
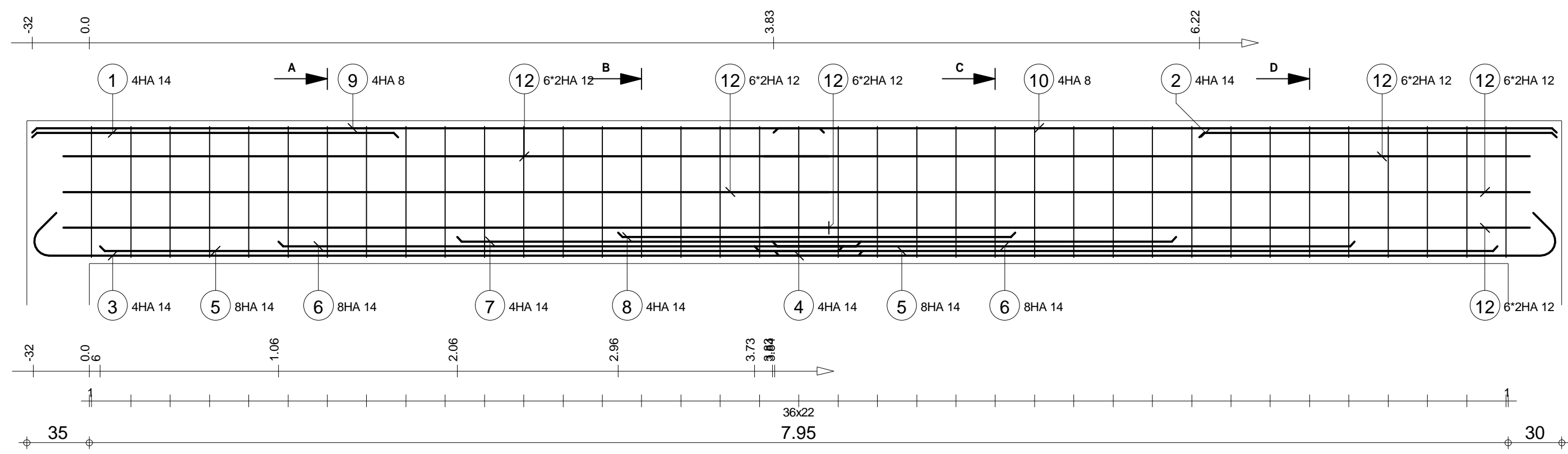
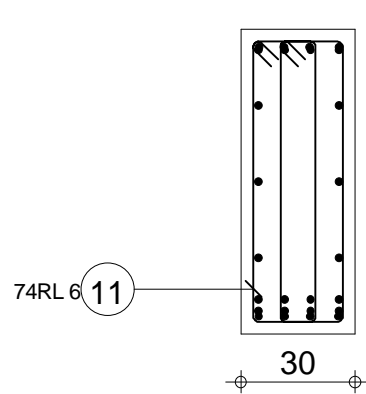


Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme										
①	3HA 8	l=1.74	00		④	3HA 14	l=4.35	00		⑦	3HA 14	l=4.38	00		⑩	3HA 8	l=5.49	00											
②	3HA 12	l=4.27	00		⑤	3HA 14	l=4.10	00		⑧	3HA 14	l=3.39	00		⑪	6*2HA 12	l=3.79	00											
③	66RL 6	l=1.56	31		⑥	3HA 14	l=5.99	00		⑨	3HA 8	l=3.89	00		⑫	3HA 12	l=3.03	00											
Tél.										Fax																			
R+4 PROJET CERME_PLANS GUIDES					POUTRE 1 Section 20x70										Nombre 1					Acier HA 400 = 164 kg									
															Béton : BETON25 = 1.28 m3					Acier RL 235 = 26.3 kg									
															Enrobage inférieur 3 cm					Enrobage supérieur 3 cm					Enrobage latéral 3 cm				
															Densité = 149.2 kg/ m3 Surface du coffrage = 14.8 m2					Echelle pour la vue 3.97cm/m Echelle pour la section 5.71cm/m					Page 1/2				

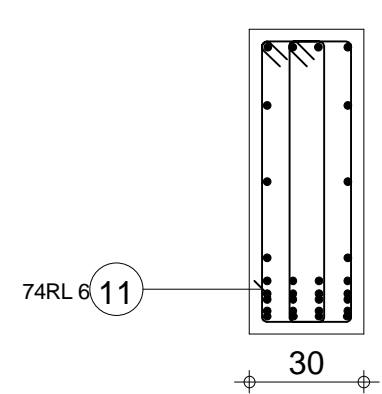
Pos.	Armature	Code	Forme
16	8RL 6 l=1.55	31	



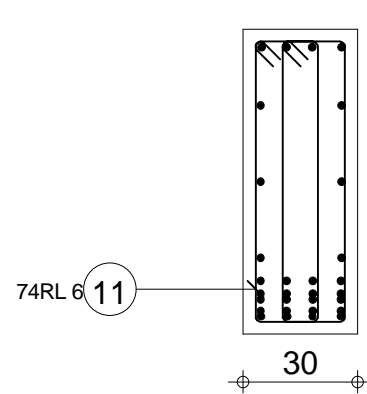
A-A



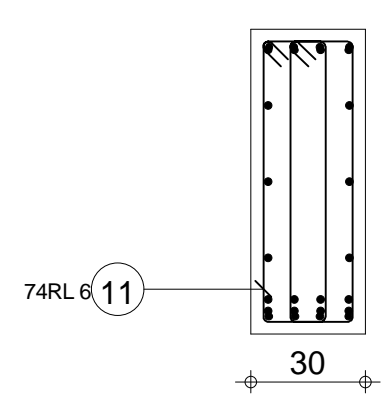
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 14	l=2.05	00	④	4HA 14	l=4.62	00	⑦	4HA 14	l=4.03	00	⑩	4HA 8	l=4.38	00
②	4HA 14	l=2.00	00	⑤	8HA 14	l=4.16	00	⑧	4HA 14	l=2.23	00	⑪	74RL 6	l=1.93	31
③	4HA 14	l=4.89	00	⑥	8HA 14	l=3.26	00	⑨	4HA 8	l=4.43	00	⑫	6*2HA 12	l=4.29	00

R+4

PROJET CERME_PLANS GUIDES

POUTRE 2

Section 30x80

Tél.

Fax

Nombre 1

Béton : BETON25 = 2.06 m3

Enrobage inférieur 3 cm

Densité = 125.7 kg/ m3

Surface du coffrage = 16.6 m2

Acier HA 400 = 227 kg

Acier RL 235 = 31.7 kg

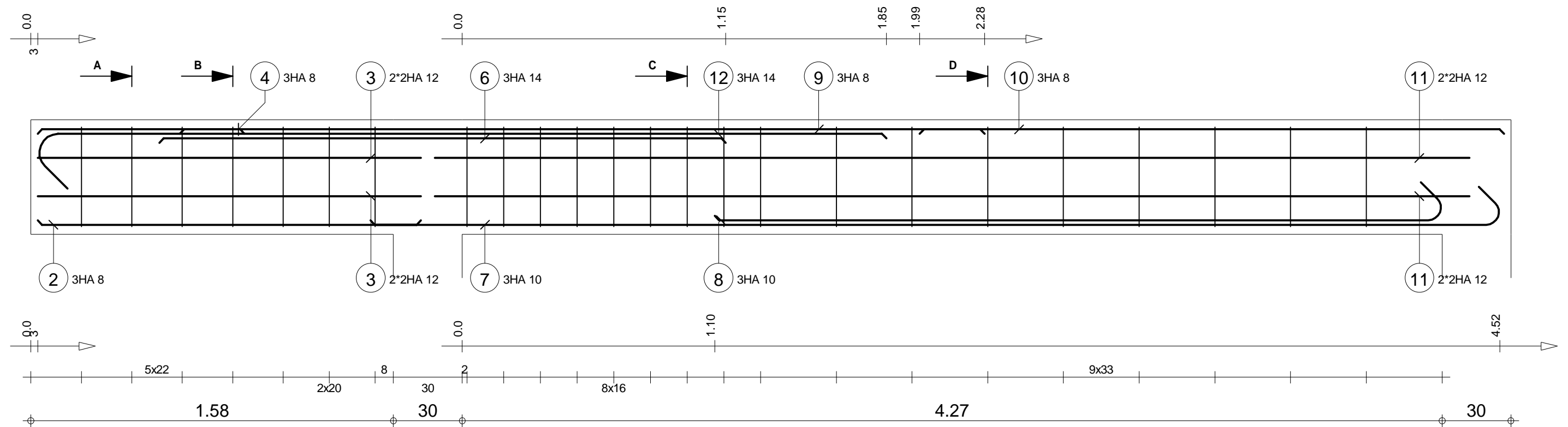
Enrobage supérieur 3 cm

Echelle pour la vue 4.22cm/m

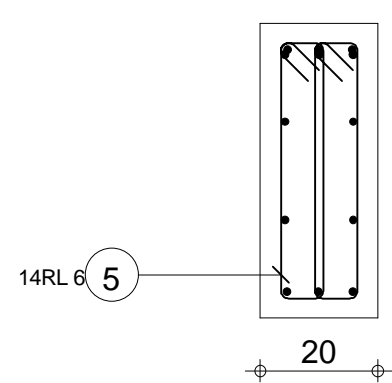
Echelle pour la section 5.05cm/m

Enrobage latéral 3 cm

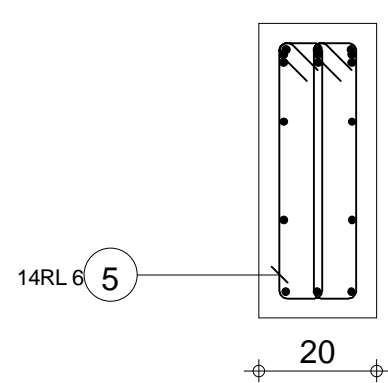
Page 1/1



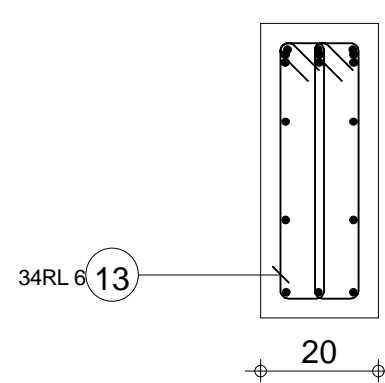
A-A



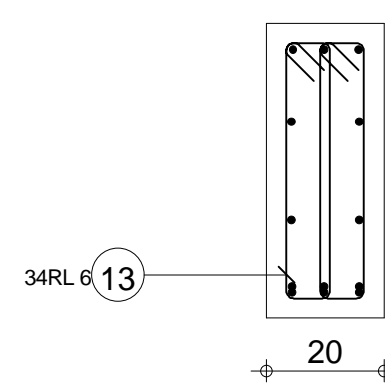
B-B



C-C

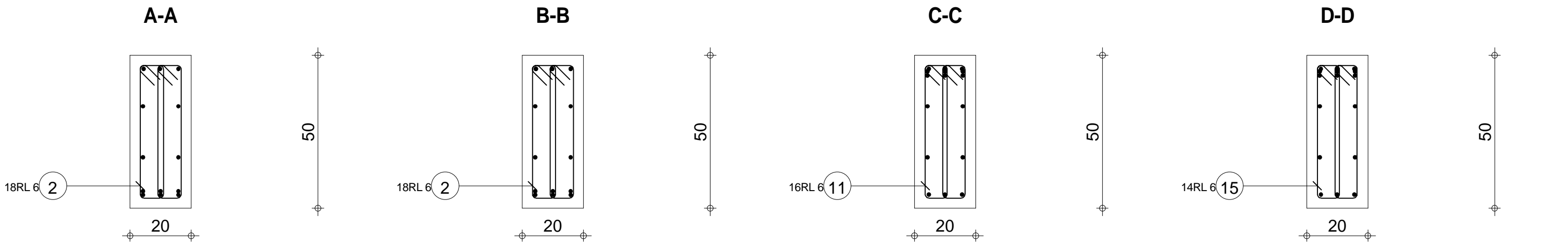


D-D

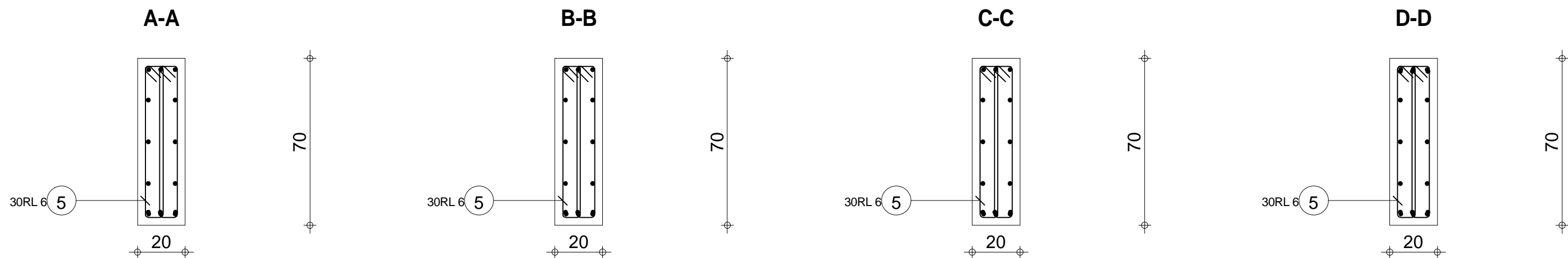
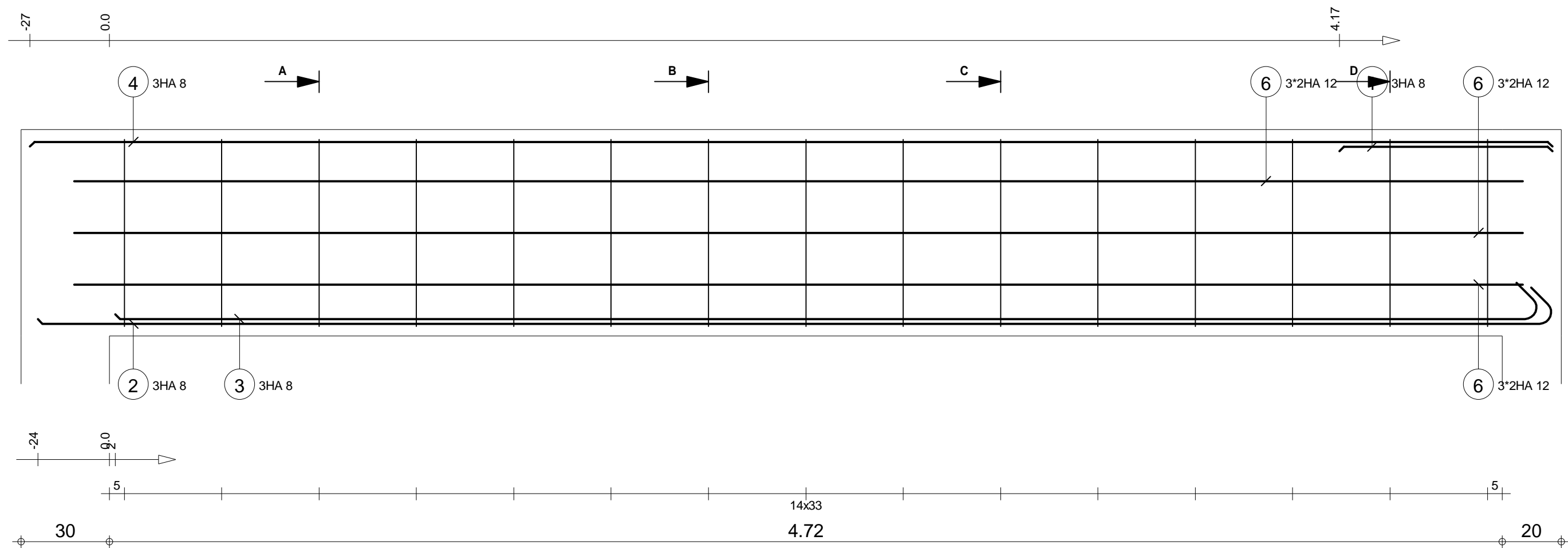



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
②	3HA 8	l=1.67	00	⑤	14RL 6	l=1.15*	31	⑧	3HA 10	l=3.34	00	⑪	2*2HA 12	l=4.51	00
③	2*2HA 12	l=1.67	00	⑥	3HA 14	l=2.47	00	⑨	3HA 8	l=3.51	00	⑫	3HA 14	l=3.94	00
④	3HA 8	l=90	00	⑦	3HA 10	l=5.09	00	⑩	3HA 8	l=2.55	00	⑬	34RL 6	l=1.16	31

R+4 PROJET CERME_PLANS GUIDES		POUTRE 4 Section 20x50		Tél. Fax		Nombre 1		Béton : BETON25 = 0.645 m3		Acier HA 400 = 71 kg	
								Enrobage inférieur 3 cm		Acier RL 235 = 12.3 kg	
								Densité = 129.1 kg/ m3		Enrobage supérieur 3 cm	
								Surface du coffrage = 7.82 m2		Enrobage latéral 3 cm	
								Echelle pour la vue 5.57cm/m		Echelle pour la section 7.8cm/m	
										Page 1/1	

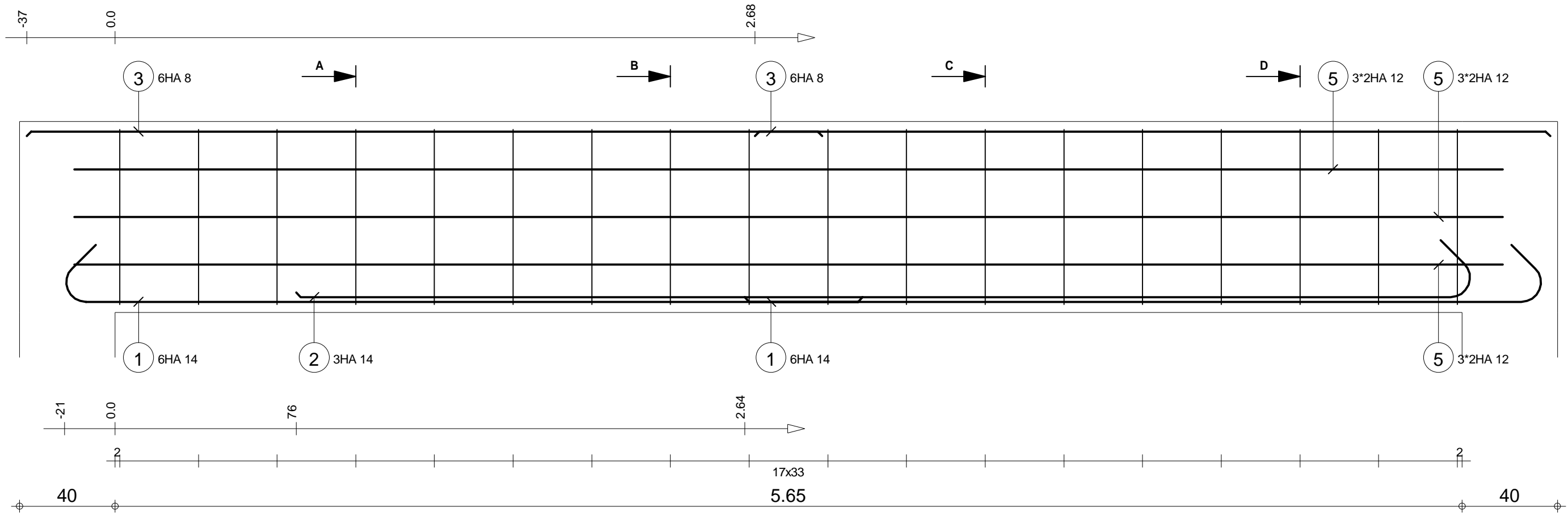


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme								
①	3HA 12 l=56	00		④	3HA 12 l=3.52	00		⑦	2*2HA 12 l=2.91	00		⑩	2*2HA 12 l=2.91	00		⑬	3HA 8 l=3.32	00									
②	18RL 6 l=1.16	31		⑤	3HA 8 l=1.63	00		⑧	3HA 14 l=4.37	00		⑪	16RL 6 l=1.15	31		⑭	2*2HA 12 l=1.67	00									
③	3HA 12 l=3.47	00		⑥	3HA 8 l=3.29	00		⑨	3HA 14 l=2.49	00		⑫	3HA 8 l=4.63	00		⑮	14RL 6 l=1.15	31									
Tél.												Fax															
R+4 PROJET CERME_PLANS GUIDES				POUTRE 5 Section 20x50								Nombre 1				Acier HA 400 = 86.8 kg											
																Béton : BETON25 = 0.774 m3				Acier RL 235 = 12.3 kg							
																Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
																Densité = 128 kg/ m3				Echelle pour la vue 4.67cm/m				Page 1/1			
												Surface du coffrage = 9.33 m2								Echelle pour la section 7.8cm/m							



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 8 l=72	00	72	④	3HA 8 l=5.16	00	5.16
②	3HA 8 l=5.26	00	5.13 ↗	⑤	30RL 6 l=1.55	31	
③	3HA 8 l=4.95	00	4.82 ↗	⑥	3*2HA 12 l=4.91	00	4.91

R+4 PROJET CERME_PLANS GUIDES		POUTRE 6 Section 20x70		Tél. Fax		Nombre 1		Béton : BETON25 = 0.731 m3		Acier HA 400 = 45.2 kg	
								Enrobage inférieur 3 cm		Acier RL 235 = 10.4 kg	
								Densité = 76.06 kg/ m3		Enrobage supérieur 3 cm	
								Surface du coffrage = 8.53 m2		Enrobage latéral 3 cm	
								Echelle pour la vue 6.83cm/m		Echelle pour la section 5.71cm/m	
										Page 1/1	

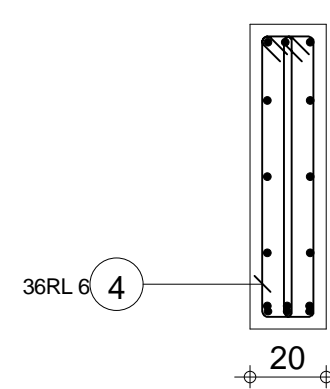
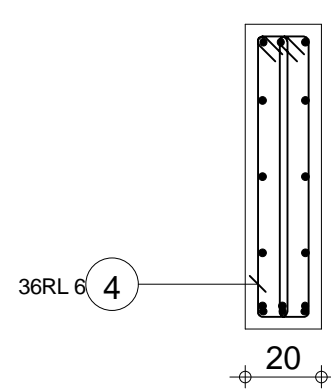
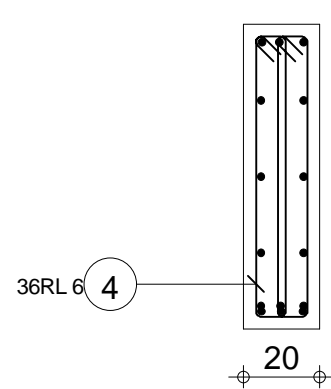
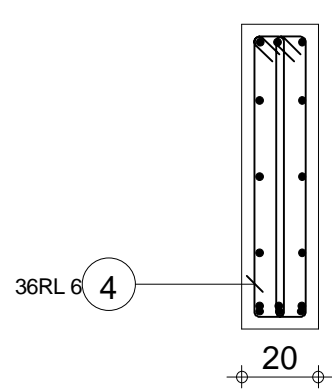


A-A

B-B

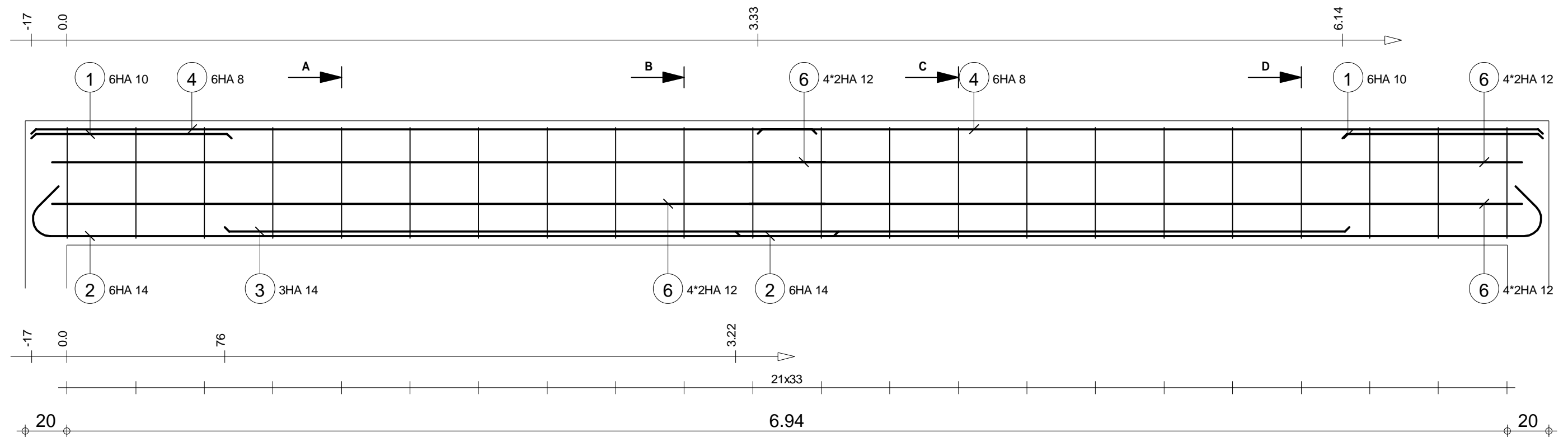
C-C

D-D

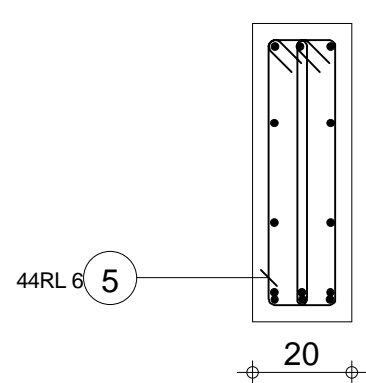


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 14	l=3.59	00	④	36RL 6	l=1.76	31
②	3HA 14	l=5.17	00	⑤	3*2HA 12	l=5.99	00
③	6HA 8	l=3.34	00				

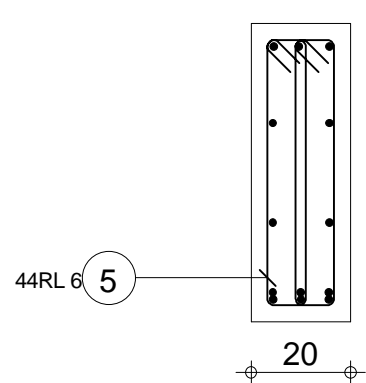
R+4		POUTRE 7		Nombre 1		Béton : BETON25 = 1.03 m3		Acier HA 400 = 84.6 kg	
PROJET CERME_PLANS GUIDES		Section 20x80				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 95.83 kg/ m3		Echelle pour la vue 5.57cm/m	
						Surface du coffrage = 11.8 m2		Echelle pour la section 5.05cm/m	
								Page 1/1	



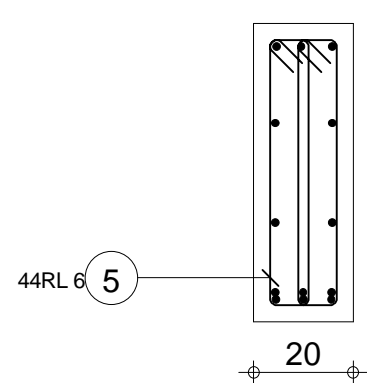
A-A



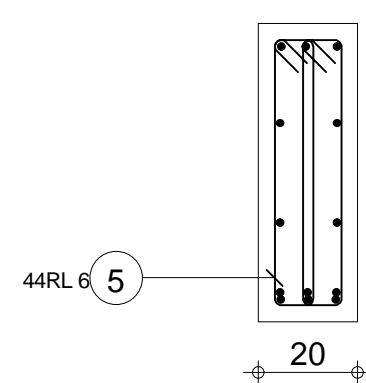
B-B



C-C

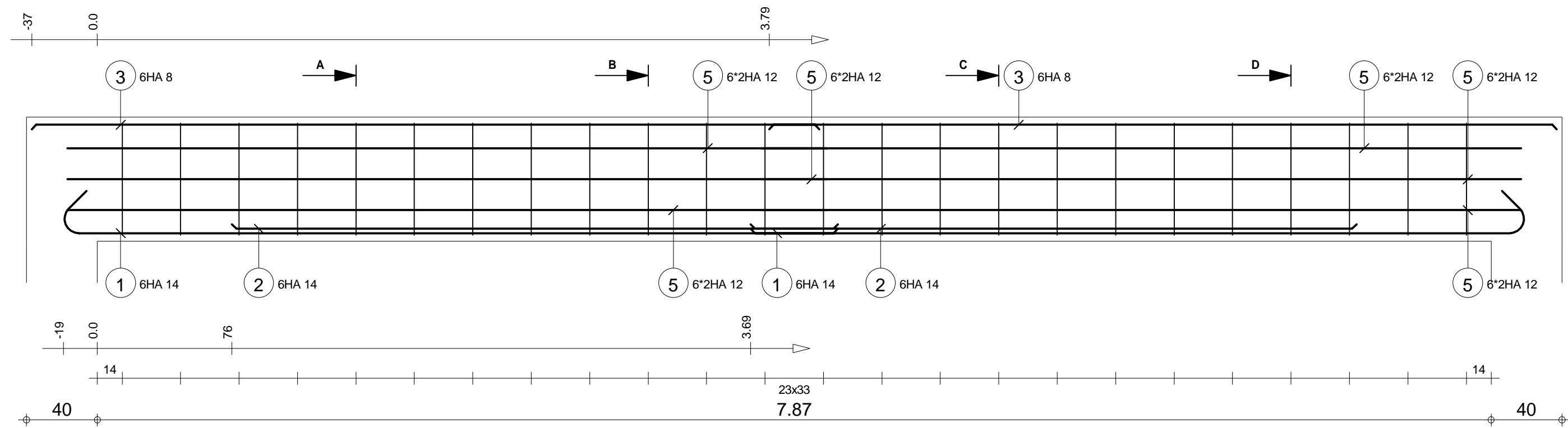


D-D

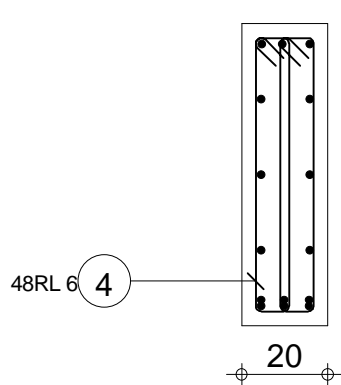


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	l=96	00	④	6HA 8	l=3.78	00
②	6HA 14	l=4.13	00	⑤	44RL 6	l=1.36	31
③	3HA 14	l=5.42	00	⑥	4*2HA 12	l=3.72	00

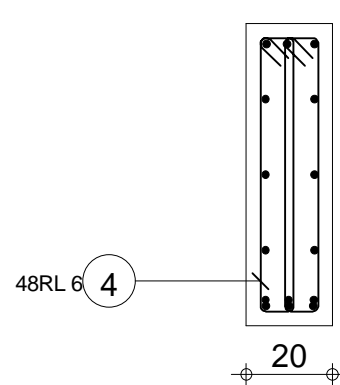
R+4 PROJET CERME_PLANS GUIDES		POUTRE 8 Section 20x60		Nombre 1		Béton : BETON25 = 0.88 m3		Acier HA 400 = 88.5 kg	
						Enrobage inférieur 3 cm		Acier RL 235 = 13.3 kg	
						Densité = 115.9 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 10.4 m2		Enrobage latéral 3 cm	
						Echelle pour la vue 4.92cm/m		Echelle pour la section 6.58cm/m	
								Page 1/1	



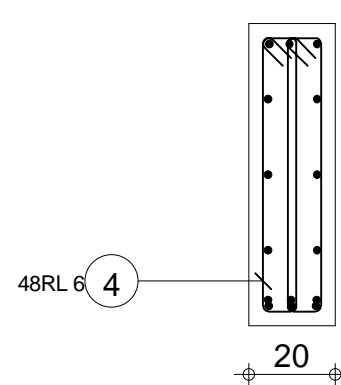
A-A



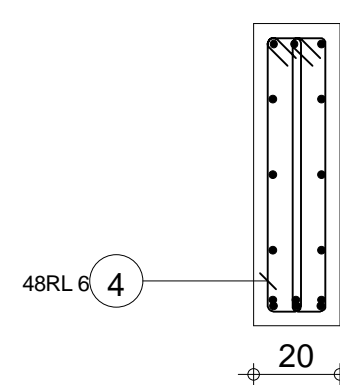
B-B



C-C

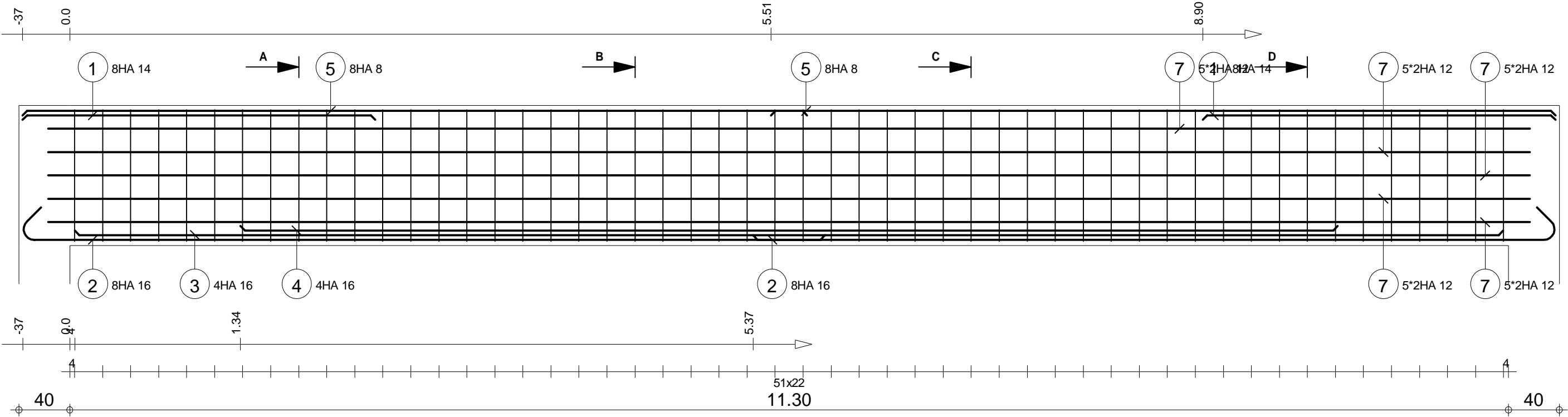


D-D

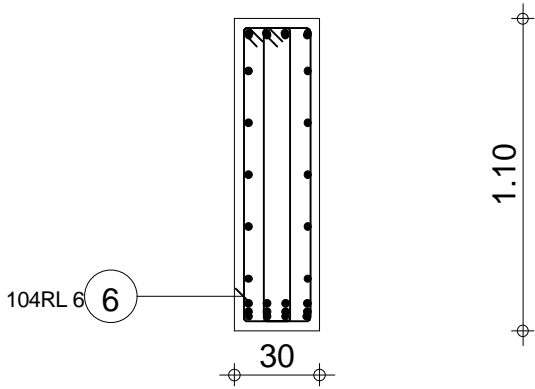


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
1	6HA 14	l=4.62	00	4	48RL 6	l=1.56	31
2	6HA 14	l=3.42	00	5	6*2HA 12	l=4.29	00
3	6HA 8	l=4.45	00				

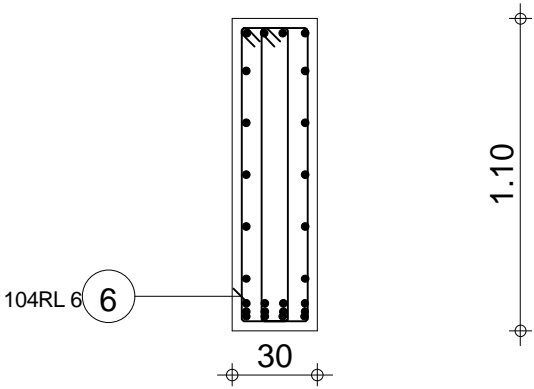
R+4		POUTRE 10		Nombre 1		Béton : BETON25 = 1.21 m3		Acier HA 400 = 114 kg	
PROJET CERME_PLANS GUIDES		Section 20x70				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 108.3 kg/ m3		Echelle pour la vue 4.18cm/m	
						Surface du coffrage = 14 m2		Echelle pour la section 5.71cm/m	
								Page 1/1	



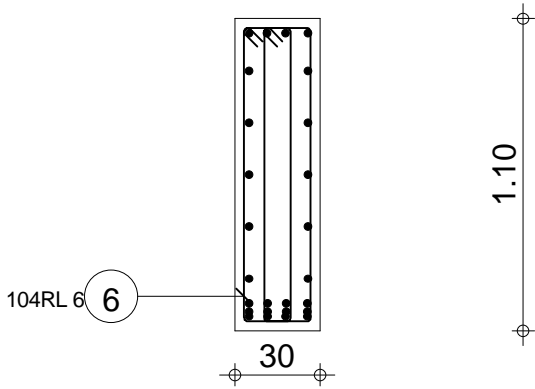
A-A



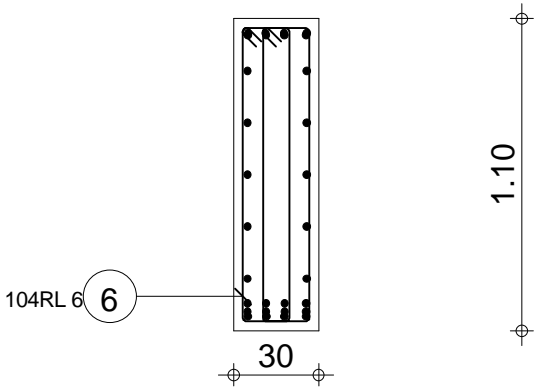
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	8HA 14	l=2.77	00	④	4HA 16	l=8.62	00	⑦	5*2HA 12	l=11.64	00
②	8HA 16	l=6.57	00	⑤	8HA 8	l=6.16	00				
③	4HA 16	l=11.22	00	⑥	104RL 6	l=2.53	31				

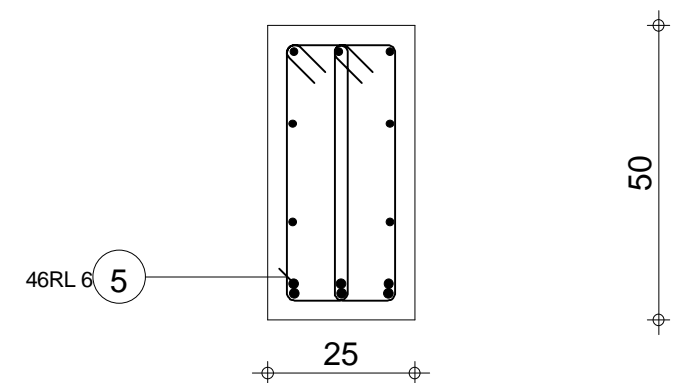
R+4				POUTRE 11				Nombre 1				Béton : BETON25 = 3.99 m3		Acier HA 400 = 358 kg	
PROJET CERME_PLANS GUIDES				Section 30x110								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 104.3 kg/ m3		Echelle pour la vue 3.03cm/m	
												Surface du coffrage = 30.7 m2		Echelle pour la section 3.76cm/m	
														Page 1/1	

A-A

B-B

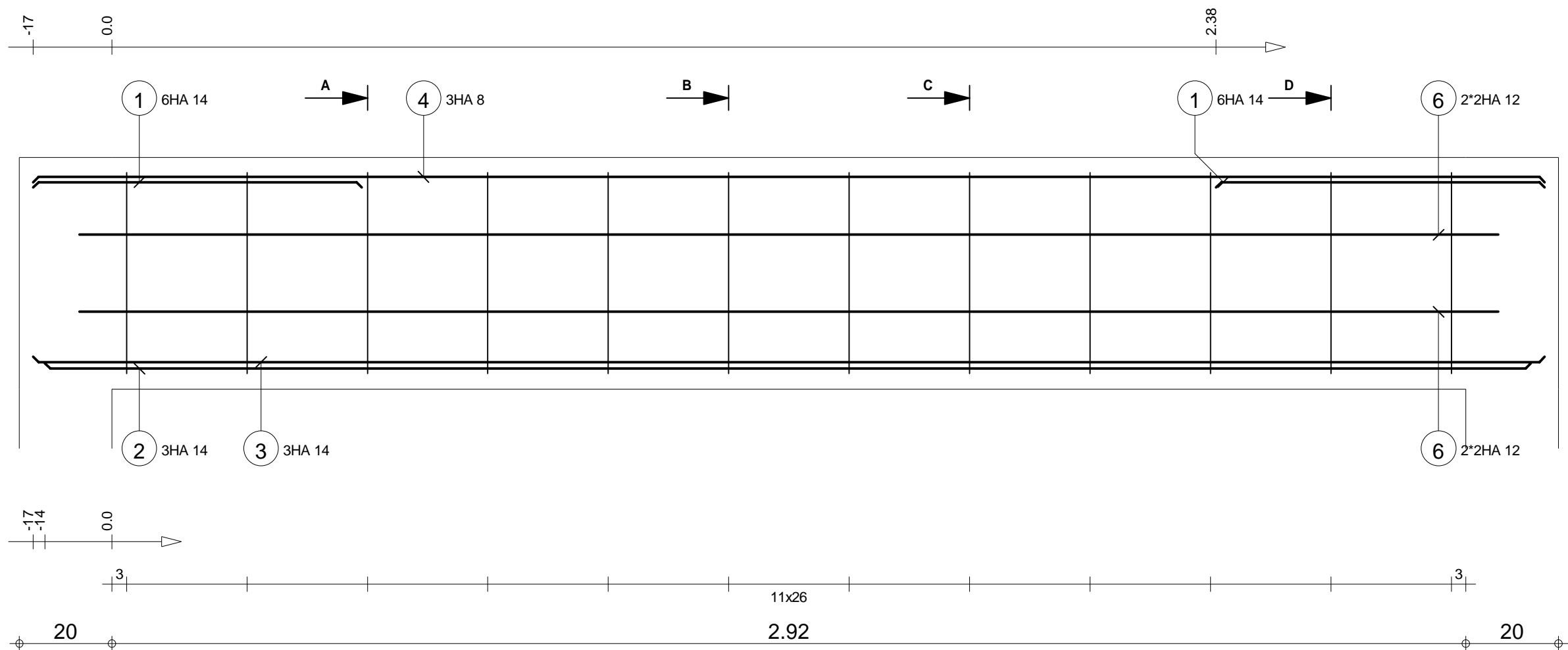
C-C

D-D

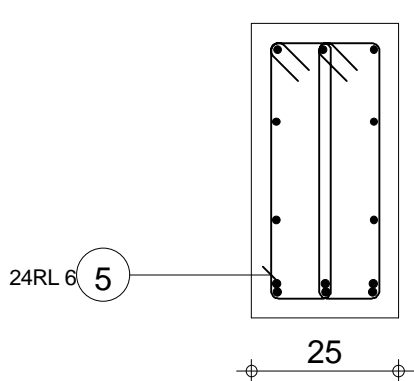


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 14 l=90	00		④	6HA 8 l=3.28	00	
②	6HA 16 l=3.69	00		⑤	46RL 6 l=1.21	31	
③	3HA 16 l=4.86	00		⑥	4*2HA 12 l=3.22	00	

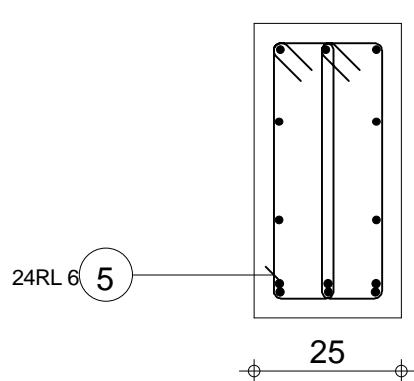
		Tél.	Fax			
R+4 PROJET CERME_PLANS GUIDES	POUTRE 12 Section 25x50	Nombre 1			Acier HA 400 = 95.1 kg	
			Béton : BETON25 = 0.792 m3		Acier RL 235 = 12.4 kg	
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 135.1 kg/ m3 Surface du coffrage = 8.07 m2		Echelle pour la vue 5.67cm/m Echelle pour la section 7.8cm/m	Page 1/1



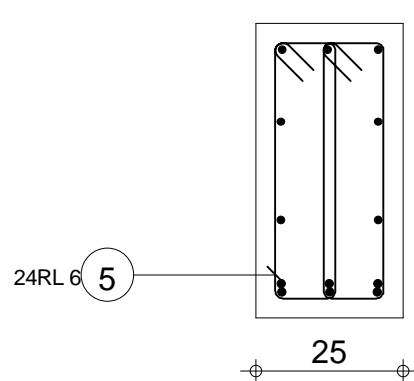
A-A



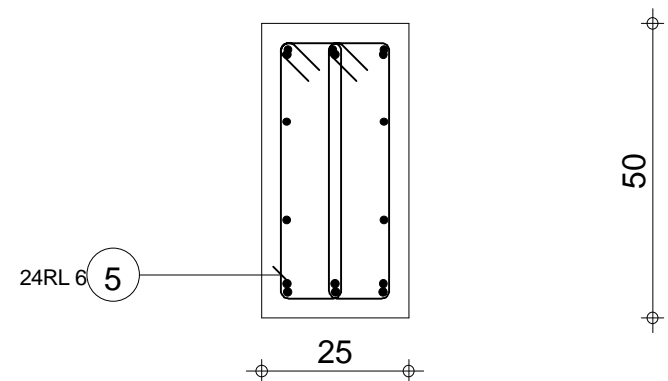
B-B



C-C

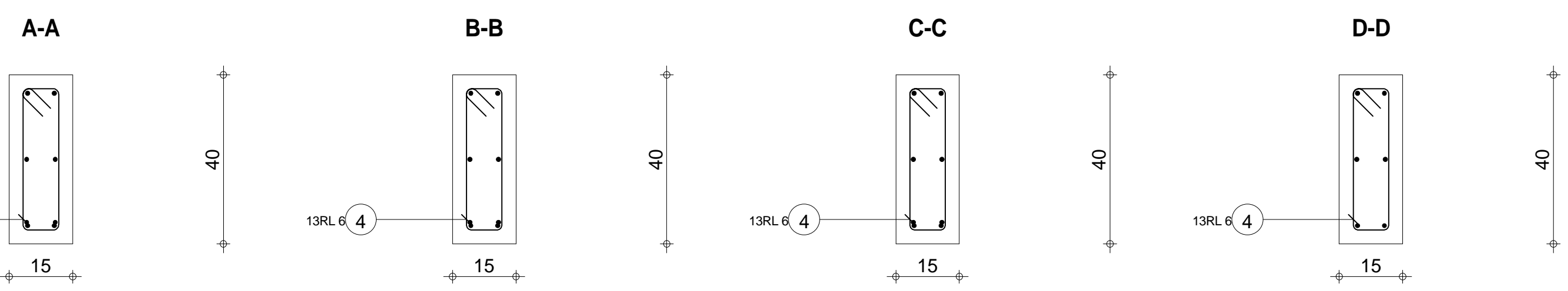
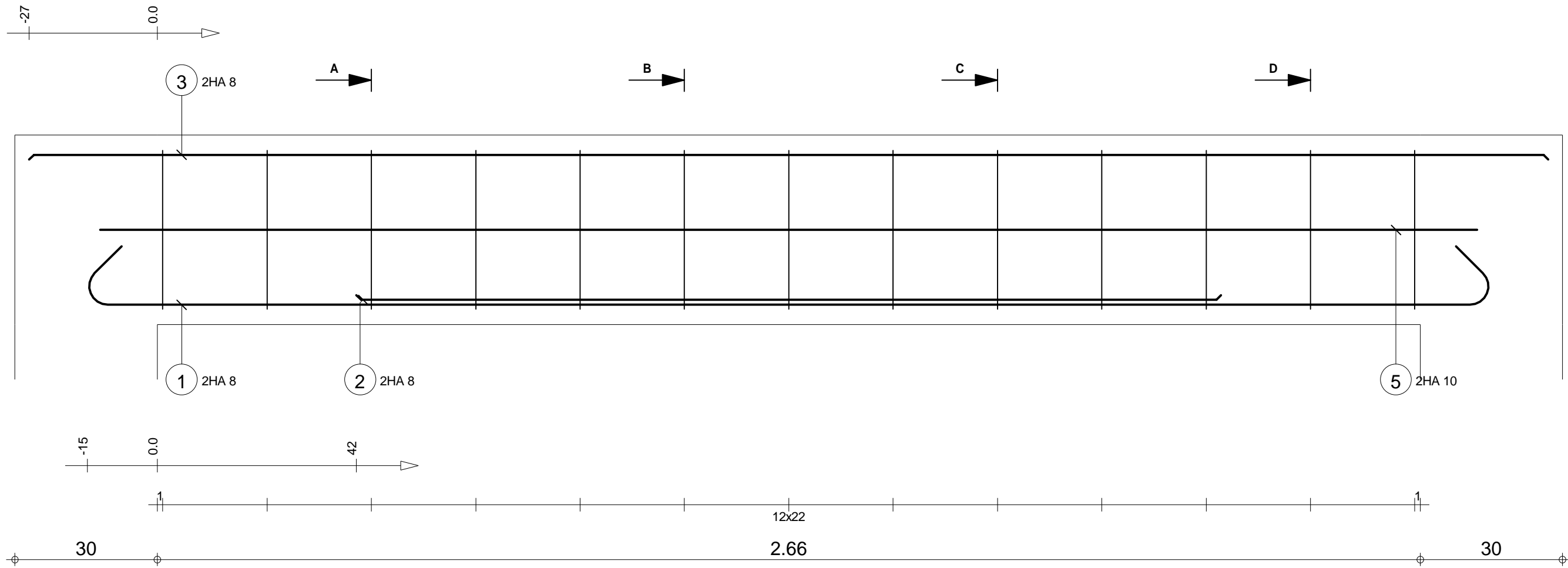


D-D



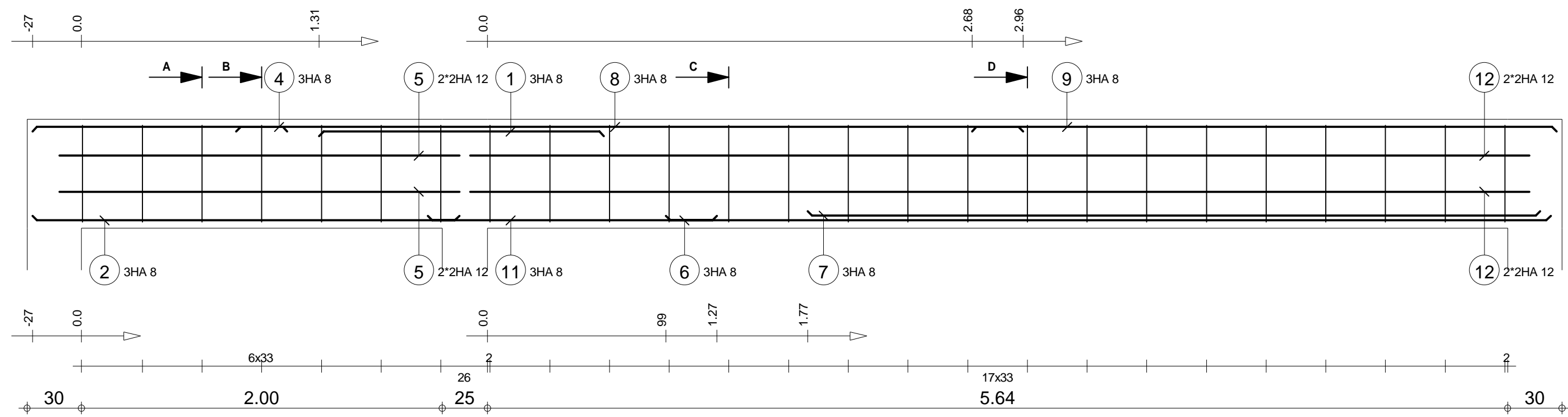
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 14	l=71	00	④	3HA 8	l=3.26	00
②	3HA 14	l=3.21	00	⑤	24RL 6	l=1.21	31
③	3HA 14	l=3.26	00	⑥	2*2HA 12	l=3.06	00

R+4 PROJET CERME_PLANS GUIDES		POUTRE 13 Section 25x50		Nombre 1		Tél.		Fax	
						Béton : BETON25 = 0.415 m3		Acier HA 400 = 43.3 kg	
						Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 120 kg/ m3		Echelle pour la vue 9.33cm/m	
						Surface du coffrage = 4.3 m2		Echelle pour la section 7.8cm/m	
								Page 1/1	

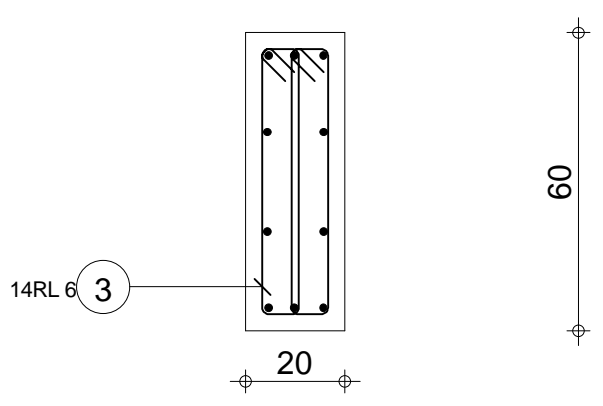


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 8	l=3.22	00	④	13RL 6	l=98	31
②	2HA 8	l=1.82	00	⑤	2HA 10	l=2.90	00
③	2HA 8	l=3.20	00				

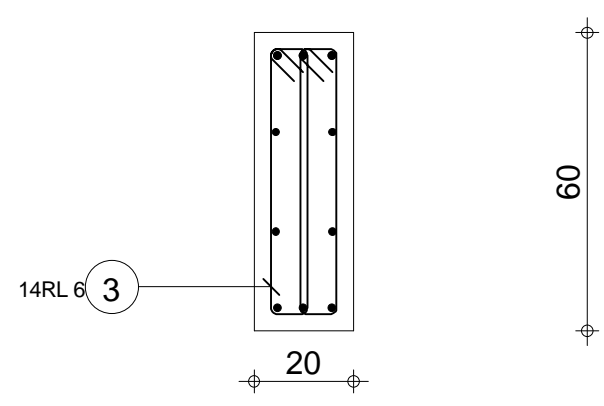
R+4		POUTRE 14		Nombre 1		Béton : BETON25 = 0.196 m3		Acier HA 400 = 10.1 kg	
PROJET CERME_PLANS GUIDES		Section 15x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 65.82 kg/ m3		Echelle pour la vue 10.7cm/m	
						Surface du coffrage = 3.13 m2		Echelle pour la section 9.55cm/m	
								Page 1/1	



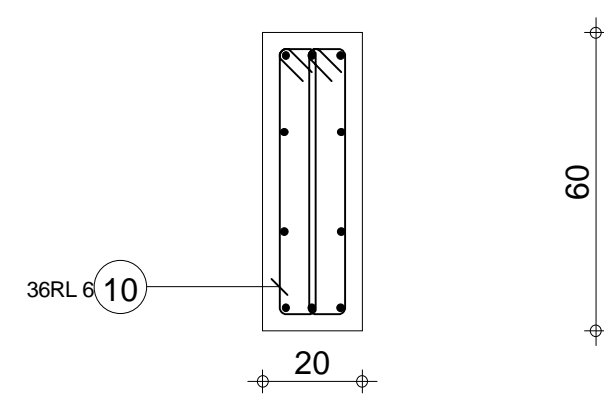
A-A



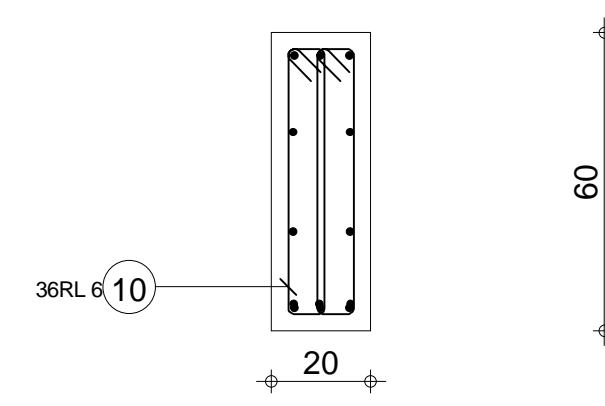
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 8	l=1.57	00	④	3HA 8	l=1.41	00	⑦	3HA 8	l=4.05	00	⑩	36RL 6	l=1.35	31
②	3HA 8	l=2.36	00	⑤	2*2HA 12	l=2.21	00	⑧	3HA 8	l=4.35	00	⑪	3HA 8	l=1.60	00
③	14RL 6	l=1.35	31	⑥	3HA 8	l=4.89	00	⑨	3HA 8	l=3.23	00	⑫	2*2HA 12	l=5.86	00

R+4

PROJET CERME_PLANS GUIDES

POUTRE 15

Section 20x60

Tél.

Fax

Nombre 1

Béton : BETON25 = 1.02 m3

Enrobage inférieur 3 cm

Densité = 70 kg/ m3

Surface du coffrage = 11.9 m2

Acier HA 400 = 56.4 kg

Acier RL 235 = 15 kg

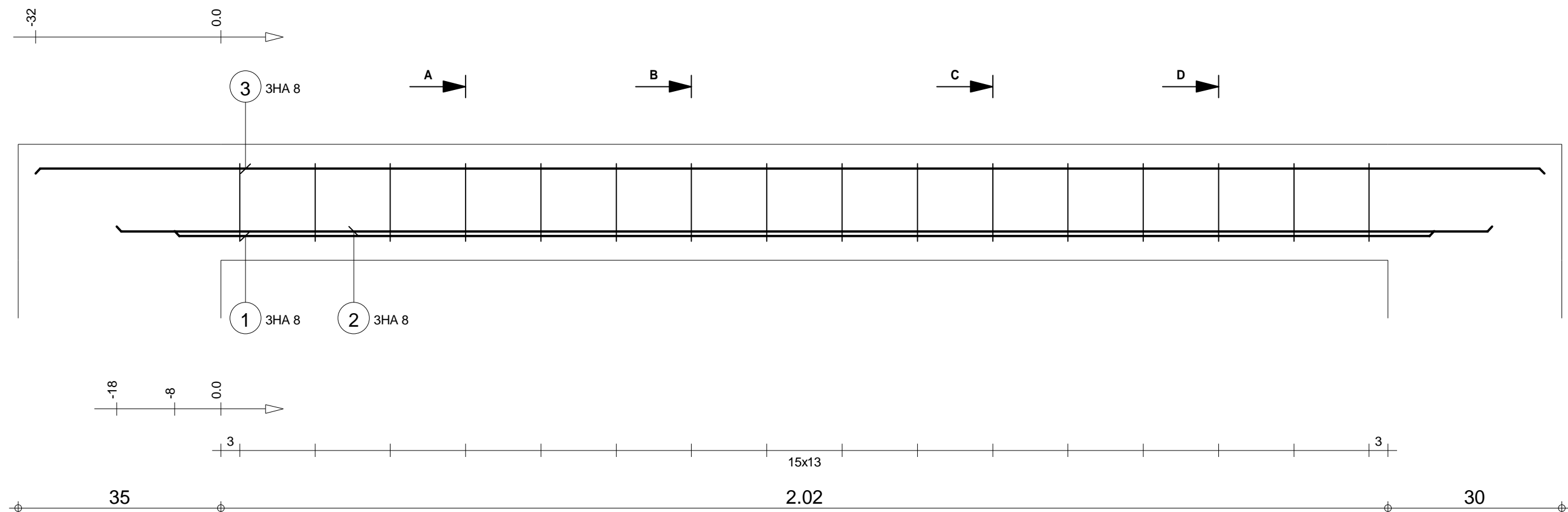
Enrobage supérieur 3 cm

Echelle pour la vue 4.27cm/m

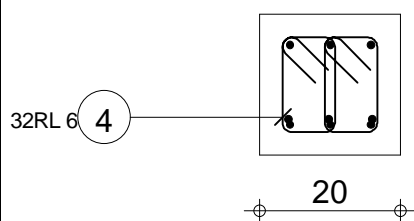
Echelle pour la section 6.58cm/m

Enrobage latéral 3 cm

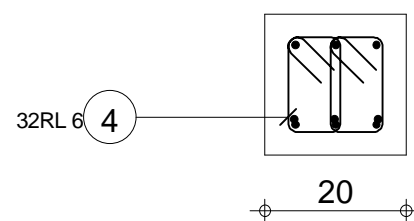
Page 1/1



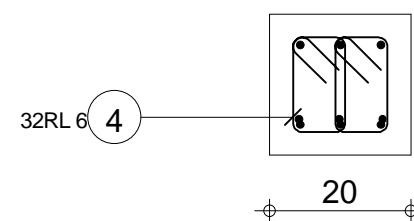
A-A



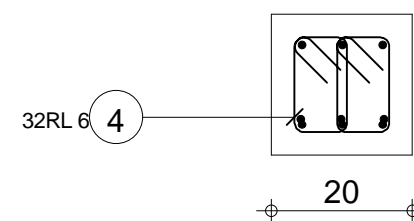
B-B



C-C

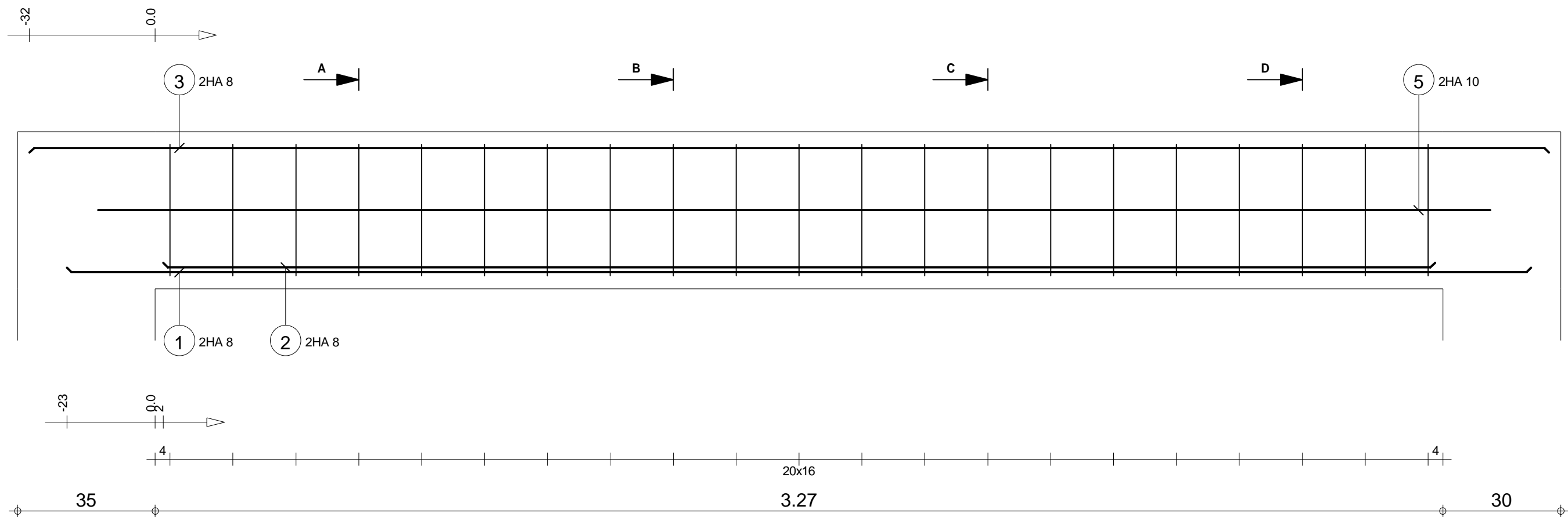


D-D

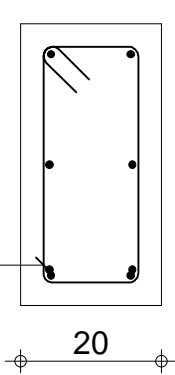


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 8	l=2.18	00	④	32RL 6	l=56	31
②	3HA 8	l=2.38	00				
③	3HA 8	l=2.61	00				

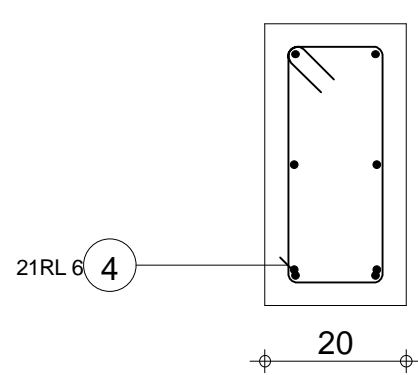
R+4 PROJET CERME_PLANS GUIDES		POUTRE 16 Section 20x20		Nombre 1		Béton : BETON25 = 0.107 m3		Acier HA 400 = 8.47 kg	
						Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 115.9 kg/ m3		Echelle pour la vue 13cm/m	
						Surface du coffrage = 1.55 m2		Echelle pour la section 9.34cm/m	
								Enrobage latéral 3 cm	
								Page 1/1	



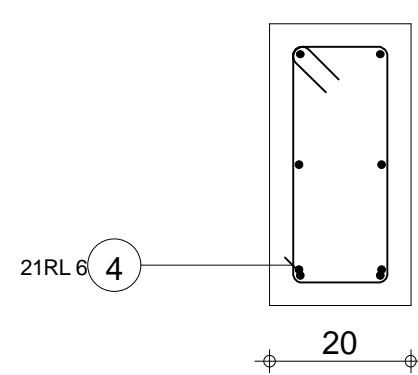
A-A



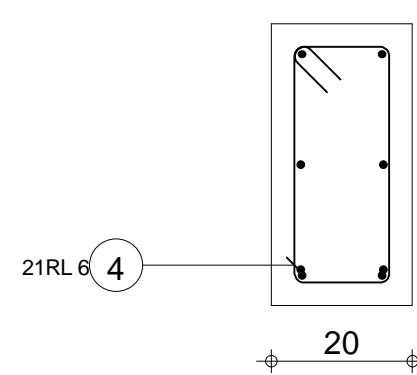
B-B



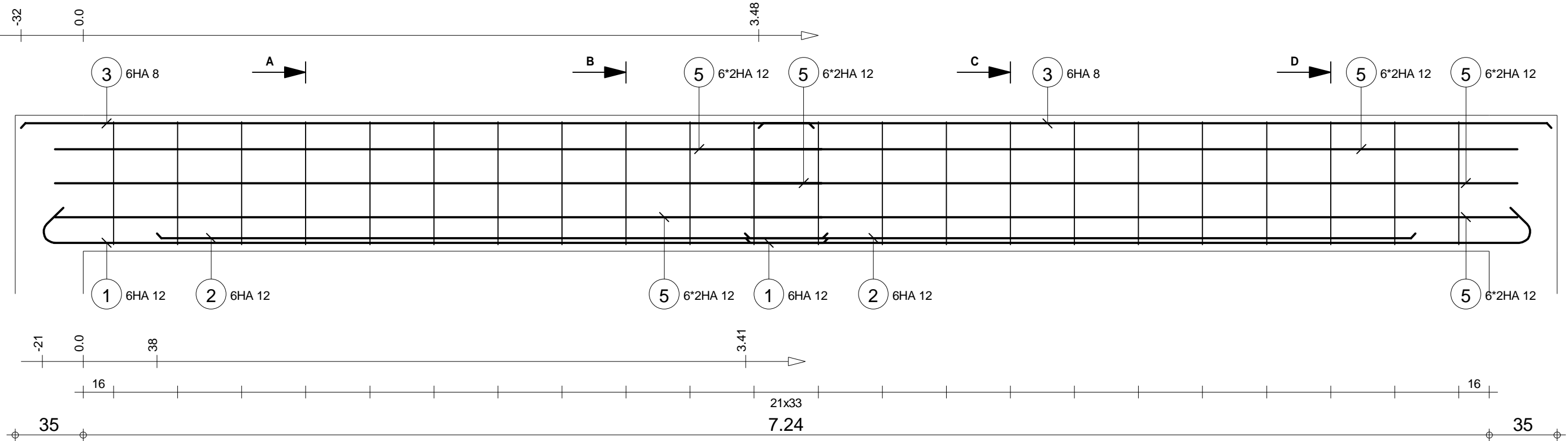
C-C



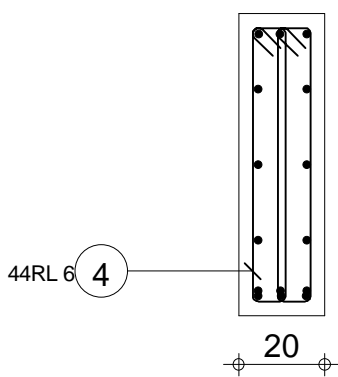
D-D



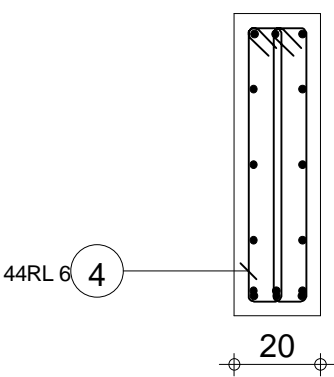
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 8	l=3.72	00	④	21RL 6	l=1.08	31
②	2HA 8	l=3.23	00	⑤	2HA 10	l=3.54	00
③	2HA 8	l=3.87	00				



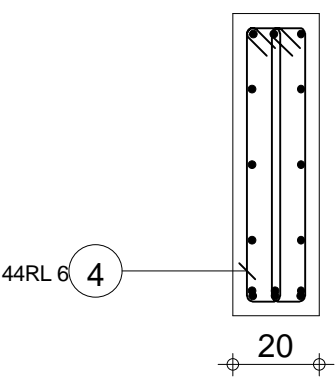
A-A



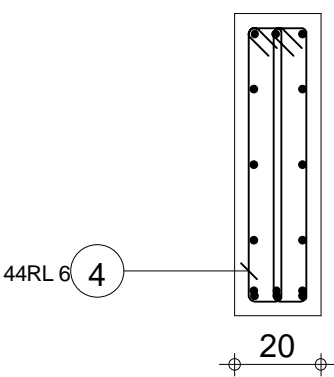
B-B



C-C

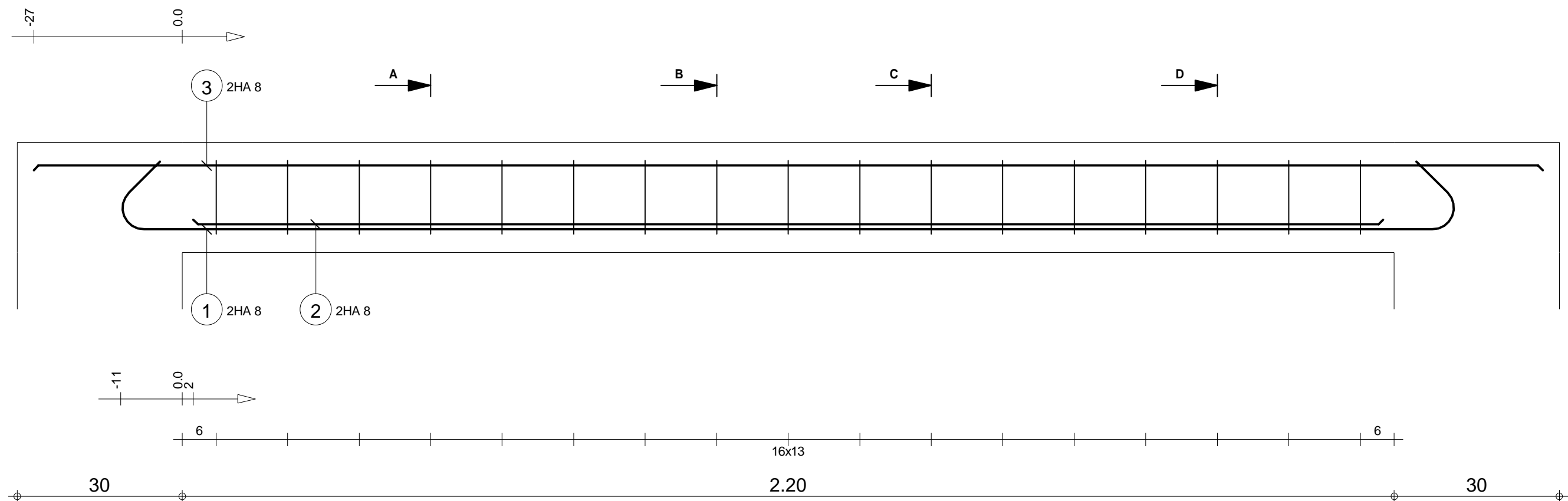


D-D

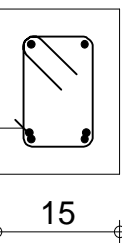


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 12	l=4.24	00	④	44RL 6	l=1.56	31
②	6HA 12	l=3.45	00	⑤	6*2HA 12	l=3.95	00
③	6HA 8	l=4.08	00				

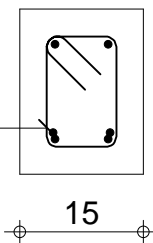
R+4		POUTRE 18		Nombre 1		Béton : BETON25 = 1.11 m3		Acier HA 400 = 92.7 kg	
PROJET CERME_PLANS GUIDES		Section 20x70				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 97.3 kg/ m3		Echelle pour la vue 4.55cm/m	
						Surface du coffrage = 12.9 m2		Echelle pour la section 5.71cm/m	
								Page 1/1	



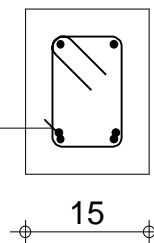
A-A



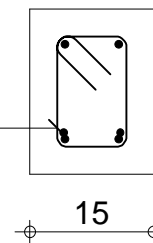
B-B



C-C

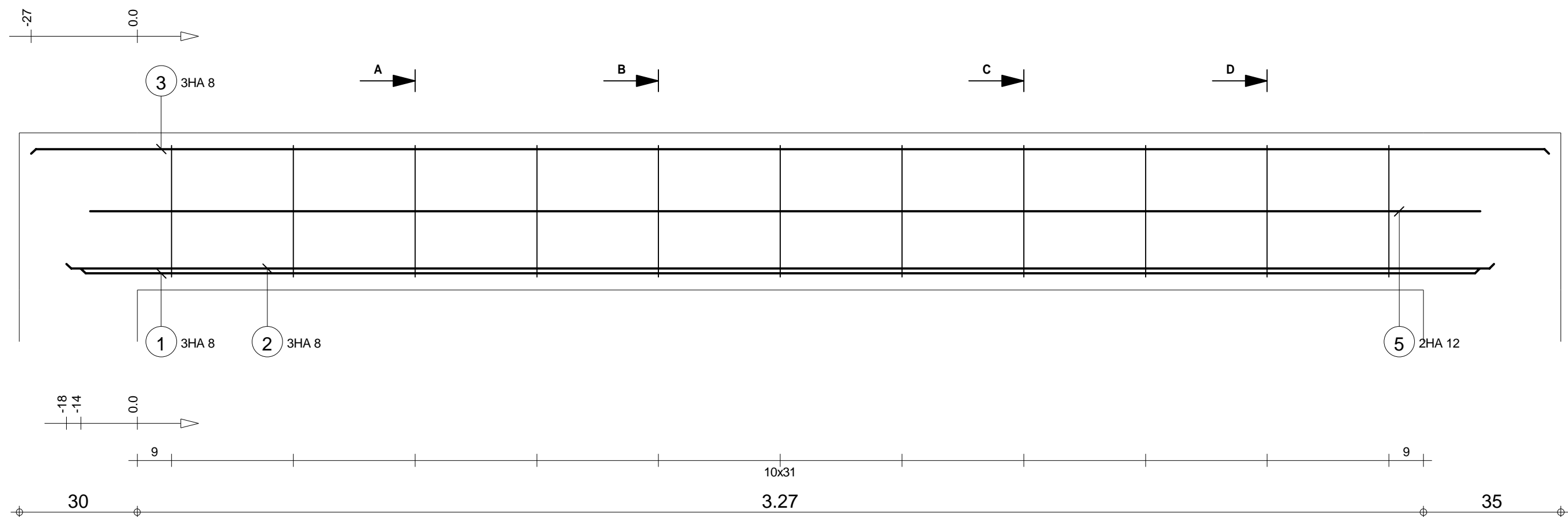


D-D

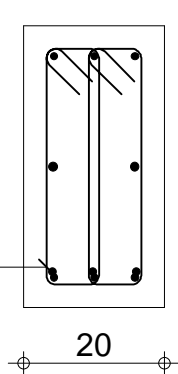


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 8	l=2.69	00	④	17RL 6	l=58	31
②	2HA 8	l=2.16	00				
③	2HA 8	l=2.74	00				

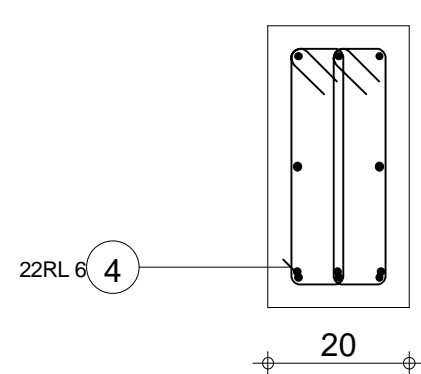
R+4		POUTRE 19		Nombre 1		Béton : BETON25 = 0.0841 m3		Acier HA 400 = 5.99 kg	
PROJET CERME_PLANS GUIDES		Section 15x20				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 97.03 kg/ m3		Echelle pour la vue 12.4cm/m	
						Surface du coffrage = 1.51 m2		Echelle pour la section 10.9cm/m	
								Page 1/1	



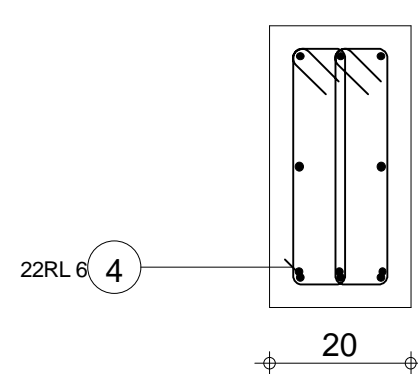
A-A



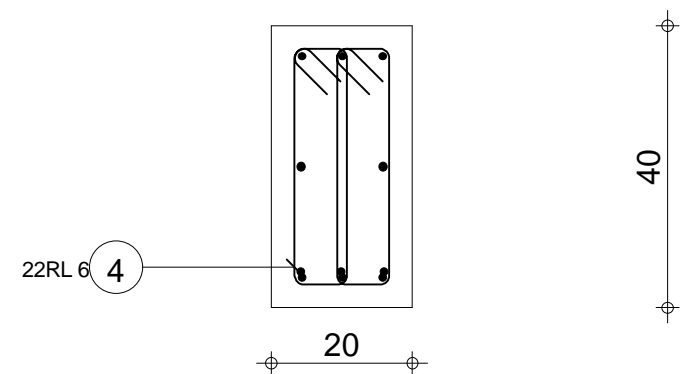
B-B



C-C

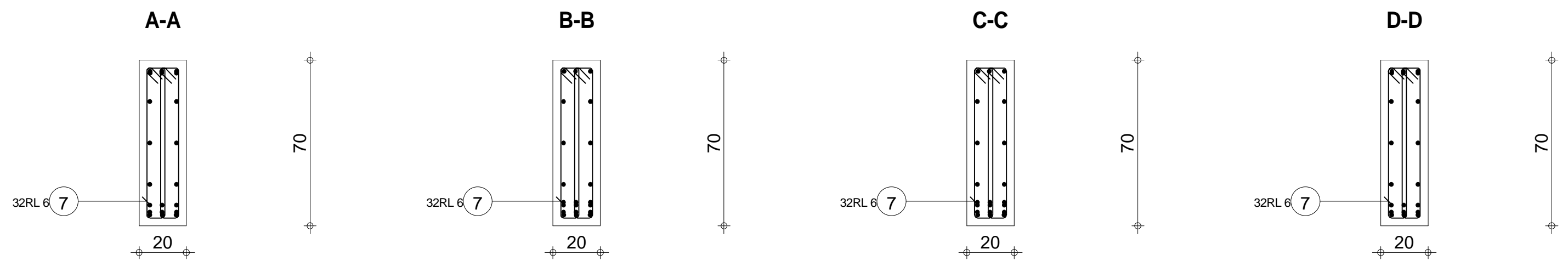
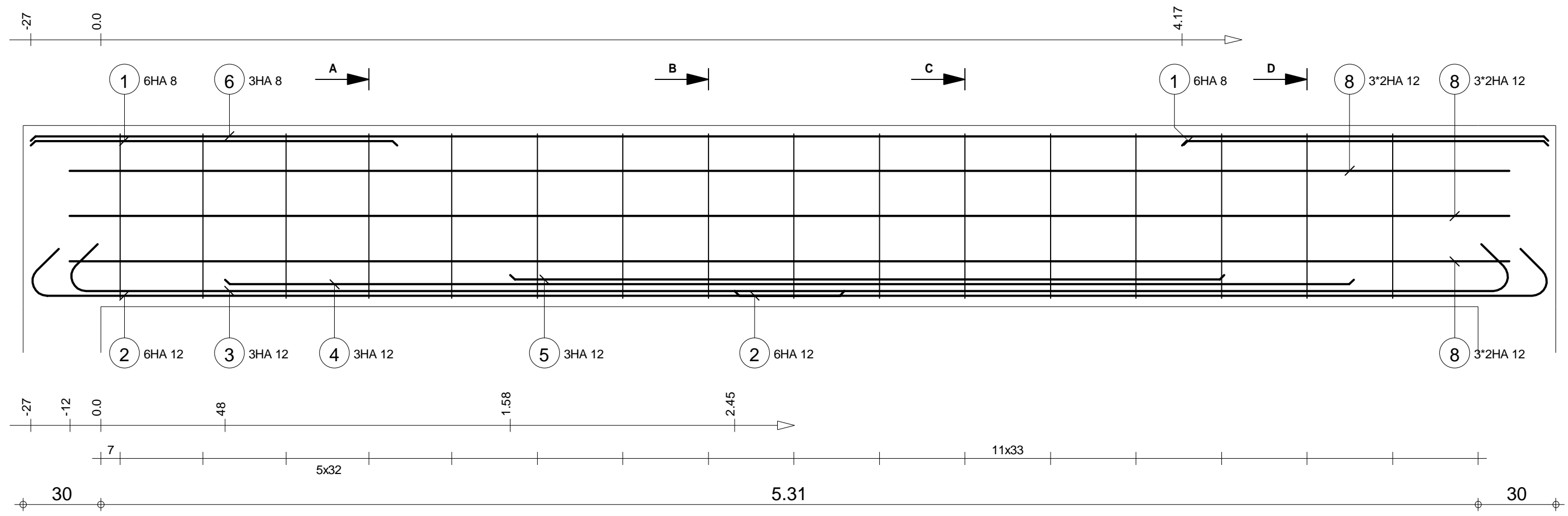


D-D



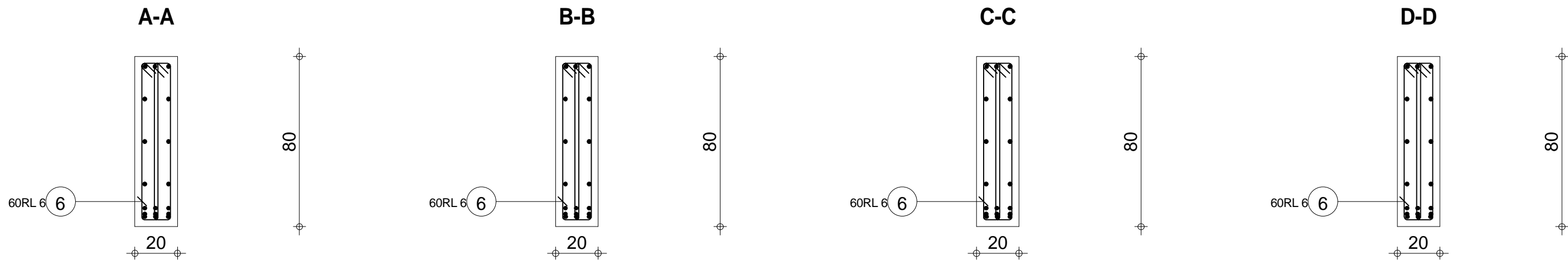
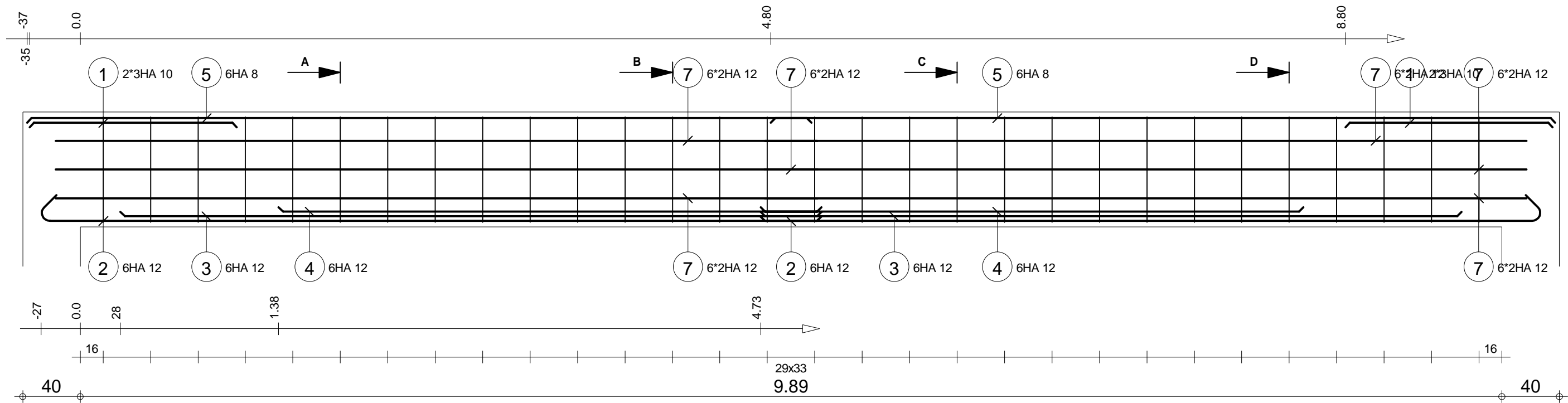
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 8	l=3.56	00	④	22RL 6	l=96	31
②	3HA 8	l=3.64	00	⑤	2HA 12	l=3.54	00
③	3HA 8	l=3.87	00				

R+4 PROJET CERME_PLANS GUIDES		POUTRE 20 Section 20x40		Tél.		Fax		Nombre 1		Acier HA 400 = 19.4 kg Acier RL 235 = 4.66 kg	
										Enrobage inférieur 3 cm	
										Enrobage supérieur 3 cm	
										Enrobage latéral 3 cm	
										Densité = 76.43 kg/ m3 Surface du coffrage = 3.96 m2	
										Echelle pour la vue 8.97cm/m Echelle pour la section 9.34cm/m	
										Page 1/1	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 8	l=1.41	00	④	3HA 12	l=4.35	00	⑦	32RL 6	l=1.56	31
②	6HA 12	l=3.33	00	⑤	3HA 12	l=2.75	00	⑧	3*2HA 12	l=5.55	00
③	3HA 12	l=5.93	00	⑥	3HA 8	l=5.85	00				

R+4 PROJET CERME_PLANS GUIDES		POUTRE 21 Section 20x70		Nombre 1		Béton : BETON25 = 0.828 m3		Acier HA 400 = 92.3 kg	
						Enrobage inférieur 3 cm		Acier RL 235 = 11.1 kg	
						Densité = 124.4 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 9.62 m2		Enrobage latéral 3 cm	
						Echelle pour la vue 6.05cm/m		Echelle pour la section 5.71cm/m	
								Page 1/1	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2*3HA 10	l=1.44	00	④	6HA 12	l=3.78	00	⑦	6*2HA 12	l=5.30	00
②	6HA 12	l=5.62	00	⑤	6HA 8	l=5.46	00				
③	6HA 12	l=4.88	00	⑥	60RL 6	l=1.76	31				






R+4 PROJET CERME_PLANS GUIDES		POUTRE 22 Section 20x80		Tél. Fax		Nombre 1		Béton : BETON25 = 1.71 m3		Acier HA 400 = 151 kg	
								Enrobage inférieur 3 cm		Acier RL 235 = 23.4 kg	
								Densité = 101.8 kg/ m3		Enrobage supérieur 3 cm	
								Surface du coffrage = 19.4 m2		Enrobage latéral 3 cm	
								Echelle pour la vue 3.42cm/m		Echelle pour la section 5.05cm/m	
										Page 1/1	

A-A

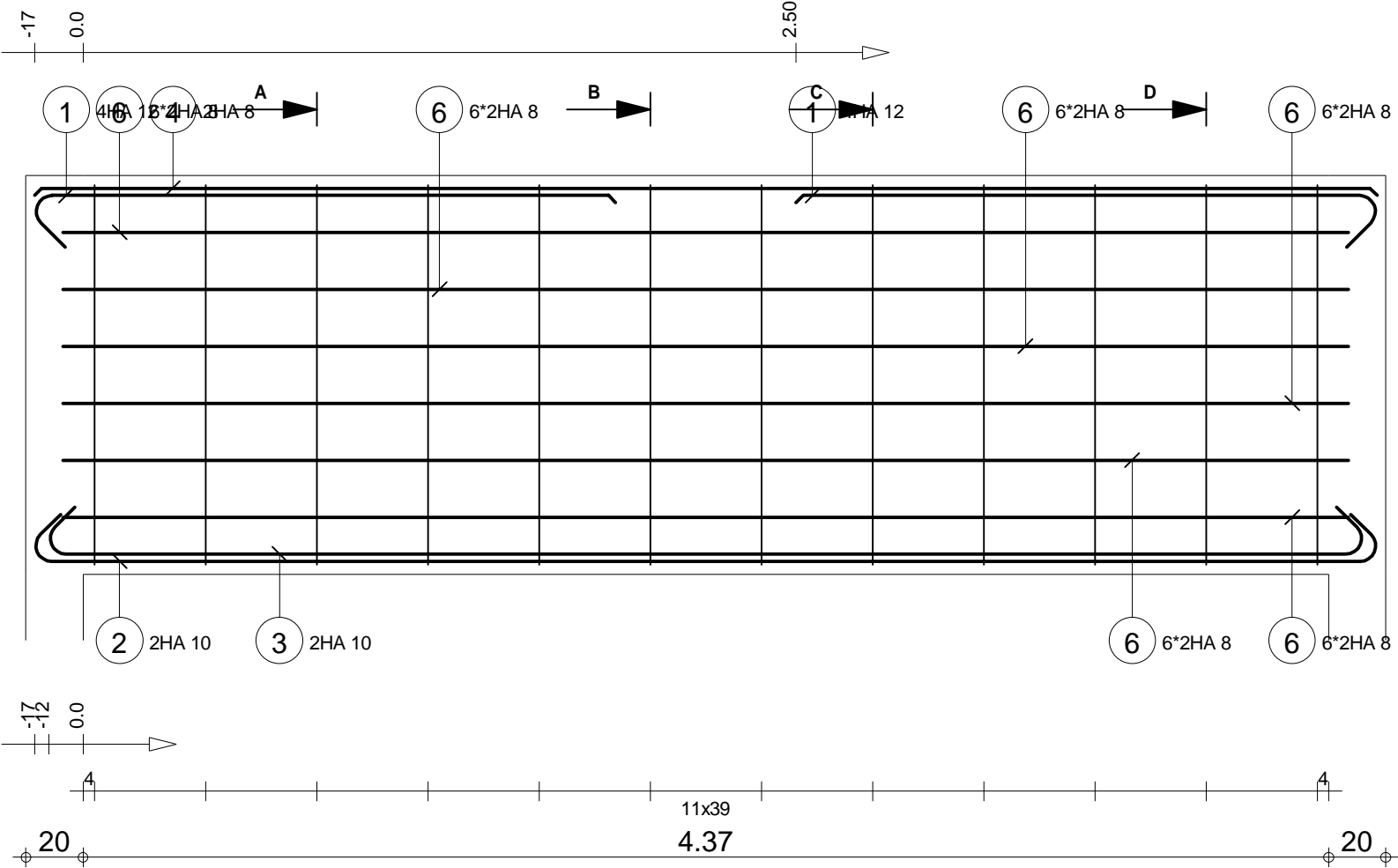
B-B

C-C

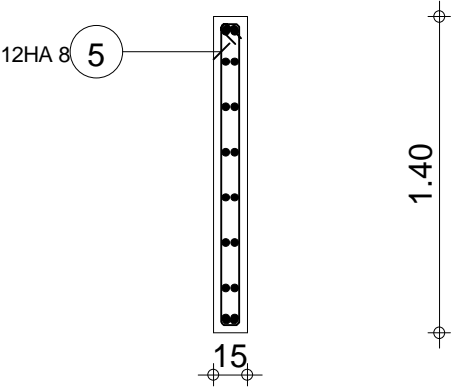
D-D

Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12 l=4.53	00		④	24RL 6 l=1.76	31	
②	3HA 12 l=2.96	00		⑤	3*2HA 12 l=4.06	00	
③	3HA 8 l=4.46	00					

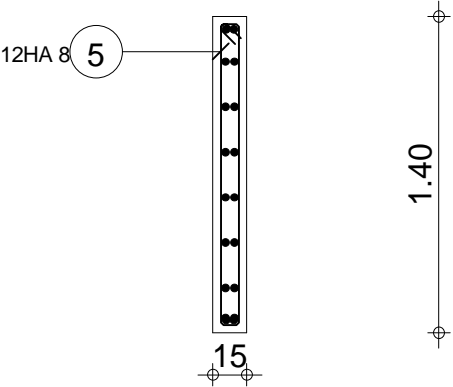
		Tél.	Fax			
R+4 PROJET CERME_PLANS GUIDES	POUTRE 23 Section 20x80	Nombre 1	Béton : BETON25 = 0.723 m3		Acier HA 400 = 46.9 kg Acier RL 235 = 9.37 kg	
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm Enrobage latéral 3 cm	
			Densité = 77.73 kg/ m3 Surface du coffrage = 8.3 m2		Echelle pour la vue 6.6cm/m Echelle pour la section 5.05cm/m	



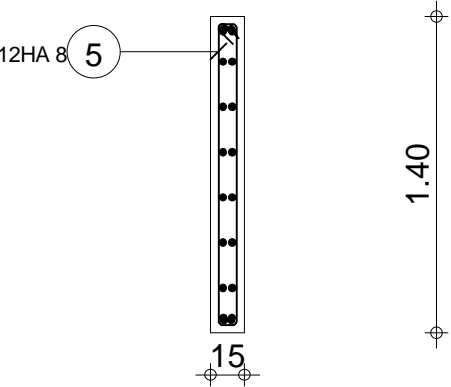
A-A



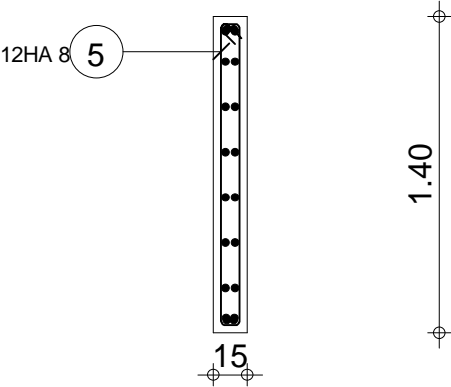
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 12	l=2.23	00	④	2HA 8	l=4.71	00
②	2HA 10	l=5.05	00	⑤	12HA 8	l=3.01	31
③	2HA 10	l=4.95	00	⑥	6*2HA 8	l=4.51	00

R+4 PROJET CERME_PLANS GUIDES		POUTRE P140 Section 15x140		Tél. Fax		Nombre 1	
				Béton : BETON25 = 1 m3		Acier HA 500 = 45.3 kg	
				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
				Densité = 59.6 kg/ m3		Echelle pour la vue 4.29cm/m	
				Surface du coffrage = 14.4 m2		Echelle pour la section 3cm/m	
						Page 1/1	