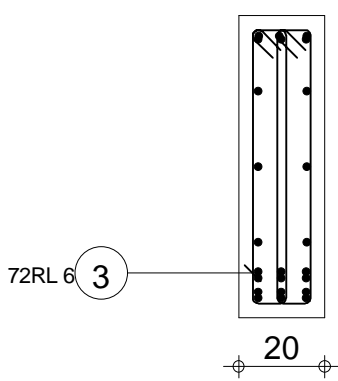
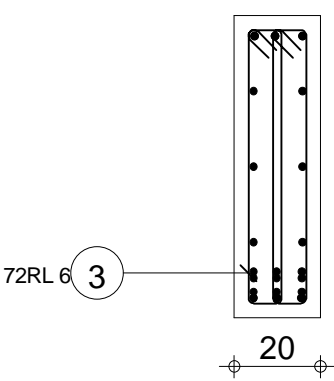


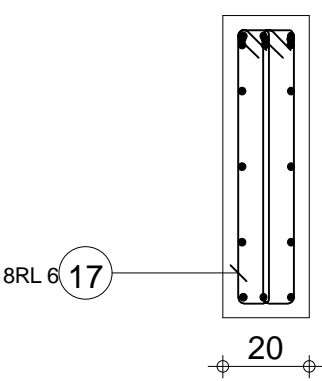
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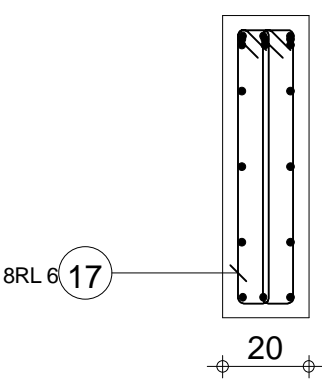
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

C-C

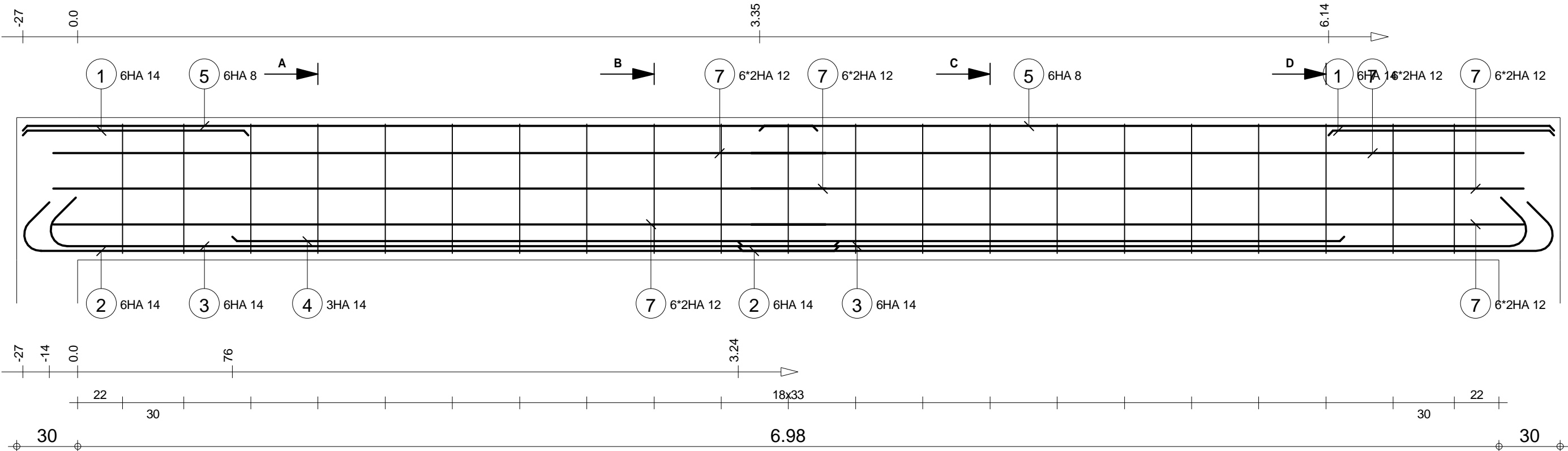


D-D

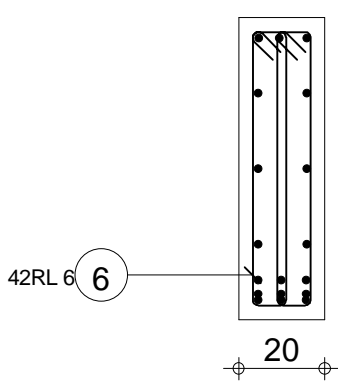


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme								
①	3HA 14	l=1.80	00	④	3HA 14	l=4.21	00	⑦	3HA 14	l=1.33	00	⑩	3HA 8	l=3.89	00	⑬	3HA 14	l=2.03	00								
②	3HA 14	l=3.65	00	⑤	3HA 14	l=4.24	00	⑧	3HA 14	l=5.59	00	⑪	3HA 8	l=5.49	00	⑭	3HA 8	l=1.67	00								
③	72RL 6	l=1.56	31	⑥	3HA 14	l=6.20	00	⑨	3HA 14	l=4.38	00	⑫	6*2HA 12	l=3.79	00	⑮	3*2HA 12	l=1.67	00								
Tél.												Fax								<div>Acier HA 400 = 184 kg Acier RL 235 = 28.4 kg</div> <div>Enrobage inférieur 3 cmEnrobage supérieur 3 cmEnrobage latéral 3 cm</div> <div>Densité = 165.6 kg/ m3 Surface du coffrage = 14.8 m2</div> <div>Echelle pour la vue 3.97cm/m Echelle pour la section 5.71cm/m</div> <div>Page 1/2</div>							
R+3 PROJET CERME_PLANS GUIDES				POUTRE 1 Section 20x70								Nombre 1															

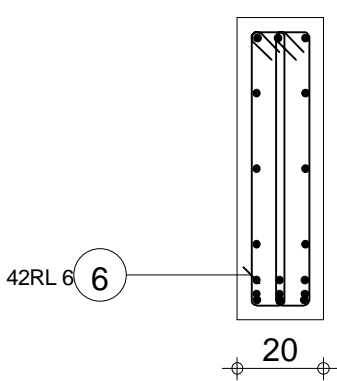
Pos.	Armature		Code	Forme
16	2RL 6	l=1.56	31	
17	8RL 6	l=1.55	31	



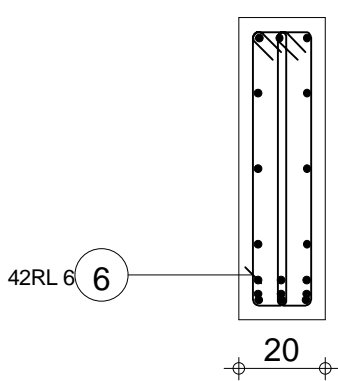
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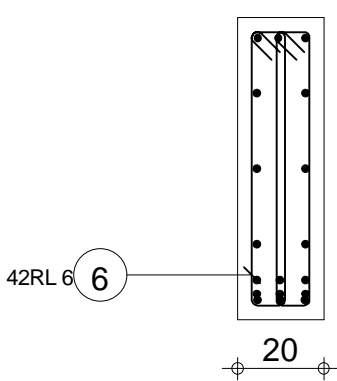
B-B



C-C

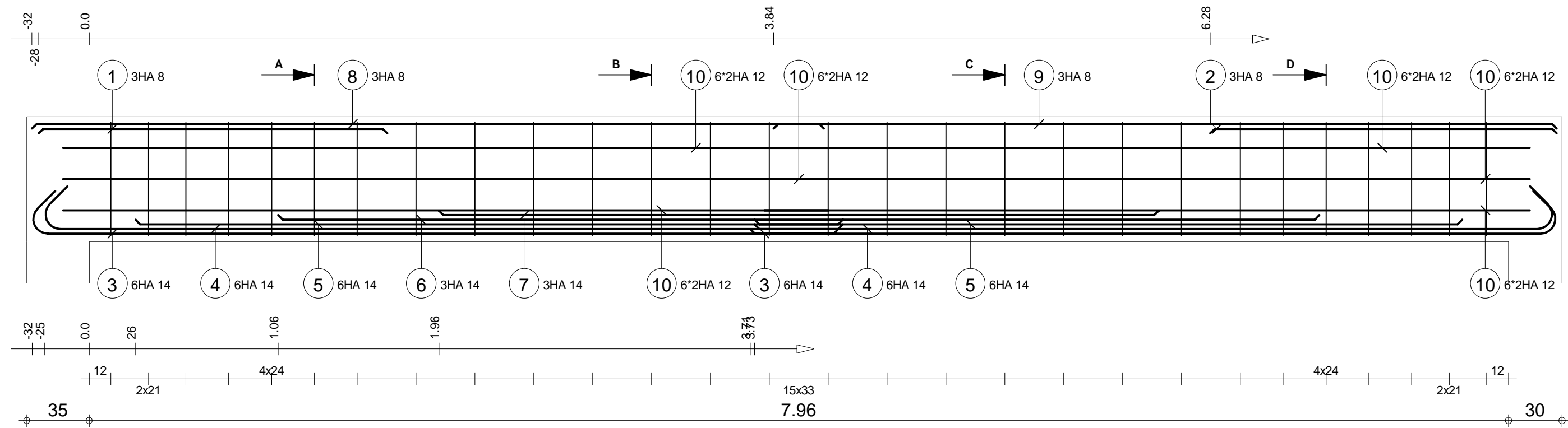


D-D

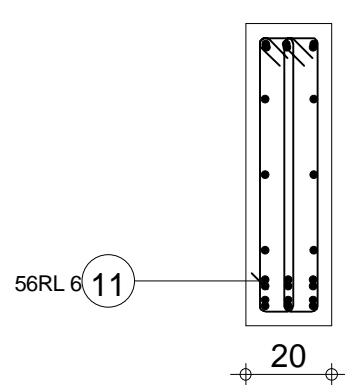


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 14	l=1.11	00	④	3HA 14	l=5.46	00	⑦	6*2HA 12	l=3.79	00
②	6HA 14	l=4.25	00	⑤	6HA 8	l=3.90	00				
③	6HA 14	l=4.12	00	⑥	42RL 6	l=1.56	31				

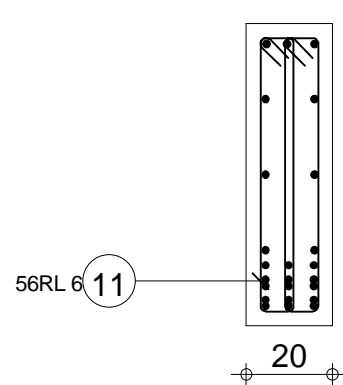
R+3 PROJET CERME_PLANS GUIDES				POUTRE 2 Section 20x70				Nombre 1		Béton : BETON25 = 1.06 m3		Acier HA 400 = 138 kg	
										Enrobage inférieur 3 cm		Acier RL 235 = 14.5 kg	
										Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
										Densité = 144.3 kg/ m3		Echelle pour la vue 4.77cm/m	
										Surface du coffrage = 12.3 m2		Echelle pour la section 5.71cm/m	
												Page 1/1	



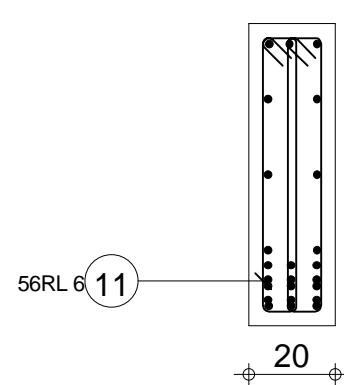
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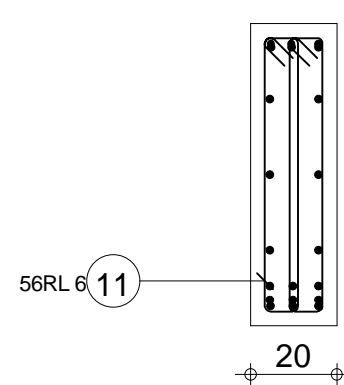
B-B



C-C

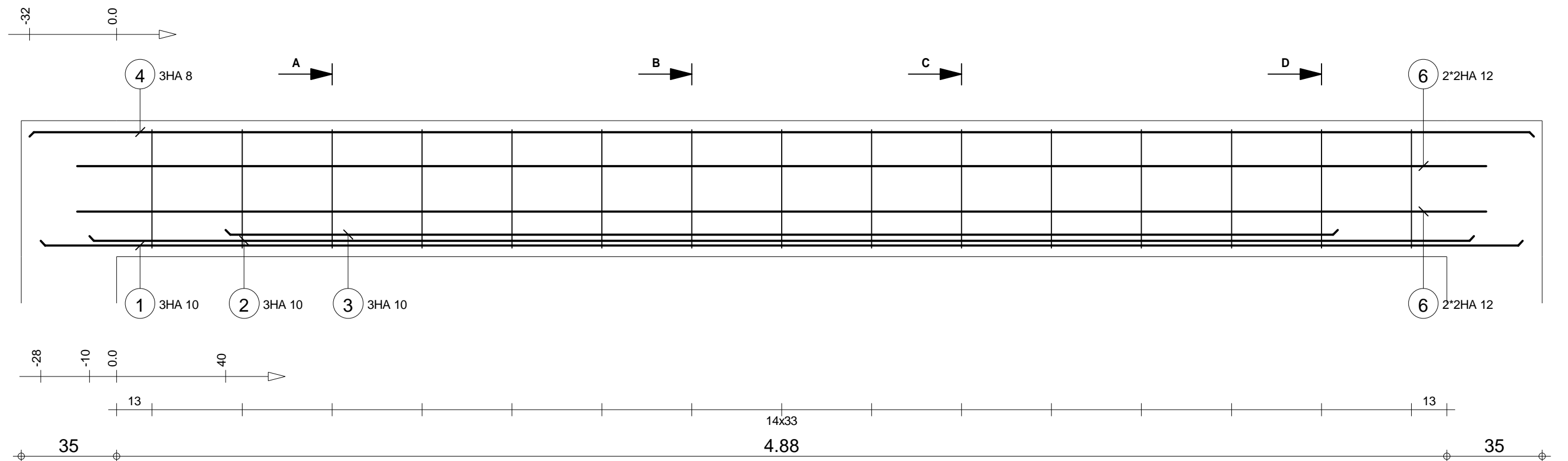


D-D

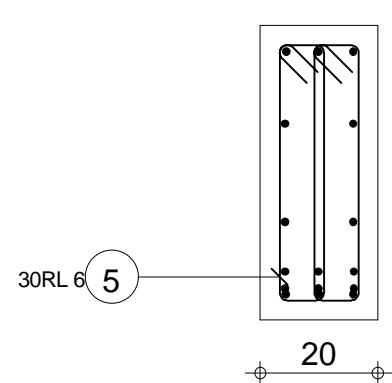


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 8	l=1.95	00	④	6HA 14	l=4.72	00	⑦	3HA 14	l=4.04	00	⑩	6*2HA 12	l=4.29	00
②	3HA 8	l=1.94	00	⑤	6HA 14	l=3.96	00	⑧	3HA 8	l=4.44	00	⑪	56RL 6	l=1.56	31
③	6HA 14	l=4.76	00	⑥	3HA 14	l=5.84	00	⑨	3HA 8	l=4.39	00				

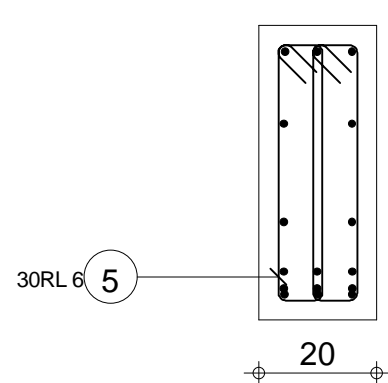
		Tél.		Fax				Acier HA 400 = 194 kg	
R+3 PROJET CERME_PLANS GUIDES	POUTRE 3 Section 20x70	Nombre 1	Béton : BETON25 = 1.2 m3		Acier RL 235 = 19.4 kg				
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm		
			Densité = 177.5 kg/ m3		Echelle pour la vue 4.22cm/m		Page 1/1		
			Surface du coffrage = 13.9 m2		Echelle pour la section 5.71cm/m				



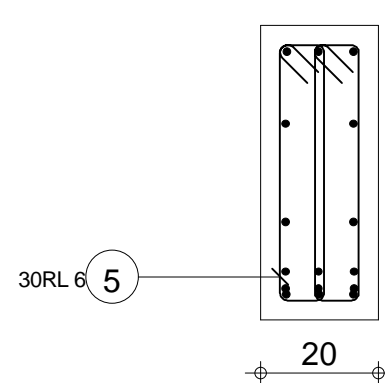
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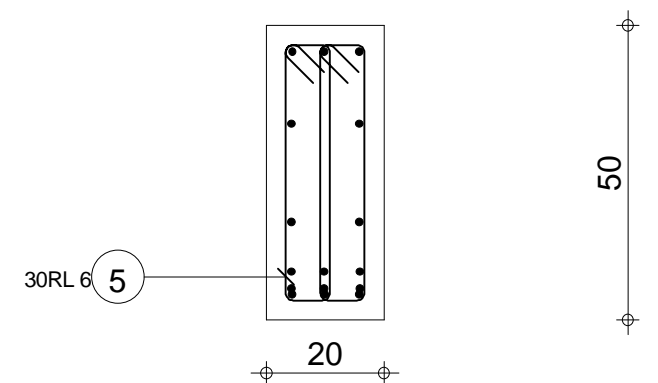
B-B



C-C

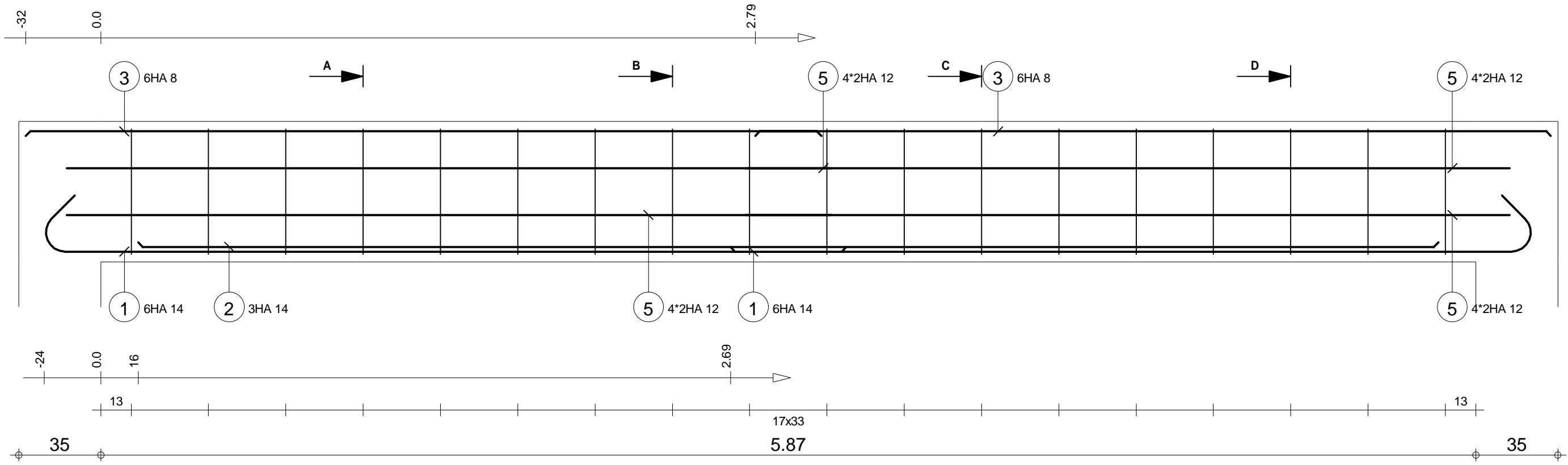


D-D

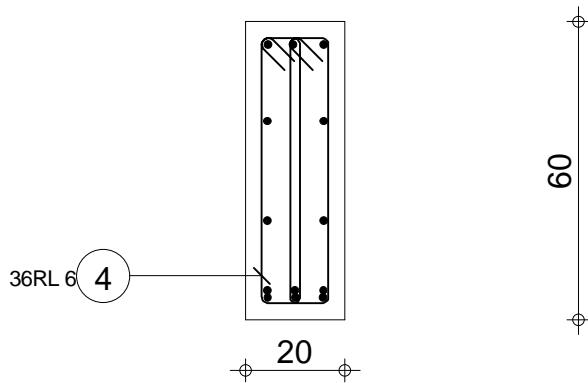


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	l=5.44	00	④	3HA 8	l=5.52	00
②	3HA 10	l=5.08	00	⑤	30RL 6	l=1.16	31
③	3HA 10	l=4.08	00	⑥	2*2HA 12	l=5.17	00

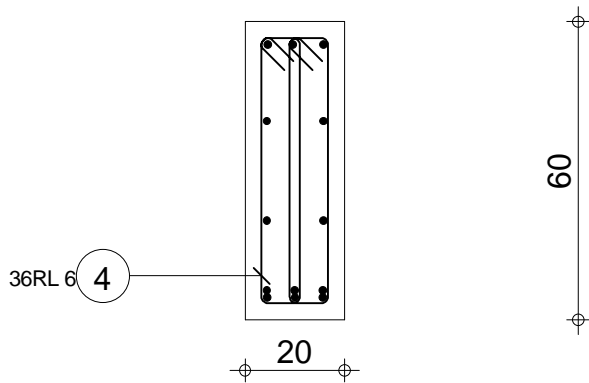
R+3 PROJET CERME_PLANS GUIDES		POUTRE 4 Section 20x50		Nombre 1	Tél.		Fax	
					Béton : BETON25 = 0.558 m3		Acier HA 400 = 51.9 kg	
					Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
					Densité = 106.8 kg/ m3		Echelle pour la vue 6.4cm/m	
						Surface du coffrage = 6.76 m2		Echelle pour la section 7.8cm/m
								Page 1/1



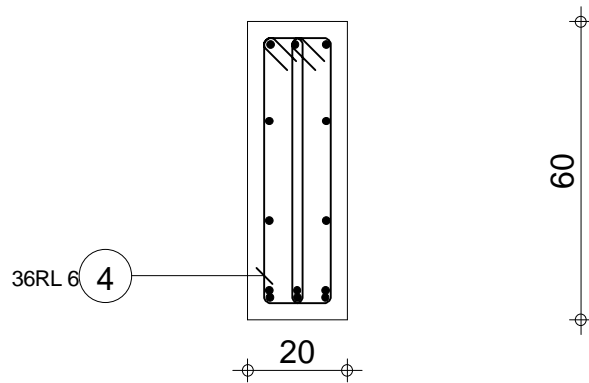
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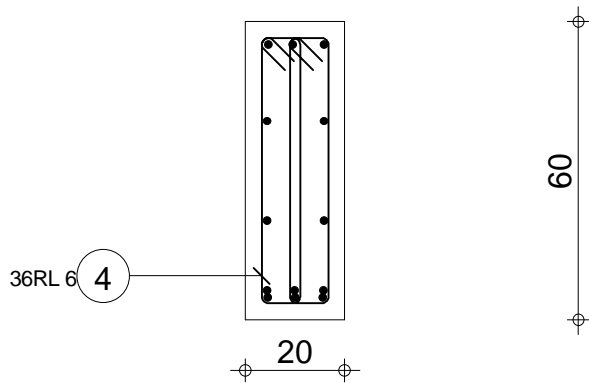
B-B



C-C

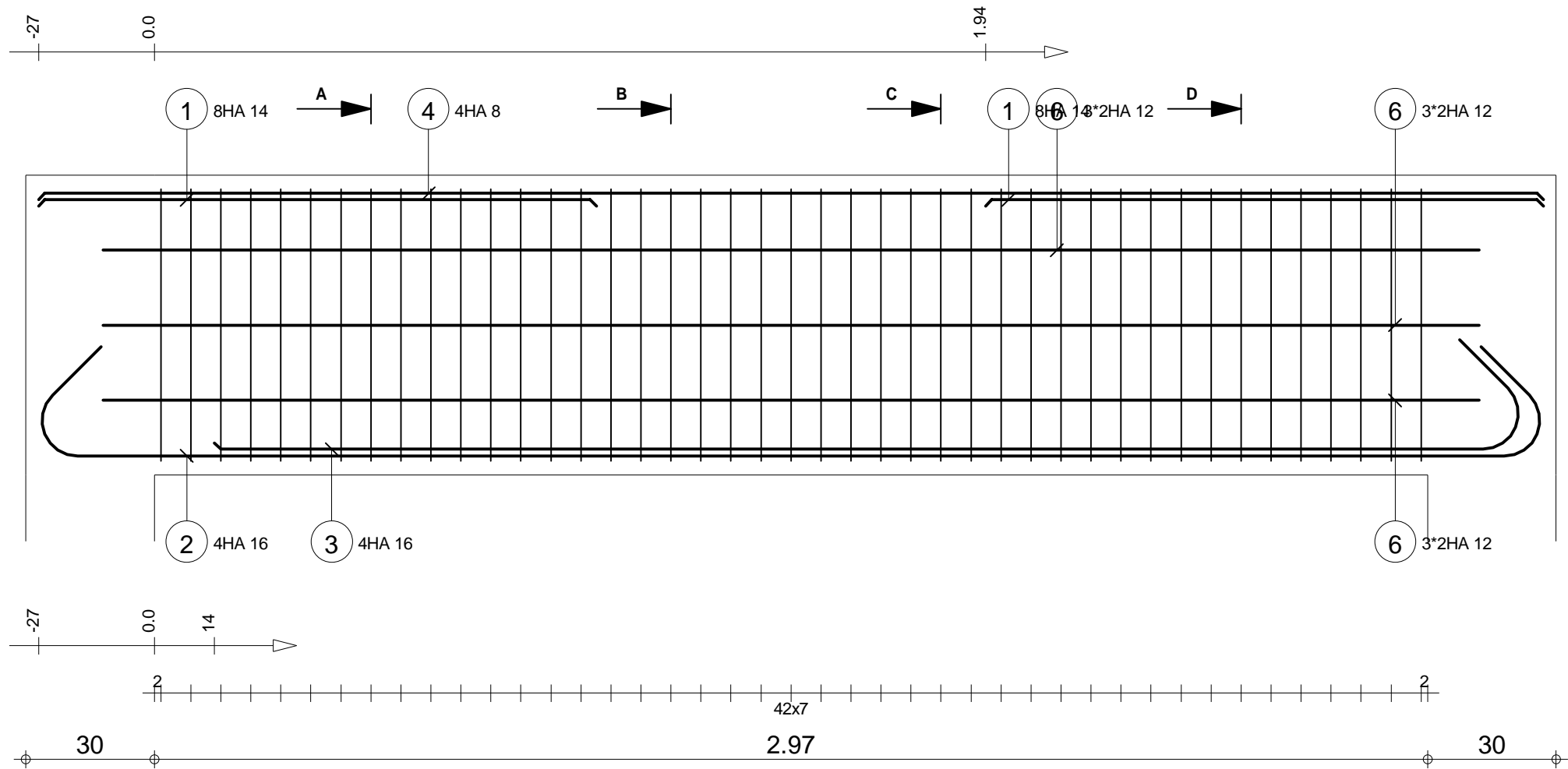


D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 14	l=3.67	00	④	36RL 6	l=1.36	31
②	3HA 14	l=5.55	00	⑤	4*2HA 12	l=3.26	00
③	6HA 8	l=3.40	00				

<div>R+3</div> <div>PROJET CERME_PLANS GUIDES</div>		<div>POUTRE 5</div> <div>Section 20x60</div>		Tél.		Fax			
				Béton : BETON25 = 0.788 m3		Acier HA 400 = 77.9 kg Acier RL 235 = 10.9 kg			
				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
				Densité = 112.7 kg/ m3 Surface du coffrage = 9.3 m2		Echelle pour la vue 5.47cm/m Echelle pour la section 6.58cm/m		Page 1/1	

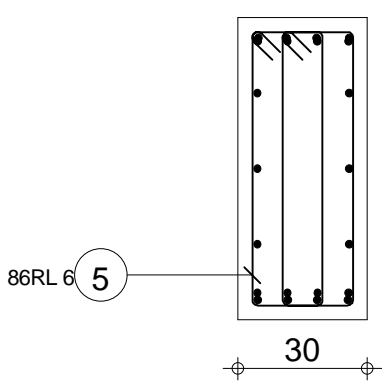
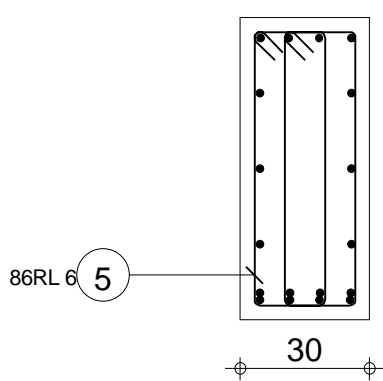
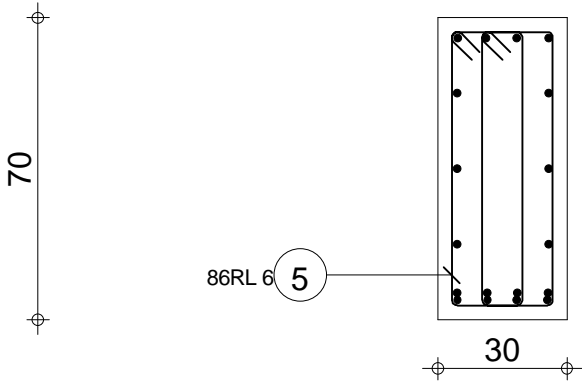
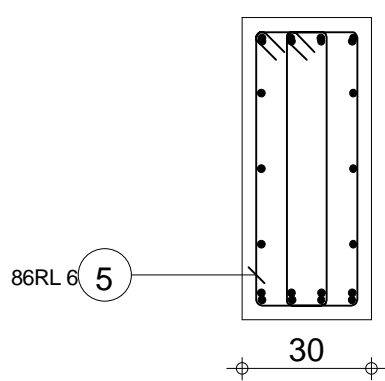


A-A

B-B

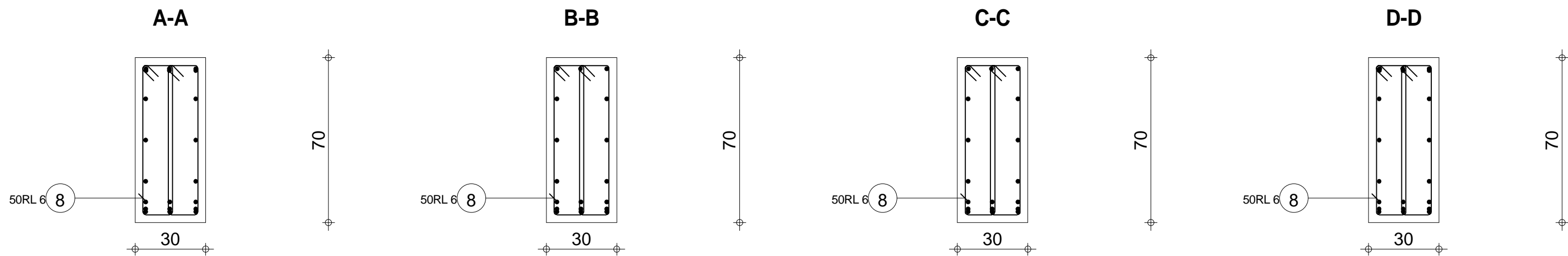
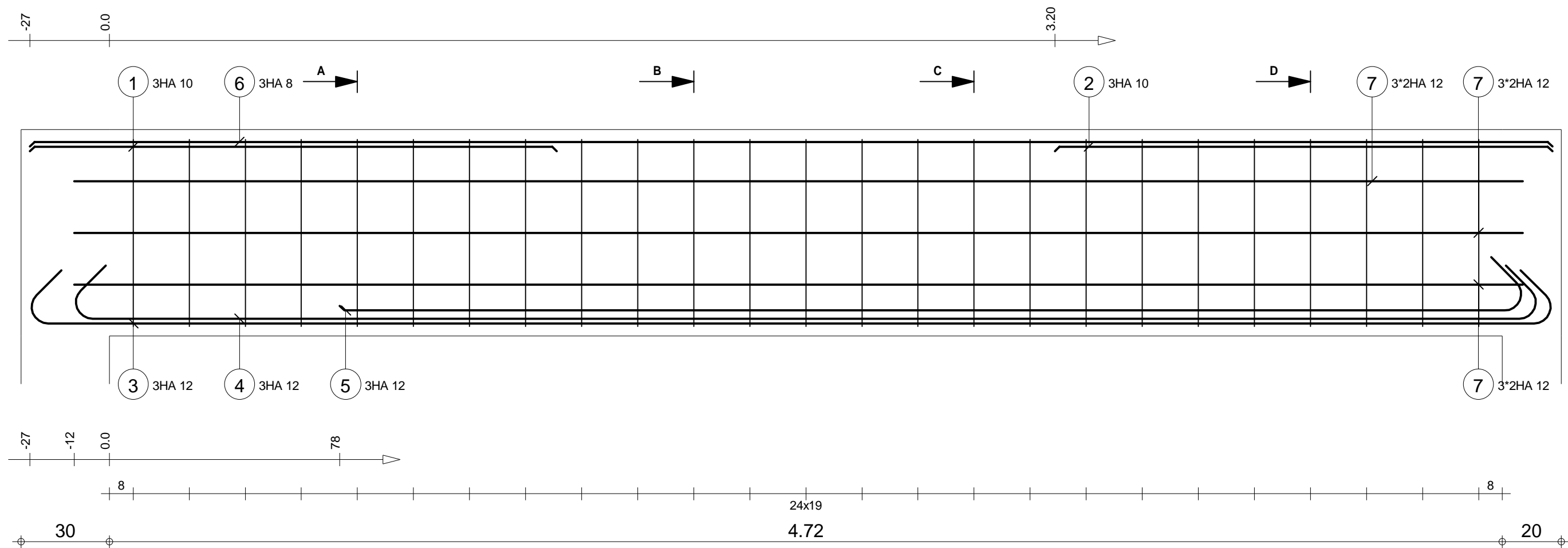
C-C

D-D



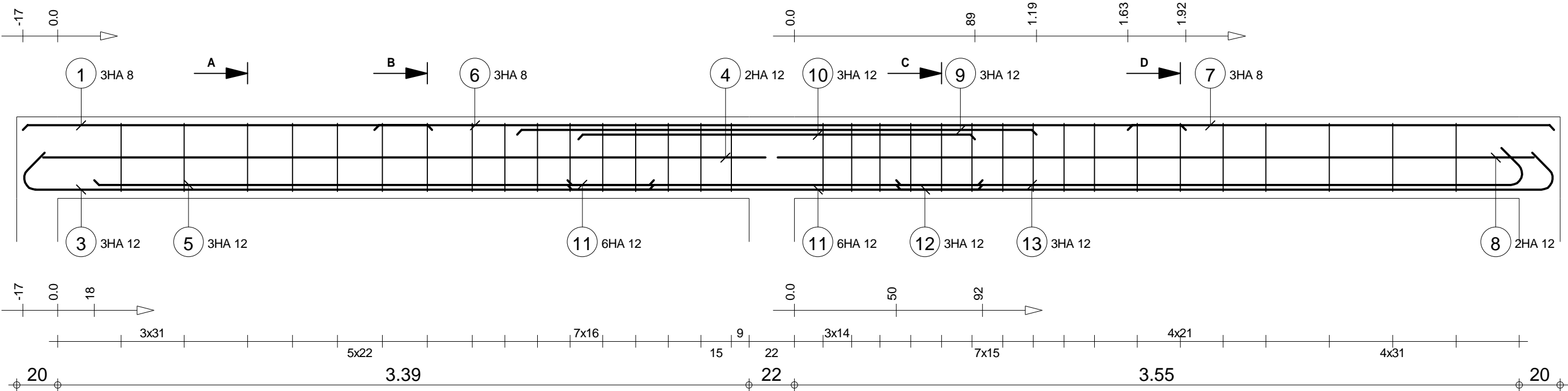
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	8HA 14	l=1.30	00	④	4HA 8	l=3.51	00
②	4HA 16	l=4.04	00	⑤	86RL 6	l=1.73	31
③	4HA 16	l=3.31	00	⑥	3*2HA 12	l=3.21	00

R+3 PROJET CERME_PLANS GUIDES		POUTRE 6 Section 30x70		Nombre 1		Béton : BETON25 = 0.75 m3		Acier HA 400 = 81.6 kg	
						Enrobage inférieur 3 cm		Acier RL 235 = 33.1 kg	
						Densité = 153.3 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 6.31 m2		Enrobage latéral 3 cm	
						Echelle pour la vue 7.29cm/m		Echelle pour la section 5.71cm/m	
								Page 1/1	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	l=1.79	00	④	3HA 12	l=5.34	00	⑦	3*2HA 12	l=4.91	00
②	3HA 10	l=1.69	00	⑤	3HA 12	l=4.20	00	⑧	50RL 6	l=1.66	31
③	3HA 12	l=5.54	00	⑥	3HA 8	l=5.16	00				

R+3 PROJET CERME_PLANS GUIDES		POUTRE 7 Section 30x70		Tél. Fax		Nombre 1		Béton : BETON25 = 1.1 m3		Acier HA 400 = 78.8 kg	
								Enrobage inférieur 3 cm		Acier RL 235 = 18.4 kg	
								Densité = 88.45 kg/ m3		Enrobage supérieur 3 cm	
								Surface du coffrage = 9.14 m2		Enrobage latéral 3 cm	
								Echelle pour la vue 6.83cm/m		Echelle pour la section 5.71cm/m	
										Page 1/1	

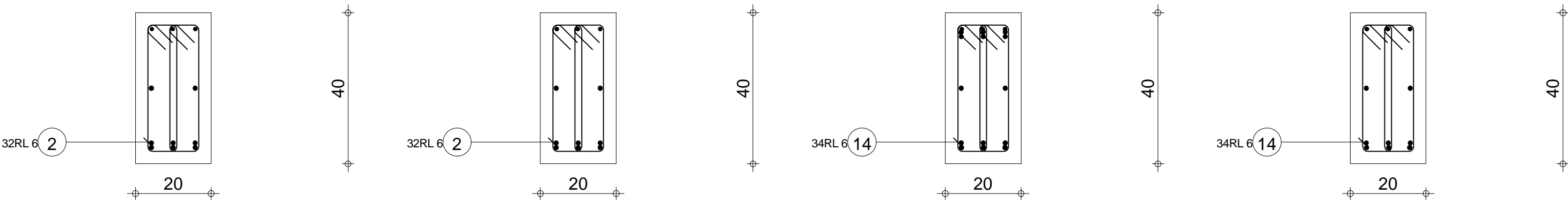


A-A

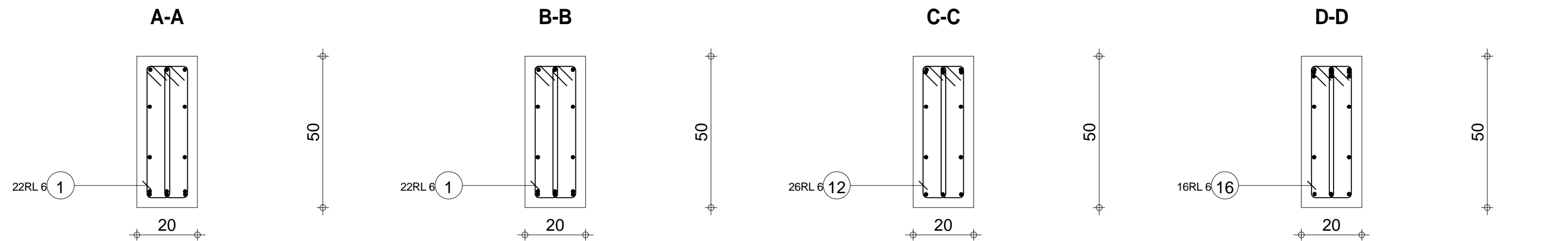
B-B

C-C

D-D




Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	3HA 8	l=2.00	00	④	2HA 12	l=3.54	00	⑦	3HA 8	l=2.09	00	⑩	3HA 12	l=1.94	00	⑬	3HA 12	l=3.26	00				
②	32RL 6	l=96	31	⑤	3HA 12	l=2.74	00	⑧	2HA 12	l=3.70	00	⑪	6HA 12	l=2.03	00	⑭	34RL 6	l=96	31				
③	3HA 12	l=3.28	00	⑥	3HA 8	l=3.97	00	⑨	3HA 12	l=2.54	00	⑫	3HA 12	l=3.41	00								
Tél.												Fax											
R+3 PROJET CERME_PLANS GUIDES				POUTRE 8 Section 20x40								Nombre 1				Béton : BETON25 = 0.605 m3			Acier HA 400 = 79 kg				
																Enrobage inférieur 3 cm			Acier RL 235 = 14 kg				
																Densité = 153.7 kg/ m3			Enrobage supérieur 3 cm				
																Surface du coffrage = 7.59 m2			Enrobage latéral 3 cm				
												Echelle pour la vue 4.78cm/m				Page 1/1							
												Echelle pour la section 9.34cm/m											

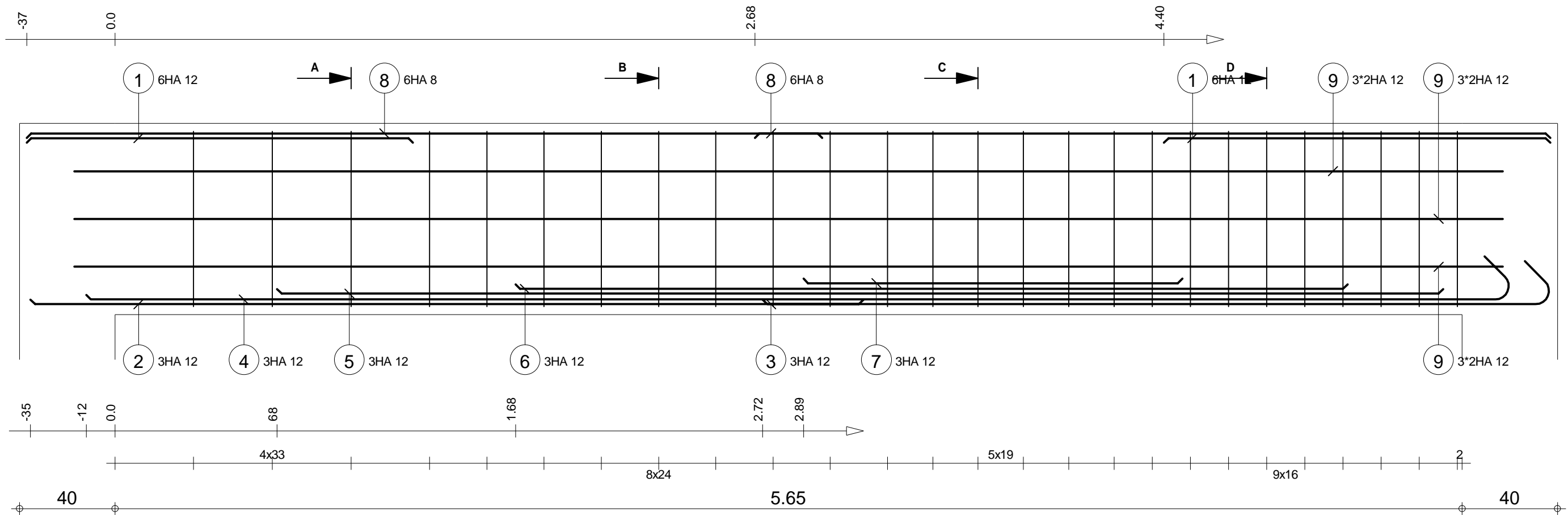


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	22RL 6	l=1.16		④	3HA 8	l=2.08		⑦	3HA 14	l=4.25		⑩	3HA 8	l=3.68		⑬	3HA 8	l=2.12	
②	3HA 10	l=3.11		⑤	3HA 8	l=3.91		⑧	3HA 14	l=2.78		⑪	2*2HA 12	l=3.59		⑭	2*2HA 12	l=1.67	
③	3HA 10	l=3.31		⑥	2*2HA 12	l=3.57		⑨	3HA 10	l=4.92		⑫	26RL 6	l=1.16		⑮	3HA 8	l=1.67	

<div>R+3</div> <div>PROJET CERME_PLANS GUIDES</div>	<div>POUTRE 9</div> <div>Section 20x50</div>	<div>Nombre 1</div>	Béton : BETON25 = 0.916 m3		Acier HA 400 = 93.7 kg	
					Acier RL 235 = 16.4 kg	
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
			Enrobage latéral 3 cm			
			Densité = 120.1 kg/ m3		Echelle pour la vue 3.97cm/m	
			Surface du coffrage = 11 m2		Echelle pour la section 7.8cm/m	
			Page 1/2			

Pos.	Armature	Code	Forme
16	16RL 6 l=1.15	31	

		Tél.	Fax		
R+3 PROJET CERME_PLANS GUIDES	POUTRE 9 Section 20x50	Nombre 1	Béton : BETON25 = 0.916 m3	Acier HA 400 = 93.7 kg Acier RL 235 = 16.4 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 120.1 kg/ m3 Surface du coffrage = 11 m2		Page 2/2

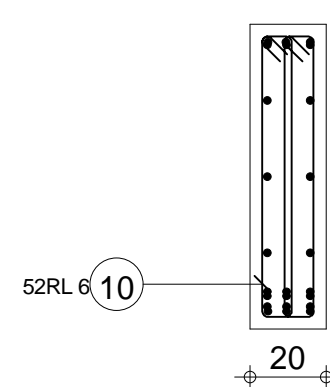
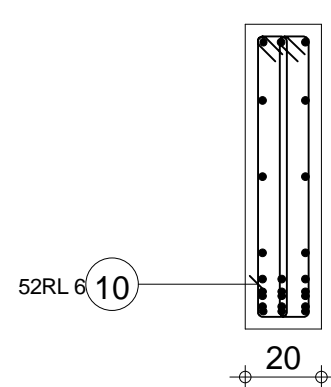
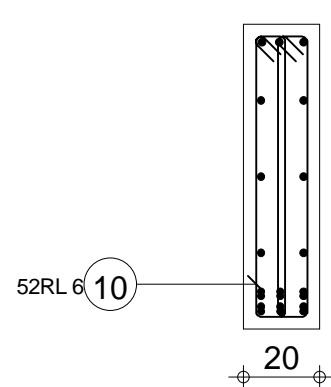
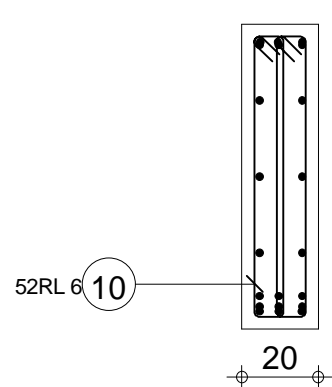


A-A

B-B

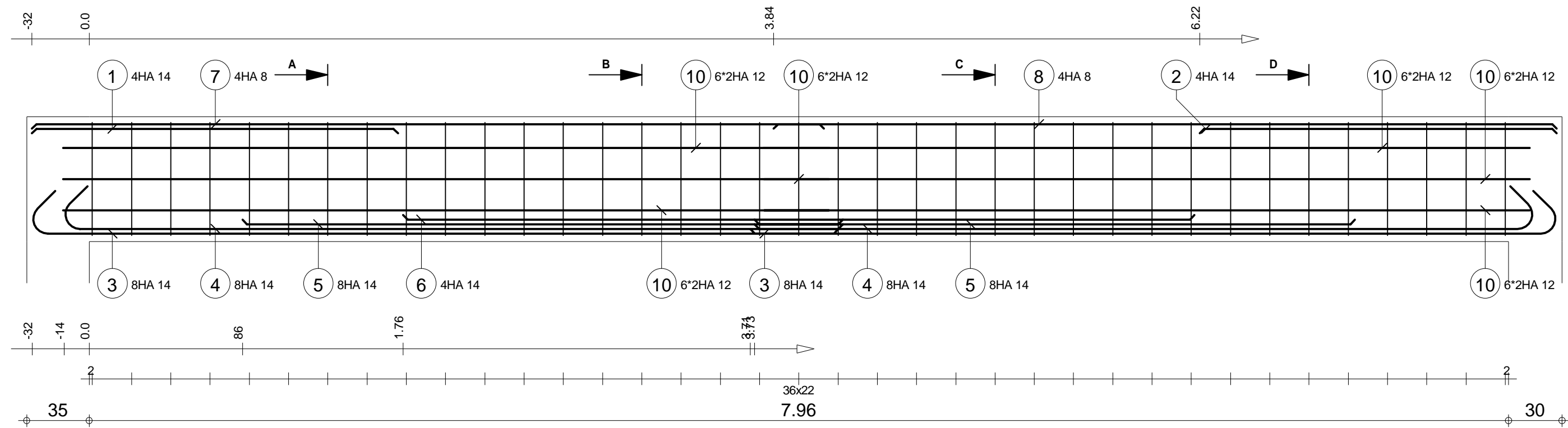
C-C

D-D

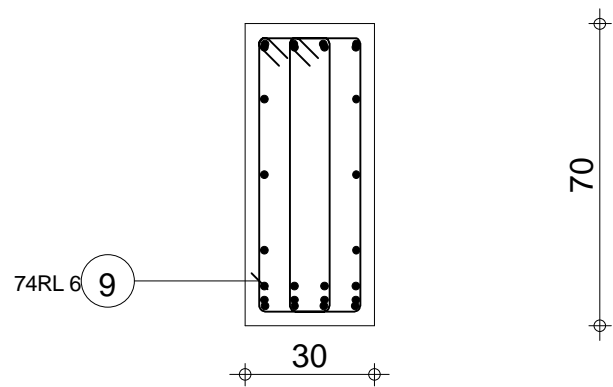


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 12	l=1.62	00	④	3HA 12	l=6.16	00	⑦	3HA 12	l=1.59	00	⑩	52RL 6	l=1.76	31
②	3HA 12	l=3.49	00	⑤	3HA 12	l=4.89	00	⑧	6HA 8	l=3.34	00				
③	3HA 12	l=3.49	00	⑥	3HA 12	l=3.49	00	⑨	3*2HA 12	l=5.99	00				

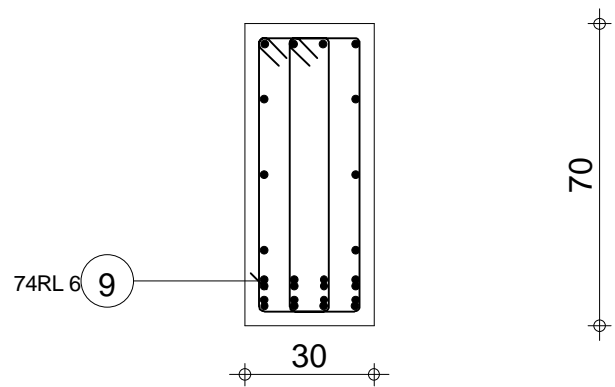
R+3 PROJET CERME_PLANS GUIDES		POUTRE 10 Section 20x80		Tél. Fax		Nombre 1		Béton : BETON25 = 1.03 m3		Acier HA 400 = 110 kg	
								Enrobage inférieur 3 cm		Acier RL 235 = 20.3 kg	
								Densité = 126.2 kg/ m3		Enrobage supérieur 3 cm	
								Surface du coffrage = 11.8 m2		Enrobage latéral 3 cm	
								Echelle pour la vue 5.57cm/m		Echelle pour la section 5.05cm/m	
										Page 1/1	



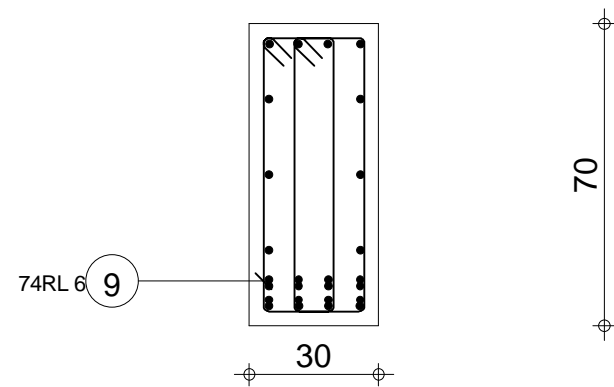
A-A



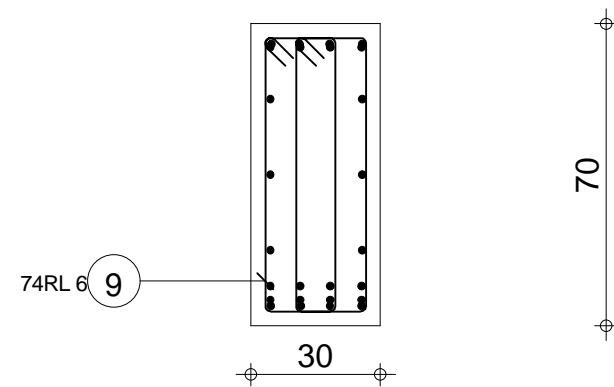
B-B



C-C

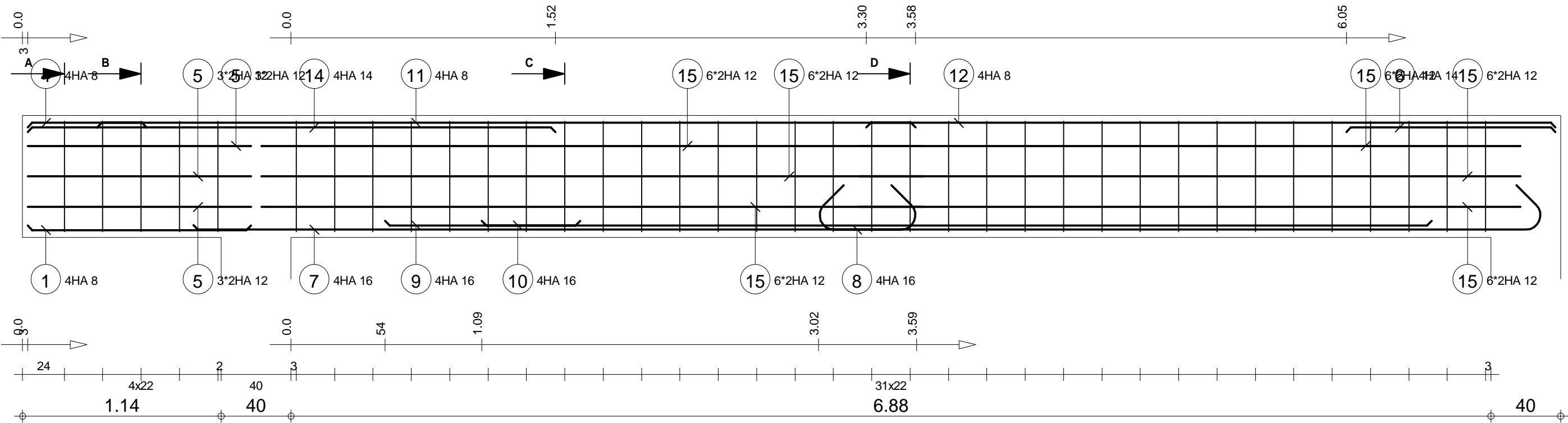


D-D

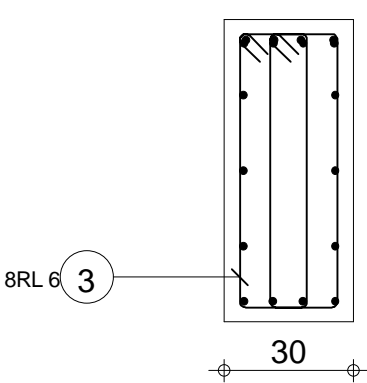


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 14	l=2.05	00	④	8HA 14	l=4.61	00	⑦	4HA 8	l=4.44	00	⑩	6*2HA 12	l=4.29	00
②	4HA 14	l=2.00	00	⑤	8HA 14	l=3.36	00	⑧	4HA 8	l=4.39	00				
③	8HA 14	l=4.76	00	⑥	4HA 14	l=4.44	00	⑨	74RL 6	l=1.73	31				

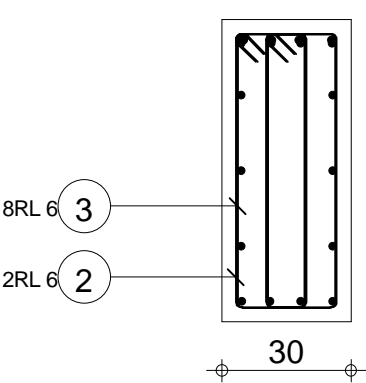
		Tél.		Fax				Acier HA 400 = 224 kg	
R+3 PROJET CERME_PLANS GUIDES	POUTRE 11 Section 30x70	Nombre 1	Béton : BETON25 = 1.81 m3		Acier RL 235 = 28.4 kg				
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm		
			Densité = 139.2 kg/ m3		Echelle pour la vue 4.22cm/m		Page 1/1		
			Surface du coffrage = 14.9 m2		Echelle pour la section 5.71cm/m				



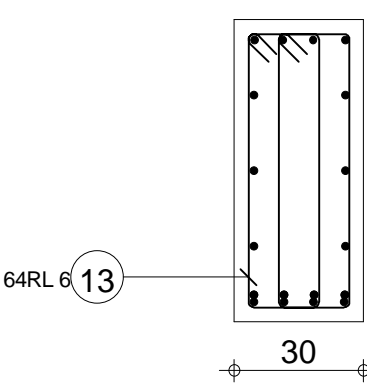
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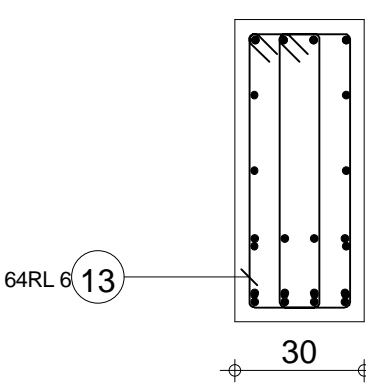
B-B



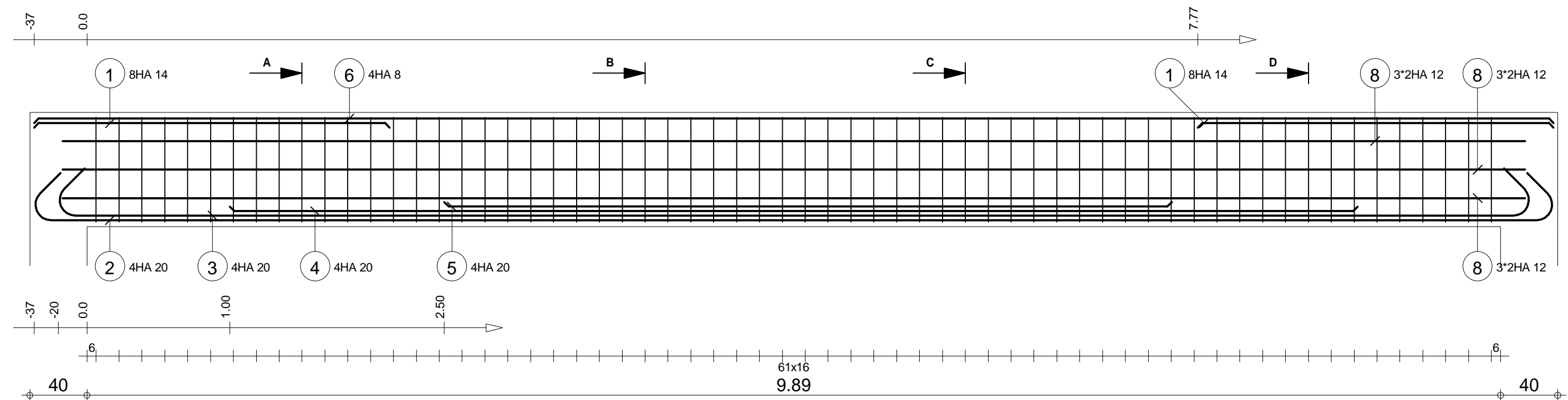
C-C



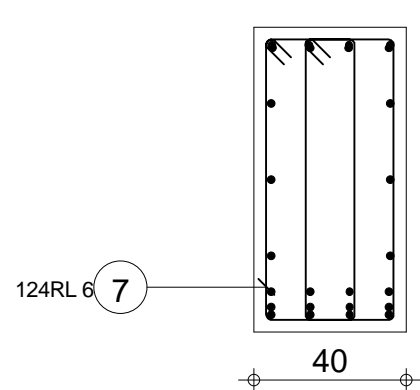
D-D



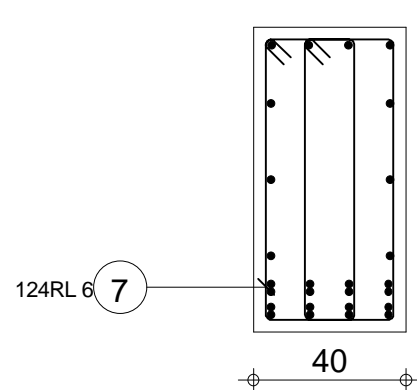
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme								
①	4HA 8	l=1.28	00	④	4HA 8	l=68	00	⑦	4HA 16	l=4.41	00	⑩	4HA 16	l=5.45	00	⑬	64RL 6	l=1.73	31								
②	2RL 6	l=1.73	31	⑤	3*2HA 12	l=1.28	00	⑧	4HA 16	l=4.68	00	⑪	4HA 8	l=4.69	00	⑭	4HA 14	l=3.03	00								
③	8RL 6	l=1.72	31	⑥	4HA 14	l=1.20	00	⑨	4HA 16	l=1.12	00	⑫	4HA 8	l=3.95	00	⑮	6*2HA 12	l=3.79	00								
Tél.												Fax															
R+3 PROJET CERME_PLANS GUIDES				POUTRE 12 Section 30x70								Nombre 1				Acier HA 400 = 183 kg											
																Béton : BETON25 = 1.85 m3				Acier RL 235 = 28.4 kg							
																Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
																Densité = 114.6 kg/ m3				Echelle pour la vue 4.12cm/m				Page 1/1			
												Surface du coffrage = 15.2 m2				Echelle pour la section 5.71cm/m											



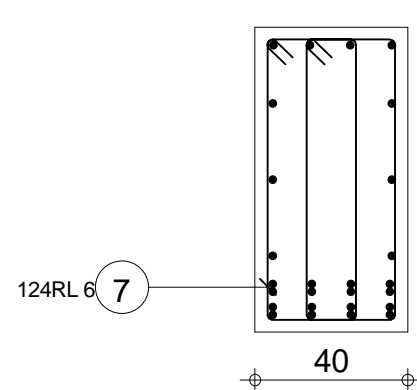
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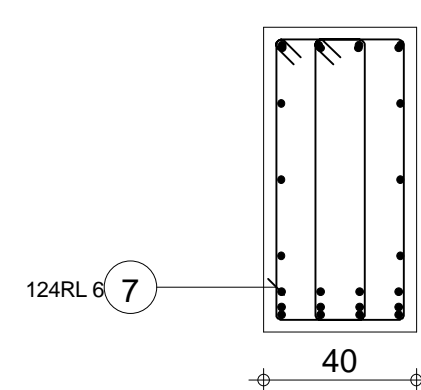
B-B











C-C



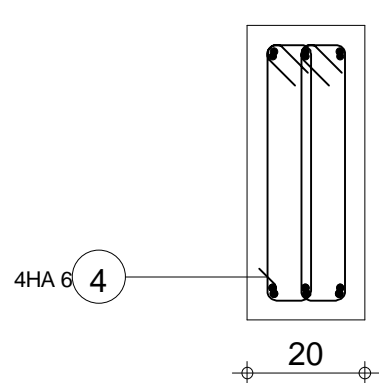
D-D



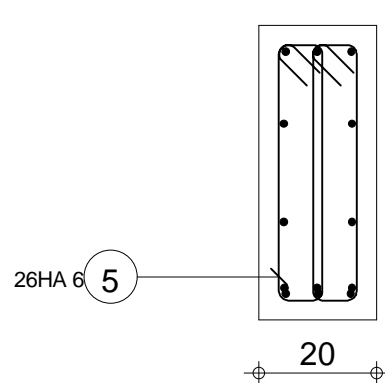
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	8HA 14 l=2.49	00		④	4HA 20 l=7.89	00		⑦	124RL 6 l=2.07	31	
②	4HA 20 l=11.31	00		⑤	4HA 20 l=5.09	00		⑧	3*2HA 12 l=10.23	00	
③	4HA 20 l=10.97	00		⑥	4HA 8 l=10.63	00					

		Tél.		Fax				Acier HA 400 = 443 kg	
R+3 PROJET CERME_PLANS GUIDES	POUTRE 13 Section 40x80	Nombre 1	Béton : BETON25 = 3.42 m3		Acier RL 235 = 56.9 kg				
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm			Enrobage latéral 3 cm	
			Densité = 146.2 kg/ m3		Echelle pour la vue 3.42cm/m			Page 1/1	
			Surface du coffrage = 21.7 m2		Echelle pour la section 5.05cm/m				

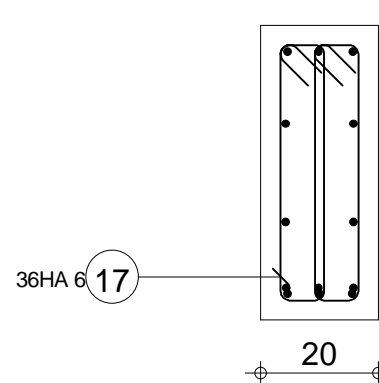
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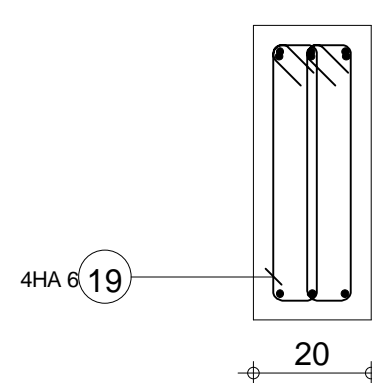
B-B



C-C

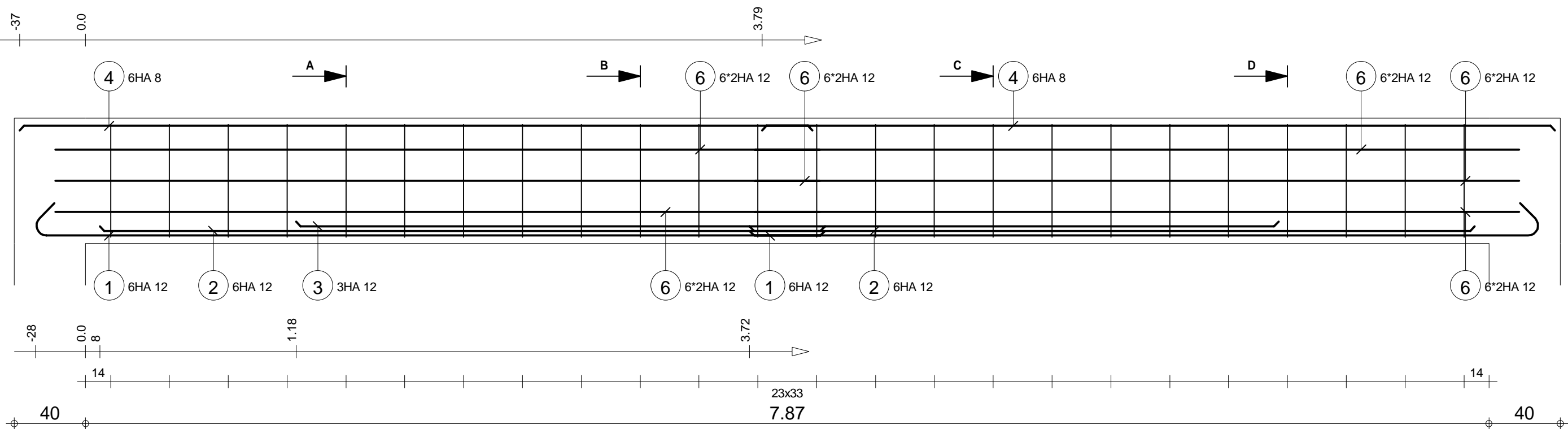


D-D

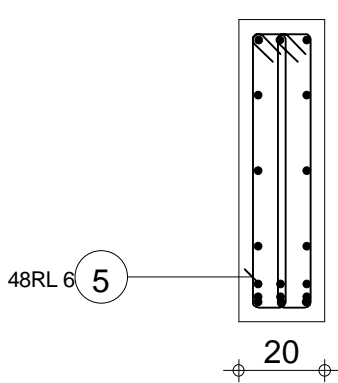


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme								
①	3HA 10	l=49	00	④	4HA 6	l=1.16	31	⑦	6HA 10	l=3.45	00	⑩	2*2HA 12	l=5.09	00	⑬	3HA 8	l=4.56	00								
②	3HA 10	l=57	00	⑤	26HA 6	l=1.16	31	⑧	3HA 8	l=4.56	00	⑪	3HA 10	l=86	00	⑭	6HA 10	l=3.04	00								
③	3HA 10	l=52	00	⑥	6HA 10	l=1.76	00	⑨	3HA 10	l=3.25	00	⑫	3HA 8	l=4.88	00	⑮	6HA 10	l=4.58	00								
Tél.								Fax								Acier HA 500 = 124 kg											
R+3 PROJET CERME_PLANS GUIDES								POUTRE 14 Section 20x50								Acier HA 500 = 18 kg											
																Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
																Densité = 106.8 kg/ m3 Surface du coffrage = 16 m2				Echelle pour la vue 2.77cm/m Echelle pour la section 7.8cm/m				Page 1/2			

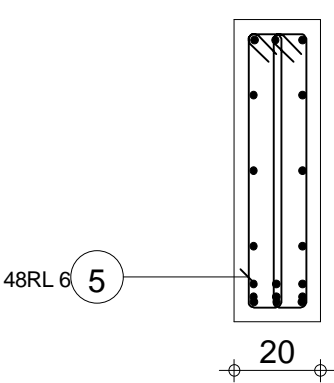
Pos.	Armature	Code	Forme
16	3HA 10 l=2.23	00	<div>2.23</div>
17	36HA 6 l=1.16	31	<div><div>8</div><div>4</div><div>8</div></div>
18	4*2HA 12 l=3.75	00	<div>3.75</div>
19	4HA 6 l=1.16	31	<div><div>8</div><div>4</div><div>8</div></div>
20	3HA 10 l=49	00	<div>49</div>



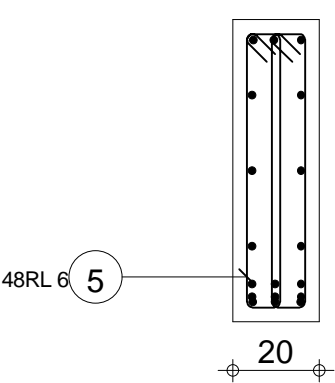
A-A



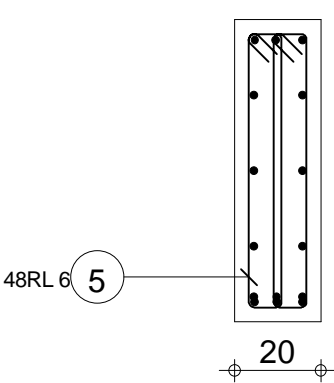
B-B



C-C

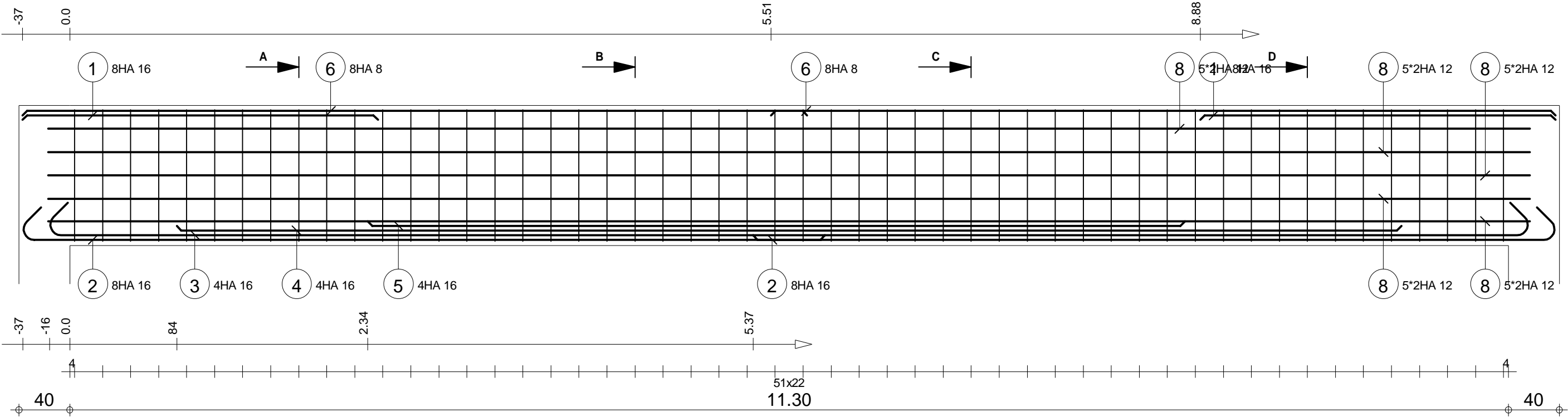


D-D

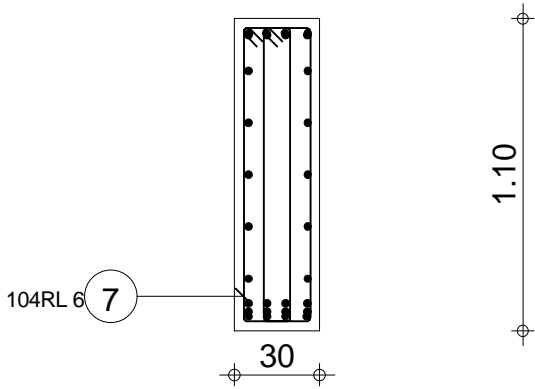


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 12	l=4.62	00	④	6HA 8	l=4.45	00
②	6HA 12	l=4.07	00	⑤	48RL 6	l=1.56	31
③	3HA 12	l=5.51	00	⑥	6*2HA 12	l=4.29	00

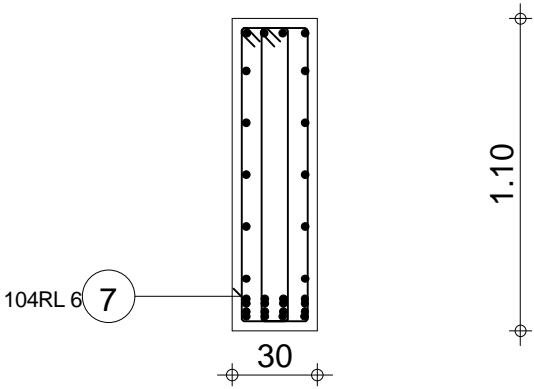
R+3 PROJET CERME_PLANS GUIDES		POUTRE 15 Section 20x70		Tél. Fax		Nombre 1		Béton : BETON25 = 1.21 m3		Acier HA 400 = 117 kg	
								Enrobage inférieur 3 cm		Acier RL 235 = 16.6 kg	
								Densité = 110.7 kg/ m3		Enrobage supérieur 3 cm	
								Surface du coffrage = 14 m2		Enrobage latéral 3 cm	
								Echelle pour la vue 4.18cm/m		Echelle pour la section 5.71cm/m	
										Page 1/1	



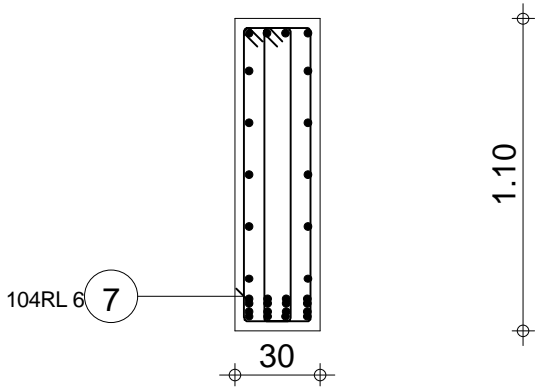
A-A



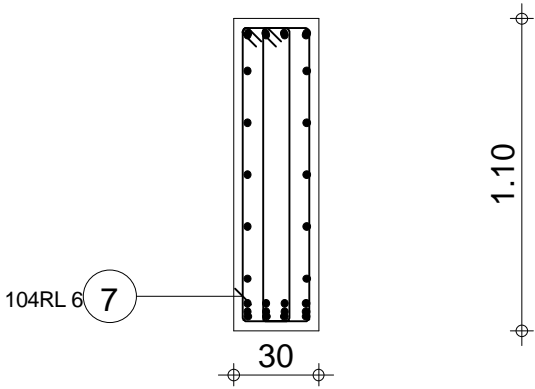
B-B



C-C

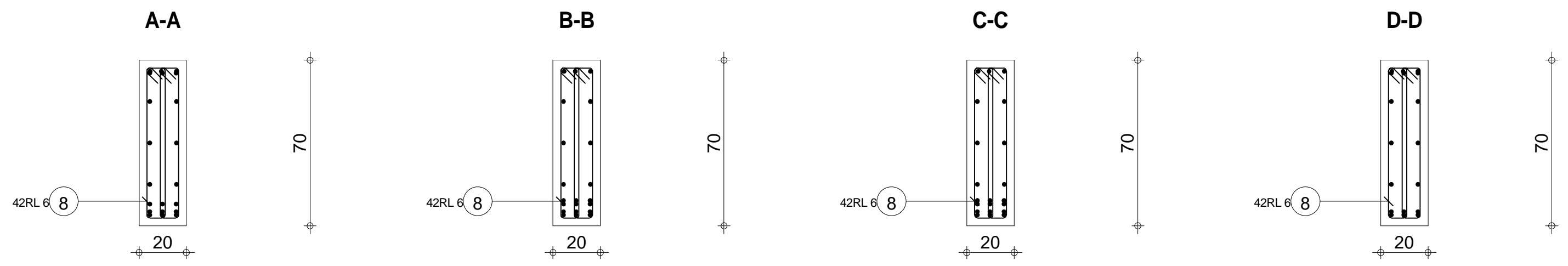
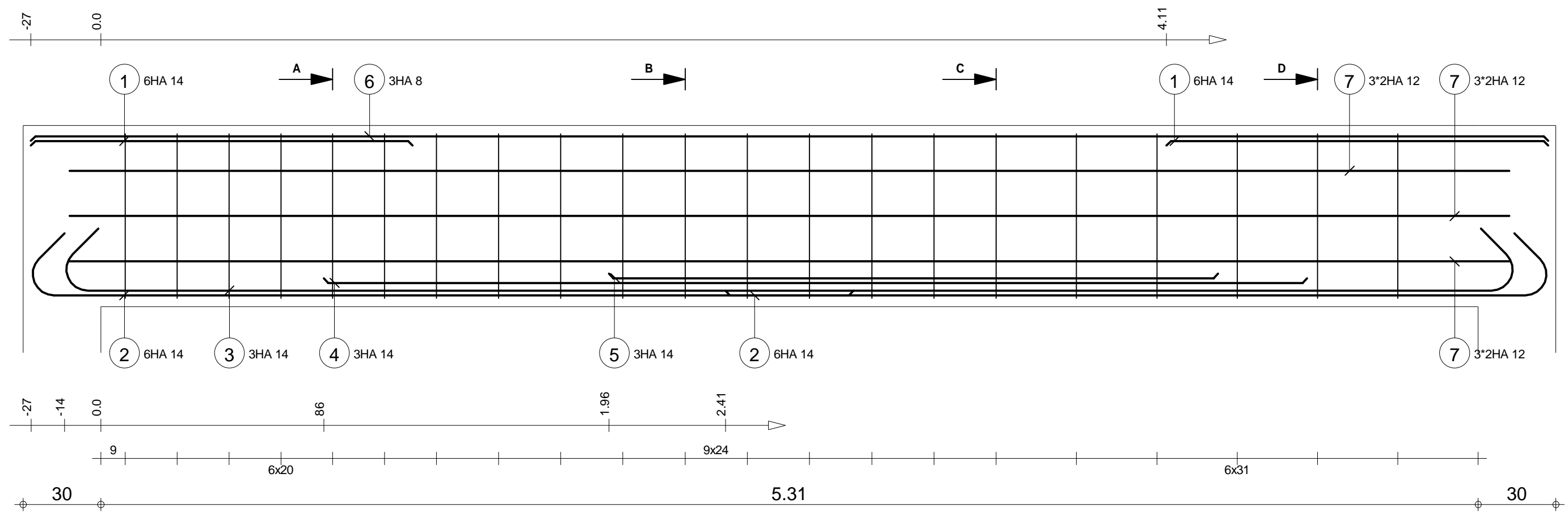



D-D



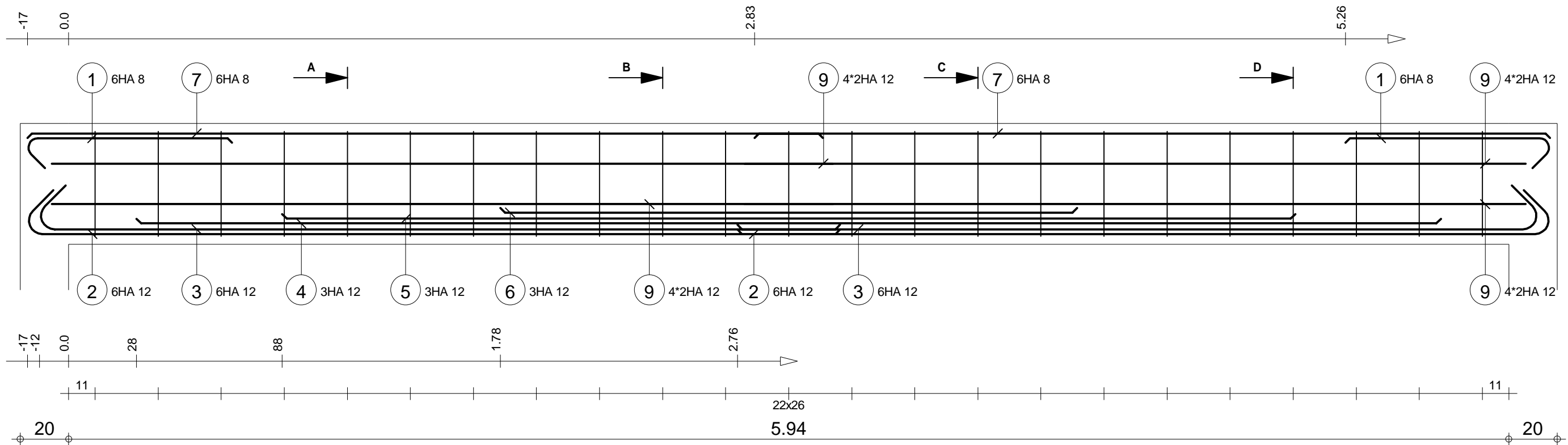
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	8HA 16	l=2.79	00	④	4HA 16	l=9.62	00	⑦	104RL 6	l=2.53	31
②	8HA 16	l=6.57	00	⑤	4HA 16	l=6.42	00	⑧	5*2HA 12	l=11.64	00
③	4HA 16	l=12.15	00	⑥	8HA 8	l=6.16	00				

R+3 PROJET CERME_PLANS GUIDES		POUTRE 16 AVEC REMONTEE DE 35CM Section 30x110		Nombre 1		Béton : BETON25 = 3.99 m3		Acier HA 400 = 419 kg	
						Enrobage inférieur 3 cm		Acier RL 235 = 58.5 kg	
						Densité = 119.5 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 30.7 m2		Enrobage latéral 3 cm	
						Echelle pour la vue 3.03cm/m		Echelle pour la section 3.76cm/m	
								Page 1/1	

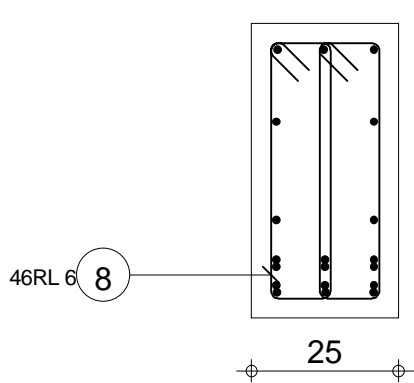


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	6HA 14	l=1.47	00	1.47	④	3HA 14	l=3.79	00	3.79	⑦	3*2HA 12	l=5.55	00	5.55
②	6HA 14	l=3.42	00	3.17	⑤	3HA 14	l=2.35	00	2.35	⑧	42RL 6	l=1.56	31	
③	3HA 14	l=6.08	00	5.59	⑥	3HA 8	l=5.85	00	5.85					

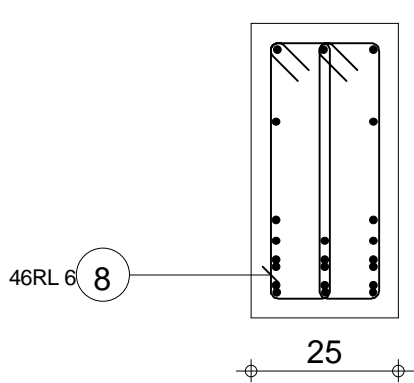
		Tél.	Fax		Acier HA 400 = 116 kg	
R+3 PROJET CERME_PLANS GUIDES	POUTRE 17 Section 20x70	Nombre 1		Béton : BETON25 = 0.828 m3	Acier RL 235 = 14.5 kg	
				Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
				Densité = 158.2 kg/ m3	Echelle pour la vue 6.05cm/m	Page 1/1
				Surface du coffrage = 9.62 m2	Echelle pour la section 5.71cm/m	



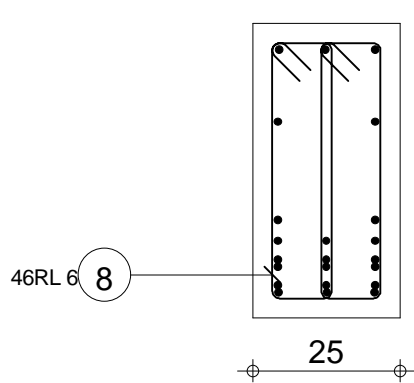
A-A



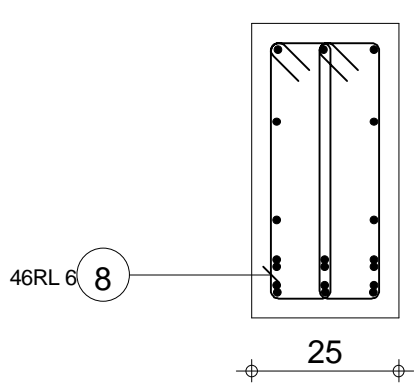
B-B






C-C

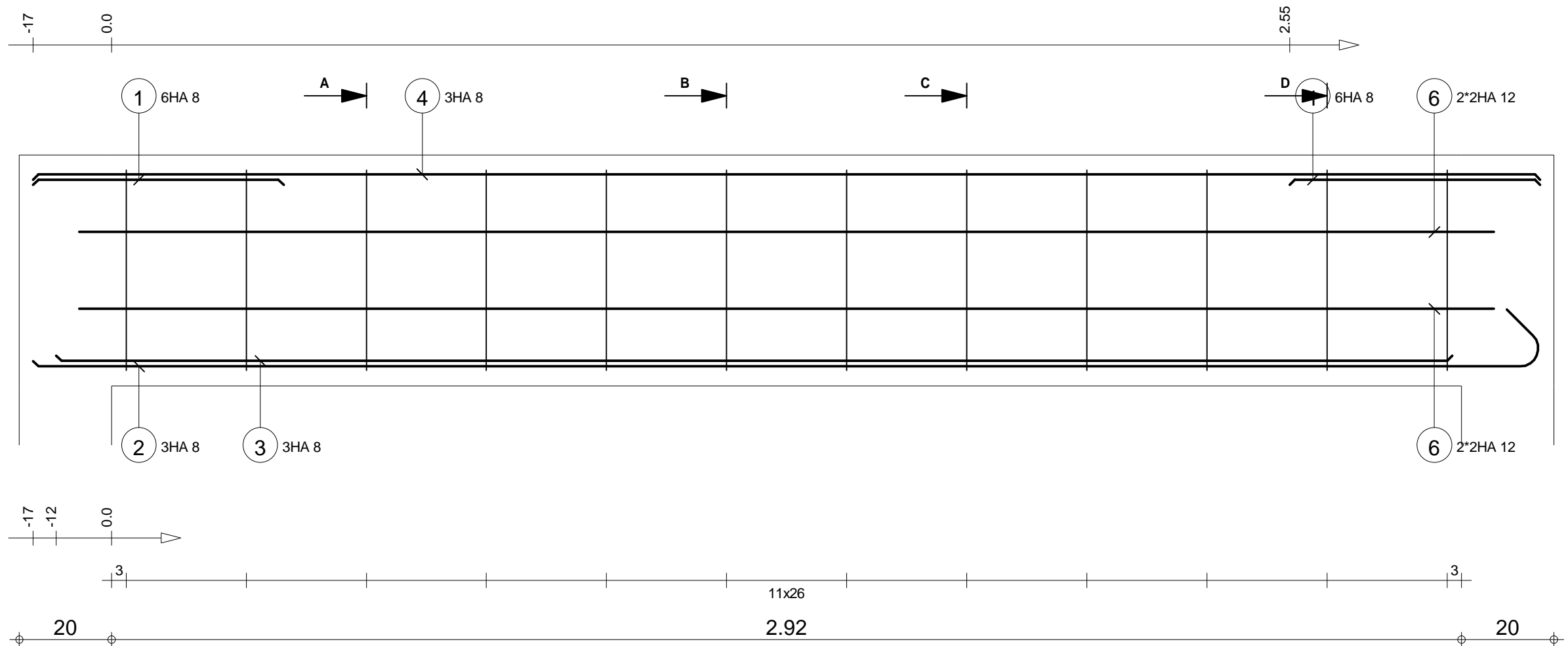


D-D

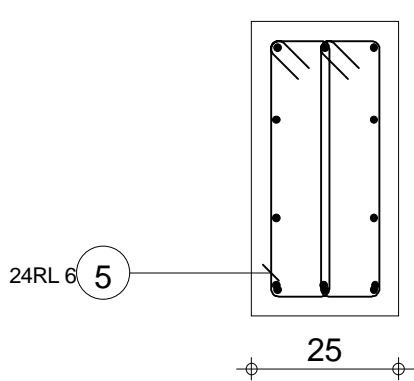


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	
①	6HA 8	l=97	00		④	3HA 12	l=5.38	00	⑦	6HA 8	l=3.28	00
②	6HA 12	l=3.54	00		⑤	3HA 12	l=4.18	00	⑧	46RL 6	l=1.21	31
③	6HA 12	l=3.49	00		⑥	3HA 12	l=2.38	00	⑨	4*2HA 12	l=3.22	00

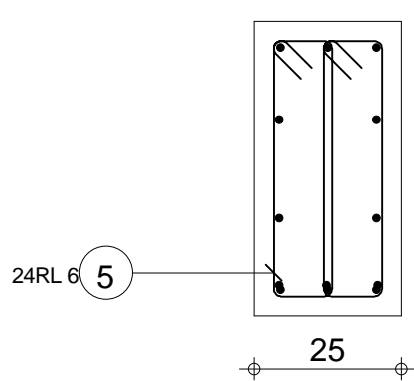
R+3 PROJET CERME_PLANS GUIDES		POUTRE 18 Section 25x50		Nombre 1		Béton : BETON25 = 0.792 m3		Acier HA 400 = 102 kg	
						Enrobage inférieur 3 cm		Acier RL 235 = 12.3 kg	
						Densité = 145.2 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 8.07 m2		Enrobage latéral 3 cm	
						Echelle pour la vue 5.67cm/m		Echelle pour la section 7.8cm/m	
								Page 1/1	



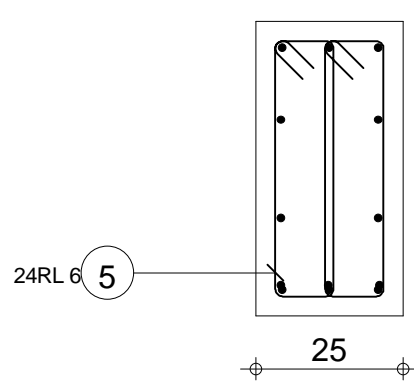
A-A



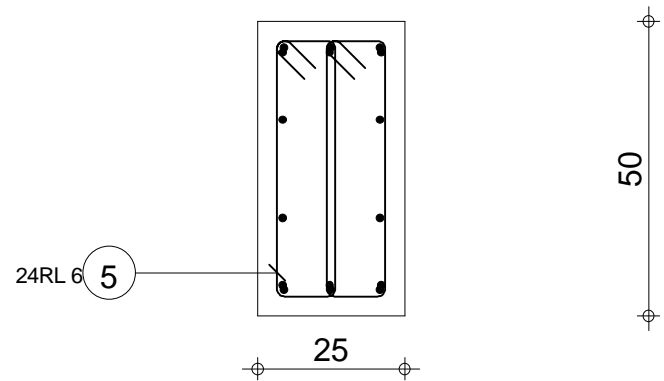
B-B




C-C

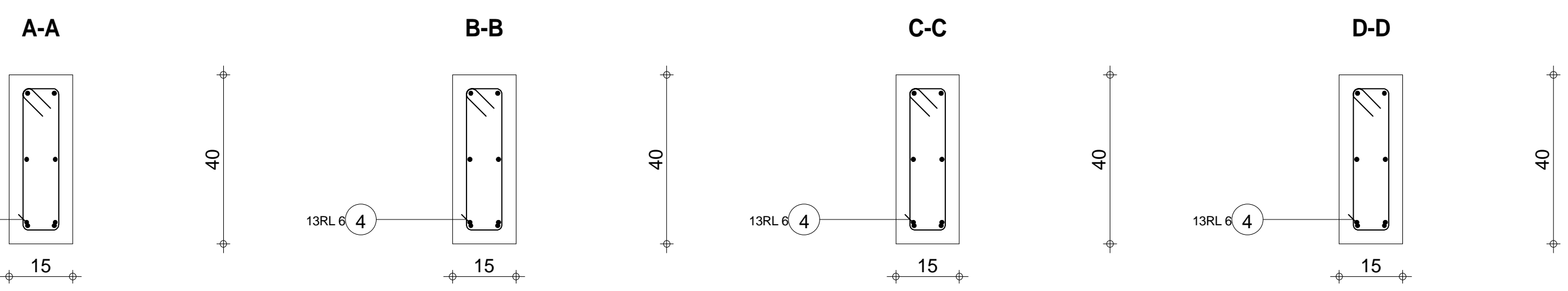
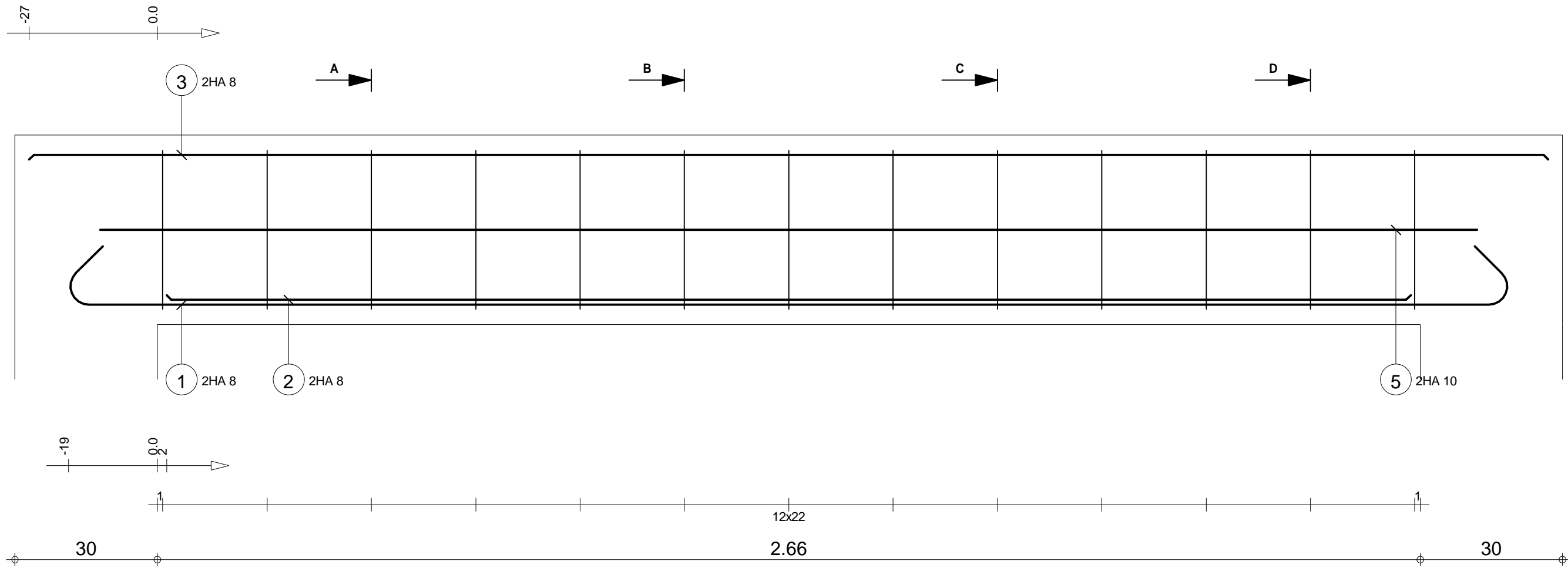



D-D

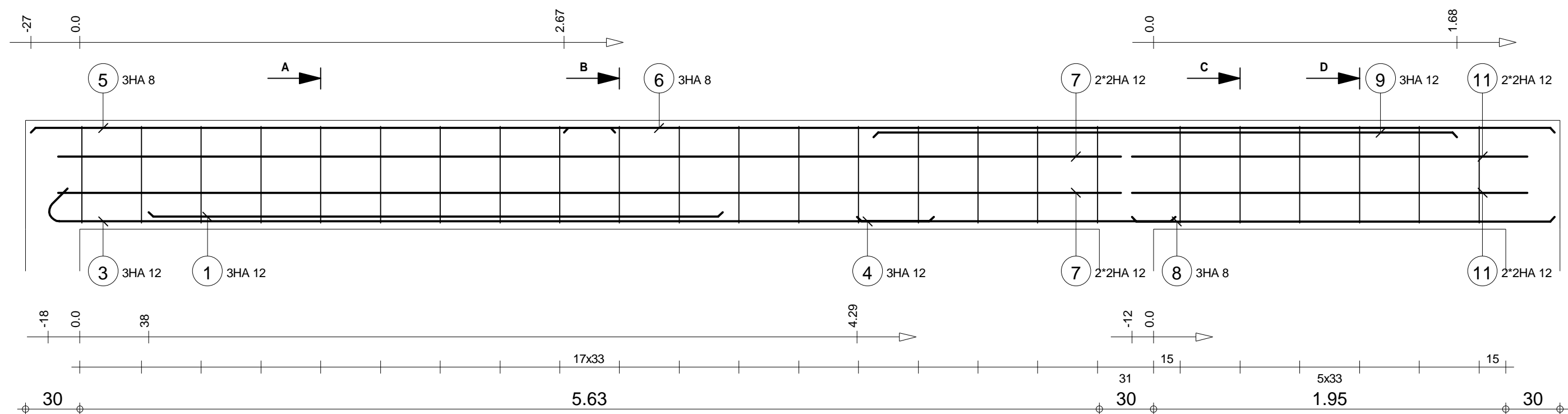


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 8 l=54	00	54	④	3HA 8 l=3.26	00	3.26
②	3HA 8 l=3.39	00	3.26 ↗	⑤	24RL 6 l=1.21	31	
③	3HA 8 l=3.02	00	3.02	⑥	2*2HA 12 l=3.06	00	3.06

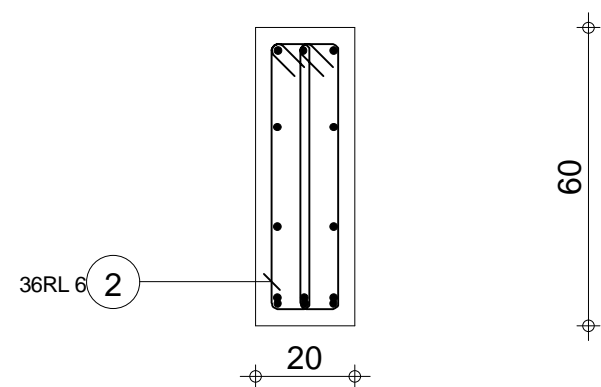
		Tél.	Fax			Acier HA 400 = 23.6 kg	
R+3 PROJET CERME_PLANS GUIDES	POUTRE 19 Section 25x50	Nombre 1	Béton : BETON25 = 0.415 m3		Acier RL 235 = 6.42 kg		
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm
			Densité = 72.29 kg/ m3		Echelle pour la vue 9.33cm/m		Page 1/1
			Surface du coffrage = 4.3 m2		Echelle pour la section 7.8cm/m		



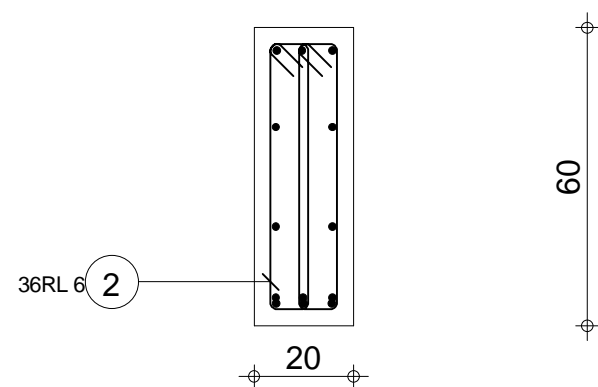
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme		
①	2HA 8	l=3.29	00	↙ 3.04 ↘	④	13RL 6	l=98	31	
②	2HA 8	l=2.62	00	2.62	⑤	2HA 10	l=2.90	00	2.90
③	2HA 8	l=3.20	00	3.20					



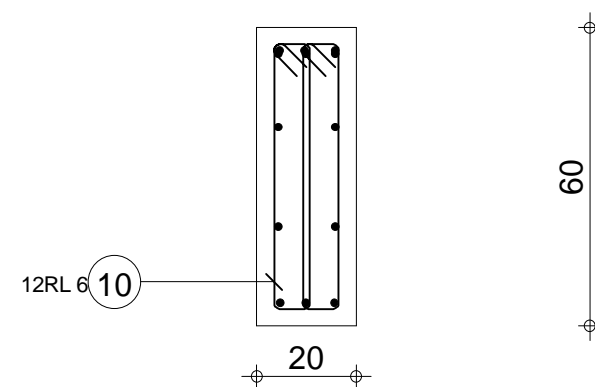
A-A



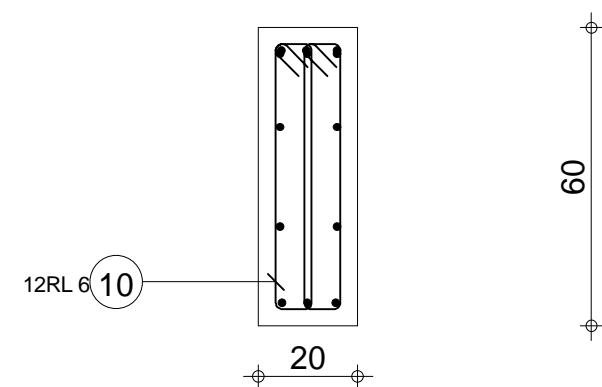
B-B



C-C

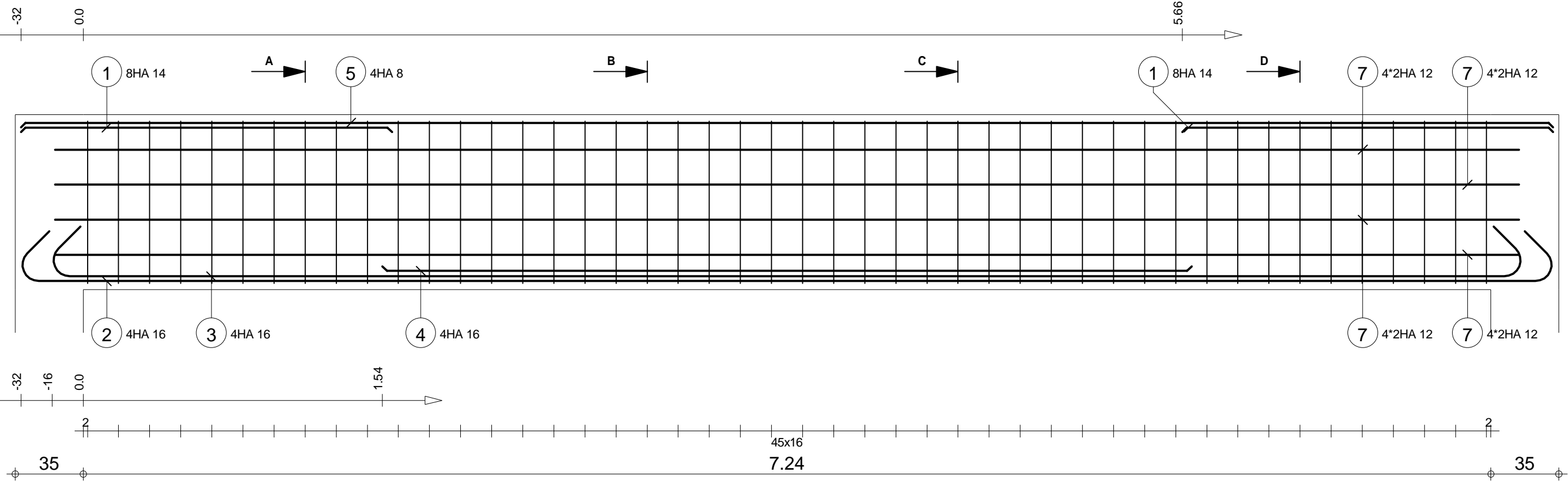


D-D

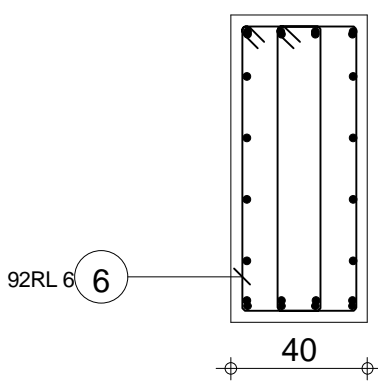


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12	l=3.17	00	④	3HA 12	l=1.76	00	⑦	2*2HA 12	l=5.87	00	⑩	12RL 6	l=1.35	31
②	36RL 6	l=1.36	31	⑤	3HA 8	l=3.23	00	⑧	3HA 8	l=2.34	00	⑪	2*2HA 12	l=2.19	00
③	3HA 12	l=5.08	00	⑥	3HA 8	l=5.47	00	⑨	3HA 12	l=3.22	00				

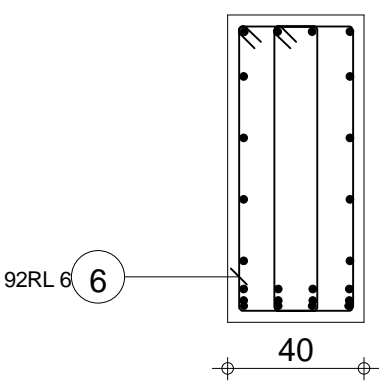
R+3 PROJET CERME_PLANS GUIDES		POUTRE 21 Section 20x60		Tél. Fax		Nombre 1		Béton : BETON25 = 1.02 m3		Acier HA 400 = 76.9 kg	
								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
								Densité = 89.61 kg/ m3		Echelle pour la vue 4.28cm/m	
								Surface du coffrage = 11.9 m2		Echelle pour la section 6.58cm/m	
										Page 1/1	



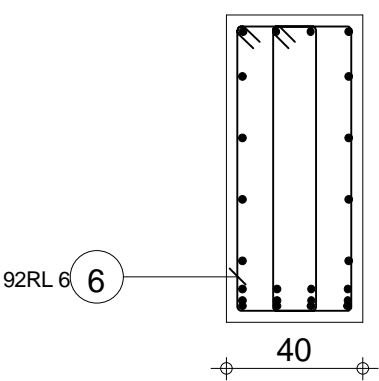
A-A



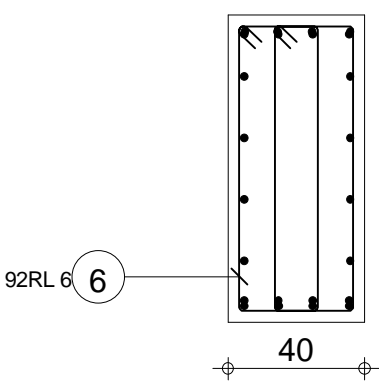
B-B



C-C

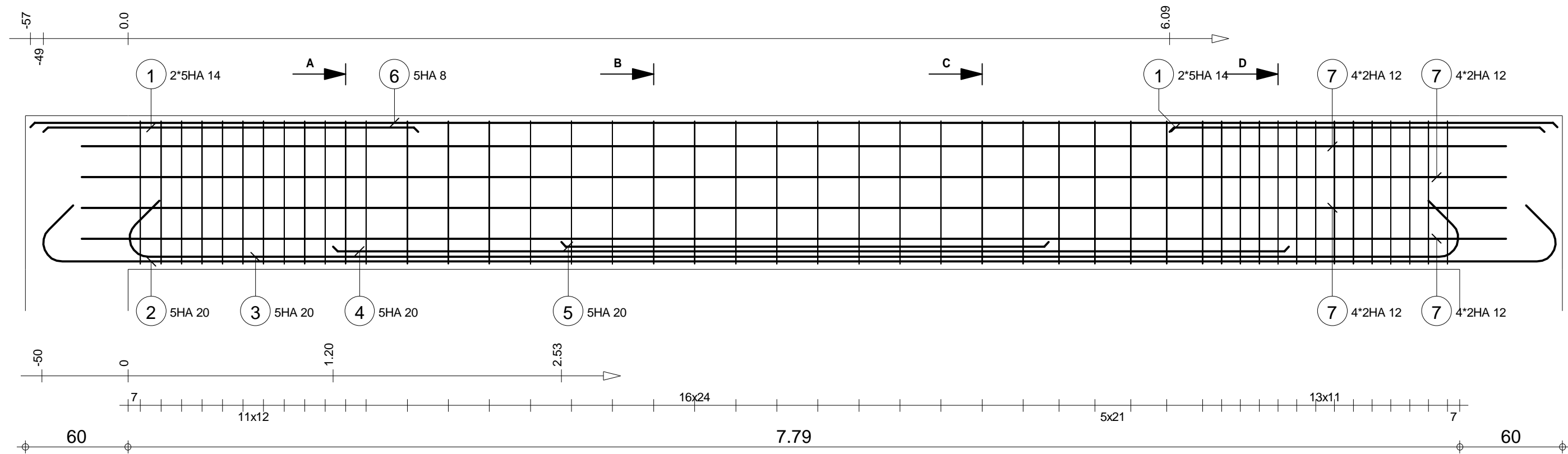


D-D

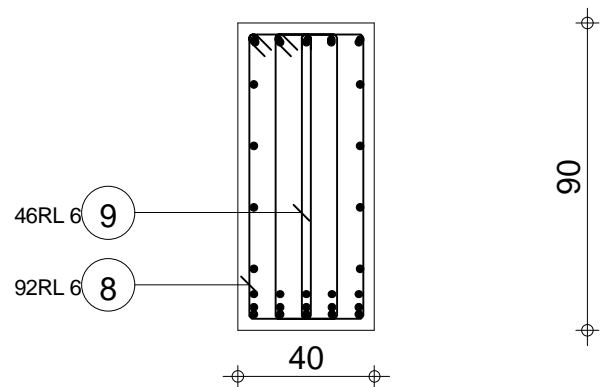


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	8HA 14	l=1.91	00	<div><div>1.91</div></div>	④	4HA 16	l=4.16	00	<div><div>4.16</div></div>	⑦	4*2HA 12	l=7.53	00	<div><div>7.53</div></div>
②	4HA 16	l=8.41	00	<div><div>7.88</div></div>	⑤	4HA 8	l=7.88	00	<div><div>7.88</div></div>					
③	4HA 16	l=8.09	00	<div><div>7.56</div></div>	⑥	92RL 6	l=2.27	31	<div><div>24</div><div>8</div><div>84</div></div>					

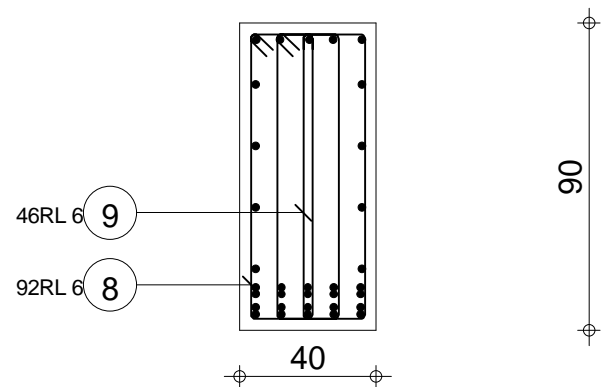
R+3 PROJET CERME_PLANS GUIDES		POUTRE 22 Section 40x90		Nombre 1		Tél.		Fax			
										Béton : BETON25 = 2.86 m3	
										Acier HA 400 = 215 kg	
										Acier RL 235 = 46.3 kg	
										Enrobage inférieur 3 cm	
										Enrobage supérieur 3 cm	
										Enrobage latéral 3 cm	
										Densité = 91.26 kg/ m3	
										Echelle pour la vue 4.55cm/m	
										Echelle pour la section 4.52cm/m	
										Page 1/1	



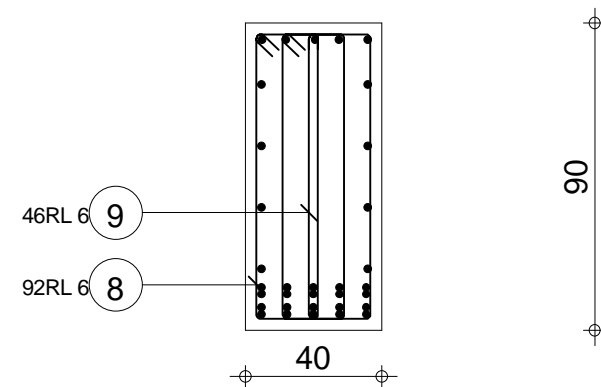
A-A



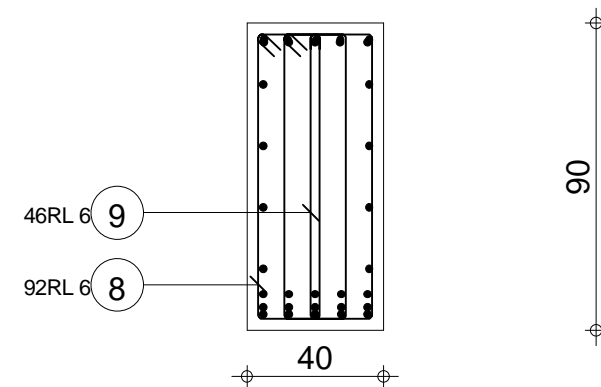
B-B



C-C

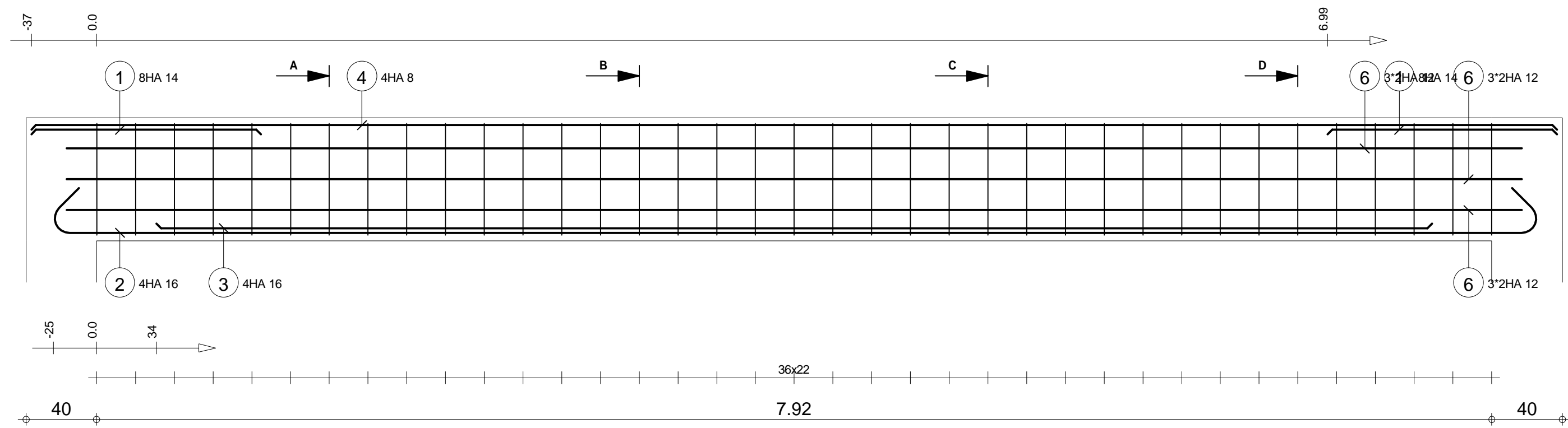


D-D

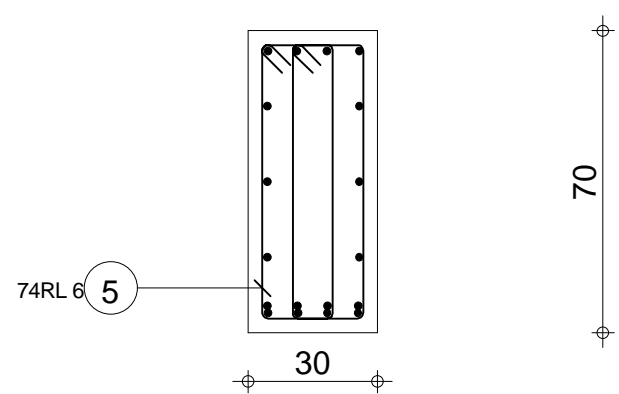


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2*5HA 14	l=2.19	00	④	5HA 20	l=5.59	00	⑦	4*2HA 12	l=8.33	00
②	5HA 20	l=9.54	00	⑤	5HA 20	l=2.85	00	⑧	92RL 6	l=2.32	31
③	5HA 20	l=8.46	00	⑥	5HA 8	l=8.93	00	⑨	46RL 6	l=1.80	

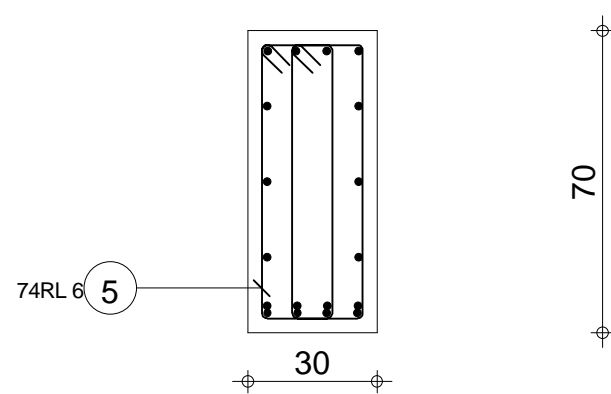
R+3 PROJET CERME_PLANS GUIDES		POUTRE 23 Section 40x90		Tél. Fax		Nombre 1		Béton : BETON25 = 3.24 m3		Acier HA 400 = 429 kg	
								Enrobage inférieur 3 cm		Acier RL 235 = 65.7 kg	
								Densité = 152.8 kg/ m3		Enrobage supérieur 3 cm	
								Surface du coffrage = 20 m2		Enrobage latéral 3 cm	
								Echelle pour la vue 4.04cm/m		Page 1/1	
								Echelle pour la section 4.52cm/m			



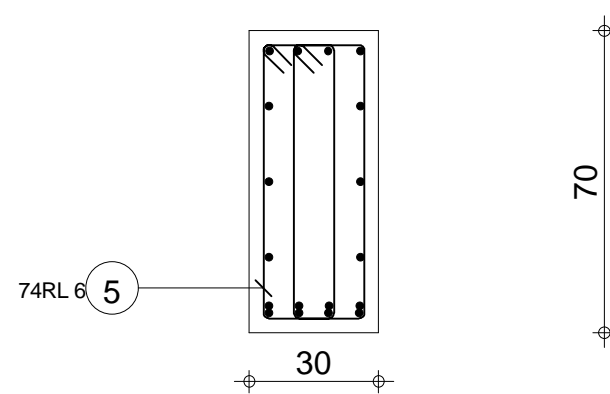
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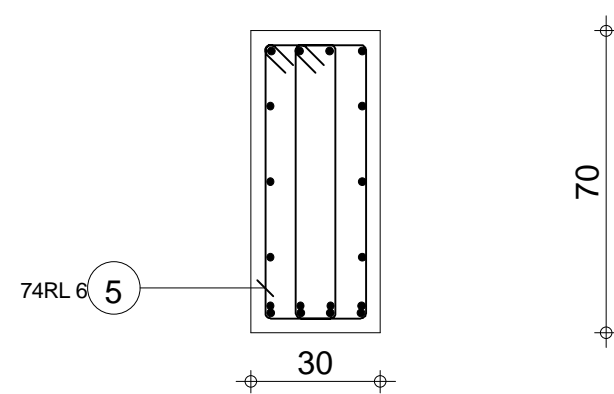
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	8HA 14	l=1.30	00	④	4HA 8	l=8.66	00
②	4HA 16	l=8.96	00	⑤	74RL 6	l=1.73	31
③	4HA 16	l=7.24	00	⑥	3*2HA 12	l=8.26	00

R+3

PROJET CERME_PLANS GUIDES

POUTRE 24

Section 30x70

Tél.

Fax

Nombre 1

Béton : BETON25 = 1.83 m3

Acier HA 400 = 173 kg

Enrobage inférieur 3 cm

Enrobage supérieur 3 cm

Densité = 109.8 kg/ m3

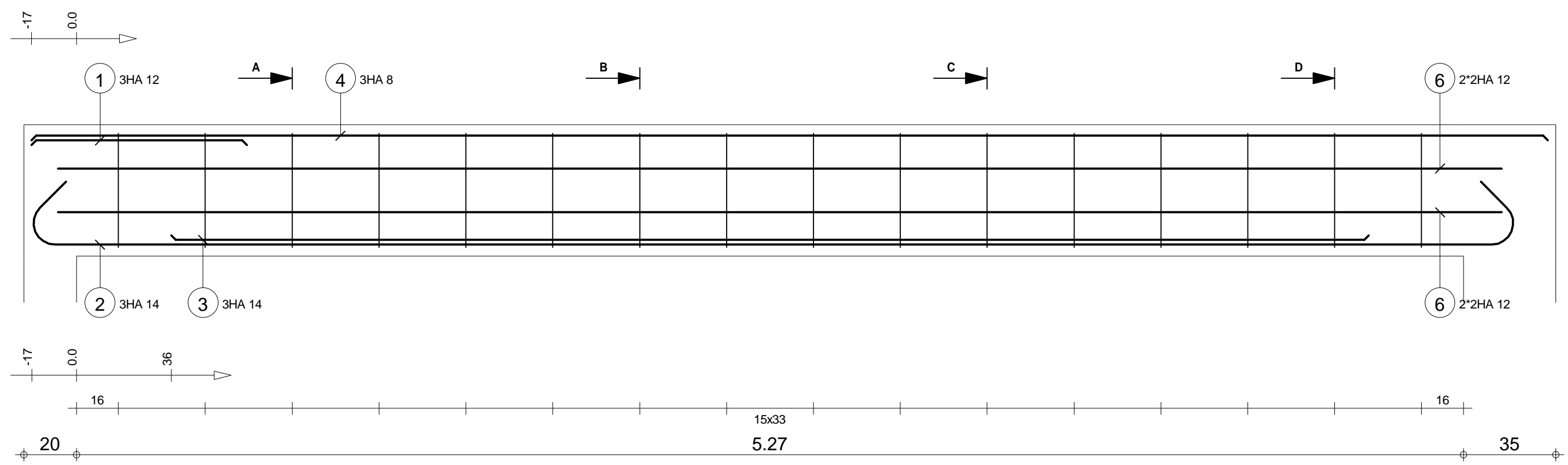
Echelle pour la vue 4.16cm/m

Surface du coffrage = 15 m2

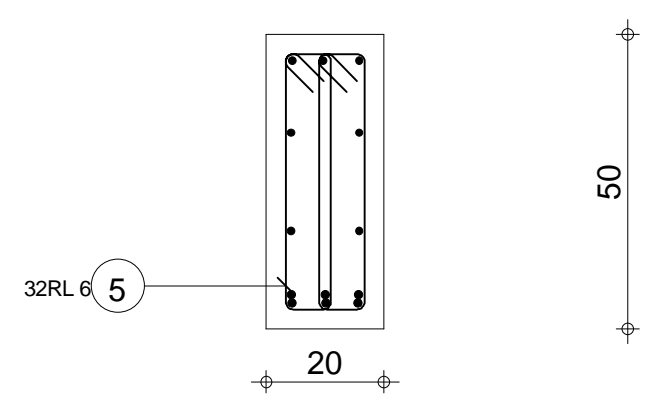
Echelle pour la section 5.71cm/m

Enrobage latéral 3 cm

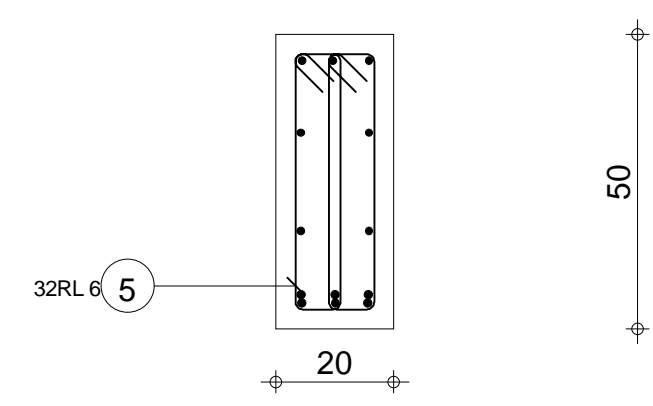
Page 1/1



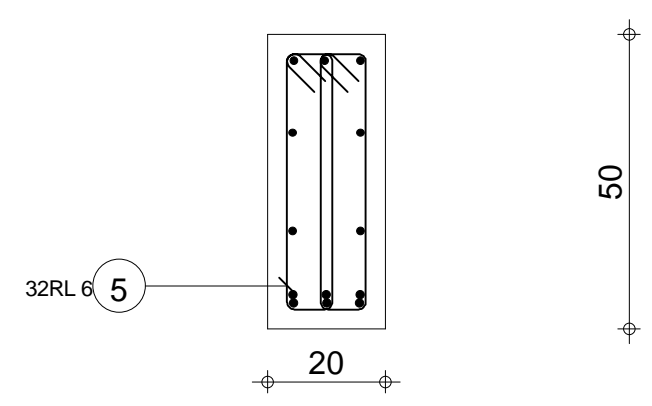
A-A



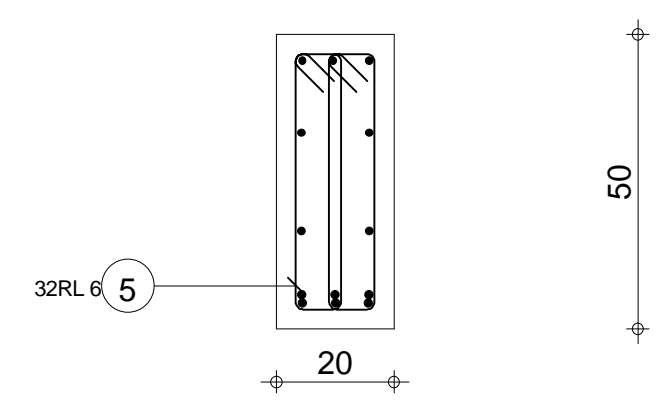
B-B









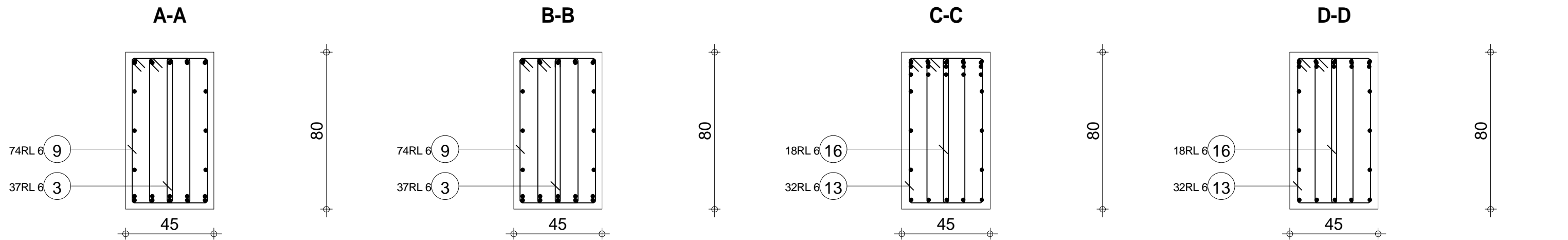
C-C




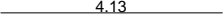
D-D



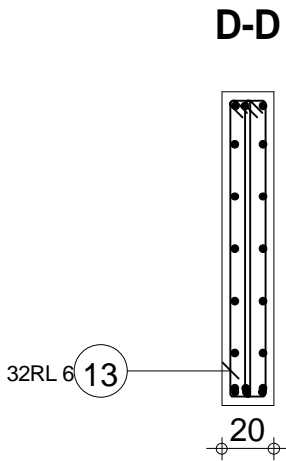
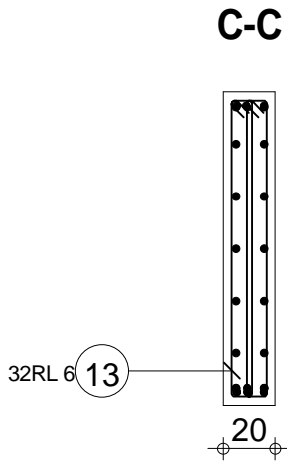
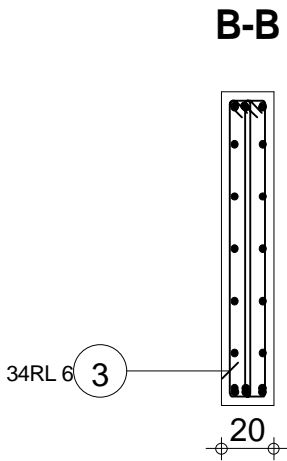
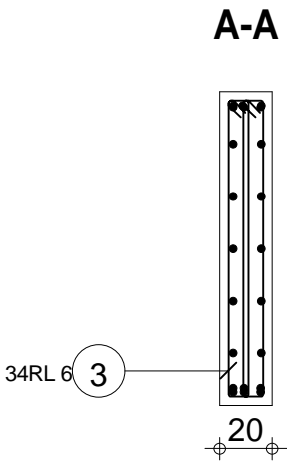
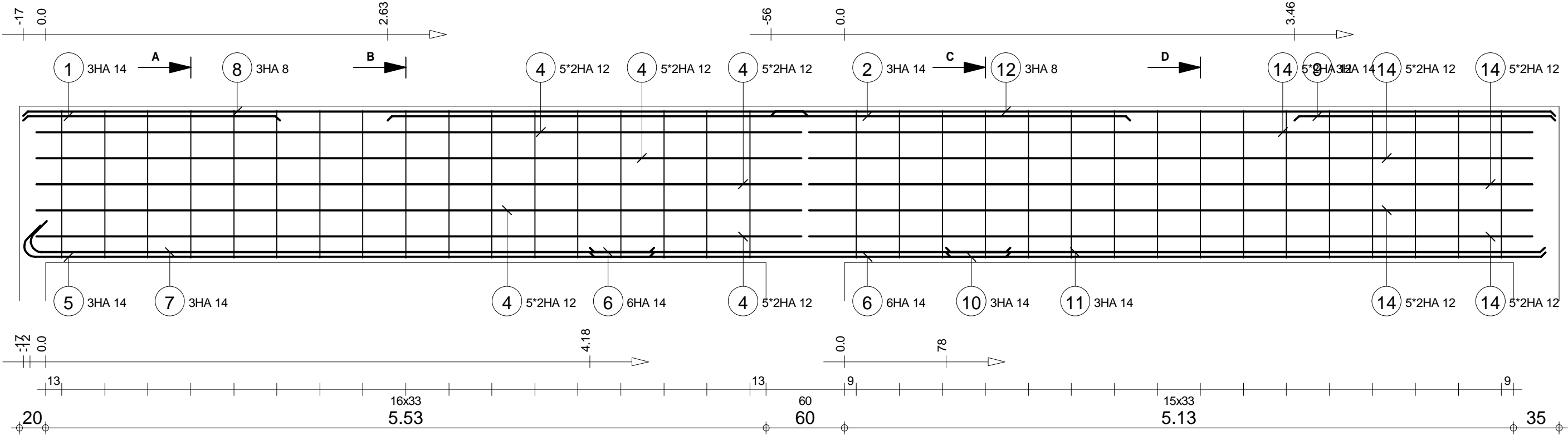
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12 l=82	00		④	3HA 8 l=5.76	00	
②	3HA 14 l=6.12	00		⑤	32RL 6 l=1.16	31	
③	3HA 14 l=4.55	00		⑥	2*2HA 12 l=5.48	00	



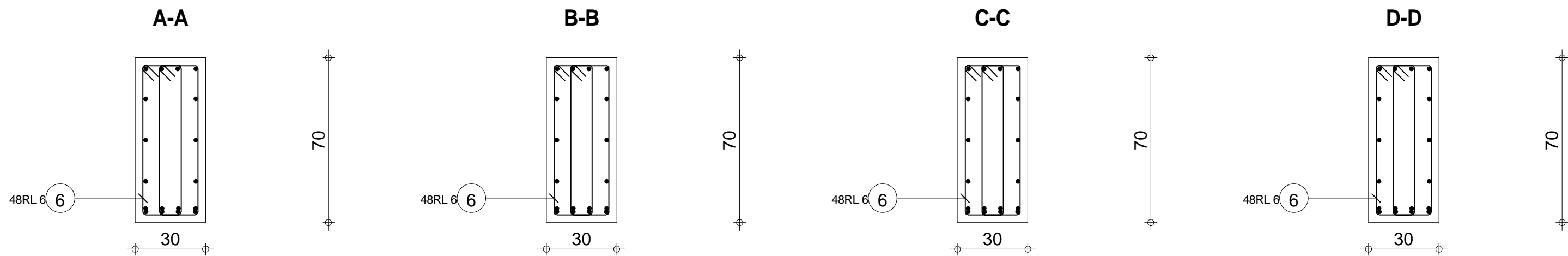
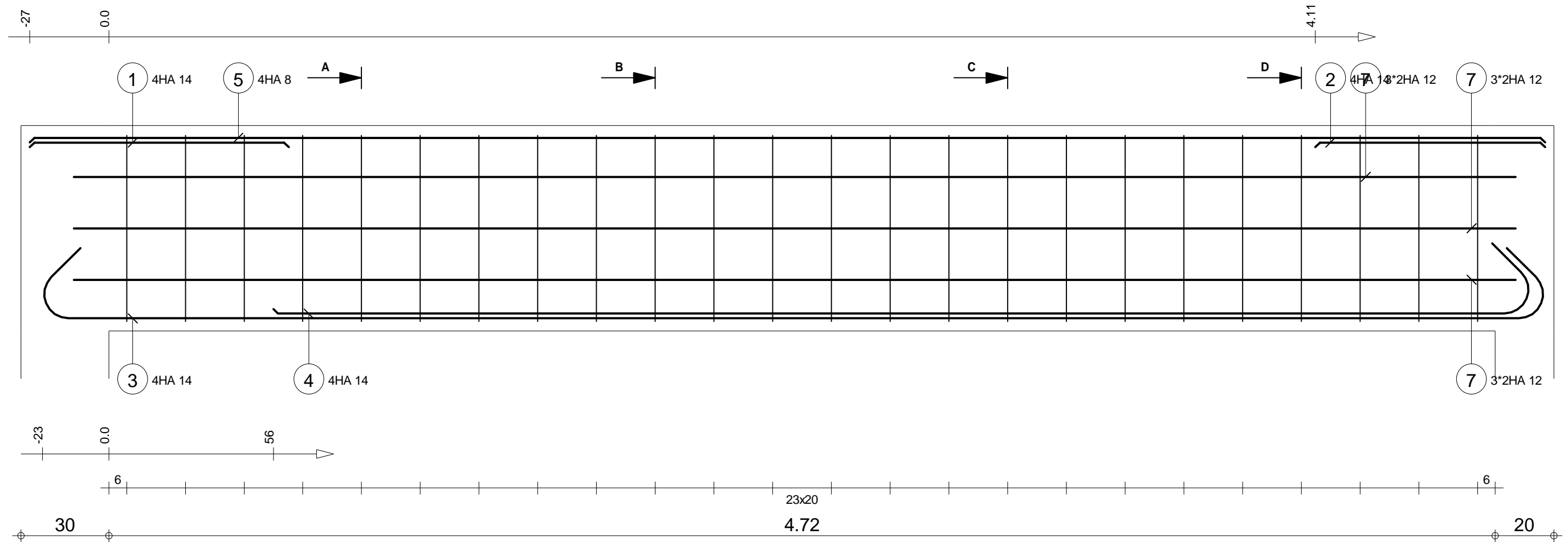
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	5HA 20	l=2.16	00	④	3*2HA 12	l=8.26	00	⑦	5HA 8	l=4.47	00	⑩	5HA 20	l=5.73	00	⑬	32RL 6	l=2.17	31				
②	5HA 20	l=11.24	00	⑤	5HA 20	l=8.72	00	⑧	5HA 8	l=8.47	00	⑪	5HA 20	l=2.28	00	⑭	3RL 6	l=2.20	31				
③	37RL 6	l=1.60		⑥	5HA 20	l=8.92	00	⑨	74RL 6	l=2.20	31	⑫	5HA 8	l=4.13	00	⑮	1RL 6	l=2.18	31				
Tél.								Fax								<div><div>R+3</div><div>PROJET CERME_PLANS GUIDES</div></div> <div><div>POUTRE 26</div><div>Section 45x80</div></div> <div><div>Nombre 1</div></div>							
								Béton : BETON25 = 4.58 m3				Acier HA 400 = 581 kg											
								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm								Enrobage latéral 3 cm			
								Densité = 142.8 kg/ m3 Surface du coffrage = 26.4 m2				Echelle pour la vue 2.89cm/m Echelle pour la section 5.05cm/m								Page 1/2			

Pos.	Armature		Code	Forme
16	18RL 6	l=1.60		
17	3*2HA 12	l=4.13	00	

		Tél.	Fax		
R+3 PROJET CERME_PLANS GUIDES	POUTRE 26 Section 45x80	Nombre 1	Béton : BETON25 = 4.58 m3	Acier HA 400 = 581 kg Acier RL 235 = 72.9 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 142.8 kg/ m3		Page 2/2
			Surface du coffrage = 26.4 m2		

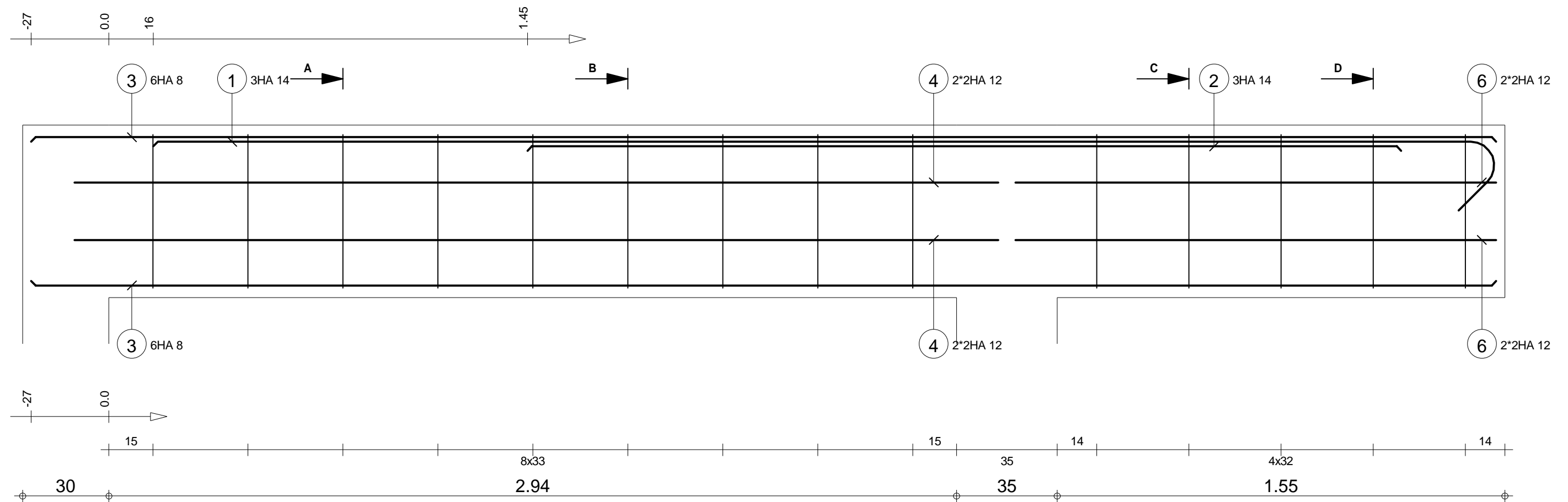


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme					
①	3HA 14	l=1.97	00	④	5*2HA 12	l=5.87	00	⑦	3HA 14	l=5.04	00	⑩	3HA 14	l=4.60	00	⑬	32RL 6	l=2.56	31					
②	3HA 14	l=5.70	00	⑤	3HA 14	l=5.09	00	⑧	3HA 8	l=6.02	00	⑪	3HA 14	l=4.59	00	⑭	5*2HA 12	l=5.55	00					
③	34RL 6	l=2.56	31	⑥	6HA 14	l=3.23	00	⑨	3HA 14	l=2.00	00	⑫	3HA 8	l=6.02	00									
Tél.												Fax												
R+3 PROJET CERME_PLANS GUIDES				POUTRE 27 Section 20x120								Nombre 1				Béton : BETON25 = 2.84 m3			Acier HA 400 = 244 kg Acier RL 235 = 37.5 kg					
																Enrobage inférieur 3 cm			Enrobage supérieur 3 cm			Enrobage latéral 3 cm		
																Densité = 99.3 kg/ m3			Echelle pour la vue 3.1cm/m			Page 1/1		
																Surface du coffrage = 31 m2			Echelle pour la section 3.46cm/m					



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	4HA 14	l=88	00	88	④	4HA 14	l=4.52	00	4.28	⑦	3*2HA 12	l=4.91	00	4.91
②	4HA 14	l=78	00	78	⑤	4HA 8	l=5.16	00	5.16					
③	4HA 14	l=5.61	00	5.12	⑥	48RL 6	l=1.73	31	17 8					

R+3 PROJET CERME_PLANS GUIDES		POUTRE 28 Section 30x70		Nombre 1		Béton : BETON25 = 1.1 m3		Acier HA 400 = 91.3 kg	
						Enrobage inférieur 3 cm		Acier RL 235 = 18.5 kg	
						Densité = 100 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 9.14 m2		Enrobage latéral 3 cm	
						Echelle pour la vue 6.83cm/m		Echelle pour la section 5.71cm/m	
								Page 1/1	

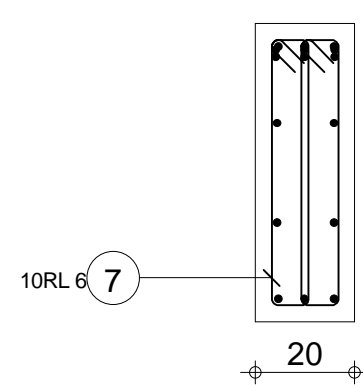
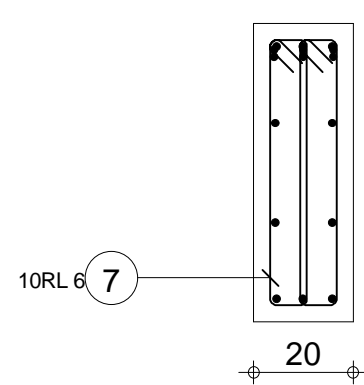
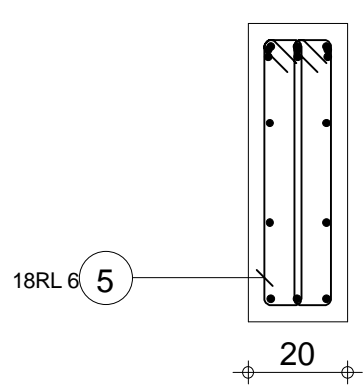
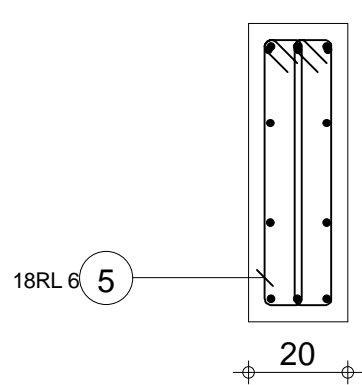


A-A

B-B

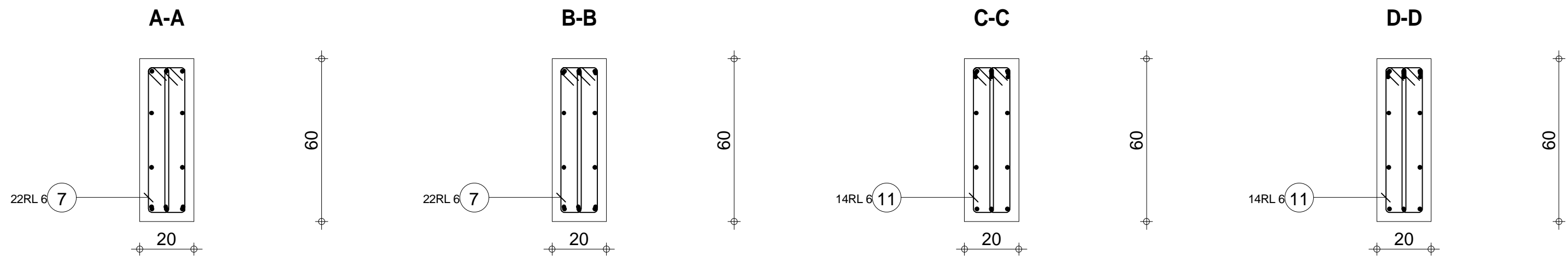
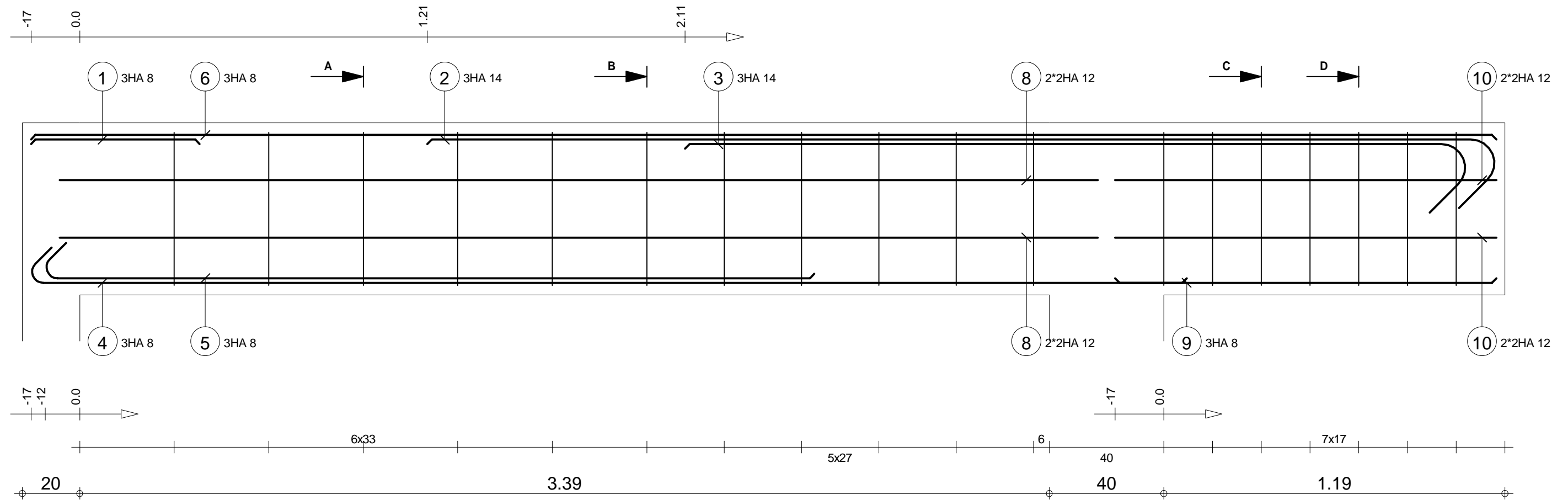
C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 14	l=4.91	00	④	2*2HA 12	l=3.21	00	⑦	10RL 6	l=1.36	31
②	3HA 14	l=3.04	00	⑤	18RL 6	l=1.36	31				
③	6HA 8	l=5.09	00	⑥	2*2HA 12	l=1.67	00				

R+3 PROJET CERME_PLANS GUIDES				POUTRE 29 Section 20x60				Nombre 1		Béton : BETON25 = 0.618 m3		Acier HA 400 = 58.2 kg	
										Enrobage inférieur 3 cm		Acier RL 235 = 8.42 kg	
										Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
										Densité = 107.8 kg/ m3		Echelle pour la vue 6.92cm/m	
										Surface du coffrage = 7.32 m2		Echelle pour la section 6.58cm/m	
												Page 1/1	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	3HA 8	I=59	00	59	④	3HA 8	I=4.16	00	4.03	⑦	22RL 6	I=1.36	31	8	⑩	2*2HA 12	I=1.33	00	1.33
②	3HA 14	I=3.98	00	3.73	⑤	3HA 8	I=2.81	00	2.68	⑧	2*2HA 12	I=3.63	00	3.62	⑪	14RL 6	I=1.36	31	8
③	3HA 14	I=2.97	00	2.73	⑥	3HA 8	I=5.12	00	5.12	⑨	3HA 8	I=1.33	00	1.33					

R+3 PROJET CERME_PLANS GUIDES		POUTRE 30 Section 20x60		Tél. Fax		Nombre 1		Béton : BETON25 = 0.621 m3		Acier HA 400 = 59.4 kg	
								Enrobage inférieur 3 cm		Acier RL 235 = 10.8 kg	
								Densité = 113 kg/ m3		Enrobage supérieur 3 cm	
								Surface du coffrage = 7.37 m2		Enrobage latéral 3 cm	
								Echelle pour la vue 6.88cm/m		Echelle pour la section 6.58cm/m	
										Page 1/1	

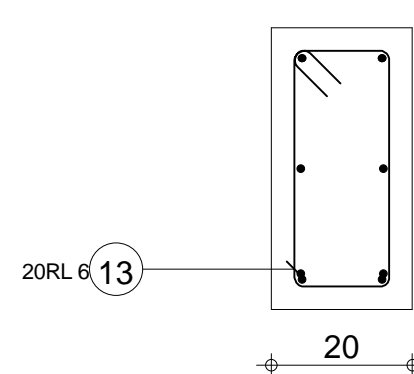
		Tél.	Fax		Acier HA 400 = 60.1 kg
R+3 PROJET CERME_PLANS GUIDES	POUTRE 31 Section 20x80	Nombre 1	Béton : BETON25 = 0.723 m3	Acier RL 235 = 9.38 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 95.99 kg/ m3 Surface du coffrage = 8.3 m2	Echelle pour la vue 6.6cm/m 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	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 8 l=4.20	00		④	2HA 8 l=2.27	00		⑦	12RL 6 l=1.08	31		⑩	2HA 8 l=3.88	00		⑬	20RL 6 l=1.08	31	
②	2HA 8 l=4.28	00		⑤	2HA 8 l=3.37	00		⑧	2HA 8 l=2.19	00		⑪	2HA 8 l=2.11	00		⑭	2HA 8 l=3.96	00	
③	22RL 6 l=1.08	31		⑥	2HA 10 l=3.86	00		⑨	2HA 10 l=2.19	00		⑫	2HA 8 l=3.21	00		⑮	2HA 10 l=3.54	00	

R+3

PROJET CERME_PLANS GUIDES

POUTRE 32

Section 20x40

Tél.

Fax

Nombre 1

Béton : BETON25 = 0.814 m3

Enrobage inférieur 3 cm

Densité = 58.97 kg/ m3

Surface du coffrage = 10 m2

Acier HA 400 = 35.1 kg

Acier RL 235 = 12.9 kg

Enrobage supérieur 3 cm

Echelle pour la vue 3.58cm/m

Echelle pour la section 9.34cm/m

Enrobage latéral 3 cm

Page 1/1