



Stazione Appaltante
 Regione Siciliana
Comune di S.Stefano di Camastra
 Provincia di Messina



Procedura aperta ex art. 183 commi 1-14 d.lgs. 50/2016 s.m.i. per l'affidamento in project financing della concessione di lavori pubblici avente per oggetto la progettazione definitiva ed esecutiva, l'esecuzione dei lavori per la **REALIZZAZIONE DEL PORTO TURISTICO E DELLE OPERE CONNESSE NEL COMUNE DI SANTO STEFANO DI CAMASTRA** nonché della loro gestione economico-finanziaria

C.I.G.67535662F8

C.U.P.H21H07000030003

PROGETTO DEFINITIVO

Concessionario Individuato



Rappresentante legale: Cono Bruno

Via Campidoglio, 70 98076 Sant'Agata di Militello (ME)

Titolo elaborato

BUNKERAGGIO

**- CARPENTERIE
 - ESECUTIVI DI CANTIERE**

Progettista indicato



Dott. Ing. Paolo Turbolente

Via Ajaccio, 14
 00198 Roma



Amministratore Unico:
 Prof. Ing. Vincenzo Cataliotti
 Direttori tecnici:
 Arch. Sebastiano Provenzano
 Prof. Ing. Antonio Cataliotti
 Via Vittorio Emanuele, 492
 90134 Palermo

Elaborato

PD | EG

16.4 - BUN

Scala

Data: Giugno 2017

Comune di SANTO STEFANO DI CAMASTRA

Provincia di MESSINA

ESECUTIVI DI CANTIERE

Fond.

Oggetto: **Calcolo delle strutture in c.a. per la realizzazione dei serbatoi di bunkeraggio a servizio del portoturistico**

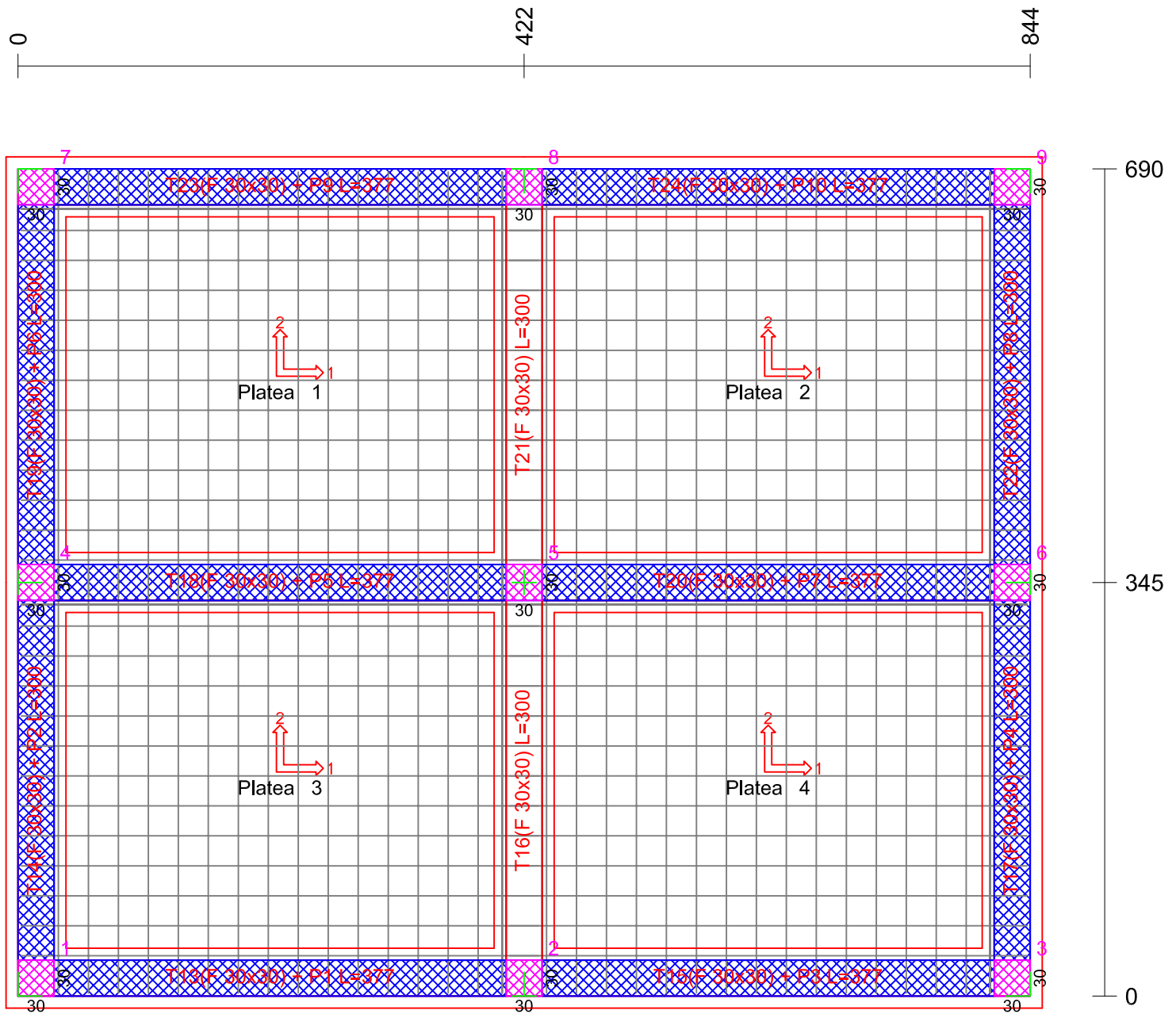
Ditta: COSTRUZIONI BRUNO S.P.A.

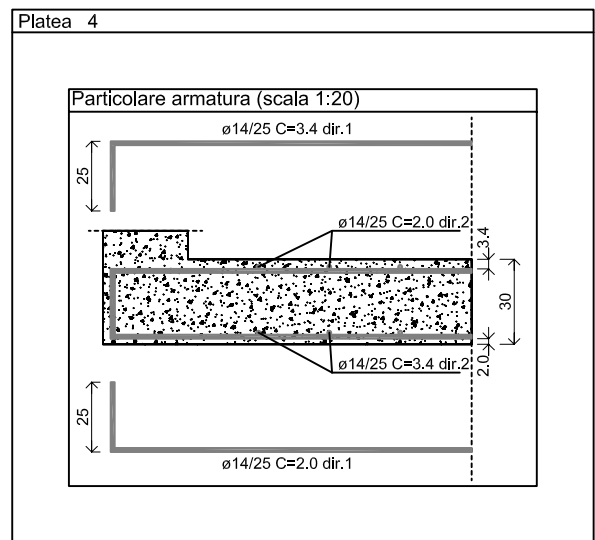
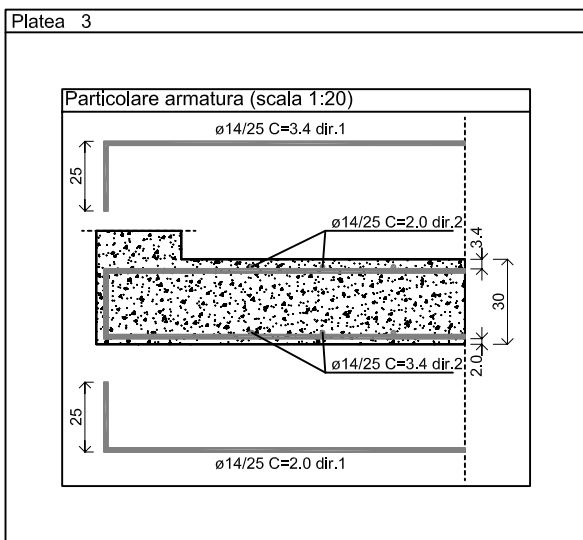
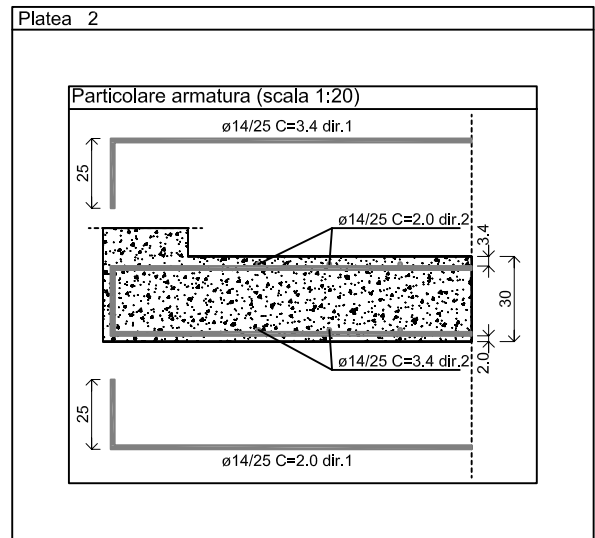
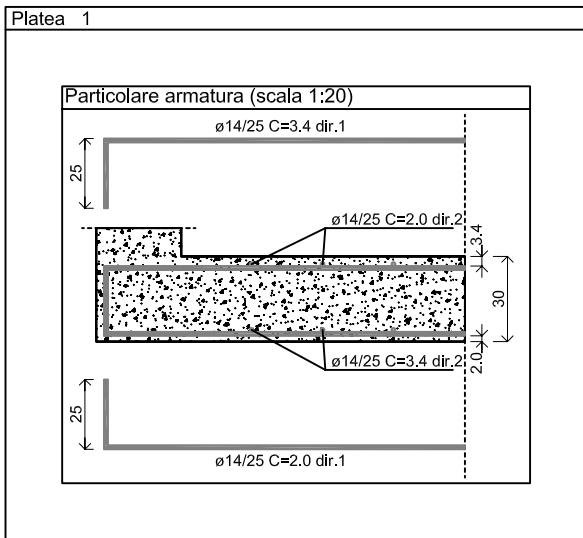
Data: 20/04/2017

Materiali

CLS
C25/30
ACCIAIO LONGITUDINALI
B450C
ACCIAIO STAFFE
B450C

Carpenteria Fond. (Scala 1:50)





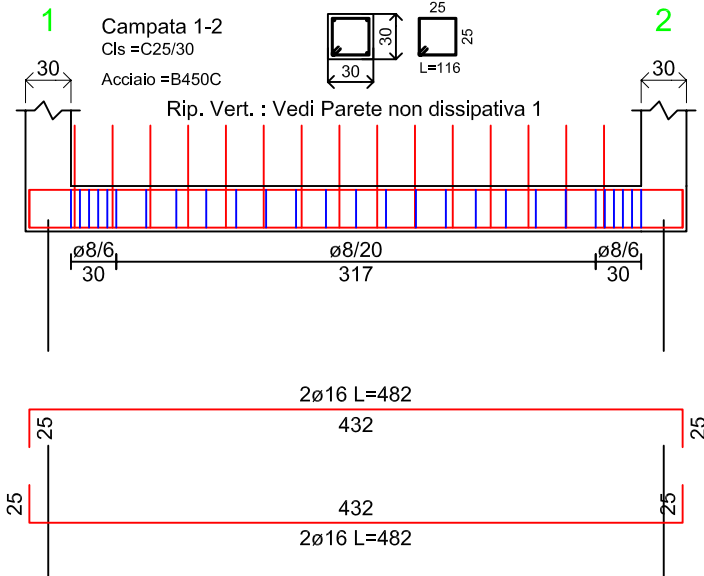
Platea 1												
Armatura a flessione												
Regione	Direzione 1						Direzione 2					
	Estradosso			Intradosso			Estradosso		Intradosso			
	ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]	ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]
Platea	14	480	3.4	25	2.0	25	14	403	2.0	25	3.4	25

Platea 2												
Armatura a flessione												
Regione	Direzione 1						Direzione 2					
	Estradosso			Intradosso			Estradosso		Intradosso			
	ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]	ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]
Platea	14	480	3.4	25	2.0	25	14	403	2.0	25	3.4	25

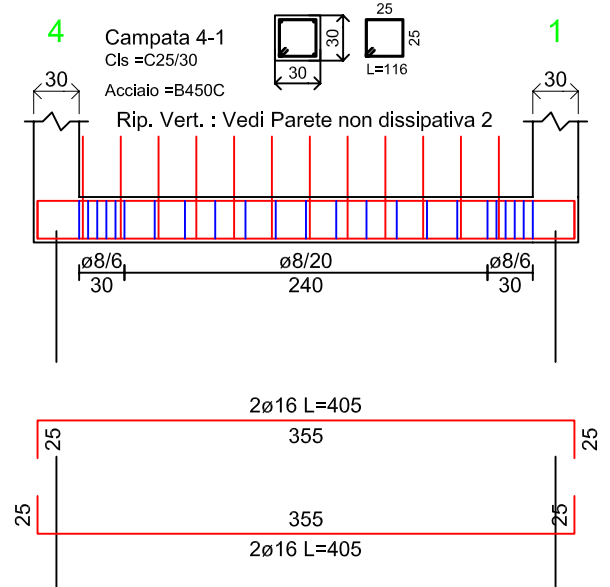
Platea 3												
Armatura a flessione												
Regione	Direzione 1						Direzione 2					
	Estradosso			Intradosso			Estradosso		Intradosso			
	ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]	ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]
Platea	14	480	3.4	25	2.0	25	14	403	2.0	25	3.4	25

Platea 4												
Armatura a flessione												
Regione	Direzione 1						Direzione 2					
	Estradosso			Intradosso			Estradosso		Intradosso			
	ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]	ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]
Platea	14	480	3.4	25	2.0	25	14	403	2.0	25	3.4	25

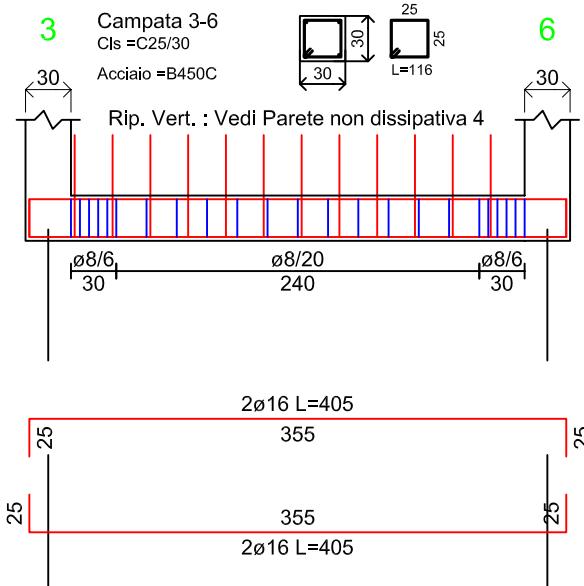
Travata 1 Fond.



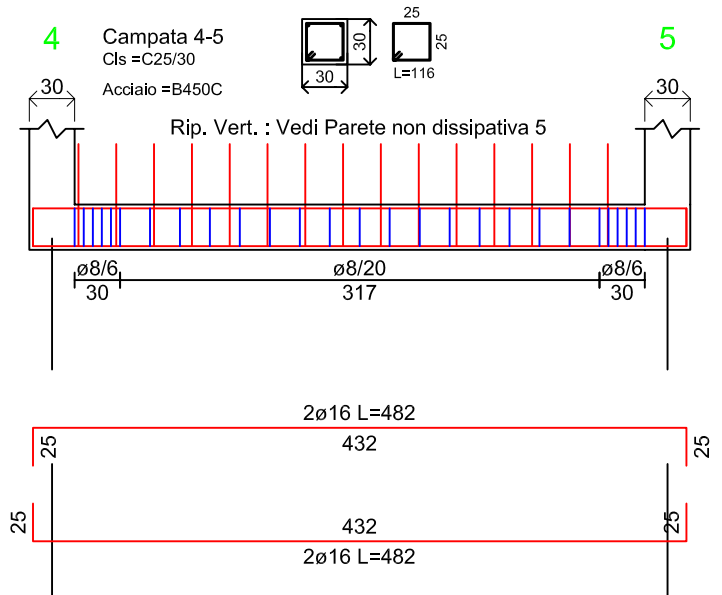
Travata 2 Fond.



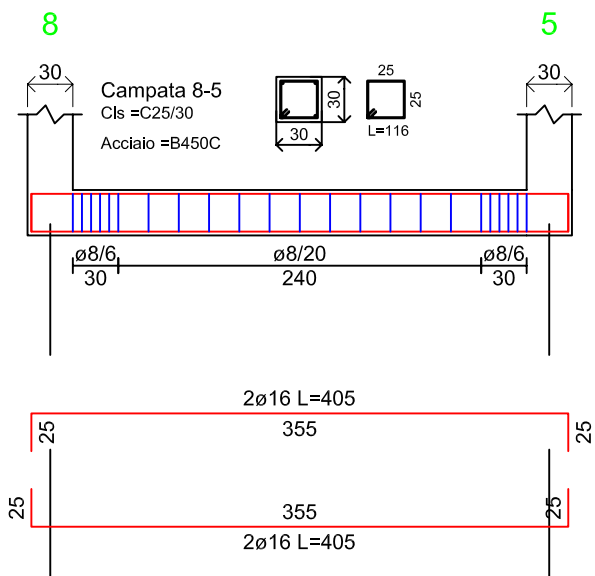
Travata 5 Fond.



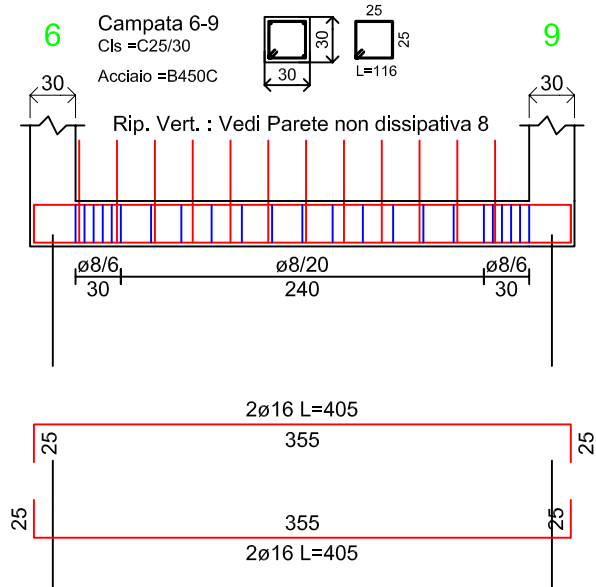
Travata 6 Fond.



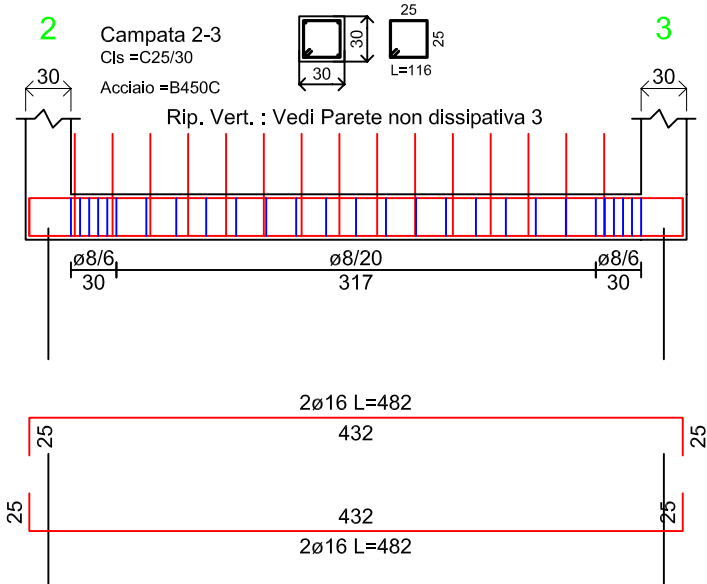
Travata 9 Fond.



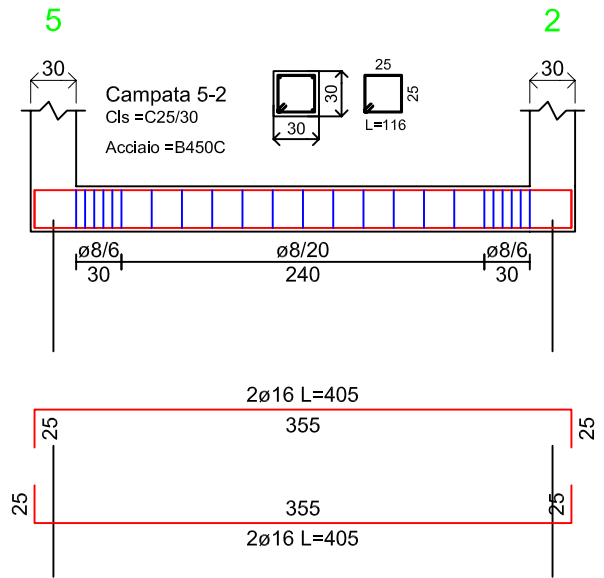
Travata 10 Fond.



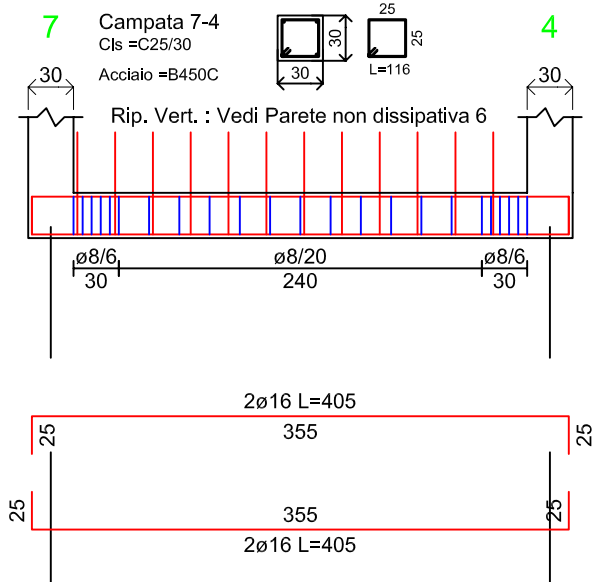
Travata 3 Fond.



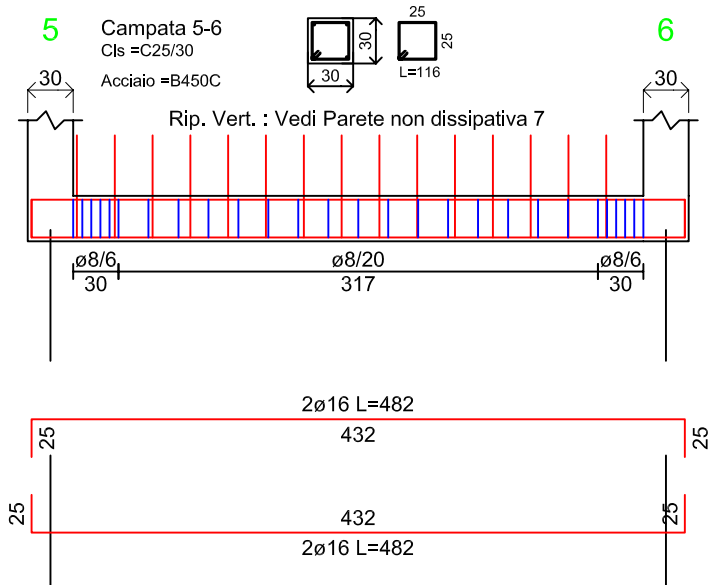
Travata 4 Fond.



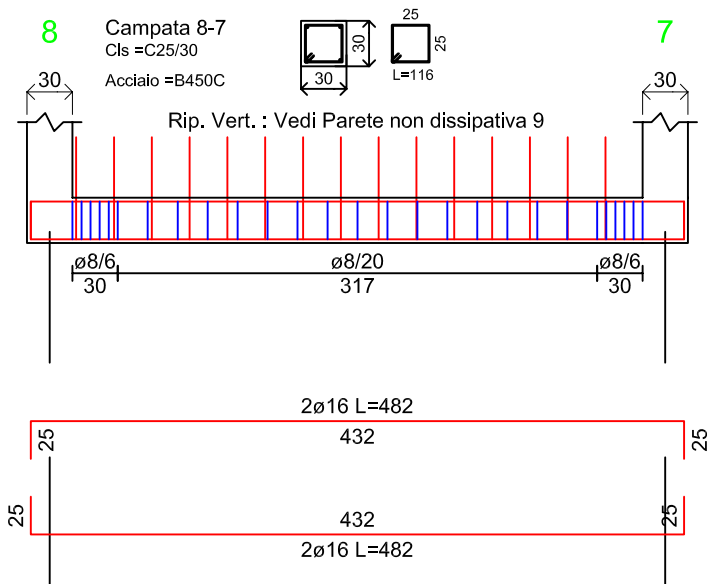
Travata 7 Fond.



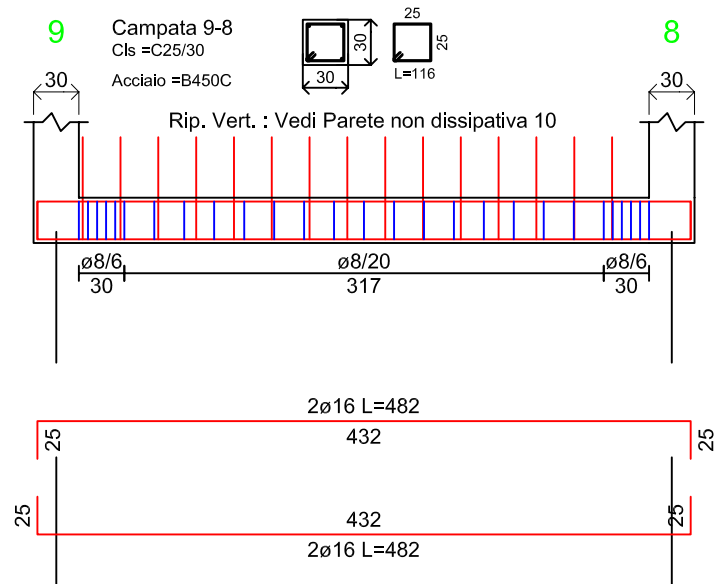
Travata 8 Fond.



Travata 11 Fond.



Travata 12 Fond.



Comune di SANTO STEFANO DI CAMASTRA

Provincia di MESSINA

ESECUTIVI DI CANTIERE

Piano 1

Oggetto: **Calcolo delle strutture in c.a. perla realizzazione dei serbatoi di bunkeraggio a servizio del portoturistico**

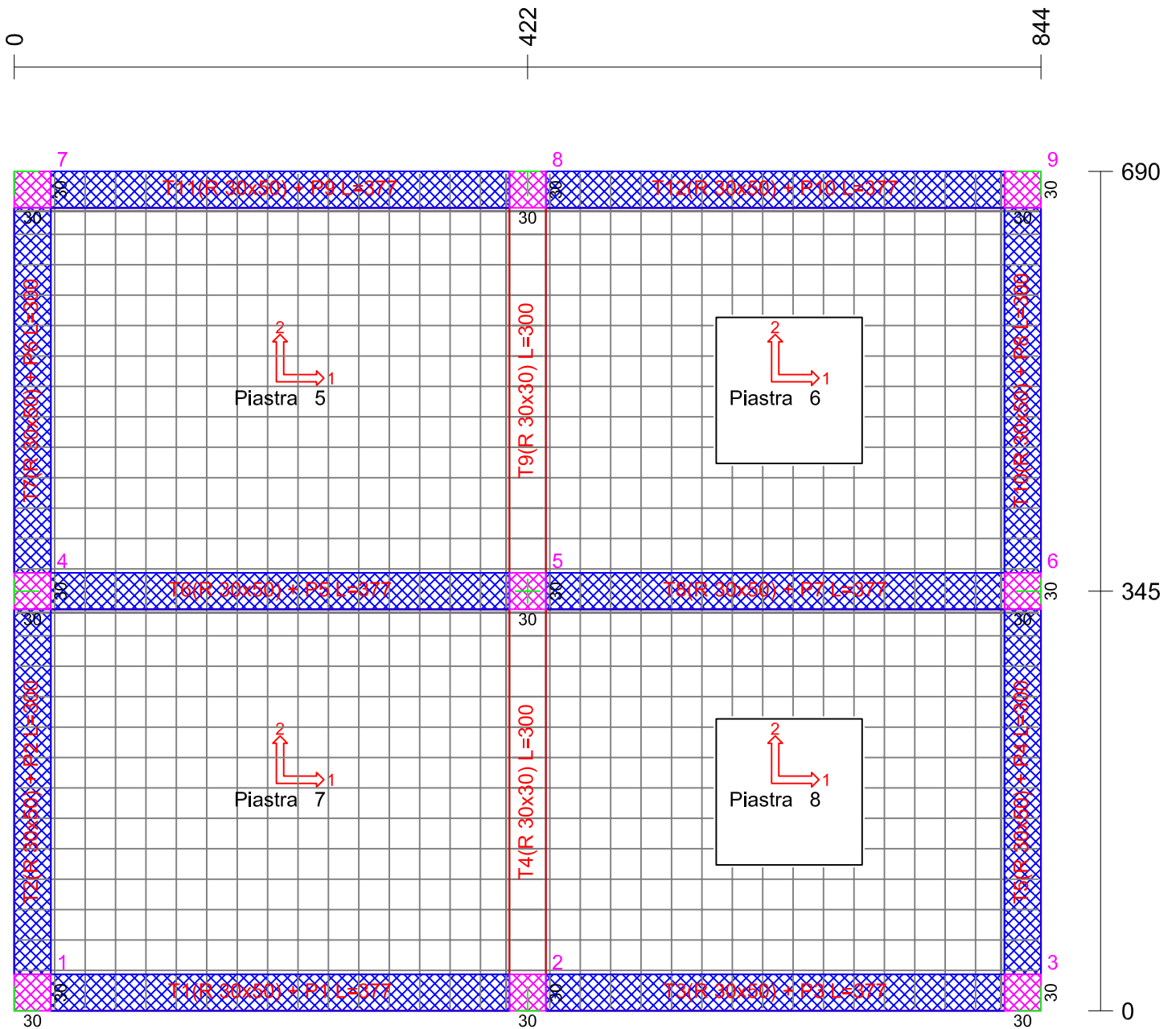
Ditta: COSTRUZIONI BRUNO S.P.A.

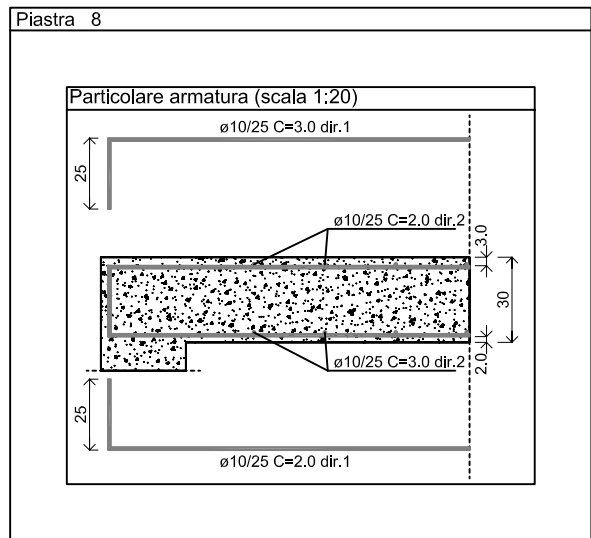
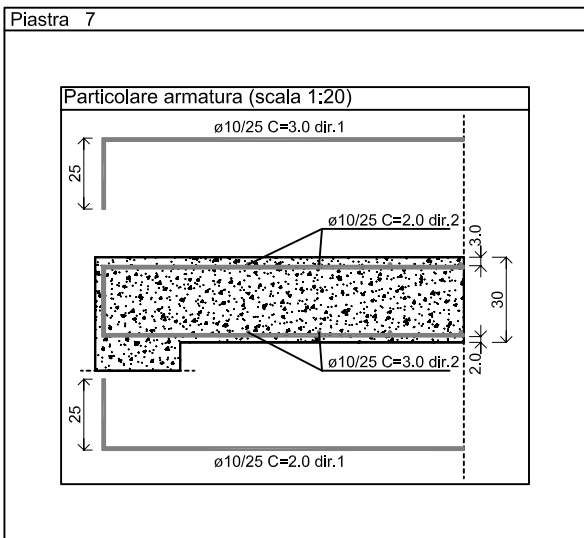
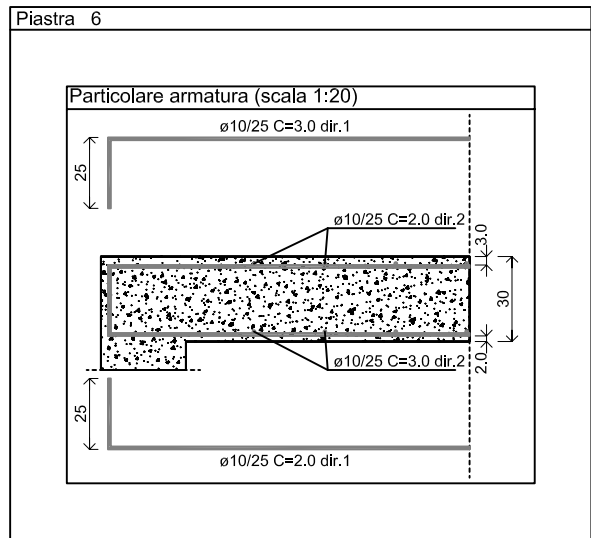
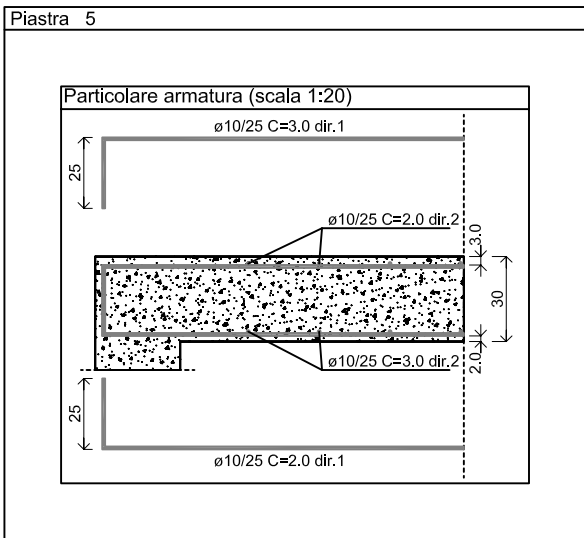
Data: 20/04/2017

Materiali

CLS
C25/30
ACCIAIO LONGITUDINALI
B450C
ACCIAIO STAFFE
B450C

Carpenteria Piano 1 (Scala 1:50)





Piastra 5

Armatura a flessione												
Regione	Direzione 1						Direzione 2					
	Estradosso			Intradosso			Estradosso			Intradosso		
	Ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]	Ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]
Piastra	10	482	3.0	25	2.0	25	10	405	2.0	25	3.0	25

Piastra 6

Armatura a flessione												
Regione	Direzione 1						Direzione 2					
	Estradosso			Intradosso			Estradosso			Intradosso		
	Ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]	Ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]
Piastra	10	482	3.0	25	2.0	25	10	405	2.0	25	3.0	25

Piastra 7

Armatura a flessione												
Regione	Direzione 1						Direzione 2					
	Estradosso			Intradosso			Estradosso			Intradosso		
	Ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]	Ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]
Piastra	10	482	3.0	25	2.0	25	10	405	2.0	25	3.0	25

Piastra 8

Armatura a flessione												
Regione	Direzione 1						Direzione 2					
	Estradosso			Intradosso			Estradosso			Intradosso		
	Ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]	Ø[mm]	L[cm]	Cop[cm]	Passo[cm]	Cop[cm]	Passo[cm]
Piastra	10	482	3.0	25	2.0	25	10	405	2.0	25	3.0	25

PILASTRI: 1-2-3-4-6-7-8-9 (fili)			Piano 1
Materiali Cls =C25/30 Acciaio =B450C	STAFFE ø 8/12 cm Da Q= 0 a Q= 48 ø 8/19 cm Da Q= 48 a Q= 242 ø 8/12 cm Da Q= 242 a Q= 290 ø 8/12 cm Da Q= 290 a Q= 340	STAFFE TIPO 1 ø 8 (25x 25 L= 116)	
PIEDE (Q=0)		TESTA (Q=340)	
Diritti: O 8ø16		Copriferro=2.5 Diritti: O 8ø16	
Scala 1:10			

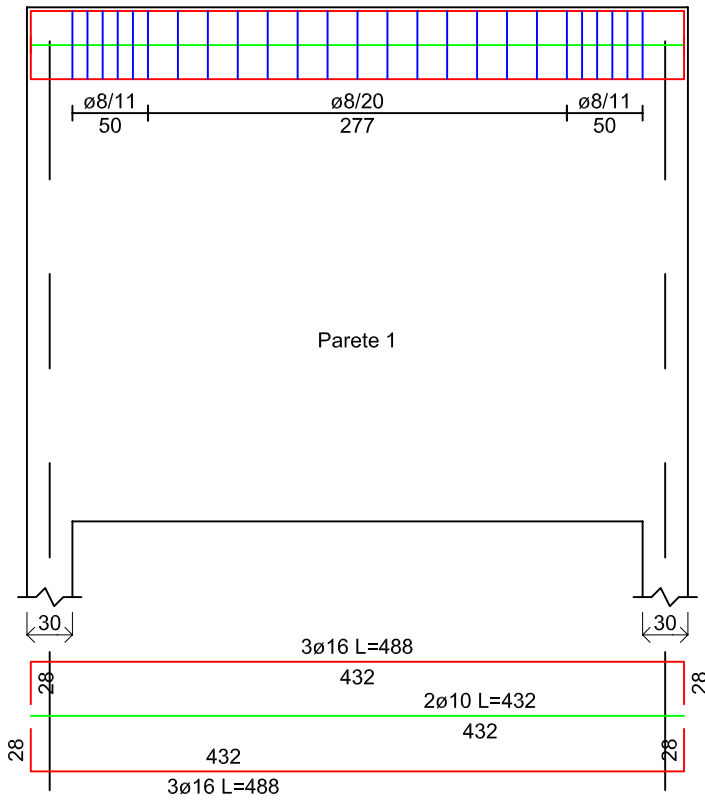
PILASTRO: 5 (filo)			Piano 1
Materiali Cls =C25/30 Acciaio =B450C	STAFFE ø 8/12 cm Da Q= 0 a Q= 48 ø 8/19 cm Da Q= 48 a Q= 242 ø 8/12 cm Da Q= 242 a Q= 340	STAFFE TIPO 1 ø 8 (25x 25 L= 116)	
PIEDE (Q=0)		TESTA (Q=340)	
Diritti: O 8ø16		Copriferro=2.5 Diritti: O 8ø16	
Scala 1:10			

Travata 13 Piano 1

2
Q=340

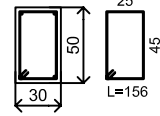


1
Q=340



Campata 2-1
Cls = C25/30

Acciaio = B450C

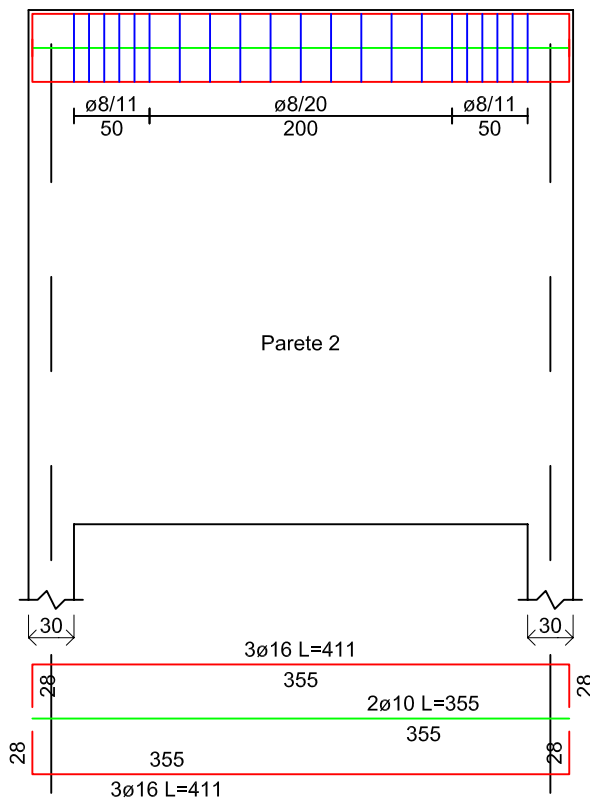


Travata 14 Piano 1

1
Q=340

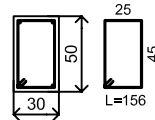


4
Q=340



Campata 1-4
Cls = C25/30

Acciaio = B450C



Travata 15 Piano 1

3
Q=340

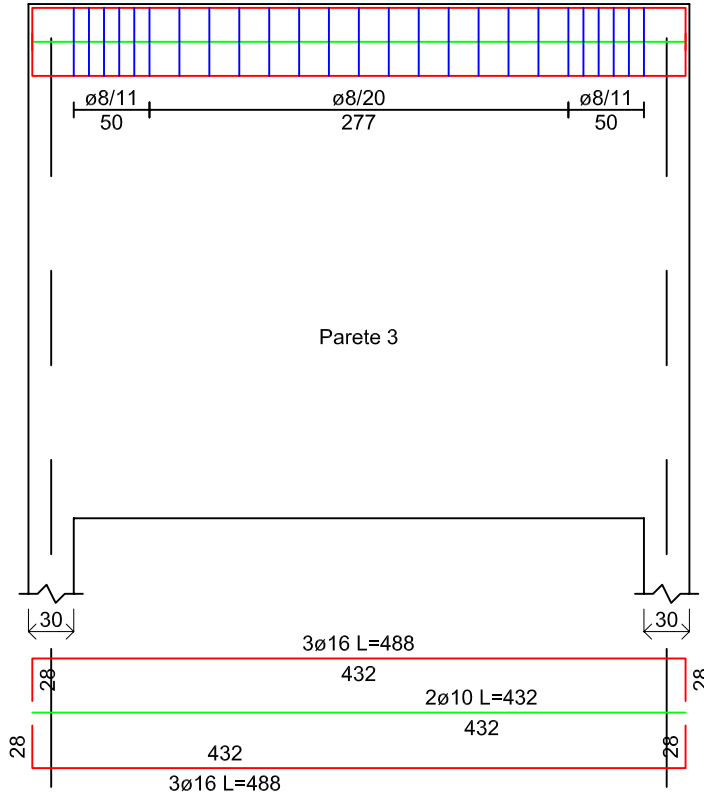
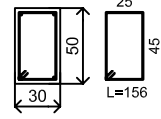


2
Q=340

Campata 3-2

Cls =C25/30

Acciaio =B450C



Travata 22 Piano 1

9
Q=340

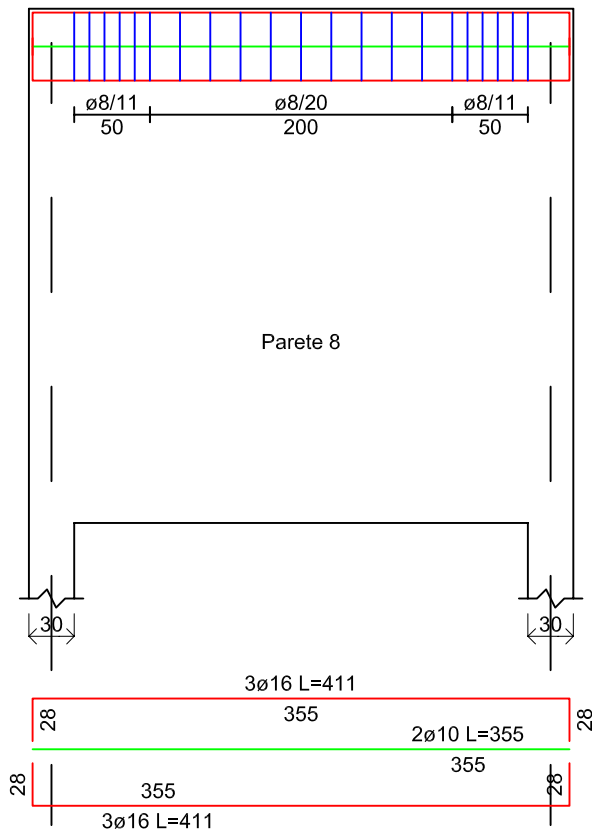
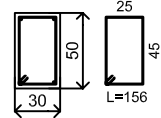


6
Q=340

Campata 9-6

Cls =C25/30

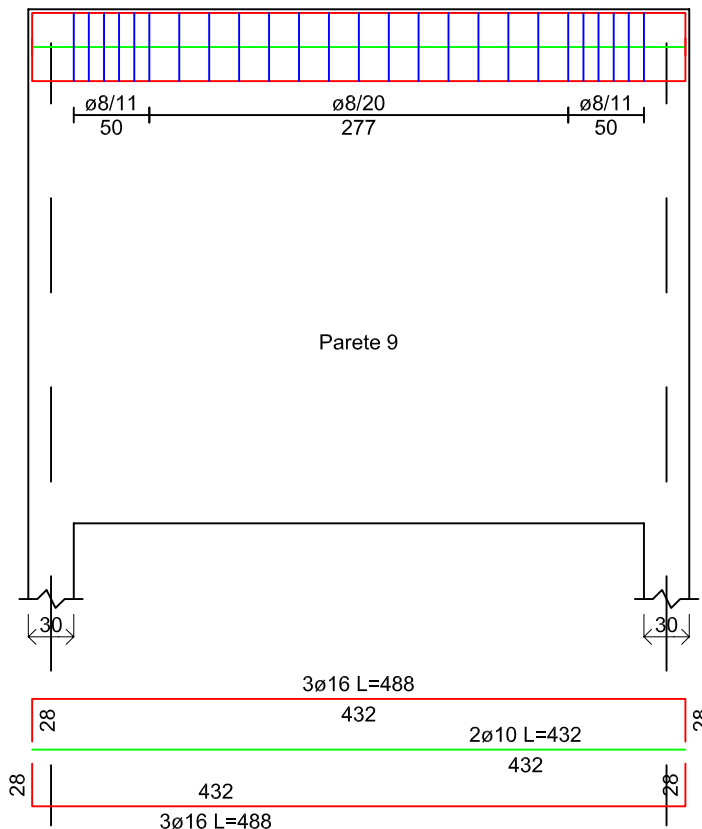
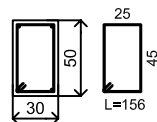
Acciaio =B450C



Travata 23 Piano 1

7 Q=340 8 Q=340

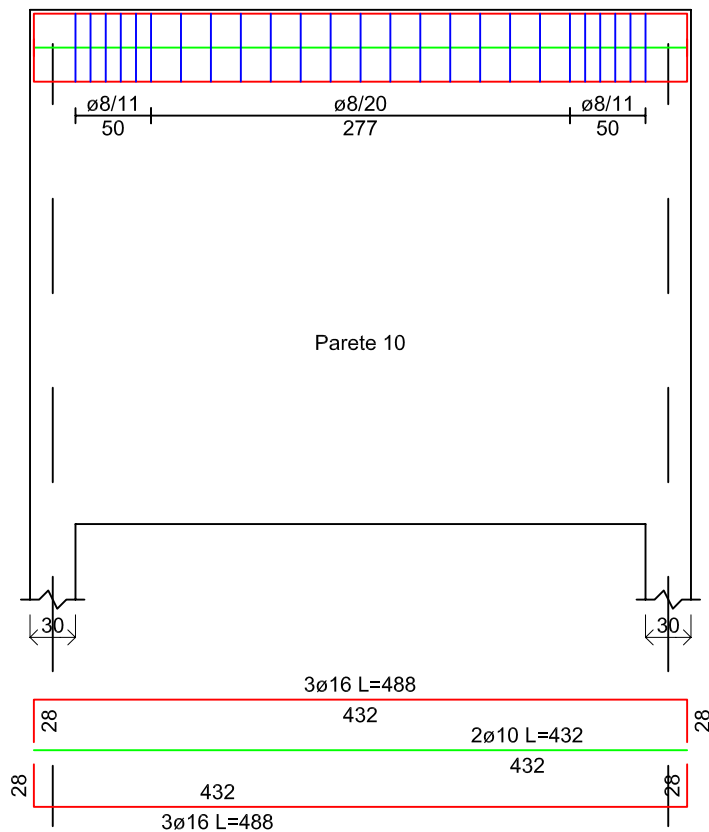
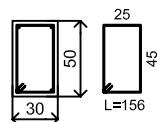
Campata 7-8
Cls =C25/30
Acciaio =B450C



Travata 24 Piano 1

8 Q=340 9 Q=340

Campata 8-9
Cls =C25/30
Acciaio =B450C



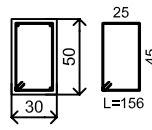
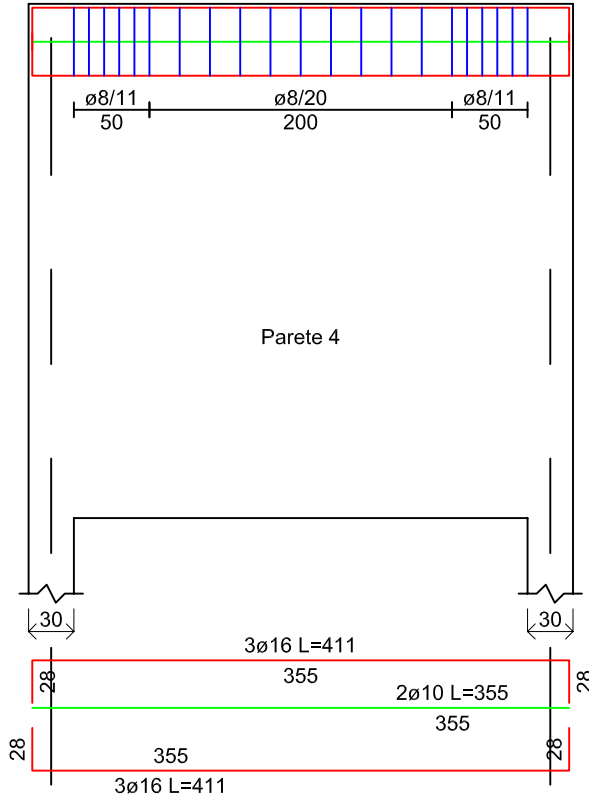
Travata 17 Piano 1

6
Q=340

3
Q=340

Campata 6-3
Cls = C25/30

Acciaio = B450C



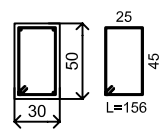
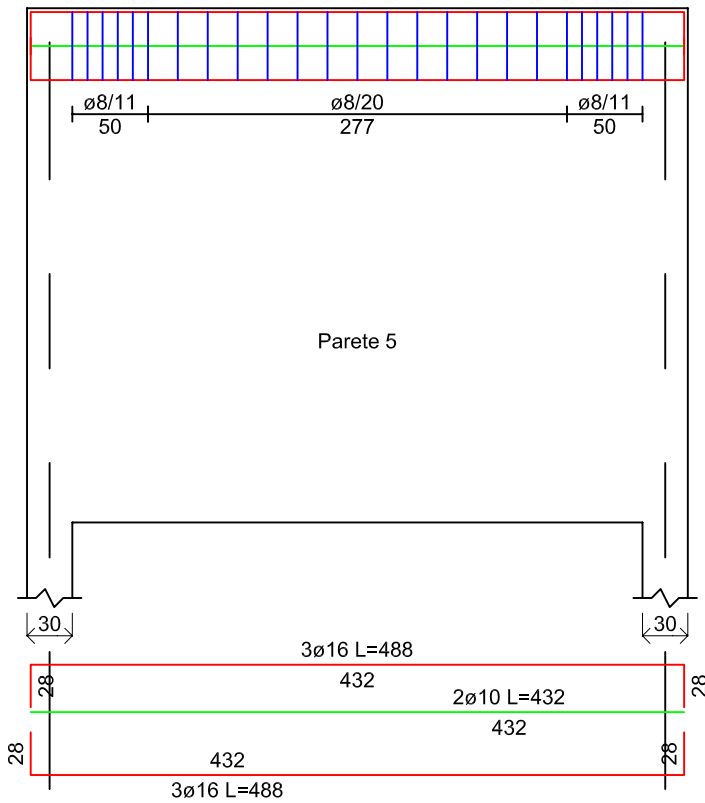
Travata 18 Piano 1

4
Q=340

5
Q=340

Campata 4-5
Cls = C25/30

Acciaio = B450C



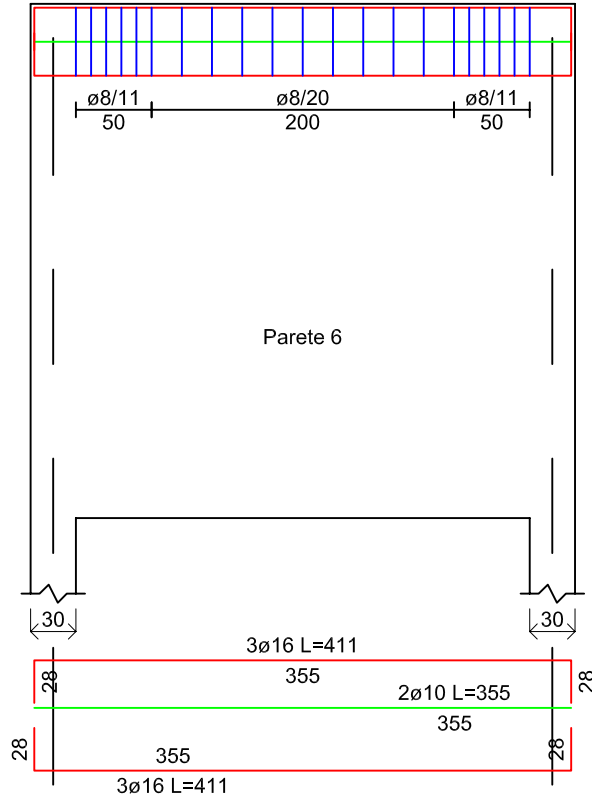
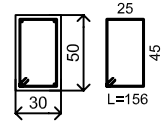
Travata 19 Piano 1

4
Q=340



7
Q=340

Campata 4-7
Clis = C25/30
Acciaio = B450C



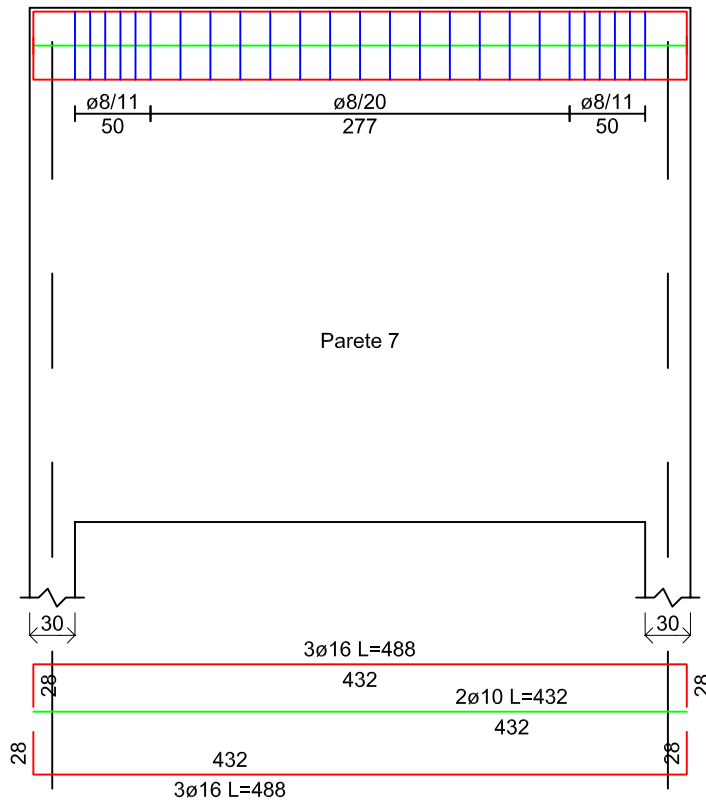
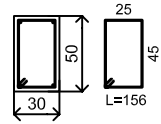
Travata 20 Piano 1

5
Q=340



6
Q=340

Campata 5-6
Clis = C25/30
Acciaio = B450C



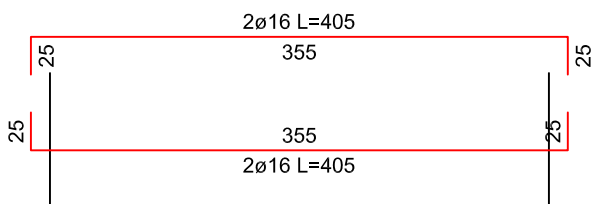
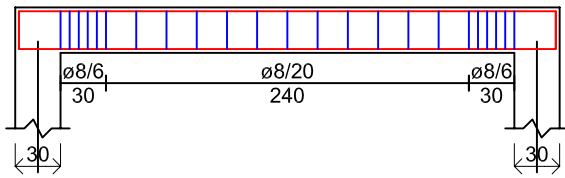
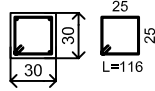
Travata 21 Piano 1

8
Q=340

Campata 8-5
Cls = C25/30

Acciaio = B450C

5
Q=340



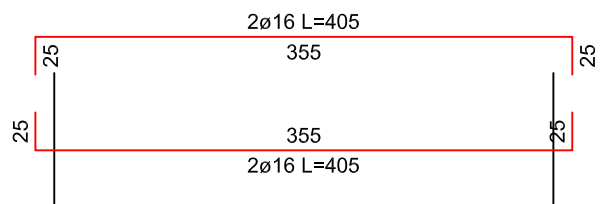
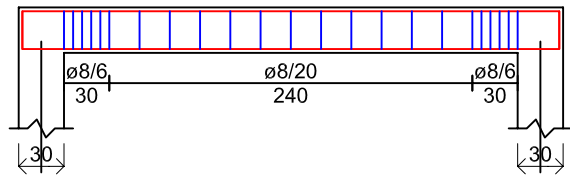
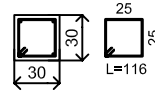
Travata 16 Piano 1

5
Q=340

Campata 5-2
Cls = C25/30

Acciaio = B450C

2
Q=340



Comune di SANTO STEFANO DI CAMASTRA

Provincia di MESSINA

ESECUTIVI DI CANTIERE

Pareti

Oggetto: **Calcolo delle strutture in c.a. perla realizzazione dei serbatoi di bunkeraggio a servizio del portoturistico**

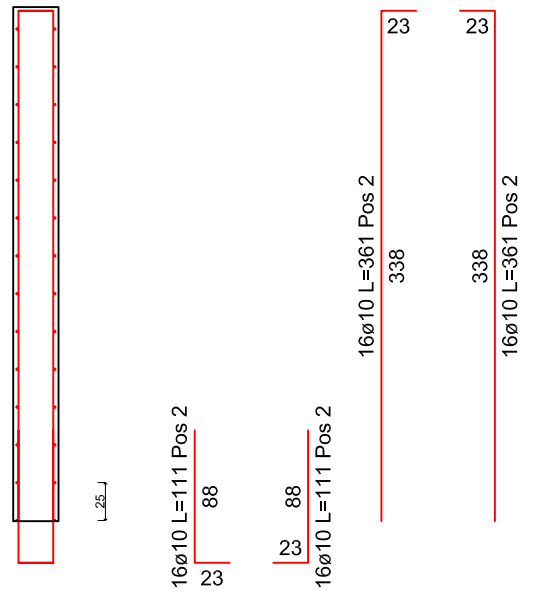
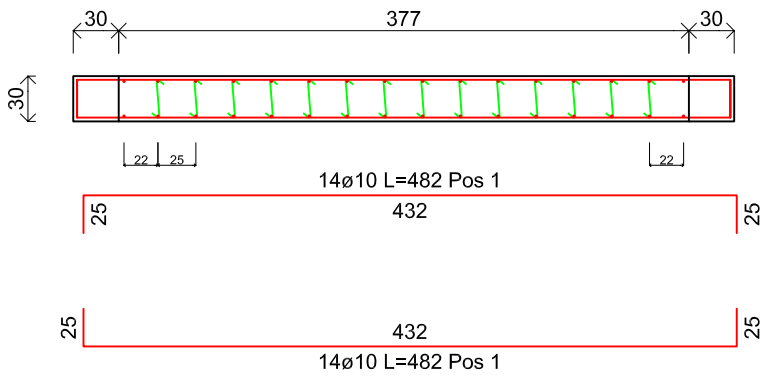
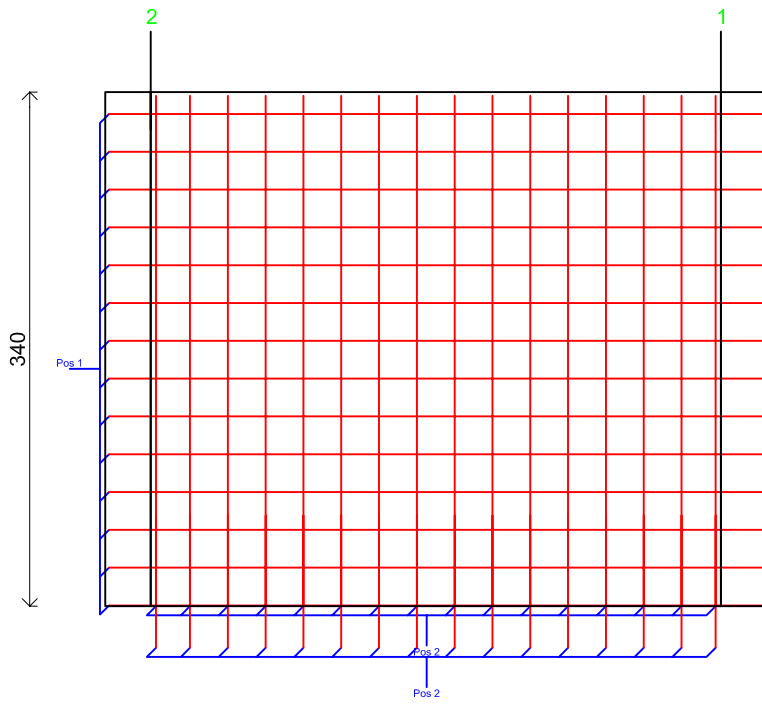
Ditta: COSTRUZIONI BRUNO S.P.A.

Data: 20/04/2017

Materiali

CLS
C25/30
ACCIAIO LONGITUDINALI
B450C
ACCIAIO STAFFE
B450C

Parete non Dissipativa1 Piano 1 Fili Fissi 2-1

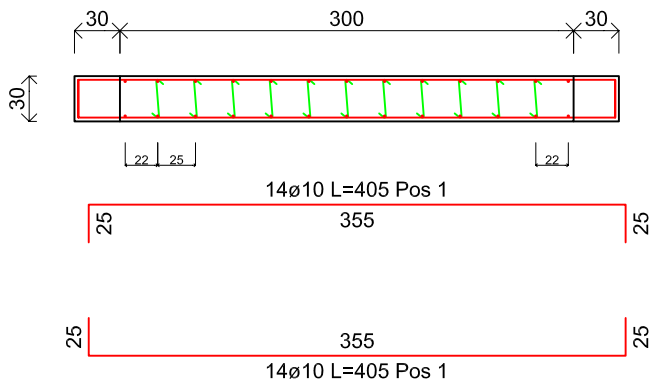
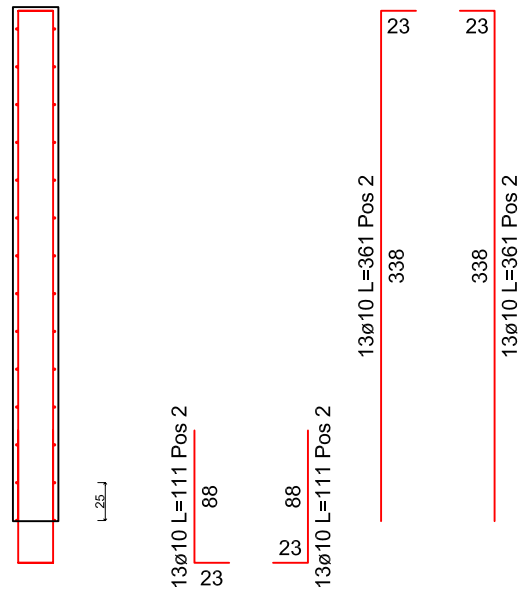
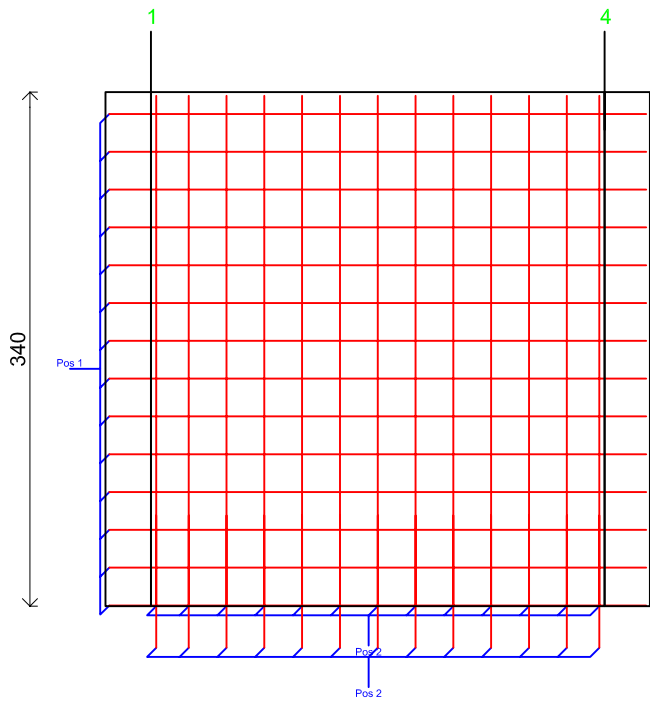


Materiali	
Cls	C25/30
Acciaio	B450C

Armature			
TIPO	ø	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE			
Zona	ø	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa2 Piano 1 Fili Fissi 1-4



Materiali

Cls	C25/30
Acclato	B450C

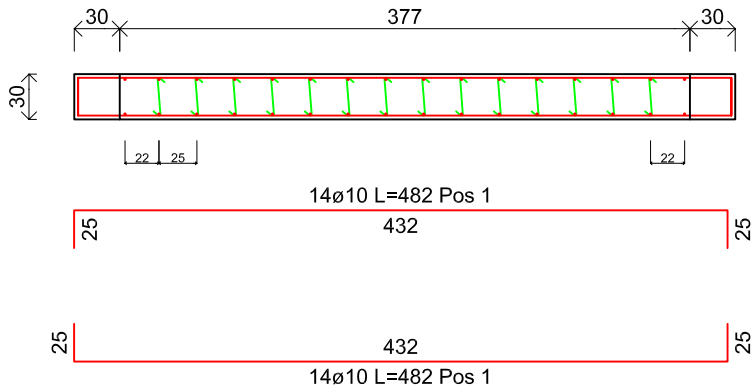
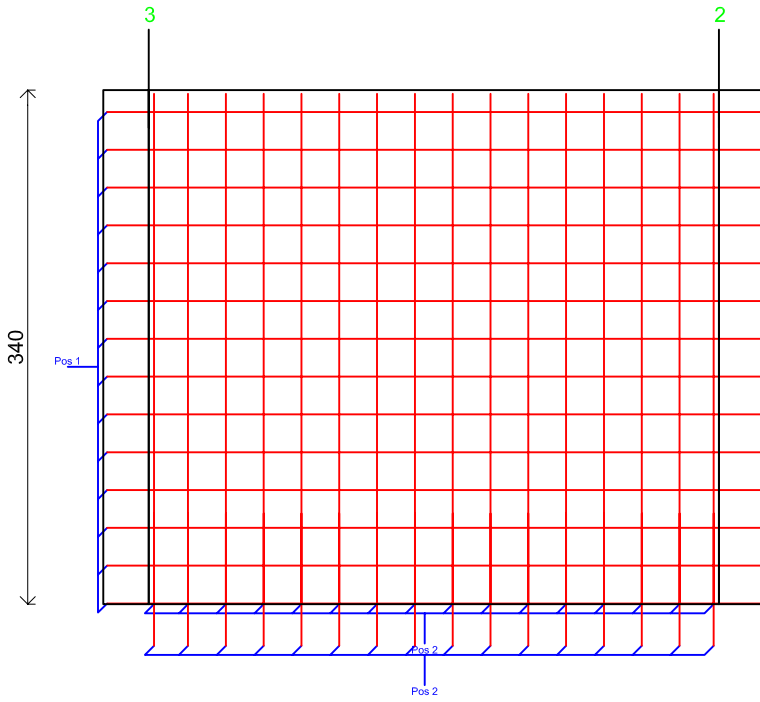
Armature

TIPO	ø	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE

Zona	ø	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa3 Piano 1 Fili Fissi 3-2



25

16ø10 L=111 Pos 2

23 88 23

23 88

16ø10 L=111 Pos 2

16ø10 L=361 Pos 2

338

23

338

23

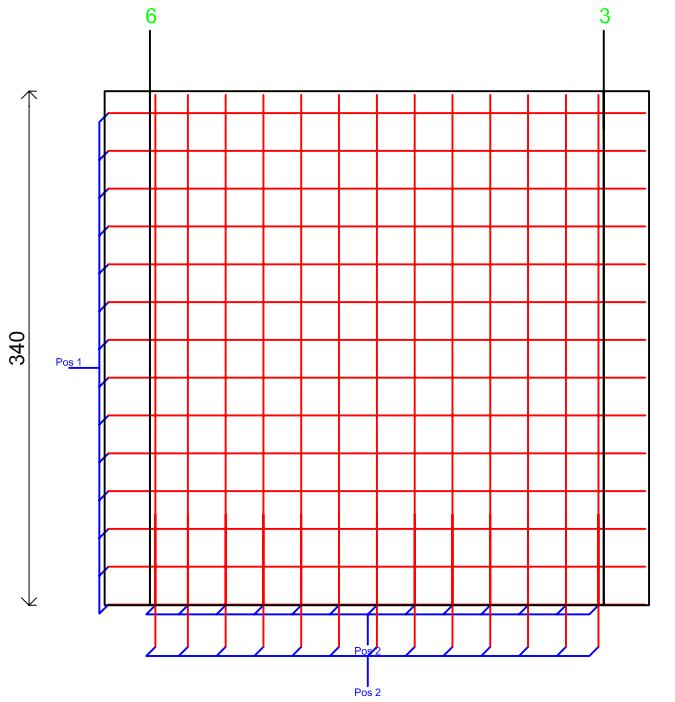
16ø10 L=361 Pos 2

Materiali	
Cls	C25/30
Acciaio	B450C

Armature			
TIPO	ø	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE			
Zona	ø	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa4 Piano 1 Fili Fissi 6-3

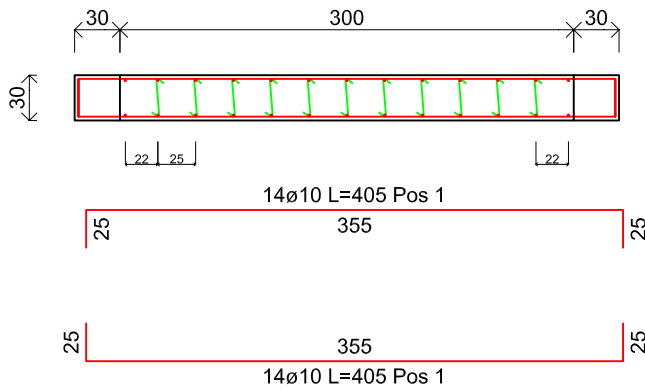


13 ϕ 10 L=111 Pos 2
23 88

13 ϕ 10 L=111 Pos 2
23 88

13 ϕ 10 L=361 Pos 2
338 23

13 ϕ 10 L=361 Pos 2
338 23



Materiali

Cls	C25/30
Acciaio	B450C

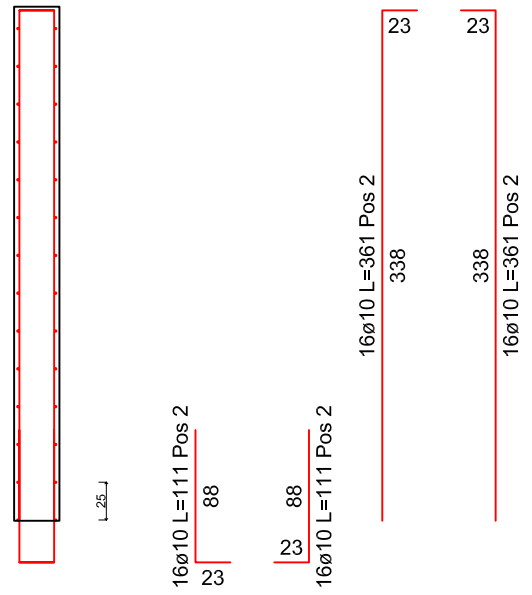
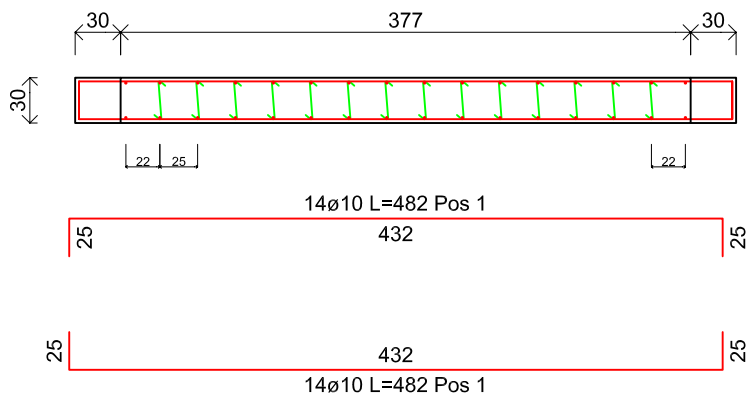
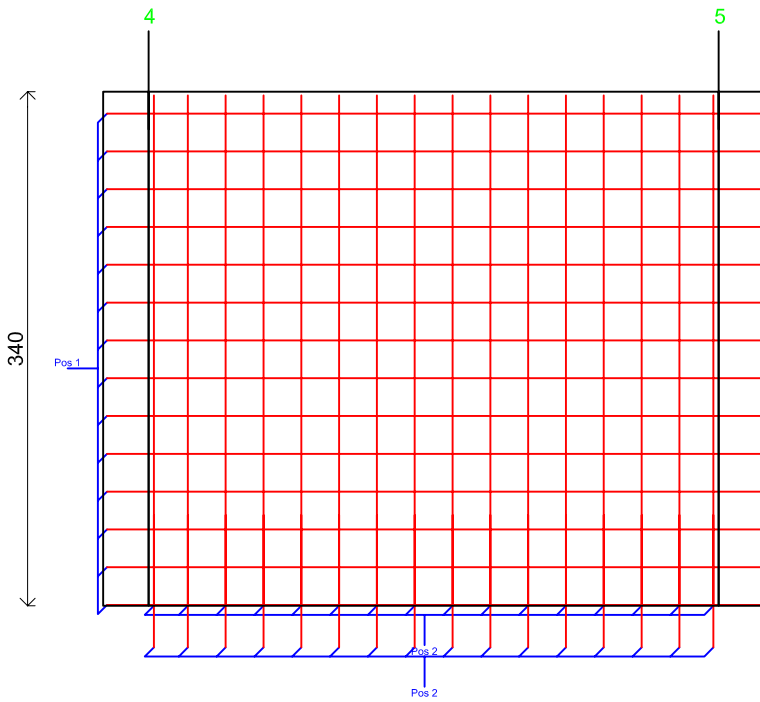
Armature

TIPO	ϕ	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE

Zona	ϕ	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa5 Piano 1 Fili Fissi 4-5



Materiali

Cls	C25/30
Acciaio	B450C

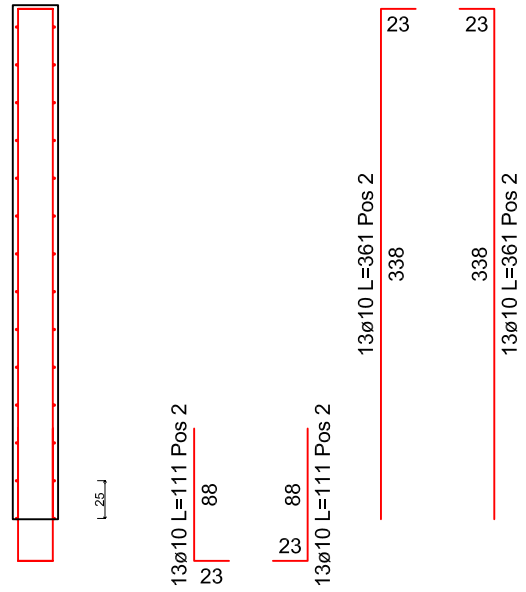
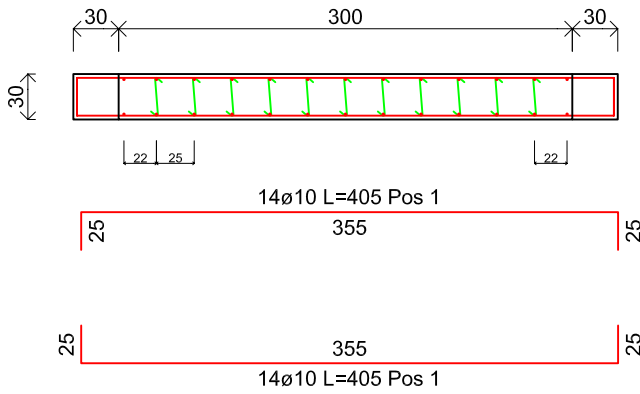
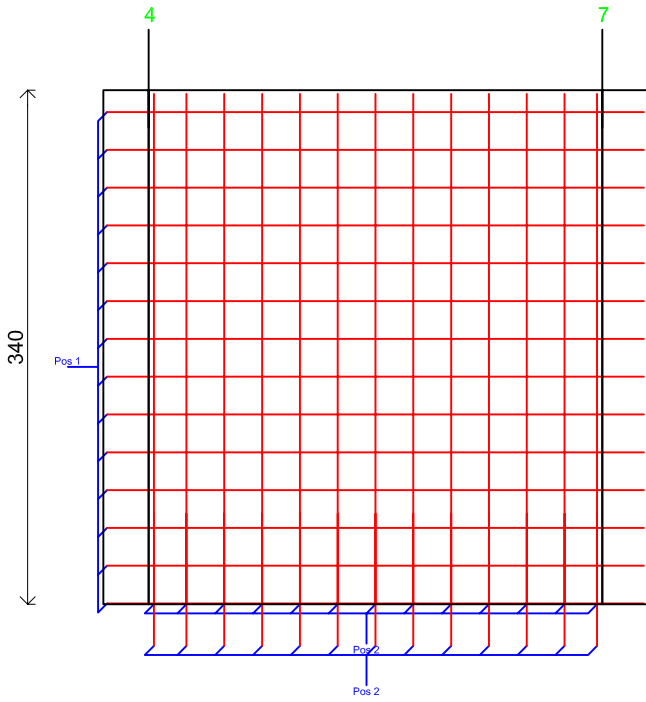
Armature

TIPO	ϕ	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE

Zona	ϕ	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa6 Piano 1 Fili Fissi 4-7



Materiali

Cls	C25/30
Acciaio	B450C

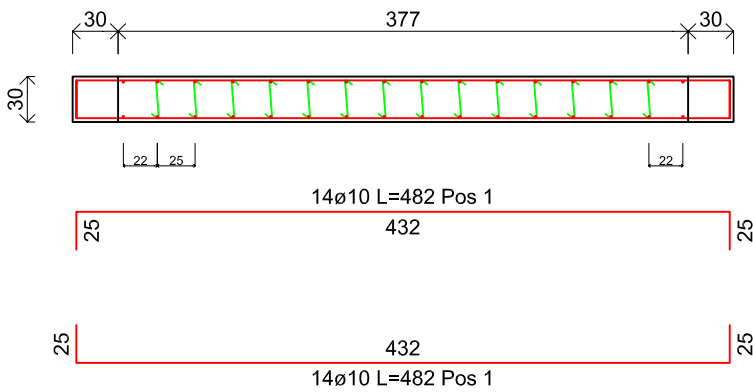
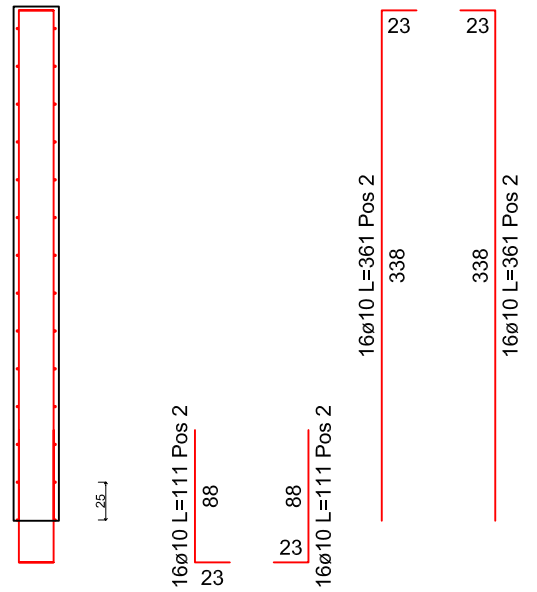
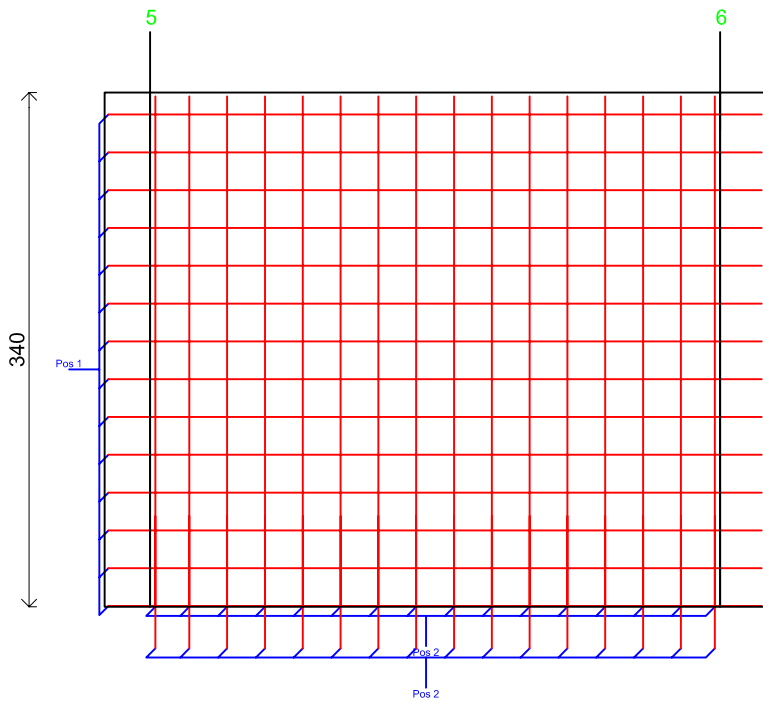
Armature

TIPO	ø	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE

Zona	ø	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa7 Piano 1 Fili Fissi 5-6



Materiali

Cls	C25/30
Acciaio	B450C

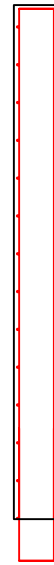
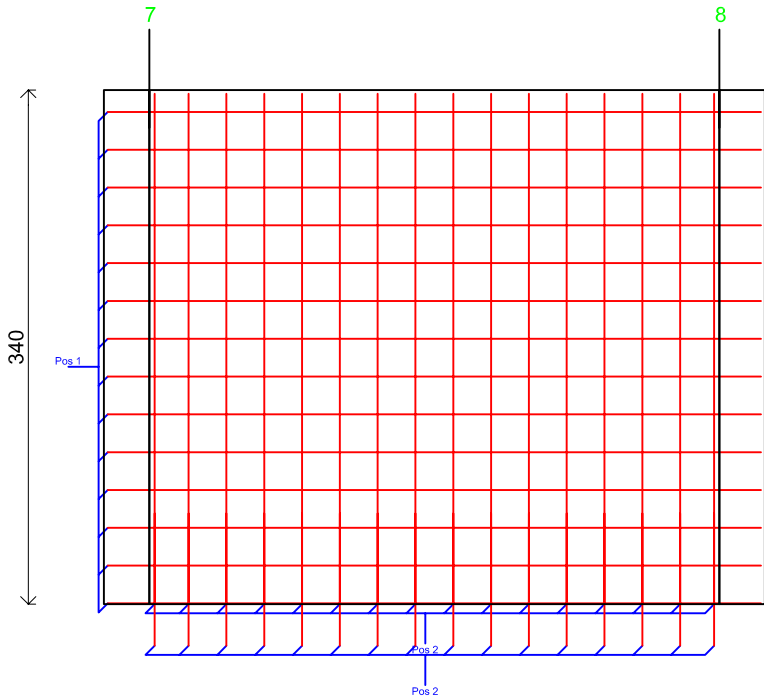
Armature

TIPO	∅	Passo	Pos.
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE

Zona	∅	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa9 Piano 1 Fili Fissi 7-8

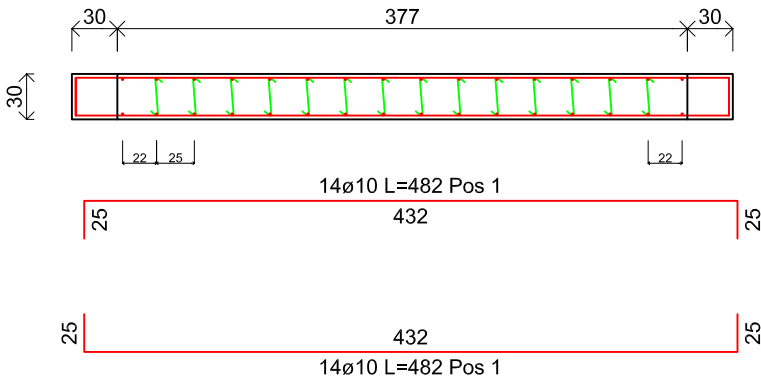


16 ϕ 10 L=111 Pos 2
23 88 23

16 ϕ 10 L=111 Pos 2
23 88 23

16 ϕ 10 L=361 Pos 2
23 338 23

16 ϕ 10 L=361 Pos 2
23 338 23



Materiali

Cls	C25/30
Acciaio	B450C

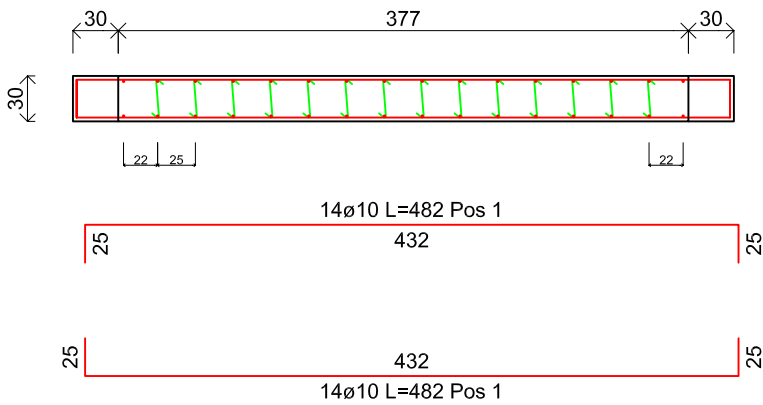
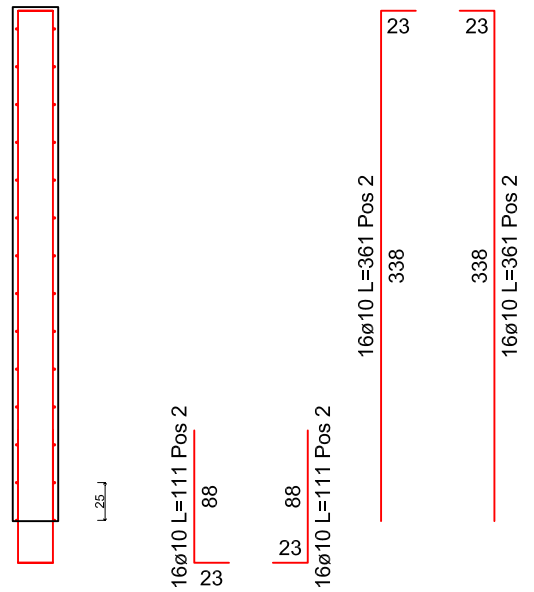
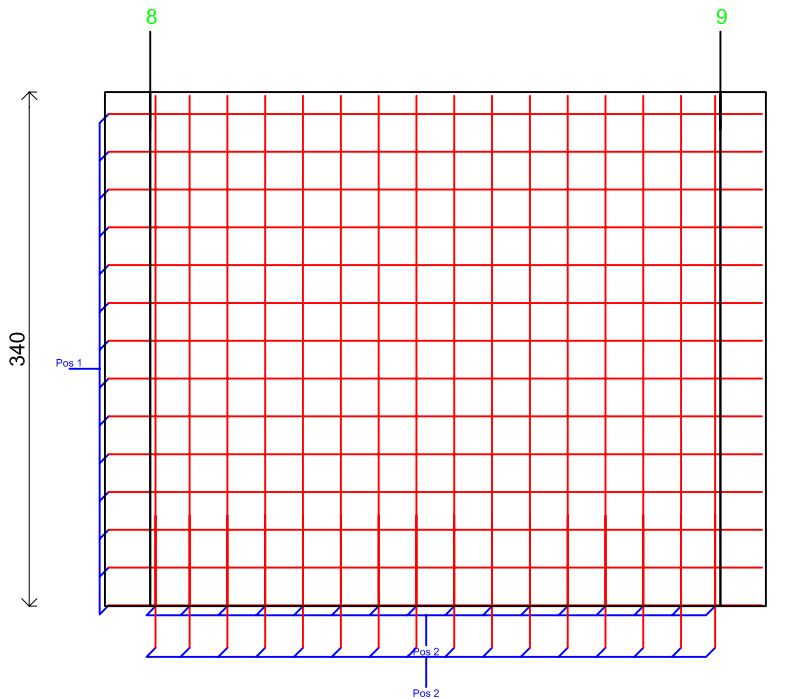
Armature

TIPO	ϕ	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE

Zona	ϕ	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa10 Piano 1 Fili Fissi 8-9



Materiali

Cls	C25/30
Acciaio	B450C

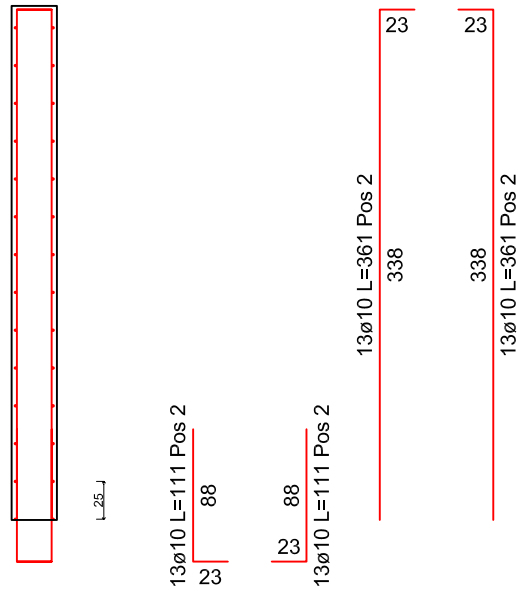
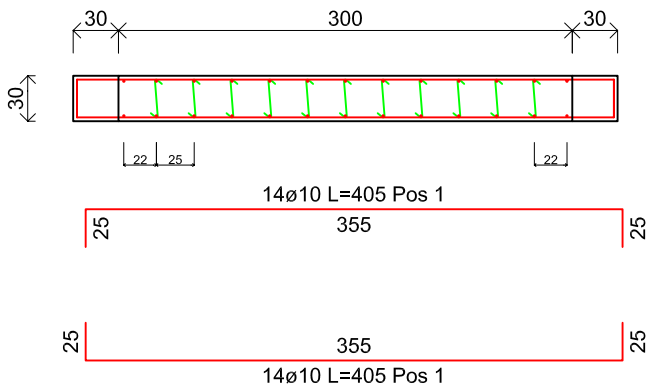
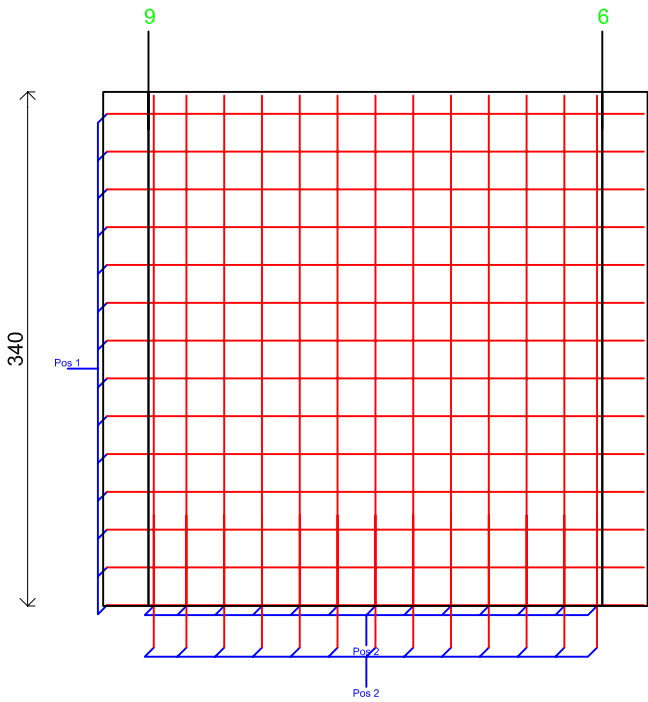
Armature

TIPO	ø	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE

Zona	ø	Passo Oriz	Passo Vert
Non Conf	8	25	25

Parete non Dissipativa8 Piano 1 Fili Fissi 9-6



Materiali

Cls	C25/30
Acciaio	B450C

Armature

TIPO	ø	Passo	Pos
Oriz.	10	25	1
Vert.	10	25	2

LEGATURE

Zona	ø	Passo Oriz	Passo Vert
Non Conf	8	25	25

Pilastrata 1

Comune di SANTO STEFANO DI CAMASTRA

Provincia di MESSINA

ESECUTIVI DI CANTIERE

Pilastrate

Oggetto: **Calcolo delle strutture in c.a. per la realizzazione dei serbatoi di bunkeraggio a servizio del portoturistico**

Ditta: COSTRUZIONI BRUNO S.P.A.

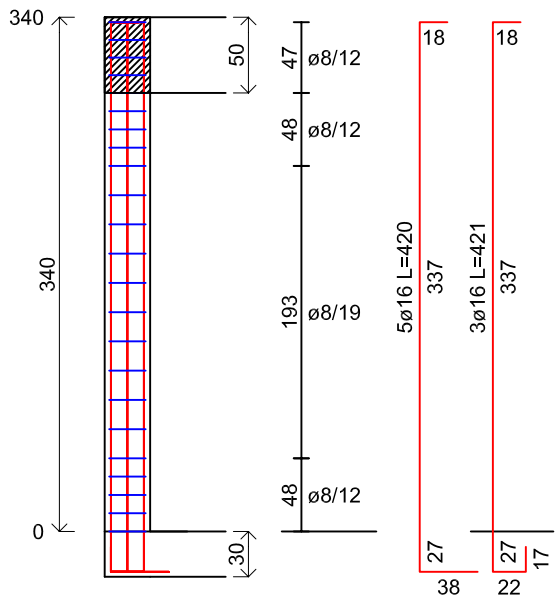
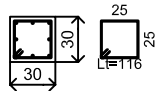
Data: 20/04/2017

Materiali

CLS
C25/30
ACCIAIO LONGITUDINALI
B450C
ACCIAIO STAFFE
B450C

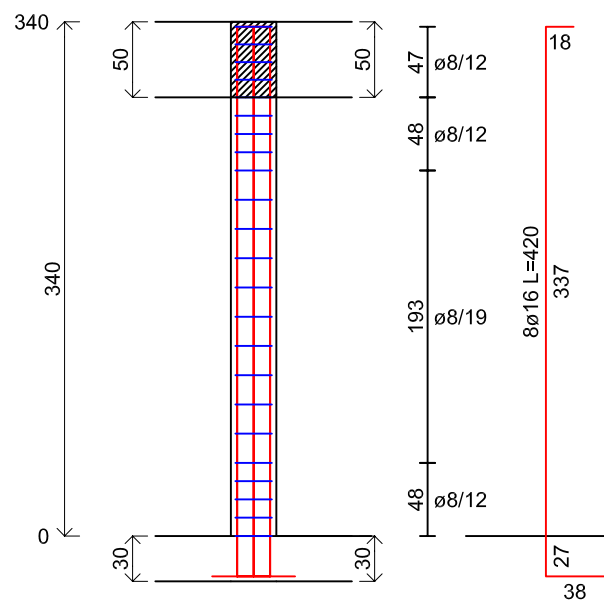
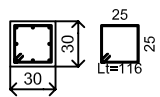
Pilastrata 1

Clis = C25/30
Acciaio = B450C



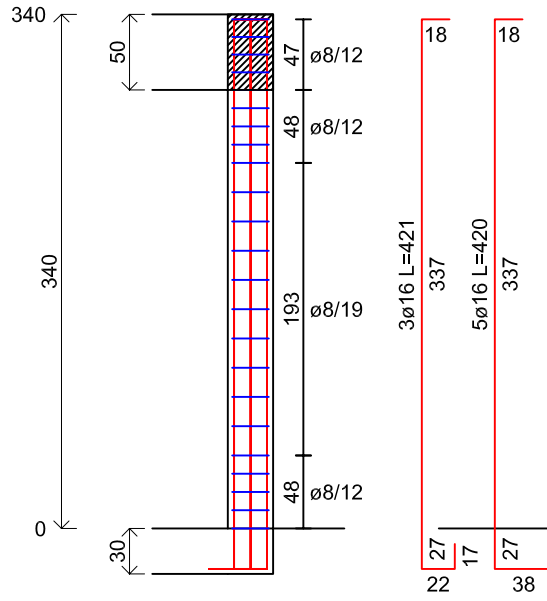
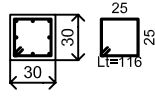
Pilastrata 2

Clis = C25/30
Acciaio = B450C



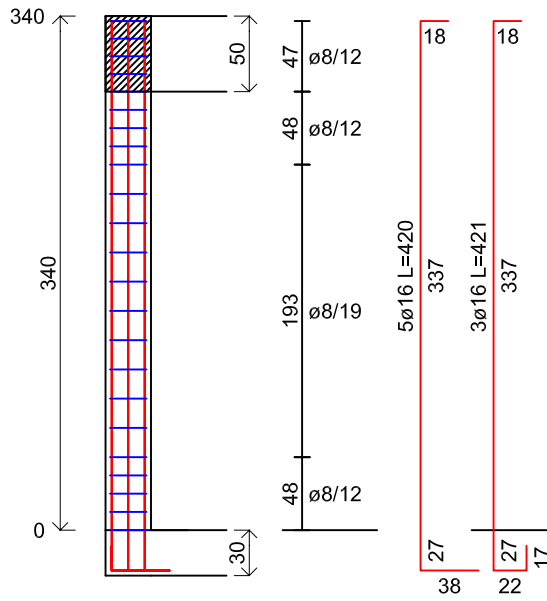
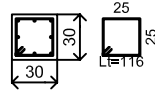
Pilastrata 3

Cls = C25/30
Acciaio = B450C



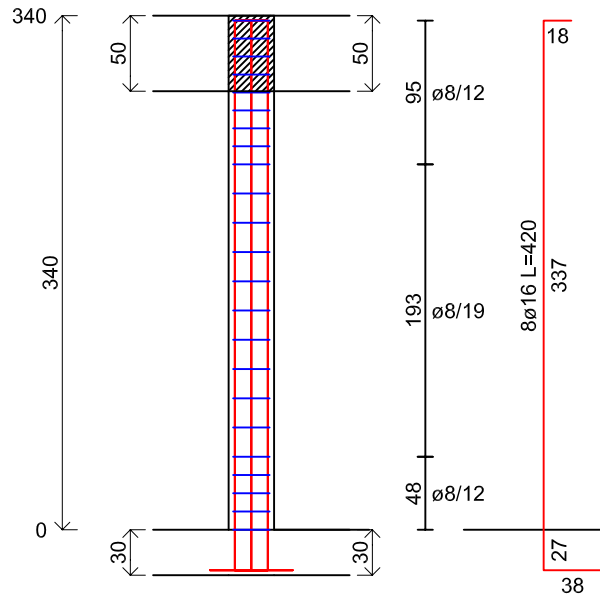
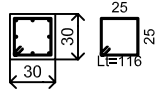
Pilastrata 4

Cls = C25/30
Acciaio = B450C



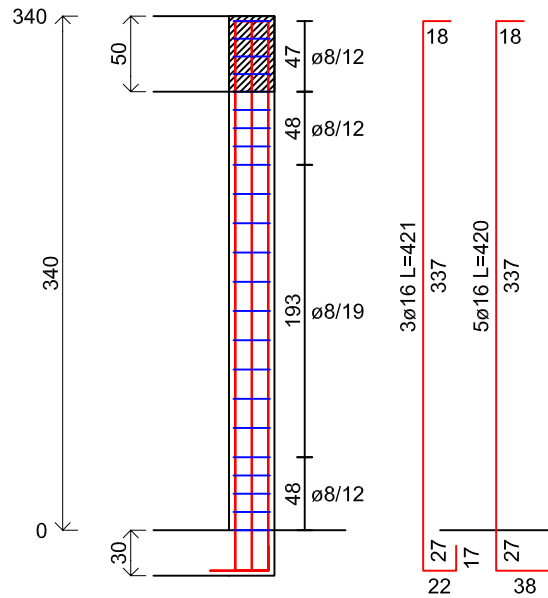
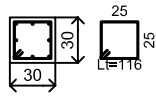
Pilastrata 5

Cls = C25/30
Acciaio = B450C



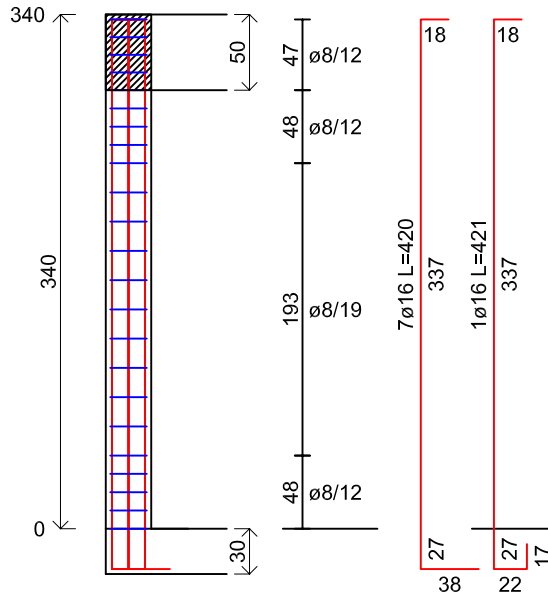
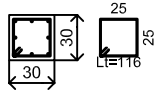
Pilastrata 6

Cls = C25/30
Acciaio = B450C



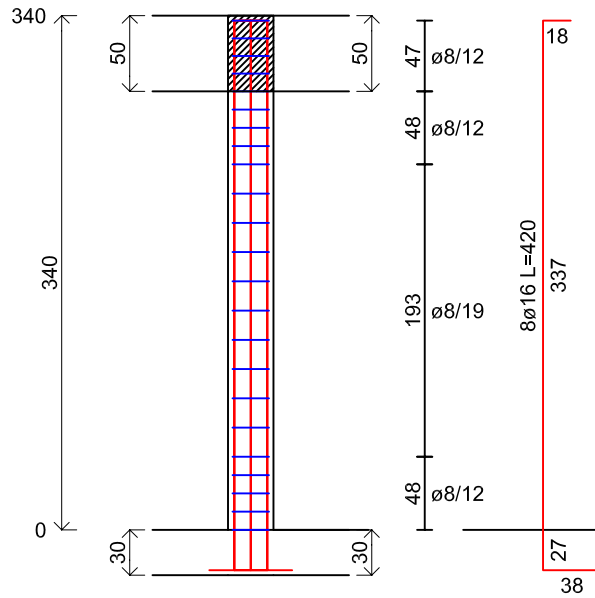
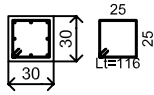
Pilastrata 7

Cls = C25/30
Acciaio = B450C



Pilastrata 8

Cls = C25/30
Acciaio = B450C



Pilastrata 9

Cls = C25/30
 Acciaio = B450C

