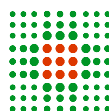


SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA
Azienda Unità Sanitaria Locale di Ferrara



SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA
Azienda Ospedaliero-Universitaria di Ferrara



SERVIZIO COMUNE TECNICO PATRIMONIALE
AZIENDA USL FERRARA
Via Cassoli 30
44100 Ferrara - tel. 0532 235800

FIRMA / VERIFICA / VALIDAZIONE

RESPONSABILE UNICO DEL PROCEDIMENTO

Arch. Giovanni Peressotti

COMMITTENZA: AZIENDA UNITÀ SANITARIA LOCALE DI FERRARA

DIRETTORE GENERALE
Dr.ssa Monica Calamai

DIRETTORE SANITARIO
Dr. Emanuele Ciotti

DIRETTORE AMMINISTRATIVO
Dr.ssa Anna Gualandi

INTERVENTO

OSPEDALE "F.LLI BORSELLI" - BONDENO (FE) REALIZZAZIONE CASA DELLA SALUTE A BONDENO - SECONDA FASE

INTERVENTO N°762 DELL'ALLEGATO C1 ALL'ORDINANZA RER N°10 DEL 25/03/2015

PROGETTAZIONE

GRUPPO DI PROGETTAZIONE

INTEGRAZIONE PRESTAZIONI SPECIALISTICHE

PROGETTAZIONE EDILE-ARCHITETTONICA

ARCH. MARCO RIZZOLI
VIA ZACCHERINI ALVISI 3
40138 BOLOGNA
Tel. 051.0562611 - Fax 051.0544773
Email: info@studio-rizzoli.it

PROGETTAZIONE STRUTTURE

ING. ALDO BARBIERI - STUDIO ENARCO SRL
ING. FILIPPO LORETI - COLLABORATORE
VIA DEL RONDONO, 1
40122 BOLOGNA
Tel. 051.552892
Email: enarco@enarco.it

PROGETTAZIONE IMPIANTI MECCANICI ED ELETTRICI

ING. PAOLO TRAPELLA - STEP ENGINEERING srl
VIA PONTEGRADELLA, 87
44123 FERRARA
Tel. 0532 740050
Email: segreteria@studio-step.it

SICUREZZA

ARCH. ANTONELLA ZENI
CORSO ISONZO, 84
44121 FERRARA
Cell. 347.4508301
Email: antozen@libero.it

LIVELLO PROGETTUALE

PROGETTO ESECUTIVO

OGGETTO ELABORATO

PROGETTO STRUTTURALE TABULATO DI CALCOLO

CODICE IMMOBILE

CP1P02

N. TAV.

PERS02

SCALA

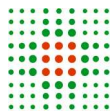
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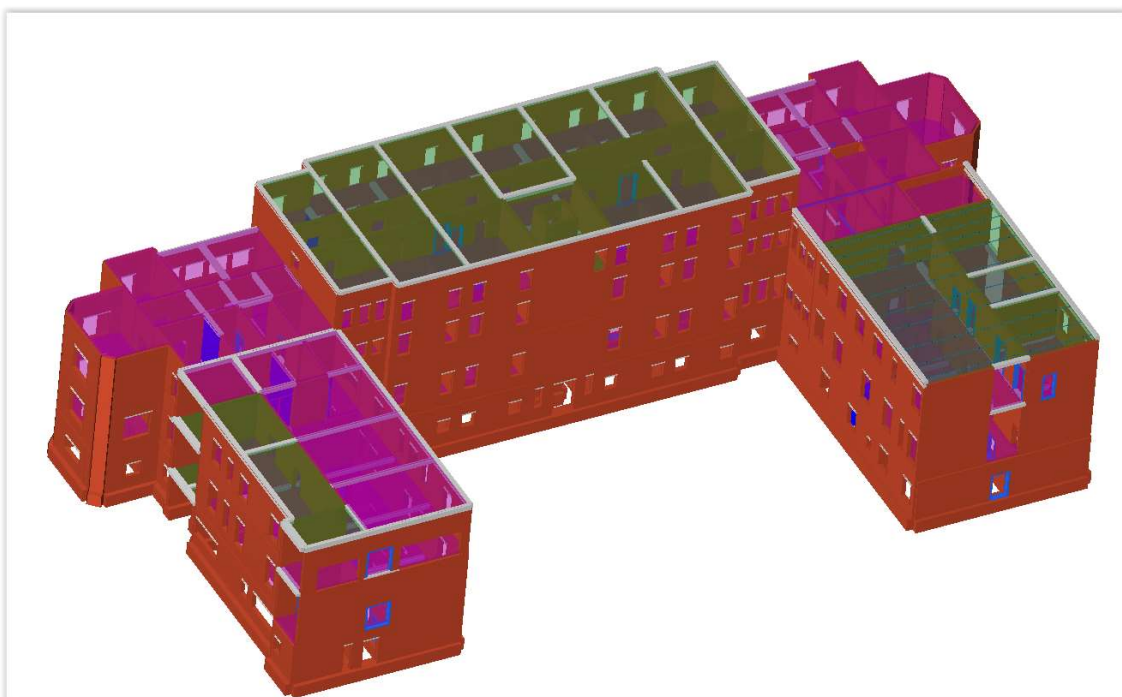
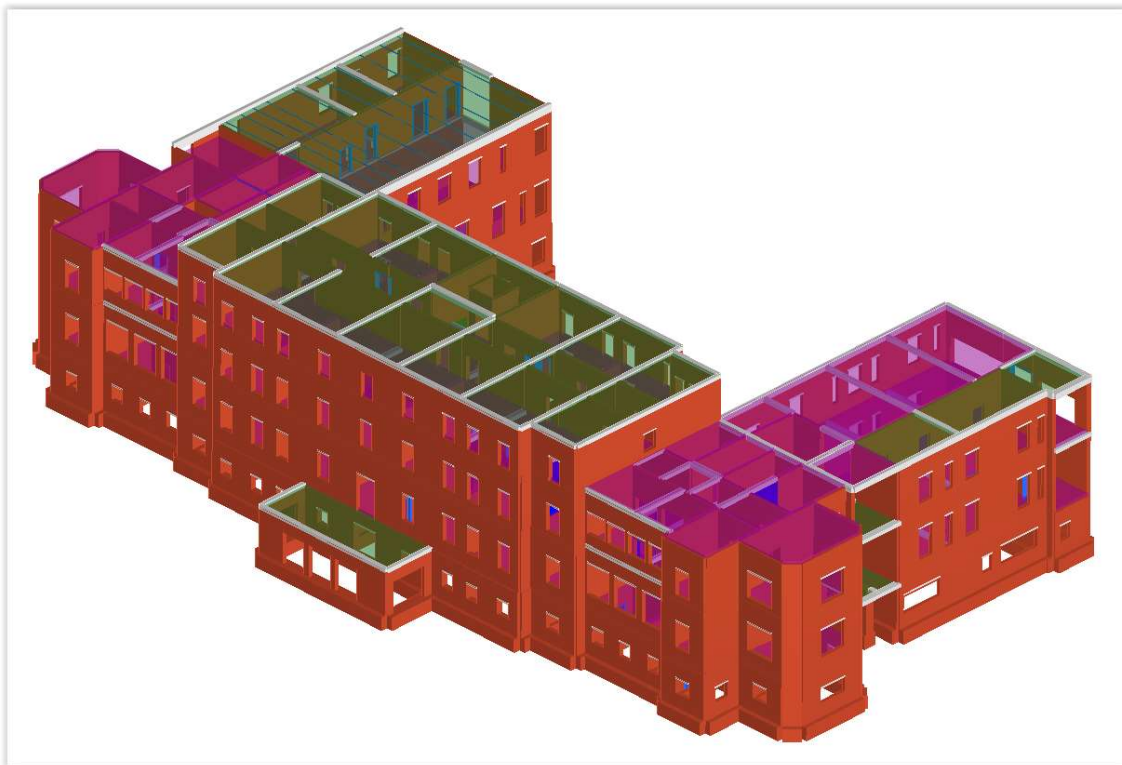
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3				
2				
1				
REV.	DESCRIZIONE	DATA	REDATTO	REVISIONE



1. DESCRIZIONE DELLA STRUTTURA

La presente relazione ha per oggetto l'analisi delle strutture, le considerazioni di merito, i calcoli svolti per l'edificio sito in Via Dazio 113 Bondeno (FE). Si veda la relazione di calcolo RS01.





2. NORME DI RIFERIMENTO

Sono stati recepiti, per le analisi di cui in seguito, i principi e le regole riportate nelle normative seguenti:

- Decreto Ministeriale 14 gennaio 2008 - "Norme tecniche per le Costruzioni"
- Circolare n. 617 del 2 febbraio 2009 - Istruzioni per l'applicazione delle "Norme tecniche per le costruzioni"

3. DESCRIZIONE DEL MODELLO

3.1. MATERIALI

Muratura

Nome	E [N/mm ²]	G [N/mm ²]	Peso specifico [kN/m ³]	f _m [N/cm ²]	T/f _m 0 [N/cm ²]
Muratura BONDENO LC2	1 500,00	500,00	18	266,67	6,33
Nuova Muratura sempiena	6 700,00	2 680,00	13	957,00	28,57

Calcestruzzo

Nome	E [N/mm ²]	G [N/mm ²]	Peso specifico [kN/m ³]	f _{cm} [N/mm ²]	f _{ck} [N/mm ²]
C12/15	27 085,00	11 285,00	25	20,0	12,00
C20/25	29 962,00	12 484,00	25	28,0	20,00
C25/30	31 476,00	13 115,00	25	33,0	25,00
C20/25 LC1	29 962,00	12 484,00	25	28,0	20,00

Acciaio armatura

Nome	E [N/mm ²]	G [N/mm ²]	Peso specifico [kN/m ³]	f _{ym} [N/mm ²]	f _{yk} [N/mm ²]
FeB38 k LC1 DEF	206 000,00	79 231,00	79	277,8	375,00
FeB38 k LC1	206 000,00	79 231,00	79	277,8	375,00

Acciaio strutturale

Nome	E [N/mm ²]	G [N/mm ²]	Peso specifico [kN/m ³]	f _{ym} [N/mm ²]	f _{yk} [N/mm ²]
S 235	210 000,00	80 769,00	79	231,0	215,00

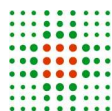


3.2. ELEMENTI DI STRUTTURA

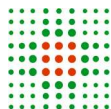
3.2.1. LIVELLO 1

Pannello murario

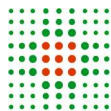
N.	Parete	Materiale	Rinforzo	Quota [cm]	Altezza [cm]	Spessore [cm]
349	7	Muratura BONDENO LC2	-	354	354	42,0
350	7	Muratura BONDENO LC2	-	354	354	28,0
15	8	Muratura BONDENO LC2	-	354	354	28,0
17	9	Muratura BONDENO LC2	-	354	354	28,0
176	12	Muratura BONDENO LC2	-	354	354	28,0
177	12	Muratura BONDENO LC2	-	354	354	28,0
231	12	Muratura BONDENO LC2	-	354	354	28,0
232	12	Muratura BONDENO LC2	-	354	354	28,0
25	13	Muratura BONDENO LC2	-	354	354	28,0
27	14	Muratura BONDENO LC2	-	354	354	28,0
1250	15	Muratura BONDENO LC2	-	354	354	28,0
1251	15	Muratura BONDENO LC2	-	354	354	28,0
31	16	Muratura BONDENO LC2	-	354	354	28,0
33	17	Muratura BONDENO LC2	-	354	354	28,0
35	18	Muratura BONDENO LC2	-	354	354	28,0
39	20	Muratura BONDENO LC2	-	354	354	28,0
208	21	Muratura BONDENO LC2	-	354	354	42,0
293	21	Muratura BONDENO LC2	-	354	354	28,0
294	21	Muratura BONDENO LC2	-	354	354	28,0
1253	21	Muratura BONDENO LC2	-	354	354	28,0
1254	21	Muratura BONDENO LC2	-	354	354	28,0
1255	21	Muratura BONDENO LC2	-	354	354	28,0
1258	21	Muratura BONDENO	-	354	354	28,0



		LC2				
1259	21	Muratura BONDENO LC2	-	354	354	42,0
201	22	Muratura BONDENO LC2	-	354	354	28,0
236	22	Muratura BONDENO LC2	-	354	354	28,0
238	22	Muratura BONDENO LC2	-	354	354	28,0
241	22	Muratura BONDENO LC2	-	354	354	28,0
242	22	Muratura BONDENO LC2	-	354	354	28,0
255	22	Muratura BONDENO LC2	-	354	354	28,0
256	22	Muratura BONDENO LC2	-	354	354	28,0
260	22	Muratura BONDENO LC2	-	354	354	28,0
287	22	Muratura BONDENO LC2	-	354	354	28,0
301	22	Muratura BONDENO LC2	-	354	354	28,0
311	22	Muratura BONDENO LC2	-	354	354	28,0
313	22	Muratura BONDENO LC2	-	354	354	28,0
314	22	Muratura BONDENO LC2	-	354	354	28,0
174	23	Muratura BONDENO LC2	-	354	354	28,0
307	23	Muratura BONDENO LC2	-	354	354	28,0
310	23	Muratura BONDENO LC2	-	354	354	28,0
47	24	Muratura BONDENO LC2	-	354	354	28,0
49	25	Muratura BONDENO LC2	-	354	354	28,0
51	26	Muratura BONDENO LC2	-	354	354	28,0
1260	29	Muratura BONDENO LC2	-	354	354	28,0
1261	29	Muratura BONDENO LC2	-	354	354	28,0
162	31	Muratura BONDENO LC2	-	354	354	28,0
291	31	Muratura BONDENO LC2	-	354	354	28,0
1256	31	Muratura BONDENO LC2	-	354	354	28,0
1257	31	Muratura BONDENO LC2	-	354	354	28,0
65	33	Muratura BONDENO LC2	-	354	354	42,0



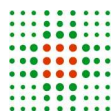
169	34	Muratura BONDENO LC2	-	354	354	28,0
296	34	Muratura BONDENO LC2	-	354	354	28,0
302	34	Muratura BONDENO LC2	-	354	354	28,0
69	35	Muratura BONDENO LC2	-	354	354	28,0
71	36	Muratura BONDENO LC2	-	354	354	28,0
83	42	Muratura BONDENO LC2	-	354	354	42,0
85	43	Muratura BONDENO LC2	-	354	354	42,0
89	45	Muratura BONDENO LC2	-	354	354	28,0
251	46	Muratura BONDENO LC2	-	354	354	28,0
252	46	Muratura BONDENO LC2	-	354	354	42,0
269	46	Muratura BONDENO LC2	-	354	354	42,0
270	46	Muratura BONDENO LC2	-	354	354	42,0
247	47	Muratura BONDENO LC2	-	354	354	42,0
248	47	Muratura BONDENO LC2	-	354	354	42,0
271	47	Muratura BONDENO LC2	-	354	354	42,0
272	47	Muratura BONDENO LC2	-	354	354	42,0
214	48	Muratura BONDENO LC2	-	354	354	42,0
253	48	Muratura BONDENO LC2	-	354	354	42,0
164	49	Muratura BONDENO LC2	-	354	354	42,0
188	49	Muratura BONDENO LC2	-	354	354	42,0
191	49	Muratura BONDENO LC2	-	354	354	42,0
192	49	Muratura BONDENO LC2	-	354	354	42,0
101	51	Muratura BONDENO LC2	-	354	354	28,0
167	52	Muratura BONDENO LC2	-	354	354	42,0
205	52	Muratura BONDENO LC2	-	354	354	42,0
257	52	Muratura BONDENO LC2	-	354	354	42,0
258	52	Muratura BONDENO LC2	-	354	354	42,0
105	53	Muratura BONDENO	-	354	354	28,0



		LC2				
363	55	Muratura BONDENO LC2	-	354	354	28,0
364	55	Muratura BONDENO LC2	-	354	354	28,0
377	56	Muratura BONDENO LC2	-	354	354	28,0
378	56	Muratura BONDENO LC2	-	354	354	28,0
370	57	Muratura BONDENO LC2	-	354	354	42,0
1388	57	Muratura BONDENO LC2	-	354	354	14,0
1389	57	Muratura BONDENO LC2	-	354	354	42,0
1394	57	Muratura BONDENO LC2	-	354	354	42,0
1397	57	Muratura BONDENO LC2	-	354	354	42,0
359	58	Muratura BONDENO LC2	-	354	354	28,0
379	58	Muratura BONDENO LC2	-	354	354	28,0
381	58	Muratura BONDENO LC2	-	354	354	28,0
382	58	Muratura BONDENO LC2	-	354	354	28,0
239	59	Muratura BONDENO LC2	-	354	354	28,0
243	60	Muratura BONDENO LC2	-	354	354	28,0
172	61	Muratura BONDENO LC2	-	354	354	28,0
210	61	Muratura BONDENO LC2	-	354	354	28,0
233	61	Muratura BONDENO LC2	-	354	354	28,0
123	62	Muratura BONDENO LC2	-	354	354	28,0
125	63	Muratura BONDENO LC2	-	354	354	28,0
354	65	Muratura BONDENO LC2	-	354	354	28,0
358	65	Muratura BONDENO LC2	-	354	354	42,0
361	65	Muratura BONDENO LC2	-	354	354	42,0
362	65	Muratura BONDENO LC2	-	354	354	28,0
131	66	Muratura BONDENO LC2	-	354	354	28,0
317	68	Muratura BONDENO LC2	-	354	354	28,0
1204	68	Muratura BONDENO LC2	-	354	354	28,0



1248	69	Muratura BONDENO LC2	-	354	354	28,0
1249	69	Muratura BONDENO LC2	-	354	354	42,0
165	70	Muratura BONDENO LC2	-	354	354	28,0
197	70	Muratura BONDENO LC2	-	354	354	28,0
200	70	Muratura BONDENO LC2	-	354	354	28,0
141	71	Muratura BONDENO LC2	-	354	354	42,0
345	72	Muratura BONDENO LC2	-	354	354	42,0
385	72	Muratura BONDENO LC2	-	354	354	42,0
386	72	Muratura BONDENO LC2	-	354	354	42,0
145	73	Muratura BONDENO LC2	-	354	354	42,0
331	74	Muratura BONDENO LC2	-	354	354	42,0
343	74	Muratura BONDENO LC2	-	354	354	42,0
325	76	Muratura BONDENO LC2	-	354	354	14,0
686	77	Nuova Muratura sempiena	-	354	354	28,0
215	81	Muratura BONDENO LC2	-	354	354	28,0
1205	82	Muratura BONDENO LC2	-	354	354	28,0
1207	82	Muratura BONDENO LC2	-	354	354	28,0
1208	82	Muratura BONDENO LC2	-	354	354	28,0
219	83	Muratura BONDENO LC2	-	354	354	42,0
221	84	Muratura BONDENO LC2	-	354	354	28,0
1390	85	Muratura BONDENO LC2	-	354	354	28,0
1392	85	Muratura BONDENO LC2	-	354	354	28,0
1393	85	Muratura BONDENO LC2	-	354	354	28,0
352	86	Muratura BONDENO LC2	-	354	354	28,0
227	87	Muratura BONDENO LC2	-	354	354	28,0
320	88	Muratura BONDENO LC2	-	354	354	28,0
342	88	Muratura BONDENO LC2	-	354	354	28,0
387	88	Muratura BONDENO	-	354	354	14,0



		LC2				
388	88	Muratura BONDENO LC2	-	354	354	28,0
275	89	Muratura BONDENO LC2	-	354	354	28,0
279	90	Muratura BONDENO LC2	-	354	354	28,0
265	91	Muratura BONDENO LC2	-	354	354	10,0
267	92	Muratura BONDENO LC2	-	354	354	42,0
347	95	Muratura BONDENO LC2	-	354	354	10,0
375	96	Muratura BONDENO LC2	-	354	354	56,0
625	97	Nuova Muratura sempiena	-	354	354	28,0

Pannello + Cordolo C.A. (1)

N.	Parete	Materiale pannello	Rinforzo	Quota pannello [cm]	Altezza [cm]	Spessore [cm]	Materiale calcestruzzo	Materiale acciaio	Quota cordolo [cm]	Base sezione [cm]	Altezza sezione [cm]
1396	57	Muratura BONDENO LC2	-	354	354,0	42,0	C25/30	FeB38 k LC1 DEF	354	30,0	25,0
335	68	Muratura BONDENO LC2	-	354	354,0	28,0	C25/30	FeB38 k LC1 DEF	354	30,0	25,0
329	75	Muratura BONDENO LC2	-	354	354,0	14,0	C25/30	FeB38 k LC1 DEF	354	30,0	25,0
155	78	Muratura BONDENO LC2	-	354	354,0	28,0	C20/25 LC1	FeB38 k LC1	354	30,0	25,0
157	79	Muratura BONDENO LC2	-	354	354,0	28,0	C20/25 LC1	FeB38 k LC1	354	30,0	25,0
159	80	Muratura BONDENO LC2	-	354	354,0	28,0	C20/25 LC1	FeB38 k LC1	354	30,0	25,0

Pannello + Cordolo C.A. (2)

N.	Parete	Area [cm2]	J [cm4]	Af intrad. [cm2]	Af estrad. [cm2]	N. barre intrad.	N. barre Estrad.	Copriferro [cm]	Passo staffe [cm]	Area staffe [cm2]	Porzione deformabile
1396	57	750,00	39 062,50	4,02	4,02	2	2	3,0	20	0,00	0,00
335	68	750,00	39 062,50	4,02	4,02	2	2	3,0	20	1,01	1,00
329	75	750,00	39 062,50	4,02	4,02	2	2	3,0	20	1,01	0,00
155	78	750,00	39 062,50	2,26	2,26	2	2	2,5	20	1,01	1,00
157	79	750,00	39 062,50	2,26	2,26	2	2	2,5	20	1,01	1,00
159	80	750,00	39 062,50	2,26	2,26	2	2	2,5	20	1,01	1,00

Trave C.A. (1)



N.	Parete	Materiale calcestruzzo	Materiale acciaio	Quota I [cm]	Quota J [cm]	Base sezione [cm]	Altezza sezione [cm]	J [cm ⁴]
183	22	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
306	23	C20/25 LC1	FeB38 k LC1	354	354	30,0	25,0	39 062,50
303	34	C20/25 LC1	FeB38 k LC1	354	354	40,0	25,0	52 083,33
368	56	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
356	57	C20/25 LC1	FeB38 k LC1	354	354	50,0	25,0	65 104,17
372	57	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
383	64	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
384	64	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
330	75	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
685	77	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
351	86	C20/25 LC1	FeB38 k LC1	354	354	50,0	25,0	65 104,17
324	88	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
273	89	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
276	89	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
277	90	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
280	90	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
315	93	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
333	94	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50
376	96	C25/30	FeB38 k LC1 DEF	354	354	30,0	25,0	39 062,50

Catena

Trave C.A. (2)

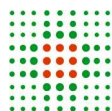
N.	Parete	Af intradosso [cm ²]	Af estradosso [cm ²]	N. barre intradosso	N. barre estradosso	Copriferro [cm]	Passo staffe [cm]	Area staffe [cm ²]
183	22	4,02	4,02	2	2	3,0	20	1,01
306	23	4,02	4,02	2	2	3,0	20	1,01
303	34	4,02	4,02	2	2	3,0	20	1,01
368	56	4,02	4,02	2	2	3,0	20	1,01
356	57	12,06	12,06	6	6	2,5	20	1,01
372	57	4,02	4,02	2	2	3,0	20	1,01
383	64	4,02	4,02	2	2	3,0	20	1,01
384	64	4,02	4,02	2	2	3,0	20	1,01
330	75	4,02	4,02	2	2	3,0	20	1,01
685	77	4,02	4,02	2	2	3,0	20	1,01
351	86	12,06	12,06	6	6	2,5	20	1,01
324	88	4,02	4,02	2	2	3,0	20	1,01
273	89	4,02	4,02	2	2	3,0	20	1,01
276	89	4,02	4,02	2	2	3,0	20	1,01
277	90	4,02	4,02	2	2	3,0	20	1,01
280	90	4,02	4,02	2	2	3,0	20	1,01
315	93	4,02	4,02	2	2	3,0	20	1,01
333	94	4,02	4,02	2	2	3,0	20	1,01
376	96	4,02	4,02	2	2	3,0	20	1,01

Solaio

PROGETTISTI

COORDINAMENTO / ARCHITETTONICO EDILE
ARCH. MARCO RIZZOLI
STRUTTURE
STUDIO ENARCO SRL

IMPIANTI MECCANICI ED ELETTRICI
STEP ENGINEERING srl
SICUREZZA
ARCH. ANTONELLA ZENI



N.	Quota [cm]	Spessore [cm]	G [N/mm2]	Ex [N/mm2]	Ey [N/mm2]	Scarico masse	Tipo
1	354	-	-	-	-	Monodirezionale	Impalcato rigido
3	354	-	-	-	-	Monodirezionale	Impalcato rigido
4	354	-	-	-	-	Monodirezionale	Impalcato rigido
5	354	-	-	-	-	Monodirezionale	Impalcato rigido
6	354	-	-	-	-	Monodirezionale	Impalcato rigido
8	354	-	-	-	-	Monodirezionale	Impalcato rigido
9	354	-	-	-	-	Monodirezionale	Impalcato rigido
10	354	-	-	-	-	Monodirezionale	Impalcato rigido
11	354	-	-	-	-	Monodirezionale	Impalcato rigido
12	354	-	-	-	-	Monodirezionale	Impalcato rigido
13	354	-	-	-	-	Monodirezionale	Impalcato rigido
14	354	-	-	-	-	Monodirezionale	Impalcato rigido
18	354	-	-	-	-	Monodirezionale	Impalcato rigido
19	354	-	-	-	-	Monodirezionale	Impalcato rigido
20	354	-	-	-	-	Monodirezionale	Impalcato rigido
21	354	-	-	-	-	Monodirezionale	Impalcato rigido
22	354	-	-	-	-	Monodirezionale	Impalcato rigido
23	354	-	-	-	-	Monodirezionale	Impalcato rigido
24	354	-	-	-	-	Monodirezionale	Impalcato rigido
25	354	-	-	-	-	Monodirezionale	Impalcato rigido
26	354	-	-	-	-	Monodirezionale	Impalcato rigido
27	354	-	-	-	-	Monodirezionale	Impalcato rigido
28	354	-	-	-	-	Monodirezionale	Impalcato rigido
29	354	-	-	-	-	Monodirezionale	Impalcato rigido
30	354	-	-	-	-	Monodirezionale	Impalcato rigido
31	354	5,0	10 416,67	49 000,00	25 000,00	Monodirezionale	Latero cemento
32	354	5,0	10 416,67	49 000,00	25 000,00	Monodirezionale	Latero cemento
33	354	5,0	10 416,67	49 000,00	25 000,00	Monodirezionale	Latero cemento
34	354	-	-	-	-	Monodirezionale	Impalcato rigido
35	354	-	-	-	-	Monodirezionale	Impalcato rigido
36	354	-	-	-	-	Monodirezionale	Impalcato rigido
37	354	-	-	-	-	Monodirezionale	Impalcato rigido
38	354	5,0	10 416,67	10 568,00	0,00	Monodirezionale	Putrelle e tavelloni
39	354	-	-	-	-	Monodirezionale	Impalcato rigido
40	354	-	-	-	-	Monodirezionale	Impalcato rigido
41	354	-	-	-	-	Monodirezionale	Impalcato rigido
42	354	-	-	-	-	Monodirezionale	Impalcato rigido
43	354	-	-	-	-	Monodirezionale	Impalcato rigido
44	354	-	-	-	-	Monodirezionale	Impalcato rigido
45	354	4,0	1 000,00	37 500,00	0,00	Monodirezionale	Latero cemento
46	354	4,0	1 000,00	37 500,00	0,00	Monodirezionale	Latero cemento
47	354	-	-	-	-	Monodirezionale	Impalcato rigido
48	354	-	-	-	-	Monodirezionale	Impalcato rigido
49	354	-	-	-	-	Monodirezionale	Impalcato rigido
50	354	-	-	-	-	Monodirezionale	Impalcato rigido
51	354	-	-	-	-	Monodirezionale	Impalcato rigido
52	354	-	-	-	-	Monodirezionale	Impalcato rigido
53	354	-	-	-	-	Monodirezionale	Impalcato rigido
54	354	-	-	-	-	Monodirezionale	Impalcato rigido



55	354	-	-	-	-	Monodirezionale	Impalcato rigido
58	354	-	-	-	-	Monodirezionale	Impalcato rigido
61	354	-	-	-	-	Monodirezionale	Impalcato rigido
63	354	-	-	-	-	Monodirezionale	Impalcato rigido
64	354	-	-	-	-	Monodirezionale	Impalcato rigido
65	354	-	-	-	-	Monodirezionale	Impalcato rigido
66	354	-	-	-	-	Monodirezionale	Impalcato rigido
67	354	-	-	-	-	Monodirezionale	Impalcato rigido
133	354	-	-	-	-	Monodirezionale	Impalcato rigido
134	354	-	-	-	-	Monodirezionale	Impalcato rigido
239	354	-	-	-	-	Monodirezionale	Impalcato rigido
241	354	-	-	-	-	Monodirezionale	Impalcato rigido
242	354	-	-	-	-	Monodirezionale	Impalcato rigido
246	354	-	-	-	-	Monodirezionale	Impalcato rigido
252	354	-	-	-	-	Monodirezionale	Impalcato rigido

Volta (1)

N.	Quota [cm]	Spessore [cm]	G [N/mm2]	Ex [N/mm2]	Ey [N/mm2]
1	354	5,0	680,75	1 648,80	1 648,80
2	354	5,0	680,75	1 648,80	1 648,80

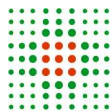
Volta (2)

N.	Tipologia	Spessore totale chiave [cm]	Freccia [cm]	Densità riempimento [kN/m3]	Materiale
1	Volta a botte	22	24	20	Muratura BONDENO LC2
2	Volta a botte	22	24	20	Muratura BONDENO LC2

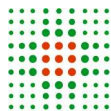
3.2.2. LIVELLO 2

Pannello murario

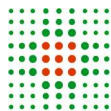
N.	Parete	Materiale	Rinforzo	Quota [cm]	Altezza [cm]	Spessore [cm]
390	7	Muratura BONDENO LC2	-	839	485	28,0
669	7	Muratura BONDENO LC2	-	839	485	42,0
392	9	Muratura BONDENO LC2	-	839	485	28,0
393	12	Muratura BONDENO LC2	-	839	485	28,0
394	12	Muratura BONDENO LC2	-	839	485	28,0
395	12	Muratura BONDENO	-	839	485	14,0



		LC2				
396	12	Muratura BONDENO LC2	-	839	485	28,0
397	13	Muratura BONDENO LC2	-	839	485	28,0
398	14	Muratura BONDENO LC2	-	839	485	28,0
399	15	Muratura BONDENO LC2	-	839	485	28,0
400	16	Muratura BONDENO LC2	-	839	485	28,0
401	17	Muratura BONDENO LC2	-	839	485	28,0
402	18	Muratura BONDENO LC2	-	839	485	28,0
406	21	Muratura BONDENO LC2	-	839	485	28,0
408	21	Muratura BONDENO LC2	-	839	485	28,0
655	21	Muratura BONDENO LC2	-	839	485	28,0
656	21	Muratura BONDENO LC2	-	839	485	28,0
659	21	Muratura BONDENO LC2	-	839	485	28,0
660	21	Muratura BONDENO LC2	-	839	485	14,0
414	22	Muratura BONDENO LC2	-	839	485	28,0
416	22	Muratura BONDENO LC2	-	839	485	28,0
417	22	Muratura BONDENO LC2	-	839	485	28,0
642	22	Muratura BONDENO LC2	-	839	485	28,0
643	22	Muratura BONDENO LC2	-	839	485	28,0
1209	22	Muratura BONDENO LC2	-	839	485	28,0
1210	22	Muratura BONDENO LC2	-	839	485	28,0
426	23	Muratura BONDENO LC2	-	839	485	28,0
658	23	Muratura BONDENO LC2	-	839	485	28,0
427	24	Muratura BONDENO LC2	-	839	485	28,0
428	25	Muratura BONDENO LC2	-	839	485	28,0
429	26	Muratura BONDENO LC2	-	839	485	28,0
632	29	Muratura BONDENO LC2	-	839	485	28,0
431	31	Muratura BONDENO LC2	-	839	485	28,0



433	31	Muratura BONDENO LC2	-	839	485	28,0
434	31	Muratura BONDENO LC2	-	839	485	28,0
435	33	Muratura BONDENO LC2	-	839	485	42,0
436	34	Muratura BONDENO LC2	-	839	485	28,0
437	34	Muratura BONDENO LC2	-	839	485	28,0
631	34	Muratura BONDENO LC2	-	839	485	28,0
441	35	Muratura BONDENO LC2	-	839	485	28,0
444	42	Muratura BONDENO LC2	-	839	485	28,0
445	43	Muratura BONDENO LC2	-	839	485	28,0
446	45	Muratura BONDENO LC2	-	839	485	28,0
447	46	Muratura BONDENO LC2	-	839	485	28,0
448	46	Muratura BONDENO LC2	-	839	485	28,0
450	46	Muratura BONDENO LC2	-	839	485	28,0
451	47	Muratura BONDENO LC2	-	839	485	28,0
453	47	Muratura BONDENO LC2	-	839	485	28,0
454	47	Muratura BONDENO LC2	-	839	485	42,0
455	48	Muratura BONDENO LC2	-	839	485	28,0
457	48	Muratura BONDENO LC2	-	839	485	28,0
458	49	Muratura BONDENO LC2	-	839	485	28,0
460	49	Muratura BONDENO LC2	-	839	485	28,0
461	49	Muratura BONDENO LC2	-	839	485	28,0
462	51	Muratura BONDENO LC2	-	839	485	28,0
463	52	Muratura BONDENO LC2	-	839	485	28,0
464	52	Muratura BONDENO LC2	-	839	485	28,0
466	52	Muratura BONDENO LC2	-	839	485	28,0
467	53	Muratura BONDENO LC2	-	839	485	28,0
476	57	Muratura BONDENO LC2	-	839	485	42,0
667	57	Muratura BONDENO	-	839	485	14,0



		LC2				
668	57	Muratura BONDENO LC2	-	839	485	42,0
482	59	Muratura BONDENO LC2	-	839	485	28,0
488	61	Muratura BONDENO LC2	-	839	485	28,0
489	61	Muratura BONDENO LC2	-	839	485	28,0
491	63	Muratura BONDENO LC2	-	839	485	28,0
494	65	Muratura BONDENO LC2	-	839	485	42,0
495	65	Muratura BONDENO LC2	-	839	485	28,0
497	65	Muratura BONDENO LC2	-	839	485	28,0
705	66	Muratura BONDENO LC2	-	839	485	28,0
706	66	Muratura BONDENO LC2	-	839	485	28,0
671	69	Muratura BONDENO LC2	-	839	485	28,0
672	69	Muratura BONDENO LC2	-	839	485	42,0
505	70	Muratura BONDENO LC2	-	839	485	28,0
506	70	Muratura BONDENO LC2	-	839	485	28,0
508	70	Muratura BONDENO LC2	-	839	485	28,0
1403	71	Muratura BONDENO LC2	-	839	485	28,0
510	72	Muratura BONDENO LC2	-	839	485	28,0
512	72	Muratura BONDENO LC2	-	839	485	28,0
689	72	Muratura BONDENO LC2	-	839	485	42,0
690	72	Muratura BONDENO LC2	-	839	485	42,0
673	73	Muratura BONDENO LC2	-	839	485	14,0
676	73	Muratura BONDENO LC2	-	839	485	14,0
644	82	Muratura BONDENO LC2	-	839	485	28,0
647	82	Muratura BONDENO LC2	-	839	485	28,0
1265	83	Muratura BONDENO LC2	-	839	485	28,0
1266	83	Muratura BONDENO LC2	-	839	485	28,0
1267	83	Muratura BONDENO LC2	-	839	485	42,0



527	84	Muratura BONDENO LC2	-	839	485	28,0
662	85	Muratura BONDENO LC2	-	839	485	28,0
663	85	Muratura BONDENO LC2	-	839	485	28,0
1409	85	Nuova Muratura sempiena	-	839	485	28,0
1412	85	Nuova Muratura sempiena	-	839	485	28,0
530	86	Muratura BONDENO LC2	-	839	485	28,0
638	87	Muratura BONDENO LC2	-	839	485	28,0
532	88	Muratura BONDENO LC2	-	839	485	28,0
538	89	Muratura BONDENO LC2	-	839	485	28,0
541	90	Muratura BONDENO LC2	-	839	485	28,0
543	91	Muratura BONDENO LC2	-	839	485	28,0
544	92	Muratura BONDENO LC2	-	839	485	28,0
627	97	Muratura BONDENO LC2	-	839	485	28,0

Pannello + Cordolo C.A. (1)

N.	Parete	Materiale pannello	Rinforzo	Quota pannello [cm]	Altezza [cm]	Spessore [cm]	Materiale calcestruzzo	Materiale acciaio	Quota cordolo [cm]	Base sezione [cm]	Altezza sezione [cm]
670	7	Muratura BONDENO LC2	-	839	485,0	42,0	C25/30	FeB38 k LC1 DEF	839	30,0	25,0
403	20	Muratura BONDENO LC2	-	839	485,0	28,0	C20/25 LC1	FeB38 k LC1 DEF	839	28,0	30,0
442	36	Muratura BONDENO LC2	-	839	485,0	28,0	C20/25 LC1	FeB38 k LC1 DEF	839	28,0	30,0
1415	55	Nuova Muratura sempiena	-	839	485,0	28,0	C20/25	FeB38 k LC1 DEF	839	30,0	40,0
484	60	Nuova Muratura sempiena	-	839	485,0	28,0	C20/25	FeB38 k LC1 DEF	839	30,0	40,0
692	68	Muratura BONDENO LC2	-	839	485,0	28,0	C25/30	FeB38 k LC1 DEF	839	30,0	25,0
507	70	Nuova Muratura sempiena	-	839	485,0	28,0	C25/30	FeB38 k LC1 DEF	839	30,0	25,0
708	71	Muratura BONDENO LC2	-	839	485,0	28,0	C25/30	FeB38 k LC1 DEF	839	30,0	25,0



1400	74	Muratura BONDENO LC2	-	839	485,0	42,0	C25/30	FeB38 k LC1 DEF	839	30,0	25,0
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Pannello + Cordolo C.A. (2)

N.	Parete	Area [cm ²]	J [cm ⁴]	Af intrad. [cm ²]	Af estrad. [cm ²]	N. barre intrad.	N. barre Estrad.	Copriferro [cm]	Passo staffe [cm]	Area staffe [cm ²]	Porzione deformabile
670	7	750,00	39 062,50	4,02	4,02	2	2	3,0	20	1,01	1,00
403	20	840,00	63 000,00	4,02	4,02	2	2	2,0	20	0,00	0,50
442	36	840,00	63 000,00	4,02	4,02	2	2	2,0	20	0,00	0,50
1415	55	1 200,00	160 000,00	8,00	8,00	2	2	2,5	20	1,01	0,00
484	60	1 200,00	160 000,00	8,00	8,00	2	2	2,5	20	0,00	0,00
692	68	750,00	39 062,50	4,02	4,02	2	2	2,5	20	1,01	1,00
507	70	750,00	39 062,50	4,02	4,02	2	2	3,0	20	1,01	1,00
708	71	750,00	39 062,50	4,02	4,02	2	2	3,0	20	1,01	1,00
1400	74	750,00	39 062,50	4,02	4,02	2	2	3,0	20	1,01	1,00

Pannello + Trave Acciaio / Legno (1)

N.	Parete	Materiale pannello	Rinforzo	Quota pannello [cm]	Altezza [cm]	Spessore [cm]	Materiale trave	Quota I [cm]	Quota J [cm]
1411	85	Muratura BONDENO LC2	-	839	485,0	28,0	S 235	839	839

Pannello + Trave Acciaio / Legno (2)

N.	Parete	Area [cm ²]	J [cm ⁴]	W plastico [cm ³]
1411	85	64,34	5 410,00	568,50

Trave C.A. (1)

N.	Parete	Materiale calcestruzzo	Materiale acciaio	Quota I [cm]	Quota J [cm]	Base sezione [cm]	Altezza sezione [cm]	J [cm ⁴]
391	8	C20/25 LC1	FeB38 k LC1	839	839	50,0	25,0	65 104,17
654	21	C20/25 LC1	FeB38 k LC1	839	839	30,0	25,0	39 062,50
420	22	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
636	22	C20/25 LC1	FeB38 k LC1	839	839	50,0	25,0	65 104,17
633	29	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
432	31	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
438	34	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
443	37	C20/25 LC1	FeB38 k LC1	839	839	30,0	25,0	39 062,50
449	46	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
452	47	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
456	48	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
459	49	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
465	52	C20/25 LC1	FeB38 k LC1	839	839	30,0	25,0	39 062,50
1234	56	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
477	57	C20/25	FeB38 k LC1 DEF	839	839	80,0	25,0	104 166,67
483	59	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50



485	60	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
486	61	C20/25	FeB38 k LC1 DEF	839	839	30,0	40,0	160 000,00
487	61	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
490	62	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
1232	64	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
496	65	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
1402	71	C20/25 LC1	FeB38 k LC1	839	839	50,0	25,0	65 104,17
675	73	C25/30	FeB38 k LC1 DEF	839	839	35,0	25,0	45 572,92
516	74	C20/25	FeB38 k LC1 DEF	839	839	80,0	25,0	104 166,67
1401	74	C20/25 LC1	FeB38 k LC1	839	839	50,0	25,0	65 104,17
648	82	C20/25 LC1	FeB38 k LC1	839	839	50,0	25,0	65 104,17
650	82	C20/25 LC1	FeB38 k LC1	839	839	50,0	25,0	65 104,17
651	82	C20/25 LC1	FeB38 k LC1	839	839	50,0	25,0	65 104,17
529	86	C20/25 LC1	FeB38 k LC1	839	839	50,0	25,0	65 104,17
639	87	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
537	89	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
539	89	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
540	90	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
542	90	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50
545	93	C25/30	FeB38 k LC1 DEF	839	839	30,0	25,0	39 062,50

Catena

Trave C.A. (2)

N.	Parete	Af intradosso [cm2]	Af estradosso [cm2]	N. barre intradosso	N. barre estradosso	Copriferro [cm]	Passo staffe [cm]	Area staffe [cm2]
391	8	12,06	12,06	6	6	2,5	20	1,01
654	21	4,02	4,02	2	2	3,0	20	1,01
420	22	4,02	4,02	2	2	3,0	20	1,01
636	22	8,04	8,04	4	4	3,0	20	1,01
633	29	4,02	4,02	2	2	3,0	20	1,01
432	31	4,02	4,02	2	2	3,0	20	1,01
438	34	4,02	4,02	2	2	3,0	20	1,01
443	37	4,02	4,02	2	2	3,0	20	1,01
449	46	4,02	4,02	2	2	3,0	20	1,01
452	47	4,02	4,02	2	2	3,0	20	1,01
456	48	4,02	4,02	2	2	3,0	20	1,01
459	49	4,02	4,02	2	2	3,0	20	1,01
465	52	4,02	4,02	2	2	3,0	20	1,01
1234	56	4,02	4,02	2	2	3,0	20	1,01
477	57	8,04	8,04	4	4	3,0	20	1,01
483	59	4,02	4,02	2	2	3,0	20	1,01
485	60	4,02	4,02	2	2	3,0	20	1,01
486	61	8,00	8,00	2	2	2,5	20	0,00
487	61	4,02	4,02	2	2	3,0	20	1,01
490	62	4,02	4,02	2	2	3,0	20	1,01
1232	64	4,02	4,02	2	2	3,0	20	1,01
496	65	4,02	4,02	2	2	3,0	20	1,01
1402	71	8,04	8,04	4	4	3,0	20	0,00



675	73	4,02	4,02	2	2	3,0	20	1,01
516	74	8,04	8,04	4	4	3,0	20	1,01
1401	74	8,04	8,04	4	4	3,0	20	1,01
648	82	8,04	8,04	4	4	3,0	20	1,01
650	82	8,04	8,04	4	4	3,0	20	1,01
651	82	8,04	8,04	4	4	3,0	20	1,01
529	86	12,06	12,06	6	6	2,5	20	1,01
639	87	4,02	4,02	2	2	3,0	20	1,01
537	89	4,02	4,02	2	2	3,0	20	1,01
539	89	4,02	4,02	2	2	3,0	20	1,01
540	90	4,02	4,02	2	2	3,0	20	1,01
542	90	4,02	4,02	2	2	3,0	20	1,01
545	93	4,02	4,02	2	2	3,0	20	1,01

Solaio

N.	Quota [cm]	Spessore [cm]	G [N/mm2]	Ex [N/mm2]	Ey [N/mm2]	Scarico masse	Tipo
68	839	-	-	-	-	Monodirezionale	Impalcato rigido
75	839	-	-	-	-	Monodirezionale	Impalcato rigido
76	839	-	-	-	-	Monodirezionale	Impalcato rigido
77	839	-	-	-	-	Monodirezionale	Impalcato rigido
79	839	-	-	-	-	Monodirezionale	Impalcato rigido
80	839	-	-	-	-	Monodirezionale	Impalcato rigido
81	839	-	-	-	-	Monodirezionale	Impalcato rigido
82	839	-	-	-	-	Monodirezionale	Impalcato rigido
83	839	-	-	-	-	Monodirezionale	Impalcato rigido
85	839	-	-	-	-	Monodirezionale	Impalcato rigido
86	839	-	-	-	-	Monodirezionale	Impalcato rigido
87	839	-	-	-	-	Monodirezionale	Impalcato rigido
88	839	-	-	-	-	Monodirezionale	Impalcato rigido
89	839	-	-	-	-	Monodirezionale	Impalcato rigido
90	839	-	-	-	-	Monodirezionale	Impalcato rigido
91	839	-	-	-	-	Monodirezionale	Impalcato rigido
92	839	-	-	-	-	Monodirezionale	Impalcato rigido
94	839	-	-	-	-	Monodirezionale	Impalcato rigido
95	839	-	-	-	-	Monodirezionale	Impalcato rigido
96	839	5,0	10 416,67	49 000,00	25 000,00	Monodirezionale	Latero cemento
97	839	5,0	10 416,67	49 000,00	25 000,00	Monodirezionale	Latero cemento
98	839	5,0	10 416,67	49 000,00	25 000,00	Monodirezionale	Latero cemento
99	839	-	-	-	-	Monodirezionale	Impalcato rigido
100	839	-	-	-	-	Monodirezionale	Impalcato rigido
101	839	-	-	-	-	Monodirezionale	Impalcato rigido
102	839	-	-	-	-	Monodirezionale	Impalcato rigido
135	839	-	-	-	-	Monodirezionale	Impalcato rigido
136	839	-	-	-	-	Monodirezionale	Impalcato rigido
137	839	-	-	-	-	Monodirezionale	Impalcato rigido
138	839	-	-	-	-	Monodirezionale	Impalcato rigido
139	839	-	-	-	-	Monodirezionale	Impalcato rigido
140	839	-	-	-	-	Monodirezionale	Impalcato rigido
142	839	-	-	-	-	Monodirezionale	Impalcato rigido

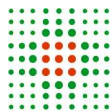


144	839	-	-	-	-	Monodirezionale	Impalcato rigido
145	839	-	-	-	-	Monodirezionale	Impalcato rigido
146	839	-	-	-	-	Monodirezionale	Impalcato rigido
147	839	-	-	-	-	Monodirezionale	Impalcato rigido
150	839	-	-	-	-	Monodirezionale	Impalcato rigido
151	839	-	-	-	-	Monodirezionale	Impalcato rigido
152	839	-	-	-	-	Monodirezionale	Impalcato rigido
153	839	4,0	1 000,00	37 500,00	0,00	Monodirezionale	Latero cemento
157	839	-	-	-	-	Monodirezionale	Impalcato rigido
244	839	-	-	-	-	Monodirezionale	Impalcato rigido
250	839	-	-	-	-	Monodirezionale	Impalcato rigido
251	839	4,0	1 000,00	37 500,00	0,00	Monodirezionale	Latero cemento
253	839	-	-	-	-	Monodirezionale	Impalcato rigido
254	839	-	-	-	-	Monodirezionale	Impalcato rigido
255	839	-	-	-	-	Monodirezionale	Impalcato rigido
256	839	-	-	-	-	Monodirezionale	Impalcato rigido
257	839	-	-	-	-	Monodirezionale	Impalcato rigido
258	839	-	-	-	-	Monodirezionale	Impalcato rigido

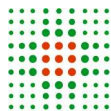
3.2.3. Livello 3

Pannello murario

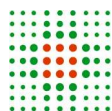
N.	Parete	Materiale	Rinforzo	Quota [cm]	Altezza [cm]	Spessore [cm]
715	12	Muratura BONDENO LC2	-	1 268	429	28,0
717	12	Muratura BONDENO LC2	-	1 268	429	28,0
718	12	Muratura BONDENO LC2	-	1 268	429	28,0
1270	12	Muratura BONDENO LC2	-	1 268	429	28,0
1271	12	Muratura BONDENO LC2	-	1 268	429	14,0
719	13	Muratura BONDENO LC2	-	1 268	429	28,0
720	14	Muratura BONDENO LC2	-	1 268	429	28,0
721	15	Muratura BONDENO LC2	-	1 268	429	28,0
722	16	Muratura BONDENO LC2	-	1 268	429	28,0
723	17	Muratura BONDENO LC2	-	1 268	429	28,0
724	18	Muratura BONDENO LC2	-	1 268	429	28,0
1222	21	Muratura BONDENO LC2	-	1 268	429	28,0
733	22	Muratura BONDENO LC2	-	1 268	429	28,0



1216	22	Muratura BONDENO LC2	-	1 268	429	28,0
1219	22	Muratura BONDENO LC2	-	1 268	429	28,0
1220	22	Muratura BONDENO LC2	-	1 268	429	28,0
745	23	Muratura BONDENO LC2	-	1 268	429	28,0
746	23	Muratura BONDENO LC2	-	1 268	429	28,0
747	24	Muratura BONDENO LC2	-	1 268	429	28,0
748	25	Muratura BONDENO LC2	-	1 268	429	28,0
749	26	Muratura BONDENO LC2	-	1 268	429	28,0
750	29	Muratura BONDENO LC2	-	1 268	429	28,0
754	31	Muratura BONDENO LC2	-	1 268	429	28,0
755	31	Muratura BONDENO LC2	-	1 268	429	14,0
1278	31	Muratura BONDENO LC2	-	1 268	429	28,0
1279	31	Muratura BONDENO LC2	-	1 268	429	28,0
756	33	Muratura BONDENO LC2	-	1 268	429	42,0
757	34	Muratura BONDENO LC2	-	1 268	429	14,0
758	34	Muratura BONDENO LC2	-	1 268	429	28,0
760	34	Muratura BONDENO LC2	-	1 268	429	28,0
761	35	Muratura BONDENO LC2	-	1 268	429	28,0
764	42	Muratura BONDENO LC2	-	1 268	429	28,0
765	43	Muratura BONDENO LC2	-	1 268	429	20,0
766	45	Muratura BONDENO LC2	-	1 268	429	28,0
767	46	Muratura BONDENO LC2	-	1 268	429	28,0
768	46	Muratura BONDENO LC2	-	1 268	429	28,0
771	47	Muratura BONDENO LC2	-	1 268	429	28,0
773	47	Muratura BONDENO LC2	-	1 268	429	28,0
774	47	Muratura BONDENO LC2	-	1 268	429	28,0
775	48	Muratura BONDENO LC2	-	1 268	429	28,0
781	49	Muratura BONDENO	-	1 268	429	42,0



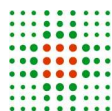
		LC2				
1272	49	Muratura BONDENO LC2	-	1 268	429	28,0
1273	49	Muratura BONDENO LC2	-	1 268	429	14,0
782	51	Muratura BONDENO LC2	-	1 268	429	28,0
783	52	Muratura BONDENO LC2	-	1 268	429	14,0
784	52	Muratura BONDENO LC2	-	1 268	429	28,0
786	52	Muratura BONDENO LC2	-	1 268	429	28,0
787	53	Muratura BONDENO LC2	-	1 268	429	28,0
788	55	Muratura BONDENO LC2	-	1 268	429	28,0
1239	57	Muratura BONDENO LC2	-	1 268	429	28,0
801	59	Muratura BONDENO LC2	-	1 268	429	28,0
803	60	Muratura BONDENO LC2	-	1 268	429	28,0
807	61	Muratura BONDENO LC2	-	1 268	429	28,0
808	61	Muratura BONDENO LC2	-	1 268	429	28,0
1223	61	Muratura BONDENO LC2	-	1 268	429	28,0
810	63	Muratura BONDENO LC2	-	1 268	429	14,0
816	65	Muratura BONDENO LC2	-	1 268	429	28,0
1269	65	Muratura BONDENO LC2	-	1 268	429	28,0
822	68	Muratura BONDENO LC2	-	1 268	429	28,0
825	70	Muratura BONDENO LC2	-	1 268	429	28,0
826	70	Muratura BONDENO LC2	-	1 268	429	28,0
828	70	Muratura BONDENO LC2	-	1 268	429	28,0
1280	72	Muratura BONDENO LC2	-	1 268	429	28,0
1281	72	Muratura BONDENO LC2	-	1 268	429	14,0
835	73	Muratura BONDENO LC2	-	1 268	429	28,0
837	73	Muratura BONDENO LC2	-	1 268	429	28,0
839	74	Muratura BONDENO LC2	-	1 268	429	28,0
958	74	Muratura BONDENO LC2	-	1 268	429	28,0



854	82	Muratura BONDENO LC2	-	1 268	429	28,0
1213	82	Muratura BONDENO LC2	-	1 268	429	28,0
1275	83	Muratura BONDENO LC2	-	1 268	429	28,0
1276	83	Muratura BONDENO LC2	-	1 268	429	28,0
1277	83	Muratura BONDENO LC2	-	1 268	429	28,0
856	84	Muratura BONDENO LC2	-	1 268	429	28,0
1406	85	Muratura BONDENO LC2	-	1 268	429	28,0
862	87	Muratura BONDENO LC2	-	1 268	429	28,0
869	89	Muratura BONDENO LC2	-	1 268	429	14,0
872	90	Muratura BONDENO LC2	-	1 268	429	28,0
874	91	Muratura BONDENO LC2	-	1 268	429	28,0
875	92	Muratura BONDENO LC2	-	1 268	429	28,0
881	97	Muratura BONDENO LC2	-	1 268	429	28,0

Pannello + Cordolo C.A. (1)

N.	Parete	Materiale pannello	Rinforzo	Quota pannello [cm]	Altezza [cm]	Spessore [cm]	Materiale calcestruzzo	Materiale acciaio	Quota cordolo [cm]	Base sezione [cm]	Altezza sezione [cm]
710	7	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
711	7	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
712	7	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
714	9	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
725	20	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1 DEF	1 268	28,0	30,0
762	36	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1 DEF	1 268	28,0	30,0
780	49	Nuova Muratura sempiena	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	40,0	25,0
1224	61	Nuova Muratura sempiena	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	30,0



817	66	Muratura BONDENO LC2	-	1 268	429,0	28,0	C12/15	FeB38 k LC1	1 268	28,0	60,0
818	66	Muratura BONDENO LC2	-	1 268	429,0	28,0	C12/15	FeB38 k LC1	1 268	28,0	60,0
823	69	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
824	69	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
829	71	Muratura BONDENO LC2	-	1 268	429,0	28,0	C12/15	FeB38 k LC1	1 268	28,0	60,0
1405	71	Muratura BONDENO LC2	-	1 268	429,0	28,0	C12/15	FeB38 k LC1	1 268	28,0	60,0
859	85	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
1407	85	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
1418	85	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
861	86	Muratura BONDENO LC2	-	1 268	429,0	28,0	C20/25 LC1	FeB38 k LC1	1 268	30,0	40,0
960	88	Muratura BONDENO LC2	-	1 268	429,0	28,0	C25/30	FeB38 k LC1 DEF	1 168	30,0	25,0
876	93	Muratura BONDENO LC2	-	1 268	429,0	28,0	C25/30	FeB38 k LC1 DEF	1 268	30,0	25,0

Pannello + Cordolo C.A. (2)

N.	Parete	Area [cm ²]	J [cm ⁴]	Af intrad. [cm ²]	Af estrad. [cm ²]	N. barre intrad.	N. barre Estrad.	Copriferro [cm]	Passo staffe [cm]	Area staffe [cm ²]	Porzione deformabile
710	7	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	1,01	1,00
711	7	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	1,01	1,00
712	7	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	1,01	1,00
714	9	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	1,01	1,00
725	20	840,00	63 000,00	4,02	4,02	2	2	2,0	20	0,00	0,50
762	36	840,00	63 000,00	4,02	4,02	2	2	2,0	20	0,00	0,50
780	49	1 000,00	52 083,33	4,02	4,02	2	2	3,0	20	1,01	0,00
1224	61	900,00	67 500,00	8,00	8,00	2	2	3,0	20	1,01	0,00
817	66	1 680,00	504 000,00	2,26	2,26	2	2	2,0	30	0,00	0,50
818	66	1 680,00	504	2,26	2,26	2	2	2,0	30	0,00	0,50



			000,00								
823	69	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	1,01	1,00
824	69	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	1,01	1,00
829	71	1 680,00	504 000,00	2,26	2,26	2	2	2,0	30	0,00	0,50
1405	71	1 680,00	504 000,00	2,26	2,26	2	2	2,0	30	0,00	0,50
859	85	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	0,00	1,00
1407	85	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	0,00	1,00
1418	85	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	0,00	1,00
861	86	1 200,00	160 000,00	4,02	4,02	2	2	3,0	20	1,01	1,00
960	88	750,00	39 062,50	4,02	4,02	2	2	2,5	20	1,01	1,00
876	93	750,00	39 062,50	4,02	4,02	2	2	3,0	20	1,01	0,00

Trave C.A. (1)

N.	Parete	Materiale calcestruzzo	Materiale acciaio	Quota I [cm]	Quota J [cm]	Base sezione [cm]	Altezza sezione [cm]	J [cm4]
713	8	C20/25 LC1	FeB38 k LC1	1 268	1 268	50,0	40,0	266 666,66
734	22	C20/25 LC1	FeB38 k LC1	1 268	1 268	50,0	25,0	65 104,17
737	22	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
742	22	C25/30	FeB38 k LC1 DEF	1 268	1 268	50,0	25,0	65 104,17
751	29	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
753	31	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
759	34	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
763	37	C20/25 LC1	FeB38 k LC1	1 268	1 268	30,0	25,0	39 062,50
769	46	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
770	46	C20/25 LC1	FeB38 k LC1	1 268	1 268	40,0	25,0	52 083,33
772	47	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
776	48	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
777	48	C20/25 LC1	FeB38 k LC1	1 268	1 268	40,0	25,0	52 083,33
779	49	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
785	52	C20/25 LC1	FeB38 k LC1	1 268	1 268	30,0	25,0	39 062,50
792	56	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
1240	56	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
796	57	C20/25	FeB38 k LC1 DEF	1 268	1 268	40,0	40,0	213 333,33
1238	57	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
802	59	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
804	60	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
806	61	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
809	62	C20/25 LC1	FeB38 k LC1	1 268	1 268	40,0	25,0	52 083,33
1235	64	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
815	65	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	30,0	67 500,00
1268	65	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
827	70	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50



1404	71	C12/15	FeB38 k LC1	1 268	1 268	28,0	60,0	504 000,00
836	73	C25/30	FeB38 k LC1 DEF	1 268	1 268	35,0	25,0	45 572,92
959	74	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
840	75	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
1201	85	C20/25 LC1	FeB38 k LC1	1 268	1 268	30,0	40,0	160 000,00
860	86	C20/25 LC1	FeB38 k LC1	1 268	1 268	30,0	40,0	160 000,00
863	87	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
868	89	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
870	89	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
871	90	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50
873	90	C25/30	FeB38 k LC1 DEF	1 268	1 268	30,0	25,0	39 062,50

Catena

Trave C.A. (2)

N.	Parete	Af intradosso [cm2]	Af estradosso [cm2]	N. barre intradosso	N. barre estradosso	Copriferro [cm]	Passo staffe [cm]	Area staffe [cm2]
713	8	12,06	12,06	6	6	2,5	20	1,01
734	22	8,04	8,04	4	4	3,0	20	1,01
737	22	4,02	4,02	2	2	3,0	20	1,01
742	22	8,02	8,02	4	4	3,0	20	1,01
751	29	4,02	4,02	2	2	3,0	20	1,01
753	31	4,02	4,02	2	2	3,0	20	1,01
759	34	4,02	4,02	2	2	3,0	20	1,01
763	37	4,02	4,02	2	2	3,0	20	1,01
769	46	4,02	4,02	2	2	3,0	20	1,01
770	46	4,02	4,02	2	2	3,0	20	1,01
772	47	4,02	4,02	2	2	3,0	20	1,01
776	48	4,02	4,02	2	2	3,0	20	1,01
777	48	4,02	4,02	2	2	3,0	20	1,01
779	49	4,02	4,02	2	2	3,0	20	1,01
785	52	4,02	4,02	2	2	3,0	20	1,01
792	56	4,02	4,02	2	2	3,0	20	1,01
1240	56	4,02	4,02	2	2	3,0	20	1,01
796	57	8,04	8,04	4	4	3,0	20	1,01
1238	57	4,02	4,02	2	2	3,0	20	0,00
802	59	4,02	4,02	2	2	3,0	20	1,01
804	60	4,02	4,02	2	2	3,0	20	1,01
806	61	4,02	4,02	2	2	3,0	20	1,01
809	62	4,02	4,02	2	2	3,0	20	1,01
1235	64	4,02	4,02	2	2	3,0	20	1,01
815	65	4,02	4,02	2	2	3,0	20	1,01
1268	65	4,02	4,02	2	2	3,0	20	0,00
827	70	4,02	4,02	2	2	3,0	20	1,01
1404	71	2,26	2,26	2	2	2,0	30	0,00
836	73	4,02	4,02	2	2	3,0	20	1,01
959	74	4,02	4,02	2	2	3,0	20	1,01
840	75	4,02	4,02	2	2	3,0	20	1,01



1201	85	4,02	4,02	2	2	3,0	20	1,01
860	86	4,02	4,02	2	2	3,0	20	1,01
863	87	4,02	4,02	2	2	3,0	20	1,01
868	89	4,02	4,02	2	2	3,0	20	1,01
870	89	4,02	4,02	2	2	3,0	20	1,01
871	90	4,02	4,02	2	2	3,0	20	1,01
873	90	4,02	4,02	2	2	3,0	20	1,01

Trave Acciaio / Legno

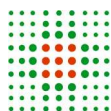
N.	Parete	Materiale	Quota I [cm]	Quota J [cm]	Area [cm ²]	J [cm ⁴]	W plastico [cm ³]
851	82	S 235	1 268	1 268	47,90	2 634,00	332,80
852	82	S 235	1 268	1 268	47,90	2 634,00	332,80
853	82	S 235	1 268	1 268	47,90	2 634,00	332,80
961	88	S 235	1 268	1 268	47,90	2 634,00	332,80

Catena

N.	Parete	Materiale	Quota [cm]	Diametro [mm]	Tiro [daN]
1312	100	S 235	1 268	26	10
1320	101	S 235	1 268	26	10
1328	102	S 235	1 268	26	10
1336	103	S 235	1 268	26	10
1344	104	S 235	1 268	26	10
1352	105	S 235	1 268	26	10
1360	106	S 235	1 268	26	10
1368	107	S 235	1 268	26	10
1376	108	S 235	1 268	26	10
1384	109	S 235	1 268	26	10

Solaio

N.	Quota [cm]	Spessore [cm]	G [N/mm ²]	Ex [N/mm ²]	Ey [N/mm ²]	Scarico masse	Tipo
163	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
164	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
165	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
166	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
167	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
168	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
171	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
172	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
173	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
174	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
175	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
176	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
177	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
178	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
179	1 268	-	-	-	-	Monodirezionale	Impalcato rigido

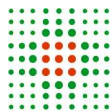


180	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
181	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
182	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
183	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
184	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
185	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
186	1 268	5,0	10 416,67	49 000,00	25 000,00	Monodirezionale	Latero cemento
187	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
188	1 268	5,0	10 416,67	49 000,00	25 000,00	Monodirezionale	Latero cemento
189	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
190	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
191	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
192	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
193	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
194	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
195	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
196	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
197	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
200	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
202	1 268	4,0	10 416,67	55 000,00	25 000,00	Monodirezionale	Latero cemento
203	1 268	4,0	10 416,67	55 000,00	25 000,00	Monodirezionale	Latero cemento
208	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
209	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
210	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
211	1 168	-	-	-	-	Monodirezionale	Impalcato rigido
212	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
213	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
214	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
215	1 268	4,0	1 000,00	24 193,55	0,00	Monodirezionale	Latero cemento
216	1 268	4,0	1 000,00	24 193,55	0,00	Monodirezionale	Latero cemento
217	1 268	4,0	1 000,00	24 193,55	0,00	Monodirezionale	Latero cemento
222	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
223	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
243	1 268	4,0	10 416,67	55 000,00	25 000,00	Monodirezionale	Latero cemento
248	1 268	4,0	1 000,00	24 193,55	0,00	Monodirezionale	Latero cemento
259	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
260	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
261	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
262	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
263	1 268	-	-	-	-	Monodirezionale	Impalcato rigido
264	1 268	-	-	-	-	Monodirezionale	Impalcato rigido

3.2.4. LIVELLO 4

Pannello murario

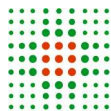
N.	Parete	Materiale	Rinforzo	Quota [cm]	Altezza [cm]	Spessore [cm]
1183	21	Muratura BONDENO	-	1 628	360	28,0



		LC2				
1185	21	Muratura BONDENO LC2	-	1 628	360	28,0
1189	21	Muratura BONDENO LC2	-	1 628	360	28,0
1190	21	Muratura BONDENO LC2	-	1 628	360	28,0
1195	22	Muratura BONDENO LC2	-	1 628	360	28,0
1288	22	Muratura BONDENO LC2	-	1 628	360	28,0
1289	22	Muratura BONDENO LC2	-	1 628	360	28,0
1290	22	Muratura BONDENO LC2	-	1 628	360	28,0
1291	22	Muratura BONDENO LC2	-	1 628	360	14,0
1175	46	Muratura BONDENO LC2	-	1 628	360	28,0
1180	47	Muratura BONDENO LC2	-	1 628	360	28,0
1172	89	Muratura BONDENO LC2	-	1 628	360	14,0
1168	90	Muratura BONDENO LC2	-	1 628	360	28,0
1034	91	Muratura BONDENO LC2	-	1 628	360	28,0
1035	92	Muratura BONDENO LC2	-	1 628	360	28,0

Pannello + Cordolo C.A. (1)

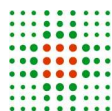
N.	Parete	Materiale pannello	Rinforzo	Quota pannello [cm]	Altezza [cm]	Spessore [cm]	Materiale calcestruzzo	Materiale acciaio	Quota cordolo [cm]	Base sezione [cm]	Altezza sezione [cm]
1226	31	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
989	42	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1132	49	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1133	49	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
996	51	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1120	52	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1121	52	Muratura BONDENO	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0



		LC2									
1124	52	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1127	52	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
998	53	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1286	70	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	30,0	20,0
1287	70	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1118	82	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1283	83	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1284	83	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1285	83	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0
1143	85	Muratura BONDENO LC2	-	1 628	360,0	28,0	C20/25 LC1	FeB38 k LC1	1 628	28,0	25,0

Pannello + Cordolo C.A. (2)

N.	Parete	Area [cm2]	J [cm4]	Af intrad. [cm2]	Af estrad. [cm2]	N. barre intrad.	N. barre Estrad.	Copriferro [cm]	Passo staffe [cm]	Area staffe [cm2]	Porzione deformabile
1226	31	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
989	42	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1132	49	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1133	49	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
996	51	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1120	52	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1121	52	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1124	52	700,00	36 458,33	2,26	2,26	2	2	2,0	20	0,00	0,50
1127	52	700,00	36 458,33	2,26	2,26	2	2	2,0	20	0,00	0,50
998	53	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1286	70	600,00	20 000,00	2,26	2,26	2	2	2,0	20	1,01	0,50
1287	70	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1118	82	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1283	83	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1284	83	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1285	83	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50
1143	85	700,00	36 458,33	2,26	2,26	2	2	2,0	20	1,01	0,50



Trave C.A. (1)

N.	Parete	Materiale calcestruzzo	Materiale acciaio	Quota I [cm]	Quota J [cm]	Base sezione [cm]	Altezza sezione [cm]	J [cm ⁴]
1177	22	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	50,0	312 500,00
990	43	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
991	45	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1181	46	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1182	46	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1187	47	C20/25 LC1	FeB38 k LC1	1 628	1 628	35,0	20,0	23 333,33
1188	47	C20/25 LC1	FeB38 k LC1	1 628	1 628	35,0	20,0	23 333,33
1192	48	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1193	48	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1194	48	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1135	49	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1139	49	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1140	49	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00
1128	52	C20/25 LC1	FeB38 k LC1	1 628	1 628	30,0	20,0	20 000,00

Catena

Trave C.A. (2)

N.	Parete	Af intradosso [cm ²]	Af estradosso [cm ²]	N. barre intradosso	N. barre estradosso	Copriferro [cm]	Passo staffe [cm]	Area staffe [cm ²]
1177	22	8,04	8,04	4	4	2,0	20	1,57
990	43	2,26	2,26	2	2	3,0	20	1,01
991	45	2,26	2,26	2	2	3,0	20	1,01
1181	46	2,26	2,26	2	2	3,0	20	1,01
1182	46	2,26	2,26	2	2	3,0	20	1,01
1187	47	2,26	2,26	2	2	3,0	20	1,01
1188	47	2,26	2,26	2	2	3,0	20	1,01
1192	48	2,26	2,26	2	2	3,0	20	1,01
1193	48	2,26	2,26	2	2	3,0	20	1,01
1194	48	2,26	2,26	2	2	3,0	20	1,01
1135	49	2,26	2,26	2	2	3,0	20	0,00
1139	49	2,26	2,26	2	2	3,0	20	0,00
1140	49	2,26	2,26	2	2	3,0	20	0,00
1128	52	2,26	2,26	2	2	3,0	20	0,00

Solaio

N.	Quota [cm]	Spessore [cm]	G [N/mm ²]	Ex [N/mm ²]	Ey [N/mm ²]	Scarico masse	Tipo
224	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
225	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
226	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
227	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
228	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
229	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
230	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento



231	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
232	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
234	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
235	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
236	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
237	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
238	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento
245	1 628	4,0	1 000,00	26 666,67	0,00	Monodirezionale	Latero cemento

4. GEOMETRIA DEL MODELLO

La modellazione dell'edificio viene realizzata mediante l'inserimento di pareti che vengono discretizzate in macroelementi, rappresentativi di maschi murari e fasce di piano deformabili; i nodi rigidi sono indicati nelle porzioni di muratura che tipicamente sono meno soggette al danneggiamento sismico. Solitamente i maschi e le fasce sono contigui alle aperture, i nodi rigidi rappresentano elementi di collegamento tra maschi e fasce. La concezione matematica che si nasconde nell'impiego di tale elemento, permette di riconoscere il meccanismo di danno, a taglio nella sua parte centrale o a pressoflessione sui bordi dell'elemento in modo da percepire la dinamica del danneggiamento così come si presenta effettivamente nella realtà.

I nodi del modello, sono nodi tridimensionali a 5 gradi di libertà (le tre componenti di spostamento nel sistema di riferimento globale e le rotazioni intorno agli assi X e Y) o nodi bidimensionali a 3 gradi di libertà (due traslazioni e la rotazione nel piano della parete). Quelli tridimensionali vengono usati per permettere il trasferimento delle azioni, da un primo muro a un secondo disposto trasversalmente rispetto al primo. I nodi di tipo bidimensionale hanno gradi di libertà nel solo piano della parete permettendo il trasferimento degli stati di sollecitazione tra i vari punti della parete.

Gli orizzontamenti, sono modellati con elementi solaio a tre nodi connessi ai nodi tridimensionali, sono caricabili perpendicolarmente al loro piano dai carichi accidentali e permanenti; le azioni sismiche caricano il solaio lungo la direzione del piano medio. Per questo l'elemento finito solaio viene definito con una rigidezza assiale, ma nessuna rigidezza flessionale, in quanto il comportamento meccanico principale che si intende sondare è quello sotto carico orizzontale dovuto al sisma.

4.1. TELAIO EQUIVALENTE

Parete : 1



Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
13	1 868	2 137	0	0
317	2 160	2 137	0	0
341	2 431	2 137	0	0
327	2 715	2 137	0	0
17	3 228	2 137	0	0
14	1 868	2 137	354	1
318	2 160	2 137	354	1
342	2 431	2 137	354	1
328	2 715	2 137	354	1
18	3 228	2 137	354	1
15	1 868	2 137	839	2
329	2 715	2 137	839	2
19	3 228	2 137	839	2
16	1 868	2 137	1 268	3
330	2 715	2 137	1 268	3
20	3 228	2 137	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
627	1 103	354	1
628	1 103	839	2
629	595	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
7	Muratura BONDENO LC2	-	42,0	675,2	311,0	338	155	317	318
8	Muratura BONDENO LC2	-	42,0	41,5	311,0	826	155	327	328
9	Muratura BONDENO LC2	-	28,0	44,5	311,0	869	155	327	328
10	Muratura BONDENO LC2	-	28,0	399,0	311,0	1 161	155	17	627
11	Muratura BONDENO LC2	-	42,0	608,2	402,0	304	555	318	15
12	Muratura BONDENO LC2	-	42,0	45,5	402,0	824	555	328	329
6	Muratura BONDENO LC2	-	28,0	513,5	485,0	1 103	597	627	628
14	Muratura BONDENO LC2	-	28,0	69,3	235,0	595	957	15	629
15	Muratura BONDENO LC2	-	28,0	63,1	235,0	861	957	329	330
13	Muratura BONDENO LC2	-	28,0	60,4	358,2	30	1 018	15	16
16	Muratura BONDENO LC2	-	28,0	117,4	358,2	1 301	1 018	19	20



Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
1	Muratura BONDENO LC2	-	42,0	161,5	104,0	722	302	342	328
2	Muratura BONDENO LC2	-	42,0	193,6	273,0	716	703	15	329
3	Muratura BONDENO LC2	-	28,0	500,0	209,0	310	1 164	16	629
5	Muratura BONDENO LC2	-	28,0	350,0	209,0	1 068	1 164	330	20
4	Muratura BONDENO LC2	-	28,0	200,0	179,0	730	1 179	629	330

Parete : 2

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
17	3 228	2 137	0	0
21	3 230	1 802	0	0
18	3 228	2 137	354	1
22	3 230	1 802	354	1
19	3 228	2 137	839	2
23	3 230	1 802	839	2
20	3 228	2 137	1 268	3
24	3 230	1 802	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
19	Muratura BONDENO LC2	-	28,0	191,9	242,0	96	176	17	18
20	Muratura BONDENO LC2	-	28,0	43,2	242,0	313	176	21	22

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
17	Muratura BONDENO LC2	-	28,0	100,0	110,0	242	55	17	21
18	Muratura BONDENO LC2	-	28,0	100,0	114,0	242	297	18	22

Parete : 3

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
25	3 159	1 802	0	0



21	3 230	1 802	0	0
26	3 159	1 802	354	1
22	3 230	1 802	354	1
27	3 159	1 802	839	2
23	3 230	1 802	839	2
28	3 159	1 802	1 268	3
24	3 230	1 802	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
630	35	0	0
631	35	354	1
632	35	839	2
633	35	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
21	Muratura BONDENO LC2	-	28,0	70,2	354,0	35	177	630	631
22	Muratura BONDENO LC2	-	28,0	70,2	485,0	35	597	631	632
23	Muratura BONDENO LC2	-	28,0	70,2	429,0	35	1 054	632	633

Parete : 4

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
33	3 087	-42	0	0
41	3 089	-354	0	0
89	3 091	-567	0	0
81	3 093	-859	0	0
61	3 095	-1 071	0	0
37	3 097	-1 388	0	0
34	3 087	-42	354	1
42	3 089	-354	354	1
90	3 091	-567	354	1
82	3 093	-859	354	1
62	3 095	-1 071	354	1
38	3 097	-1 388	354	1
35	3 087	-42	839	2
43	3 089	-354	839	2
91	3 091	-567	839	2
83	3 093	-859	839	2
63	3 095	-1 071	839	2
39	3 097	-1 388	839	2
36	3 087	-42	1 268	3
44	3 089	-354	1 268	3



92	3 091	-567	1 268	3
84	3 093	-859	1 268	3
64	3 095	-1 071	1 268	3
40	3 097	-1 388	1 268	3

Nodi 2D

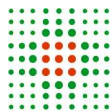
Nodo	X locale [cm]	Z [cm]	Livello
634	923	354	1
636	1 188	354	1
635	923	839	2
637	1 188	839	2

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
38	Muratura BONDENO LC2	-	28,0	208,7	220,0	569	110	89	90
37	Muratura BONDENO LC2	-	28,0	181,7	170,0	289	140	41	42
39	Muratura BONDENO LC2	-	28,0	376,9	170,0	957	140	61	634
36	Muratura BONDENO LC2	-	28,0	77,8	237,0	39	175	33	34
40	Muratura BONDENO LC2	-	28,0	80,9	237,0	1 306	175	37	38
43	Muratura BONDENO LC2	-	28,0	125,7	265,0	552	487	90	91
42	Muratura BONDENO LC2	-	28,0	181,7	242,5	289	530	42	43
44	Muratura BONDENO LC2	-	28,0	81,9	407,3	776	558	82	83
41	Muratura BONDENO LC2	-	28,0	77,8	352,5	39	589	34	35
33	Muratura BONDENO LC2	-	14,0	212,4	485,0	923	597	634	635
34	Muratura BONDENO LC2	-	28,0	316,5	485,0	1 188	597	636	637
47	Muratura BONDENO LC2	-	14,0	90,1	358,2	570	1 018	91	92
48	Muratura BONDENO LC2	-	14,0	81,9	358,2	776	1 018	83	84
45	Muratura BONDENO LC2	-	28,0	77,8	324,5	39	1 030	35	36
46	Muratura BONDENO LC2	-	28,0	327,3	324,5	361	1 030	43	44
35	Muratura BONDENO LC2	-	28,0	528,9	429,0	1 082	1 054	63	64

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
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24	Muratura BONDENO LC2	-	28,0	120,0	110,0	138	55	33	41
28	Muratura BONDENO LC2	-	28,0	120,0	110,0	1 205	55	61	37
26	Muratura BONDENO LC2	-	28,0	97,5	134,0	428	287	42	90
27	Muratura BONDENO LC2	-	28,0	107,5	134,0	698	287	90	82
25	Muratura BONDENO LC2	-	28,0	120,0	234,0	138	347	34	42
30	Muratura BONDENO LC2	-	28,0	120,0	220,0	675	729	91	83
29	Muratura BONDENO LC2	-	28,0	120,0	190,0	138	779	35	43
32	Muratura BONDENO LC2	-	14,0	120,0	209,0	675	1 164	92	84
31	Muratura BONDENO LC2	-	28,0	120,0	174,0	138	1 181	36	44

Parete : 5

Nodi 3D

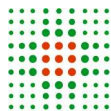
Nodo	X [cm]	Y [cm]	Z [cm]	Livello
41	3 089	-354	0	0
45	3 524	-349	0	0
42	3 089	-354	354	1
46	3 524	-349	354	1
43	3 089	-354	839	2
47	3 524	-349	839	2
44	3 089	-354	1 268	3
48	3 524	-349	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
638	217	839	2
639	217	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
52	Muratura BONDENO LC2	-	28,0	152,7	237,0	76	175	41	42
53	Muratura BONDENO LC2	-	28,0	161,9	237,0	354	175	45	46
54	Muratura BONDENO LC2	-	28,0	100,2	352,5	50	589	42	43
55	Muratura BONDENO LC2	-	28,0	109,4	352,5	380	589	46	47
51	Muratura BONDENO LC2	-	28,0	434,6	429,0	217	1 054	638	639



Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
49	Muratura BONDENO LC2	-	28,0	120,0	110,0	213	55	41	45
50	Muratura BONDENO LC2	-	28,0	172,5	234,0	213	347	42	46

Parete : 6

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
45	3 524	-349	0	0
49	3 605	-424	0	0
46	3 524	-349	354	1
50	3 605	-424	354	1
47	3 524	-349	839	2
51	3 605	-424	839	2
48	3 524	-349	1 268	3
52	3 605	-424	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
640	55	0	0
641	55	354	1
642	55	839	2
643	55	1 268	3

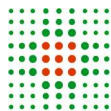
Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
56	Muratura BONDENO LC2	-	28,0	110,0	354,0	55	177	640	641
57	Muratura BONDENO LC2	-	28,0	110,0	485,0	55	597	641	642
58	Muratura BONDENO LC2	-	28,0	110,0	429,0	55	1 054	642	643

Parete : 7

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
49	3 605	-424	0	0
53	3 606	-982	0	0
50	3 605	-424	354	1
54	3 606	-982	354	1
51	3 605	-424	839	2
55	3 606	-982	839	2



52	3 605	-424	1 268	3
56	3 606	-982	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
63	Muratura BONDENO LC2	-	28,0	155,3	237,0	78	175	49	50
64	Muratura BONDENO LC2	-	28,0	167,5	237,0	474	175	53	54
65	Muratura BONDENO LC2	-	28,0	160,3	352,5	80	589	50	51
66	Muratura BONDENO LC2	-	28,0	172,5	352,5	472	589	54	55
67	Muratura BONDENO LC2	-	28,0	160,3	319,5	80	1 029	51	52
68	Muratura BONDENO LC2	-	28,0	172,5	319,5	472	1 029	55	56

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
59	Muratura BONDENO LC2	-	28,0	235,0	110,0	273	55	49	53
60	Muratura BONDENO LC2	-	28,0	230,0	234,0	273	347	50	54
61	Muratura BONDENO LC2	-	28,0	225,0	190,0	273	779	51	55
62	Muratura BONDENO LC2	-	28,0	225,0	184,0	273	1 176	52	56

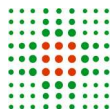
Parete : 8

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
57	3 516	-1 068	0	0
53	3 606	-982	0	0
58	3 516	-1 068	354	1
54	3 606	-982	354	1
59	3 516	-1 068	839	2
55	3 606	-982	839	2
60	3 516	-1 068	1 268	3
56	3 606	-982	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
644	62	0	0
645	62	354	1
646	62	839	2



647	62	1 268	3
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Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
69	Muratura BONDENO LC2	-	28,0	124,6	354,0	62	177	644	645
70	Muratura BONDENO LC2	-	28,0	124,6	485,0	62	597	645	646
71	Muratura BONDENO LC2	-	28,0	124,6	429,0	62	1 054	646	647

Parete : 9

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
61	3 095	-1 071	0	0
57	3 516	-1 068	0	0
62	3 095	-1 071	354	1
58	3 516	-1 068	354	1
63	3 095	-1 071	839	2
59	3 516	-1 068	839	2
64	3 095	-1 071	1 268	3
60	3 516	-1 068	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
76	Muratura BONDENO LC2	-	28,0	155,2	237,0	78	175	61	62
77	Muratura BONDENO LC2	-	28,0	146,6	237,0	349	175	57	58
78	Muratura BONDENO LC2	-	28,0	102,7	352,5	51	589	62	63
79	Muratura BONDENO LC2	-	28,0	94,1	352,5	375	589	58	59
80	Muratura BONDENO LC2	-	28,0	102,7	319,5	51	1 029	63	64
81	Muratura BONDENO LC2	-	28,0	94,1	319,5	375	1 029	59	60

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
72	Muratura BONDENO LC2	-	28,0	120,0	110,0	215	55	61	57
73	Muratura BONDENO LC2	-	28,0	172,5	234,0	215	347	62	58
74	Muratura BONDENO LC2	-	28,0	225,0	190,0	215	779	63	59



75	Muratura BONDENO LC2	-	28,0	225,0	184,0	215	1 176	64	60
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Parete : 10

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
65	2 695	-1 390	0	0
37	3 097	-1 388	0	0
66	2 695	-1 390	354	1
38	3 097	-1 388	354	1
67	2 695	-1 390	839	2
39	3 097	-1 388	839	2
68	2 695	-1 390	1 268	3
40	3 097	-1 388	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
86	Muratura BONDENO LC2	-	28,0	137,3	237,0	69	175	65	66
87	Muratura BONDENO LC2	-	28,0	144,3	237,0	329	175	37	38
88	Muratura BONDENO LC2	-	28,0	137,3	347,5	69	588	66	67
89	Muratura BONDENO LC2	-	28,0	144,3	347,5	329	588	38	39
90	Muratura BONDENO LC2	-	28,0	137,3	319,5	69	1 029	67	68
91	Muratura BONDENO LC2	-	28,0	144,3	319,5	329	1 029	39	40

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
82	Muratura BONDENO LC2	-	28,0	120,0	110,0	197	55	65	37
83	Muratura BONDENO LC2	-	28,0	120,0	234,0	197	347	66	38
84	Muratura BONDENO LC2	-	28,0	120,0	200,0	197	774	67	39
85	Muratura BONDENO LC2	-	28,0	120,0	184,0	197	1 176	68	40

Parete : 11

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
69	1 872	-1 311	0	0
381	2 353	-1 311	0	0



73	2 694	-1 310	0	0
70	1 872	-1 311	354	1
382	2 353	-1 311	354	1
74	2 694	-1 310	354	1
71	1 872	-1 311	839	2
383	2 353	-1 311	839	2
75	2 694	-1 310	839	2
72	1 872	-1 311	1 268	3
384	2 353	-1 311	1 268	3
76	2 694	-1 310	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
648	270	0	0
649	270	354	1
650	219	839	2
651	270	839	2
652	411	839	2
653	533	839	2
654	606	839	2
655	219	1 268	3
656	411	1 268	3
657	606	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
111	Muratura BONDENO LC2	-	28,0	157,0	120,0	270	170	648	649
112	Muratura BONDENO LC2	-	28,0	169,0	120,0	533	170	381	382
110	Muratura BONDENO LC2	-	28,0	91,9	237,0	46	175	69	70
113	Muratura BONDENO LC2	-	28,0	104,8	237,0	770	175	73	74
115	Muratura BONDENO LC2	-	28,0	52,0	250,0	270	589	649	651
116	Muratura BONDENO LC2	-	28,0	64,0	250,0	533	589	382	653
114	Muratura BONDENO LC2	-	28,0	39,4	367,5	20	594	70	71
117	Muratura BONDENO LC2	-	28,0	52,3	367,5	797	594	74	75
119	Muratura BONDENO LC2	-	28,0	25,0	170,0	219	1 024	650	655
120	Muratura BONDENO LC2	-	28,0	29,0	170,0	411	1 024	652	656
121	Muratura BONDENO LC2	-	28,0	31,0	170,0	606	1 024	654	657
118	Muratura BONDENO LC2	-	28,0	41,8	299,5	21	1 045	71	72



122	Muratura BONDENO LC2	-	28,0	35,9	299,5	805	1 045	75	76
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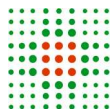
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
92	Muratura BONDENO LC2	-	28,0	100,0	110,0	142	55	69	648
94	Muratura BONDENO LC2	-	28,0	100,0	110,0	399	55	648	381
96	Muratura BONDENO LC2	-	28,0	100,0	110,0	668	55	381	73
93	Muratura BONDENO LC2	-	28,0	149,2	234,0	144	347	70	649
95	Muratura BONDENO LC2	-	28,0	152,5	234,0	399	347	649	382
97	Muratura BONDENO LC2	-	28,0	152,4	234,0	668	347	382	74
98	Muratura BONDENO LC2	-	28,0	172,4	225,0	127	827	71	650
99	Muratura BONDENO LC2	-	28,0	31,9	225,0	241	827	650	651
100	Muratura BONDENO LC2	-	28,0	120,6	225,0	344	827	651	652
101	Muratura BONDENO LC2	-	28,0	62,4	225,0	450	827	652	383
102	Muratura BONDENO LC2	-	28,0	36,5	225,0	499	827	383	653
103	Muratura BONDENO LC2	-	28,0	49,1	225,0	574	827	653	654
104	Muratura BONDENO LC2	-	28,0	164,6	225,0	696	827	654	75
105	Muratura BONDENO LC2	-	28,0	165,0	159,0	124	1 189	72	655
106	Muratura BONDENO LC2	-	28,0	165,0	159,0	314	1 189	655	656
107	Muratura BONDENO LC2	-	28,0	55,1	159,0	453	1 189	656	384
108	Muratura BONDENO LC2	-	28,0	109,9	159,0	536	1 189	384	657
109	Muratura BONDENO LC2	-	28,0	165,0	159,0	704	1 189	657	76

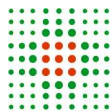
Parete : 12

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
77	-3 097	-867	0	0
169	-2 694	-866	0	0
125	-2 429	-866	0	0
509	-2 159	-865	0	0
143	-1 892	-865	0	0



299	-1 460	-865	0	0
199	-899	-864	0	0
229	-316	-863	0	0
249	272	-862	0	0
269	860	-862	0	0
279	1 436	-861	0	0
430	1 875	-860	0	0
377	2 352	-860	0	0
369	2 689	-859	0	0
81	3 093	-859	0	0
78	-3 097	-867	354	1
170	-2 694	-866	354	1
126	-2 429	-866	354	1
510	-2 159	-865	354	1
144	-1 892	-865	354	1
300	-1 460	-865	354	1
200	-899	-864	354	1
230	-316	-863	354	1
250	272	-862	354	1
270	860	-862	354	1
280	1 436	-861	354	1
431	1 875	-860	354	1
378	2 352	-860	354	1
370	2 689	-859	354	1
82	3 093	-859	354	1
79	-3 097	-867	839	2
171	-2 694	-866	839	2
127	-2 429	-866	839	2
185	-2 398	-866	839	2
511	-2 159	-865	839	2
145	-1 892	-865	839	2
301	-1 460	-865	839	2
201	-899	-864	839	2
231	-316	-863	839	2
251	272	-862	839	2
271	860	-862	839	2
281	1 436	-861	839	2
432	1 875	-860	839	2
359	2 146	-860	839	2
379	2 352	-860	839	2
349	2 414	-860	839	2
371	2 689	-859	839	2
83	3 093	-859	839	2
80	-3 097	-867	1 268	3
172	-2 694	-866	1 268	3
128	-2 429	-866	1 268	3
186	-2 398	-866	1 268	3
512	-2 159	-865	1 268	3
146	-1 892	-865	1 268	3
302	-1 460	-865	1 268	3



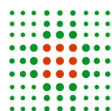
202	-899	-864	1 268	3
232	-316	-863	1 268	3
252	272	-862	1 268	3
272	860	-862	1 268	3
282	1 436	-861	1 268	3
433	1 875	-860	1 268	3
360	2 146	-860	1 268	3
380	2 352	-860	1 268	3
350	2 414	-860	1 268	3
372	2 689	-859	1 268	3
84	3 093	-859	1 268	3
147	-1 892	-865	1 628	4
303	-1 460	-865	1 628	4
203	-899	-864	1 628	4
233	-316	-863	1 628	4
253	272	-862	1 628	4
273	860	-862	1 628	4
283	1 436	-861	1 628	4
434	1 875	-860	1 628	4

Nodi 2D

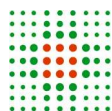
Nodo	X locale [cm]	Z [cm]	Livello
663	1 072	0	0
665	5 988	0	0
658	448	354	1
660	643	354	1
664	1 072	354	1
662	5 510	354	1
666	5 988	354	1
659	448	839	2
661	643	839	2
667	1 922	1 268	3
668	2 510	1 268	3
669	3 669	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
169	Muratura BONDENO LC2	-	28,0	148,7	220,0	670	110	125	126
175	Muratura BONDENO LC2	-	28,0	253,0	220,0	3 296	110	249	250
176	Muratura BONDENO LC2	-	28,0	626,7	220,0	3 832	110	269	270
177	Muratura BONDENO LC2	-	28,0	1 100,6	220,0	4 781	110	430	431
178	Muratura BONDENO LC2	-	28,0	200,0	220,0	5 526	110	377	662
174	Muratura BONDENO LC2	-	28,0	512,5	222,5	2 724	111	229	230



168	Muratura BONDENO LC2	-	28,0	234,0	230,0	399	115	169	170
172	Muratura BONDENO LC2	-	28,0	358,3	230,0	1 651	115	299	300
173	Muratura BONDENO LC2	-	28,0	367,3	237,5	2 144	119	199	200
170	Muratura BONDENO LC2	-	28,0	93,6	300,4	891	150	509	510
171	Muratura BONDENO LC2	-	28,0	146,4	300,4	1 279	150	143	144
179	Muratura BONDENO LC2	-	28,0	64,4	302,6	5 753	151	369	370
167	Muratura BONDENO LC2	-	28,0	181,6	305,2	91	153	77	78
165	Muratura BONDENO LC2	-	42,0	267,3	354,0	1 072	177	663	664
166	Muratura BONDENO LC2	-	42,0	404,3	354,0	5 988	177	665	666
185	Muratura BONDENO LC2	-	28,0	374,5	220,0	1 669	464	300	301
186	Muratura BONDENO LC2	-	28,0	472,1	220,0	2 202	464	200	201
189	Muratura BONDENO LC2	-	28,0	650,0	245,0	3 850	477	270	271
190	Muratura BONDENO LC2	-	28,0	447,7	245,0	4 499	477	280	281
187	Muratura BONDENO LC2	-	28,0	476,4	260,0	2 787	484	230	231
184	Muratura BONDENO LC2	-	28,0	204,8	285,0	1 269	497	144	145
188	Muratura BONDENO LC2	-	28,0	270,3	285,0	3 280	497	250	251
192	Muratura BONDENO LC2	-	28,0	49,0	287,5	5 237	498	431	359
191	Muratura BONDENO LC2	-	28,0	169,8	312,5	4 918	510	431	432
183	Muratura BONDENO LC2	-	28,0	67,7	350,0	933	529	510	511
180	Muratura BONDENO LC2	-	28,0	136,5	402,3	68	555	78	79
181	Muratura BONDENO LC2	-	28,0	191,8	402,3	352	555	170	171
193	Muratura BONDENO LC2	-	28,0	68,8	402,3	5 476	555	378	349
194	Muratura BONDENO LC2	-	14,0	28,4	402,3	5 525	555	662	349
195	Muratura BONDENO LC2	-	14,0	166,6	402,3	5 702	555	370	371
196	Muratura BONDENO LC2	-	28,0	152,3	407,3	5 862	558	370	371
197	Muratura BONDENO LC2	-	28,0	142,1	407,3	6 119	558	82	83
182	Muratura BONDENO LC2	-	28,0	76,2	428,4	681	568	126	127
211	Muratura	-	28,0	193,4	210,0	4 920	944	432	433



	BONDENO LC2								
212	Muratura BONDENO LC2	-	28,0	39,0	210,0	5 246	944	359	360
213	Muratura BONDENO LC2	-	28,0	57,6	210,0	5 495	944	349	350
202	Muratura BONDENO LC2	-	28,0	347,8	215,0	1 563	947	301	302
201	Muratura BONDENO LC2	-	28,0	374,6	220,0	1 081	949	145	146
214	Muratura BONDENO LC2	-	28,0	182,4	220,0	5 825	949	371	372
199	Muratura BONDENO LC2	-	28,0	168,9	222,5	376	950	171	172
200	Muratura BONDENO LC2	-	28,0	214,2	222,5	677	950	127	128
203	Muratura BONDENO LC2	-	28,0	151,2	225,0	1 922	952	201	667
206	Muratura BONDENO LC2	-	28,0	315,0	232,5	2 872	955	231	232
207	Muratura BONDENO LC2	-	28,0	290,1	232,5	3 285	955	251	252
210	Muratura BONDENO LC2	-	28,0	421,7	237,5	4 513	958	281	282
205	Muratura BONDENO LC2	-	28,0	190,5	240,0	2 510	959	231	668
208	Muratura BONDENO LC2	-	28,0	258,8	240,0	3 669	959	271	669
204	Muratura BONDENO LC2	-	28,0	166,5	247,5	2 191	963	201	202
209	Muratura BONDENO LC2	-	28,0	223,0	255,0	4 050	967	271	272
198	Muratura BONDENO LC2	-	28,0	171,1	358,2	86	1 018	79	80
215	Muratura BONDENO LC2	-	28,0	153,8	361,2	6 113	1 020	83	84
217	Muratura BONDENO LC2	-	28,0	323,9	210,0	1 648	1 373	302	303
218	Muratura BONDENO LC2	-	28,0	1 160,9	210,0	2 551	1 373	668	233
219	Muratura BONDENO LC2	-	28,0	167,0	210,0	3 325	1 373	252	253
220	Muratura BONDENO LC2	-	28,0	649,2	210,0	3 848	1 373	272	273
221	Muratura BONDENO LC2	-	28,0	420,4	210,0	4 497	1 373	282	283
216	Muratura BONDENO LC2	-	28,0	166,0	304,7	1 288	1 420	146	147
222	Muratura BONDENO LC2	-	28,0	149,3	304,7	4 897	1 420	433	434

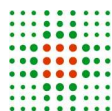
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore	Base	Altezza	Baricentro X	Baricentro Z	Nodo	Nodo
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PROGETTISTI

COORDINAMENTO / ARCHITETTONICO EDILE
ARCH. MARCO RIZZOLI
STRUTTURE
STUDIO ENARCO SRL

IMPIANTI MECCANICI ED ELETTRICI
STEP ENGINEERING srl
SICUREZZA
ARCH. ANTONELLA ZENI



			[cm]	[cm]	[cm]	[cm]	[cm]	sinistro	destro
125	Muratura BONDENO LC2	-	28,0	135,9	144,0	800	282	126	510
126	Muratura BONDENO LC2	-	28,0	115,0	144,0	1 419	282	144	300
129	Muratura BONDENO LC2	-	28,0	155,0	134,0	3 080	287	230	250
130	Muratura BONDENO LC2	-	28,0	103,0	134,0	3 470	287	250	270
131	Muratura BONDENO LC2	-	28,0	92,5	134,0	4 207	287	270	280
132	Muratura BONDENO LC2	-	28,0	137,5	134,0	5 365	287	431	378
128	Muratura BONDENO LC2	-	28,0	125,0	129,0	2 445	290	200	230
123	Muratura BONDENO LC2	-	28,0	110,0	124,0	214	292	78	170
124	Muratura BONDENO LC2	-	28,0	80,0	124,0	556	292	658	660
127	Muratura BONDENO LC2	-	28,0	120,0	104,0	1 903	302	300	200
133	Muratura BONDENO LC2	-	28,0	120,0	265,0	214	707	79	171
135	Muratura BONDENO LC2	-	28,0	114,7	265,0	1 378	707	145	301
138	Muratura BONDENO LC2	-	28,0	120,0	265,0	4 228	707	271	281
141	Muratura BONDENO LC2	-	28,0	185,3	265,0	5 356	707	359	379
142	Muratura BONDENO LC2	-	28,0	4,7	265,0	5 451	707	379	349
143	Muratura BONDENO LC2	-	14,0	128,8	265,0	5 596	707	349	371
144	Muratura BONDENO LC2	-	28,0	115,0	220,0	5 984	729	371	83
137	Muratura BONDENO LC2	-	28,0	110,0	215,0	3 478	732	251	271
139	Muratura BONDENO LC2	-	28,0	105,0	215,0	4 776	732	281	432
136	Muratura BONDENO LC2	-	28,0	115,0	185,0	3 085	747	231	251
134	Muratura BONDENO LC2	-	28,0	145,0	135,0	824	772	185	511
140	Muratura BONDENO LC2	-	28,0	210,0	130,0	5 115	774	432	359
154	Muratura BONDENO LC2	-	28,0	210,0	229,0	5 122	1 154	433	360
157	Muratura BONDENO LC2	-	28,0	210,0	229,0	5 629	1 154	350	372
149	Muratura BONDENO LC2	-	28,0	111,0	219,0	1 829	1 159	302	667
145	Muratura BONDENO LC2	-	28,0	120,0	209,0	231	1 164	80	172
147	Muratura BONDENO LC2	-	28,0	110,0	209,0	839	1 164	186	512



148	Muratura BONDENO LC2	-	28,0	107,7	209,0	1 384	1 164	146	302
153	Muratura BONDENO LC2	-	28,0	107,5	209,0	4 769	1 164	282	433
155	Muratura BONDENO LC2	-	28,0	183,2	209,0	5 357	1 164	360	380
156	Muratura BONDENO LC2	-	28,0	16,8	209,0	5 457	1 164	380	350
146	Muratura BONDENO LC2	-	28,0	110,0	204,0	515	1 166	172	128
151	Muratura BONDENO LC2	-	28,0	112,5	204,0	3 475	1 166	252	669
150	Muratura BONDENO LC2	-	28,0	110,0	189,0	3 135	1 174	232	252
158	Muratura BONDENO LC2	-	28,0	120,0	189,0	5 976	1 174	372	84
152	Muratura BONDENO LC2	-	28,0	127,5	174,0	4 231	1 181	272	282
159	Muratura BONDENO LC2	-	28,0	115,0	150,0	1 429	1 553	147	303
160	Muratura BONDENO LC2	-	28,0	160,0	150,0	1 890	1 553	303	203
161	Muratura BONDENO LC2	-	28,0	110,0	150,0	3 186	1 553	233	253
162	Muratura BONDENO LC2	-	28,0	115,0	150,0	3 466	1 553	253	273
163	Muratura BONDENO LC2	-	28,0	115,0	150,0	4 230	1 553	273	283
164	Muratura BONDENO LC2	-	28,0	115,0	150,0	4 765	1 553	283	434

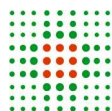
Parete : 13

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
85	-3 098	-588	0	0
173	-2 694	-586	0	0
129	-2 429	-585	0	0
513	-2 159	-584	0	0
148	-1 892	-583	0	0
304	-1 458	-582	0	0
209	-888	-580	0	0
234	-316	-578	0	0
254	273	-576	0	0
274	860	-574	0	0
284	1 436	-572	0	0
435	1 877	-571	0	0
361	2 145	-570	0	0
351	2 413	-569	0	0
373	2 685	-568	0	0
89	3 091	-567	0	0
86	-3 098	-588	354	1



174	-2 694	-586	354	1
130	-2 429	-585	354	1
514	-2 159	-584	354	1
149	-1 892	-583	354	1
305	-1 458	-582	354	1
210	-888	-580	354	1
235	-316	-578	354	1
255	273	-576	354	1
275	860	-574	354	1
285	1 436	-572	354	1
436	1 877	-571	354	1
362	2 145	-570	354	1
352	2 413	-569	354	1
374	2 685	-568	354	1
90	3 091	-567	354	1
87	-3 098	-588	839	2
175	-2 694	-586	839	2
131	-2 429	-585	839	2
515	-2 159	-584	839	2
150	-1 892	-583	839	2
306	-1 458	-582	839	2
211	-888	-580	839	2
236	-316	-578	839	2
256	273	-576	839	2
276	860	-574	839	2
286	1 436	-572	839	2
437	1 877	-571	839	2
363	2 145	-570	839	2
353	2 413	-569	839	2
375	2 685	-568	839	2
91	3 091	-567	839	2
88	-3 098	-588	1 268	3
176	-2 694	-586	1 268	3
132	-2 429	-585	1 268	3
516	-2 159	-584	1 268	3
151	-1 892	-583	1 268	3
307	-1 458	-582	1 268	3
212	-888	-580	1 268	3
237	-316	-578	1 268	3
257	273	-576	1 268	3
277	860	-574	1 268	3
287	1 436	-572	1 268	3
438	1 877	-571	1 268	3
364	2 145	-570	1 268	3
354	2 413	-569	1 268	3
376	2 685	-568	1 268	3
92	3 091	-567	1 268	3
152	-1 892	-583	1 628	4
308	-1 458	-582	1 628	4
213	-888	-580	1 628	4



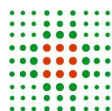
238	-316	-578	1 628	4
258	273	-576	1 628	4
278	860	-574	1 628	4
288	1 436	-572	1 628	4
439	1 877	-571	1 628	4

Nodi 2D

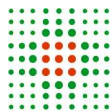
Nodo	X locale [cm]	Z [cm]	Livello
672	2 034	0	0
674	2 488	0	0
673	2 034	354	1
670	2 387	1 268	3
675	3 659	1 268	3
676	3 795	1 268	3
671	2 387	1 628	4
677	3 636	1 628	4
678	3 795	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
259	Muratura BONDENO LC2	-	28,0	392,3	215,0	1 675	108	304	305
258	Muratura BONDENO LC2	-	28,0	474,7	220,0	1 146	110	148	149
265	Muratura BONDENO LC2	-	28,0	604,0	220,0	3 871	110	274	275
266	Muratura BONDENO LC2	-	28,0	983,9	220,0	4 775	110	435	436
260	Muratura BONDENO LC2	-	28,0	104,5	222,5	2 034	111	672	673
262	Muratura BONDENO LC2	-	28,0	225,1	222,5	2 488	111	674	210
261	Muratura BONDENO LC2	-	28,0	49,3	225,0	2 211	113	209	210
267	Muratura BONDENO LC2	-	28,0	205,1	225,0	5 469	113	351	352
263	Muratura BONDENO LC2	-	28,0	95,7	302,6	2 733	151	234	235
264	Muratura BONDENO LC2	-	28,0	108,0	302,6	3 425	151	254	255
257	Muratura BONDENO LC2	-	28,0	698,6	305,2	349	153	173	174
268	Muratura BONDENO LC2	-	28,0	471,7	305,2	5 953	153	373	374
273	Muratura BONDENO LC2	-	28,0	403,0	220,0	1 659	464	305	306
274	Muratura BONDENO LC2	-	28,0	615,1	220,0	2 278	464	210	211
272	Muratura BONDENO LC2	-	28,0	227,1	157,5	1 254	488	149	150



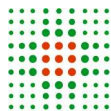
277	Muratura BONDENO LC2	-	28,0	621,9	270,0	3 894	489	275	276
278	Muratura BONDENO LC2	-	28,0	405,0	270,0	4 508	489	285	286
269	Muratura BONDENO LC2	-	28,0	137,7	402,3	69	555	86	87
270	Muratura BONDENO LC2	-	28,0	410,9	402,3	463	555	174	175
275	Muratura BONDENO LC2	-	28,0	85,7	402,3	2 738	555	235	236
280	Muratura BONDENO LC2	-	28,0	427,2	407,3	5 725	558	374	375
281	Muratura BONDENO LC2	-	28,0	140,1	407,3	6 118	558	90	91
276	Muratura BONDENO LC2	-	28,0	102,9	408,1	3 422	558	255	256
279	Muratura BONDENO LC2	-	28,0	422,2	408,1	5 032	558	436	437
271	Muratura BONDENO LC2	-	28,0	92,0	290,0	984	583	514	515
285	Muratura BONDENO LC2	-	28,0	263,9	230,0	1 728	954	306	307
292	Muratura BONDENO LC2	-	28,0	313,9	237,5	4 539	958	286	287
287	Muratura BONDENO LC2	-	28,0	178,2	240,0	2 495	959	211	670
290	Muratura BONDENO LC2	-	28,0	193,8	240,0	3 681	959	276	675
286	Muratura BONDENO LC2	-	28,0	285,7	247,5	2 123	963	211	212
291	Muratura BONDENO LC2	-	28,0	323,6	255,0	4 080	967	276	277
282	Muratura BONDENO LC2	-	28,0	149,8	358,2	75	1 018	87	88
283	Muratura BONDENO LC2	-	28,0	398,8	358,2	469	1 018	175	176
284	Muratura BONDENO LC2	-	28,0	538,1	358,2	1 207	1 018	150	151
293	Muratura BONDENO LC2	-	28,0	457,0	358,2	5 014	1 018	437	438
288	Muratura BONDENO LC2	-	28,0	86,9	358,8	2 738	1 018	236	237
289	Muratura BONDENO LC2	-	28,0	103,7	358,8	3 423	1 018	256	257
294	Muratura BONDENO LC2	-	28,0	399,1	361,2	5 711	1 020	375	376
295	Muratura BONDENO LC2	-	28,0	158,2	361,2	6 109	1 020	91	92
297	Muratura BONDENO LC2	-	28,0	345,0	210,0	1 688	1 373	307	308
302	Muratura BONDENO LC2	-	28,0	103,5	210,0	3 636	1 373	675	677
305	Muratura BONDENO LC2	-	28,0	460,1	210,0	4 493	1 373	287	288
298	Muratura	-	28,0	290,6	242,5	2 121	1 389	212	213



	BONDENO LC2								
303	Muratura BONDENO LC2	-	28,0	21,5	242,5	3 795	1 389	676	678
304	Muratura BONDENO LC2	-	28,0	257,3	242,5	4 044	1 389	277	278
296	Muratura BONDENO LC2	-	28,0	220,0	304,7	1 316	1 420	151	152
299	Muratura BONDENO LC2	-	14,0	191,9	304,7	2 483	1 420	670	671
300	Muratura BONDENO LC2	-	14,0	87,3	304,7	2 737	1 420	237	238
301	Muratura BONDENO LC2	-	28,0	117,8	304,7	3 430	1 420	257	258
306	Muratura BONDENO LC2	-	28,0	162,1	304,7	4 894	1 420	438	439

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
224	Muratura BONDENO LC2	-	28,0	93,0	144,0	1 422	282	149	305
225	Muratura BONDENO LC2	-	28,0	110,0	134,0	1 921	287	305	673
226	Muratura BONDENO LC2	-	28,0	97,5	134,0	2 642	287	210	235
227	Muratura BONDENO LC2	-	28,0	100,0	134,0	3 526	287	255	275
228	Muratura BONDENO LC2	-	28,0	105,0	134,0	4 242	287	275	285
229	Muratura BONDENO LC2	-	28,0	100,0	134,0	5 317	287	362	352
223	Muratura BONDENO LC2	-	28,0	210,0	124,0	804	292	130	514
230	Muratura BONDENO LC2	-	28,0	120,0	265,0	204	707	87	175
231	Muratura BONDENO LC2	-	28,0	115,0	265,0	1 918	707	306	211
232	Muratura BONDENO LC2	-	28,0	110,0	265,0	2 640	707	211	236
236	Muratura BONDENO LC2	-	28,0	115,0	220,0	5 982	729	375	91
233	Muratura BONDENO LC2	-	28,0	110,0	215,0	3 529	732	256	276
234	Muratura BONDENO LC2	-	28,0	120,0	215,0	4 284	732	276	286
235	Muratura BONDENO LC2	-	28,0	100,0	215,0	4 753	732	286	437
237	Muratura BONDENO LC2	-	28,0	120,0	209,0	210	1 164	88	176
238	Muratura BONDENO LC2	-	28,0	105,0	209,0	1 504	1 164	151	307
246	Muratura BONDENO LC2	-	28,0	90,0	209,0	4 754	1 164	287	438
241	Muratura	-	28,0	112,5	204,0	2 638	1 166	670	237

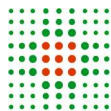


	BONDENO LC2								
242	Muratura BONDENO LC2	-	28,0	103,0	204,0	3 533	1 166	257	675
239	Muratura BONDENO LC2	-	28,0	117,5	189,0	1 919	1 174	307	212
247	Muratura BONDENO LC2	-	28,0	120,0	189,0	5 970	1 174	376	92
240	Muratura BONDENO LC2	-	28,0	131,6	174,0	2 332	1 181	212	670
243	Muratura BONDENO LC2	-	28,0	56,3	174,0	3 761	1 181	675	676
244	Muratura BONDENO LC2	-	28,0	116,7	174,0	3 859	1 181	676	277
245	Muratura BONDENO LC2	-	28,0	115,0	174,0	4 265	1 181	277	287
248	Muratura BONDENO LC2	-	28,0	90,0	150,0	1 471	1 553	152	308
249	Muratura BONDENO LC2	-	28,0	115,0	150,0	1 918	1 553	308	213
251	Muratura BONDENO LC2	-	14,0	115,0	150,0	2 636	1 553	671	238
252	Muratura BONDENO LC2	-	28,0	96,0	150,0	3 536	1 553	258	677
253	Muratura BONDENO LC2	-	28,0	96,0	150,0	3 736	1 553	677	678
255	Muratura BONDENO LC2	-	28,0	90,0	150,0	4 218	1 553	278	288
256	Muratura BONDENO LC2	-	28,0	90,0	150,0	4 768	1 553	288	439
250	Muratura BONDENO LC2	-	28,0	135,0	85,0	2 334	1 586	213	671
254	Muratura BONDENO LC2	-	28,0	110,0	85,0	3 861	1 586	678	278

Parete : 14

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
93	-3 099	-61	0	0
587	-3 098	-360	0	0
85	-3 098	-588	0	0
77	-3 097	-867	0	0
105	-3 096	-1 092	0	0
97	-3 095	-1 410	0	0
94	-3 099	-61	354	1
588	-3 098	-360	354	1
86	-3 098	-588	354	1
78	-3 097	-867	354	1
106	-3 096	-1 092	354	1
98	-3 095	-1 410	354	1
95	-3 099	-61	839	2
589	-3 098	-360	839	2



87	-3 098	-588	839	2
79	-3 097	-867	839	2
107	-3 096	-1 092	839	2
99	-3 095	-1 410	839	2
96	-3 099	-61	1 268	3
590	-3 098	-360	1 268	3
88	-3 098	-588	1 268	3
80	-3 097	-867	1 268	3
108	-3 096	-1 092	1 268	3
100	-3 095	-1 410	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
316	Muratura BONDENO LC2	-	28,0	144,5	200,0	296	150	587	588
317	Muratura BONDENO LC2	-	28,0	18,0	311,0	518	155	85	86
315	Muratura BONDENO LC2	-	28,0	124,1	252,0	62	176	93	94
314	Muratura BONDENO LC2	-	28,0	543,0	354,0	1 077	177	105	106
319	Muratura BONDENO LC2	-	28,0	442,0	200,0	389	509	588	589
320	Muratura BONDENO LC2	-	28,0	618,8	402,3	1 039	555	106	107
318	Muratura BONDENO LC2	-	28,0	47,9	332,5	24	585	94	95
323	Muratura BONDENO LC2	-	28,0	126,4	220,0	785	949	79	80
322	Muratura BONDENO LC2	-	28,0	433,7	210,0	385	962	589	590
324	Muratura BONDENO LC2	-	28,0	420,6	358,2	1 138	1 018	107	108
321	Muratura BONDENO LC2	-	28,0	47,9	314,5	24	1 028	95	96

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
307	Muratura BONDENO LC2	-	28,0	100,0	100,0	174	50	93	587
308	Muratura BONDENO LC2	-	28,0	102,9	214,0	145	357	94	588
310	Muratura BONDENO LC2	-	28,0	120,0	265,0	666	707	87	79
309	Muratura BONDENO LC2	-	28,0	120,0	230,0	108	759	95	589
312	Muratura BONDENO LC2	-	28,0	120,0	209,0	662	1 164	88	80
313	Muratura BONDENO LC2	-	28,0	80,0	209,0	888	1 164	80	108



311	Muratura BONDENO LC2	-	28,0	120,0	194,0	108	1 171	96	590
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Parete : 15

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
101	-3 516	-1 092	0	0
105	-3 096	-1 092	0	0
102	-3 516	-1 092	354	1
106	-3 096	-1 092	354	1
103	-3 516	-1 092	839	2
107	-3 096	-1 092	839	2
104	-3 516	-1 092	1 268	3
108	-3 096	-1 092	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
329	Muratura BONDENO LC2	-	28,0	140,2	237,0	70	175	101	102
330	Muratura BONDENO LC2	-	28,0	179,5	237,0	330	175	105	106
331	Muratura BONDENO LC2	-	28,0	130,4	352,5	65	589	102	103
332	Muratura BONDENO LC2	-	28,0	159,3	352,5	340	589	106	107
333	Muratura BONDENO LC2	-	28,0	140,4	324,5	70	1 030	103	104
334	Muratura BONDENO LC2	-	28,0	159,3	324,5	340	1 030	107	108

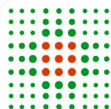
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
325	Muratura BONDENO LC2	-	28,0	100,0	110,0	190	55	101	105
326	Muratura BONDENO LC2	-	28,0	115,0	234,0	193	347	102	106
327	Muratura BONDENO LC2	-	28,0	125,0	190,0	198	779	103	107
328	Muratura BONDENO LC2	-	28,0	120,0	174,0	200	1 181	104	108

Parete : 16

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
109	-3 604	-1 003	0	0
101	-3 516	-1 092	0	0



110	-3 604	-1 003	354	1
102	-3 516	-1 092	354	1
111	-3 604	-1 003	839	2
103	-3 516	-1 092	839	2
112	-3 604	-1 003	1 268	3
104	-3 516	-1 092	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
679	63	0	0
680	63	354	1
681	63	839	2
682	63	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
335	Muratura BONDENO LC2	-	28,0	125,3	354,0	63	177	679	680
336	Muratura BONDENO LC2	-	28,0	125,3	485,0	63	597	680	681
337	Muratura BONDENO LC2	-	28,0	125,3	429,0	63	1 054	681	682

Parete : 17

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
109	-3 604	-1 003	0	0
113	-3 604	-464	0	0
110	-3 604	-1 003	354	1
114	-3 604	-464	354	1
111	-3 604	-1 003	839	2
115	-3 604	-464	839	2
112	-3 604	-1 003	1 268	3
116	-3 604	-464	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
342	Muratura BONDENO LC2	-	28,0	127,4	237,0	64	175	109	110
343	Muratura BONDENO LC2	-	28,0	127,4	237,0	476	175	113	114
344	Muratura BONDENO LC2	-	28,0	159,9	332,5	80	585	110	111
345	Muratura BONDENO LC2	-	28,0	159,9	332,5	460	585	114	115
346	Muratura	-	28,0	159,9	314,5	80	1 028	111	112



	BONDENO LC2								
347	Muratura BONDENO LC2	-	28,0	159,9	314,5	460	1 028	115	116

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
338	Muratura BONDENO LC2	-	28,0	285,0	110,0	270	55	109	113
339	Muratura BONDENO LC2	-	28,0	252,5	234,0	270	347	110	114
340	Muratura BONDENO LC2	-	28,0	220,0	230,0	270	759	111	115
341	Muratura BONDENO LC2	-	28,0	220,0	194,0	270	1 171	112	116

Parete : 18

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
121	-2 429	-59	0	0
157	-2 429	-451	0	0
129	-2 429	-585	0	0
125	-2 429	-866	0	0
122	-2 429	-59	354	1
158	-2 429	-451	354	1
130	-2 429	-585	354	1
126	-2 429	-866	354	1
123	-2 429	-59	839	2
159	-2 429	-451	839	2
131	-2 429	-585	839	2
127	-2 429	-866	839	2
124	-2 429	-59	1 268	3
160	-2 429	-451	1 268	3
132	-2 429	-585	1 268	3
128	-2 429	-866	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
352	Muratura BONDENO LC2	-	28,0	633,2	311,0	317	155	157	158
353	Muratura BONDENO LC2	-	28,0	54,0	311,0	780	155	125	126
354	Muratura BONDENO LC2	-	28,0	208,0	402,3	104	555	122	123
355	Muratura BONDENO LC2	-	28,0	198,7	402,3	427	555	158	159
357	Muratura BONDENO LC2	-	28,0	87,5	260,0	388	969	159	160



358	Muratura BONDENO LC2	-	28,0	15,2	358,2	519	1 018	131	132
356	Muratura BONDENO LC2	-	28,0	159,0	375,9	79	1 027	123	124

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
348	Muratura BONDENO LC2	-	28,0	120,0	104,0	693	302	130	126
349	Muratura BONDENO LC2	-	28,0	152,5	265,0	260	707	123	159
351	Muratura BONDENO LC2	-	28,0	80,0	209,0	471	1 164	160	132
350	Muratura BONDENO LC2	-	28,0	185,0	129,0	251	1 204	124	160

Parete : 19

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
133	-1 892	-57	0	0
148	-1 892	-583	0	0
143	-1 892	-865	0	0
181	-1 891	-1 315	0	0
138	-1 891	-1 405	0	0
134	-1 892	-57	354	1
149	-1 892	-583	354	1
144	-1 892	-865	354	1
182	-1 891	-1 315	354	1
139	-1 891	-1 405	354	1
135	-1 892	-57	839	2
150	-1 892	-583	839	2
145	-1 892	-865	839	2
183	-1 891	-1 315	839	2
140	-1 891	-1 405	839	2
136	-1 892	-57	1 268	3
151	-1 892	-583	1 268	3
146	-1 892	-865	1 268	3
184	-1 891	-1 315	1 268	3
141	-1 891	-1 405	1 268	3
137	-1 892	-57	1 628	4
152	-1 892	-583	1 628	4
147	-1 892	-865	1 628	4
142	-1 891	-1 405	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
683	263	0	0



684	263	354	1
685	263	839	2
687	1 303	839	2
686	263	1 268	3
688	1 303	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
361	Muratura BONDENO LC2	-	28,0	526,7	354,0	263	177	683	684
362	Muratura BONDENO LC2	-	28,0	539,9	354,0	1 078	177	181	182
363	Muratura BONDENO LC2	-	28,0	526,7	485,0	263	597	684	685
364	Muratura BONDENO LC2	-	28,0	539,9	485,0	1 078	597	182	183
367	Muratura BONDENO LC2	-	28,0	157,9	358,8	887	1 018	145	146
368	Muratura BONDENO LC2	-	28,0	191,8	358,8	1 162	1 018	183	184
365	Muratura BONDENO LC2	-	28,0	526,7	429,0	263	1 054	685	686
366	Muratura BONDENO LC2	-	14,0	90,1	429,0	1 303	1 054	687	688
369	Muratura BONDENO LC2	-	28,0	602,9	255,0	301	1 433	686	152
370	Muratura BONDENO LC2	-	28,0	625,3	255,0	1 036	1 433	184	147

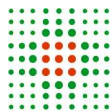
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
359	Muratura BONDENO LC2	-	28,0	120,0	55,0	663	1 296	151	146
360	Muratura BONDENO LC2	-	28,0	120,0	155,0	663	1 551	152	147

Parete : 20

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
153	-2 694	-451	0	0
157	-2 429	-451	0	0
154	-2 694	-451	354	1
158	-2 429	-451	354	1
155	-2 694	-451	839	2
159	-2 429	-451	839	2
156	-2 694	-451	1 268	3
160	-2 429	-451	1 268	3



Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
689	132	0	0
690	132	354	1
691	132	839	2
692	132	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
371	Muratura BONDENO LC2	-	42,0	265,0	354,0	132	177	689	690
372	Muratura BONDENO LC2	-	42,0	265,0	485,0	132	597	690	691
373	Muratura BONDENO LC2	-	42,0	265,0	429,0	132	1 054	691	692

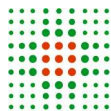
Parete : 21

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
161	-2 694	-1 408	0	0
177	-2 694	-1 322	0	0
169	-2 694	-866	0	0
173	-2 694	-586	0	0
153	-2 694	-451	0	0
165	-2 694	-60	0	0
162	-2 694	-1 408	354	1
178	-2 694	-1 322	354	1
170	-2 694	-866	354	1
174	-2 694	-586	354	1
154	-2 694	-451	354	1
166	-2 694	-60	354	1
163	-2 694	-1 408	839	2
179	-2 694	-1 322	839	2
171	-2 694	-866	839	2
175	-2 694	-586	839	2
155	-2 694	-451	839	2
167	-2 694	-60	839	2
164	-2 694	-1 408	1 268	3
180	-2 694	-1 322	1 268	3
172	-2 694	-866	1 268	3
176	-2 694	-586	1 268	3
156	-2 694	-451	1 268	3
168	-2 694	-60	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
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693	890	0	0
694	890	354	1
695	43	839	2
697	314	839	2
696	43	1 268	3
698	314	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
375	Muratura BONDENO LC2	-	28,0	542,1	354,0	271	177	177	178
376	Muratura BONDENO LC2	-	28,0	135,5	354,0	890	177	693	694
377	Muratura BONDENO LC2	-	28,0	542,1	485,0	271	597	178	697
378	Muratura BONDENO LC2	-	28,0	526,6	485,0	1 085	597	154	155
381	Muratura BONDENO LC2	-	28,0	418,9	358,2	1 032	1 018	155	156
382	Muratura BONDENO LC2	-	28,0	27,7	358,2	1 335	1 018	167	168
379	Muratura BONDENO LC2	-	14,0	85,8	429,0	43	1 054	695	696
380	Muratura BONDENO LC2	-	28,0	456,3	429,0	314	1 054	697	698

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
374	Muratura BONDENO LC2	-	28,0	80,0	209,0	1 281	1 164	156	168

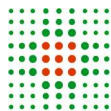
Parete : 22

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
97	-3 095	-1 410	0	0
161	-2 694	-1 408	0	0
98	-3 095	-1 410	354	1
162	-2 694	-1 408	354	1
99	-3 095	-1 410	839	2
163	-2 694	-1 408	839	2
100	-3 095	-1 410	1 268	3
164	-2 694	-1 408	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
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387	Muratura BONDENO LC2	-	28,0	153,0	237,0	76	175	97	98
388	Muratura BONDENO LC2	-	28,0	148,1	237,0	327	175	161	162
389	Muratura BONDENO LC2	-	28,0	143,0	347,5	71	588	98	99
390	Muratura BONDENO LC2	-	28,0	138,1	347,5	332	588	162	163
391	Muratura BONDENO LC2	-	28,0	143,0	319,5	71	1 029	99	100
392	Muratura BONDENO LC2	-	28,0	138,1	319,5	332	1 029	163	164

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
383	Muratura BONDENO LC2	-	28,0	100,0	110,0	203	55	97	161
384	Muratura BONDENO LC2	-	28,0	110,0	234,0	203	347	98	162
385	Muratura BONDENO LC2	-	28,0	120,0	200,0	203	774	99	163
386	Muratura BONDENO LC2	-	28,0	120,0	184,0	203	1 176	100	164

Parete : 23

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
177	-2 694	-1 322	0	0
181	-1 891	-1 315	0	0
178	-2 694	-1 322	354	1
182	-1 891	-1 315	354	1
179	-2 694	-1 322	839	2
187	-2 398	-1 320	839	2
183	-1 891	-1 315	839	2
180	-2 694	-1 322	1 268	3
188	-2 398	-1 320	1 268	3
184	-1 891	-1 315	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
699	278	0	0
701	539	0	0
700	278	354	1
702	537	354	1
703	206	839	2
704	278	839	2
705	400	839	2
706	536	839	2



707	595	839	2
708	206	1 268	3
709	400	1 268	3
710	595	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
412	Muratura BONDENO LC2	-	28,0	161,8	120,0	278	170	699	700
413	Muratura BONDENO LC2	-	28,0	159,0	120,0	539	170	701	702
411	Muratura BONDENO LC2	-	28,0	97,3	237,0	49	175	177	178
414	Muratura BONDENO LC2	-	28,0	85,0	237,0	761	175	181	182
416	Muratura BONDENO LC2	-	28,0	56,8	250,0	278	589	700	704
417	Muratura BONDENO LC2	-	28,0	49,1	250,0	536	589	702	706
415	Muratura BONDENO LC2	-	28,0	44,8	367,5	22	594	178	179
418	Muratura BONDENO LC2	-	28,0	37,5	367,5	784	594	182	183
420	Muratura BONDENO LC2	-	28,0	28,7	170,0	206	1 024	703	708
421	Muratura BONDENO LC2	-	28,0	30,0	170,0	400	1 024	705	709
422	Muratura BONDENO LC2	-	28,0	30,4	170,0	595	1 024	707	710
419	Muratura BONDENO LC2	-	28,0	26,2	299,5	13	1 045	179	180
423	Muratura BONDENO LC2	-	28,0	42,7	299,5	782	1 045	183	184

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
393	Muratura BONDENO LC2	-	28,0	100,0	110,0	147	55	177	699
395	Muratura BONDENO LC2	-	28,0	100,0	110,0	409	55	699	701
397	Muratura BONDENO LC2	-	28,0	100,0	110,0	668	55	701	181
394	Muratura BONDENO LC2	-	28,0	150,6	234,0	148	347	178	700
396	Muratura BONDENO LC2	-	28,0	152,5	234,0	409	347	700	702
398	Muratura BONDENO LC2	-	28,0	150,0	234,0	664	347	702	182
399	Muratura BONDENO LC2	-	28,0	162,9	225,0	117	827	179	703



400	Muratura BONDENO LC2	-	28,0	51,2	225,0	238	827	703	704
401	Muratura BONDENO LC2	-	28,0	3,8	225,0	294	827	704	187
402	Muratura BONDENO LC2	-	28,0	96,3	225,0	344	827	187	705
403	Muratura BONDENO LC2	-	28,0	116,4	225,0	466	827	705	706
404	Muratura BONDENO LC2	-	28,0	39,2	225,0	568	827	706	707
405	Muratura BONDENO LC2	-	28,0	160,2	225,0	683	827	707	183
406	Muratura BONDENO LC2	-	28,0	165,0	159,0	109	1 189	180	708
407	Muratura BONDENO LC2	-	28,0	76,2	159,0	258	1 189	708	188
408	Muratura BONDENO LC2	-	28,0	88,8	159,0	341	1 189	188	709
409	Muratura BONDENO LC2	-	28,0	165,0	159,0	497	1 189	709	710
410	Muratura BONDENO LC2	-	28,0	150,0	159,0	685	1 189	710	184

Parete : 24

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
185	-2 398	-866	839	2
187	-2 398	-1 320	839	2
186	-2 398	-866	1 268	3
188	-2 398	-1 320	1 268	3

Parete : 25

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
189	-1 464	-1 496	0	0
204	-898	-1 495	0	0
485	-600	-1 494	0	0
224	-316	-1 494	0	0
239	269	-1 493	0	0
489	599	-1 493	0	0
264	861	-1 492	0	0
194	1 436	-1 491	0	0
190	-1 464	-1 496	354	1
205	-898	-1 495	354	1
486	-600	-1 494	354	1
225	-316	-1 494	354	1
240	269	-1 493	354	1
490	599	-1 493	354	1
265	861	-1 492	354	1



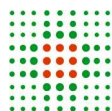
195	1 436	-1 491	354	1
191	-1 464	-1 496	839	2
206	-898	-1 495	839	2
226	-316	-1 494	839	2
241	269	-1 493	839	2
266	861	-1 492	839	2
196	1 436	-1 491	839	2
192	-1 464	-1 496	1 268	3
207	-898	-1 495	1 268	3
227	-316	-1 494	1 268	3
242	269	-1 493	1 268	3
267	861	-1 492	1 268	3
197	1 436	-1 491	1 268	3
193	-1 464	-1 496	1 628	4
208	-898	-1 495	1 628	4
228	-316	-1 494	1 628	4
243	269	-1 493	1 628	4
268	861	-1 492	1 628	4
198	1 436	-1 491	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
711	277	0	0
713	2 614	0	0
712	277	354	1
714	2 614	354	1
715	277	839	2
716	855	839	2
717	2 043	839	2
718	2 614	839	2
719	278	1 268	3
720	857	1 268	3
721	2 042	1 268	3
722	2 613	1 268	3
723	279	1 628	4
724	858	1 628	4
725	2 041	1 628	4
726	2 612	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
480	Muratura BONDENO LC2	-	42,0	250,4	190,0	1 225	150	224	225
481	Muratura BONDENO LC2	-	42,0	249,6	190,0	1 675	150	239	240
477	Muratura BONDENO LC2	-	42,0	191,0	120,0	277	170	711	712
478	Muratura BONDENO LC2	-	42,0	138,0	120,0	542	170	204	205



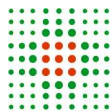
479	Muratura BONDENO LC2	-	42,0	288,8	120,0	855	170	485	486
482	Muratura BONDENO LC2	-	42,0	287,0	120,0	2 043	170	489	490
483	Muratura BONDENO LC2	-	42,0	130,0	120,0	2 352	170	264	265
484	Muratura BONDENO LC2	-	42,0	195,0	120,0	2 614	170	713	714
476	Muratura BONDENO LC2	-	42,0	81,8	237,0	41	175	189	190
485	Muratura BONDENO LC2	-	42,0	88,5	237,0	2 856	175	194	195
490	Muratura BONDENO LC2	-	28,0	262,9	255,0	1 234	537	225	226
491	Muratura BONDENO LC2	-	28,0	262,1	255,0	1 666	537	240	241
487	Muratura BONDENO LC2	-	28,0	186,0	210,0	277	569	712	715
488	Muratura BONDENO LC2	-	28,0	133,0	210,0	542	569	205	206
489	Muratura BONDENO LC2	-	28,0	283,8	210,0	855	569	486	716
492	Muratura BONDENO LC2	-	28,0	282,0	210,0	2 043	569	490	717
493	Muratura BONDENO LC2	-	28,0	125,0	210,0	2 352	569	265	266
494	Muratura BONDENO LC2	-	28,0	190,0	210,0	2 614	569	714	718
486	Muratura BONDENO LC2	-	28,0	79,3	347,5	40	588	190	191
495	Muratura BONDENO LC2	-	28,0	86,0	347,5	2 857	588	195	196
497	Muratura BONDENO LC2	-	28,0	186,0	210,0	277	979	715	719
498	Muratura BONDENO LC2	-	28,0	133,0	210,0	542	979	206	207
499	Muratura BONDENO LC2	-	28,0	283,8	210,0	855	979	716	720
500	Muratura BONDENO LC2	-	28,0	295,4	210,0	1 250	979	226	227
501	Muratura BONDENO LC2	-	28,0	294,6	210,0	1 650	979	241	242
502	Muratura BONDENO LC2	-	28,0	282,0	210,0	2 043	979	717	721
503	Muratura BONDENO LC2	-	28,0	125,0	210,0	2 352	979	266	267
504	Muratura BONDENO LC2	-	28,0	190,0	210,0	2 614	979	718	722
496	Muratura BONDENO LC2	-	28,0	79,3	319,5	40	1 029	191	192
505	Muratura BONDENO LC2	-	28,0	86,0	319,5	2 857	1 029	196	197
507	Muratura BONDENO LC2	-	28,0	184,6	190,0	279	1 363	719	723
508	Muratura	-	28,0	134,4	190,0	544	1 363	207	208



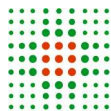
	BONDENO LC2								
509	Muratura BONDENO LC2	-	28,0	283,9	190,0	858	1 363	720	724
510	Muratura BONDENO LC2	-	28,0	301,9	190,0	1 256	1 363	227	228
511	Muratura BONDENO LC2	-	28,0	283,0	190,0	1 653	1 363	242	243
512	Muratura BONDENO LC2	-	28,0	282,1	190,0	2 041	1 363	721	725
513	Muratura BONDENO LC2	-	28,0	125,0	190,0	2 349	1 363	267	268
514	Muratura BONDENO LC2	-	28,0	190,0	190,0	2 612	1 363	722	726
506	Muratura BONDENO LC2	-	28,0	82,1	301,3	41	1 419	192	193
515	Muratura BONDENO LC2	-	28,0	88,3	301,3	2 856	1 419	197	198

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
424	Muratura BONDENO LC2	-	42,0	100,0	110,0	132	55	189	711
427	Muratura BONDENO LC2	-	42,0	100,0	110,0	423	55	711	204
430	Muratura BONDENO LC2	-	42,0	100,0	110,0	661	55	204	485
433	Muratura BONDENO LC2	-	42,0	100,0	110,0	1 050	55	485	224
437	Muratura BONDENO LC2	-	42,0	100,0	110,0	1 850	55	239	489
440	Muratura BONDENO LC2	-	42,0	100,0	110,0	2 237	55	489	264
443	Muratura BONDENO LC2	-	42,0	100,0	110,0	2 467	55	264	713
446	Muratura BONDENO LC2	-	42,0	100,0	110,0	2 762	55	713	194
425	Muratura BONDENO LC2	-	42,0	102,5	124,0	132	292	190	712
428	Muratura BONDENO LC2	-	42,0	102,5	124,0	423	292	712	205
431	Muratura BONDENO LC2	-	42,0	102,5	124,0	661	292	205	486
434	Muratura BONDENO LC2	-	42,0	102,5	124,0	1 050	292	486	225
438	Muratura BONDENO LC2	-	42,0	102,5	124,0	1 850	292	240	490
441	Muratura BONDENO LC2	-	42,0	102,5	124,0	2 237	292	490	265
444	Muratura BONDENO LC2	-	42,0	102,5	124,0	2 467	292	265	714
447	Muratura BONDENO LC2	-	42,0	102,5	124,0	2 762	292	714	195
436	Muratura	-	42,0	185,0	94,0	1 450	307	225	240



	BONDENO LC2								
426	Muratura BONDENO LC2	-	28,0	102,5	110,0	132	409	190	712
429	Muratura BONDENO LC2	-	28,0	102,5	110,0	423	409	712	205
432	Muratura BONDENO LC2	-	28,0	102,5	110,0	661	409	205	486
435	Muratura BONDENO LC2	-	28,0	102,5	110,0	1 050	409	486	225
439	Muratura BONDENO LC2	-	28,0	102,5	110,0	1 850	409	240	490
442	Muratura BONDENO LC2	-	28,0	102,5	110,0	2 237	409	490	265
445	Muratura BONDENO LC2	-	28,0	102,5	110,0	2 467	409	265	714
448	Muratura BONDENO LC2	-	28,0	102,5	110,0	2 762	409	714	195
453	Muratura BONDENO LC2	-	28,0	137,5	220,0	1 450	764	226	241
449	Muratura BONDENO LC2	-	28,0	105,0	200,0	132	774	191	715
450	Muratura BONDENO LC2	-	28,0	105,0	200,0	423	774	715	206
451	Muratura BONDENO LC2	-	28,0	105,0	200,0	661	774	206	716
452	Muratura BONDENO LC2	-	28,0	105,0	200,0	1 050	774	716	226
454	Muratura BONDENO LC2	-	28,0	105,0	200,0	1 850	774	241	717
455	Muratura BONDENO LC2	-	28,0	105,0	200,0	2 237	774	717	266
456	Muratura BONDENO LC2	-	28,0	105,0	200,0	2 467	774	266	718
457	Muratura BONDENO LC2	-	28,0	105,0	200,0	2 762	774	718	196
458	Muratura BONDENO LC2	-	28,0	105,0	184,0	133	1 176	192	719
459	Muratura BONDENO LC2	-	28,0	105,0	184,0	424	1 176	719	207
460	Muratura BONDENO LC2	-	28,0	105,0	184,0	662	1 176	207	720
461	Muratura BONDENO LC2	-	28,0	105,0	184,0	1 051	1 176	720	227
462	Muratura BONDENO LC2	-	28,0	105,0	184,0	1 455	1 176	227	242
463	Muratura BONDENO LC2	-	28,0	105,0	184,0	1 849	1 176	242	721
464	Muratura BONDENO LC2	-	28,0	105,0	184,0	2 236	1 176	721	267
465	Muratura BONDENO LC2	-	28,0	105,0	184,0	2 466	1 176	267	722
466	Muratura BONDENO LC2	-	28,0	105,0	184,0	2 761	1 176	722	197
467	Muratura BONDENO LC2	-	28,0	105,0	170,0	135	1 543	193	723



468	Muratura BONDENO LC2	-	28,0	105,0	170,0	424	1 543	723	208
469	Muratura BONDENO LC2	-	28,0	105,0	170,0	664	1 543	208	724
470	Muratura BONDENO LC2	-	28,0	105,0	170,0	1 052	1 543	724	228
471	Muratura BONDENO LC2	-	28,0	105,0	170,0	1 459	1 543	228	243
472	Muratura BONDENO LC2	-	28,0	105,0	170,0	1 847	1 543	243	725
473	Muratura BONDENO LC2	-	28,0	105,0	170,0	2 234	1 543	725	268
474	Muratura BONDENO LC2	-	28,0	105,0	170,0	2 464	1 543	268	726
475	Muratura BONDENO LC2	-	28,0	105,0	170,0	2 759	1 543	726	198

Parete : 26

Nodi 3D

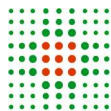
Nodo	X [cm]	Y [cm]	Z [cm]	Livello
199	-899	-864	0	0
204	-898	-1 495	0	0
200	-899	-864	354	1
205	-898	-1 495	354	1
201	-899	-864	839	2
206	-898	-1 495	839	2
202	-899	-864	1 268	3
207	-898	-1 495	1 268	3
203	-899	-864	1 628	4
208	-898	-1 495	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
727	231	0	0
729	457	0	0
728	231	354	1
730	457	354	1
731	316	839	2
732	316	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
520	Muratura BONDENO LC2	-	42,0	164,7	175,0	231	138	727	728
521	Muratura BONDENO LC2	-	42,0	46,1	175,0	457	138	729	730
519	Muratura	-	42,0	62,9	305,2	31	153	199	200



	BONDENO LC2								
522	Muratura BONDENO LC2	-	42,0	46,4	305,2	608	153	204	205
523	Muratura BONDENO LC2	-	28,0	48,6	402,3	24	555	200	201
524	Muratura BONDENO LC2	-	28,0	502,5	402,3	380	555	730	731
518	Muratura BONDENO LC2	-	20,0	631,0	429,0	316	1 054	731	732

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
517	Muratura BONDENO LC2	-	42,0	120,0	100,0	374	50	727	729
516	Muratura BONDENO LC2	-	42,0	83,0	124,0	97	292	200	728

Parete : 27

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
209	-888	-580	0	0
214	-888	41	0	0
210	-888	-580	354	1
215	-888	41	354	1
211	-888	-580	839	2
216	-888	41	839	2
212	-888	-580	1 268	3
217	-888	41	1 268	3
213	-888	-580	1 628	4
218	-888	41	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
733	311	0	0
734	311	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
527	Muratura BONDENO LC2	-	28,0	621,2	354,0	311	177	733	734
528	Muratura BONDENO LC2	-	28,0	61,5	402,3	31	555	210	211
529	Muratura BONDENO LC2	-	28,0	479,8	402,3	381	555	734	216
530	Muratura BONDENO LC2	-	28,0	61,5	358,2	31	1 018	211	212



531	Muratura BONDENO LC2	-	28,0	479,8	358,2	381	1 018	216	217
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Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
525	Muratura BONDENO LC2	-	28,0	80,0	265,0	101	707	211	216
526	Muratura BONDENO LC2	-	28,0	80,0	209,0	101	1 164	212	217

Parete : 28

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
219	-317	41	0	0
539	-317	-177	0	0
531	-317	-402	0	0
234	-316	-578	0	0
229	-316	-863	0	0
224	-316	-1 494	0	0
220	-317	41	354	1
540	-317	-177	354	1
532	-317	-402	354	1
235	-316	-578	354	1
230	-316	-863	354	1
225	-316	-1 494	354	1
221	-317	41	839	2
541	-317	-177	839	2
533	-317	-402	839	2
236	-316	-578	839	2
231	-316	-863	839	2
226	-316	-1 494	839	2
222	-317	41	1 268	3
542	-317	-177	1 268	3
534	-317	-402	1 268	3
237	-316	-578	1 268	3
232	-316	-863	1 268	3
227	-316	-1 494	1 268	3
223	-317	41	1 628	4
238	-316	-578	1 628	4
233	-316	-863	1 628	4
228	-316	-1 494	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
735	1 220	0	0
736	1 220	354	1
737	1 220	839	2



738	310	1 628	4
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Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
539	Muratura BONDENO LC2	-	28,0	77,5	300,4	658	150	234	235
540	Muratura BONDENO LC2	-	28,0	77,5	300,4	865	150	229	230
533	Muratura BONDENO LC2	-	42,0	619,3	354,0	310	177	539	540
534	Muratura BONDENO LC2	-	42,0	630,9	354,0	1 220	177	735	736
535	Muratura BONDENO LC2	-	28,0	619,3	485,0	310	597	540	541
536	Muratura BONDENO LC2	-	28,0	630,9	485,0	1 220	597	736	737
537	Muratura BONDENO LC2	-	28,0	619,3	429,0	310	1 054	541	542
538	Muratura BONDENO LC2	-	28,0	619,3	360,0	310	1 448	542	738

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
532	Muratura BONDENO LC2	-	28,0	130,0	144,0	762	282	235	230

Parete : 29

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
239	269	-1 493	0	0
249	272	-862	0	0
254	273	-576	0	0
535	274	-400	0	0
543	275	-177	0	0
244	276	41	0	0
240	269	-1 493	354	1
250	272	-862	354	1
255	273	-576	354	1
536	274	-400	354	1
544	275	-177	354	1
245	276	41	354	1
241	269	-1 493	839	2
251	272	-862	839	2
256	273	-576	839	2
537	274	-400	839	2
545	275	-177	839	2
246	276	41	839	2



242	269	-1 493	1 268	3
252	272	-862	1 268	3
257	273	-576	1 268	3
538	274	-400	1 268	3
546	275	-177	1 268	3
247	276	41	1 268	3
243	269	-1 493	1 628	4
253	272	-862	1 628	4
258	273	-576	1 628	4
248	276	41	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
739	1 005	354	1
741	315	839	2
740	1 005	839	2
742	315	1 268	3
743	1 226	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
547	Muratura BONDENO LC2	-	42,0	678,8	300,4	339	150	249	250
548	Muratura BONDENO LC2	-	42,0	665,4	300,4	1 202	150	535	536
549	Muratura BONDENO LC2	-	28,0	34,3	402,3	17	555	240	241
550	Muratura BONDENO LC2	-	28,0	510,5	402,3	375	555	250	741
542	Muratura BONDENO LC2	-	28,0	176,5	485,0	1 005	597	739	740
543	Muratura BONDENO LC2	-	42,0	440,8	485,0	1 314	597	544	545
544	Muratura BONDENO LC2	-	28,0	630,7	429,0	315	1 054	741	742
545	Muratura BONDENO LC2	-	28,0	617,3	429,0	1 226	1 054	545	546
546	Muratura BONDENO LC2	-	28,0	617,3	360,0	1 226	1 448	546	743

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
541	Muratura BONDENO LC2	-	42,0	190,0	144,0	774	282	250	255

Parete : 30

Nodi 3D



Nodo	X [cm]	Y [cm]	Z [cm]	Livello
259	859	41	0	0
274	860	-574	0	0
269	860	-862	0	0
264	861	-1 492	0	0
260	859	41	354	1
275	860	-574	354	1
270	860	-862	354	1
265	861	-1 492	354	1
261	859	41	839	2
276	860	-574	839	2
271	860	-862	839	2
266	861	-1 492	839	2
262	859	41	1 268	3
277	860	-574	1 268	3
272	860	-862	1 268	3
267	861	-1 492	1 268	3
263	859	41	1 628	4
278	860	-574	1 628	4
273	860	-862	1 628	4
268	861	-1 492	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
744	1 218	0	0
745	1 218	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
556	Muratura BONDENO LC2	-	42,0	512,3	300,4	256	150	259	260
557	Muratura BONDENO LC2	-	42,0	23,0	300,4	604	150	274	275
555	Muratura BONDENO LC2	-	42,0	630,6	354,0	1 218	177	744	745
558	Muratura BONDENO LC2	-	28,0	489,6	402,3	245	555	260	261
559	Muratura BONDENO LC2	-	28,0	45,7	402,3	592	555	275	276
560	Muratura BONDENO LC2	-	28,0	47,6	402,3	926	555	270	271
561	Muratura BONDENO LC2	-	28,0	503,0	402,3	1 282	555	745	266
562	Muratura BONDENO LC2	-	28,0	413,1	358,8	207	1 018	261	262
563	Muratura BONDENO LC2	-	28,0	102,3	358,8	564	1 018	276	277

Macroelementi Fasce



N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
551	Muratura BONDENO LC2	-	42,0	80,0	144,0	541	282	260	275
552	Muratura BONDENO LC2	-	28,0	87,3	265,0	495	707	261	276
553	Muratura BONDENO LC2	-	28,0	80,0	265,0	990	707	271	266
554	Muratura BONDENO LC2	-	28,0	100,0	204,0	463	1 166	262	277

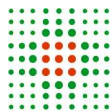
Parete : 31

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
8	1 436	41	0	0
500	1 436	-42	0	0
284	1 436	-572	0	0
279	1 436	-861	0	0
289	1 436	-1 394	0	0
194	1 436	-1 491	0	0
9	1 436	41	354	1
501	1 436	-42	354	1
285	1 436	-572	354	1
280	1 436	-861	354	1
290	1 436	-1 394	354	1
195	1 436	-1 491	354	1
10	1 436	41	839	2
502	1 436	-42	839	2
286	1 436	-572	839	2
281	1 436	-861	839	2
291	1 436	-1 394	839	2
196	1 436	-1 491	839	2
11	1 436	41	1 268	3
503	1 436	-42	1 268	3
287	1 436	-572	1 268	3
282	1 436	-861	1 268	3
292	1 436	-1 394	1 268	3
197	1 436	-1 491	1 268	3
12	1 436	41	1 628	4
504	1 436	-42	1 628	4
288	1 436	-572	1 628	4
283	1 436	-861	1 628	4
293	1 436	-1 394	1 628	4
198	1 436	-1 491	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
746	41	839	2
748	348	839	2



750	1 168	839	2
752	1 484	839	2
747	41	1 268	3
749	348	1 268	3
751	1 168	1 268	3
753	1 484	1 268	3
754	41	1 628	4
755	1 484	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
573	Muratura BONDENO LC2	-	42,0	647,7	311,0	324	155	500	501
574	Muratura BONDENO LC2	-	42,0	664,7	311,0	1 200	155	289	290
565	Muratura BONDENO LC2	-	28,0	613,4	485,0	307	597	501	748
566	Muratura BONDENO LC2	-	28,0	630,4	485,0	1 217	597	290	750
567	Muratura BONDENO LC2	-	28,0	82,8	429,0	41	1 054	746	747
568	Muratura BONDENO LC2	-	14,0	530,7	429,0	348	1 054	748	749
569	Nuova Muratura sempiena	-	28,0	532,9	429,0	1 168	1 054	750	751
570	Muratura BONDENO LC2	-	42,0	97,5	429,0	1 484	1 054	752	753
571	Muratura BONDENO LC2	-	28,0	82,8	360,0	41	1 448	747	754
572	Muratura BONDENO LC2	-	28,0	97,5	360,0	1 484	1 448	753	755

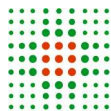
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
564	Muratura BONDENO LC2	-	42,0	220,0	104,0	758	302	285	280

Parete : 32

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
289	1 436	-1 394	0	0
294	1 871	-1 394	0	0
290	1 436	-1 394	354	1
295	1 871	-1 394	354	1
291	1 436	-1 394	839	2
296	1 871	-1 394	839	2
292	1 436	-1 394	1 268	3



297	1 871	-1 394	1 268	3
293	1 436	-1 394	1 628	4
298	1 871	-1 394	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
580	Muratura BONDENO LC2	-	28,0	170,4	237,0	85	175	289	290
581	Muratura BONDENO LC2	-	28,0	144,4	237,0	363	175	294	295
582	Muratura BONDENO LC2	-	28,0	170,4	347,5	85	588	290	291
583	Muratura BONDENO LC2	-	28,0	144,4	347,5	363	588	295	296
584	Muratura BONDENO LC2	-	28,0	170,4	319,5	85	1 029	291	292
585	Muratura BONDENO LC2	-	28,0	144,4	319,5	363	1 029	296	297
586	Muratura BONDENO LC2	-	28,0	190,7	301,3	95	1 419	292	293
587	Muratura BONDENO LC2	-	28,0	139,1	301,3	365	1 419	297	298

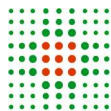
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
575	Muratura BONDENO LC2	-	28,0	120,0	110,0	230	55	289	294
576	Muratura BONDENO LC2	-	28,0	120,0	234,0	230	347	290	295
577	Muratura BONDENO LC2	-	28,0	120,0	200,0	230	774	291	296
578	Muratura BONDENO LC2	-	28,0	112,5	184,0	237	1 176	292	297
579	Muratura BONDENO LC2	-	28,0	105,0	170,0	243	1 543	293	298

Parete : 33

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
189	-1 464	-1 496	0	0
309	-1 463	-1 404	0	0
299	-1 460	-865	0	0
304	-1 458	-582	0	0
491	-1 454	-55	0	0
3	-1 454	41	0	0
190	-1 464	-1 496	354	1
310	-1 463	-1 404	354	1
300	-1 460	-865	354	1



305	-1 458	-582	354	1
492	-1 454	-55	354	1
4	-1 454	41	354	1
191	-1 464	-1 496	839	2
311	-1 463	-1 404	839	2
301	-1 460	-865	839	2
306	-1 458	-582	839	2
493	-1 454	-55	839	2
5	-1 454	41	839	2
192	-1 464	-1 496	1 268	3
312	-1 463	-1 404	1 268	3
302	-1 460	-865	1 268	3
307	-1 458	-582	1 268	3
494	-1 454	-55	1 268	3
6	-1 454	41	1 268	3
193	-1 464	-1 496	1 628	4
313	-1 463	-1 404	1 628	4
303	-1 460	-865	1 628	4
308	-1 458	-582	1 628	4
495	-1 454	-55	1 628	4
7	-1 454	41	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
756	46	839	2
758	361	839	2
757	46	1 268	3
759	361	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
596	Muratura BONDENO LC2	-	42,0	662,5	311,0	331	155	309	310
597	Muratura BONDENO LC2	-	42,0	654,4	311,0	1 210	155	491	492
589	Muratura BONDENO LC2	-	28,0	631,2	485,0	316	597	310	758
590	Muratura BONDENO LC2	-	28,0	623,2	485,0	1 225	597	492	493
591	Muratura BONDENO LC2	-	14,0	91,4	429,0	46	1 054	756	757
592	Muratura BONDENO LC2	-	28,0	539,8	429,0	361	1 054	758	759
593	Muratura BONDENO LC2	-	28,0	623,2	429,0	1 225	1 054	493	494
594	Muratura BONDENO LC2	-	28,0	631,2	360,0	316	1 448	759	313
595	Muratura BONDENO LC2	-	28,0	623,2	360,0	1 225	1 448	494	495



Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
588	Muratura BONDENO LC2	-	42,0	220,0	104,0	772	302	300	305

Parete : 34

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
138	-1 891	-1 405	0	0
309	-1 463	-1 404	0	0
139	-1 891	-1 405	354	1
310	-1 463	-1 404	354	1
140	-1 891	-1 405	839	2
311	-1 463	-1 404	839	2
141	-1 891	-1 405	1 268	3
312	-1 463	-1 404	1 268	3
142	-1 891	-1 405	1 628	4
313	-1 463	-1 404	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
603	Muratura BONDENO LC2	-	28,0	145,8	237,0	73	175	138	139
604	Muratura BONDENO LC2	-	28,0	161,9	237,0	347	175	309	310
605	Muratura BONDENO LC2	-	28,0	145,8	347,5	73	588	139	140
606	Muratura BONDENO LC2	-	28,0	161,9	347,5	347	588	310	311
607	Muratura BONDENO LC2	-	28,0	145,8	319,5	73	1 054	140	141
608	Muratura BONDENO LC2	-	28,0	161,9	319,5	347	1 054	311	312
609	Muratura BONDENO LC2	-	28,0	153,5	301,3	77	1 419	141	142
610	Muratura BONDENO LC2	-	28,0	169,2	301,3	343	1 419	312	313

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
598	Muratura BONDENO LC2	-	28,0	120,0	110,0	206	55	138	309
599	Muratura BONDENO LC2	-	28,0	120,0	234,0	206	347	139	310
600	Muratura	-	28,0	120,0	275,0	206	812	140	311



	BONDENO LC2								
601	Muratura BONDENO LC2	-	28,0	112,5	109,0	206	1 214	141	312
602	Muratura BONDENO LC2	-	28,0	105,0	170,0	206	1 543	142	313

Parete : 35

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
314	2 159	-42	0	0
405	2 159	391	0	0
593	2 160	982	0	0
595	2 160	1 559	0	0
317	2 160	2 137	0	0
315	2 159	-42	354	1
406	2 159	391	354	1
594	2 160	982	354	1
596	2 160	1 559	354	1
318	2 160	2 137	354	1
316	2 159	-42	839	2
407	2 159	391	839	2
408	2 159	391	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
760	1 300	0	0
762	1 885	0	0
761	1 300	354	1
763	1 885	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
620	Muratura BONDENO LC2	-	28,0	392,5	218,5	870	109	593	594
621	Muratura BONDENO LC2	-	28,0	26,4	218,5	1 300	109	760	761
619	Muratura BONDENO LC2	-	28,0	280,1	220,0	409	110	405	406
623	Muratura BONDENO LC2	-	28,0	56,1	230,0	1 885	115	762	763
622	Muratura BONDENO LC2	-	28,0	95,7	234,0	1 611	117	595	596
624	Muratura BONDENO LC2	-	28,0	42,7	300,8	2 157	150	317	318
618	Muratura BONDENO LC2	-	28,0	188,9	302,6	94	151	314	315
625	Nuova Muratura sempiena	-	28,0	157,6	403,9	79	556	315	316



626	Nuova Muratura sempiena	-	28,0	178,9	403,9	343	556	406	407
617	Muratura BONDENO LC2	-	28,0	432,7	429,0	232	1 054	407	408

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
616	Muratura BONDENO LC2	-	28,0	223,0	142,0	2 024	283	763	318
613	Muratura BONDENO LC2	-	28,0	220,0	137,0	1 176	286	594	761
611	Muratura BONDENO LC2	-	28,0	88,0	134,0	217	287	315	406
612	Muratura BONDENO LC2	-	28,0	125,0	134,0	611	287	406	594
614	Muratura BONDENO LC2	-	28,0	250,0	134,0	1 438	287	761	596
615	Muratura BONDENO LC2	-	28,0	198,0	106,0	1 758	301	596	763

Parete : 36

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
319	1 868	982	0	0
593	2 160	982	0	0
343	2 431	982	0	0
335	2 717	982	0	0
323	3 159	982	0	0
320	1 868	982	354	1
594	2 160	982	354	1
344	2 431	982	354	1
336	2 717	982	354	1
324	3 159	982	354	1
321	1 868	982	839	2
337	2 717	982	839	2
325	3 159	982	839	2
322	1 868	982	1 268	3
338	2 717	982	1 268	3
326	3 159	982	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
630	Muratura BONDENO LC2	-	28,0	426,6	222,5	471	111	343	344
631	Muratura BONDENO LC2	-	28,0	39,5	302,6	829	151	335	336
629	Muratura	-	28,0	78,1	303,9	39	152	319	320



	BONDENO LC2								
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Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
628	Muratura BONDENO LC2	-	28,0	125,0	134,0	747	287	344	336
627	Muratura BONDENO LC2	-	28,0	180,0	129,0	168	290	320	594

Parete : 37

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
327	2 715	2 137	0	0
385	2 715	1 801	0	0
393	2 716	1 559	0	0
335	2 717	982	0	0
409	2 718	391	0	0
582	2 719	203	0	0
331	2 719	-42	0	0
328	2 715	2 137	354	1
386	2 715	1 801	354	1
394	2 716	1 559	354	1
336	2 717	982	354	1
410	2 718	391	354	1
583	2 719	203	354	1
332	2 719	-42	354	1
329	2 715	2 137	839	2
387	2 715	1 801	839	2
395	2 716	1 559	839	2
337	2 717	982	839	2
411	2 718	391	839	2
333	2 719	-42	839	2
330	2 715	2 137	1 268	3
388	2 715	1 801	1 268	3
396	2 716	1 559	1 268	3
338	2 717	982	1 268	3
412	2 718	391	1 268	3
334	2 719	-42	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
768	168	0	0
764	809	0	0
766	929	0	0
769	168	354	1
765	809	354	1
767	929	354	1



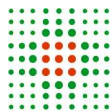
770	818	839	2
771	809	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
644	Muratura BONDENO LC2	-	42,0	444,0	307,9	1 151	154	335	336
645	Muratura BONDENO LC2	-	42,0	233,1	307,9	1 629	154	409	410
642	Muratura BONDENO LC2	-	14,0	336,1	354,0	168	177	768	769
643	Muratura BONDENO LC2	-	42,0	472,8	354,0	573	177	393	394
649	Muratura BONDENO LC2	-	42,0	359,7	222,5	827	465	765	770
650	Muratura BONDENO LC2	-	42,0	246,1	222,5	1 250	465	336	337
646	Muratura BONDENO LC2	-	14,0	172,5	402,3	86	555	769	329
647	Muratura BONDENO LC2	-	14,0	43,6	402,3	314	555	386	387
648	Muratura BONDENO LC2	-	42,0	171,0	402,6	422	555	386	387
651	Muratura BONDENO LC2	-	42,0	233,1	402,6	1 629	555	410	411
653	Muratura BONDENO LC2	-	28,0	396,5	220,0	809	949	770	771
654	Muratura BONDENO LC2	-	28,0	282,0	220,0	1 268	949	337	338
652	Muratura BONDENO LC2	-	28,0	154,2	358,2	413	1 018	387	388
655	Muratura BONDENO LC2	-	28,0	217,2	358,2	1 637	1 018	411	412

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
632	Muratura BONDENO LC2	-	42,0	140,0	114,0	1 443	297	336	410
633	Muratura BONDENO LC2	-	14,0	120,0	265,0	233	707	329	387
636	Muratura BONDENO LC2	-	42,0	120,0	265,0	1 067	707	770	337
634	Muratura BONDENO LC2	-	42,0	79,4	260,0	538	709	387	395
635	Muratura BONDENO LC2	-	42,0	50,6	260,0	603	709	395	770
637	Muratura BONDENO LC2	-	42,0	130,0	260,0	1 456	709	337	411
638	Muratura BONDENO LC2	-	28,0	87,9	209,0	534	1 164	388	396



639	Muratura BONDENO LC2	-	28,0	32,1	209,0	594	1 164	396	771
640	Muratura BONDENO LC2	-	28,0	120,0	209,0	1 067	1 164	771	338
641	Muratura BONDENO LC2	-	28,0	120,0	209,0	1 469	1 164	338	412

Parete : 38

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
339	2 431	-42	0	0
413	2 431	391	0	0
343	2 431	982	0	0
585	2 431	1 559	0	0
341	2 431	2 137	0	0
340	2 431	-42	354	1
414	2 431	391	354	1
344	2 431	982	354	1
586	2 431	1 559	354	1
342	2 431	2 137	354	1

Nodi 2D

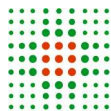
Nodo	X locale [cm]	Z [cm]	Livello
772	1 889	0	0
773	1 889	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
662	Muratura BONDENO LC2	-	28,0	277,6	222,5	407	111	413	414
665	Muratura BONDENO LC2	-	28,0	49,1	222,5	1 889	111	772	773
663	Muratura BONDENO LC2	-	28,0	436,4	230,0	904	115	343	344
664	Muratura BONDENO LC2	-	28,0	426,5	234,0	1 455	117	585	586
666	Muratura BONDENO LC2	-	28,0	42,2	300,8	2 157	150	341	342
661	Muratura BONDENO LC2	-	28,0	187,7	302,6	94	151	339	340

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
660	Muratura BONDENO LC2	-	28,0	223,0	142,0	2 025	283	773	342
656	Muratura BONDENO LC2	-	28,0	80,0	134,0	228	287	340	414



657	Muratura BONDENO LC2	-	28,0	140,0	129,0	615	290	414	344
659	Muratura BONDENO LC2	-	28,0	196,0	121,0	1 766	294	586	773
658	Muratura BONDENO LC2	-	28,0	120,0	119,0	1 182	295	344	586

Parete : 39

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
345	2 413	-42	0	0
351	2 413	-569	0	0
346	2 413	-42	354	1
352	2 413	-569	354	1
347	2 413	-42	839	2
353	2 413	-569	839	2
349	2 414	-860	839	2
348	2 413	-42	1 268	3
354	2 413	-569	1 268	3
350	2 414	-860	1 268	3

Nodi 2D

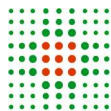
Nodo	X locale [cm]	Z [cm]	Livello
774	264	0	0
775	264	354	1
776	259	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
670	Muratura BONDENO LC2	-	28,0	527,4	354,0	264	177	774	775
671	Muratura BONDENO LC2	-	28,0	392,5	402,3	196	555	775	347
672	Muratura BONDENO LC2	-	28,0	54,8	402,3	500	555	352	353
674	Muratura BONDENO LC2	-	28,0	235,5	225,0	259	952	347	776
673	Muratura BONDENO LC2	-	28,0	31,6	358,8	16	1 018	347	348
675	Muratura BONDENO LC2	-	28,0	40,3	358,8	507	1 018	353	354

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
667	Muratura BONDENO LC2	-	28,0	95,0	265,0	432	707	347	353



668	Muratura BONDENO LC2	-	28,0	110,0	204,0	87	1 166	348	776
669	Muratura BONDENO LC2	-	28,0	110,0	204,0	432	1 166	776	354

Parete : 40

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
355	2 144	-42	0	0
361	2 145	-570	0	0
356	2 144	-42	354	1
362	2 145	-570	354	1
357	2 144	-42	839	2
363	2 145	-570	839	2
359	2 146	-860	839	2
358	2 144	-42	1 268	3
364	2 145	-570	1 268	3
360	2 146	-860	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
777	344	839	2

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
679	Muratura BONDENO LC2	-	28,0	166,3	302,6	83	151	355	356
680	Muratura BONDENO LC2	-	28,0	265,9	302,6	395	151	361	362
682	Nuova Muratura sempiena	-	28,0	76,5	220,0	344	464	362	777
681	Nuova Muratura sempiena	-	28,0	216,1	402,3	108	555	356	357
683	Nuova Muratura sempiena	-	28,0	55,7	402,3	500	555	362	363
684	Muratura BONDENO LC2	-	28,0	217,4	358,2	109	1 018	357	358
685	Muratura BONDENO LC2	-	28,0	190,9	358,2	433	1 018	777	364

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
676	Muratura BONDENO LC2	-	28,0	93,0	134,0	238	287	356	362
677	Nuova Muratura sempiena	-	28,0	105,0	265,0	269	707	357	777
678	Muratura	-	28,0	120,0	209,0	277	1 164	358	364

PROGETTISTI

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SICUREZZA
ARCH. ANTONELLA ZENI



	BONDENO LC2								
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Parete : 41

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
365	2 678	-42	0	0
373	2 685	-568	0	0
369	2 689	-859	0	0
73	2 694	-1 310	0	0
65	2 695	-1 390	0	0
366	2 678	-42	354	1
374	2 685	-568	354	1
370	2 689	-859	354	1
74	2 694	-1 310	354	1
66	2 695	-1 390	354	1
367	2 678	-42	839	2
375	2 685	-568	839	2
371	2 689	-859	839	2
75	2 694	-1 310	839	2
67	2 695	-1 390	839	2
368	2 678	-42	1 268	3
376	2 685	-568	1 268	3
372	2 689	-859	1 268	3
76	2 694	-1 310	1 268	3
68	2 695	-1 390	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
780	132	839	2
778	263	839	2
782	395	839	2
781	132	1 268	3
779	263	1 268	3
783	395	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
691	Muratura BONDENO LC2	-	28,0	285,0	300,4	143	150	365	366
692	Muratura BONDENO LC2	-	28,0	131,5	300,4	461	150	373	374
693	Muratura BONDENO LC2	-	28,0	225,6	303,9	931	152	369	370
694	Muratura BONDENO LC2	-	28,0	195,4	303,9	1 251	152	73	74
687	Muratura BONDENO LC2	-	28,0	531,0	485,0	1 083	597	74	75



688	Muratura BONDENO LC2	-	28,0	263,2	429,0	132	1 054	780	781
689	Nuova Muratura sempiena	-	28,0	263,2	429,0	395	1 054	782	783
690	Muratura BONDENO LC2	-	28,0	531,0	429,0	1 083	1 054	75	76

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
686	Muratura BONDENO LC2	-	28,0	110,0	144,0	340	282	366	374

Parete : 42

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
377	2 352	-860	0	0
381	2 353	-1 311	0	0
378	2 352	-860	354	1
382	2 353	-1 311	354	1
379	2 352	-860	839	2
383	2 353	-1 311	839	2
380	2 352	-860	1 268	3
384	2 353	-1 311	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
784	226	0	0
785	226	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
695	Muratura BONDENO LC2	-	28,0	451,0	354,0	226	177	784	785

Parete : 43

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
385	2 715	1 801	0	0
25	3 159	1 802	0	0
386	2 715	1 801	354	1
26	3 159	1 802	354	1
387	2 715	1 801	839	2
27	3 159	1 802	839	2
388	2 715	1 801	1 268	3



28	3 159	1 802	1 268	3
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Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
786	222	839	2
787	222	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
697	Muratura BONDENO LC2	-	28,0	22,5	314,2	11	157	385	386
698	Muratura BONDENO LC2	-	28,0	341,6	314,2	273	157	25	26
699	Muratura BONDENO LC2	-	28,0	240,7	402,6	120	555	386	786
700	Muratura BONDENO LC2	-	28,0	103,4	402,6	392	555	26	27
696	Muratura BONDENO LC2	-	14,0	444,1	429,0	222	1 054	786	787

Parete : 44

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
389	1 868	1 559	0	0
595	2 160	1 559	0	0
585	2 431	1 559	0	0
393	2 716	1 559	0	0
390	1 868	1 559	354	1
596	2 160	1 559	354	1
586	2 431	1 559	354	1
394	2 716	1 559	354	1
391	1 868	1 559	839	2
395	2 716	1 559	839	2
392	1 868	1 559	1 268	3
396	2 716	1 559	1 268	3

Parete : 45

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
397	1 868	391	0	0
405	2 159	391	0	0
413	2 431	391	0	0
409	2 718	391	0	0
401	3 159	391	0	0



398	1 868	391	354	1
406	2 159	391	354	1
414	2 431	391	354	1
410	2 718	391	354	1
402	3 159	391	354	1
399	1 868	391	839	2
407	2 159	391	839	2
411	2 718	391	839	2
403	3 159	391	839	2
400	1 868	391	1 268	3
408	2 159	391	1 268	3
412	2 718	391	1 268	3
404	3 159	391	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
790	1 071	0	0
792	146	354	1
794	427	354	1
791	1 071	354	1
793	146	839	2
795	427	839	2
788	563	839	2
796	1 071	839	2
797	427	1 268	3
789	563	1 268	3
798	1 071	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
710	Muratura BONDENO LC2	-	28,0	106,5	302,6	345	151	405	406
711	Muratura BONDENO LC2	-	28,0	39,7	302,6	543	151	413	414
712	Muratura BONDENO LC2	-	42,0	76,7	302,6	601	151	413	414
713	Muratura BONDENO LC2	-	42,0	101,2	302,6	800	151	409	410
708	Muratura BONDENO LC2	-	42,0	75,8	303,9	38	152	397	398
709	Muratura BONDENO LC2	-	42,0	75,8	303,9	254	152	405	406
702	Muratura BONDENO LC2	-	28,0	440,9	354,0	1 071	177	790	791
703	Muratura BONDENO LC2	-	42,0	291,5	485,0	146	597	792	793
704	Muratura BONDENO LC2	-	28,0	271,2	485,0	427	597	794	795
705	Muratura BONDENO LC2	-	28,0	440,9	485,0	1 071	597	791	796



706	Muratura BONDENO LC2	-	28,0	271,2	429,0	427	1 054	795	797
707	Muratura BONDENO LC2	-	28,0	440,9	429,0	1 071	1 054	796	798

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
701	Muratura BONDENO LC2	-	42,0	110,0	134,0	694	287	414	410

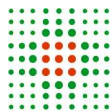
Parete : 46

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
415	-1 877	2 115	0	0
477	-1 877	1 520	0	0
481	-1 877	972	0	0
452	-1 876	370	0	0
496	-1 876	-57	0	0
416	-1 877	2 115	354	1
478	-1 877	1 520	354	1
482	-1 877	972	354	1
453	-1 876	370	354	1
497	-1 876	-57	354	1
417	-1 877	2 115	839	2
454	-1 876	370	839	2
498	-1 876	-57	839	2
418	-1 877	2 115	1 268	3
619	-1 877	2 050	1 268	3
616	-1 877	1 884	1 268	3
613	-1 877	1 694	1 268	3
610	-1 877	1 453	1 268	3
607	-1 877	1 276	1 268	3
604	-1 877	1 054	1 268	3
601	-1 876	812	1 268	3
622	-1 876	688	1 268	3
598	-1 876	568	1 268	3
625	-1 876	428	1 268	3
455	-1 876	370	1 268	3
499	-1 876	-57	1 268	3

Nodi 2D

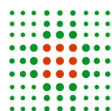
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799	308	0	0
801	851	0	0
800	303	354	1
802	851	354	1
803	201	839	2



804	627	839	2
805	1 037	839	2
806	1 455	839	2
807	1 884	839	2
808	2 019	839	2
809	1 162	1 268	3
810	1 884	1 268	3
811	2 021	1 268	3

Macroelementi Maschi

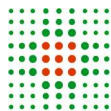
N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
746	Muratura BONDENO LC2	-	28,0	143,0	145,0	634	173	477	478
747	Muratura BONDENO LC2	-	28,0	190,0	145,0	851	173	801	802
749	Muratura BONDENO LC2	-	28,0	382,0	145,0	1 703	173	452	453
750	Muratura BONDENO LC2	-	28,0	147,7	227,0	2 098	173	496	497
744	Muratura BONDENO LC2	-	28,0	52,9	272,0	26	180	415	416
745	Muratura BONDENO LC2	-	28,0	250,0	190,0	308	185	799	800
748	Muratura BONDENO LC2	-	28,0	306,0	190,0	1 229	185	481	482
758	Muratura BONDENO LC2	-	28,0	46,5	144,0	1 884	536	453	807
759	Muratura BONDENO LC2	-	28,0	46,8	144,0	2 016	536	497	808
757	Muratura BONDENO LC2	-	28,0	108,9	199,5	1 722	564	453	454
760	Muratura BONDENO LC2	-	28,0	47,1	314,5	2 148	583	497	498
752	Muratura BONDENO LC2	-	28,0	78,0	255,0	201	592	800	803
753	Muratura BONDENO LC2	-	28,0	132,7	255,0	366	592	800	803
754	Muratura BONDENO LC2	-	28,0	220,3	255,0	673	592	478	804
755	Muratura BONDENO LC2	-	28,0	329,0	255,0	1 077	592	482	805
756	Muratura BONDENO LC2	-	28,0	165,3	255,0	1 455	592	453	806
751	Muratura BONDENO LC2	-	28,0	32,0	370,0	16	595	416	417
768	Muratura BONDENO LC2	-	28,0	46,5	155,0	1 884	1 027	807	810
767	Muratura BONDENO LC2	-	28,0	108,9	182,5	1 722	1 040	454	455
769	Muratura BONDENO LC2	-	28,0	57,3	200,0	2 021	1 049	808	811
761	Muratura	-	28,0	32,0	319,5	16	1 054	417	418



	BONDENO LC2								
762	Muratura BONDENO LC2	-	28,0	263,0	210,0	293	1 054	803	616
763	Muratura BONDENO LC2	-	28,0	172,4	210,0	576	1 054	804	610
764	Muratura BONDENO LC2	-	28,0	160,0	210,0	872	1 054	805	607
765	Muratura BONDENO LC2	-	28,0	159,5	210,0	1 162	1 054	805	809
766	Muratura BONDENO LC2	-	28,0	165,3	210,0	1 455	1 054	806	622
770	Muratura BONDENO LC2	-	28,0	57,6	337,0	2 143	1 060	498	499

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
714	Muratura BONDENO LC2	-	28,0	130,0	90,0	118	45	415	799
716	Muratura BONDENO LC2	-	28,0	130,0	90,0	498	45	799	477
719	Muratura BONDENO LC2	-	28,0	130,0	90,0	1 011	45	801	481
720	Muratura BONDENO LC2	-	28,0	130,0	90,0	1 447	45	481	452
718	Muratura BONDENO LC2	-	28,0	50,0	110,0	731	55	477	801
721	Muratura BONDENO LC2	-	28,0	130,0	110,0	1 959	55	452	496
722	Muratura BONDENO LC2	-	28,0	103,6	254,0	1 953	337	453	497
715	Muratura BONDENO LC2	-	28,0	130,0	184,0	107	372	416	800
717	Muratura BONDENO LC2	-	28,0	130,0	184,0	498	372	800	478
728	Muratura BONDENO LC2	-	28,0	85,0	341,0	1 819	779	454	807
729	Muratura BONDENO LC2	-	28,0	85,0	341,0	1 950	779	807	808
730	Muratura BONDENO LC2	-	28,0	74,5	341,0	2 082	779	808	498
723	Muratura BONDENO LC2	-	28,0	130,0	230,0	97	834	417	803
724	Muratura BONDENO LC2	-	28,0	97,5	230,0	478	834	803	804
725	Muratura BONDENO LC2	-	28,0	104,6	230,0	780	834	804	805
726	Muratura BONDENO LC2	-	28,0	130,0	230,0	1 307	834	805	806
727	Muratura BONDENO LC2	-	28,0	130,0	230,0	1 602	834	806	454
741	Muratura BONDENO LC2	-	28,0	85,0	164,0	1 819	1 186	455	810
742	Muratura	-	28,0	85,0	164,0	1 950	1 186	810	811



	BONDENO LC2								
731	Muratura BONDENO LC2	-	28,0	32,7	109,0	48	1 214	418	619
732	Muratura BONDENO LC2	-	28,0	97,3	109,0	113	1 214	619	616
733	Muratura BONDENO LC2	-	28,0	65,0	109,0	457	1 214	613	610
734	Muratura BONDENO LC2	-	28,0	130,0	109,0	727	1 214	610	607
735	Muratura BONDENO LC2	-	28,0	108,6	109,0	1 007	1 214	607	604
736	Muratura BONDENO LC2	-	28,0	21,4	109,0	1 072	1 214	604	809
737	Muratura BONDENO LC2	-	28,0	61,4	109,0	1 273	1 214	809	601
738	Muratura BONDENO LC2	-	28,0	68,6	109,0	1 338	1 214	601	622
739	Muratura BONDENO LC2	-	28,0	10,0	109,0	1 542	1 214	622	598
740	Muratura BONDENO LC2	-	28,0	120,0	109,0	1 607	1 214	598	625
743	Muratura BONDENO LC2	-	28,0	64,0	74,0	2 082	1 231	811	499

Parete : 47

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
419	-2 430	2 115	0	0
475	-2 430	1 520	0	0
473	-2 430	1 107	0	0
591	-2 430	972	0	0
456	-2 429	370	0	0
121	-2 429	-59	0	0
420	-2 430	2 115	354	1
476	-2 430	1 520	354	1
474	-2 430	1 107	354	1
592	-2 430	972	354	1
457	-2 429	370	354	1
122	-2 429	-59	354	1
458	-2 429	370	839	2
123	-2 429	-59	839	2
459	-2 429	370	1 268	3
124	-2 429	-59	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
812	301	0	0
814	1 475	0	0
813	301	354	1
815	1 475	354	1



816	1 959	839	2
817	1 959	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
778	Muratura BONDENO LC2	-	28,0	49,3	225,0	301	113	812	813
781	Muratura BONDENO LC2	-	28,0	35,0	250,0	1 475	125	814	815
779	Muratura BONDENO LC2	-	28,0	67,2	274,0	589	137	475	476
780	Muratura BONDENO LC2	-	28,0	616,3	286,5	1 059	143	473	474
777	Muratura BONDENO LC2	-	28,0	80,4	303,9	40	152	419	420
782	Muratura BONDENO LC2	-	28,0	541,3	311,0	1 903	155	456	457
783	Muratura BONDENO LC2	-	28,0	40,2	405,1	1 765	557	457	458
784	Muratura BONDENO LC2	-	28,0	148,7	405,1	2 099	557	122	123
776	Muratura BONDENO LC2	-	28,0	428,9	429,0	1 959	1 054	816	817

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
771	Muratura BONDENO LC2	-	28,0	196,0	129,0	178	290	420	813
772	Muratura BONDENO LC2	-	28,0	230,0	129,0	441	290	813	476
774	Muratura BONDENO LC2	-	28,0	90,0	104,0	1 412	302	592	815
775	Muratura BONDENO LC2	-	28,0	140,0	104,0	1 562	302	815	457
773	Muratura BONDENO LC2	-	28,0	128,0	31,0	687	339	476	474

Parete : 48

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
421	1 868	-42	0	0
397	1 868	391	0	0
319	1 868	982	0	0
389	1 868	1 559	0	0
13	1 868	2 137	0	0
422	1 868	-42	354	1
398	1 868	391	354	1
320	1 868	982	354	1



390	1 868	1 559	354	1
14	1 868	2 137	354	1
423	1 868	-42	839	2
399	1 868	391	839	2
321	1 868	982	839	2
391	1 868	1 559	839	2
15	1 868	2 137	839	2
424	1 868	-42	1 268	3
400	1 868	391	1 268	3
322	1 868	982	1 268	3
392	1 868	1 559	1 268	3
16	1 868	2 137	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
818	279	839	2
819	1 408	839	2
820	1 188	1 268	3
821	1 408	1 268	3
822	1 984	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
811	Muratura BONDENO LC2	-	42,0	345,4	155,0	1 059	133	319	320
808	Muratura BONDENO LC2	-	28,0	139,2	300,4	70	150	421	422
809	Muratura BONDENO LC2	-	28,0	163,3	300,4	351	150	397	398
810	Muratura BONDENO LC2	-	42,0	323,5	300,4	594	150	397	398
812	Muratura BONDENO LC2	-	42,0	434,0	100,0	1 578	160	389	390
813	Muratura BONDENO LC2	-	42,0	253,2	227,0	2 052	173	13	14
816	Muratura BONDENO LC2	-	28,0	52,9	136,5	279	532	398	818
815	Muratura BONDENO LC2	-	28,0	46,1	138,0	144	533	422	423
817	Muratura BONDENO LC2	-	28,0	42,4	310,0	411	582	398	399
814	Muratura BONDENO LC2	-	28,0	56,1	311,5	28	582	422	423
819	Muratura BONDENO LC2	-	42,0	89,1	250,0	628	589	398	399
820	Muratura BONDENO LC2	-	42,0	428,9	250,0	1 017	589	320	321
821	Muratura BONDENO LC2	-	42,0	93,1	250,0	1 408	589	390	819
822	Muratura	-	42,0	260,9	250,0	1 665	589	390	391



	BONDENO LC2								
818	Muratura BONDENO LC2	-	42,0	70,9	367,5	468	594	398	399
823	Muratura BONDENO LC2	-	42,0	253,2	367,5	2 052	594	14	15
825	Muratura BONDENO LC2	-	28,0	282,3	177,5	531	1 038	399	400
824	Muratura BONDENO LC2	-	28,0	180,0	287,0	90	1 045	423	424
831	Muratura BONDENO LC2	-	28,0	70,3	319,5	2 143	1 054	15	16
826	Muratura BONDENO LC2	-	28,0	276,9	210,0	941	1 054	321	322
827	Muratura BONDENO LC2	-	28,0	86,9	210,0	1 188	1 054	321	820
828	Muratura BONDENO LC2	-	28,0	93,1	210,0	1 408	1 054	819	821
829	Muratura BONDENO LC2	-	28,0	260,9	210,0	1 665	1 054	391	392
830	Muratura BONDENO LC2	-	28,0	117,9	210,0	1 984	1 054	15	822

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
787	Muratura BONDENO LC2	-	42,0	130,0	110,0	1 296	55	319	389
789	Muratura BONDENO LC2	-	42,0	130,0	110,0	1 860	55	389	13
785	Muratura BONDENO LC2	-	28,0	105,0	254,0	208	337	422	398
786	Muratura BONDENO LC2	-	42,0	130,0	254,0	779	337	398	320
788	Muratura BONDENO LC2	-	42,0	130,0	254,0	1 296	337	320	390
790	Muratura BONDENO LC2	-	42,0	130,0	254,0	1 860	337	390	14
792	Muratura BONDENO LC2	-	28,0	98,2	350,0	341	774	818	399
791	Muratura BONDENO LC2	-	28,0	91,8	347,0	220	776	423	818
793	Muratura BONDENO LC2	-	42,0	130,0	125,0	737	777	399	321
795	Muratura BONDENO LC2	-	42,0	130,0	125,0	1 296	777	321	819
797	Muratura BONDENO LC2	-	42,0	80,0	125,0	1 494	777	819	391
799	Muratura BONDENO LC2	-	42,0	130,0	125,0	1 860	777	391	15
794	Muratura BONDENO LC2	-	28,0	130,0	110,0	737	894	399	321
796	Muratura BONDENO LC2	-	28,0	130,0	110,0	1 296	894	321	819
798	Muratura	-	28,0	80,0	110,0	1 494	894	819	391



	BONDENO LC2								
800	Muratura BONDENO LC2	-	28,0	130,0	110,0	1 860	894	391	15
801	Muratura BONDENO LC2	-	28,0	210,0	174,0	285	1 181	424	400
802	Muratura BONDENO LC2	-	28,0	130,0	109,0	737	1 214	400	322
803	Muratura BONDENO LC2	-	28,0	65,0	109,0	1 112	1 214	322	820
804	Muratura BONDENO LC2	-	28,0	130,0	109,0	1 296	1 214	820	821
805	Muratura BONDENO LC2	-	28,0	80,0	109,0	1 494	1 214	821	392
806	Muratura BONDENO LC2	-	28,0	130,0	109,0	1 860	1 214	392	822
807	Muratura BONDENO LC2	-	28,0	65,0	109,0	2 076	1 214	822	16

Parete : 49

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
294	1 871	-1 394	0	0
69	1 872	-1 311	0	0
430	1 875	-860	0	0
435	1 877	-571	0	0
425	1 881	-42	0	0
295	1 871	-1 394	354	1
70	1 872	-1 311	354	1
431	1 875	-860	354	1
436	1 877	-571	354	1
426	1 881	-42	354	1
296	1 871	-1 394	839	2
71	1 872	-1 311	839	2
432	1 875	-860	839	2
437	1 877	-571	839	2
427	1 881	-42	839	2
297	1 871	-1 394	1 268	3
72	1 872	-1 311	1 268	3
433	1 875	-860	1 268	3
438	1 877	-571	1 268	3
428	1 881	-42	1 268	3
298	1 871	-1 394	1 628	4
434	1 875	-860	1 628	4
439	1 877	-571	1 628	4
429	1 881	-42	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
823	1 088	354	1



824	1 088	839	2
825	1 088	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
839	Muratura BONDENO LC2	-	28,0	343,9	303,9	172	152	69	70
840	Muratura BONDENO LC2	-	28,0	79,5	303,9	494	152	430	431
841	Muratura BONDENO LC2	-	28,0	326,1	303,9	986	152	435	823
842	Muratura BONDENO LC2	-	28,0	93,1	303,9	1 306	152	425	426
843	Nuova Muratura sempiena	-	28,0	59,7	482,5	563	595	431	432
844	Nuova Muratura sempiena	-	28,0	59,7	482,5	793	595	436	437
835	Muratura BONDENO LC2	-	28,0	533,5	485,0	267	597	70	71
836	Muratura BONDENO LC2	-	28,0	529,2	485,0	1 088	597	823	824
837	Muratura BONDENO LC2	-	28,0	533,5	429,0	267	1 054	71	72
838	Muratura BONDENO LC2	-	28,0	529,2	429,0	1 088	1 054	824	825
845	Muratura BONDENO LC2	-	28,0	623,6	255,0	312	1 433	433	434
846	Muratura BONDENO LC2	-	28,0	608,5	255,0	1 048	1 433	825	439

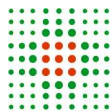
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
832	Nuova Muratura sempiena	-	28,0	170,0	5,0	678	837	432	437
833	Muratura BONDENO LC2	-	28,0	120,0	55,0	684	1 296	433	438
834	Muratura BONDENO LC2	-	28,0	120,0	155,0	684	1 551	434	439

Parete : 50

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
440	-3 290	-62	0	0
448	-3 289	370	0	0
470	-3 286	1 107	0	0
567	-3 284	1 490	0	0
444	-3 282	2 115	0	0
441	-3 290	-62	354	1



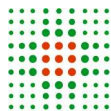
449	-3 289	370	354	1
471	-3 286	1 107	354	1
568	-3 284	1 490	354	1
445	-3 282	2 115	354	1
442	-3 290	-62	839	2
450	-3 289	370	839	2
569	-3 284	1 490	839	2
446	-3 282	2 115	839	2
443	-3 290	-62	1 268	3
451	-3 289	370	1 268	3
624	-3 288	427	1 268	3
597	-3 288	568	1 268	3
621	-3 287	686	1 268	3
600	-3 287	812	1 268	3
603	-3 286	1 053	1 268	3
472	-3 286	1 107	1 268	3
606	-3 285	1 275	1 268	3
609	-3 285	1 452	1 268	3
570	-3 284	1 490	1 268	3
612	-3 284	1 693	1 268	3
615	-3 283	1 884	1 268	3
618	-3 282	2 050	1 268	3
447	-3 282	2 115	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
829	1 879	0	0
826	748	354	1
830	1 883	354	1
828	629	839	2
827	748	839	2
831	1 813	839	2

Macroelementi Maschi

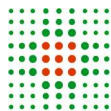
N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
866	Muratura BONDENO LC2	-	42,0	299,0	235,0	370	118	448	449
867	Muratura BONDENO LC2	-	42,0	580,0	210,0	969	150	470	471
865	Muratura BONDENO LC2	-	42,0	70,0	311,0	35	155	440	441
870	Muratura BONDENO LC2	-	42,0	37,5	272,0	2 158	180	444	445
869	Muratura BONDENO LC2	-	42,0	260,0	190,0	1 879	185	829	830
868	Muratura BONDENO LC2	-	42,0	260,0	195,0	1 489	188	567	568
874	Muratura BONDENO LC2	-	28,0	115,4	255,0	1 813	592	830	831



875	Muratura BONDENO LC2	-	28,0	89,8	255,0	1 975	592	830	831
873	Muratura BONDENO LC2	-	28,0	876,8	370,0	1 187	595	471	569
876	Muratura BONDENO LC2	-	28,0	26,4	370,0	2 163	595	445	446
871	Muratura BONDENO LC2	-	28,0	57,9	387,5	29	601	441	442
872	Muratura BONDENO LC2	-	28,0	249,0	387,5	307	601	449	450
879	Muratura BONDENO LC2	-	28,0	740,6	319,5	999	1 054	827	603
882	Muratura BONDENO LC2	-	28,0	26,4	319,5	2 163	1 054	446	447
880	Muratura BONDENO LC2	-	28,0	125,2	210,0	1 562	1 054	569	570
881	Muratura BONDENO LC2	-	28,0	265,2	210,0	1 888	1 054	831	615
877	Muratura BONDENO LC2	-	28,0	57,9	359,5	29	1 070	442	443
878	Muratura BONDENO LC2	-	28,0	249,0	359,5	307	1 070	450	451

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
850	Muratura BONDENO LC2	-	42,0	100,0	90,0	1 309	45	470	567
851	Muratura BONDENO LC2	-	42,0	130,0	90,0	1 684	45	567	829
854	Muratura BONDENO LC2	-	42,0	130,0	90,0	2 074	45	829	444
849	Muratura BONDENO LC2	-	42,0	160,0	134,0	599	287	449	826
847	Muratura BONDENO LC2	-	42,0	137,5	104,0	133	302	441	449
852	Muratura BONDENO LC2	-	42,0	130,0	74,0	1 687	317	568	830
855	Muratura BONDENO LC2	-	42,0	130,0	74,0	2 080	317	830	445
848	Muratura BONDENO LC2	-	28,0	137,5	110,0	133	409	441	449
853	Muratura BONDENO LC2	-	28,0	130,0	110,0	1 687	409	568	830
856	Muratura BONDENO LC2	-	28,0	130,0	110,0	2 080	409	830	445
858	Muratura BONDENO LC2	-	28,0	130,0	230,0	1 690	834	569	831
859	Muratura BONDENO LC2	-	28,0	130,0	230,0	2 085	834	831	446
857	Muratura BONDENO LC2	-	28,0	125,0	195,0	120	852	442	450
861	Muratura BONDENO LC2	-	28,0	130,0	109,0	1 435	1 214	606	609



862	Muratura BONDENO LC2	-	28,0	130,0	109,0	1 690	1 214	570	612
863	Muratura BONDENO LC2	-	28,0	91,6	109,0	2 066	1 214	615	618
864	Muratura BONDENO LC2	-	28,0	38,4	109,0	2 131	1 214	618	447
860	Muratura BONDENO LC2	-	28,0	125,0	29,0	120	1 254	443	451

Parete : 51

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
448	-3 289	370	0	0
578	-2 863	370	0	0
466	-2 722	370	0	0
456	-2 429	370	0	0
523	-2 173	370	0	0
452	-1 876	370	0	0
449	-3 289	370	354	1
579	-2 863	370	354	1
467	-2 722	370	354	1
457	-2 429	370	354	1
524	-2 173	370	354	1
453	-1 876	370	354	1
450	-3 289	370	839	2
468	-2 722	370	839	2
458	-2 429	370	839	2
525	-2 173	370	839	2
454	-1 876	370	839	2
451	-3 289	370	1 268	3
469	-2 722	370	1 268	3
459	-2 429	370	1 268	3
526	-2 173	370	1 268	3
455	-1 876	370	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
833	1 264	354	1
832	283	839	2
834	1 264	839	2

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
889	Muratura BONDENO LC2	-	42,0	358,2	220,0	721	110	456	457
888	Muratura BONDENO LC2	-	42,0	441,5	302,6	221	151	578	579



890	Muratura BONDENO LC2	-	42,0	322,8	302,6	1 251	151	523	833
891	Muratura BONDENO LC2	-	42,0	51,3	402,3	593	555	467	468
892	Muratura BONDENO LC2	-	42,0	297,5	402,3	967	555	457	458
885	Muratura BONDENO LC2	-	28,0	566,9	485,0	283	597	579	832
886	Muratura BONDENO LC2	-	28,0	296,7	485,0	1 264	597	833	834
893	Muratura BONDENO LC2	-	28,0	674,0	358,2	337	1 018	832	469
894	Muratura BONDENO LC2	-	28,0	25,4	358,2	847	1 018	458	459
887	Muratura BONDENO LC2	-	14,0	553,1	429,0	1 136	1 054	525	526

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
883	Muratura BONDENO LC2	-	42,0	180,0	265,0	736	707	468	458
884	Muratura BONDENO LC2	-	28,0	160,0	209,0	754	1 164	469	459

Parete : 52

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
444	-3 282	2 115	0	0
460	-2 722	2 115	0	0
419	-2 430	2 115	0	0
521	-2 172	2 115	0	0
415	-1 877	2 115	0	0
445	-3 282	2 115	354	1
461	-2 722	2 115	354	1
420	-2 430	2 115	354	1
522	-2 172	2 115	354	1
416	-1 877	2 115	354	1
446	-3 282	2 115	839	2
462	-2 722	2 115	839	2
417	-1 877	2 115	839	2
447	-3 282	2 115	1 268	3
463	-2 722	2 115	1 268	3
418	-1 877	2 115	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
837	280	354	1
838	280	839	2



835	852	839	2
839	1 128	839	2
836	852	1 268	3
840	1 128	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
900	Muratura BONDENO LC2	-	42,0	648,9	306,5	324	153	460	837
901	Muratura BONDENO LC2	-	42,0	615,9	306,5	1 097	153	521	522
897	Muratura BONDENO LC2	-	14,0	560,3	485,0	280	597	837	838
898	Muratura BONDENO LC2	-	14,0	552,9	485,0	1 128	597	522	839
902	Muratura BONDENO LC2	-	28,0	330,0	358,8	165	1 018	838	447
903	Muratura BONDENO LC2	-	28,0	130,3	358,8	495	1 018	462	463
899	Muratura BONDENO LC2	-	28,0	552,9	429,0	1 128	1 054	839	840

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
895	Muratura BONDENO LC2	-	42,0	140,0	119,0	719	295	461	420
896	Muratura BONDENO LC2	-	28,0	100,0	204,0	380	1 166	447	463

Parete : 53

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
460	-2 722	2 115	0	0
571	-2 722	1 490	0	0
575	-2 722	1 107	0	0
479	-2 722	972	0	0
466	-2 722	370	0	0
461	-2 722	2 115	354	1
572	-2 722	1 490	354	1
576	-2 722	1 107	354	1
480	-2 722	972	354	1
467	-2 722	370	354	1
462	-2 722	2 115	839	2
573	-2 722	1 490	839	2
468	-2 722	370	839	2
464	-2 722	-60	839	2
463	-2 722	2 115	1 268	3



620	-2 722	2 050	1 268	3
617	-2 722	1 884	1 268	3
614	-2 722	1 694	1 268	3
574	-2 722	1 490	1 268	3
611	-2 722	1 453	1 268	3
608	-2 722	1 275	1 268	3
577	-2 722	1 107	1 268	3
605	-2 722	1 053	1 268	3
602	-2 722	812	1 268	3
623	-2 722	687	1 268	3
599	-2 722	568	1 268	3
626	-2 722	427	1 268	3
469	-2 722	370	1 268	3
465	-2 722	-60	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
841	1 428	354	1
844	254	839	2
845	1 079	839	2
842	1 428	839	2
843	1 547	839	2

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
920	Muratura BONDENO LC2	-	42,0	283,8	222,5	623	111	571	572
921	Muratura BONDENO LC2	-	42,0	601,2	235,0	1 186	118	479	480
919	Muratura BONDENO LC2	-	42,0	341,6	303,9	171	152	460	461
922	Muratura BONDENO LC2	-	42,0	108,0	311,0	1 691	155	466	467
924	Muratura BONDENO LC2	-	42,0	300,4	220,0	261	464	461	844
925	Muratura BONDENO LC2	-	42,0	267,0	220,0	664	464	572	573
926	Muratura BONDENO LC2	-	42,0	322,0	220,0	1 079	464	480	845
923	Muratura BONDENO LC2	-	42,0	20,4	402,3	10	555	461	462
927	Muratura BONDENO LC2	-	42,0	108,0	402,3	1 374	555	841	842
931	Muratura BONDENO LC2	-	28,0	130,2	257,5	990	968	845	577
929	Muratura BONDENO LC2	-	28,0	163,9	290,0	248	984	844	617
930	Muratura BONDENO LC2	-	28,0	345,4	290,0	642	984	573	574
933	Muratura	-	28,0	110,7	358,2	1 800	1 018	468	469



	BONDENO LC2								
934	Muratura BONDENO LC2	-	28,0	209,3	358,2	2 070	1 018	464	465
932	Muratura BONDENO LC2	-	28,0	382,0	358,8	1 356	1 018	842	602
928	Muratura BONDENO LC2	-	28,0	25,8	372,9	13	1 025	462	463

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
905	Muratura BONDENO LC2	-	42,0	120,0	134,0	842	287	572	576
904	Muratura BONDENO LC2	-	42,0	130,0	129,0	441	290	461	572
906	Muratura BONDENO LC2	-	42,0	150,0	104,0	1 562	302	841	467
907	Muratura BONDENO LC2	-	42,0	115,0	265,0	81	707	462	844
908	Muratura BONDENO LC2	-	42,0	130,0	265,0	435	707	844	573
909	Muratura BONDENO LC2	-	42,0	115,0	265,0	864	707	573	845
918	Muratura BONDENO LC2	-	28,0	110,0	209,0	1 910	1 164	469	465
916	Muratura BONDENO LC2	-	28,0	6,4	204,0	1 058	1 166	577	605
917	Muratura BONDENO LC2	-	28,0	103,6	204,0	1 113	1 166	605	602
910	Muratura BONDENO LC2	-	28,0	39,0	139,0	45	1 199	463	620
911	Muratura BONDENO LC2	-	28,0	101,0	139,0	115	1 199	620	617
912	Muratura BONDENO LC2	-	28,0	91,6	139,0	375	1 199	617	614
913	Muratura BONDENO LC2	-	28,0	48,4	139,0	445	1 199	614	574
914	Muratura BONDENO LC2	-	28,0	24,7	139,0	827	1 199	611	608
915	Muratura BONDENO LC2	-	28,0	85,3	139,0	882	1 199	608	577

Parete : 54

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
470	-3 286	1 107	0	0
575	-2 722	1 107	0	0
473	-2 430	1 107	0	0
471	-3 286	1 107	354	1
576	-2 722	1 107	354	1
474	-2 430	1 107	354	1



472	-3 286	1 107	1 268	3
577	-2 722	1 107	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
846	282	0	0
847	282	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
935	Muratura BONDENO LC2	-	14,0	564,1	354,0	282	177	846	847

Parete : 55

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
475	-2 430	1 520	0	0
527	-2 172	1 520	0	0
477	-1 877	1 520	0	0
476	-2 430	1 520	354	1
528	-2 172	1 520	354	1
478	-1 877	1 520	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
936	Muratura BONDENO LC2	-	14,0	553,0	354,0	276	177	527	528

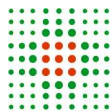
Parete : 56

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
479	-2 722	972	0	0
591	-2 430	972	0	0
529	-2 173	972	0	0
481	-1 877	972	0	0
480	-2 722	972	354	1
592	-2 430	972	354	1
530	-2 173	972	354	1
482	-1 877	972	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
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937	Nuova Muratura sempiena	-	28,0	553,0	354,0	569	177	529	530
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Parete : 57

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
483	-600	-1 920	0	0
485	-600	-1 494	0	0
484	-600	-1 920	354	1
486	-600	-1 494	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
939	Muratura BONDENO LC2	-	28,0	45,1	311,0	23	155	483	484
940	Muratura BONDENO LC2	-	28,0	80,0	311,0	385	155	485	486

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
938	Muratura BONDENO LC2	-	28,0	300,0	104,0	195	302	484	486

Parete : 58

Nodi 3D

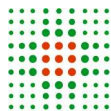
Nodo	X [cm]	Y [cm]	Z [cm]	Livello
483	-600	-1 920	0	0
487	602	-1 920	0	0
484	-600	-1 920	354	1
488	602	-1 920	354	1

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
848	451	0	0
850	701	0	0
849	451	354	1
851	701	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
945	Muratura BONDENO LC2	-	28,0	50,0	250,0	451	125	848	849



946	Muratura BONDENO LC2	-	28,0	50,0	250,0	701	125	850	851
944	Muratura BONDENO LC2	-	28,0	225,8	311,0	113	155	483	484
947	Muratura BONDENO LC2	-	28,0	275,6	311,0	1 064	155	487	488

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
941	Muratura BONDENO LC2	-	28,0	200,0	104,0	326	302	484	849
942	Muratura BONDENO LC2	-	28,0	200,0	104,0	576	302	849	851
943	Muratura BONDENO LC2	-	28,0	200,0	104,0	826	302	851	488

Parete : 59

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
489	599	-1 493	0	0
487	602	-1 920	0	0
490	599	-1 493	354	1
488	602	-1 920	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
949	Muratura BONDENO LC2	-	28,0	81,1	311,0	41	155	489	490
950	Muratura BONDENO LC2	-	28,0	45,9	311,0	404	155	487	488

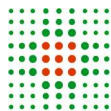
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
948	Muratura BONDENO LC2	-	28,0	300,0	104,0	231	302	490	488

Parete : 60

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
1	-3 504	-62	0	0
117	-3 504	-362	0	0
2	-3 504	-62	354	1
118	-3 504	-362	354	1



Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
953	Muratura BONDENO LC2	-	28,0	87,0	237,0	44	175	1	2
954	Muratura BONDENO LC2	-	28,0	92,2	237,0	253	175	117	118

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
951	Muratura BONDENO LC2	-	28,0	120,0	110,0	147	55	1	117
952	Muratura BONDENO LC2	-	28,0	120,0	124,0	147	292	2	118

Parete : 61

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
1	-3 504	-62	0	0
440	-3 290	-62	0	0
93	-3 099	-61	0	0
580	-2 860	-60	0	0
165	-2 694	-60	0	0
121	-2 429	-59	0	0
517	-2 173	-58	0	0
505	-2 160	-58	0	0
133	-1 892	-57	0	0
496	-1 876	-57	0	0
491	-1 454	-55	0	0
2	-3 504	-62	354	1
441	-3 290	-62	354	1
94	-3 099	-61	354	1
581	-2 860	-60	354	1
166	-2 694	-60	354	1
122	-2 429	-59	354	1
518	-2 173	-58	354	1
506	-2 160	-58	354	1
134	-1 892	-57	354	1
497	-1 876	-57	354	1
492	-1 454	-55	354	1
442	-3 290	-62	839	2
95	-3 099	-61	839	2
464	-2 722	-60	839	2
167	-2 694	-60	839	2
123	-2 429	-59	839	2
519	-2 173	-58	839	2
507	-2 160	-58	839	2
135	-1 892	-57	839	2



498	-1 876	-57	839	2
493	-1 454	-55	839	2
443	-3 290	-62	1 268	3
96	-3 099	-61	1 268	3
465	-2 722	-60	1 268	3
168	-2 694	-60	1 268	3
124	-2 429	-59	1 268	3
520	-2 173	-58	1 268	3
508	-2 160	-58	1 268	3
136	-1 892	-57	1 268	3
499	-1 876	-57	1 268	3
494	-1 454	-55	1 268	3
137	-1 892	-57	1 628	4
495	-1 454	-55	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
852	1 761	839	2
853	1 895	839	2
854	1 762	1 268	3
855	1 895	1 268	3
856	1 762	1 628	4
857	1 895	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
970	Muratura BONDENO LC2	-	28,0	353,0	250,0	925	125	165	166
971	Muratura BONDENO LC2	-	28,0	460,9	185,0	1 542	148	133	134
969	Muratura BONDENO LC2	-	28,0	658,1	311,0	329	155	93	94
972	Muratura BONDENO LC2	-	28,0	158,0	237,0	1 971	175	491	492
974	Muratura BONDENO LC2	-	28,0	43,0	220,0	1 761	574	497	852
975	Muratura BONDENO LC2	-	28,0	54,5	220,0	1 895	574	492	853
973	Muratura BONDENO LC2	-	28,0	26,5	352,5	1 642	589	497	498
976	Muratura BONDENO LC2	-	28,0	42,7	352,5	2 029	589	492	493
967	Muratura BONDENO LC2	-	28,0	596,3	485,0	512	597	94	95
978	Muratura BONDENO LC2	-	28,0	43,0	155,0	1 761	1 027	852	854
979	Muratura BONDENO LC2	-	28,0	54,5	155,0	1 895	1 027	853	855



977	Muratura BONDENO LC2	-	28,0	26,5	292,0	1 642	1 046	498	499
980	Muratura BONDENO LC2	-	28,0	42,7	292,0	2 029	1 046	493	494
968	Muratura BONDENO LC2	-	28,0	596,3	429,0	512	1 054	95	96
982	Muratura BONDENO LC2	-	28,0	43,0	190,0	1 762	1 363	854	856
983	Muratura BONDENO LC2	-	28,0	54,5	190,0	1 895	1 363	855	857
981	Muratura BONDENO LC2	-	28,0	43,3	301,3	1 634	1 419	499	137
984	Muratura BONDENO LC2	-	28,0	42,3	301,3	2 029	1 419	494	495

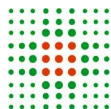
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
956	Muratura BONDENO LC2	-	28,0	120,0	110,0	1 832	55	496	491
955	Muratura BONDENO LC2	-	28,0	210,0	104,0	1 206	302	122	518
957	Muratura BONDENO LC2	-	28,0	102,5	234,0	1 829	347	497	492
958	Muratura BONDENO LC2	-	28,0	85,0	265,0	1 697	817	498	852
959	Muratura BONDENO LC2	-	28,0	85,0	265,0	1 825	817	852	853
960	Muratura BONDENO LC2	-	28,0	85,0	265,0	1 965	817	853	493
961	Muratura BONDENO LC2	-	28,0	85,0	164,0	1 698	1 186	499	854
962	Muratura BONDENO LC2	-	28,0	85,0	164,0	1 826	1 186	854	855
963	Muratura BONDENO LC2	-	28,0	85,0	164,0	1 965	1 186	855	494
964	Muratura BONDENO LC2	-	28,0	85,0	170,0	1 698	1 543	137	856
965	Muratura BONDENO LC2	-	28,0	85,0	170,0	1 826	1 543	856	857
966	Muratura BONDENO LC2	-	28,0	85,0	170,0	1 965	1 543	857	495

Parete : 62

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
3	-1 454	41	0	0
214	-888	41	0	0
219	-317	41	0	0
244	276	41	0	0
259	859	41	0	0



8	1 436	41	0	0
4	-1 454	41	354	1
215	-888	41	354	1
220	-317	41	354	1
245	276	41	354	1
260	859	41	354	1
9	1 436	41	354	1
5	-1 454	41	839	2
216	-888	41	839	2
221	-317	41	839	2
246	276	41	839	2
261	859	41	839	2
10	1 436	41	839	2
6	-1 454	41	1 268	3
217	-888	41	1 268	3
222	-317	41	1 268	3
247	276	41	1 268	3
262	859	41	1 268	3
11	1 436	41	1 268	3
7	-1 454	41	1 628	4
218	-888	41	1 628	4
223	-317	41	1 628	4
248	276	41	1 628	4
263	859	41	1 628	4
12	1 436	41	1 628	4

Nodi 2D

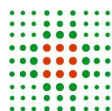
Nodo	X locale [cm]	Z [cm]	Livello
858	278	0	0
860	848	0	0
862	1 294	0	0
864	1 559	0	0
866	2 021	0	0
868	2 606	0	0
859	278	354	1
861	848	354	1
863	1 294	354	1
865	1 559	354	1
867	2 021	354	1
869	2 606	354	1
870	278	839	2
871	848	839	2
872	1 433	839	2
873	2 021	839	2
874	2 606	839	2
875	278	1 268	3
876	848	1 268	3
877	2 021	1 268	3
878	2 606	1 268	3
879	278	1 628	4



880	848	1 628	4
881	2 021	1 628	4
882	2 606	1 628	4

Macroelementi Maschi

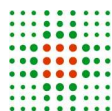
N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1038	Muratura BONDENO LC2	-	42,0	265,0	120,0	278	170	858	859
1039	Muratura BONDENO LC2	-	42,0	86,7	120,0	559	170	214	215
1040	Muratura BONDENO LC2	-	42,0	281,0	120,0	848	170	860	861
1045	Muratura BONDENO LC2	-	42,0	278,0	120,0	2 021	170	866	867
1046	Muratura BONDENO LC2	-	42,0	95,0	120,0	2 313	170	259	260
1047	Muratura BONDENO LC2	-	42,0	281,0	120,0	2 606	170	868	869
1042	Muratura BONDENO LC2	-	42,0	78,9	240,0	1 294	175	862	863
1043	Muratura BONDENO LC2	-	42,0	89,6	240,0	1 559	175	864	865
1037	Muratura BONDENO LC2	-	42,0	40,3	237,0	20	175	3	4
1048	Muratura BONDENO LC2	-	42,0	38,6	237,0	2 870	175	8	9
1041	Muratura BONDENO LC2	-	42,0	97,0	152,5	1 142	186	219	220
1044	Muratura BONDENO LC2	-	42,0	108,6	152,5	1 723	186	244	245
1050	Muratura BONDENO LC2	-	28,0	265,0	210,0	278	569	859	870
1051	Muratura BONDENO LC2	-	28,0	86,7	210,0	559	569	215	216
1052	Muratura BONDENO LC2	-	28,0	281,0	210,0	848	569	861	871
1055	Muratura BONDENO LC2	-	28,0	278,0	210,0	2 021	569	867	873
1056	Muratura BONDENO LC2	-	28,0	95,0	210,0	2 313	569	260	261
1057	Muratura BONDENO LC2	-	28,0	281,0	210,0	2 606	569	869	874
1049	Muratura BONDENO LC2	-	28,0	40,3	347,5	20	588	4	5
1053	Muratura BONDENO LC2	-	28,0	43,6	347,5	1 115	588	220	221
1054	Muratura BONDENO LC2	-	28,0	48,0	347,5	1 753	588	245	246
1058	Muratura BONDENO LC2	-	28,0	38,6	347,5	2 870	588	9	10
1036	Muratura BONDENO LC2	-	42,0	592,5	485,0	1 433	597	865	872



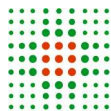
1059	Muratura BONDENO LC2	-	28,0	40,3	319,5	20	1 054	5	6
1067	Muratura BONDENO LC2	-	28,0	38,6	319,5	2 870	1 054	10	11
1060	Muratura BONDENO LC2	-	28,0	265,0	210,0	278	1 054	870	875
1061	Muratura BONDENO LC2	-	28,0	86,7	210,0	559	1 054	216	217
1062	Muratura BONDENO LC2	-	28,0	281,0	210,0	848	1 054	871	876
1063	Muratura BONDENO LC2	-	28,0	684,1	210,0	1 435	1 054	872	247
1064	Muratura BONDENO LC2	-	28,0	278,0	210,0	2 021	1 054	873	877
1065	Muratura BONDENO LC2	-	28,0	95,0	210,0	2 313	1 054	261	262
1066	Muratura BONDENO LC2	-	28,0	281,0	210,0	2 606	1 054	874	878
1069	Muratura BONDENO LC2	-	28,0	265,0	190,0	278	1 363	875	879
1070	Muratura BONDENO LC2	-	28,0	86,7	190,0	559	1 363	217	218
1071	Muratura BONDENO LC2	-	28,0	281,0	190,0	848	1 363	876	880
1074	Muratura BONDENO LC2	-	28,0	278,0	190,0	2 021	1 363	877	881
1075	Muratura BONDENO LC2	-	28,0	95,0	190,0	2 313	1 363	262	263
1076	Muratura BONDENO LC2	-	28,0	281,0	190,0	2 606	1 363	878	882
1072	Muratura BONDENO LC2	-	28,0	76,4	195,0	1 131	1 366	222	223
1073	Muratura BONDENO LC2	-	28,0	507,7	195,0	1 524	1 366	247	248
1068	Muratura BONDENO LC2	-	28,0	40,6	301,3	20	1 419	6	7
1077	Muratura BONDENO LC2	-	28,0	38,4	301,3	2 871	1 419	11	12

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
985	Muratura BONDENO LC2	-	42,0	105,0	110,0	93	55	3	858
988	Muratura BONDENO LC2	-	42,0	105,0	110,0	463	55	858	214
991	Muratura BONDENO LC2	-	42,0	105,0	110,0	655	55	214	860
994	Muratura BONDENO LC2	-	42,0	105,0	110,0	1 041	55	860	219
997	Muratura BONDENO LC2	-	42,0	65,0	110,0	1 223	55	219	862
998	Muratura BONDENO LC2	-	42,0	65,0	110,0	1 636	55	864	244



999	Muratura BONDENO LC2	-	42,0	105,0	110,0	1 830	55	244	866
1002	Muratura BONDENO LC2	-	42,0	105,0	110,0	2 213	55	866	259
1005	Muratura BONDENO LC2	-	42,0	105,0	110,0	2 413	55	259	868
1008	Muratura BONDENO LC2	-	42,0	105,0	110,0	2 799	55	868	8
986	Muratura BONDENO LC2	-	42,0	105,0	124,0	93	292	4	859
989	Muratura BONDENO LC2	-	42,0	105,0	124,0	463	292	859	215
992	Muratura BONDENO LC2	-	42,0	105,0	124,0	655	292	215	861
995	Muratura BONDENO LC2	-	42,0	105,0	124,0	1 041	292	861	220
1000	Muratura BONDENO LC2	-	42,0	105,0	124,0	1 830	292	245	867
1003	Muratura BONDENO LC2	-	42,0	105,0	124,0	2 213	292	867	260
1006	Muratura BONDENO LC2	-	42,0	105,0	124,0	2 413	292	260	869
1009	Muratura BONDENO LC2	-	42,0	105,0	124,0	2 799	292	869	9
987	Muratura BONDENO LC2	-	28,0	105,0	110,0	93	409	4	859
990	Muratura BONDENO LC2	-	28,0	105,0	110,0	463	409	859	215
993	Muratura BONDENO LC2	-	28,0	105,0	110,0	655	409	215	861
996	Muratura BONDENO LC2	-	28,0	105,0	110,0	1 041	409	861	220
1001	Muratura BONDENO LC2	-	28,0	105,0	110,0	1 830	409	245	867
1004	Muratura BONDENO LC2	-	28,0	105,0	110,0	2 213	409	867	260
1007	Muratura BONDENO LC2	-	28,0	105,0	110,0	2 413	409	260	869
1010	Muratura BONDENO LC2	-	28,0	105,0	110,0	2 799	409	869	9
1011	Muratura BONDENO LC2	-	28,0	105,0	275,0	93	812	5	870
1012	Muratura BONDENO LC2	-	28,0	105,0	275,0	463	812	870	216
1013	Muratura BONDENO LC2	-	28,0	105,0	275,0	655	812	216	871
1014	Muratura BONDENO LC2	-	28,0	105,0	275,0	1 041	812	871	221
1015	Muratura BONDENO LC2	-	28,0	105,0	275,0	1 830	812	246	873
1016	Muratura BONDENO LC2	-	28,0	105,0	275,0	2 213	812	873	261
1017	Muratura BONDENO LC2	-	28,0	105,0	275,0	2 413	812	261	874
1018	Muratura	-	28,0	105,0	275,0	2 799	812	874	10



	BONDENO LC2								
1019	Muratura BONDENO LC2	-	28,0	105,0	109,0	93	1 214	6	875
1020	Muratura BONDENO LC2	-	28,0	105,0	109,0	463	1 214	875	217
1021	Muratura BONDENO LC2	-	28,0	105,0	109,0	655	1 214	217	876
1022	Muratura BONDENO LC2	-	28,0	105,0	109,0	1 041	1 214	876	222
1023	Muratura BONDENO LC2	-	28,0	105,0	109,0	1 830	1 214	247	877
1024	Muratura BONDENO LC2	-	28,0	105,0	109,0	2 213	1 214	877	262
1025	Muratura BONDENO LC2	-	28,0	105,0	109,0	2 413	1 214	262	878
1026	Muratura BONDENO LC2	-	28,0	105,0	109,0	2 799	1 214	878	11
1027	Muratura BONDENO LC2	-	28,0	105,0	170,0	93	1 543	7	879
1028	Muratura BONDENO LC2	-	28,0	105,0	170,0	463	1 543	879	218
1029	Muratura BONDENO LC2	-	28,0	105,0	170,0	655	1 543	218	880
1030	Muratura BONDENO LC2	-	28,0	105,0	170,0	1 041	1 543	880	223
1032	Muratura BONDENO LC2	-	28,0	105,0	170,0	1 830	1 543	248	881
1033	Muratura BONDENO LC2	-	28,0	105,0	170,0	2 213	1 543	881	263
1034	Muratura BONDENO LC2	-	28,0	105,0	170,0	2 413	1 543	263	882
1035	Muratura BONDENO LC2	-	28,0	105,0	170,0	2 799	1 543	882	12
1031	Muratura BONDENO LC2	-	28,0	100,0	160,0	1 220	1 548	223	248

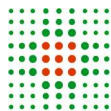
Parete : 63

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
113	-3 604	-464	0	0
117	-3 504	-362	0	0
114	-3 604	-464	354	1
118	-3 504	-362	354	1
115	-3 604	-464	839	2
119	-3 504	-362	839	2
116	-3 604	-464	1 268	3
120	-3 504	-362	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
883	72	0	0



884	72	354	1
885	72	839	2
886	72	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1078	Muratura BONDENO LC2	-	28,0	143,3	354,0	72	177	883	884
1079	Muratura BONDENO LC2	-	28,0	143,3	485,0	72	597	884	885
1080	Muratura BONDENO LC2	-	28,0	143,3	429,0	72	1 054	885	886

Parete : 64

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
500	1 436	-42	0	0
421	1 868	-42	0	0
425	1 881	-42	0	0
355	2 144	-42	0	0
314	2 159	-42	0	0
345	2 413	-42	0	0
339	2 431	-42	0	0
365	2 678	-42	0	0
331	2 719	-42	0	0
33	3 087	-42	0	0
29	3 159	-42	0	0
501	1 436	-42	354	1
422	1 868	-42	354	1
426	1 881	-42	354	1
356	2 144	-42	354	1
315	2 159	-42	354	1
346	2 413	-42	354	1
340	2 431	-42	354	1
366	2 678	-42	354	1
332	2 719	-42	354	1
34	3 087	-42	354	1
30	3 159	-42	354	1
502	1 436	-42	839	2
423	1 868	-42	839	2
427	1 881	-42	839	2
357	2 144	-42	839	2
316	2 159	-42	839	2
347	2 413	-42	839	2
367	2 678	-42	839	2
333	2 719	-42	839	2
35	3 087	-42	839	2
31	3 159	-42	839	2



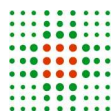
503	1 436	-42	1 268	3
424	1 868	-42	1 268	3
428	1 881	-42	1 268	3
358	2 144	-42	1 268	3
348	2 413	-42	1 268	3
368	2 678	-42	1 268	3
334	2 719	-42	1 268	3
36	3 087	-42	1 268	3
32	3 159	-42	1 268	3
504	1 436	-42	1 628	4
429	1 881	-42	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
890	154	0	0
891	154	354	1
887	686	354	1
892	154	839	2
893	289	839	2
888	686	839	2
894	154	1 268	3
895	290	1 268	3
889	723	1 268	3
896	154	1 628	4
897	290	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1102	Muratura BONDENO LC2	-	28,0	193,6	225,0	951	113	345	346
1101	Muratura BONDENO LC2	-	28,0	486,4	190,0	505	150	425	426
1103	Muratura BONDENO LC2	-	28,0	555,8	305,2	1 445	153	331	332
1099	Muratura BONDENO LC2	-	28,0	46,5	257,0	23	181	500	501
1100	Muratura BONDENO LC2	-	28,0	45,0	160,0	154	190	890	891
1105	Muratura BONDENO LC2	-	28,0	45,0	160,0	154	544	891	892
1106	Muratura BONDENO LC2	-	28,0	55,8	160,0	289	544	422	893
1108	Nuova Muratura sempiena	-	28,0	12,2	456,1	451	582	426	427
1109	Nuova Muratura sempiena	-	28,0	12,2	456,1	680	582	887	888
1110	Nuova Muratura sempiena	-	28,0	19,0	456,1	733	582	315	316
1111	Nuova Muratura sempiena	-	28,0	19,0	456,1	968	582	346	347



1104	Muratura BONDENO LC2	-	28,0	46,5	322,5	23	583	501	502
1107	Muratura BONDENO LC2	-	28,0	43,0	322,5	424	583	422	423
1096	Muratura BONDENO LC2	-	28,0	37,3	485,0	704	597	356	357
1097	Muratura BONDENO LC2	-	28,0	746,2	485,0	1 350	597	332	333
1113	Muratura BONDENO LC2	-	28,0	45,0	145,0	154	1 022	892	894
1114	Muratura BONDENO LC2	-	28,0	55,8	145,0	289	1 022	893	895
1112	Muratura BONDENO LC2	-	28,0	46,5	287,0	23	1 045	502	503
1115	Muratura BONDENO LC2	-	28,0	320,8	287,0	563	1 045	427	428
1098	Muratura BONDENO LC2	-	28,0	746,2	429,0	1 350	1 054	333	334
1117	Muratura BONDENO LC2	-	28,0	45,0	190,0	154	1 363	894	896
1118	Muratura BONDENO LC2	-	28,0	56,0	190,0	290	1 363	895	897
1116	Muratura BONDENO LC2	-	28,0	46,7	301,3	23	1 419	503	504
1119	Muratura BONDENO LC2	-	28,0	42,6	301,3	424	1 419	424	429

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
1081	Muratura BONDENO LC2	-	28,0	85,0	110,0	89	55	500	890
1083	Muratura BONDENO LC2	-	28,0	85,0	110,0	219	55	890	421
1085	Muratura BONDENO LC2	-	28,0	157,3	134,0	824	287	315	346
1082	Muratura BONDENO LC2	-	28,0	85,0	194,0	89	367	501	891
1084	Muratura BONDENO LC2	-	28,0	85,0	194,0	219	367	891	422
1086	Muratura BONDENO LC2	-	28,0	85,0	325,0	89	787	502	892
1087	Muratura BONDENO LC2	-	28,0	85,0	325,0	219	787	892	893
1088	Muratura BONDENO LC2	-	28,0	85,0	325,0	360	787	893	423
1089	Nuova Muratura sempiena	-	28,0	216,0	62,0	850	808	316	347
1090	Muratura BONDENO LC2	-	28,0	85,0	174,0	89	1 181	503	894
1091	Muratura BONDENO LC2	-	28,0	85,0	174,0	219	1 181	894	895
1092	Muratura BONDENO LC2	-	28,0	85,0	174,0	360	1 181	895	424



1093	Muratura BONDENO LC2	-	28,0	85,0	170,0	89	1 543	504	896
1094	Muratura BONDENO LC2	-	28,0	85,0	170,0	219	1 543	896	897
1095	Muratura BONDENO LC2	-	28,0	85,0	170,0	360	1 543	897	429

Parete : 65

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
29	3 159	-42	0	0
401	3 159	391	0	0
323	3 159	982	0	0
25	3 159	1 802	0	0
30	3 159	-42	354	1
584	3 159	204	354	1
402	3 159	391	354	1
324	3 159	982	354	1
26	3 159	1 802	354	1
31	3 159	-42	839	2
403	3 159	391	839	2
325	3 159	982	839	2
27	3 159	1 802	839	2
32	3 159	-42	1 268	3
404	3 159	391	1 268	3
326	3 159	982	1 268	3
28	3 159	1 802	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
898	1 353	0	0
899	1 710	354	1
900	799	839	2
901	1 366	839	2
902	1 710	839	2
903	799	1 268	3
904	1 366	1 268	3
905	1 710	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1136	Muratura BONDENO LC2	-	28,0	33,7	252,0	449	179	401	402
1139	Muratura BONDENO LC2	-	28,0	99,2	252,0	1 794	179	25	26
1137	Muratura BONDENO LC2	-	28,0	396,0	140,0	1 014	180	323	324



1138	Muratura BONDENO LC2	-	28,0	82,0	140,0	1 353	180	898	324
1141	Muratura BONDENO LC2	-	28,0	115,0	250,0	799	589	324	900
1142	Muratura BONDENO LC2	-	28,0	118,0	250,0	995	589	324	325
1143	Muratura BONDENO LC2	-	28,0	364,0	250,0	1 366	589	324	901
1144	Muratura BONDENO LC2	-	28,0	62,5	250,0	1 710	589	899	902
1140	Muratura BONDENO LC2	-	28,0	178,9	367,5	522	594	402	403
1145	Muratura BONDENO LC2	-	28,0	37,6	367,5	1 825	594	26	27
1147	Muratura BONDENO LC2	-	28,0	115,0	210,0	799	1 009	900	903
1148	Muratura BONDENO LC2	-	28,0	118,0	210,0	995	1 009	325	326
1149	Muratura BONDENO LC2	-	28,0	364,0	210,0	1 366	1 009	901	904
1150	Muratura BONDENO LC2	-	28,0	62,5	210,0	1 710	1 009	902	905
1146	Muratura BONDENO LC2	-	28,0	178,9	319,5	522	1 039	403	404
1151	Muratura BONDENO LC2	-	28,0	37,6	319,5	1 825	1 039	27	28

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
1120	Muratura BONDENO LC2	-	28,0	350,0	110,0	641	55	401	323
1122	Muratura BONDENO LC2	-	28,0	100,0	110,0	1 262	55	323	898
1123	Muratura BONDENO LC2	-	28,0	350,0	110,0	1 569	55	898	25
1121	Muratura BONDENO LC2	-	28,0	203,5	204,0	668	362	402	324
1124	Muratura BONDENO LC2	-	28,0	222,7	204,0	1 583	362	324	899
1125	Muratura BONDENO LC2	-	28,0	43,8	204,0	1 747	362	899	26
1126	Muratura BONDENO LC2	-	28,0	130,0	190,0	676	809	403	900
1127	Muratura BONDENO LC2	-	28,0	80,0	190,0	896	809	900	325
1128	Muratura BONDENO LC2	-	28,0	130,0	190,0	1 119	809	325	901
1129	Muratura BONDENO LC2	-	28,0	130,0	190,0	1 613	809	901	902
1130	Muratura BONDENO LC2	-	28,0	65,0	190,0	1 773	809	902	27
1131	Muratura BONDENO LC2	-	28,0	130,0	154,0	676	1 191	404	903



1132	Muratura BONDENO LC2	-	28,0	80,0	154,0	896	1 191	903	326
1133	Muratura BONDENO LC2	-	28,0	130,0	154,0	1 119	1 191	326	904
1134	Muratura BONDENO LC2	-	28,0	130,0	154,0	1 613	1 191	904	905
1135	Muratura BONDENO LC2	-	28,0	65,0	154,0	1 773	1 191	905	28

Parete : 66

Nodi 3D

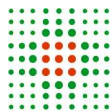
Nodo	X [cm]	Y [cm]	Z [cm]	Livello
505	-2 160	-58	0	0
513	-2 159	-584	0	0
509	-2 159	-865	0	0
506	-2 160	-58	354	1
514	-2 159	-584	354	1
510	-2 159	-865	354	1
507	-2 160	-58	839	2
515	-2 159	-584	839	2
511	-2 159	-865	839	2
508	-2 160	-58	1 268	3
516	-2 159	-584	1 268	3
512	-2 159	-865	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
906	269	0	0
907	269	354	1
908	330	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1159	Muratura BONDENO LC2	-	28,0	79,6	225,0	269	113	906	907
1160	Muratura BONDENO LC2	-	28,0	181,2	237,5	509	119	513	514
1158	Muratura BONDENO LC2	-	28,0	119,0	303,9	60	152	505	506
1161	Muratura BONDENO LC2	-	28,0	88,0	311,0	764	155	509	510
1163	Muratura BONDENO LC2	-	28,0	40,9	157,5	330	488	908	507
1162	Muratura BONDENO LC2	-	28,0	214,1	402,3	107	555	506	507
1164	Muratura BONDENO LC2	-	28,0	46,7	290,0	503	583	514	515
1165	Muratura	-	28,0	416,1	358,2	208	1 018	507	508



	BONDENO LC2								
1166	Muratura BONDENO LC2	-	28,0	30,6	358,2	511	1 018	515	516

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
1152	Muratura BONDENO LC2	-	28,0	82,4	129,0	208	290	506	907
1153	Muratura BONDENO LC2	-	28,0	30,6	129,0	304	290	907	908
1155	Muratura BONDENO LC2	-	28,0	120,0	104,0	660	302	514	510
1154	Muratura BONDENO LC2	-	28,0	109,6	239,0	395	345	908	514
1156	Muratura BONDENO LC2	-	28,0	105,0	280,0	436	699	507	515
1157	Muratura BONDENO LC2	-	28,0	80,0	209,0	456	1 164	508	516

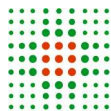
Parete : 67

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
517	-2 173	-58	0	0
523	-2 173	370	0	0
529	-2 173	972	0	0
527	-2 172	1 520	0	0
521	-2 172	2 115	0	0
518	-2 173	-58	354	1
524	-2 173	370	354	1
530	-2 173	972	354	1
528	-2 172	1 520	354	1
522	-2 172	2 115	354	1
519	-2 173	-58	839	2
525	-2 173	370	839	2
520	-2 173	-58	1 268	3
526	-2 173	370	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
909	1 408	0	0
913	1 845	0	0
910	1 408	354	1
914	1 845	354	1
915	80	839	2
911	160	839	2
916	80	1 268	3
912	160	1 268	3



Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1177	Muratura BONDENO LC2	-	28,0	52,0	250,0	1 845	125	913	914
1172	Muratura BONDENO LC2	-	14,0	169,0	302,6	84	151	517	518
1173	Muratura BONDENO LC2	-	14,0	169,0	302,6	343	151	523	524
1174	Muratura BONDENO LC2	-	28,0	293,6	302,6	575	151	523	524
1175	Muratura BONDENO LC2	-	28,0	596,3	302,6	1 110	151	529	530
1176	Muratura BONDENO LC2	-	28,0	30,9	311,0	1 593	155	527	528
1178	Muratura BONDENO LC2	-	28,0	61,8	311,0	2 142	155	521	522
1179	Muratura BONDENO LC2	-	28,0	298,9	402,3	149	555	518	911
1180	Muratura BONDENO LC2	-	28,0	49,0	402,3	403	555	524	525
1171	Muratura BONDENO LC2	-	28,0	159,9	429,0	80	1 054	915	916

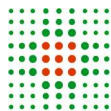
Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
1167	Muratura BONDENO LC2	-	28,0	90,0	134,0	767	287	524	530
1168	Muratura BONDENO LC2	-	28,0	210,0	104,0	1 714	302	528	914
1169	Muratura BONDENO LC2	-	28,0	240,0	104,0	1 991	302	914	522
1170	Muratura BONDENO LC2	-	28,0	80,0	265,0	339	707	911	525

Parete : 68

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
531	-317	-402	0	0
552	-137	-401	0	0
562	93	-400	0	0
535	274	-400	0	0
532	-317	-402	354	1
553	-137	-401	354	1
563	93	-400	354	1
536	274	-400	354	1
533	-317	-402	839	2
554	-137	-401	839	2
564	93	-400	839	2



537	274	-400	839	2
534	-317	-402	1 268	3
555	-137	-401	1 268	3
565	93	-400	1 268	3
538	274	-400	1 268	3
556	-137	-401	1 628	4
566	93	-400	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1185	Muratura BONDENO LC2	-	28,0	65,0	300,4	212	150	552	553
1186	Muratura BONDENO LC2	-	28,0	65,0	300,4	377	150	562	563
1187	Muratura BONDENO LC2	-	28,0	68,7	402,3	214	555	553	554
1188	Muratura BONDENO LC2	-	28,0	51,3	402,3	384	555	563	564
1189	Muratura BONDENO LC2	-	14,0	68,7	358,2	214	1 018	554	555
1190	Muratura BONDENO LC2	-	14,0	51,3	358,2	384	1 018	564	565
1191	Muratura BONDENO LC2	-	14,0	73,1	304,7	216	1 420	555	556
1192	Muratura BONDENO LC2	-	14,0	46,9	304,7	386	1 420	565	566

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
1181	Muratura BONDENO LC2	-	28,0	105,0	144,0	299	282	553	563
1182	Muratura BONDENO LC2	-	28,0	110,0	265,0	303	707	554	564
1183	Muratura BONDENO LC2	-	14,0	110,0	209,0	305	1 164	555	565
1184	Muratura BONDENO LC2	-	14,0	110,0	150,0	308	1 553	556	566

Parete : 69

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
539	-317	-177	0	0
547	-137	-177	0	0
557	93	-177	0	0
543	275	-177	0	0
540	-317	-177	354	1
548	-137	-177	354	1
558	93	-177	354	1



544	275	-177	354	1
541	-317	-177	839	2
549	-137	-177	839	2
559	93	-177	839	2
545	275	-177	839	2
542	-317	-177	1 268	3
550	-137	-177	1 268	3
560	93	-177	1 268	3
546	275	-177	1 268	3
551	-137	-177	1 628	4
561	93	-177	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
917	295	0	0
918	295	354	1
919	295	839	2
920	295	1 268	3
921	295	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1193	Muratura BONDENO LC2	-	28,0	230,0	354,0	295	177	917	918
1194	Muratura BONDENO LC2	-	28,0	230,0	485,0	295	597	918	919
1195	Muratura BONDENO LC2	-	28,0	230,0	429,0	295	1 054	919	920
1196	Muratura BONDENO LC2	-	28,0	230,0	360,0	295	1 448	920	921

Parete : 70

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
547	-137	-177	0	0
552	-137	-401	0	0
548	-137	-177	354	1
553	-137	-401	354	1
549	-137	-177	839	2
554	-137	-401	839	2
550	-137	-177	1 268	3
555	-137	-401	1 268	3
551	-137	-177	1 628	4
556	-137	-401	1 628	4

Nodi 2D



Nodo	X locale [cm]	Z [cm]	Livello
922	112	0	0
923	112	354	1
924	112	839	2
925	112	1 268	3
926	112	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1197	Muratura BONDENO LC2	-	10,0	224,0	354,0	112	177	922	923
1198	Muratura BONDENO LC2	-	28,0	224,0	485,0	112	597	923	924
1199	Muratura BONDENO LC2	-	28,0	224,0	429,0	112	1 054	924	925
1200	Muratura BONDENO LC2	-	28,0	224,0	360,0	112	1 448	925	926

Parete : 71

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
557	93	-177	0	0
562	93	-400	0	0
558	93	-177	354	1
563	93	-400	354	1
559	93	-177	839	2
564	93	-400	839	2
560	93	-177	1 268	3
565	93	-400	1 268	3
561	93	-177	1 628	4
566	93	-400	1 628	4

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
927	112	0	0
928	112	354	1
929	112	839	2
930	112	1 268	3
931	112	1 628	4

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1201	Muratura BONDENO LC2	-	42,0	223,2	354,0	112	177	927	928
1202	Muratura BONDENO LC2	-	28,0	223,2	485,0	112	597	928	929



1203	Muratura BONDENO LC2	-	28,0	223,2	429,0	112	1 054	929	930
1204	Muratura BONDENO LC2	-	28,0	223,2	360,0	112	1 448	930	931

Parete : 72

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
567	-3 284	1 490	0	0
571	-2 722	1 490	0	0
568	-3 284	1 490	354	1
572	-2 722	1 490	354	1
569	-3 284	1 490	839	2
573	-2 722	1 490	839	2
570	-3 284	1 490	1 268	3
574	-2 722	1 490	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
932	281	839	2
933	281	1 268	3

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1205	Muratura BONDENO LC2	-	28,0	562,6	429,0	281	1 054	932	933

Parete : 73

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
571	-2 722	1 490	0	0
572	-2 722	1 490	354	1
476	-2 430	1 520	354	1

Parete : 74

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
578	-2 863	370	0	0
580	-2 860	-60	0	0
579	-2 863	370	354	1
581	-2 860	-60	354	1

Nodi 2D



Nodo	X locale [cm]	Z [cm]	Livello
934	132	0	0
935	132	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1210	Muratura BONDENO LC2	-	10,0	32,0	152,5	132	126	934	935
1209	Muratura BONDENO LC2	-	10,0	35,5	305,2	18	153	578	579
1211	Muratura BONDENO LC2	-	10,0	62,9	214,5	399	170	580	581

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
1207	Muratura BONDENO LC2	-	10,0	220,0	100,0	258	50	934	580
1208	Muratura BONDENO LC2	-	10,0	220,0	179,0	258	265	935	581
1206	Muratura BONDENO LC2	-	10,0	80,0	124,0	76	292	579	935

Parete : 75

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
582	2 719	203	0	0
583	2 719	203	354	1
584	3 159	204	354	1

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
938	178	0	0
936	356	0	0
939	178	354	1
937	356	354	1

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1212	Muratura BONDENO LC2	-	56,0	355,6	354,0	178	177	938	939

Parete : 76

Nodi 3D



Nodo	X [cm]	Y [cm]	Z [cm]	Livello
117	-3 504	-362	0	0
587	-3 098	-360	0	0
118	-3 504	-362	354	1
588	-3 098	-360	354	1
119	-3 504	-362	839	2
589	-3 098	-360	839	2
120	-3 504	-362	1 268	3
590	-3 098	-360	1 268	3

Nodi 2D

Nodo	X locale [cm]	Z [cm]	Livello
940	203	354	1
941	203	839	2

Macroelementi Maschi

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sopra	Nodo sotto
1215	Nuova Muratura sempiana	-	28,0	98,8	302,6	49	151	117	118
1216	Nuova Muratura sempiana	-	28,0	106,7	302,6	352	151	587	588
1214	Muratura BONDENO LC2	-	28,0	405,5	485,0	203	597	940	941
1217	Muratura BONDENO LC2	-	28,0	124,5	314,5	62	1 028	119	120
1218	Muratura BONDENO LC2	-	28,0	161,1	314,5	325	1 028	589	590

Macroelementi Fasce

N.	Materiale	Rinforzo	Spessore [cm]	Base [cm]	Altezza [cm]	Baricentro X [cm]	Baricentro Z [cm]	Nodo sinistro	Nodo destro
1213	Muratura BONDENO LC2	-	28,0	120,0	194,0	184	1 171	120	590

Parete : 77

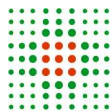
Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
597	-3 288	568	1 268	3
599	-2 722	568	1 268	3
598	-1 876	568	1 268	3

Parete : 78

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
600	-3 287	812	1 268	3



602	-2 722	812	1 268	3
601	-1 876	812	1 268	3

Parete : 79

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
603	-3 286	1 053	1 268	3
605	-2 722	1 053	1 268	3
604	-1 877	1 054	1 268	3

Parete : 80

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
606	-3 285	1 275	1 268	3
608	-2 722	1 275	1 268	3
607	-1 877	1 276	1 268	3

Parete : 81

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
609	-3 285	1 452	1 268	3
611	-2 722	1 453	1 268	3
610	-1 877	1 453	1 268	3

Parete : 82

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
612	-3 284	1 693	1 268	3
614	-2 722	1 694	1 268	3
613	-1 877	1 694	1 268	3

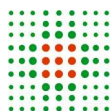
Parete : 83

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
615	-3 283	1 884	1 268	3
617	-2 722	1 884	1 268	3
616	-1 877	1 884	1 268	3

Parete : 84

Nodi 3D



Nodo	X [cm]	Y [cm]	Z [cm]	Livello
618	-3 282	2 050	1 268	3
620	-2 722	2 050	1 268	3
619	-1 877	2 050	1 268	3

Parete : 85

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
621	-3 287	686	1 268	3
623	-2 722	687	1 268	3
622	-1 876	688	1 268	3

Parete : 86

Nodi 3D

Nodo	X [cm]	Y [cm]	Z [cm]	Livello
624	-3 288	427	1 268	3
626	-2 722	427	1 268	3
625	-1 876	428	1 268	3

(*) Elementi di copertura

5. CARICHI

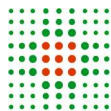
Le verifiche allo stato limite ultimo (SLV) e allo stato limite di esercizio (SLD; SLO); devono essere effettuate per la seguente combinazione della azione sismica con le altre azioni [Norme Tecniche 2008 p.3.2.4].

$$E + G_1 + G_2 + \sum_i \Psi_{2i} Q_{Ki}$$

dove:

- E azione sismica per lo stato limite in esame;
- G₁ peso proprio di tutti gli elementi strutturali;
- G₂ peso proprio di tutti gli elementi non strutturali;
- ψ_{2i} coefficiente di combinazione;
- Q_{Ki} valore caratteristico della azione variabile;

Gli effetti dell'azione sismica saranno valutati tenendo conto delle masse associate ai seguenti carichi gravitazionali:



$$G_1 + G_2 + \sum_i \Psi_{2i} Q_{Ki}$$

I valori dei vari coefficienti sono scelti in base alla destinazione d'uso dei vari solai secondo quanto indicato nella norma. [Norme Tecniche 2008 Tabella 2.5.1].

N. Carico	Livello	Tipo	Gk1 [daN/m2]	Gk2 [daN/m2]	Qk [daN/m2]	Ψ2
12	4	Lineare [daN/m]	2 600	0	0	0,30
13	4	Lineare [daN/m]	2 600	0	0	0,30
14	4	Lineare [daN/m]	2 600	0	0	0,30
15	4	Lineare [daN/m]	2 600	0	0	0,30

N. Solaio	Gk1 [daN/m2]	Gk2 [daN/m2]	Qk [daN/m2]	Ψ2
80	385	260	300	0,60
81	385	260	300	0,60
238	150	110	80	0,00
239	335	280	300	0,60
244	475	260	300	0,60
33	300	300	400	0,60
182	385	260	300	0,60
10	335	280	300	0,60
11	335	280	300	0,60
12	335	280	300	0,60
133	335	280	300	0,60
38	250	220	300	0,60
24	385	260	300	0,60
40	335	280	300	0,60
195	295	220	80	0,00
55	335	280	300	0,60
42	385	260	300	0,60
43	385	260	300	0,60
44	385	260	300	0,60
45	300	320	400	0,60
46	300	150	400	0,60
187	385	260	300	0,60
163	295	220	75	0,00
64	335	280	300	0,60
65	385	260	300	0,60
245	150	110	80	0,00
246	335	280	300	0,60
144	475	260	300	0,60
50	335	280	300	0,60
200	295	220	75	0,00



237	150	110	80	0,00
61	335	280	300	0,60
140	385	260	300	0,60
75	385	260	300	0,60
164	295	220	75	0,00
165	295	220	75	0,00
166	295	220	75	0,00
167	295	220	75	0,00
168	295	220	75	0,00
34	385	260	300	0,60
95	385	260	300	0,60
53	335	280	300	0,60
209	295	220	75	0,00
196	385	260	300	0,60
58	335	280	300	0,60
250	475	260	300	0,60
4	335	280	300	0,60
251	300	285	400	0,60
190	280	140	80	0,00
137	385	260	300	0,60
188	300	285	400	0,60
217	300	230	75	0,00
222	295	220	75	0,00
223	295	220	75	0,00
224	150	110	80	0,00
225	150	110	80	0,00
87	385	260	300	0,60
88	385	260	300	0,60
89	385	260	300	0,60
90	385	260	300	0,60
28	325	240	300	0,60
29	385	260	300	0,60
30	310	310	300	0,60
31	300	300	400	0,60
99	385	260	300	0,60
228	150	110	80	0,00
226	150	110	80	0,00
51	385	260	300	0,60
79	385	260	300	0,60
48	335	280	300	0,60
47	335	280	300	0,60
49	335	280	300	0,60
82	385	260	300	0,60
83	385	260	300	0,60
85	385	260	300	0,60
86	385	260	300	0,60
241	335	280	300	0,60
173	280	140	80	0,00
37	385	260	300	0,60
236	150	110	80	0,00



186	300	285	400	0,60
66	385	260	300	0,60
67	385	260	300	0,60
136	385	260	300	0,60
97	300	285	400	0,60
98	300	285	400	0,60
211	725	100	75	0,00
19	385	260	300	0,60
20	385	260	300	0,60
21	385	260	300	0,60
22	385	260	300	0,60
151	475	260	300	0,60
208	295	220	75	0,00
150	475	260	300	0,60
177	385	260	300	0,60
14	335	280	300	0,60
39	335	280	300	0,60
91	385	260	300	0,60
92	385	260	300	0,60
94	385	260	300	0,60
68	385	260	300	0,60
139	385	260	300	0,60
27	385	260	300	0,60
142	475	260	300	0,60
184	385	260	300	0,60
13	385	260	300	0,60
242	335	280	300	0,60
202	550	130	75	0,00
255	385	260	300	0,60
26	385	260	300	0,60
96	300	285	400	0,60
258	475	260	300	0,60
263	295	220	75	0,00
264	295	220	75	0,00
77	385	260	300	0,60
260	385	260	300	0,60
203	550	130	75	0,00
63	385	260	300	0,60
152	385	260	300	0,60
153	300	285	400	0,60
35	385	260	300	0,60
36	385	260	300	0,60
185	385	260	300	0,60
191	280	140	80	0,00
135	385	260	300	0,60
25	335	280	300	0,60
192	295	220	75	0,00
189	385	260	300	0,60
261	295	220	75	0,00
178	385	260	300	0,60



179	385	260	300	0,60
180	385	260	300	0,60
171	385	260	300	0,60
32	300	300	400	0,60
181	385	260	300	0,60
216	300	230	75	0,00
230	150	110	80	0,00
174	280	140	80	0,00
175	385	260	300	0,60
176	385	260	300	0,60
23	385	260	300	0,60
147	385	260	300	0,60
5	335	280	300	0,60
6	335	280	300	0,60
8	335	280	300	0,60
243	550	130	75	0,00
229	150	110	80	0,00
9	335	280	300	0,60
100	385	260	300	0,60
101	385	260	300	0,60
102	385	260	300	0,60
231	150	110	80	0,00
232	150	110	80	0,00
234	150	110	80	0,00
235	150	110	80	0,00
157	475	260	300	0,60
212	725	100	80	0,00
213	725	100	80	0,00
214	725	100	75	0,00
215	300	230	75	0,00
172	295	220	75	0,00
183	405	453	300	0,60
227	150	110	80	0,00
145	475	260	300	0,60
138	385	260	300	0,60
262	385	260	300	0,60
210	385	260	300	0,60
1	335	280	300	0,60
252	335	280	300	0,60
253	385	260	300	0,60
257	385	260	300	0,60
41	335	280	300	0,60
193	295	220	75	0,00
248	300	230	75	0,00
134	385	260	300	0,60
18	335	280	300	0,60
54	335	280	300	0,60
52	335	280	300	0,60
254	385	260	300	0,60
194	295	220	75	0,00



256	385	260	300	0,60
197	385	260	300	0,60
3	335	280	300	0,60
259	295	220	75	0,00
146	385	260	300	0,60
76	385	260	300	0,60

N. Volta	Gk1 [daN/m2]	Gk2 [daN/m2]	Qk [daN/m2]	Ψ_2
1	310	310	300	0,60
2	310	310	300	0,60

6. ANALISI INCREMENTALE A COLLASSO (PUSH-OVER)

Al fine di eseguire le dovute verifiche nei riguardi dell'edificio in questione, si è deciso di procedere con l'esecuzione di una analisi statica non lineare.

Le verifiche richieste si concretizzano nel confronto tra la curva di capacità per le diverse condizioni previste e la domanda di spostamento prevista dalla normativa.

La curva di capacità è individuata mediante un diagramma spostamento-taglio massimo alla base.

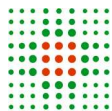
Secondo le prescrizioni da normativa [D.M. 14 gennaio 2008 p. 7.3.4.1.], le condizioni di carico da esaminare devono considerare almeno due distribuzioni di forze d'inerzia, ricadenti l'una nelle distribuzioni principali (Gruppo 1) e l'altra nelle distribuzioni secondarie (Gruppo 2) appresso illustrate.

- distribuzione proporzionale alle forze statiche (Gruppo 1)
- distribuzione uniforme di forze, da intendersi come derivata da una distribuzione uniforme di accelerazioni lungo l'altezza della costruzione (Gruppo 2);

L'analisi, eseguita in controllo di spostamento, procede al calcolo della distribuzione di forze che genera il valore dello spostamento richiesto. L'analisi viene fatta continuare fino a che non si verifica il decadimento del taglio del 20% dal suo valore di picco. Si calcola così il valore dello spostamento massimo alla base dell'edificio generato da quella distribuzione di forze. Questo valore di spostamento costituisce il valore ultimo dell'edificio.

Lo spostamento preso in esame per il tracciamento della curva di capacità è quello di un punto dell'edificio detto nodo di controllo.

La normativa richiede il tracciamento di una curva di capacità bi-lineare di un sistema equivalente (SDOF). Il tracciamento di tale curva deve avvenire con una retta che, passando per l'origine interseca la curva del



sistema reale in corrispondenza del 70% del valore di picco; la seconda retta risulterà parallela all'asse degli spostamenti tale da generare l'equivalenza delle aree tra i diagrammi del sistema reale e quello equivalente.

La determinazione della curva relativa al sistema equivalente, permette di determinare il periodo con cui ricavare lo spostamento massimo richiesto dal sisma, secondo gli spettri riportati sulla normativa .

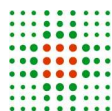
La normativa definisce una eccentricità accidentale del centro delle masse pari al 5% della massima dimensione dell'edificio in direzione perpendicolare al sisma.

In base alla tipologia dell'edificio e alle scelte progettuali che si ritengono più idonee, si può decidere la condizione di carico sismico da prendere in esame.

Carico sismico: Individua quale delle due tipologie di distribuzioni (proporzionale alle masse o al primo modo) prendere in esame.

Direzione: Individua la direzione lungo cui viene caricata la struttura (X o Y del sistema globale) dal carico sismico.

Al fine di individuare la condizione di carico sismico più gravosa, si è deciso di eseguire le analisi distinte per tipologia di carico, direzione del sisma e di eventuali eccentricità accidentali.



N.	Dir. sisma	Carico sismico proporzionale	Eccentricità [cm]	Livello	Nodo
1	+X	Masse	0,0	4	233
2	+X	1° modo	0,0	4	233
3	-X	Masse	0,0	4	233
4	-X	1° modo	0,0	4	233
5	+Y	Masse	0,0	4	233
6	+Y	1° modo	0,0	4	233
7	-Y	Masse	0,0	4	233
8	-Y	1° modo	0,0	4	233
9	+X	Masse	202,8	4	233
10	+X	Masse	-202,8	4	233
11	+X	1° modo	202,8	4	233
12	+X	1° modo	-202,8	4	233
13	-X	Masse	202,8	4	233
14	-X	Masse	-202,8	4	233
15	-X	1° modo	202,8	4	233
16	-X	1° modo	-202,8	4	233
17	+Y	Masse	360,5	4	233
18	+Y	Masse	-360,5	4	233
19	+Y	1° modo	360,5	4	233
20	+Y	1° modo	-360,5	4	233
21	-Y	Masse	360,5	4	233
22	-Y	Masse	-360,5	4	233
23	-Y	1° modo	360,5	4	233
24	-Y	1° modo	-360,5	4	233

7. SPETTRO DA NORMATIVA

Gli spettri di risposta, sono definiti in funzione del reticolo di riferimento definito nella "Tabella 1" (parametri spettrali) in allegato alle Norme Tecniche 14 gennaio 2008 .

Tale tabella fornisce, in funzione delle coordinate geografiche (latitudine, longitudine), i parametri necessari a tracciare lo spettro. I parametri forniti dal reticolo di riferimento sono:

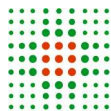
a_g : accelerazione orizzontale massima del terreno;

F_0 : valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;

T^*_c : periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale.

La trilogia di valori qui descritta, è definita per un periodo di ritorno assegnato (TR), definito in base alla probabilità di superamento di ciascuno degli stati limite.

Tali valori, saranno pertanto definiti per ciascuno degli stati limite esaminati (vedere tabella).



Lo spettro sismico dipende anche dalla "Classe del suolo" e dalla "categoria topografica" (vedere tabella).

	SLV	SLD	SLO
Ag [m/s ²]	2,02	0,77	0,60
F0	2,52	2,57	2,50
Tc* [s]	0,28	0,28	0,28
Tr	1424,00	151,00	90,00

	SLV	SLD	SLO
Ss	1,39	1,50	1,50
Tb [s]	0,15	0,15	0,15
Tc [s]	0,45	0,45	0,45
Td [s]	2,42	1,91	1,84

8. RISULTATI

Secondo le indicazioni da normativa si devono eseguire le seguenti verifiche:

8.1. STATO LIMITE ULTIMO (SLV):

$$D_{\max} \leq D_u$$

D_{\max} : Spostamento massimo richiesto dalla normativa individuato dallo spettro elastico.

D_u : Spostamento massimo offerto dalla struttura corrispondente con il decadimento della curva Push-over di un valore pari al 20% di quello massimo.

$$q^* < 3$$

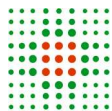
q^* : rapporto tra la forza di risposta elastica e la forza di snervamento del sistema equivalente

8.2. STATO LIMITE DI DANNO (SLD):

$$D_{\max}^{SLD} \leq D_d$$

D_{\max}^{SLD} : Spostamento massimo richiesto dalla normativa, calcolato in base allo spettro sismico definito per lo stato limite di danno.

D_d : Spostamento massimo corrispondente al valore che causa il superamento del valore massimo di drift di piano (0.003).



8.3. STATO LIMITE DI OPERATIVITÀ (SLO):

$$D_{\max}^{SLO} \leq D_o$$

D_{\max}^{SLO} : Spostamento massimo richiesto dalla normativa, calcolato in base allo spettro sismico definito per lo stato limite di operatività.

D_o : Spostamento massimo corrispondente al valore che causa il superamento del valore massimo di drift di piano (0.002).

8.4. VULNERABILITÀ SISMICA

Per ciascuno stato limite viene calcolato l'indice di rischio α (α_{SLV} , α_{SLD} , α_{SLO})

Questi parametri vengono calcolati come indicato nel seguito:

$$\alpha_{SLV} = \frac{PGA_{CLV}}{PGA_{DLV}} ; \alpha_{SLD} = \frac{PGA_{CLD}}{PGA_{DLD}} ; \alpha_{SLO} = \frac{PGA_{CLO}}{PGA_{DLO}} ;$$

Accelerazioni di capacità: l'entità massima delle azioni, considerate nelle combinazioni di progetto previste, che la struttura è capace di sostenere.

- PGA_{CLV} : accelerazione di capacità corrispondente a SLV
- PGA_{CLD} : accelerazione di capacità corrispondente a SLD
- PGA_{CLO} : accelerazione di capacità corrispondente a SLO

Accelerazioni di domanda: Valori di riferimento delle accelerazioni dell'azione sismica

Tali valori vengono definiti a partire dal "reticolo di riferimento" determinato dall'allegato A delle NTC

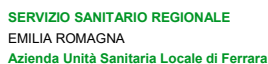
- PGA_{DLV} : accelerazione di picco al suolo corrispondente a SLV
- PGA_{DLD} : accelerazione di picco al suolo corrispondente a SLD
- PGA_{DLO} : accelerazione di picco al suolo corrispondente a SLO



8.5. DETTAGLIO VERIFICHE

N.	Dir. sisma	Car. sismico prop.	Ecc. [cm]	Dmax SLV [cm]	Du SLV [cm]	q* SLV	SLV ver.	Dmax SLD [cm]	Dd SLD [cm]	SLD ver.	Dmax SLO [cm]	Do SLO [cm]	SLO ver.
1	+X	Masse	0,0	4,10	3,68	2,97	No	1,61	2,52	Si	1,19	2,52	Si
2	+X	1° modo	0,0	5,15	3,73	3,76	No	2,15	2,72	Si	1,63	2,72	Si
3	-X	Masse	0,0	4,07	3,15	2,83	No	1,59	2,23	Si	1,17	2,23	Si
4	-X	1° modo	0,0	5,03	3,63	3,82	No	2,11	2,09	No	1,59	2,09	Si
5	+Y	Masse	0,0	4,98	4,15	2,36	No	1,90	3,90	Si	1,44	3,90	Si
6	+Y	1° modo	0,0	6,33	5,62	3,48	No	2,65	3,55	Si	2,00	3,55	Si
7	-Y	Masse	0,0	4,95	4,48	2,38	No	1,88	3,00	Si	1,42	3,00	Si
8	-Y	1° modo	0,0	6,43	6,95	3,18	No	2,69	4,74	Si	2,03	3,28	Si
9	+X	Masse	202,8	4,06	3,62	2,96	No	1,59	2,54	Si	1,17	2,54	Si
10	+X	Masse	-202,8	4,17	3,67	2,99	No	1,65	2,51	Si	1,21	2,51	Si
11	+X	1° modo	202,8	5,23	3,67	3,63	No	2,19	2,66	Si	1,65	2,66	Si
12	+X	1° modo	-202,8	5,15	3,85	3,78	No	2,16	3,03	Si	1,63	2,95	Si
13	-X	Masse	202,8	4,03	3,09	2,83	No	1,57	2,41	Si	1,16	2,41	Si
14	-X	Masse	-202,8	4,07	3,30	2,87	No	1,59	2,55	Si	1,17	2,55	Si
15	-X	1° modo	202,8	5,03	3,50	3,81	No	2,10	2,28	Si	1,59	2,28	Si
16	-X	1° modo	-202,8	5,07	3,85	3,87	No	2,12	2,06	No	1,60	2,06	Si
17	+Y	Masse	360,5	4,98	3,72	2,58	No	1,91	3,62	Si	1,43	3,62	Si
18	+Y	Masse	-360,5	4,91	3,03	2,52	No	1,87	2,88	Si	1,40	2,58	Si
19	+Y	1° modo	360,5	6,38	6,35	3,70	No	2,67	3,19	Si	2,02	3,19	Si
20	+Y	1° modo	-360,5	6,32	4,92	3,40	No	2,65	3,79	Si	2,00	2,61	Si
21	-Y	Masse	360,5	4,98	3,75	2,62	No	1,91	2,99	Si	1,42	2,99	Si
22	-Y	Masse	-360,5	5,02	3,51	2,45	No	1,93	3,45	Si	1,45	2,47	Si
23	-Y	1° modo	360,5	6,42	6,28	3,47	No	2,69	3,91	Si	2,03	3,91	Si
24	-Y	1° modo	-360,5	6,46	3,89	3,14	No	2,70	3,00	Si	2,04	2,23	Si

N.	Dir. sisma	Car. sismico prop.	Ecc. [cm]	α SLV	α SLD	α SLO
1	+X	Masse	0,0	0,902	1,509	1,996
2	+X	1° modo	0,0	0,724	1,263	1,671
3	-X	Masse	0,0	0,785	1,357	1,795
4	-X	1° modo	0,0	0,722	0,990	1,310
5	+Y	Masse	0,0	0,843	1,901	2,515
6	+Y	1° modo	0,0	0,862	1,342	1,775
7	-Y	Masse	0,0	0,911	1,507	1,993
8	-Y	1° modo	0,0	0,944	1,762	1,614
9	+X	Masse	202,8	0,896	1,534	2,030
10	+X	Masse	-202,8	0,884	1,472	1,947
11	+X	1° modo	202,8	0,702	1,216	1,609
12	+X	1° modo	-202,8	0,747	1,407	1,813
13	-X	Masse	202,8	0,777	1,478	1,955
14	-X	Masse	-202,8	0,820	1,537	2,034
15	-X	1° modo	202,8	0,696	1,084	1,435
16	-X	1° modo	-202,8	0,760	0,971	1,285



17	+Y	Masse	360,5	0,761	1,770	2,342
18	+Y	Masse	-360,5	0,641	1,465	1,756
19	+Y	1° modo	360,5	0,811	1,195	1,581
20	+Y	1° modo	-360,5	0,778	1,431	1,304
21	-Y	Masse	360,5	0,767	1,490	1,971
22	-Y	Masse	-360,5	0,716	1,684	1,647
23	-Y	1° modo	360,5	0,864	1,455	1,924
24	-Y	1° modo	-360,5	0,603	1,111	1,093

Verifica analisi

N.	Inserisci in relazione	Dir. sisma	Carico sismico proporzionale	Eccentricità [cm]	Dmax SLV [cm]	Du SLV [cm]	q* SLV	Dmax SLD [cm]	Du SLD [cm]	Dmax SLO [cm]	Do SLO [cm]	a SLV	a SLD	a SLO
1	<input checked="" type="checkbox"/>	+X	Masse	0,00	4,10	3,68	2,97	1,61	2,52	1,19	2,52	0,902	1,509	1,996
2	<input checked="" type="checkbox"/>	+X	1° modo	0,00	5,15	3,73	3,76	2,15	2,72	1,63	2,72	0,724	1,263	1,671
3	<input checked="" type="checkbox"/>	-X	Masse	0,00	4,07	3,15	2,83	1,59	2,23	1,17	2,23	0,785	1,357	1,795
4	<input checked="" type="checkbox"/>	-X	1° modo	0,00	5,03	3,63	3,82	2,11	2,09	1,59	2,09	0,722	0,990	1,310
5	<input checked="" type="checkbox"/>	+Y	Masse	0,00	4,98	4,15	2,36	1,90	3,90	1,44	3,90	0,843	1,901	2,515
6	<input checked="" type="checkbox"/>	+Y	1° modo	0,00	6,33	5,62	3,48	2,65	3,55	2,00	3,55	0,862	1,342	1,775
7	<input checked="" type="checkbox"/>	-Y	Masse	0,00	4,95	4,48	2,38	1,88	3,00	1,42	3,00	0,911	1,507	1,993
8	<input checked="" type="checkbox"/>	-Y	1° modo	0,00	6,43	6,95	3,18	2,69	4,74	2,03	3,28	0,944	1,762	1,614
9	<input checked="" type="checkbox"/>	+X	Masse	202,82	4,06	3,62	2,96	1,59	2,54	1,17	2,54	0,896	1,534	2,030
10	<input checked="" type="checkbox"/>	+X	Masse	-202,82	4,17	3,67	2,99	1,65	2,51	1,21	2,51	0,884	1,472	1,947
11	<input checked="" type="checkbox"/>	+X	1° modo	202,82	5,23	3,67	3,63	2,19	2,66	1,65	2,66	0,702	1,216	1,609
12	<input checked="" type="checkbox"/>	+X	1° modo	-202,82	5,15	3,85	3,78	2,16	3,03	1,63	2,95	0,747	1,407	1,813
13	<input checked="" type="checkbox"/>	-X	Masse	202,82	4,03	3,09	2,83	1,57	2,41	1,16	2,41	0,777	1,478	1,955
14	<input checked="" type="checkbox"/>	-X	Masse	-202,82	4,07	3,30	2,87	1,59	2,55	1,17	2,55	0,820	1,537	2,034
15	<input checked="" type="checkbox"/>	-X	1° modo	202,82	5,03	3,50	3,81	2,10	2,28	1,59	2,28	0,696	1,084	1,435
16	<input checked="" type="checkbox"/>	-X	1° modo	-202,82	5,07	3,85	3,87	2,12	2,06	1,60	2,06	0,760	0,971	1,285
17	<input checked="" type="checkbox"/>	+Y	Masse	360,53	4,98	3,72	2,58	1,91	3,62	1,43	3,62	0,761	1,770	2,342
18	<input checked="" type="checkbox"/>	+Y	Masse	-360,53	4,91	3,03	2,52	1,87	2,88	1,40	2,58	0,641	1,465	1,756
19	<input checked="" type="checkbox"/>	+Y	1° modo	360,53	6,38	6,35	3,70	2,67	3,19	2,02	3,19	0,811	1,195	1,581
20	<input checked="" type="checkbox"/>	+Y	1° modo	-360,53	6,32	4,92	3,40	2,65	3,79	2,00	2,61	0,778	1,431	1,304
21	<input checked="" type="checkbox"/>	-Y	Masse	360,53	4,98	3,75	2,62	1,91	2,99	1,42	2,99	0,767	1,490	1,971
22	<input checked="" type="checkbox"/>	-Y	Masse	-360,53	5,02	3,51	2,45	1,93	3,45	1,45	2,47	0,716	1,684	1,647
23	<input checked="" type="checkbox"/>	-Y	1° modo	360,53	6,42	6,28	3,47	2,69	3,91	2,03	3,91	0,864	1,455	1,924
24	<input checked="" type="checkbox"/>	-Y	1° modo	-360,53	6,46	3,89	3,14	2,70	3,00	2,04	2,23	0,603	1,111	1,093

Visualizza dettagli

Inserisci tutto in relazione

Cancella analisi

Piano-Soil

Legenda colori

Verificato

Non verificato

Non converge a p.p.

Analisi più gravosa

Esci