.10	-1450.04	180.36	20.00	4.242

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.00	5	SND	1	4	0.00	-29860.80	1341.39		9967.62		-29860.80	2764.88	20432.50	39.38	8.78	2.050
0.00	5	SND	1	4	0.00	-29860.80	1341.39		9967.62		-29860.80	2764.88	20432.50	39.38	8.78	2.050
3.32	5	SND	1	4	332.00	-27993.30	-1457.21		4310.84		-27993.30	-6033.36	18763.70	165.94	7.32	4.331
3.52	5	SND	2	4	0.00	-11303.00	1363.19		4877.67		-11303.00	4027.71	14116.90	16.88	9.17	2.899
3.52	5	SND	2	4	0.00	-11303.00	1363.19		4877.67		-11303.00	4027.71	14116.90	16.88	9.17	2.899
6.88	1(e)	SND	2	4	336.00	-9468.75	-1672.15	-1672.15	-48.30	189.38	-9468.75	-7761.10	835.54	179.69	20.00	4.639

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
0.00	0.90	ø6/12	2	2	11	SLU	0.25	334.33	2.50	28610.90	46645.70	0.90	622.58	2.50	7136.20	41884.20	11.46
0.00	0.90	ø6/12	2	2	1	SND	0.25	2360.07	2.50	28610.90	44861.10	0.90	1468.28	2.50	7136.20	40281.80	4.86
0.00	0.90	ø6/12	2	2	5	SND	0.25	4104.81	2.50	28610.90	44888.40	0.90	842.04	2.50	7136.20	40306.30	6.97
0.90	2.42	ø6/12	2	2	11	SLU	0.25	334.33	2.50	28610.90	46547.50	0.90	622.58	2.50	7136.20	41796.00	11.46
0.90	2.42	ø6/12	2	2	1	SND	0.25	2360.07	2.50	28610.90	44785.50	0.90	1468.28	2.50	7136.20	40213.90	4.86
0.90	2.42	ø6/12	2	2	5	SND	0.25	4104.81	2.50	28610.90	44812.90	0.90	842.04	2.50	7136.20	40238.40	6.97
2.42	3.32	ø6/12	2	2	11	SLU	0.25	334.33	2.50	28610.90	46381.50	0.90	622.58	2.50	7136.20	41646.90	11.46
2.42	3.32	ø6/12	2	2	1	SND	0.25	2360.07	2.50	28610.90	44657.90	0.90	1468.28	2.50	7136.20	40099.30	4.86
2.42	3.32	ø6/12	2	2	5	SND	0.25	4104.81	2.50	28610.90	44685.20	0.90	842.04	2.50	7136.20	40123.80	6.97
3.52	4.42	ø6/12	2	2	9	SLU	0.25	321.42	2.50	28610.90	42778.80	0.90	849.08	2.50	7136.20	38412.00	8.40
3.52	4.42	ø6/12	2	2	1	SND	0.25	949.01	2.50	28610.90	42023.00	0.90	993.74	2.50	7136.20	37733.30	7.18
3.52	4.42	ø6/12	2	2	5	SND	0.25	1426.54	2.50	28610.90	42031.30	0.90	780.58	2.50	7136.20	37740.80	9.14
4.42	5.98	ø6/12	2	2	9	SLU	0.25	321.42	2.50	28610.90	42680.60	0.90	849.08	2.50	7136.20	38323.80	8.40
4.42	5.98	ø6/12	2	2	1	SND	0.25	949.01	2.50	28610.90	41947.40	0.90	993.74	2.50	7136.20	37665.40	7.18
4.42	5.98	ø6/12	2	2	5	SND	0.25	1426.54	2.50	28610.90	41955.70	0.90	780.58	2.50	7136.20	37672.90	9.14
5.98	6.88	ø6/12	2	2	9	SLU	0.25	321.42	2.50	28610.90	42510.20	0.90	849.08	2.50	7136.20	38170.80	8.40
5.98	6.88	ø6/12	2	2	1	SND	0.25	949.01	2.50	28610.90	41816.40	0.90	993.74	2.50	7136.20	37547.80	7.18
5.98	6.88	ø6/12	2	2	5	SND	0.25	1426.54	2.50	28610.90	41824.70	0.90	780.58	2.50	7136.20	37555.30	9.14

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
-25	1	SND	11358.70	-1426.54	0.00	-993.74	-13362.90	14427.30	9.42	60.00	4.37	10.39
-49	1	SND	0.00	0.00	0.00	0.00	-7010.24	7010.24	3.12	60.00	3.12	10.39

Pilastrata n. 15

Nodi: -11 -24 -48

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
4R		90.00	25.00	2.70	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11(e)	SLU	1	4	0.00	-45496.50	-166.93	-909.93	1198.33	1198.33	-45496.50	-8468.17	11252.10	175.43	8.12	9.359
0.00	11(e)	SLU	1	4	0.00	-45496.50	-166.93	-909.93	1198.33	1198.33	-45496.50	-8468.17	11252.10	175.43	8.12	9.359
2.87	11(e)	SLU	1	4	287.00	-43397.80	645.22	-867.96	436.08	867.96	-43397.80	-8456.90	8616.34	176.84	9.52	9.836
3.52	10(e)	SLU	2	4	0.00	-19997.50	-211.79	-399.95	598.30	598.30	-19997.50	-6246.80	9205.32	176.84	12.54	15.458
3.52	10(e)	SLU	2	4	0.00	-19997.50	-211.79	-399.95	598.30	598.30	-19997.50	-6246.80	9205.32	176.84	12.54	15.458
6.39	9(e)	SLU	2	4	287.00	-18112.30	-710.39	-710.39	-47.58	362.25	-18112.30	-6212.51	3138.27	179.12	17.97	8.728

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'yzd <daNm>	α <grad>	ε _y	Sic.
0.00	5	SND	1	4	0.00	-29642.30	-911.35		7743.01		-29642.30	-2340.18	20482.20	135.00	9.47	2.644
0.00	5	SND	1	4	0.00	-29642.30	-911.35		7743.01		-29642.30	-2340.18	20482.20	135.00	9.47	2.644
2.87	5	SND	1	4	287.00	-28027.90	735.82		2292.89		-28027.90	6044.03	18794.90	14.06	7.32	8.199
3.52	5	SND	2	4	0.00	-9464.48	-495.95		4167.38		-9464.48	-1707.82	14254.00	129.38	13.31	3.421
3.52	5	SND	2	4	0.00	-9464.48	-495.95		4167.38		-9464.48	-1707.82	14254.00	129.38	13.31	3.421
6.39	3	SND	2	4	287.00	-614.14	-1722.47		32.89		-614.14	-4190.52	150.78	179.91	20.00	2.434

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
0.00	0.90	ø6/12	2	2	11	SLU	0.25	265.59	2.50	28610.90	47106.70	0.90	282.98	2.50	7136.20	42298.10	25.22
0.00	0.90	ø6/12	2	2	1	SND	0.25	1490.64	2.50	28610.90	45980.90	0.90	1216.42	2.50	7136.20	41287.30	5.87
0.00	0.90	ø6/12	2	2	5	SND	0.25	3204.06	2.50	28610.90	45418.10	0.90	573.25	2.50	7136.20	40781.90	8.93
0.90	1.97	ø6/12	2	2	11	SLU	0.25	265.59	2.50	28610.90	47008.40	0.90	282.98	2.50	7136.20	42209.90	25.22
0.90	1.97	ø6/12	2	2	1	SND	0.25	1490.64	2.50	28610.90	45905.40	0.90	1216.42	2.50	7136.20	41219.40	5.87
0.90	1.97	ø6/12	2	2	5	SND	0.25	3204.06	2.50	28610.90	45342.50	0.90	573.25	2.50	7136.20	40714.00	8.93
1.97	2.87	ø6/12	2	2	11	SLU	0.25	265.59	2.50	28610.90	46891.60	0.90	282.98	2.50	7136.20	42105.00	25.22
1.97	2.87	ø6/12	2	2	1	SND	0.25	1490.64	2.50	28610.90	45815.50	0.90	1216.42	2.50	7136.20	41138.70	5.87
1.97	2.87	ø6/12	2	2	5	SND	0.25	3204.06	2.50	28610.90	45252.70	0.90	573.25	2.50	7136.20	40633.30	8.93
3.52	4.42	ø6/12	2	2	9	SLU	0.25	230.79	2.50	28610.90	43331.30	0.90	175.64	2.50	7136.20	38908.10	40.63
3.52	4.42	ø6/12	2	2	1	SND	0.25	630.22	2.50	28610.90	44253.80	0.90	868.66	2.50	7136.20	39736.50	8.22
3.52	4.42	ø6/12	2	2	5	SND	0.25	1210.71	2.50	28610.90	43089.30	0.90	389.61	2.50	7136.20	38690.80	18.32
4.42	5.49	ø6/12	2	2	9	SLU	0.25	230.79	2.50	28610.90	43233.10	0.90	175.64	2.50	7136.20	38819.90	40.63
4.42	5.49	ø6/12	2	2	1	SND	0.25	630.22	2.50	28610.90	44178.30	0.90	868.66	2.50	7136.20	39668.60	8.22
4.42	5.49	ø6/12	2	2	5	SND	0.25	1210.71	2.50	28610.90	43013.80	0.90	389.61	2.50	7136.20	38623.00	18.32
5.49	6.39	ø6/12	2	2	9	SLU	0.25	230.79	2.50	28610.90	43116.20	0.90	175.64	2.50	7136.20	38715.00	40.63
5.49	6.39	ø6/12	2	2	1	SND	0.25	630.22	2.50	28610.90	44088.40	0.90	868.66	2.50	7136.20	39587.90	8.22
5.49	6.39	ø6/12	2	2	5	SND	0.25	1210.71	2.50	28610.90	42923.90	0.90	389.61	2.50	7136.20	38542.30	18.32

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm²>	σ _{ncR} <daN/cm²>	σ _{nt} <daN/cm²>	σ _{ntR} <daN/cm²>
-24	1	SND	1665.25	-1210.71	0.00	-868.66	-37687.60	38575.20	17.52	60.00	16.78	10.39
-48	1	SND	0.00	0.00	0.00	0.00	-28536.40	28536.40	12.68	60.00	12.68	10.39

Pilastrata n. 16

Nodi: -12 -23 -47

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm²>	Fctm <daN/cm²>	Fcd <daN/cm²>	Fcd (Tag) <daN/cm²>	Fctd <daN/cm²>	Fym <daN/cm²>	Fyd <daN/cm²>	Fyd (Tag) <daN/cm²>
4	R	90.00	25.00	2.70	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11(e)	SLU	1	4	0.00	-44102.80	36.76	-882.06	1133.31	1133.31	-44102.80	-8379.80	10534.50	175.78	8.49	9.373
0.00	11(e)	SLU	1	4	0.00	-44102.80	36.76	-882.06	1133.31	1133.31	-44102.80	-8379.80	10534.50	175.78	8.49	9.373
2.87	11(e)	SLU	1	4	287.00	-42004.10	-518.32	-840.08	431.05	-840.08	-42004.10	-8344.55	-8206.61	182.99	9.84	9.851
3.52	9(e)	SLU	2	4	0.00	-19795.60	-10.16	-395.91	562.40	562.40	-19795.60	-6237.82	8760.14	177.01	12.81	15.636
3.52	9(e)	SLU	2	4	0.00	-19795.60	-10.16	-395.91	562.40	562.40	-19795.60	-6237.82	8760.14	177.01	12.81	15.636
6.39	10(e)	SLU	2	4	287.00	-17494.40	839.99	839.99	-30.90	-349.89	-17494.40	6172.57	-2527.69	359.52	19.87	7.330

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'yzd <daNm>	α <grad>	ε _y	Sic.
0.00	5	SND	1	4	0.00	-28729.00	880.50		6844.35		-28729.00	2324.74	20161.80	45.00	9.58	2.941
0.00	5	SND	1	4	0.00	-28729.00	880.50		6844.35		-28729.00	2324.74	20161.80	45.00	9.58	2.941
2.87	5	SND	1	4	287.00	-27114.70	-674.52		2138.89		-27114.70	-5947.58	18546.70	165.94	7.39	8.685
3.52	5	SND	2	4	0.00	-9201.52	348.87		3747.92		-9201.52	1399.70	14244.10	56.25	14.50	3.802
3.52	5	SND	2	4	0.00	-9201.52	348.87		3747.92		-9201.52	1399.70	14244.10	56.25	14.50	3.802
6.39	3	SND	2	4	287.00	-350.89	1815.84		69.81		-350.89	4432.30	160.67	0.09	20.00	2.441

Staffe - Verifiche armatura

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _y	Vsdu _y	ctgθ _y	VRsd _y	VRcd _y	bw _z	Vsdu _z	ctgθ _z	VRsd _z	VRcd _z	Sic.T
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<m>	<m>					<m>	<daN>		<daN>	<daN>	<m>	<daN>		<daN>	<daN>		
0.00	0.90	ø6/12	2	2	11	SLU	0.25	244.69	2.50	28610.90	46898.60	0.90	193.41	2.50	7136.20	42111.30	36.90
0.00	0.90	ø6/12	2	2	1	SND	0.25	1176.21	2.50	28610.90	45829.50	0.90	1187.48	2.50	7136.20	41151.30	6.01
0.00	0.90	ø6/12	2	2	5	SND	0.25	2837.40	2.50	28610.90	45265.30	0.90	541.17	2.50	7136.20	40644.70	10.08
0.90	1.97	ø6/12	2	2	11	SLU	0.25	244.69	2.50	28610.90	46800.30	0.90	193.41	2.50	7136.20	42023.00	36.90
0.90	1.97	ø6/12	2	2	1	SND	0.25	1176.21	2.50	28610.90	45753.90	0.90	1187.48	2.50	7136.20	41083.40	6.01
0.90	1.97	ø6/12	2	2	5	SND	0.25	2837.40	2.50	28610.90	45189.70	0.90	541.17	2.50	7136.20	40576.80	10.08
1.97	2.87	ø6/12	2	2	11	SLU	0.25	244.69	2.50	28610.90	46683.50	0.90	193.41	2.50	7136.20	41918.10	36.90
1.97	2.87	ø6/12	2	2	1	SND	0.25	1176.21	2.50	28610.90	45664.00	0.90	1187.48	2.50	7136.20	41002.70	6.01
1.97	2.87	ø6/12	2	2	5	SND	0.25	2837.40	2.50	28610.90	45099.90	0.90	541.17	2.50	7136.20	40496.10	10.08
3.52	4.42	ø6/12	2	2	9	SLU	0.25	206.14	2.50	28610.90	43269.30	0.90	299.68	2.50	7136.20	38852.40	23.81
3.52	4.42	ø6/12	2	2	1	SND	0.25	521.45	2.50	28610.90	44212.50	0.90	957.28	2.50	7136.20	39699.40	7.45
3.52	4.42	ø6/12	2	2	5	SND	0.25	1083.92	2.50	28610.90	43048.30	0.90	482.96	2.50	7136.20	38654.00	14.78
4.42	5.49	ø6/12	2	2	9	SLU	0.25	206.14	2.50	28610.90	43171.00	0.90	299.68	2.50	7136.20	38764.20	23.81
4.42	5.49	ø6/12	2	2	1	SND	0.25	521.45	2.50	28610.90	44136.90	0.90	957.28	2.50	7136.20	39631.50	7.45
4.42	5.49	ø6/12	2	2	5	SND	0.25	1083.92	2.50	28610.90	42972.70	0.90	482.96	2.50	7136.20	38586.10	14.78
5.49	6.39	ø6/12	2	2	9	SLU	0.25	206.14	2.50	28610.90	43054.20	0.90	299.68	2.50	7136.20	38659.30	23.81
5.49	6.39	ø6/12	2	2	1	SND	0.25	521.45	2.50	28610.90	44047.10	0.90	957.28	2.50	7136.20	39550.80	7.45
5.49	6.39	ø6/12	2	2	5	SND	0.25	1083.92	2.50	28610.90	42882.90	0.90	482.96	2.50	7136.20	38505.40	14.78

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm ² >	σ _{ncR} <daN/cm ² >	σ _{nt} <daN/cm ² >	σ _{ntR} <daN/cm ² >
-23	1	SND	26112.80	-1083.92	0.00	957.28	34225.60	35199.60	22.49	60.00	10.88	10.39
-47	1	SND	0.00	0.00	0.00	0.00	25360.00	25360.00	11.27	60.00	11.27	10.39

Pilastrata n. 17

Nodi: -13 -22 -46

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm ² >	Fctm <daN/cm ² >	Fcd <daN/cm ² >	Fcd (Tag) <daN/cm ² >	Fctd <daN/cm ² >	Fym <daN/cm ² >	Fyd <daN/cm ² >	Fyd (Tag) <daN/cm ² >
4R		90.00	25.00	2.70	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <cm>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11	SLU	1	4	0.00	-49175.30	1247.87		1566.91		-49175.30	8782.04	11199.60	4.57	7.85	7.105
0.00	11	SLU	1	4	0.00	-49175.30	1247.87		1566.91		-49175.30	8782.04	11199.60	4.57	7.85	7.105
3.32	11(e)	SLU	1	4	332.00	-46747.50	-2107.60	-2107.60	184.95	934.95	-46747.50	-8940.00	4071.26	178.77	11.73	4.261
3.52	11	SLU	2	4	0.00	-18187.40	3154.41		376.32		-18187.40	6156.04	723.56	0.32	19.77	1.951
3.52	11	SLU	2	4	0.00	-18187.40	3154.41		376.32		-18187.40	6156.04	723.56	0.32	19.77	1.951
6.88	9(e)	SLU	2	4	336.00	-16794.50	-3455.51	-3455.51	-264.58	335.89	-16794.50	-6027.27	494.00	179.74	20.00	1.742

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <cm>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'yz <daNm>	α <grad>	ε _y	Sic.
0.00	5	SND	1	4	0.00	-34863.80	1668.81		8796.25		-34863.80	4127.57	21610.90	28.13	7.36	2.457
0.00	5	SND	1	4	0.00	-34863.80	1668.81		8796.25		-34863.80	4127.57	21610.90	28.13	7.36	2.457
3.32	3(e)	SND	1	4	332.00	-33303.30	-2977.76	-2977.76	374.01	666.07	-33303.30	-14305.70	3259.81	179.60	15.84	4.808
3.52	3(e)	SND	2	4	0.00	-13353.20	3003.69	3003.69	124.33	-267.06	-13353.20	7527.98	-650.74	359.74	20.00	2.506
3.52	3(e)	SND	2	4	0.00	-13353.20	3003.69	3003.69	124.33	-267.06	-13353.20	7527.98	-650.74	359.74	20.00	2.506
6.88	1(e)	SND	2	4	336.00	-11419.50	-3293.92	-3293.92	-66.65	228.39	-11419.50	-6611.74	391.23	179.82	20.00	2.006

Staffe - Verifiche armatura

X0 <cm>	X1 <cm>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <cm>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	b _{w,z} <cm>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
0.00	0.90	ø6/12	2	2	11	SLU	0.25	416.25	2.50	28610.90	47656.00	0.90	1010.68	2.50	7136.20	42791.30	7.06
0.00	0.90	ø6/12	2	2	1	SND	0.25	1942.61	2.50	28610.90	45593.10	0.90	1831.28	2.50	7136.20	40939.00	3.90
0.00	0.90	ø6/12	2	2	5	SND	0.25	3553.51	2.50	28610.90	45618.90	0.90	1122.81	2.50	7136.20	40962.20	6.36
0.90	2.42	ø6/12	2	2	11	SLU	0.25	416.25	2.50	28610.90	47557.70	0.90	1010.68	2.50	7136.20	42703.10	7.06
0.90	2.42	ø6/12	2	2	1	SND	0.25	1942.61	2.50	28610.90	45517.50	0.90	1831.28	2.50	7136.20	40871.20	3.90
0.90	2.42	ø6/12	2	2	5	SND	0.25	3553.51	2.50	28610.90	45543.40	0.90	1122.81	2.50	7136.20	40894.40	6.36
2.42	3.32	ø6/12	2	2	11	SLU	0.25	416.25	2.50	28610.90	47391.80	0.90	1010.68	2.50	7136.20	42554.10	7.06
2.42	3.32	ø6/12	2	2	1	SND	0.25	1942.61	2.50	28610.90	45389.90	0.90	1831.28	2.50	7136.20	40756.50	3.90
2.42	3.32	ø6/12	2	2	5	SND	0.25	3553.51	2.50	28610.90	45415.70	0.90	1122.81	2.50	7136.20	40779.70	6.36
3.52	4.42	ø6/12	2	2	9	SLU	0.25	239.82	2.50	28610.90	43188.00	0.90	1961.54	2.50	7136.20	38779.50	3.64
3.52	4.42	ø6/12	2	2	1	SND	0.25	782.02	2.50	28610.90	42315.00	0.90	1890.29	2.50	7136.20	37995.50	3.78
3.52	4.42	ø6/12	2	2	5	SND	0.25	1196.27	2.50	28610.90	42321.60	0.90	1592.45	2.50	7136.20	38001.50	4.48
4.42	5.98	ø6/12	2	2	9	SLU	0.25	239.82	2.50	28610.90	43089.80	0.90	1961.54	2.50	7136.20	38691.20	3.64
4.42	5.98	ø6/12	2	2	1	SND	0.25	782.02	2.50	28610.90	42239.40	0.90	1890.29	2.50	7136.20	37927.70	3.78
4.42	5.98	ø6/12	2	2	5	SND	0.25	1196.27	2.50	28610.90	42246.00	0.90	1592.45	2.50	7136.20	37933.60	4.48
5.98	6.88	ø6/12	2	2	9	SLU	0.25	239.82	2.50	28610.90	42919.50	0.90	1961.54	2.50	7136.20	38538.30	3.64
5.98	6.88	ø6/12	2	2	1	SND	0.25	782.02	2.50	28610.90	42108.40	0.90	1890.29	2.50	7136.20	37810.00	3.78
5.98	6.88	ø6/12	2	2	5	SND	0.25	1196.27	2.50	28610.90	42115.00	0.90	1592.45	2.50	7136.20	37816.00	4.48

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm ² >	σ _{ncR} <daN/cm ² >	σ _{nt} <daN/cm ² >	σ _{ntR} <daN/cm ² >
-22	1	SND	13404.30	-1196.27	0.00	-1890.29	36286.30	34416.80	18.56	60.00	12.60	10.39

-46	1	SND	0.00	0.00	0.00	0.00	25564.10	25564.10	11.36	60.00	11.36	10.39
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Pilastrata n. 18

Nodi: 10 41 78

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
4R		90.00	25.00	2.70	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11	SLU	1	4	0.00	-26989.60	-3656.35		1167.66		-26989.60	-7078.78	2188.90	179.56	17.69	1.930
0.00	11	SLU	1	4	0.00	-26989.60	-3656.35		1167.66		-26989.60	-7078.78	2188.90	179.56	17.69	1.930
3.32	11	SLU	1	4	332.00	-24561.80	5747.78		579.85		-24561.80	6775.86	802.70	0.33	18.08	1.181

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.00	5	SND	1	4	0.00	-17995.60	-3249.73		7987.34		-17995.60	-6383.43	15303.70	172.97	9.61	1.923
0.00	5	SND	1	4	0.00	-17995.60	-3249.73		7987.34		-17995.60	-6383.43	15303.70	172.97	9.61	1.923
3.32	3	SND	1	4	332.00	-16526.00	5052.62		-1028.42		-16526.00	10750.40	-2280.82	359.65	20.00	2.131

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	b _{w,z} <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
0.00	0.90	ø6/12	2	2	11	SLU	0.25	177.05	2.50	28610.90	44343.40	0.90	2832.57	2.50	7136.20	39816.90	2.52
0.00	0.90	ø6/12	2	2	1	SND	0.25	2551.07	2.50	28610.90	43510.70	0.90	2875.63	2.50	7136.20	39069.20	2.48
0.00	0.90	ø6/12	2	2	5	SND	0.25	3377.18	2.50	28610.90	43469.90	0.90	2310.52	2.50	7136.20	39032.60	3.09
0.90	2.42	ø6/12	2	2	11	SLU	0.25	177.05	2.50	28610.90	44245.20	0.90	2832.57	2.50	7136.20	39728.70	2.52
0.90	2.42	ø6/12	2	2	1	SND	0.25	2551.07	2.50	28610.90	43435.10	0.90	2875.63	2.50	7136.20	39001.30	2.48
0.90	2.42	ø6/12	2	2	5	SND	0.25	3377.18	2.50	28610.90	43394.30	0.90	2310.52	2.50	7136.20	38964.70	3.09
2.42	3.32	ø6/12	2	2	11	SLU	0.25	177.05	2.50	28610.90	44079.20	0.90	2832.57	2.50	7136.20	39579.70	2.52
2.42	3.32	ø6/12	2	2	1	SND	0.25	2551.07	2.50	28610.90	43307.50	0.90	2875.63	2.50	7136.20	38886.70	2.48
2.42	3.32	ø6/12	2	2	5	SND	0.25	3377.18	2.50	28610.90	43266.60	0.90	2310.52	2.50	7136.20	38850.00	3.09
3.52	4.42	ø6/12	2	2	9	SLU	0.25	234.54	2.50	28610.90	41929.50	0.90	4679.65	2.50	7136.20	37649.40	1.52
3.52	4.42	ø6/12	2	2	11	SLU	0.25	246.37	2.50	28610.90	41869.30	0.90	4578.25	2.50	7136.20	37595.40	1.56
3.52	4.42	ø6/12	2	2	1	SND	0.25	666.35	2.50	28610.90	41567.00	0.90	3575.88	2.50	7136.20	37323.90	2.00
3.52	4.42	ø6/12	2	2	5	SND	0.25	742.30	2.50	28610.90	41557.60	0.90	3413.23	2.50	7136.20	37315.40	2.09
4.42	5.98	ø6/12	2	2	9	SLU	0.25	234.54	2.50	28610.90	41831.30	0.90	4679.65	2.50	7136.20	37561.20	1.52
4.42	5.98	ø6/12	2	2	11	SLU	0.25	246.37	2.50	28610.90	41771.10	0.90	4578.25	2.50	7136.20	37507.10	1.56
4.42	5.98	ø6/12	2	2	1	SND	0.25	666.35	2.50	28610.90	41491.40	0.90	3575.88	2.50	7136.20	37256.00	2.00
4.42	5.98	ø6/12	2	2	5	SND	0.25	742.30	2.50	28610.90	41482.00	0.90	3413.23	2.50	7136.20	37247.60	2.09
5.98	6.88	ø6/12	2	2	9	SLU	0.25	234.54	2.50	28610.90	41660.90	0.90	4679.65	2.50	7136.20	37408.30	1.52
5.98	6.88	ø6/12	2	2	11	SLU	0.25	246.37	2.50	28610.90	41600.70	0.90	4578.25	2.50	7136.20	37354.20	1.56
5.98	6.88	ø6/12	2	2	1	SND	0.25	666.35	2.50	28610.90	41360.40	0.90	3575.88	2.50	7136.20	37138.40	2.00
5.98	6.88	ø6/12	2	2	5	SND	0.25	742.30	2.50	28610.90	41351.00	0.90	3413.23	2.50	7136.20	37129.90	2.09

Pilastrata n. 19

Nodi: 11 42 79

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
3R		25.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11	SLU	1	3	0.00	-21345.50	1670.80		659.85		-21345.50	3818.65	1511.25	25.31	4.36	2.286
0.00	11	SLU	1	3	0.00	-21345.50	1670.80		659.85		-21345.50	3818.65	1511.25	25.31	4.36	2.286
3.32	11	SLU	1	3	332.00	-20671.20	-2800.86		-1049.18		-20671.20	-3837.69	-1372.57	202.50	4.67	1.363

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.00	1	SND	1	3	0.00	-15034.60	1787.61		591.84		-15034.60	2959.82	985.62	16.88	6.31	1.657
0.00	1	SND	1	3	0.00	-15034.60	1787.61		591.84		-15034.60	2959.82	985.62	16.88	6.31	1.657
3.32	1	SND	1	3	332.00	-14515.90	-2439.22		-875.62		-14515.90	-2902.32	-985.92	196.88	6.42	1.183

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	b _{w,z} <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
0.00	0.55	ø6/12	2	2	11	SLU	0.25	514.77	2.50	7136.20	12066.20	0.25	1346.88	2.50	7136.20	12066.20	5.30
0.00	0.55	ø6/12	2	2	1	SND	0.25	439.62	2.50	7136.20	12066.20	0.25	1273.06	2.50	7136.20	12066.20	5.61

0.00	0.55	ø6/12	2	2	5	SND	0.25	517.16	2.50	7136.20	12066.20	0.25	1073.83	2.50	7136.20	12066.20	6.65
0.55	2.77	ø6/12	2	2	11	SLU	0.25	514.77	2.50	7136.20	12066.20	0.25	1346.88	2.50	7136.20	12066.20	5.30
0.55	2.77	ø6/12	2	2	1	SND	0.25	439.62	2.50	7136.20	12066.20	0.25	1273.06	2.50	7136.20	12066.20	5.61
0.55	2.77	ø6/12	2	2	5	SND	0.25	517.16	2.50	7136.20	12066.20	0.25	1073.83	2.50	7136.20	12066.20	6.65
2.77	3.32	ø6/12	2	2	11	SLU	0.25	514.77	2.50	7136.20	12066.20	0.25	1346.88	2.50	7136.20	12066.20	5.30
2.77	3.32	ø6/12	2	2	1	SND	0.25	439.62	2.50	7136.20	12066.20	0.25	1273.06	2.50	7136.20	12066.20	5.61
2.77	3.32	ø6/12	2	2	5	SND	0.25	517.16	2.50	7136.20	12066.20	0.25	1073.83	2.50	7136.20	12066.20	6.65
3.52	4.08	ø6/12	2	2	9	SLU	0.25	698.91	2.50	7136.20	11043.10	0.25	2119.02	2.50	7136.20	11043.10	3.37
3.52	4.08	ø6/12	2	2	1	SND	0.25	531.03	2.50	7136.20	10748.20	0.25	1663.31	2.50	7136.20	10748.20	4.29
3.52	4.08	ø6/12	2	2	5	SND	0.25	573.80	2.50	7136.20	10752.10	0.25	1555.42	2.50	7136.20	10752.10	4.59
4.08	6.32	ø6/12	2	2	9	SLU	0.25	698.91	2.50	7136.20	11027.90	0.25	2119.02	2.50	7136.20	11027.90	3.37
4.08	6.32	ø6/12	2	2	1	SND	0.25	531.03	2.50	7136.20	10736.50	0.25	1663.31	2.50	7136.20	10736.50	4.29
4.08	6.32	ø6/12	2	2	5	SND	0.25	573.80	2.50	7136.20	10740.40	0.25	1555.42	2.50	7136.20	10740.40	4.59
6.32	6.88	ø6/12	2	2	9	SLU	0.25	698.91	2.50	7136.20	10966.90	0.25	2119.02	2.50	7136.20	10966.90	3.37
6.32	6.88	ø6/12	2	2	1	SND	0.25	531.03	2.50	7136.20	10689.60	0.25	1663.31	2.50	7136.20	10689.60	4.29
6.32	6.88	ø6/12	2	2	5	SND	0.25	573.80	2.50	7136.20	10693.40	0.25	1555.42	2.50	7136.20	10693.40	4.59

Pilastrata n. 20

Nodi: -37 -473 -36 -476 -60

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
3R		25.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11(e)	SLU	1	3	0.00	-20954.00	-950.25	-950.25	136.40	-419.08	-20954.00	-3723.82	-1663.96	208.13	4.22	3.927
0.00	11(e)	SLU	1	3	0.00	-20954.00	-950.25	-950.25	136.40	-419.08	-20954.00	-3723.82	-1663.96	208.13	4.22	3.927
1.76	11(e)	SLU	1	3	176.00	-20596.50	458.72	458.72	-19.90	411.93	-20596.50	2905.17	2570.92	42.19	3.99	6.292
1.76	11(e)	SLU	2	3	0.00	-20596.50	458.72	458.72	-19.90	411.93	-20596.50	2905.17	2570.92	42.19	3.99	6.292
3.32	11(e)	SLU	2	3	156.00	-20279.60	1707.58	1707.58	-158.45	405.59	-20279.60	3969.24	920.46	14.06	5.71	2.322
3.52	11	SLU	3	3	0.00	-7097.99	-2315.77		168.01		-7097.99	-2933.13	192.92	178.59	14.85	1.266
3.52	11	SLU	3	3	0.00	-7097.99	-2315.77		168.01		-7097.99	-2933.13	192.92	178.59	14.85	1.266
5.28	9(e)	SLU	3	3	176.00	-7214.42	75.04	-144.29	20.40	-144.29	-7214.42	-2384.47	-2384.47	225.00	5.50	16.526
5.28	9(e)	SLU	4	3	0.00	-7214.42	75.04	-144.29	20.40	-144.29	-7214.42	-2384.47	-2384.47	225.00	5.50	16.526
6.88	9(e)	SLU	4	3	160.00	-6889.42	2234.54	2234.54	-115.05	137.79	-6889.42	2914.14	193.50	1.41	14.95	1.305

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.00	1(e)	SND	1	3	0.00	-13672.90	-1429.03	-1429.03	140.58	-273.46	-13672.90	-3055.70	-568.91	187.03	9.22	2.137
0.00	1(e)	SND	1	3	0.00	-13672.90	-1429.03	-1429.03	140.58	-273.46	-13672.90	-3055.70	-568.91	187.03	9.22	2.137
1.76	1(e)	SND	1	3	176.00	-16233.80	361.43	361.43	10.54	324.68	-16233.80	2328.68	2059.92	42.19	4.42	6.399
1.76	1(e)	SND	2	3	0.00	-16233.80	361.43	361.43	10.54	324.68	-16233.80	2328.68	2059.92	42.19	4.42	6.399
3.32	1(e)	SND	2	3	156.00	-13154.10	1911.05	1911.05	-79.91	263.08	-13154.10	3107.80	390.09	4.22	10.55	1.624
3.52	1	SND	3	3	0.00	-4765.91	-2258.36		138.36		-4765.91	-2495.18	184.44	178.59	16.11	1.106
3.52	1	SND	3	3	0.00	-4765.91	-2258.36		138.36		-4765.91	-2495.18	184.44	178.59	16.11	1.106
5.28	1(e)	SND	3	3	176.00	-5358.87	57.37	-107.18	52.79	-107.18	-5358.87	-1616.04	-1616.04	225.00	5.82	15.078
5.28	1(e)	SND	4	3	0.00	-5358.87	57.37	-107.18	52.79	-107.18	-5358.87	-1616.04	-1616.04	225.00	5.82	15.078
6.88	1(e)	SND	4	3	160.00	-4240.91	2100.46	2100.46	-67.29	84.82	-4240.91	2490.69	59.40	0.70	16.97	1.185

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
0.00	0.55	ø6/12	2	2	11	SLU	0.25	88.81	2.50	7136.20	12066.20	0.25	800.55	2.50	7136.20	12066.20	8.91
0.00	0.55	ø6/12	2	2	1	SND	0.25	90.83	2.50	7136.20	12066.20	0.25	1012.77	2.50	7136.20	12066.20	7.05
0.00	0.55	ø6/12	2	2	5	SND	0.25	135.88	2.50	7136.20	12066.20	0.25	736.11	2.50	7136.20	12066.20	9.69
0.55	2.77	ø6/12	2	2	11	SLU	0.25	88.81	2.50	7136.20	12066.20	0.25	800.55	2.50	7136.20	12066.20	8.91
0.55	2.77	ø6/12	2	2	1	SND	0.25	90.83	2.50	7136.20	12066.20	0.25	1012.77	2.50	7136.20	12066.20	7.05
0.55	2.77	ø6/12	2	2	5	SND	0.25	135.88	2.50	7136.20	12066.20	0.25	736.11	2.50	7136.20	12066.20	9.69
2.77	3.32	ø6/12	2	2	11	SLU	0.25	88.81	2.50	7136.20	12066.20	0.25	800.55	2.50	7136.20	12066.20	8.91
2.77	3.32	ø6/12	2	2	1	SND	0.25	89.37	2.50	7136.20	12066.20	0.25	999.18	2.50	7136.20	12066.20	7.14
2.77	3.32	ø6/12	2	2	5	SND	0.25	125.58	2.50	7136.20	12066.20	0.25	730.50	2.50	7136.20	12066.20	9.77
3.52	4.08	ø6/12	2	2	9	SLU	0.25	84.65	2.50	7136.20	11070.30	0.25	1349.69	2.50	7136.20	11070.30	5.29
3.52	4.08	ø6/12	2	2	1	SND	0.25	76.71	2.50	7136.20	10810.50	0.25	1315.15	2.50	7136.20	10810.50	5.43
3.52	4.08	ø6/12	2	2	5	SND	0.25	103.74	2.50	7136.20	10773.90	0.25	1086.59	2.50	7136.20	10773.90	6.57
4.08	6.32	ø6/12	2	2	9	SLU	0.25	84.65	2.50	7136.20	11055.00	0.25	1349.69	2.50	7136.20	11055.00	5.29
4.08	6.32	ø6/12	2	2	1	SND	0.25	78.06	2.50	7136.20	10798.70	0.25	1315.15	2.50	7136.20	10798.70	5.43
4.08	6.32	ø6/12	2	2	5	SND	0.25	106.81	2.50	7136.20	10762.20	0.25	1086.59	2.50	7136.20	10762.20	6.57
6.32	6.88	ø6/12	2	2	9	SLU	0.25	84.65	2.50	7136.20	10994.00	0.25	1349.69	2.50	7136.20	10994.00	5.29
6.32	6.88	ø6/12	2	2	1	SND	0.25	78.06	2.50	7136.20	10751.80	0.25	1277.79	2.50	7136.20	10751.80	5.58
6.32	6.88	ø6/12	2	2	5	SND	0.25	106.81	2.50	7136.20	10715.20	0.25	1071.92	2.50	7136.20	10715.20	6.66

Pilastrata n. 21

Nodi: -39 -474 -38 -475 -59

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
3R		25.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11(e)	SLU	1	3	0.00	-20897.50	992.76	992.76	132.54	-417.95	-20897.50	3754.37	-1586.34	333.28	4.32	3.784
0.00	11(e)	SLU	1	3	0.00	-20897.50	992.76	992.76	132.54	-417.95	-20897.50	3754.37	-1586.34	333.28	4.32	3.784
1.76	11(e)	SLU	1	3	176.00	-20540.00	-452.38	-452.38	-17.83	-410.80	-20540.00	-2903.69	-2569.60	222.19	3.99	6.345
1.76	11(e)	SLU	2	3	0.00	-20540.00	-452.38	-452.38	-17.83	-410.80	-20540.00	-2903.69	-2569.60	222.19	3.99	6.345
3.32	11(e)	SLU	2	3	156.00	-20223.20	-1733.30	-1733.30	-151.10	-404.46	-20223.20	-3965.16	-921.37	194.06	5.72	2.287
3.52	11	SLU	3	3	0.00	-7170.20	2312.97		157.25		-7170.20	2939.74	192.71	1.41	14.81	1.271
3.52	11	SLU	3	3	0.00	-7170.20	2312.97		157.25		-7170.20	2939.74	192.71	1.41	14.81	1.271
5.28	9(e)	SLU	3	3	176.00	-7280.72	-75.88	-145.61	21.06	145.61	-7280.72	-2386.34	2386.34	135.00	5.49	16.388
5.28	9(e)	SLU	4	3	0.00	-7280.72	-75.88	-145.61	21.06	145.61	-7280.72	-2386.34	2386.34	135.00	5.49	16.388
6.88	9(e)	SLU	4	3	160.00	-6955.72	-2235.36	-2235.36	-104.38	-139.11	-6955.72	-2920.18	-193.34	181.41	14.92	1.307

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.00	1(e)	SND	1	3	0.00	-13652.00	1458.48	1458.48	134.54	273.04	-13652.00	3065.22	571.13	7.03	9.23	2.102
0.00	1(e)	SND	1	3	0.00	-13652.00	1458.48	1458.48	134.54	273.04	-13652.00	3065.22	571.13	7.03	9.23	2.102
1.76	1(e)	SND	1	3	176.00	-16212.90	-357.62	-357.62	9.70	-324.26	-16212.90	-2328.04	-2059.31	222.19	4.42	6.439
1.76	1(e)	SND	2	3	0.00	-16212.90	-357.62	-357.62	9.70	-324.26	-16212.90	-2328.04	-2059.31	222.19	4.42	6.439
3.32	1(e)	SND	2	3	156.00	-13133.30	-1929.75	-1929.75	-80.06	-262.67	-13133.30	-3102.63	-389.80	184.22	10.56	1.606
3.52	1	SND	3	3	0.00	-4820.51	2257.83		130.78		-4820.51	2502.81	184.42	1.41	16.07	1.110
3.52	1	SND	3	3	0.00	-4820.51	2257.83		130.78		-4820.51	2502.81	184.42	1.41	16.07	1.110
5.28	1(e)	SND	3	3	176.00	-5414.59	23.50	-108.29	51.54	108.29	-5414.59	-1618.59	1618.60	135.00	5.80	14.947
5.28	1(e)	SND	4	3	0.00	-5414.59	23.50	-108.29	51.54	108.29	-5414.59	-1618.59	1618.60	135.00	5.80	14.947
6.88	1(e)	SND	4	3	160.00	-4295.51	-2101.02	-2101.02	-60.53	-85.91	-4295.51	-2488.92	-59.15	180.70	16.93	1.184

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <cm>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <cm>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
0.00	0.55	ø6/12	2	2	11	SLU	0.25	85.43	2.50	7136.20	12066.20	0.25	821.10	2.50	7136.20	12066.20	8.69
0.00	0.55	ø6/12	2	2	1	SND	0.25	86.41	2.50	7136.20	12066.20	0.25	1027.28	2.50	7136.20	12066.20	6.95
0.00	0.55	ø6/12	2	2	5	SND	0.25	130.76	2.50	7136.20	12066.20	0.25	750.70	2.50	7136.20	12066.20	9.51
0.55	2.77	ø6/12	2	2	11	SLU	0.25	85.43	2.50	7136.20	12066.20	0.25	821.10	2.50	7136.20	12066.20	8.69
0.55	2.77	ø6/12	2	2	1	SND	0.25	86.41	2.50	7136.20	12066.20	0.25	1027.28	2.50	7136.20	12066.20	6.95
0.55	2.77	ø6/12	2	2	5	SND	0.25	130.76	2.50	7136.20	12066.20	0.25	750.70	2.50	7136.20	12066.20	9.51
2.77	3.32	ø6/12	2	2	11	SLU	0.25	85.43	2.50	7136.20	12066.20	0.25	821.10	2.50	7136.20	12066.20	8.69
2.77	3.32	ø6/12	2	2	1	SND	0.25	82.03	2.50	7136.20	12066.20	0.25	1013.70	2.50	7136.20	12066.20	7.04
2.77	3.32	ø6/12	2	2	5	SND	0.25	120.17	2.50	7136.20	12066.20	0.25	745.09	2.50	7136.20	12066.20	9.58
3.52	4.08	ø6/12	2	2	9	SLU	0.25	78.40	2.50	7136.20	11079.20	0.25	1349.67	2.50	7136.20	11079.20	5.29
3.52	4.08	ø6/12	2	2	1	SND	0.25	71.98	2.50	7136.20	10817.90	0.25	1315.15	2.50	7136.20	10817.90	5.43
3.52	4.08	ø6/12	2	2	5	SND	0.25	99.10	2.50	7136.20	10781.40	0.25	1086.43	2.50	7136.20	10781.40	6.57
4.08	6.32	ø6/12	2	2	9	SLU	0.25	78.40	2.50	7136.20	11063.90	0.25	1349.67	2.50	7136.20	11063.90	5.29
4.08	6.32	ø6/12	2	2	1	SND	0.25	72.69	2.50	7136.20	10806.20	0.25	1315.15	2.50	7136.20	10806.20	5.43
4.08	6.32	ø6/12	2	2	5	SND	0.25	101.99	2.50	7136.20	10769.60	0.25	1086.43	2.50	7136.20	10769.60	6.57
6.32	6.88	ø6/12	2	2	9	SLU	0.25	78.40	2.50	7136.20	11002.90	0.25	1349.67	2.50	7136.20	11002.90	5.29
6.32	6.88	ø6/12	2	2	1	SND	0.25	72.69	2.50	7136.20	10759.30	0.25	1277.81	2.50	7136.20	10759.30	5.58
6.32	6.88	ø6/12	2	2	5	SND	0.25	101.99	2.50	7136.20	10722.70	0.25	1071.80	2.50	7136.20	10722.70	6.66

Pilastrata n. 22

Nodi: 12 43 80

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
3R		25.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11	SLU	1	3	0.00	-20642.10	-1648.59		606.68		-20642.10	-3835.79	1372.92	157.50	4.67	2.319
0.00	11	SLU	1	3	0.00	-20642.10	-1648.59		606.68		-20642.10	-3835.79	1372.92	157.50	4.67	2.319
3.32	11	SLU	1	3	332.00	-19967.80	2733.42		-939.57		-19967.80	3820.85	-1305.52	338.91	4.89	1.397

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.00	1	SND	1	3	0.00	-14552.90	-1799.70		546.51		-14552.90	-2979.86	871.48	165.94	6.93	1.651
0.00	1	SND	1	3	0.00	-14552.90	-1799.70		546.51		-14552.90	-2979.86	871.48	165.94	6.93	1.651
3.32	1	SND	1	3	332.00	-14034.10	2404.18		-794.63		-14034.10	2869.54	-995.23	343.13	6.54	1.199

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <cm>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <cm>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
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Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{nc} R <daN/cmq>	σ _{nt} <daN/cmq>	σ _{nt} R <daN/cmq>
71	1	SND	17981.90	97.43	0.00	-1995.74	12755.80	10760.50	23.01	60.00	5.03	10.39
83	1	SND	0.00	0.00	0.00	0.00	9460.22	9460.22	9.46	60.00	9.46	10.39

Pilastrata n. 26

Nodi: 99 24 -82 72 82

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
8	R	25.00	40.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94
8	R	25.00	40.00	1.50	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
-1.07	11(e)	SLU	1	8	0.00	-78418.50	18.70	1568.37	-12.14	-1568.37	-223227.00	6535.33	-6616.57	295.31	2.19	2.847
-1.07	11(e)	SLU	1	8	0.00	-78418.50	18.70	1568.37	-12.14	-1568.37	-223227.00	6535.33	-6616.57	295.31	2.19	2.847
0.00	11(e)	SLU	1	8	107.00	-78070.70	-237.41	-1561.41	46.99	1561.41	-223227.00	-6532.99	6615.32	115.31	2.21	2.859
-0.16	11(e)	SLU	2	8	-16.00	-64392.50	-528.71	-1287.85	47.32	1287.85	-223227.00	-6424.79	6523.70	115.31	2.64	3.467
0.00	11(e)	SLU	2	8	0.00	-64340.50	-237.41	-1286.81	46.99	1286.81	-223227.00	-6424.26	6523.13	115.31	2.65	3.469
0.88	11(e)	SLU	3	8	0.00	-47786.30	-1645.95	-1645.95	22.51	955.73	-223227.00	-8434.62	4781.57	126.56	3.28	4.671
2.92	11(e)	SLU	3	8	204.00	-47123.30	1644.33	1644.33	17.34	942.47	-223227.00	8414.25	4776.60	53.44	3.31	4.737
3.52	11(e)	SLU	4	8	0.00	-16803.20	-2175.22	-2175.22	14.21	336.06	-16803.20	-9306.41	1511.93	157.50	6.80	4.284
3.52	11(e)	SLU	4	8	0.00	-16803.20	-2175.22	-2175.22	14.21	336.06	-16803.20	-9306.41	1511.93	157.50	6.80	4.284
6.44	9(e)	SLU	4	8	292.00	-16979.20	1668.01	1668.01	4.95	-339.58	-16979.20	9138.43	-1773.51	334.69	6.56	5.469

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
-1.07	1(e)	SND	1	8	0.00	-74080.60	932.22	1481.61	201.24	1481.61	-179999.00	6153.46	6242.48	64.69	2.33	2.430
-1.07	1(e)	SND	1	8	0.00	-74080.60	932.22	1481.61	201.24	1481.61	-179999.00	6153.46	6242.48	64.69	2.33	2.430
0.00	1(e)	SND	1	8	107.00	-73813.10	1938.79	1938.79	505.67	1476.26	-179999.00	7368.91	5592.21	59.77	2.33	2.439
-0.16	1	SND	2	8	-16.00	-25700.60	-3813.03		678.12		-25700.60	-8333.96	1539.04	154.69	5.62	2.188
0.00	1(e)	SND	2	8	0.00	-65406.90	1938.79	1938.79	505.67	1308.14	-179999.00	7832.32	5322.34	57.66	2.61	2.752
0.88	1	SND	3	8	0.00	-16630.10	-3596.02		356.36		-16630.10	-7521.16	756.30	163.13	7.36	2.092
2.92	1(e)	SND	3	8	204.00	-16120.10	2639.09	2639.09	95.52	322.40	-16120.10	7411.66	977.05	19.69	7.15	2.812
3.52	1(e)	SND	4	8	0.00	-6604.13	-3403.75	-3403.75	109.88	-132.08	-6604.13	-6404.45	-348.88	185.63	13.60	1.883
3.52	1(e)	SND	4	8	0.00	-6604.13	-3403.75	-3403.75	109.88	-132.08	-6604.13	-6404.45	-348.88	185.63	13.60	1.883
6.44	1(e)	SND	4	8	292.00	-5874.14	2709.84	2709.84	19.60	117.48	-5874.14	6295.44	358.50	5.63	13.88	2.325

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
-1.07	-0.16	ø6/12	2	2	11	SLU	0.40	55.26	2.50	7136.20	19305.80	0.25	239.35	2.50	12091.90	20445.40	50.52
-1.07	-0.16	ø6/12	2	2	9	SLU	0.40	56.24	2.50	7136.20	19305.80	0.25	237.91	2.50	12091.90	20445.40	50.83
-1.07	-0.16	ø6/12	2	2	1	SND	0.40	631.13	2.50	7136.20	19305.80	0.25	1304.95	2.50	12091.90	20445.40	9.27
-1.07	-0.16	ø6/12	2	2	5	SND	0.40	1255.99	2.50	7136.20	19305.80	0.25	601.54	2.50	12091.90	20445.40	5.68
0.88	1.33	ø6/12	2	2	11	SLU	0.40	2.53	2.50	7136.20	19305.80	0.25	1612.88	2.50	12091.90	20445.40	7.50
0.88	1.33	ø6/12	2	2	1	SND	0.40	202.75	2.50	7136.20	19305.80	0.25	3056.11	2.50	12091.90	20445.40	3.96
0.88	1.33	ø6/12	2	2	5	SND	0.40	384.13	2.50	7136.20	19305.80	0.25	2015.34	2.50	12091.90	20445.40	6.00
1.33	2.47	ø6/12	2	2	11	SLU	0.40	2.53	2.50	7136.20	19305.80	0.25	1612.88	2.50	12091.90	20445.40	7.50
1.33	2.47	ø6/12	2	2	1	SND	0.40	202.75	2.50	7136.20	19305.80	0.25	3056.11	2.50	12091.90	20445.40	3.96
1.33	2.47	ø6/12	2	2	5	SND	0.40	384.13	2.50	7136.20	19305.80	0.25	2015.34	2.50	12091.90	20445.40	6.00
2.47	2.92	ø6/12	2	2	11	SLU	0.40	2.53	2.50	7136.20	19305.80	0.25	1612.88	2.50	12091.90	20445.40	7.50
2.47	2.92	ø6/12	2	2	1	SND	0.40	202.75	2.50	7136.20	19305.80	0.25	3056.11	2.50	12091.90	20445.40	3.96
2.47	2.92	ø6/12	2	2	5	SND	0.40	384.13	2.50	7136.20	19305.80	0.25	2015.34	2.50	12091.90	20445.40	6.00
3.52	4.01	ø6/12	2	2	11	SLU	0.40	3.34	2.50	7136.20	18341.00	0.25	1306.96	2.50	12091.90	19423.60	9.25
3.52	4.01	ø6/12	2	2	9	SLU	0.40	3.68	2.50	7136.20	18491.80	0.25	1306.46	2.50	12091.90	19583.30	9.26
3.52	4.01	ø6/12	2	2	1	SND	0.40	40.15	2.50	7136.20	18503.30	0.25	2093.65	2.50	12091.90	19595.60	5.78
3.52	4.01	ø6/12	2	2	5	SND	0.40	85.02	2.50	7136.20	18117.10	0.25	1540.52	2.50	12091.90	19186.50	7.85
4.01	5.95	ø6/12	2	2	11	SLU	0.40	3.34	2.50	7136.20	18319.80	0.25	1306.96	2.50	12091.90	19401.20	9.25
4.01	5.95	ø6/12	2	2	9	SLU	0.40	3.68	2.50	7136.20	18470.60	0.25	1306.46	2.50	12091.90	19560.90	9.26
4.01	5.95	ø6/12	2	2	1	SND	0.40	40.15	2.50	7136.20	18487.00	0.25	2093.65	2.50	12091.90	19578.30	5.78
4.01	5.95	ø6/12	2	2	5	SND	0.40	85.02	2.50	7136.20	18100.80	0.25	1540.52	2.50	12091.90	19169.20	7.85
5.95	6.44	ø6/12	2	2	11	SLU	0.40	3.34	2.50	7136.20	18235.00	0.25	1306.96	2.50	12091.90	19311.30	9.25
5.95	6.44	ø6/12	2	2	9	SLU	0.40	3.68	2.50	7136.20	18385.80	0.25	1306.46	2.50	12091.90	19471.10	9.26
5.95	6.44	ø6/12	2	2	1	SND	0.40	40.15	2.50	7136.20	18421.80	0.25	2093.65	2.50	12091.90	19509.20	5.78
5.95	6.44	ø6/12	2	2	5	SND	0.40	85.02	2.50	7136.20	18035.50	0.25	1540.52	2.50	12091.90	19100.10	7.85

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{nc} R <daN/cmq>	σ _{nt} <daN/cmq>	σ _{nt} R <daN/cmq>
72	1	SND	6604.13	-85.02	0.00	2093.65	-13263.20	11169.80	14.95	60.00	8.35	10.39
	1	SND	18014.20	-85.02	0.00	2093.65	3122.24	5216.59	19.42	60.00	1.40	10.39
82	1	SND	0.00	0.00	0.00	0.00	-10270.50	10270.50	10.27	60.00	10.27	10.39

Pilastrata n. 30

Nodi: 113 26 119

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
10	R	40.00	40.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
-0.65	11(e)	SLU	1	10	0.00	-37301.00	-564.72	746.02	-1397.92	-1397.92	-37301.00	5261.35	-10170.40	292.50	6.38	7.227
-0.65	11(e)	SLU	1	10	0.00	-37301.00	-564.72	746.02	-1397.92	-1397.92	-37301.00	5261.35	-10170.40	292.50	6.38	7.227
0.38	11(e)	SLU	1	10	103.00	-36765.40	640.21	735.31	1488.65	1488.65	-36765.40	4937.38	10254.40	68.91	6.56	6.855
0.88	9	SLU	2	10	0.00	-24197.50	3631.08		-879.78		-24197.50	9823.49	-2226.80	351.56	12.94	2.696
0.88	9	SLU	2	10	0.00	-24197.50	3631.08		-879.78		-24197.50	9823.49	-2226.80	351.56	12.94	2.696
4.63	9(e)	SLU	2	10	375.00	-22247.50	-6096.36	-6096.36	330.59	500.57	-22247.50	-9659.19	634.48	178.59	20.00	1.583

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _r	Sic.
-0.65	1	SND	1	10	0.00	-19006.80	-3280.20		-3115.55		-19006.80	-5245.42	-4954.36	230.63	7.18	1.595
-0.65	1	SND	1	10	0.00	-19006.80	-3280.20		-3115.55		-19006.80	-5245.42	-4954.36	230.63	7.18	1.595
0.38	5	SND	1	10	103.00	-18081.20	557.58		1508.01		-18081.20	2401.82	6283.06	75.94	9.89	4.184
0.88	1	SND	2	10	0.00	-7295.15	3634.94		-1923.52		-7295.15	5194.26	-2635.95	345.94	13.90	1.416
0.88	1	SND	2	10	0.00	-7295.15	3634.94		-1923.52		-7295.15	5194.26	-2635.95	345.94	13.90	1.416
4.63	1	SND	2	10	375.00	-5795.15	-5269.93		1102.92		-5795.15	-5858.90	1290.22	175.78	20.00	1.114

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
-0.65	0.38	ø6/12	2	2	9	SLU	0.40	2623.24	2.50	12091.90	32671.30	0.40	1245.79	2.50	12091.90	32671.30	4.61
-0.65	0.38	ø6/12	2	2	11	SLU	0.40	2802.50	2.50	12091.90	32556.70	0.40	1169.84	2.50	12091.90	32556.70	4.31
-0.65	0.38	ø6/12	2	2	1	SND	0.40	4188.15	2.50	12091.90	32359.60	0.40	3657.53	2.50	12091.90	32359.60	2.89
0.88	1.50	ø6/12	2	2	9	SLU	0.40	322.76	2.50	12091.90	30696.20	0.40	2593.98	2.50	12091.90	30696.20	4.66
0.88	1.50	ø6/12	2	2	11	SLU	0.40	338.07	2.50	12091.90	30556.10	0.40	2458.21	2.50	12091.90	30556.10	4.92
0.88	1.50	ø6/12	2	2	1	SND	0.40	805.01	2.50	12091.90	31071.10	0.40	2372.10	2.50	12091.90	31071.10	5.10
0.88	1.50	ø6/12	2	2	5	SND	0.40	936.54	2.50	12091.90	30366.40	0.40	2013.21	2.50	12091.90	30366.40	6.01
1.50	4.00	ø6/12	2	2	9	SLU	0.40	322.76	2.50	12091.90	30650.00	0.40	2593.98	2.50	12091.90	30650.00	4.66
1.50	4.00	ø6/12	2	2	11	SLU	0.40	338.07	2.50	12091.90	30509.90	0.40	2458.21	2.50	12091.90	30509.90	4.92
1.50	4.00	ø6/12	2	2	1	SND	0.40	805.01	2.50	12091.90	31035.60	0.40	2372.10	2.50	12091.90	31035.60	5.10
1.50	4.00	ø6/12	2	2	5	SND	0.40	936.54	2.50	12091.90	30330.90	0.40	2013.21	2.50	12091.90	30330.90	6.01
4.00	4.63	ø6/12	2	2	9	SLU	0.40	322.76	2.50	12091.90	30465.50	0.40	2593.98	2.50	12091.90	30465.50	4.66
4.00	4.63	ø6/12	2	2	11	SLU	0.40	338.07	2.50	12091.90	30325.40	0.40	2458.21	2.50	12091.90	30325.40	4.92
4.00	4.63	ø6/12	2	2	1	SND	0.40	805.01	2.50	12091.90	30893.60	0.40	2372.10	2.50	12091.90	30893.60	5.10
4.00	4.63	ø6/12	2	2	5	SND	0.40	936.54	2.50	12091.90	30188.90	0.40	2013.21	2.50	12091.90	30188.90	6.01

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
26	1	SND	7295.15	936.54	-7753.97	-2372.10	-1997.77	8097.73	7.83	60.00	3.27	10.39
	1	SND	26838.10	936.54	-418.77	-2372.10	7645.09	5298.34	17.40	60.00	0.63	10.39
119	1	SND	0.00	0.00	2051.29	0.00	7942.82	8203.42	5.13	60.00	5.13	10.39

Pilastrata n. 31

Nodi: -107 -106

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
8	R	25.00	40.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
-0.70	11(e)	SLU	1	8	0.00	-31979.70	-887.94	-887.94	-276.48	-639.60	-213096.00	-6236.55	-4472.95	239.06	4.25	6.663
-0.70	11(e)	SLU	1	8	0.00	-31979.70	-887.94	-887.94	-276.48	-639.60	-213096.00	-6236.55	-4472.95	239.06	4.25	6.663
0.28	11(e)	SLU	1	8	98.00	-31661.20	809.39	809.39	267.34	633.22	-213096.00	6001.94	4587.21	60.47	4.28	6.731

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _r	Sic.
-0.70	1	SND	1	8	0.00	-11962.40	-1452.18		-1187.43		-11962.40	-3882.55	-3253.06	244.69	6.09	2.700
-0.70	1	SND	1	8	0.00	-11962.40	-1452.18		-1187.43		-11962.40	-3882.55	-3253.06	244.69	6.09	2.700
0.28	1(e)	SND	1	8	98.00	-32183.60	761.98	761.98	400.26	643.67	-179999.00	5571.19	4551.28	61.88	4.26	5.593

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
-0.70	0.28	ø6/12	2	2	11	SLU	0.40	554.92	2.50	7136.20	19305.80	0.25	1731.97	2.50	12091.90	20445.40	6.98
-0.70	0.28	ø6/12	2	2	5	SND	0.40	760.53	2.50	7136.20	19305.80	0.25	2270.30	2.50	12091.90	20445.40	5.33

-0.70	0.28	ø6/12	2	2	1	SND	0.40	1619.30	2.50	7136.20	19305.80	0.25	2060.55	2.50	12091.90	20445.40	4.41
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Pilastrata n. 32

Nodi: 115 21 -406 122

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
10	R	40.00	40.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
-0.83	9(e)	SLU	1	10	0.00	-102937.00	-70.45	-2058.74	-1834.25	-2058.74	-331227.00	-12057.60	-11690.10	227.81	2.79	3.218
-0.83	9(e)	SLU	1	10	0.00	-102937.00	-70.45	-2058.74	-1834.25	-2058.74	-331227.00	-12057.60	-11690.10	227.81	2.79	3.218
0.18	9(e)	SLU	1	10	101.00	-102412.00	40.47	2048.24	1857.35	2048.24	-331227.00	12052.80	11676.40	47.81	2.81	3.234
0.88	9(e)	SLU	2	10	0.00	-79763.90	-39.24	-1595.28	-2901.54	-2901.54	-331227.00	-7610.15	-14092.30	241.88	3.61	4.153
0.88	9(e)	SLU	2	10	0.00	-79763.90	-39.24	-1595.28	-2901.54	-2901.54	-331227.00	-7610.15	-14092.30	241.88	3.61	4.153
3.12	9(e)	SLU	2	10	224.00	-78599.10	70.79	1571.98	1536.51	1571.98	-331227.00	11353.40	11265.70	49.22	3.47	4.214
3.52	9(e)	SLU	3	10	0.00	-67384.20	-42.54	-1347.68	1603.01	1603.01	-331227.00	-9888.08	11681.90	126.56	3.90	4.915
3.52	9(e)	SLU	3	10	0.00	-67384.20	-42.54	-1347.68	1603.01	1603.01	-331227.00	-9888.08	11681.90	126.56	3.90	4.915
4.63	9(e)	SLU	3	10	111.00	-66807.00	-73.26	1336.14	3703.98	3703.98	-66807.00	5303.28	14621.70	70.31	4.44	3.950

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _r	Sic.
-0.83	5(e)	SND	1	10	0.00	-73307.60	808.73	1466.15	536.09	1466.15	-287999.00	9476.60	9371.48	49.22	3.65	3.929
-0.83	5(e)	SND	1	10	0.00	-73307.60	808.73	1466.15	536.09	1466.15	-287999.00	9476.60	9371.48	49.22	3.65	3.929
0.18	5(e)	SND	1	10	101.00	-72903.60	173.72	1458.07	1822.34	1822.34	-287999.00	8154.40	10340.80	54.84	3.71	3.950
0.88	5(e)	SND	2	10	0.00	-55616.50	674.36	1112.33	-3827.11	-3827.11	-55616.50	3356.04	-11613.60	285.47	5.40	3.033
0.88	5(e)	SND	2	10	0.00	-55616.50	674.36	1112.33	-3827.11	-3827.11	-55616.50	3356.04	-11613.60	285.47	5.40	3.033
3.12	5(e)	SND	2	10	224.00	-55018.20	712.16	1100.36	1838.99	1838.99	-287999.00	6065.04	10363.20	61.88	4.62	5.235
3.52	5(e)	SND	3	10	0.00	-46803.20	551.52	936.07	2185.40	2185.40	-46803.20	4468.74	10161.30	68.91	5.52	4.669
3.52	5(e)	SND	3	10	0.00	-46803.20	551.52	936.07	2185.40	2185.40	-46803.20	4468.74	10161.30	68.91	5.52	4.669
4.63	1	SND	3	10	111.00	-46424.20	-2139.41		2729.83		-46424.20	-6822.18	8978.80	123.75	4.86	3.251

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
-0.83	0.18	ø6/12	2	2	11	SLU	0.40	4389.72	2.50	12091.90	32712.70	0.40	118.15	2.50	12091.90	32712.70	2.75
-0.83	0.18	ø6/12	2	2	1	SND	0.40	3478.42	2.50	12091.90	32712.70	0.40	2236.02	2.50	12091.90	32712.70	3.48
-0.83	0.18	ø6/12	2	2	5	SND	0.40	4784.75	2.50	12091.90	32712.70	0.40	868.16	2.50	12091.90	32712.70	2.53
0.88	1.33	ø6/12	2	2	9	SLU	0.40	1981.27	2.50	12091.90	32712.70	0.40	49.12	2.50	12091.90	32712.70	6.10
0.88	1.33	ø6/12	2	2	1	SND	0.40	1755.79	2.50	12091.90	32712.70	0.40	1775.62	2.50	12091.90	32712.70	6.81
0.88	1.33	ø6/12	2	2	5	SND	0.40	2416.08	2.50	12091.90	32712.70	0.40	633.55	2.50	12091.90	32712.70	5.00
1.33	2.67	ø6/12	2	2	9	SLU	0.40	1981.27	2.50	12091.90	32712.70	0.40	49.12	2.50	12091.90	32712.70	6.10
1.33	2.67	ø6/12	2	2	1	SND	0.40	1755.79	2.50	12091.90	32712.70	0.40	1775.62	2.50	12091.90	32712.70	6.81
1.33	2.67	ø6/12	2	2	5	SND	0.40	2416.08	2.50	12091.90	32712.70	0.40	633.55	2.50	12091.90	32712.70	5.00
2.67	3.12	ø6/12	2	2	9	SLU	0.40	1981.27	2.50	12091.90	32712.70	0.40	49.12	2.50	12091.90	32712.70	6.10
2.67	3.12	ø6/12	2	2	1	SND	0.40	1755.79	2.50	12091.90	32712.70	0.40	1775.62	2.50	12091.90	32712.70	6.81
2.67	3.12	ø6/12	2	2	5	SND	0.40	2416.08	2.50	12091.90	32712.70	0.40	633.55	2.50	12091.90	32712.70	5.00
3.52	4.63	ø6/12	2	2	11	SLU	0.40	1832.16	2.50	12091.90	32712.70	0.40	28.23	2.50	12091.90	32712.70	6.60
3.52	4.63	ø6/12	2	2	9	SLU	0.40	1892.76	2.50	12091.90	32712.70	0.40	27.68	2.50	12091.90	32712.70	6.39
3.52	4.63	ø6/12	2	2	1	SND	0.40	1617.85	2.50	12091.90	32712.70	0.40	3013.35	2.50	12091.90	32712.70	4.01
3.52	4.63	ø6/12	2	2	5	SND	0.40	2092.20	2.50	12091.90	32712.70	0.40	1038.90	2.50	12091.90	32712.70	5.78

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
21	3	SND	55731.60	2416.08	-5838.83	1775.62	6044.88	8536.72	35.63	60.00	0.80	10.39
-406	1	SND	46868.20	2092.20	0.00	-3013.35	-6587.89	9826.54	30.53	60.00	1.24	10.39
122	1	SND	0.00	0.00	0.00	0.00	6444.00	6444.00	4.03	60.00	4.03	10.39

Pilastrata n. 33

Nodi: -105 -104

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
8	R	25.00	40.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _r	Sic.
-0.85	11(e)	SLU	1	8	0.00	-31791.10	812.72	812.72	-270.41	-635.82	-213096.00	6007.02	-4592.01	299.53	4.27	6.703
-0.85	11(e)	SLU	1	8	0.00	-31791.10	812.72	812.72	-270.41	-635.82	-213096.00	6007.02	-4592.01	299.53	4.27	6.703
0.28	11(e)	SLU	1	8	113.00	-31423.90	-829.85	-829.85	267.71	628.48	-213096.00	-5992.87	4578.30	119.53	4.29	6.781

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _r	Sic.
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-0.85	1	SND	1	8	0.00	-12418.30	1319.15		-1030.04		-12418.30	4057.94	-3160.12	298.13	5.88	3.073
-0.85	1	SND	1	8	0.00	-12418.30	1319.15		-1030.04		-12418.30	4057.94	-3160.12	298.13	5.88	3.073
0.28	1(e)	SND	1	8	113.00	-31452.00	-257.28	-629.04	418.34	629.04	-179999.00	-4885.07	4962.21	113.91	4.38	5.723

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
-0.85	0.28	ø6/12	2	2	11	SLU	0.40	476.21	2.50	7136.20	19305.80	0.25	1453.60	2.50	12091.90	20445.40	8.32
-0.85	0.28	ø6/12	2	2	5	SND	0.40	666.27	2.50	7136.20	19305.80	0.25	1982.95	2.50	12091.90	20445.40	6.10
-0.85	0.28	ø6/12	2	2	1	SND	0.40	1281.41	2.50	7136.20	19305.80	0.25	1759.94	2.50	12091.90	20445.40	5.57

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm²>	σ _{ncR} <daN/cm²>	σ _{nt} <daN/cm²>	σ _{ntR} <daN/cm²>
-104	5	SND	9079.49	1937.95	-1013.47	3726.41	9589.67	13348.10	18.64	60.00	9.56	10.39

Pilastrata n. 34

Nodi: 117 28 120

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm²>	Fctm <daN/cm²>	Fcd <daN/cm²>	Fcd (Tag) <daN/cm²>	Fctd <daN/cm²>	Fym <daN/cm²>	Fyd <daN/cm²>	Fyd (Tag) <daN/cm²>
10	R	40.00	40.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
-0.81	11(e)	SLU	1	10	0.00	-37782.60	436.61	755.65	-1302.87	-1302.87	-37782.60	6457.03	-11161.30	295.31	5.81	8.561
-0.81	11(e)	SLU	1	10	0.00	-37782.60	436.61	755.65	-1302.87	-1302.87	-37782.60	6457.03	-11161.30	295.31	5.81	8.561
0.38	11(e)	SLU	1	10	119.00	-37163.80	-598.34	-743.28	1554.01	1554.01	-37163.80	-5435.24	11578.40	111.09	6.18	7.425
0.88	9	SLU	2	10	0.00	-24320.20	-3660.91		-938.29		-24320.20	-11391.10	-3048.62	191.25	10.96	3.120
0.88	9	SLU	2	10	0.00	-24320.20	-3660.91		-938.29		-24320.20	-11391.10	-3048.62	191.25	10.96	3.120
4.63	9(e)	SLU	2	10	375.00	-22370.20	6152.95	6152.95	326.50	503.33	-22370.20	11323.50	832.64	2.11	18.72	1.839

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
-0.81	1	SND	1	10	0.00	-19163.30	2684.56		-2677.94		-19163.30	5768.57	-5931.51	306.56	6.71	2.182
-0.81	1	SND	1	10	0.00	-19163.30	2684.56		-2677.94		-19163.30	5768.57	-5931.51	306.56	6.71	2.182
0.38	5	SND	1	10	119.00	-18350.00	-570.83		1558.04		-18350.00	-2705.58	7320.17	105.47	8.65	4.703
0.88	1	SND	2	10	0.00	-7346.44	-3686.08		-1888.11		-7346.44	-6348.87	-3210.09	196.88	11.80	1.718
0.88	1	SND	2	10	0.00	-7346.44	-3686.08		-1888.11		-7346.44	-6348.87	-3210.09	196.88	11.80	1.718
4.63	1	SND	2	10	375.00	-5846.45	5312.65		1066.14		-5846.45	7307.02	1497.57	4.22	20.00	1.377

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
-0.81	0.38	ø6/12	2	2	9	SLU	0.40	2251.25	2.50	12091.90	32712.70	0.40	948.28	2.50	12091.90	32712.70	5.37
-0.81	0.38	ø6/12	2	2	11	SLU	0.40	2400.74	2.50	12091.90	32625.00	0.40	869.71	2.50	12091.90	32625.00	5.04
-0.81	0.38	ø6/12	2	2	1	SND	0.40	3329.05	2.50	12091.90	32432.60	0.40	2714.81	2.50	12091.90	32432.60	3.63
-0.81	0.38	ø6/12	2	2	5	SND	0.40	3386.27	2.50	12091.90	32480.50	0.40	1437.68	2.50	12091.90	32480.50	3.57
0.88	1.50	ø6/12	2	2	9	SLU	0.40	337.28	2.50	12091.90	30713.60	0.40	2617.03	2.50	12091.90	30713.60	4.62
0.88	1.50	ø6/12	2	2	11	SLU	0.40	355.43	2.50	12091.90	30573.00	0.40	2479.95	2.50	12091.90	30573.00	4.88
0.88	1.50	ø6/12	2	2	1	SND	0.40	786.34	2.50	12091.90	31088.20	0.40	2397.96	2.50	12091.90	31088.20	5.04
0.88	1.50	ø6/12	2	2	5	SND	0.40	941.72	2.50	12091.90	30412.40	0.40	2034.50	2.50	12091.90	30412.40	5.94
1.50	4.00	ø6/12	2	2	9	SLU	0.40	337.28	2.50	12091.90	30667.50	0.40	2617.03	2.50	12091.90	30667.50	4.62
1.50	4.00	ø6/12	2	2	11	SLU	0.40	355.43	2.50	12091.90	30526.90	0.40	2479.95	2.50	12091.90	30526.90	4.88
1.50	4.00	ø6/12	2	2	1	SND	0.40	786.34	2.50	12091.90	31052.70	0.40	2397.96	2.50	12091.90	31052.70	5.04
1.50	4.00	ø6/12	2	2	5	SND	0.40	941.72	2.50	12091.90	30376.90	0.40	2034.50	2.50	12091.90	30376.90	5.94
4.00	4.63	ø6/12	2	2	9	SLU	0.40	337.28	2.50	12091.90	30482.90	0.40	2617.03	2.50	12091.90	30482.90	4.62
4.00	4.63	ø6/12	2	2	11	SLU	0.40	355.43	2.50	12091.90	30342.30	0.40	2479.95	2.50	12091.90	30342.30	4.88
4.00	4.63	ø6/12	2	2	1	SND	0.40	786.34	2.50	12091.90	30910.70	0.40	2397.96	2.50	12091.90	30910.70	5.04
4.00	4.63	ø6/12	2	2	5	SND	0.40	941.72	2.50	12091.90	30234.90	0.40	2034.50	2.50	12091.90	30234.90	5.94

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm²>	σ _{ncR} <daN/cm²>	σ _{nt} <daN/cm²>	σ _{ntR} <daN/cm²>
28	1	SND	7346.44	941.72	-7255.87	2397.96	-7456.57	8090.61	7.85	60.00	3.26	10.39
	1	SND	26958.40	941.72	-752.35	2397.96	1248.41	3651.29	17.15	60.00	0.30	10.39
120	1	SND	0.00	0.00	-2343.38	0.00	-8034.96	8369.71	5.23	60.00	5.23	10.39

Pilastrata n. 40

Nodi: 27 118

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm²>	Fctm <daN/cm²>	Fcd <daN/cm²>	Fcd (Tag) <daN/cm²>	Fctd <daN/cm²>	Fym <daN/cm²>	Fyd <daN/cm²>	Fyd (Tag) <daN/cm²>
10	R	40.00	40.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
0.88	9	SLU	1	10	0.00	-17448.90	2250.95		1272.22		-17448.90	9749.43	5325.82	25.31	8.33	4.297
0.88	9	SLU	1	10	0.00	-17448.90	2250.95		1272.22		-17448.90	9749.43	5325.82	25.31	8.33	4.297
4.63	9	SLU	1	10	375.00	-15498.90	-3730.52		-811.33		-15498.90	-10155.80	-2120.70	185.63	16.97	2.718

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	M'ydy	M'ydz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
0.88	5	SND	1	10	0.00	-10839.90	1791.39		2686.68		-10839.90	3844.90	5823.48	66.09	8.30	2.161
0.88	5	SND	1	10	0.00	-10839.90	1791.39		2686.68		-10839.90	3844.90	5823.48	66.09	8.30	2.161
4.63	1	SND	1	10	375.00	-9167.51	-3217.04		-1733.30		-9167.51	-6459.62	-3432.62	199.69	10.62	2.002

Staffe - Verifiche armatura

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{,y}	Vsdu _{,y}	ctgθ _{,y}	VRsd _{,y}	VRcd _{,y}	bw _{,z}	Vsdu _{,z}	ctgθ _{,z}	VRsd _{,z}	VRcd _{,z}	Sic.T
<m>	<m>						<m>	<daN>		<daN>	<daN>	<m>	<daN>		<daN>	<daN>	
0.88	1.50	ø6/12	2	2	9	SLU	0.40	555.61	2.50	12091.90	29738.00	0.40	1595.06	2.50	12091.90	29738.00	7.58
0.88	1.50	ø6/12	2	2	11	SLU	0.40	569.22	2.50	12091.90	29634.90	0.40	1517.35	2.50	12091.90	29634.90	7.97
0.88	1.50	ø6/12	2	2	1	SND	0.40	1042.88	2.50	12091.90	29263.50	0.40	1419.89	2.50	12091.90	29263.50	8.52
0.88	1.50	ø6/12	2	2	5	SND	0.40	1258.47	2.50	12091.90	29239.00	0.40	1223.37	2.50	12091.90	29239.00	9.61
1.50	4.00	ø6/12	2	2	9	SLU	0.40	555.61	2.50	12091.90	29691.90	0.40	1595.06	2.50	12091.90	29691.90	7.58
1.50	4.00	ø6/12	2	2	11	SLU	0.40	569.22	2.50	12091.90	29588.70	0.40	1517.35	2.50	12091.90	29588.70	7.97
1.50	4.00	ø6/12	2	2	1	SND	0.40	1042.88	2.50	12091.90	29228.00	0.40	1419.89	2.50	12091.90	29228.00	8.52
1.50	4.00	ø6/12	2	2	5	SND	0.40	1258.47	2.50	12091.90	29203.60	0.40	1223.37	2.50	12091.90	29203.60	9.61
4.00	4.63	ø6/12	2	2	9	SLU	0.40	555.61	2.50	12091.90	29507.30	0.40	1595.06	2.50	12091.90	29507.30	7.58
4.00	4.63	ø6/12	2	2	11	SLU	0.40	569.22	2.50	12091.90	29404.10	0.40	1517.35	2.50	12091.90	29404.10	7.97
4.00	4.63	ø6/12	2	2	1	SND	0.40	1042.88	2.50	12091.90	29086.00	0.40	1419.89	2.50	12091.90	29086.00	8.52
4.00	4.63	ø6/12	2	2	5	SND	0.40	1258.47	2.50	12091.90	29061.60	0.40	1223.37	2.50	12091.90	29061.60	9.61

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{ncR}	σ _{nt}	σ _{ntR}
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >
118	5	SND	0.00	0.00	5021.69	0.00	1336.74	5196.56	3.25	60.00	3.25	10.39

Pilastrata n. 42

Nodi: 31 123

Sez.	Tipo	B	H	Cf	Fcm	Fctm	Fcd	Fcd (Tag)	Fctd	Fym	Fyd	Fyd (Tag)
		<cm>	<cm>	<cm>	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >
10	R	40.00	40.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	MRdy	MRdz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
0.88	11(e)	SLU	1	10	0.00	-36285.20	-42.97	-816.42	1771.73	1771.73	-36285.20	-5423.42	11482.60	111.09	6.25	6.510
0.88	11(e)	SLU	1	10	0.00	-36285.20	-42.97	-816.42	1771.73	1771.73	-36285.20	-5423.42	11482.60	111.09	6.25	6.510
4.63	9(e)	SLU	1	10	375.00	-36247.00	10.00	-815.56	-1188.57	-1188.57	-36247.00	-7316.38	-10536.30	240.47	5.66	8.899

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg	CC	TCC	El	Sez.	X	N	My	My ver.	Mz	Mz ver.	Nu	M'ydy	M'ydz	α	ε _y	Sic.
<m>					<cm>	<daN>	<daNm>	<daNm>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	<grad>		
0.88	5(e)	SND	1	10	0.00	-26680.40	205.70	600.31	2322.67	2322.67	-26680.40	2251.76	8566.75	77.34	8.22	3.692
0.88	5(e)	SND	1	10	0.00	-26680.40	205.70	600.31	2322.67	2322.67	-26680.40	2251.76	8566.75	77.34	8.22	3.692
4.63	5(e)	SND	1	10	375.00	-25180.40	245.73	566.56	-1103.73	-1103.73	-25180.40	3962.29	-7729.77	291.09	7.16	7.001

Staffe - Verifiche armatura

X0	X1	Staff.	Br _y	Br _z	CC	TCC	bw _{,y}	Vsdu _{,y}	ctgθ _{,y}	VRsd _{,y}	VRcd _{,y}	bw _{,z}	Vsdu _{,z}	ctgθ _{,z}	VRsd _{,z}	VRcd _{,z}	Sic.T
<m>	<m>						<m>	<daN>		<daN>	<daN>	<m>	<daN>		<daN>	<daN>	
0.88	1.50	ø6/12	2	2	11	SLU	0.40	774.22	2.50	12091.90	32412.40	0.40	14.21	2.50	12091.90	32412.40	15.62
0.88	1.50	ø6/12	2	2	1	SND	0.40	661.49	2.50	12091.90	31056.10	0.40	379.58	2.50	12091.90	31056.10	18.28
0.88	1.50	ø6/12	2	2	5	SND	0.40	912.30	2.50	12091.90	31059.60	0.40	136.66	2.50	12091.90	31059.60	13.25
1.50	4.00	ø6/12	2	2	11	SLU	0.40	774.22	2.50	12091.90	32366.30	0.40	14.21	2.50	12091.90	32366.30	15.62
1.50	4.00	ø6/12	2	2	1	SND	0.40	661.49	2.50	12091.90	31020.70	0.40	379.58	2.50	12091.90	31020.70	18.28
1.50	4.00	ø6/12	2	2	5	SND	0.40	912.30	2.50	12091.90	31024.10	0.40	136.66	2.50	12091.90	31024.10	13.25
4.00	4.63	ø6/12	2	2	11	SLU	0.40	774.22	2.50	12091.90	32181.70	0.40	14.21	2.50	12091.90	32181.70	15.62
4.00	4.63	ø6/12	2	2	1	SND	0.40	661.49	2.50	12091.90	30878.70	0.40	379.58	2.50	12091.90	30878.70	18.28
4.00	4.63	ø6/12	2	2	5	SND	0.40	912.30	2.50	12091.90	30882.10	0.40	136.66	2.50	12091.90	30882.10	13.25

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N	Vc _y	Vt _y	Vc _z	Vt _z	Vn	σ _{nc}	σ _{ncR}	σ _{nt}	σ _{ntR}
			<daN>	<daN>	<daN>	<daN>	<daN>	<daN>	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >	<daN/cm ² >
123	1	SND	0.00	0.00	0.00	0.00	-2392.23	2392.23	1.50	60.00	1.50	10.39

Pilastrata n. 44

Nodi: 29 121

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
10	R	40.00	40.00	2.90	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.88	9	SLU	1	10	0.00	-17411.50	-2309.82		1245.90		-17411.50	-9743.96	5325.70	154.69	8.34	4.231
0.88	9	SLU	1	10	0.00	-17411.50	-2309.82		1245.90		-17411.50	-9743.96	5325.70	154.69	8.34	4.231
4.63	9	SLU	1	10	375.00	-15461.50	3766.73		-799.27		-15461.50	10149.40	-2121.32	354.38	16.98	2.693

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.88	5	SND	1	10	0.00	-10794.30	-1825.94		2595.84		-10794.30	-4012.67	5705.24	115.31	8.17	2.198
0.88	5	SND	1	10	0.00	-10794.30	-1825.94		2595.84		-10794.30	-4012.67	5705.24	115.31	8.17	2.198
4.63	1	SND	1	10	375.00	-9176.21	3226.19		-1650.46		-9176.21	6496.07	-3451.50	340.31	10.62	2.030

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
0.88	1.50	ø6/12	2	2	9	SLU	0.40	545.38	2.50	12091.90	29732.70	0.40	1620.41	2.50	12091.90	29732.70	7.46
0.88	1.50	ø6/12	2	2	11	SLU	0.40	558.40	2.50	12091.90	29629.90	0.40	1542.62	2.50	12091.90	29629.90	7.84
0.88	1.50	ø6/12	2	2	1	SND	0.40	979.61	2.50	12091.90	29255.00	0.40	1423.49	2.50	12091.90	29255.00	8.49
0.88	1.50	ø6/12	2	2	5	SND	0.40	1225.53	2.50	12091.90	29238.20	0.40	1238.39	2.50	12091.90	29238.20	9.76
1.50	4.00	ø6/12	2	2	9	SLU	0.40	545.38	2.50	12091.90	29686.60	0.40	1620.42	2.50	12091.90	29686.60	7.46
1.50	4.00	ø6/12	2	2	11	SLU	0.40	558.40	2.50	12091.90	29583.80	0.40	1542.62	2.50	12091.90	29583.80	7.84
1.50	4.00	ø6/12	2	2	1	SND	0.40	979.61	2.50	12091.90	29219.50	0.40	1423.49	2.50	12091.90	29219.50	8.49
1.50	4.00	ø6/12	2	2	5	SND	0.40	1225.53	2.50	12091.90	29202.70	0.40	1238.39	2.50	12091.90	29202.70	9.76
4.00	4.63	ø6/12	2	2	9	SLU	0.40	545.38	2.50	12091.90	29502.00	0.40	1620.42	2.50	12091.90	29502.00	7.46
4.00	4.63	ø6/12	2	2	11	SLU	0.40	558.40	2.50	12091.90	29399.20	0.40	1542.62	2.50	12091.90	29399.20	7.84
4.00	4.63	ø6/12	2	2	1	SND	0.40	979.61	2.50	12091.90	29077.50	0.40	1423.49	2.50	12091.90	29077.50	8.49
4.00	4.63	ø6/12	2	2	5	SND	0.40	1225.53	2.50	12091.90	29060.70	0.40	1238.39	2.50	12091.90	29060.70	9.76

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
121	5	SND	0.00	0.00	4945.50	0.00	-374.63	4959.67	3.10	60.00	3.10	10.39

Pilastrata n. 45

Nodi: 13 64

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
3	R	25.00	25.00	2.70	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
0.00	11(e)	SLU	1	3	0.00	-22468.90	1513.24	1513.24	41.42	-449.38	-22468.90	3514.98	-1109.49	340.31	4.89	2.335
0.00	11(e)	SLU	1	3	0.00	-22468.90	1513.24	1513.24	41.42	-449.38	-22468.90	3514.98	-1109.49	340.31	4.89	2.335
2.82	11(e)	SLU	1	3	282.00	-21896.10	-1671.81	-1671.81	-20.39	437.92	-21896.10	-3524.69	974.34	163.13	5.27	2.116

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
0.00	1	SND	1	3	0.00	-14796.50	2174.90		549.43		-14796.50	2622.74	660.37	11.25	7.93	1.206
0.00	1	SND	1	3	0.00	-14796.50	2174.90		549.43		-14796.50	2622.74	660.37	11.25	7.93	1.206
2.82	1(e)	SND	1	3	282.00	-14355.90	-2152.08	-2152.08	221.03	287.12	-14355.90	-2737.54	336.85	175.78	10.68	1.270

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
0.00	0.47	ø6/12	2	2	11	SLU	0.25	21.92	2.50	7136.20	12066.20	0.25	1129.45	2.50	7136.20	12066.20	6.32
0.00	0.47	ø6/12	2	2	1	SND	0.25	280.67	2.50	7136.20	12066.20	0.25	1534.30	2.50	7136.20	12066.20	4.65
0.47	2.35	ø6/12	2	2	11	SLU	0.25	21.92	2.50	7136.20	12066.20	0.25	1129.45	2.50	7136.20	12066.20	6.32
0.47	2.35	ø6/12	2	2	1	SND	0.25	280.67	2.50	7136.20	12066.20	0.25	1534.29	2.50	7136.20	12066.20	4.65
2.35	2.82	ø6/12	2	2	11	SLU	0.25	21.92	2.50	7136.20	12066.20	0.25	1129.45	2.50	7136.20	12066.20	6.32
2.35	2.82	ø6/12	2	2	1	SND	0.25	280.67	2.50	7136.20	12066.20	0.25	1534.29	2.50	7136.20	12066.20	4.65

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
64	1	SND	7005.61	-446.26	0.00	-1790.73	7501.51	5728.19	16.35	60.00	5.14	10.39

Pilastrata n. 46

Nodi: -76 -41 -43 -62

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
3R		25.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
-1.63	11(e)	SLU	1	3	0.00	-78241.10	-901.65	-1564.82	-16.73	-1564.82	-134564.00	-2819.45	-2819.41	225.00	0.87	1.720
-1.63	11(e)	SLU	1	3	0.00	-78241.10	-901.65	-1564.82	-16.73	-1564.82	-134564.00	-2819.45	-2819.41	225.00	0.87	1.720
-0.70	11(e)	SLU	1	3	93.00	-78052.20	1001.43	1561.04	15.12	1561.04	-134564.00	2823.81	2823.77	45.00	0.88	1.724
3.52	9(e)	SLU	3	3	0.00	-21437.60	-609.00	-609.00	51.96	428.75	-21437.60	-3265.96	2237.65	143.44	3.95	5.316
3.52	9(e)	SLU	3	3	0.00	-21437.60	-609.00	-609.00	51.96	428.75	-21437.60	-3265.96	2237.65	143.44	3.95	5.316
6.34	9(e)	SLU	3	3	282.00	-20864.70	499.54	499.54	-41.97	-417.30	-20864.70	2996.02	-2491.93	319.22	3.97	5.987

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
-1.63	1(e)	SND	1	3	0.00	-54769.90	-1495.99	-1495.99	11.76	1095.40	-54769.90	-2801.57	2122.71	140.63	1.73	1.896
-1.63	1(e)	SND	1	3	0.00	-54769.90	-1495.99	-1495.99	11.76	1095.40	-54769.90	-2801.57	2122.71	140.63	1.73	1.896
-0.70	1(e)	SND	1	3	93.00	-54624.60	1278.69	1278.69	109.78	1092.49	-112499.00	2627.86	2285.89	42.19	1.74	2.059
3.52	1(e)	SND	3	3	0.00	-14568.90	-1973.53	-1973.53	165.99	291.38	-14568.90	-3182.66	467.72	174.38	9.43	1.613
3.52	1(e)	SND	3	3	0.00	-14568.90	-1973.53	-1973.53	165.99	291.38	-14568.90	-3182.66	467.72	174.38	9.43	1.613
6.34	1(e)	SND	3	3	282.00	-14128.30	1749.81	1749.81	96.61	282.57	-14128.30	3137.57	469.31	5.63	9.59	1.790

Dati per verifiche di stabilità

Xg <m>	El	l ₀	λ	λ*
0.00	2	3.52	48.77	37.59
2.82	2	3.52	48.77	37.59

Stato limite ultimo - Verifiche a flessione/pressoflessione - Controlli di stabilità

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy,s <daNm>	MRdz,s <daNm>	α <grad>	ε _y	Sic.
0.00	11(e)	SLU	2	3	0.00	-50053.80	-604.82	-1001.08	53.32	1001.08	-50053.80	-2471.83	2471.79	135.00	1.95	2.470
2.82	11(e)	SLU	2	3	282.00	-49481.00	616.76	989.62	-16.54	-989.62	-49481.00	2475.97	-2475.93	315.00	1.98	2.502

Stato limite elastico - Verifiche a flessione/pressoflessione - Controlli di stabilità

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy,s <daNm>	M'ydz,s <daNm>	α <grad>	ε _y	Sic.
0.00	1(e)	SND	2	3	0.00	-34780.30	-1796.27	-1796.27	242.04	695.61	-34780.30	-3333.34	1467.60	153.28	3.02	1.891
2.82	1(e)	SND	2	3	282.00	-34994.10	1670.43	1670.43	29.71	699.88	-34994.10	3266.83	1585.05	28.13	2.99	2.005

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _y <cm>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	bw _z <cm>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
-1.63	-0.70	ø6/12	2	2	11	SLU	0.25	34.25	2.50	7136.20	12066.20	0.25	2046.32	2.50	7136.20	12066.20	3.49
-1.63	-0.70	ø6/12	2	2	1	SND	0.25	136.36	2.50	7136.20	12066.20	0.25	2983.52	2.50	7136.20	12066.20	2.39
-1.63	-0.70	ø6/12	2	2	5	SND	0.25	165.44	2.50	7136.20	12066.20	0.25	2004.57	2.50	7136.20	12066.20	3.56
0.00	0.47	ø6/12	2	2	11	SLU	0.25	24.77	2.50	7136.20	12066.20	0.25	433.18	2.50	7136.20	12066.20	16.47
0.00	0.47	ø6/12	2	2	1	SND	0.25	95.23	2.50	7136.20	12066.20	0.25	1229.32	2.50	7136.20	12066.20	5.80
0.00	0.47	ø6/12	2	2	5	SND	0.25	105.81	2.50	7136.20	12066.20	0.25	642.30	2.50	7136.20	12066.20	11.11
0.47	2.35	ø6/12	2	2	11	SLU	0.25	24.77	2.50	7136.20	12066.20	0.25	433.18	2.50	7136.20	12066.20	16.47
0.47	2.35	ø6/12	2	2	1	SND	0.25	95.23	2.50	7136.20	12066.20	0.25	1229.32	2.50	7136.20	12066.20	5.80
0.47	2.35	ø6/12	2	2	5	SND	0.25	105.81	2.50	7136.20	12066.20	0.25	642.30	2.50	7136.20	12066.20	11.11
2.35	2.82	ø6/12	2	2	11	SLU	0.25	24.77	2.50	7136.20	12066.20	0.25	433.18	2.50	7136.20	12066.20	16.47
2.35	2.82	ø6/12	2	2	1	SND	0.25	95.23	2.50	7136.20	12066.20	0.25	1229.32	2.50	7136.20	12066.20	5.80
2.35	2.82	ø6/12	2	2	5	SND	0.25	105.81	2.50	7136.20	12066.20	0.25	642.30	2.50	7136.20	12066.20	11.11
3.52	3.99	ø6/12	2	2	9	SLU	0.25	33.31	2.50	7136.20	12066.20	0.25	393.10	2.50	7136.20	12066.20	18.15
3.52	3.99	ø6/12	2	2	11	SLU	0.25	33.50	2.50	7136.20	12066.20	0.25	390.26	2.50	7136.20	12066.20	18.29
3.52	3.99	ø6/12	2	2	1	SND	0.25	113.34	2.50	7136.20	12043.90	0.25	1320.33	2.50	7136.20	12043.90	5.40
3.52	3.99	ø6/12	2	2	5	SND	0.25	150.90	2.50	7136.20	12039.10	0.25	666.10	2.50	7136.20	12039.10	10.71
3.99	5.87	ø6/12	2	2	9	SLU	0.25	33.31	2.50	7136.20	12066.20	0.25	393.10	2.50	7136.20	12066.20	18.15
3.99	5.87	ø6/12	2	2	11	SLU	0.25	33.50	2.50	7136.20	12066.20	0.25	390.26	2.50	7136.20	12066.20	18.29
3.99	5.87	ø6/12	2	2	1	SND	0.25	113.34	2.50	7136.20	12034.10	0.25	1320.33	2.50	7136.20	12034.10	5.40
3.99	5.87	ø6/12	2	2	5	SND	0.25	150.90	2.50	7136.20	12029.30	0.25	666.10	2.50	7136.20	12029.30	10.71
5.87	6.34	ø6/12	2	2	9	SLU	0.25	33.31	2.50	7136.20	12066.20	0.25	393.10	2.50	7136.20	12066.20	18.15
5.87	6.34	ø6/12	2	2	11	SLU	0.25	33.50	2.50	7136.20	12066.20	0.25	390.26	2.50	7136.20	12066.20	18.29
5.87	6.34	ø6/12	2	2	1	SND	0.25	113.34	2.50	7136.20	11994.70	0.25	1320.33	2.50	7136.20	11994.70	5.40
5.87	6.34	ø6/12	2	2	5	SND	0.25	150.90	2.50	7136.20	11989.90	0.25	666.10	2.50	7136.20	11989.90	10.71

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
-41	1	SND	34780.30	-105.81	0.00	1229.32	-7384.25	6155.84	57.34	60.00	1.69	10.39

-43	1	SND	14834.30	-150.90	0.00	1320.33	4299.96	5622.32	26.76	60.00	3.02	10.39
-62	1	SND	0.00	0.00	0.00	0.00	-3602.76	3602.76	5.76	60.00	5.76	10.39

Pilastrata n. 47

Nodi: -78 -42 -44 -61

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
3R		25.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	α <grad>	ε _y	Sic.
-1.71	11(e)	SLU	1	3	0.00	-78488.10	874.37	1569.76	-22.19	-1569.76	-134564.00	2813.74	-2813.70	315.00	0.86	1.714
-1.71	11(e)	SLU	1	3	0.00	-78488.10	874.37	1569.76	-22.19	-1569.76	-134564.00	2813.74	-2813.70	315.00	0.86	1.714
-0.70	11(e)	SLU	1	3	101.00	-78283.00	-1042.73	-1565.66	28.74	1565.66	-134564.00	-2818.48	2818.44	135.00	0.87	1.719
3.52	9(e)	SLU	3	3	0.00	-21102.40	585.46	585.46	22.51	422.05	-21102.40	3171.34	2322.04	37.97	3.97	5.446
3.52	9(e)	SLU	3	3	0.00	-21102.40	585.46	585.46	22.51	422.05	-21102.40	3171.34	2322.04	37.97	3.97	5.446
6.34	9(e)	SLU	3	3	282.00	-20529.60	-481.07	-481.07	2.02	410.59	-20529.60	-2987.05	2484.41	139.22	4.00	6.143

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	α <grad>	ε _y	Sic.
-1.71	1(e)	SND	1	3	0.00	-54504.80	1344.44	1344.44	7.15	1090.10	-54504.80	2708.51	2203.08	40.78	1.74	2.017
-1.71	1(e)	SND	1	3	0.00	-54504.80	1344.44	1344.44	7.15	1090.10	-54504.80	2708.51	2203.08	40.78	1.74	2.017
-0.70	5(e)	SND	1	3	101.00	-54382.10	-513.53	-1087.64	160.52	1087.64	-112499.00	-2452.73	2452.69	135.00	1.75	2.069
3.52	1(e)	SND	3	3	0.00	-14436.50	1943.31	1943.31	128.72	288.73	-14436.50	3170.22	468.37	5.63	9.48	1.631
3.52	1(e)	SND	3	3	0.00	-14436.50	1943.31	1943.31	128.72	288.73	-14436.50	3170.22	468.37	5.63	9.48	1.631
6.34	1(e)	SND	3	3	282.00	-13995.90	-1725.54	-1725.54	113.34	279.92	-13995.90	-3126.19	470.09	174.38	9.63	1.808

Dati per verifiche di stabilità

Xg <m>	El	l ₀ <m>	λ	λ*
0.00	2	3.52	48.77	37.95
2.82	2	3.52	48.77	37.95

Stato limite ultimo - Verifiche a flessione/pressoflessione - Controlli di stabilità

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy,s <daNm>	MRdz,s <daNm>	α <grad>	ε _y	Sic.
0.00	11(e)	SLU	2	3	0.00	-49119.90	646.68	982.40	43.42	982.40	-49119.90	2478.02	2477.98	45.00	2.00	2.522
2.82	11(e)	SLU	2	3	282.00	-48547.10	-623.49	-970.94	-9.67	-970.94	-48547.10	-2482.34	-2482.31	225.00	2.03	2.557

Stato limite elastico - Verifiche a flessione/pressoflessione - Controlli di stabilità

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy,s <daNm>	M'ydz,s <daNm>	α <grad>	ε _y	Sic.
0.00	1(e)	SND	2	3	0.00	-34332.10	1811.10	1811.10	156.56	-686.64	-34332.10	3302.72	-1519.99	333.28	3.06	1.877
2.82	1(e)	SND	2	3	282.00	-34143.50	-1662.81	-1662.81	43.71	682.87	-34143.50	-3264.33	1570.48	151.88	3.05	2.016

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw, _y <m>	Vsdu, _y <daN>	ctgθ _y	VRsd, _y <daN>	VRcd, _y <daN>	bw, _z <m>	Vsdu, _z <daN>	ctgθ _z	VRsd, _z <daN>	VRcd, _z <daN>	Sic.T
-1.71	-0.70	ø6/12	2	2	1	SLU	0.25	50.43	2.50	7136.20	12066.20	0.25	1898.12	2.50	7136.20	12066.20	3.76
-1.71	-0.70	ø6/12	2	2	1	SND	0.25	112.68	2.50	7136.20	12066.20	0.25	2534.74	2.50	7136.20	12066.20	2.82
-1.71	-0.70	ø6/12	2	2	5	SND	0.25	173.07	2.50	7136.20	12066.20	0.25	1779.95	2.50	7136.20	12066.20	4.01
0.00	0.47	ø6/12	2	2	1	SLU	0.25	18.83	2.50	7136.20	12066.20	0.25	450.42	2.50	7136.20	12066.20	15.84
0.00	0.47	ø6/12	2	2	1	SND	0.25	67.79	2.50	7136.20	12066.20	0.25	1231.88	2.50	7136.20	12066.20	5.79
0.00	0.47	ø6/12	2	2	5	SND	0.25	97.68	2.50	7136.20	12066.20	0.25	655.77	2.50	7136.20	12066.20	10.88
0.47	2.35	ø6/12	2	2	1	SLU	0.25	18.83	2.50	7136.20	12066.20	0.25	450.42	2.50	7136.20	12066.20	15.84
0.47	2.35	ø6/12	2	2	1	SND	0.25	67.79	2.50	7136.20	12066.20	0.25	1231.88	2.50	7136.20	12066.20	5.79
0.47	2.35	ø6/12	2	2	5	SND	0.25	97.68	2.50	7136.20	12066.20	0.25	655.77	2.50	7136.20	12066.20	10.88
2.35	2.82	ø6/12	2	2	1	SLU	0.25	18.83	2.50	7136.20	12066.20	0.25	450.42	2.50	7136.20	12066.20	15.84
2.35	2.82	ø6/12	2	2	1	SND	0.25	67.79	2.50	7136.20	12066.20	0.25	1231.88	2.50	7136.20	12066.20	5.79
2.35	2.82	ø6/12	2	2	5	SND	0.25	97.68	2.50	7136.20	12066.20	0.25	655.77	2.50	7136.20	12066.20	10.88
3.52	3.99	ø6/12	2	2	9	SLU	0.25	7.26	2.50	7136.20	12066.20	0.25	378.20	2.50	7136.20	12066.20	18.87
3.52	3.99	ø6/12	2	2	1	SLU	0.25	9.86	2.50	7136.20	12066.20	0.25	374.72	2.50	7136.20	12066.20	19.04
3.52	3.99	ø6/12	2	2	1	SND	0.25	86.05	2.50	7136.20	12000.90	0.25	1301.01	2.50	7136.20	12000.90	5.49
3.52	3.99	ø6/12	2	2	5	SND	0.25	148.78	2.50	7136.20	12001.70	0.25	660.23	2.50	7136.20	12001.70	10.81
3.99	5.87	ø6/12	2	2	9	SLU	0.25	7.26	2.50	7136.20	12066.20	0.25	378.20	2.50	7136.20	12066.20	18.87
3.99	5.87	ø6/12	2	2	1	SLU	0.25	9.86	2.50	7136.20	12066.20	0.25	374.72	2.50	7136.20	12066.20	19.04
3.99	5.87	ø6/12	2	2	1	SND	0.25	86.05	2.50	7136.20	11991.10	0.25	1301.01	2.50	7136.20	11991.10	5.49
3.99	5.87	ø6/12	2	2	5	SND	0.25	148.78	2.50	7136.20	11991.80	0.25	660.23	2.50	7136.20	11991.80	10.81
5.87	6.34	ø6/12	2	2	9	SLU	0.25	7.26	2.50	7136.20	12066.20	0.25	378.20	2.50	7136.20	12066.20	18.87
5.87	6.34	ø6/12	2	2	1	SLU	0.25	9.86	2.50	7136.20	12066.20	0.25	374.72	2.50	7136.20	12066.20	19.04
5.87	6.34	ø6/12	2	2	1	SND	0.25	86.05	2.50	7136.20	11951.70	0.25	1301.01	2.50	7136.20	11951.70	5.49
5.87	6.34	ø6/12	2	2	5	SND	0.25	148.78	2.50	7136.20	11952.40	0.25	660.23	2.50	7136.20	11952.40	10.81

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{nc} R <daN/cmq>	σ _{nt} <daN/cmq>	σ _{nt} R <daN/cmq>
-42	1	SND	34584.20	-97.68	0.00	-1231.88	6819.18	5588.15	56.74	60.00	1.41	10.39
-44	1	SND	14436.50	-148.78	0.00	-1301.01	-4242.79	5545.80	26.11	60.00	3.02	10.39
-61	1	SND	0.00	0.00	0.00	0.00	3567.94	3567.94	5.71	60.00	5.71	10.39

Pilastrata n. 48

Nodi: 97 14 65 89

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	F _{cm} <daN/cmq>	F _{ctm} <daN/cmq>	F _{cd} <daN/cmq>	F _{cd} (Tag) <daN/cmq>	F _{ctd} <daN/cmq>	F _{ym} <daN/cmq>	F _{yd} <daN/cmq>	F _{yd} (Tag) <daN/cmq>
3	R	25.00	25.00	2.80	216.00	16.29	180.00	120.00	9.05	4300.00	3583.33	3115.94

Stato limite ultimo - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MR _{dy} <daNm>	MR _{dz} <daNm>	α <grad>	ε _y	Sic.
-1.78	11(e)	SLU	1	3	0.00	-36184.00	-1370.55	-1370.55	-141.53	-723.68	-36184.00	-3919.81	-2098.59	212.34	2.83	2.869
-1.78	11(e)	SLU	1	3	0.00	-36184.00	-1370.55	-1370.55	-141.53	-723.68	-36184.00	-3919.81	-2098.59	212.34	2.83	2.869
-0.70	11(e)	SLU	1	3	108.00	-35964.60	1315.07	1315.07	145.32	-719.29	-35964.60	3914.90	-2096.77	327.66	2.85	2.963
0.00	11(e)	SLU	2	3	0.00	-23013.50	-1481.37	-1481.37	-32.42	460.27	-23013.50	-4059.80	1189.55	160.31	4.60	2.727
2.82	11(e)	SLU	2	3	282.00	-22440.70	1236.45	1236.45	5.49	-448.81	-22440.70	3923.15	-1429.56	336.09	4.33	3.174
3.52	11(e)	SLU	3	3	0.00	-9626.29	-1586.16	-1586.16	-3.61	-192.53	-9626.29	-3177.99	-333.40	182.81	12.79	2.000
3.52	11(e)	SLU	3	3	0.00	-9626.29	-1586.16	-1586.16	-3.61	-192.53	-9626.29	-3177.99	-333.40	182.81	12.79	2.000
6.34	9(e)	SLU	3	3	282.00	-9627.11	1133.21	1133.21	77.61	-192.54	-9627.11	3166.93	-569.73	354.38	11.16	2.799

Stato limite elastico - Verifiche a flessione/pressoflessione

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'y _{dy} <daNm>	M'y _{dz} <daNm>	α <grad>	ε _y	Sic.
-1.78	1(e)	SND	1	3	0.00	-23805.20	-1367.41	-1367.41	-28.16	476.11	-23805.20	-3533.30	1164.12	157.50	4.24	2.569
-1.78	1(e)	SND	1	3	0.00	-23805.20	-1367.41	-1367.41	-28.16	476.11	-23805.20	-3533.30	1164.12	157.50	4.24	2.569
-0.70	1(e)	SND	1	3	108.00	-26981.90	1027.16	1027.16	195.13	-539.64	-26981.90	3234.61	-1629.24	329.06	3.56	3.121
0.00	1	SND	2	3	0.00	-15194.00	-2102.73		-507.01		-15194.00	-3101.29	-733.98	191.25	7.45	1.473
2.82	1	SND	2	3	282.00	-14753.30	1642.65		304.47		-14753.30	3137.37	619.06	8.44	8.38	1.914
3.52	1	SND	3	3	0.00	-6578.90	-2293.31		-629.87		-6578.90	-2395.74	-684.96	188.44	11.02	1.048
3.52	1	SND	3	3	0.00	-6578.90	-2293.31		-629.87		-6578.90	-2395.74	-684.96	188.44	11.02	1.048
6.34	1	SND	3	3	282.00	-6138.27	1724.16		558.93		-6138.27	2301.53	767.70	9.84	10.67	1.339

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	Vsdu _y <daN>	ctgθ _y	VRsd _y <daN>	VRcd _y <daN>	b _{w,z} <m>	Vsdu _z <daN>	ctgθ _z	VRsd _z <daN>	VRcd _z <daN>	Sic.T
-1.78	-0.70	ø6/12	2	2	11	SLU	0.25	265.61	2.50	7136.20	12066.20	0.25	2486.69	2.50	7136.20	12066.20	2.87
-1.78	-0.70	ø6/12	2	2	1	SND	0.25	327.45	2.50	7136.20	12066.20	0.25	2217.06	2.50	7136.20	12066.20	3.22
0.00	0.47	ø6/12	2	2	11	SLU	0.25	13.44	2.50	7136.20	12066.20	0.25	963.77	2.50	7136.20	12066.20	7.40
0.00	0.47	ø6/12	2	2	1	SND	0.25	287.69	2.50	7136.20	12066.20	0.25	1328.14	2.50	7136.20	12066.20	5.37
0.00	0.47	ø6/12	2	2	5	SND	0.25	353.01	2.50	7136.20	12066.20	0.25	916.65	2.50	7136.20	12066.20	7.79
0.47	2.35	ø6/12	2	2	11	SLU	0.25	13.44	2.50	7136.20	12066.20	0.25	963.77	2.50	7136.20	12066.20	7.40
0.47	2.35	ø6/12	2	2	1	SND	0.25	287.69	2.50	7136.20	12066.20	0.25	1328.14	2.50	7136.20	12066.20	5.37
0.47	2.35	ø6/12	2	2	5	SND	0.25	353.01	2.50	7136.20	12066.20	0.25	916.65	2.50	7136.20	12066.20	7.79
2.35	2.82	ø6/12	2	2	11	SLU	0.25	13.44	2.50	7136.20	12066.20	0.25	963.77	2.50	7136.20	12066.20	7.40
2.35	2.82	ø6/12	2	2	1	SND	0.25	287.69	2.50	7136.20	12066.20	0.25	1328.14	2.50	7136.20	12066.20	5.37
2.35	2.82	ø6/12	2	2	5	SND	0.25	353.01	2.50	7136.20	12066.20	0.25	916.65	2.50	7136.20	12066.20	7.79
3.52	3.99	ø6/12	2	2	11	SLU	0.25	21.55	2.50	7136.20	11345.70	0.25	956.30	2.50	7136.20	11345.70	7.46
3.52	3.99	ø6/12	2	2	9	SLU	0.25	32.77	2.50	7136.20	11422.60	0.25	951.50	2.50	7136.20	11422.60	7.50
3.52	3.99	ø6/12	2	2	1	SND	0.25	421.54	2.50	7136.20	11059.90	0.25	1424.63	2.50	7136.20	11059.90	5.01
3.52	3.99	ø6/12	2	2	5	SND	0.25	607.18	2.50	7136.20	11093.00	0.25	972.51	2.50	7136.20	11093.00	7.34
3.99	5.87	ø6/12	2	2	11	SLU	0.25	21.55	2.50	7136.20	11332.90	0.25	956.30	2.50	7136.20	11332.90	7.46
3.99	5.87	ø6/12	2	2	9	SLU	0.25	32.77	2.50	7136.20	11409.80	0.25	951.50	2.50	7136.20	11409.80	7.50
3.99	5.87	ø6/12	2	2	1	SND	0.25	421.54	2.50	7136.20	11050.00	0.25	1424.63	2.50	7136.20	11050.00	5.01
3.99	5.87	ø6/12	2	2	5	SND	0.25	607.18	2.50	7136.20	11083.20	0.25	972.51	2.50	7136.20	11083.20	7.34
5.87	6.34	ø6/12	2	2	11	SLU	0.25	21.55	2.50	7136.20	11281.70	0.25	956.30	2.50	7136.20	11281.70	7.46
5.87	6.34	ø6/12	2	2	9	SLU	0.25	32.77	2.50	7136.20	11358.60	0.25	951.50	2.50	7136.20	11358.60	7.50
5.87	6.34	ø6/12	2	2	1	SND	0.25	421.54	2.50	7136.20	11010.60	0.25	1424.63	2.50	7136.20	11010.60	5.01
5.87	6.34	ø6/12	2	2	5	SND	0.25	607.18	2.50	7136.20	11043.80	0.25	972.51	2.50	7136.20	11043.80	7.34

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{nc} R <daN/cmq>	σ _{nt} <daN/cmq>	σ _{nt} R <daN/cmq>
14	1	SND	15194.00	353.01	-1248.41	1328.14	-6098.19	4853.36	26.58	60.00	2.27	10.39
	5	SND	17882.00	353.01	1450.31	1328.14	-2567.84	2188.33	29.03	60.00	0.42	10.39
65	5	SND	7741.47	607.18	5282.20	1424.63	-925.38	5910.50	17.50	60.00	5.11	10.39
89	5	SND	0.00	0.00	-3612.72	0.00	-2188.72	4224.01	6.76	60.00	6.76	10.39

Pilastrata n. 80

Nodi: -7 -32

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	F _{cm} <daN/cmq>	F _{ctm} <daN/cmq>	F _{cd} <daN/cmq>	F _{cd} (Tag) <daN/cmq>	F _{ctd} <daN/cmq>	F _{ym} <daN/cmq>	F _{yd} <daN/cmq>	F _{yd} (Tag) <daN/cmq>
37	R	60.00	25.00	3.90	216.00	16.29	153.00	102.00	9.05	4500.00	3750.00	3260.87

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cmq>	E _f <daN/cmq>	ε _{fk}	f _{fd<i>dd</i>} _{f,y} <daN/cmq>	f _{fd<i>dd</i>} _{f,y,2} <daN/cmq>	f _{fd<i>dd</i>} _{f,z} <daN/cmq>	f _{fd<i>dd</i>} _{f,z,2} <daN/cmq>	ε _{fd}	n
0.00	2.72	L _y	1	3	60.0	53400.00	2560000.00	20.00	3635.45	7470.80			0.02	16.81
0.00	2.72	L _z	1	3	25.0	53400.00	2560000.00	20.00			3635.45	7470.80	0.02	16.81

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	esp.	Sic.	Δ%
0.00	11	SLU	1	37	0.00	-52199.10	3112.44		3002.43		-52201.30	14899.70	28461.70	1.07	3.585	44.58
0.00	11	SLU	1	37	0.00	-52199.10	3112.44		3002.43		-52201.30	14899.70	28461.70	1.07	3.585	44.58
2.72	9(e)	SLU	1	37	272.00	-50889.10	-928.67	-1017.78	-383.14	-1017.78	-289818.00	-14932.10	-28483.20	1.06	5.695	--

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	esp.	Sic.	Δ%
0.00	1	SND	1	37	0.00	-16993.50	2511.07		11494.60		-16997.00	10522.60	21177.90	1.00	1.280	52.27
0.00	1	SND	1	37	0.00	-16993.50	2511.07		11494.60		-16997.00	10522.60	21177.90	1.00	1.280	52.27
2.72	1	SND	1	37	272.00	-15973.50	-855.78		-4243.68		-15977.60	-10449.30	-21023.50	1.00	3.524	53.14

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{f,y} <m>	Vsdu _{f,y} <daN>	ctgθ _{f,y}	VRsd _{f,y} <daN>	VRcd _{f,y} <daN>	bw _{f,z} <m>	Vsdu _{f,z} <daN>	ctgθ _{f,z}	VRsd _{f,z} <daN>	VRcd _{f,z} <daN>	Sic.T
0.00	0.60	ø6/12	2	2	11	SLU	0.25	1258.99	2.50	19223.50	26400.30	0.60	1531.62	2.50	7122.37	23475.40	4.65
0.00	0.60	ø6/12	2	2	5	SND	0.25	2669.56	2.50	19223.50	26400.30	0.60	1513.74	2.50	7122.37	23475.40	4.71
0.00	0.60	ø6/12	2	2	1	SND	0.25	5785.01	2.50	19223.50	26400.30	0.60	1235.72	2.50	7122.37	23475.40	3.32
0.60	2.12	ø6/12	2	2	11	SLU	0.25	1258.99	2.50	19223.50	26400.30	0.60	1531.62	2.50	7122.37	23475.40	4.65
0.60	2.12	ø6/12	2	2	5	SND	0.25	2669.56	2.50	19223.50	26400.30	0.60	1513.74	2.50	7122.37	23475.40	4.71
0.60	2.12	ø6/12	2	2	1	SND	0.25	5785.01	2.50	19223.50	26400.30	0.60	1235.72	2.50	7122.37	23475.40	3.32
2.12	2.72	ø6/12	2	2	11	SLU	0.25	1258.99	2.50	19223.50	26400.30	0.60	1531.62	2.50	7122.37	23475.40	4.65
2.12	2.72	ø6/12	2	2	5	SND	0.25	2669.56	2.50	19223.50	26400.30	0.60	1513.74	2.50	7122.37	23475.40	4.71
2.12	2.72	ø6/12	2	2	1	SND	0.25	5785.01	2.50	19223.50	26400.30	0.60	1235.72	2.50	7122.37	23475.40	3.32

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cmq>	σ _{ncR} <daN/cmq>	σ _{nt} <daN/cmq>	σ _{ntR} <daN/cmq>
-32	1	SND	6898.59	-5029.55	-18800.60	-912.91	545.14	23833.00	18.35	51.00	13.75	9.58
	1	SND	21064.40	-5029.55	25934.30	-912.91	2023.09	20934.20	22.64	51.00	8.60	9.58

Pilastrata n. 90

Nodi: -8 -33

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cmq>	Fctm <daN/cmq>	Fcd <daN/cmq>	Fcd (Tag) <daN/cmq>	Fctd <daN/cmq>	Fym <daN/cmq>	Fyd <daN/cmq>	Fyd (Tag) <daN/cmq>
37	R	60.00	25.00	3.90	216.00	16.29	153.00	102.00	9.05	4500.00	3750.00	3260.87

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cmq>	E _f <daN/cmq>	ε _{fk}	f _{fd<i>dd</i>} _{f,y} <daN/cmq>	f _{fd<i>dd</i>} _{f,y,2} <daN/cmq>	f _{fd<i>dd</i>} _{f,z} <daN/cmq>	f _{fd<i>dd</i>} _{f,z,2} <daN/cmq>	ε _{fd}	n
0.00	2.72	L _y	1	5	60.0	53400.00	2560000.00	20.00	2816.01	5786.86			0.02	16.81
0.00	2.72	L _z	1	5	25.0	53400.00	2560000.00	20.00			2816.01	5786.86	0.02	16.81

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	esp.	Sic.	Δ%
0.00	11	SLU	1	37	0.00	-57556.30	4992.57		-2736.94		-57558.80	15389.80	-29133.80	1.08	2.680	48.43
0.00	11	SLU	1	37	0.00	-57556.30	4992.57		-2736.94		-57558.80	15389.80	-29133.80	1.08	2.680	48.43
2.72	11(e)	SLU	1	37	272.00	-56230.30	-4314.22	-4314.22	598.92	1124.61	-56233.40	-15454.20	29200.80	1.08	3.541	53.28

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	esp.	Sic.	Δ%
0.00	1	SND	1	37	0.00	-20264.80	3948.86		-12813.40		-20267.60	13099.40	-25500.60	1.00	1.244	78.52
0.00	1	SND	1	37	0.00	-20264.80	3948.86		-12813.40		-20267.60	13099.40	-25500.60	1.00	1.244	78.52
2.72	1	SND	1	37	272.00	-19244.80	-3419.94		7535.23		-19246.30	-13132.60	25534.30	1.00	1.800	81.79

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{f,y} <m>	Vsdu _{f,y} <daN>	ctgθ _{f,y}	VRsd _{f,y} <daN>	VRcd _{f,y} <daN>	bw _{f,z} <m>	Vsdu _{f,z} <daN>	ctgθ _{f,z}	VRsd _{f,z} <daN>	VRcd _{f,z} <daN>	Sic.T
0.00	0.60	ø6/12	2	2	11	SLU	0.25	1226.42	2.50	19223.50	26400.30	0.60	3421.61	2.50	7122.37	23475.40	2.08
0.00	0.60	ø6/12	2	2	5	SND	0.25	3280.56	2.50	19223.50	26400.30	0.60	3281.06	2.50	7122.37	23475.40	2.17
0.00	0.60	ø6/12	2	2	1	SND	0.25	7480.03	2.50	19223.50	26400.30	0.60	2709.03	2.50	7122.37	23475.40	2.57
0.60	2.12	ø6/12	2	2	11	SLU	0.25	1226.42	2.50	19223.50	26400.30	0.60	3421.61	2.50	7122.37	23475.40	2.08
0.60	2.12	ø6/12	2	2	5	SND	0.25	3280.56	2.50	19223.50	26400.30	0.60	3281.06	2.50	7122.37	23475.40	2.17
0.60	2.12	ø6/12	2	2	1	SND	0.25	7480.03	2.50	19223.50	26400.30	0.60	2709.03	2.50	7122.37	23475.40	2.57
2.12	2.72	ø6/12	2	2	11	SLU	0.25	1226.42	2.50	19223.50	26400.30	0.60	3421.61	2.50	7122.37	23475.40	2.08
2.12	2.72	ø6/12	2	2	5	SND	0.25	3280.56	2.50	19223.50	26400.30	0.60	3281.06	2.50	7122.37	23475.40	2.17

2.12	2.72	ø6/12	2	2	1	SND	0.25	7480.03	2.50	19223.50	26400.30	0.60	2709.03	2.50	7122.37	23475.40	2.57
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Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm ² >	σ _{ncR} <daN/cm ² >	σ _{nt} <daN/cm ² >	σ _{ntR} <daN/cm ² >
-33	1	SND	14532.80	4585.54	-28980.50	-2596.66	6852.44	24763.40	22.05	51.00	12.36	9.58
	1	SND	25172.40	4585.54	21498.40	-2596.66	12616.30	27942.20	28.82	51.00	12.04	9.58

Pilastrata n. 100

Nodi: -9 -34

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm ² >	Fctm <daN/cm ² >	Fcd <daN/cm ² >	Fcd (Tag) <daN/cm ² >	Fctd <daN/cm ² >	Fym <daN/cm ² >	Fyd <daN/cm ² >	Fyd (Tag) <daN/cm ² >
37	R	60.00	25.00	3.90	216.00	16.29	153.00	102.00	9.05	4500.00	3750.00	3260.87

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cm ² >	E _f <daN/cm ² >	ε _{fk}	f _{added y} <daN/cm ² >	f _{added y,2} <daN/cm ² >	f _{added z} <daN/cm ² >	f _{added z,2} <daN/cm ² >	ε _{fd}	n
0.00	2.72	L _y	1	5	60.0	53400.00	2560000.00	20.00	2816.01	5786.86			0.02	16.81
0.00	2.72	L _z	1	5	25.0	53400.00	2560000.00	20.00			2816.01	5786.86	0.02	16.81

Dati per verifiche di stabilità

Xg <m>	El	l ₀ <m>	λ	λ*
0.00	1	3.52	48.77	47.44
0.00	1	3.52	48.77	47.44
2.72	1	3.52	48.77	47.44

Stato limite ultimo - Verifiche a flessione/pressoflessione - Controlli di stabilità con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MR _{dy,s} <daNm>	MR _{dy} <daNm>	MR _{dz,s} <daNm>	MR _{dz} <daNm>	esp.	Sic.	Δ%
0.00	1	SLU	1	37	0.00	-62347.00	5177.08		2745.33		-62355.80	13323.60	15158.00	28113.70	28851.40	1.10	2.309	53.31
0.00	1	SLU	1	37	0.00	-62347.00	5177.08		2745.33		-62355.80	13323.60	15158.00	28113.70	28851.40	1.10	2.309	53.31
2.72	1	(e) SLU	1	37	272.00	-61021.00	-3682.17	-3682.17	-599.05	-1220.42	-61029.50	-13407.80	-15221.70	-28180.40	-28929.90	1.09	3.620	57.18

Stato limite elastico - Verifiche a flessione/pressoflessione - Controlli di stabilità con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'y _{dy} <daNm>	M'y _{dz} <daNm>	M'y _{dy,s} <daNm>	M'y _{dz,s} <daNm>	esp.	Sic.	Δ%
0.00	1	SND	1	37	0.00	-22690.30	3934.57		11892.10		-22686.50	13019.90	25420.30	13019.90	25420.30	1.00	1.299	77.20
0.00	1	SND	1	37	0.00	-22690.30	3934.57		11892.10		-22686.50	13019.90	25420.30	13019.90	25420.30	1.00	1.299	77.20
2.72	1	SND	1	37	272.00	-21670.30	-2807.76		-5486.29		-21677.50	-13053.40	-25454.00	-13053.40	-25454.00	1.00	2.322	81.34

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	Vs _{du,y} <daN>	ctgθ _y	VR _{sd,y} <daN>	VR _{cd,y} <daN>	b _{w,z} <m>	Vs _{du,z} <daN>	ctgθ _z	VR _{sd,z} <daN>	VR _{cd,z} <daN>	Sic.T
0.00	0.60	ø6/12	2	2	11	SLU	0.25	1229.55	2.50	19223.50	26400.30	0.60	3257.08	2.50	7122.37	23475.40	2.19
0.00	0.60	ø6/12	2	2	5	SND	0.25	2901.94	2.50	19223.50	26400.30	0.60	2871.34	2.50	7122.37	23475.40	2.48
0.00	0.60	ø6/12	2	2	1	SND	0.25	6387.95	2.50	19223.50	26400.30	0.60	2478.52	2.50	7122.37	23475.40	2.87
0.60	2.12	ø6/12	2	2	11	SLU	0.25	1229.55	2.50	19223.50	26400.30	0.60	3257.08	2.50	7122.37	23475.40	2.19
0.60	2.12	ø6/12	2	2	5	SND	0.25	2901.94	2.50	19223.50	26400.30	0.60	2871.34	2.50	7122.37	23475.40	2.48
0.60	2.12	ø6/12	2	2	1	SND	0.25	6387.95	2.50	19223.50	26400.30	0.60	2478.52	2.50	7122.37	23475.40	2.87
2.12	2.72	ø6/12	2	2	11	SLU	0.25	1229.55	2.50	19223.50	26400.30	0.60	3257.08	2.50	7122.37	23475.40	2.19
2.12	2.72	ø6/12	2	2	5	SND	0.25	2901.94	2.50	19223.50	26400.30	0.60	2871.34	2.50	7122.37	23475.40	2.48
2.12	2.72	ø6/12	2	2	1	SND	0.25	6387.95	2.50	19223.50	26400.30	0.60	2478.52	2.50	7122.37	23475.40	2.87

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm ² >	σ _{ncR} <daN/cm ² >	σ _{nt} <daN/cm ² >	σ _{ntR} <daN/cm ² >
-34	1	SND	12985.30	-5183.60	-19432.60	-2913.80	8217.35	25181.10	21.66	51.00	13.01	9.58
	1	SND	27415.40	-5183.60	27626.40	-2913.80	11645.70	24081.60	27.61	51.00	9.33	9.58

Pilastrata n. 330

Nodi: -104 -111

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm ² >	Fctm <daN/cm ² >	Fcd <daN/cm ² >	Fcd (Tag) <daN/cm ² >	Fctd <daN/cm ² >	Fym <daN/cm ² >	Fyd <daN/cm ² >	Fyd (Tag) <daN/cm ² >
38	R	25.00	40.00	3.80	216.00	16.29	153.00	102.00	9.05	4500.00	3750.00	3260.87

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cm ² >	E _f <daN/cm ² >	ε _{fk}	f _{added y} <daN/cm ² >	f _{added y,2} <daN/cm ² >	f _{added z} <daN/cm ² >	f _{added z,2} <daN/cm ² >	ε _{fd}	n
0.88	3.12	L _y	1	3	25.0	53400.00	2560000.00	20.00	3635.45	7470.80			0.02	16.81
0.88	3.12	L _z	1	3	40.0	53400.00	2560000.00	20.00			3635.45	7470.80	0.02	16.81

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MR _{dy} <daNm>	MR _{dz} <daNm>	esp.	Sic.	Δ%
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0.88	11	SLU	1	38	0.00	-6254.61	285.77		-1431.08		-6257.57	13226.00	-9981.92	1.00	6.062	146.41
0.88	11	SLU	1	38	0.00	-6254.61	285.77		-1431.08		-6257.57	13226.00	-9981.92	1.00	6.062	146.41
3.12	9	SLU	1	38	224.00	-5751.76	414.90		2032.63		-5755.18	13232.00	9993.36	1.00	4.260	149.26

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	esp.	Sic.	Δ%
0.88	5	SND	1	38	0.00	-284.54	4467.12		-1391.02		-287.25	8615.80	-6055.92	1.00	1.337	91.90
0.88	5	SND	1	38	0.00	-284.54	4467.12		-1391.02		-287.25	8615.80	-6055.92	1.00	1.337	91.90
3.12	5	SND	1	38	224.00	275.46	4079.32		1734.98		279.52	8551.70	6012.27	1.00	1.306	93.46

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
0.88	1.33	ø6/12	2	2	9	SLU	0.40	1555.05	2.50	7122.37	13870.40	0.25	106.84	2.50	12308.60	14981.40	4.58
0.88	1.33	ø6/12	2	2	5	SND	0.40	1391.95	2.50	7122.37	14202.80	0.25	3726.41	2.50	12308.60	15340.40	3.30
0.88	1.33	ø6/12	2	2	3	SND	0.40	1905.64	2.50	7122.37	13732.00	0.25	763.44	2.50	12308.60	14831.90	3.74
0.88	1.33	ø6/12	2	2	1	SND	0.40	1937.95	2.50	7122.37	14026.40	0.25	2652.52	2.50	12308.60	15149.90	3.68
1.33	2.67	ø6/12	2	2	9	SLU	0.40	1555.05	2.50	7122.37	13851.70	0.25	106.84	2.50	12308.60	14961.20	4.58
1.33	2.67	ø6/12	2	2	5	SND	0.40	1391.95	2.50	7122.37	14188.40	0.25	3726.41	2.50	12308.60	15324.90	3.30
1.33	2.67	ø6/12	2	2	3	SND	0.40	1905.64	2.50	7122.37	13717.60	0.25	763.45	2.50	12308.60	14816.40	3.74
1.33	2.67	ø6/12	2	2	1	SND	0.40	1937.95	2.50	7122.37	14012.00	0.25	2652.52	2.50	12308.60	15134.30	3.68
2.67	3.12	ø6/12	2	2	9	SLU	0.40	1555.05	2.50	7122.37	13796.00	0.25	106.84	2.50	12308.60	14901.00	4.58
2.67	3.12	ø6/12	2	2	5	SND	0.40	1391.95	2.50	7122.37	14145.60	0.25	3726.41	2.50	12308.60	15278.60	3.30
2.67	3.12	ø6/12	2	2	3	SND	0.40	1905.64	2.50	7122.37	13674.80	0.25	763.45	2.50	12308.60	14770.10	3.74
2.67	3.12	ø6/12	2	2	1	SND	0.40	1937.95	2.50	7122.37	13969.20	0.25	2652.52	2.50	12308.60	15088.10	3.68

Pilastrata n. 1100

Nodi: 36 63

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
37	R	60.00	25.00	3.90	216.00	16.29	153.00	102.00	9.05	4500.00	3750.00	3260.87

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cm>	E _f <daN/cm>	ε _{fk}	f _{fd} ,y <daN/cm>	f _{fd} ,y,2 <daN/cm>	f _{fd} ,z <daN/cm>	f _{fd} ,z,2 <daN/cm>	ε _{fd}	n
0.00	2.72	L _y	1	5	60.0	53400.00	2560000.00	20.00	2816.01	5786.86			0.02	16.81
0.00	2.72	L _z	1	5	25.0	53400.00	2560000.00	20.00			2816.01	5786.86	0.02	16.81

Dati per verifiche di stabilità

Xg <m>	El	l ₀ <m>	λ	λ*
0.00	1	3.52	48.77	47.64
0.00	1	3.52	48.77	47.64
2.72	1	3.52	48.77	47.64

Stato limite ultimo - Verifiche a flessione/pressoflessione - Controlli di stabilità con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy,s <daNm>	MRdy <daNm>	MRdz,s <daNm>	MRdz <daNm>	esp.	Sic.	Δ%
0.00	11	SLU	1	37	0.00	-59938.20	5185.71		-2834.16		-59943.70	13476.30	15273.60	-28234.50	-28993.70	1.09	2.298	55.82
0.00	11	SLU	1	37	0.00	-59938.20	5185.71		-2834.16		-59943.70	13476.30	15273.60	-28234.50	-28993.70	1.09	2.298	55.82
2.72	11(e)	SLU	1	37	272.00	-58612.20	-4577.67	-4577.67	547.46	1172.24	-58605.50	-13560.60	-15338.30	28300.60	29071.70	1.09	2.947	61.05

Stato limite elastico - Verifiche a flessione/pressoflessione - Controlli di stabilità con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	M'ydy,s <daNm>	M'ydz,s <daNm>	esp.	Sic.	Δ%
0.00	1	SND	1	37	0.00	-19559.40	4096.19		-13054.10		-19554.00	13122.30	-25523.80	13122.30	-25523.80	1.00	1.214	83.97
0.00	1	SND	1	37	0.00	-19559.40	4096.19		-13054.10		-19554.00	13122.30	-25523.80	13122.30	-25523.80	1.00	1.214	83.97
2.72	1	SND	1	37	272.00	-18539.40	-3618.97		7627.90		-18549.00	-13155.50	25557.50	-13155.50	25557.50	1.00	1.744	88.12

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	bw _{,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	bw _{,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
0.00	0.60	ø6/12	2	2	11	SLU	0.25	1243.24	2.50	19223.50	26400.30	0.60	3589.48	2.50	7122.37	23475.40	1.98
0.00	0.60	ø6/12	2	2	5	SND	0.25	3424.79	2.50	19223.50	26400.30	0.60	3349.62	2.50	7122.37	23475.40	2.13
0.00	0.60	ø6/12	2	2	1	SND	0.25	7601.33	2.50	19223.50	26400.30	0.60	2836.36	2.50	7122.37	23475.40	2.51
0.60	2.12	ø6/12	2	2	11	SLU	0.25	1243.24	2.50	19223.50	26400.30	0.60	3589.48	2.50	7122.37	23475.40	1.98
0.60	2.12	ø6/12	2	2	5	SND	0.25	3424.79	2.50	19223.50	26400.30	0.60	3349.62	2.50	7122.37	23475.40	2.13
0.60	2.12	ø6/12	2	2	1	SND	0.25	7601.33	2.50	19223.50	26400.30	0.60	2836.36	2.50	7122.37	23475.40	2.51
2.12	2.72	ø6/12	2	2	11	SLU	0.25	1243.24	2.50	19223.50	26400.30	0.60	3589.48	2.50	7122.37	23475.40	1.98
2.12	2.72	ø6/12	2	2	5	SND	0.25	3424.79	2.50	19223.50	26400.30	0.60	3349.62	2.50	7122.37	23475.40	2.13
2.12	2.72	ø6/12	2	2	1	SND	0.25	7601.32	2.50	19223.50	26400.30	0.60	2836.36	2.50	7122.37	23475.40	2.51

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
63	1	SND	26773.00	4644.33	22407.30	-2739.56	11123.50	28321.00	29.81	51.00	11.96	9.58

Pilastrata n. 1200

Nodi: 5 40

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
37	R	60.00	25.00	3.90	216.00	16.29	153.00	102.00	9.05	4500.00	3750.00	3260.87

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cm>	E _f <daN/cm>	ε _{fk}	f _{fd} y <daN/cm>	f _{fd} y,2 <daN/cm>	f _{fd} z <daN/cm>	f _{fd} z,2 <daN/cm>	ε _{fd}	n
0.00	2.72	L _y	2	5	30.0	53400.00	2560000.00	20.00	2816.01	5786.86			0.02	16.81
0.00	2.72	L _z	1	5	25.0	53400.00	2560000.00	20.00			2816.01	5786.86	0.02	16.81

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	esp.	Sic.	Δ%
0.00	11	SLU	1	37	0.00	-57197.80	4554.54		4156.02		-57200.10	15407.00	35558.60	1.08	2.732	55.10
0.00	11	SLU	1	37	0.00	-57197.80	4554.54		4156.02		-57200.10	15407.00	35558.60	1.08	2.732	55.10
2.72	11(e)	SLU	1	37	272.00	-55871.80	-3084.94	-3084.94	-564.02	-1117.44	-55872.00	-15471.50	-35661.30	1.08	5.000	56.94

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	esp.	Sic.	Δ%
0.00	1	SND	1	37	0.00	-26809.40	4330.39		9093.95		-26812.30	12885.80	27085.50	1.01	1.511	71.85
0.00	1	SND	1	37	0.00	-26809.40	4330.39		9093.95		-26812.30	12885.80	27085.50	1.01	1.511	71.85
2.72	1	SND	1	37	272.00	-25789.40	-2920.35		-1744.00		-25790.40	-12918.20	-26940.80	1.01	3.502	72.20

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	V _{sdu,y} <daN>	ctgθ _y	V _{Rsd,y} <daN>	V _{Rcd,y} <daN>	b _{w,z} <m>	V _{sdu,z} <daN>	ctgθ _z	V _{Rsd,z} <daN>	V _{Rcd,z} <daN>	Sic.T
0.00	0.60	ø6/12	2	2	11	SLU	0.25	1735.31	2.50	19223.50	26400.30	0.60	2808.63	2.50	7122.37	23475.40	2.54
0.00	0.60	ø6/12	2	2	5	SND	0.25	2199.06	2.50	19223.50	26400.30	0.60	2801.38	2.50	7122.37	23475.40	2.54
0.00	0.60	ø6/12	2	2	1	SND	0.25	3957.93	2.50	19223.50	26400.30	0.60	2665.68	2.50	7122.37	23475.40	2.67
0.60	2.12	ø6/12	2	2	11	SLU	0.25	1735.31	2.50	19223.50	26400.30	0.60	2808.63	2.50	7122.37	23475.40	2.54
0.60	2.12	ø6/12	2	2	5	SND	0.25	2199.06	2.50	19223.50	26400.30	0.60	2801.38	2.50	7122.37	23475.40	2.54
0.60	2.12	ø6/12	2	2	1	SND	0.25	3957.93	2.50	19223.50	26400.30	0.60	2665.68	2.50	7122.37	23475.40	2.67
2.12	2.72	ø6/12	2	2	11	SLU	0.25	1735.31	2.50	19223.50	26400.30	0.60	2808.63	2.50	7122.37	23475.40	2.54
2.12	2.72	ø6/12	2	2	5	SND	0.25	2199.06	2.50	19223.50	26400.30	0.60	2801.38	2.50	7122.37	23475.40	2.54
2.12	2.72	ø6/12	2	2	1	SND	0.25	3957.93	2.50	19223.50	26400.30	0.60	2665.68	2.50	7122.37	23475.40	2.67

Verifiche nodi trave-pilastr

Nodo	CC	TCC	N <daN>	V _{c_y} <daN>	V _{t_y} <daN>	V _{c_z} <daN>	V _{t_z} <daN>	V _n <daN>	σ _{nc} <daN/cm>	σ _{ncR} <daN/cm>	σ _{nt} <daN/cm>	σ _{ntR} <daN/cm>
40	1	SND	11419.30	-3578.81	-5649.58	-2607.45	8110.47	10744.60	11.92	51.00	4.31	9.58
	1	SND	25528.40	-3578.81	14323.80	-2607.45	12139.30	14363.50	21.32	51.00	4.30	9.58

Pilastrata n. 3100

Nodi: -106 -112

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
38	R	25.00	40.00	3.80	216.00	16.29	153.00	102.00	9.05	4500.00	3750.00	3260.87

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cm>	E _f <daN/cm>	ε _{fk}	f _{fd} y <daN/cm>	f _{fd} y,2 <daN/cm>	f _{fd} z <daN/cm>	f _{fd} z,2 <daN/cm>	ε _{fd}	n
0.88	3.12	L _y	1	4	25.0	53400.00	2560000.00	20.00	3148.39	6469.90			0.02	16.81
0.88	3.12	L _z	1	4	40.0	53400.00	2560000.00	20.00			3148.39	6469.90	0.02	16.81

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	esp.	Sic.	Δ%
0.88	11	SLU	1	38	0.00	-6383.24	-281.59		-1497.17		-6386.46	-13727.70	-10439.30	1.00	6.100	157.13
0.88	11	SLU	1	38	0.00	-6383.24	-281.59		-1497.17		-6386.46	-13727.70	-10439.30	1.00	6.100	157.13
3.12	9	SLU	1	38	224.00	-5883.65	-430.39		2118.22		-5885.88	-13737.20	10452.60	1.00	4.274	159.74

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	esp.	Sic.	Δ%
0.88	1	SND	1	38	0.00	-612.99	-4454.69		-2134.66		-613.18	-9905.98	-6973.33	1.00	1.323	118.24
0.88	1	SND	1	38	0.00	-612.99	-4454.69		-2134.66		-613.18	-9905.98	-6973.33	1.00	1.323	118.24
3.12	1	SND	1	38	224.00	-52.99	-3947.31		2314.23		-57.40	-9848.15	6932.96	1.00	1.361	120.41

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	b _{w,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
0.88	1.33	ø6/12	2	2	9	SLU	0.40	1623.79	2.50	7122.37	13887.20	0.25	116.17	2.50	12308.60	14999.60	4.39
0.88	1.33	ø6/12	2	2	5	SND	0.40	1457.20	2.50	7122.37	14244.10	0.25	4004.55	2.50	12308.60	15385.00	3.07
0.88	1.33	ø6/12	2	2	1	SND	0.40	1985.30	2.50	7122.37	14185.30	0.25	3665.78	2.50	12308.60	15321.50	3.36
1.33	2.67	ø6/12	2	2	9	SLU	0.40	1623.79	2.50	7122.37	13868.60	0.25	116.17	2.50	12308.60	14979.40	4.39
1.33	2.67	ø6/12	2	2	5	SND	0.40	1457.20	2.50	7122.37	14229.70	0.25	4004.55	2.50	12308.60	15369.40	3.07
1.33	2.67	ø6/12	2	2	1	SND	0.40	1985.30	2.50	7122.37	14170.90	0.25	3665.78	2.50	12308.60	15305.90	3.36
2.67	3.12	ø6/12	2	2	9	SLU	0.40	1623.79	2.50	7122.37	13812.90	0.25	116.17	2.50	12308.60	14919.20	4.39
2.67	3.12	ø6/12	2	2	5	SND	0.40	1457.19	2.50	7122.37	14186.80	0.25	4004.55	2.50	12308.60	15323.20	3.07
2.67	3.12	ø6/12	2	2	1	SND	0.40	1985.30	2.50	7122.37	14128.00	0.25	3665.78	2.50	12308.60	15259.70	3.36

Pilastrata n. 4500

Nodi: 64 90

Sez.	Tipo	B <cm>	H <cm>	Cf <cm>	Fcm <daN/cm>	Fctm <daN/cm>	Fcd <daN/cm>	Fcd (Tag) <daN/cm>	Fctd <daN/cm>	Fym <daN/cm>	Fyd <daN/cm>	Fyd (Tag) <daN/cm>
39	R	25.00	25.00	3.80	216.00	16.29	153.00	102.00	9.05	4500.00	3750.00	3260.87

Caratteristiche rinforzi FRP longitudinali utilizzati

X0 <m>	X1 <m>	TRL	NS	ST	Lst <cm>	f _{fk} <daN/cm>	E _f <daN/cm>	ε _{fk}	f _{fd} _{,y} <daN/cm>	f _{fd} _{,y,2} <daN/cm>	f _{fd} _{,z} <daN/cm>	f _{fd} _{,z,2} <daN/cm>	ε _{fd}	n
3.52	6.34	L _y	1	2	25.0	53400.00	2560000.00	20.00	4452.50	9149.82			0.02	16.81
3.52	6.34	L _z	1	2	25.0	53400.00	2560000.00	20.00			4452.50	9149.82	0.02	16.81

Stato limite ultimo - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	MRdy <daNm>	MRdz <daNm>	esp.	Sic.	Δ%
3.52	11(e)	SLU	1	39	0.00	-8992.11	1947.55	1947.55	94.71	179.84	-8995.59	5773.13	5773.10	1.00	2.714	91.99
3.52	11(e)	SLU	1	39	0.00	-8992.11	1947.55	1947.55	94.71	179.84	-8995.59	5773.13	5773.10	1.00	2.714	91.99
6.34	9(e)	SLU	1	39	282.00	-8916.01	-1681.73	-1681.73	-97.01	-178.32	-8919.56	-5773.96	-5773.93	1.00	3.104	92.42

Stato limite elastico - Verifiche a flessione/pressoflessione con rinforzi

Xg <m>	CC	TCC	El	Sez.	X <cm>	N <daN>	My <daNm>	My ver. <daNm>	Mz <daNm>	Mz ver. <daNm>	Nu <daN>	M'ydy <daNm>	M'ydz <daNm>	esp.	Sic.	Δ%
3.52	1	SND	1	39	0.00	-6153.97	2663.94		569.95		-6154.91	4000.85	4000.81	1.00	1.237	51.82
3.52	1	SND	1	39	0.00	-6153.97	2663.94		569.95		-6154.91	4000.85	4000.81	1.00	1.237	51.82
6.34	1	SND	1	39	282.00	-5713.35	-2385.93		-571.74		-5715.31	-3968.66	-3969.27	1.00	1.342	52.77

Staffe - Verifiche armatura

X0 <m>	X1 <m>	Staff.	Br _y	Br _z	CC	TCC	b _{w,y} <m>	Vsdu _{,y} <daN>	ctgθ _{,y}	VRsd _{,y} <daN>	VRcd _{,y} <daN>	b _{w,z} <m>	Vsdu _{,z} <daN>	ctgθ _{,z}	VRsd _{,z} <daN>	VRcd _{,z} <daN>	Sic.T
3.52	3.99	ø6/12	2	2	11	SLU	0.25	67.19	2.50	7122.37	9300.92	0.25	1274.11	2.50	7122.37	9300.92	5.59
3.52	3.99	ø6/12	2	2	9	SLU	0.25	67.78	2.50	7122.37	9364.43	0.25	1276.10	2.50	7122.37	9364.43	5.58
3.52	3.99	ø6/12	2	2	1	SND	0.25	404.71	2.50	7122.37	9046.92	0.25	1790.73	2.50	7122.37	9046.92	3.98
3.52	3.99	ø6/12	2	2	5	SND	0.25	446.26	2.50	7122.37	9048.40	0.25	1235.62	2.50	7122.37	9048.40	5.76
3.99	5.87	ø6/12	2	2	11	SLU	0.25	67.19	2.50	7122.37	9288.71	0.25	1274.11	2.50	7122.37	9288.71	5.59
3.99	5.87	ø6/12	2	2	9	SLU	0.25	67.78	2.50	7122.37	9352.22	0.25	1276.10	2.50	7122.37	9352.22	5.58
3.99	5.87	ø6/12	2	2	1	SND	0.25	404.71	2.50	7122.37	9037.53	0.25	1790.73	2.50	7122.37	9037.53	3.98
3.99	5.87	ø6/12	2	2	5	SND	0.25	446.26	2.50	7122.37	9039.02	0.25	1235.62	2.50	7122.37	9039.02	5.76
5.87	6.34	ø6/12	2	2	11	SLU	0.25	67.19	2.50	7122.37	9239.89	0.25	1274.11	2.50	7122.37	9239.89	5.59
5.87	6.34	ø6/12	2	2	9	SLU	0.25	67.78	2.50	7122.37	9303.40	0.25	1276.10	2.50	7122.37	9303.40	5.58
5.87	6.34	ø6/12	2	2	1	SND	0.25	404.71	2.50	7122.37	8999.97	0.25	1790.73	2.50	7122.37	8999.97	3.98
5.87	6.34	ø6/12	2	2	5	SND	0.25	446.25	2.50	7122.37	9001.46	0.25	1235.62	2.50	7122.37	9001.46	5.76

Verifiche nodi trave-pilastro

Nodo	CC	TCC	N <daN>	Vc _y <daN>	Vt _y <daN>	Vc _z <daN>	Vt _z <daN>	Vn <daN>	σ _{nc} <daN/cm>	σ _{nc} R <daN/cm>	σ _{nt} <daN/cm>	σ _{nt} R <daN/cm>
90	1	SND	0.00	0.00	0.00	0.00	4505.92	4505.92	7.21	51.00	7.21	9.58

Verifiche e armature nuclei

Simbologia

Liv.	= Numero del livello
Pos.	= Posizione (P=Piede, T=Testa)
Par.	= Parete
CC	= Numero della combinazione delle condizioni di carico elementari
TCC	= Tipo di combinazione di carico
	SLU = Stato limite ultimo
	SLU S = Stato limite ultimo (azione sismica)
	SLE R = Stato limite d'esercizio, combinazione rara
	SLE F = Stato limite d'esercizio, combinazione frequente
	SLE Q = Stato limite d'esercizio, combinazione quasi permanente
	SLD = Stato limite di danno
	SLV = Stato limite di salvaguardia della vita
	SLC = Stato limite di prevenzione del collasso
	SLO = Stato limite di operatività
	SLU I = Stato limite di resistenza al fuoco
	SND = Stato limite di salvaguardia della vita (non dissipativo)
N	= Sforzo normale
My	= Momento flettente intorno all'asse Y
Mz	= Momento flettente intorno all'asse Z
Nu	= Sforzo normale ultimo
MRdy,r	= Momento resistente allo stato limite ultimo (ridotto del 30%) intorno all'asse Y
MRdz,r	= Momento resistente allo stato limite ultimo (ridotto del 30%) intorno all'asse Z
M'yd,r	= Momento resistente massimo in campo sostanzialmente elastico (ridotto del 30%) intorno all'asse Y
M'yd,z,r	= Momento resistente massimo in campo sostanzialmente elastico (ridotto del 30%) intorno all'asse Z
Sic.	= Sicurezza a rottura
σ_c	= Tensione nel calcestruzzo
σ_f	= Tensione nel ferro
c	= Ricoprimento dell'armatura
s	= Distanza minima tra le barre
K3	= Coefficiente di forma del diagramma delle tensioni prima della fessurazione
s_{rm}	= Distanza media tra le fessure
Φ	= Diametro della barra
A_s	= Area complessiva dei ferri nell'area di calcestruzzo efficace
$A_{c\ eff}$	= Area di calcestruzzo efficace
σ_s	= Tensione nell'acciaio nella sezione fessurata
σ_{sr}	= Tensione nell'acciaio corrispondente al raggiungimento della resistenza a trazione nel calcestruzzo
ϵ_{sm}	= Deformazione unitaria media dell'armatura (*1000)
Wk	= Apertura delle fessure
Vsdu	= Taglio agente nella direzione del momento ultimo
ctg θ	= Cotangente dell'angolo di inclinazione dei puntoni di calcestruzzo

VRsd	=	Taglio ultimo lato armatura
VRcd	=	Taglio ultimo lato calcestruzzo
Sic.T	=	Sicurezza a rottura per taglio
Spess.	=	Spessore
Cf	=	Copriferro
Cls	=	Tipo di calcestruzzo
Fck	=	Resistenza caratteristica cilindrica a compressione del calcestruzzo
Fctk	=	Resistenza caratteristica a trazione del calcestruzzo
Fcd	=	Resistenza di calcolo a compressione del calcestruzzo
Fctd	=	Resistenza di calcolo a trazione del calcestruzzo
Tp	=	Tipo di acciaio
Fyk	=	Tensione caratteristica di snervamento dell'acciaio
Fyd	=	Resistenza di calcolo dell'acciaio

Numero del nucleo n. 1

Nodi: -850 -849 -848 101 100 -852 -851

Caratteristiche delle sezioni e dei materiali utilizzati

Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
20.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N	My	Mz	Nu	MRdy,r	MRdz,r	Sic.
				<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1	P	11	SLU	-23311.90	0.00	2636.64	-23311.90	-0.06	62744.10	23.797
2	P	11	SLU	-22841.50	4.55	0.00	-592553.00	8545.15	-0.64	25.942
3	P	11	SLU	-22075.10	95.51	0.00	-592553.00	8514.30	-0.64	26.843
4	P	11	SLU	-14892.70	0.00	1657.23	-14892.70	-0.06	60731.90	36.647
5	P	11	SLU	-14657.80	0.00	1595.94	-14657.80	-0.06	60675.20	38.018
6	P	11	SLU	-14270.40	0.00	1493.56	-14270.40	-0.06	60581.60	40.562
7	P	11	SLU	-13708.80	-119.86	0.00	-592553.00	-8177.87	0.58	43.224
8	P	11	SLU	-11490.30	-56.41	0.00	-488548.00	-6603.21	-1053.90	42.519
9	P	9	SLU	-1580.89	-10.25	0.00	-88268.80	-902.60	456.05	55.835
10	P	11	SLU	-10671.50	4.05	0.00	-488548.00	6569.89	-1062.90	45.781
11	P	9	SLU	-1724.32	-8.56	0.00	-88268.80	-908.77	452.33	51.190
12	P	11	SLU	-7622.21	56.79	0.00	-384546.00	4964.15	-0.11	50.451
13	P	9	SLU	-1840.92	-9.45	0.00	-88268.80	-913.78	449.30	47.948
14	P	11	SLU	-7283.33	30.21	0.00	-384546.00	4949.97	-0.11	52.798
15	P	11	SLU	-5440.44	-262.46	0.00	-5440.44	-7837.27	0.59	29.860
16	P	9	SLU	-5906.05	-146.68	0.00	-5906.05	-7856.56	0.59	53.562
17	P	9	SLU	-5762.79	-54.15	0.00	-592553.00	-7850.87	0.59	>100
18	P	9	SLU	-5452.34	-3.68	0.00	-592553.00	-7837.76	0.59	>100
19	P	9	SLU	-5082.25	50.60	0.00	-592553.00	7822.35	-0.68	>100
20	P	9	SLU	-4703.05	169.72	0.00	-4703.05	7806.55	-0.68	45.995
21	P	9	SLU	-4337.72	353.25	0.00	-4337.72	7791.33	-0.69	22.056
22	P	9	SLU	-3527.90	282.82	0.00	-3527.90	7757.58	-0.64	27.429

Stato limite elastico - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N	My	Mz	Nu	M'ydy,r	M'ydz,r	Sic.
				<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1	P	1	SND	12836.30	0.00	23152.40	12836.30	-0.03	33042.60	1.427
2	P	1	SND	11847.60	0.00	21242.10	11847.60	-0.03	33308.10	1.568
3	P	1	SND	10230.20	0.00	18548.90	10230.20	-0.03	33803.50	1.822
4	P	1	SND	11909.40	0.00	16510.10	11909.40	-0.03	33298.50	2.017
5	P	1	SND	11074.70	0.00	15080.30	11074.70	-0.03	33553.60	2.225
6	P	1	SND	10026.70	0.00	13550.70	10026.70	-0.03	33852.80	2.498
7	P	1	SND	8467.24	0.00	11224.30	8467.24	-0.03	34319.90	3.058
8	P	1	SND	7706.14	0.00	4573.76	7706.14	-0.02	21817.60	4.770
9	P	5	SND	6327.84	51.82	0.00	15735.30	364.68	458.70	2.487
10	P	1	SND	4630.73	0.00	2740.69	4630.73	-0.02	22531.80	8.221
11	P	5	SND	4736.02	38.35	0.00	15735.30	443.28	462.47	3.322
12	P	5	SND	9944.41	99.58	0.00	94411.70	3907.08	-0.11	9.494
13	P	5	SND	3315.64	25.97	0.00	15735.30	516.82	450.71	4.746
14	P	5	SND	7629.25	100.24	0.00	94411.70	3996.32	-0.10	12.375
15	P	5	SND	12918.90	-780.27	0.00	12918.90	-6572.61	0.60	8.424
16	P	5	SND	11400.30	-555.97	0.00	11400.30	-6642.12	0.60	11.947
17	P	1	SND	1913.20	0.00	-2483.59	1913.20	0.03	-36082.40	14.528
18	P	1	SND	1052.25	0.00	-2044.29	1052.25	0.03	-36331.90	17.772
19	P	1	SND	179.91	0.00	-1647.86	179.91	0.03	-36550.20	22.180
20	P	5	SND	2482.03	366.00	0.00	2482.03	7105.46	-0.67	19.414
21	P	5	SND	306.01	676.81	0.00	306.01	7187.09	-0.66	10.619
22	P	5	SND	-1098.87	498.55	0.00	-1098.87	7242.48	-0.61	14.527

Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	Vsdu	ctgθ	VRsd	VRcd	Sic.T
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			<daN>		<daN>	<daN>	
1P	1	24167.30	2.09	73829.70	73829.70	3.05	
2P	1	26859.30	2.09	73829.70	73829.70	2.75	
3P	1	26092.60	2.09	73829.70	73829.70	2.83	
4P	1	17883.10	2.09	73829.70	73829.70	4.13	
5P	1	19223.30	2.09	73829.70	73829.70	3.84	
6P	1	19263.60	2.09	73829.70	73829.70	3.83	
7P	1	19086.40	2.09	73829.70	73829.70	3.87	
8P	1	15797.10	2.09	61110.80	61110.80	3.87	
9P	1	3108.67	2.09	10236.30	10236.30	3.29	
10P	1	15696.70	2.09	61110.80	61110.80	3.89	
11P	1	3027.57	2.09	10236.30	10236.30	3.38	
12P	1	12842.20	2.09	48392.50	48392.50	3.77	
13P	1	3167.94	2.09	10236.30	10236.30	3.23	
14P	1	10369.00	2.09	48392.50	48392.50	4.67	
15P	5	6291.19	2.09	73829.70	73829.70	11.74	
16P	5	6578.70	2.09	73829.70	73829.70	11.22	
17P	5	6414.23	2.09	73829.70	73829.70	11.51	
18P	5	6329.16	2.09	73829.70	73829.70	11.66	
19P	5	6413.87	2.09	73829.70	73829.70	11.51	
20P	5	6702.43	2.09	73829.70	73829.70	11.02	
21P	5	7020.47	2.09	73829.70	73829.70	10.52	
22P	5	6424.00	2.09	73944.40	73944.40	11.51	

Numero del nucleo n. 2

Nodi: -834 -833 100 -836 -835 -837 -85

Caratteristiche delle sezioni e dei materiali utilizzati

Spess.	Cf	Cls	Fck	Fctk	Fcd	Fctd	Tp	Fyk	Fyd
<cm>	<cm>		<daN/cmq>	<daN/cmq>	<daN/cmq>	<daN/cmq>		<daN/cmq>	<daN/cmq>
20.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N	My	Mz	Nu	MRdy,r	MRdz,r	Sic.
				<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1P	11	SLU		-30853.30	0.00	-4302.75	-30853.30	0.00	-78408.00	18.223
2P	11	SLU		-31108.90	0.00	-4542.70	-31108.90	0.00	-78466.90	17.273
3P	11	SLU		-30801.60	0.00	-4673.54	-30801.60	0.00	-78396.10	16.774
4P	11	SLU		-25796.10	0.00	-3845.59	-25796.10	0.00	-77214.10	20.079
5P	11	SLU		-25173.60	0.00	-4183.02	-25173.60	0.00	-77064.00	18.423
6P	11	SLU		-23831.50	0.00	-4070.95	-23831.50	0.00	-76739.90	18.851
7P	11	SLU		-21236.20	0.00	-2736.35	-21236.20	0.00	-76043.10	27.790
8P	11	SLU		-20674.60	0.00	-2413.67	-20674.60	0.00	-75885.70	31.440
9P	11	SLU		-20105.70	21.14	0.00	-657851.00	9216.18	0.01	32.720
10P	11	SLU		-19424.10	305.44	0.00	-19424.10	9188.78	0.01	30.083
11P	11	SLU		-17516.80	558.59	0.00	-17516.80	9112.13	0.01	16.313
12P	11	SLU		-10159.70	-489.98	0.00	-10159.70	-8809.94	0.02	17.980
13P	11	SLU		-9040.72	-388.51	0.00	-9040.72	-8764.21	0.02	22.559
14P	11	SLU		-8200.20	-206.71	0.00	-8200.20	-8730.67	0.02	42.236
15P	9	SLU		-7860.67	-84.60	0.00	-657851.00	-8716.13	0.02	83.689
16P	9	SLU		-7302.93	13.53	0.00	-657851.00	8692.73	0.01	90.080
17P	11	SLU		-6358.74	160.95	0.00	-6358.74	8653.39	0.01	53.766
18P	11	SLU		-5300.04	402.45	0.00	-5300.04	8609.26	0.01	21.392
19P	9	SLU		-3699.93	703.60	0.00	-3699.93	8542.51	-0.02	12.141

Stato limite elastico - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N	My	Mz	Nu	M'ydy,r	M'ydz,r	Sic.
				<daN>	<daNm>	<daNm>	<daN>	<daNm>	<daNm>	
1P	5	SND		13089.30	0.00	-27501.30	13089.30	0.00	-40563.40	1.475
2P	5	SND		12345.50	0.00	-27189.10	12345.50	0.00	-40772.60	1.500
3P	5	SND		11172.30	0.00	-26319.90	11172.30	0.00	-41181.90	1.565
4P	5	SND		12907.40	0.00	-25241.60	12907.40	0.00	-40563.40	1.607
5P	5	SND		12568.40	0.00	-25644.60	12568.40	0.00	-40720.40	1.588
6P	5	SND		11116.40	0.00	-24823.40	11116.40	0.00	-41181.90	1.659
7P	5	SND		11184.40	0.00	-22386.90	11184.40	0.00	-41181.90	1.840
8P	5	SND		10037.60	0.00	-19660.10	10037.60	0.00	-41499.40	2.111
9P	5	SND		6918.70	0.00	-15791.30	6918.70	0.00	-42501.20	2.691
10P	5	SND		4603.58	0.00	-12533.70	4603.58	0.00	-43223.80	3.449
11P	5	SND		6764.78	0.00	-10605.70	6764.78	0.00	-42554.40	4.012
12P	5	SND		5702.41	0.00	-8829.88	5702.41	0.00	-42867.10	4.855
13P	5	SND		6850.24	0.00	-8496.48	6850.24	0.00	-42554.40	5.008
14P	5	SND		6190.46	0.00	-7214.54	6190.46	0.00	-42765.00	5.928
15P	5	SND		4544.35	0.00	-5771.68	4544.35	0.00	-43227.10	7.490
16P	5	SND		2709.00	0.00	-4434.96	2709.00	0.00	-43794.50	9.875

17P	5	SND	941.38	0.00	-3158.51	941.38	0.00	-44317.80	14.031
18P	1	SND	-1209.57	585.16	0.00	-1209.57	7985.35	0.00	13.646
19P	1	SND	-1048.55	1067.96	0.00	-1048.55	7978.82	-0.02	7.471

Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Sic.T
1P	1	12431.10	2.09	82520.60	82520.60	6.64	
2P	5	13437.00	2.09	82520.60	82520.60	6.14	
3P	5	13035.30	2.09	82520.60	82520.60	6.33	
4P	5	11180.20	2.09	82520.60	82520.60	7.38	
5P	5	11634.20	2.09	82520.60	82520.60	7.09	
6P	5	10277.80	2.09	82520.70	82520.70	8.03	
7P	5	17204.40	2.09	82520.60	82520.60	4.80	
8P	5	20071.80	2.09	82520.70	82520.70	4.11	
9P	5	19591.50	2.09	82520.60	82520.60	4.21	
10P	5	19428.30	2.09	82520.60	82520.60	4.25	
11P	5	16632.20	2.09	82520.60	82520.60	4.96	
12P	5	10697.60	2.09	82520.60	82520.60	7.71	
13P	5	12836.70	2.09	82520.60	82520.60	6.43	
14P	5	12861.30	2.09	82520.60	82520.60	6.42	
15P	5	12699.60	2.09	82520.60	82520.60	6.50	
16P	5	12551.30	2.09	82520.60	82520.60	6.57	
17P	5	12415.20	2.09	82520.60	82520.60	6.65	
18P	5	12078.60	2.09	82575.00	82575.00	6.84	
19P	5	10602.60	2.09	82603.20	82603.20	7.79	

Numero del nucleo n. 3

Nodi: -346 146 143 103 -404 -405 102

Caratteristiche delle sezioni e dei materiali utilizzati

Spess. <cm>	Cf <cm>	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
20.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
1	P	11	SLU	-31736.30	143.25	0.00	-657834.00	9669.39	-153.50	20.728
2	P	11	SLU	-35707.00	67.91	0.00	-657834.00	9830.63	-150.61	18.423
3	P	11	SLU	-35360.00	-35.53	0.00	-657834.00	-9805.78	150.45	18.604
4	P	11	SLU	-29382.60	26.64	0.00	-657834.00	9574.03	-155.19	22.389
5	P	11	SLU	-28162.30	107.67	0.00	-657834.00	9524.79	-156.06	23.359
6	P	11	SLU	-26144.40	91.17	0.00	-657834.00	9443.40	-157.48	25.162
7	P	11	SLU	-22277.90	-155.87	0.00	-657834.00	-9280.79	159.73	29.529
8	P	11	SLU	-21714.20	-92.69	0.00	-657834.00	-9258.25	160.12	30.295
9	P	11	SLU	-21186.70	-43.99	0.00	-657834.00	-9237.17	160.48	31.049
10	P	11	SLU	-20709.50	-2.82	0.00	-657834.00	-9218.09	160.81	31.765
11	P	11	SLU	-20238.30	41.25	0.00	-657834.00	9205.32	-161.57	32.504
12	P	11	SLU	-19767.50	100.00	0.00	-657834.00	9186.36	-161.90	33.279
13	P	11	SLU	-19227.30	0.00	2380.82	-19227.30	-29.68	75466.80	31.698
14	P	11	SLU	-18629.80	0.00	2915.09	-18629.80	-29.68	75299.10	25.831
15	P	11	SLU	-17962.50	525.46	0.00	-17962.50	9108.96	-163.21	17.335
16	P	11	SLU	-8504.18	-575.93	0.00	-8504.18	-8721.24	169.11	15.143
17	P	11	SLU	-8025.76	-370.99	0.00	-8025.76	-8701.55	169.43	23.455
18	P	11	SLU	-7618.09	-219.63	0.00	-7618.09	-8684.65	169.77	39.543
19	P	11	SLU	-7270.00	-120.65	0.00	-7270.00	-8670.20	170.09	71.862
20	P	9	SLU	-7272.66	-61.71	0.00	-657833.00	-8670.31	170.09	90.453
21	P	9	SLU	-7034.19	-22.98	0.00	-657833.00	-8660.41	170.31	93.519
22	P	9	SLU	-6816.90	0.00	746.89	-6816.90	-29.71	71928.30	96.303
23	P	9	SLU	-6575.71	0.00	814.96	-6575.71	-29.71	71858.70	88.175
24	P	9	SLU	-6291.36	113.44	0.00	-6291.36	8631.24	-171.48	76.085
25	P	9	SLU	-5920.58	224.20	0.00	-5920.58	8615.72	-171.82	38.429
26	P	9	SLU	-5465.81	404.10	0.00	-5465.81	8596.69	-172.24	21.274
27	P	9	SLU	-4942.72	663.75	0.00	-4942.72	8574.79	-172.72	12.919

Stato limite elastico - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	M'ydy,r <daNm>	M'ydz,r <daNm>	Sic.
1	P	5	SND	7104.68	0.00	17296.30	7104.68	-18.63	42431.60	2.453
2	P	5	SND	8538.05	0.00	24495.30	8538.05	-18.56	42005.80	1.715
3	P	5	SND	8847.97	0.00	25301.30	8847.97	-18.54	41900.00	1.656
4	P	5	SND	12274.40	0.00	24754.00	12274.40	-18.36	40809.10	1.649
5	P	5	SND	13132.00	0.00	25582.80	13132.00	-18.31	40533.90	1.584

6P	5SND	13025.80	0.00	25672.10	13025.80	-18.30	40547.80	1.579
7P	5SND	19535.90	0.00	29522.00	19535.90	-17.93	38483.30	1.304
8P	5SND	17144.40	0.00	25833.10	17144.40	-18.07	39231.60	1.519
9P	5SND	14247.20	0.00	22346.00	14247.20	-18.24	40180.70	1.798
10P	5SND	11078.20	0.00	19130.00	11078.20	-18.42	41175.80	2.152
11P	5SND	7852.72	0.00	16036.70	7852.72	-18.60	42218.20	2.633
12P	5SND	4863.28	0.00	12957.00	4863.28	-18.75	43156.50	3.331
13P	5SND	2288.65	0.00	10079.60	2288.65	-18.85	43888.10	4.354
14P	5SND	278.98	0.00	8202.88	278.98	-18.95	44507.70	5.426
15P	1SND	-4902.96	0.00	9070.42	-4902.96	-19.19	46101.20	5.083
16P	5SND	15099.00	0.00	-15528.20	15099.00	6.45	-39922.50	2.571
17P	5SND	13681.20	0.00	13158.30	13681.20	-18.26	40338.20	3.066
18P	5SND	11801.50	0.00	11147.00	11801.50	-18.38	40954.50	3.674
19P	5SND	9541.27	0.00	9290.58	9541.27	-18.51	41688.00	4.487
20P	5SND	7004.04	0.00	7524.89	7004.04	-18.64	42484.80	5.646
21P	5SND	4331.14	0.00	5838.84	4331.14	-18.75	43261.70	7.409
22P	5SND	1614.37	0.00	4185.87	1614.37	-18.88	44094.70	10.534
23P	5SND	-1033.72	0.00	2557.05	-1033.72	-19.01	44922.40	17.568
24P	5SND	-3461.48	253.22	0.00	-3461.48	8030.86	-164.23	31.715
25P	5SND	-1966.12	580.10	0.00	-1966.12	7972.01	-165.52	13.742
26P	5SND	387.80	1029.52	0.00	387.80	7883.47	-167.72	7.657
27P	5SND	2580.70	1583.10	0.00	2580.70	7806.17	-169.77	4.931

Stato limite ultimo - Armatura a taglio

Liv.	Pos.	CC	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Sic.T
1	P	1	9934.12	2.09	82528.30	82528.30	8.31
2	P	5	13325.30	2.09	82528.30	82528.30	6.19
3	P	5	13311.70	2.09	82528.30	82528.30	6.20
4	P	5	9862.79	2.09	82528.30	82528.30	8.37
5	P	5	10128.60	2.09	82528.30	82528.30	8.15
6	P	5	9030.55	2.09	82528.30	82528.30	9.14
7	P	5	21370.40	2.09	82528.30	82528.30	3.86
8	P	5	21109.40	2.09	82528.30	82528.30	3.91
9	P	5	20995.90	2.09	82528.30	82528.30	3.93
10	P	5	20923.40	2.09	82528.30	82528.30	3.94
11	P	5	20882.20	2.09	82528.30	82528.30	3.95
12	P	5	20847.40	2.09	82528.30	82528.30	3.96
13	P	5	20775.90	2.09	82528.30	82528.30	3.97
14	P	5	20666.20	2.09	82528.30	82528.30	3.99
15	P	5	20489.30	2.09	82654.80	82654.80	4.03
16	P	5	13492.90	2.09	82528.30	82528.30	6.12
17	P	5	13571.90	2.09	82528.30	82528.30	6.08
18	P	5	13607.80	2.09	82528.30	82528.30	6.06
19	P	5	13566.60	2.09	82528.30	82528.30	6.08
20	P	5	13480.90	2.09	82528.30	82528.30	6.12
21	P	5	13392.90	2.09	82528.30	82528.30	6.16
22	P	5	13299.90	2.09	82528.30	82528.30	6.21
23	P	5	13196.70	2.09	82636.40	82636.40	6.26
24	P	5	13072.40	2.10	82889.80	82889.80	6.34
25	P	5	12880.70	2.09	82733.80	82733.80	6.42
26	P	5	12634.50	2.09	82528.30	82528.30	6.53
27	P	5	12422.50	2.09	82528.30	82528.30	6.64

Numero del nucleo n. 4

Nodi: 104 -326 -297 -510 -333 135 103

Caratteristiche delle sezioni e dei materiali utilizzati

Spess.	Cf	Cls	Fck <daN/cm²>	Fctk <daN/cm²>	Fcd <daN/cm²>	Fctd <daN/cm²>	Tp	Fyk <daN/cm²>	Fyd <daN/cm²>
20.00	4.30	C28/35	290.50	19.84	164.62	13.23	B450C	4500.00	3913.04

Stato limite ultimo - Verifiche a flessione/presoflessione

Liv.	Pos.	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	MRdy,r <daNm>	MRdz,r <daNm>	Sic.
1	P	11	SLU	-16301.40	0.00	2081.79	-16301.40	0.04	61070.80	29.336
2	P	11	SLU	-18431.40	0.00	2343.61	-18431.40	0.05	61581.60	26.276
3	P	11	SLU	-18579.60	75.44	0.00	-592552.00	8373.63	0.52	31.893
4	P	11	SLU	-12713.90	0.00	1310.34	-12713.90	0.04	60205.60	45.946
5	P	11	SLU	-5230.51	0.00	293.27	-5230.51	0.01	10739.60	36.620
6	P	11	SLU	-5279.46	0.00	298.52	-5279.46	0.01	10750.60	36.014
7	P	11	SLU	-10231.40	0.00	1351.90	-10231.40	0.04	59604.00	44.089
8	P	11	SLU	-10262.40	0.00	1152.85	-10262.40	0.04	59611.60	51.708
9	P	9	SLU	-10275.30	-31.81	0.00	-592552.00	-8034.24	-0.57	57.668

10P	11SLU	-10201.80	-37.01	0.00	-592552.00	-8031.25	-0.57	58.083
11P	11SLU	-10140.30	-43.85	0.00	-592552.00	-8028.75	-0.57	58.435
12P	11SLU	-10078.30	-40.82	0.00	-592552.00	-8026.23	-0.57	58.794
13P	11SLU	-10085.90	-12.75	0.00	-592552.00	-8026.53	-0.57	58.751
14P	11SLU	-10150.60	66.38	0.00	-592552.00	8029.16	0.54	58.376
15P	11SLU	-10285.10	204.52	0.00	-10285.10	8034.64	0.54	39.285
16P	11SLU	-5081.08	-253.75	0.00	-5081.08	-7822.29	-0.58	30.827
17P	11SLU	-5026.44	-127.28	0.00	-5026.44	-7820.02	-0.58	61.438
18P	9SLU	-5063.74	-43.94	0.00	-592552.00	-7821.57	-0.58	>100
19P	9SLU	-4872.62	-9.58	0.00	-592552.00	-7813.61	-0.58	>100
20P	9SLU	-4603.54	-3.95	0.00	-592552.00	-7802.40	-0.58	>100
21P	9SLU	-4308.80	-11.66	0.00	-592552.00	-7790.12	-0.58	>100
22P	9SLU	-3992.86	-22.53	0.00	-592552.00	-7776.95	-0.58	>100
23P	9SLU	-3700.85	-27.85	0.00	-592552.00	-7764.77	-0.58	>100
24P	9SLU	-3451.98	-15.68	0.00	-592552.00	-7754.40	-0.59	>100
25P	9SLU	-3289.55	37.96	0.00	-592552.00	7747.63	0.56	>100
26P	9SLU	-3211.09	169.00	0.00	-3211.09	7744.36	0.56	45.826
27P	9SLU	-3203.86	379.22	0.00	-3203.86	7744.05	0.56	20.421

Stato limite elastico - Verifiche a flessione/pressoflessione

Liv.	Pos.	CC	TCC	N <daN>	My <daNm>	Mz <daNm>	Nu <daN>	M'ydy,r <daNm>	M'yzd,r <daNm>	Sic.
1P	1	SND		6280.33	0.00	15441.40	6280.33	0.03	34916.70	2.261
2P	1	SND		7656.34	0.00	19964.00	7656.34	0.03	34534.30	1.730
3P	1	SND		7752.22	0.00	17880.30	7752.22	0.03	34491.60	1.929
4P	1	SND		11862.00	0.00	15559.00	11862.00	0.02	33308.40	2.141
5P	1	SND		5021.85	0.00	3630.83	5021.85	0.00	6609.37	1.820
6P	1	SND		4980.89	0.00	3797.74	4980.89	0.00	6618.98	1.743
7P	1	SND		13958.10	0.00	17266.70	13958.10	0.02	32713.80	1.895
8P	1	SND		12760.70	0.00	14426.20	12760.70	0.02	33054.10	2.291
9P	1	SND		11378.20	0.00	11331.70	11378.20	0.02	33468.90	2.954
10P	1	SND		10014.90	0.00	8169.72	10014.90	0.02	33853.10	4.144
11P	5	SND		23159.00	231.41	0.00	157353.00	6144.16	0.59	6.794
12P	5	SND		20008.30	142.07	0.00	157353.00	6279.96	0.59	7.864
13P	5	SND		17107.10	67.01	0.00	157353.00	6394.52	0.58	9.198
14P	1	SND		6675.88	0.00	-4594.73	6675.88	-0.03	-34833.60	7.581
15P	1	SND		6562.64	0.00	-7319.16	6562.64	-0.03	-34833.60	4.759
16P	5	SND		20118.20	291.23	0.00	157353.00	6279.03	0.59	7.821
17P	5	SND		18416.70	250.14	0.00	157353.00	6344.01	0.58	8.544
18P	5	SND		16347.30	213.94	0.00	157353.00	6428.20	0.58	9.626
19P	5	SND		13975.00	170.22	0.00	157353.00	6531.50	0.57	11.260
20P	5	SND		11436.40	120.50	0.00	157353.00	6642.10	0.57	13.759
21P	5	SND		8796.10	64.99	0.00	157353.00	6769.16	0.56	17.889
22P	5	SND		6139.68	10.82	0.00	157353.00	6901.97	0.56	25.629
23P	1	SND		1090.26	0.00	-953.71	1090.26	-0.03	-36332.20	38.096
24P	1	SND		-312.12	0.00	-643.90	-312.12	-0.03	-36716.90	57.023
25P	5	SND		-1409.64	245.95	0.00	-1409.64	7259.31	0.54	29.516
26P	5	SND		-752.74	514.16	0.00	-752.74	7231.71	0.54	14.065
27P	5	SND		1139.06	902.31	0.00	1139.06	7160.50	0.54	7.936

Definizione Pareti

Liv. 1 Par. 1 dal nodo 104 al nodo 103
 Liv. 2 Par. 1 dal nodo -498 al nodo -489
 Liv. 3 Par. 1 dal nodo -502 al nodo -490
 Liv. 4 Par. 1 dal nodo 15 al nodo 16
 Liv. 5 Par. 1/1 dal nodo -546 al nodo -548
 Par. 1/2 dal nodo -550 al nodo -552
 Liv. 6 Par. 1/1 dal nodo -547 al nodo -549
 Par. 1/2 dal nodo -551 al nodo -553
 Liv. 7 Par. 1 dal nodo -532 al nodo -528
 Liv. 8 Par. 1 dal nodo -604 al nodo -563
 Liv. 9 Par. 1 dal nodo -614 al nodo -568
 Liv. 10 Par. 1 dal nodo -616 al nodo -573
 Liv. 11 Par. 1 dal nodo -626 al nodo -578
 Liv. 12 Par. 1 dal nodo -628 al nodo -583
 Liv. 13 Par. 1 dal nodo -640 al nodo -588
 Liv. 14 Par. 1 dal nodo -642 al nodo -593
 Liv. 15 Par. 1 dal nodo -647 al nodo -598
 Liv. 16 Par. 1 dal nodo 66 al nodo 67
 Liv. 17 Par. 1 dal nodo -728 al nodo -686
 Liv. 18 Par. 1 dal nodo -729 al nodo -687
 Liv. 19 Par. 1 dal nodo -730 al nodo -688
 Liv. 20 Par. 1 dal nodo -731 al nodo -689
 Liv. 21 Par. 1 dal nodo -732 al nodo -690
 Liv. 22 Par. 1 dal nodo -733 al nodo -691

Liv. 23 Par. 1 dal nodo -734 al nodo -692
 Liv. 24 Par. 1 dal nodo -736 al nodo -759
 Liv. 25 Par. 1 dal nodo -738 al nodo -760
 Liv. 26 Par. 1 dal nodo -740 al nodo -761
 Liv. 27 Par. 1 dal nodo -742 al nodo -762

Stato limite ultimo - Armatura a taglio

Liv.	Pos.	Par.	CC	Vsdu <daN>	ctgθ	VRsd <daN>	VRcd <daN>	Sic.T
1	P	1	1	18213.30	2.09	73829.50	73829.50	4.05
2	P	1	1	28854.70	2.09	73829.50	73829.50	2.56
3	P	1	1	28844.40	2.09	73829.50	73829.50	2.56
4	P	1	1	15042.20	2.09	73829.50	73829.50	4.91
5	P	1/1	1	2582.94	2.09	9711.81	9711.81	3.76
5	P	1/2	1	4347.48	2.09	16262.90	16262.90	3.74
6	P	1/1	1	2220.54	2.09	9711.81	9711.81	4.37
6	P	1/2	1	4025.88	2.09	16262.90	16262.90	4.04
7	P	1	1	15698.30	2.09	73829.50	73829.50	4.70
8	P	1	1	15283.30	2.09	73829.50	73829.50	4.83
9	P	1	1	15108.30	2.09	73829.50	73829.50	4.89
10	P	1	1	14977.10	2.09	73829.50	73829.50	4.93
11	P	1	1	14897.30	2.09	73829.50	73829.50	4.96
12	P	1	1	14819.20	2.09	73829.50	73829.50	4.98
13	P	1	1	14720.30	2.09	73829.50	73829.50	5.02
14	P	1	1	14561.30	2.09	73829.50	73829.50	5.07
15	P	1	1	14216.90	2.09	73829.50	73829.50	5.19
16	P	1	5	6353.12	2.09	73829.50	73829.50	11.62
17	P	1	5	6356.84	2.09	73829.50	73829.50	11.61
18	P	1	5	6246.98	2.09	73829.50	73829.50	11.82
19	P	1	5	6276.27	2.09	73829.50	73829.50	11.76
20	P	1	5	6383.47	2.09	73829.50	73829.50	11.57
21	P	1	5	6438.90	2.09	73829.50	73829.50	11.47
22	P	1	5	6442.00	2.09	73829.50	73829.50	11.46
23	P	1	5	6394.78	2.09	73829.50	73829.50	11.55
24	P	1	5	6300.04	2.09	73829.50	73829.50	11.72
25	P	1	5	6360.14	2.09	73976.40	73976.40	11.63
26	P	1	5	6575.14	2.09	73908.00	73908.00	11.24
27	P	1	5	6666.83	2.09	73829.50	73829.50	11.07

SPOSTAMENTI RELATIVI SLO

Asta	CC	TCC	Dx	Dy	Dz	d	d/ht	d/hn
(N1 N2)			<m>	<m>	<m>	<m>	*1000	*1000
1 (1 37)		1 SLO	-0.00234	-0.00124	0.00018	0.00266	0.75463	0.76093
1 (1 37)		2 SLO	-0.00222	-0.00055	0.00025	0.0023	0.65349	0.65895
1 (1 37)		3 SLO	-0.00089	-0.00143	0.00014	0.0017	0.48161	0.48563
1 (1 37)		4 SLO	-0.00048	0.00086	0.00036	0.00105	0.29854	0.30103
1 (91 1)		1 SLO	0.00024	0.00024	0.00021	0.0004	0.2218	0.25592
1 (91 1)		2 SLO	0.00022	0.00016	0.00016	0.00031	0.17468	0.20155
1 (91 1)		3 SLO	0.00009	0.00021	0.00023	0.00033	0.1826	0.21069
1 (91 1)		4 SLO	-0.00005	0.0001	0.0002	0.00023	0.12799	0.14768
6 (2 38)		1 SLO	-0.00242	-0.00094	0.00026	0.00261	0.74062	0.7468
6 (2 38)		2 SLO	-0.00229	-0.00032	0.00032	0.00234	0.6637	0.66925
6 (2 38)		3 SLO	-0.00092	-0.00126	0.00022	0.00158	0.44792	0.45166
6 (2 38)		4 SLO	0.00049	-0.00092	0.00025	0.00107	0.30309	0.30562
6 (92 2)		1 SLO	0.00025	0.00021	0.00042	0.00053	0.20784	0.22925
6 (92 2)		2 SLO	0.00024	0.00012	0.00036	0.00044	0.17245	0.19022
6 (92 2)		3 SLO	0.0001	0.00021	0.00045	0.0005	0.19649	0.21673
6 (92 2)		4 SLO	-0.00005	0.00012	0.00041	0.00043	0.16688	0.18407
13 (3 39)		1 SLO	-0.00177	-0.0012	0.00013	0.00215	0.61007	0.64683
13 (3 39)		2 SLO	-0.00166	-0.00052	0.00014	0.00175	0.49574	0.5256
13 (3 39)		3 SLO	-0.0007	-0.00142	0.00013	0.00159	0.45144	0.47863
13 (3 39)		4 SLO	0.00034	-0.00092	0.00014	0.00099	0.28145	0.29841
0 (94 3)		1 SLO	0.0001	0.00023	0.00005	0.00026	0.30009	0.56104
0 (94 3)		2 SLO	0.00009	0.00015	0.00005	0.00018	0.20963	0.39192
0 (94 3)		3 SLO	0.00004	0.00021	0.00005	0.00022	0.25424	0.47532
0 (94 3)		4 SLO	-0.00002	0.00011	0.00004	0.00012	0.13514	0.25266

6 (38 75)	1 SLO	-0.00217	-0.00074	0.00015	0.0023	0.65219	0.65763
6 (38 75)	2 SLO	-0.00206	-0.0003	0.00016	0.00209	0.59264	0.59759
6 (38 75)	3 SLO	-0.00081	-0.001	0.00014	0.00129	0.36749	0.37056
6 (38 75)	4 SLO	0.00046	-0.00077	0.00014	0.00091	0.25806	0.26022
1200 (5 40)	1 SLO	-0.00204	-0.00096	0.0002	0.00226	0.64224	0.68923
1200 (5 40)	2 SLO	-0.00192	-0.00034	0.00025	0.00197	0.55939	0.60033
1200 (5 40)	3 SLO	-0.00078	-0.00126	0.00018	0.0015	0.42579	0.45694
1200 (5 40)	4 SLO	0.00041	-0.00091	0.00021	0.00102	0.28914	0.3103
0 (106 5)	1 SLO	0.00016	0.00022	0.00028	0.00039	0.27257	0.3219
0 (106 5)	2 SLO	0.00015	0.00013	0.00024	0.00031	0.22057	0.26049
0 (106 5)	3 SLO	0.00006	0.00021	0.00027	0.00035	0.2491	0.29418
0 (106 5)	4 SLO	-0.00004	0.00012	0.00024	0.00027	0.19173	0.22643
7 (-1 -21)	1 SLO	-0.00197	-0.00121	0.00014	0.00232	0.65773	0.7119
7 (-1 -21)	2 SLO	-0.00185	-0.00053	0.00018	0.00194	0.54973	0.59502
7 (-1 -21)	3 SLO	-0.00076	-0.00143	0.00012	0.00162	0.46017	0.49808
7 (-1 -21)	4 SLO	0.00039	-0.00092	0.00015	0.00101	0.28645	0.31005
0 (-68 -1)	1 SLO	0.00015	0.00023	0.00015	0.00032	0.2951	0.3317
0 (-68 -1)	2 SLO	0.00014	0.00015	0.00013	0.00024	0.22647	0.25455
0 (-68 -1)	3 SLO	0.00006	0.00021	0.00015	0.00027	0.24807	0.27883
0 (-68 -1)	4 SLO	-0.00003	0.0001	0.00013	0.00017	0.16106	0.18103
17 (-13 -22)	1 SLO	-0.00183	-0.00065	0.00016	0.00195	0.55269	0.58599
17 (-13 -22)	2 SLO	0.00173	-0.00008	0.00016	0.00174	0.49325	0.52297
17 (-13 -22)	3 SLO	-0.00071	-0.00119	0.00016	0.0014	0.39634	0.42022
17 (-13 -22)	4 SLO	0.00035	-0.00102	0.00016	0.00109	0.30925	0.32788
0 (-75 -13)	1 SLO	0.00011	0.00014	0.00003	0.00018	0.20455	0.73639
0 (-75 -13)	2 SLO	-0.00012	-0.00003	0.00003	0.00012	0.13527	0.48697
0 (-75 -13)	3 SLO	0.00004	0.00019	0.00003	0.0002	0.21764	0.7835
0 (-75 -13)	4 SLO	-0.00003	0.00014	0.00003	0.00014	0.15983	0.57537
16 (-12 -23)	1 SLO	-0.00181	-0.00046	0.00012	0.00188	0.53323	0.56535
16 (-12 -23)	2 SLO	0.00171	-0.00027	0.00017	0.00174	0.49545	0.52529
16 (-12 -23)	3 SLO	-0.00071	-0.00115	0.00013	0.00136	0.38509	0.40829
16 (-12 -23)	4 SLO	0.00035	-0.00109	0.00015	0.00115	0.32727	0.34698
0 (-84 -12)	1 SLO	0.00011	0.00009	0.00008	0.00016	0.21125	0.21125
0 (-84 -12)	2 SLO	0.0001	0	0.00008	0.00013	0.16863	0.16863
0 (-84 -12)	3 SLO	0.00004	0.00017	0.00007	0.00019	0.24607	0.24607
0 (-84 -12)	4 SLO	-0.00003	0.00015	0.00005	0.00016	0.21645	0.21645
15 (-11 -24)	1 SLO	-0.0018	-0.00068	0.00012	0.00193	0.54767	0.58066
15 (-11 -24)	2 SLO	0.0017	-0.00005	0.00017	0.00171	0.48582	0.51508
15 (-11 -24)	3 SLO	-0.00071	-0.00123	0.00014	0.00142	0.40465	0.42903
15 (-11 -24)	4 SLO	0.00034	-0.00104	0.00015	0.00111	0.31473	0.33369
0 (-83 -11)	1 SLO	0.00011	0.00011	0.00008	0.00017	0.19858	0.24254
0 (-83 -11)	2 SLO	0.0001	0.00002	0.00008	0.00013	0.14724	0.17982
0 (-83 -11)	3 SLO	0.00004	0.00017	0.00007	0.00019	0.22184	0.27094
0 (-83 -11)	4 SLO	-0.00002	0.00014	0.00005	0.00016	0.18165	0.22185
14 (-10 -25)	1 SLO	-0.00179	-0.00094	0.00014	0.00202	0.57522	0.60988
14 (-10 -25)	2 SLO	0.00169	0.00021	0.00014	0.00171	0.48458	0.51378
14 (-10 -25)	3 SLO	-0.0007	-0.00133	0.00014	0.00151	0.42792	0.4537
14 (-10 -25)	4 SLO	0.00034	-0.00098	0.00014	0.00105	0.29756	0.31549
0 (-72 -10)	1 SLO	0.0001	0.00017	0.00003	0.0002	0.23402	0.64922

0 (-72 -10)	2 SLO	0.00009	0.00009	0.00003	0.00013	0.15187	0.42132
0 (-72 -10)	3 SLO	0.00004	0.00019	0.00003	0.0002	0.22998	0.638
0 (-72 -10)	4 SLO	-0.00002	0.00012	0.00003	0.00013	0.15121	0.41948
18 (10 41)	1 SLO	-0.00184	-0.00098	0.00008	0.00209	0.59358	0.62934
18 (10 41)	2 SLO	-0.00173	-0.00036	0.00008	0.00177	0.50314	0.53345
18 (10 41)	3 SLO	-0.00072	-0.00127	0.00008	0.00146	0.41532	0.44034
18 (10 41)	4 SLO	0.00036	-0.0009	0.00008	0.00097	0.27648	0.29313
0 (105 10)	1 SLO	0.00012	0.00022	0.00003	0.00025	0.21066	0.46814
0 (105 10)	2 SLO	0.00011	0.00013	0.00003	0.00017	0.14261	0.31691
0 (105 10)	3 SLO	0.00004	0.00022	0.00003	0.00022	0.1853	0.41178
0 (105 10)	4 SLO	-0.00003	0.00012	0.00003	0.00012	0.1034	0.22978
19 (11 42)	1 SLO	-0.00167	-0.00085	0.00025	0.00189	0.5359	0.56818
19 (11 42)	2 SLO	0.00157	0.00011	0.00026	0.0016	0.45357	0.48089
19 (11 42)	3 SLO	-0.00066	-0.00129	0.00025	0.00147	0.41872	0.44395
19 (11 42)	4 SLO	0.00031	-0.001	0.00025	0.00108	0.30635	0.32481
0 (95 11)	1 SLO	0.00007	0.00015	0.00005	0.00017	0.25176	0.59902
0 (95 11)	2 SLO	0.00007	0.00006	0.00005	0.0001	0.15146	0.36038
0 (95 11)	3 SLO	0.00003	0.00019	0.00005	0.00019	0.28179	0.67046
0 (95 11)	4 SLO	-0.00002	0.00013	0.00005	0.00014	0.20496	0.48766
22 (12 43)	1 SLO	-0.0017	-0.00057	0.00024	0.00181	0.51362	0.54456
22 (12 43)	2 SLO	0.0016	-0.00016	0.00025	0.00163	0.46277	0.49065
22 (12 43)	3 SLO	-0.00067	-0.00117	0.00024	0.00137	0.38961	0.41308
22 (12 43)	4 SLO	0.00032	-0.00104	0.00024	0.00112	0.31759	0.33672
0 (96 12)	1 SLO	0.00008	0.00012	0.00006	0.00016	0.19778	0.38614
0 (96 12)	2 SLO	-0.00009	-0.00001	0.00006	0.0001	0.12724	0.24842
0 (96 12)	3 SLO	0.00003	0.00018	0.00007	0.0002	0.23958	0.46776
0 (96 12)	4 SLO	-0.00002	0.00014	0.00006	0.00016	0.19266	0.37614
45 (13 64)	1 SLO	-0.002	-0.00177	0.00022	0.00268	0.7608	0.94965
45 (13 64)	2 SLO	-0.00189	-0.00113	0.00023	0.00221	0.62811	0.78402
45 (13 64)	3 SLO	-0.00077	-0.00157	0.00022	0.00176	0.50052	0.62477
45 (13 64)	4 SLO	0.00039	-0.00076	0.00023	0.00088	0.2505	0.31269
0 (107 13)	1 SLO	-0.00021	-0.00008	0.0001	0.00024	0.17119	0.39207
0 (107 13)	2 SLO	-0.00019	-0.00004	0.0001	0.00022	0.15602	0.35733
0 (107 13)	3 SLO	0.00007	0.0001	0.00011	0.00016	0.11239	0.25741
0 (107 13)	4 SLO	-0.00005	0.00006	0.0001	0.00013	0.08862	0.20296
48 (14 65)	1 SLO	-0.002	-0.0014	0.00025	0.00246	0.69762	0.78706
48 (14 65)	2 SLO	-0.00189	-0.00077	0.00026	0.00205	0.58334	0.65813
48 (14 65)	3 SLO	-0.00077	-0.00145	0.00024	0.00167	0.47303	0.53368
48 (14 65)	4 SLO	0.00039	-0.00086	0.00025	0.00098	0.278	0.31365
48 (97 14)	1 SLO	-0.00021	-0.00008	0.00018	0.00028	0.16007	0.20646
48 (97 14)	2 SLO	-0.00019	-0.00003	0.00018	0.00027	0.1518	0.1958
48 (97 14)	3 SLO	0.00007	0.00009	0.0002	0.00023	0.12867	0.16597
48 (97 14)	4 SLO	-0.00005	0.00006	0.0002	0.00021	0.11712	0.15106
0 (-502 15)	1 SLO	0.00008	0.00006	0.00005	0.00011	0.26988	0.26988
0 (-502 15)	2 SLO	0.00007	0.00003	0.00004	0.00009	0.21894	0.21894
0 (-502 15)	3 SLO	0.00003	0.00006	0.00004	0.00007	0.18656	0.18656
0 (-502 15)	4 SLO	-0.00002	0.00003	0.00001	0.00004	0.10221	0.10221
0 (15 -538)	1 SLO	0.00006	0.00006	0.00003	0.00009	0.31768	0.31768
0 (15 -538)	2 SLO	0.00006	0.00003	0.00002	0.00007	0.24576	0.24576

0 (15 -538)	3 SLO	0.00003	0.00006	0.00002	0.00007	0.23052	0.23052
0 (15 -538)	4 SLO	-0.00001	0.00003	0.00001	0.00003	0.10981	0.10981
0 (-490 16)	1 SLO	0.00008	0.00005	0.00005	0.0001	0.25846	0.25846
0 (-490 16)	2 SLO	0.00007	0.00002	0.00004	0.00009	0.2132	0.2132
0 (-490 16)	3 SLO	0.00003	0.00005	0.00004	0.00007	0.17058	0.17058
0 (-490 16)	4 SLO	-0.00002	0.00003	0.00001	0.00004	0.0875	0.0875
0 (16 -540)	1 SLO	-0.00006	-0.00006	-0.00003	0.00009	0.30577	0.30577
0 (16 -540)	2 SLO	-0.00006	-0.00003	-0.00002	0.00007	0.24274	0.24274
0 (16 -540)	3 SLO	-0.00003	-0.00005	-0.00002	0.00006	0.21306	0.21306
0 (16 -540)	4 SLO	0.00001	-0.00003	0	0.00003	0.10243	0.10243
0 (17 -788)	1 SLO	-0.00007	-0.00005	-0.00002	0.00009	0.29741	0.29741
0 (17 -788)	2 SLO	0.00007	0.00002	0.00002	0.00007	0.24241	0.24241
0 (17 -788)	3 SLO	-0.00003	-0.00005	-0.00002	0.00006	0.21303	0.21303
0 (17 -788)	4 SLO	0.00001	-0.00003	0	0.00004	0.12601	0.12601
0 (-830 17)	1 SLO	-0.00008	-0.00004	-0.00003	0.00009	0.25037	0.25037
0 (-830 17)	2 SLO	-0.00007	-0.00002	-0.00002	0.00008	0.21048	0.21048
0 (-830 17)	3 SLO	-0.00003	-0.00005	-0.00002	0.00006	0.17088	0.17088
0 (-830 17)	4 SLO	0.00001	-0.00003	0	0.00004	0.10142	0.10142
0 (18 -790)	1 SLO	0.00007	0.00005	0.00004	0.00009	0.31879	0.31879
0 (18 -790)	2 SLO	0.00007	0.00003	0.00003	0.00008	0.26577	0.26577
0 (18 -790)	3 SLO	0.00003	0.00005	0.00002	0.00006	0.21776	0.21776
0 (18 -790)	4 SLO	-0.00002	0.00003	0	0.00004	0.1286	0.1286
0 (-832 18)	1 SLO	0.00007	0.00004	0.00005	0.0001	0.26756	0.26756
0 (-832 18)	2 SLO	0.00007	0.00002	0.00004	0.00008	0.22554	0.22554
0 (-832 18)	3 SLO	0.00003	0.00005	0.00003	0.00006	0.17642	0.17642
0 (-832 18)	4 SLO	-0.00001	0.00003	0	0.00004	0.09908	0.09908
33 (-105 -104)	1 SLO	0.00025	0.00014	0.00017	0.00033	0.19098	0.19615
33 (-105 -104)	2 SLO	0.00024	0.00005	0.00015	0.00029	0.16924	0.17383
33 (-105 -104)	3 SLO	0.00009	0.00017	0.00015	0.00024	0.14123	0.14505
33 (-105 -104)	4 SLO	-0.00006	0.00012	0.00012	0.00018	0.10671	0.1096
31 (-107 -106)	1 SLO	0.00025	0.00014	0.00015	0.00033	0.20756	0.21353
31 (-107 -106)	2 SLO	0.00024	0.00007	0.00014	0.00029	0.18403	0.18932
31 (-107 -106)	3 SLO	0.00009	0.00016	0.00014	0.00023	0.14565	0.14983
31 (-107 -106)	4 SLO	-0.00006	0.00011	0.00011	0.00017	0.10586	0.1089
32 (115 21)	1 SLO	0.00026	0.00006	0.00019	0.00032	0.189	0.2671
32 (115 21)	2 SLO	-0.00025	0.00003	0.00019	0.00032	0.18445	0.26067
32 (115 21)	3 SLO	0.00009	0.00014	0.00019	0.00025	0.14861	0.21002
32 (115 21)	4 SLO	-0.00006	0.00014	0.00019	0.00024	0.14126	0.19963
32 (21 -406)	1 SLO	0.00072	0.00038	0.00025	0.00085	0.32256	0.38016
32 (21 -406)	2 SLO	-0.0007	0.00032	0.00025	0.00082	0.30884	0.36399
32 (21 -406)	3 SLO	0.00024	0.00081	0.00025	0.00088	0.33494	0.39475
32 (21 -406)	4 SLO	-0.00019	0.0008	0.00025	0.00086	0.32406	0.38193
0 (-494 22)	1 SLO	0.0001	0.00005	0.00006	0.00013	0.31375	0.31375
0 (-494 22)	2 SLO	0.00009	0.00002	0.00003	0.0001	0.25666	0.25666
0 (-494 22)	3 SLO	0.00004	0.00005	0.00007	0.00009	0.23	0.23
0 (-494 22)	4 SLO	-0.00002	0.00003	0.00005	0.00006	0.14875	0.14875
0 (22 -542)	1 SLO	0.00013	0.00005	0.00004	0.00015	0.49548	0.49548
0 (22 -542)	2 SLO	0.00012	0.00003	0.00002	0.00013	0.42636	0.42636
0 (22 -542)	3 SLO	0.00006	0.00005	0.00004	0.00009	0.30469	0.30469

0 (22 -542)	4 SLO	0.00003	-0.00003	-0.00001	0.00004	0.14594	0.14594
25 (98 23)	1 SLO	0.00015	0.00005	0.00025	0.00029	0.27245	0.27245
25 (98 23)	2 SLO	0.00014	0.00001	0.00024	0.00028	0.26059	0.26059
25 (98 23)	3 SLO	0.00006	0.00008	0.00021	0.00023	0.21682	0.21682
25 (98 23)	4 SLO	0.00002	-0.00006	0.0002	0.00021	0.19479	0.19479
25 (23 -81)	1 SLO	0.00034	0.00014	0.00018	0.00041	0.46673	0.46673
25 (23 -81)	2 SLO	0.00032	0	0.00017	0.00036	0.41405	0.41405
25 (23 -81)	3 SLO	-0.00013	-0.00028	0.00011	0.00032	0.36866	0.36866
25 (23 -81)	4 SLO	0.00006	-0.00023	0.00014	0.00027	0.31083	0.31083
26 (99 24)	1 SLO	0.00015	0.00004	0.00024	0.00029	0.26859	0.26859
26 (99 24)	2 SLO	0.00014	-0.00001	0.00024	0.00027	0.25492	0.25492
26 (99 24)	3 SLO	0.00006	0.00008	0.00021	0.00024	0.21974	0.21974
26 (99 24)	4 SLO	0.00002	-0.00007	0.00019	0.0002	0.18787	0.18787
26 (24 -82)	1 SLO	0.00033	0.00011	0.00018	0.00039	0.44449	0.44449
26 (24 -82)	2 SLO	0.00031	-0.00003	0.00017	0.00035	0.39946	0.39946
26 (24 -82)	3 SLO	-0.00015	-0.00026	0.0001	0.00032	0.35992	0.35992
26 (24 -82)	4 SLO	0.00005	-0.00023	0.00013	0.00027	0.30435	0.30435
1 (37 74)	1 SLO	-0.00218	-0.00088	0.0001	0.00236	0.66931	0.6749
1 (37 74)	2 SLO	-0.00206	-0.00043	0.00012	0.00211	0.59861	0.60361
1 (37 74)	3 SLO	-0.0009	-0.00099	0.00009	0.00134	0.38113	0.38431
1 (37 74)	4 SLO	-0.00049	0.00052	0.00014	0.00073	0.20682	0.20855
0 (-2 -825)	1 SLO	-0.00013	-0.00005	-0.00001	0.00014	0.48471	0.48471
0 (-2 -825)	2 SLO	-0.00013	-0.00002	0.00001	0.00013	0.43647	0.43647
0 (-2 -825)	3 SLO	-0.00006	-0.00006	-0.00002	0.00008	0.28584	0.28584
0 (-2 -825)	4 SLO	-0.00003	0.00003	0.00003	0.00006	0.18962	0.18962
0 (-828 -2)	1 SLO	-0.0001	-0.00004	-0.00001	0.00011	0.29223	0.29223
0 (-828 -2)	2 SLO	-0.00009	-0.00002	0.00001	0.00009	0.26095	0.26095
0 (-828 -2)	3 SLO	0.00003	0.00004	0.00005	0.00008	0.20893	0.20893
0 (-828 -2)	4 SLO	-0.00002	0.00003	0.00005	0.00006	0.15888	0.15888
30 (113 26)	1 SLO	0.00025	0.00019	0.0001	0.00033	0.21455	0.2215
30 (113 26)	2 SLO	0.00024	0.00011	0.00009	0.00028	0.18468	0.19066
30 (113 26)	3 SLO	0.00009	0.00017	0.0001	0.00022	0.14301	0.14764
30 (113 26)	4 SLO	-0.00006	0.00009	0.00009	0.00014	0.09357	0.0966
30 (26 119)	1 SLO	-0.00103	-0.00093	0.00007	0.00139	0.30926	0.31203
30 (26 119)	2 SLO	0.001	0.00031	0.00022	0.00107	0.23813	0.24026
30 (26 119)	3 SLO	-0.00034	-0.00119	0.00013	0.00125	0.27716	0.27965
30 (26 119)	4 SLO	0.00027	-0.00082	0.00018	0.00088	0.19572	0.19747
0 (108 27)	1 SLO	0.00017	0.00019	0.00009	0.00027	0.25297	0.26509
0 (108 27)	2 SLO	0.00017	0.00011	0.00008	0.00022	0.20514	0.21497
0 (108 27)	3 SLO	0.00006	0.00017	0.00008	0.0002	0.19017	0.19928
0 (108 27)	4 SLO	-0.00005	0.00009	0.00007	0.00012	0.11807	0.12373
40 (27 118)	1 SLO	-0.00067	-0.00093	0.00011	0.00115	0.25591	0.2582
40 (27 118)	2 SLO	-0.00065	-0.00034	0.00011	0.00074	0.16479	0.16626
40 (27 118)	3 SLO	-0.00023	-0.00119	0.00011	0.00122	0.27081	0.27324
40 (27 118)	4 SLO	0.00015	-0.00082	0.0001	0.00084	0.18592	0.18759
34 (117 28)	1 SLO	0.00025	0.00018	0.00012	0.00033	0.19557	0.20125
34 (117 28)	2 SLO	0.00024	0.0001	0.0001	0.00028	0.16561	0.17043
34 (117 28)	3 SLO	0.00009	0.00019	0.00012	0.00024	0.14185	0.14597
34 (117 28)	4 SLO	-0.00006	0.00011	0.00011	0.00017	0.09796	0.10081

34 (28 120)	1 SLO	0.00102	0.00087	0.00021	0.00136	0.30172	0.30442
34 (28 120)	2 SLO	0.00101	0.00026	0.00022	0.00107	0.23681	0.23893
34 (28 120)	3 SLO	-0.00032	-0.0012	0.00014	0.00125	0.27715	0.27963
34 (28 120)	4 SLO	0.00028	-0.00085	0.00018	0.00092	0.20343	0.20526
0 (112 29)	1 SLO	0.00017	0.00018	0.00009	0.00026	0.25041	0.26234
0 (112 29)	2 SLO	0.00017	0.0001	0.00008	0.00021	0.19638	0.20573
0 (112 29)	3 SLO	0.00006	0.00019	0.00008	0.00022	0.20542	0.21521
0 (112 29)	4 SLO	-0.00005	0.00011	0.00007	0.00014	0.13475	0.14116
44 (29 121)	1 SLO	0.00066	0.00087	0.00008	0.0011	0.24398	0.24617
44 (29 121)	2 SLO	0.00065	0.00027	0.00009	0.00071	0.15819	0.15961
44 (29 121)	3 SLO	-0.00019	-0.0012	0.00011	0.00121	0.26995	0.27237
44 (29 121)	4 SLO	0.0002	-0.00085	0.0001	0.00088	0.19476	0.19651
330 (-104 -111)	1 SLO	-0.00067	-0.00102	0.00002	0.00122	0.46155	0.54396
330 (-104 -111)	2 SLO	-0.00065	-0.00044	0.00004	0.00078	0.29705	0.35009
330 (-104 -111)	3 SLO	-0.00021	-0.00126	0.00001	0.00128	0.485	0.57161
330 (-104 -111)	4 SLO	0.00021	-0.00089	0.00001	0.00092	0.34773	0.40983
0 (110 31)	1 SLO	0.00017	0.00006	0.00014	0.00022	0.18994	0.19839
0 (110 31)	2 SLO	-0.00016	0.00003	0.00014	0.00022	0.18254	0.19066
0 (110 31)	3 SLO	0.00005	0.00014	0.00014	0.00021	0.17642	0.18427
0 (110 31)	4 SLO	-0.00004	0.00014	0.00014	0.0002	0.16885	0.17636
42 (31 123)	1 SLO	-0.00063	-0.00037	0.00023	0.00076	0.16953	0.17105
42 (31 123)	2 SLO	0.00062	-0.00029	0.00023	0.00072	0.16027	0.1617
42 (31 123)	3 SLO	-0.0002	-0.00109	0.00023	0.00113	0.25079	0.25304
42 (31 123)	4 SLO	0.00018	-0.00106	0.00023	0.0011	0.24482	0.24701
0 (111 32)	1 SLO	0.00017	0.00013	0.00005	0.00022	0.1925	0.34527
0 (111 32)	2 SLO	0.00016	0.00004	0.00005	0.00018	0.15747	0.28245
0 (111 32)	3 SLO	0.00006	0.00017	0.00006	0.00019	0.16553	0.2969
0 (111 32)	4 SLO	-0.00004	0.00012	0.00005	0.00014	0.1254	0.22492
2 (-3 -27)	1 SLO	-0.00236	-0.00085	0.00026	0.00252	0.71728	0.72686
2 (-3 -27)	2 SLO	-0.00224	-0.00018	0.00027	0.00226	0.64294	0.65153
2 (-3 -27)	3 SLO	-0.0009	-0.00129	0.00025	0.00159	0.45308	0.45913
2 (-3 -27)	4 SLO	0.00048	-0.001	0.00026	0.00114	0.32419	0.32852
2 (-64 -3)	1 SLO	0.00024	0.00015	0.00036	0.00046	0.20423	0.20853
2 (-64 -3)	2 SLO	-0.00024	-0.00003	0.00034	0.00042	0.18687	0.1908
2 (-64 -3)	3 SLO	0.00009	0.00019	0.00039	0.00045	0.19779	0.20195
2 (-64 -3)	4 SLO	-0.00005	0.00013	0.00039	0.00041	0.18376	0.18763
3 (-4 -28)	1 SLO	-0.00237	-0.00072	0.00037	0.00251	0.7122	0.71815
3 (-4 -28)	2 SLO	-0.00225	-0.00006	0.00038	0.00228	0.64756	0.65297
3 (-4 -28)	3 SLO	-0.0009	-0.00125	0.00035	0.00158	0.44854	0.45229
3 (-4 -28)	4 SLO	0.00048	-0.00103	0.00034	0.00119	0.33741	0.34023
3 (-65 -4)	1 SLO	0.00024	0.00012	0.00032	0.00042	0.18479	0.20686
3 (-65 -4)	2 SLO	0.00023	0.00003	0.00031	0.00038	0.1703	0.19063
3 (-65 -4)	3 SLO	0.00009	0.00018	0.00031	0.00037	0.16506	0.18477
3 (-65 -4)	4 SLO	-0.00005	0.00014	0.0003	0.00034	0.14994	0.16784
4 (-5 -29)	1 SLO	-0.00239	-0.00047	0.00032	0.00246	0.69853	0.70436
4 (-5 -29)	2 SLO	-0.00227	0.00017	0.00039	0.0023	0.65473	0.6602
4 (-5 -29)	3 SLO	-0.00091	-0.00115	0.00024	0.00149	0.42219	0.42572
4 (-5 -29)	4 SLO	0.00048	-0.00108	0.00025	0.00121	0.34384	0.34671
4 (-66 -5)	1 SLO	0.00025	0.00009	0.00043	0.00051	0.19486	0.21468

4 (-66 -5)	2 SLO	-0.00025	0.00002	0.00035	0.00043	0.16605	0.18294
4 (-66 -5)	3 SLO	0.0001	0.00017	0.00049	0.00052	0.2015	0.22199
4 (-66 -5)	4 SLO	-0.00005	0.00015	0.00046	0.00049	0.18816	0.2073
5 (-6 -30)	1 SLO	-0.0024	-0.00057	0.0003	0.00248	0.70529	0.75689
5 (-6 -30)	2 SLO	-0.00227	0.00007	0.00031	0.00229	0.65194	0.69964
5 (-6 -30)	3 SLO	-0.00091	-0.00117	0.0003	0.00151	0.43021	0.46168
5 (-6 -30)	4 SLO	0.00048	-0.00105	0.00032	0.0012	0.33975	0.36461
5 (-67 -6)	1 SLO	0.00025	0.00012	0.00039	0.00048	0.18483	0.20362
5 (-67 -6)	2 SLO	0.00023	0.00003	0.00038	0.00045	0.17196	0.18945
5 (-67 -6)	3 SLO	0.0001	0.00018	0.00039	0.00044	0.17034	0.18767
5 (-67 -6)	4 SLO	-0.00005	0.00014	0.00038	0.00041	0.15794	0.174
80 (-7 -32)	1 SLO	0.00199	0.00076	0.00041	0.00217	0.61616	0.62439
80 (-7 -32)	2 SLO	0.00188	0.00009	0.0004	0.00192	0.54585	0.55314
80 (-7 -32)	3 SLO	-0.00077	-0.00128	0.00022	0.00151	0.42917	0.4349
80 (-7 -32)	4 SLO	0.00039	-0.00101	0.0003	0.00112	0.31865	0.32291
0 (-69 -7)	1 SLO	0.00015	0.00014	0.00022	0.00031	0.29721	0.31124
0 (-69 -7)	2 SLO	0.00014	0.00006	0.00021	0.00026	0.25186	0.26375
0 (-69 -7)	3 SLO	0.00006	0.00018	0.00021	0.00029	0.27797	0.29108
0 (-69 -7)	4 SLO	-0.00003	0.00013	0.00019	0.00023	0.22513	0.23575
90 (-8 -33)	1 SLO	0.002	0.00063	0.00036	0.00213	0.60384	0.75373
90 (-8 -33)	2 SLO	0.00188	-0.00003	0.00035	0.00192	0.54455	0.67972
90 (-8 -33)	3 SLO	-0.00077	-0.00124	0.0002	0.00147	0.41793	0.52167
90 (-8 -33)	4 SLO	0.00039	-0.00104	0.00027	0.00114	0.32396	0.40438
0 (-70 -8)	1 SLO	0.00015	0.00011	0.00019	0.00027	0.25823	0.28895
0 (-70 -8)	2 SLO	0.00014	0.00003	0.00018	0.00023	0.2247	0.25143
0 (-70 -8)	3 SLO	0.00006	0.00018	0.00017	0.00025	0.24301	0.27192
0 (-70 -8)	4 SLO	-0.00003	0.00014	0.00015	0.00021	0.20274	0.22686
100 (-9 -34)	1 SLO	0.00202	0.00039	0.00044	0.0021	0.59705	0.64623
100 (-9 -34)	2 SLO	0.0019	-0.00025	0.0004	0.00196	0.55627	0.60209
100 (-9 -34)	3 SLO	-0.00078	-0.00115	0.00019	0.0014	0.39757	0.43032
100 (-9 -34)	4 SLO	0.0004	-0.00108	0.00026	0.00118	0.33476	0.36233
0 (-71 -9)	1 SLO	0.00016	0.0001	0.0002	0.00027	0.2797	0.31529
0 (-71 -9)	2 SLO	0.00015	0.00001	0.00018	0.00023	0.23576	0.26576
0 (-71 -9)	3 SLO	0.00006	0.00017	0.00021	0.00028	0.2845	0.3207
0 (-71 -9)	4 SLO	-0.00004	0.00015	0.00019	0.00024	0.25215	0.28424
1100 (36 63)	1 SLO	0.00202	0.00049	0.00039	0.00212	0.60122	0.75046
1100 (36 63)	2 SLO	0.00191	-0.00015	0.00037	0.00195	0.55373	0.69117
1100 (36 63)	3 SLO	-0.00078	-0.00117	0.0002	0.00142	0.40368	0.50389
1100 (36 63)	4 SLO	0.0004	-0.00104	0.00027	0.00115	0.32601	0.40694
0 (93 36)	1 SLO	0.00016	0.00013	0.00018	0.00027	0.28197	0.32087
0 (93 36)	2 SLO	0.00015	0.00004	0.00018	0.00023	0.23988	0.27298
0 (93 36)	3 SLO	0.00006	0.00018	0.00017	0.00026	0.26394	0.30035
0 (93 36)	4 SLO	-0.00004	0.00014	0.00015	0.00021	0.215	0.24466
0 (-86 -16)	1 SLO	0.0002	0.00019	0.00004	0.00028	0.28944	0.60404
0 (-86 -16)	2 SLO	0.0002	0.00011	0.00004	0.00023	0.24151	0.50402
0 (-86 -16)	3 SLO	0.00007	0.00017	0.00004	0.00019	0.19618	0.40943
0 (-86 -16)	4 SLO	-0.00006	0.00009	0.00004	0.00011	0.11474	0.23946
0 (-90 -17)	1 SLO	0.0002	0.00018	0.00004	0.00028	0.26283	0.50177
0 (-90 -17)	2 SLO	0.0002	0.0001	0.00004	0.00022	0.21351	0.40761

0 (-90 -17)	3 SLO	0.00007	0.00019	0.00004	0.00021	0.19642	0.37498
0 (-90 -17)	4 SLO	-0.00005	0.00011	0.00004	0.00013	0.12453	0.23774
0 (-87 -18)	1 SLO	0.0002	0.00014	0.00005	0.00025	0.23797	0.55527
0 (-87 -18)	2 SLO	0.0002	0.00006	0.00004	0.00021	0.20321	0.47415
0 (-87 -18)	3 SLO	0.00007	0.00016	0.00005	0.00018	0.17177	0.40081
0 (-87 -18)	4 SLO	-0.00006	0.00011	0.00004	0.00013	0.12181	0.28421
0 (-88 -19)	1 SLO	0.0002	0.00006	0.00004	0.00022	0.22113	0.77396
0 (-88 -19)	2 SLO	-0.0002	0.00003	0.00004	0.00021	0.21312	0.74591
0 (-88 -19)	3 SLO	0.00007	0.00014	0.00004	0.00017	0.16868	0.59038
0 (-88 -19)	4 SLO	-0.00005	0.00014	0.00004	0.00015	0.15631	0.5471
0 (-89 -20)	1 SLO	0.0002	0.00013	0.00004	0.00025	0.23812	0.57038
0 (-89 -20)	2 SLO	0.0002	0.00005	0.00004	0.00021	0.2023	0.48459
0 (-89 -20)	3 SLO	0.00007	0.00017	0.00004	0.00019	0.18341	0.43932
0 (-89 -20)	4 SLO	-0.00005	0.00012	0.00004	0.00014	0.13674	0.32753
13 (39 76)	1 SLO	-0.00166	-0.00089	0.00005	0.00189	0.53624	0.54241
13 (39 76)	2 SLO	-0.00159	-0.00042	0.00005	0.00164	0.46643	0.47179
13 (39 76)	3 SLO	-0.00063	-0.00103	0.00005	0.0012	0.34221	0.34615
13 (39 76)	4 SLO	0.00033	-0.00067	0.00005	0.00075	0.21237	0.21481
12 (40 77)	1 SLO	-0.00185	-0.00078	0.00008	0.00201	0.57213	0.57871
12 (40 77)	2 SLO	-0.00175	-0.00033	0.00009	0.00178	0.50608	0.5119
12 (40 77)	3 SLO	-0.00072	-0.00102	0.0001	0.00125	0.35524	0.35933
12 (40 77)	4 SLO	0.00035	-0.00076	0.00013	0.00085	0.2405	0.24326
7 (-21 -45)	1 SLO	-0.00181	-0.00089	0.00005	0.00202	0.57298	0.57956
7 (-21 -45)	2 SLO	-0.00172	-0.00042	0.00006	0.00177	0.50309	0.50887
7 (-21 -45)	3 SLO	-0.00071	-0.00101	0.00007	0.00123	0.35015	0.35418
7 (-21 -45)	4 SLO	0.00033	-0.00065	0.00009	0.00073	0.20839	0.21079
17 (-22 -46)	1 SLO	-0.00158	-0.00058	0.00006	0.00169	0.47902	0.48452
17 (-22 -46)	2 SLO	-0.00148	-0.00005	0.00006	0.00149	0.42233	0.42719
17 (-22 -46)	3 SLO	-0.00063	-0.00107	0.00006	0.00125	0.35443	0.35851
17 (-22 -46)	4 SLO	0.00028	-0.00097	0.00006	0.00101	0.28816	0.29147
16 (-23 -47)	1 SLO	-0.00161	-0.00051	0.00001	0.00169	0.47892	0.48442
16 (-23 -47)	2 SLO	0.00149	-0.00031	0.00012	0.00153	0.43394	0.43893
16 (-23 -47)	3 SLO	-0.00063	-0.00109	0.00004	0.00126	0.35708	0.36119
16 (-23 -47)	4 SLO	0.0003	-0.00103	0.00008	0.00107	0.30419	0.30768
15 (-24 -48)	1 SLO	-0.00162	-0.00069	0.00001	0.00176	0.49913	0.50487
15 (-24 -48)	2 SLO	-0.00153	-0.00012	0.00001	0.00153	0.43532	0.44032
15 (-24 -48)	3 SLO	-0.00063	-0.00115	0.00004	0.00131	0.37225	0.37653
15 (-24 -48)	4 SLO	0.00031	-0.00098	0.00008	0.00103	0.29228	0.29564
14 (-25 -49)	1 SLO	-0.00165	-0.00082	0.00005	0.00184	0.52314	0.52916
14 (-25 -49)	2 SLO	-0.00157	-0.00028	0.00005	0.00159	0.45269	0.45789
14 (-25 -49)	3 SLO	-0.00063	-0.00113	0.00005	0.00129	0.36689	0.3711
14 (-25 -49)	4 SLO	0.00033	-0.00085	0.00005	0.00091	0.25994	0.26293
18 (41 78)	1 SLO	-0.00151	-0.00084	0.00003	0.00173	0.49149	0.49714
18 (41 78)	2 SLO	-0.00142	-0.00037	0.00003	0.00147	0.41659	0.42138
18 (41 78)	3 SLO	-0.00059	-0.00106	0.00003	0.00121	0.34505	0.34901
18 (41 78)	4 SLO	0.00029	-0.00078	0.00003	0.00083	0.23628	0.23899
19 (42 79)	1 SLO	-0.00153	-0.00078	0.00008	0.00172	0.48926	0.49488
19 (42 79)	2 SLO	-0.00144	-0.00022	0.00008	0.00146	0.41588	0.42066
19 (42 79)	3 SLO	-0.0006	-0.00115	0.00008	0.0013	0.37019	0.37444

19 (42 79)	4 SLO	0.00029	-0.00091	0.00008	0.00096	0.27312	0.27626
22 (43 80)	1 SLO	-0.00153	-0.00053	0.00008	0.00162	0.45973	0.46501
22 (43 80)	2 SLO	0.00144	-0.0003	0.00008	0.00147	0.41902	0.42384
22 (43 80)	3 SLO	-0.0006	-0.00108	0.00008	0.00124	0.35129	0.35533
22 (43 80)	4 SLO	0.00029	-0.00101	0.00008	0.00106	0.29989	0.30334
47 (-42 -44)	1 SLO	-0.002	-0.00059	0.00051	0.00215	0.60992	0.76131
47 (-42 -44)	2 SLO	0.00188	-0.00024	0.00052	0.00196	0.55797	0.69647
47 (-42 -44)	3 SLO	-0.00077	-0.00121	0.00051	0.00152	0.43262	0.54
47 (-42 -44)	4 SLO	0.00039	-0.0011	0.00051	0.00128	0.36262	0.45263
47 (-44 -61)	1 SLO	-0.00219	-0.00086	0.00025	0.00237	0.67301	0.68075
47 (-44 -61)	2 SLO	0.00207	-0.00051	0.00025	0.00214	0.60913	0.61613
47 (-44 -61)	3 SLO	-0.00085	-0.00195	0.00024	0.00214	0.60852	0.61552
47 (-44 -61)	4 SLO	0.00043	-0.00185	0.00025	0.00191	0.54335	0.5496
46 (-41 -43)	1 SLO	-0.002	-0.00092	0.00052	0.00226	0.64179	0.80111
46 (-41 -43)	2 SLO	-0.00189	-0.00028	0.00052	0.00198	0.56147	0.70084
46 (-41 -43)	3 SLO	-0.00077	-0.00131	0.00052	0.0016	0.45574	0.56887
46 (-41 -43)	4 SLO	0.00039	-0.00101	0.00052	0.0012	0.34078	0.42537
46 (-43 -62)	1 SLO	-0.00217	-0.00145	0.00025	0.00262	0.74334	0.75189
46 (-43 -62)	2 SLO	-0.00204	-0.0004	0.00025	0.0021	0.59537	0.60222
46 (-43 -62)	3 SLO	-0.00084	-0.00213	0.00025	0.00231	0.65537	0.6629
46 (-43 -62)	4 SLO	0.00042	-0.00168	0.00025	0.00175	0.49649	0.5022
47 (-78 -42)	1 SLO	-0.00021	-0.00004	0.00032	0.00038	0.22197	0.37582
47 (-78 -42)	2 SLO	-0.00019	0.00001	0.00032	0.00037	0.21768	0.36855
47 (-78 -42)	3 SLO	-0.00009	-0.00008	0.00032	0.00034	0.19694	0.33343
47 (-78 -42)	4 SLO	-0.00005	0.00007	0.00032	0.00033	0.19292	0.32663
46 (-76 -41)	1 SLO	-0.00021	-0.00004	0.00029	0.00036	0.22112	0.38755
46 (-76 -41)	2 SLO	-0.00019	0	0.00029	0.00035	0.21563	0.37793
46 (-76 -41)	3 SLO	0.00007	0.00008	0.0003	0.00032	0.19443	0.34077
46 (-76 -41)	4 SLO	-0.00005	0.00007	0.0003	0.00031	0.18837	0.33015
0 (-795 -40)	1 SLO	0.00016	0.00017	0.00002	0.00023	0.4436	0.4436
0 (-795 -40)	2 SLO	0.00014	0.00005	0.00001	0.00015	0.28265	0.28265
0 (-795 -40)	3 SLO	0	-0.00027	-0.00001	0.00027	0.50514	0.50514
0 (-795 -40)	4 SLO	0.00006	-0.00019	0	0.0002	0.37273	0.37273
0 (-40 -804)	1 SLO	0.00012	0.00014	0.00001	0.00019	0.42485	0.42485
0 (-40 -804)	2 SLO	0.00011	0.00003	0	0.00011	0.25928	0.25928
0 (-40 -804)	3 SLO	0.00001	-0.00023	-0.00002	0.00023	0.52377	0.52377
0 (-40 -804)	4 SLO	0.00005	-0.00017	-0.00002	0.00017	0.3959	0.3959
26 (72 82)	1 SLO	-0.00096	-0.00094	0.00008	0.00135	0.38297	0.38737
26 (72 82)	2 SLO	0.00087	-0.00042	0.00017	0.00098	0.27914	0.28235
26 (72 82)	3 SLO	-0.00042	-0.00197	0.0001	0.00201	0.5724	0.57898
26 (72 82)	4 SLO	0.00013	-0.00181	0.00013	0.00182	0.51736	0.52331
26 (-82 72)	1 SLO	-0.00072	-0.00053	0.00015	0.00091	0.34424	0.37956
26 (-82 72)	2 SLO	0.00068	-0.00014	0.00036	0.00078	0.29672	0.32716
26 (-82 72)	3 SLO	-0.00029	-0.00097	0.0002	0.00103	0.39071	0.4308
26 (-82 72)	4 SLO	0.00013	-0.00085	0.00027	0.0009	0.34178	0.37684
25 (71 83)	1 SLO	-0.00099	-0.00154	0.00008	0.00184	0.52149	0.52749
25 (71 83)	2 SLO	-0.00093	-0.0005	0.00008	0.00106	0.29981	0.30326
25 (71 83)	3 SLO	-0.00041	-0.00216	0.00011	0.0022	0.62403	0.63121
25 (71 83)	4 SLO	0.00017	-0.00164	0.00014	0.00166	0.47093	0.47635

25 (-81 71)	1 SLO	-0.00073	-0.00084	0.00015	0.00112	0.42583	0.46952
25 (-81 71)	2 SLO	-0.00068	-0.00035	0.00015	0.00078	0.29639	0.32679
25 (-81 71)	3 SLO	-0.0003	-0.00106	0.00022	0.00112	0.42448	0.46802
25 (-81 71)	4 SLO	0.00012	-0.00075	0.00028	0.00082	0.30885	0.34053
0 (70 84)	1 SLO	-0.00103	-0.00212	-0.00005	0.00236	0.67067	0.67838
0 (70 84)	2 SLO	-0.00097	-0.00114	0	0.00149	0.42409	0.42896
0 (70 84)	3 SLO	-0.00041	-0.00225	-0.00008	0.00229	0.65022	0.65769
0 (70 84)	4 SLO	0.00018	-0.00137	-0.00005	0.00139	0.39397	0.3985
0 (-80 70)	1 SLO	-0.00075	-0.00133	-0.00009	0.00153	0.57952	0.683
0 (-80 70)	2 SLO	-0.0007	-0.00077	0.00001	0.00104	0.39237	0.46244
0 (-80 70)	3 SLO	-0.00031	-0.00132	-0.00014	0.00136	0.51624	0.60842
0 (-80 70)	4 SLO	0.00012	-0.00075	-0.00008	0.00076	0.28822	0.33968
0 (-803 69)	1 SLO	0.00022	0.0002	0	0.0003	0.5738	2.36691
0 (-803 69)	2 SLO	0.00021	0.00011	0	0.00023	0.43946	1.81276
0 (-803 69)	3 SLO	0.00009	0.00021	0.00001	0.00023	0.44371	1.8303
0 (-803 69)	4 SLO	-0.00004	0.00013	0.00001	0.00013	0.24802	1.0231
0 (69 -818)	1 SLO	-0.00017	-0.00019	0.00001	0.00026	0.57988	0.57988
0 (69 -818)	2 SLO	-0.00016	-0.00009	0.00001	0.00018	0.41502	0.41502
0 (69 -818)	3 SLO	-0.00007	-0.00021	0	0.00022	0.50314	0.50314
0 (69 -818)	4 SLO	0.00003	-0.00013	0	0.00013	0.29841	0.29841
0 (-799 68)	1 SLO	-0.00022	-0.00023	0	0.00032	0.60197	2.48311
0 (-799 68)	2 SLO	-0.00021	-0.0001	0.00001	0.00023	0.43448	1.79223
0 (-799 68)	3 SLO	-0.00009	-0.00028	0	0.00029	0.55551	2.2915
0 (-799 68)	4 SLO	0.00004	-0.0002	0	0.0002	0.37669	1.55384
0 (68 -811)	1 SLO	-0.00017	-0.00019	0	0.00025	0.57647	0.57647
0 (68 -811)	2 SLO	-0.00016	-0.00008	0.00001	0.00018	0.39931	0.39931
0 (68 -811)	3 SLO	-0.00007	-0.00024	-0.00001	0.00025	0.56193	0.56193
0 (68 -811)	4 SLO	0.00003	-0.00017	-0.00001	0.00017	0.3885	0.3885
0 (67 87)	1 SLO	-0.00149	-0.00214	-0.00001	0.00261	0.74072	0.74923
0 (67 87)	2 SLO	-0.0014	-0.00115	0.00001	0.00181	0.51507	0.52099
0 (67 87)	3 SLO	-0.00058	-0.00226	-0.00002	0.00233	0.6627	0.67031
0 (67 87)	4 SLO	0.00028	-0.00137	-0.00001	0.0014	0.39808	0.40266
0 (-528 67)	1 SLO	-0.00108	-0.0013	-0.00011	0.00169	0.64178	0.70596
0 (-528 67)	2 SLO	-0.00101	-0.00076	-0.00006	0.00126	0.47859	0.52645
0 (-528 67)	3 SLO	-0.00043	-0.00128	-0.00009	0.00136	0.51356	0.56492
0 (-528 67)	4 SLO	0.0002	-0.00072	-0.00003	0.00075	0.28378	0.31216
0 (66 88)	1 SLO	-0.0015	-0.00236	-0.00001	0.00279	0.79324	0.80236
0 (66 88)	2 SLO	-0.00141	-0.00136	0.00001	0.00196	0.55583	0.56222
0 (66 88)	3 SLO	-0.00059	-0.00234	-0.00002	0.00241	0.68406	0.69192
0 (66 88)	4 SLO	0.00029	-0.00132	-0.00002	0.00135	0.38368	0.38809
0 (-532 66)	1 SLO	-0.00107	-0.00149	-0.00008	0.00184	0.69524	0.76476
0 (-532 66)	2 SLO	-0.00101	-0.00095	-0.00004	0.00138	0.5238	0.57618
0 (-532 66)	3 SLO	-0.00042	-0.00133	-0.00006	0.0014	0.53055	0.58361
0 (-532 66)	4 SLO	0.0002	-0.00066	-0.00001	0.00069	0.26175	0.28793
48 (65 89)	1 SLO	-0.0022	-0.00186	0.00011	0.00288	0.81876	0.82817
48 (65 89)	2 SLO	-0.00207	-0.00088	0.00012	0.00226	0.6413	0.64868
48 (65 89)	3 SLO	-0.00084	-0.00216	0.00011	0.00232	0.65793	0.66549
48 (65 89)	4 SLO	0.00044	-0.00142	0.00011	0.0015	0.42506	0.42995
2 (-27 -50)	1 SLO	-0.00218	-0.00079	0.00007	0.00232	0.65783	0.66539

2 (-27 -50)	2 SLO	-0.00206	-0.00024	0.00007	0.00207	0.58847	0.59523
2 (-27 -50)	3 SLO	-0.00088	-0.00114	0.00009	0.00145	0.4113	0.41603
2 (-27 -50)	4 SLO	0.00035	-0.00091	0.0001	0.00098	0.27716	0.28035
3 (-28 -51)	1 SLO	-0.00218	-0.00074	0.00017	0.00231	0.65541	0.66088
3 (-28 -51)	2 SLO	-0.00206	-0.00018	0.00017	0.00207	0.58943	0.59436
3 (-28 -51)	3 SLO	-0.00088	-0.00117	0.00018	0.00147	0.41874	0.42224
3 (-28 -51)	4 SLO	0.00036	-0.00098	0.00019	0.00106	0.30107	0.30358
4 (-29 -52)	1 SLO	-0.00217	-0.0005	0.00018	0.00223	0.63421	0.63951
4 (-29 -52)	2 SLO	-0.00206	0.00002	0.00019	0.00207	0.58687	0.59177
4 (-29 -52)	3 SLO	-0.00084	-0.00105	0.00015	0.00135	0.38368	0.38688
4 (-29 -52)	4 SLO	0.00041	-0.001	0.00014	0.00109	0.30902	0.3116
5 (-30 -53)	1 SLO	-0.00218	-0.00055	0.00014	0.00225	0.63879	0.64613
5 (-30 -53)	2 SLO	-0.00206	-0.00002	0.00015	0.00207	0.58798	0.59474
5 (-30 -53)	3 SLO	-0.00084	-0.00108	0.00014	0.00138	0.39108	0.39557
5 (-30 -53)	4 SLO	0.00042	-0.00102	0.00014	0.00111	0.31469	0.3183
8 (-32 -55)	1 SLO	-0.0018	-0.00076	0.00015	0.00196	0.55642	0.56282
8 (-32 -55)	2 SLO	-0.0017	-0.00021	0.00014	0.00172	0.48915	0.49477
8 (-32 -55)	3 SLO	-0.0007	-0.00113	0.00013	0.00134	0.38003	0.3844
8 (-32 -55)	4 SLO	0.00033	-0.0009	0.0001	0.00097	0.27451	0.27766
9 (-33 -56)	1 SLO	-0.0018	-0.0007	0.00018	0.00194	0.55176	0.55811
9 (-33 -56)	2 SLO	-0.0017	-0.00014	0.00018	0.00172	0.48833	0.49394
9 (-33 -56)	3 SLO	-0.00071	-0.00115	0.00015	0.00136	0.38535	0.38978
9 (-33 -56)	4 SLO	0.00033	-0.00097	0.00013	0.00103	0.293	0.29637
10 (-34 -57)	1 SLO	-0.0018	-0.00047	0.00019	0.00187	0.53208	0.53819
10 (-34 -57)	2 SLO	-0.0017	0.00005	0.0002	0.00171	0.48716	0.49276
10 (-34 -57)	3 SLO	-0.0007	-0.00103	0.00014	0.00126	0.3572	0.36131
10 (-34 -57)	4 SLO	0.00034	-0.00098	0.00011	0.00105	0.29728	0.3007
11 (63 81)	1 SLO	-0.00181	-0.00053	0.0002	0.0019	0.5386	0.54479
11 (63 81)	2 SLO	-0.00171	0	0.0002	0.00172	0.48848	0.4941
11 (63 81)	3 SLO	-0.00071	-0.00106	0.00017	0.00129	0.36622	0.37043
11 (63 81)	4 SLO	0.00034	-0.00099	0.00014	0.00106	0.30004	0.30349
4500 (64 90)	1 SLO	-0.0021	-0.00239	0.00011	0.00318	0.9045	0.9149
4500 (64 90)	2 SLO	-0.00198	-0.00139	0.00011	0.00242	0.68815	0.69606
4500 (64 90)	3 SLO	-0.00082	-0.00234	0.0001	0.00248	0.70546	0.71357
4500 (64 90)	4 SLO	0.0004	-0.0013	0.0001	0.00136	0.38775	0.3922
0 (-73 -39)	1 SLO	0.00008	0.00007	0.00003	0.00011	0.16977	2.20695
0 (-73 -39)	2 SLO	-0.00008	0.00005	0.00002	0.0001	0.14679	1.90826
0 (-73 -39)	3 SLO	0.00003	0.00016	0.00002	0.00017	0.26064	3.38837
0 (-73 -39)	4 SLO	-0.00002	0.00016	0.00002	0.00016	0.24473	3.18153
21 (-39 -474)	1 SLO	0.00138	0.00013	0.00014	0.00139	0.79112	0.79112
21 (-39 -474)	2 SLO	0.00132	-0.00017	0.00014	0.00134	0.76097	0.76097
21 (-39 -474)	3 SLO	0.00085	0.00044	0.00014	0.00097	0.55165	0.55165
21 (-39 -474)	4 SLO	0.00066	-0.00058	0.00013	0.00088	0.50258	0.50258
21 (-474 -38)	1 SLO	-0.00131	-0.00021	0.00011	0.00133	0.75412	0.85081
21 (-474 -38)	2 SLO	-0.00125	0.00014	0.00011	0.00126	0.71795	0.80999
21 (-474 -38)	3 SLO	-0.00082	-0.00055	0.00011	0.00099	0.5651	0.63755
21 (-474 -38)	4 SLO	-0.00064	0.00059	0.00012	0.00088	0.49825	0.56213
21 (-38 -475)	1 SLO	-0.00095	-0.00021	0.00004	0.00097	0.55136	0.55136
21 (-38 -475)	2 SLO	-0.0009	0.00014	0.00004	0.00092	0.52015	0.52015

21 (-38 -475)	3 SLO	-0.00047	-0.00055	0.00004	0.00072	0.41173	0.41173
21 (-38 -475)	4 SLO	-0.00032	0.00062	0.00004	0.0007	0.39565	0.39565
0 (-74 -37)	1 SLO	0.00008	0.00009	0.00003	0.00012	0.18179	2.3633
0 (-74 -37)	2 SLO	-0.00008	0.00003	0.00002	0.00009	0.13717	1.78318
0 (-74 -37)	3 SLO	0.00003	0.00017	0.00002	0.00017	0.26516	3.44713
0 (-74 -37)	4 SLO	-0.00002	0.00015	0.00002	0.00015	0.23795	3.09335
20 (-37 -473)	1 SLO	-0.00138	-0.00029	0.00012	0.00141	0.8032	0.8032
20 (-37 -473)	2 SLO	-0.00132	0.00001	0.00012	0.00133	0.7536	0.7536
20 (-37 -473)	3 SLO	-0.00085	-0.00058	0.00013	0.00104	0.58934	0.58934
20 (-37 -473)	4 SLO	-0.00066	0.00045	0.00013	0.00081	0.45997	0.45997
20 (-473 -36)	1 SLO	0.00133	0.00028	0.00013	0.00136	0.77308	0.87219
20 (-473 -36)	2 SLO	0.00127	-0.00007	0.00013	0.00128	0.72632	0.81944
20 (-473 -36)	3 SLO	0.00084	0.0006	0.00012	0.00104	0.59232	0.66825
20 (-473 -36)	4 SLO	0.00065	-0.00055	0.00012	0.00086	0.49044	0.55331
20 (-36 -476)	1 SLO	0.00095	0.00034	0.00005	0.00101	0.57158	0.57158
20 (-36 -476)	2 SLO	0.00089	-0.00001	0.00005	0.00089	0.50704	0.50704
20 (-36 -476)	3 SLO	0.00048	0.00066	0.00005	0.00082	0.46687	0.46687
20 (-36 -476)	4 SLO	0.00003	0.00059	0.00004	0.00059	0.33741	0.33741
21 (-475 -59)	1 SLO	0.00091	-0.00002	0.00004	0.00091	0.51801	0.53006
21 (-475 -59)	2 SLO	0.00086	-0.00023	0.00004	0.00089	0.50669	0.51848
21 (-475 -59)	3 SLO	-0.00014	-0.00056	0.00004	0.00058	0.32991	0.33759
21 (-475 -59)	4 SLO	0.0003	-0.00052	0.00004	0.0006	0.34176	0.3497
20 (-476 -60)	1 SLO	-0.00091	-0.00037	0.00004	0.00098	0.55879	0.57178
20 (-476 -60)	2 SLO	-0.00087	-0.00016	0.00004	0.00089	0.50495	0.51669
20 (-476 -60)	3 SLO	-0.00044	-0.00055	0.00004	0.00071	0.40367	0.41305
20 (-476 -60)	4 SLO	-0.00001	-0.0005	0.00004	0.0005	0.28318	0.28977
0 (-810 -63)	1 SLO	0	-0.00019	0	0.00019	0.43296	0.43296
0 (-810 -63)	2 SLO	0.00008	0.00002	0.00001	0.00009	0.19625	0.19625
0 (-810 -63)	3 SLO	0.00001	-0.00027	0	0.00027	0.60401	0.60401
0 (-810 -63)	4 SLO	0.00003	-0.0002	0.00001	0.0002	0.46381	0.46381
0 (-824 85)	1 SLO	0.00016	0.00019	0	0.00024	0.55364	0.609
0 (-824 85)	2 SLO	0.00014	0.0001	0	0.00017	0.3896	0.42856
0 (-824 85)	3 SLO	0.00007	0.00021	0	0.00022	0.50907	0.55998
0 (-824 85)	4 SLO	-0.00002	0.00015	0	0.00015	0.33823	0.37206
0 (-817 86)	1 SLO	-0.00015	-0.00019	0	0.00025	0.55892	0.61481
0 (-817 86)	2 SLO	-0.00014	-0.00006	0	0.00015	0.35207	0.38728
0 (-817 86)	3 SLO	-0.00007	-0.00026	0	0.00027	0.61781	0.67959
0 (-817 86)	4 SLO	0.00002	-0.0002	0	0.0002	0.45292	0.49821
0 (-79 -792)	1 SLO	-0.00008	-0.00017	-0.00003	0.00019	0.36373	0.36373
0 (-79 -792)	2 SLO	-0.00007	-0.00008	0.00001	0.00011	0.2082	0.2082
0 (-79 -792)	3 SLO	-0.00003	-0.0002	-0.00005	0.00021	0.39683	0.39683
0 (-79 -792)	4 SLO	0.00002	-0.00014	-0.00004	0.00014	0.27197	0.27197
0 (-826 -79)	1 SLO	0.00008	0.00004	0.00003	0.0001	0.32789	0.32789
0 (-826 -79)	2 SLO	0.00007	0.00001	0.00002	0.00008	0.26232	0.26232
0 (-826 -79)	3 SLO	0.00004	0.00005	0.00004	0.00008	0.26185	0.26185
0 (-826 -79)	4 SLO	0	0.00003	0.00004	0.00005	0.1554	0.1554
0 (-543 -80)	1 SLO	-0.00008	-0.00005	-0.00002	0.0001	0.3248	0.3248
0 (-543 -80)	2 SLO	-0.00008	-0.00003	0	0.00008	0.28812	0.28812
0 (-543 -80)	3 SLO	-0.00003	-0.00004	-0.00002	0.00006	0.20306	0.20306

0 (-543 -80)	4 SLO	-0.00003	0.00002	0.00003	0.00005	0.15519	0.15519
0 (-85 -827)	1 SLO	0.00001	0.00001	0.00004	0.00004	0.10822	0.10822
0 (-85 -827)	2 SLO	0.00001	0	0.00001	0.00002	0.0494	0.0494
0 (-85 -827)	3 SLO	0.00001	0.00001	0.00005	0.00006	0.15746	0.15746
0 (-85 -827)	4 SLO	0	0.00001	0.00005	0.00005	0.13613	0.13613
0 (100 -829)	1 SLO	0.00003	0.00001	0.00005	0.00006	0.15873	0.15873
0 (100 -829)	2 SLO	0.00003	0	0.00003	0.00005	0.12519	0.12519
0 (100 -829)	3 SLO	0.00001	0.00001	0.00004	0.00004	0.11544	0.11544
0 (100 -829)	4 SLO	-0.00001	0.00001	0.00002	0.00002	0.05724	0.05724
0 (101 -831)	1 SLO	0.00003	0.00001	0.00006	0.00007	0.19651	0.19651
0 (101 -831)	2 SLO	0.00003	0	0.00006	0.00006	0.17832	0.17832
0 (101 -831)	3 SLO	0.00001	0.00001	0.00003	0.00004	0.10129	0.10129
0 (101 -831)	4 SLO	0	-0.00001	0.00001	0.00002	0.05387	0.05387
0 (102 -486)	1 SLO	0	0.00001	0.00003	0.00003	0.0694	0.2776
0 (102 -486)	2 SLO	0	0	0.00001	0.00001	0.03355	0.13419
0 (102 -486)	3 SLO	0	0.00001	0.00003	0.00004	0.08977	0.35909
0 (102 -486)	4 SLO	0	0.00001	0.00003	0.00003	0.07109	0.28436
0 (103 -489)	1 SLO	0.00002	0.00001	0.00004	0.00004	0.1042	0.41681
0 (103 -489)	2 SLO	0.00002	0	0.00003	0.00003	0.08699	0.34794
0 (103 -489)	3 SLO	0.00001	0.00001	0.00003	0.00003	0.06976	0.27903
0 (103 -489)	4 SLO	-0.00001	0.00001	0.00001	0.00001	0.03444	0.13776
0 (104 -498)	1 SLO	0.00002	0	0.00003	0.00004	0.10217	0.40869
0 (104 -498)	2 SLO	0.00002	0	0.00003	0.00003	0.08515	0.34061
0 (104 -498)	3 SLO	0.00001	0	0.00002	0.00003	0.06281	0.25125
0 (104 -498)	4 SLO	0	0	0.00001	0.00001	0.01913	0.07653
3100 (-106 -112)	1 SLO	-0.00075	-0.00137	0.00002	0.00157	0.59318	0.69911
3100 (-106 -112)	2 SLO	-0.00071	-0.00078	0.00003	0.00105	0.39846	0.46962
3100 (-106 -112)	3 SLO	-0.00032	-0.00139	0.00001	0.00142	0.53939	0.63571
3100 (-106 -112)	4 SLO	0.0001	-0.00081	0.00001	0.00081	0.30729	0.36217
32 (-406 122)	1 SLO	-0.00034	-0.00031	0.00017	0.00049	0.2647	0.27052
32 (-406 122)	2 SLO	0.00035	-0.00028	0.00017	0.00048	0.25713	0.26278
32 (-406 122)	3 SLO	-0.0001	-0.0006	0.00017	0.00063	0.33887	0.34632
32 (-406 122)	4 SLO	0.00011	-0.00059	0.00017	0.00062	0.33561	0.34299
0 (-110 -109)	1 SLO	0.00017	0.00014	0.00004	0.00022	0.22886	0.47762
0 (-110 -109)	2 SLO	0.00016	0.00006	0.00004	0.00018	0.18732	0.39093
0 (-110 -109)	3 SLO	0.00006	0.00016	0.00004	0.00018	0.18257	0.38101
0 (-110 -109)	4 SLO	-0.00004	0.00011	0.00004	0.00012	0.12904	0.2693
0 (-486 -494)	1 SLO	0.00004	0.00003	0.00006	0.00007	0.18748	0.18748
0 (-486 -494)	2 SLO	0.00004	0.00001	0.00003	0.00005	0.12492	0.12492
0 (-486 -494)	3 SLO	0.00001	0.00003	0.00007	0.00008	0.19574	0.19574
0 (-486 -494)	4 SLO	-0.00001	0.00002	0.00005	0.00006	0.14939	0.14939
0 (-489 -490)	1 SLO	0.00006	0.00003	0.00006	0.00009	0.21891	0.21891
0 (-489 -490)	2 SLO	0.00006	0.00001	0.00005	0.00007	0.18397	0.18397
0 (-489 -490)	3 SLO	0.00002	0.00003	0.00004	0.00006	0.14267	0.14267
0 (-489 -490)	4 SLO	-0.00001	0.00002	0.00002	0.00003	0.07683	0.07683
0 (-498 -502)	1 SLO	0.00006	0.00003	0.00006	0.00009	0.23034	0.23034

0 (-498 -502)	2 SLO	0.00006	0.00002	0.00005	0.00008	0.19245	0.19245
0 (-498 -502)	3 SLO	0.00002	0.00003	0.00004	0.00006	0.14642	0.14642
0 (-498 -502)	4 SLO	-0.00001	0.00002	0.00001	0.00003	0.06987	0.06987
0 (-541 -528)	1 SLO	-0.00008	-0.00008	-0.00002	0.00012	0.41452	0.41452
0 (-541 -528)	2 SLO	-0.00008	-0.00005	-0.00001	0.00009	0.31817	0.31817
0 (-541 -528)	3 SLO	-0.00004	-0.00008	-0.00002	0.00009	0.3122	0.3122
0 (-541 -528)	4 SLO	0.00001	-0.00005	0	0.00005	0.16307	0.16307
0 (-539 -532)	1 SLO	-0.00008	-0.0001	-0.00002	0.00013	0.44194	0.44194
0 (-539 -532)	2 SLO	-0.00008	-0.00006	-0.00001	0.0001	0.33274	0.33274
0 (-539 -532)	3 SLO	-0.00003	-0.00009	-0.00001	0.0001	0.33367	0.33367
0 (-539 -532)	4 SLO	0.00001	-0.00005	0	0.00005	0.16191	0.16191
0 (-538 -539)	1 SLO	-0.00007	-0.00008	-0.00002	0.00011	0.37477	0.37477
0 (-538 -539)	2 SLO	-0.00007	-0.00005	-0.00001	0.00008	0.28444	0.28444
0 (-538 -539)	3 SLO	-0.00003	-0.00007	-0.00001	0.00008	0.27617	0.27617
0 (-538 -539)	4 SLO	0.00001	-0.00004	0	0.00004	0.13025	0.13025
0 (-540 -541)	1 SLO	-0.00007	-0.00007	-0.00002	0.00011	0.3596	0.3596
0 (-540 -541)	2 SLO	-0.00007	-0.00004	-0.00002	0.00008	0.2805	0.2805
0 (-540 -541)	3 SLO	-0.00003	-0.00007	-0.00002	0.00008	0.26168	0.26168
0 (-540 -541)	4 SLO	0.00001	-0.00004	0	0.00004	0.13196	0.13196
0 (-542 -543)	1 SLO	0.00013	0.00006	0.00004	0.00015	0.51028	0.51028
0 (-542 -543)	2 SLO	0.00012	0.00003	0.00002	0.00013	0.43748	0.43748
0 (-542 -543)	3 SLO	0.00006	0.00006	0.00004	0.00009	0.31433	0.31433
0 (-542 -543)	4 SLO	-0.00001	0.00003	0.00003	0.00004	0.15127	0.15127
0 (-789 -786)	1 SLO	-0.00009	-0.00007	-0.00002	0.00012	0.39292	0.39292
0 (-789 -786)	2 SLO	-0.00009	-0.00003	-0.00001	0.00009	0.31299	0.31299
0 (-789 -786)	3 SLO	-0.00003	-0.00008	-0.00002	0.00009	0.30199	0.30199
0 (-789 -786)	4 SLO	0.00002	-0.00005	-0.00001	0.00006	0.18994	0.18994
0 (-786 -796)	1 SLO	-0.00018	-0.00015	-0.00003	0.00024	0.45456	0.45456
0 (-786 -796)	2 SLO	-0.00017	-0.00007	-0.00002	0.00019	0.35447	0.35447
0 (-786 -796)	3 SLO	-0.00007	-0.00018	-0.00003	0.00019	0.36533	0.36533
0 (-786 -796)	4 SLO	0.00003	-0.00012	-0.00001	0.00012	0.23304	0.23304
0 (-791 -787)	1 SLO	-0.00009	-0.00009	-0.00002	0.00013	0.44339	0.44339
0 (-791 -787)	2 SLO	-0.00008	-0.00005	-0.00002	0.0001	0.33999	0.33999
0 (-791 -787)	3 SLO	-0.00003	-0.0001	-0.00001	0.0001	0.35286	0.35286
0 (-791 -787)	4 SLO	0.00002	-0.00006	0	0.00006	0.21194	0.21194
0 (-787 -800)	1 SLO	-0.00018	-0.00021	-0.00003	0.00028	0.52622	0.52622
0 (-787 -800)	2 SLO	-0.00017	-0.00012	-0.00002	0.00021	0.39258	0.39258
0 (-787 -800)	3 SLO	-0.00007	-0.00022	-0.00002	0.00023	0.43855	0.43855
0 (-787 -800)	4 SLO	0.00004	-0.00014	0	0.00014	0.26812	0.26812
0 (-788 -789)	1 SLO	-0.00008	-0.00006	-0.00002	0.0001	0.34599	0.34599
0 (-788 -789)	2 SLO	-0.00008	-0.00003	-0.00001	0.00008	0.27991	0.27991
0 (-788 -789)	3 SLO	-0.00003	-0.00007	-0.00002	0.00007	0.25565	0.25565
0 (-788 -789)	4 SLO	0.00002	-0.00004	-0.00001	0.00005	0.1582	0.1582
0 (-790 -791)	1 SLO	-0.00008	-0.00007	-0.00002	0.00011	0.37448	0.37448
0 (-790 -791)	2 SLO	-0.00008	-0.00004	-0.00002	0.00009	0.2983	0.2983
0 (-790 -791)	3 SLO	-0.00003	-0.00007	-0.00001	0.00008	0.27608	0.27608
0 (-790 -791)	4 SLO	0.00002	-0.00004	0	0.00005	0.15954	0.15954
0 (-792 -793)	1 SLO	-0.0002	-0.00019	-0.00002	0.00027	0.51546	0.51546
0 (-792 -793)	2 SLO	-0.00019	-0.00009	0.00001	0.00021	0.39392	0.39392

0 (-792 -793)	3 SLO	-0.00009	-0.00022	-0.00004	0.00024	0.4566	0.4566
0 (-792 -793)	4 SLO	0.00002	-0.00015	-0.00003	0.00015	0.29021	0.29021
0 (-793 -794)	1 SLO	-0.00022	-0.0002	-0.00001	0.0003	0.57339	0.57339
0 (-793 -794)	2 SLO	-0.00021	-0.00009	0.00001	0.00023	0.44291	0.44291
0 (-793 -794)	3 SLO	-0.0001	-0.00024	-0.00003	0.00026	0.50114	0.50114
0 (-793 -794)	4 SLO	0.00001	-0.00017	-0.00002	0.00017	0.31766	0.31766
0 (-794 -795)	1 SLO	-0.00019	-0.00022	0	0.00029	0.5479	0.5479
0 (-794 -795)	2 SLO	-0.00018	-0.00009	0.00001	0.0002	0.38168	0.38168
0 (-794 -795)	3 SLO	-0.00008	-0.00027	-0.00002	0.00028	0.53126	0.53126
0 (-794 -795)	4 SLO	0.00002	-0.00019	-0.00001	0.00019	0.35611	0.35611
0 (-796 -797)	1 SLO	-0.0002	-0.00018	-0.00002	0.00028	0.52152	0.52152
0 (-796 -797)	2 SLO	-0.00019	-0.00009	-0.00001	0.00021	0.39788	0.39788
0 (-796 -797)	3 SLO	-0.00008	-0.00021	-0.00002	0.00023	0.43682	0.43682
0 (-796 -797)	4 SLO	0.00004	-0.00014	-0.00001	0.00015	0.28244	0.28244
0 (-797 -798)	1 SLO	-0.00022	-0.0002	-0.00001	0.0003	0.56947	0.56947
0 (-797 -798)	2 SLO	-0.00021	-0.00009	0	0.00023	0.42743	0.42743
0 (-797 -798)	3 SLO	-0.00009	-0.00024	-0.00002	0.00026	0.49157	0.49157
0 (-797 -798)	4 SLO	0.00004	-0.00017	-0.00001	0.00017	0.32206	0.32206
0 (-798 -799)	1 SLO	-0.00023	-0.00022	-0.00001	0.00032	0.59992	0.59992
0 (-798 -799)	2 SLO	-0.00021	-0.0001	0	0.00023	0.44344	0.44344
0 (-798 -799)	3 SLO	-0.00009	-0.00027	-0.00001	0.00028	0.534	0.534
0 (-798 -799)	4 SLO	0.00004	-0.00018	-0.00001	0.00019	0.35701	0.35701
0 (-800 -801)	1 SLO	-0.0002	-0.00025	-0.00002	0.00032	0.60758	0.60758
0 (-800 -801)	2 SLO	-0.00019	-0.00014	-0.00002	0.00023	0.44507	0.44507
0 (-800 -801)	3 SLO	-0.00008	-0.00026	-0.00001	0.00027	0.51937	0.51937
0 (-800 -801)	4 SLO	0.00004	-0.00016	0	0.00017	0.31906	0.31906
0 (-801 -802)	1 SLO	-0.00022	-0.00027	-0.00001	0.00034	0.65057	0.65057
0 (-801 -802)	2 SLO	-0.0002	-0.00015	-0.00001	0.00025	0.4741	0.4741
0 (-801 -802)	3 SLO	-0.00009	-0.00028	-0.00001	0.00029	0.55743	0.55743
0 (-801 -802)	4 SLO	0.00004	-0.00017	0	0.00018	0.33949	0.33949
0 (-802 -803)	1 SLO	-0.00023	-0.00025	0	0.00034	0.63944	0.63944
0 (-802 -803)	2 SLO	-0.00021	-0.00013	0	0.00025	0.47421	0.47421
0 (-802 -803)	3 SLO	-0.00009	-0.00026	0	0.00028	0.52948	0.52948
0 (-802 -803)	4 SLO	0.00004	-0.00016	0	0.00016	0.31121	0.31121
0 (-804 -805)	1 SLO	-0.00013	-0.00019	-0.00001	0.00023	0.52273	0.52273
0 (-804 -805)	2 SLO	-0.00012	-0.00007	0	0.00014	0.31386	0.31386
0 (-804 -805)	3 SLO	-0.00005	-0.00025	-0.00002	0.00026	0.58261	0.58261
0 (-804 -805)	4 SLO	0.00002	-0.00018	-0.00002	0.00018	0.41939	0.41939
0 (-805 -806)	1 SLO	-0.00017	-0.00019	0	0.00026	0.58905	0.58905
0 (-805 -806)	2 SLO	-0.00016	-0.00007	0	0.00018	0.40855	0.40855
0 (-805 -806)	3 SLO	-0.00008	-0.00025	-0.00001	0.00027	0.60703	0.60703
0 (-805 -806)	4 SLO	0.00001	-0.00019	-0.00001	0.00019	0.42716	0.42716
0 (-806 -807)	1 SLO	-0.00019	-0.0002	0	0.00027	0.62081	0.62081
0 (-806 -807)	2 SLO	-0.00018	-0.00007	0	0.0002	0.44592	0.44592
0 (-806 -807)	3 SLO	-0.00009	-0.00026	-0.00001	0.00028	0.62846	0.62846
0 (-806 -807)	4 SLO	0	-0.00019	-0.00001	0.00019	0.44005	0.44005
0 (-807 -808)	1 SLO	-0.00019	-0.0002	0	0.00027	0.61797	0.61797
0 (-807 -808)	2 SLO	-0.00018	-0.00007	0	0.00019	0.43697	0.43697
0 (-807 -808)	3 SLO	-0.00009	-0.00027	-0.00001	0.00028	0.63786	0.63786

0 (-807 -808)	4 SLO	0	-0.0002	-0.00001	0.0002	0.44983	0.44983
0 (-808 -809)	1 SLO	-0.00016	-0.0002	0	0.00026	0.58005	0.58005
0 (-808 -809)	2 SLO	-0.00015	-0.00007	0	0.00017	0.38001	0.38001
0 (-808 -809)	3 SLO	-0.00008	-0.00027	0	0.00028	0.63458	0.63458
0 (-808 -809)	4 SLO	0	-0.0002	0	0.0002	0.45596	0.45596
0 (-809 -810)	1 SLO	-0.00011	-0.00019	0	0.00022	0.50529	0.50529
0 (-809 -810)	2 SLO	-0.00009	-0.00007	0	0.00011	0.26088	0.26088
0 (-809 -810)	3 SLO	-0.00005	-0.00027	0	0.00027	0.6203	0.6203
0 (-809 -810)	4 SLO	0.00001	-0.0002	0	0.0002	0.46008	0.46008
0 (-811 -812)	1 SLO	-0.00017	-0.00019	0	0.00025	0.57615	0.57615
0 (-811 -812)	2 SLO	-0.00015	-0.00007	0.00001	0.00017	0.38943	0.38943
0 (-811 -812)	3 SLO	-0.00007	-0.00025	0	0.00026	0.5825	0.5825
0 (-811 -812)	4 SLO	0.00002	-0.00018	-0.00001	0.00018	0.41039	0.41039
0 (-812 -813)	1 SLO	-0.00017	-0.00019	0	0.00026	0.58154	0.58154
0 (-812 -813)	2 SLO	-0.00015	-0.00007	0.00001	0.00017	0.38732	0.38732
0 (-812 -813)	3 SLO	-0.00007	-0.00025	0	0.00026	0.6011	0.6011
0 (-812 -813)	4 SLO	0.00002	-0.00019	0	0.00019	0.42806	0.42806
0 (-813 -814)	1 SLO	-0.00017	-0.0002	0	0.00026	0.58393	0.58393
0 (-813 -814)	2 SLO	-0.00015	-0.00007	0.00001	0.00017	0.38336	0.38336
0 (-813 -814)	3 SLO	-0.00007	-0.00026	0	0.00027	0.61533	0.61533
0 (-813 -814)	4 SLO	0.00002	-0.00019	0	0.00019	0.44203	0.44203
0 (-814 -815)	1 SLO	-0.00016	-0.0002	0	0.00026	0.58449	0.58449
0 (-814 -815)	2 SLO	-0.00015	-0.00007	0	0.00017	0.37902	0.37902
0 (-814 -815)	3 SLO	-0.00007	-0.00027	0	0.00028	0.62544	0.62544
0 (-814 -815)	4 SLO	0.00002	-0.0002	0	0.0002	0.45242	0.45242
0 (-815 -816)	1 SLO	-0.00016	-0.0002	0	0.00026	0.58352	0.58352
0 (-815 -816)	2 SLO	-0.00015	-0.00007	0	0.00016	0.37444	0.37444
0 (-815 -816)	3 SLO	-0.00007	-0.00027	0	0.00028	0.63196	0.63196
0 (-815 -816)	4 SLO	0.00002	-0.0002	0	0.0002	0.45969	0.45969
0 (-816 -817)	1 SLO	-0.00016	-0.0002	0	0.00025	0.57918	0.57918
0 (-816 -817)	2 SLO	-0.00015	-0.00007	0	0.00016	0.36775	0.36775
0 (-816 -817)	3 SLO	-0.00007	-0.00027	0	0.00028	0.63512	0.63512
0 (-816 -817)	4 SLO	0.00002	-0.0002	0	0.0002	0.46486	0.46486
0 (-818 -819)	1 SLO	-0.00017	-0.00024	0.00001	0.00029	0.66461	0.66461
0 (-818 -819)	2 SLO	-0.00015	-0.00012	0.00001	0.00019	0.43924	0.43924
0 (-818 -819)	3 SLO	-0.00007	-0.00028	0	0.00029	0.65018	0.65018
0 (-818 -819)	4 SLO	0.00002	-0.00019	0	0.00019	0.42649	0.42649
0 (-819 -820)	1 SLO	-0.00016	-0.00026	0	0.00031	0.70574	0.70574
0 (-819 -820)	2 SLO	-0.00015	-0.00013	0.00001	0.0002	0.4497	0.4497
0 (-819 -820)	3 SLO	-0.00007	-0.00031	0	0.00032	0.72255	0.72255
0 (-819 -820)	4 SLO	0.00002	-0.00021	0	0.00022	0.4907	0.4907
0 (-820 -821)	1 SLO	-0.00016	-0.00027	0	0.00032	0.71864	0.71864
0 (-820 -821)	2 SLO	-0.00015	-0.00013	0.00001	0.0002	0.4492	0.4492
0 (-820 -821)	3 SLO	-0.00007	-0.00032	0	0.00033	0.75185	0.75185
0 (-820 -821)	4 SLO	0.00002	-0.00023	0	0.00023	0.51807	0.51807
0 (-821 -822)	1 SLO	-0.00016	-0.00027	0	0.00031	0.70916	0.70916
0 (-821 -822)	2 SLO	-0.00015	-0.00013	0.00001	0.00019	0.44044	0.44044
0 (-821 -822)	3 SLO	-0.00007	-0.00032	0	0.00033	0.7462	0.7462
0 (-821 -822)	4 SLO	0.00002	-0.00023	0	0.00023	0.51509	0.51509

0 (-822 -823)	1 SLO	-0.00016	-0.00025	0	0.0003	0.67225	0.67225
0 (-822 -823)	2 SLO	-0.00015	-0.00011	0	0.00019	0.42099	0.42099
0 (-822 -823)	3 SLO	-0.00007	-0.0003	0	0.00031	0.69891	0.69891
0 (-822 -823)	4 SLO	0.00002	-0.00021	0	0.00021	0.47573	0.47573
0 (-823 -824)	1 SLO	-0.00016	-0.00021	0	0.00026	0.5945	0.5945
0 (-823 -824)	2 SLO	-0.00015	-0.00009	0	0.00017	0.38684	0.38684
0 (-823 -824)	3 SLO	-0.00007	-0.00025	0	0.00026	0.58865	0.58865
0 (-823 -824)	4 SLO	0.00002	-0.00017	0	0.00017	0.38075	0.38075
0 (-825 -826)	1 SLO	-0.00013	-0.00005	-0.00001	0.00014	0.49069	0.49069
0 (-825 -826)	2 SLO	-0.00012	-0.00002	0.00001	0.00013	0.43432	0.43432
0 (-825 -826)	3 SLO	-0.00006	-0.00006	-0.00002	0.00009	0.2971	0.2971
0 (-825 -826)	4 SLO	-0.00003	0.00004	0.00003	0.00006	0.19347	0.19347
0 (-827 -828)	1 SLO	0.00005	0.00002	0.00004	0.00006	0.17203	0.17203
0 (-827 -828)	2 SLO	-0.00004	0	0.00001	0.00005	0.12763	0.12763
0 (-827 -828)	3 SLO	0.00002	0.00003	0.00005	0.00006	0.17628	0.17628
0 (-827 -828)	4 SLO	-0.00001	0.00002	0.00005	0.00005	0.14327	0.14327
0 (-829 -830)	1 SLO	0.00006	0.00002	0.00004	0.00007	0.20535	0.20535
0 (-829 -830)	2 SLO	0.00005	0	0.00003	0.00006	0.17181	0.17181
0 (-829 -830)	3 SLO	0.00002	0.00003	0.00003	0.00005	0.1382	0.1382
0 (-829 -830)	4 SLO	-0.00001	0.00002	0.00002	0.00003	0.08157	0.08157
0 (-831 -832)	1 SLO	0.00006	0.00002	0.00006	0.00008	0.22614	0.22614
0 (-831 -832)	2 SLO	0.00005	0	0.00005	0.00007	0.19979	0.19979
0 (-831 -832)	3 SLO	-0.00003	-0.00004	-0.00002	0.00005	0.13576	0.13576
0 (-831 -832)	4 SLO	0.00001	-0.00003	0.00001	0.00003	0.08639	0.08639

