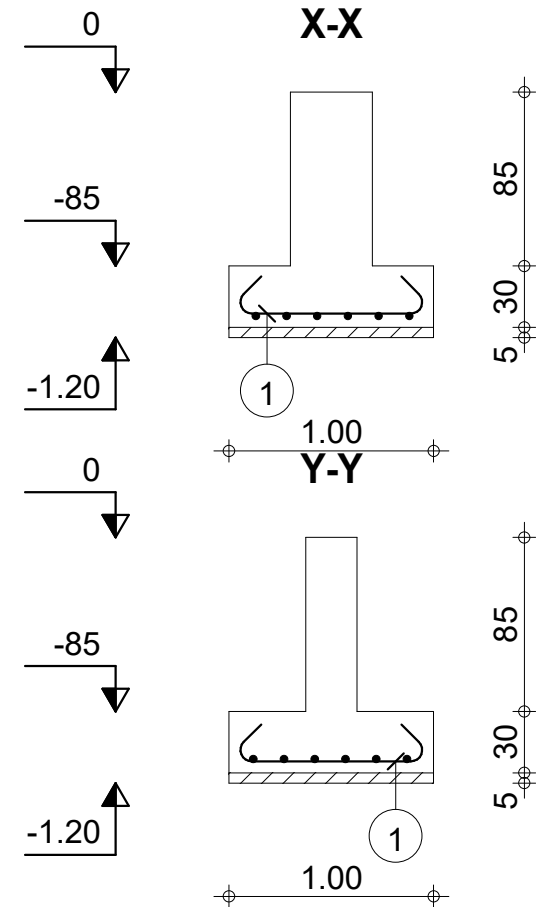
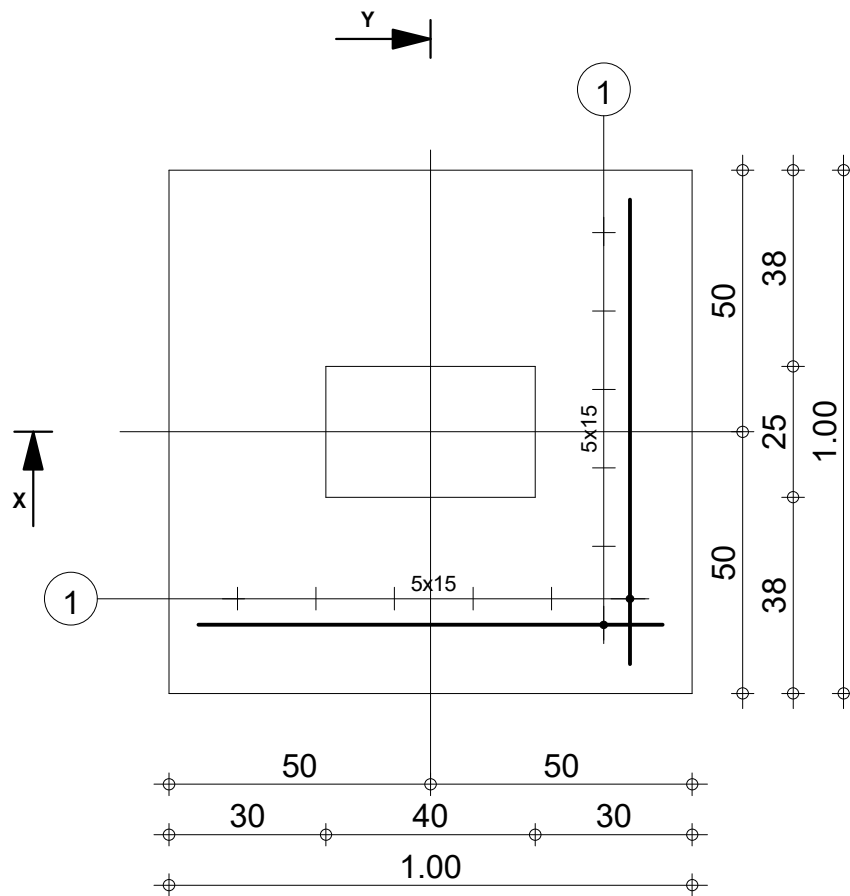
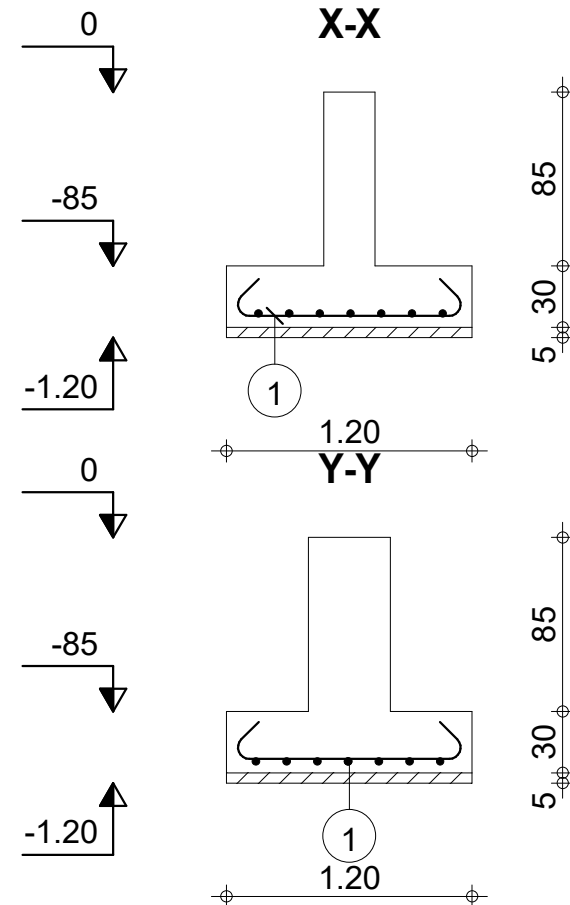
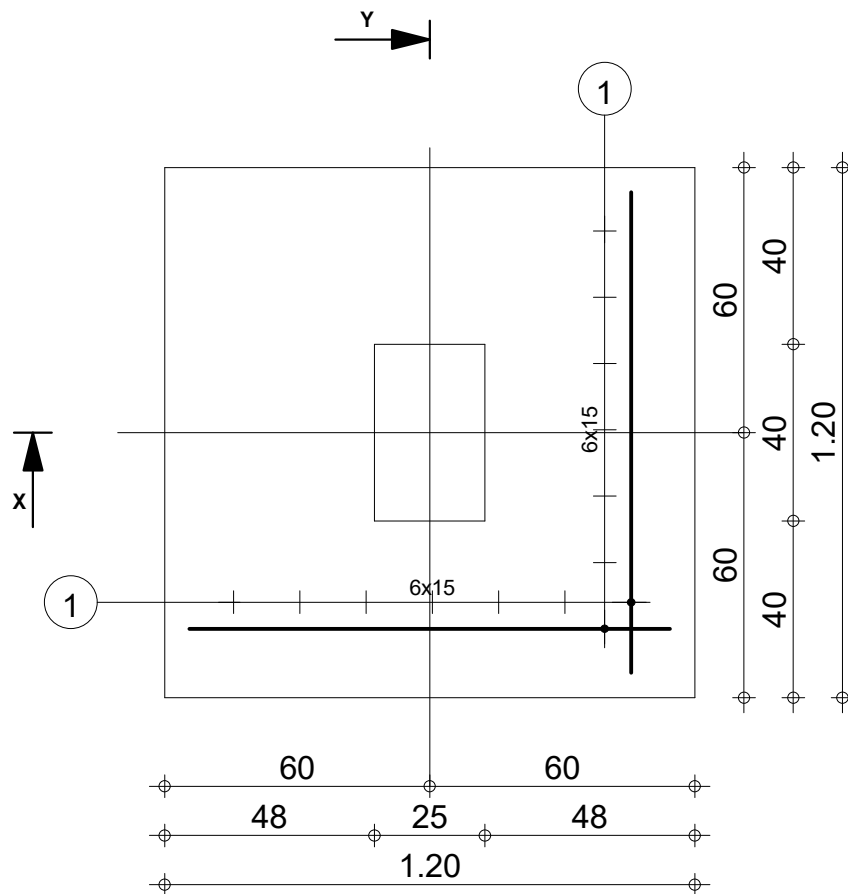


SEMELLES



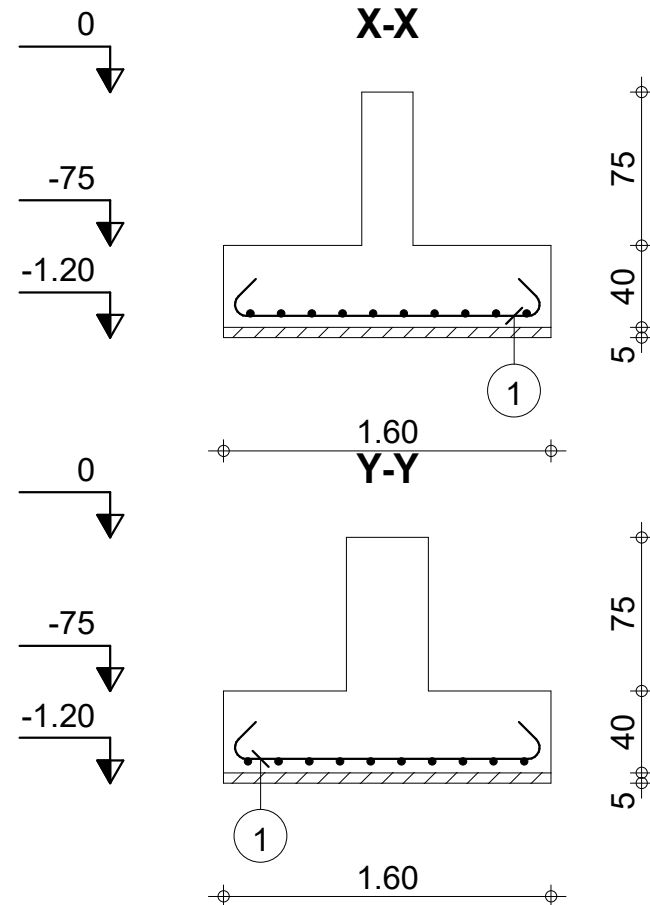
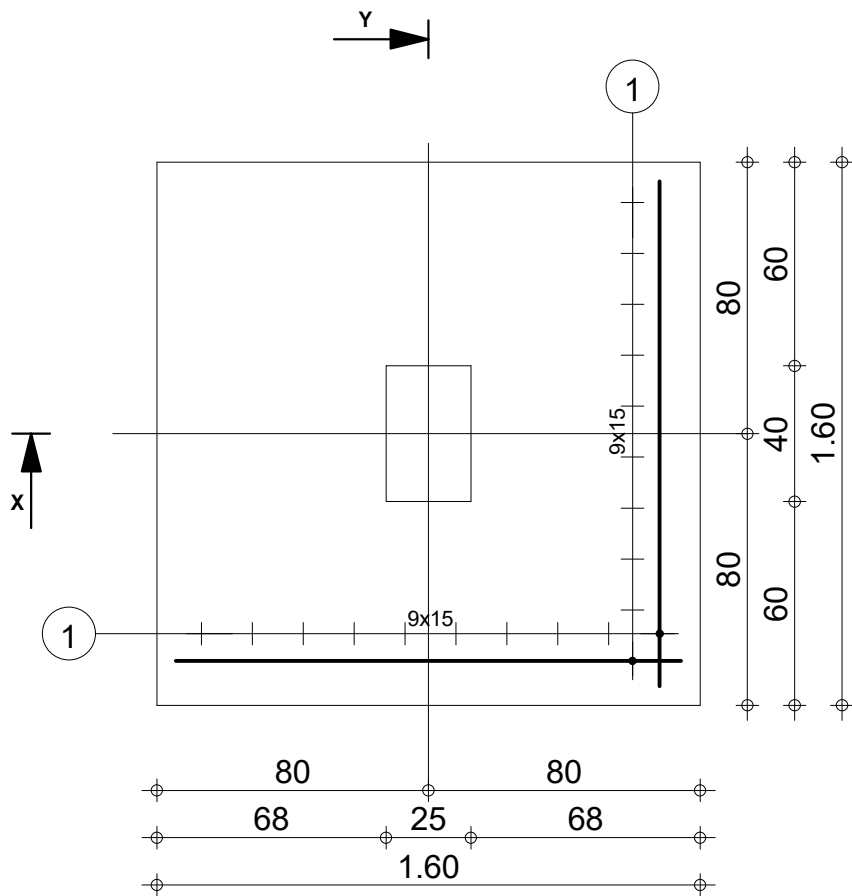
Pos.	Armature	Code	Forme
①	12HA 12 l=1.28	00	90

Tél.		Fax		Acier HA 400 = 13.6 kg	
Fissuration préjudiciable				Béton : BETON20 = 0.385 m3	
STRUCTURE BATIMENT CEA/ITECH-MTV	Semelle S1	Nombre 1	Surface du coffrage = 2.31 m2		
			Enrobage c1 = 5 cm, c2 = 3 cm		
COFFRAGE & FERRAILLAGE SEMELLES			Densité = 35.32 kg/ m3		
			Echelle pour la vue 6.93cm/m		
			Page 1/5		



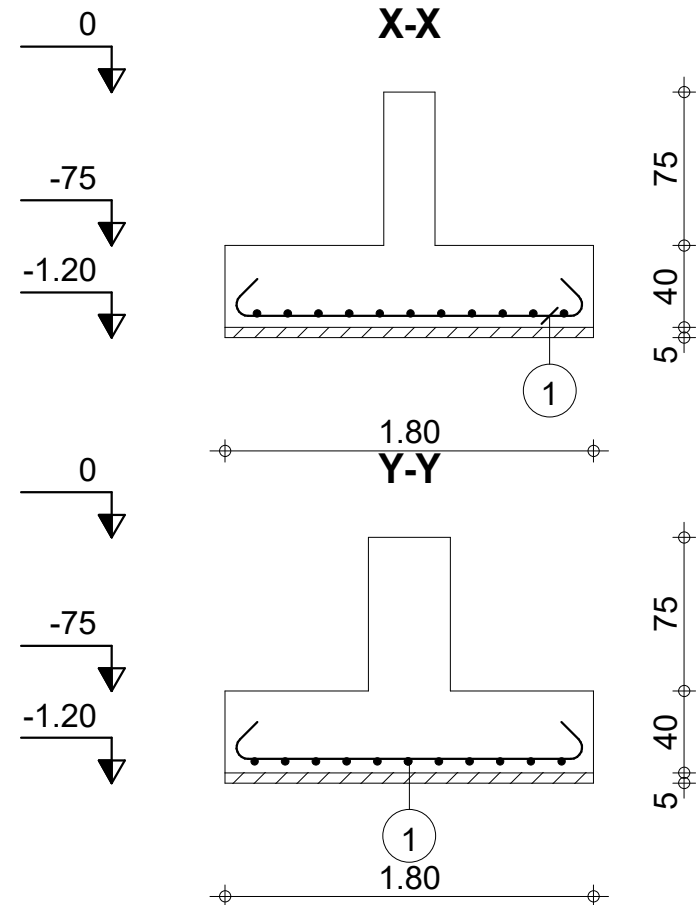
Pos.	Armature	Code	Forme
①	14HA 12 l=1.48	00	1.10

		Tél.	Fax		Acier HA 400 = 18.4 kg	
Fissuration préjudiciable				Béton : BETON20 = 0.517 m3		
STRUCTURE BATIMENT CEA/ITECH-MTV	Semelle S2	Nombre 1	Surface du coffrage = 2.55 m2	Enrobage c1 = 5 cm, c2 = 3 cm		
			Densité = 35.59 kg/ m3			
COFFRAGE & FERRAILLAGE SEMELLES				Echelle pour la vue 5.85cm/m	Page 2/5	

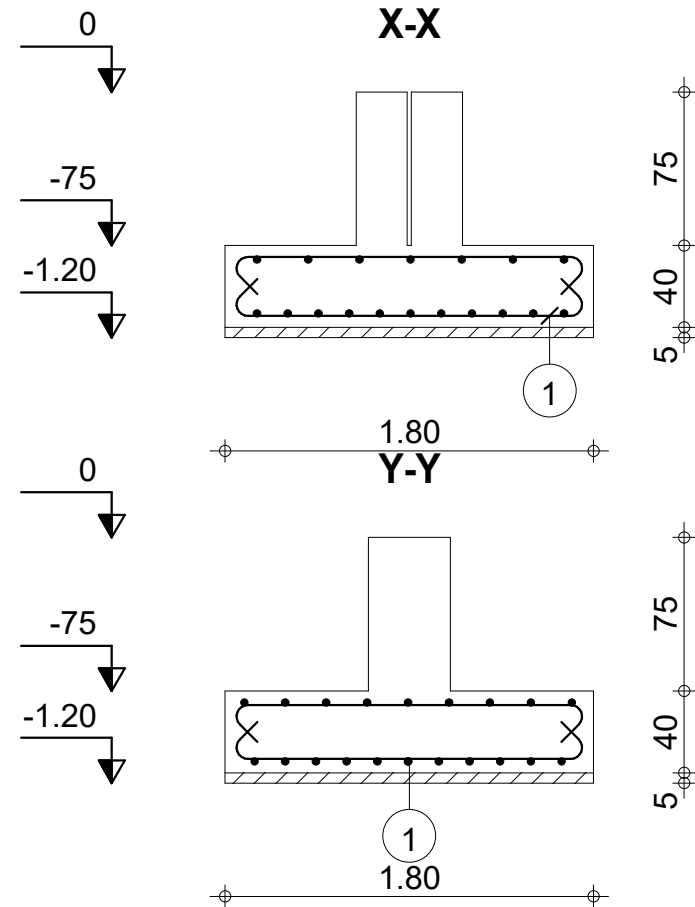
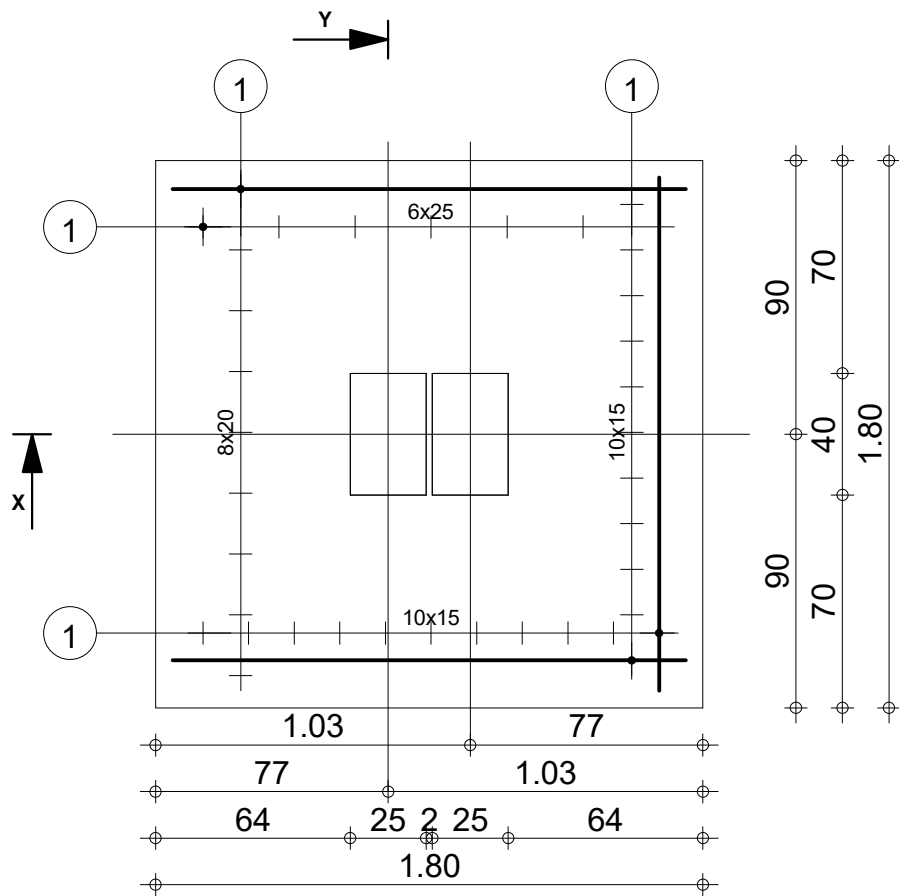


Pos.	Armature	Code	Forme
①	20HA 12 l=1.88	00	1.50

		Tél.	Fax		Acier HA 400 = 33.4 kg	
Fissuration préjudiciable				Béton : BETON20 = 1.1 m3		
STRUCTURE BATIMENT CEA/ITECH-MTV	Semelle S3	Nombre 1	Surface du coffrage = 3.54 m2	Enrobage c1 = 5 cm, c2 = 3 cm		
			Densité = 30.36 kg/ m3			
COFFRAGE & FERRAILLAGE SEMELLES				Echelle pour la vue 4.5cm/m	Page 3/5	

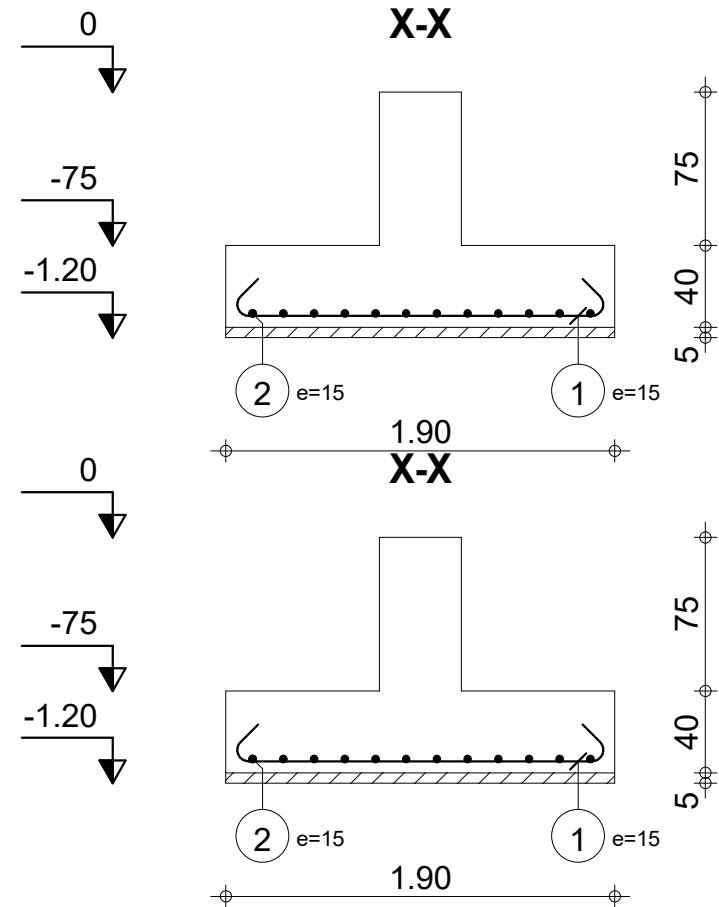
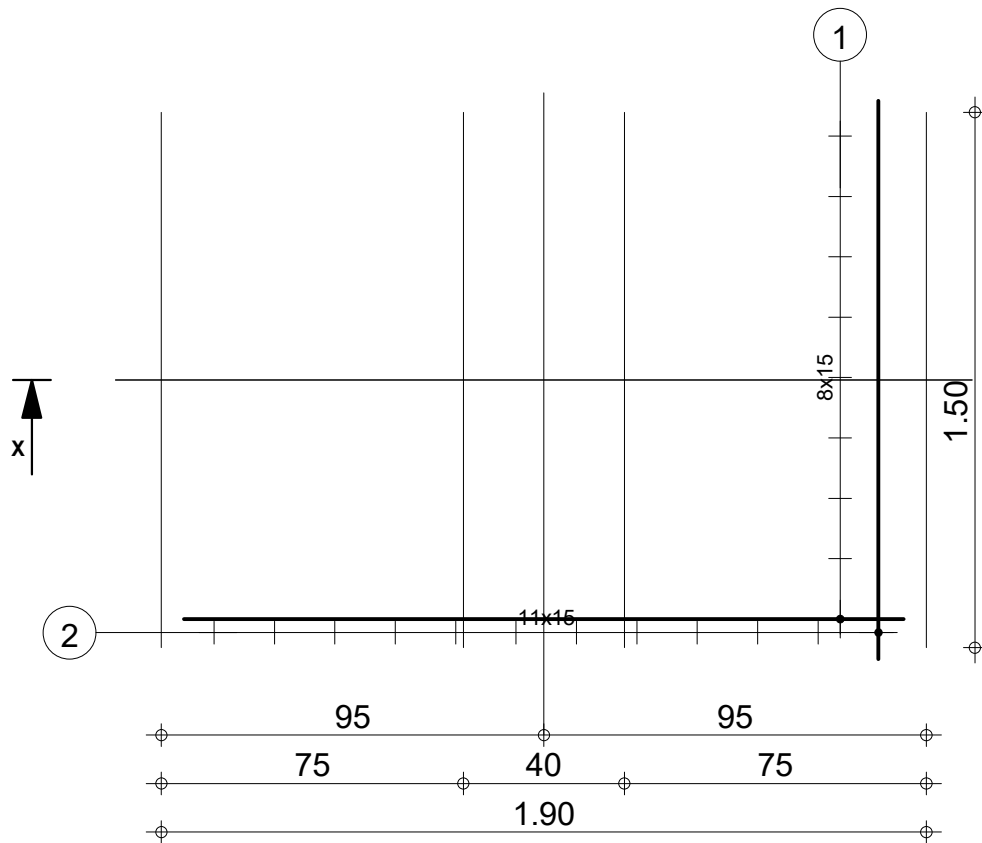


Tél.		Fax		Acier HA 400 = 40.6 kg	
Fissuration préjudiciable				Béton : BETON20 = 1.37 m3	
STRUCTURE BATIMENT CEA/ITECH-MTV	Semelle S4	Nombre 1	Surface du coffrage = 3.86 m2		Enrobage c1 = 5 cm, c2 = 3 cm
			Densité = 29.64 kg/ m3		
COFFRAGE & FERRAILLAGE SEMELLES			Echelle pour la vue 4.03cm/m		Page 4/5



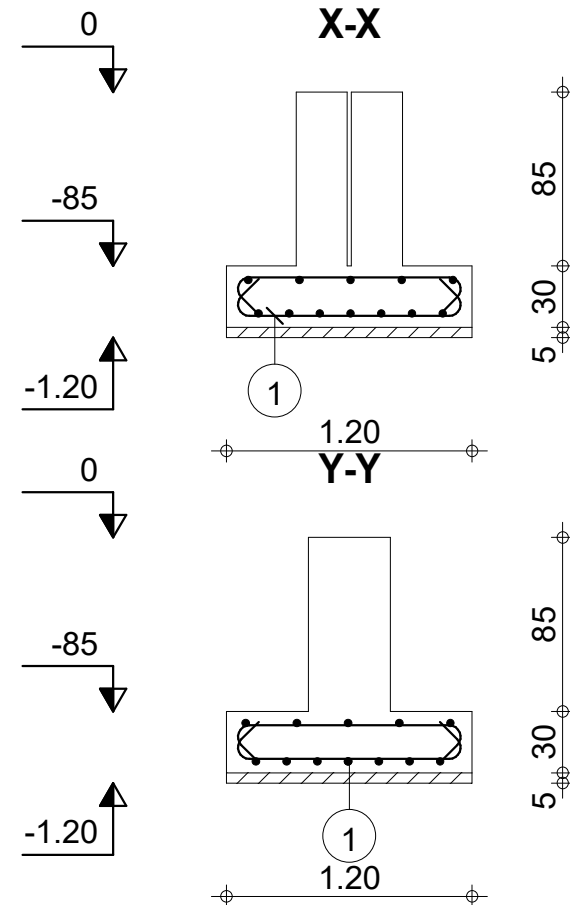
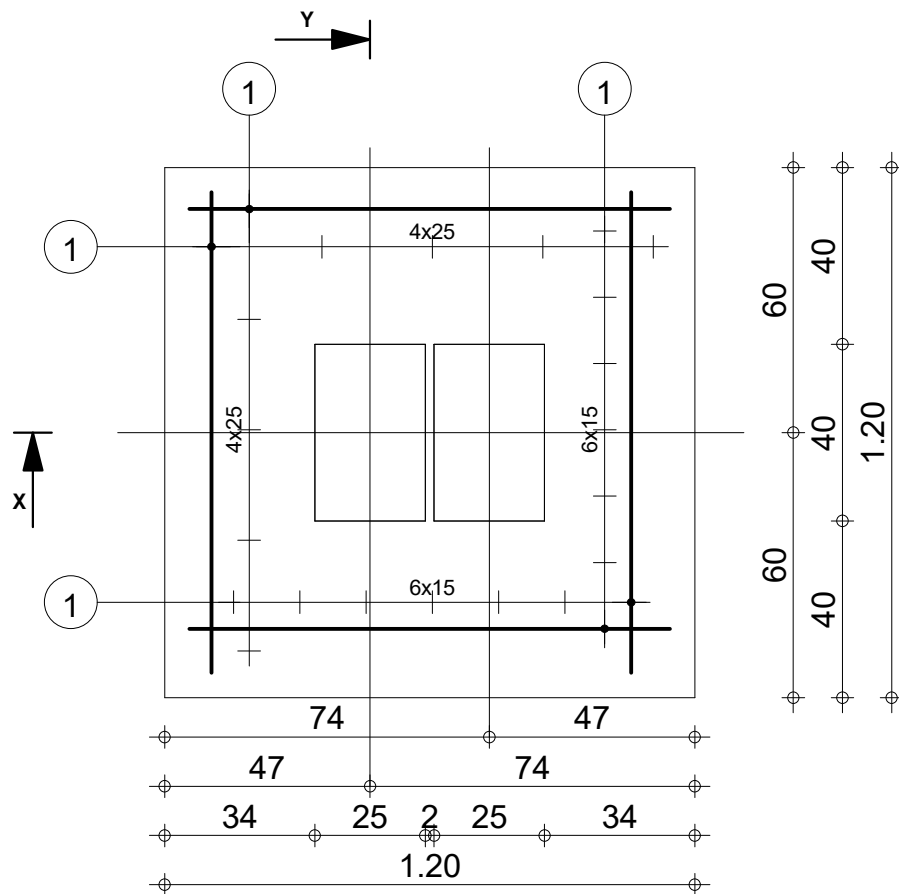
Pos.	Armature	Code	Forme
①	38HA 12 l=2.08	00	

		Tél.	Fax		Acier HA 400 = 70.2 kg	
Fissuration préjudiciable				Béton : BETON20 = 1.45 m3		
STRUCTURE BATIMENT CEA/ITECH-MTV	SDN1	Nombre 1	Surface du coffrage = 4.83 m2	Enrobage c1 = 5 cm, c2 = 3 cm		
			Densité = 48.41 kg/ m3			
COFFRAGE & FERRAILLAGE SEMELLES				Echelle pour la vue 4.03cm/m	Page 5/5	



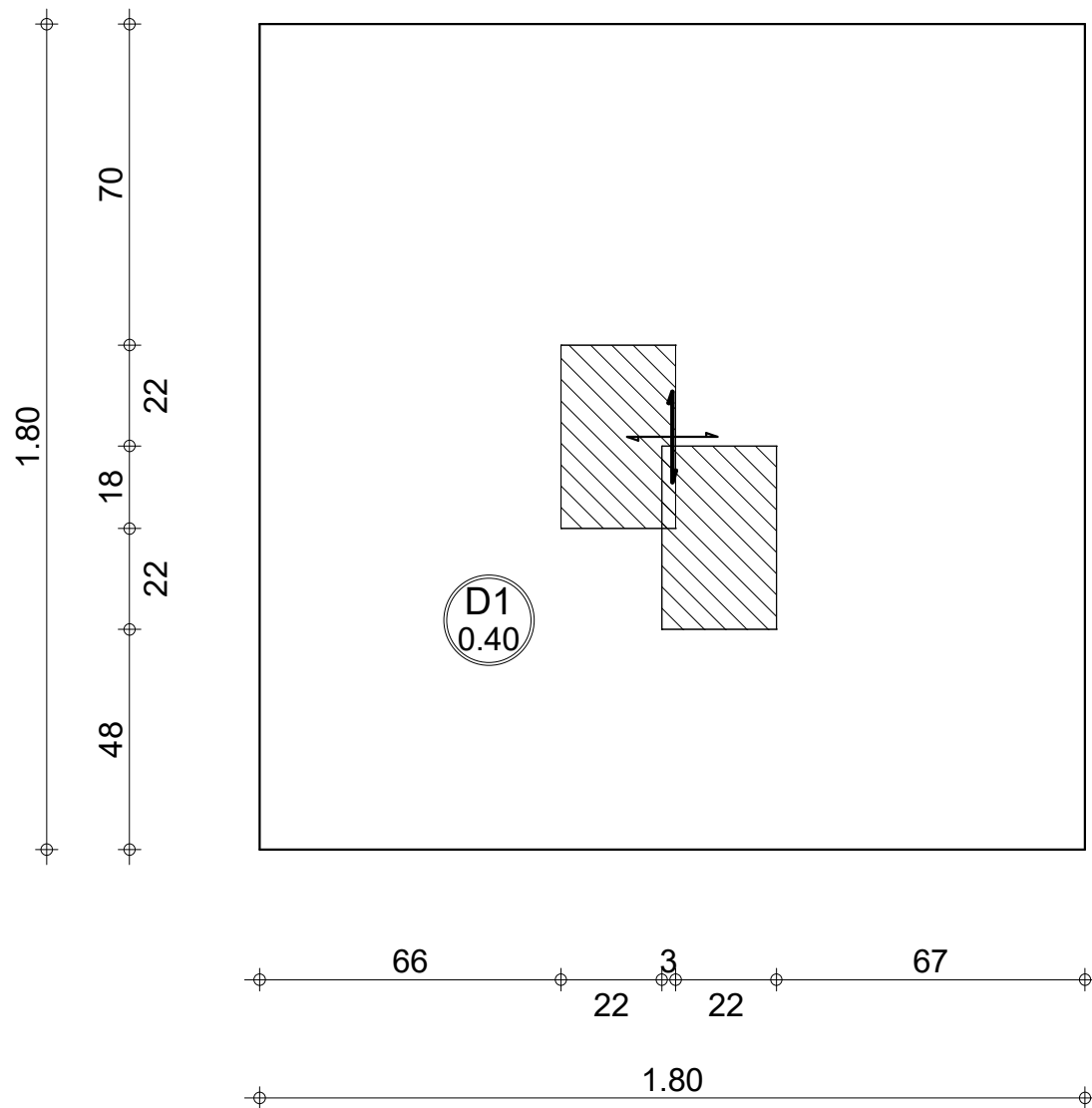
Pos.	Armature	Code	Forme
①	9HA 12 l=2.18	00	⤴ 1.80 ⤵
②	12HA 12 l=1.78	00	⤴ 1.40 ⤵

Tél.		Fax		Acier HA 400 = 36.4 kg	
Fissuration préjudiciable				Béton : BETON20 = 1.59 m3	
STRUCTURE BATIMENT CEA/ITECH-MTV	Semelle S5	Nombre 1	Surface du coffrage = 5.57 m2		
			Enrobage c1 = 5 cm, c2 = 3 cm		
COFFRAGE ET FERRAILLAGE SEMELLES			Densité = 22.89 kg/ m3		
			Echelle pour la vue 5.33cm/m		Page 1/1

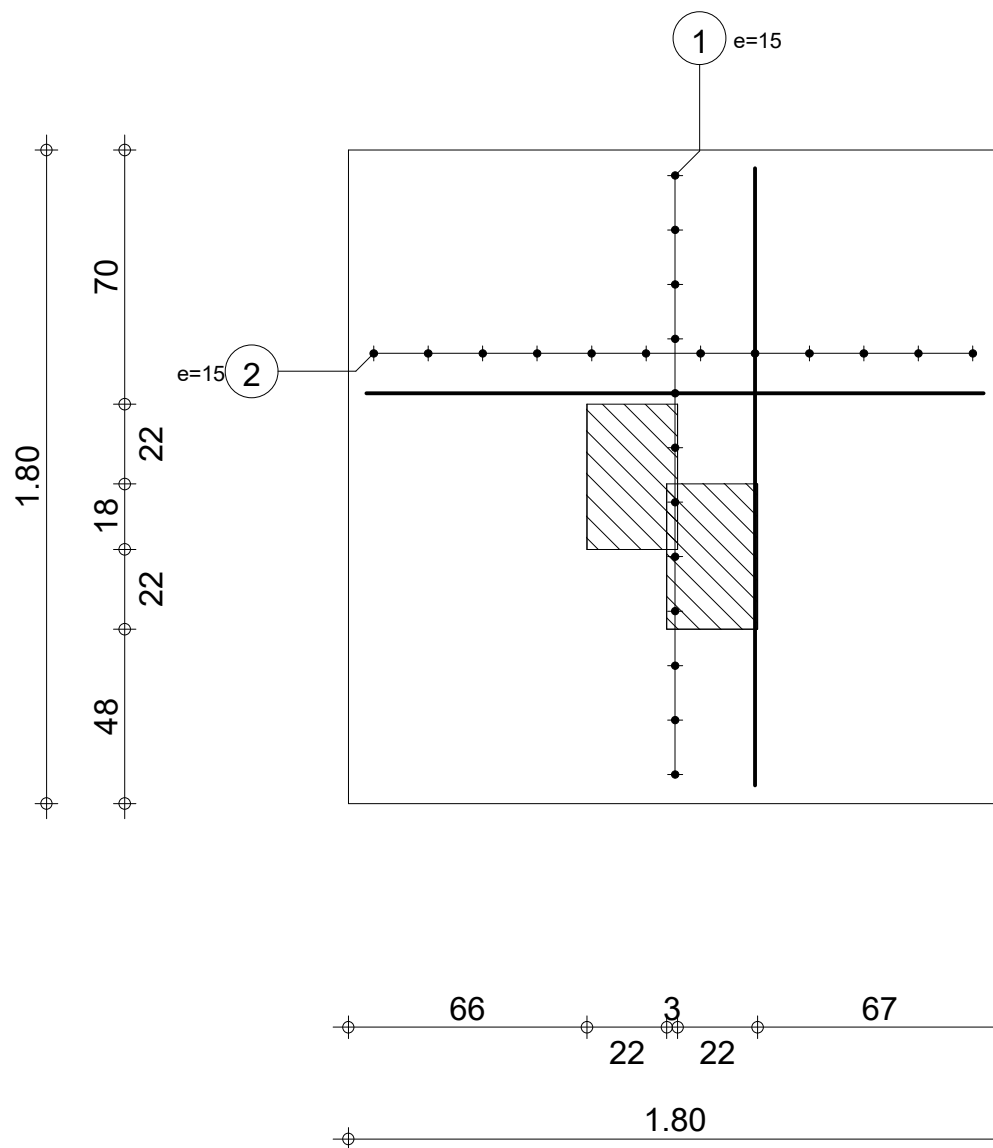


Pos.	Armature	Code	Forme
①	24HA 12 l=1.48	00	1.10

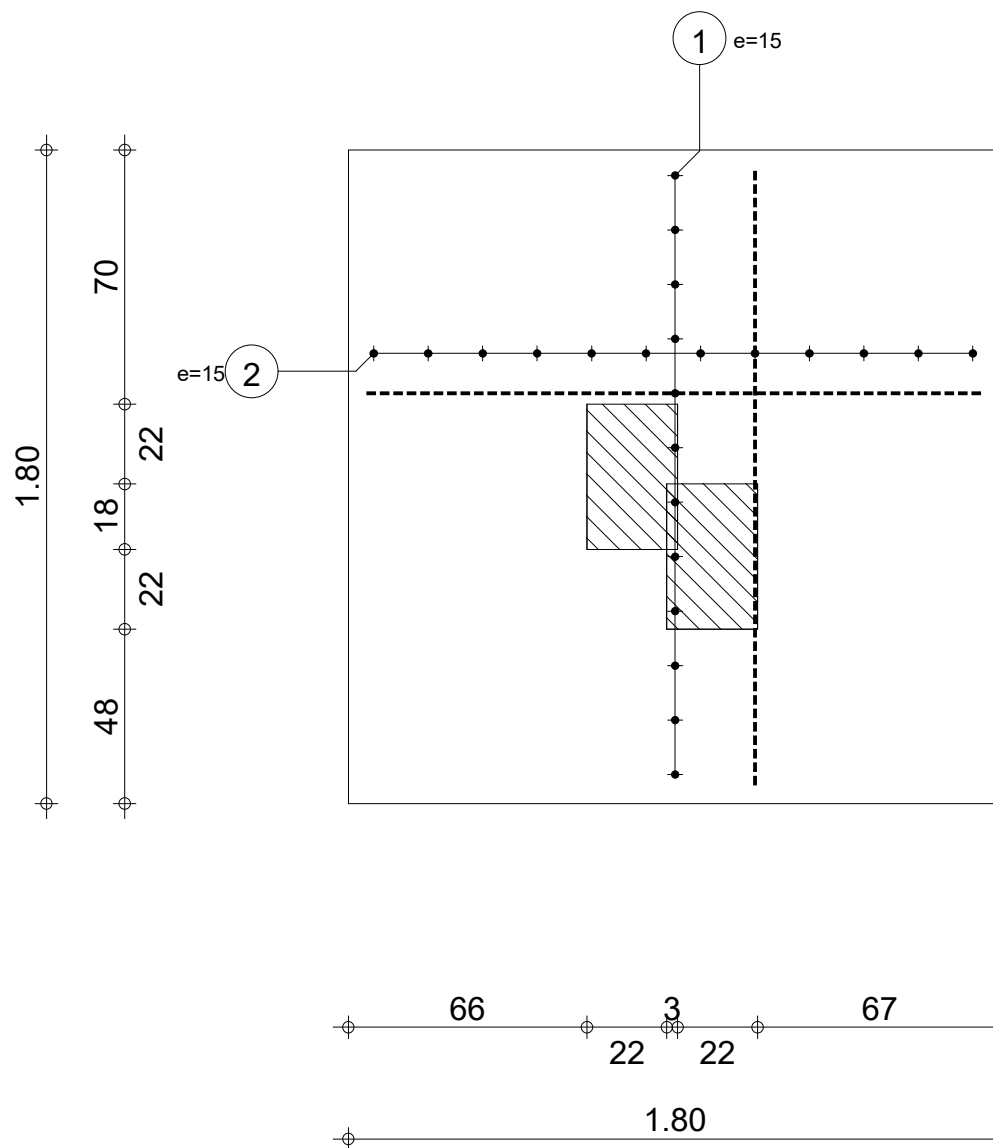
		Tél.	Fax			Acier HA 400 = 31.5 kg		
Fissuration préjudiciable				Béton : BETON20 = 0.602 m3				
sSTRUCTURE BATIMENT CEA/ITECH-MTV		SDN2		Nombre 1	Surface du coffrage = 3.65 m2		Enrobage c1 = 5 cm, c2 = 3 cm	
COFFRAGE ET FERRAILLAGE SEMELLES					Densité = 52.33 kg/ m3			
					Echelle pour la vue 5.85cm/m		Page 1/1	



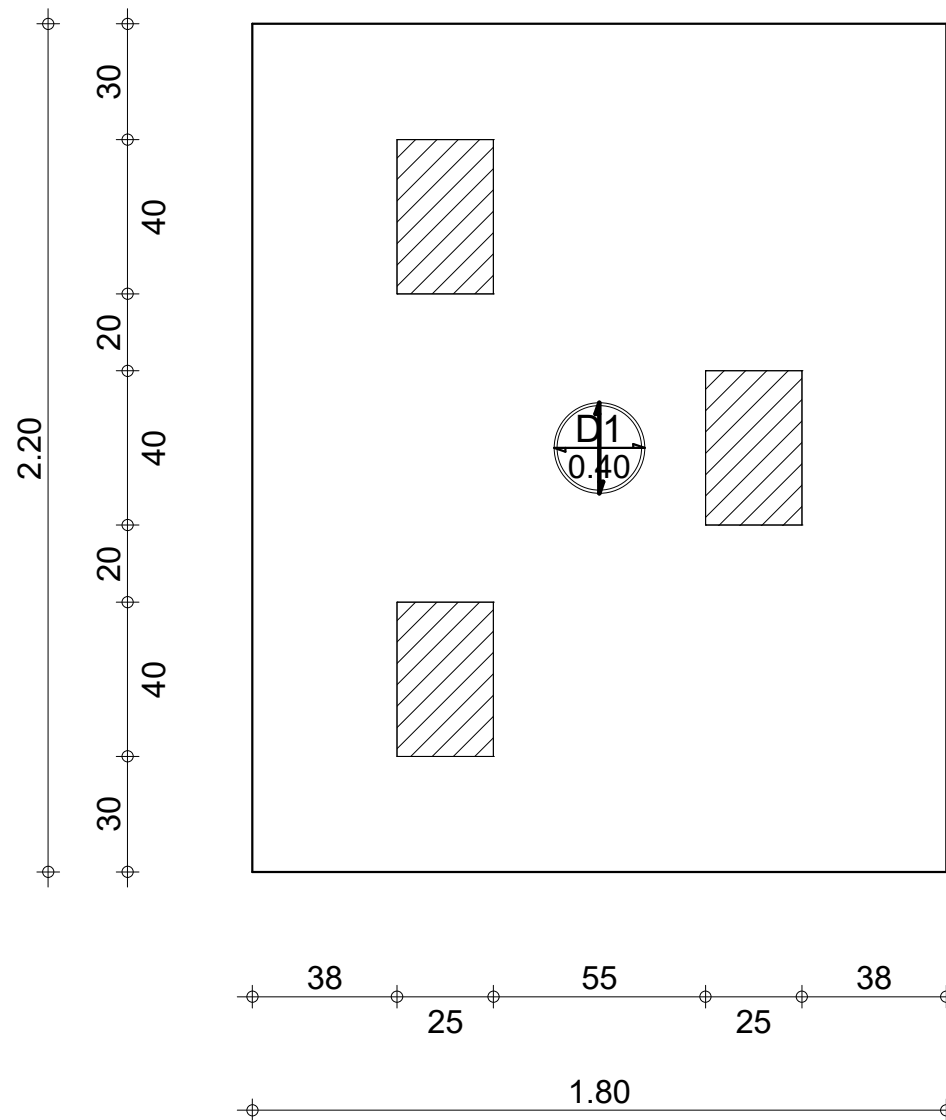
			Tél.		Fax		Béton : BETON20 = 1.3 m3		Enrobage	
	Niveau	Niveau -1,2	Elément:		SDN3		Surface du coffrage = 3.24 m2		supérieur = 5 cm	
	Sujet:	COFFRAGE ET FERRAILLAGE SEMELLES	Dessin:		COFFRAGE DE LA DALLE		Echelle : 6.09cm/m		Date : 07/06/21	Page 1/4



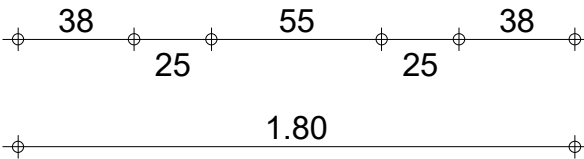
		Tél.		Fax		Béton : BETON20 = 1.3 m3		Enrobage	
Niveau		Niveau -1,2		Elément: SDN3		Ferrailage : HA 400 = 72.4 kg		supérieur = 5 cm	
Sujet:		COFFRAGE ET FERRAILLAGE SEMELLES		Dessin: FERRAILLAGE INFERIEUR		Echelle : 4.81cm/m		inférieur = 5 cm	
						Date : 07/06/21		Page 2/4	

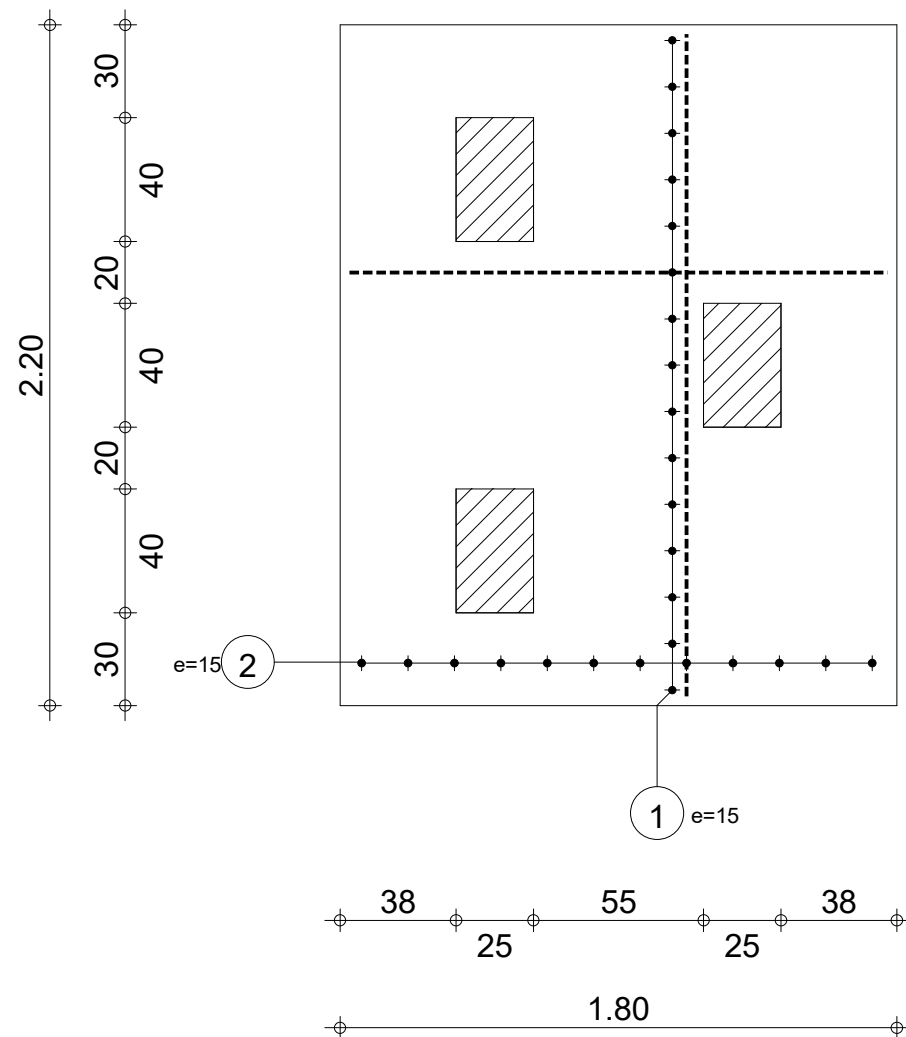


		Tél.		Fax		Béton : BETON20 = 1.3 m3		Enrobage	
Niveau		Niveau -1,2		Elément:		SDN3		supérieur = 5 cm	
Sujet:		COFFRAGE ET FERRAILLAGE SEMELLES		Dessin:		FERRAILLAGE SUPERIEUR		inférieur = 5 cm	
						Echelle : 4.81cm/m		Date : 07/06/21	
								Page 3/4	

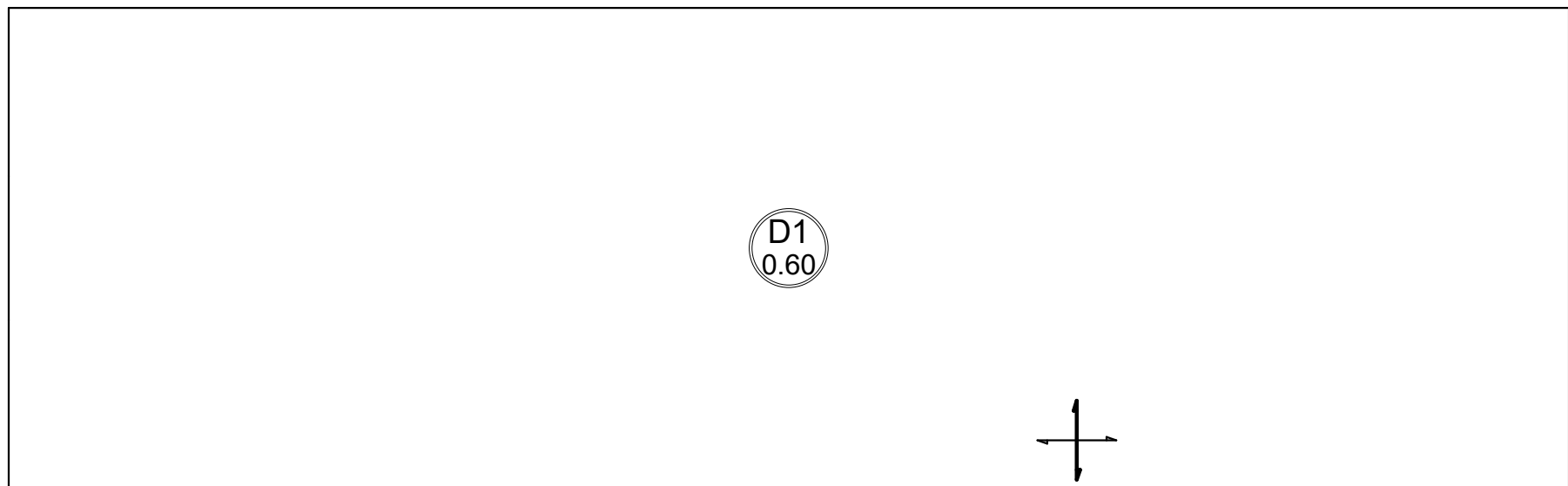


			Tél.		Fax		Béton : BETON20 = 1.58 m3		Enrobage		
	Niveau	STRUCTURE BATIMENT CEA/ITECH-MTV		Elément:		SDN4		Surface du coffrage = 3.96 m2		supérieur = 3 cm	
	Sujet:	COFFRAGE ET FERRAILLAGE SEMELLES		Dessin:		COFFRAGE DE LA DALLE		Echelle : 5.11cm/m		Date : 07/06/21	
									Page 1/4		

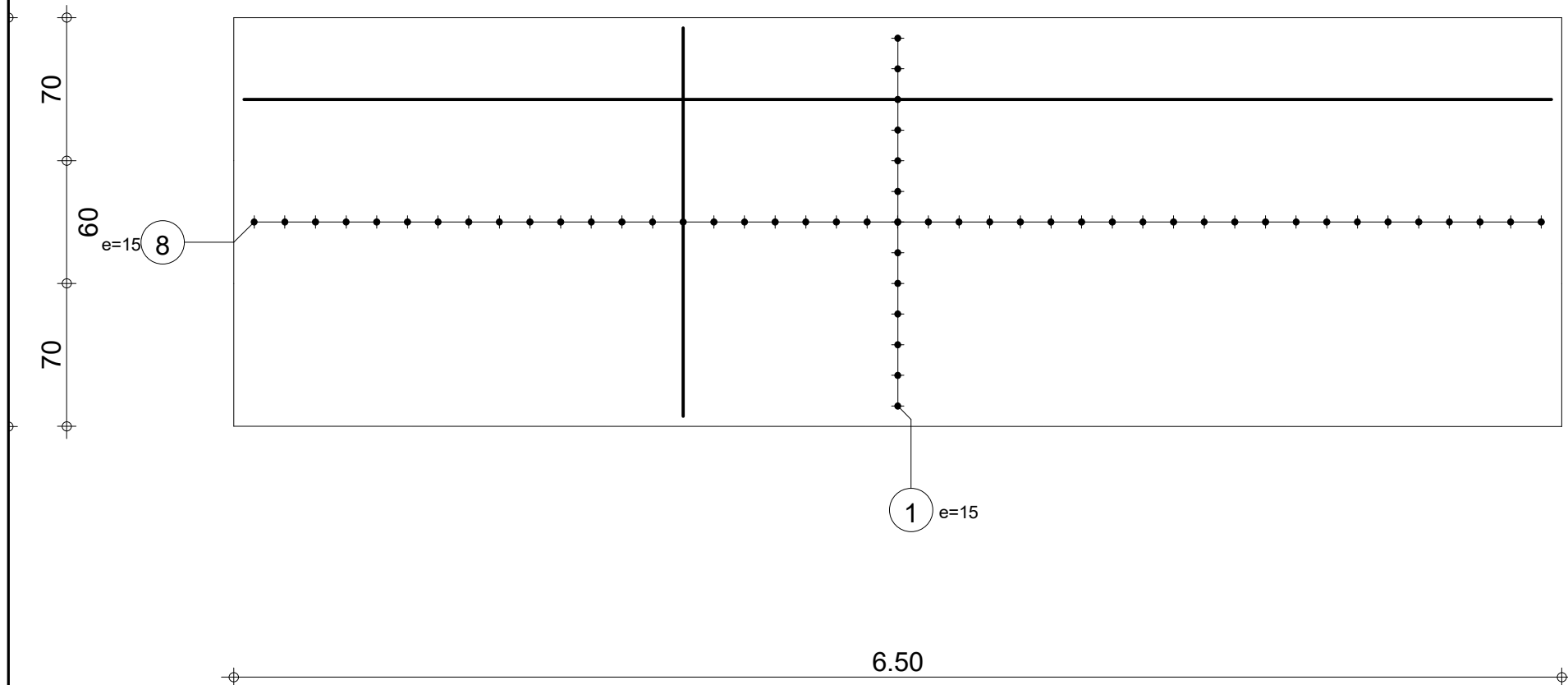




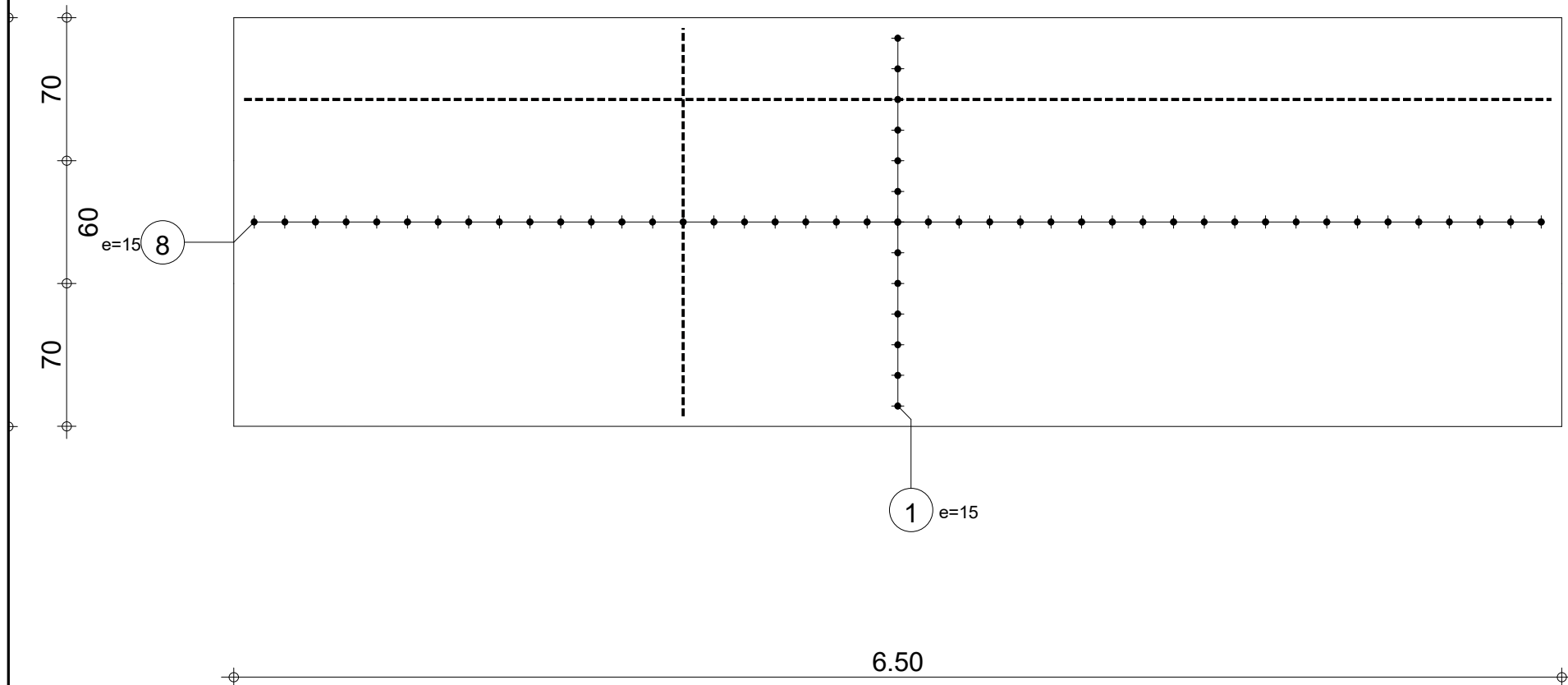
		Tél.		Fax		Béton : BETON20 = 1.58 m3		Enrobage	
Niveau		STRUCTURE BATIMENT CEA/ITECH-MTV		Elément:		SDN4		supérieur = 3 cm	
Sujet:		COFFRAGE ET FERRAILLAGE SEMELLES		Dessin:		FERRAILLAGE SUPERIEUR		inférieur = 3 cm	
						Echelle : 4.1cm/m		Date : 07/06/21	
								Page 3/4	



			Tél.		Fax		Béton : BETON20 = 7.8 m3		Enrobage	
	Niveau	Niveau -1,20	Elément:		Radier partiel		Surface du coffrage = 13 m2		supérieur = 5 cm	
	Sujet:	COFFRAGE ET FERRAILLAGE RADIER	Dessin:		COFFRAGE DE LA DALLE		Echelle : 3.65cm/m		inférieur = 5 cm	
							Date : 09/06/21		Page 1/4	

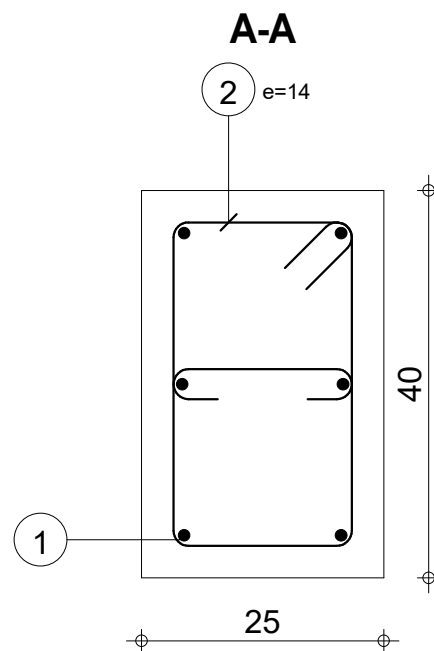
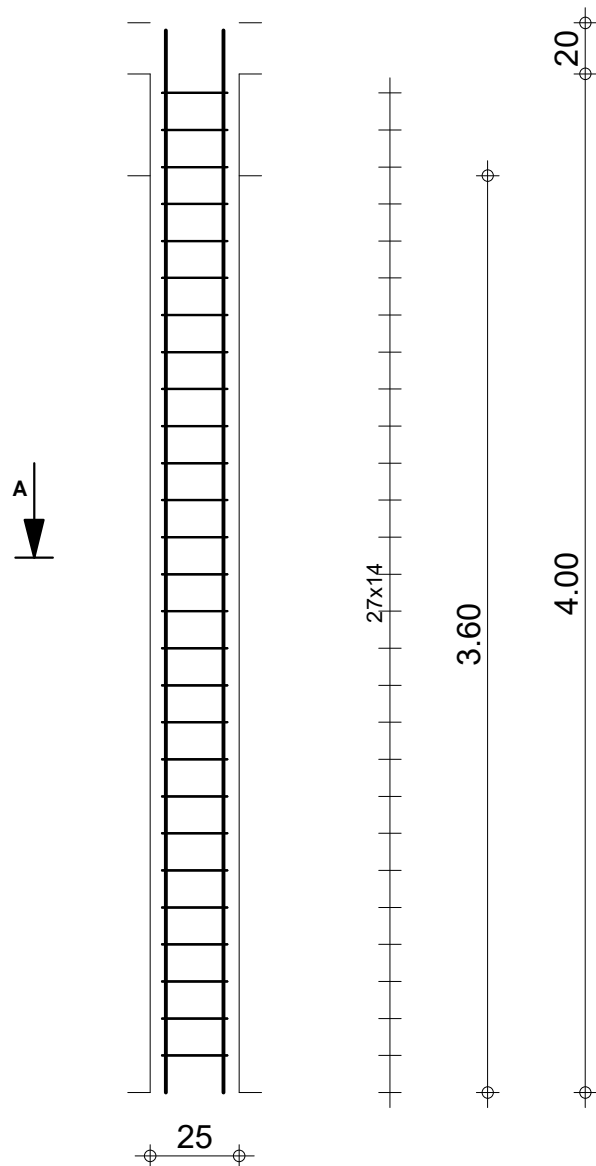


		Tél.	Fax		
	Niveau	Niveau -1,20	Elément:	Radier partiel	
	Sujet:	COFFRAGE ET FERRAILLAGE RADIER	Dessin:	FERRAILLAGE INFERIEUR	
		Béton : BETON20 = 7.8 m3		Enrobage supérieur = 5 cm inférieur = 5 cm	
		Ferrailage : HA 400 = 293 kg			
		Echelle : 3.3cm/m	Date : 09/06/21	Page 2/4	



			Tél.		Fax		Béton : BETON20 = 7.8 m3		Enrobage		
							supérieur = 5 cm				
	Niveau		Niveau -1,20		Elément: Radier partiel		Ferrailage : HA 400 = 293 kg		inférieur = 5 cm		
	Sujet:		COFFRAGE ET FERRAILLAGE RADIER		Dessin: FERRAILLAGE SUPERIEUR		Echelle : 3.3cm/m		Date : 09/06/21		
										Page 3/4	

POTEAUX



Pos.	Armature	Code	Forme
①	6HA 12 l=4.17	00	4.17
②	27HA 6 l=1.18	31	19 19 19
③	27HA 6 l=31	00	5 19

STRUCTURE BATIMENT CEA/ITECH-MTV

COFFRAGE & FERRAILLAGE POTEaux

Poteau P1 Section 25x40

Tél.

Fax

Acier HA 400 = 22.2 kg

Béton : BETON20 = 0.36 m3

Acier HA 400 = 8.92 kg

Surface du coffrage = 4.68 m2

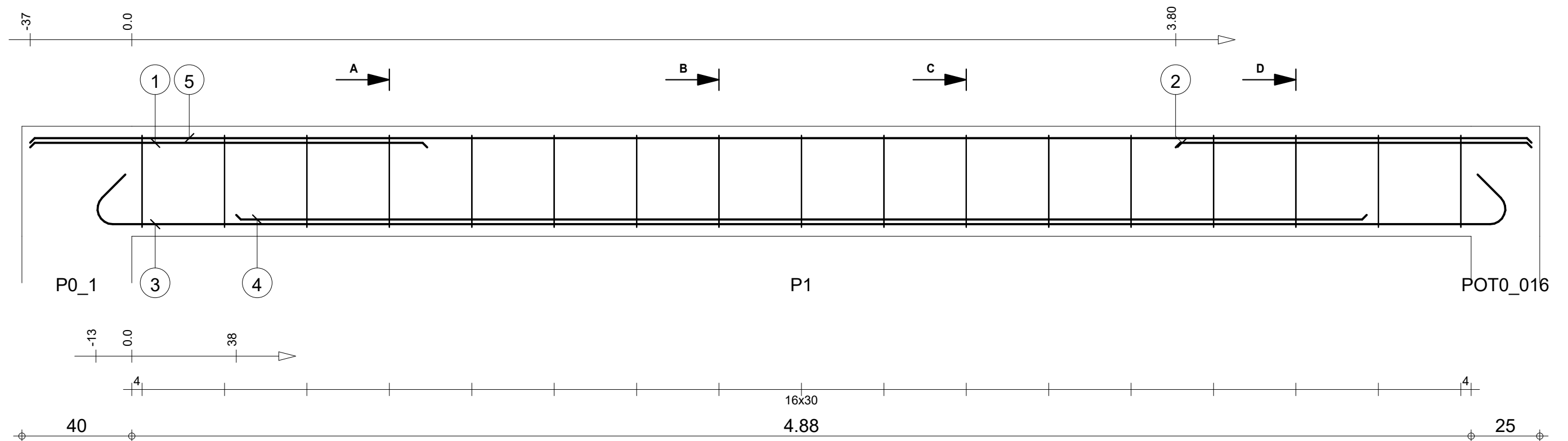
Enrobage 3 cm

Echelle pour la vue 4.72cm/m x 3.37cm/m

Echelle pour la section 12.8cm/m

Page 1/1

LONGRINES

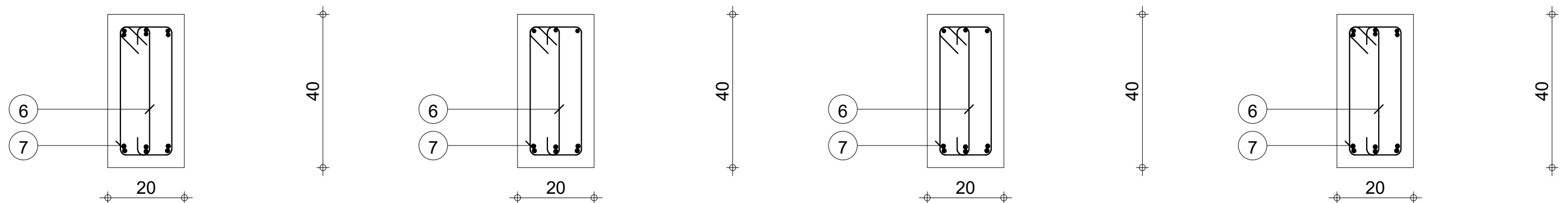


A-A

B-B

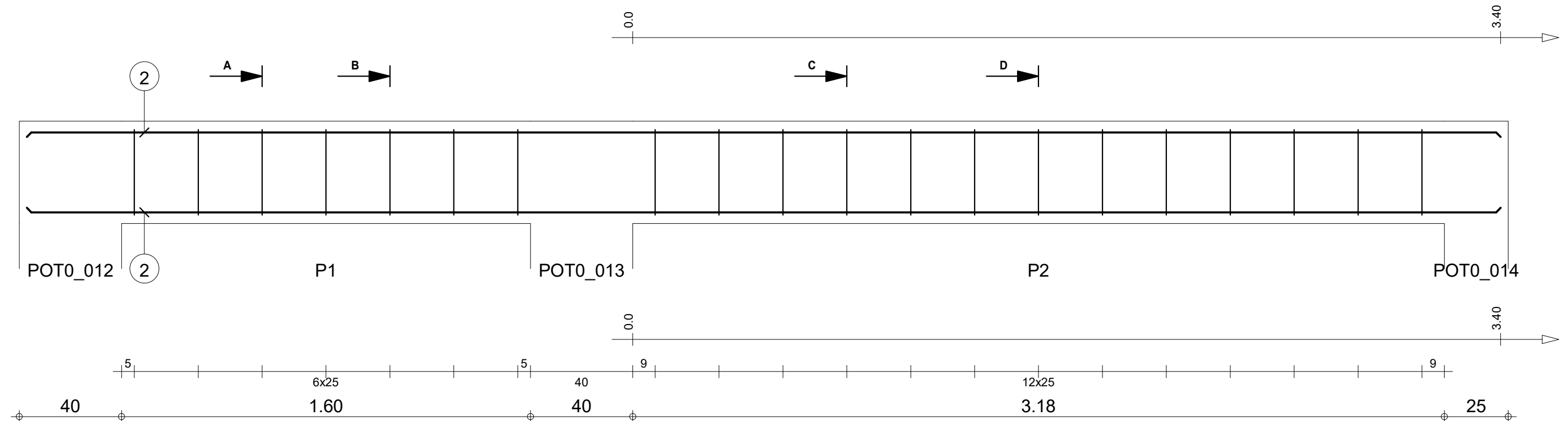
C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	I=1.45	00	④	3HA 12	I=4.12	00	⑦	17HA 6	I=1.08	31
②	3HA 10	I=1.29	00	⑤	3HA 10	I=5.46	00				
③	3HA 12	I=5.52	00	⑥	17HA 6	I=46	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 01: P1				Nombre 1				Béton : BETON20 = 0.442 m3		Acier HA 400 = 40.8 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 105.4 kg/ m3		Echelle pour la vue 6.46cm/m	
												Surface du coffrage = 5.56 m2		Echelle pour la section 9.34cm/m	
														Page 1/123	

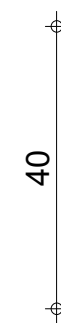
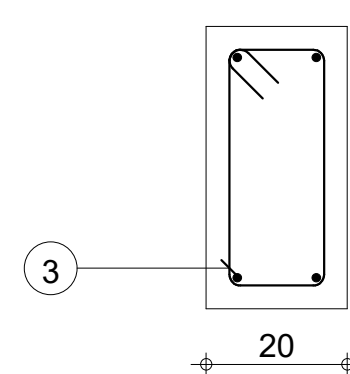
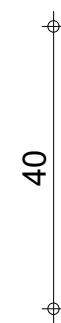
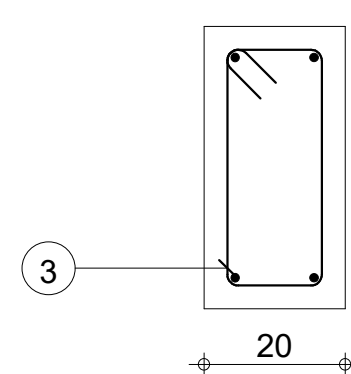
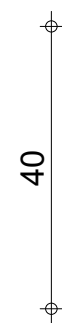
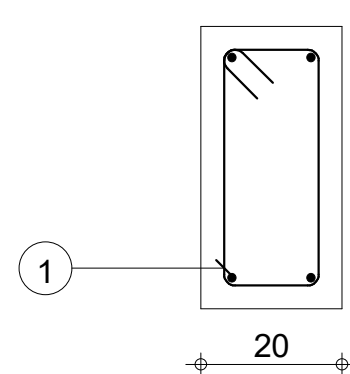
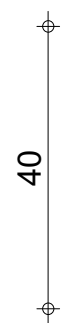
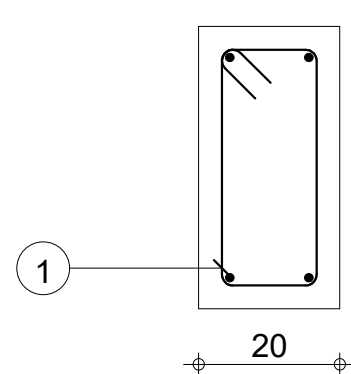


A-A

B-B

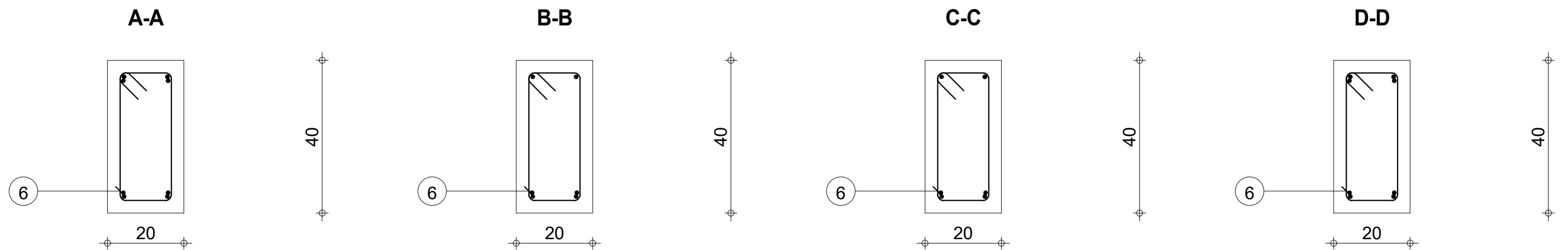
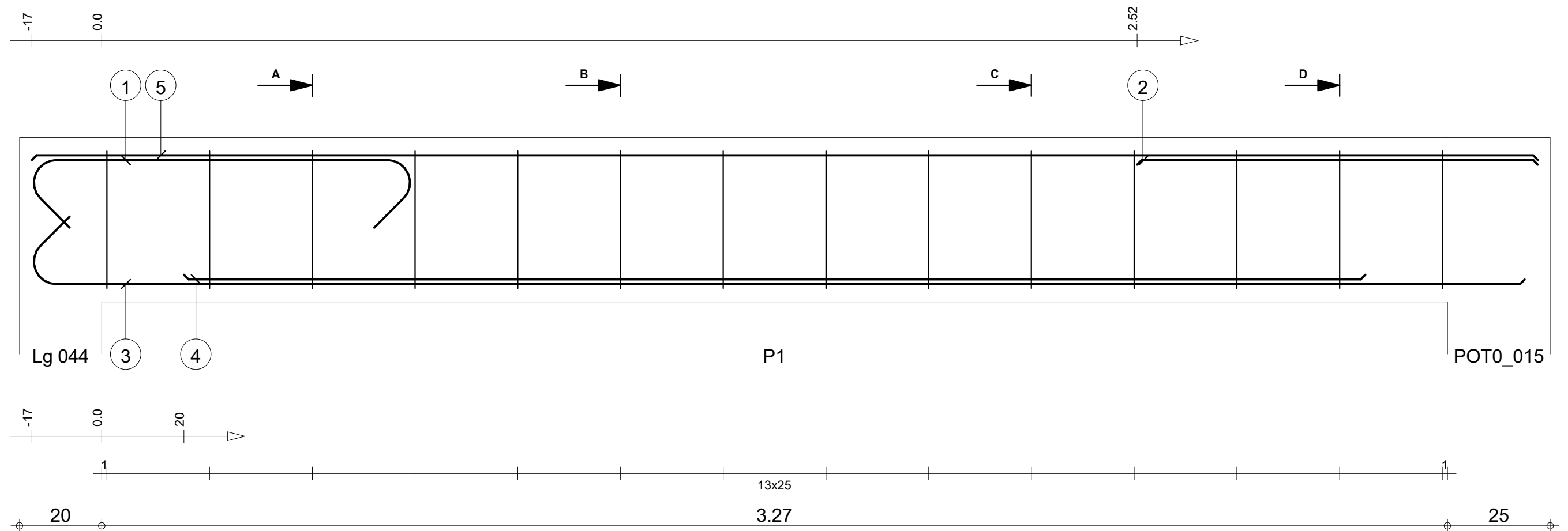
C-C

D-D



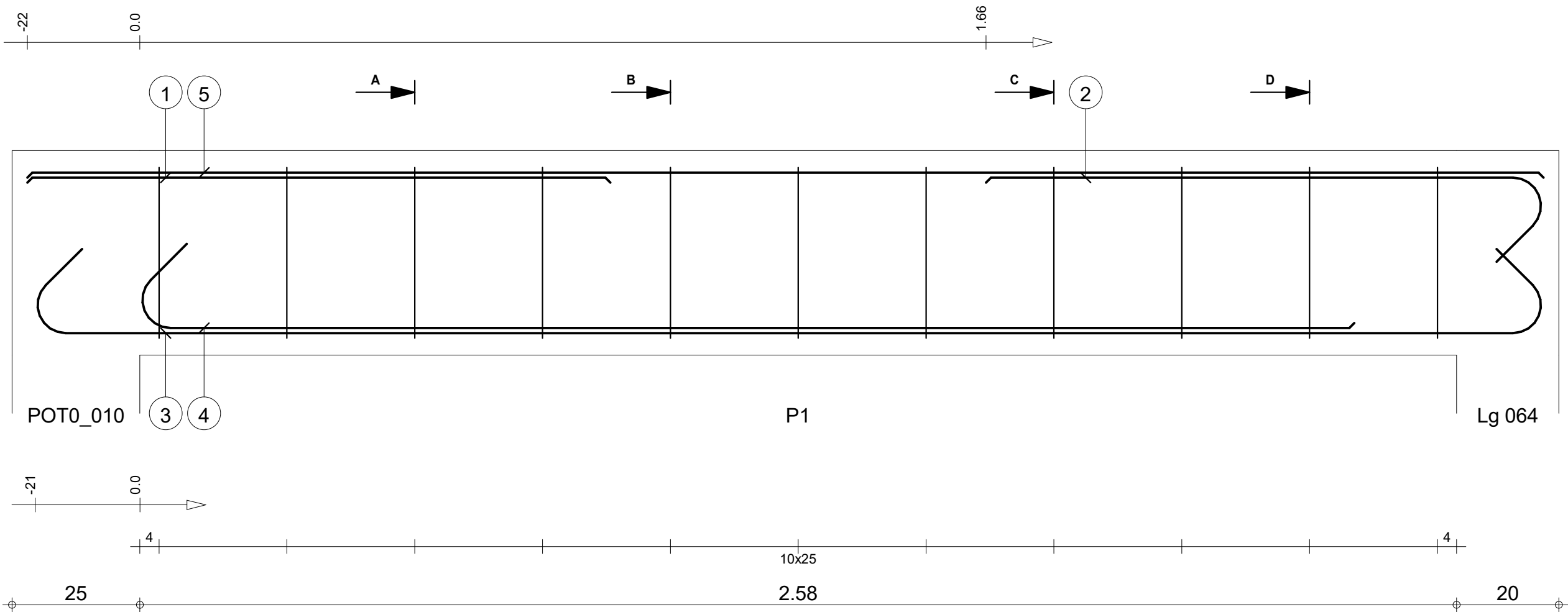
Pos.	Armature	Code	Forme
①	7HA 6	I=1.08	31
②	4HA 12	I=5.76	00
③	13HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 03		Tél. Fax		Nombre 1	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40		Béton : BETON20 = 0.466 m3	
				Acier HA 400 = 20.5 kg	
				Enrobage inférieur 3 cm	
				Enrobage supérieur 3 cm	
				Enrobage latéral 3 cm	
				Densité = 54.29 kg/ m3	
				Surface du coffrage = 5.78 m2	
				Echelle pour la vue 6.14cm/m	
				Echelle pour la section 9.34cm/m	
				Page 3/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.26	00	④	2HA 10	I=2.88	00
②	2HA 10	I=98	00	⑤	2HA 10	I=3.67	00
③	2HA 10	I=3.80	00	⑥	14HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 04: P1		Tél.		Fax		Nombre 1		Béton : BETON20 = 0.298 m3		Acier HA 400 = 15.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 63.42 kg/ m3		Echelle pour la vue 9.43cm/m	
										Surface du coffrage = 3.8 m2		Echelle pour la section 9.34cm/m	
												Page 4/123	

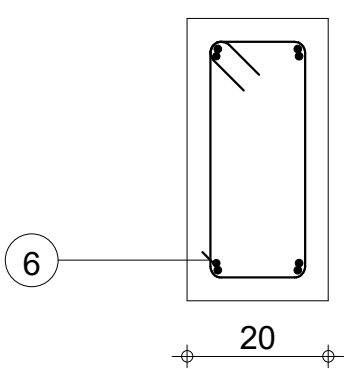
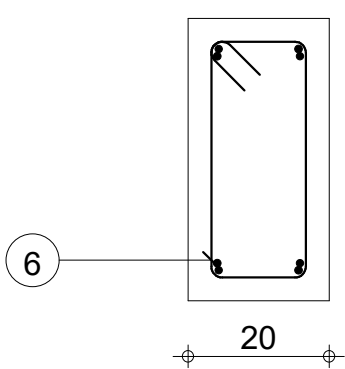
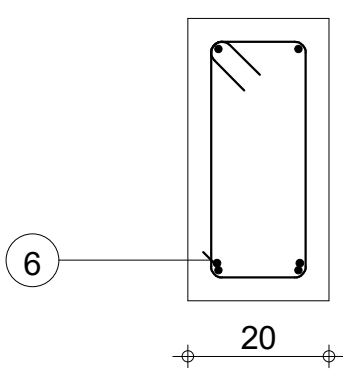
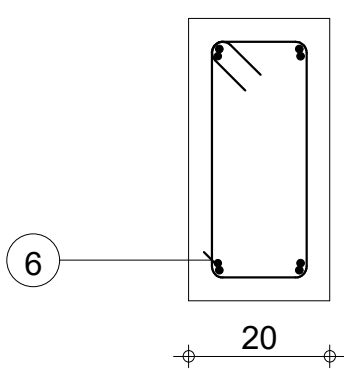


A-A

B-B

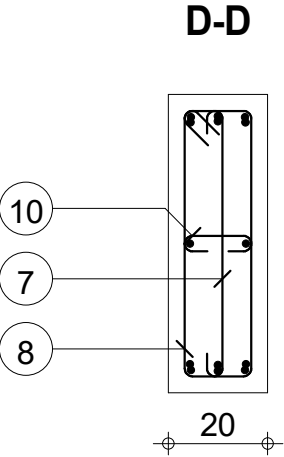
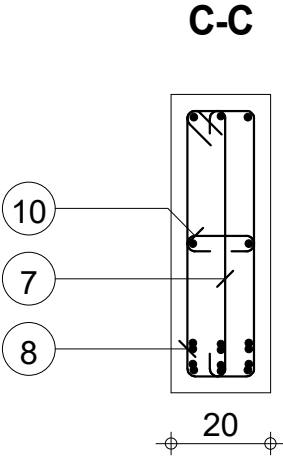
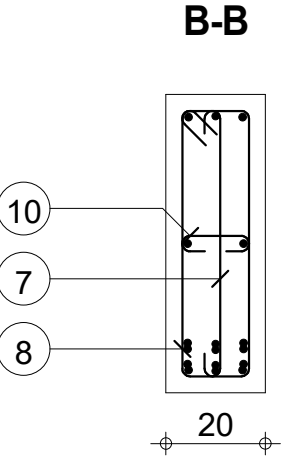
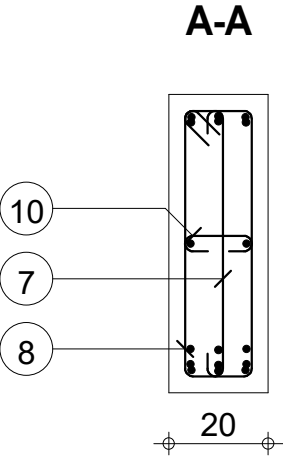
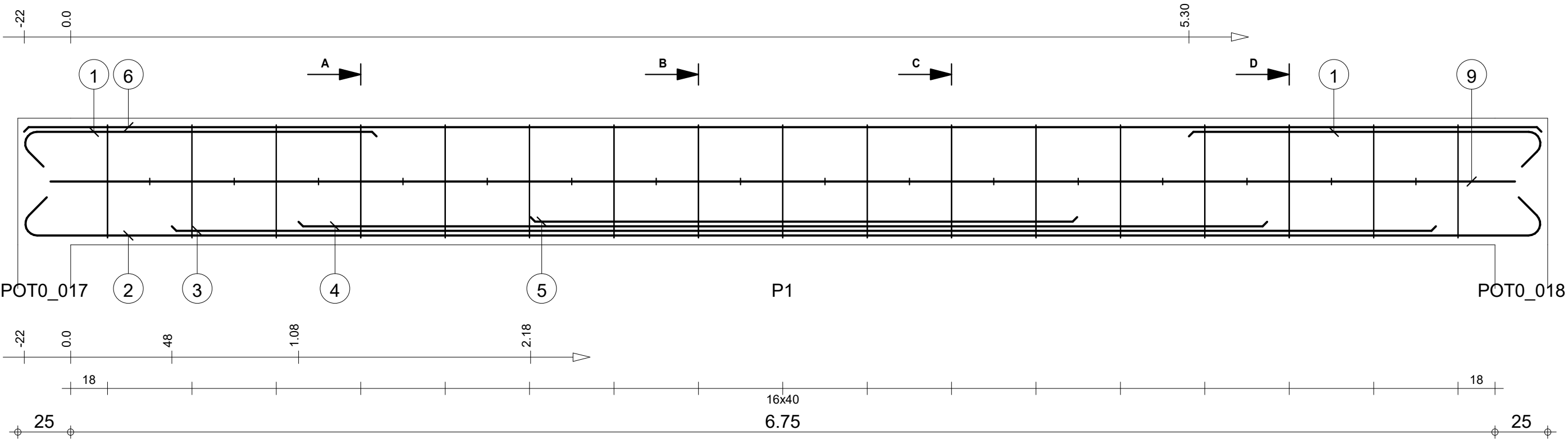
C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.14	00	④	2HA 10	I=2.54	00
②	2HA 10	I=1.26	00	⑤	2HA 10	I=2.96	00
③	2HA 10	I=3.29	00	⑥	11HA 6	I=1.08	31

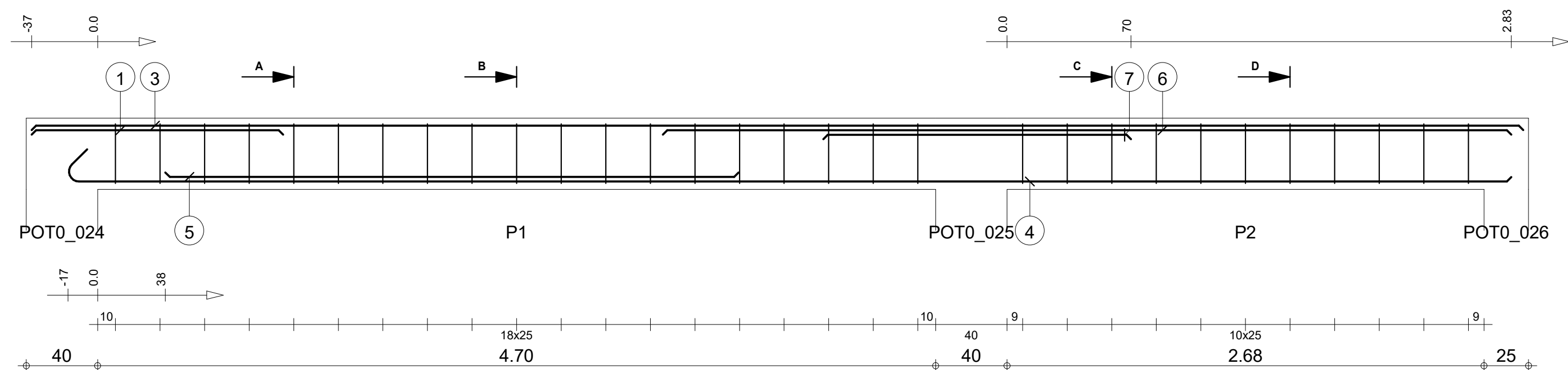
STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 05: P1		Nombre 1		Béton : BETON20 = 0.242 m3		Acier HA 400 = 13.8 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 67.77 kg/ m3		Echelle pour la vue 10.9cm/m	
						Surface du coffrage = 3.1 m2		Echelle pour la section 9.34cm/m	
								Page 5/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	I=1.84	00	④	3HA 12	I=4.59	00	⑦	17HA 6	I=66	00	⑩	16HA 6	I=26	00
②	3HA 12	I=7.57	00	⑤	3HA 12	I=2.59	00	⑧	17HA 6	I=1.48	31				
③	3HA 12	I=5.99	00	⑥	3HA 10	I=7.19	00	⑨	2HA 12	I=6.94	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 06: P1				Nombre 1				Béton : BETON20 = 0.87 m3				Acier HA 400 = 75.3 kg			
												Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 111.1 kg/ m3				Echelle pour la vue 4.98cm/m			
												Surface du coffrage = 10.3 m2				Echelle pour la section 6.58cm/m			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60												Page 6/123			

		Tél.	Fax			Acier HA 400 = 34.6 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE LONGRINES	Lg 07 Section 20x40	Nombre 1	Béton : BETON20 = 0.58 m3		Acier HA 400 = 7.51 kg		
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm
			Densité = 72.59 kg/ m3 Surface du coffrage = 7.26 m2		Echelle pour la vue 4.98cm/m Echelle pour la section 9.34cm/m		Page 7/123

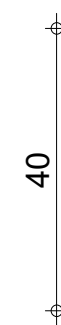
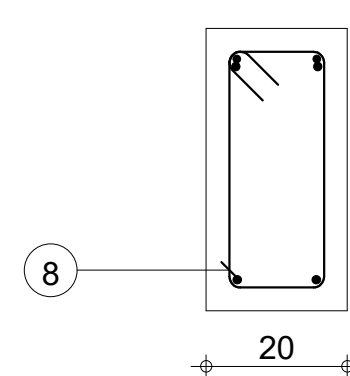
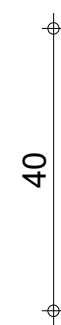
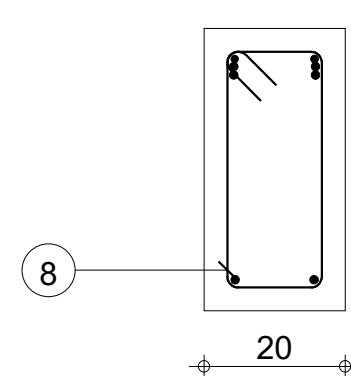
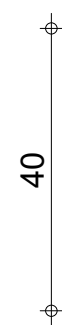
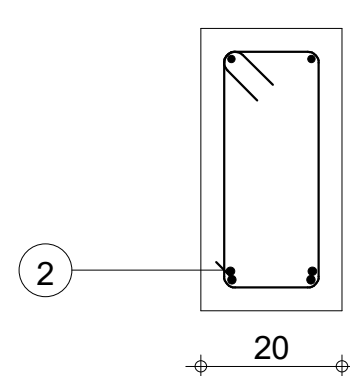
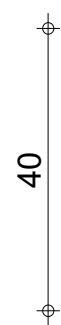
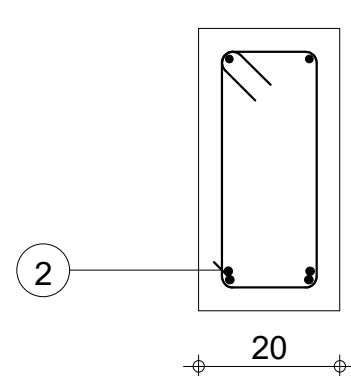


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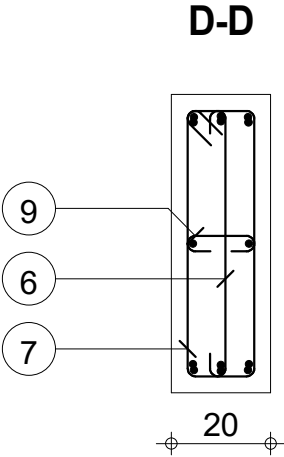
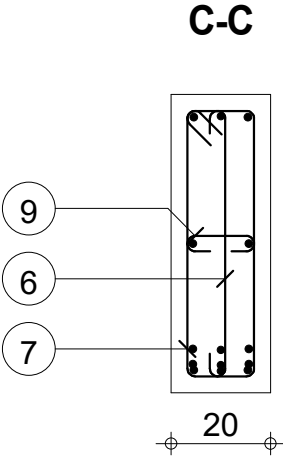
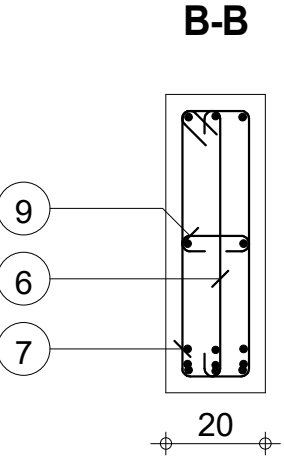
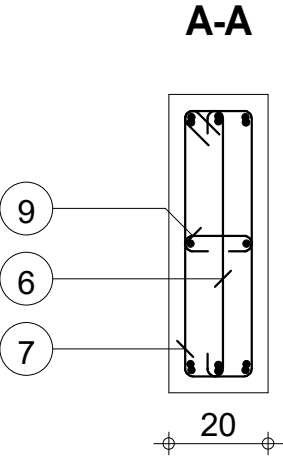
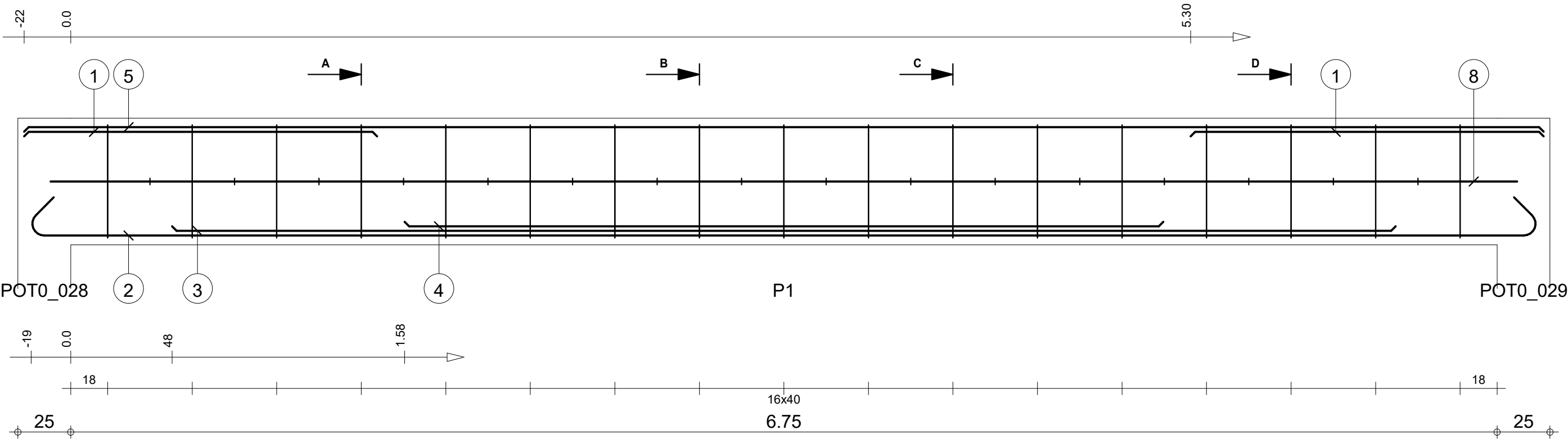
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D-D



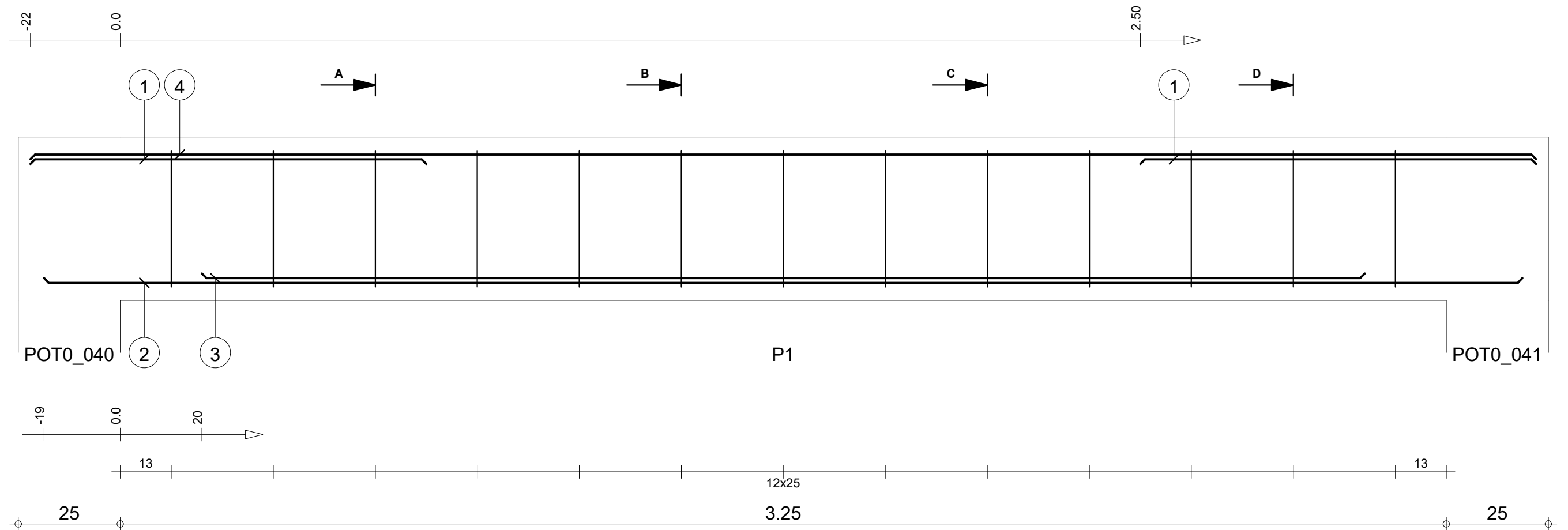
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②	19HA 6	l=1.08	31	⑤	2HA 12	l=3.21	00	⑧	11HA 6	l=1.08	31
③	2HA 10	l=8.37	00	⑥	2HA 12	l=4.76	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 08				Nombre 1				Béton : BETON20 = 0.674 m3				Acier HA 400 = 44 kg			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 75.96 kg/ m3				Echelle pour la vue 4.3cm/m			
												Surface du coffrage = 8.38 m2				Echelle pour la section 9.34cm/m			
																Page 8/123			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	I=1.67	00	④	3HA 12	I=3.59	00	⑦	17HA 6	I=1.48	31
②	3HA 12	I=7.50	00	⑤	3HA 10	I=7.19	00	⑧	2HA 12	I=6.94	00
③	3HA 12	I=5.79	00	⑥	17HA 6	I=66	00	⑨	16HA 6	I=26	00

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 10: P1				Nombre 1				Béton : BETON20 = 0.87 m3		Acier HA 400 = 64.4 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 98.62 kg/ m3		Echelle pour la vue 4.98cm/m	
												Surface du coffrage = 10.3 m2		Echelle pour la section 6.58cm/m	
														Page 10/123	

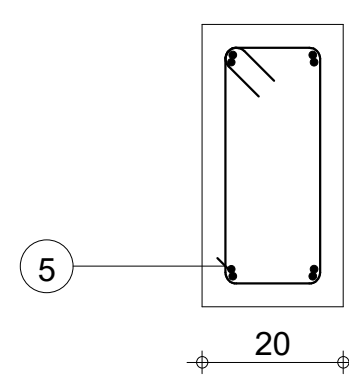
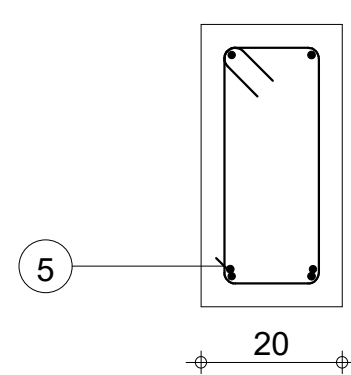
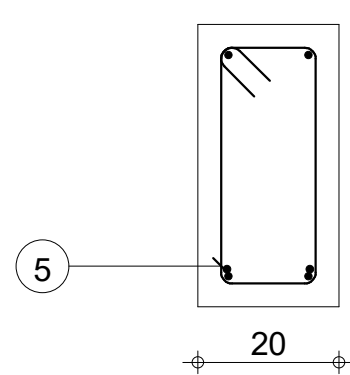
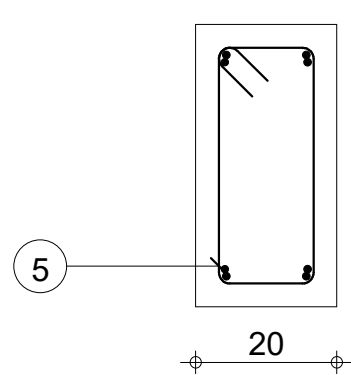


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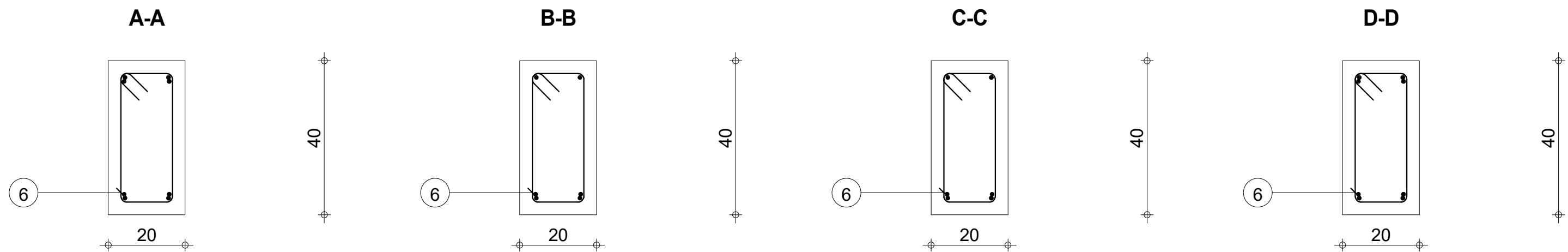
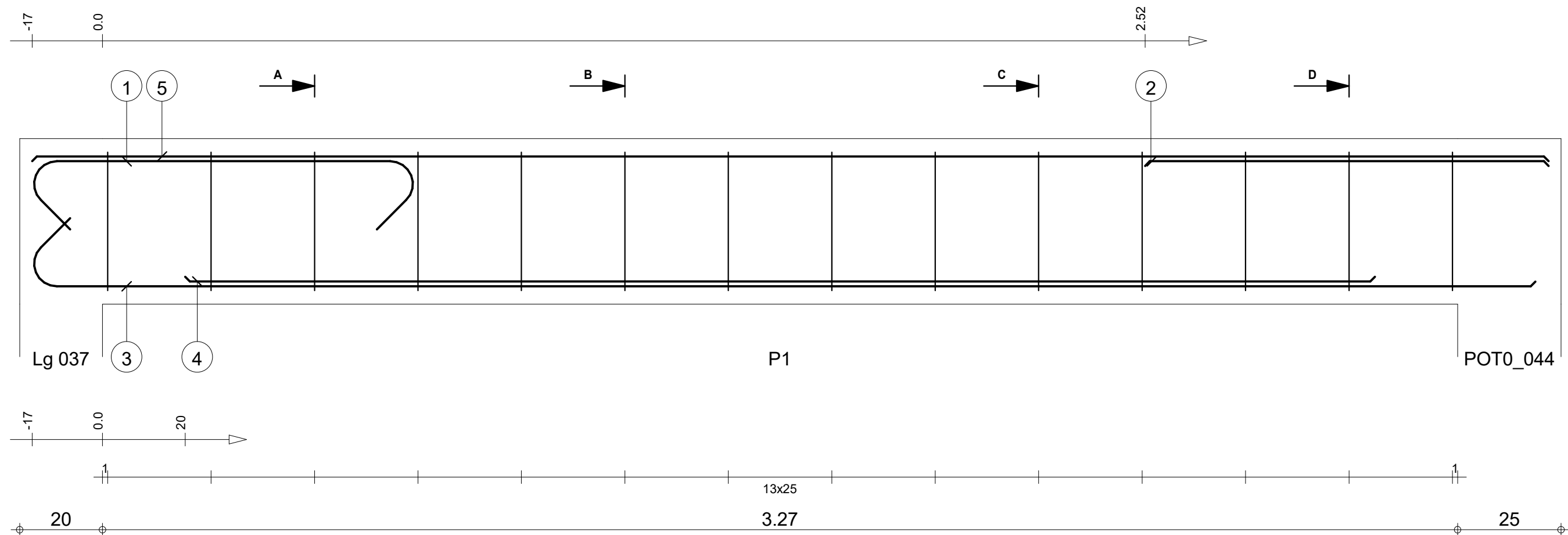
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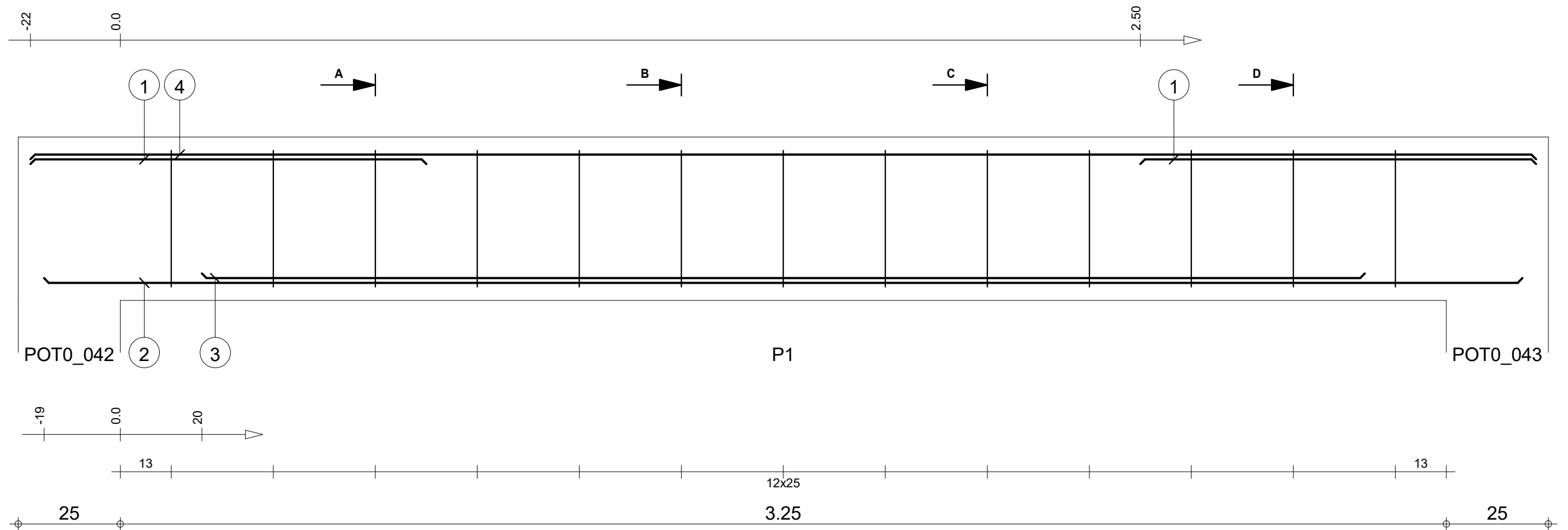
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②	2HA 10	I=3.62	00	⑤	13HA 6	I=1.08	31
③	2HA 10	I=2.85	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 11: P1		Nombre 1		Béton : BETON20 = 0.3 m3		Acier HA 400 = 14.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 60 kg/ m3		Echelle pour la vue 9.37cm/m	
						Surface du coffrage = 3.81 m2		Echelle pour la section 9.34cm/m	
								Page 11/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.26	00	④	2HA 10	I=2.88	00
②	2HA 10	I=98	00	⑤	2HA 10	I=3.67	00
③	2HA 10	I=3.80	00	⑥	14HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 12: P1		Tél.		Fax		Nombre 1		Béton : BETON20 = 0.298 m3		Acier HA 400 = 15.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 63.42 kg/ m3		Echelle pour la vue 9.43cm/m	
										Surface du coffrage = 3.8 m2		Echelle pour la section 9.34cm/m	
												Page 12/123	

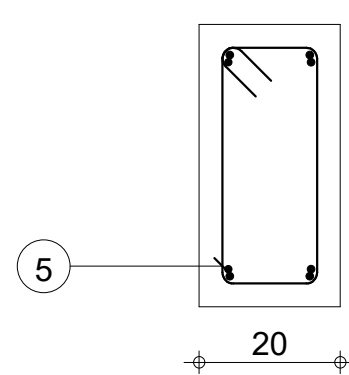
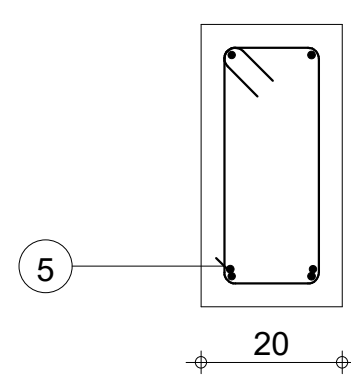
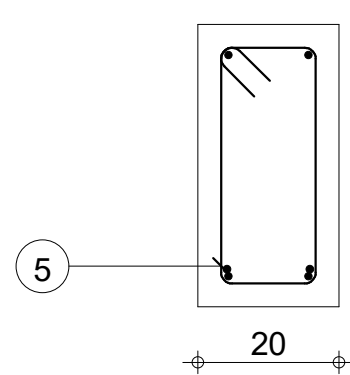
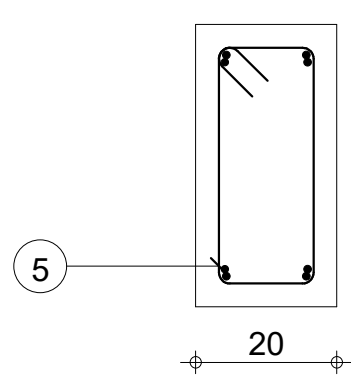


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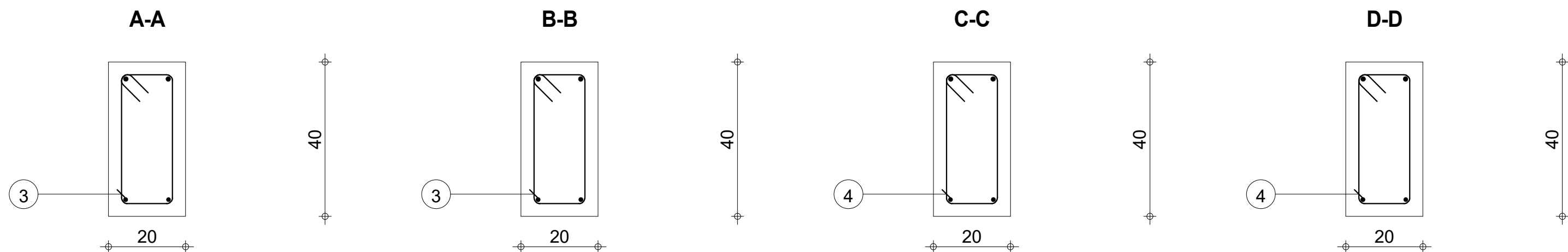
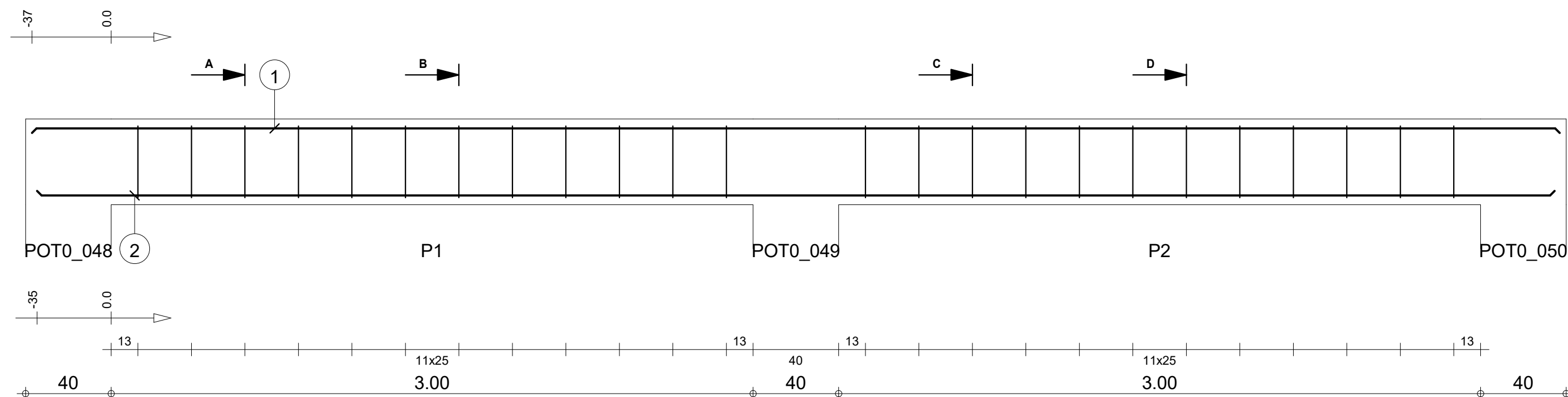
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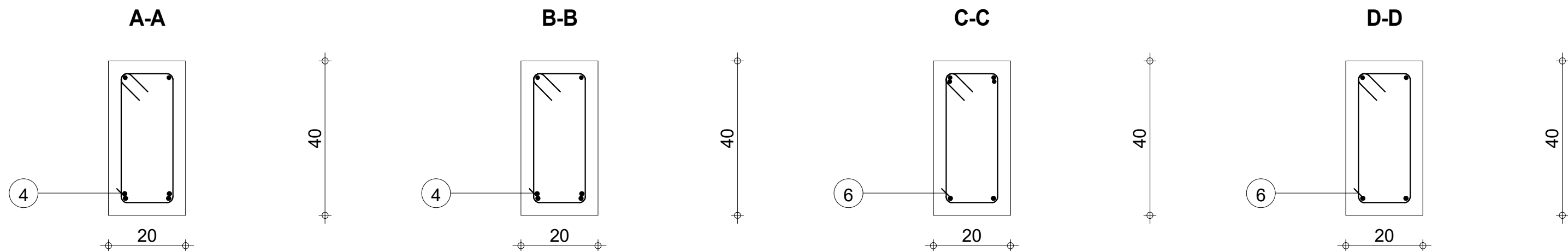
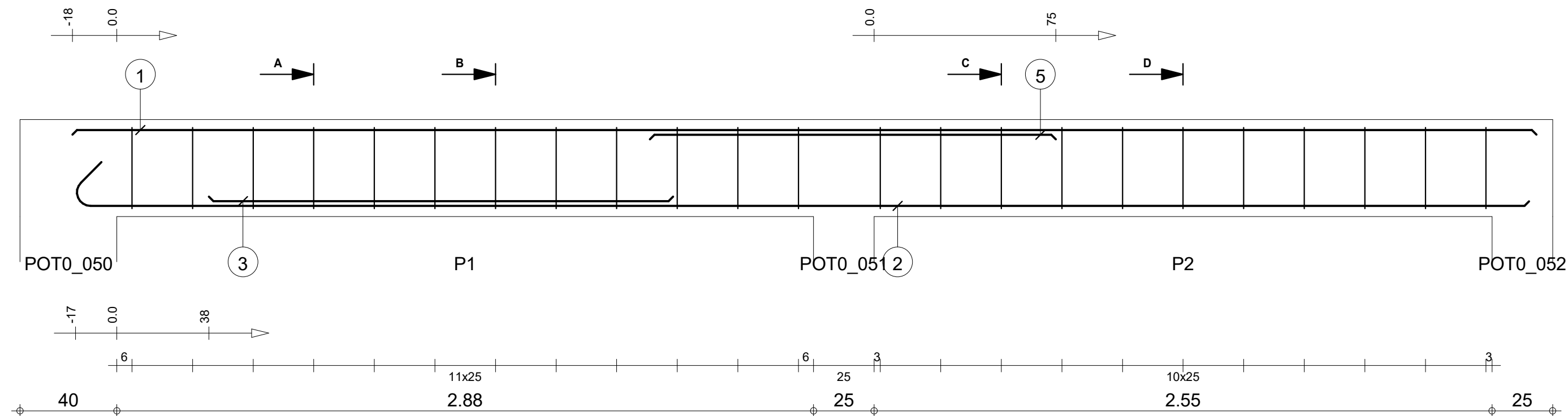
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②	2HA 10	I=3.62	00	⑤	13HA 6	I=1.08	31
③	2HA 10	I=2.85	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 13: P1		Nombre 1		Béton : BETON20 = 0.3 m3		Acier HA 400 = 14.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 60 kg/ m3		Echelle pour la vue 9.37cm/m	
						Surface du coffrage = 3.81 m2		Echelle pour la section 9.34cm/m	
								Page 13/123	



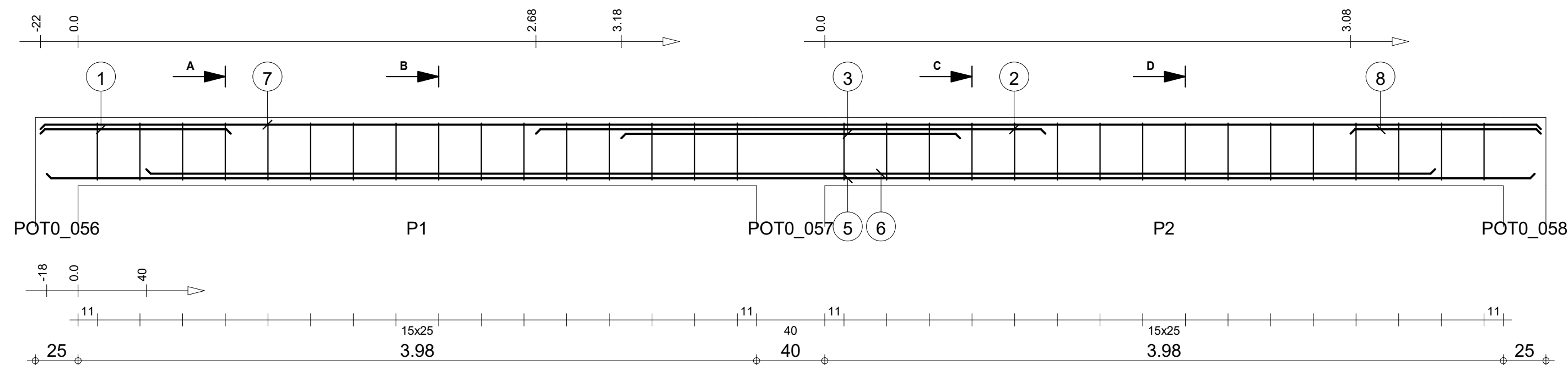
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②	2HA 10	l=7.09	00				
③	12HA 6	l=1.07	31				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 14		Nombre 1		Béton : BETON20 = 0.576 m3		Acier HA 400 = 21.4 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 47.05 kg/ m3		Echelle pour la vue 5.01cm/m	
						Surface du coffrage = 7.12 m2		Echelle pour la section 9.34cm/m	
								Page 14/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=6.04	00	④	12HA 6	I=1.08	31
②	2HA 12	I=6.19	00	⑤	2HA 10	I=1.68	00
③	2HA 12	I=1.92	00	⑥	11HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 15		Nombre 1		Béton : BETON20 = 0.506 m3		Acier HA 400 = 23.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 58.1 kg/ m3		Echelle pour la vue 5.67cm/m	
						Surface du coffrage = 6.3 m2		Echelle pour la section 9.34cm/m	
								Page 15/123	

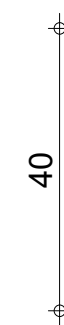
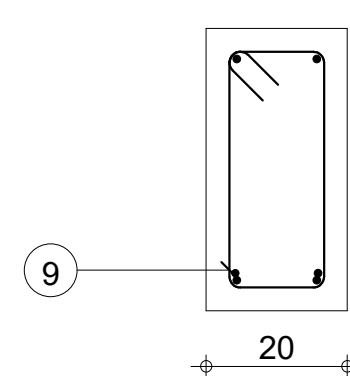
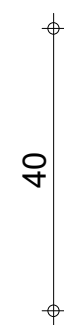
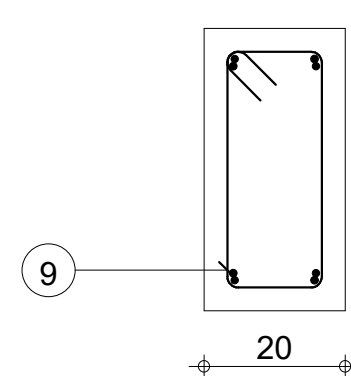
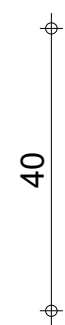
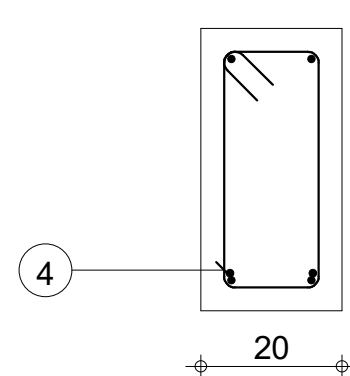
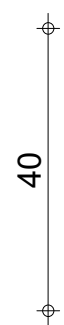
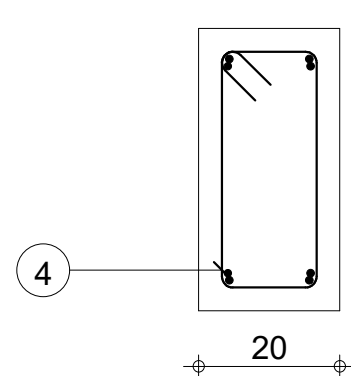


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B-B

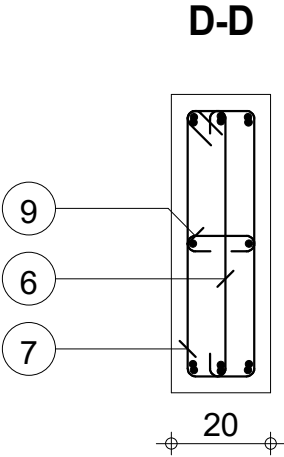
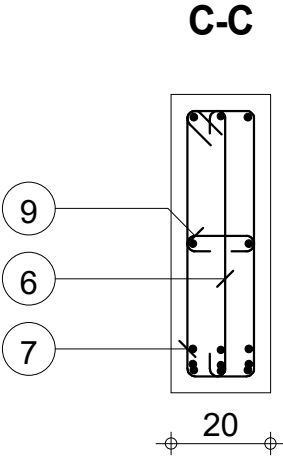
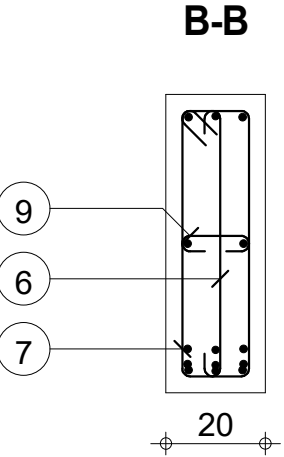
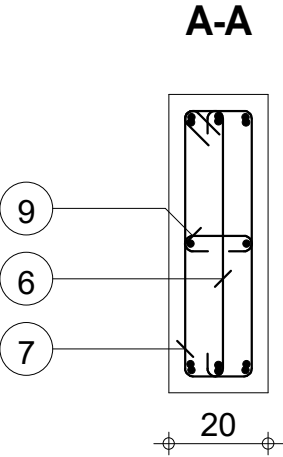
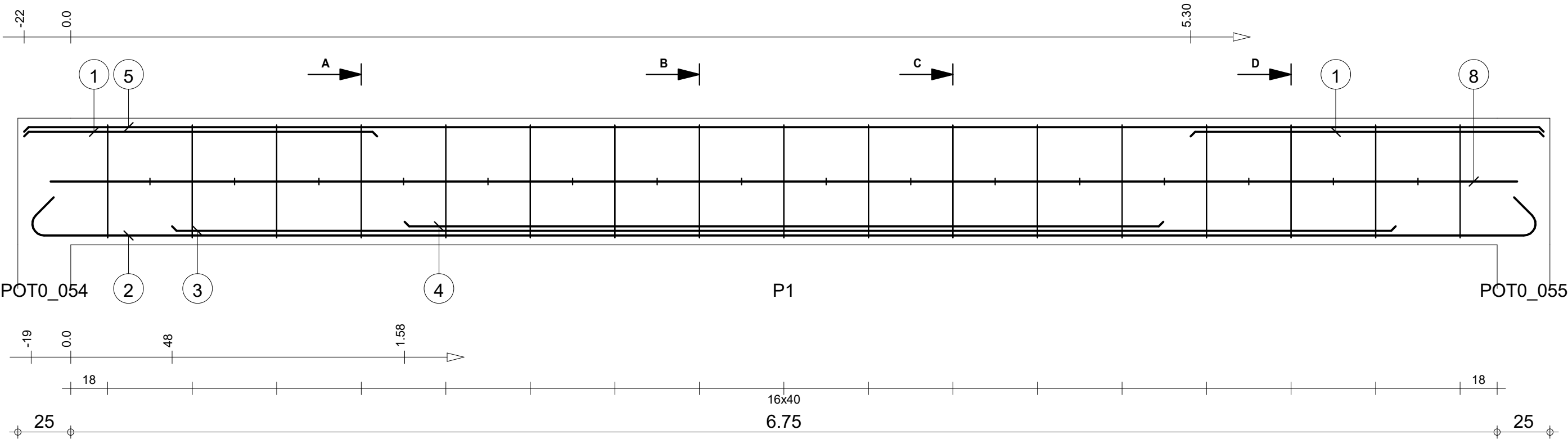
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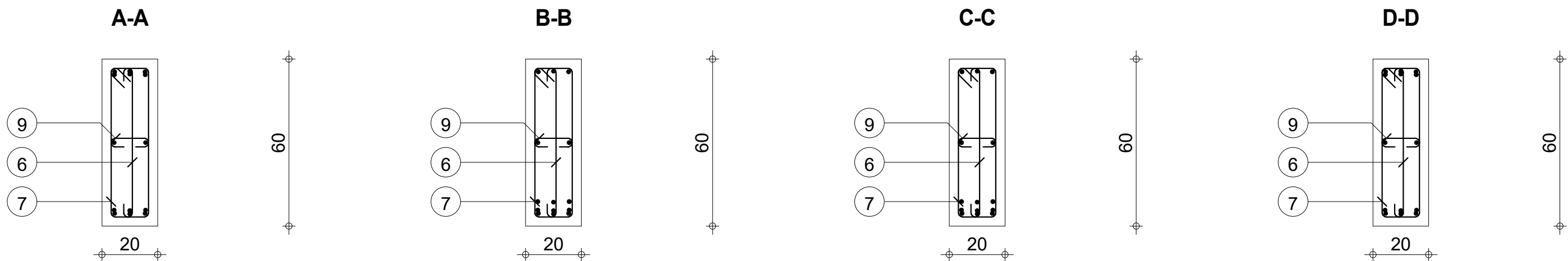
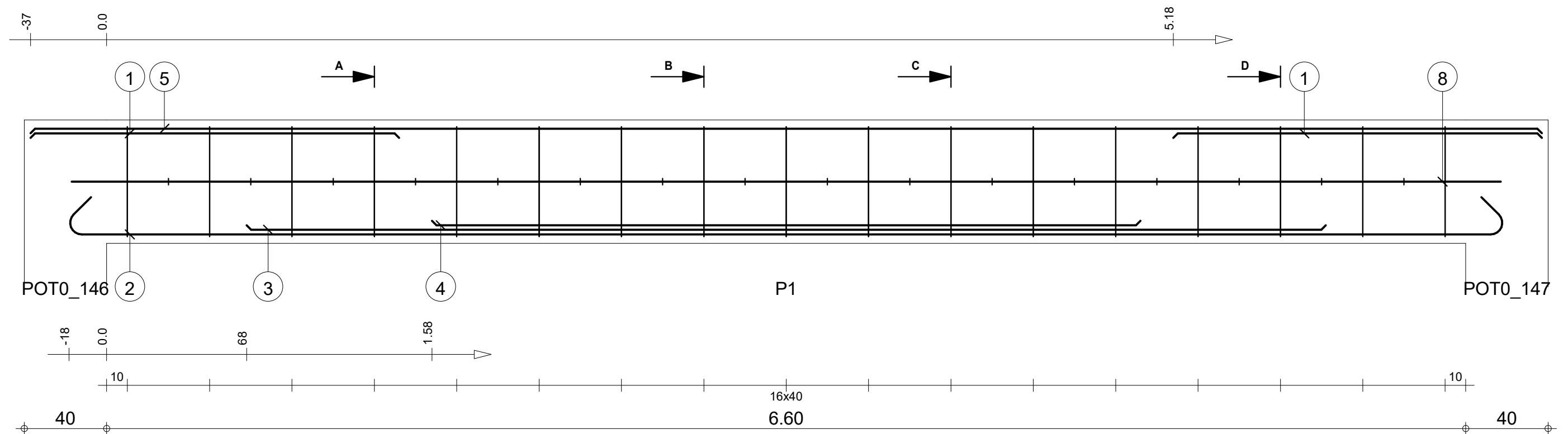
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②	2HA 10	I=2.98	00	⑤	2HA 10	I=8.72	00	⑧	2HA 10	I=1.12	00
③	2HA 10	I=1.99	00	⑥	2HA 10	I=7.55	00	⑨	16HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 16				Nombre 1				Béton : BETON20 = 0.708 m3		Acier HA 400 = 39.8 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 66.95 kg/ m3		Echelle pour la vue 4.1cm/m	
												Surface du coffrage = 8.83 m2		Echelle pour la section 9.34cm/m	
														Page 16/123	



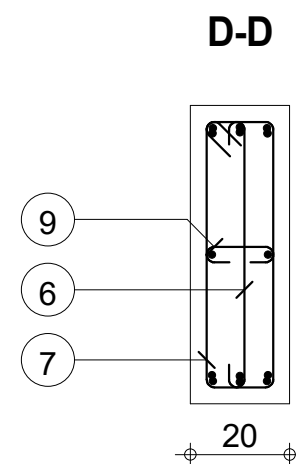
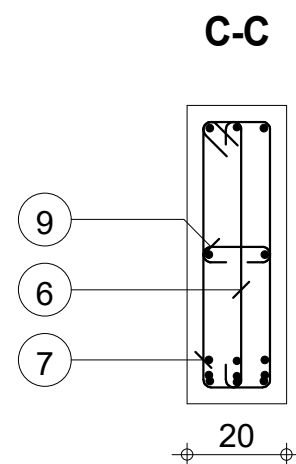
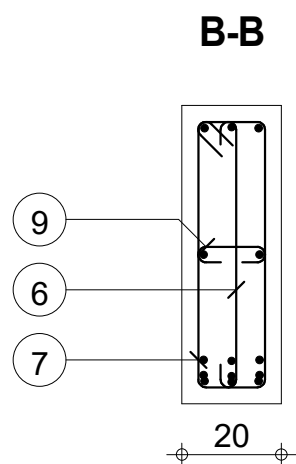
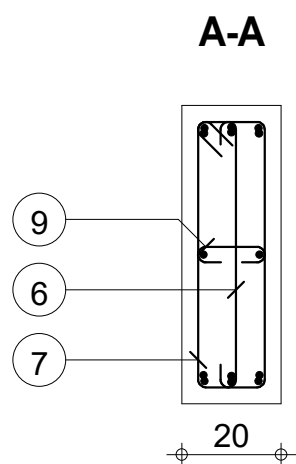
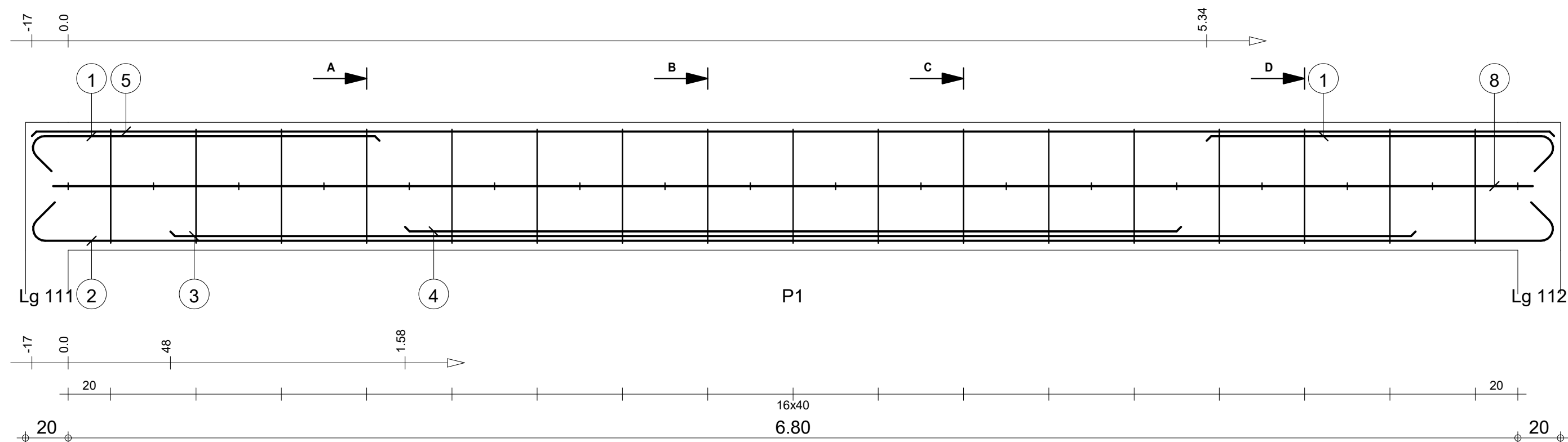
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②	3HA 12	I=7.50	00		⑤	3HA 10	I=7.19	00		⑧	2HA 12	I=6.94	00	
③	3HA 12	I=5.79	00		⑥	17HA 6	I=66	00		⑨	16HA 6	I=26	00	

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 17: P1				Nombre 1				Béton : BETON20 = 0.87 m3		Acier HA 400 = 64.4 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 98.62 kg/ m3		Echelle pour la vue 4.98cm/m	
												Surface du coffrage = 10.3 m2		Echelle pour la section 6.58cm/m	
														Page 17/123	



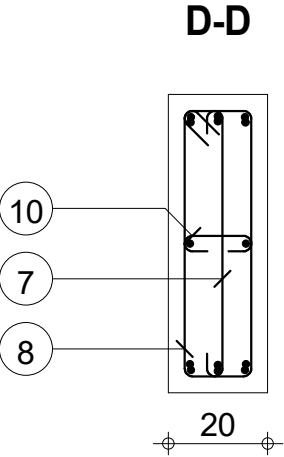
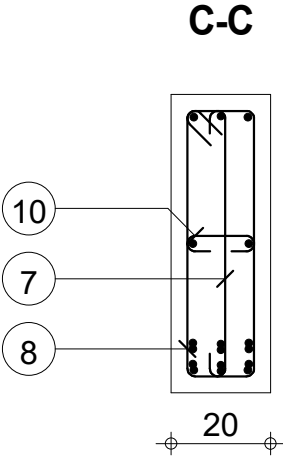
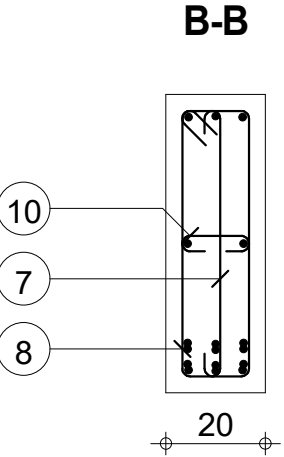
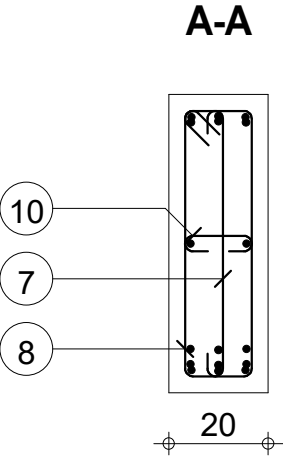
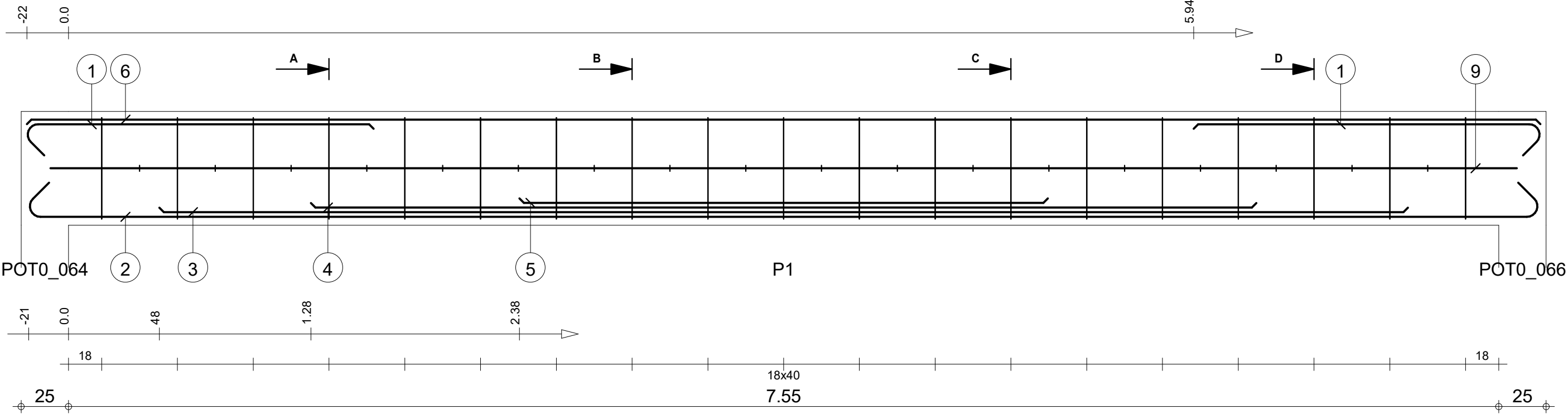
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②	3HA 12	l=7.35	00	⑤	3HA 10	l=7.34	00	⑧	2HA 12	l=6.94	00
③	3HA 12	l=5.24	00	⑥	17HA 6	l=66	00	⑨	16HA 6	l=26	00

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 18: P1				Nombre 1				Béton : BETON20 = 0.888 m3		Acier HA 400 = 62.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 94.82 kg/ m3		Echelle pour la vue 4.88cm/m	
												Surface du coffrage = 10.4 m2		Echelle pour la section 6.58cm/m	
														Page 18/123	



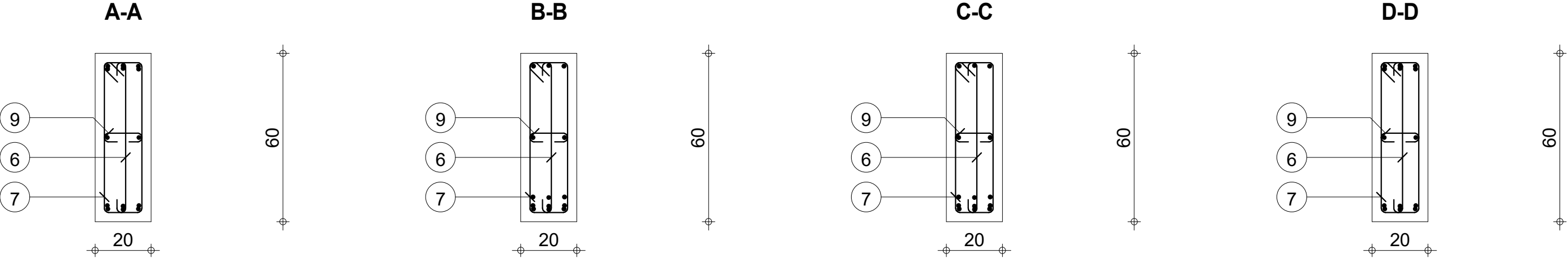
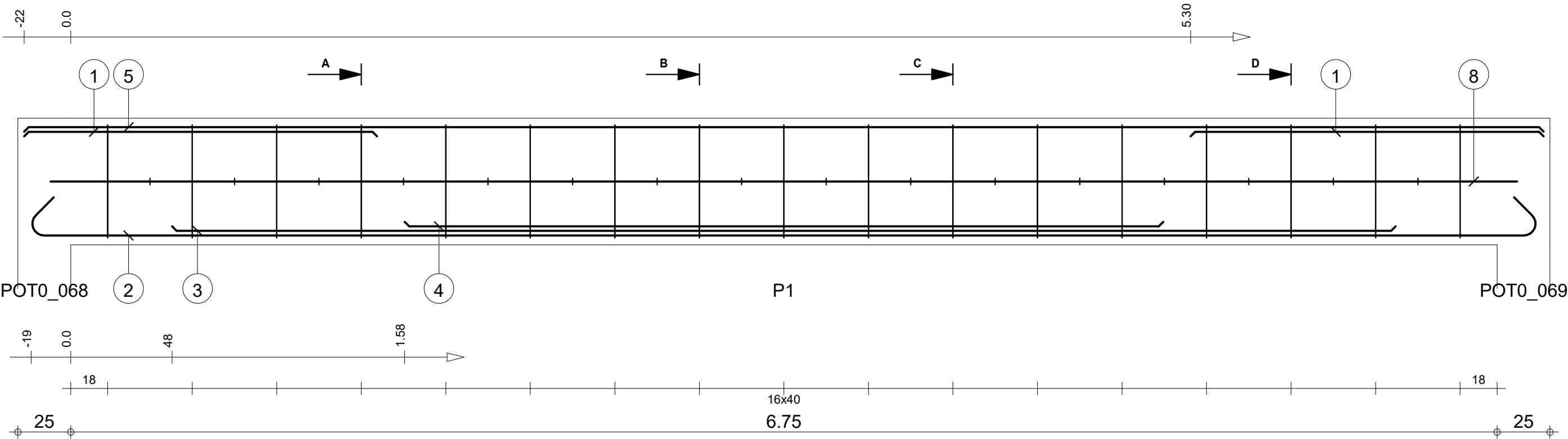
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	I=1.80	00	④	3HA 12	I=3.64	00	⑦	17HA 6	I=1.48	31
②	3HA 12	I=7.52	00	⑤	3HA 10	I=7.14	00	⑧	2HA 12	I=6.94	00
③	3HA 12	I=5.84	00	⑥	17HA 6	I=66	00	⑨	18HA 6	I=26	00

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 19: P1				Nombre 1				Béton : BETON20 = 0.864 m3		Acier HA 400 = 65.1 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 100.2 kg/ m3		Echelle pour la vue 5.01cm/m	
												Surface du coffrage = 10.2 m2		Echelle pour la section 6.58cm/m	
														Page 19/123	



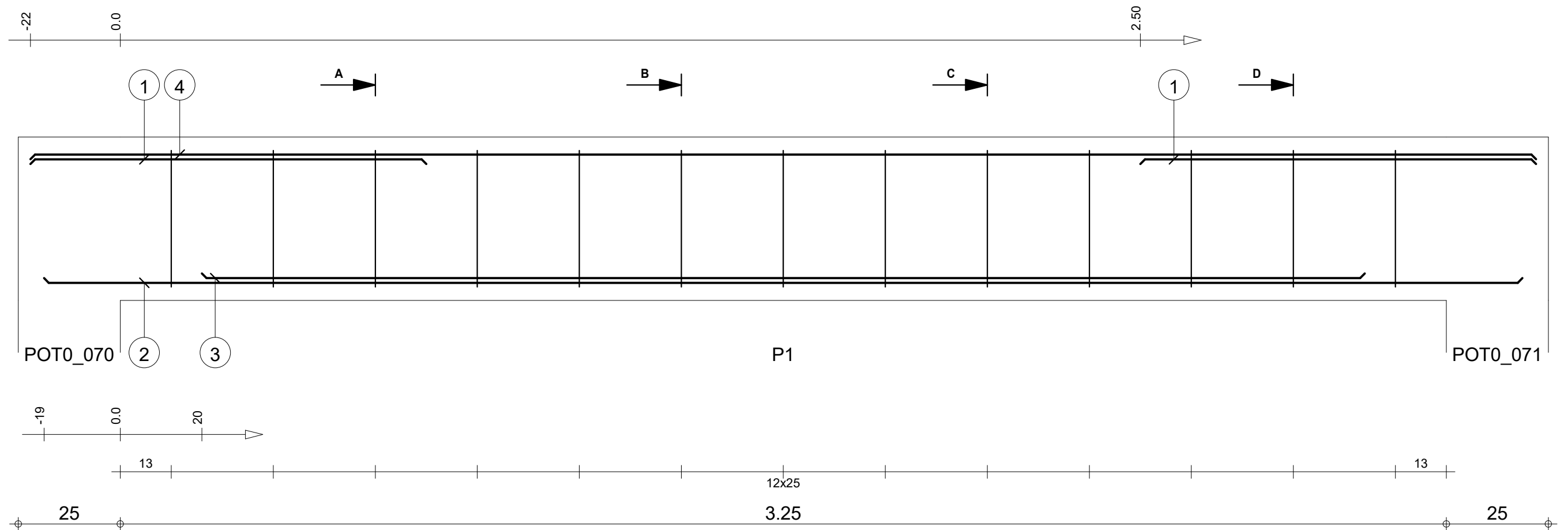
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①	6HA 10	l=2.00	00	④	3HA 12	l=4.99	00	⑦	19HA 6	l=66	00	⑩	18HA 6	l=26	00
②	3HA 12	l=8.35	00	⑤	3HA 12	l=2.79	00	⑧	19HA 6	l=1.48	31				
③	3HA 12	l=6.59	00	⑥	3HA 10	l=7.99	00	⑨	2HA 12	l=7.74	00				

STRUCTURE BATIMENT CEA/ITECH-MTV										Lg 20: P1					Nombre 1		Béton : BETON20 = 0.966 m3		Acier HA 400 = 82.7 kg	
COFFRAGE & FERRAILLAGE LONGRINES										Section 20x60							Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
																	Densité = 109.7 kg/ m3		Echelle pour la vue 4.5cm/m	
																	Surface du coffrage = 11.4 m2		Echelle pour la section 6.58cm/m	
																			Page 20/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	6HA 10	I=1.67	00		④	3HA 12	I=3.59	00		⑦	17HA 6	I=1.48	31	
②	3HA 12	I=7.50	00		⑤	3HA 10	I=7.19	00		⑧	2HA 12	I=6.94	00	
③	3HA 12	I=5.79	00		⑥	17HA 6	I=66	00		⑨	16HA 6	I=26	00	

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 21: P1				Nombre 1				Béton : BETON20 = 0.87 m3		Acier HA 400 = 64.4 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 98.62 kg/ m3		Echelle pour la vue 4.98cm/m	
												Surface du coffrage = 10.3 m2		Echelle pour la section 6.58cm/m	
														Page 21/123	

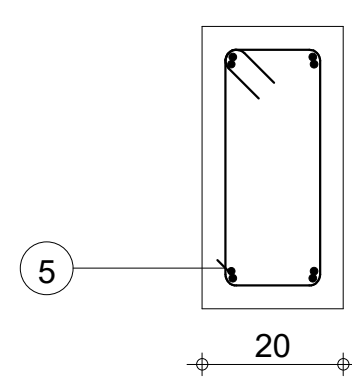
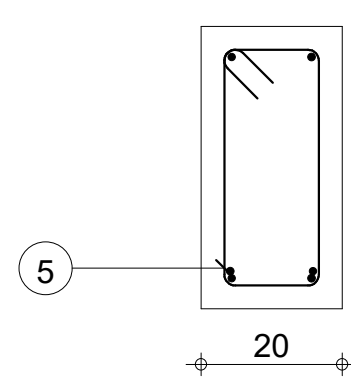
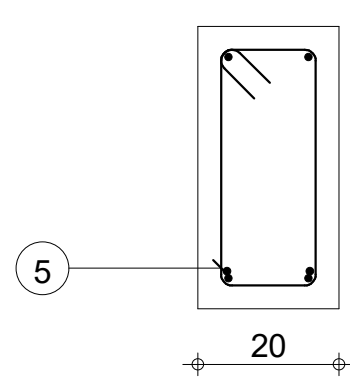
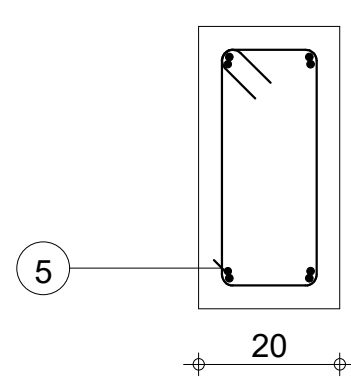


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B-B

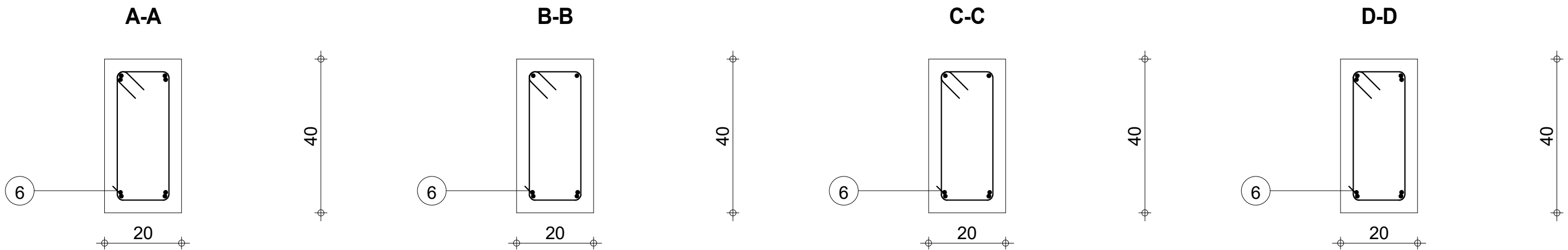
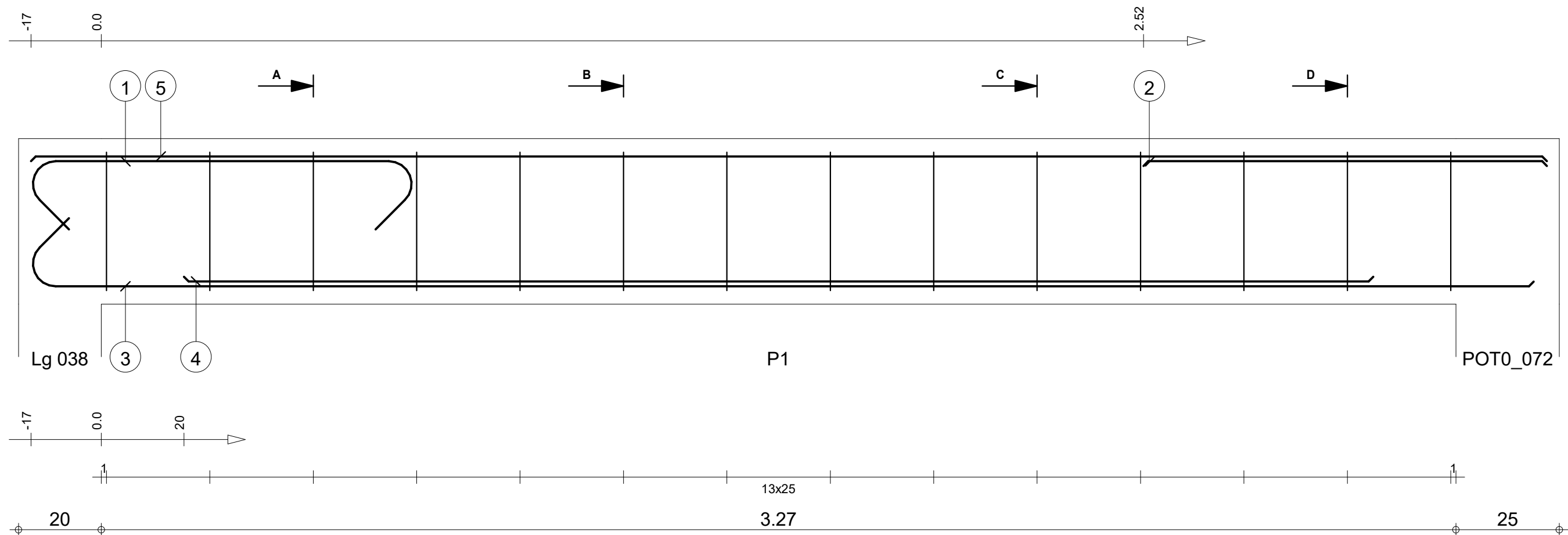
C-C

D-D



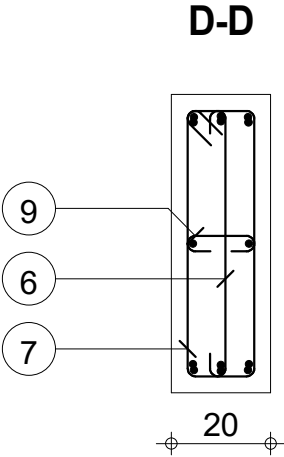
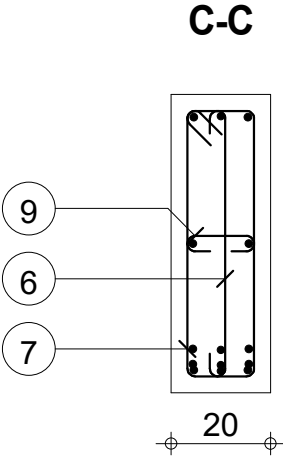
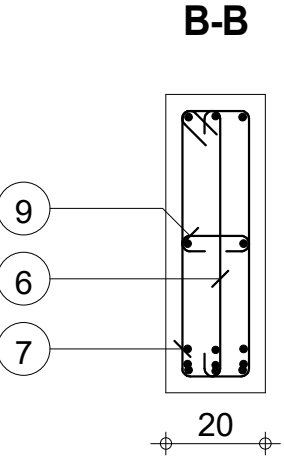
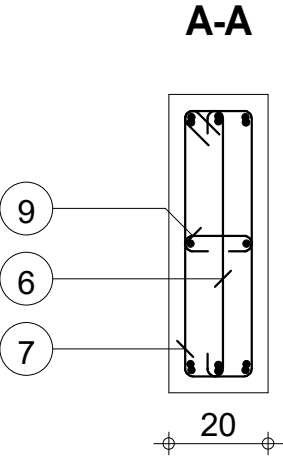
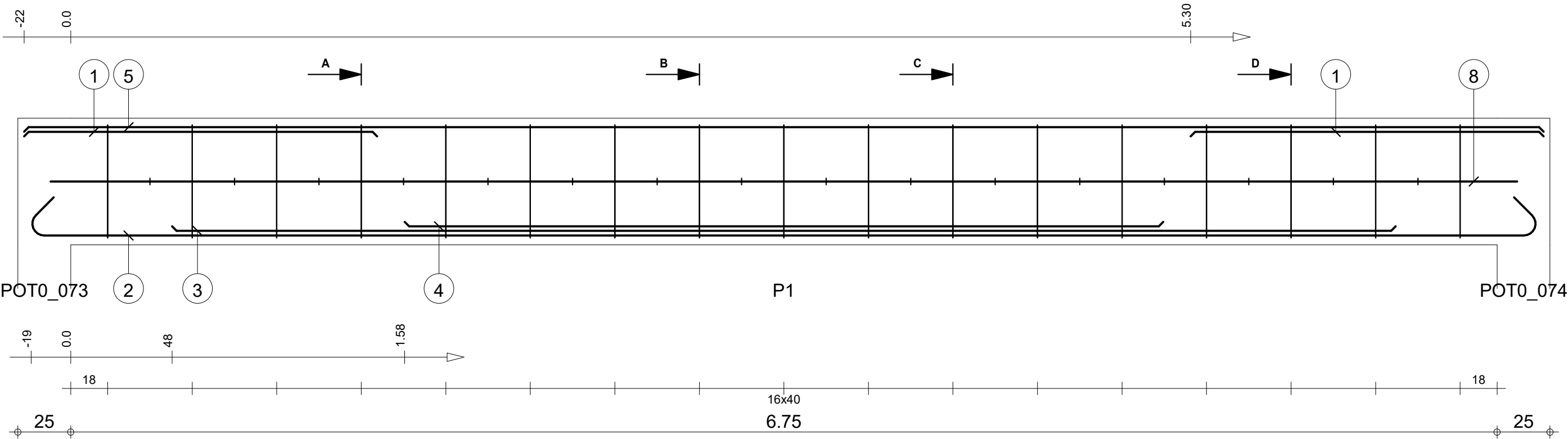
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	I=97	00	④	2HA 10	I=3.69	00
②	2HA 10	I=3.62	00	⑤	13HA 6	I=1.08	31
③	2HA 10	I=2.85	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 22: P1		Nombre 1		Béton : BETON20 = 0.3 m3		Acier HA 400 = 14.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 60 kg/ m3		Echelle pour la vue 9.37cm/m	
						Surface du coffrage = 3.81 m2		Echelle pour la section 9.34cm/m	
								Page 22/123	



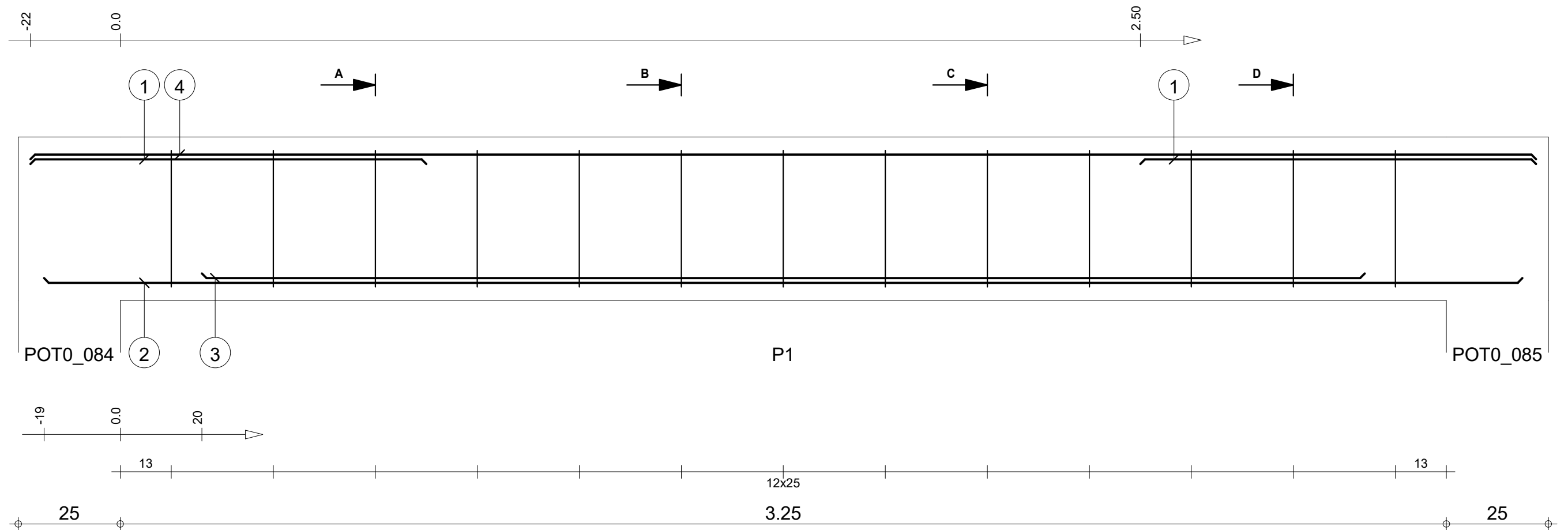
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②	2HA 10	I=98	00	⑤	2HA 10	I=3.67	00
③	2HA 10	I=3.80	00	⑥	14HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 23: P1		Tél.		Fax		Nombre 1		Béton : BETON20 = 0.298 m3		Acier HA 400 = 15.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 63.42 kg/ m3		Echelle pour la vue 9.43cm/m	
										Surface du coffrage = 3.8 m2		Echelle pour la section 9.34cm/m	
												Page 23/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	6HA 10	I=1.67	00	1.67	④	3HA 12	I=3.59	00	3.59	⑦	17HA 6	I=1.48	31	14
②	3HA 12	I=7.50	00	7.12	⑤	3HA 10	I=7.19	00	7.19	⑧	2HA 12	I=6.94	00	6.94
③	3HA 12	I=5.79	00	5.79	⑥	17HA 6	I=66	00	54	⑨	16HA 6	I=26	00	14

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 24: P1				Nombre 1				Béton : BETON20 = 0.87 m3		Acier HA 400 = 64.4 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 98.62 kg/ m3		Echelle pour la vue 4.98cm/m	
												Surface du coffrage = 10.3 m2		Echelle pour la section 6.58cm/m	
														Page 24/123	

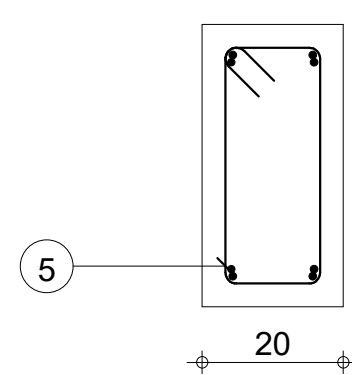
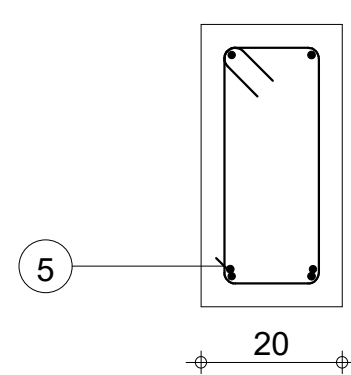
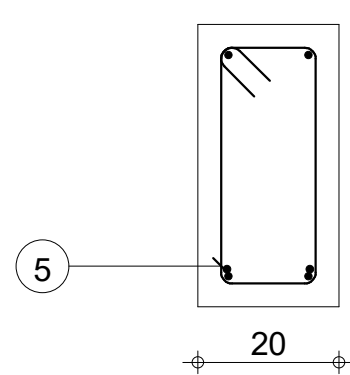
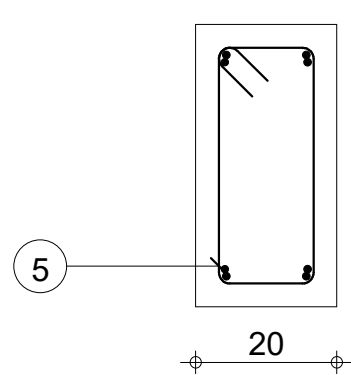


A-A

B-B

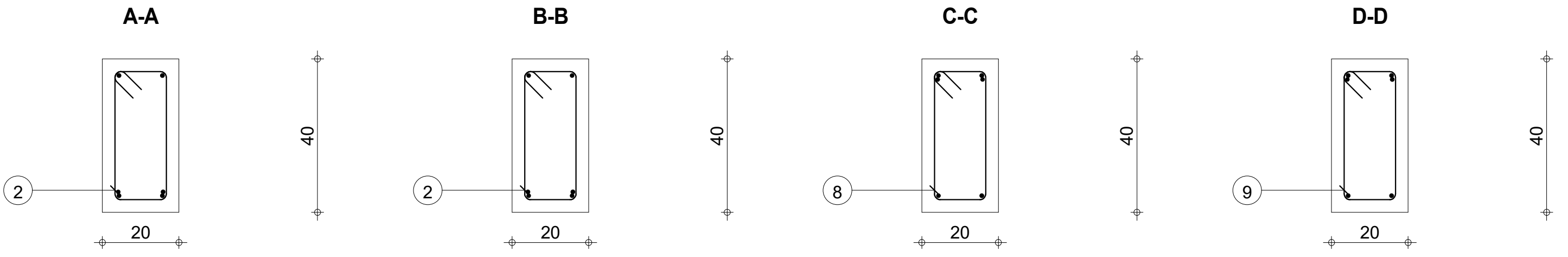
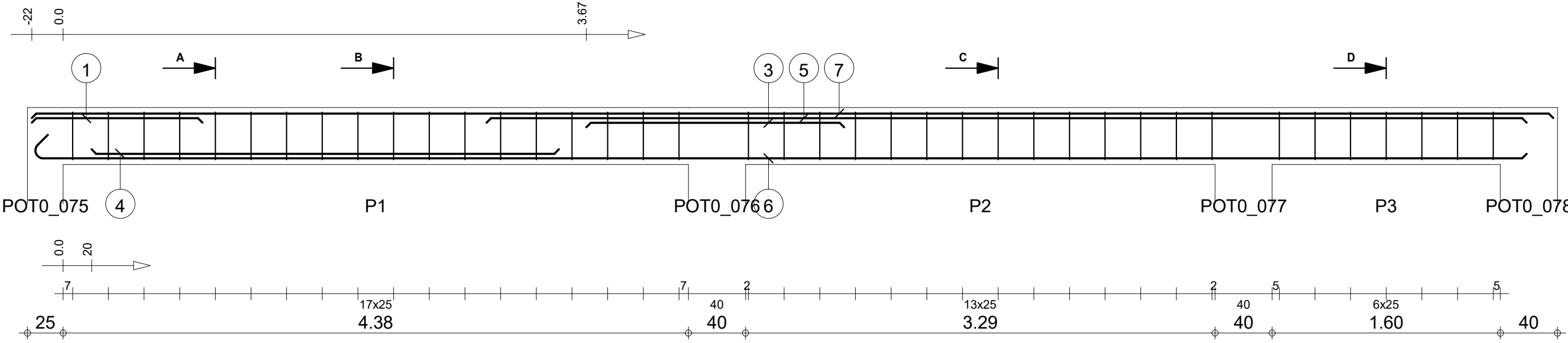
C-C

D-D



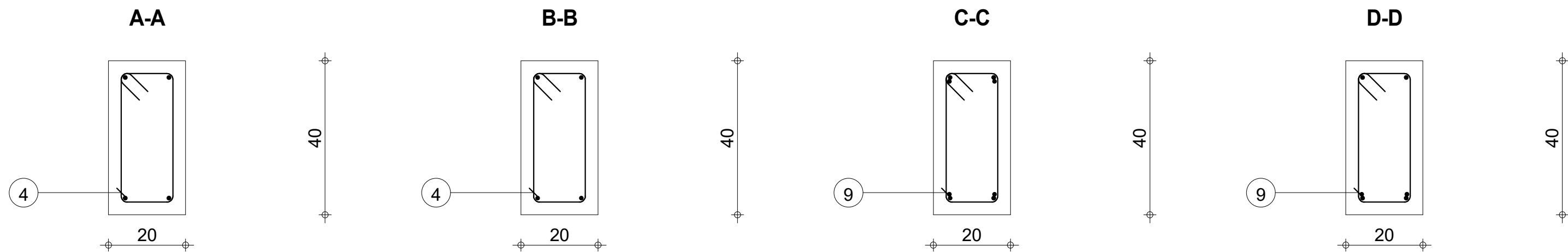
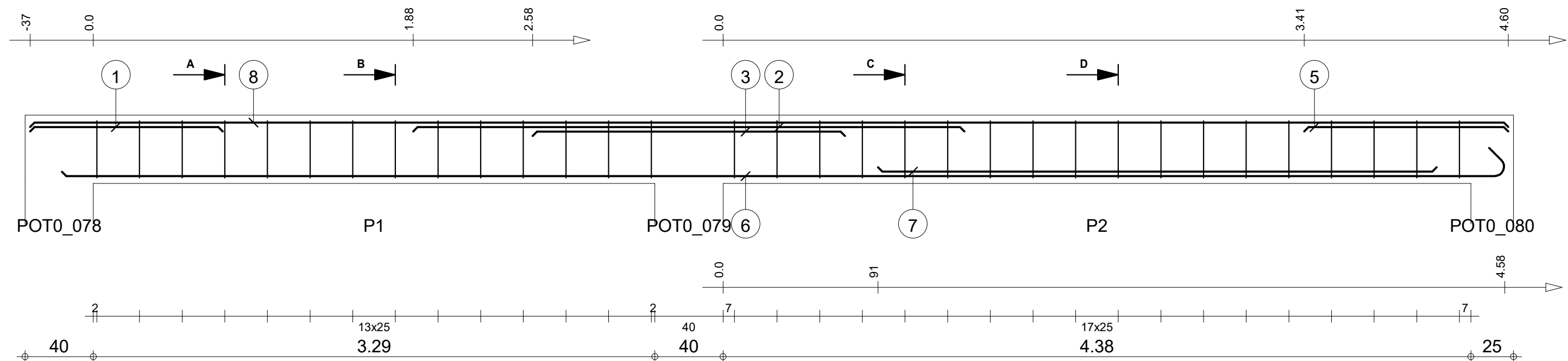
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	I=97	00	④	2HA 10	I=3.69	00
②	2HA 10	I=3.62	00	⑤	13HA 6	I=1.08	31
③	2HA 10	I=2.85	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 25: P1		Nombre 1		Béton : BETON20 = 0.3 m3		Acier HA 400 = 14.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 60 kg/ m3		Echelle pour la vue 9.37cm/m	
						Surface du coffrage = 3.81 m2		Echelle pour la section 9.34cm/m	
								Page 25/123	



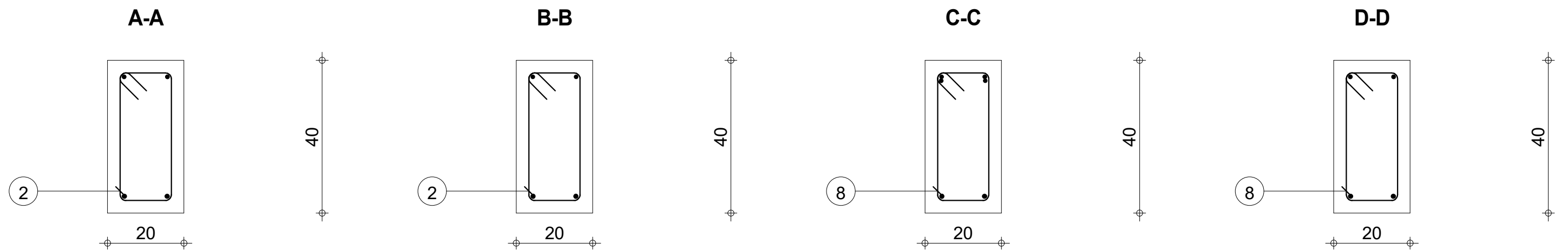
Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=1.20	00	1.20	④	2HA 10	l=3.27	00	3.28	⑦	2HA 10	l=10.67	00	10.67
②	18HA 6	l=1.08	31	14 34 6 31	⑤	2HA 10	l=7.29	00	7.29	⑧	14HA 6	l=1.08	31	14 34 6 31
③	2HA 10	l=1.81	00	1.81	⑥	2HA 10	l=10.63	00	10.46	⑨	7HA 6	l=1.08	31	14 34 6 31

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 26				Tél.		Fax		Nombre 1		Béton : BETON20 = 0.858 m3		Acier HA 400 = 43 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40						Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 60.96 kg/ m3		Echelle pour la vue 3.41cm/m	
										Surface du coffrage = 10.6 m2		Echelle pour la section 9.34cm/m	
												Page 26/123	

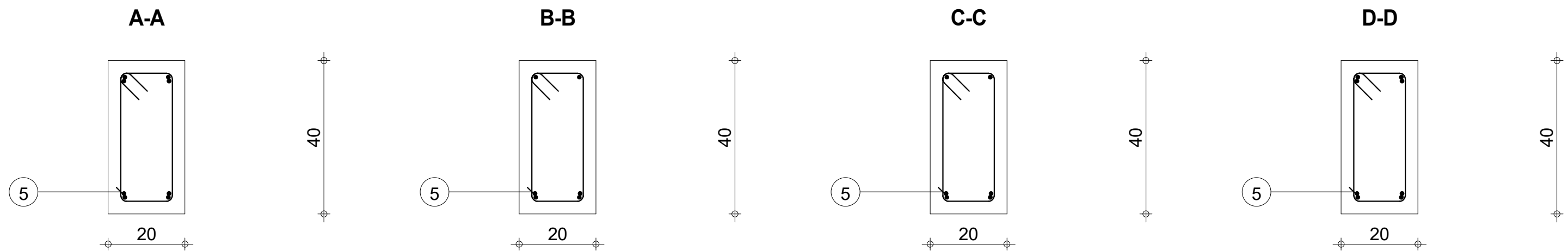
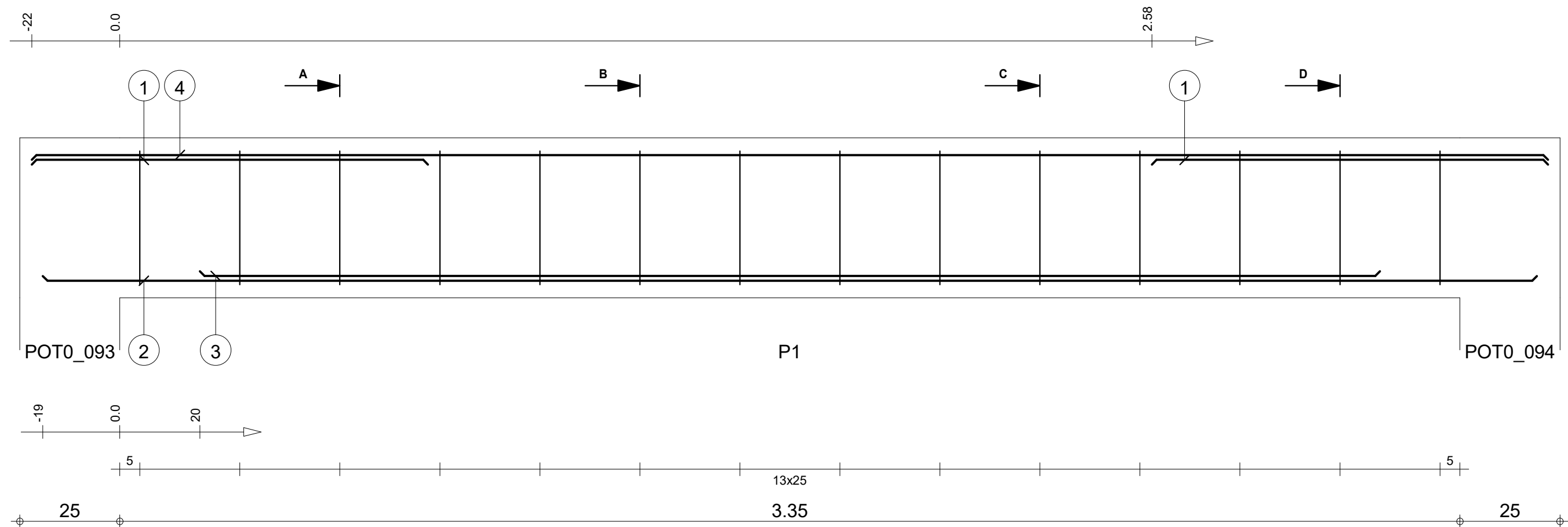


Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
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②	2HA 10	l=3.23	00	3.23	⑤	2HA 10	l=1.20	00	1.20	⑧	2HA 10	l=8.67	00	8.67
③	2HA 10	l=1.83	00	1.83	⑥	2HA 10	l=8.63	00	8.63	⑨	18HA 6	l=1.08	31	14 1.08

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 27				Tél.		Fax		Nombre 1		Béton : BETON20 = 0.698 m3		Acier HA 400 = 34.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40						Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 60.32 kg/ m3		Echelle pour la vue 4.16cm/m	
										Surface du coffrage = 8.68 m2		Echelle pour la section 9.34cm/m	
												Page 27/123	

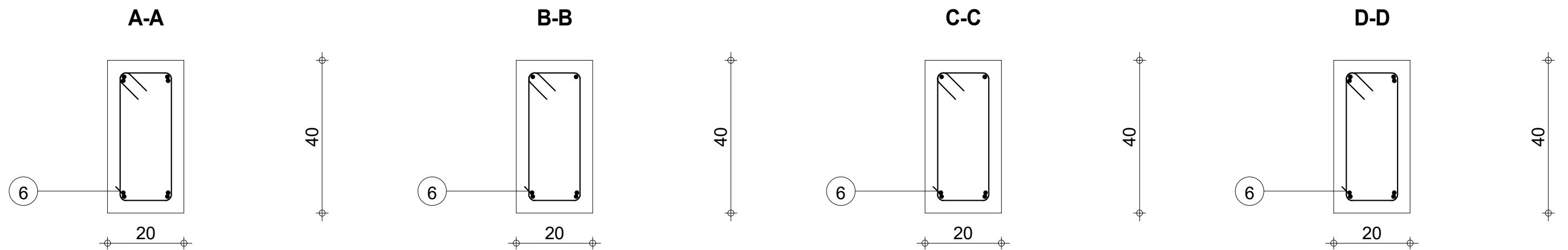
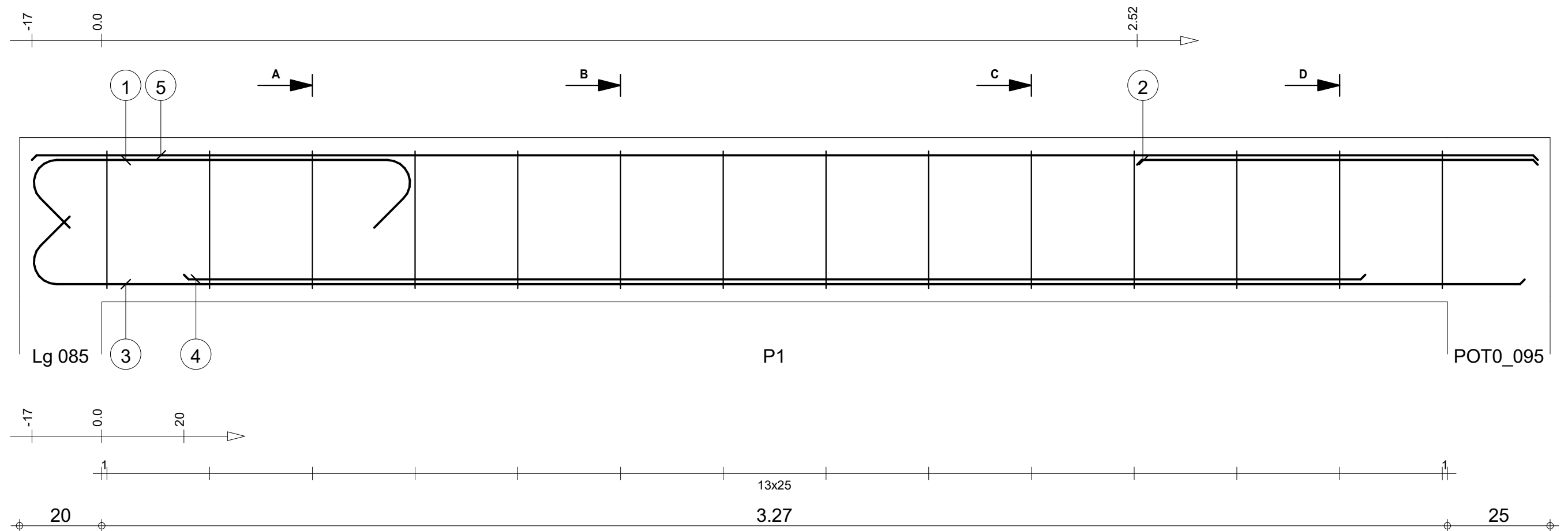


		Tél.	Fax		
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE LONGRINES	Lg 28 Section 20x40	Nombre 1		Acier HA 400 = 29 kg	
			Béton : BETON20 = 0.58 m3	Acier HA 400 = 6.22 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 60.69 kg/ m3 Surface du coffrage = 7.26 m2	Echelle pour la vue 4.98cm/m Echelle pour la section 9.34cm/m	Page 28/123



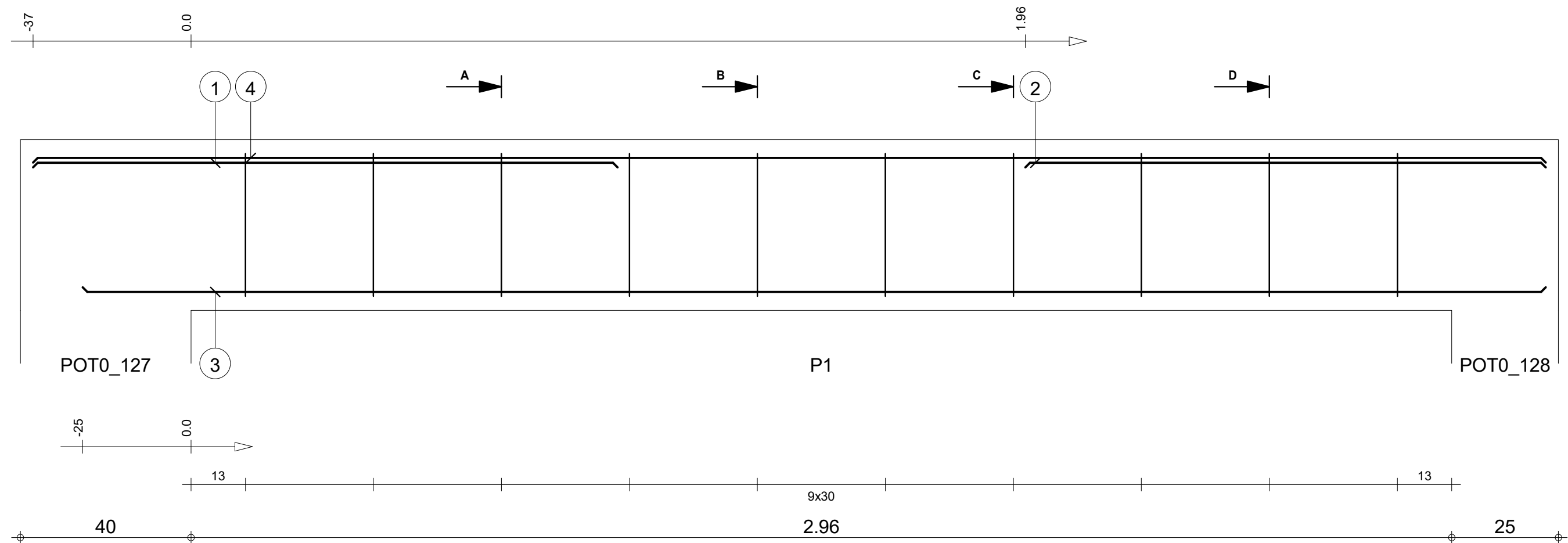
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme		
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②	2HA 10	I=3.73	00	3.73	⑤	14HA 6	I=1.08	31	14 3.73 1.08
③	2HA 10	I=2.95	00	2.95					

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 29: P1		Tél.		Fax		Nombre 1		Béton : BETON20 = 0.308 m3		Acier HA 400 = 15.4 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 60.71 kg/ m3		Echelle pour la vue 9.14cm/m	
										Surface du coffrage = 3.91 m2		Echelle pour la section 9.34cm/m	
												Page 29/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.26	00	④	2HA 10	I=2.88	00
②	2HA 10	I=98	00	⑤	2HA 10	I=3.67	00
③	2HA 10	I=3.80	00	⑥	14HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 30: P1		Nombre 1		Béton : BETON20 = 0.298 m3		Acier HA 400 = 15.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 63.42 kg/ m3		Echelle pour la vue 9.43cm/m	
						Surface du coffrage = 3.8 m2		Echelle pour la section 9.34cm/m	
								Page 30/123	

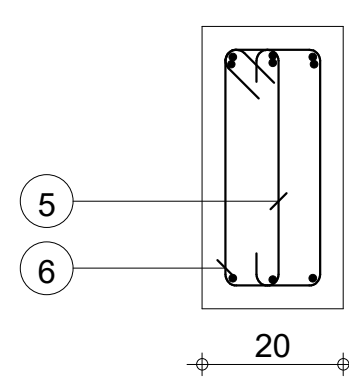
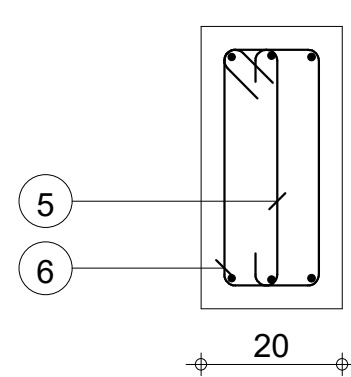
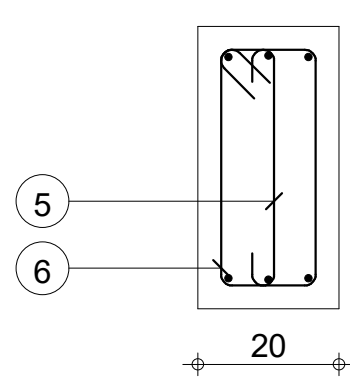
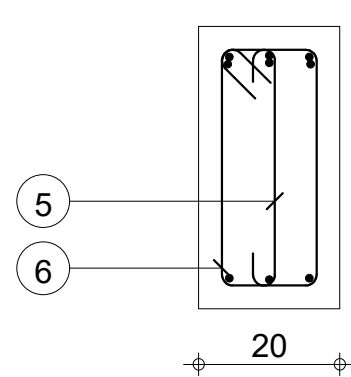


A-A

B-B

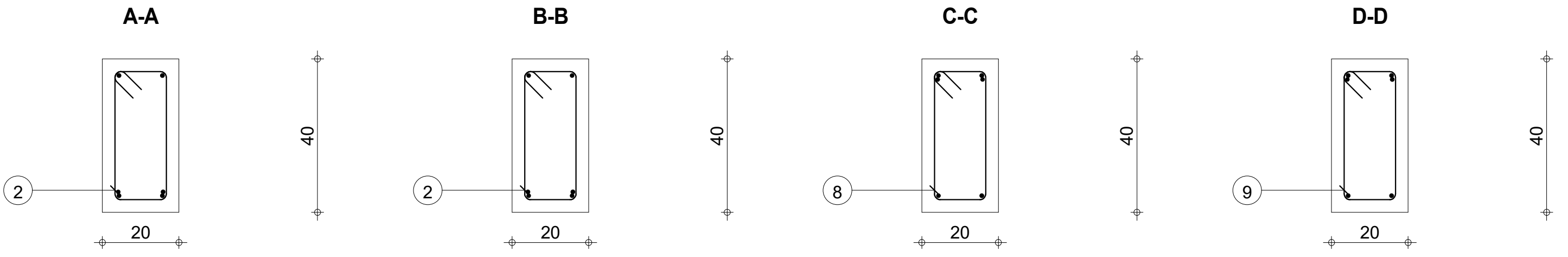
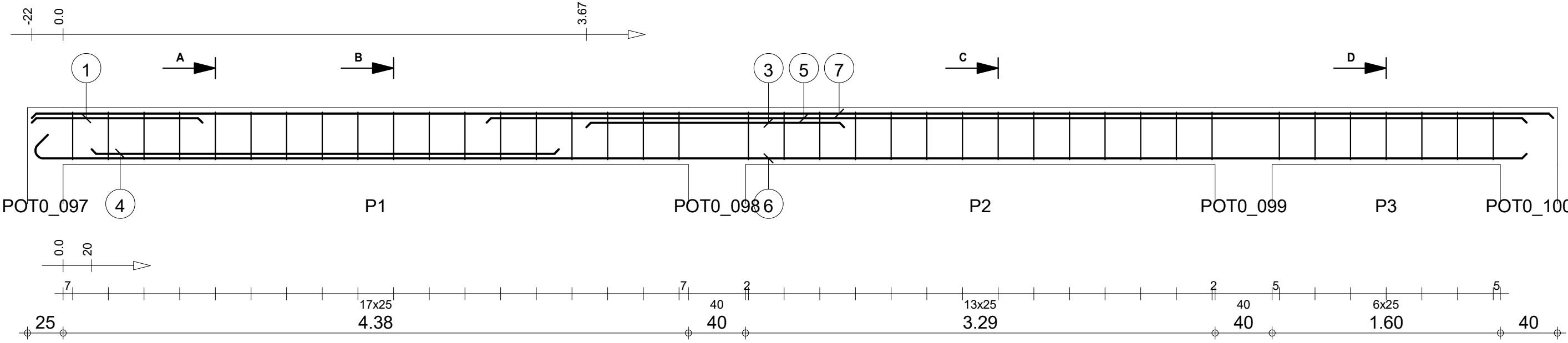
C-C

D-D



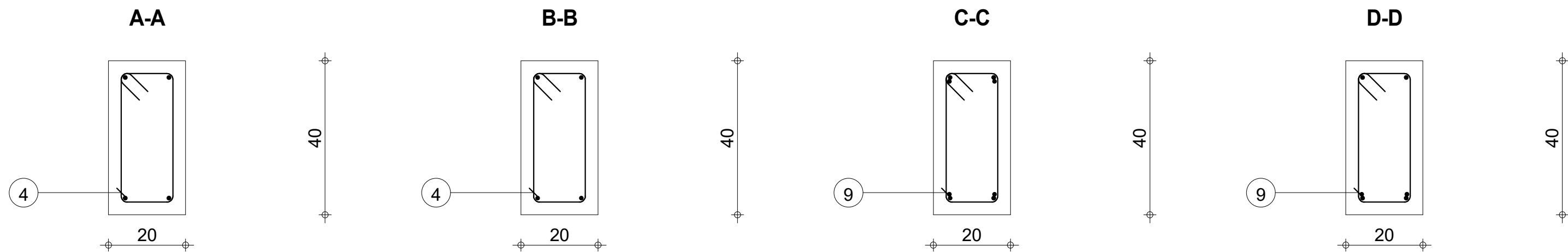
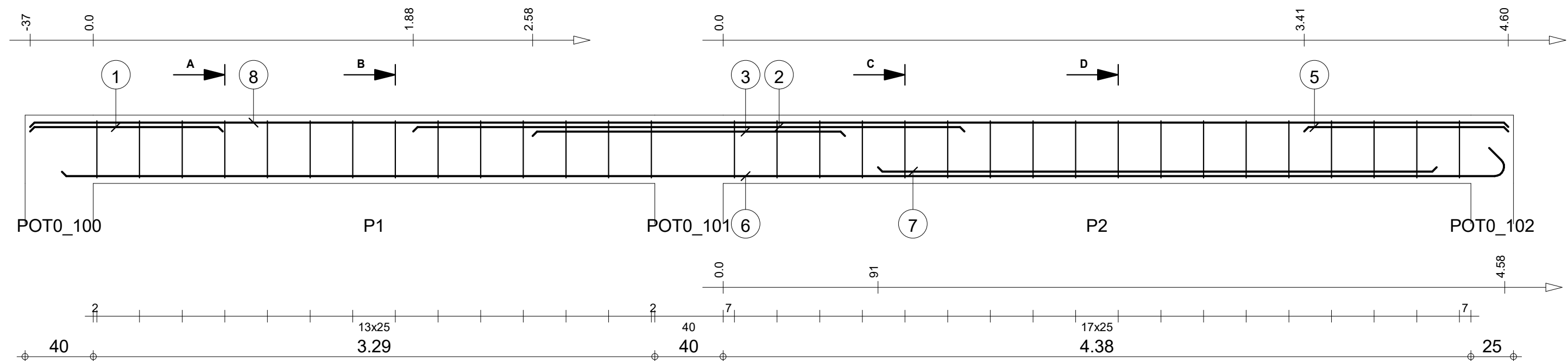
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	I=1.37	00	④	3HA 10	I=3.54	00
②	3HA 10	I=1.22	00	⑤	10HA 6	I=46	00
③	3HA 10	I=3.43	00	⑥	10HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 31: P1				Nombre 1				Béton : BETON20 = 0.288 m3		Acier HA 400 = 17.7 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 73.26 kg/ m3		Echelle pour la vue 9.73cm/m	
												Surface du coffrage = 3.63 m2		Echelle pour la section 9.34cm/m	
														Page 31/123	



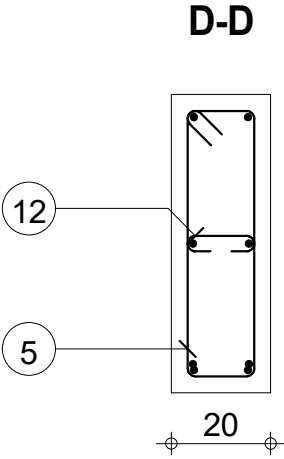
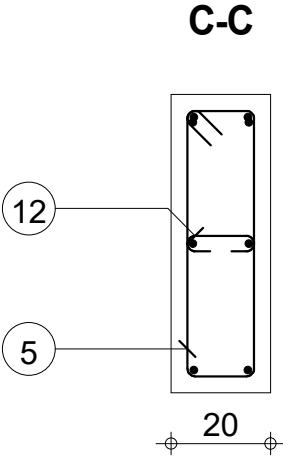
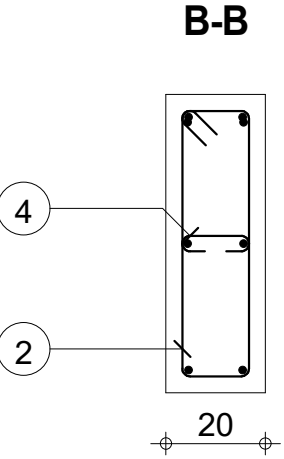
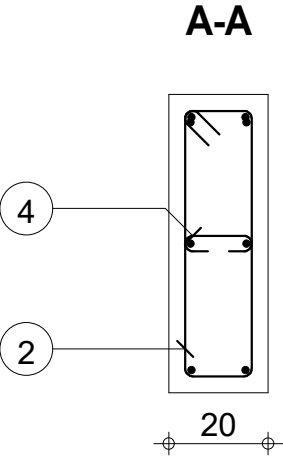
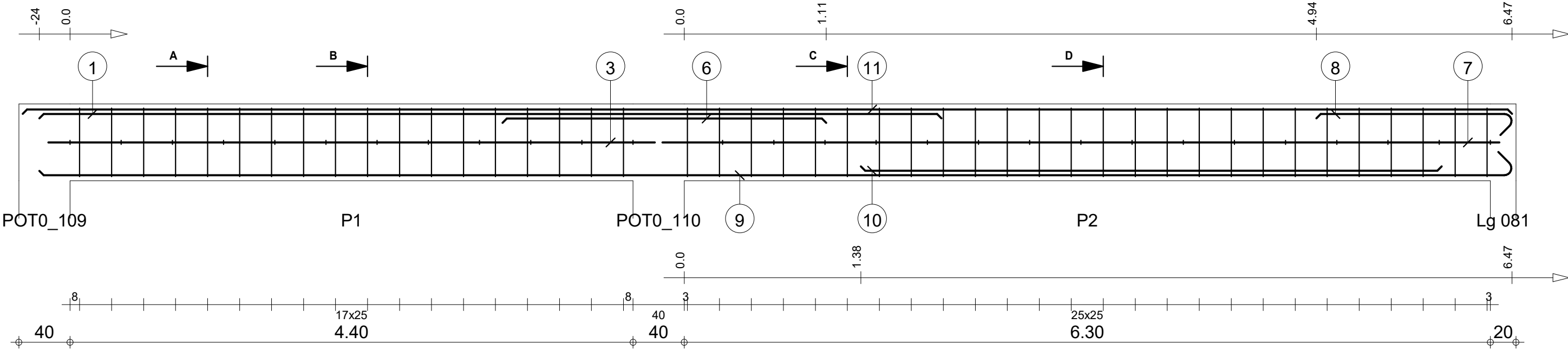
Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=1.20	00	1.20	④	2HA 10	l=3.27	00	3.28	⑦	2HA 10	l=10.67	00	10.67
②	18HA 6	l=1.08	31	14 34 6 31	⑤	2HA 10	l=7.29	00	7.29	⑧	14HA 6	l=1.08	31	14 34 6 31
③	2HA 10	l=1.81	00	1.81	⑥	2HA 10	l=10.63	00	10.46	⑨	7HA 6	l=1.08	31	14 34 6 31

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 32				Tél.		Fax		Nombre 1		Béton : BETON20 = 0.858 m3		Acier HA 400 = 43 kg	
COFFRAGE & FERRAILLAGE LONGRINES										Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 60.96 kg/ m3		Echelle pour la vue 3.41cm/m	
										Surface du coffrage = 10.6 m2		Echelle pour la section 9.34cm/m	
												Page 32/123	



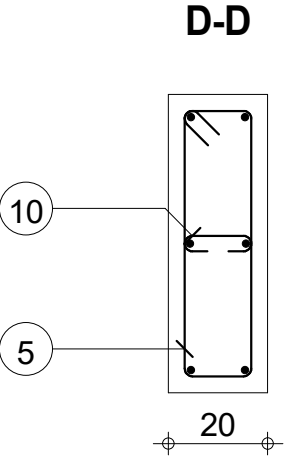
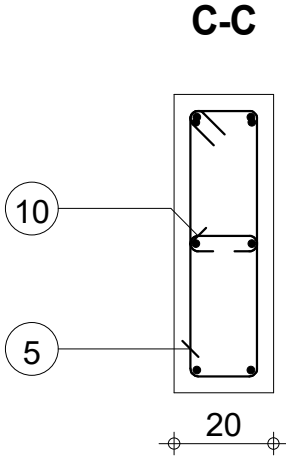
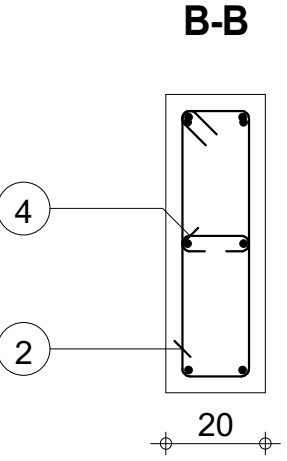
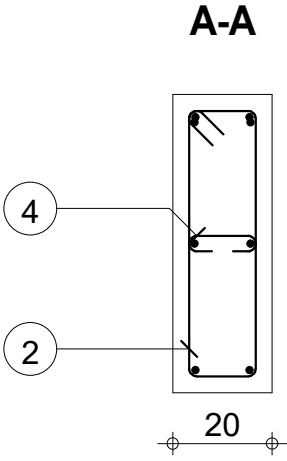
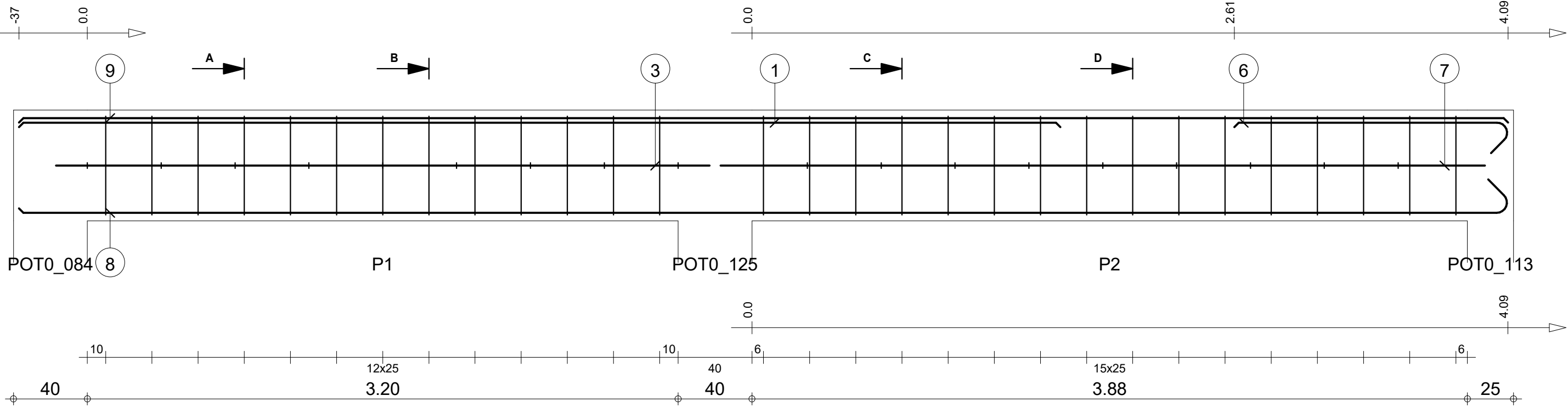
Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=1.13	00	1.13	④	14HA 6	l=1.08	31	1.08	⑦	2HA 10	l=3.27	00	3.28
②	2HA 10	l=3.23	00	3.23	⑤	2HA 10	l=1.20	00	1.20	⑧	2HA 10	l=8.67	00	8.67
③	2HA 10	l=1.83	00	1.83	⑥	2HA 10	l=8.63	00	8.63	⑨	18HA 6	l=1.08	31	1.08

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 33				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40				Béton : BETON20 = 0.698 m3			
								Acier HA 400 = 34.5 kg			
								Acier HA 400 = 7.66 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 60.32 kg/ m3			
								Echelle pour la vue 4.16cm/m			
								Surface du coffrage = 8.68 m2			
								Echelle pour la section 9.34cm/m			
								Page 33/123			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	I=7.05	00	④	12HA 6	I=26	00	⑦	2HA 12	I=6.54	00	⑩	2HA 12	I=4.54	00
②	18HA 6	I=1.48	31	⑤	26HA 6	I=1.48	31	⑧	2HA 10	I=1.70	00	⑪	2HA 10	I=11.64	00
③	2HA 12	I=4.74	00	⑥	2HA 12	I=2.53	00	⑨	2HA 12	I=11.70	00	⑫	16HA 6	I=26	00

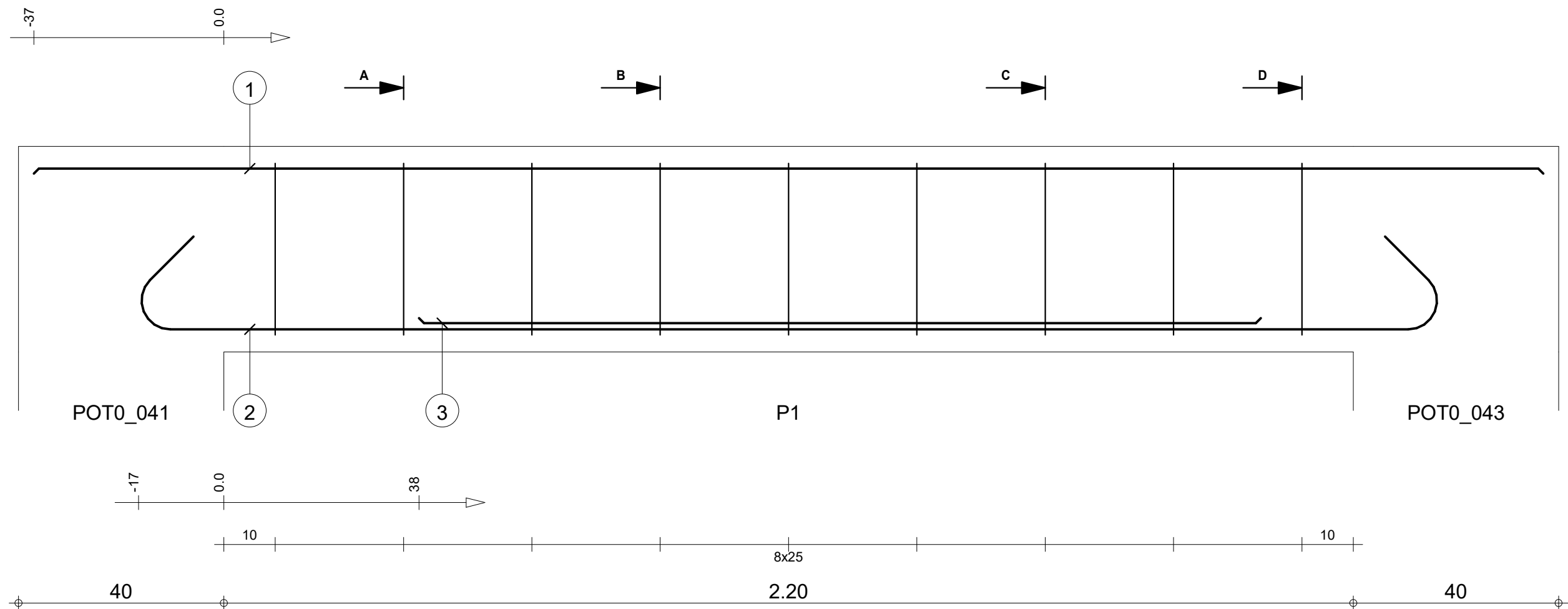
STRUCTURE BATIMENT CEA/ITECH-MTV Lg 34										Nombre 1		Béton : BETON20 = 1.4 m3		Acier HA 400 = 62.3 kg	
COFFRAGE & FERRAILLAGE LONGRINES												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 70.29 kg/ m3		Echelle pour la vue 3.13cm/m	
												Surface du coffrage = 16.4 m2		Echelle pour la section 6.58cm/m	
														Page 34/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	I=5.64	00	④	9HA 6	I=26	00	⑦	2HA 12	I=4.14	00	⑩	9HA 6	I=26	00
②	13HA 6	I=1.48	31	⑤	16HA 6	I=1.48	31	⑧	2HA 12	I=8.26	00				
③	2HA 12	I=3.54	00	⑥	2HA 10	I=1.65	00	⑨	2HA 10	I=8.06	00				

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 35										Nombre 1		Béton : BETON20 = 0.975 m3		Acier HA 400 = 36.7 kg	
COFFRAGE & FERRAILLAGE LONGRINES												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 62.36 kg/ m3		Echelle pour la vue 4.46cm/m	
												Surface du coffrage = 11.4 m2		Echelle pour la section 6.58cm/m	
														Page 35/123	

		Tél.	Fax		
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE LONGRINES	Lg 36: P1 Section 20x40	Nombre 1	Béton : BETON20 = 0.224 m3	Acier HA 400 = 7.59 kg Acier HA 400 = 2.39 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 44.6 kg/ m3 Surface du coffrage = 2.88 m2	Echelle pour la vue 10.9cm/m Echelle pour la section 9.34cm/m	Page 36/123

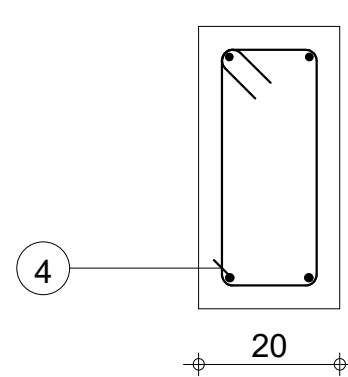


A-A

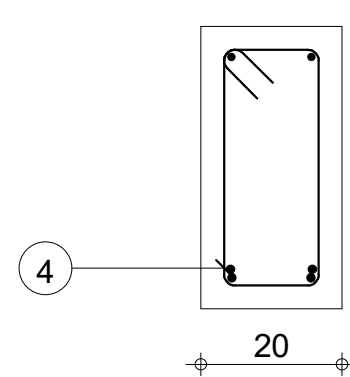
B-B

C-C

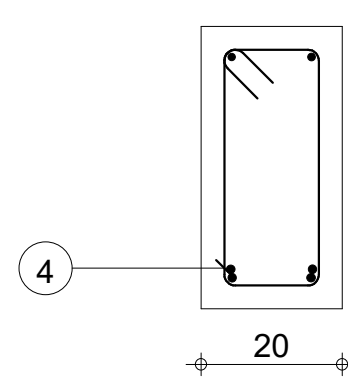
D-D



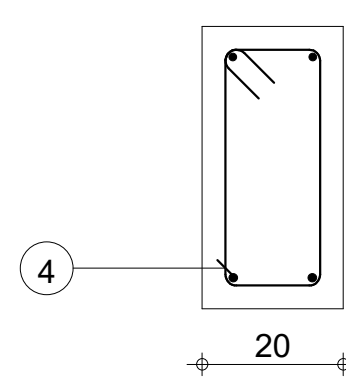
40



40



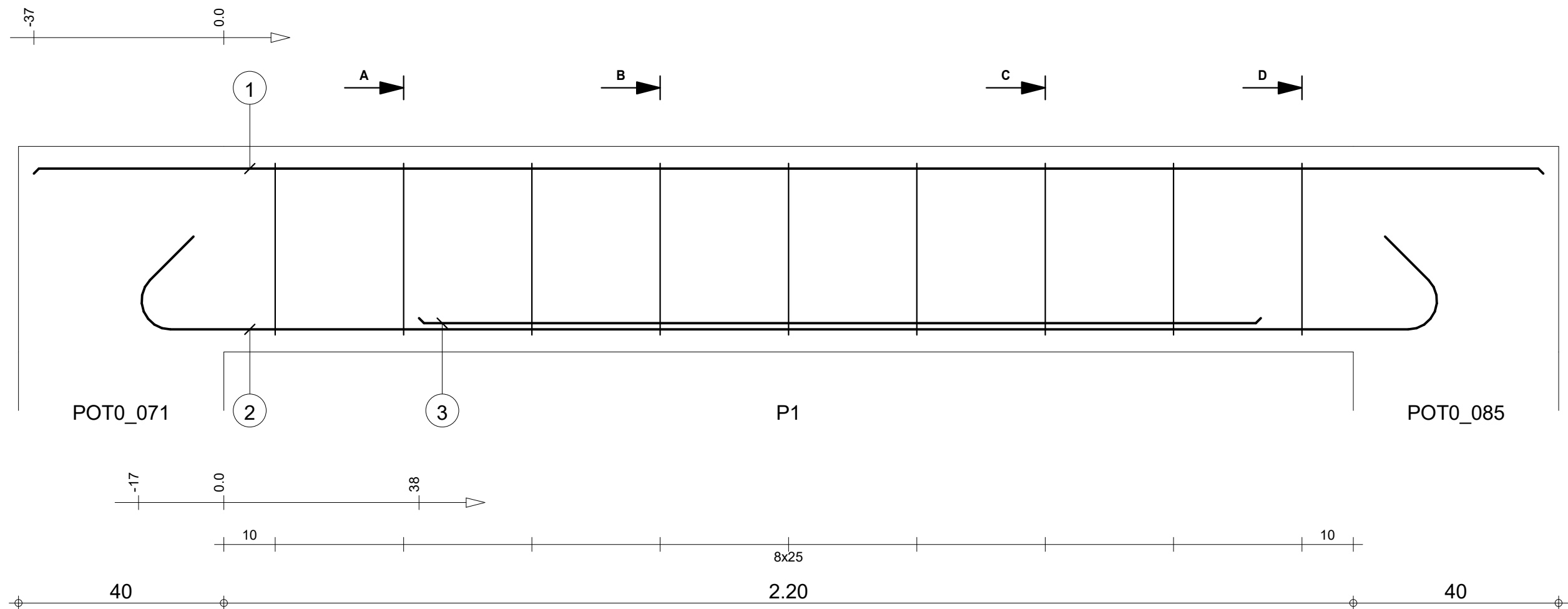
40



40

Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=2.94	00	④	9HA 6	l=1.08	31
②	2HA 12	l=2.92	00				
③	2HA 12	l=1.64	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 37: P1		Nombre 1		Béton : BETON20 = 0.24 m3		Acier HA 400 = 11.7 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 57.92 kg/ m3		Echelle pour la vue 10.9cm/m	
						Surface du coffrage = 3 m2		Echelle pour la section 9.34cm/m	
								Page 37/123	

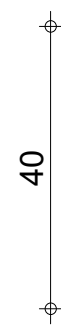
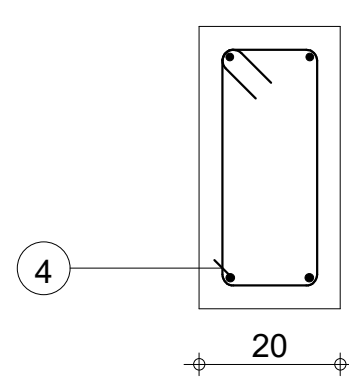
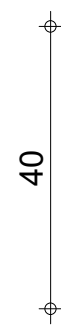
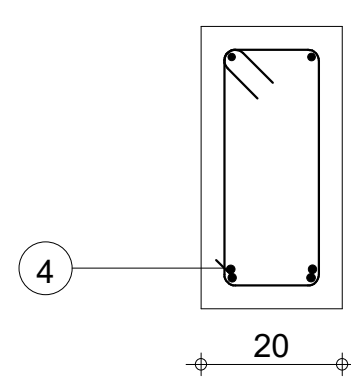
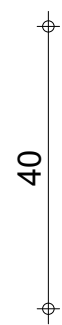
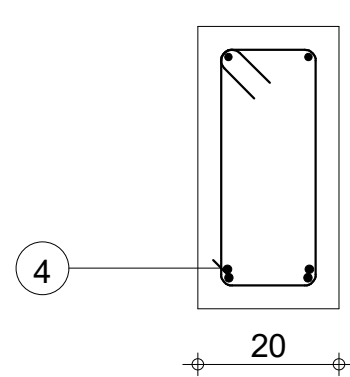
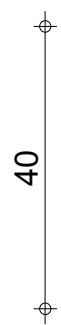
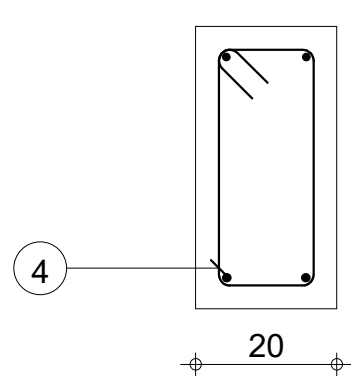


A-A

B-B

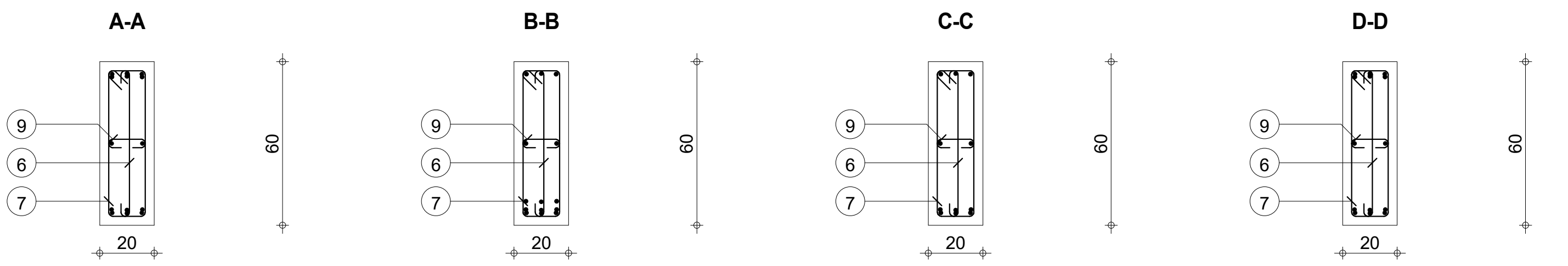
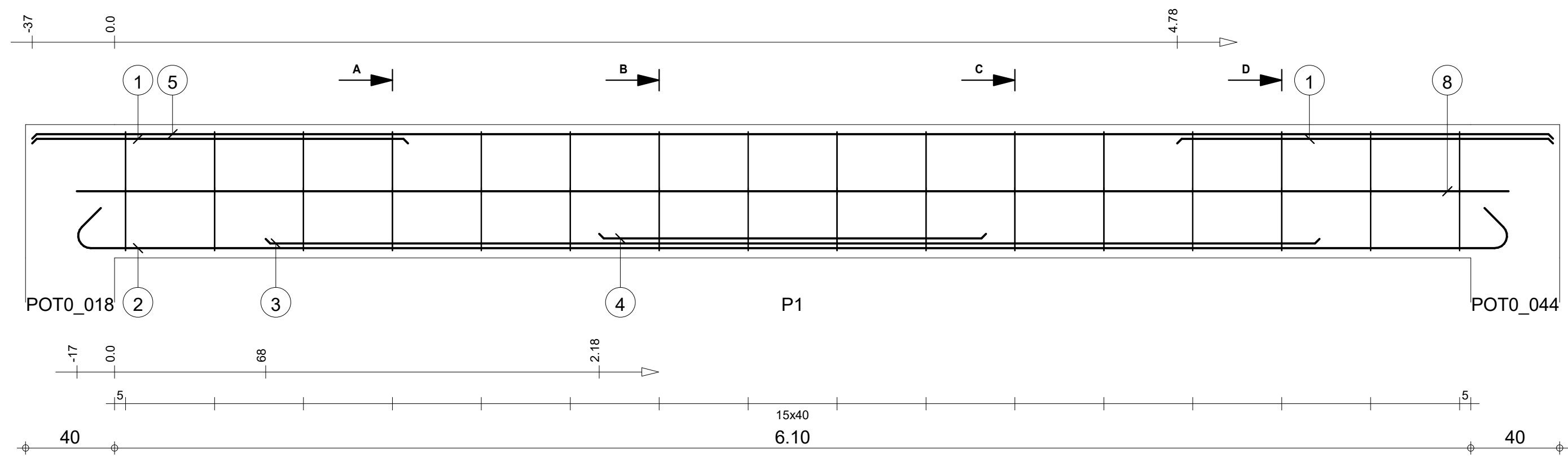
C-C

D-D



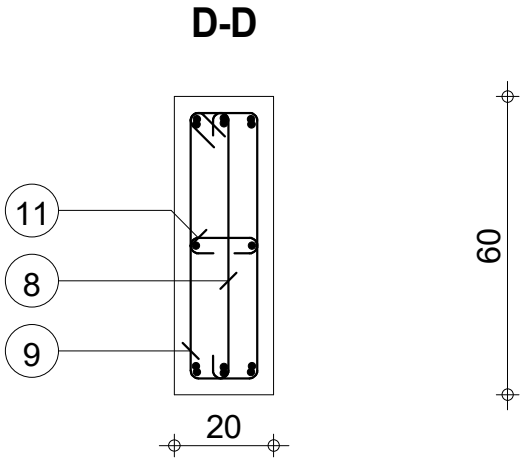
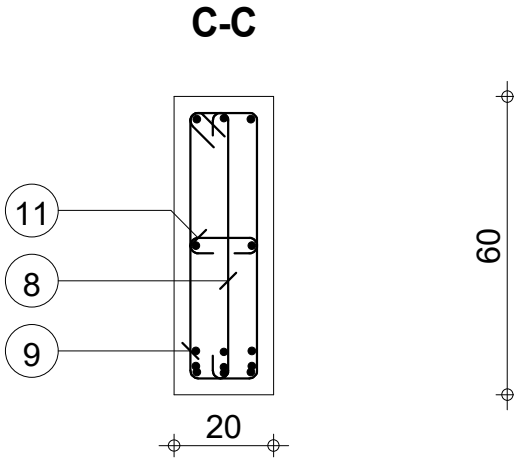
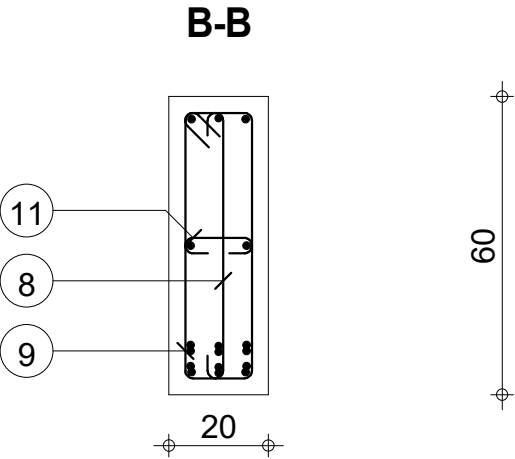
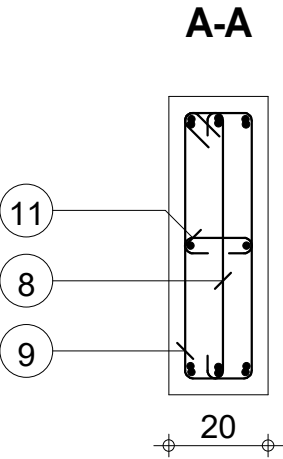
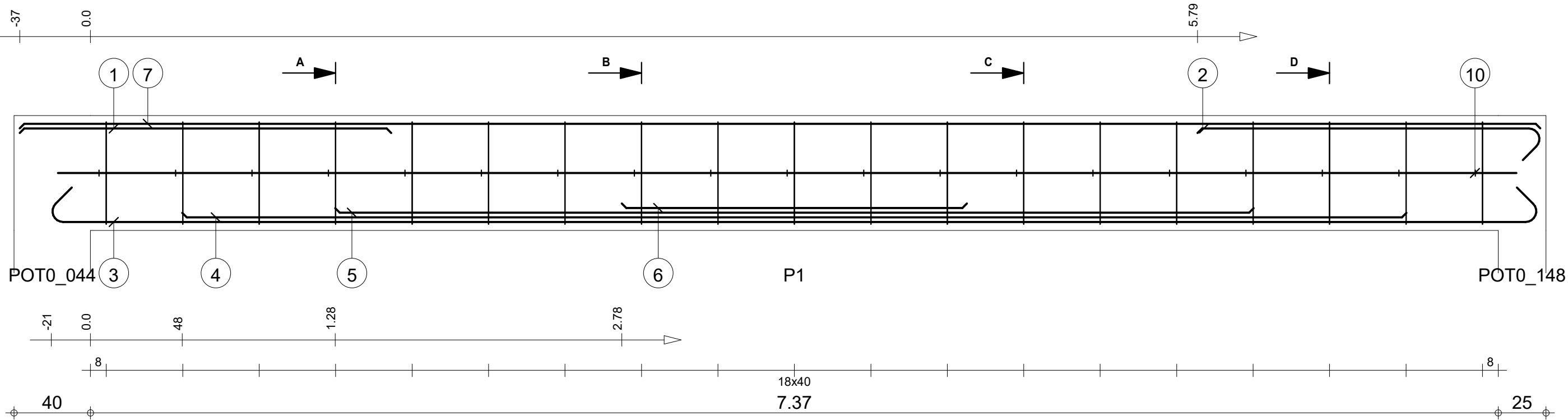
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=2.94	00	④	9HA 6	l=1.08	31
②	2HA 12	l=2.92	00				
③	2HA 12	l=1.64	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 38: P1		Nombre 1		Béton : BETON20 = 0.24 m3		Acier HA 400 = 11.7 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 57.92 kg/ m3		Echelle pour la vue 10.9cm/m	
						Surface du coffrage = 3 m2		Echelle pour la section 9.34cm/m	
								Page 38/123	



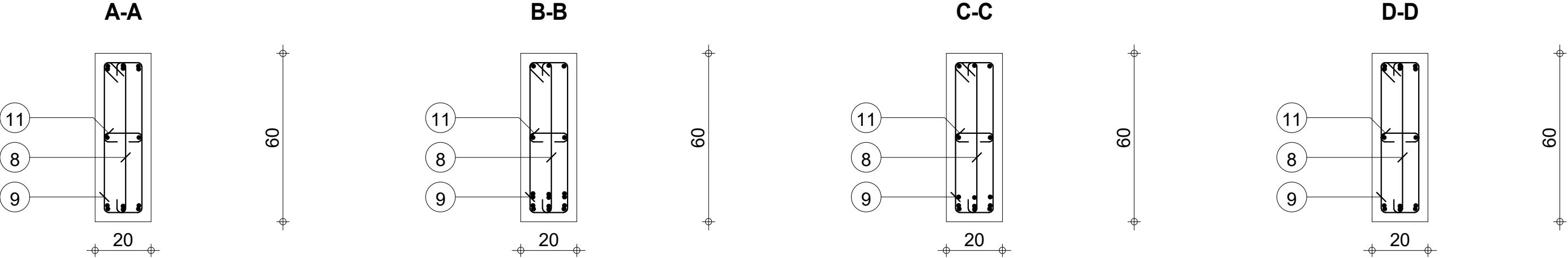
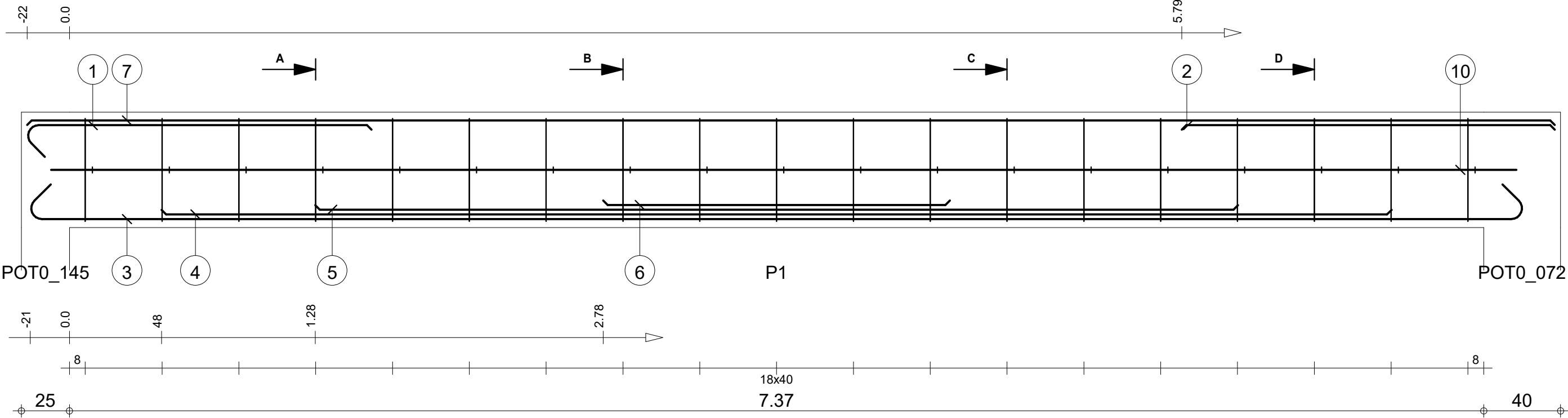
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	6HA 10	I=1.69	00		④	3HA 12	I=1.74	00		⑦	16HA 6	I=1.48	31	
②	3HA 12	I=6.82	00		⑤	3HA 10	I=6.84	00		⑧	2HA 12	I=6.44	00	
③	3HA 12	I=4.74	00		⑥	16HA 6	I=66	00		⑨	16HA 6	I=26	00	

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 39: P1				Nombre 1				Béton : BETON20 = 0.828 m3		Acier HA 400 = 54.3 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 89.73 kg/ m3		Echelle pour la vue 5.22cm/m	
												Surface du coffrage = 9.74 m2		Echelle pour la section 6.58cm/m	
														Page 39/123	



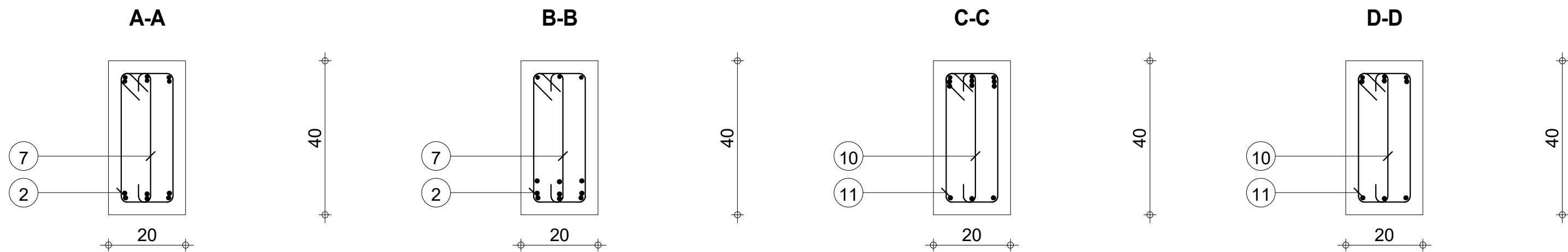
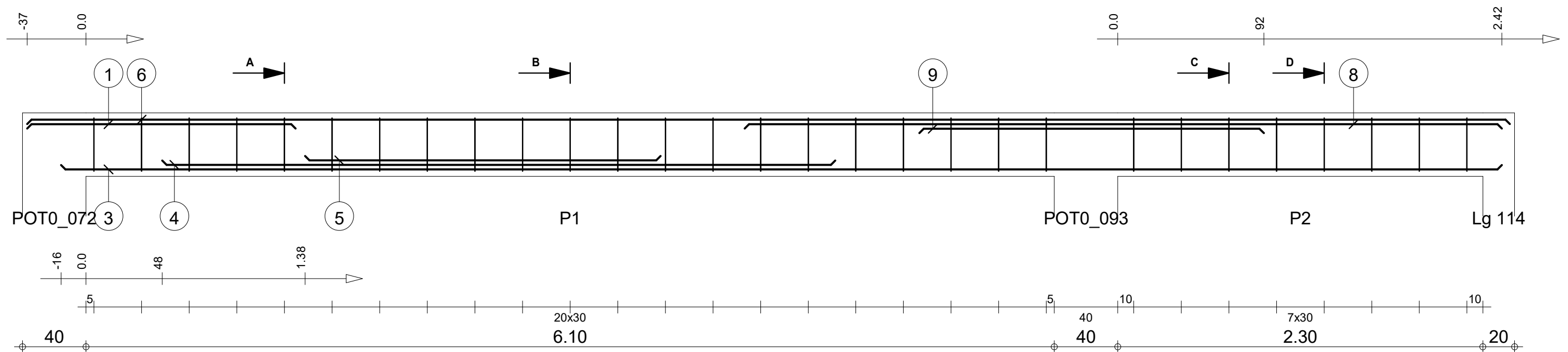
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	3HA 10	I=1.94	00	1.94	④	3HA 12	I=6.41	00	6.41	⑦	3HA 10	I=7.96	00	7.96	⑩	2HA 12	I=7.63	00	7.63
②	3HA 10	I=1.96	00	1.79	⑤	3HA 12	I=4.80	00	4.81	⑧	19HA 6	I=66	00	554	⑪	19HA 6	I=26	00	514
③	3HA 12	I=8.15	00	7.77	⑥	3HA 12	I=1.80	00	1.81	⑨	19HA 6	I=1.48	31	14					

		Tél.		Fax			
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 40: P1	Nombre 1	Béton : BETON20 = 0.962 m3		Acier HA 400 = 78.3 kg		
					Acier HA 400 = 23.7 kg		
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		
			Enrobage latéral 3 cm				
COFFRAGE & FERRAILLAGE LONGRINES	Section 20x60		Densité = 106 kg/ m3		Echelle pour la vue 4.52cm/m		
			Surface du coffrage = 11.3 m2		Echelle pour la section 6.58cm/m		
						Page 40/123	



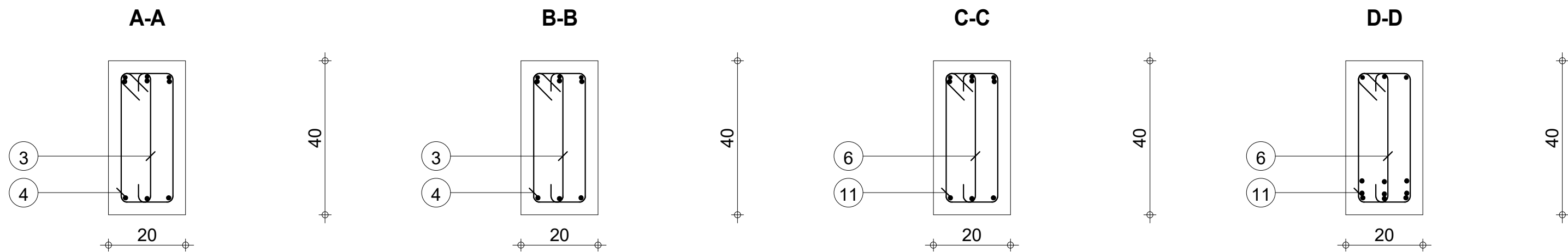
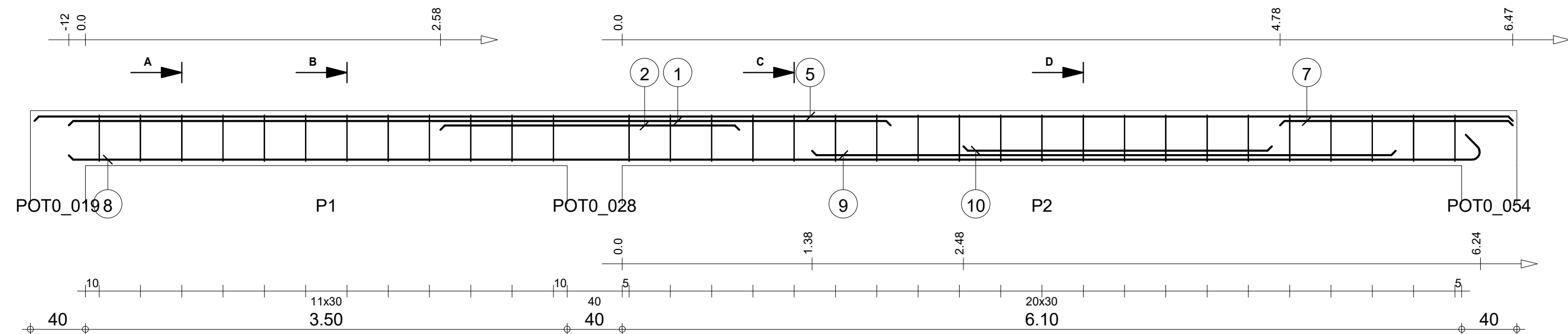
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	I=1.96	00	④	3HA 12	I=6.41	00	⑦	3HA 10	I=7.96	00	⑩	2HA 12	I=7.63	00
②	3HA 10	I=1.94	00	⑤	3HA 12	I=4.80	00	⑧	19HA 6	I=66	00	⑪	19HA 6	I=26	00
③	3HA 12	I=8.15	00	⑥	3HA 12	I=1.80	00	⑨	19HA 6	I=1.48	31				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 41: P1				Nombre 1				Béton : BETON20 = 0.962 m3				Acier HA 400 = 78.3 kg			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 106 kg/ m3				Echelle pour la vue 4.52cm/m			
												Surface du coffrage = 11.3 m2				Echelle pour la section 6.58cm/m			
																Page 41/123			



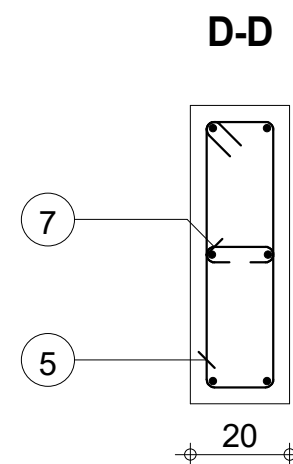
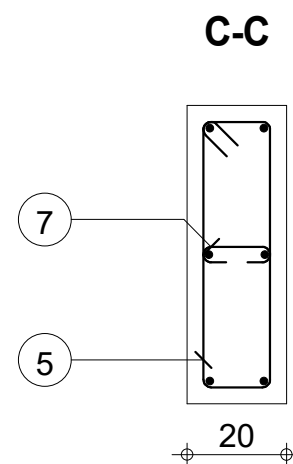
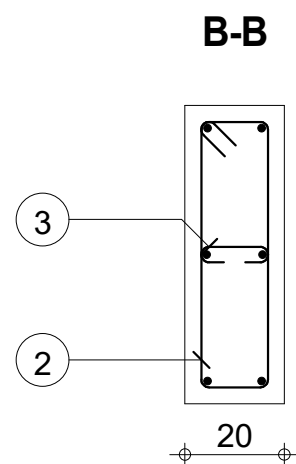
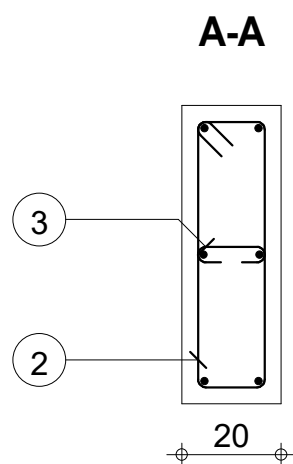
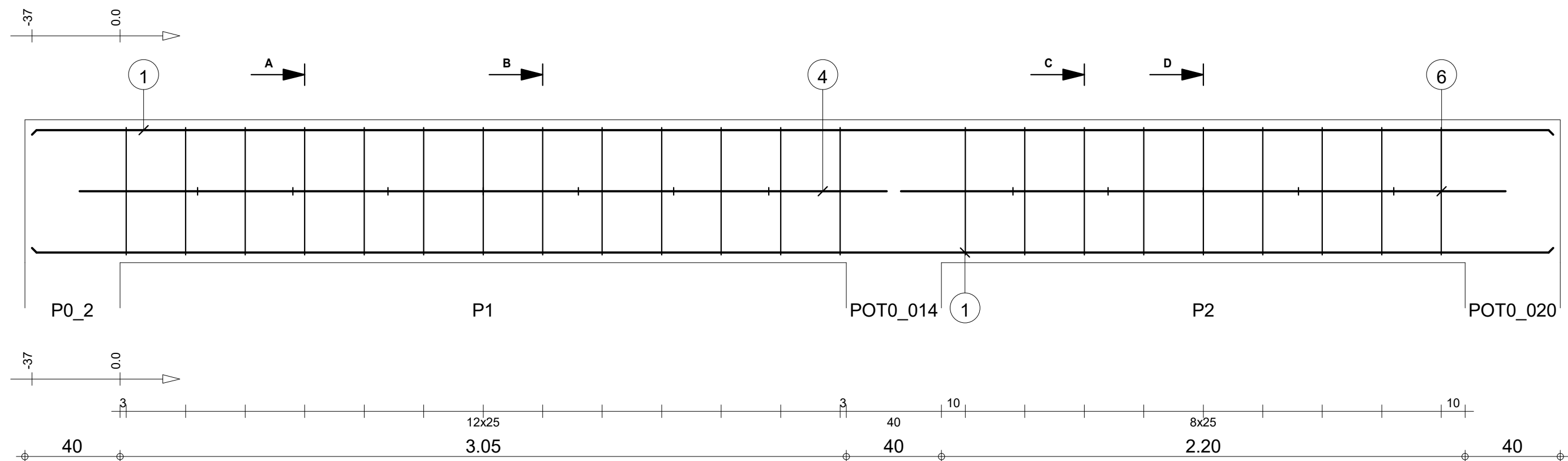
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	I=1.69	00	④	3HA 12	I=4.24	00	⑦	21HA 6	I=46	00	⑩	8HA 6	I=46	00
②	21HA 6	I=1.08	31	⑤	3HA 12	I=2.24	00	⑧	3HA 12	I=4.77	00	⑪	8HA 6	I=1.08	31
③	3HA 12	I=9.08	00	⑥	3HA 10	I=9.34	00	⑨	3HA 12	I=2.17	00				

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 42										Tél.		Fax		Nombre 1		Béton : BETON20 = 0.752 m3		Acier HA 400 = 80.3 kg	
COFFRAGE & FERRAILLAGE LONGRINES																Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
																Densité = 119.9 kg/ m3		Echelle pour la vue 3.87cm/m	
																Surface du coffrage = 9.36 m2		Echelle pour la section 9.34cm/m	
																		Page 42/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12	I=5.97	00	④	12HA 6	I=1.08	31	⑦	3HA 10	I=1.69	00	⑩	3HA 12	I=2.24	00
②	3HA 12	I=2.17	00	⑤	3HA 10	I=10.74	00	⑧	3HA 12	I=10.45	00	⑪	21HA 6	I=1.08	31
③	12HA 6	I=46	00	⑥	21HA 6	I=46	00	⑨	3HA 12	I=4.24	00				

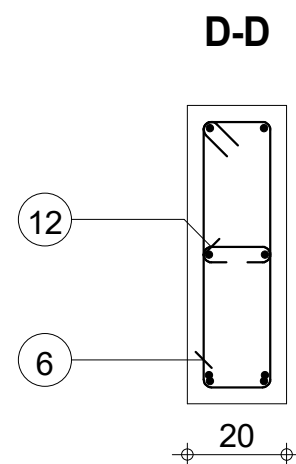
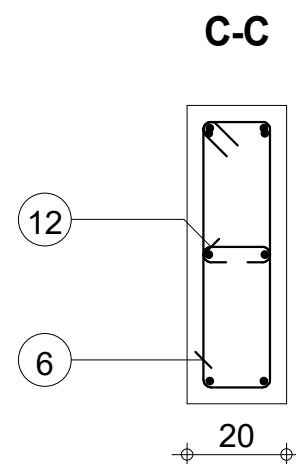
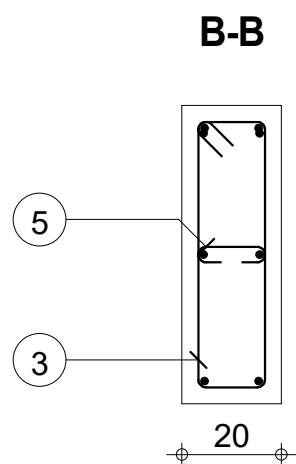
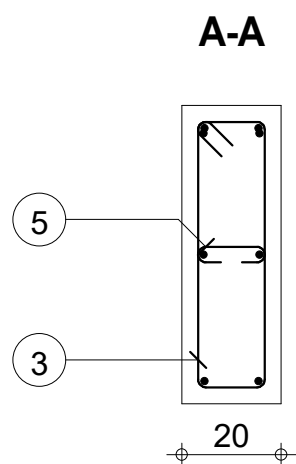
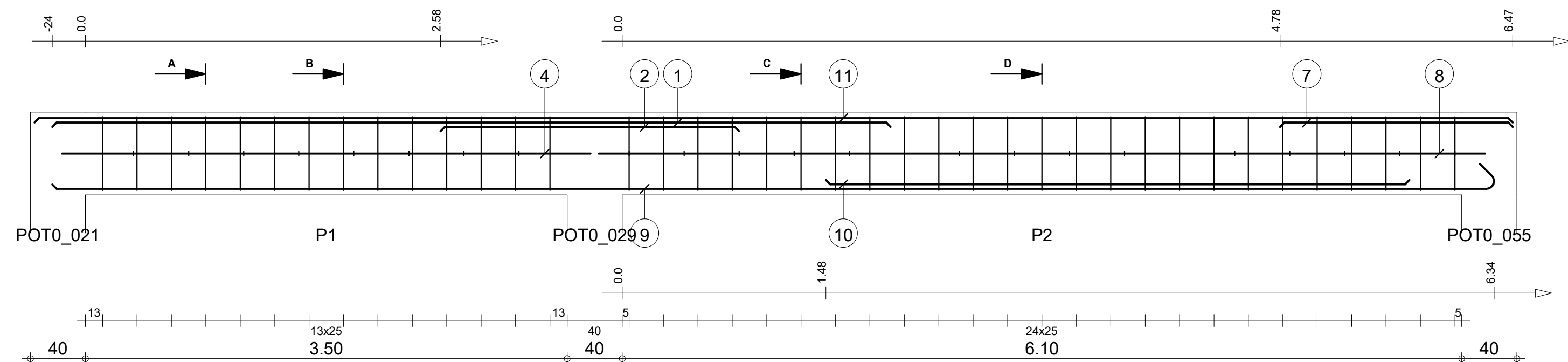
Tél. Fax										Béton : BETON20 = 0.864 m3		Acier HA 400 = 89.8 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV Lg 43										Enrobage inférieur 3 cm		Acier HA 400 = 11.3 kg	
COFFRAGE & FERRAILLAGE LONGRINES										Densité = 116.9 kg/ m3		Enrobage supérieur 3 cm	
Section 20x40										Surface du coffrage = 10.7 m2		Enrobage latéral 3 cm	
Nombre 1										Echelle pour la vue 3.38cm/m		Echelle pour la section 9.34cm/m	
												Page 43/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	l=6.39	00	④	2HA 12	l=3.39	00	⑦	5HA 6	l=26	00
②	13HA 6	l=1.48	31	⑤	9HA 6	l=1.48	31				
③	7HA 6	l=26	00	⑥	2HA 12	l=2.54	00				

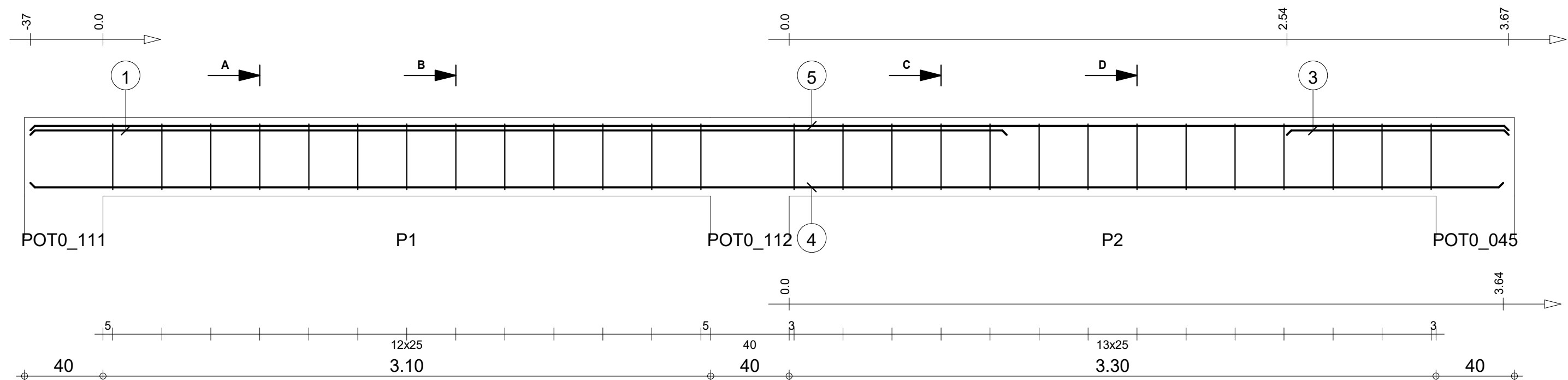
STRUCTURE BATIMENT CEA/ITECH-MTV Lg 44				Tél.		Fax		Nombre 1		Béton : BETON20 = 0.774 m3		Acier HA 400 = 15.8 kg	
COFFRAGE & FERRAILLAGE LONGRINES										Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 44.19 kg/ m3		Echelle pour la vue 5.57cm/m	
										Surface du coffrage = 9.03 m2		Echelle pour la section 6.58cm/m	
												Page 44/123	

Section 20x60



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 12	I=6.09	00	6.09	④	2HA 12	I=3.84	00	3.84	⑦	2HA 10	I=1.69	00	1.69	⑩	2HA 12	I=4.24	00	4.24
②	2HA 12	I=2.17	00	2.17	⑤	8HA 6	I=26	00	5 14	⑧	2HA 12	I=6.44	00	6.44	⑪	2HA 10	I=10.74	00	10.74
③	14HA 6	I=1.48	31	14 25 1.48	⑥	25HA 6	I=1.48	31	14 25 1.48	⑨	2HA 12	I=10.67	00	10.48 5	⑫	16HA 6	I=26	00	5 14

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 45										Tél.		Fax		Nombre 1		Acier HA 400 = 56.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES										Béton : BETON20 = 1.3 m3		Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
Section 20x60										Densité = 68.38 kg/ m3		Surface du coffrage = 15.1 m2		Echelle pour la vue 3.38cm/m		Echelle pour la section 6.58cm/m	
																Page 45/123	

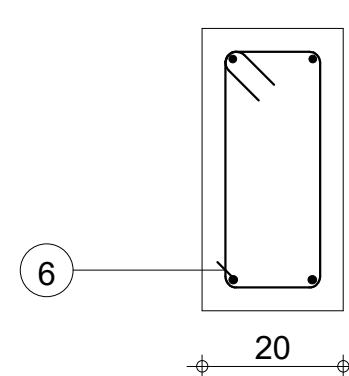
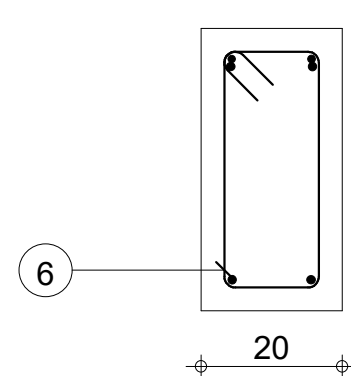
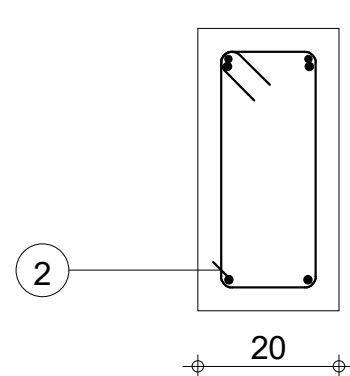
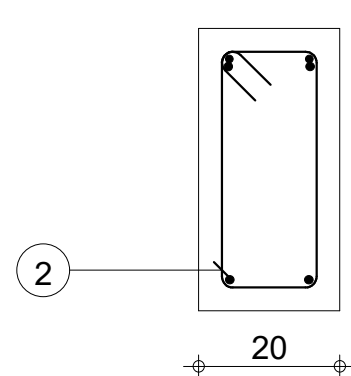


A-A

B-B

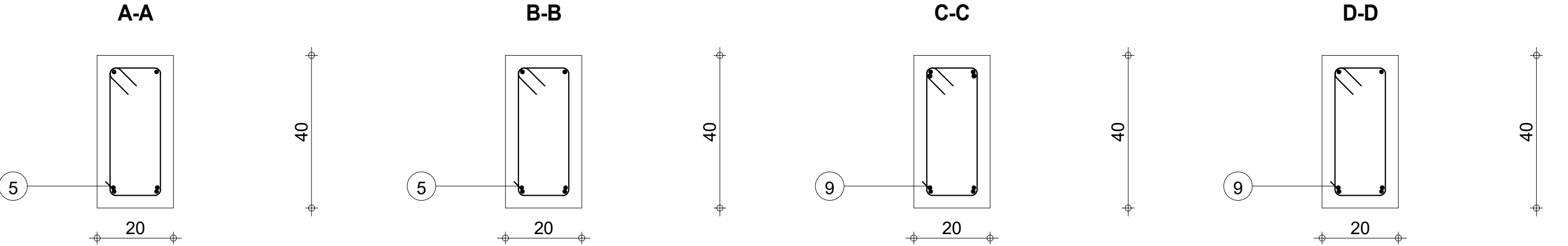
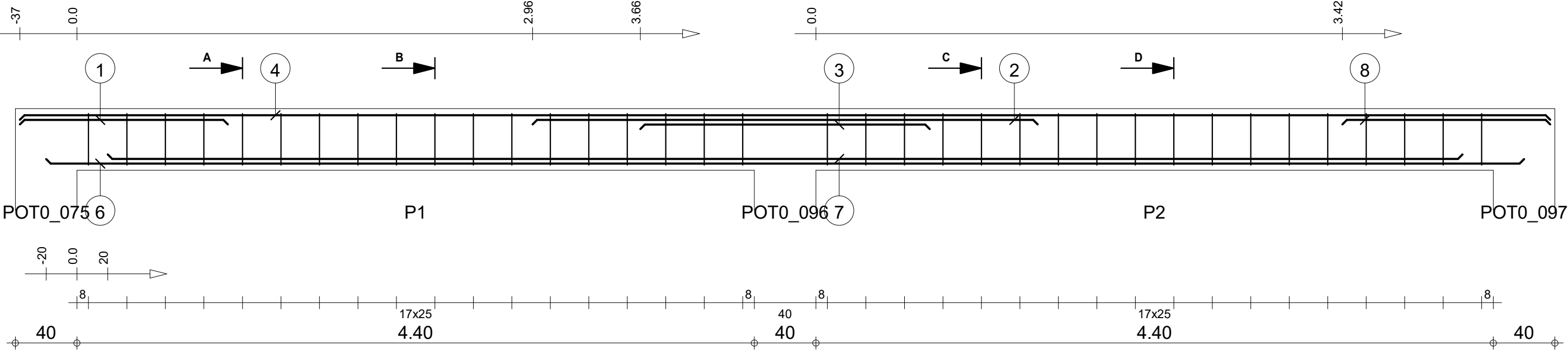
C-C

D-D



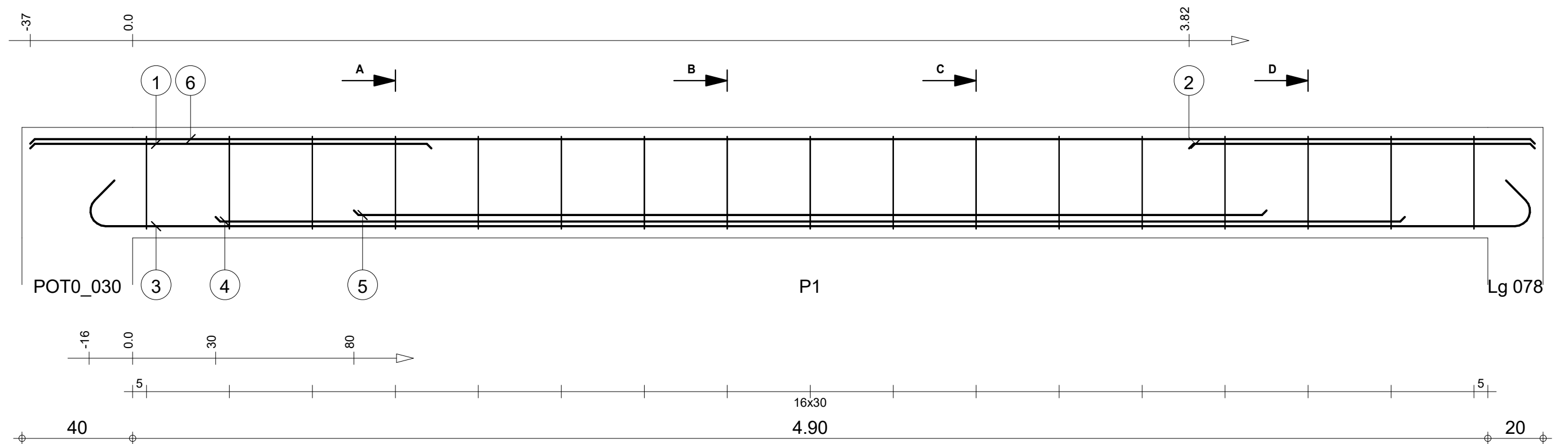
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	l=4.98	00	④	2HA 12	l=7.51	00
②	13HA 6	l=1.08	31	⑤	2HA 10	l=7.54	00
③	2HA 10	l=1.13	00	⑥	14HA 6	l=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 46				Tél.		Fax		Nombre 1		Béton : BETON20 = 0.608 m3		Acier HA 400 = 32.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES										Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
Section 20x40										Densité = 64.64 kg/ m3		Echelle pour la vue 4.75cm/m	
										Surface du coffrage = 7.52 m2		Echelle pour la section 9.34cm/m	
												Page 46/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.35	00	④	2HA 10	I=9.94	00	⑦	2HA 10	I=8.80	00
②	2HA 12	I=3.28	00	⑤	18HA 6	I=1.07	31	⑧	2HA 10	I=1.35	00
③	2HA 12	I=1.88	00	⑥	2HA 10	I=9.60	00	⑨	18HA 6	I=1.07	31

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 47				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40				Béton : BETON20 = 0.8 m3			
								Acier HA 400 = 47.4 kg			
								Acier HA 400 = 8.58 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 70 kg/ m3			
								Surface du coffrage = 9.92 m2			
								Echelle pour la vue 3.65cm/m			
								Echelle pour la section 9.34cm/m			
								Page 47/123			

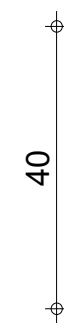
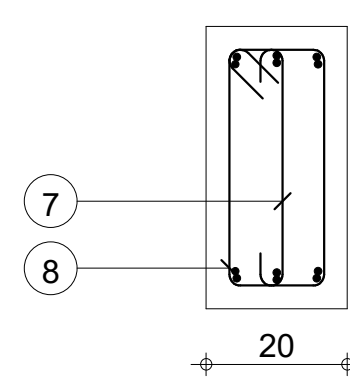
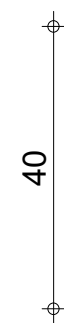
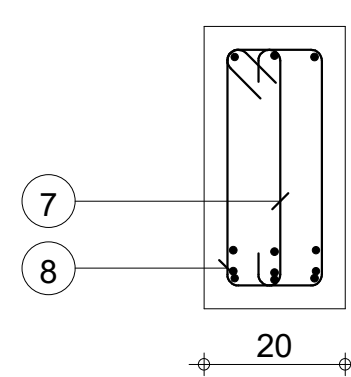
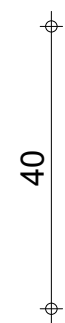
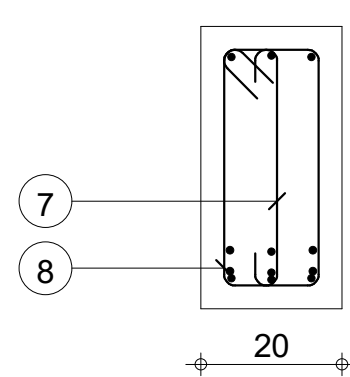
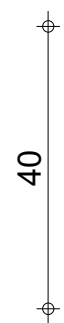
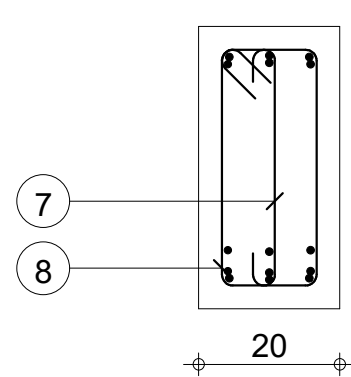


A-A

B-B

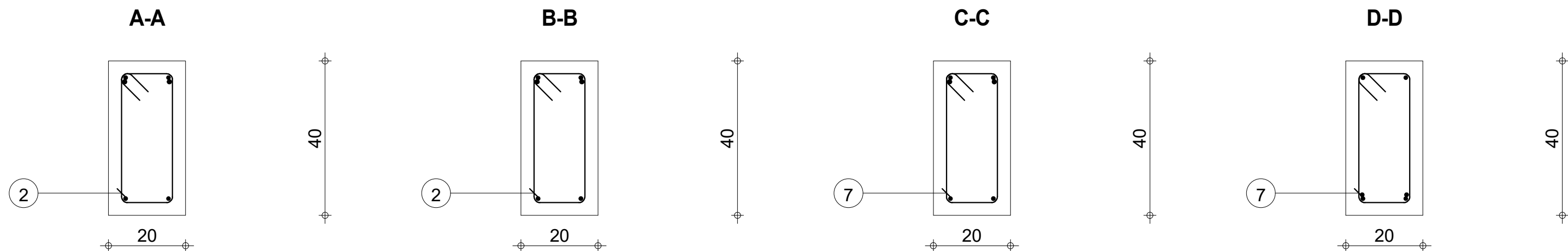
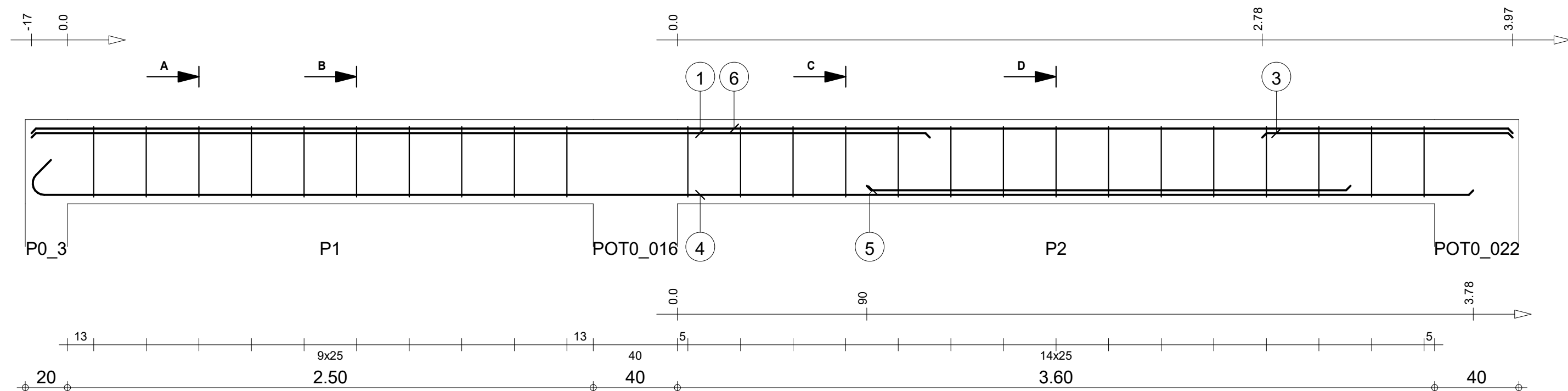
C-C

D-D



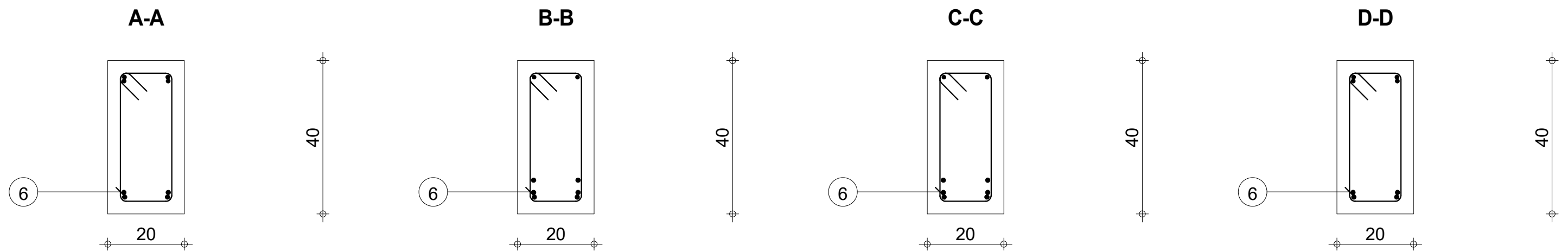
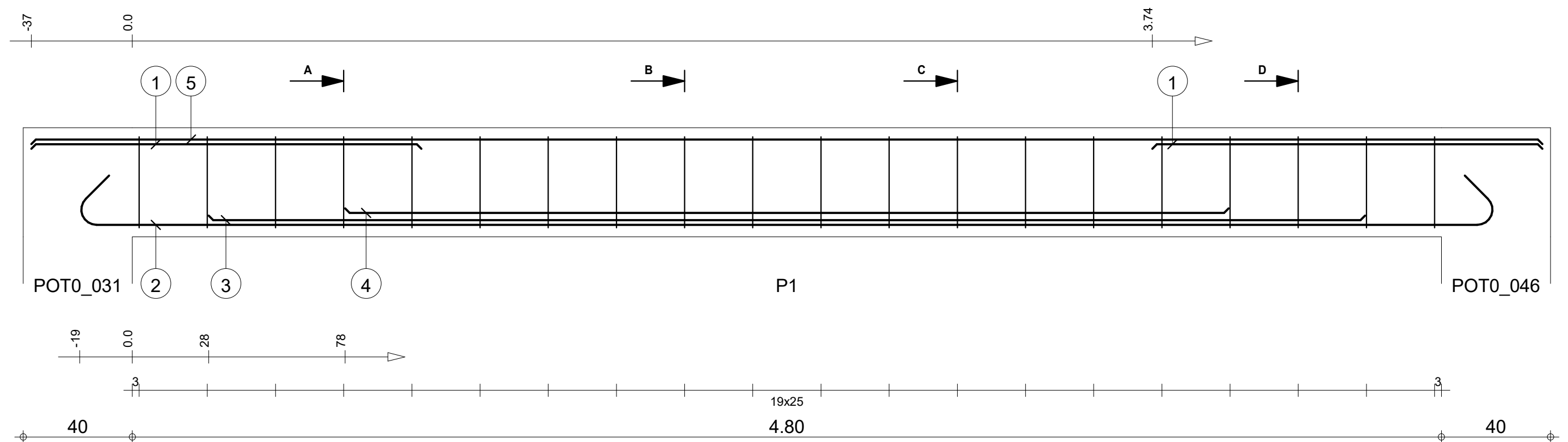
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	l=1.45	00	④	3HA 10	l=4.30	00	⑦	17HA 6	l=46	00
②	3HA 10	l=1.25	00	⑤	3HA 10	l=3.30	00	⑧	17HA 6	l=1.08	31
③	3HA 10	l=5.55	00	⑥	3HA 10	l=5.44	00				

Tél.				Fax			
STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 48: P1			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40			
				Nombre 1			
				Béton : BETON20 = 0.44 m3			
				Acier HA 400 = 39.4 kg			
				Enrobage inférieur 3 cm			
				Enrobage supérieur 3 cm			
				Enrobage latéral 3 cm			
				Densité = 102.7 kg/ m3			
				Surface du coffrage = 5.54 m2			
				Echelle pour la vue 6.49cm/m			
				Echelle pour la section 9.34cm/m			
				Page 48/123			



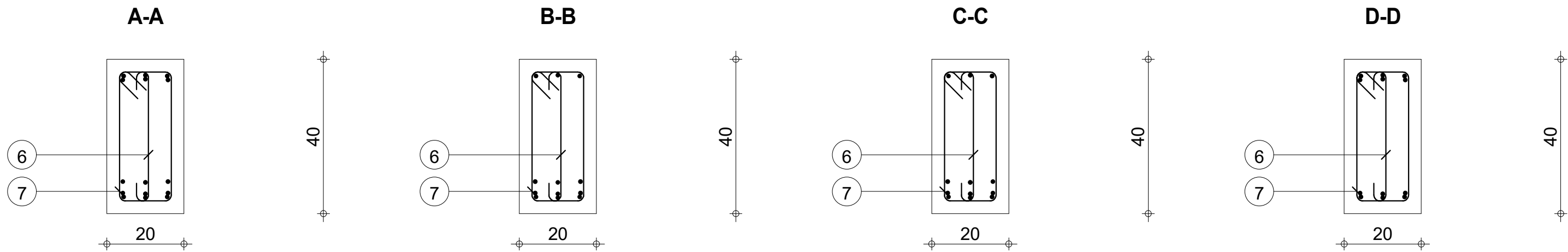
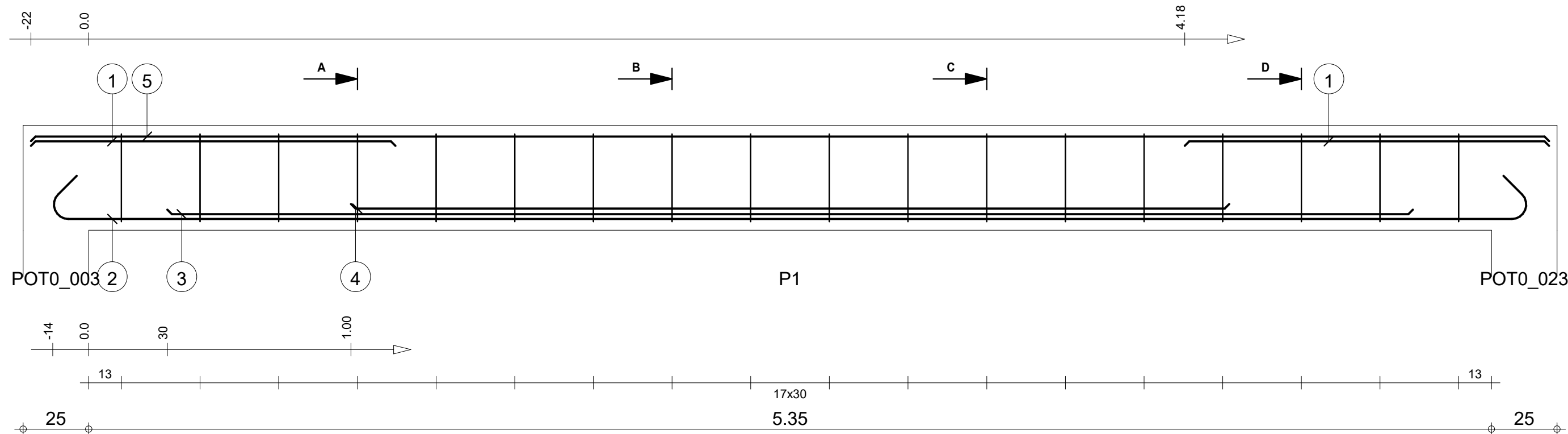
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	I=4.27	00	④	2HA 10	I=7.02	00	⑦	15HA 6	I=1.07	31
②	10HA 6	I=1.07	31	⑤	2HA 10	I=2.30	00				
③	2HA 10	I=1.19	00	⑥	2HA 10	I=7.04	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 49				Nombre 1				Béton : BETON20 = 0.568 m3		Acier HA 400 = 29.2 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 61.97 kg/ m3		Echelle pour la vue 5.08cm/m	
												Surface du coffrage = 7.06 m2		Echelle pour la section 9.34cm/m	
														Page 49/123	



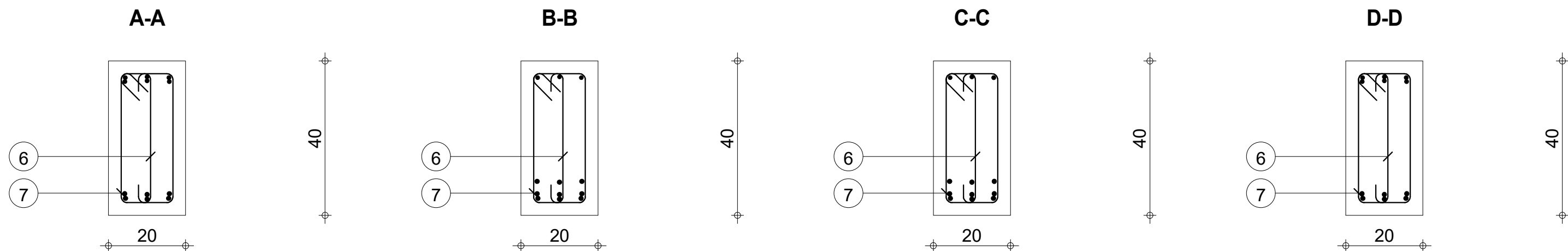
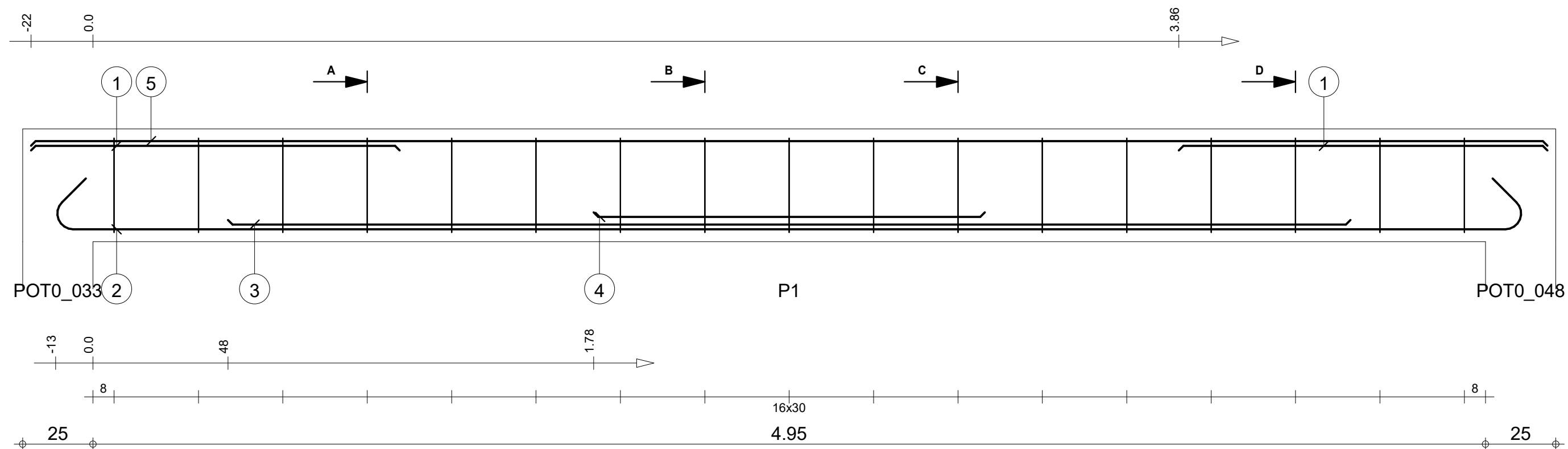
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	l=1.43	00	④	2HA 12	l=3.24	00
②	2HA 12	l=5.57	00	⑤	2HA 10	l=5.54	00
③	2HA 12	l=4.24	00	⑥	20HA 6	l=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 50: P1				Nombre 1				Béton : BETON20 = 0.448 m3				Acier HA 400 = 33.5 kg			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 85.49 kg/ m3				Echelle pour la vue 6.38cm/m			
												Surface du coffrage = 5.6 m2				Echelle pour la section 9.34cm/m			
																Page 50/123			



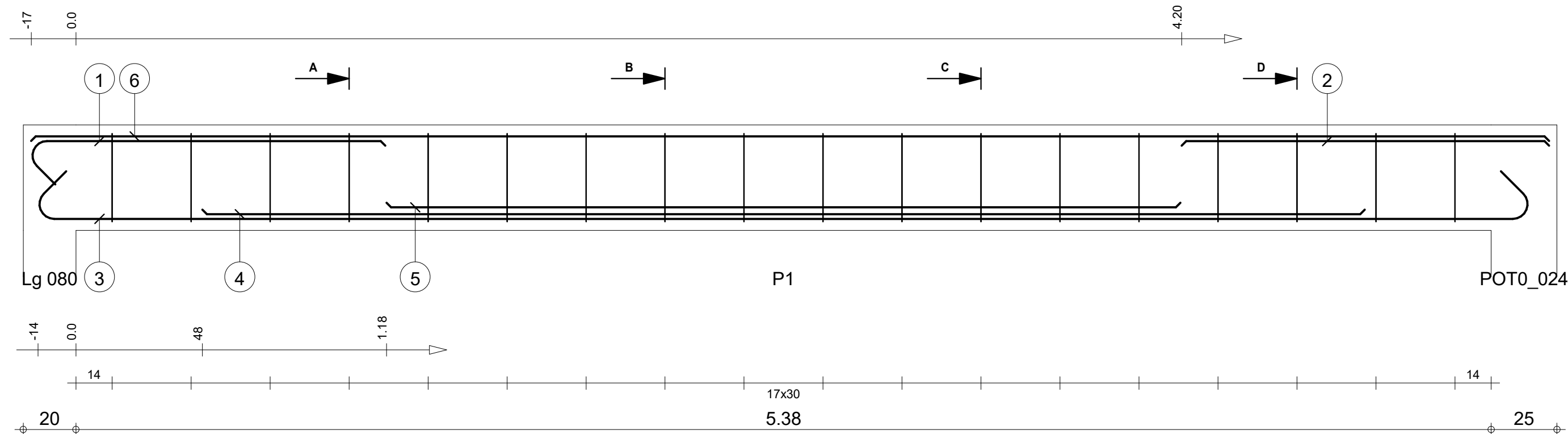
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	I=1.39	00	④	3HA 10	I=3.35	00	⑦	18HA 6	I=1.08	31
②	3HA 10	I=5.96	00	⑤	3HA 10	I=5.79	00				
③	3HA 10	I=4.75	00	⑥	18HA 6	I=46	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 51: P1				Nombre 1				Béton : BETON20 = 0.468 m3		Acier HA 400 = 41.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 102.6 kg/ m3		Echelle pour la vue 6.12cm/m	
												Surface du coffrage = 5.91 m2		Echelle pour la section 9.34cm/m	
														Page 51/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	I=1.31	00	④	3HA 12	I=1.39	00	⑦	17HA 6	I=1.08	31
②	3HA 12	I=5.59	00	⑤	3HA 10	I=5.39	00				
③	3HA 12	I=3.99	00	⑥	17HA 6	I=46	00				

		Tél.	Fax	Nombre 1			Acier HA 400 = 44 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 52: P1				Béton : BETON20 = 0.436 m3	Acier HA 400 = 5.8 kg		
					Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm	
					Densité = 114.5 kg/ m3	Echelle pour la vue 6.55cm/m	Page 52/123	
					Surface du coffrage = 5.51 m2	Echelle pour la section 9.34cm/m		
COFFRAGE & FERRAILLAGE LONGRINES	Section 20x40							

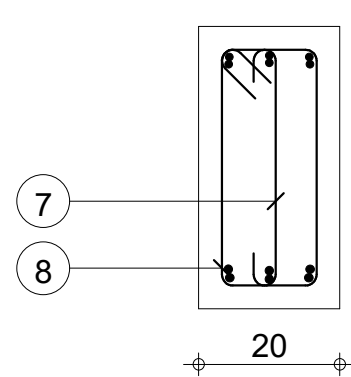


A-A

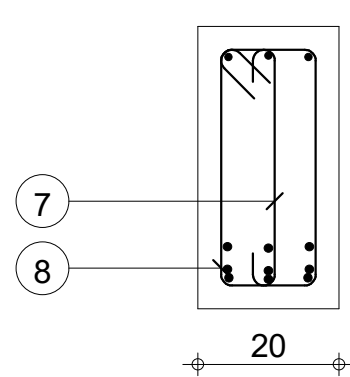
B-B

C-C

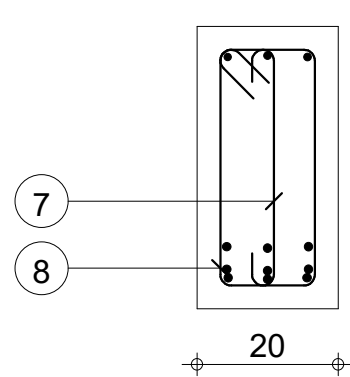
D-D



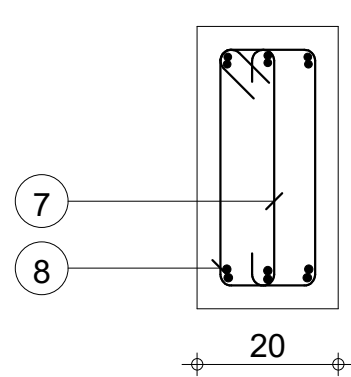
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40



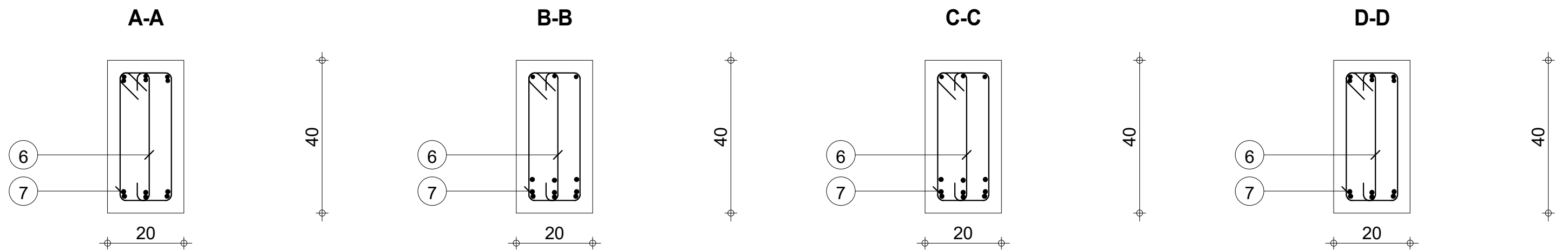
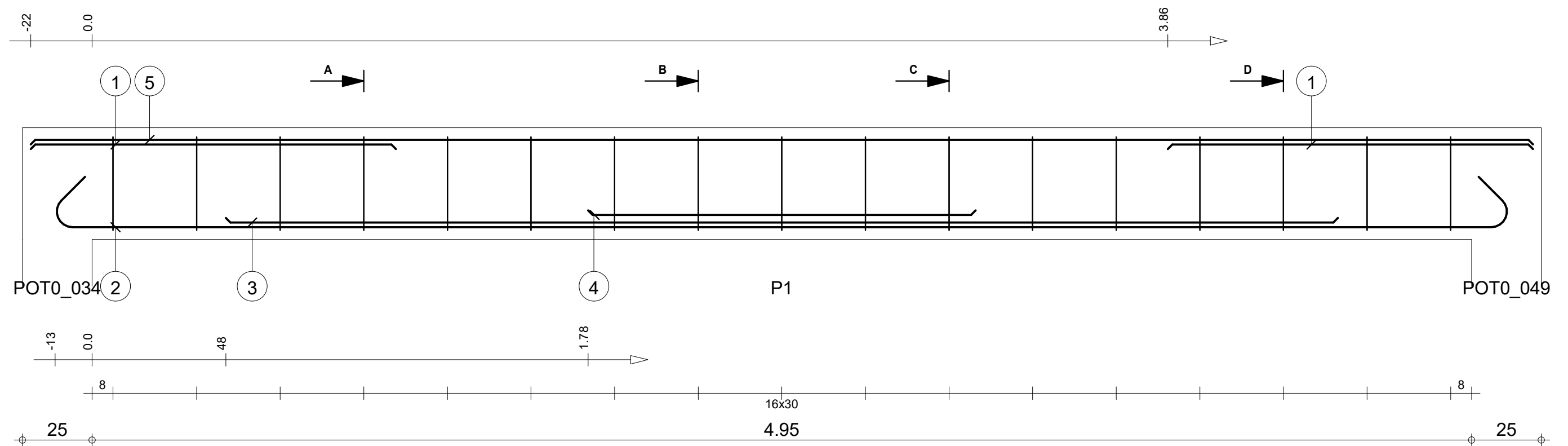
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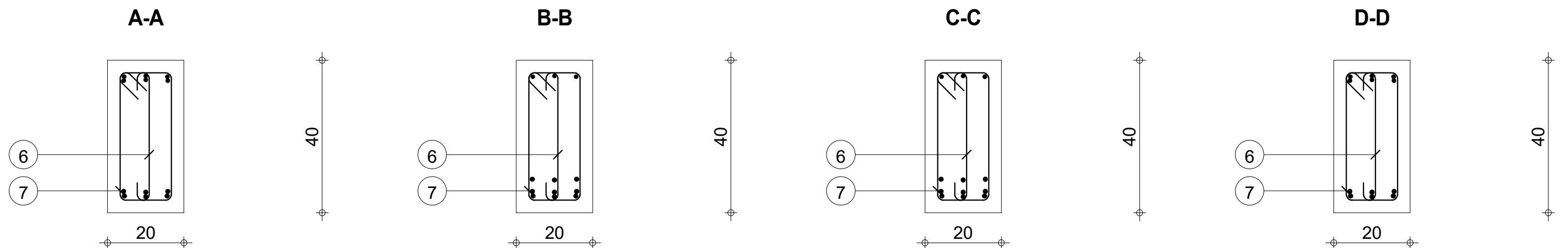
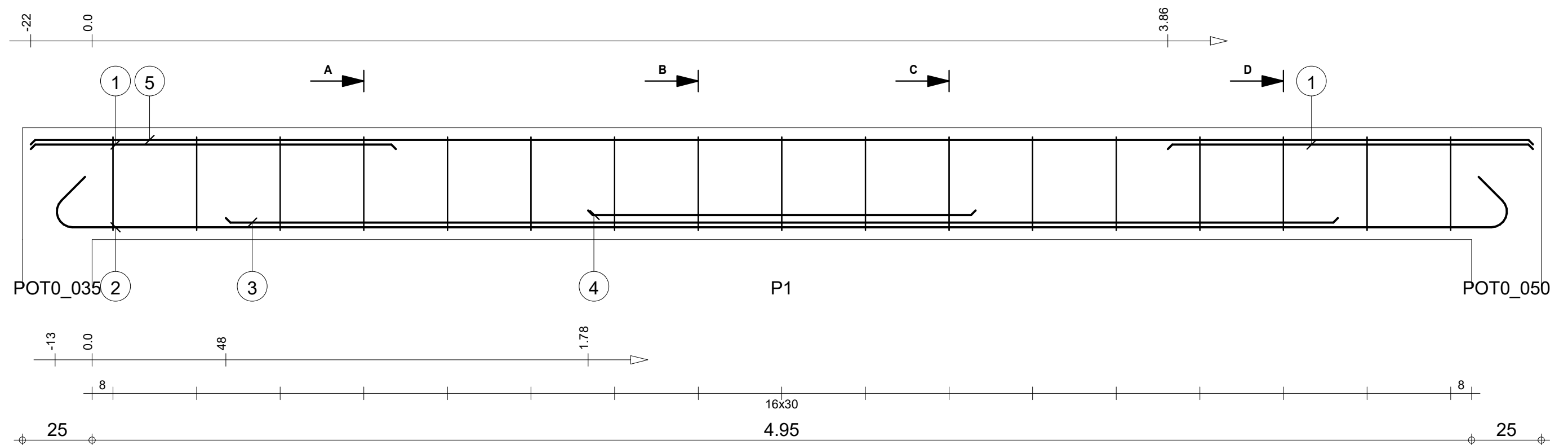
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②	3HA 10	I=1.40	00	⑤	3HA 12	I=3.02	00	⑧	18HA 6	I=1.08	31
③	3HA 12	I=6.04	00	⑥	3HA 10	I=5.76	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 53: P1				Nombre 1				Béton : BETON20 = 0.466 m3		Acier HA 400 = 51.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 124.7 kg/ m3		Echelle pour la vue 6.14cm/m	
												Surface du coffrage = 5.9 m2		Echelle pour la section 9.34cm/m	
														Page 53/123	



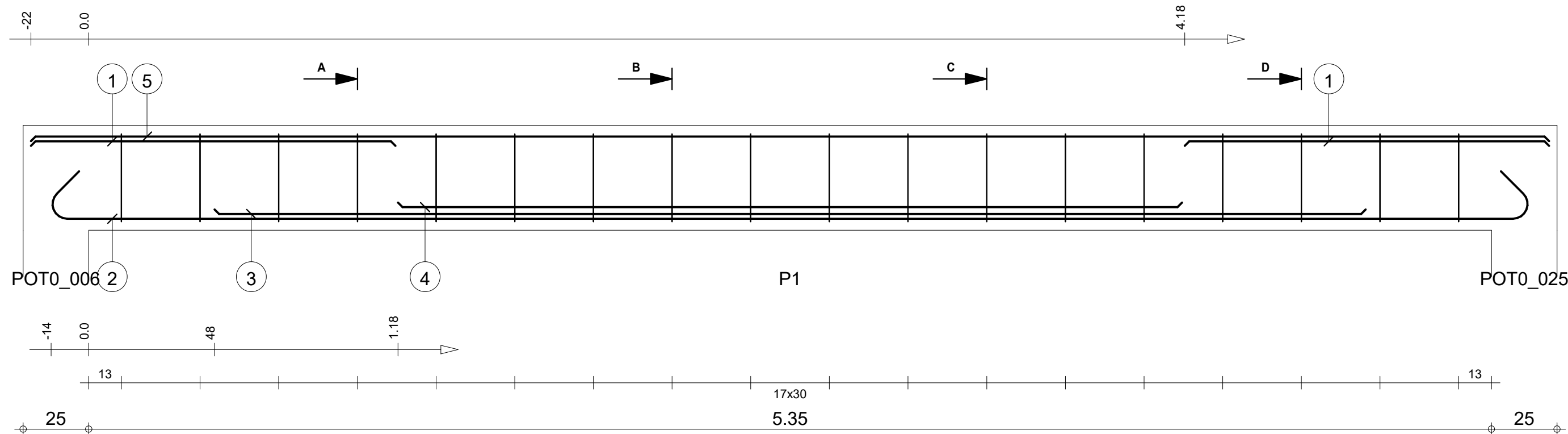
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	I=1.31	00	④	3HA 12	I=1.39	00	⑦	17HA 6	I=1.08	31
②	3HA 12	I=5.59	00	⑤	3HA 10	I=5.39	00				
③	3HA 12	I=3.99	00	⑥	17HA 6	I=46	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 54: P1				Nombre 1				Béton : BETON20 = 0.436 m3				Acier HA 400 = 44 kg			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 114.5 kg/ m3				Echelle pour la vue 6.55cm/m			
												Surface du coffrage = 5.51 m2				Echelle pour la section 9.34cm/m			
																Page 54/123			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	I=1.31	00	④	3HA 12	I=1.39	00	⑦	17HA 6	I=1.08	31
②	3HA 12	I=5.59	00	⑤	3HA 10	I=5.39	00				
③	3HA 12	I=3.99	00	⑥	17HA 6	I=46	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 55: P1				Nombre 1				Béton : BETON20 = 0.436 m3		Acier HA 400 = 44 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 114.5 kg/ m3		Echelle pour la vue 6.55cm/m	
												Surface du coffrage = 5.51 m2		Echelle pour la section 9.34cm/m	
														Page 55/123	

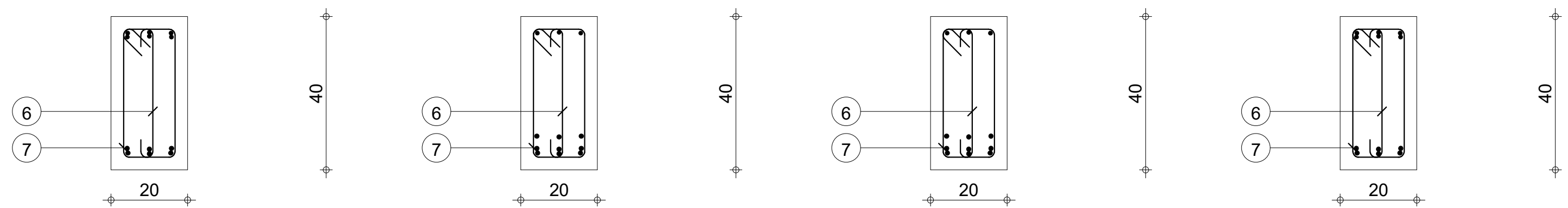


A-A

B-B

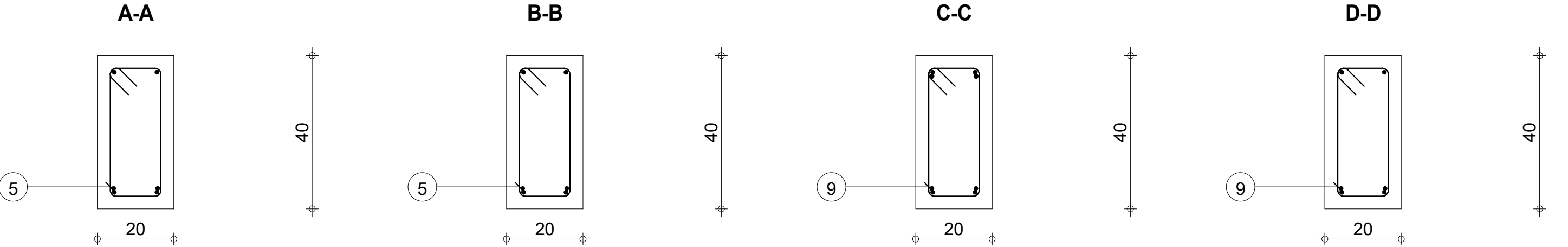
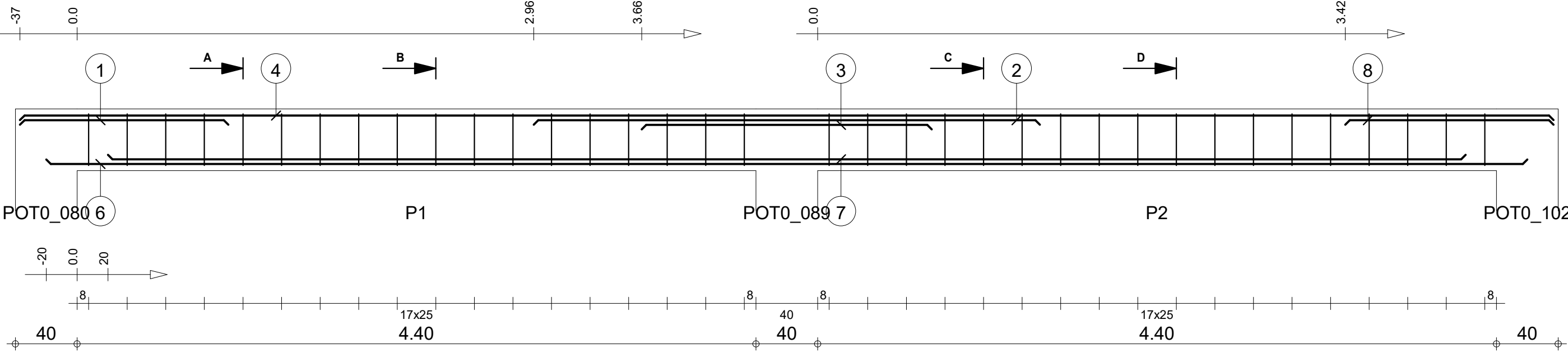
C-C

D-D



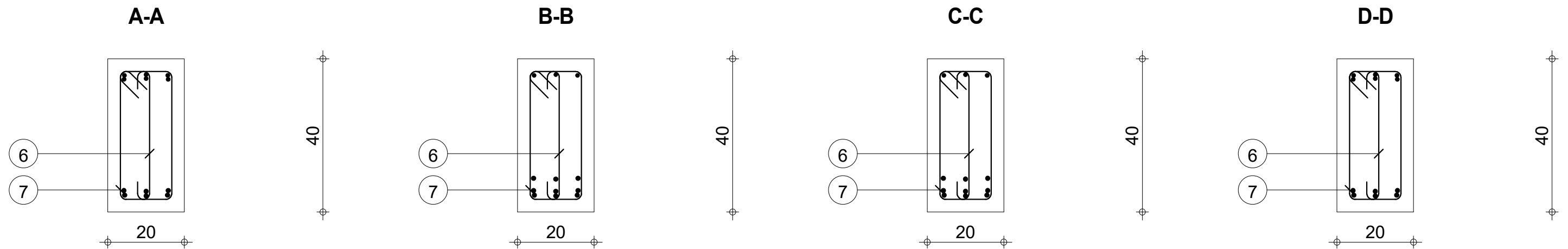
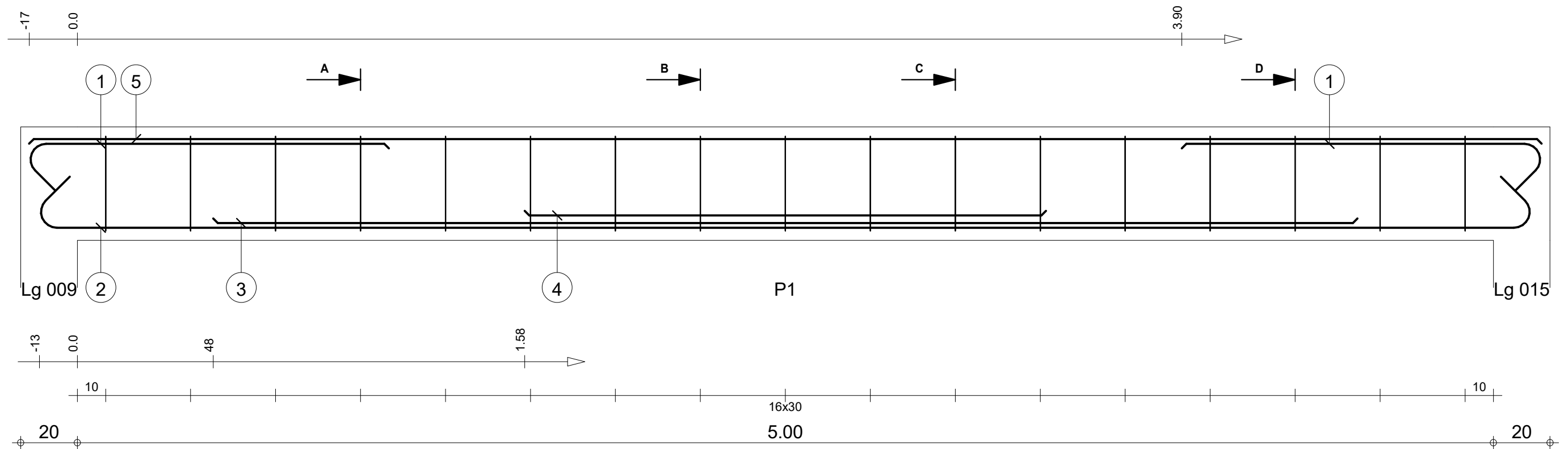
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	I=1.39	00	④	3HA 12	I=2.99	00	⑦	18HA 6	I=1.08	31
②	3HA 12	I=6.02	00	⑤	3HA 10	I=5.79	00				
③	3HA 12	I=4.39	00	⑥	18HA 6	I=46	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 56: P1				Nombre 1				Béton : BETON20 = 0.468 m3		Acier HA 400 = 51.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 123.3 kg/ m3		Echelle pour la vue 6.12cm/m	
												Surface du coffrage = 5.91 m2		Echelle pour la section 9.34cm/m	
														Page 56/123	



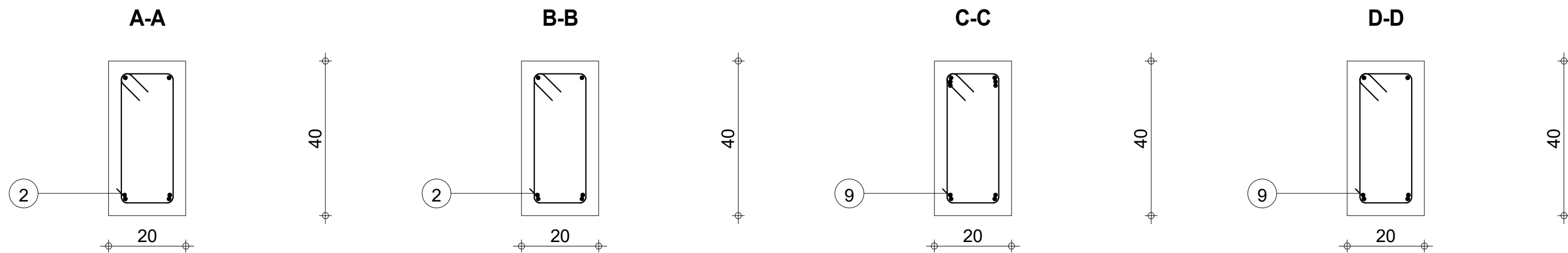
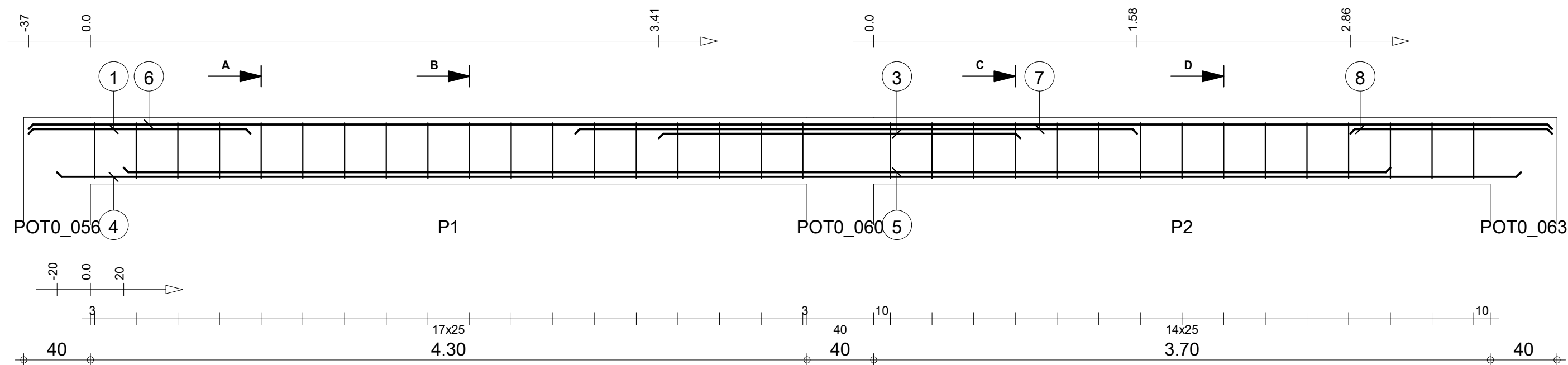
Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=1.35	00	1.35	④	2HA 10	l=9.94	00	9.94	⑦	2HA 10	l=8.80	00	8.80
②	2HA 12	l=3.28	00	3.28	⑤	18HA 6	l=1.07	31	14 1.07 31	⑧	2HA 10	l=1.35	00	1.35
③	2HA 12	l=1.88	00	1.88	⑥	2HA 10	l=9.60	00	9.60	⑨	18HA 6	l=1.07	31	14 1.07 31

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 57				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40				Béton : BETON20 = 0.8 m3			
								Acier HA 400 = 47.4 kg			
								Acier HA 400 = 8.58 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 70 kg/ m3			
								Surface du coffrage = 9.92 m2			
								Echelle pour la vue 3.65cm/m			
								Echelle pour la section 9.34cm/m			
								Page 57/123			



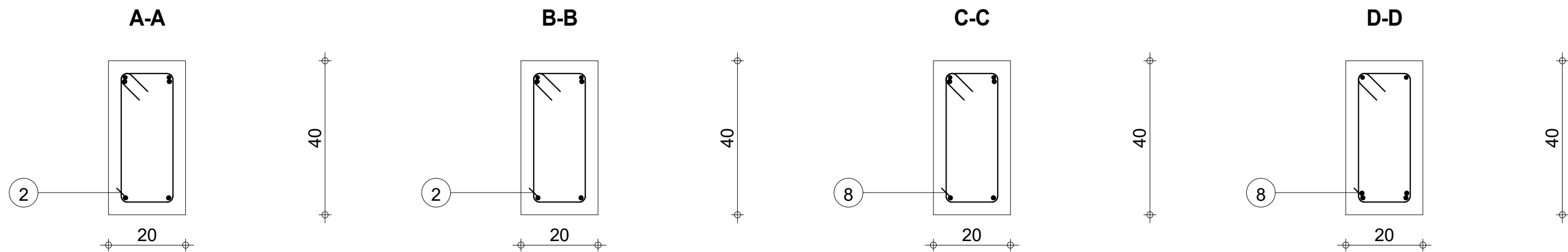
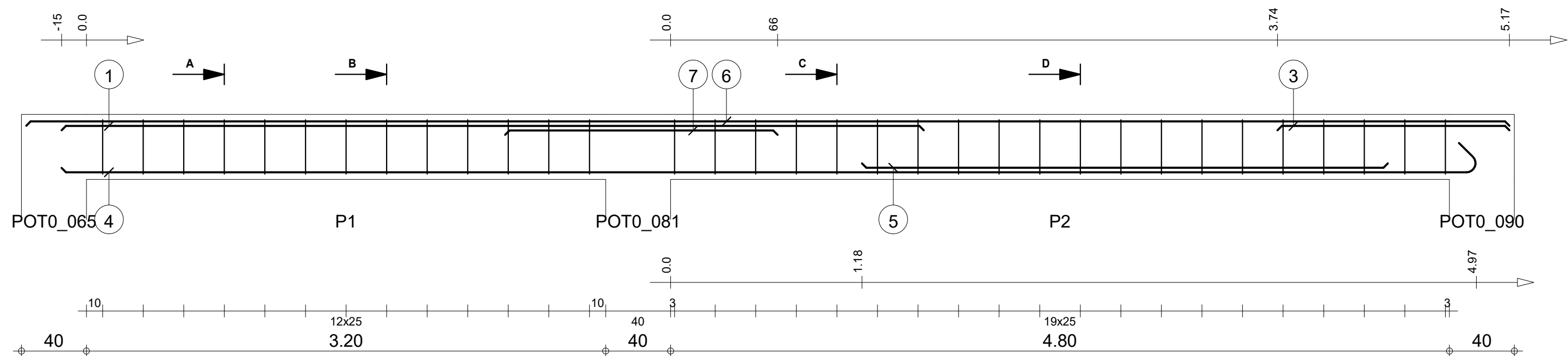
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	6HA 10	l=1.44	00	④	3HA 12	l=1.84	00	⑦	17HA 6	l=1.08	31
②	3HA 12	l=5.65	00	⑤	3HA 10	l=5.34	00				
③	3HA 12	l=4.04	00	⑥	17HA 6	l=46	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 58: P1				Nombre 1				Béton : BETON20 = 0.432 m3		Acier HA 400 = 45.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 119.7 kg/ m3		Echelle pour la vue 6.61cm/m	
												Surface du coffrage = 5.48 m2		Echelle pour la section 9.34cm/m	
														Page 58/123	



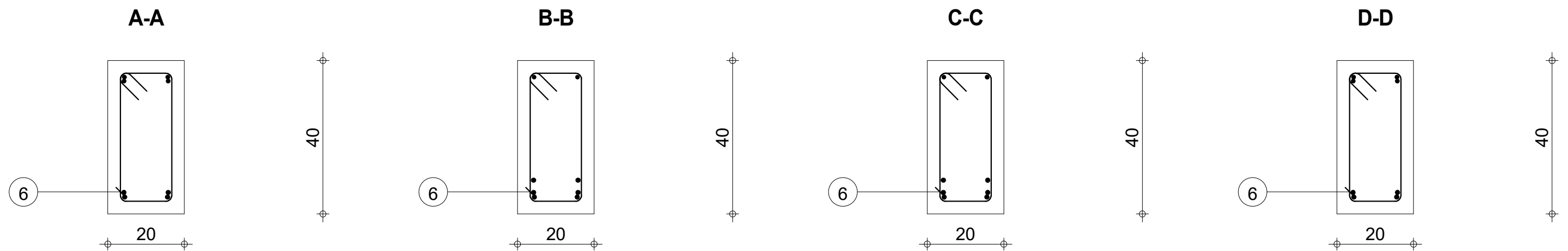
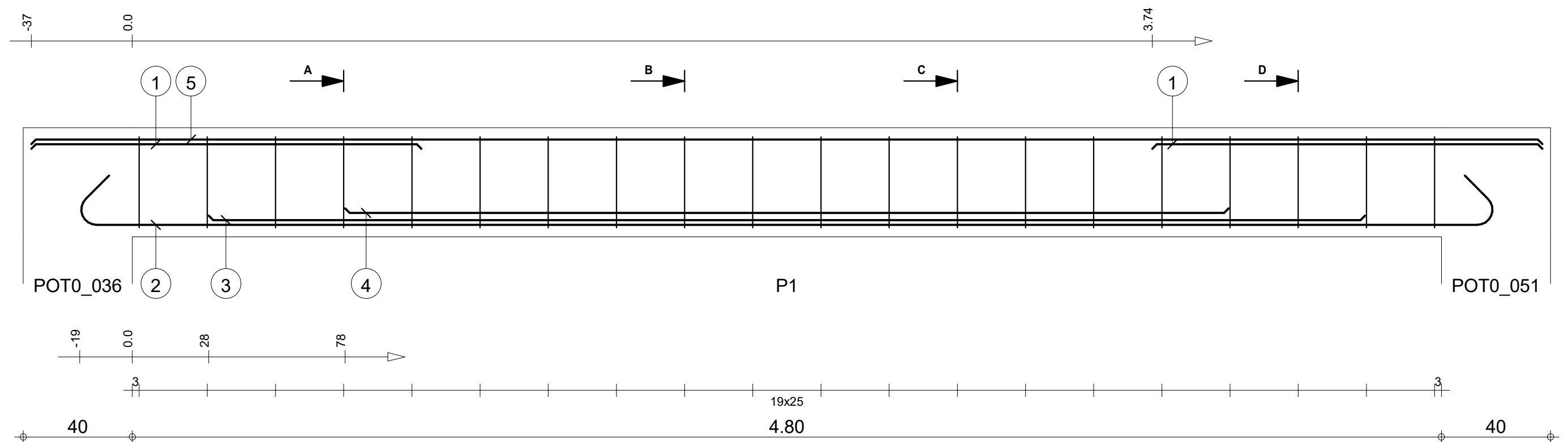
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.33	00	④	2HA 10	I=8.78	00	⑦	2HA 10	I=3.37	00
②	18HA 6	I=1.08	31	⑤	2HA 10	I=7.60	00	⑧	2HA 10	I=1.21	00
③	2HA 10	I=2.17	00	⑥	2HA 10	I=9.14	00	⑨	15HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 59				Nombre 1				Béton : BETON20 = 0.736 m3		Acier HA 400 = 41.4 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 66.98 kg/ m3		Echelle pour la vue 3.95cm/m	
												Surface du coffrage = 9.12 m2		Echelle pour la section 9.34cm/m	
														Page 59/123	



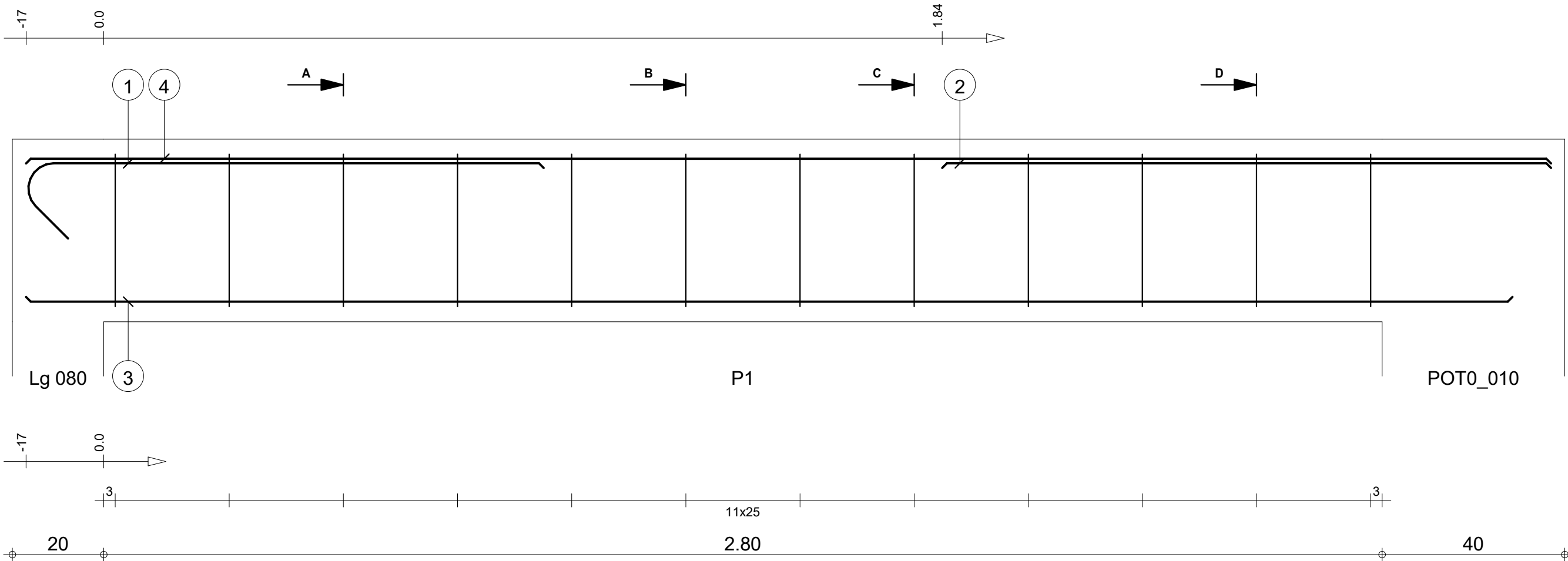
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	I=5.31	00	④	2HA 12	I=8.91	00	⑦	2HA 12	I=1.68	00
②	13HA 6	I=1.08	31	⑤	2HA 12	I=3.24	00	⑧	20HA 6	I=1.08	31
③	2HA 10	I=1.43	00	⑥	2HA 10	I=9.14	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 60				Nombre 1				Béton : BETON20 = 0.736 m3		Acier HA 400 = 47 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 74.59 kg/ m3		Echelle pour la vue 3.95cm/m	
												Surface du coffrage = 9.12 m2		Echelle pour la section 9.34cm/m	
														Page 60/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	l=1.43	00	④	2HA 12	l=3.24	00
②	2HA 12	l=5.57	00	⑤	2HA 10	l=5.54	00
③	2HA 12	l=4.24	00	⑥	20HA 6	l=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 61: P1		Nombre 1		Béton : BETON20 = 0.448 m3		Acier HA 400 = 33.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
								Densité = 85.49 kg/ m3		Echelle pour la vue 6.38cm/m	
								Surface du coffrage = 5.6 m2		Echelle pour la section 9.34cm/m	
										Page 61/123	

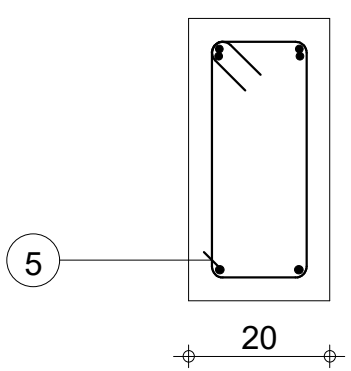


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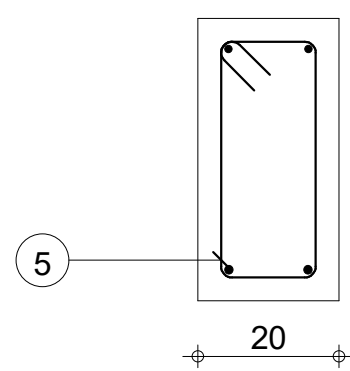
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C-C

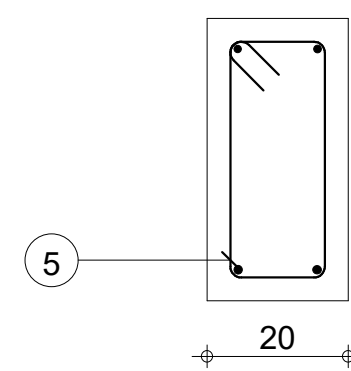
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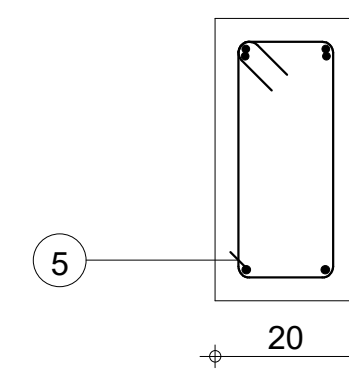
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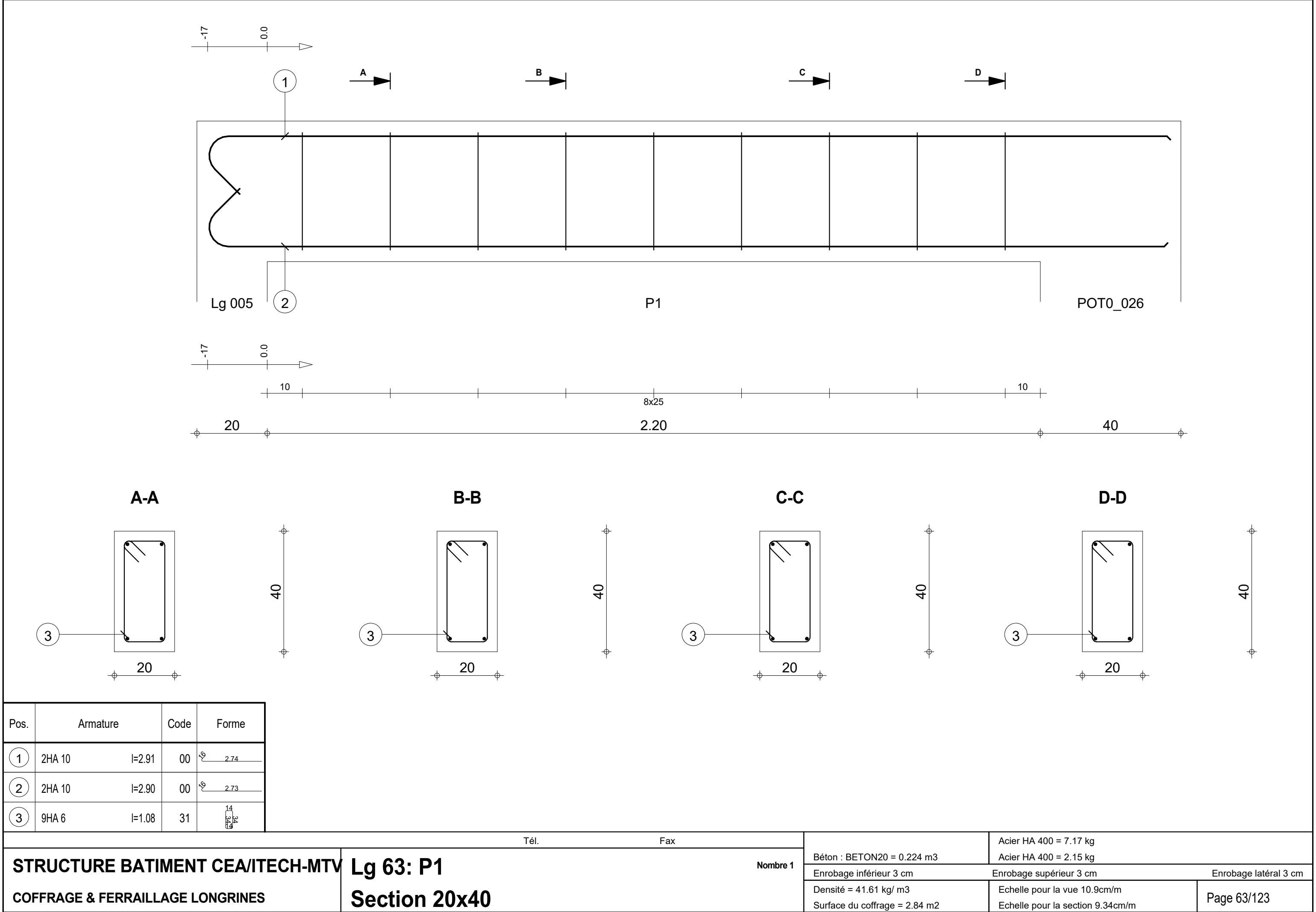
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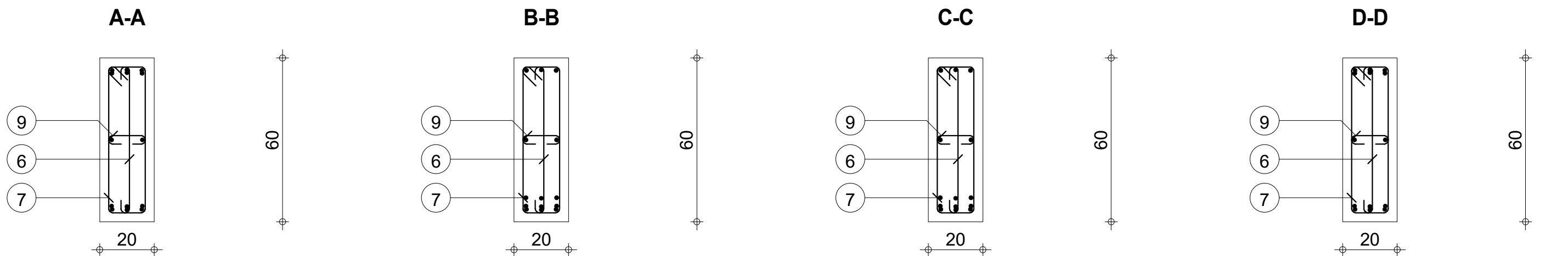
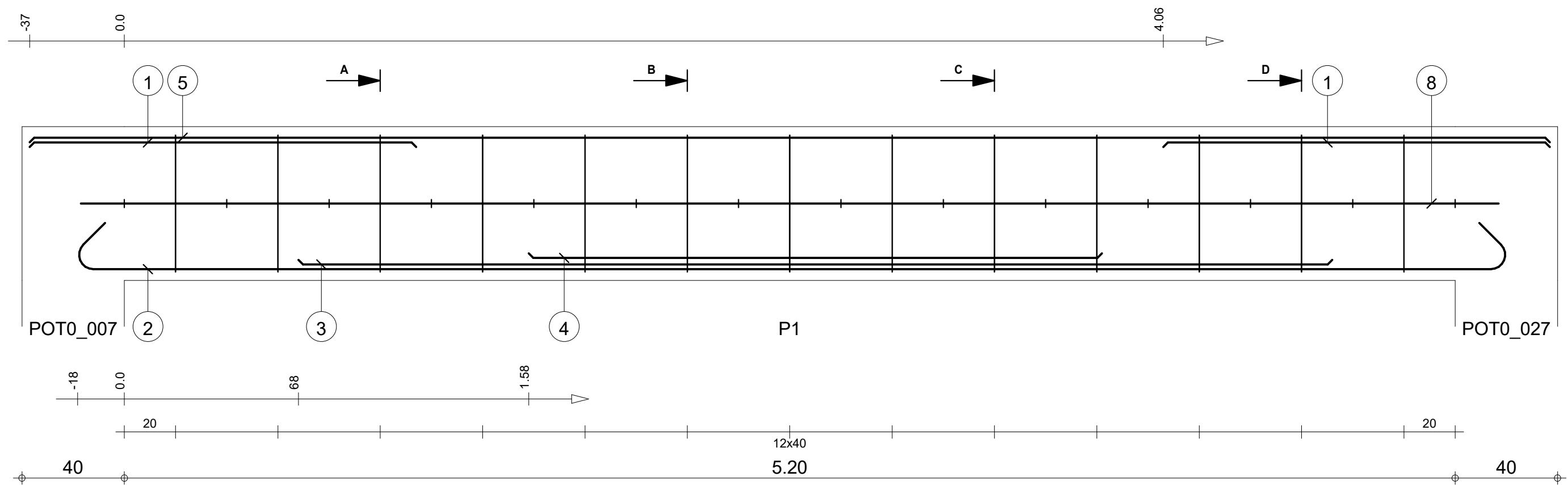


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Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.30	00	④	2HA 10	I=3.34	00
②	2HA 10	I=1.33	00	⑤	12HA 6	I=1.08	31
③	2HA 12	I=3.26	00				

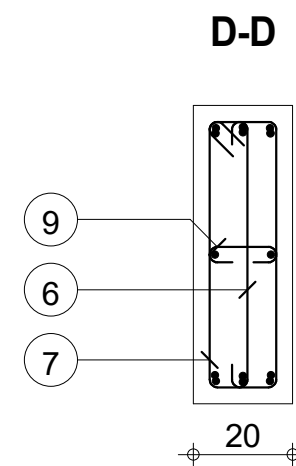
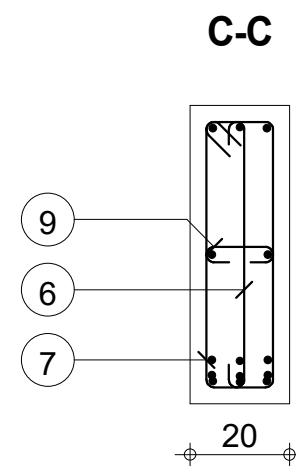
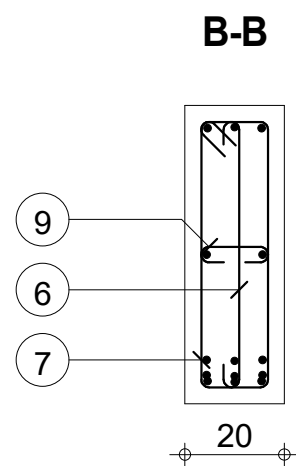
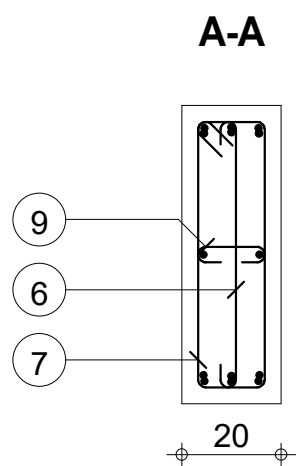
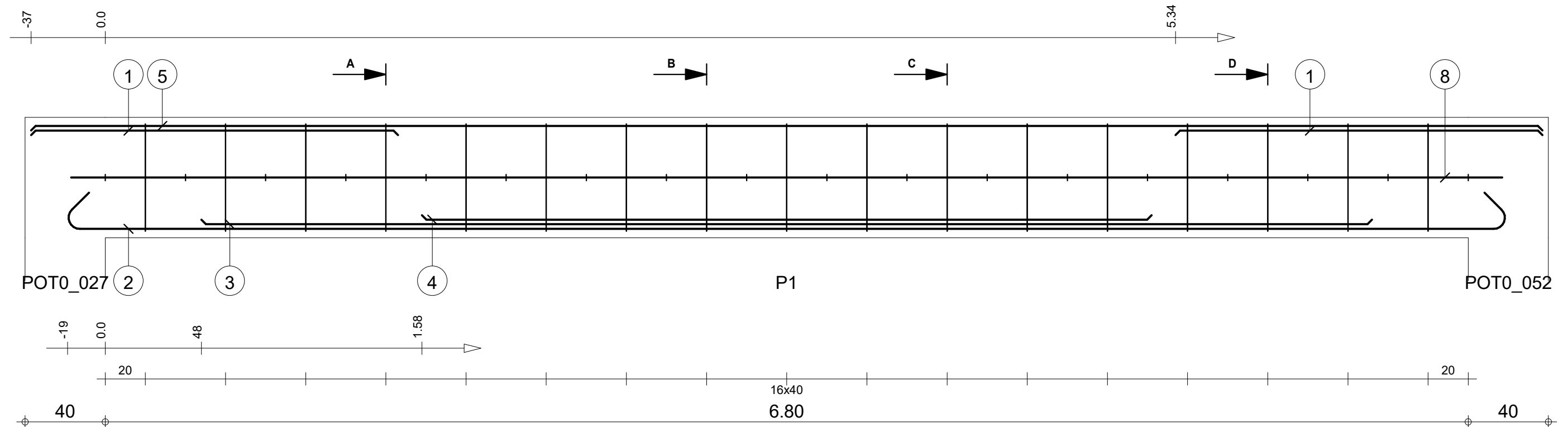
STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 62: P1		Nombre 1		Béton : BETON20 = 0.272 m3		Acier HA 400 = 13.2 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 58.82 kg/ m3		Echelle pour la vue 10.3cm/m	
						Surface du coffrage = 3.44 m2		Echelle pour la section 9.34cm/m	
								Page 62/123	





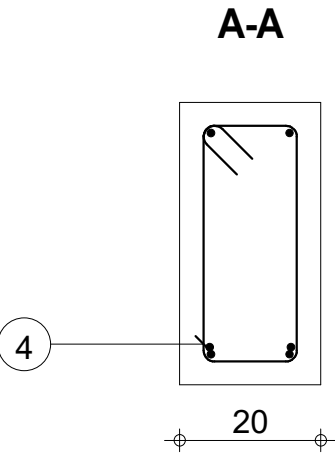
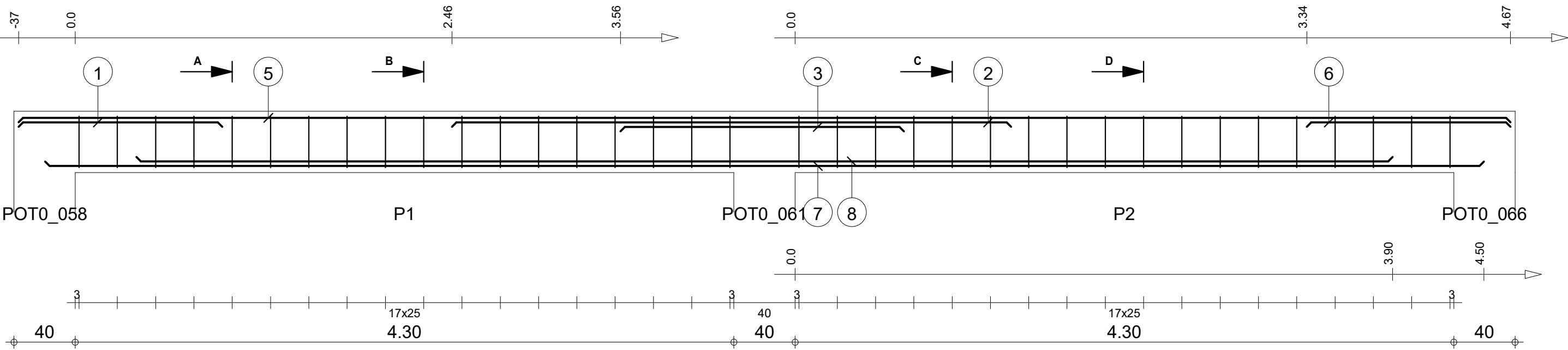
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①	6HA 10	I=1.51	00	1.51	④	3HA 12	I=2.24	00	2.24	⑦	13HA 6	I=1.48	31	14 5.54 14
②	3HA 12	I=5.96	00	5.58	⑤	3HA 10	I=5.94	00	5.94	⑧	2HA 12	I=5.54	00	5.54
③	3HA 12	I=4.04	00	4.04	⑥	13HA 6	I=66	00	54	⑨	14HA 6	I=26	00	514

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 64: P1				Nombre 1				Béton : BETON20 = 0.72 m3		Acier HA 400 = 49.2 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 91.67 kg/ m3		Echelle pour la vue 5.97cm/m	
												Surface du coffrage = 8.48 m2		Echelle pour la section 6.58cm/m	
														Page 64/123	

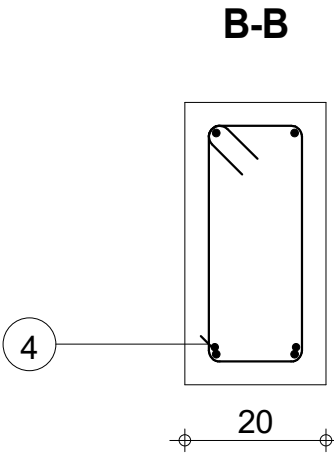


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	6HA 10	I=1.83	00	1.83	④	3HA 12	I=3.64	00	3.64	⑦	17HA 6	I=1.48	31	14 14 14
②	3HA 12	I=7.56	00	7.18	⑤	3HA 10	I=7.54	00	7.54	⑧	2HA 12	I=7.14	00	7.14
③	3HA 12	I=5.84	00	5.84	⑥	17HA 6	I=66	00	54	⑨	18HA 6	I=26	00	14

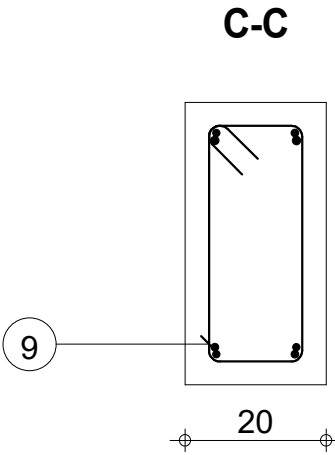
STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 65: P1				Nombre 1				Béton : BETON20 = 0.912 m3		Acier HA 400 = 66.1 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 96.38 kg/ m3		Echelle pour la vue 4.75cm/m	
												Surface du coffrage = 10.7 m2		Echelle pour la section 6.58cm/m	
														Page 65/123	



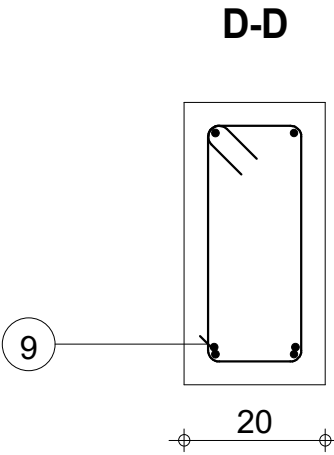
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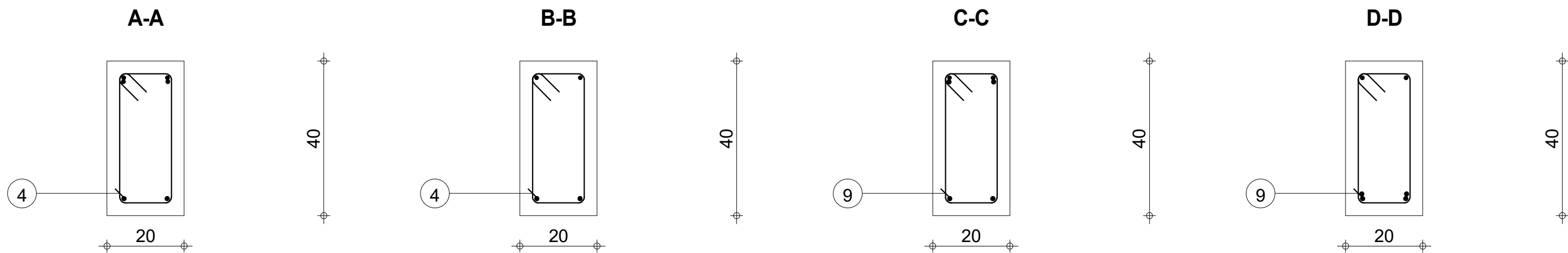
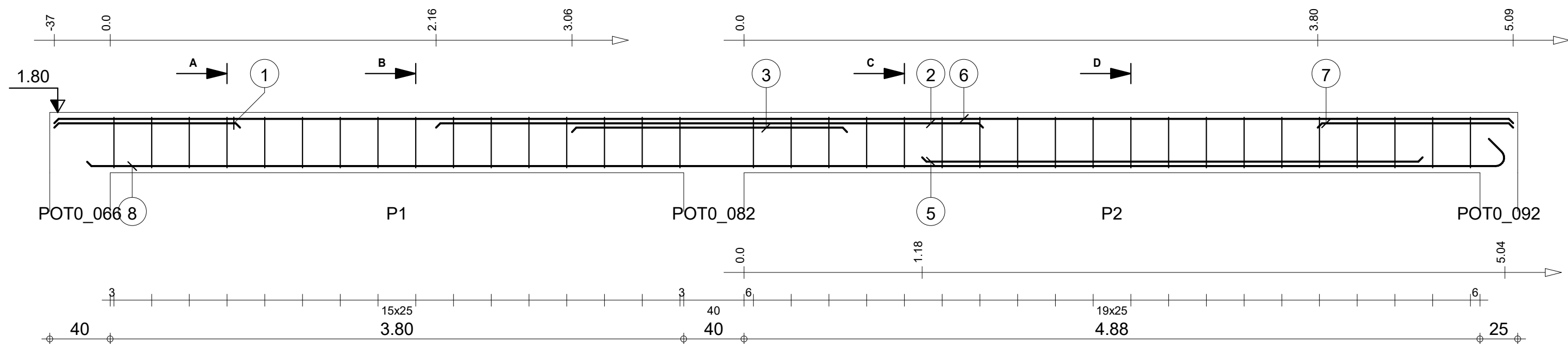
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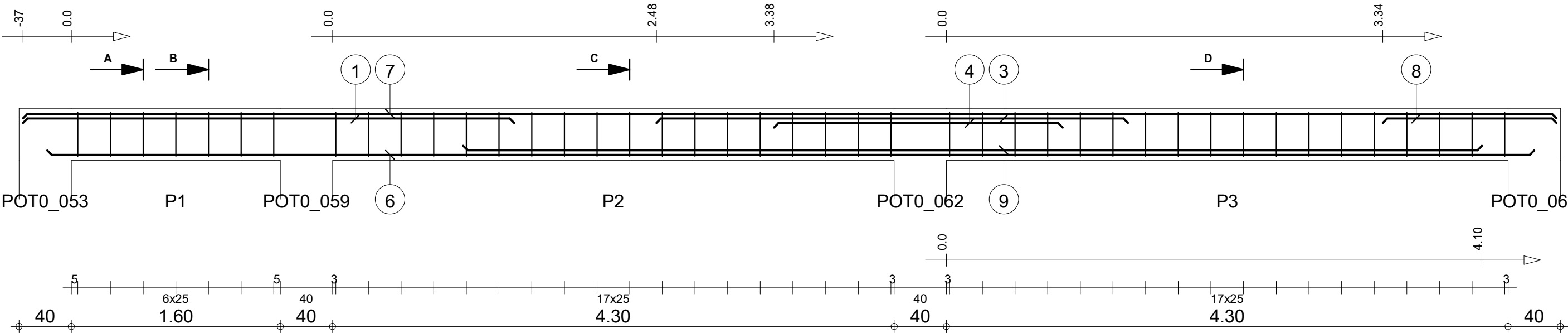
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①	2HA 10	l=1.33	00	④	18HA 6	l=1.07	31	⑦	2HA 10	l=9.39	00
②	2HA 12	l=3.65	00	⑤	2HA 10	l=9.74	00	⑧	2HA 10	l=8.20	00
③	2HA 12	l=1.85	00	⑥	2HA 10	l=1.33	00	⑨	18HA 6	l=1.07	31

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 66				Nombre 1				Béton : BETON20 = 0.784 m3		Acier HA 400 = 46.7 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 70.54 kg/ m3		Echelle pour la vue 3.72cm/m	
												Surface du coffrage = 9.72 m2		Echelle pour la section 9.34cm/m	
														Page 66/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.23	00	④	16HA 6	I=1.08	31	⑦	2HA 10	I=1.29	00
②	2HA 12	I=3.62	00	⑤	2HA 12	I=3.31	00	⑧	2HA 12	I=9.58	00
③	2HA 12	I=1.82	00	⑥	2HA 10	I=9.67	00	⑨	20HA 6	I=1.08	31

		Tél.		Fax				Acier HA 400 = 47.6 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 67	Nombre 1	Section 20x40	Béton : BETON20 = 0.778 m3		Acier HA 400 = 8.61 kg			
				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
				Densité = 72.24 kg/ m3		Echelle pour la vue 3.75cm/m		Page 67/123	
				Surface du coffrage = 9.68 m2		Echelle pour la section 9.34cm/m			
COFFRAGE & FERRAILLAGE LONGRINES									



A-A

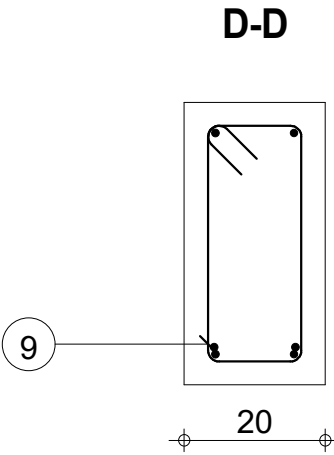
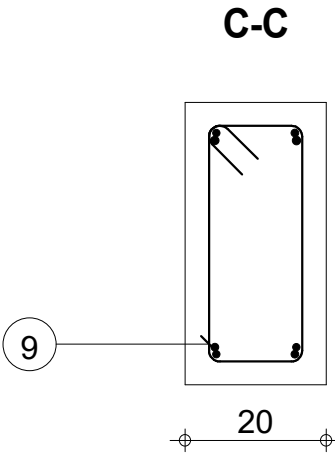
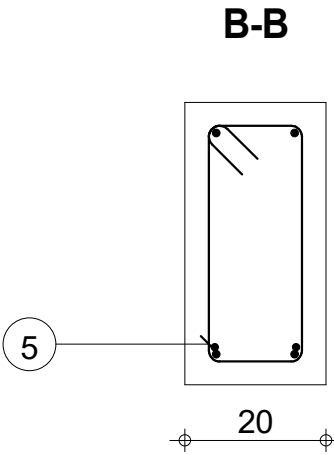
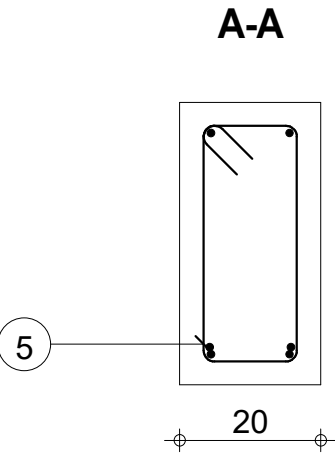
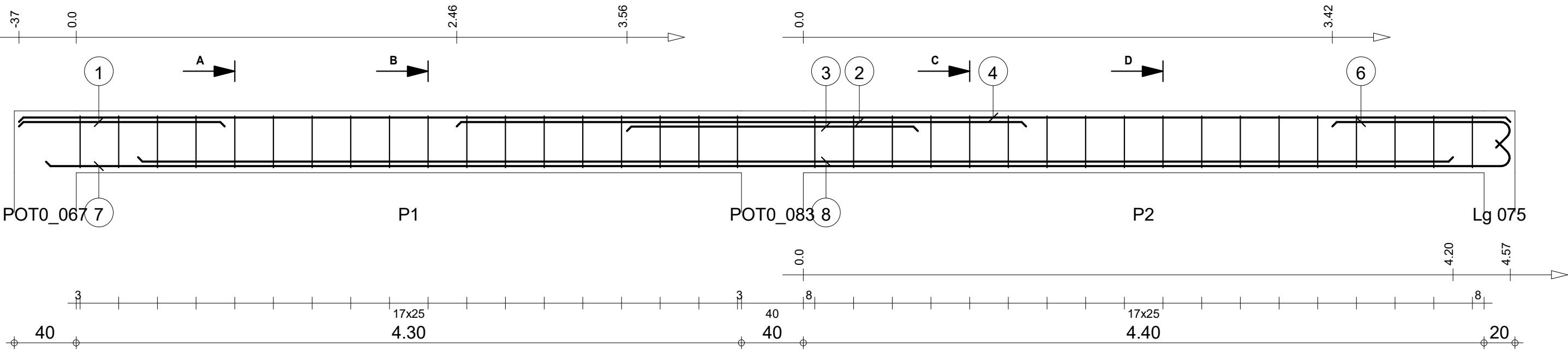
B-B

C-C

D-D

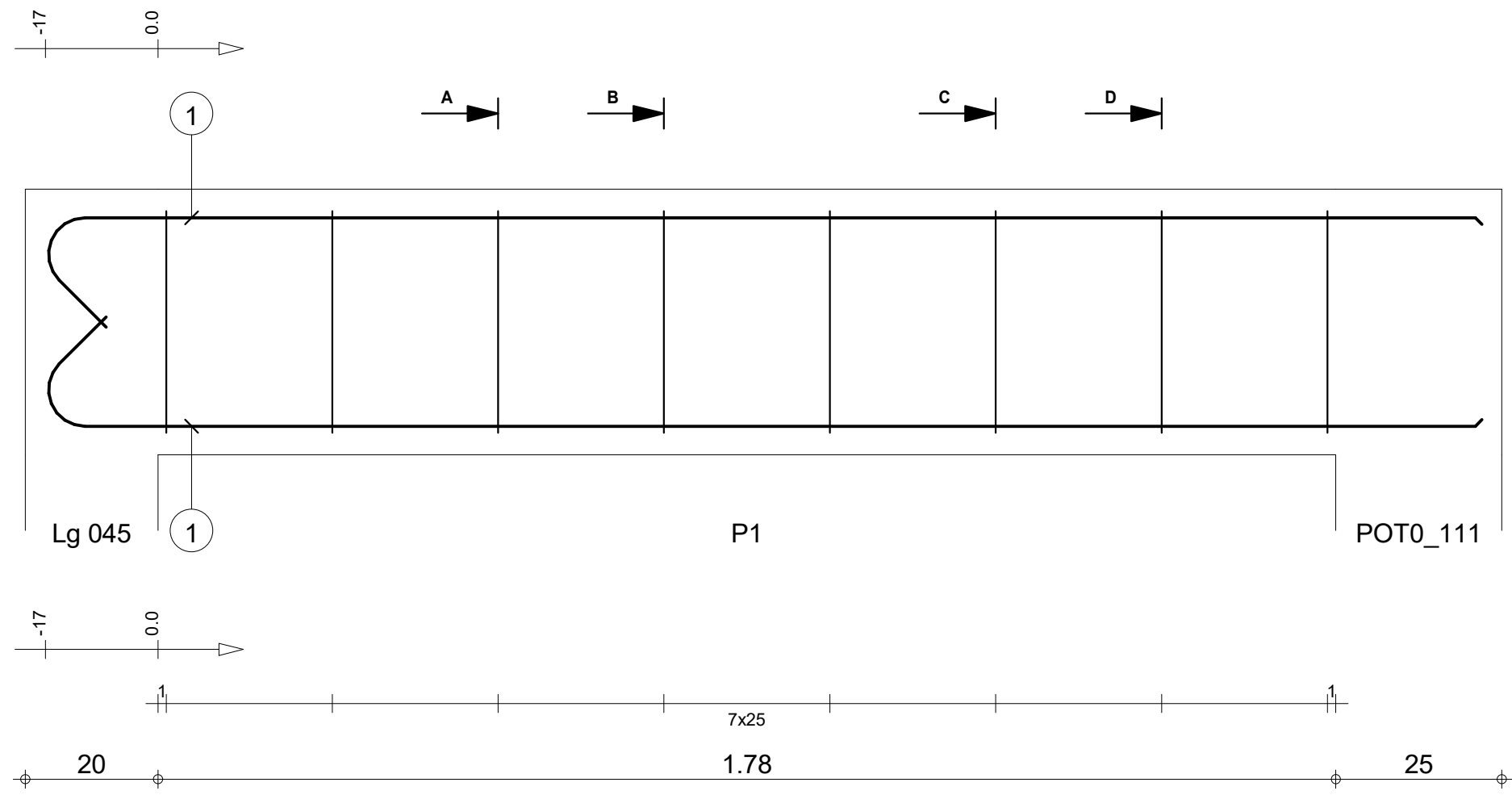
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②	7HA 6	I=1.08	31	⑤	18HA 6	I=1.08	31	⑧	2HA 10	I=1.33	00				
③	2HA 10	I=3.61	00	⑥	2HA 10	I=11.38	00	⑨	2HA 10	I=7.80	00				

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 68										Tél.		Fax		Nombre 1		Béton : BETON20 = 0.944 m3		Acier HA 400 = 51.6 kg	
COFFRAGE & FERRAILLAGE LONGRINES																Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
																Densité = 65.57 kg/ m3		Echelle pour la vue 3.1cm/m	
																Surface du coffrage = 11.6 m2		Echelle pour la section 9.34cm/m	
																		Page 68/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.33	00	④	2HA 10	I=9.64	00	⑦	2HA 10	I=9.63	00
②	2HA 12	I=3.68	00	⑤	18HA 6	I=1.07	31	⑧	2HA 10	I=8.50	00
③	2HA 12	I=1.88	00	⑥	2HA 10	I=1.32	00	⑨	18HA 6	I=1.07	31

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 69				Nombre 1				Béton : BETON20 = 0.776 m3		Acier HA 400 = 47.4 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 72.16 kg/ m3		Echelle pour la vue 3.75cm/m	
												Surface du coffrage = 9.66 m2		Echelle pour la section 9.34cm/m	
														Page 69/123	

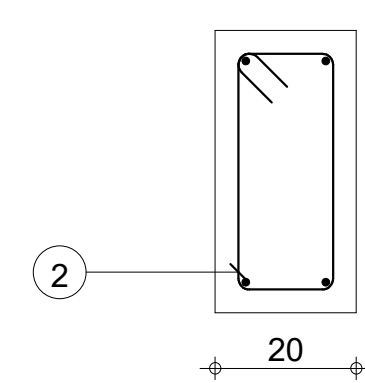
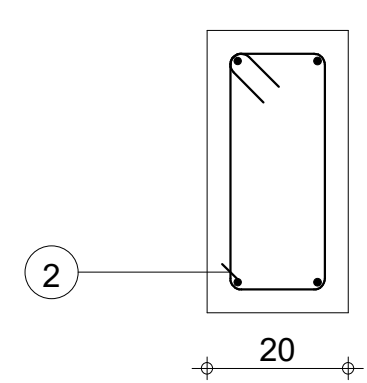
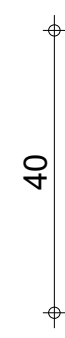
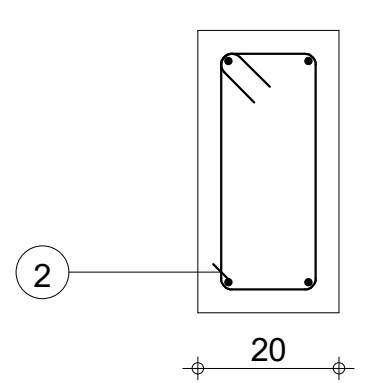
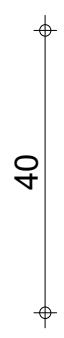
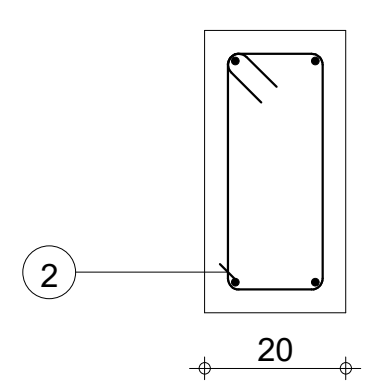


A-A

B-B

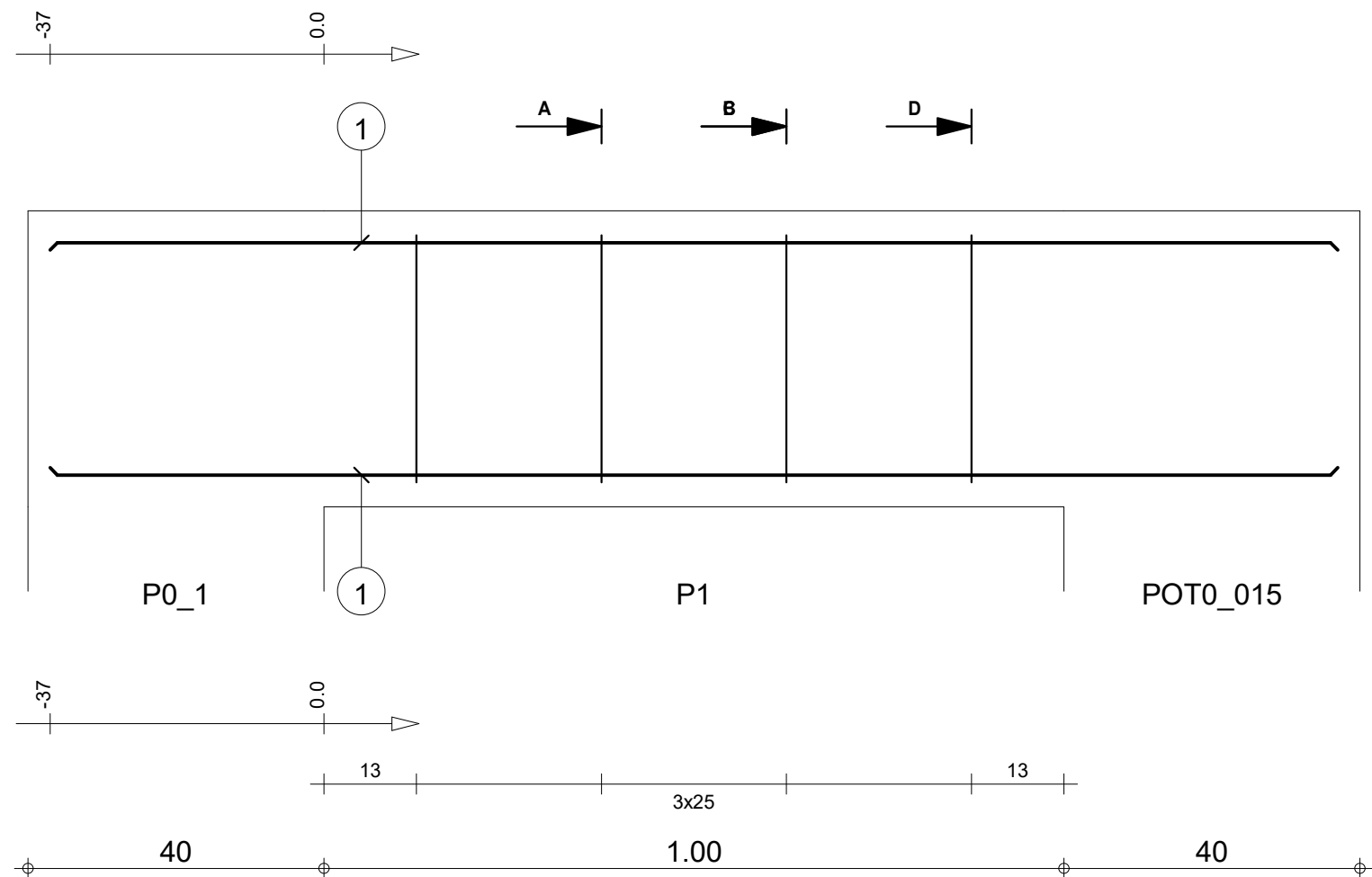
C-C

D-D



Pos.	Armature	Code	Forme
①	4HA 10 l=2.34	00	
②	8HA 6 l=1.08	31	

STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE LONGRINES	Lg 70: P1 Section 20x40	Nombre 1	Tél.	Fax	Acier HA 400 = 5.76 kg		
			Béton : BETON20 = 0.178 m3		Acier HA 400 = 1.91 kg		
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm
			Densité = 43.09 kg/ m3 Surface du coffrage = 2.29 m2		Echelle pour la vue 10.9cm/m Echelle pour la section 9.34cm/m		Page 70/123

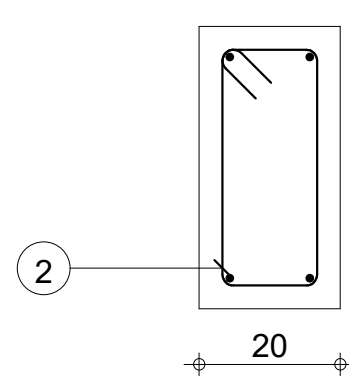
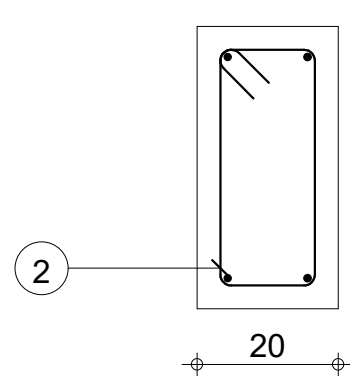
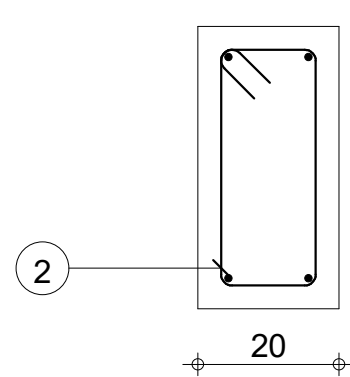
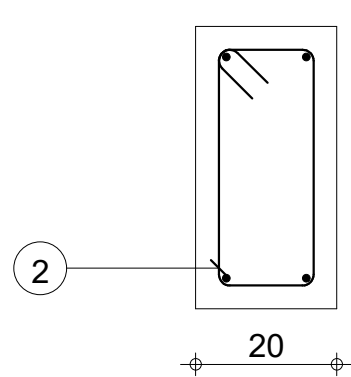


A-A

B-B

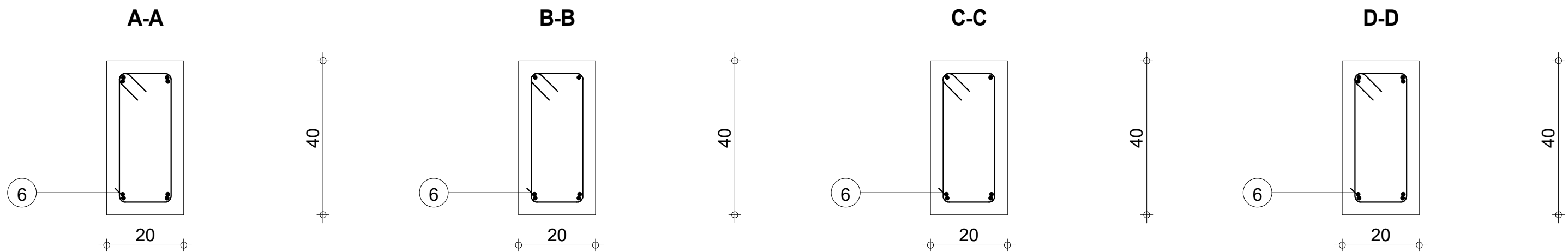
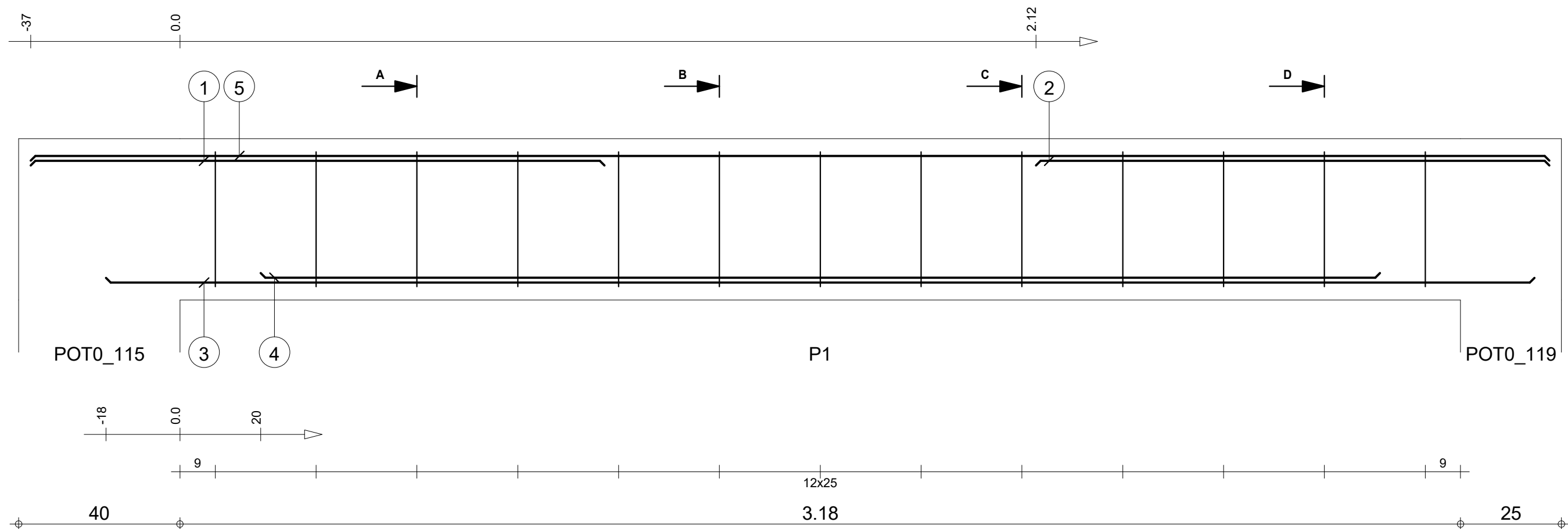
C-C

D-D



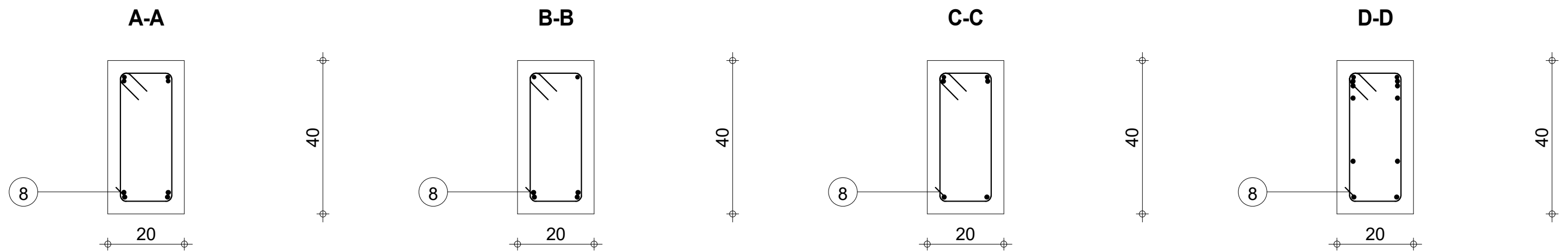
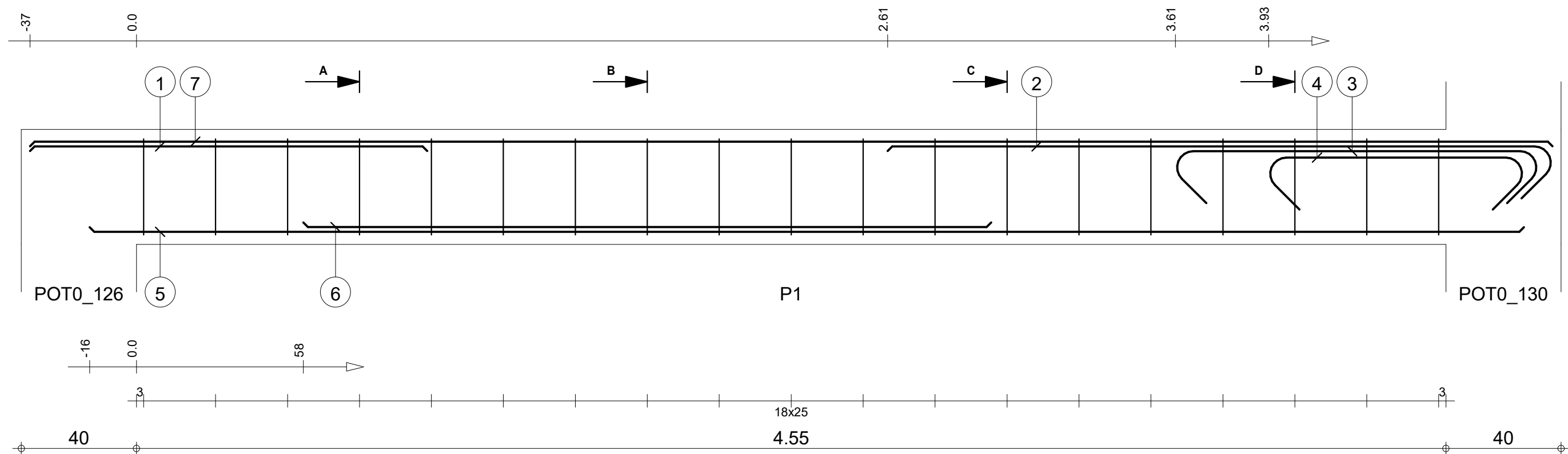
Pos.	Armature	Code	Forme
①	4HA 10	I=1.74	00
②	4HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 71: P1		Nombre 1		Béton : BETON20 = 0.144 m3		Acier HA 400 = 4.29 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 36.46 kg/ m3		Echelle pour la vue 10.9cm/m	
						Surface du coffrage = 1.8 m2		Echelle pour la section 9.34cm/m	
								Page 71/123	



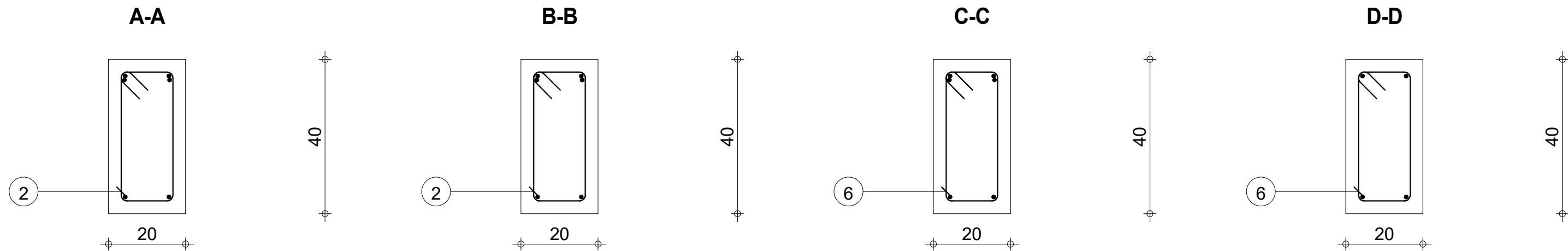
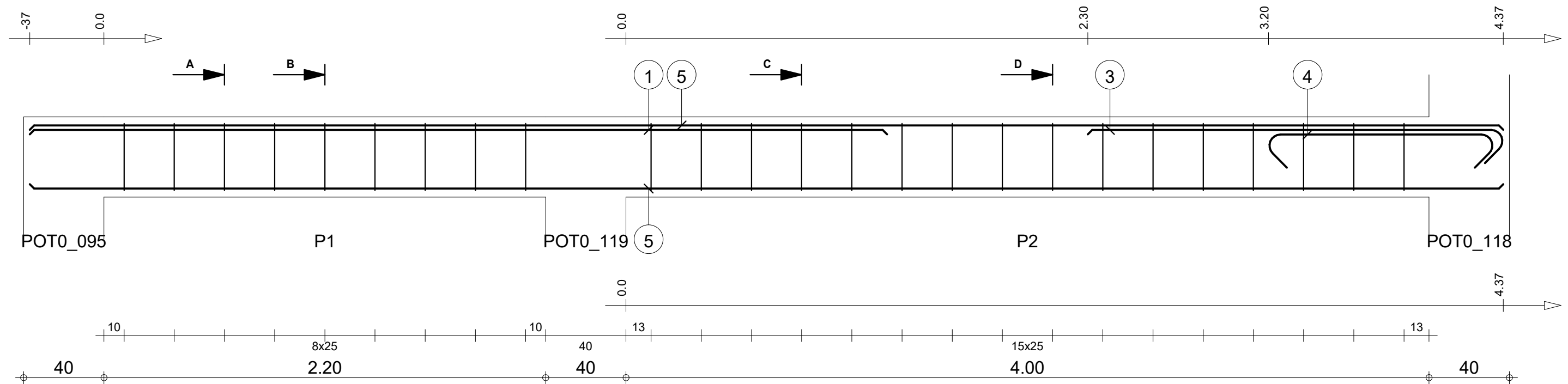
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.42	00	④	2HA 10	I=2.77	00
②	2HA 10	I=1.27	00	⑤	2HA 10	I=3.77	00
③	2HA 10	I=3.54	00	⑥	13HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 72: P1		Nombre 1		Béton : BETON20 = 0.306 m3		Acier HA 400 = 15.8 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 61.76 kg/ m3		Echelle pour la vue 9.19cm/m	
						Surface du coffrage = 3.85 m2		Echelle pour la section 9.34cm/m	
								Page 72/123	



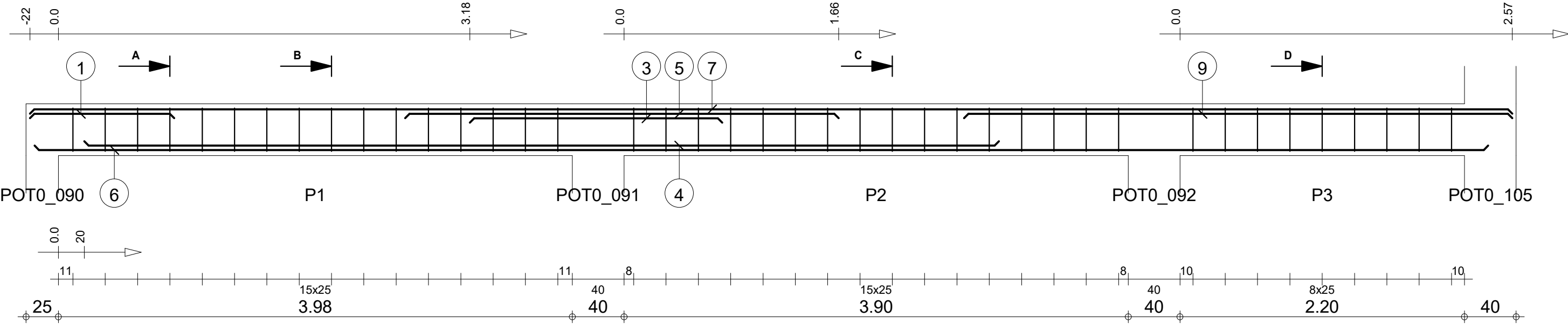
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①	2HA 10	l=1.38	00	1.38	④	2HA 12	l=1.27	00	89	⑦	2HA 10	l=5.29	00	5.29
②	2HA 12	l=2.50	00	2.31	⑤	2HA 12	l=4.98	00	4.98	⑧	19HA 6	l=1.08	31	14
③	2HA 12	l=1.64	00	1.26	⑥	2HA 12	l=2.39	00	2.39					

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 73: P1				Nombre 1				Béton : BETON20 = 0.428 m3		Acier HA 400 = 30.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 82.94 kg/ m3		Echelle pour la vue 6.67cm/m	
												Surface du coffrage = 5.35 m2		Echelle pour la section 9.34cm/m	
														Page 73/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=4.27	00	④	2HA 10	I=1.46	00
②	9HA 6	I=1.08	31	⑤	4HA 10	I=7.34	00
③	2HA 10	I=2.24	00	⑥	16HA 6	I=1.08	31

		Tél.		Fax		
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 74	Nombre 1	Béton : BETON20 = 0.592 m3		Acier HA 400 = 27.9 kg	
			Enrobage inférieur 3 cm		Acier HA 400 = 5.98 kg	
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
			Enrobage inférieur 3 cm		Enrobage latéral 3 cm	
COFFRAGE & FERRAILLAGE LONGRINES	Section 20x40		Densité = 57.26 kg/ m3		Echelle pour la vue 4.88cm/m	
			Surface du coffrage = 7.32 m2		Echelle pour la section 9.34cm/m	
				Page 74/123		

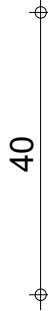
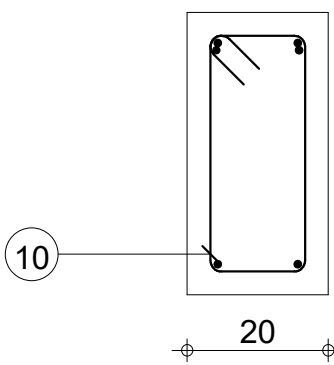
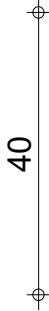
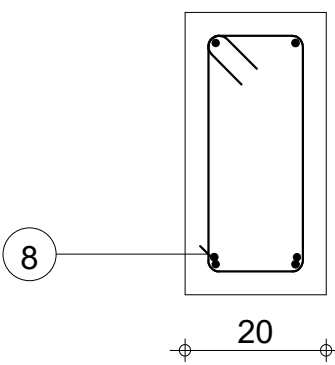
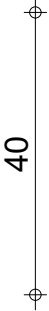
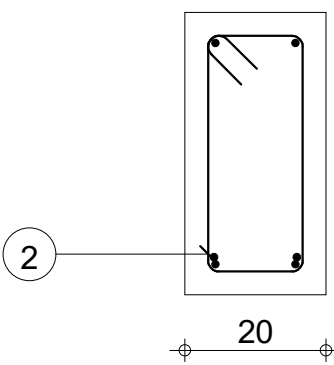
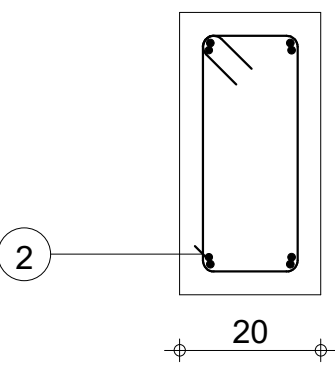


A-A

B-B

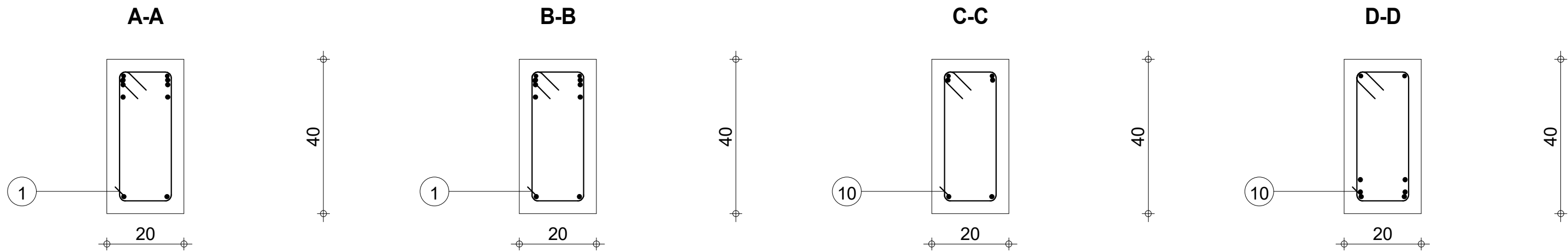
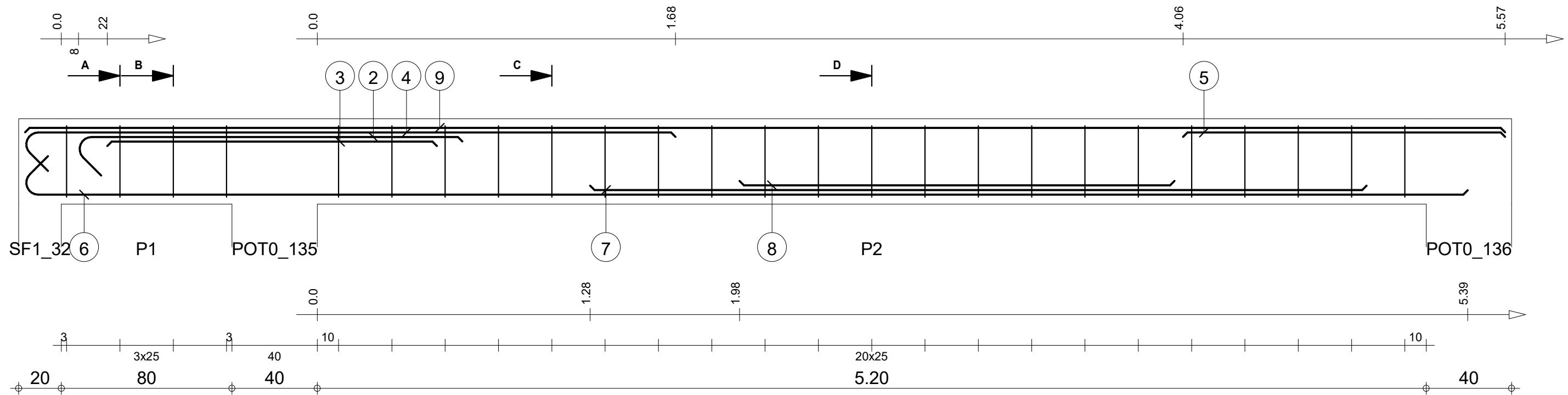
C-C

D-D



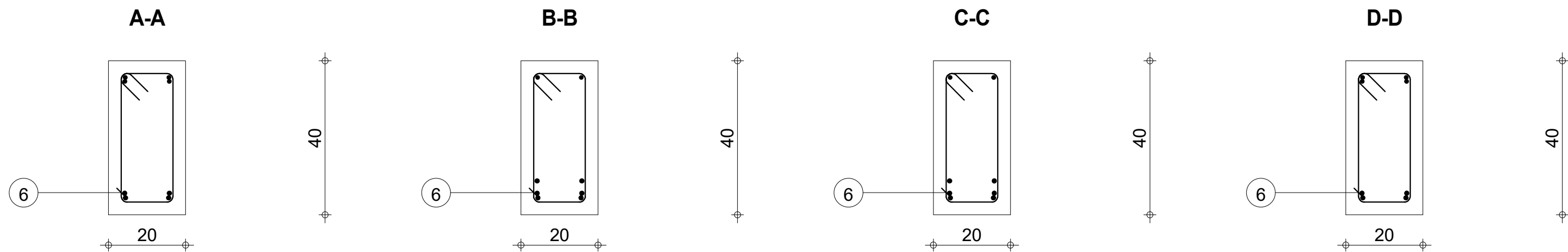
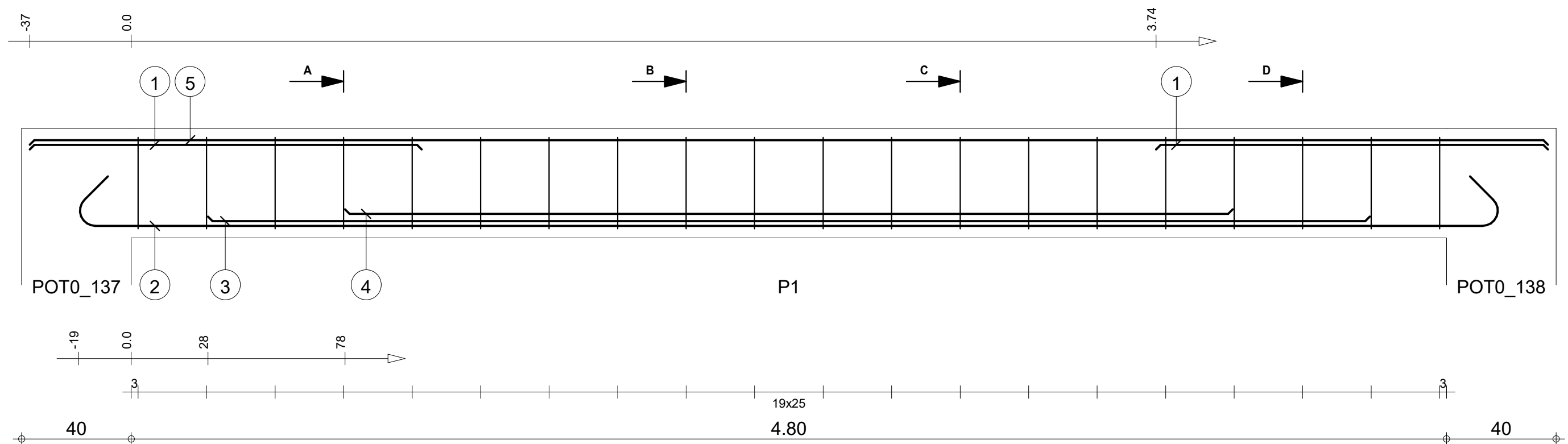
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②	16HA 6	I=1.08	31	⑤	2HA 10	I=3.35	00	⑧	16HA 6	I=1.08	31				
③	2HA 10	I=1.95	00	⑥	2HA 10	I=11.24	00	⑨	2HA 10	I=4.24	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 75				Nombre 1				Béton : BETON20 = 0.922 m3				Acier HA 400 = 49.9 kg			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 64.75 kg/ m3				Echelle pour la vue 3.18cm/m			
												Surface du coffrage = 11.4 m2				Echelle pour la section 9.34cm/m			
																Page 75/123			



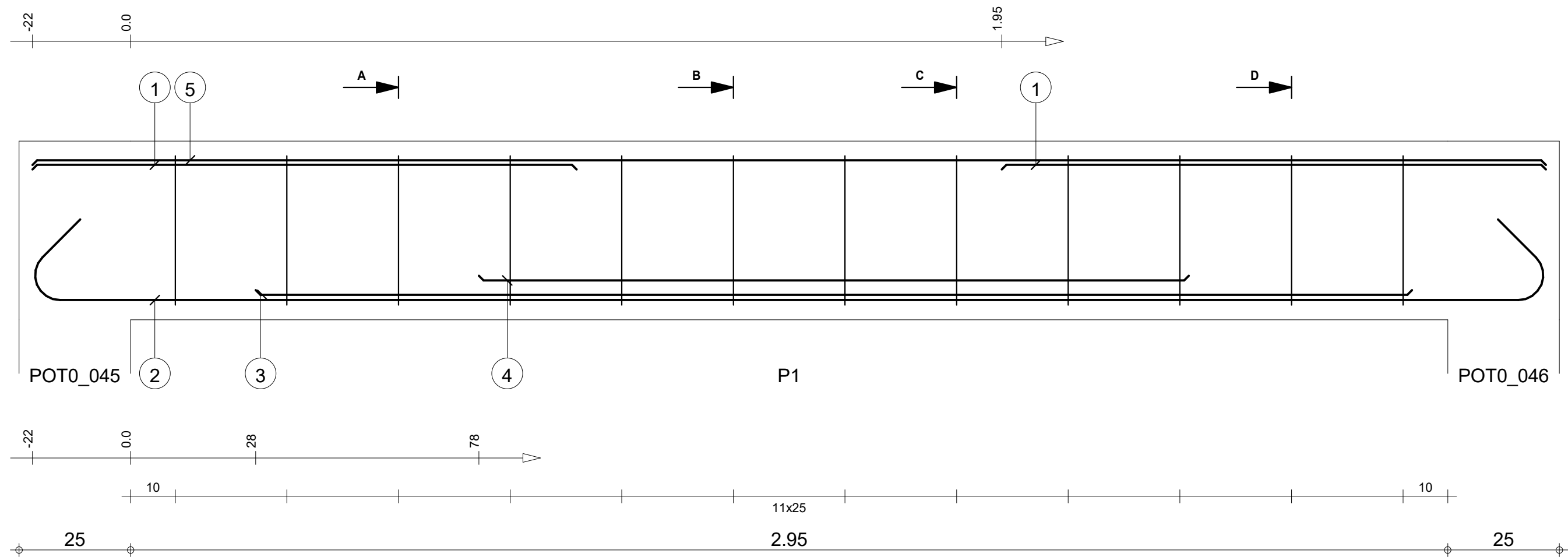
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 6	l=1.08	31	④	2HA 12	l=3.24	00	⑦	2HA 12	l=3.64	00	⑩	21HA 6	l=1.08	31
②	2HA 12	l=1.99	00	⑤	2HA 10	l=1.51	00	⑧	2HA 12	l=2.04	00				
③	2HA 12	l=1.54	00	⑥	2HA 12	l=6.95	00	⑨	2HA 10	l=6.94	00				

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 76										Nombre 1		Béton : BETON20 = 0.56 m3				Acier HA 400 = 44.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES												Enrobage inférieur 3 cm				Enrobage supérieur 3 cm	
												Densité = 90.89 kg/ m3				Echelle pour la vue 5.15cm/m	
												Surface du coffrage = 6.96 m2				Echelle pour la section 9.34cm/m	
																Page 76/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	I=1.43	00	④	2HA 12	I=3.24	00
②	2HA 12	I=5.57	00	⑤	2HA 10	I=5.54	00
③	2HA 12	I=4.24	00	⑥	20HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE LONGRINES		Lg 77: P1 Section 20x40		Nombre 1		Béton : BETON20 = 0.448 m3		Acier HA 400 = 33.5 kg	
						Enrobage inférieur 3 cm		Acier HA 400 = 4.79 kg	
						Densité = 85.49 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 5.6 m2		Enrobage latéral 3 cm	
						Echelle pour la vue 6.38cm/m		Echelle pour la section 9.34cm/m	
								Page 77/123	

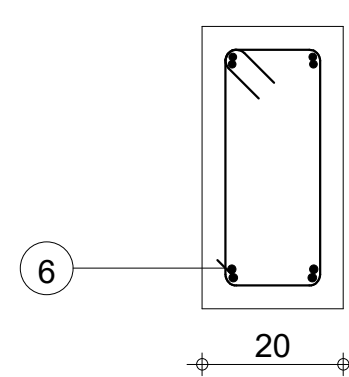
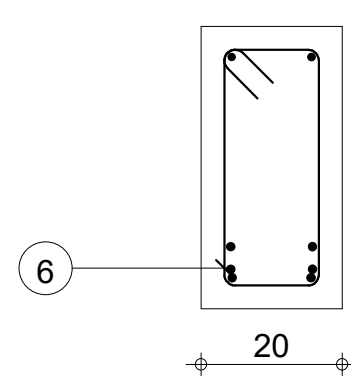
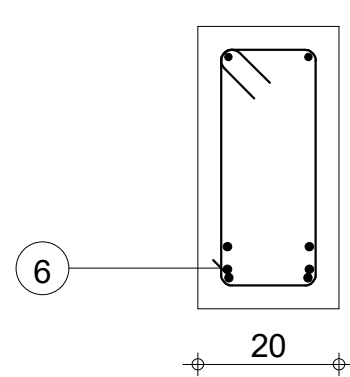
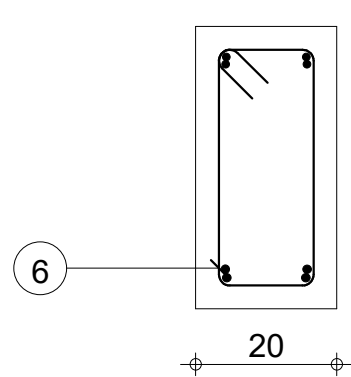


A-A

B-B

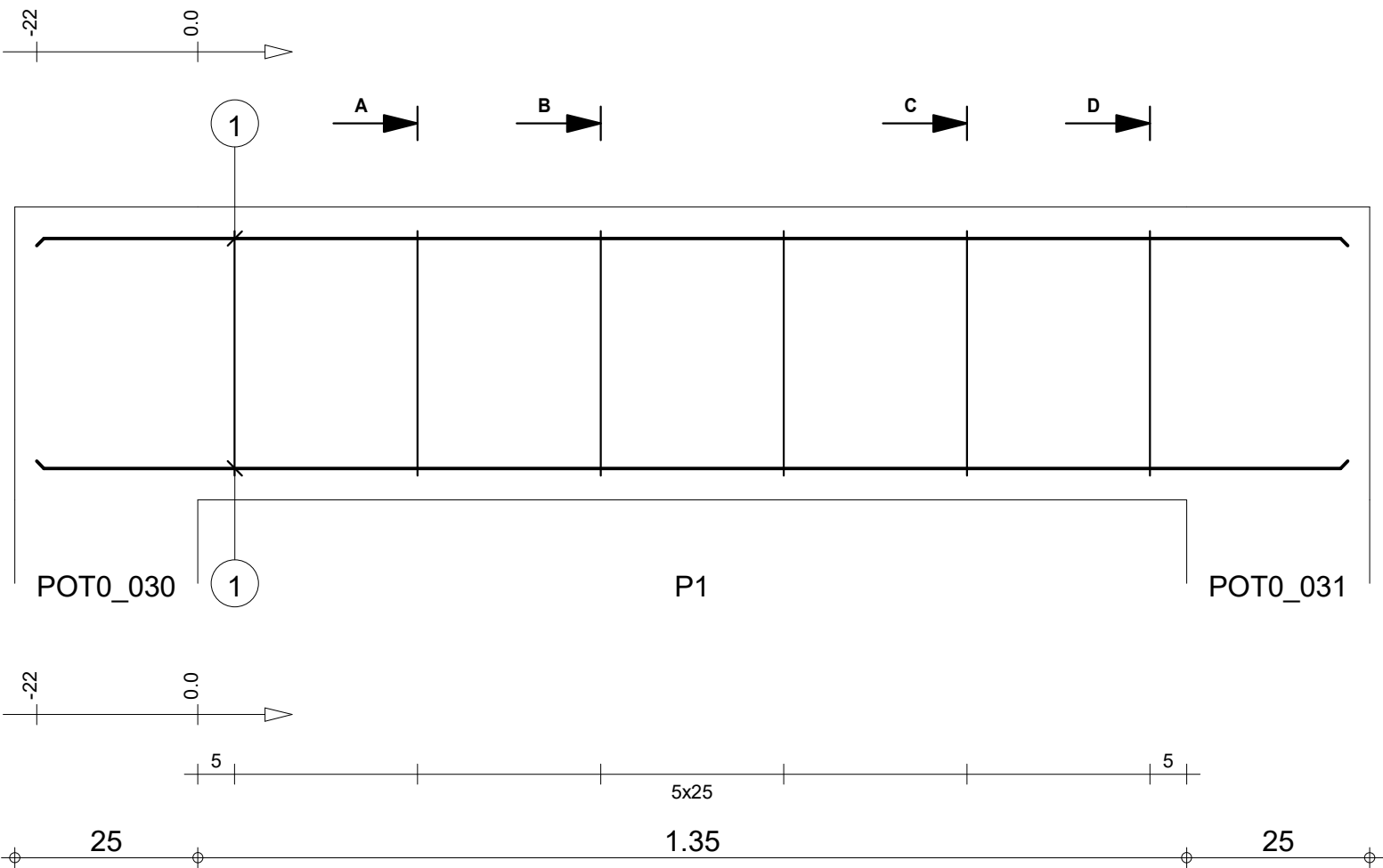
C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	I=1.22	00	④	2HA 12	I=1.59	00
②	2HA 12	I=3.77	00	⑤	2HA 10	I=3.39	00
③	2HA 12	I=2.59	00	⑥	12HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 78: P1				Nombre 1				Béton : BETON20 = 0.276 m3		Acier HA 400 = 21.3 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 87.68 kg/ m3		Echelle pour la vue 10.1cm/m	
												Surface du coffrage = 3.51 m2		Echelle pour la section 9.34cm/m	
														Page 78/123	

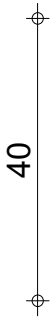
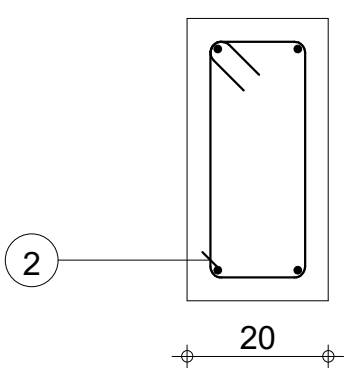
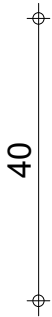
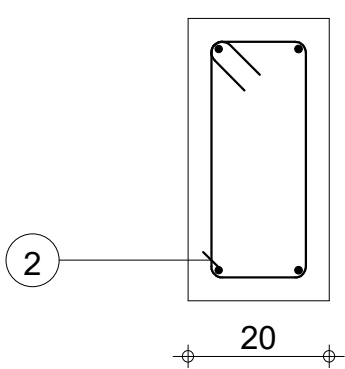
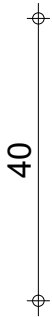
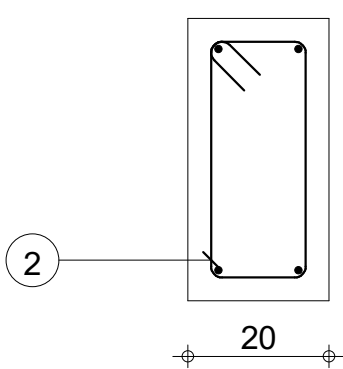
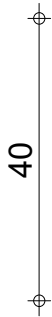
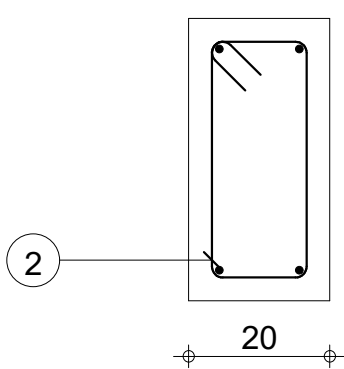


A-A

B-B

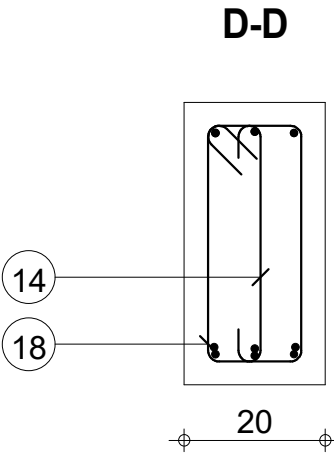
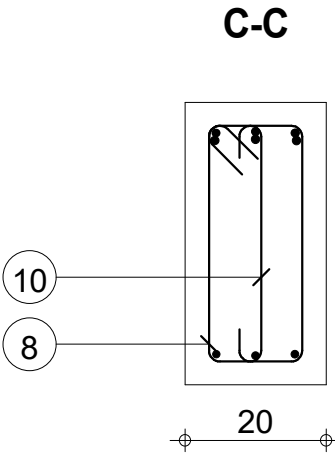
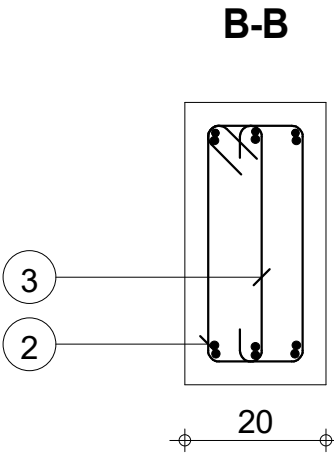
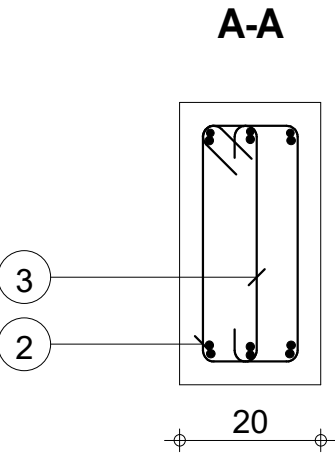
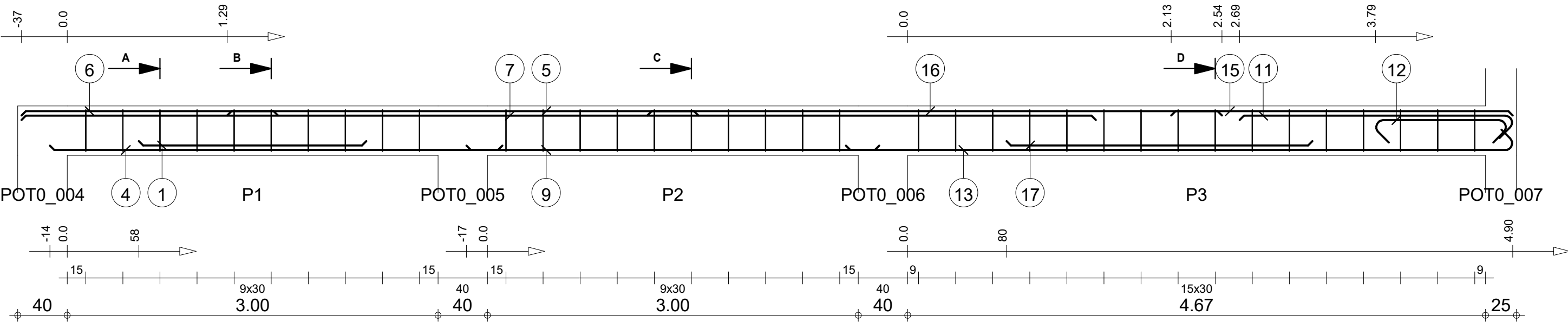
C-C

D-D



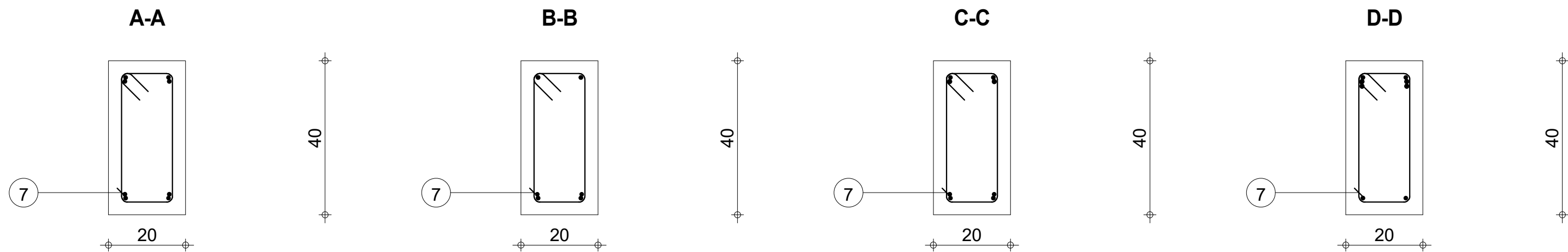
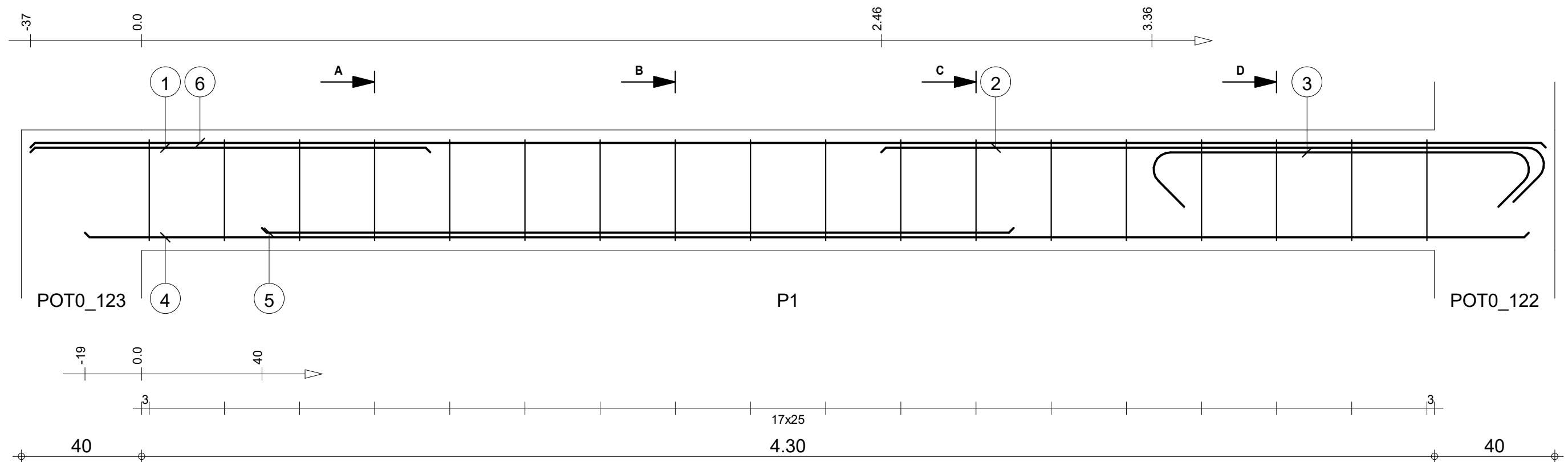
Pos.	Armature	Code	Forme
①	4HA 10	I=1.79	00
②	6HA 6	I=1.08	31

		Tél.	Fax	Nombre 1		Acier HA 400 = 4.41 kg			
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 79: P1				Béton : BETON20 = 0.148 m3	Acier HA 400 = 1.44 kg			
					Enrobage inférieur 3 cm	Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
					Densité = 39.53 kg/ m3	Echelle pour la vue 10.9cm/m	Page 79/123		
COFFRAGE & FERRAILLAGE LONGRINES	Section 20x40				Surface du coffrage = 1.91 m2	Echelle pour la section 9.34cm/m			



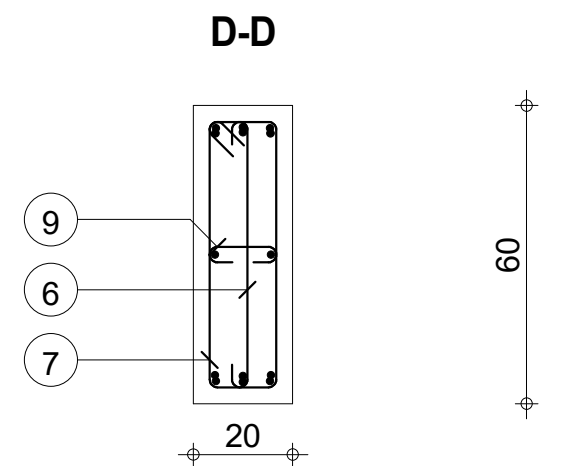
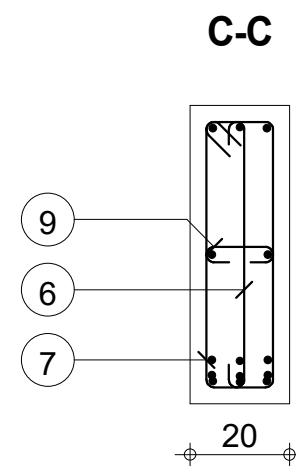
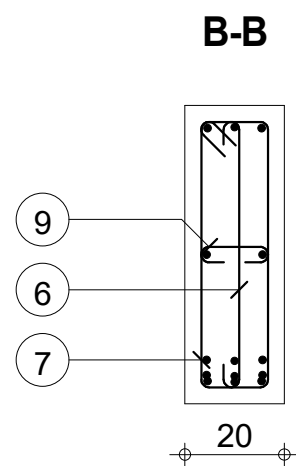
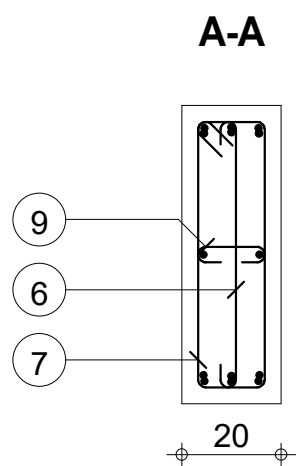
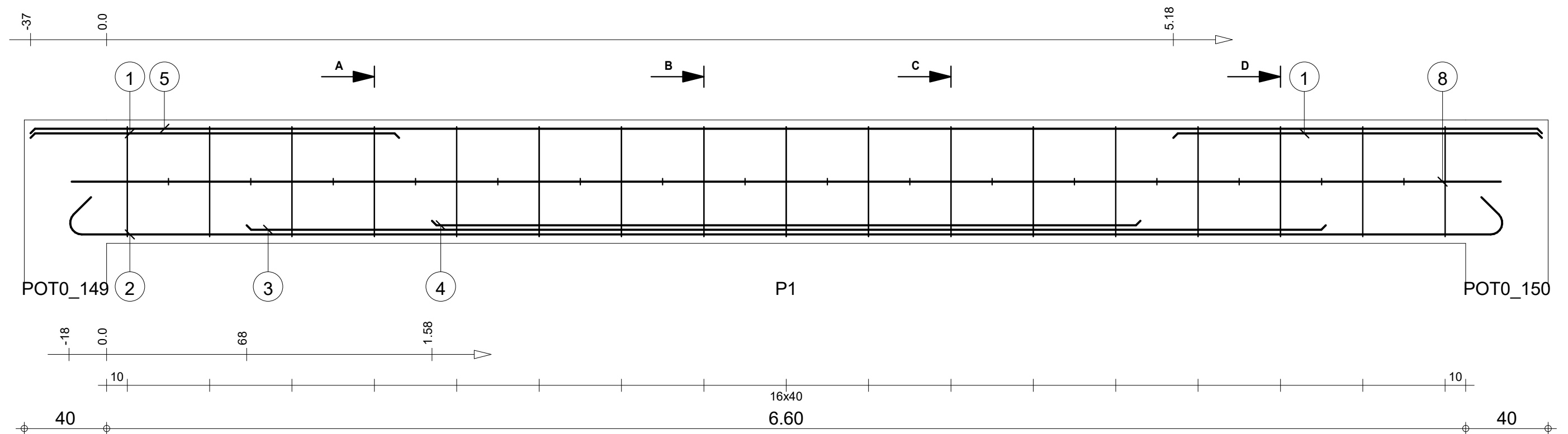
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12	l=1.84	00	④	3HA 12	l=3.66	00	⑦	3HA 12	l=8.69	00	⑩	10HA 6	l=46	00	⑬	3HA 10	l=5.57	00
②	10HA 6	l=1.08	31	⑤	3HA 10	l=3.81	00	⑧	10HA 6	l=1.07	31	⑪	3HA 12	l=2.40	00	⑭	16HA 6	l=46	00
③	10HA 6	l=46	00	⑥	3HA 10	l=2.08	00	⑨	3HA 10	l=3.34	00	⑫	3HA 12	l=1.44	00	⑮	3HA 10	l=2.76	00
Tél.												Fax							
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE LONGRINES					Lg 80 Section 20x40							Béton : BETON20 = 0.97 m3			Acier HA 400 = 93.7 kg Acier HA 400 = 12.3 kg				
												Enrobage inférieur 3 cm			Enrobage supérieur 3 cm			Enrobage latéral 3 cm	
												Densité = 109.3 kg/ m3			Echelle pour la vue 3.02cm/m			Page 80/123	
												Surface du coffrage = 12 m2			Echelle pour la section 9.34cm/m				

Pos.	Armature		Code	Forme
16	3HA 10	l=4.65	00	4.65
17	3HA 10	l=2.48	00	2.48
18	16HA 6	l=1.07	31	14 13 12 11 10



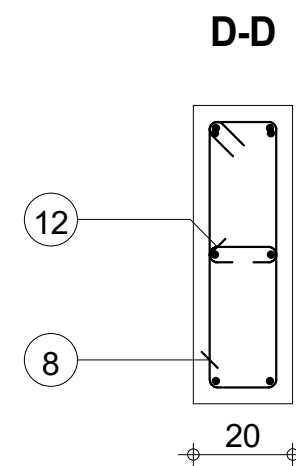
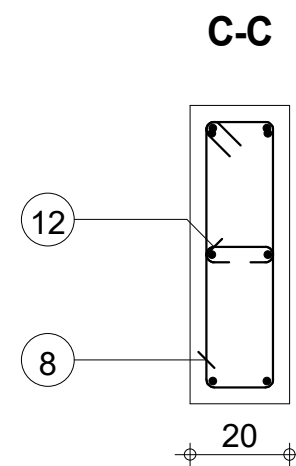
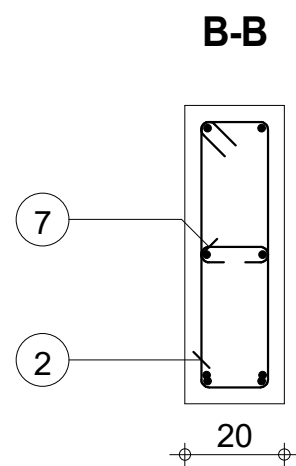
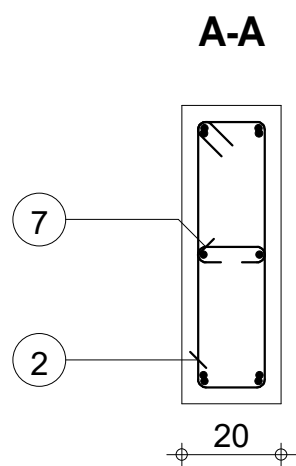
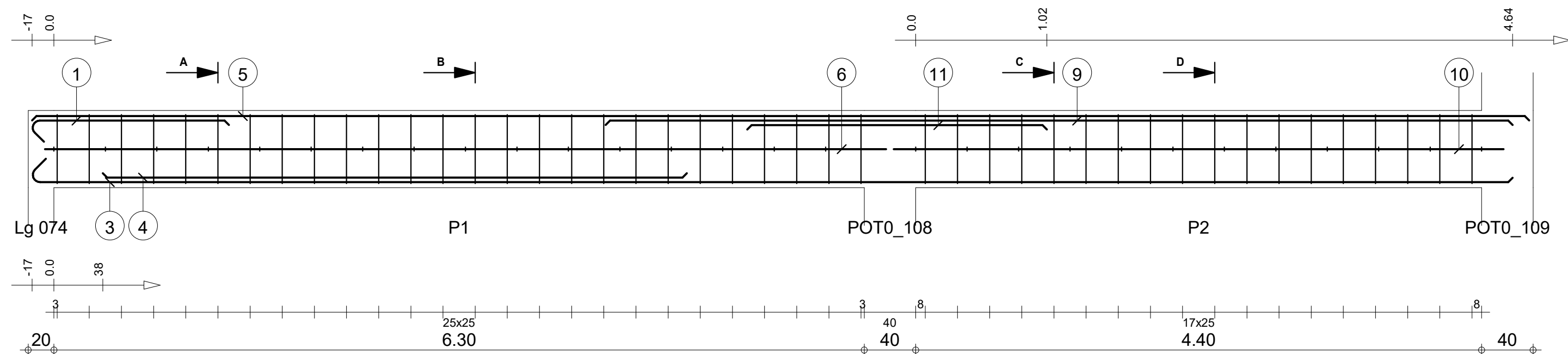
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.33	00	_____1.33_____	④	2HA 10	I=4.80	00	_____4.80_____	⑦	18HA 6 I=1.07 31 14 12 10
②	2HA 12	I=2.40	00	_____2.21_____	⑤	2HA 10	I=2.50	00	_____2.50_____		
③	2HA 12	I=1.64	00	_____1.26_____	⑥	2HA 10	I=5.04	00	_____5.04_____		

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 81: P1				Nombre 1				Béton : BETON20 = 0.408 m3		Acier HA 400 = 24 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 69.36 kg/ m3		Echelle pour la vue 6.98cm/m	
												Surface du coffrage = 5.1 m2		Echelle pour la section 9.34cm/m	
														Page 82/123	



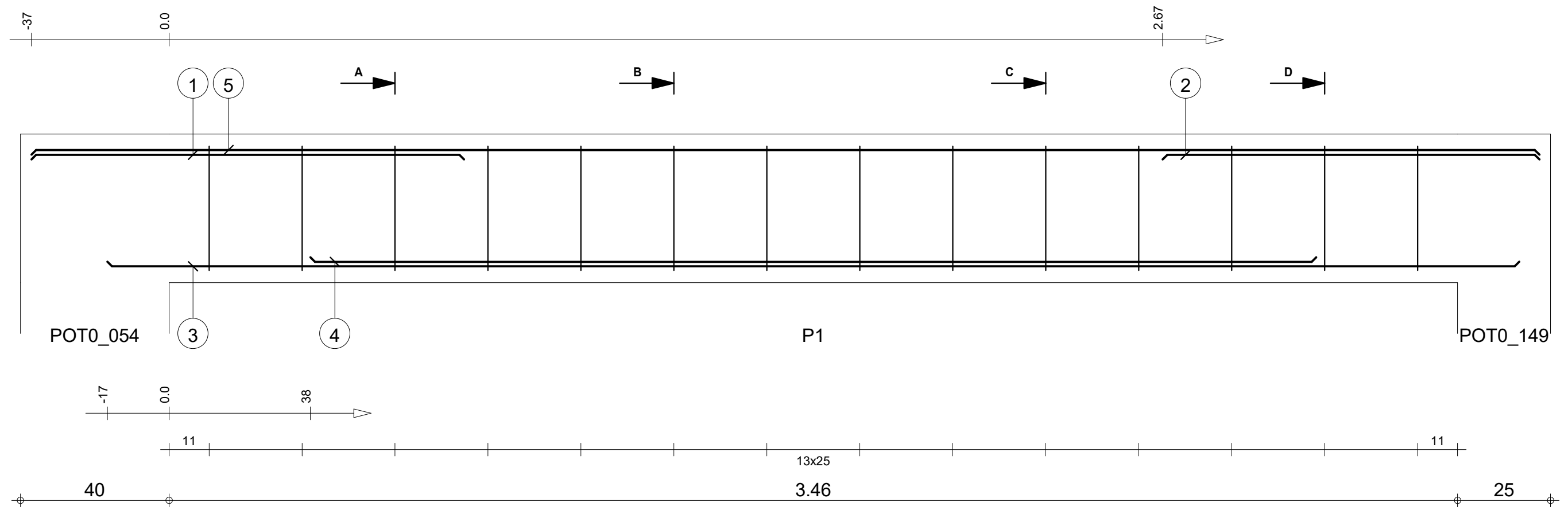
Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	6HA 10	l=1.79	00		④	3HA 12	l=3.44	00		⑦	17HA 6	l=1.48	31	
②	3HA 12	l=7.35	00		⑤	3HA 10	l=7.34	00		⑧	2HA 12	l=6.94	00	
③	3HA 12	l=5.24	00		⑥	17HA 6	l=66	00		⑨	16HA 6	l=26	00	

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 82: P1				Nombre 1				Béton : BETON20 = 0.888 m3		Acier HA 400 = 62.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 94.82 kg/ m3		Echelle pour la vue 4.88cm/m	
												Surface du coffrage = 10.4 m2		Echelle pour la section 6.58cm/m	
														Page 83/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.70	00	④	2HA 12	I=4.54	00	⑦	16HA 6	I=26	00	⑩	2HA 12	I=4.74	00
②	26HA 6	I=1.48	31	⑤	2HA 10	I=11.64	00	⑧	18HA 6	I=1.48	31	⑪	2HA 12	I=2.33	00
③	2HA 12	I=11.70	00	⑥	2HA 12	I=6.54	00	⑨	2HA 12	I=7.05	00	⑫	12HA 6	I=26	00

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 83										Nombre 1		Béton : BETON20 = 1.4 m3		Acier HA 400 = 61.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 70 kg/ m3		Echelle pour la vue 3.13cm/m	
												Surface du coffrage = 16.4 m2		Echelle pour la section 6.58cm/m	
														Page 84/123	

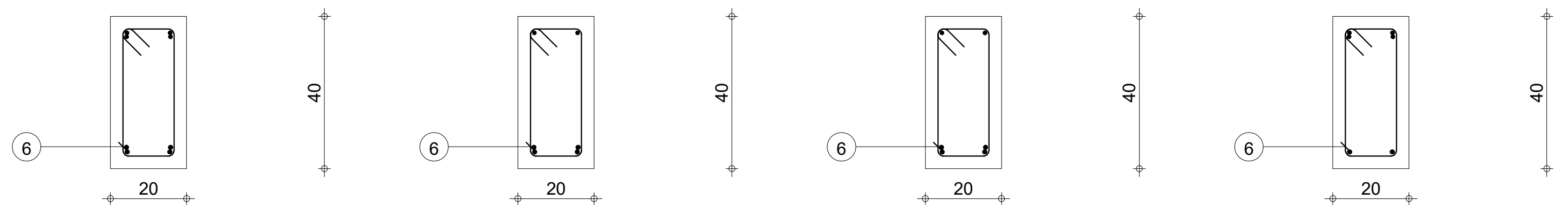


A-A

B-B

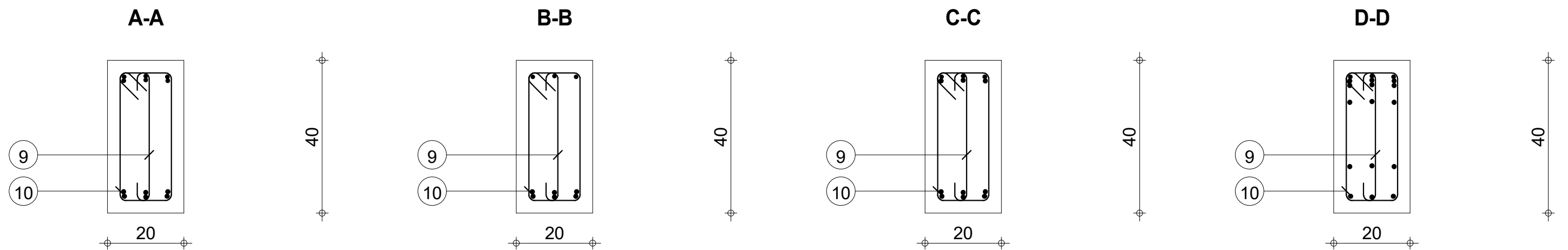
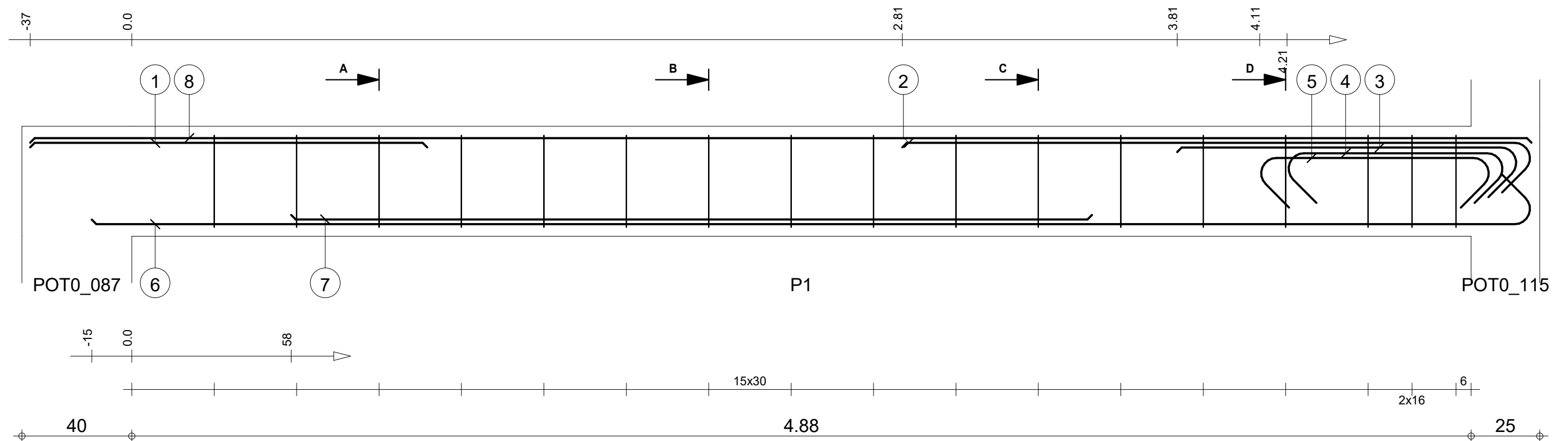
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D-D



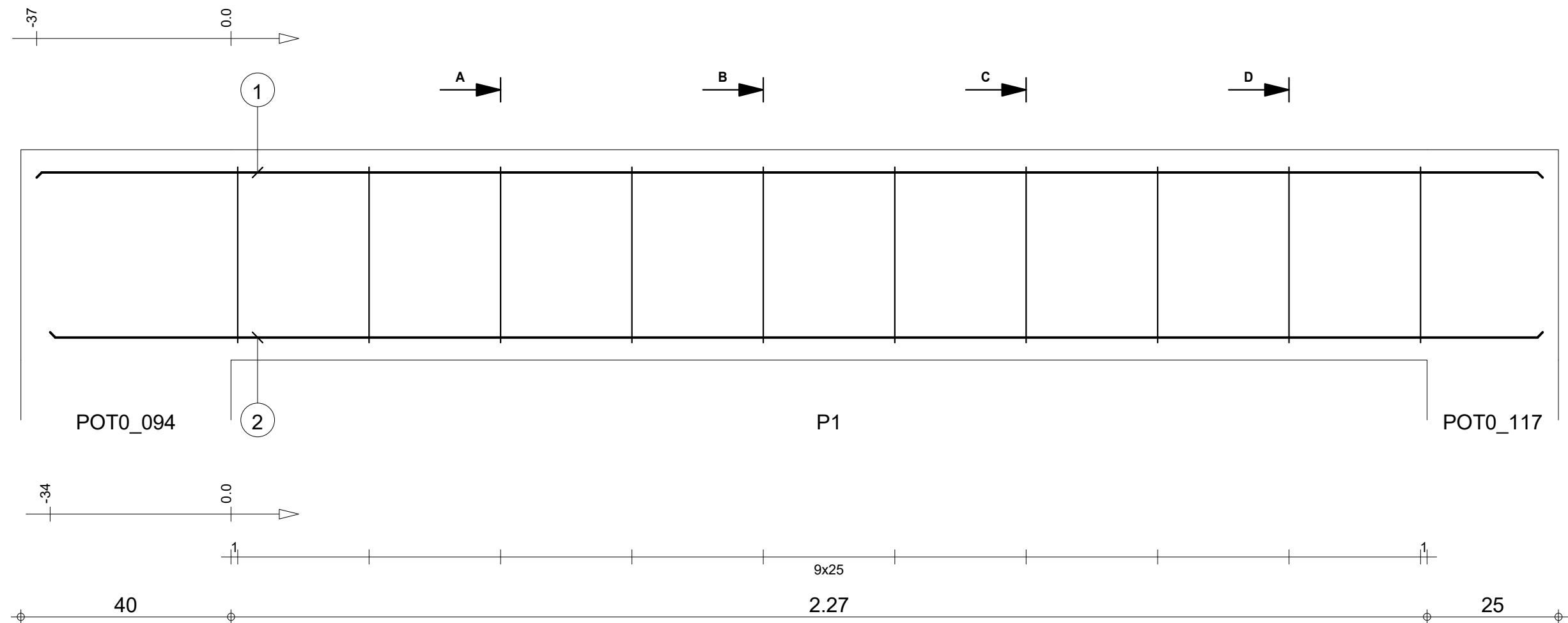
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=1.16	00	④	2HA 12	l=2.71	00
②	2HA 10	l=1.01	00	⑤	2HA 10	l=4.05	00
③	2HA 12	l=3.80	00	⑥	14HA 6	l=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 84: P1		Nombre 1		Béton : BETON20 = 0.329 m3		Acier HA 400 = 19.2 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 68.69 kg/ m3		Echelle pour la vue 8.58cm/m	
						Surface du coffrage = 4.15 m2		Echelle pour la section 9.34cm/m	
								Page 85/123	



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	3HA 10	I=1.45	00	1.45	④	3HA 12	I=1.17	00	79	⑦	3HA 12	I=2.92	00	2.92	⑩	17HA 6	I=1.08	31	14 31 14
②	3HA 12	I=2.48	00	2.29	⑤	3HA 12	I=1.22	00	84	⑧	3HA 10	I=5.46	00	5.47					
③	3HA 12	I=1.43	00	1.24	⑥	3HA 12	I=5.43	00	5.24	⑨	17HA 6	I=46	00	34					

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 85: P1										Tél.		Fax		Nombre 1		Béton : BETON20 = 0.442 m3		Acier HA 400 = 51.8 kg	
COFFRAGE & FERRAILLAGE LONGRINES																Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
Section 20x40																Densité = 130.3 kg/ m3		Echelle pour la vue 6.46cm/m	
																Surface du coffrage = 5.56 m2		Echelle pour la section 9.34cm/m	
																		Page 86/123	

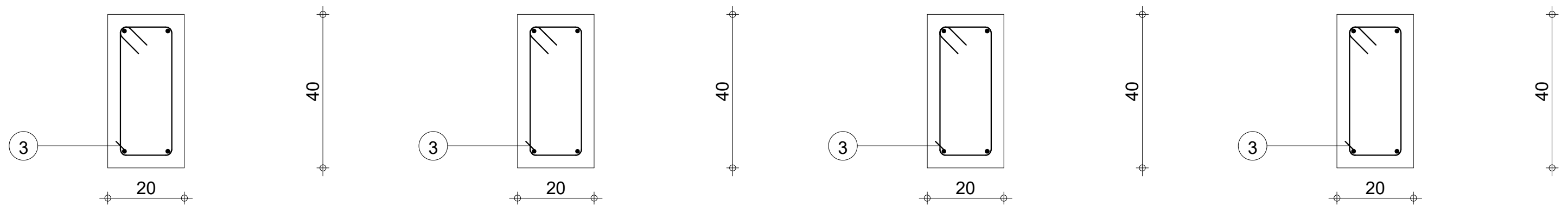


A-A

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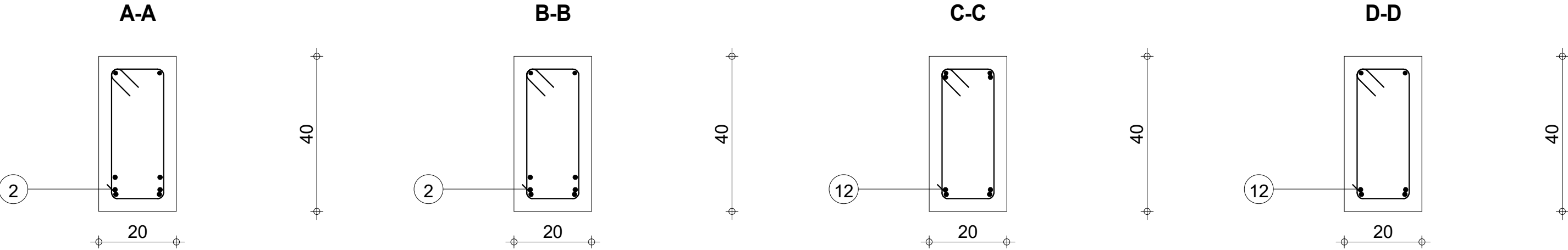
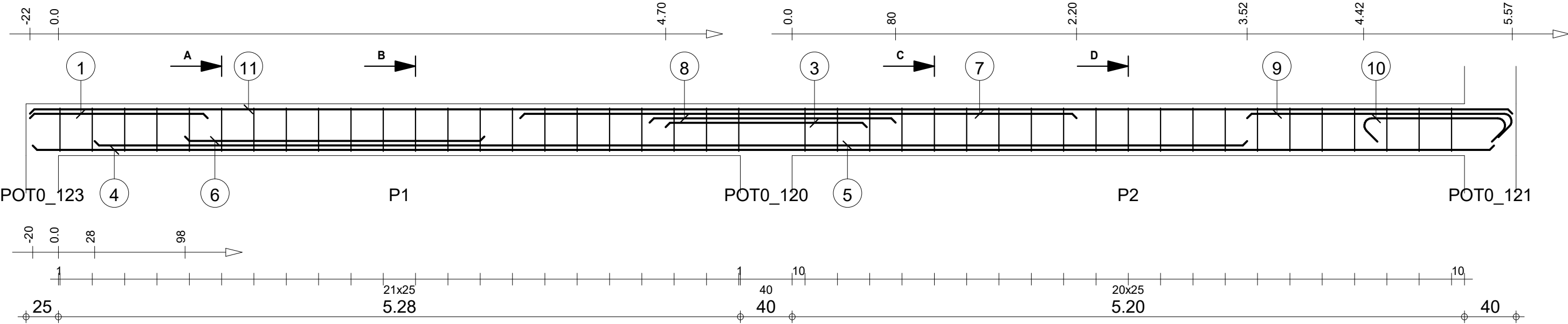
C-C

D-D

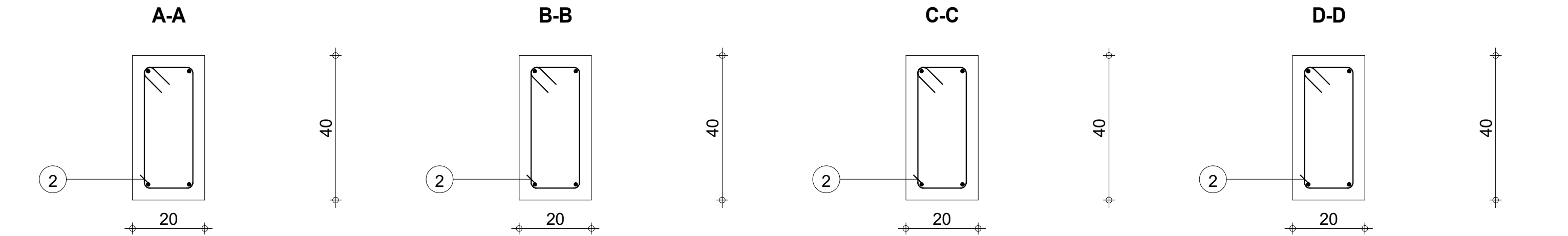
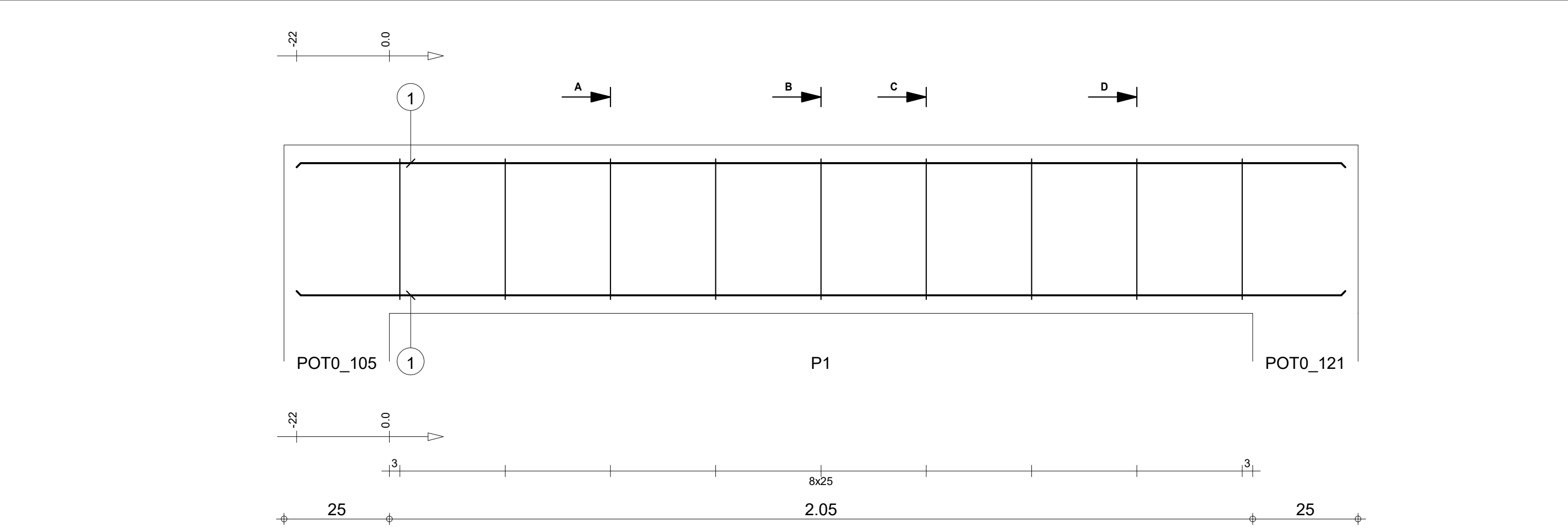


Pos.	Armature		Code	Forme
①	2HA 10	l=2.87	00	2.87
②	2HA 10	l=2.84	00	2.84
③	10HA 6	l=1.08	31	14 34 32 15

Tél.		Fax		Nombre 1			Acier HA 400 = 7.03 kg			
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 86: P1	Section 20x40	COFFRAGE & FERRAILLAGE LONGRINES		Béton : BETON20 = 0.234 m3		Acier HA 400 = 2.39 kg			
					Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
					Densité = 40.3 kg/ m3 Surface du coffrage = 2.96 m2		Echelle pour la vue 10.9cm/m Echelle pour la section 9.34cm/m		Page 87/123	

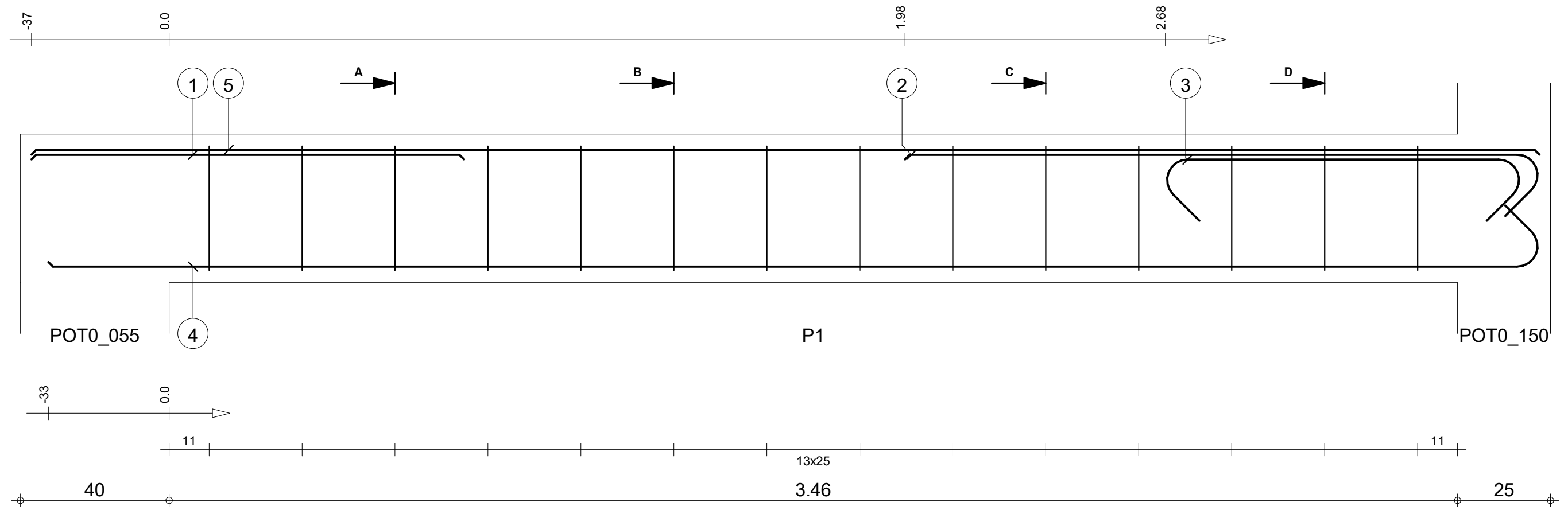


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme						
①	2HA 10	l=1.38	00	④	2HA 12	l=11.30	00	⑦	2HA 12	l=4.30	00	⑩	2HA 12	l=1.48	00						
②	22HA 6	l=1.08	31	⑤	2HA 12	l=8.92	00	⑧	2HA 12	l=1.90	00	⑪	2HA 10	l=11.47	00						
③	2HA 12	l=1.56	00	⑥	2HA 12	l=2.31	00	⑨	2HA 12	l=2.24	00	⑫	21HA 6	l=1.08	31						
Tél.												Fax				Acier HA 400 = 76.2 kg					
STRUCTURE BATIMENT CEA/ITECH-MTV												Lg 87				Béton : BETON20 = 0.922 m3		Acier HA 400 = 10.3 kg			
																Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
																Densité = 93.82 kg/ m3		Echelle pour la vue 3.18cm/m		Page 88/123	
COFFRAGE & FERRAILLAGE LONGRINES												Section 20x40				Echelle pour la section 9.34cm/m					



Pos.	Armature	Code	Forme
①	4HA 10 l=2.49	00	2.49
②	9HA 6 l=1.08	31	14 34 6

STRUCTURE BATIMENT CEA/ITECH-MTV		Tél.	Fax	Nombre 1		Béton : BETON20 = 0.204 m3	Acier HA 400 = 6.14 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Lg 88: P1		Section 20x40		Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
						Densité = 40.64 kg/ m3	Echelle pour la vue 10.9cm/m	Page 89/123
						Surface du coffrage = 2.61 m2	Echelle pour la section 9.34cm/m	

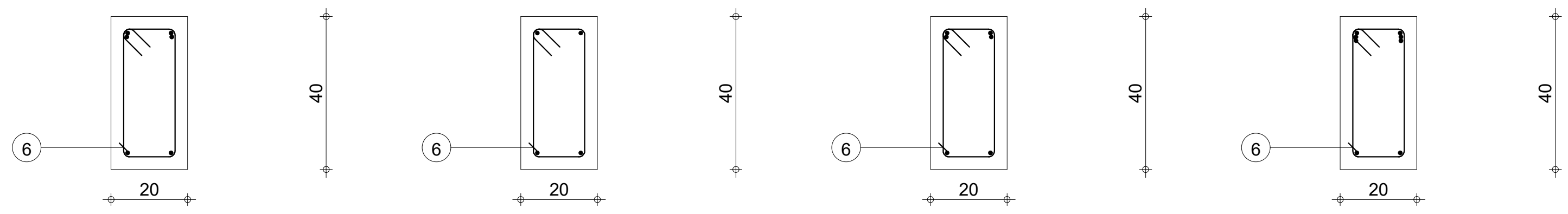


A-A

B-B

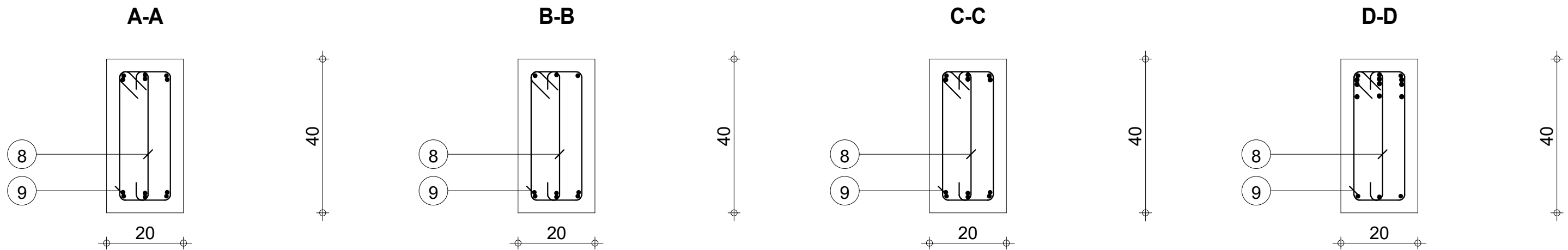
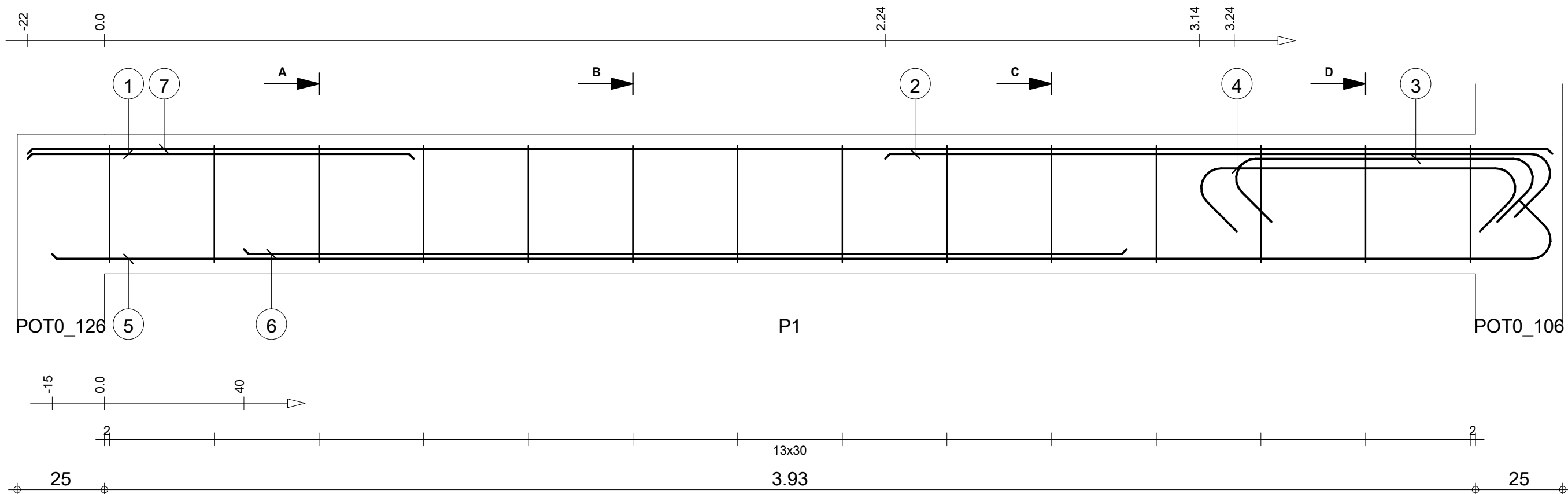
C-C

D-D



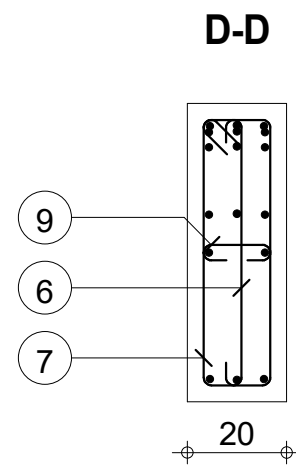
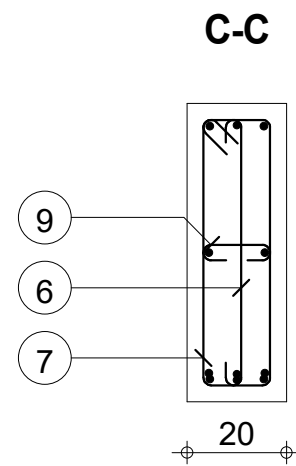
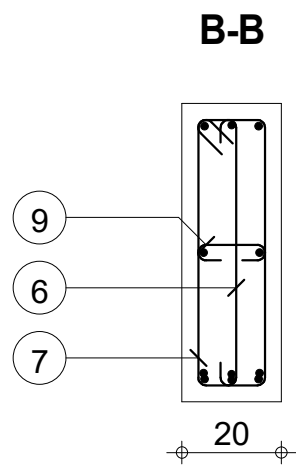
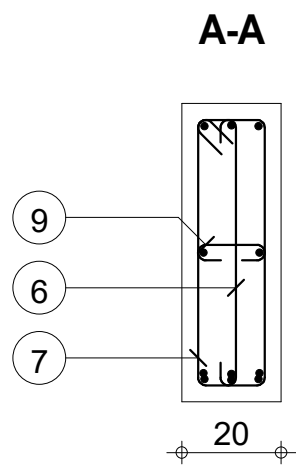
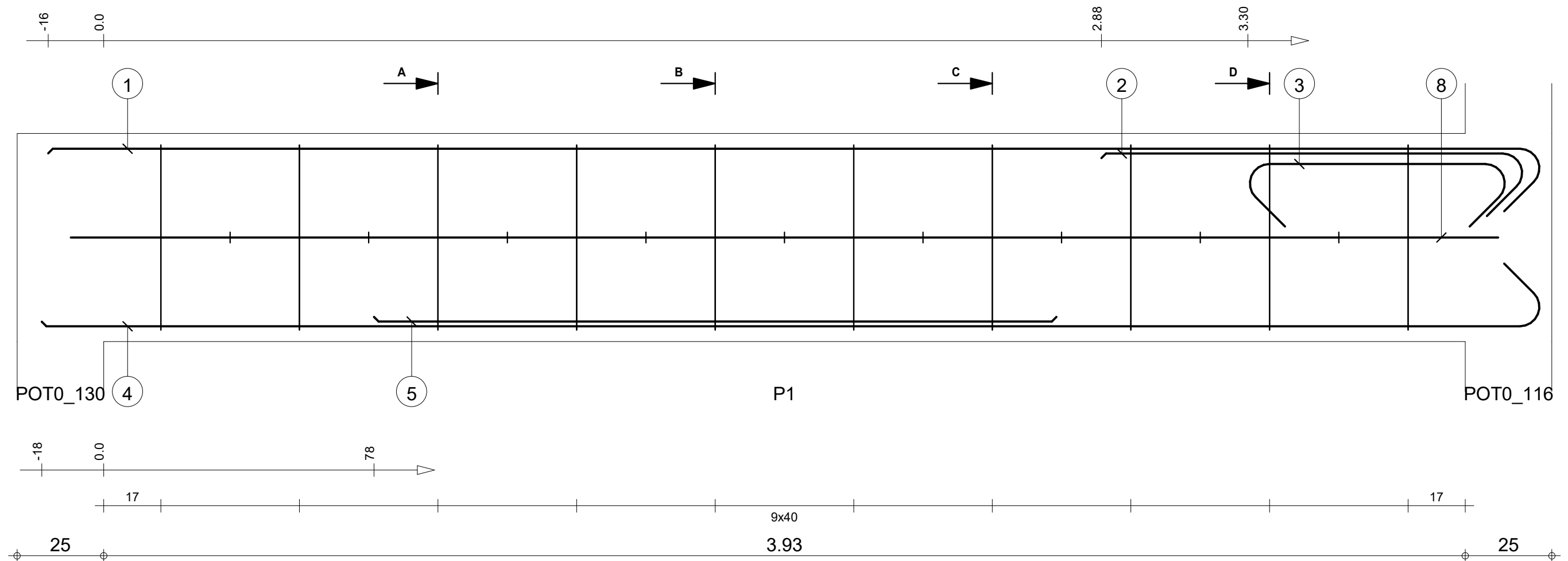
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.16	00	④	2HA 10	I=4.18	00
②	2HA 10	I=1.88	00	⑤	2HA 10	I=4.05	00
③	2HA 10	I=1.29	00	⑥	14HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 89: P1		Section 20x40		Nombre 1		Tél.		Fax	
								Béton : BETON20 = 0.329 m3		Acier HA 400 = 15.5 kg	
								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
								Enrobage latéral 3 cm			
COFFRAGE & FERRAILLAGE LONGRINES		Densité = 57.14 kg/ m3 Surface du coffrage = 4.15 m2		Echelle pour la vue 8.58cm/m Echelle pour la section 9.34cm/m		Page 90/123					



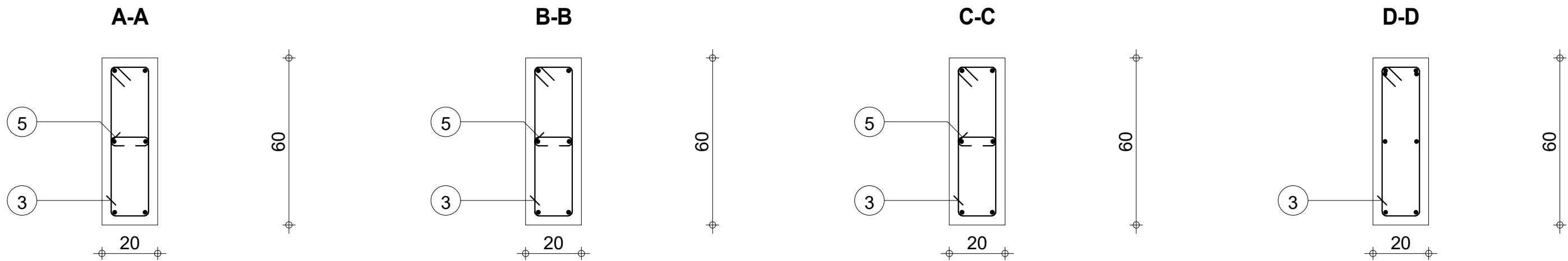
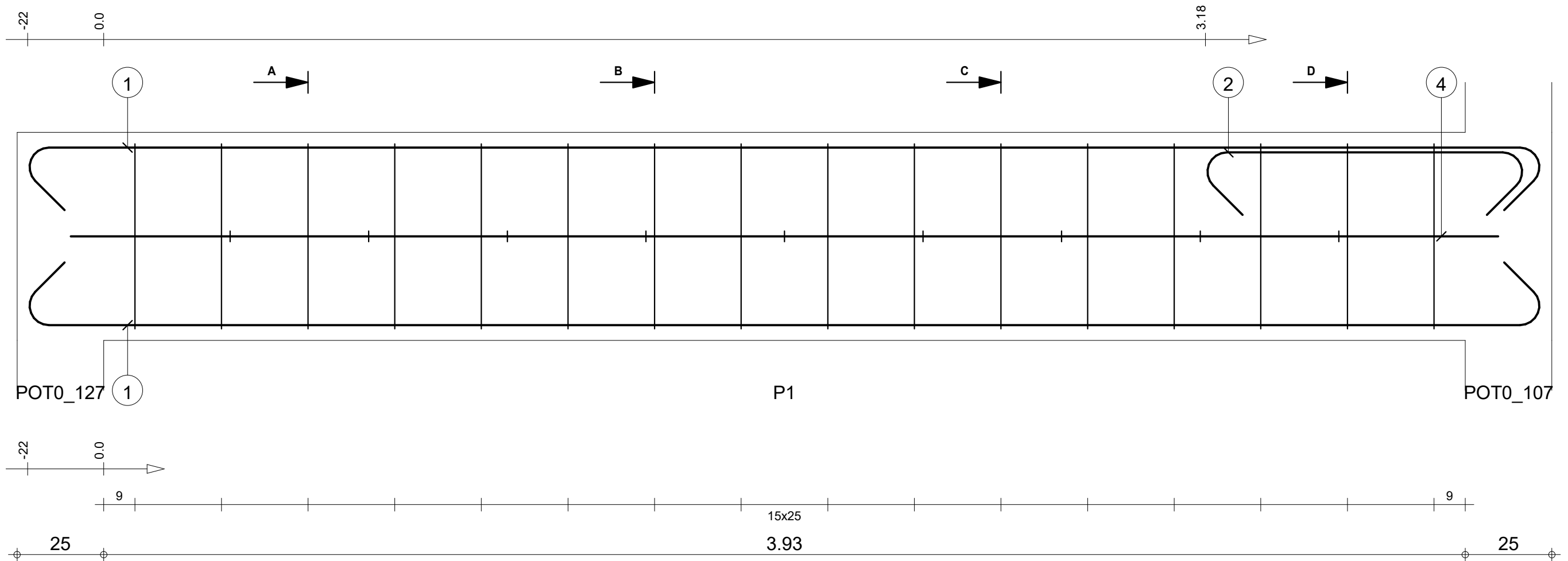
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	3HA 12	I=2.10	00	⑤	3HA 10	I=4.47	00	⑧	14HA 6	I=46	00
③	3HA 12	I=1.24	00	⑥	3HA 10	I=2.53	00	⑨	14HA 6	I=1.07	31

		Tél.		Fax				Acier HA 400 = 35.4 kg					
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 90: P1	Nombre 1						Béton : BETON20 = 0.354 m3		Acier HA 400 = 4.77 kg			
								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
								Densité = 113.6 kg/ m3 Surface du coffrage = 4.49 m2		Echelle pour la vue 7.99cm/m Echelle pour la section 9.34cm/m		Page 91/123	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40											



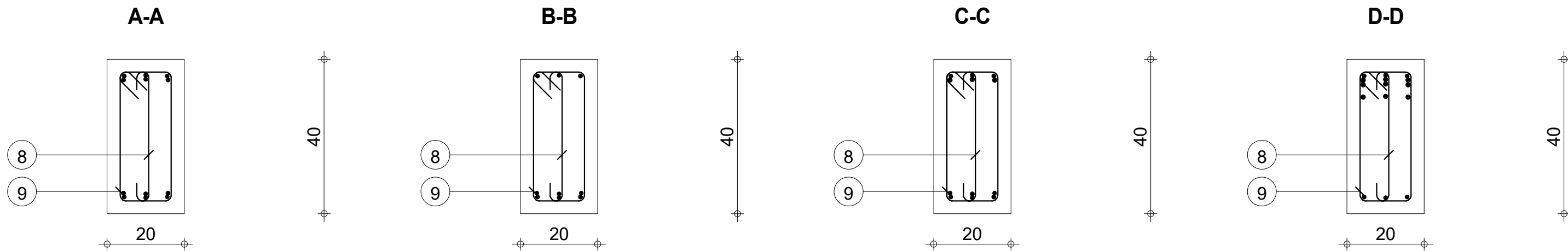
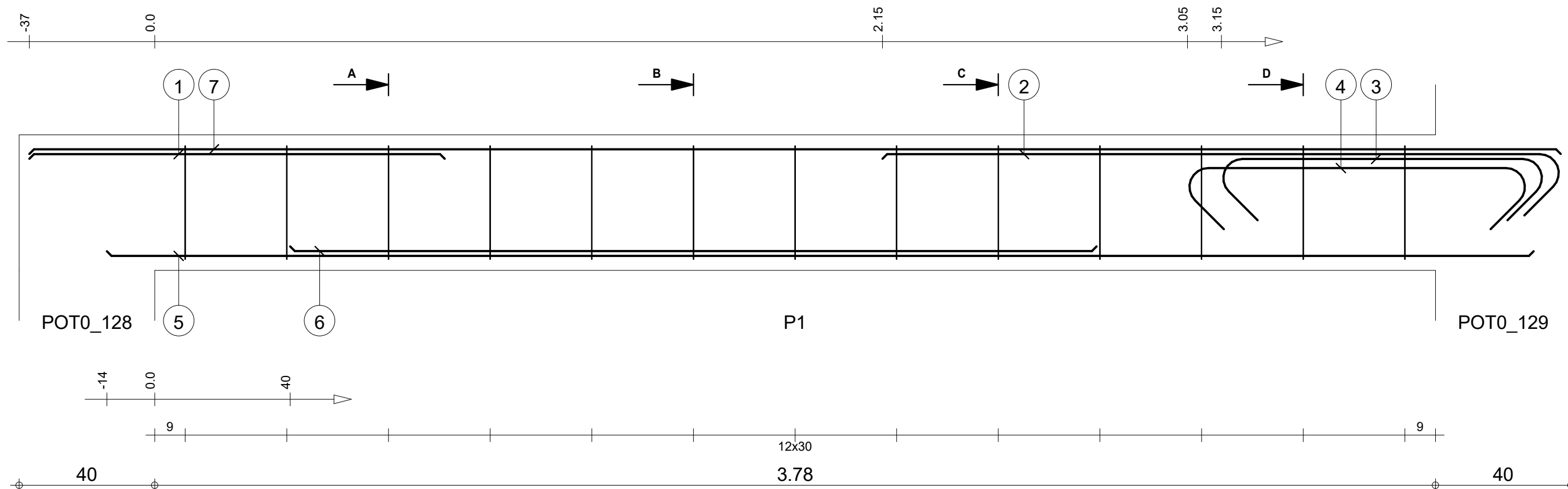
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12	l=4.50	00	④	3HA 12	l=4.52	00	⑦	10HA 6	l=1.48	31
②	3HA 12	l=1.41	00	⑤	3HA 12	l=1.97	00	⑧	2HA 12	l=4.12	00
③	3HA 12	l=1.13	00	⑥	10HA 6	l=66	00	⑨	9HA 6	l=26	00

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 91: P1				Nombre 1				Béton : BETON20 = 0.532 m3		Acier HA 400 = 36 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 91.35 kg/ m3		Echelle pour la vue 7.99cm/m	
												Surface du coffrage = 6.34 m2		Echelle pour la section 6.58cm/m	
														Page 92/123	



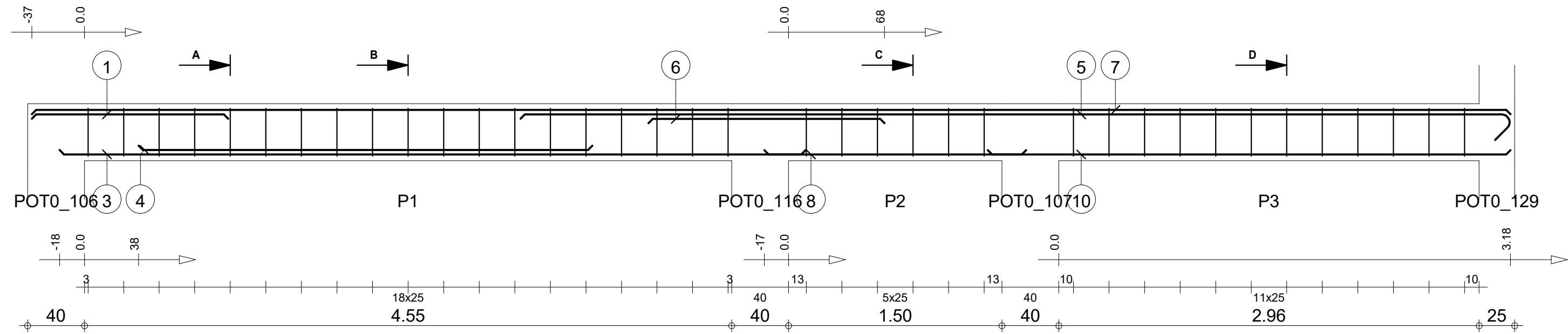
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 12	l=4.75	00	④	2HA 12	l=4.12	00
②	2HA 12	l=1.30	00	⑤	9HA 6	l=26	00
③	16HA 6	l=1.48	31				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 92: P1		Nombre 1		Béton : BETON20 = 0.532 m3		Acier HA 400 = 19.2 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x60				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 60.71 kg/ m3		Echelle pour la vue 7.99cm/m	
						Surface du coffrage = 6.34 m2		Echelle pour la section 6.58cm/m	
								Page 93/123	



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	3HA 10	l=1.23	00	1.23	④	3HA 12	l=1.38	00	1.00	⑦	3HA 10	l=4.52	00	4.52
②	3HA 12	l=2.19	00	2.00	⑤	3HA 10	l=4.21	00	4.21	⑧	13HA 6	l=46	00	34
③	3HA 12	l=1.33	00	95	⑥	3HA 10	l=2.38	00	2.38	⑨	13HA 6	l=1.07	31	14

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 93: P1				Nombre 1				Béton : BETON20 = 0.366 m3		Acier HA 400 = 35.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 110.1 kg/ m3		Echelle pour la vue 7.74cm/m	
												Surface du coffrage = 4.58 m2		Echelle pour la section 9.34cm/m	
														Page 94/123	



A-A

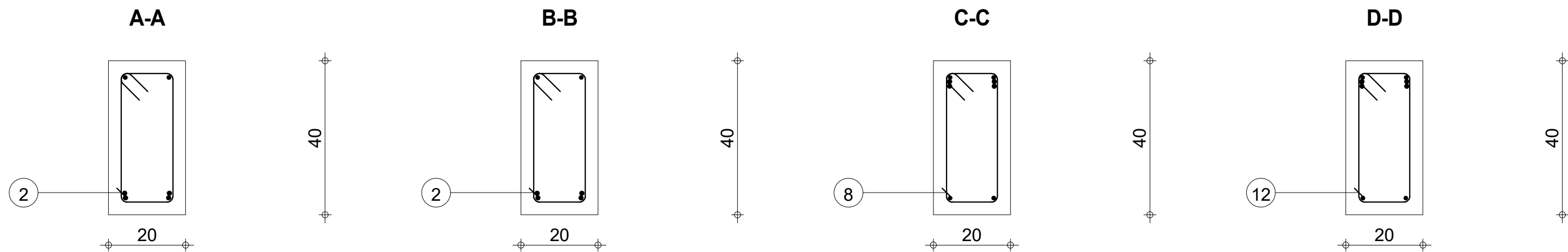
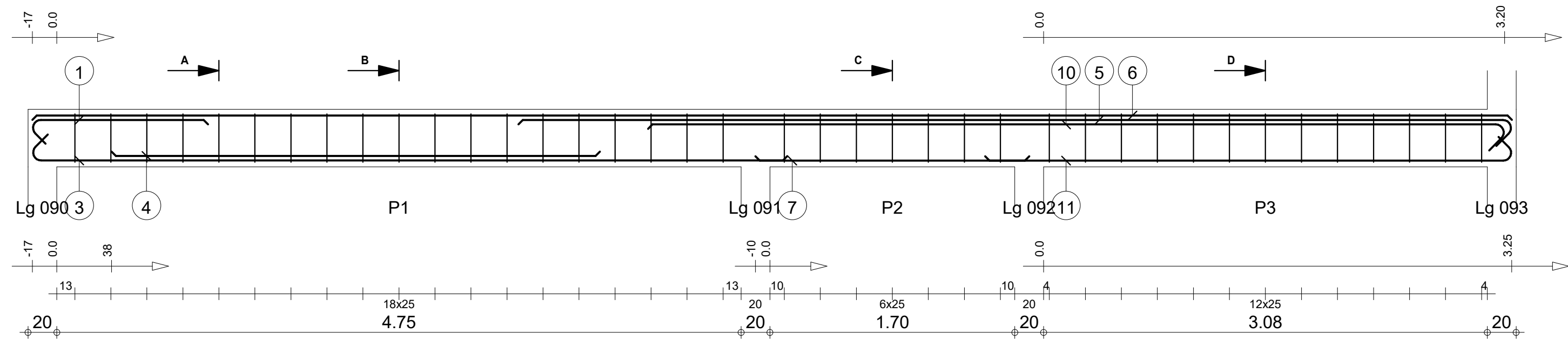
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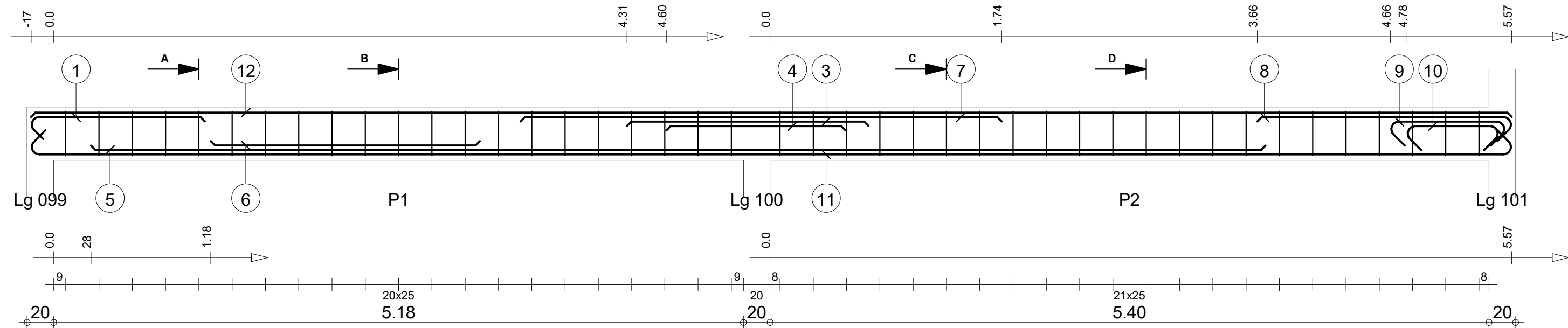
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②	19HA 6	I=1.08	31	⑤	2HA 12	I=7.15	00	⑧	2HA 10	I=1.84	00	⑪	12HA 6	I=1.07	31
③	2HA 12	I=5.25	00	⑥	2HA 12	I=1.66	00	⑨	6HA 6	I=1.07	31				

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 94 COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40		Nombre 1		Béton : BETON20 = 0.836 m3		Acier HA 400 = 51.9 kg	
						Enrobage inférieur 3 cm		Acier HA 400 = 8.84 kg	
						Densité = 72.73 kg/ m3		Enrobage supérieur 3 cm	
						Surface du coffrage = 10.3 m2		Enrobage latéral 3 cm	
						Echelle pour la vue 3.49cm/m		Echelle pour la section 9.34cm/m	
								Page 95/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.39	00	④	2HA 12	I=3.39	00	⑦	2HA 10	I=1.90	00	⑪	2HA 10	I=3.83	00
②	19HA 6	I=1.08	31	⑤	2HA 12	I=7.09	00	⑧	7HA 6	I=1.08*	31	⑫	13HA 6	I=1.07	31
③	2HA 12	I=5.43	00	⑥	2HA 10	I=10.27	00	⑩	2HA 12	I=6.13	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 95				Nombre 1				Béton : BETON20 = 0.826 m3				Acier HA 400 = 60.6 kg			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 84.62 kg/ m3				Echelle pour la vue 3.53cm/m			
												Surface du coffrage = 10.3 m2				Echelle pour la section 9.34cm/m			
																Page 96/123			

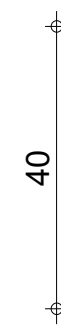
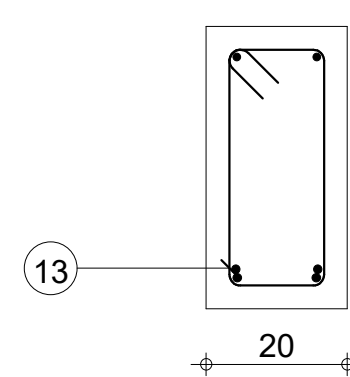
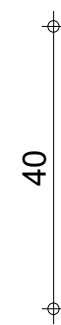
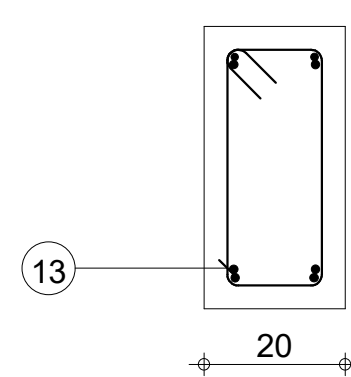
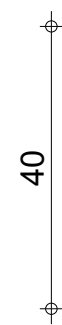
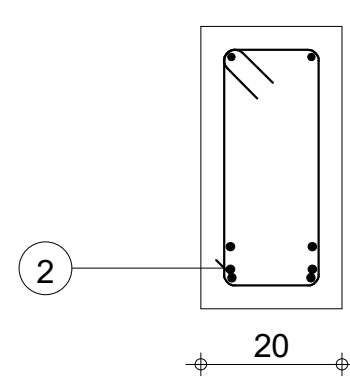
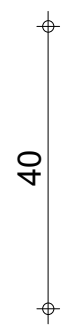
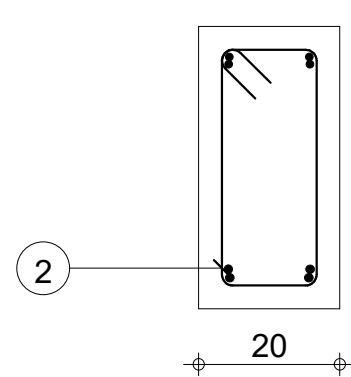


A-A

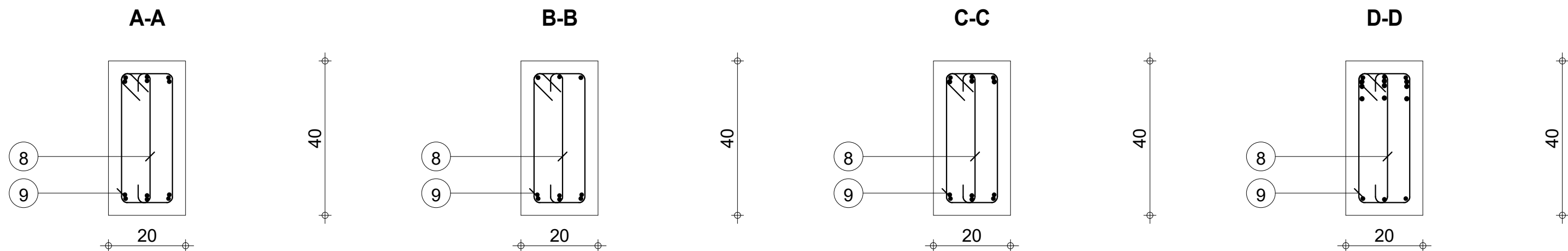
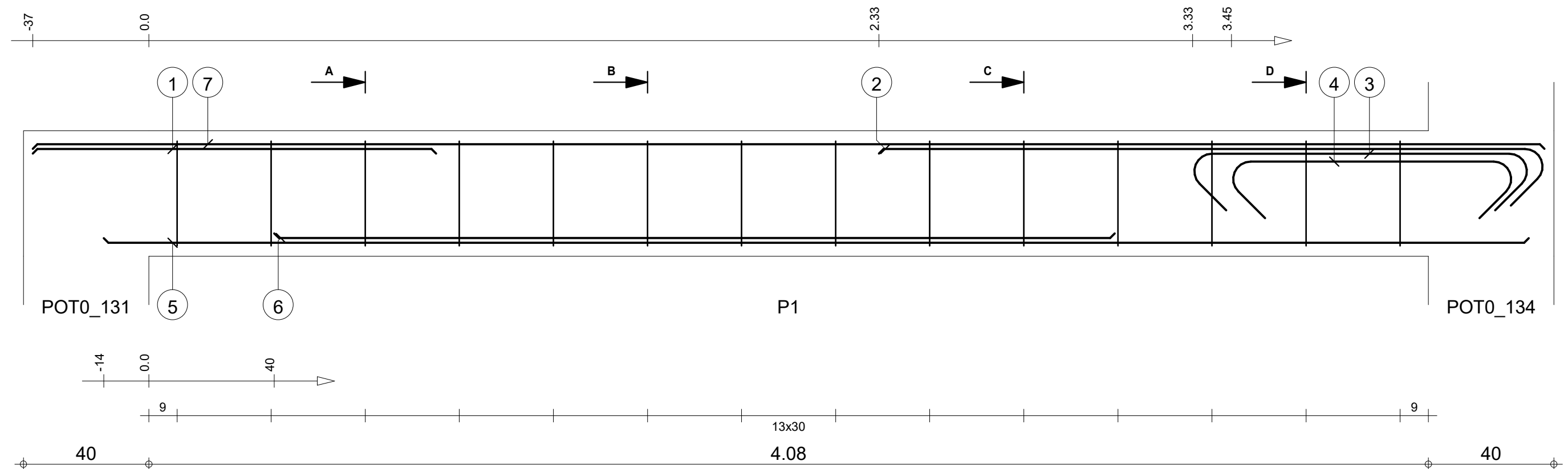
B-B

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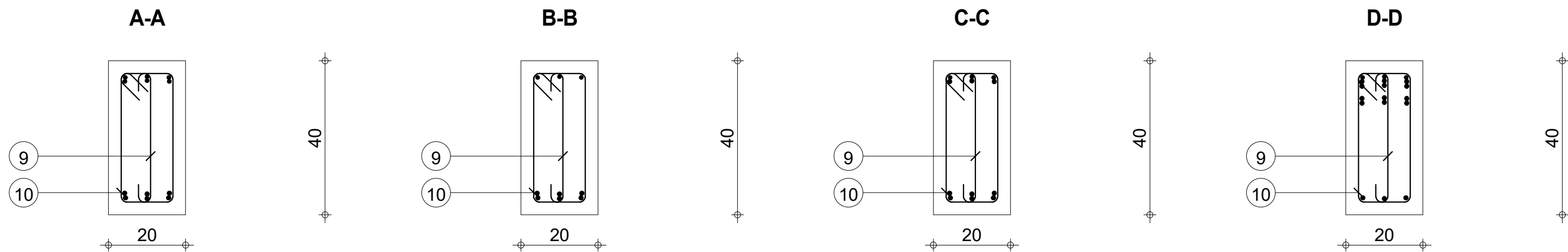
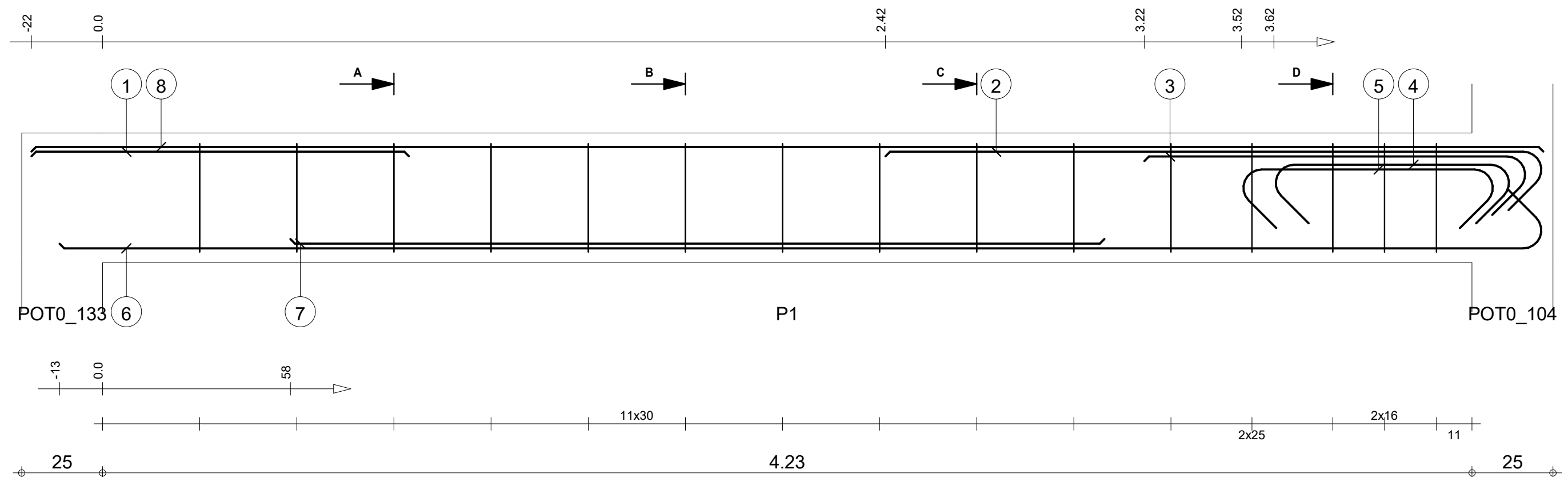


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	2HA 10	I=1.48	00	④	2HA 12	I=1.35	00	⑦	2HA 12	I=3.61	00	⑩	2HA 12	I=1.07	00	⑬	22HA 6	I=1.08	31				
②	21HA 6	I=1.08	31	⑤	2HA 12	I=8.82	00	⑧	2HA 12	I=2.10	00	⑪	2HA 12	I=11.50	00								
③	2HA 12	I=1.81	00	⑥	2HA 12	I=2.02	00	⑨	2HA 12	I=1.24	00	⑫	2HA 10	I=11.12	00								
Tél.												Fax		Béton : BETON20 = 0.894 m3			Acier HA 400 = 75 kg						
STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 97								Enrobage inférieur 3 cm			Enrobage supérieur 3 cm			Enrobage latéral 3 cm					
												COFFRAGE & FERRAILLAGE LONGRINES				Densité = 95.41 kg/ m3			Echelle pour la vue 3.27cm/m			Page 98/123	
																Surface du coffrage = 11.2 m2			Echelle pour la section 9.34cm/m				
				Section 20x40																			



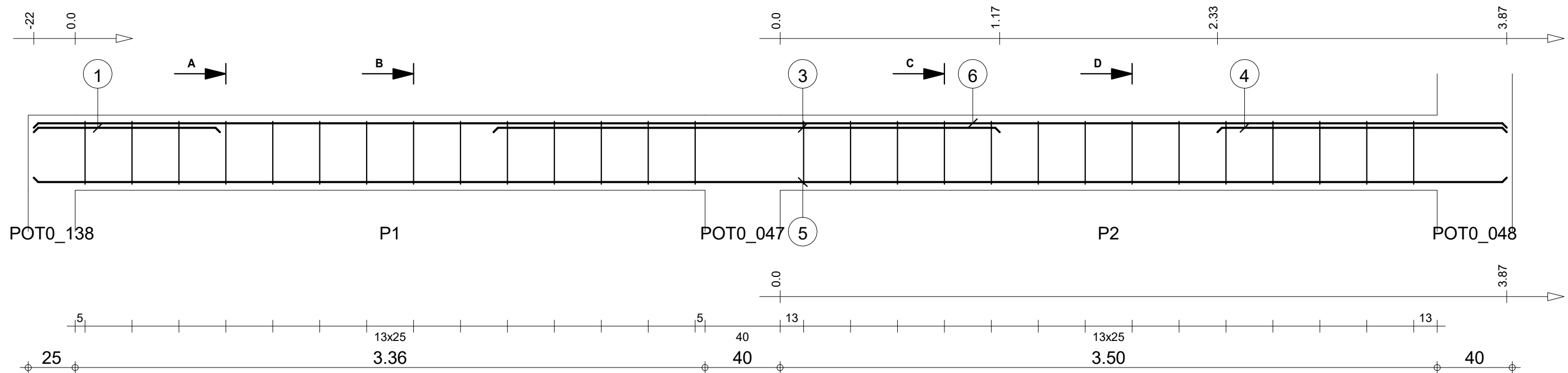
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	I=1.29	00	④	3HA 12	I=1.28	00	⑦	3HA 10	I=4.82	00
②	3HA 12	I=2.31	00	⑤	3HA 10	I=4.54	00	⑧	14HA 6	I=46	00
③	3HA 12	I=1.45	00	⑥	3HA 10	I=2.68	00	⑨	14HA 6	I=1.07	31

		Tél.	Fax	Nombre 1		Acier HA 400 = 38.1 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 99: P1				Béton : BETON20 = 0.39 m3	Acier HA 400 = 4.77 kg	
					Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
					Densité = 110 kg/ m3	Echelle pour la vue 7.28cm/m	Page 100/123
					Surface du coffrage = 4.88 m2	Echelle pour la section 9.34cm/m	
COFFRAGE & FERRAILLAGE LONGRINES	Section 20x40						



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	3HA 10	I=1.17	00	1.17	④	3HA 12	I=1.11	00	73	⑦	3HA 12	I=2.51	00	2.51	⑩	15HA 6	I=1.08	31	14
②	3HA 12	I=2.22	00	2.03	⑤	3HA 12	I=1.16	00	78	⑧	3HA 10	I=4.67	00	4.67					
③	3HA 12	I=1.37	00	1.18	⑥	3HA 12	I=4.77	00	4.58	⑨	15HA 6	I=46	00	34					

		Tél.	Fax		Acier HA 400 = 45.8 kg
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE LONGRINES	Lg 101: P1 Section 20x40	Nombre 1	Béton : BETON20 = 0.378 m3	Acier HA 400 = 5.12 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 134.9 kg/ m3 Surface du coffrage = 4.79 m2	Echelle pour la vue 7.5cm/m Echelle pour la section 9.34cm/m	Page 102/123



A-A

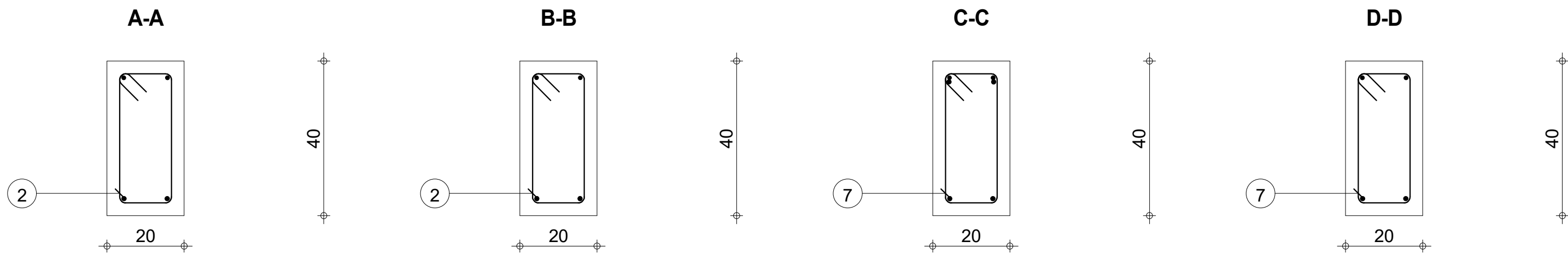
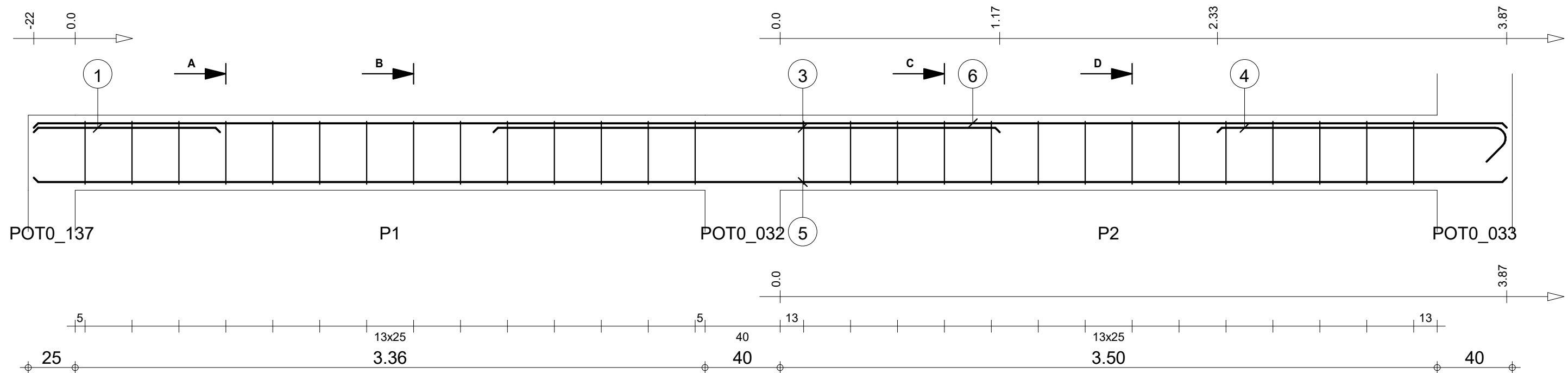
B-B

C-C

D-D

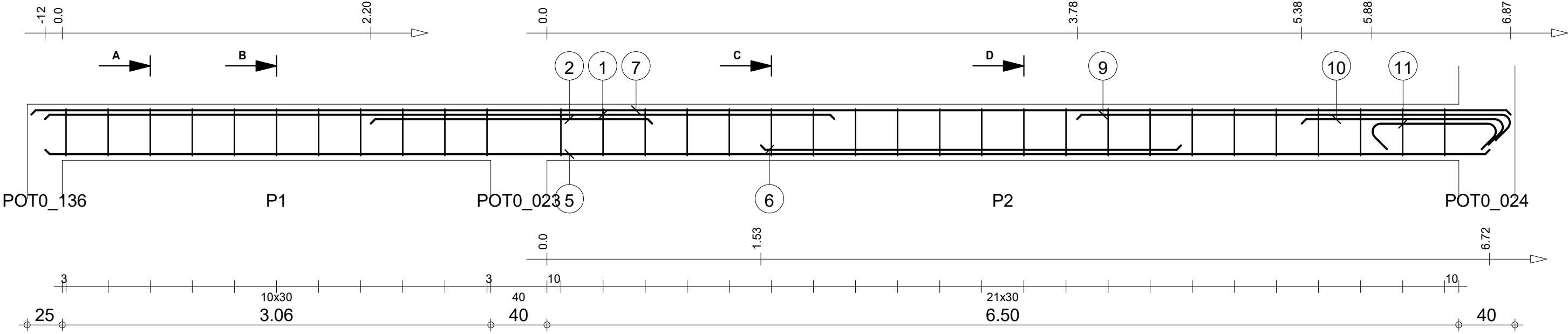
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②	14HA 6	I=1.08	31	⑤	2HA 12	I=7.84	00				
③	2HA 12	I=2.70	00	⑥	2HA 10	I=7.84	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 102				Nombre 1				Béton : BETON20 = 0.632 m3		Acier HA 400 = 32.3 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 61.71 kg/ m3		Echelle pour la vue 4.58cm/m	
												Surface du coffrage = 7.86 m2		Echelle pour la section 9.34cm/m	
														Page 103/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	2HA 10	I=99	00	99	④	2HA 12	I=1.73	00	1.54	⑦	14HA 6	I=1.08	31	14 31 14
②	14HA 6	I=1.08	31	14 31 14	⑤	2HA 12	I=7.84	00	7.85					
③	2HA 12	I=2.70	00	2.70	⑥	2HA 10	I=7.84	00	7.85					

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 103				Nombre 1				Béton : BETON20 = 0.632 m3		Acier HA 400 = 32.7 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 62.34 kg/ m3		Echelle pour la vue 4.58cm/m	
												Surface du coffrage = 7.86 m2		Echelle pour la section 9.34cm/m	
														Page 104/123	

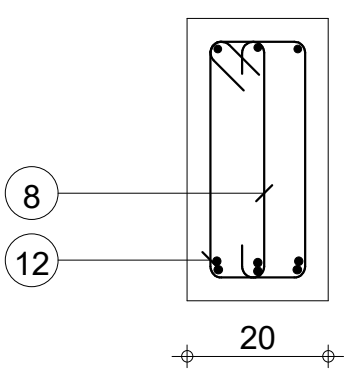
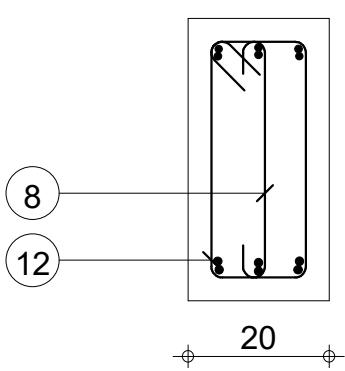
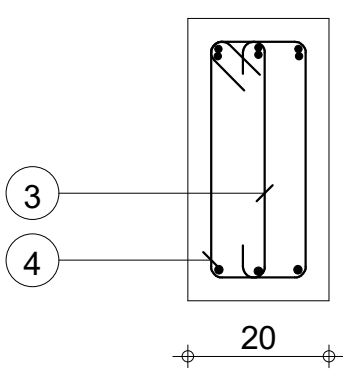
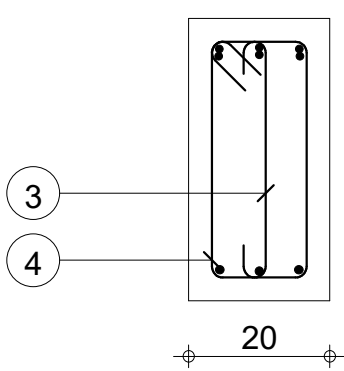


A-A

B-B

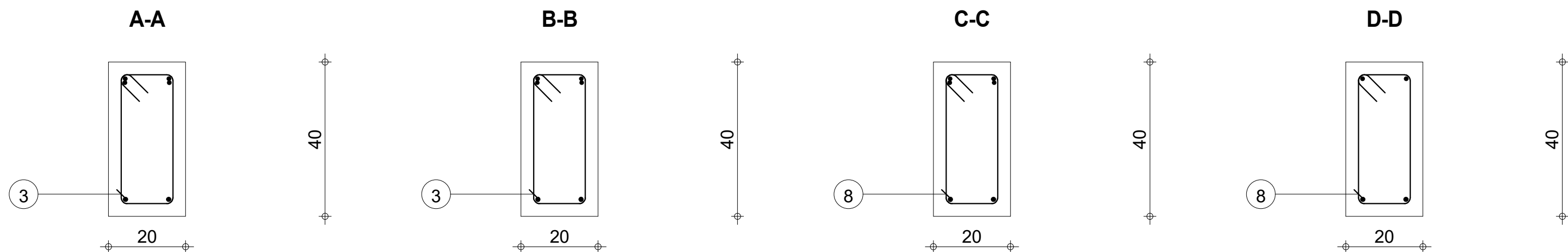
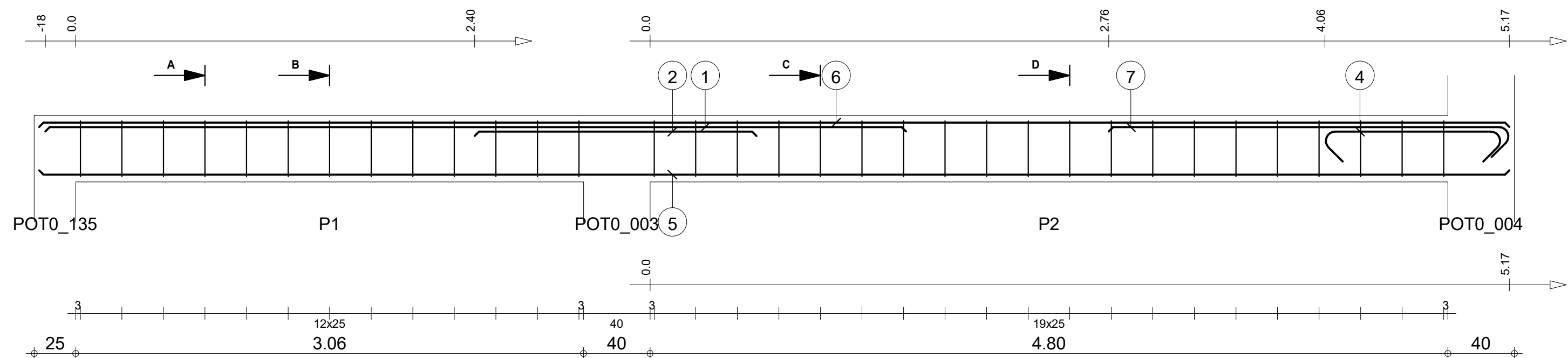
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D-D



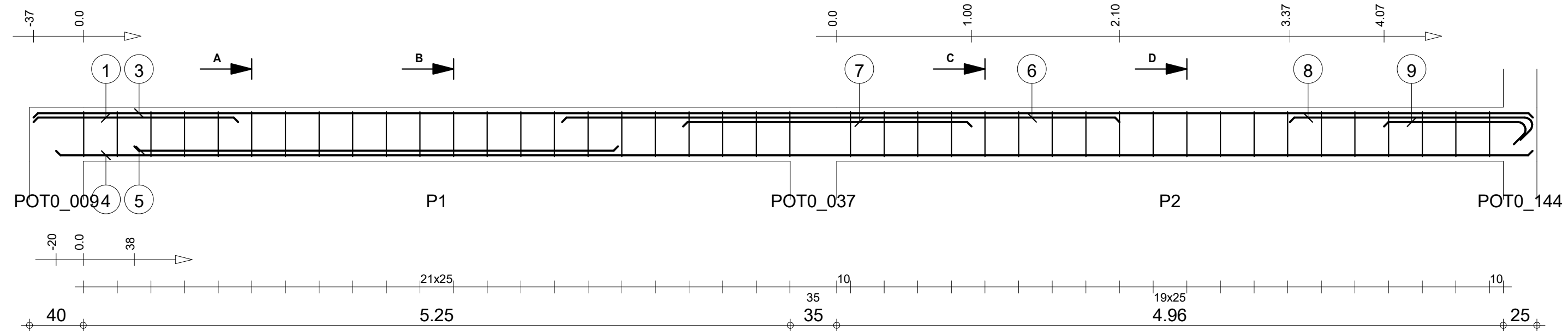
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②	3HA 10	I=2.00	00	⑤	3HA 12	I=10.30	00	⑧	22HA 6	I=46	00	⑪	3HA 12	I=1.27	00
③	11HA 6	I=46	00	⑥	3HA 12	I=3.00	00	⑨	3HA 12	I=3.28	00	⑫	22HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 104										Tél.		Fax		Nombre 1		Béton : BETON20 = 0.848 m3		Acier HA 400 = 85.5 kg	
COFFRAGE & FERRAILLAGE LONGRINES																Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
																Densité = 114 kg/ m3		Echelle pour la vue 3.44cm/m	
Section 20x40																Surface du coffrage = 10.6 m2		Echelle pour la section 9.34cm/m	
																		Page 105/123	



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=5.18	00	5.18	④	2HA 12	l=1.44	00	1.06	⑦	2HA 12	l=2.60	00	2.41
②	2HA 10	l=1.70	00	1.70	⑤	2HA 12	l=8.85	00	8.85	⑧	20HA 6	l=1.08	31	14
③	13HA 6	l=1.08	31	14	⑥	2HA 10	l=8.85	00	8.85					

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 105					Tél. Fax		Nombre 1		Béton : BETON20 = 0.712 m3		Acier HA 400 = 42.3 kg	
COFFRAGE & FERRAILLAGE LONGRINES									Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
									Densité = 70.51 kg/ m3		Echelle pour la vue 4.08cm/m	
									Surface du coffrage = 8.86 m2		Echelle pour la section 9.34cm/m	
											Page 106/123	

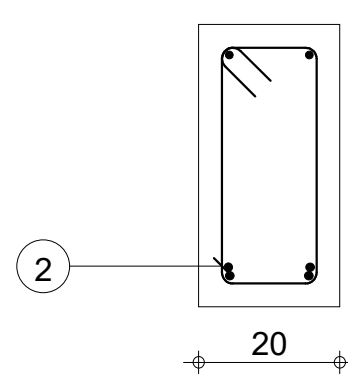


A-A

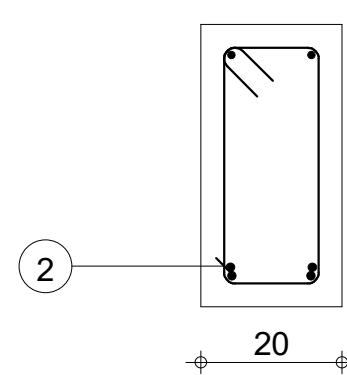
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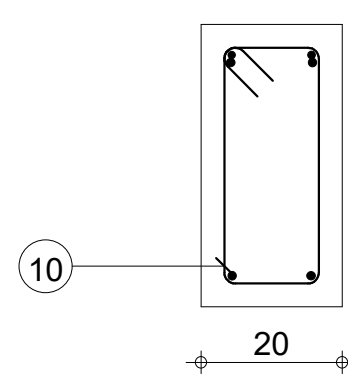
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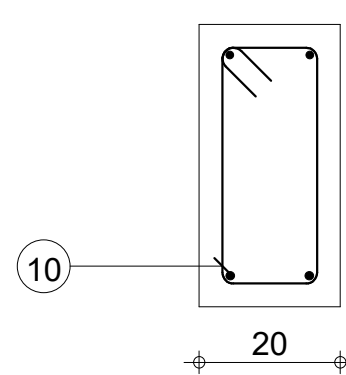
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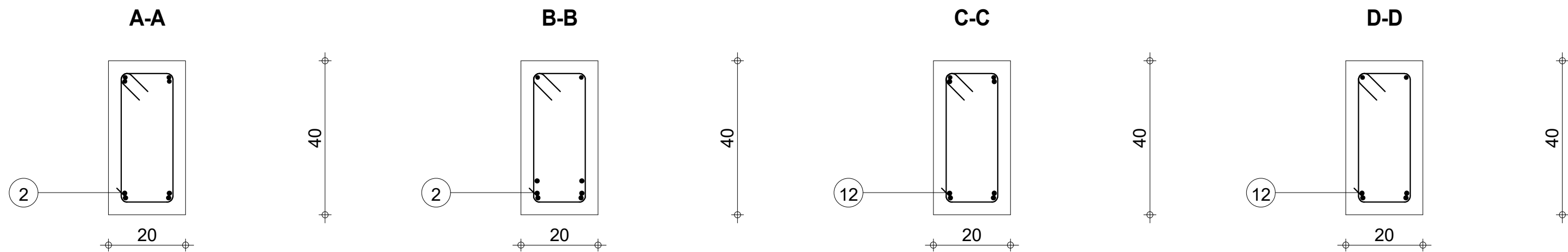
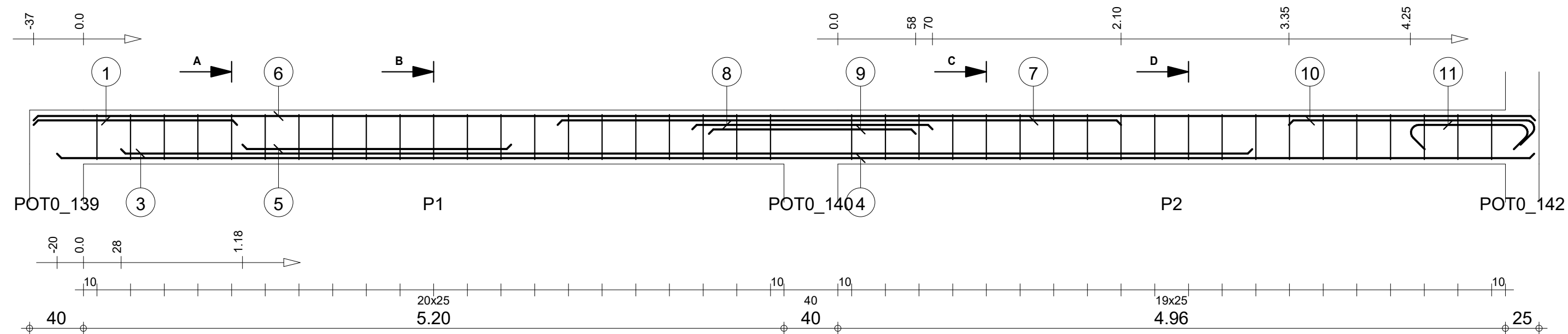
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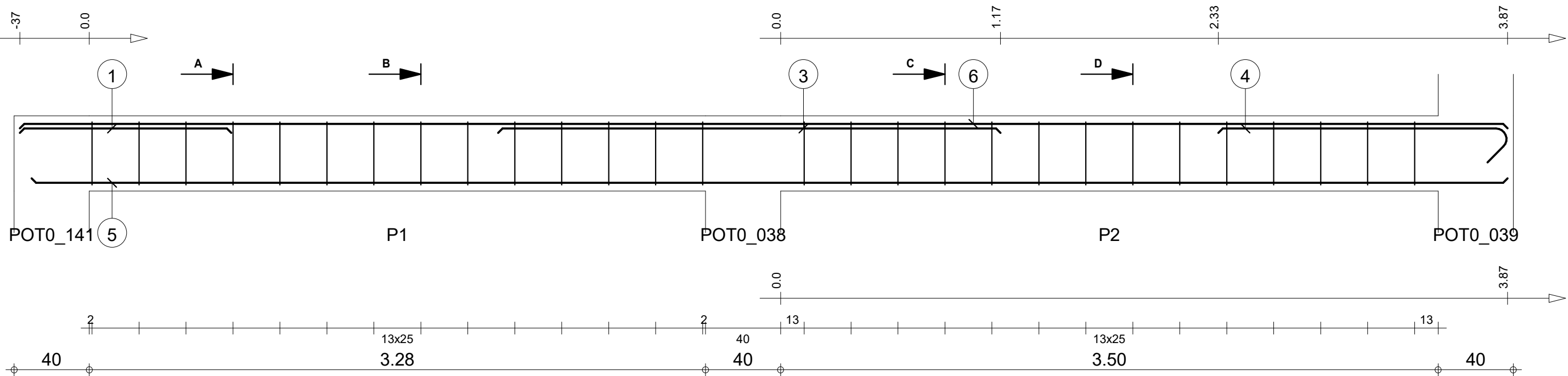
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②	22HA 6	l=1.08	31	⑤	2HA 12	l=3.60	00	⑧	2HA 10	l=1.98	00				
③	2HA 10	l=11.15	00	⑥	2HA 12	l=4.14	00	⑨	2HA 10	l=1.23	00				

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 106										Nombre 1		Béton : BETON20 = 0.896 m3		Acier HA 400 = 56.6 kg	
COFFRAGE & FERRAILLAGE LONGRINES												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 74.33 kg/ m3		Echelle pour la vue 3.26cm/m	
												Surface du coffrage = 11.2 m2		Echelle pour la section 9.34cm/m	
														Page 107/123	



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	I=1.51	00	1.51	④	2HA 12	I=10.97	00	10.96	⑦	2HA 12	I=4.18	00	4.18	⑩	2HA 12	I=2.02	00	1.83
②	21HA 6	I=1.08	31	1.08	⑤	2HA 12	I=2.00	00	2.00	⑧	2HA 12	I=1.78	00	1.78	⑪	2HA 12	I=1.26	00	1.26
③	2HA 12	I=8.39	00	8.40	⑥	2HA 10	I=11.15	00	11.15	⑨	2HA 12	I=1.54	00	1.53	⑫	20HA 6	I=1.08	31	1.08

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 107										Nombre 1		Béton : BETON20 = 0.896 m3		Acier HA 400 = 72.6 kg	
COFFRAGE & FERRAILLAGE LONGRINES												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 92.08 kg/ m3		Echelle pour la vue 3.26cm/m	
												Surface du coffrage = 11.2 m2		Echelle pour la section 9.34cm/m	
														Page 108/123	

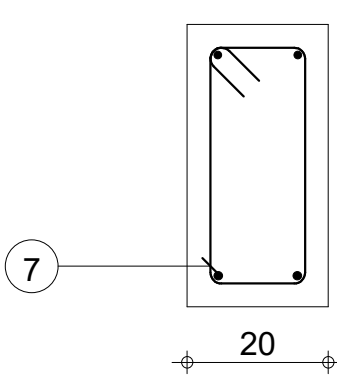
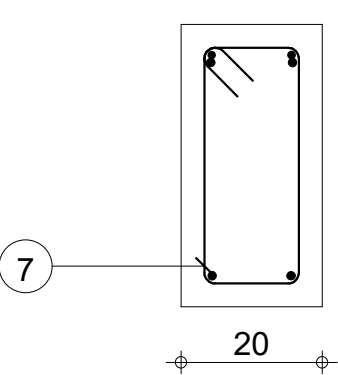
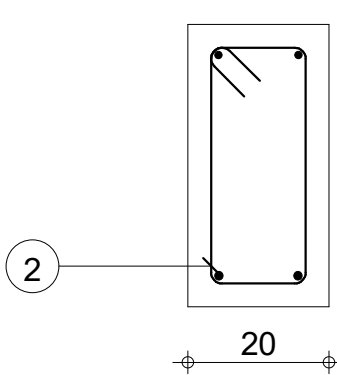
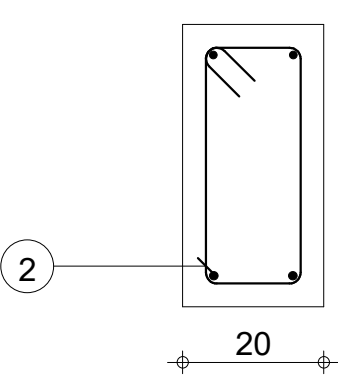


A-A

B-B

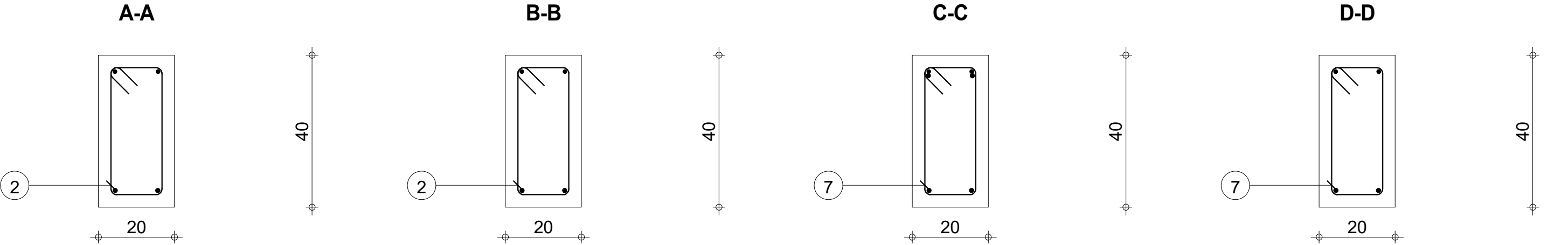
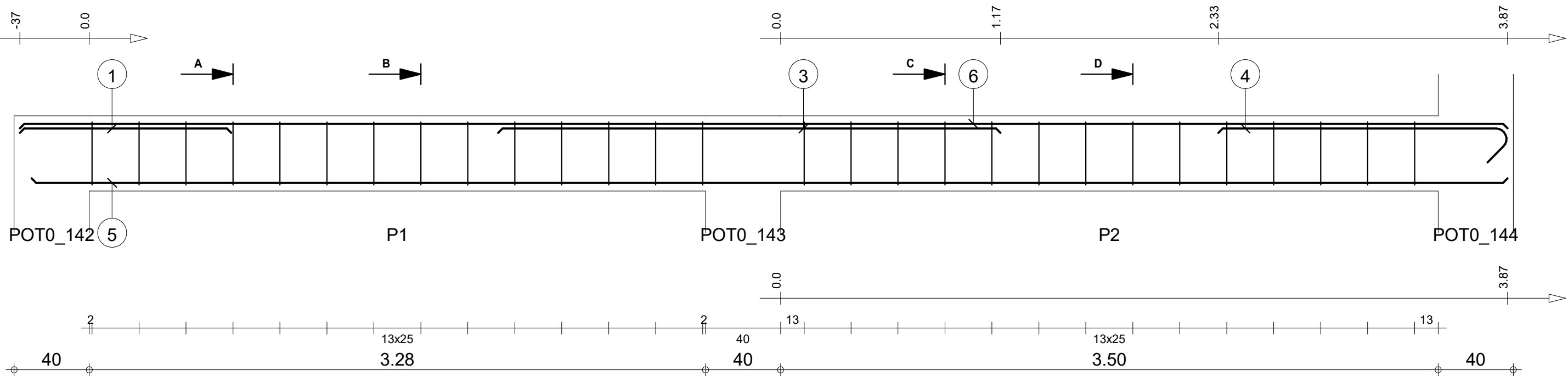
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D-D



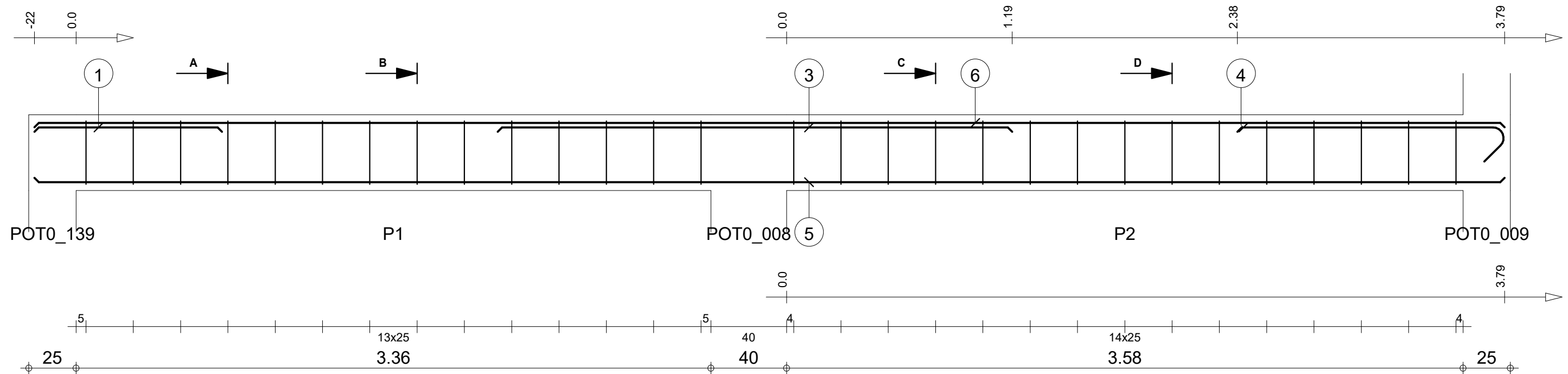
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①	2HA 10	I=1.13	00	④	2HA 12	I=1.73	00	⑦	14HA 6	I=1.08	31
②	14HA 6	I=1.08	31	⑤	2HA 12	I=7.86	00				
③	2HA 12	I=2.67	00	⑥	2HA 10	I=7.92	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 108				Nombre 1				Béton : BETON20 = 0.638 m3				Acier HA 400 = 32.9 kg			
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 62.07 kg/ m3				Echelle pour la vue 4.53cm/m			
												Surface du coffrage = 7.9 m2				Echelle pour la section 9.34cm/m			
																Page 109/123			



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=1.13	00	1.13	④	2HA 12	l=1.73	00	1.54	⑦	14HA 6	l=1.08	31	14 31 6
②	14HA 6	l=1.08	31	14 31 6	⑤	2HA 12	l=7.86	00	7.86					
③	2HA 12	l=2.67	00	2.67	⑥	2HA 10	l=7.92	00	7.92					

STRUCTURE BATIMENT CEA/ITECH-MTV Lg 109					Tél. Fax		Nombre 1		Béton : BETON20 = 0.638 m3		Acier HA 400 = 32.9 kg	
COFFRAGE & FERRAILLAGE LONGRINES									Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
									Densité = 62.07 kg/ m3		Echelle pour la vue 4.53cm/m	
									Surface du coffrage = 7.9 m2		Echelle pour la section 9.34cm/m	
											Page 110/123	

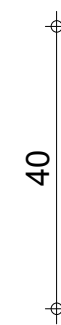
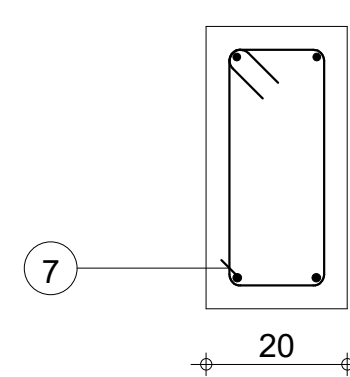
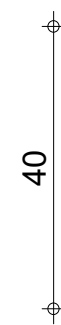
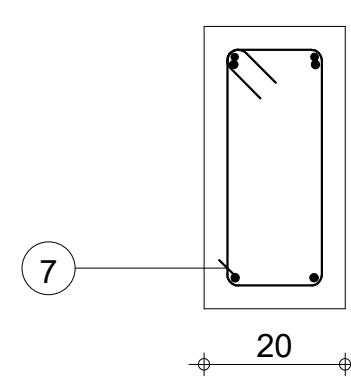
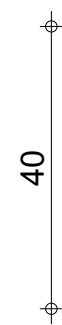
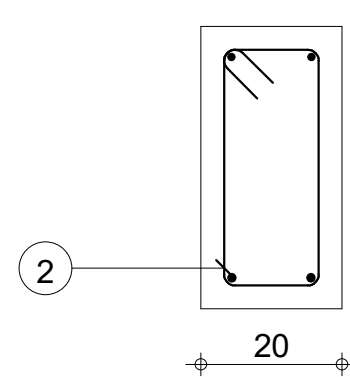
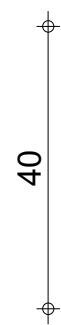
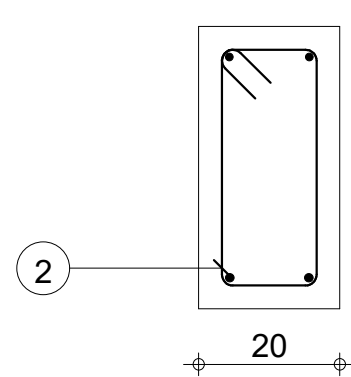


A-A

B-B

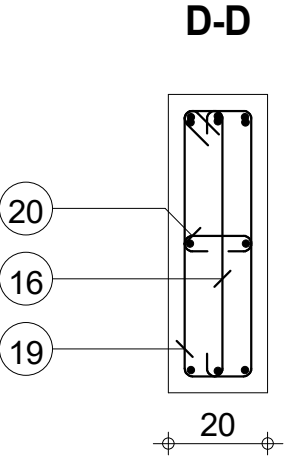
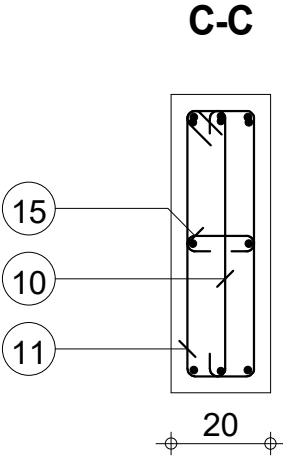
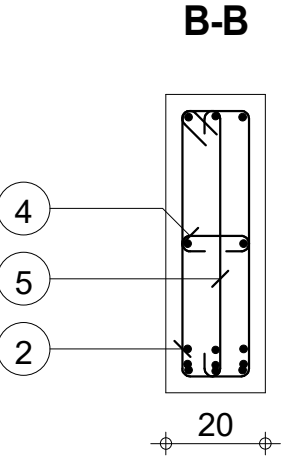
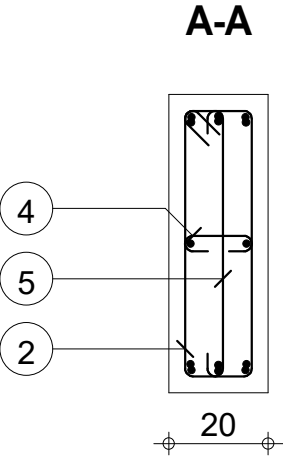
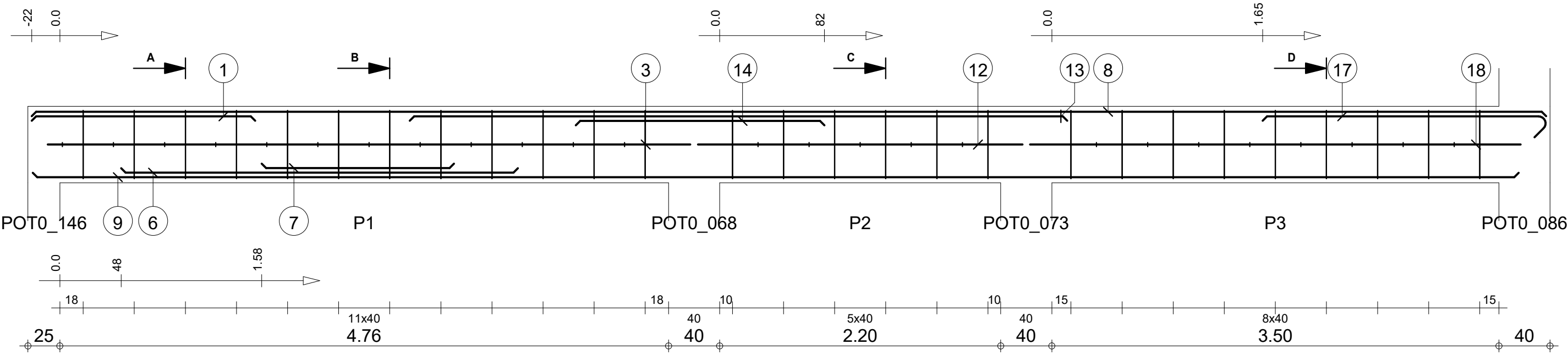
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D-D



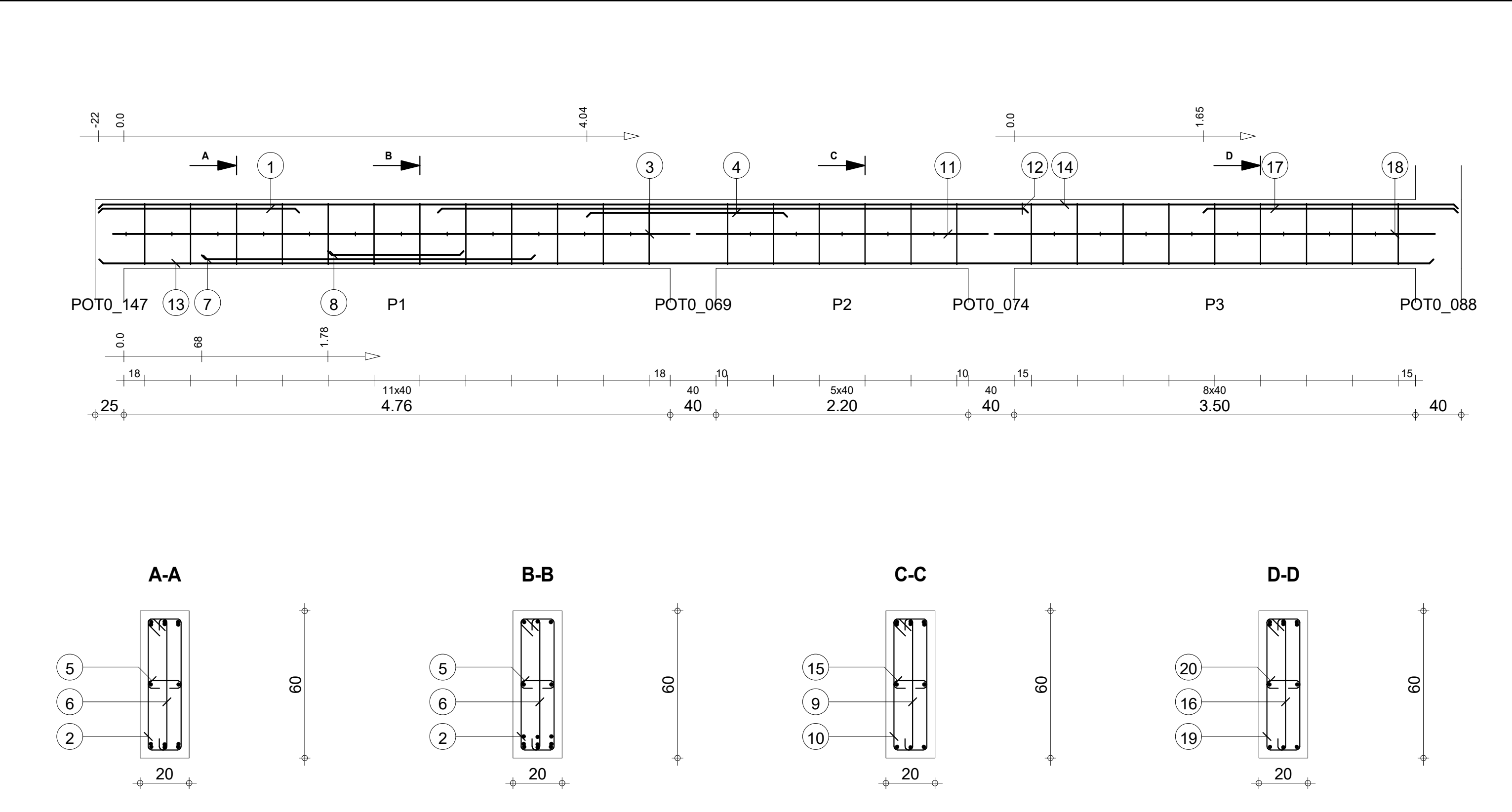
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②	14HA 6	I=1.08	31	14	⑤	2HA 12	I=7.77	00	7.77					
③	2HA 12	I=2.72	00	2.72	⑥	2HA 10	I=7.77	00	7.77					

STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 110				Nombre 1				Béton : BETON20 = 0.626 m3		Acier HA 400 = 32.3 kg	
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 62.62 kg/ m3		Echelle pour la vue 4.62cm/m	
												Surface du coffrage = 7.81 m2		Echelle pour la section 9.34cm/m	
														Page 111/123	

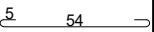
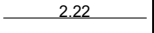
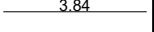
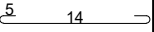


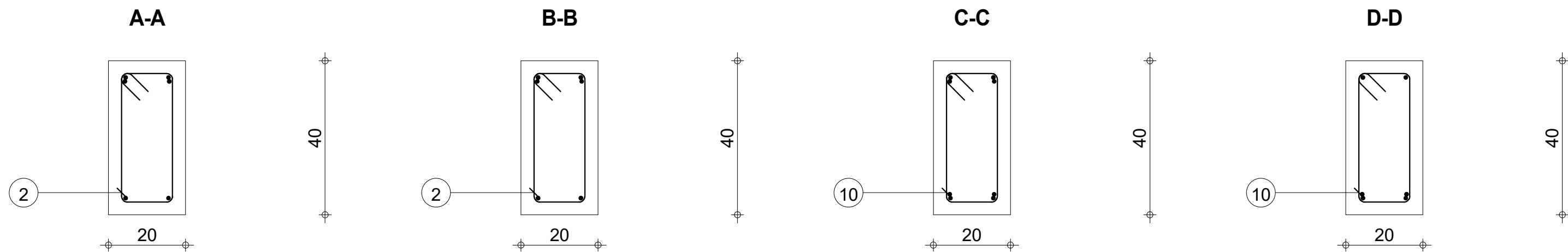
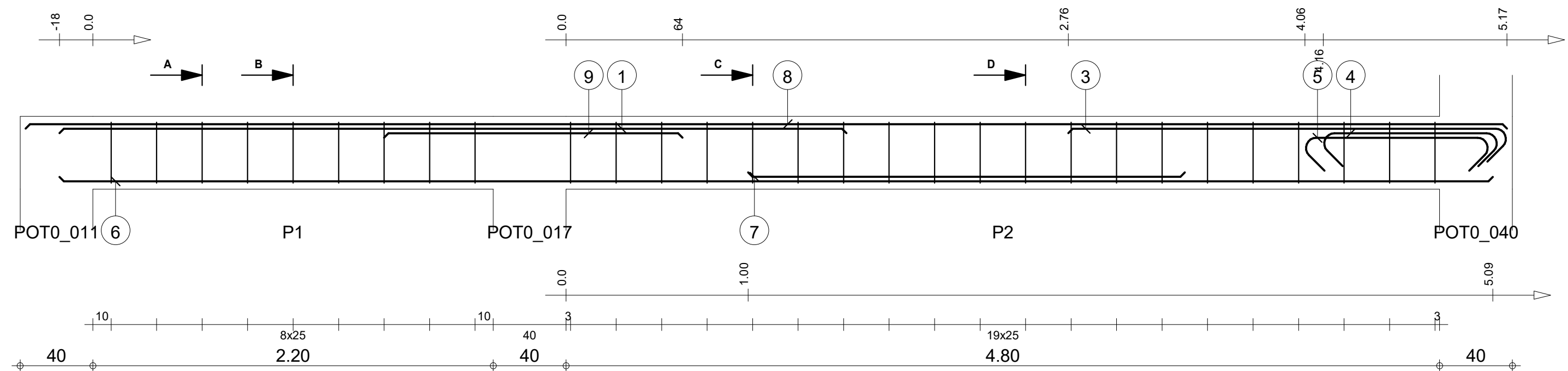
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②	12HA 6	I=1.48	31	14 54	⑤	12HA 6	I=66	00	5 54	⑧	3HA 10	I=11.86	00	11.86	⑪	6HA 6	I=1.48	31	14 54
③	2HA 12	I=5.03	00	5.03	⑥	3HA 12	I=3.11	00	3.11	⑨	3HA 12	I=11.63	00	11.63	⑫	2HA 12	I=2.54	00	2.54
Tél.								Fax								Acier HA 400 = 91.7 kg			
STRUCTURE BATIMENT CEA/ITECH-MTV Lg 111								Nombre 1								Béton : BETON20 = 1.43 m3			
																Enrobage inférieur 3 cm			
																Enrobage supérieur 3 cm			
COFFRAGE & FERRAILLAGE LONGRINES																Densité = 88.11 kg/ m3			
																Surface du coffrage = 16.6 m2			
																Echelle pour la vue 3.07cm/m			
																Echelle pour la section 6.58cm/m			
																Page 112/123			

Pos.	Armature		Code	Forme
16	9HA 6	l=66	00	
17	3HA 10	l=2.39	00	
18	2HA 12	l=3.84	00	
19	9HA 6	l=1.48	31	
20	8HA 6	l=26	00	



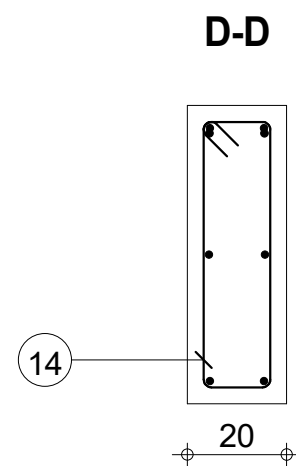
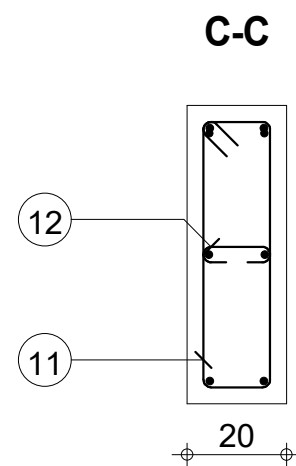
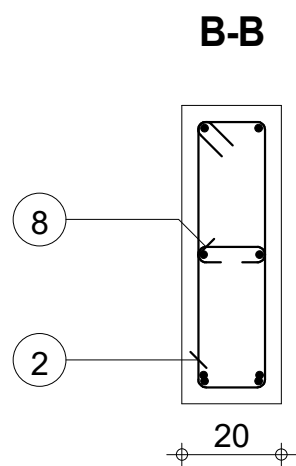
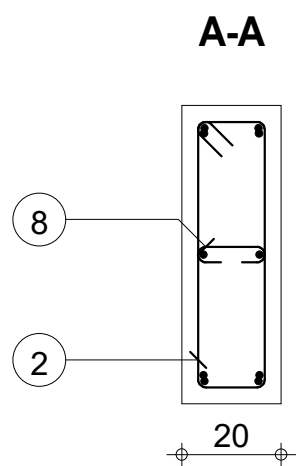
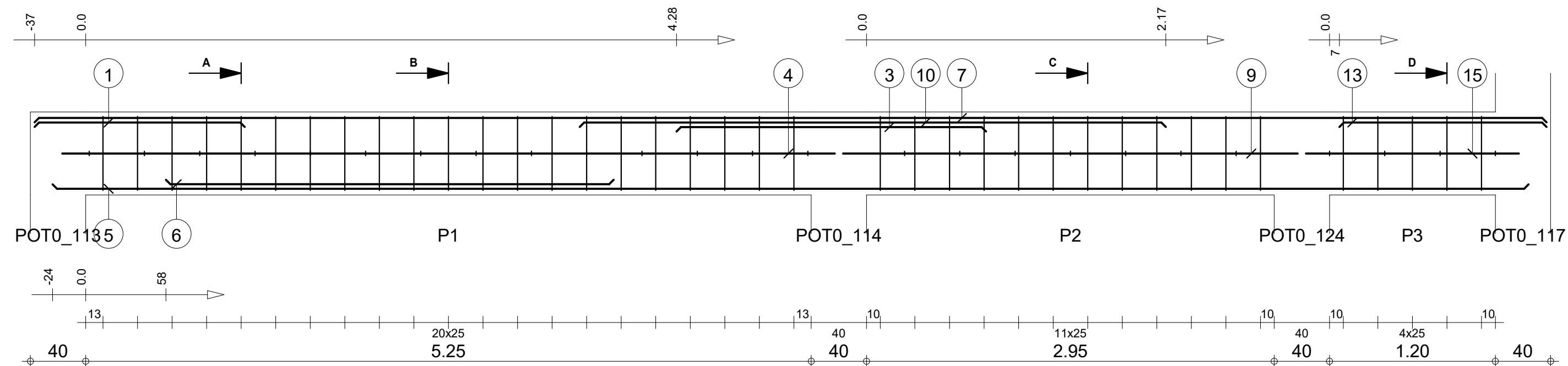
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme								
①	3HA 10	I=1.75	00	④	3HA 12	I=1.75	00	⑦	3HA 12	I=2.91	00	⑩	6HA 6	I=1.48	31	⑬	3HA 12	I=11.64	00								
②	12HA 6	I=1.48	31	⑤	12HA 6	I=26	00	⑧	3HA 12	I=1.18	00	⑪	2HA 12	I=2.54	00	⑭	3HA 10	I=11.86	00								
③	2HA 12	I=5.03	00	⑥	12HA 6	I=66	00	⑨	6HA 6	I=66	00	⑫	3HA 12	I=5.15	00	⑮	5HA 6	I=26	00								
Tél.								Fax				Nombre 1															
STRUCTURE BATIMENT CEA/ITECH-MTV Lg 112 COFFRAGE & FERRAILLAGE LONGRINES								Section 20x60								Béton : BETON20 = 1.43 m3				Acier HA 400 = 89.5 kg Acier HA 400 = 34.5 kg							
																Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
																Densité = 86.71 kg/ m3				Echelle pour la vue 3.07cm/m				Page 114/123			
																Surface du coffrage = 16.6 m2				Echelle pour la section 6.58cm/m							

Pos.	Armature		Code	Forme
16	9HA 6	l=66	00	
17	3HA 10	l=2.22	00	
18	2HA 12	l=3.84	00	
19	9HA 6	l=1.48	31	
20	8HA 6	l=26	00	

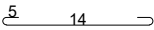


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	2HA 10	l=4.32	00	4.32	④	2HA 12	l=1.34	00	96	⑦	2HA 10	l=2.40	00	2.40	⑩	20HA 6	l=1.07	31	14
②	9HA 6	l=1.07	31	14	⑤	2HA 12	l=1.39	00	1.01	⑧	2HA 10	l=8.14	00	8.14					
③	2HA 12	l=2.60	00	2.41	⑥	2HA 10	l=7.88	00	7.88	⑨	2HA 10	l=1.64	00	1.64					

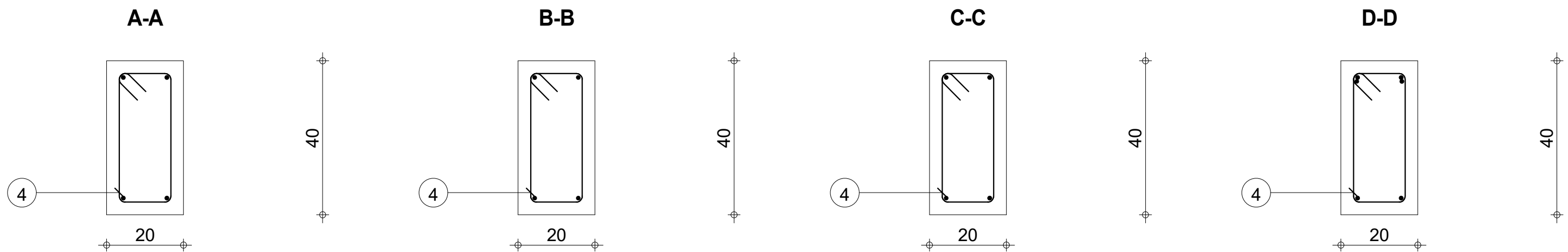
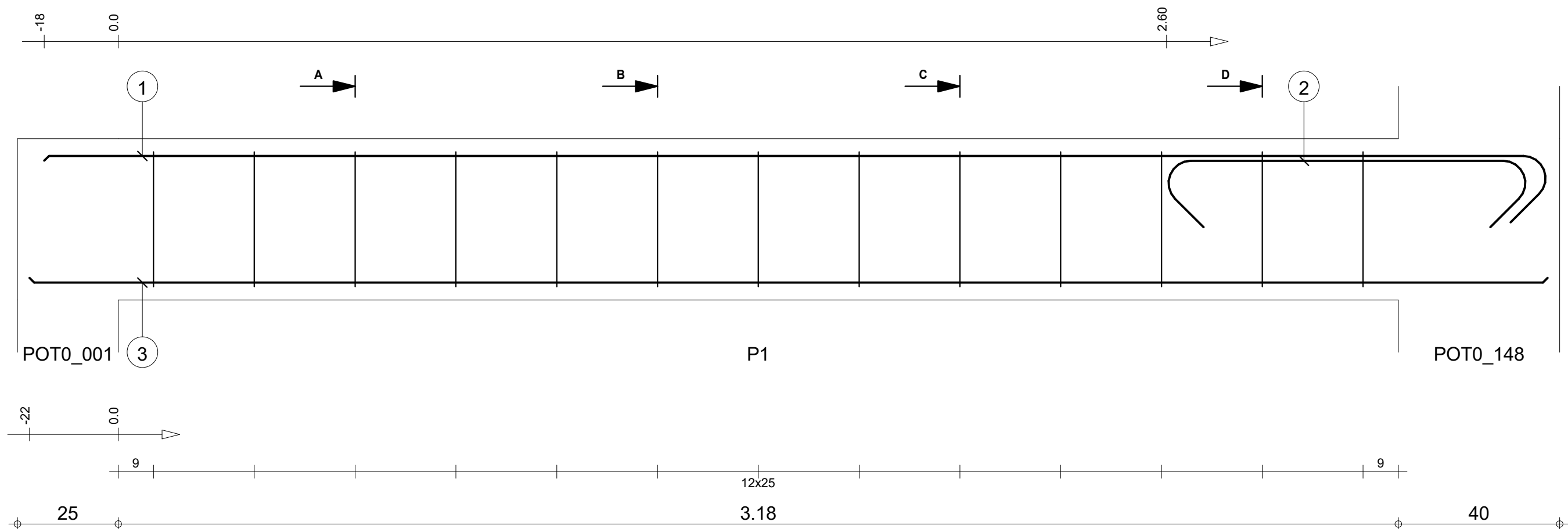
STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 113				Section 20x40				Nombre 1				Béton : BETON20 = 0.656 m3				Acier HA 400 = 39.5 kg			
																Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
																Densité = 70.73 kg/ m3				Echelle pour la vue 4.42cm/m			
																Surface du coffrage = 8.12 m2				Echelle pour la section 9.34cm/m			
COFFRAGE & FERRAILLAGE LONGRINES																				Page 116/123			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme								
①	2HA 10	l=1.52	00	④	2HA 12	l=5.59	00	⑦	2HA 10	l=10.94	00	⑩	2HA 10	l=4.24	00	⑬	2HA 10	l=1.50	00								
②	21HA 6	l=1.48	31	⑤	2HA 12	l=10.68	00	⑧	14HA 6	l=26	00	⑪	12HA 6	l=1.48	31	⑭	5HA 6	l=1.48	31								
③	2HA 10	l=2.24	00	⑥	2HA 12	l=3.24	00	⑨	2HA 12	l=3.29	00	⑫	7HA 6	l=26	00	⑮	2HA 12	l=1.54	00								
Tél.												Fax															
STRUCTURE BATIMENT CEA/ITECH-MTV				Lg 114								Nombre 1				Béton : BETON20 = 1.32 m3				Acier HA 400 = 49.9 kg							
																Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
																Densité = 62.35 kg/ m3				Echelle pour la vue 3.32cm/m				Page 117/123			
																Surface du coffrage = 15.3 m2				Echelle pour la section 6.58cm/m							
COFFRAGE & FERRAILLAGE LONGRINES				Section 20x60																							

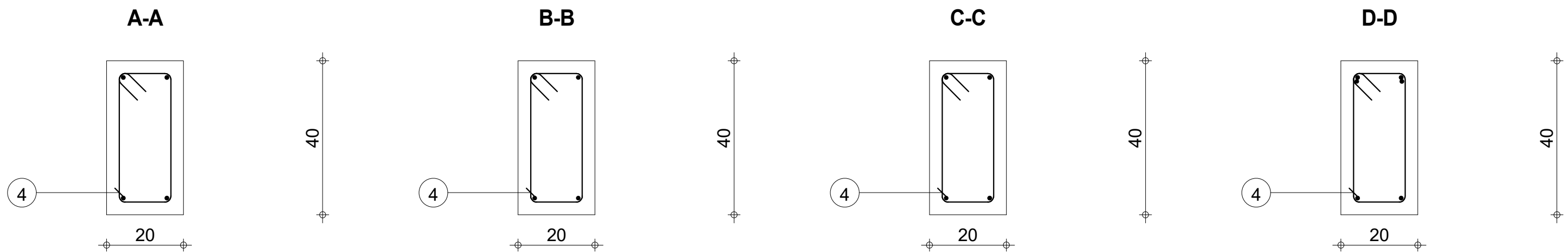
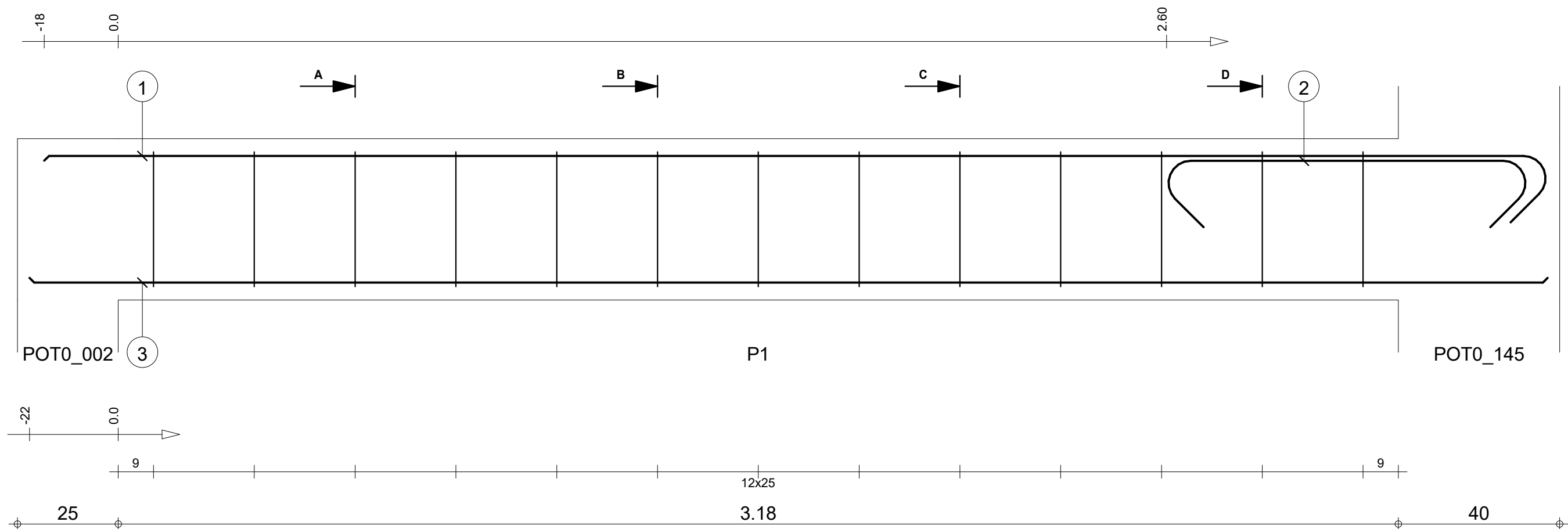
Pos.	Armature		Code	Forme
16	4HA 6	l=26	00	

Tél.		Fax		Nombre 1	Acier HA 400 = 49.9 kg					
STRUCTURE BATIMENT CEA/ITECH-MTV	Lg 114				Acier HA 400 = 32.4 kg					
					Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
					Densité = 62.35 kg/ m3				Page 118/123	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x60			Surface du coffrage = 15.3 m2					



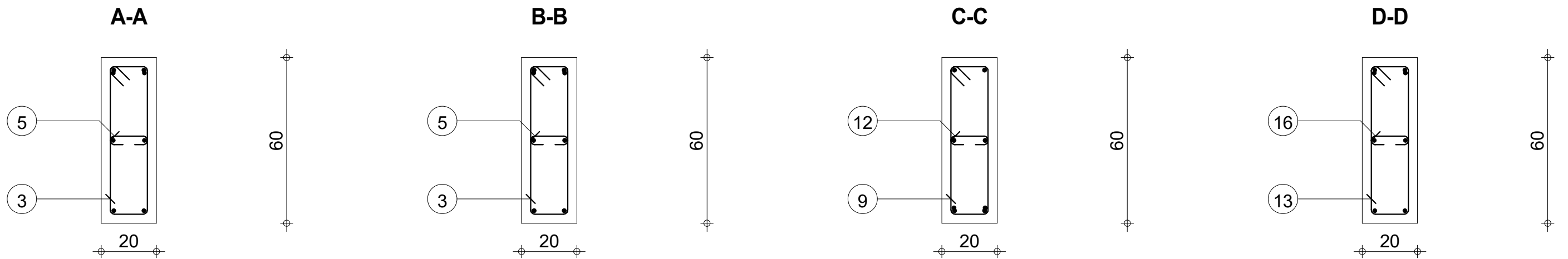
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=3.90	00	④	13HA 6	l=1.08	31
②	2HA 10	l=1.23	00				
③	2HA 10	l=3.77	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 115: P1		Nombre 1		Béton : BETON20 = 0.306 m3		Acier HA 400 = 11 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 46.08 kg/ m3		Echelle pour la vue 9.19cm/m	
						Surface du coffrage = 3.86 m2		Echelle pour la section 9.34cm/m	
								Page 119/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=3.90	00	④	13HA 6	l=1.08	31
②	2HA 10	l=1.23	00				
③	2HA 10	l=3.77	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		Lg 116: P1		Nombre 1		Béton : BETON20 = 0.306 m3		Acier HA 400 = 11 kg	
COFFRAGE & FERRAILLAGE LONGRINES		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 46.08 kg/ m3		Echelle pour la vue 9.19cm/m	
						Surface du coffrage = 3.86 m2		Echelle pour la section 9.34cm/m	
								Page 120/123	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10 l=2.69	00		④	2HA 10 l=1.23	00		⑦	2HA 10 l=2.80	00		⑩	2HA 12 l=5.14	00		⑬	9HA 6 l=1.48	31	
②	2HA 12 l=1.23	00		⑤	3HA 6 l=26	00		⑧	2HA 10 l=9.23	00		⑪	2HA 10 l=1.64	00		⑭	2HA 10 l=4.24	00	
③	5HA 6 l=1.48	31		⑥	2HA 10 l=8.19	00		⑨	20HA 6 l=1.48	31		⑫	13HA 6 l=26	00		⑮	2HA 12 l=2.54	00	

Tél.

Fax

STRUCTURE BATIMENT CEA/ITECH-MTV

COFFRAGE & FERRAILLAGE LONGRINES

Lg 117

Section 20x60

Nombre 1

Béton : BETON20 = 1.11 m3

Enrobage inférieur 3 cm

Densité = 58.74 kg/ m3

Surface du coffrage = 13 m2

Acier HA 400 = 37 kg

Acier HA 400 = 28.2 kg

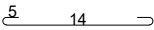
Enrobage supérieur 3 cm

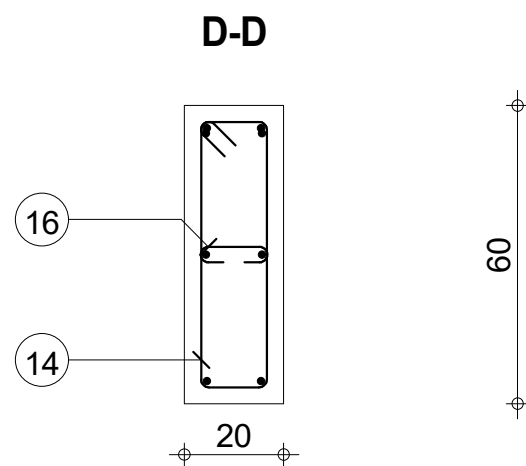
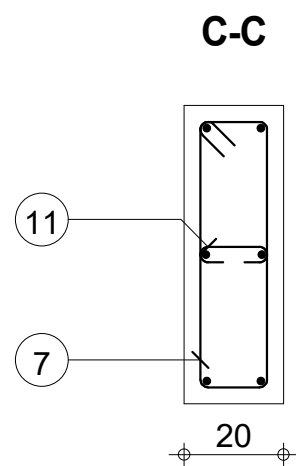
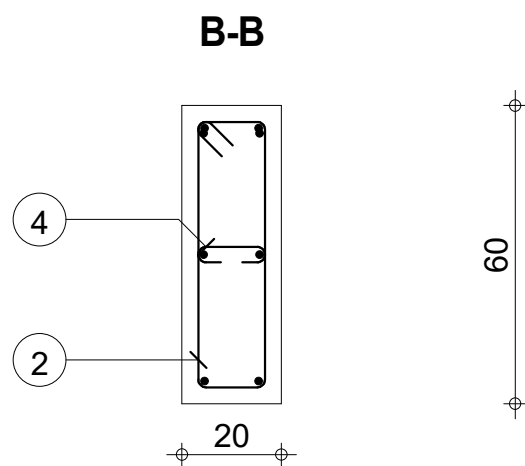
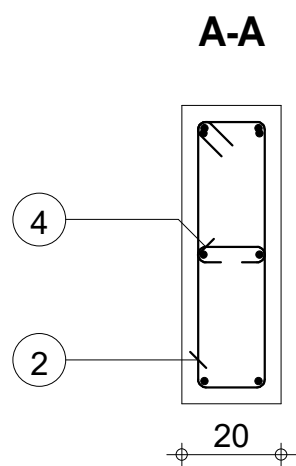
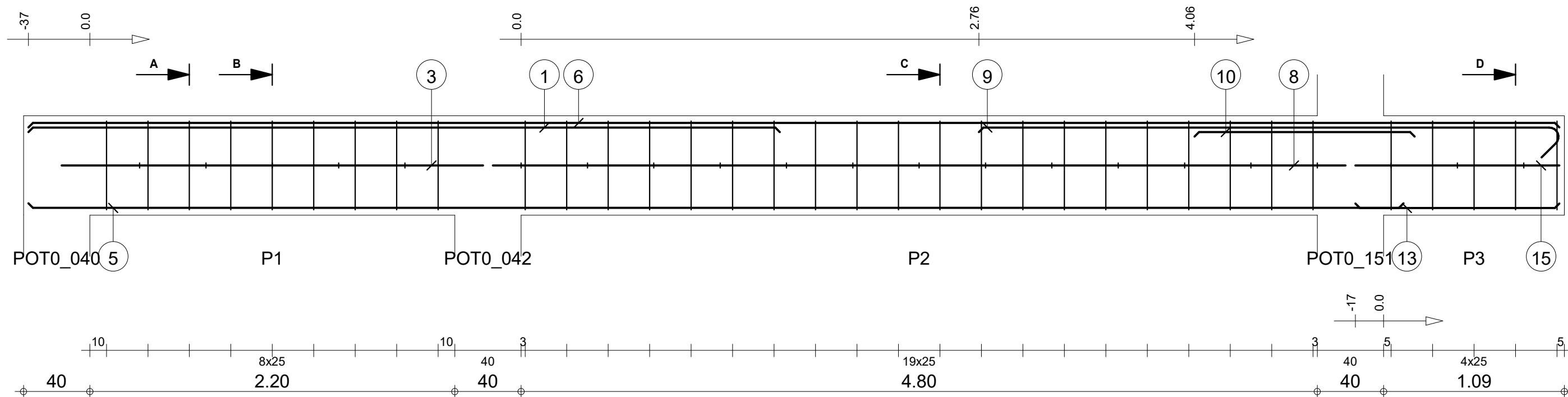
Echelle pour la vue 3.92cm/m

Echelle pour la section 6.58cm/m

Enrobage latéral 3 cm

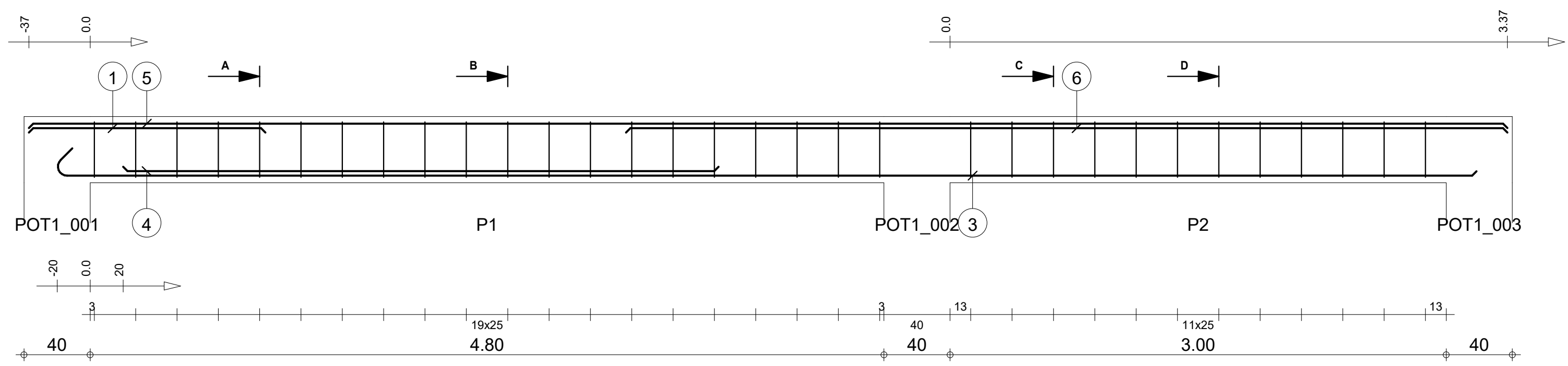
Page 121/123

Pos.	Armature		Code	Forme
16	5HA 6	l=26	00	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	l=4.53	00	4.53	④	5HA 6	l=26	00	514	⑦	20HA 6	l=1.48	31	14	⑩	2HA 12	l=1.33	00	1.33
②	9HA 6	l=1.48	31	14	⑤	2HA 12	l=8.29	00	8.29	⑧	2HA 12	l=5.14	00	5.14	⑪	13HA 6	l=26	00	514
③	2HA 12	l=2.54	00	2.54	⑥	2HA 10	l=9.23	00	9.23	⑨	2HA 12	l=3.69	00	3.69	⑬	2HA 10	l=1.23	00	1.23
Tél.								Fax								Acier HA 400 = 44.6 kg			
STRUCTURE BATIMENT CEA/ITECH-MTV								Lg 118								Béton : BETON20 = 1.11 m3			
																Acier HA 400 = 28.2 kg			
																Enrobage inférieur 3 cm			
COFFRAGE & FERRAILLAGE LONGRINES								Section 20x60								Enrobage supérieur 3 cm			
																Enrobage latéral 3 cm			
																Densité = 65.59 kg/ m3			
																Echelle pour la vue 3.92cm/m			
																Echelle pour la section 6.58cm/m			
																Page 123/123			

POUTRES PH RDC-A

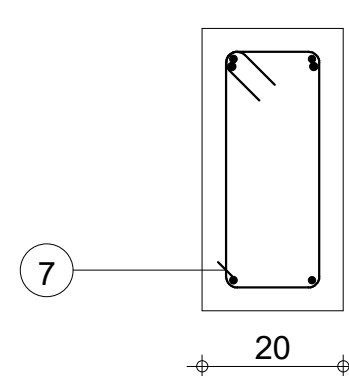
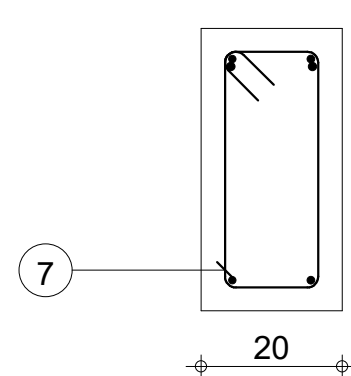
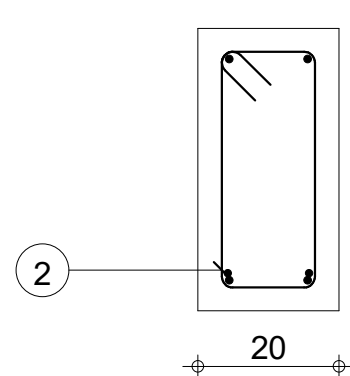
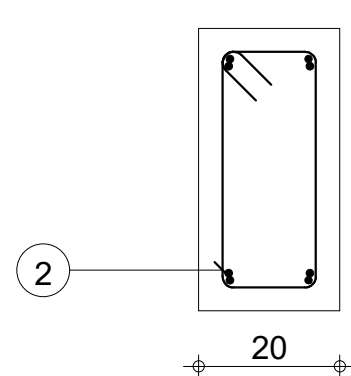


A-A

B-B

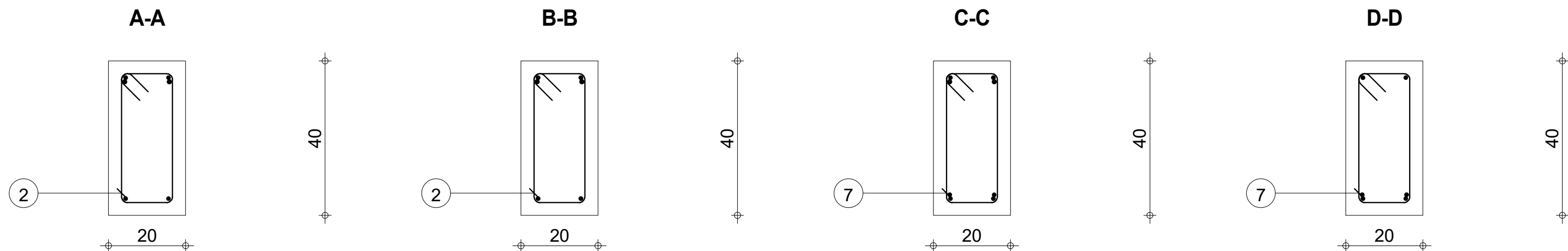
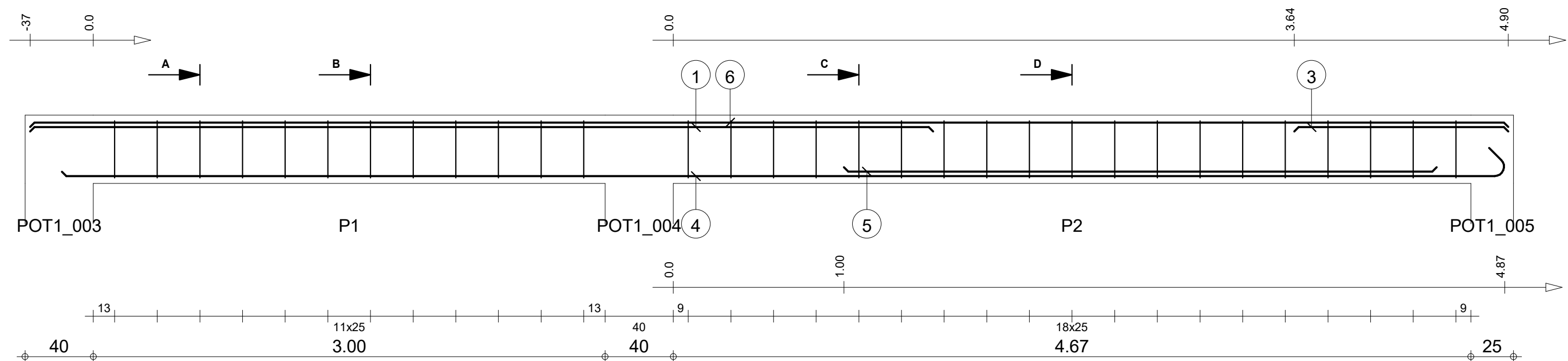
C-C

D-D



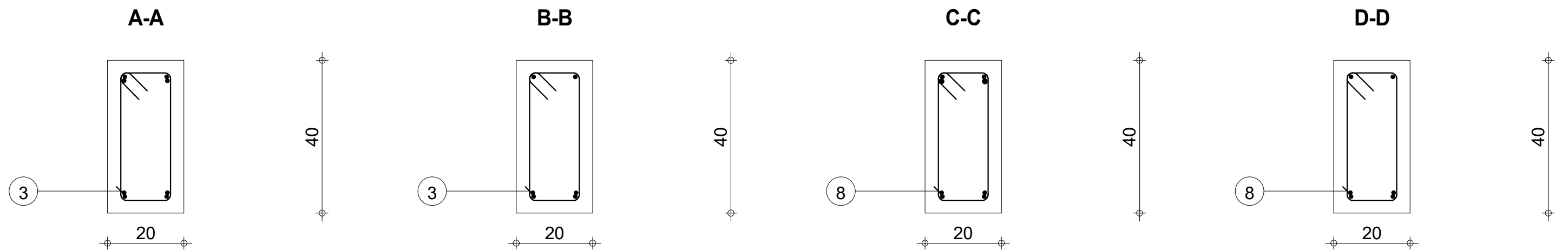
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.43	00	④	2HA 10	I=3.60	00	⑦	12HA 6	I=1.07	31
②	20HA 6	I=1.07	31	⑤	2HA 10	I=8.94	00				
③	2HA 10	I=8.75	00	⑥	2HA 12	I=5.33	00				

STRUCTURE BATIMENT CEA/ITECH-MTV A 01				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Béton : BETON20 = 0.72 m3			
								Acier HA 400 = 37.5 kg			
								Acier HA 400 = 7.63 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 62.64 kg/ m3			
								Echelle pour la vue 4.04cm/m			
								Echelle pour la section 9.34cm/m			
								Page 1/48			

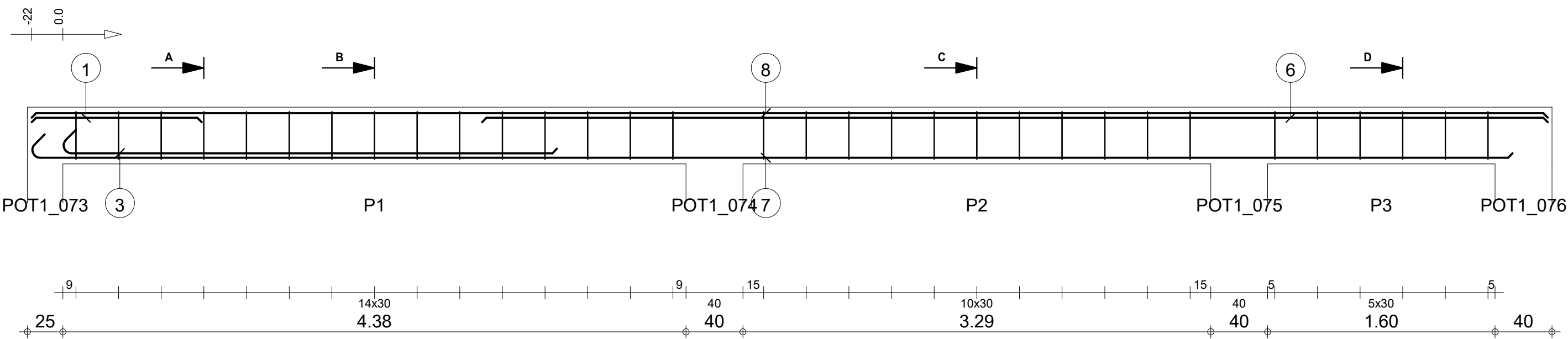


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	I=5.29	00	④	2HA 10	I=8.63	00	⑦	19HA 6	I=1.07	31
②	12HA 6	I=1.07	31	⑤	2HA 10	I=3.48	00				
③	2HA 10	I=1.26	00	⑥	2HA 10	I=8.67	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				A 02				Nombre 1				Béton : BETON20 = 0.698 m3		Acier HA 400 = 36.6 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 62.89 kg/ m3		Echelle pour la vue 4.16cm/m	
												Surface du coffrage = 8.68 m2		Echelle pour la section 9.34cm/m	
														Page 2/48	



		Tél.	Fax		
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	A 04 Section 20x40	Nombre 1		Acier HA 400 = 43.4 kg	
			Béton : BETON20 = 0.708 m3	Acier HA 400 = 7.6 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 72.03 kg/ m3 Surface du coffrage = 8.83 m2	Echelle pour la vue 4.1cm/m Echelle pour la section 9.34cm/m	Page 4/48

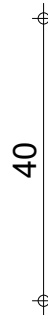
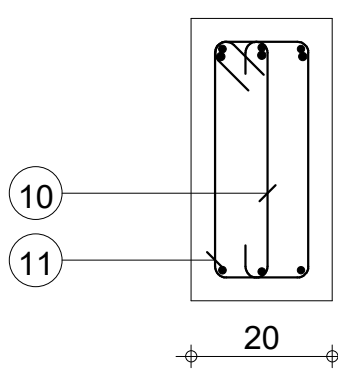
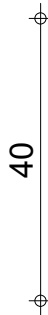
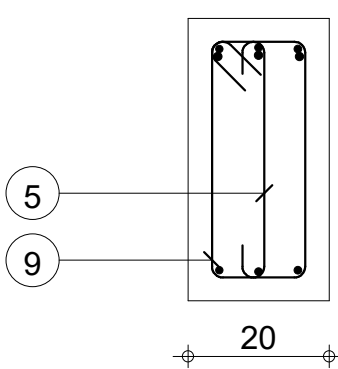
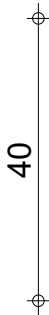
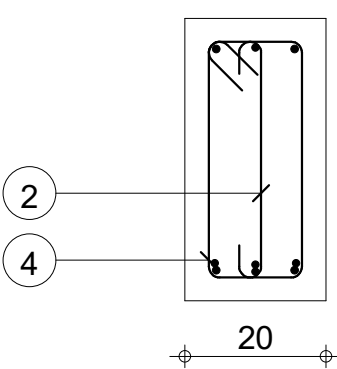
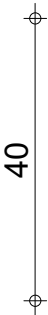
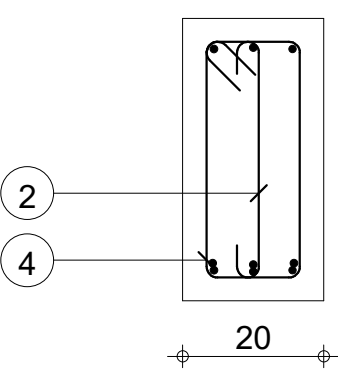


A-A

B-B

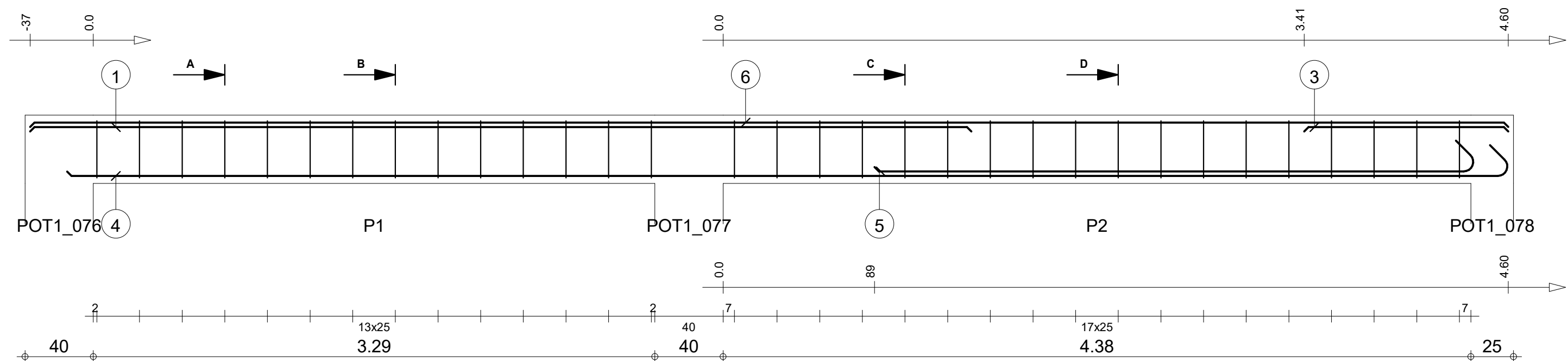
C-C

D-D

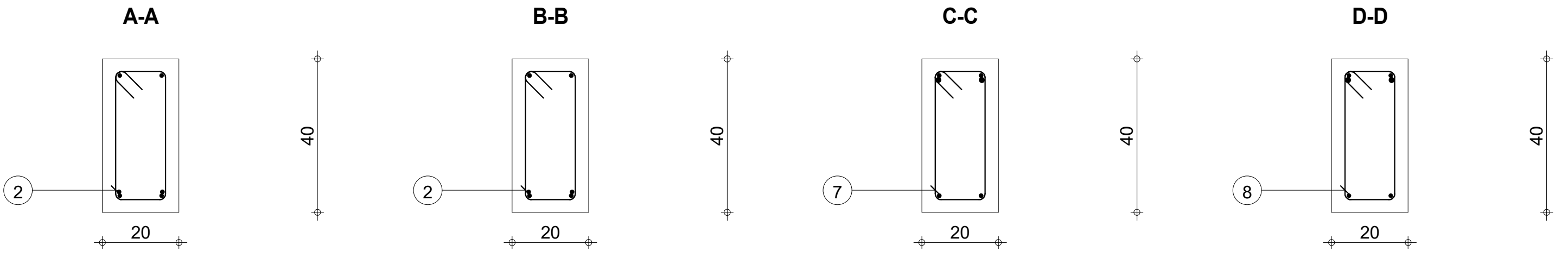
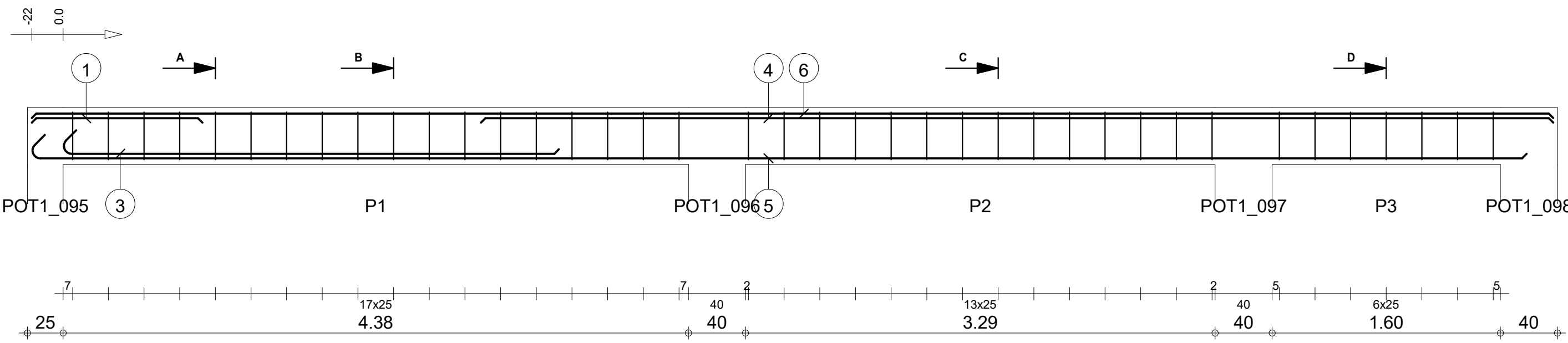


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	I=1.20	00	④	15HA 6	I=1.07	31	⑦	3HA 10	I=10.59	00	⑩	6HA 6	I=46	00
②	15HA 6	I=46	00	⑤	11HA 6	I=46	00	⑧	3HA 10	I=10.67	00	⑪	6HA 6	I=1.07	31
③	3HA 10	I=3.65	00	⑥	3HA 12	I=7.50	00	⑨	11HA 6	I=1.07	31				

STRUCTURE BATIMENT CEA/ITECH-MTV A 05										Nombre 1		Béton : BETON20 = 0.858 m3		Acier HA 400 = 68.2 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 92.19 kg/ m3		Echelle pour la vue 3.41cm/m	
												Surface du coffrage = 10.6 m2		Echelle pour la section 9.34cm/m	
														Page 5/48	



Pos.				Armature				Code				Forme			
①	2HA 14	l=5.52	00	④	2HA 12	l=8.64	00	⑦	18HA 6	l=1.07	31	②	14HA 6	l=1.07	31
②	14HA 6	l=1.07	31	⑤	2HA 12	l=3.71	00								
③	2HA 10	l=1.20	00	⑥	2HA 10	l=8.67	00								
Tél.												Fax			
STRUCTURE BATIMENT CEA/ITECH-MTV A 06												Nombre 1			
												Béton : BETON20 = 0.698 m3			
												Acier HA 400 = 47.4 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A												Enrobage inférieur 3 cm			
												Enrobage supérieur 3 cm			
												Enrobage latéral 3 cm			
Section 20x40												Densité = 78.8 kg/ m3			
												Echelle pour la vue 4.16cm/m			
												Echelle pour la section 9.34cm/m			
												Page 6/48			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.20	00	④	2HA 14	I=7.52	00	⑦	14HA 6	I=1.07	31
②	18HA 6	I=1.07	31	⑤	2HA 10	I=10.65	00	⑧	7HA 6	I=1.07	31
③	2HA 10	I=3.65	00	⑥	2HA 10	I=10.67	00				

STRUCTURE BATIMENT CEA/ITECH-MTV A 07				COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40			
Tél.				Fax				Nombre 1			
Béton : BETON20 = 0.858 m3				Acier HA 400 = 50.4 kg				Acier HA 400 = 9.26 kg			
Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
Densité = 69.58 kg/ m3				Echelle pour la vue 3.41cm/m				Page 7/48			
Surface du coffrage = 10.6 m2				Echelle pour la section 9.34cm/m							

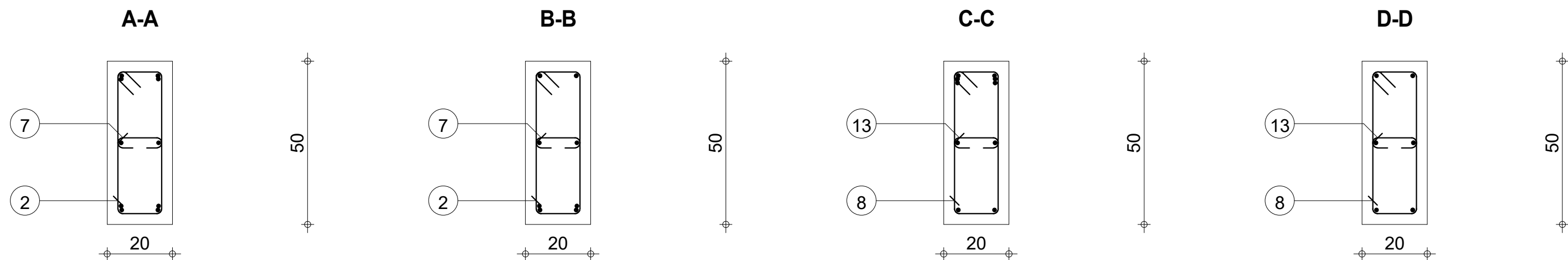
A-A

B-B

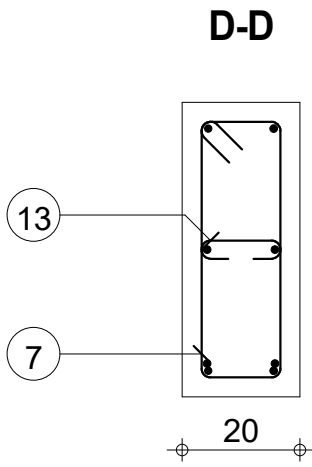
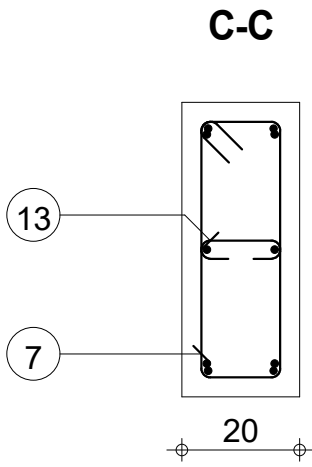
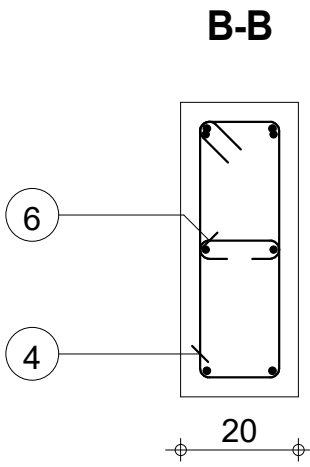
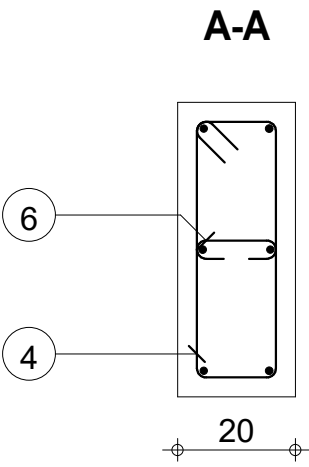
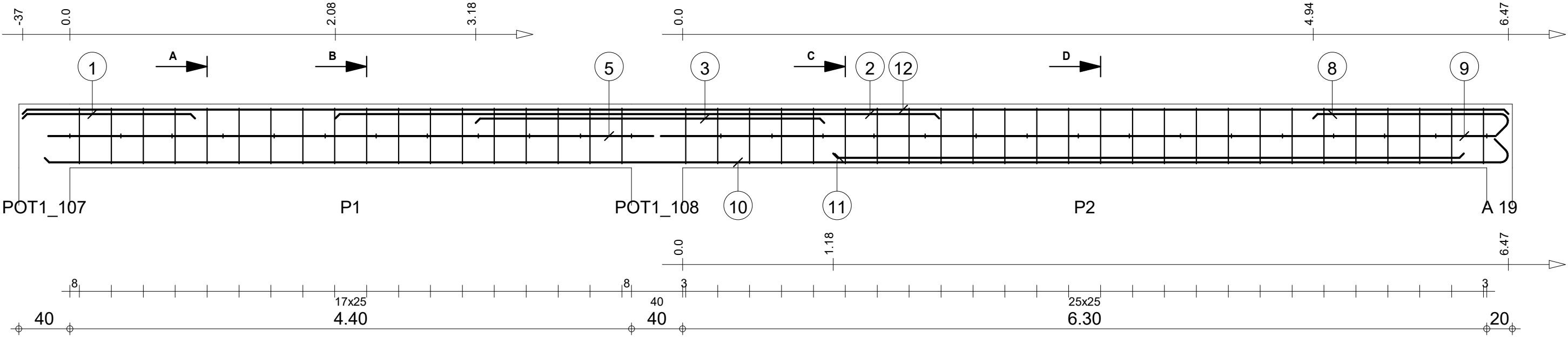
C-C

D-D

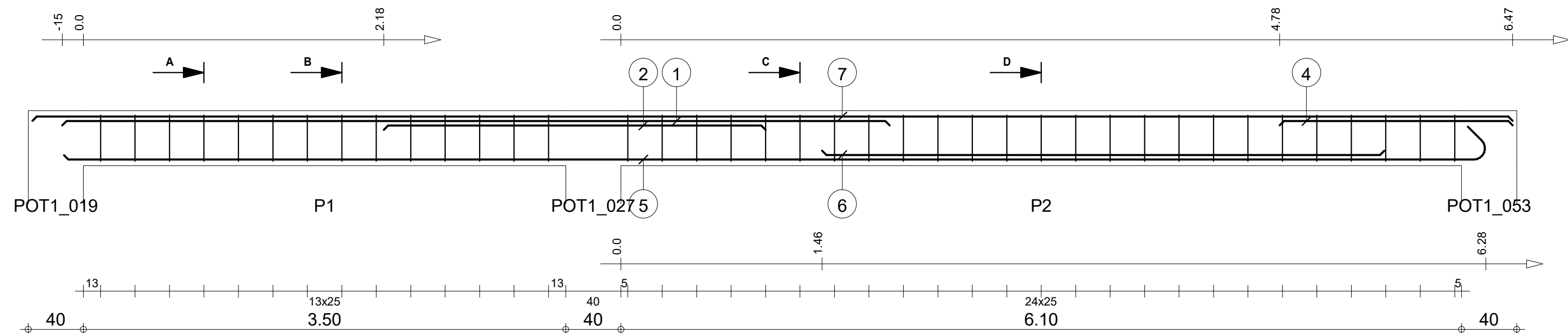
		Tél.	Fax		
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	A 08 Section 20x40	Nombre 1	Béton : BETON20 = 0.698 m3 Acier HA 400 = 40.2 kg Acier HA 400 = 7.6 kg		
			Enrobage inférieur 3 cm Enrobage supérieur 3 cm Enrobage latéral 3 cm		
			Densité = 68.48 kg/ m3 Surface du coffrage = 8.68 m2		Echelle pour la vue 4.16cm/m Echelle pour la section 9.34cm/m Page 8/48



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10 l=1.70	00		④	2HA 12 l=4.94	00		⑦	16HA 6 l=26	00		⑩	2HA 10 l=4.74	00		⑬	12HA 6 l=26	00	
②	26HA 6 l=1.28	31		⑤	2HA 10 l=11.64	00		⑧	18HA 6 l=1.28	31		⑪	2HA 12 l=2.73	00					
③	2HA 12 l=11.66	00		⑥	2HA 10 l=6.54	00		⑨	2HA 12 l=4.73	00		⑫	2HA 10 l=1.35	00					
Tél.												Fax		Béton : BETON20 = 1.17 m3		Acier HA 400 = 60.8 kg			
STRUCTURE BATIMENT CEA/ITECH-MTV A 09				Section 20x50								Nombre 1		Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
														Densité = 75.9 kg/ m3		Echelle pour la vue 3.13cm/m		Page 9/48	
														Surface du coffrage = 14 m2		Echelle pour la section 7.8cm/m			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A																			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.35	00	1.35	④	18HA 6	I=1.28	31	1.28	⑦	26HA 6	I=1.28	31	1.28	⑩	2HA 12	I=11.66	00	11.47
②	2HA 12	I=4.73	00	4.73	⑤	2HA 10	I=4.74	00	4.74	⑧	2HA 10	I=1.70	00	1.53	⑪	2HA 12	I=4.94	00	4.94
③	2HA 12	I=2.73	00	2.73	⑥	12HA 6	I=26	00	5 14	⑨	2HA 10	I=6.54	00	6.54	⑫	2HA 10	I=11.64	00	11.64
Tél.								Fax								Acier HA 400 = 60.8 kg			
STRUCTURE BATIMENT CEA/ITECH-MTV A 10								Nombre 1								Acier HA 400 = 28 kg			
																Enrobage inférieur 3 cm			
																Enrobage supérieur 3 cm			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A																Densité = 75.9 kg/ m3			
																Echelle pour la vue 3.13cm/m			
																Echelle pour la section 7.8cm/m			
																Page 10/48			

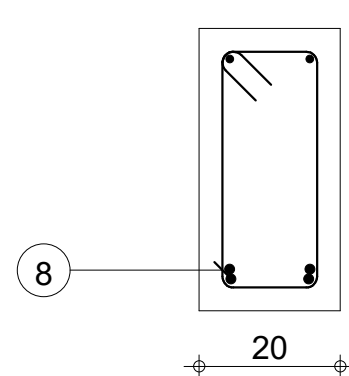
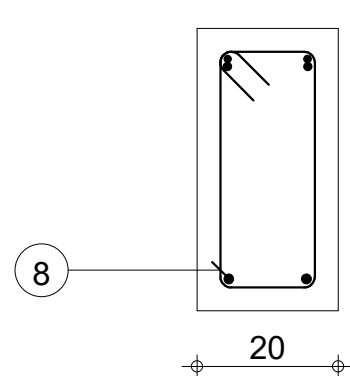
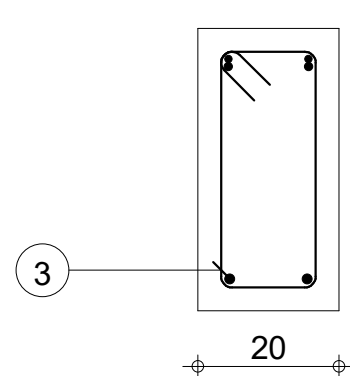
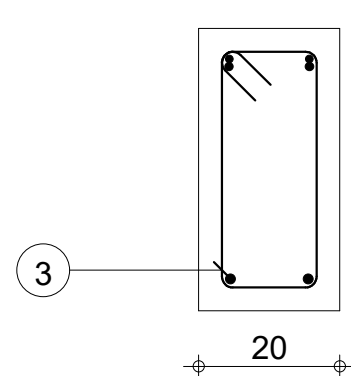


A-A

B-B

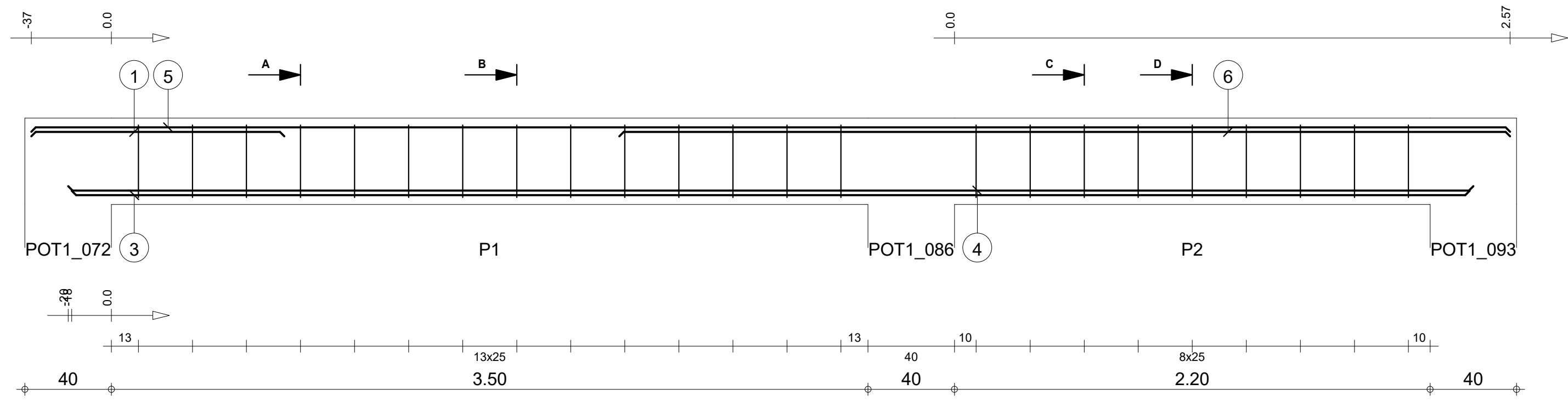
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D-D



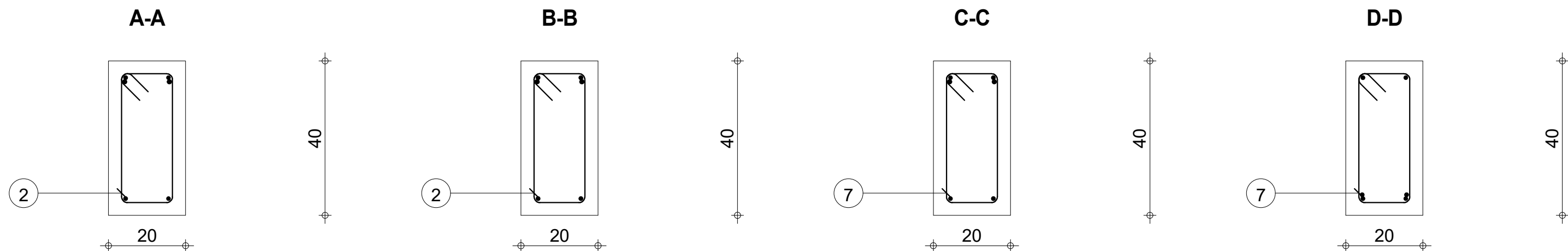
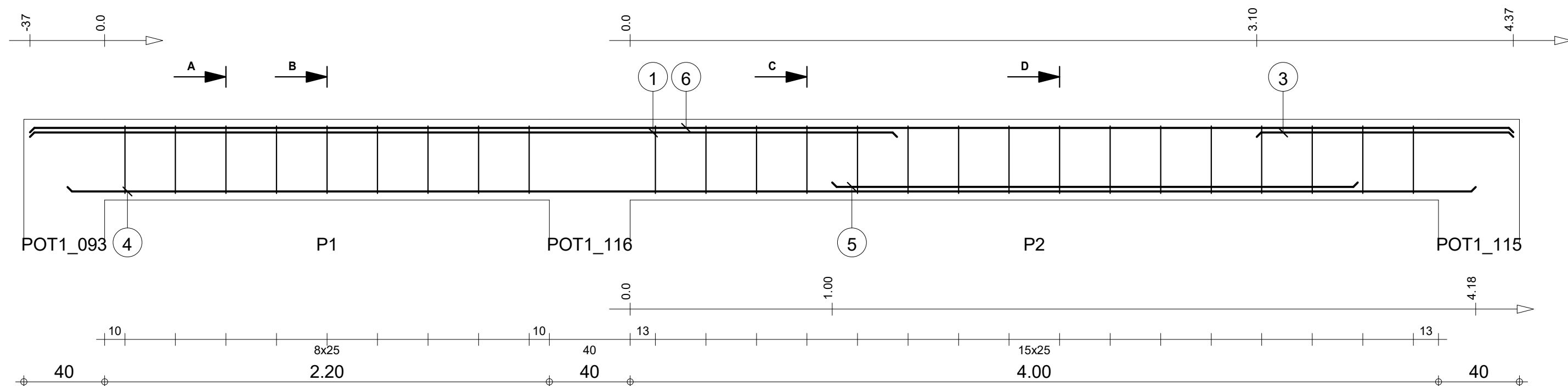
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	2HA 12	I=2.77	00	⑤	2HA 14	I=10.56	00	⑧	25HA 6	I=1.08	31
③	14HA 6	I=1.08	31	⑥	2HA 14	I=4.08	00				

STRUCTURE BATIMENT CEA/ITECH-MTV A 11				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Béton : BETON20 = 0.864 m3			
								Acier HA 400 = 66.3 kg			
								Acier HA 400 = 9.33 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 87.5 kg/ m3			
								Echelle pour la vue 3.38cm/m			
								Echelle pour la section 9.34cm/m			
								Page 11/48			



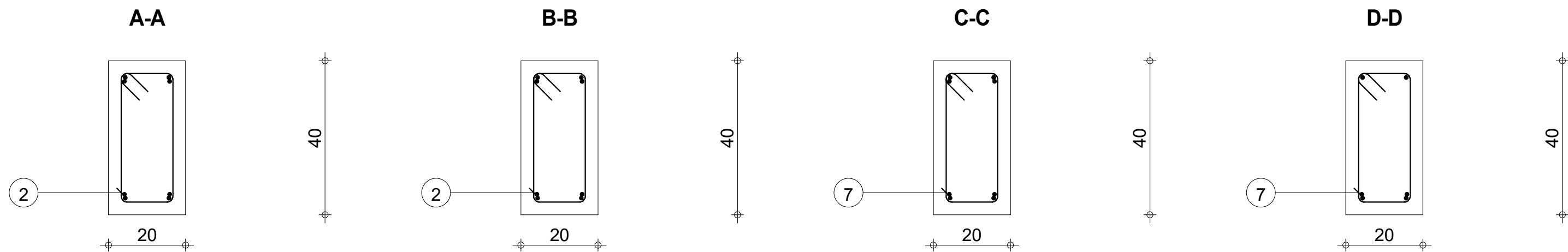
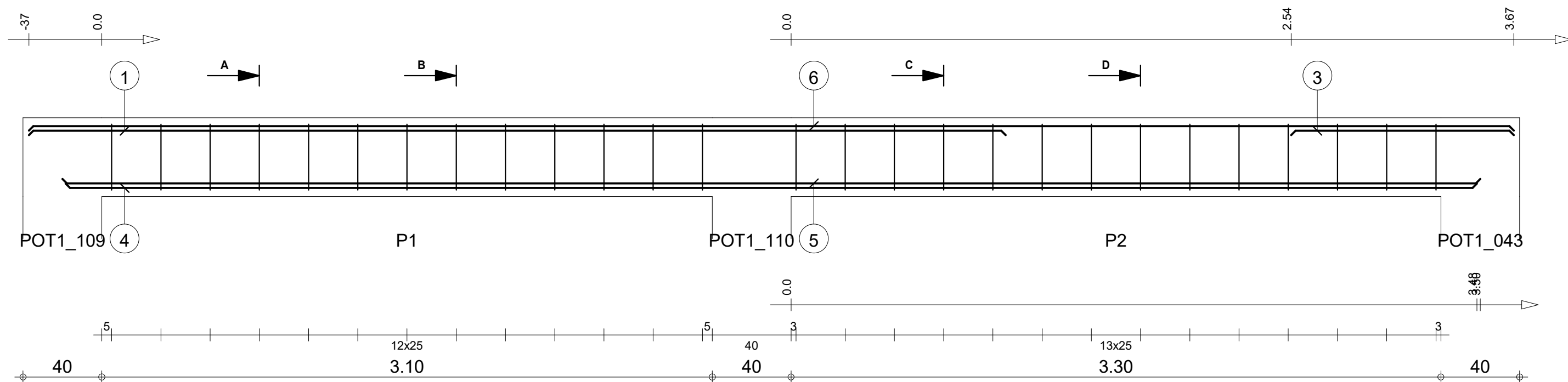
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.17	00	④	2HA 10	I=6.50	00	⑦	9HA 6	I=1.08	31
②	14HA 6	I=1.08	31	⑤	2HA 10	I=6.84	00				
③	2HA 10	I=6.47	00	⑥	2HA 10	I=4.12	00				

STRUCTURE BATIMENT CEA/ITECH-MTV A 12				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Béton : BETON20 = 0.552 m3			
								Acier HA 400 = 30.9 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 65.94 kg/ m3			
								Surface du coffrage = 6.82 m2			
								Echelle pour la vue 5.22cm/m			
								Echelle pour la section 9.34cm/m			
								Page 12/48			



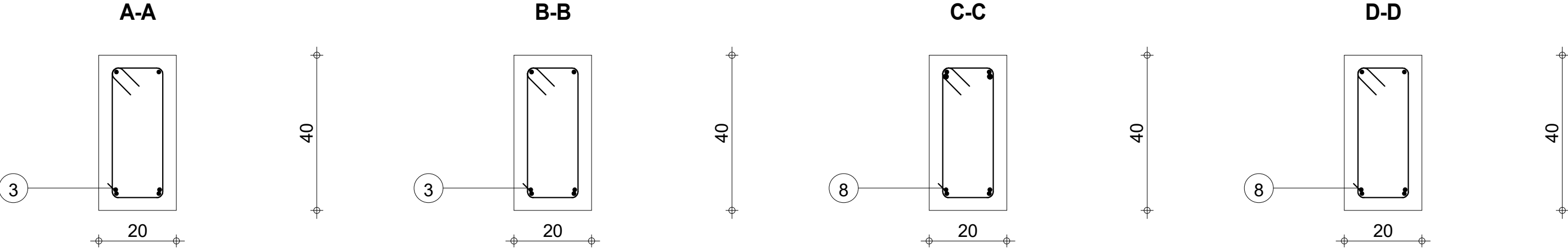
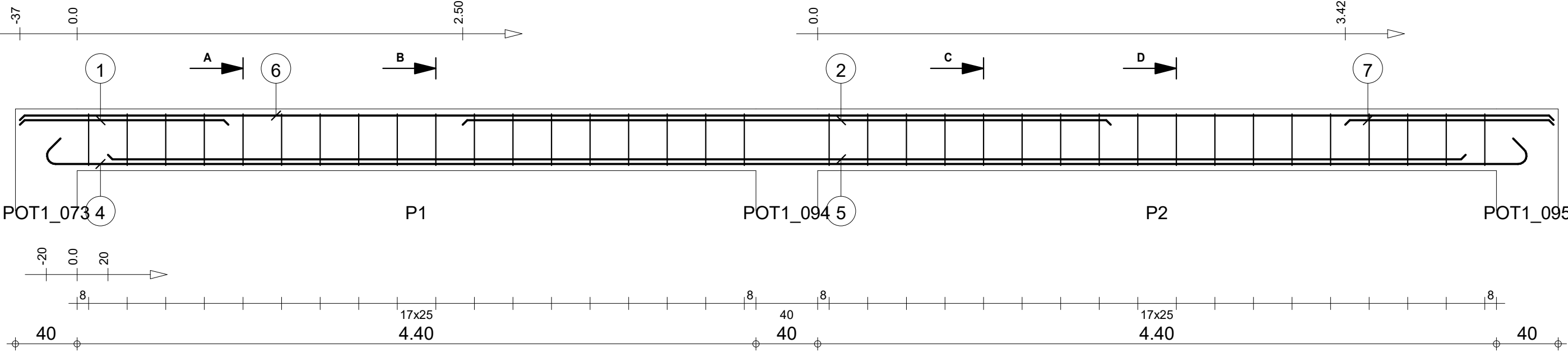
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	9HA 6	I=1.07	31	⑤	2HA 10	I=2.60	00				
③	2HA 10	I=1.27	00	⑥	2HA 10	I=7.34	00				

STRUCTURE BATIMENT CEA/ITECH-MTV A 13				Nombre 1				Béton : BETON20 = 0.592 m3				Acier HA 400 = 30 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
								Densité = 60.81 kg/ m3				Echelle pour la vue 4.88cm/m			
								Surface du coffrage = 7.32 m2				Echelle pour la section 9.34cm/m			
												Page 13/48			



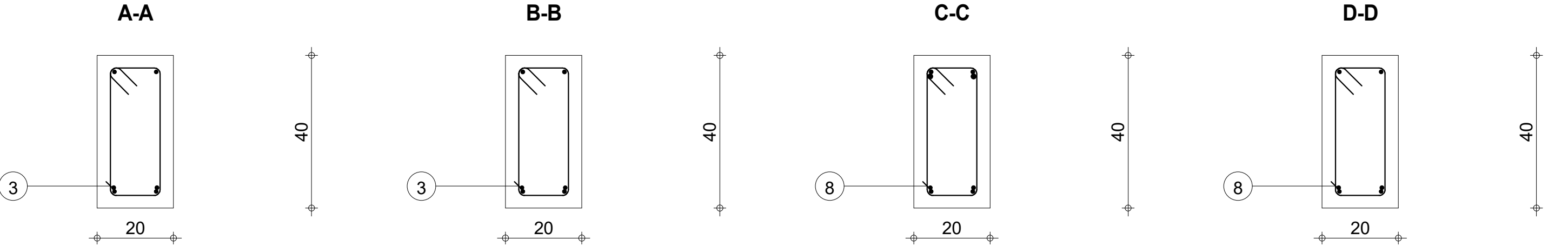
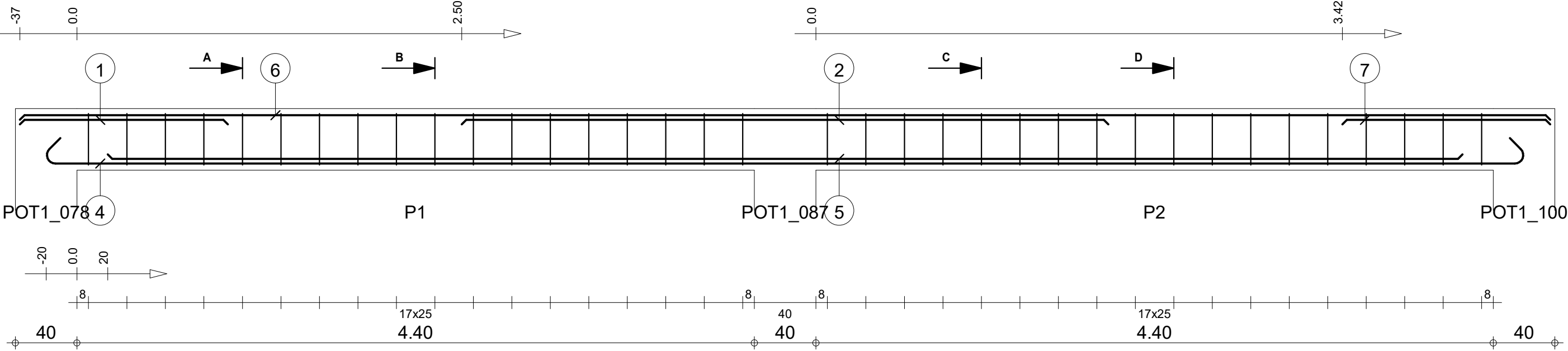
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=4.96	00	④	2HA 10	I=7.17	00	⑦	14HA 6	I=1.08	31
②	13HA 6	I=1.08	31	⑤	2HA 10	I=7.20	00				
③	2HA 10	I=1.13	00	⑥	2HA 10	I=7.54	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				A 14				Nombre 1				Béton : BETON20 = 0.608 m3				Acier HA 400 = 34.5 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 67.43 kg/ m3				Echelle pour la vue 4.75cm/m			
												Surface du coffrage = 7.52 m2				Echelle pour la section 9.34cm/m			
																Page 14/48			



Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=1.35	00	1.35	④	2HA 10	l=9.94	00	9.60	⑦	2HA 10	l=1.35	00	1.35
②	2HA 14	l=4.20	00	4.20	⑤	2HA 10	l=8.80	00	8.80	⑧	18HA 6	l=1.07	31	14
③	18HA 6	l=1.07	31	14	⑥	2HA 10	l=9.94	00	9.94					

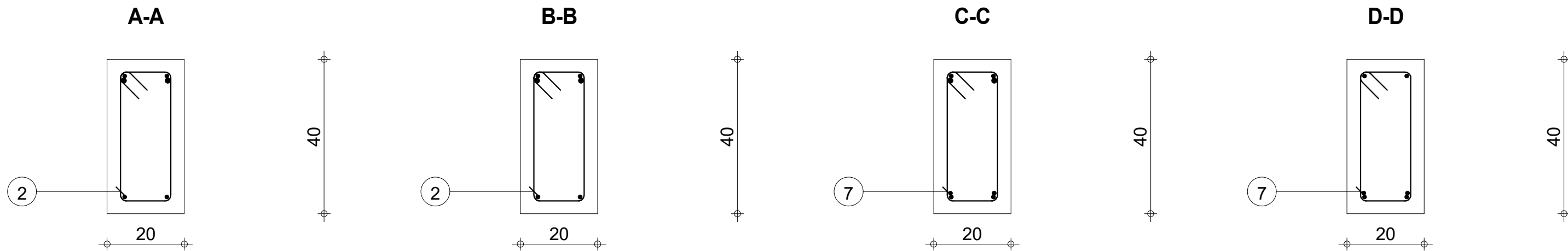
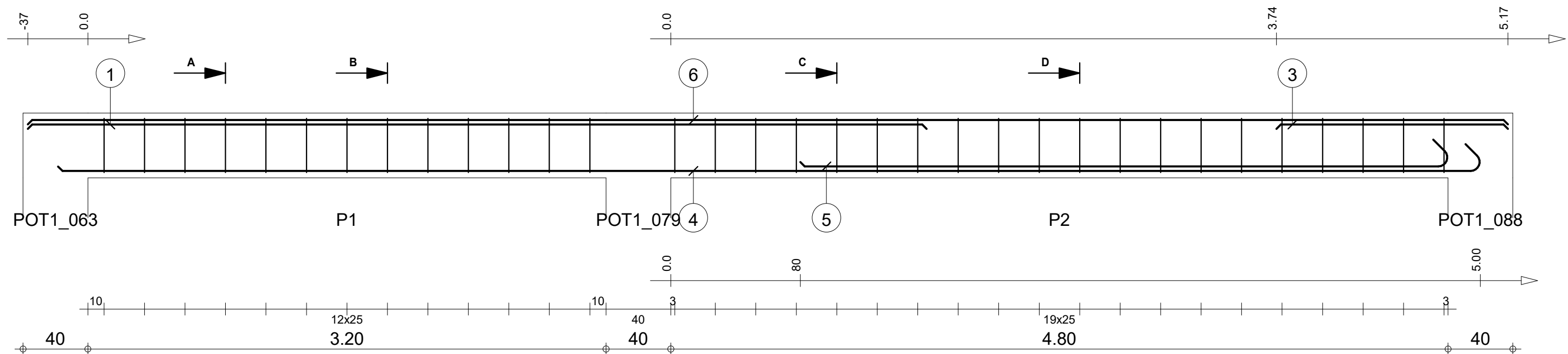
STRUCTURE BATIMENT CEA/ITECH-MTV A 15					Tél. Fax		Nombre 1		Béton : BETON20 = 0.8 m3		Acier HA 400 = 48.8 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A									Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
									Densité = 71.75 kg/ m3		Echelle pour la vue 3.65cm/m	
									Surface du coffrage = 9.92 m2		Echelle pour la section 9.34cm/m	
											Page 15/48	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.35	00	④	2HA 10	I=9.94	00	⑦	2HA 10	I=1.35	00
②	2HA 14	I=4.20	00	⑤	2HA 10	I=8.80	00	⑧	18HA 6	I=1.07	31
③	18HA 6	I=1.07	31	⑥	2HA 10	I=9.94	00				

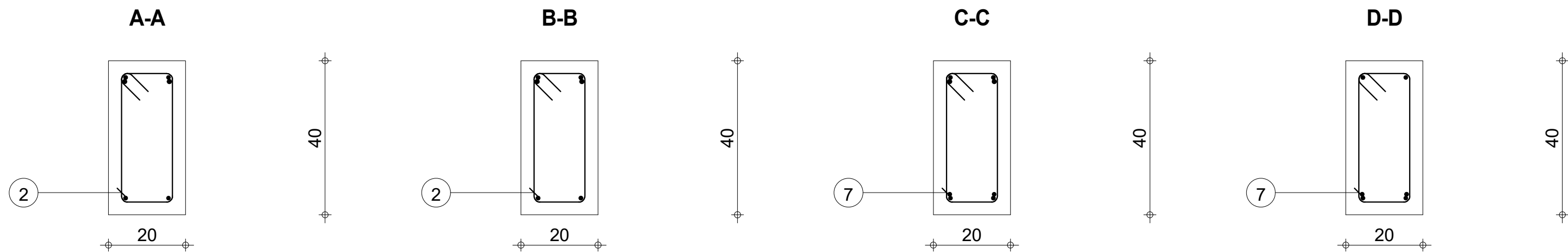
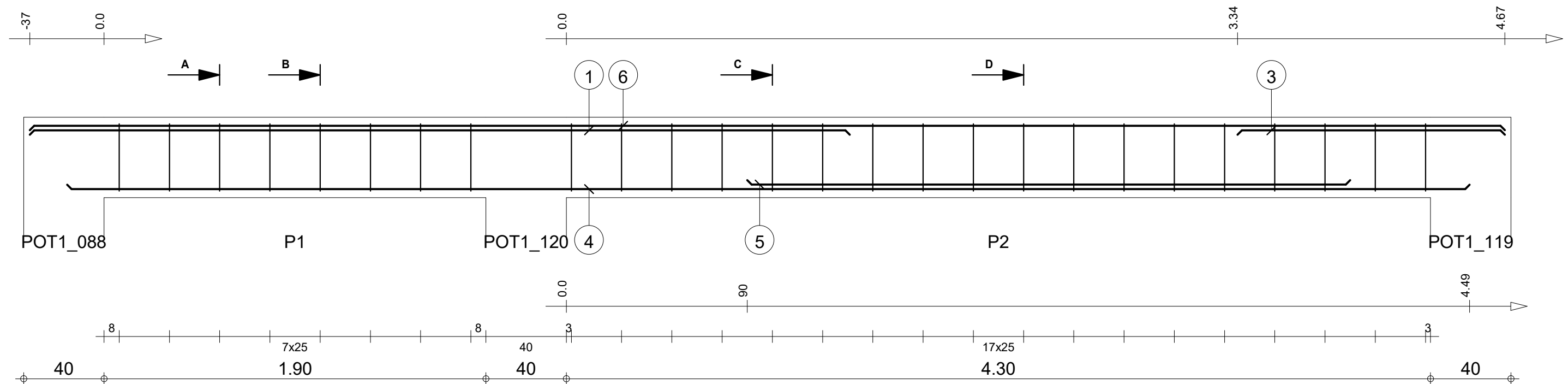
STRUCTURE BATIMENT CEA/ITECH-MTV A 16				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Béton : BETON20 = 0.8 m3			
								Acier HA 400 = 48.8 kg			
								Acier HA 400 = 8.55 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 71.75 kg/ m3			
								Surface du coffrage = 9.92 m2			
								Echelle pour la vue 3.65cm/m			
								Echelle pour la section 9.34cm/m			
								Page 16/48			

		Tél.	Fax		Acier HA 400 = 55.3 kg
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	A 17 Section 20x40	Nombre 1		Béton : BETON20 = 0.832 m3	Acier HA 400 = 8.82 kg
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 77.04 kg/ m3 Surface du coffrage = 10.2 m2	Echelle pour la vue 3.51cm/m Echelle pour la section 9.34cm/m	Page 17/48



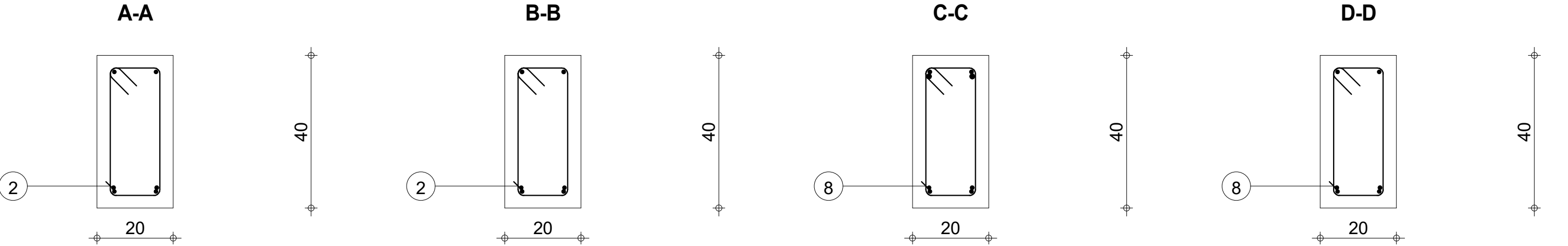
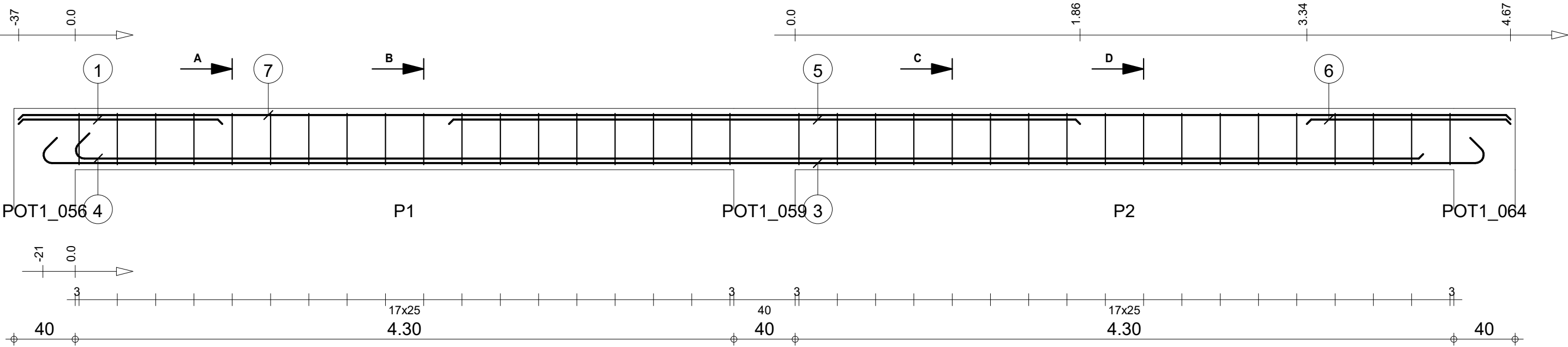
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	2HA 14	I=5.55	00	5.55	④	2HA 10	I=8.95	00	8.78	⑦	20HA 6	I=1.07	31	14 24 34 44
②	13HA 6	I=1.07	31	14 24 34 44	⑤	2HA 10	I=4.17	00	4.00					
③	2HA 10	I=1.43	00	1.43	⑥	2HA 10	I=9.14	00	9.14					

Tél.				Fax				Nombre 1			
STRUCTURE BATIMENT CEA/ITECH-MTV A 18				COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Béton : BETON20 = 0.736 m3			
								Acier HA 400 = 42.6 kg			
								Acier HA 400 = 7.84 kg			
Section 20x40								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 68.61 kg/ m3			
								Surface du coffrage = 9.12 m2			
								Echelle pour la vue 3.95cm/m			
								Echelle pour la section 9.34cm/m			
								Page 18/48			



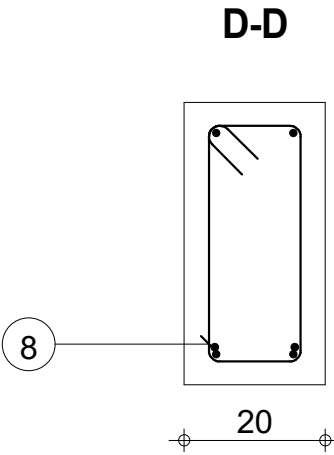
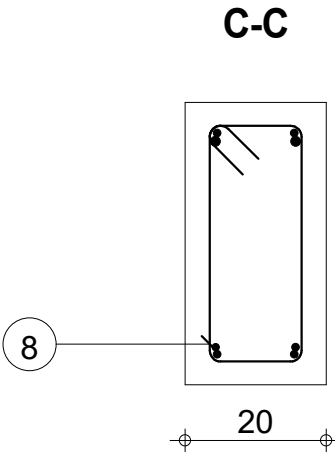
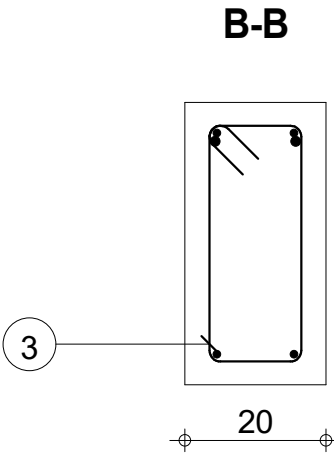
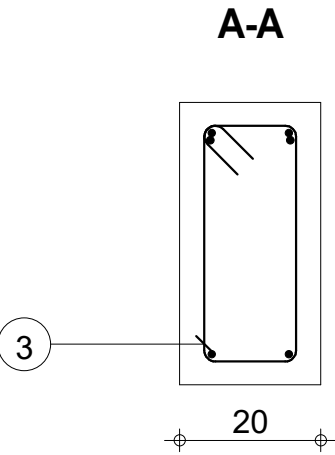
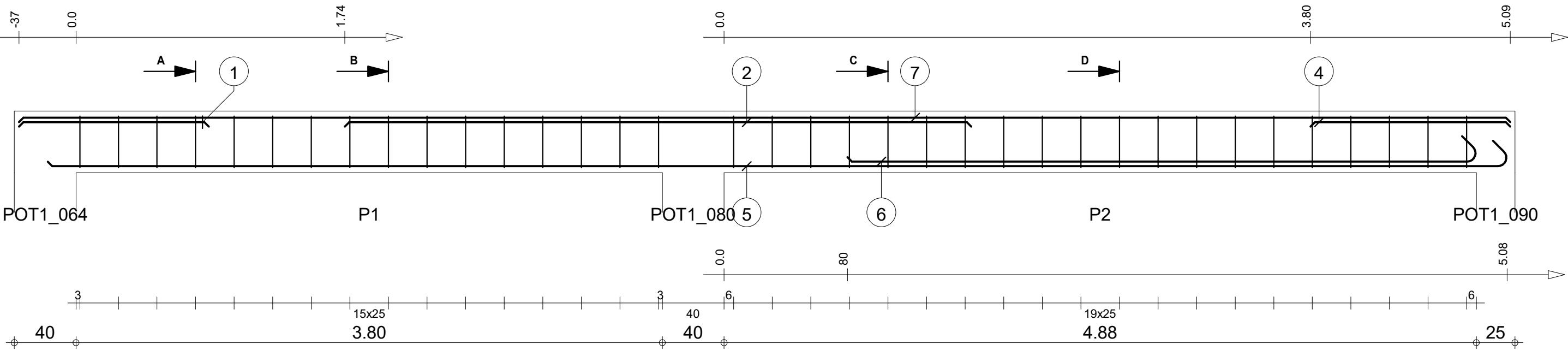
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	8HA 6	l=1.07	31	⑤	2HA 10	l=3.00	00				
③	2HA 10	l=1.33	00	⑥	2HA 10	l=7.34	00				

STRUCTURE BATIMENT CEA/ITECH-MTV A 19				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Béton : BETON20 = 0.592 m3			
								Acier HA 400 = 30.2 kg			
								Acier HA 400 = 6.2 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 61.49 kg/ m3			
								Echelle pour la vue 4.88cm/m			
								Echelle pour la section 9.34cm/m			
								Page 19/48			



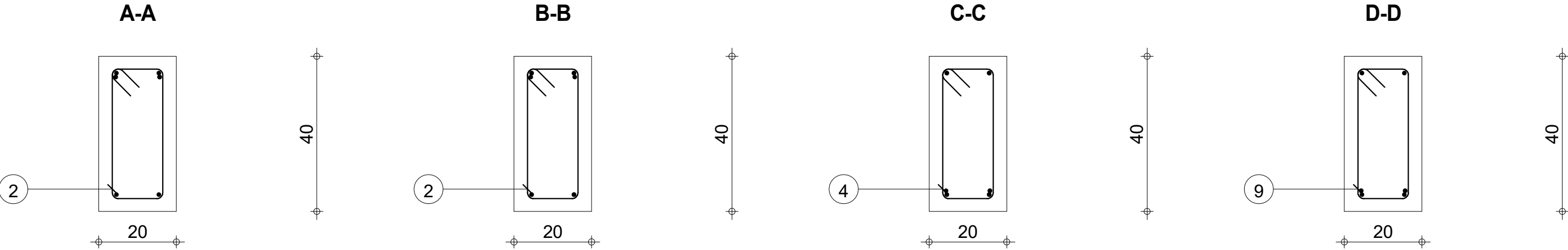
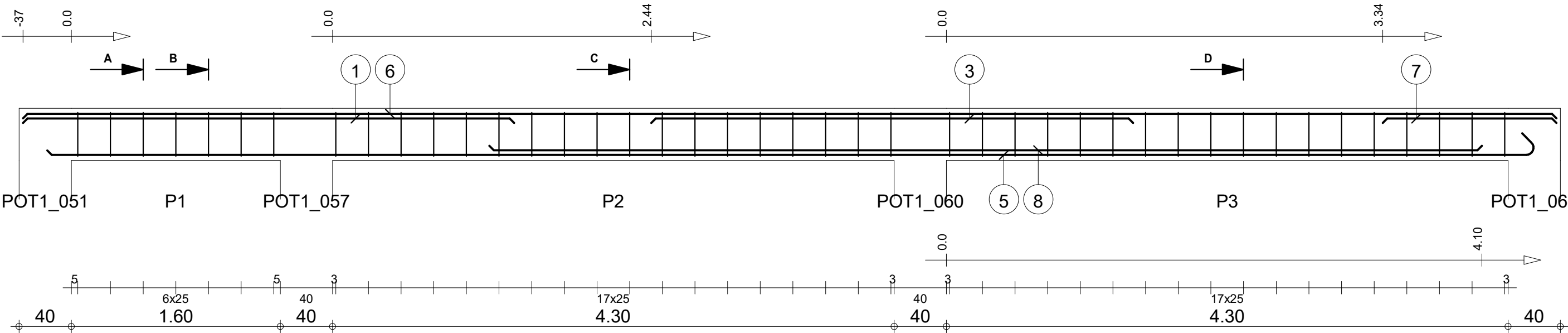
Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=1.33	00	1.33	④	2HA 10	l=8.97	00	8.80	⑦	2HA 10	l=9.74	00	9.74
②	18HA 6	l=1.07	31	14 14 14 14 14	⑤	2HA 14	l=4.12	00	4.12	⑧	18HA 6	l=1.07	31	14 14 14 14 14
③	2HA 10	l=9.75	00	9.41	⑥	2HA 10	l=1.33	00	1.33					

		Tél.	Fax			Acier HA 400 = 48.3 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV	A 20	Nombre 1			Béton : BETON20 = 0.784 m3		Acier HA 400 = 8.55 kg
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm
			Densité = 72.58 kg/ m3		Echelle pour la vue 3.72cm/m		Page 20/48
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	Section 20x40	Surface du coffrage = 9.72 m2		Echelle pour la section 9.34cm/m			



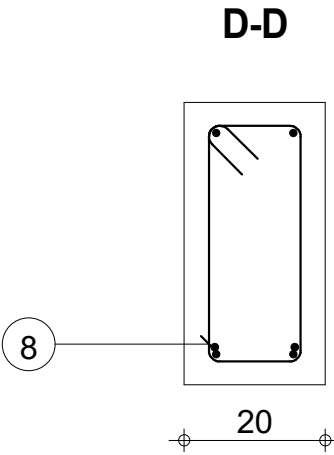
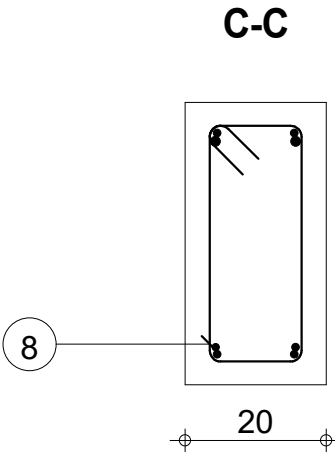
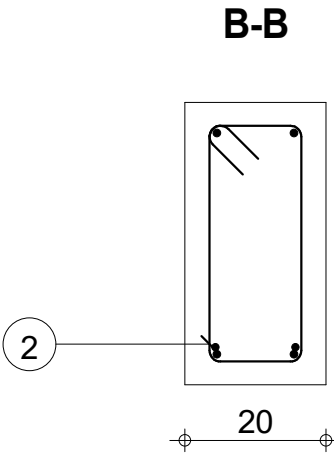
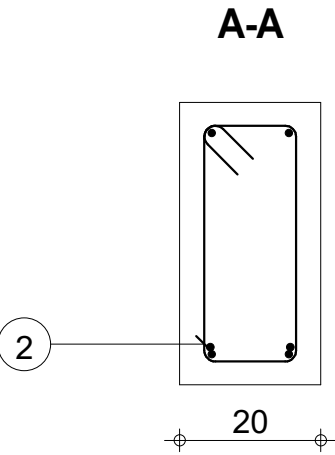
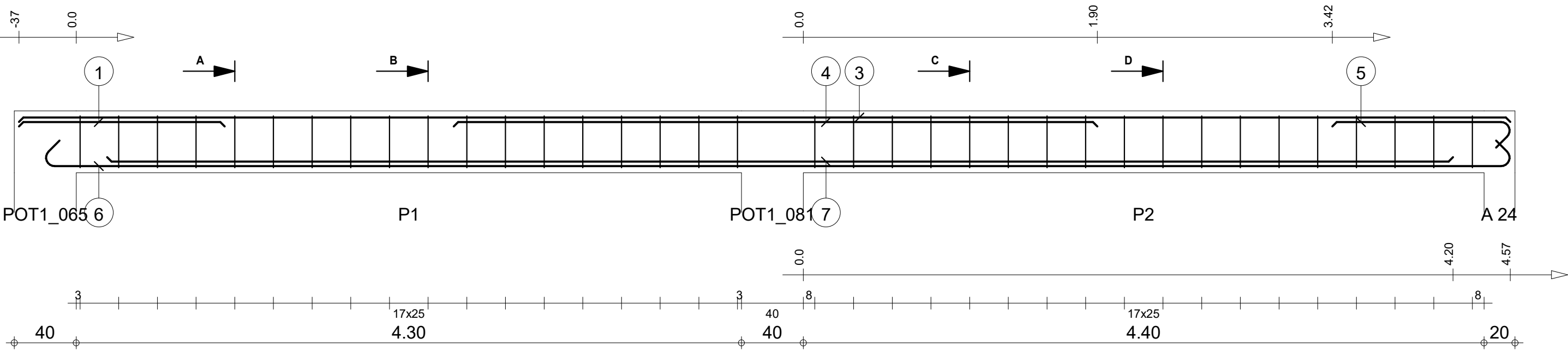
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.23	00	④	2HA 10	I=1.29	00	⑦	2HA 10	I=9.67	00
②	2HA 14	I=4.06	00	⑤	2HA 10	I=9.63	00	⑧	20HA 6	I=1.07	31
③	16HA 6	I=1.07	31	⑥	2HA 10	I=4.25	00				

STRUCTURE BATIMENT CEA/ITECH-MTV A 21				COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Nombre 1			
Tél.				Fax				Béton : BETON20 = 0.778 m3				Acier HA 400 = 41.9 kg			
								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
								Densité = 64.91 kg/ m3				Echelle pour la vue 3.75cm/m			
								Surface du coffrage = 9.68 m2				Echelle pour la section 9.34cm/m			
												Page 21/48			



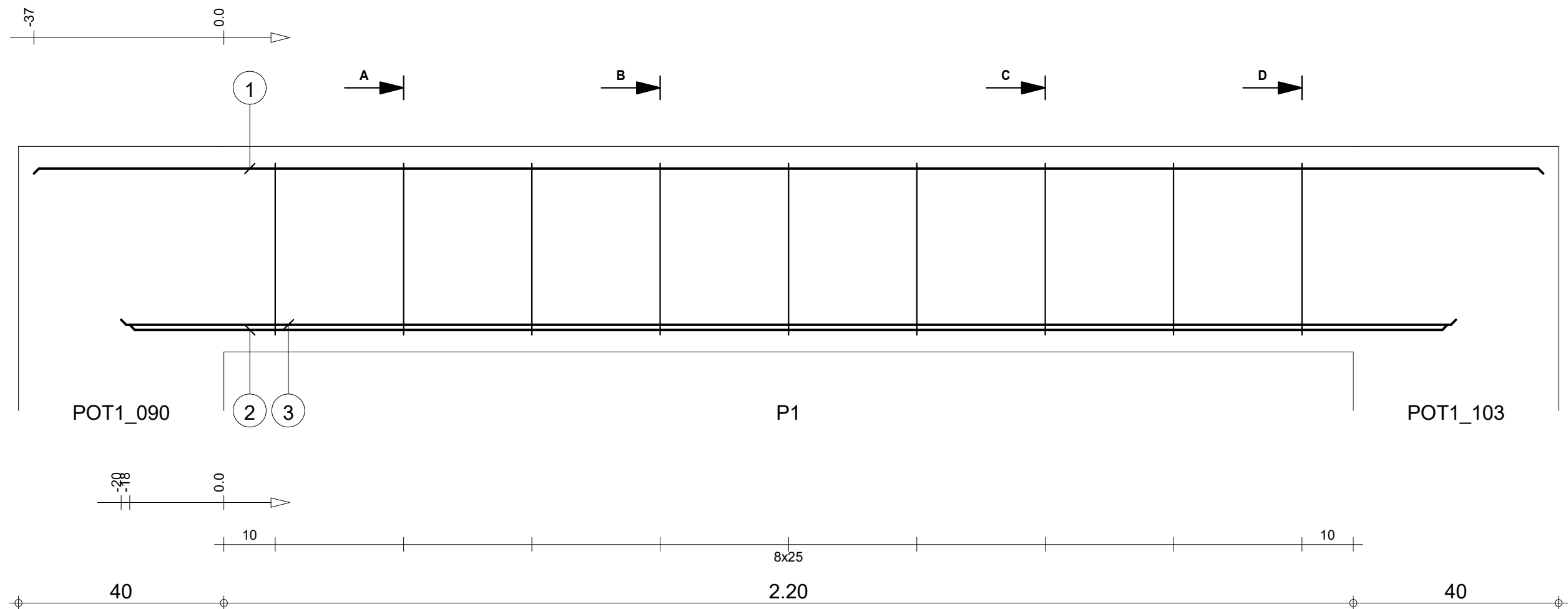
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=3.76	00	④	18HA 6	I=1.07	31	⑦	2HA 10	I=1.33	00
②	7HA 6	I=1.07	31	⑤	2HA 10	I=11.55	00	⑧	2HA 10	I=7.60	00
③	2HA 14	I=3.69	00	⑥	2HA 10	I=11.74	00	⑨	18HA 6	I=1.07	31

STRUCTURE BATIMENT CEA/ITECH-MTV				A 22				Nombre 1				Béton : BETON20 = 0.944 m3		Acier HA 400 = 53.3 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 67.27 kg/ m3		Echelle pour la vue 3.1cm/m	
												Surface du coffrage = 11.6 m2		Echelle pour la section 9.34cm/m	
														Page 22/48	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.33	00	④	2HA 14	I=4.16	00	⑦	2HA 10	I=8.70	00
②	18HA 6	I=1.07	31	⑤	2HA 10	I=1.32	00	⑧	18HA 6	I=1.07	31
③	2HA 10	I=9.64	00	⑥	2HA 10	I=9.81	00				

Tél.				Fax				Nombre 1			
STRUCTURE BATIMENT CEA/ITECH-MTV A 23				Section 20x40				Béton : BETON20 = 0.776 m3			
								Acier HA 400 = 48 kg			
								Acier HA 400 = 8.55 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 72.94 kg/ m3			
								Surface du coffrage = 9.66 m2			
								Echelle pour la vue 3.75cm/m			
								Echelle pour la section 9.34cm/m			
								Page 23/48			

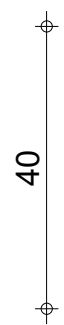
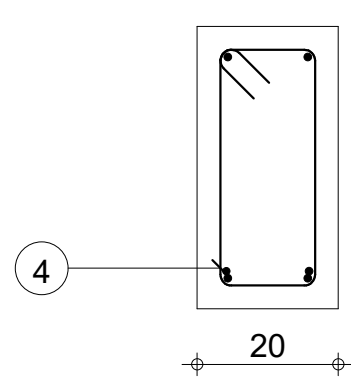
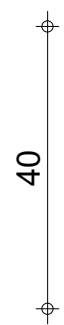
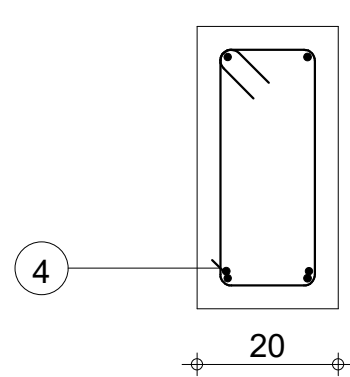
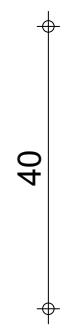
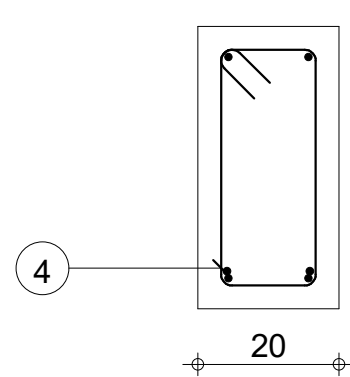
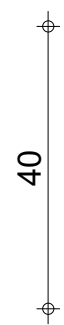
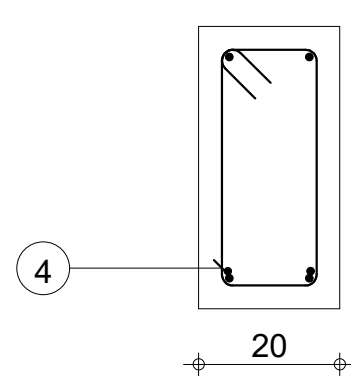


A-A

B-B

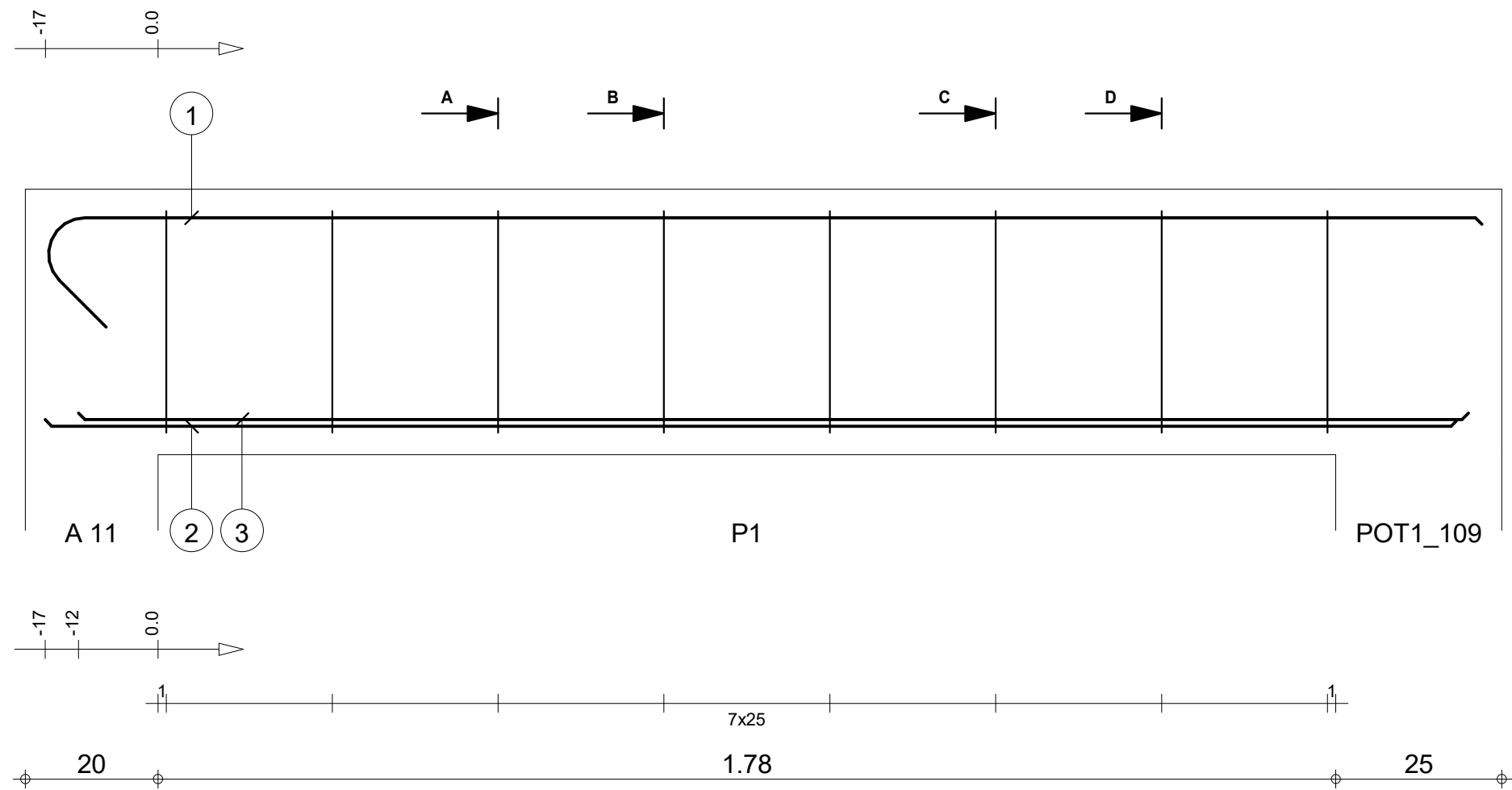
C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=2.94	00	④	9HA 6	I=1.08	31
②	2HA 10	I=2.57	00				
③	2HA 10	I=2.60	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		A 24: P1		Nombre 1		Béton : BETON20 = 0.24 m3		Acier HA 400 = 10 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 50.42 kg/ m3		Echelle pour la vue 10.9cm/m	
						Surface du coffrage = 3 m2		Echelle pour la section 9.34cm/m	
								Page 24/48	

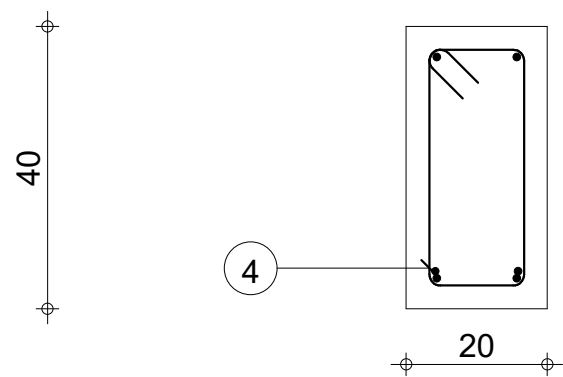
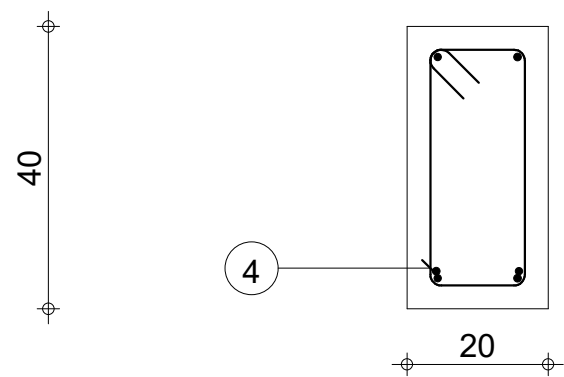
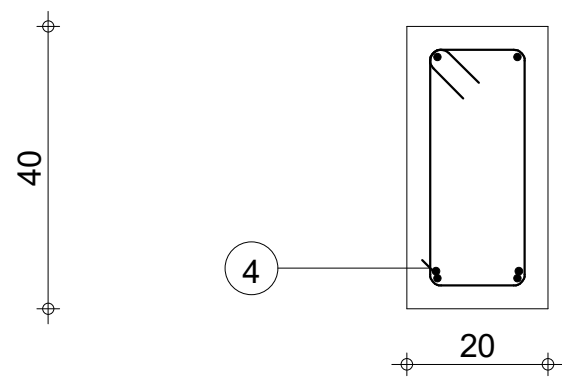
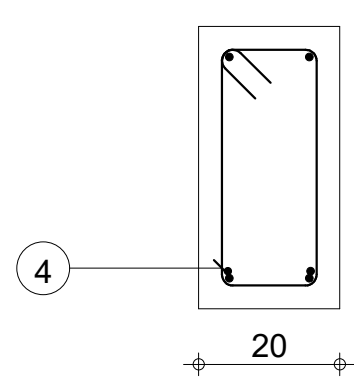


A-A

B-B

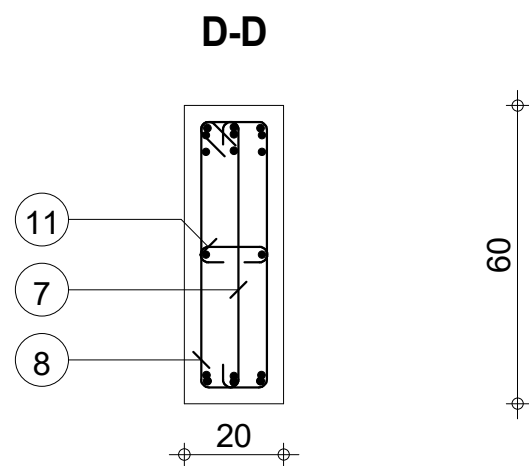
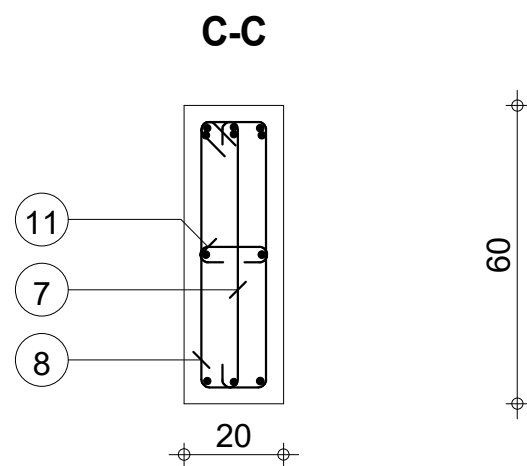
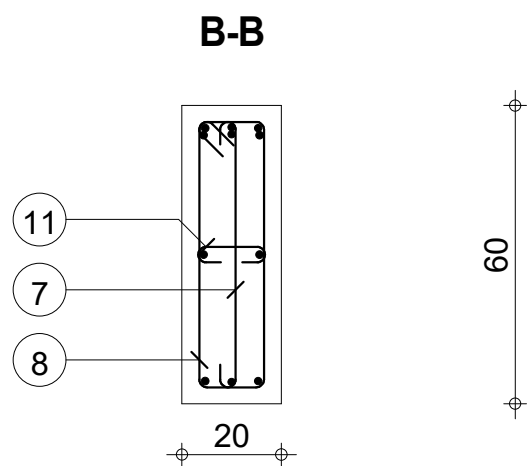
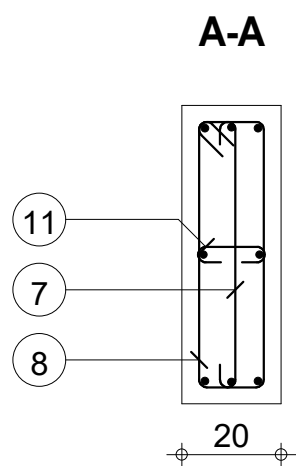
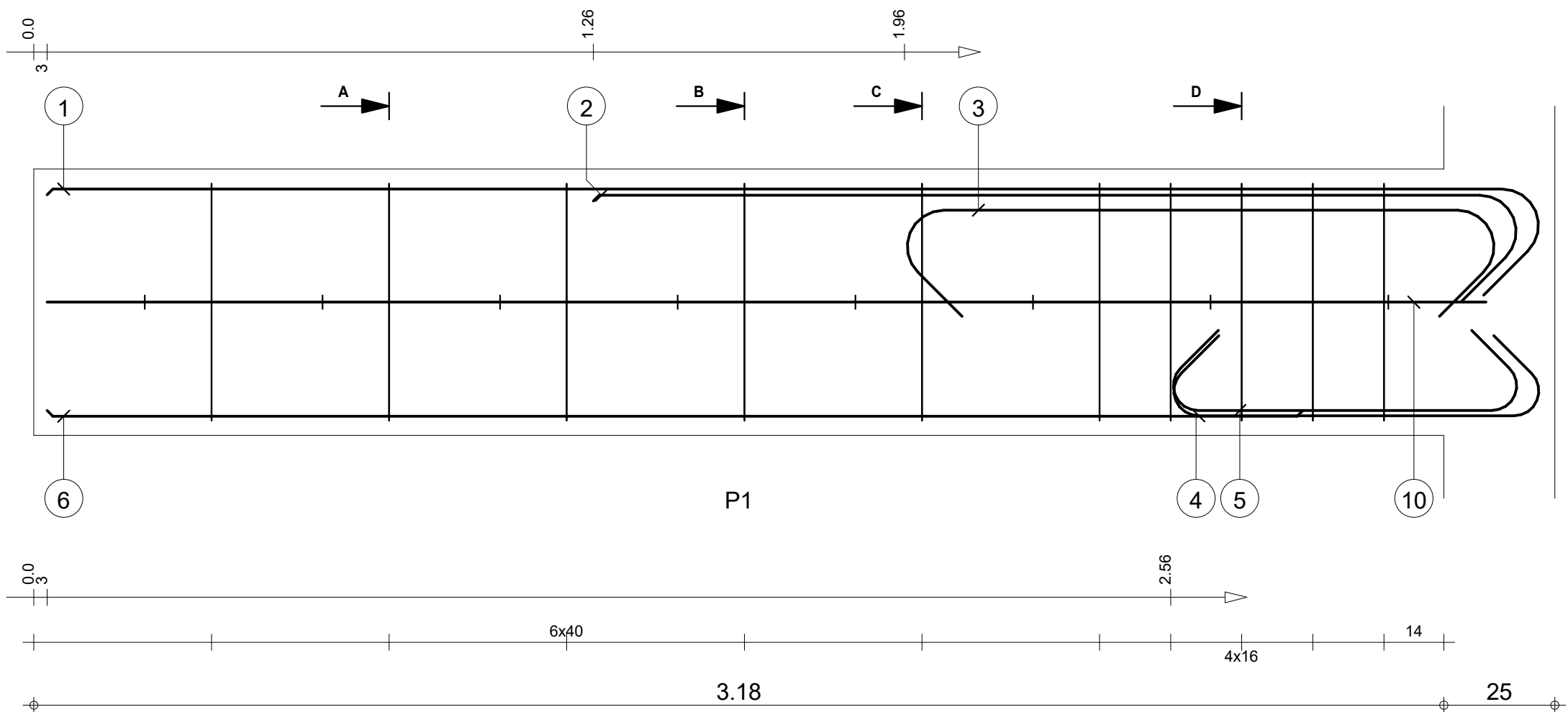
C-C

D-D



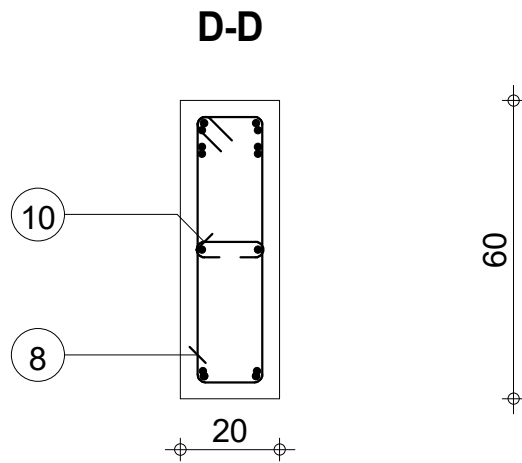
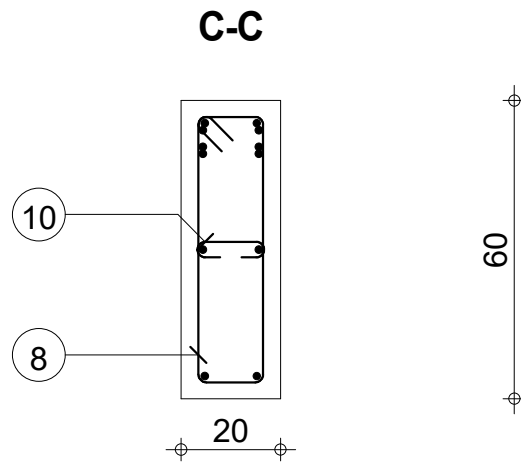
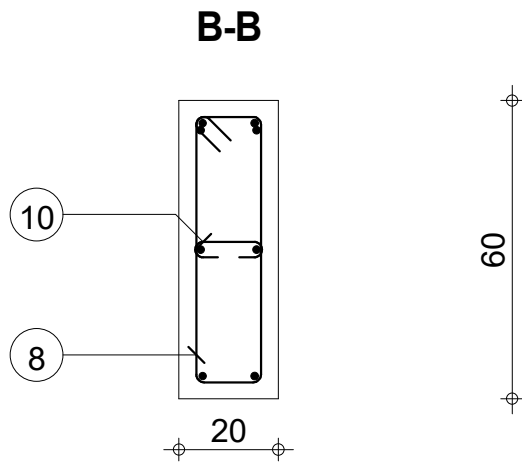
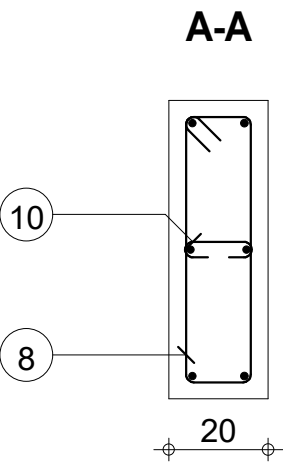
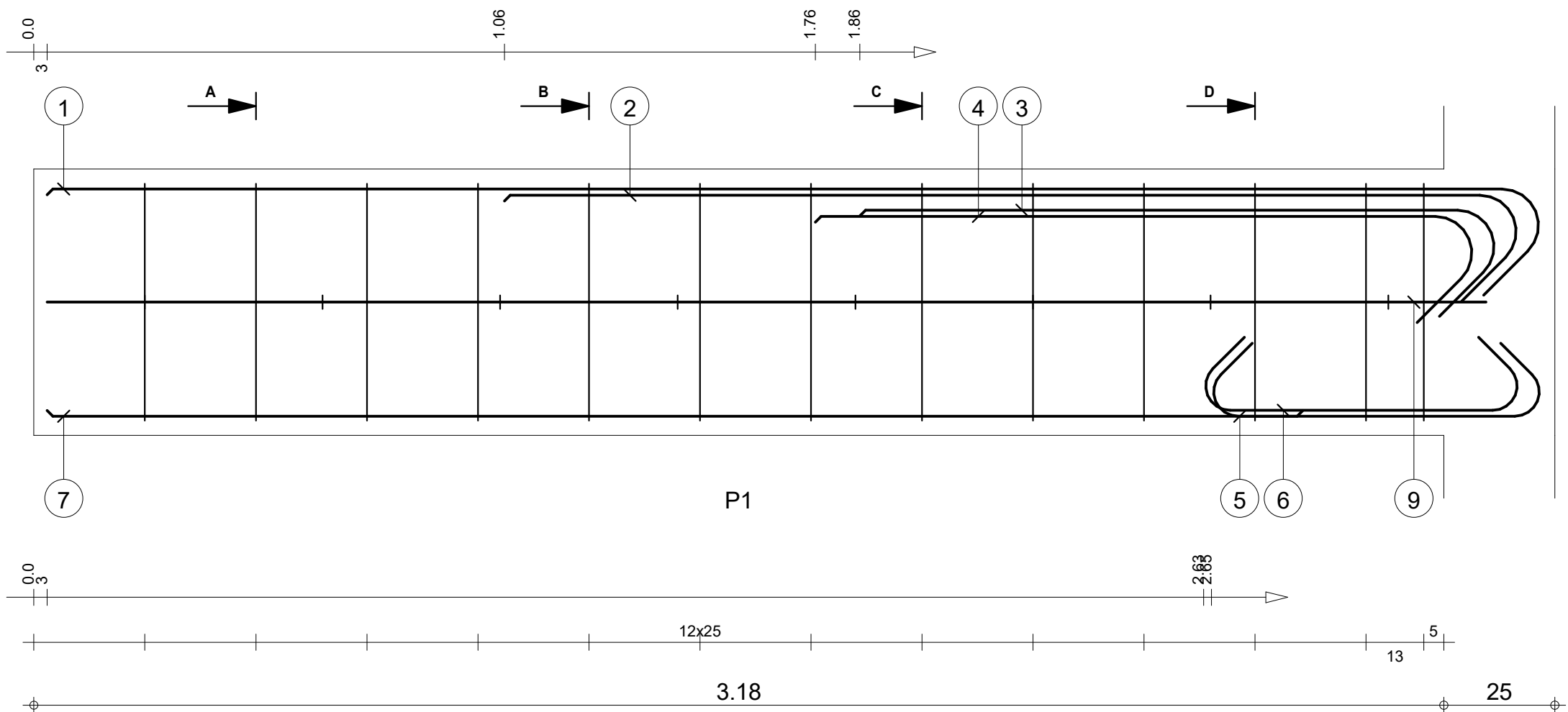
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	2HA 10	l=2.13	00				
③	2HA 10	l=2.10	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		A 25: P1		Nombre 1		Béton : BETON20 = 0.178 m3		Acier HA 400 = 8.09 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 56.18 kg/ m3		Echelle pour la vue 10.9cm/m	
						Surface du coffrage = 2.29 m2		Echelle pour la section 9.34cm/m	
								Page 25/48	



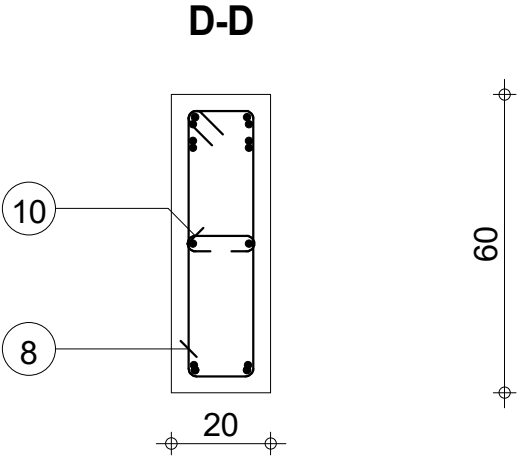
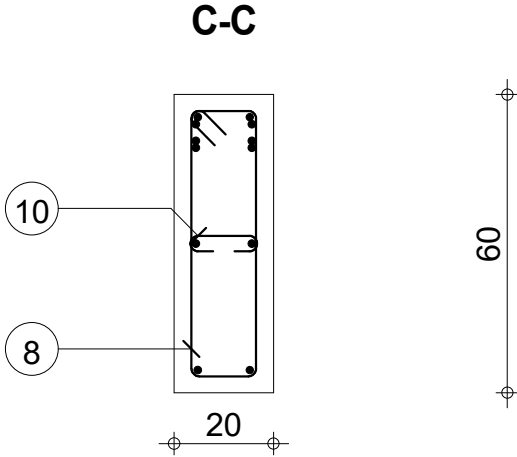
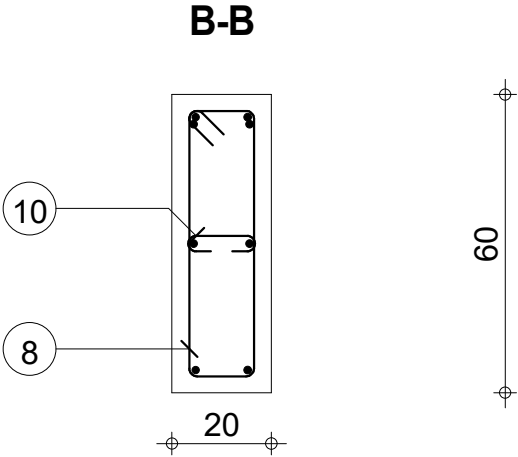
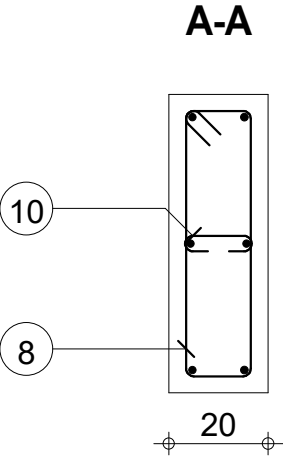
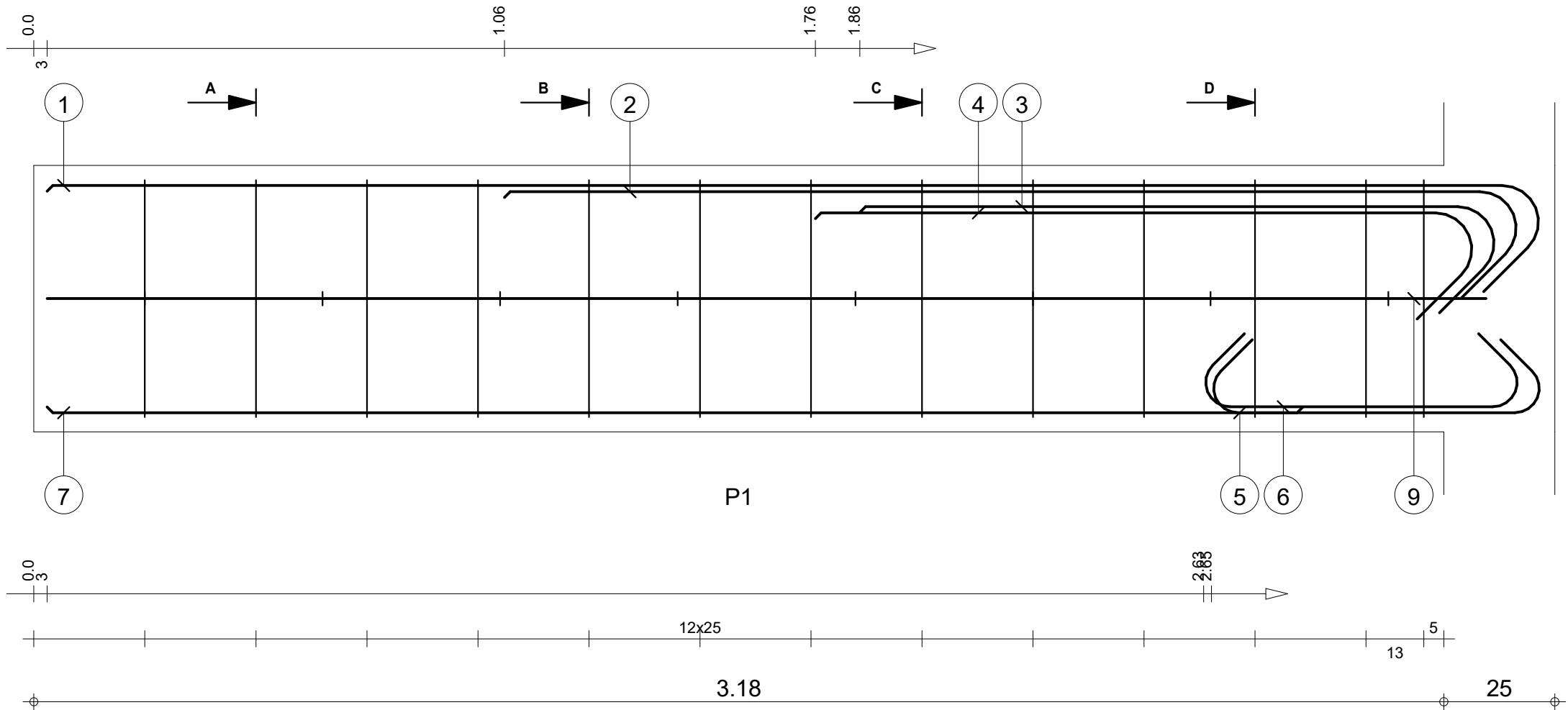
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 14	I=3.61	00	3.37	④	3HA 12	I=1.21	00	83	⑦	10HA 6	I=66	00	5	54
②	3HA 14	I=2.33	00	2.09	⑤	3HA 12	I=1.17	00	79	⑧	10HA 6	I=1.47*	31	14	14
③	3HA 14	I=1.82	00	1.34	⑥	3HA 10	I=2.83	00	2.83	⑩	2HA 10	I=3.24	00	3.24	

Tél. Fax										Nombre 1		Béton : BETON20 = 0.411 m3			Acier HA 400 = 39.7 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-A										A 26: P1 Section 20x60		Enrobage inférieur 3 cm			Acier HA 400 = 9.19 kg	
												Enrobage supérieur 3 cm			Enrobage latéral 3 cm	
												Densité = 119 kg/ m3			Echelle pour la vue 8.17cm/m	
												Surface du coffrage = 4.98 m2			Echelle pour la section 6.58cm/m	
															Page 26/48	



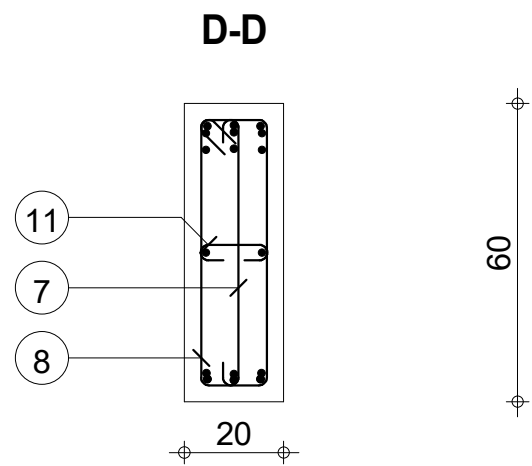
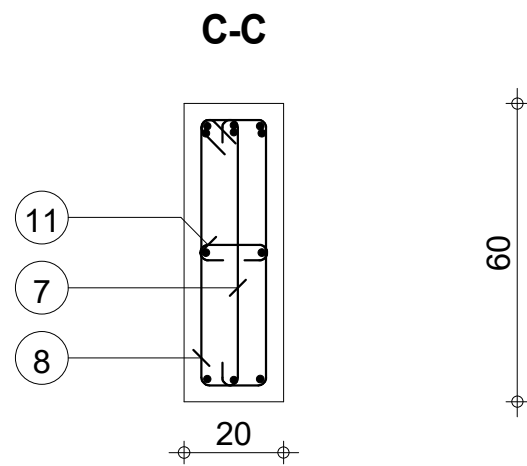
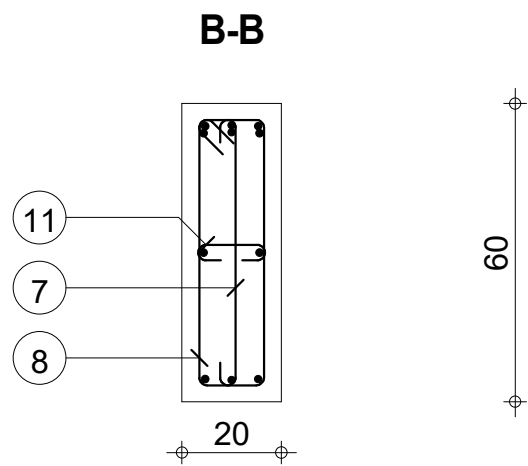
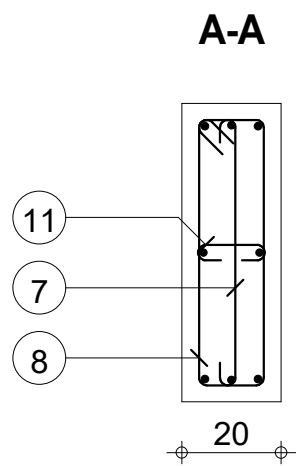
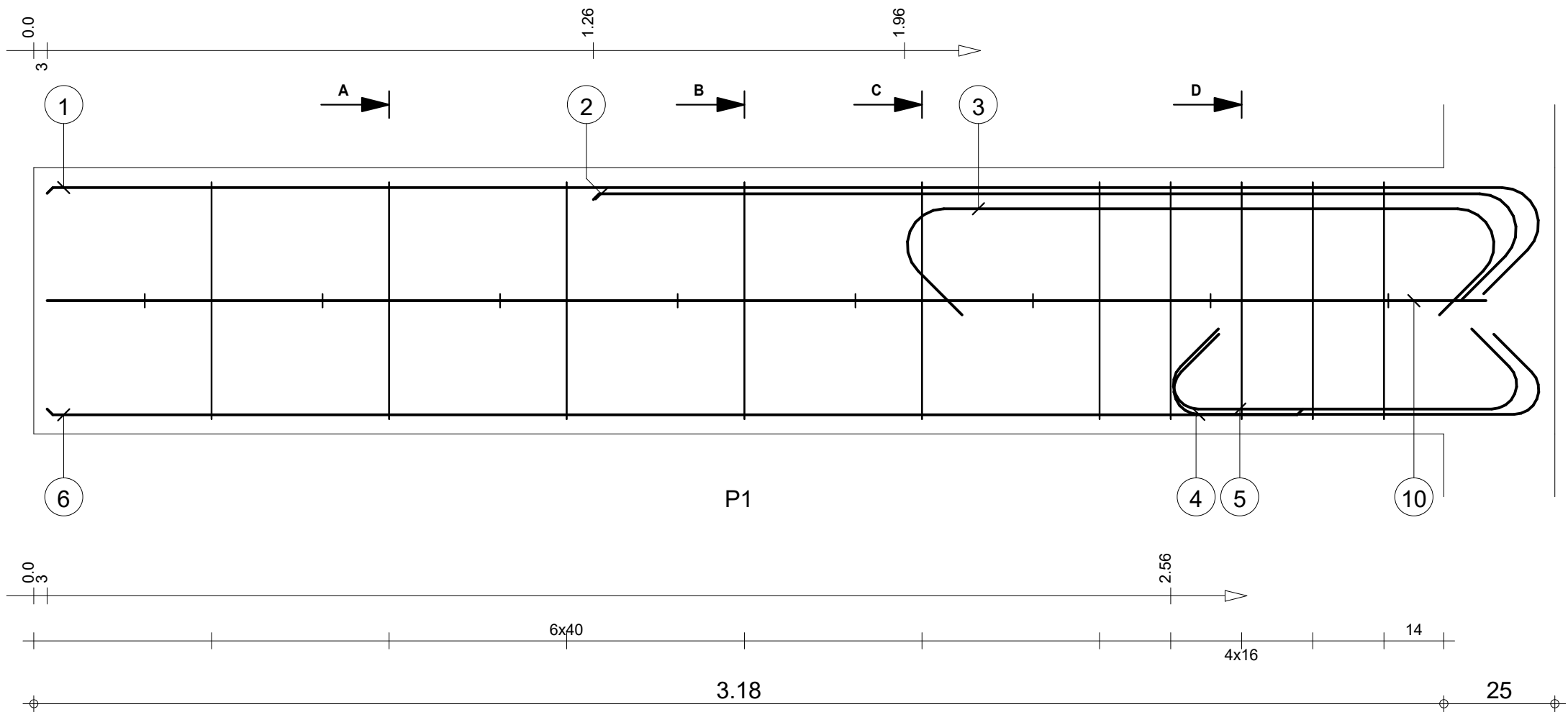
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 14	I=3.61	00	④	2HA 14	I=1.73	00	⑦	2HA 10	I=2.83	00	⑩	8HA 6	I=26	00
②	2HA 14	I=2.53	00	⑤	2HA 10	I=1.08	00	⑧	13HA 6	I=1.47	31				
③	2HA 14	I=1.68	00	⑥	2HA 10	I=1.05	00	⑨	2HA 10	I=3.24	00				

STRUCTURE BATIMENT CEA/ITECH-MTV A 27: P1										Nombre 1		Béton : BETON20 = 0.411 m3		Acier HA 400 = 29.2 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 92.21 kg/ m3		Echelle pour la vue 8.17cm/m	
												Surface du coffrage = 4.98 m2		Echelle pour la section 6.58cm/m	
														Page 27/48	



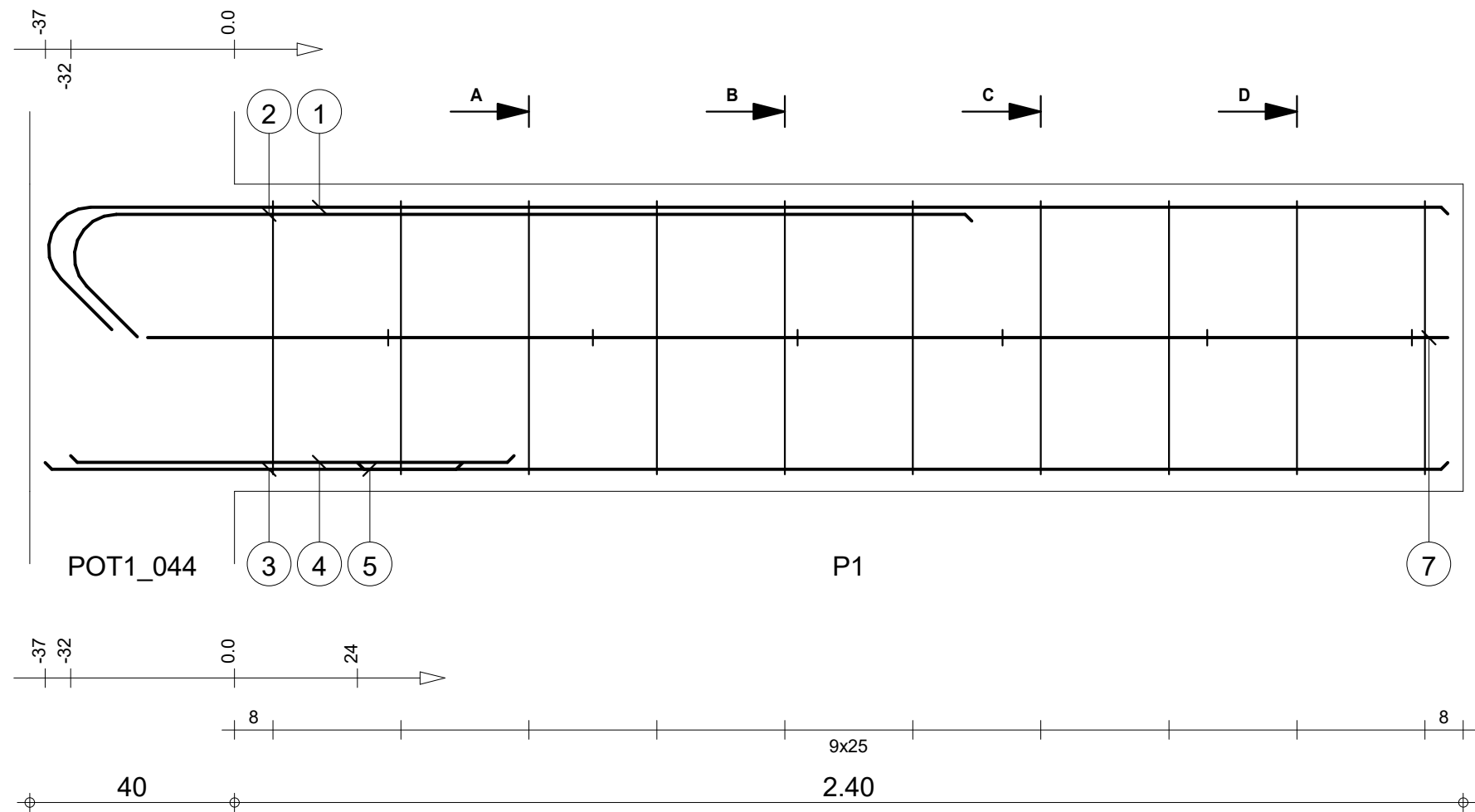
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 14	I=3.61	00	④	2HA 14	I=1.73	00	⑦	2HA 10	I=2.83	00	⑩	8HA 6	I=26	00
②	2HA 14	I=2.53	00	⑤	2HA 10	I=1.08	00	⑧	13HA 6	I=1.47	31				
③	2HA 14	I=1.68	00	⑥	2HA 10	I=1.05	00	⑨	2HA 10	I=3.24	00				

		Tél.	Fax		Acier HA 400 = 29.2 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	A 28: P1 Section 20x60	Nombre 1	Béton : BETON20 = 0.411 m3		Acier HA 400 = 8.7 kg	
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 92.21 kg/ m3		Echelle pour la vue 8.17cm/m	Page 28/48
			Surface du coffrage = 4.98 m2		Echelle pour la section 6.58cm/m	

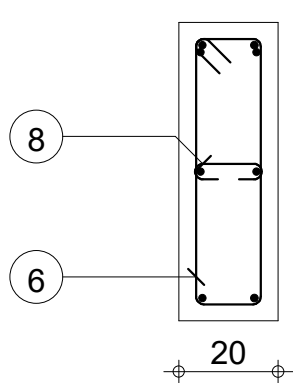


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 14	I=3.61	00	3.37	④	3HA 12	I=1.21	00	83	⑦	10HA 6	I=66	00	5	54
②	3HA 14	I=2.33	00	2.09	⑤	3HA 12	I=1.17	00	79	⑧	10HA 6	I=1.47*	31	14	14
③	3HA 14	I=1.82	00	1.34	⑥	3HA 10	I=2.83	00	2.83	⑩	2HA 10	I=3.24	00	3.24	

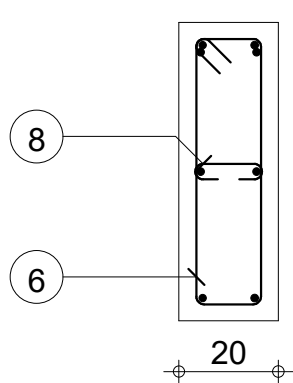
		Tél.	Fax		Acier HA 400 = 39.7 kg
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	A 29: P1 Section 20x60	Nombre 1	Béton : BETON20 = 0.411 m3	Acier HA 400 = 9.19 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 119 kg/ m3	Echelle pour la vue 8.17cm/m	Page 29/48
			Surface du coffrage = 4.98 m2	Echelle pour la section 6.58cm/m	



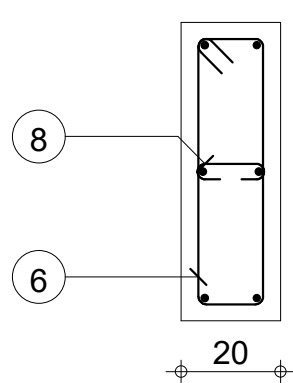
A-A



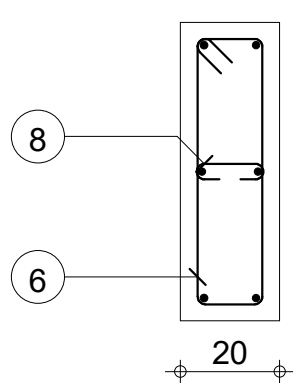
B-B



C-C

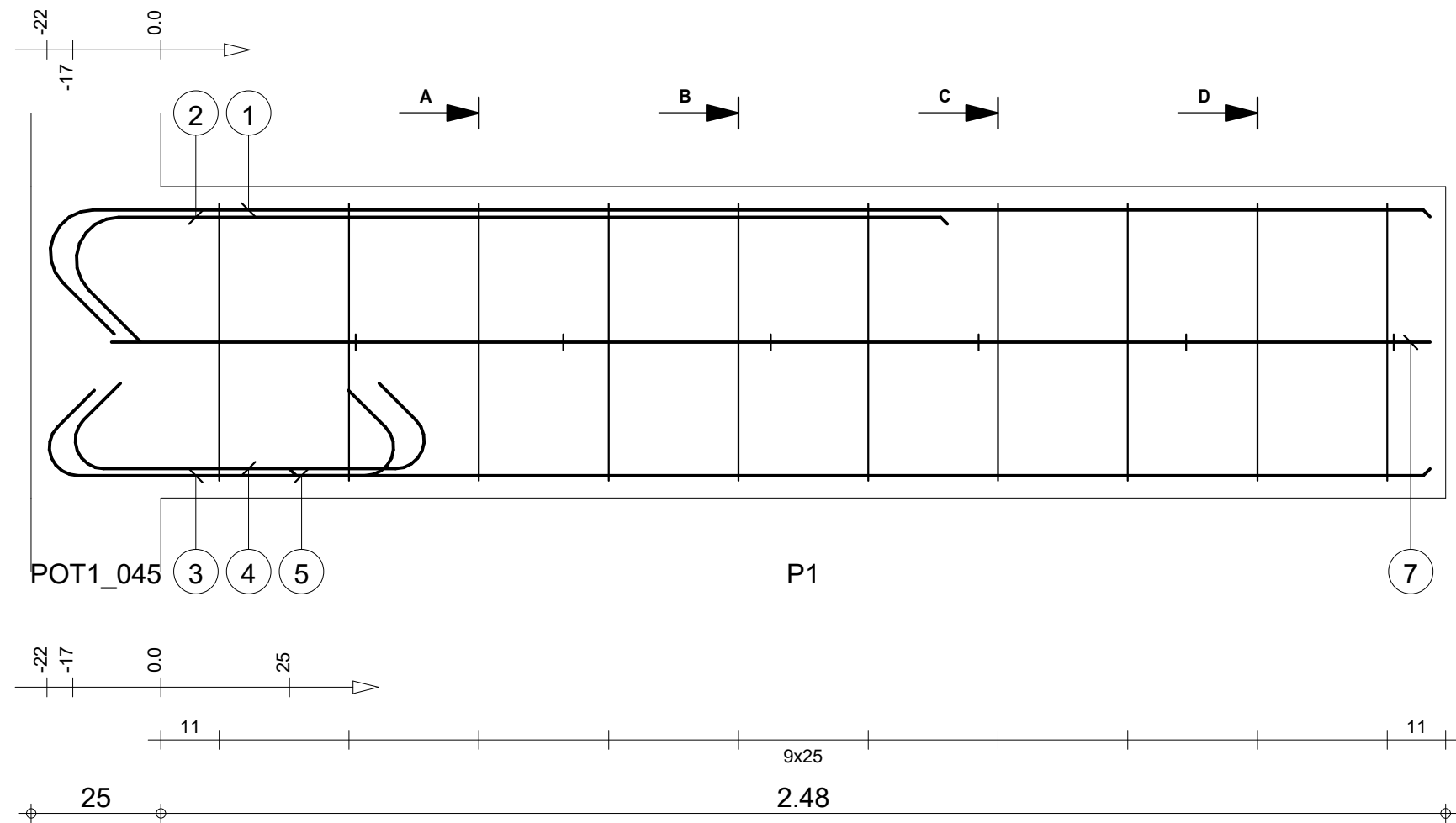


D-D

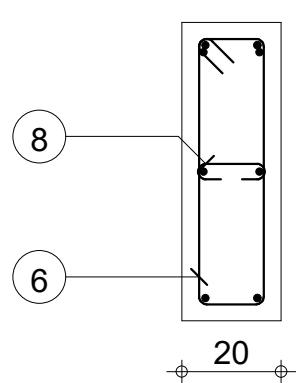


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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④	2HA 10	l=87	00	⑤	2HA 10	l=2.13	00	⑥	10HA 6	l=1.47	31
⑦	2HA 10	l=2.54	00	⑧	6HA 6	l=26	00				

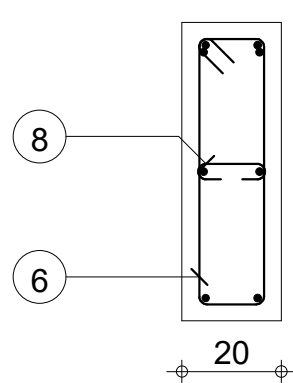
STRUCTURE BATIMENT CEA/ITECH-MTV				A 30: P1				Nombre 1				Béton : BETON20 = 0.336 m3				Acier HA 400 = 16.8 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 69.94 kg/ m3				Echelle pour la vue 8.17cm/m			
												Surface du coffrage = 4.08 m2				Echelle pour la section 6.58cm/m			
																Page 30/48			



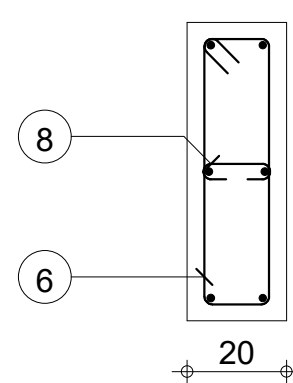
A-A



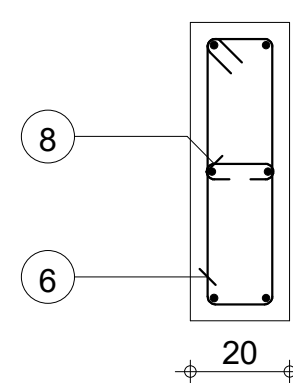
B-B



C-C

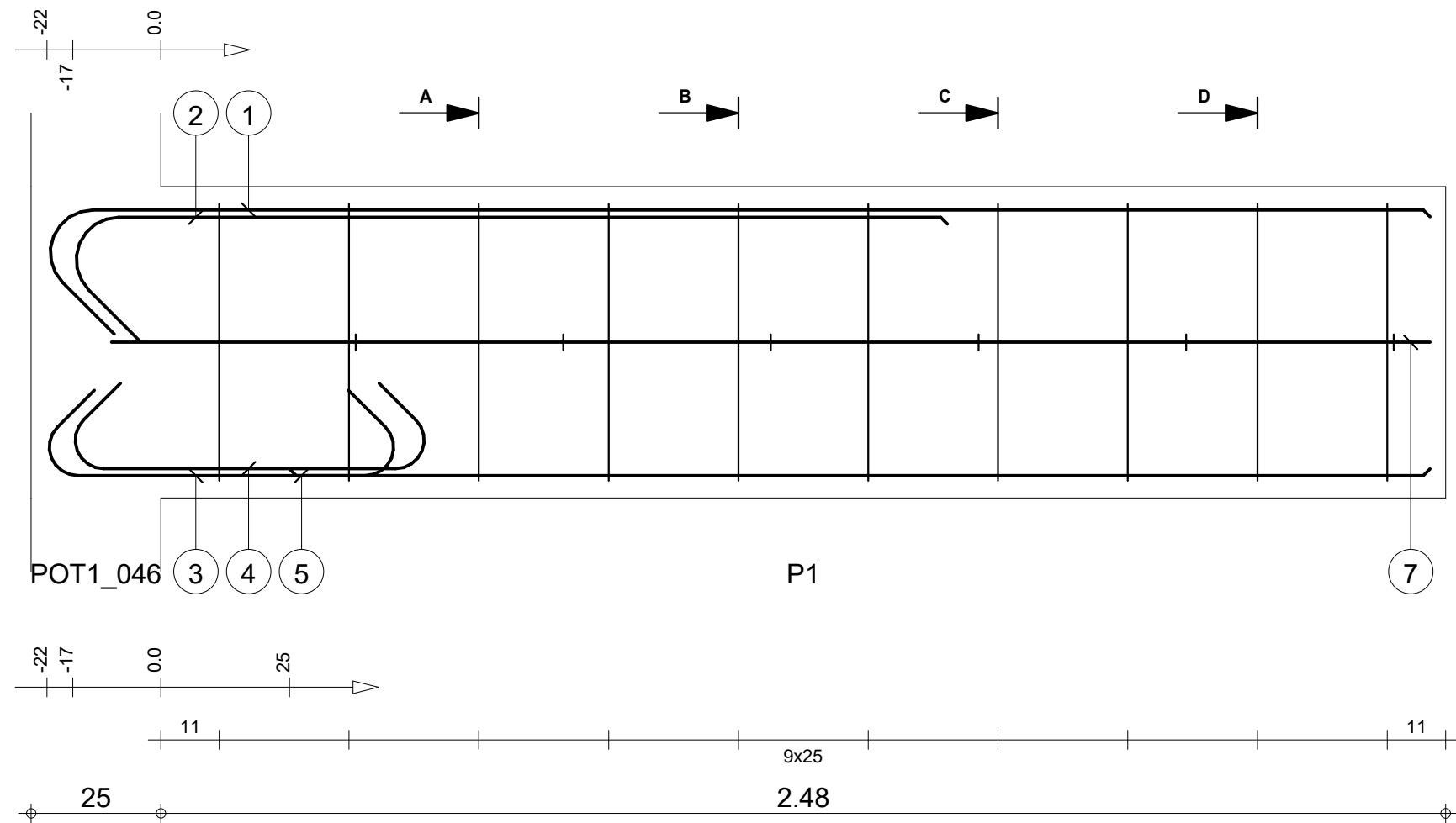


D-D

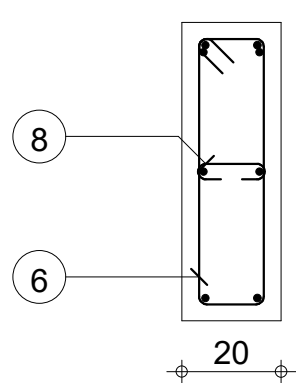


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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④	2HA 10	l=1.02	00	⑤	2HA 10	l=2.20	00	⑥	10HA 6	l=1.47	31
⑦	2HA 10	l=2.54	00	⑧	6HA 6	l=26	00				

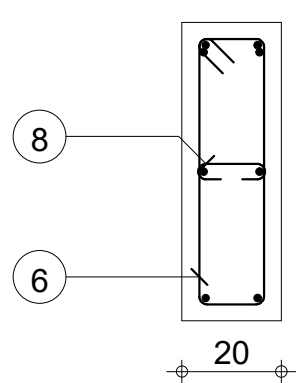
STRUCTURE BATIMENT CEA/ITECH-MTV				A 31: P1				Nombre 1				Béton : BETON20 = 0.327 m3				Acier HA 400 = 16.9 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 72.48 kg/ m3				Echelle pour la vue 8.17cm/m			
												Surface du coffrage = 4.01 m2				Echelle pour la section 6.58cm/m			
																Page 31/48			



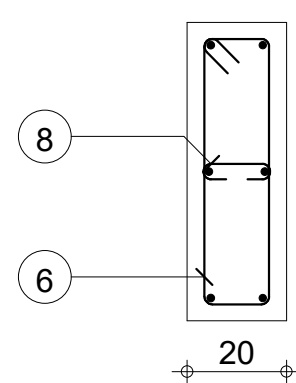
A-A



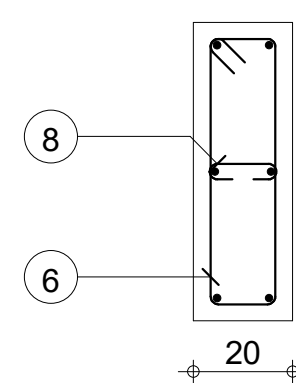
B-B



C-C

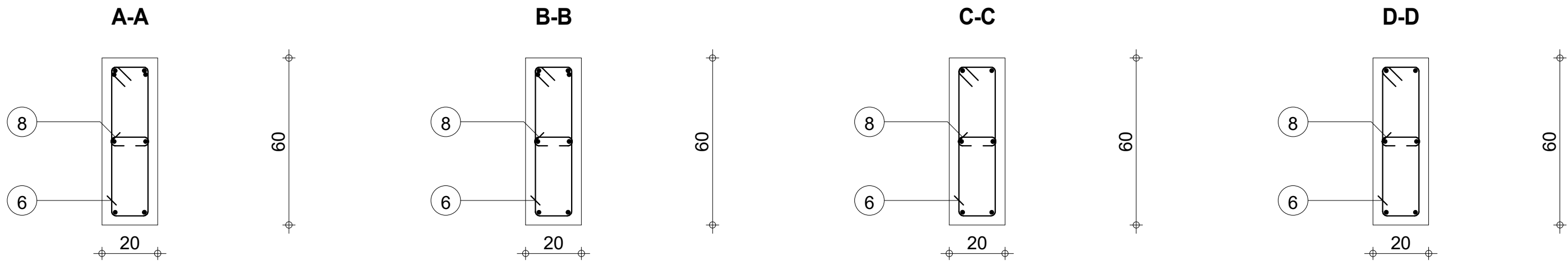
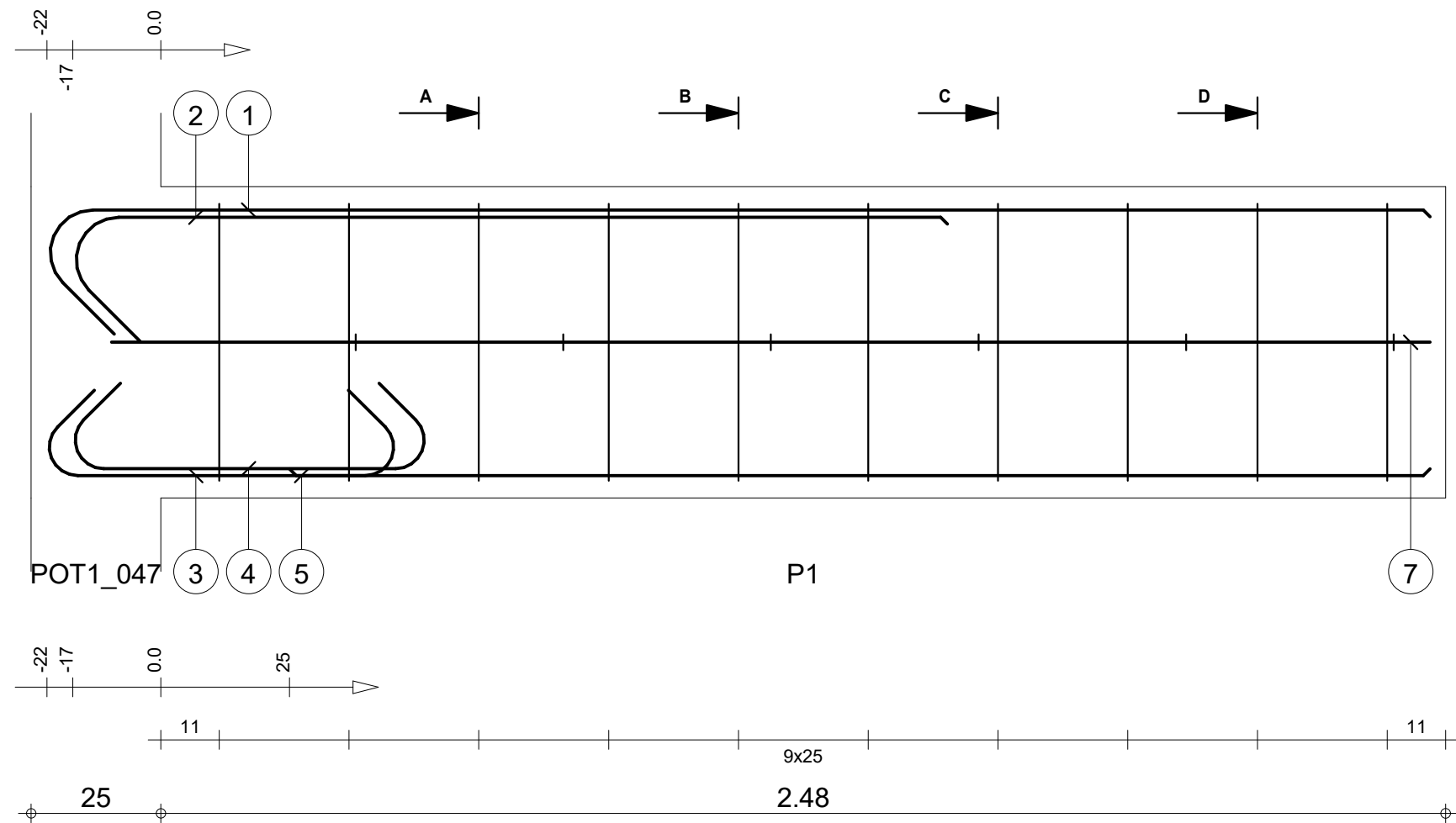


D-D



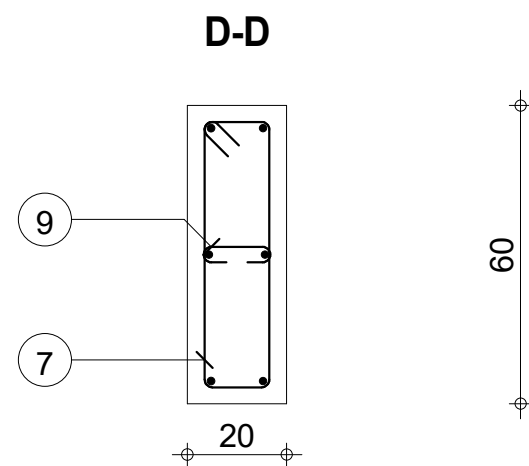
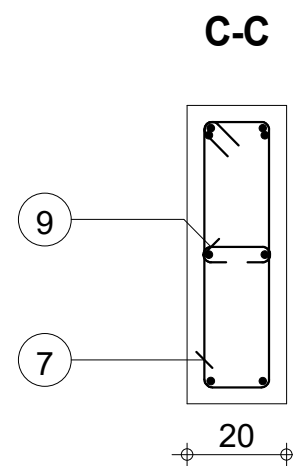
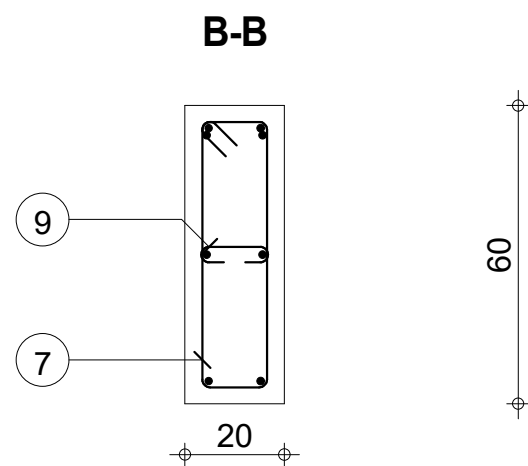
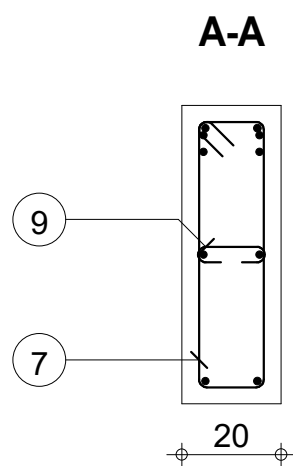
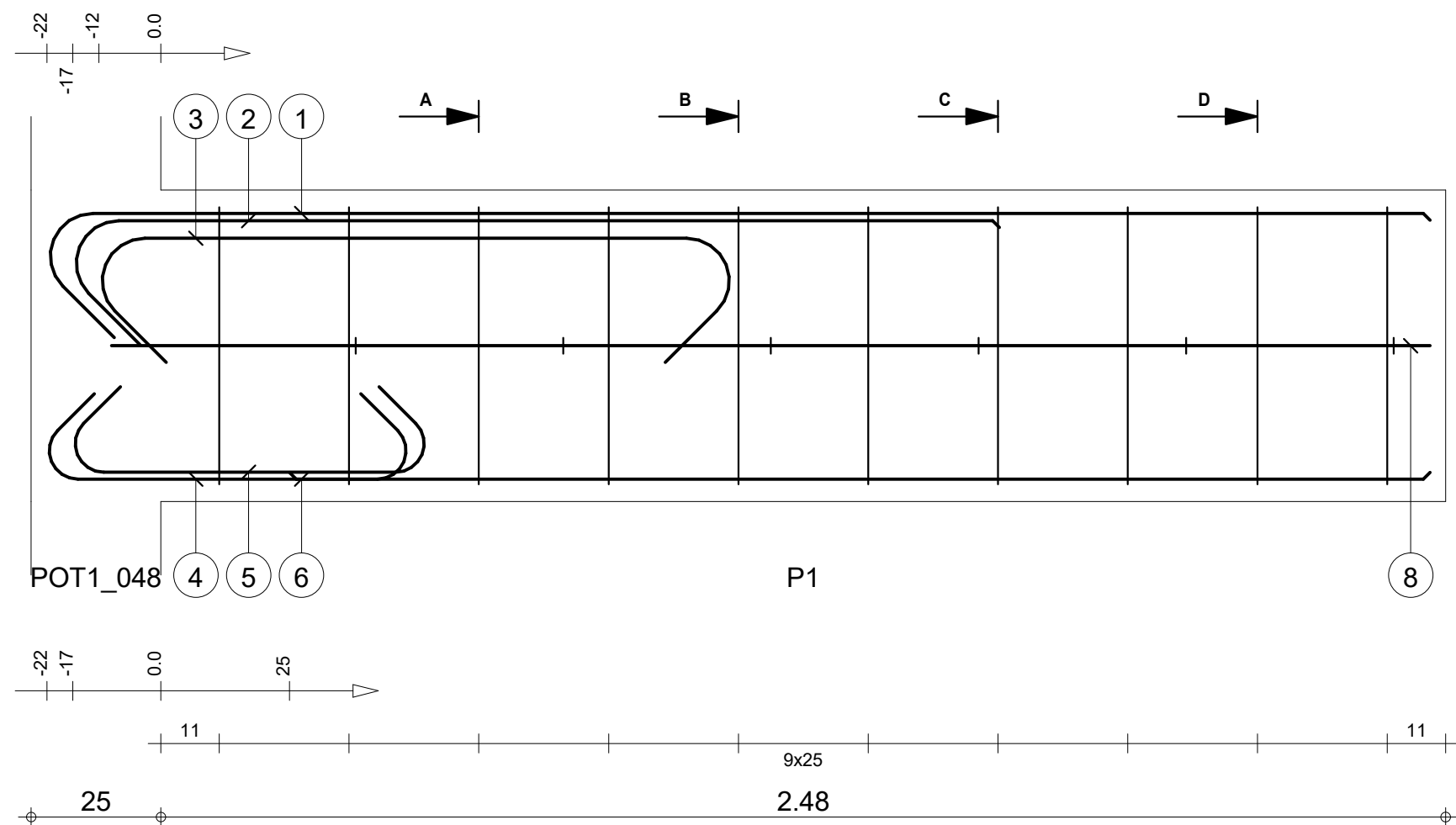
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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④	2HA 10	l=1.02	00	⑤	2HA 10	l=2.20	00	⑥	10HA 6	l=1.47	31
⑦	2HA 10	l=2.54	00	⑧	6HA 6	l=26	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				A 32: P1				Nombre 1				Béton : BETON20 = 0.327 m3				Acier HA 400 = 16.9 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 72.48 kg/ m3				Echelle pour la vue 8.17cm/m			
												Surface du coffrage = 4.01 m2				Echelle pour la section 6.58cm/m			
																Page 32/48			



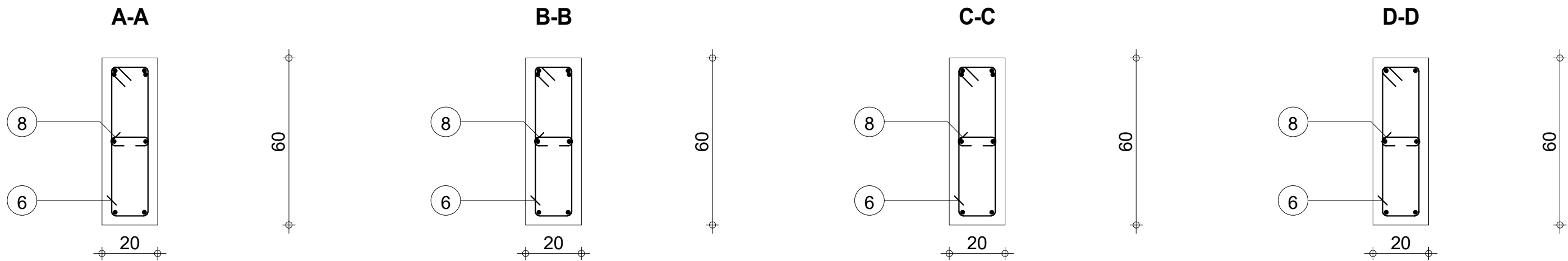
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①	2HA 14	I=2.91	00	②	2HA 14	I=1.93	00	③	2HA 10	I=1.01	00
④	2HA 10	I=1.02	00	⑤	2HA 10	I=2.20	00	⑥	10HA 6	I=1.47	31
⑦	2HA 10	I=2.54	00	⑧	6HA 6	I=26	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				A 33: P1				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60							
Béton : BETON20 = 0.327 m3				Acier HA 400 = 16.9 kg							
Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
Densité = 72.48 kg/ m3				Echelle pour la vue 8.17cm/m				Page 33/48			
Surface du coffrage = 4.01 m2				Echelle pour la section 6.58cm/m							



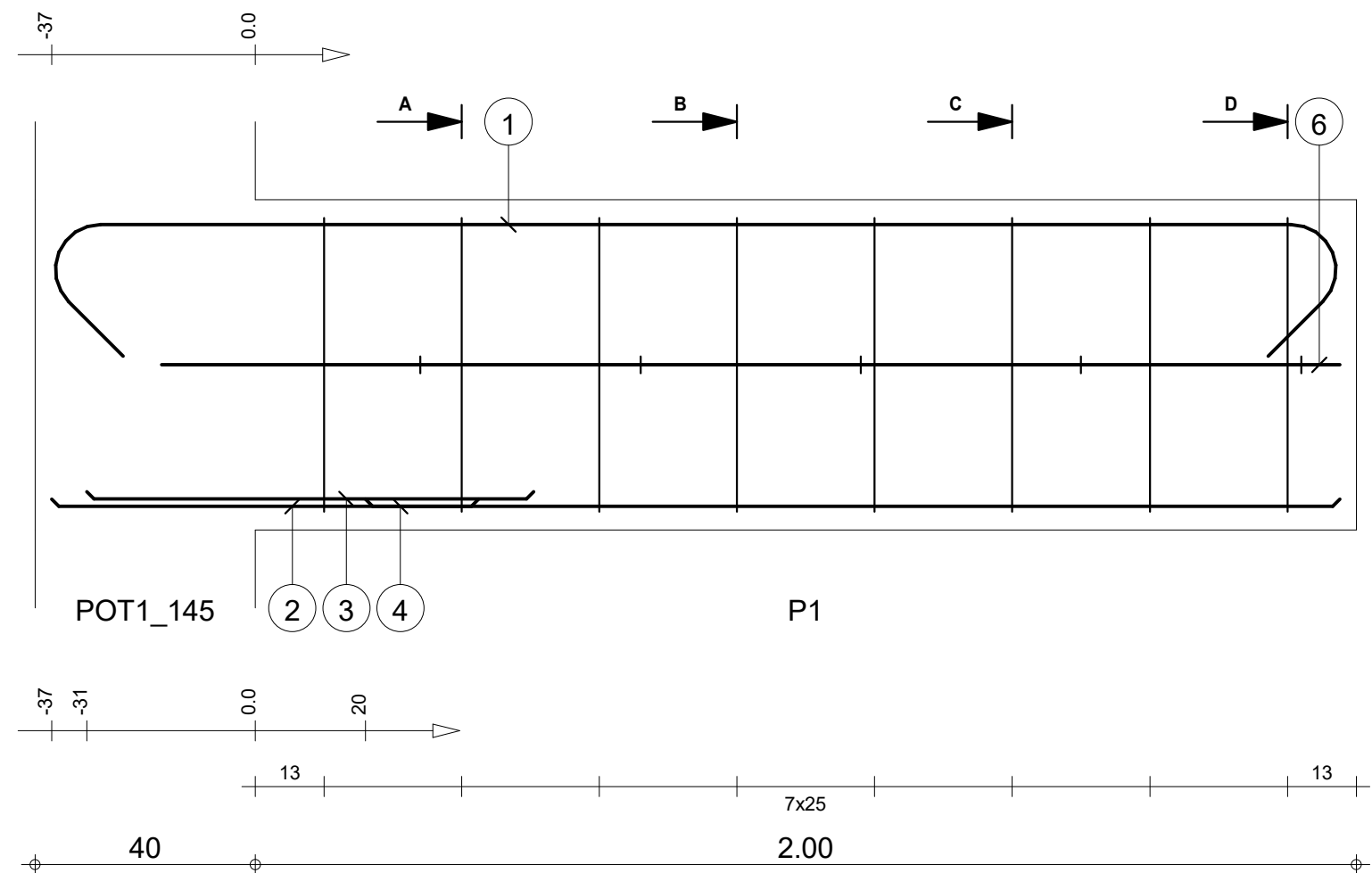
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④	2HA 10	l=1.04	00	⑤	2HA 10	l=1.02	00	⑥	2HA 10	l=2.20	00
⑦	10HA 6	l=1.47	31	⑧	2HA 10	l=2.54	00	⑨	6HA 6	l=26	00

STRUCTURE BATIMENT CEA/ITECH-MTV				A 34: P1				Nombre 1				Béton : BETON20 = 0.327 m3		Acier HA 400 = 21.3 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 85.93 kg/ m3		Echelle pour la vue 8.17cm/m	
												Surface du coffrage = 4.01 m2		Echelle pour la section 6.58cm/m	
														Page 34/48	

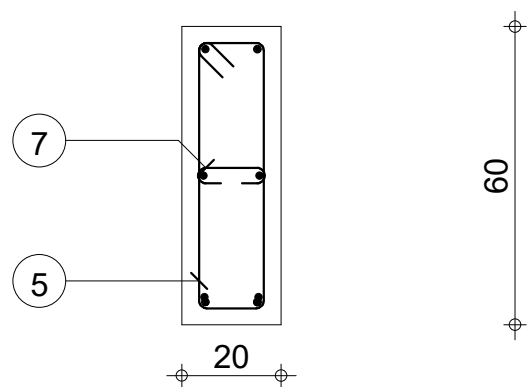


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 14	l=2.75	00 	④	2HA 10	l=1.02	00 	⑦	2HA 10	l=2.14	00 
②	2HA 14	l=1.93	00 	⑤	2HA 10	l=1.84	00 	⑧	5HA 6	l=26	00 
③	2HA 10	l=1.01	00 	⑥	9HA 6	l=1.47	31 				

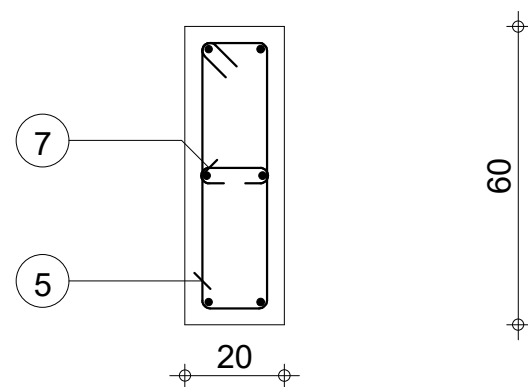
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	A 35: P1 Section 20x60	Tél.	Fax			Acier HA 400 = 16.1 kg			
		Nombre 1		Béton : BETON20 = 0.279 m3		Acier HA 400 = 5.86 kg			
				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
				Densité = 78.85 kg/ m3		Echelle pour la vue 8.17cm/m		Page 35/48	
Surface du coffrage = 3.45 m2		Echelle pour la section 6.58cm/m							



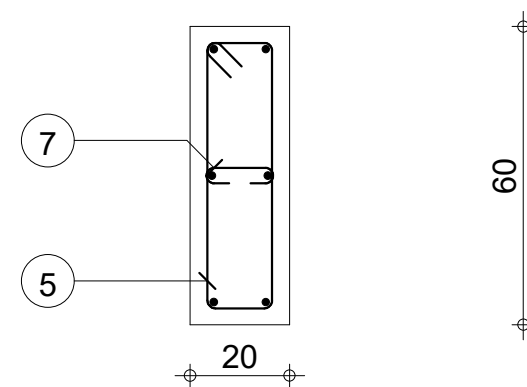
A-A



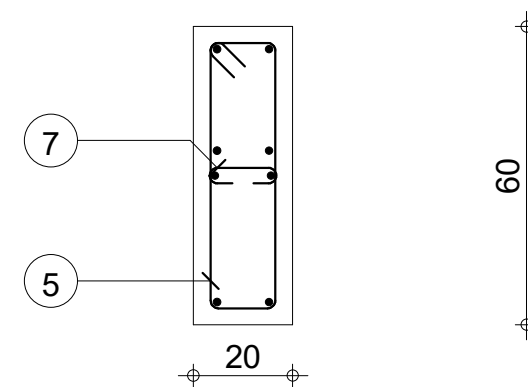
B-B



C-C

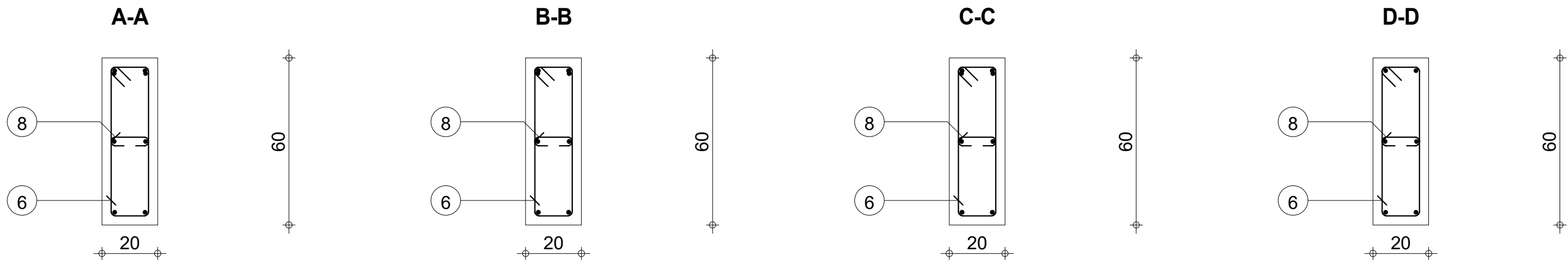
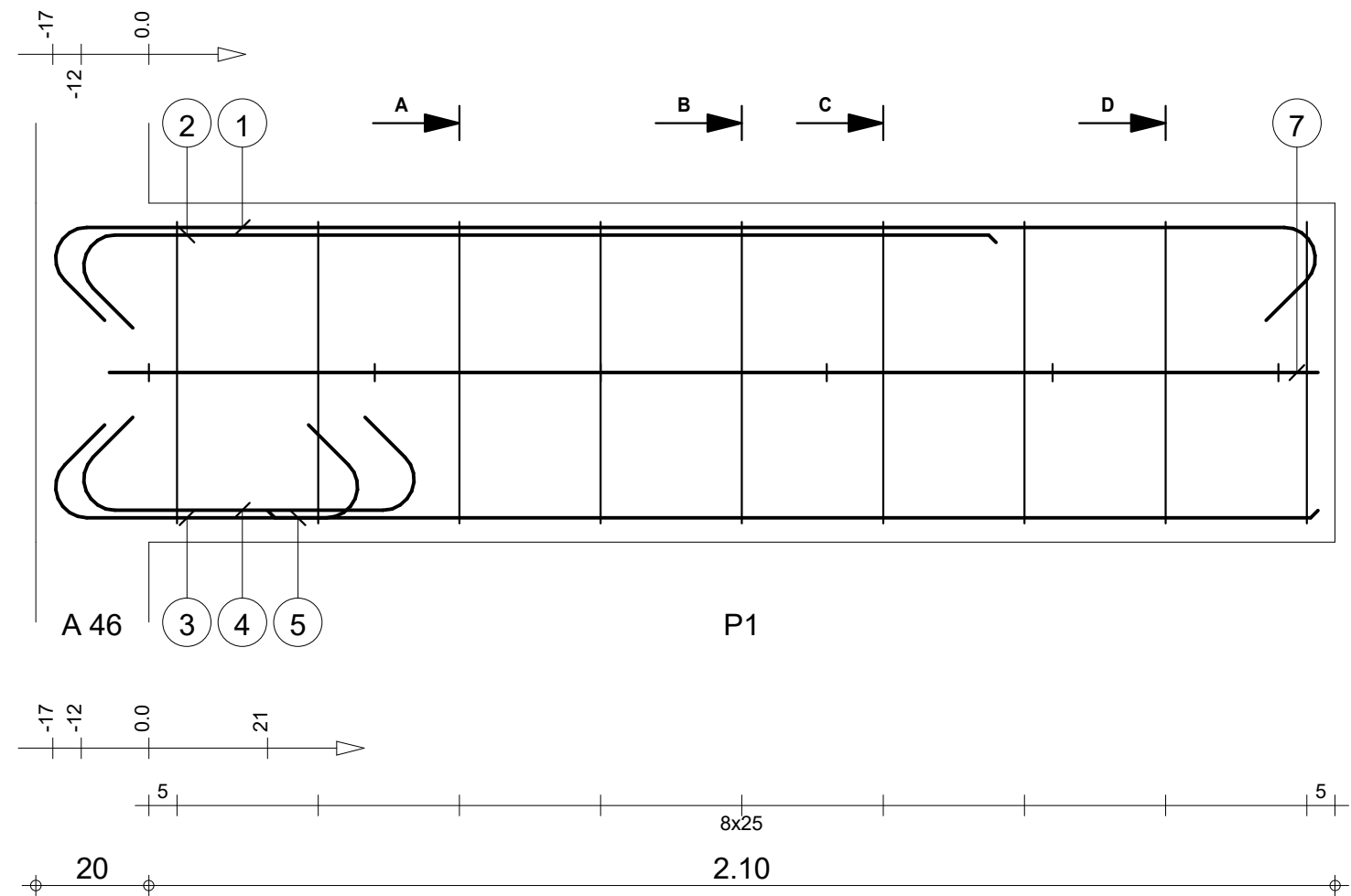


D-D



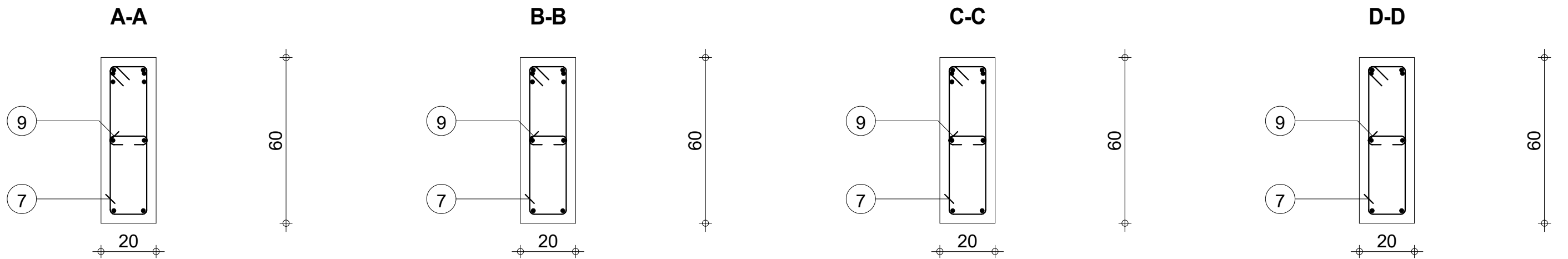
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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④	2HA 10	l=1.77	00	⑤	8HA 6	l=1.47	31	⑥	2HA 10	l=2.14	00
⑦	5HA 6	l=26	00								

STRUCTURE BATIMENT CEA/ITECH-MTV				A 36: P1				Nombre 1				Béton : BETON20 = 0.288 m3				Acier HA 400 = 11 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 57.29 kg/ m3				Echelle pour la vue 8.17cm/m			
												Surface du coffrage = 3.52 m2				Echelle pour la section 6.58cm/m			
																Page 36/48			

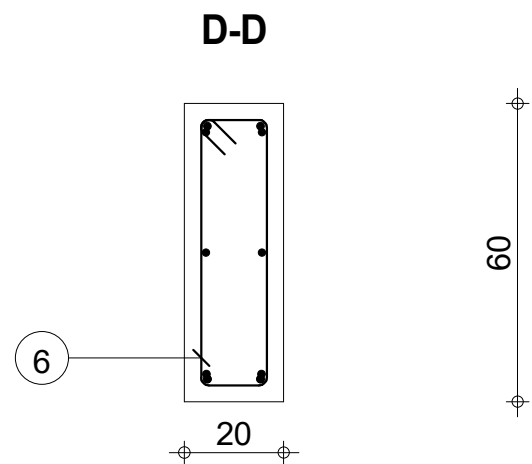
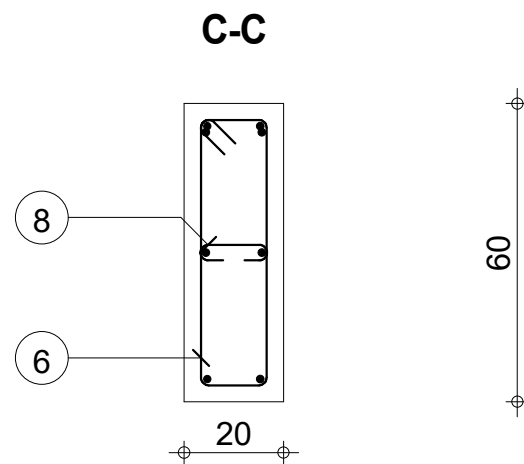
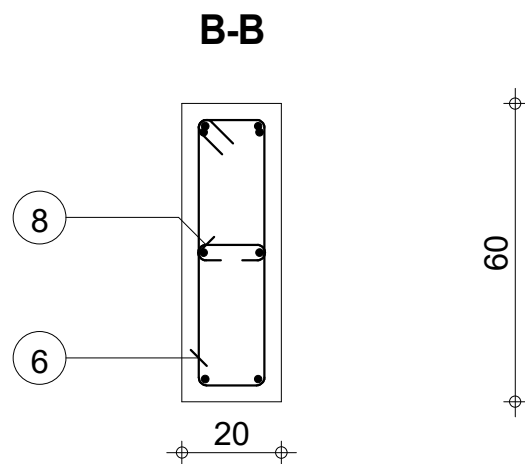
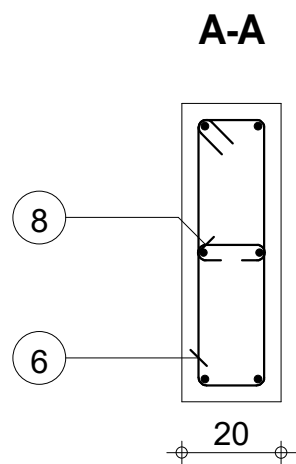
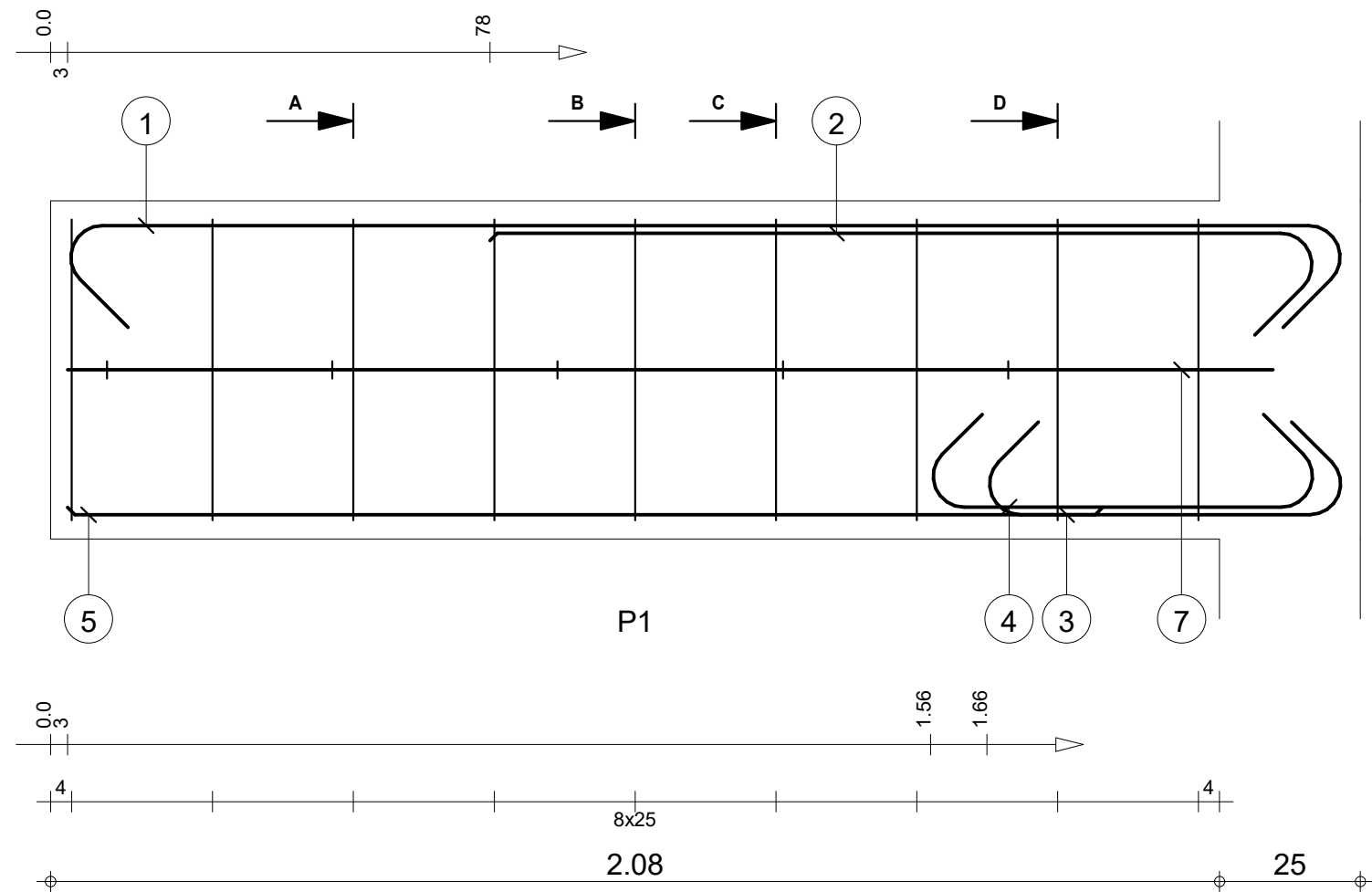


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	2HA 10	l=1.79	00	⑤	2HA 10	l=1.86	00	⑧	6HA 6	l=26	00
③	2HA 10	l=88	00	⑥	9HA 6	l=1.48	31				

STRUCTURE BATIMENT CEA/ITECH-MTV				A 37: P1				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60							
				Tél.				Fax			
								Béton : BETON20 = 0.276 m3			
								Acier HA 400 = 9.92 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 57.61 kg/ m3			
								Echelle pour la vue 8.17cm/m			
								Surface du coffrage = 3.42 m2			
								Echelle pour la section 6.58cm/m			
								Page 37/48			

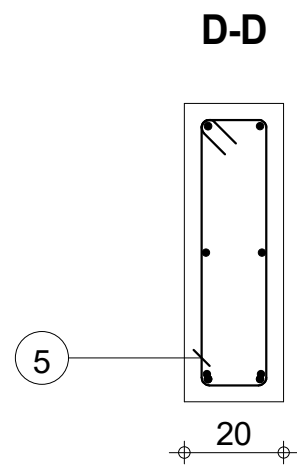
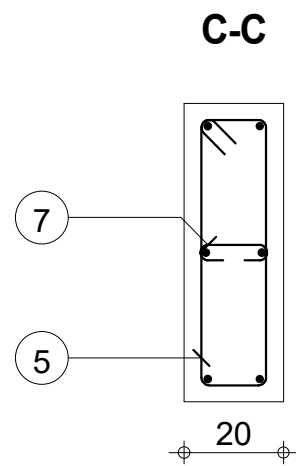
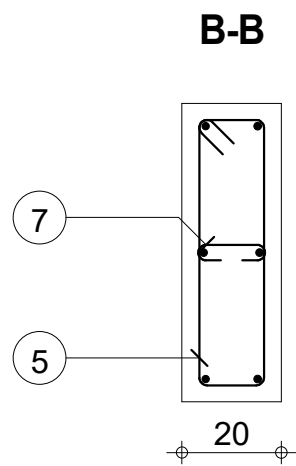
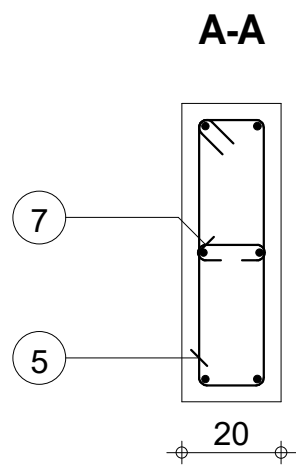
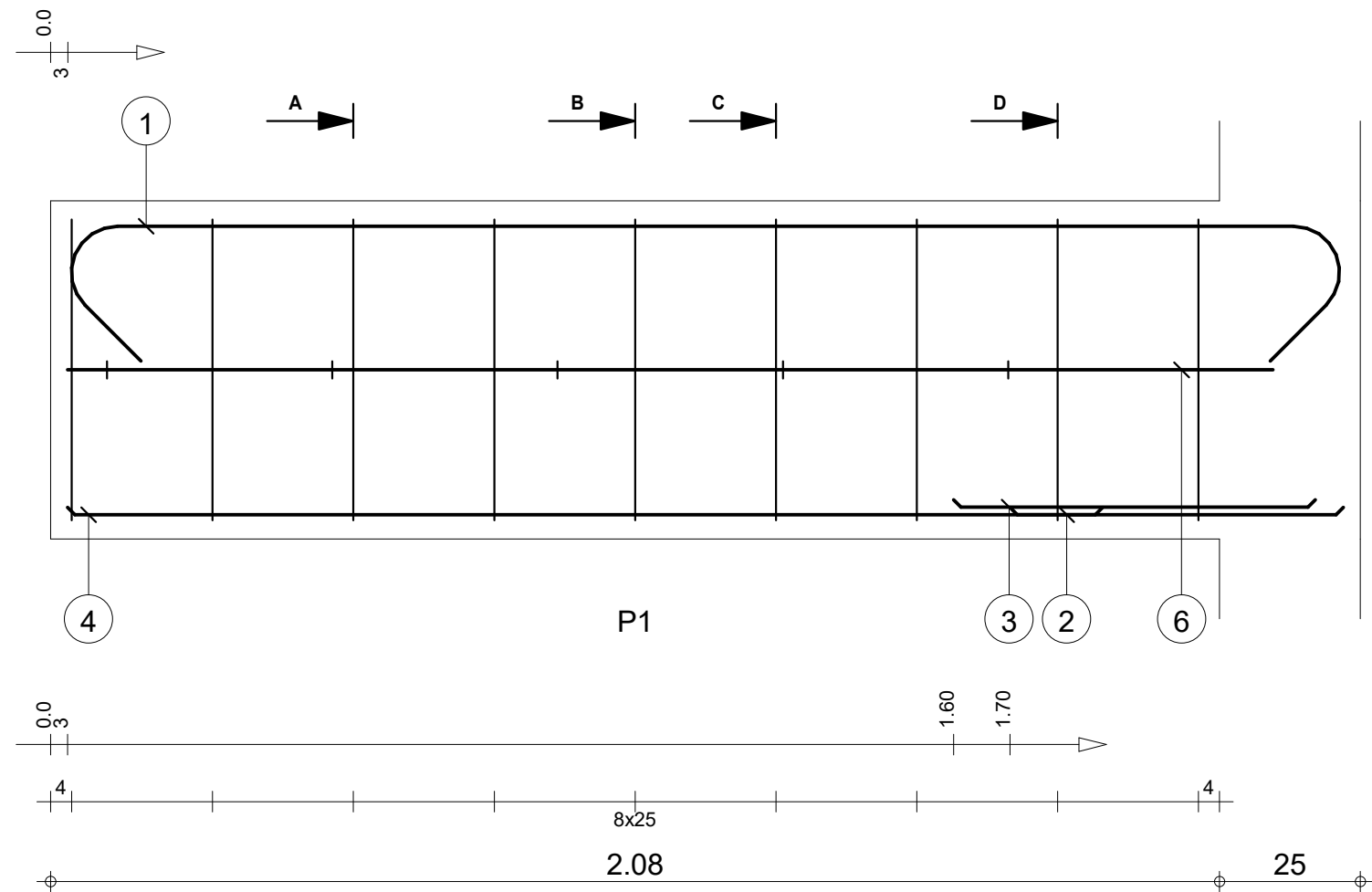


		Tél.	Fax		
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	A 38: P1 Section 20x60	Nombre 1	Béton : BETON20 = 0.279 m3	Acier HA 400 = 16.1 kg Acier HA 400 = 5.87 kg	
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 78.85 kg/ m3 Surface du coffrage = 3.45 m2	Echelle pour la vue 8.17cm/m Echelle pour la section 6.58cm/m	Page 38/48



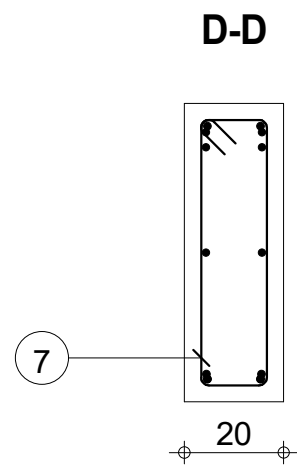
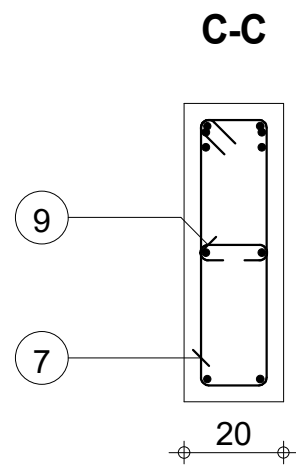
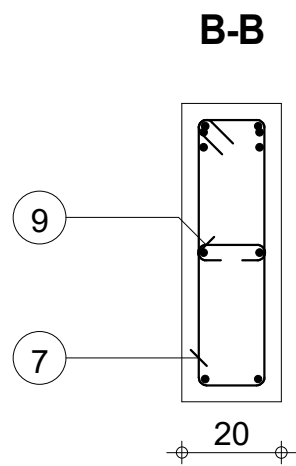
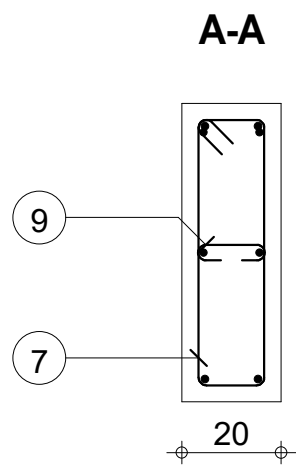
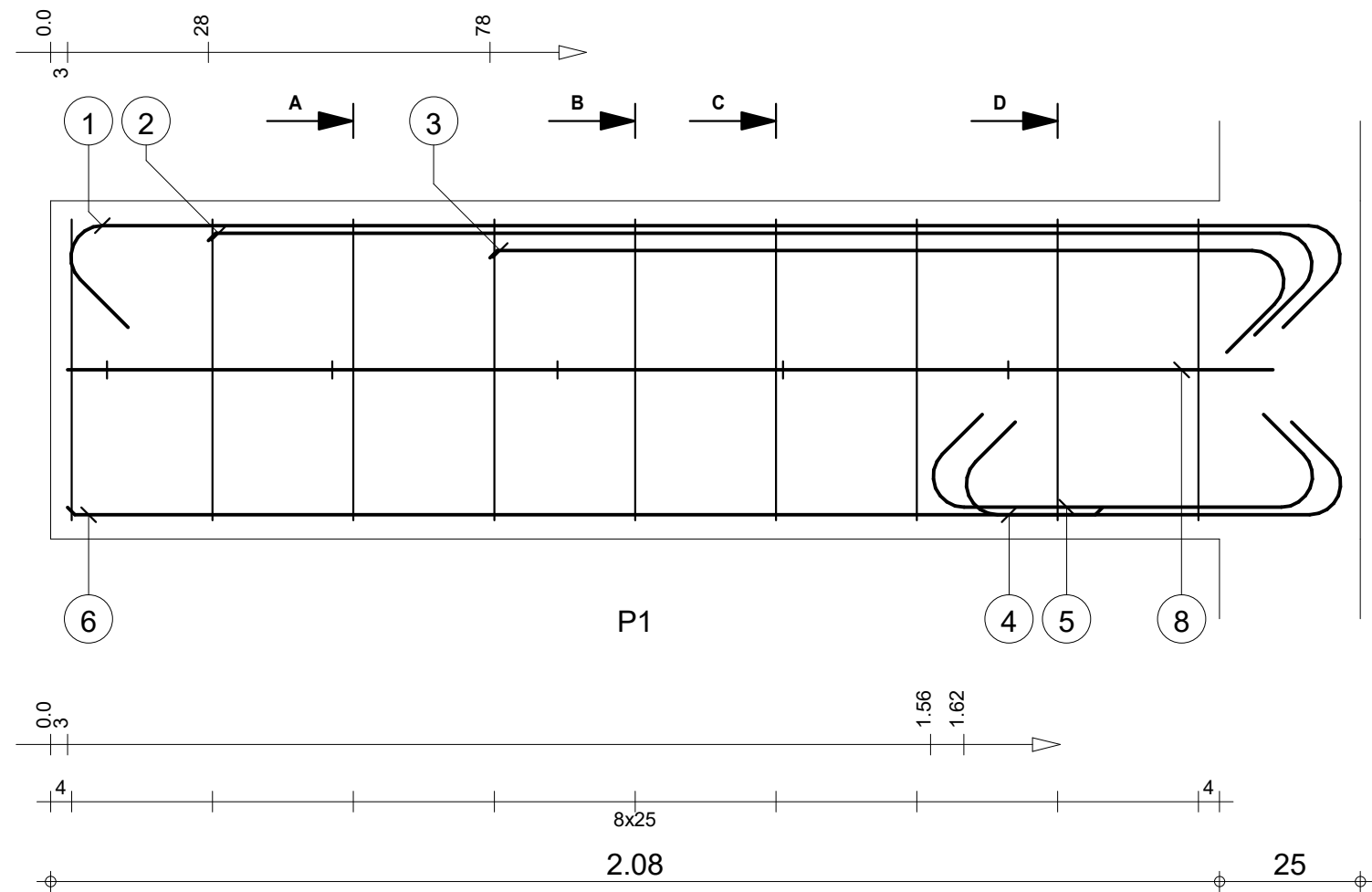
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①	2HA 12	l=2.65	00	↳ 2.27	④	2HA 10	l=1.02	00	↳ 68	⑦	2HA 10	l=2.14	00	↳ 2.14
②	2HA 12	l=1.66	00	↳ 1.47	⑤	2HA 10	l=1.84	00	↳ 1.84	⑧	5HA 6	l=26	00	↳ 14
③	2HA 10	l=97	00	↳ 63	⑥	9HA 6	l=1.47	31	↳ 14					

STRUCTURE BATIMENT CEA/ITECH-MTV				A 39: P1				Nombre 1				Béton : BETON20 = 0.279 m3		Acier HA 400 = 12.4 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 65.23 kg/ m3		Echelle pour la vue 8.17cm/m	
												Surface du coffrage = 3.45 m2		Echelle pour la section 6.58cm/m	
														Page 39/48	



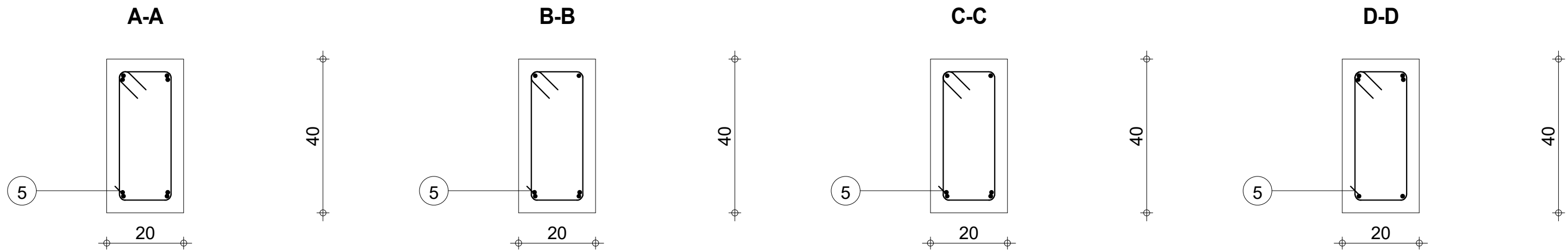
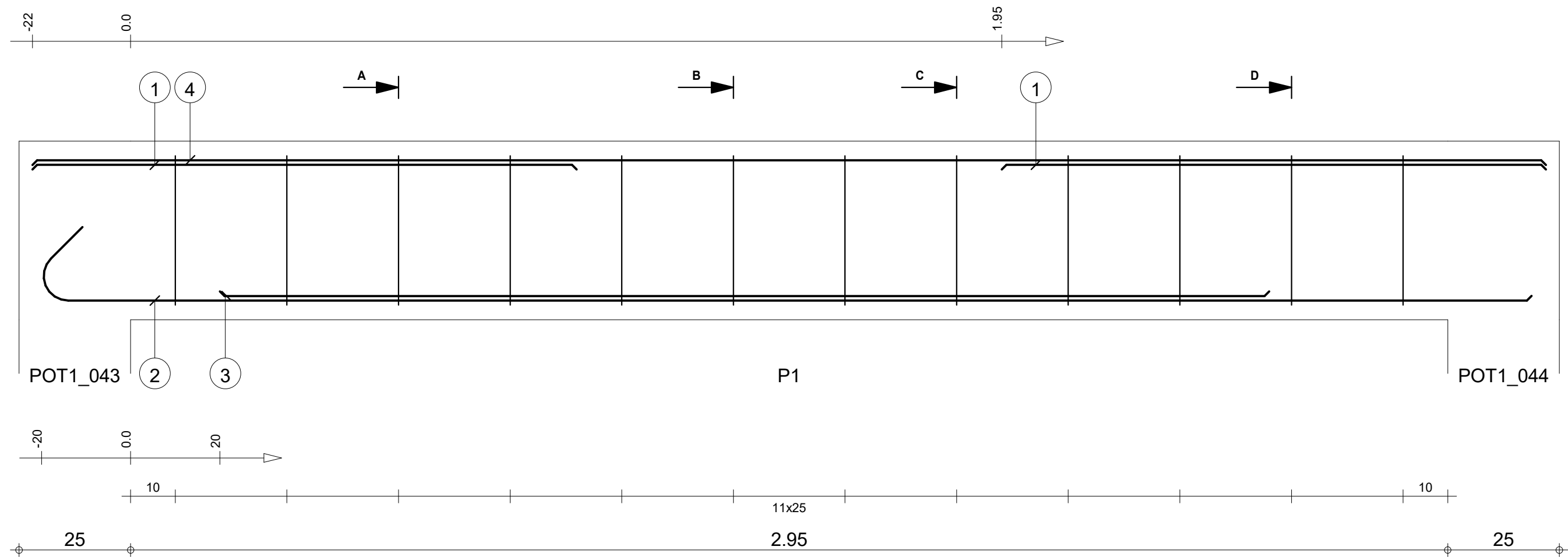
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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④	2HA 10	l=1.84	00	⑤	9HA 6	l=1.47	31	⑥	2HA 10	l=2.14	00
⑦	5HA 6	l=26	00								

STRUCTURE BATIMENT CEA/ITECH-MTV				A 40: P1				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60				Tél. Fax			
								Béton : BETON20 = 0.279 m3			
								Acier HA 400 = 10.4 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 58.42 kg/ m3			
								Surface du coffrage = 3.45 m2			
								Echelle pour la vue 8.17cm/m			
								Echelle pour la section 6.58cm/m			
								Page 40/48			



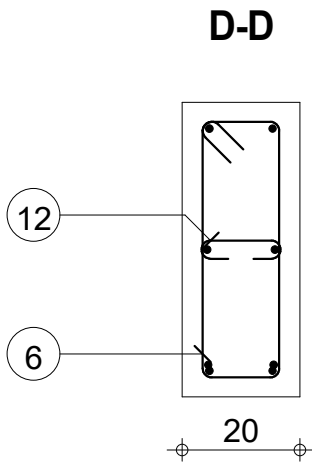
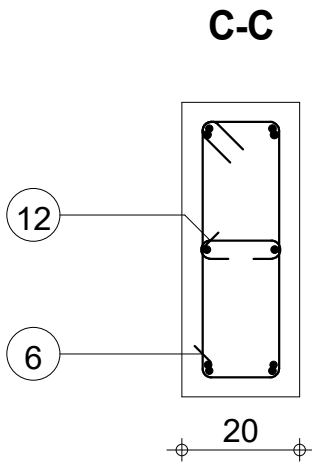
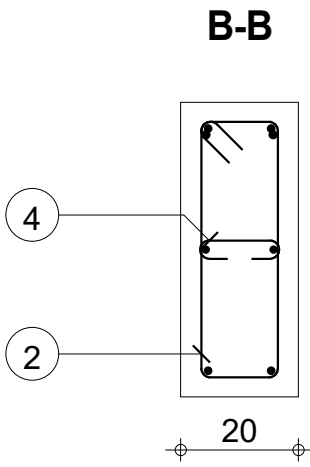
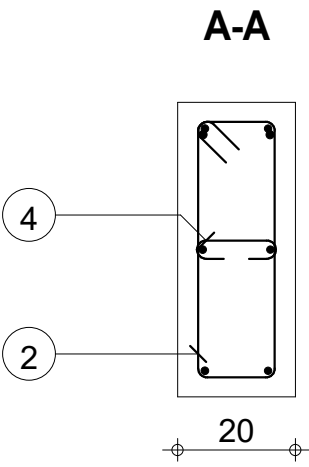
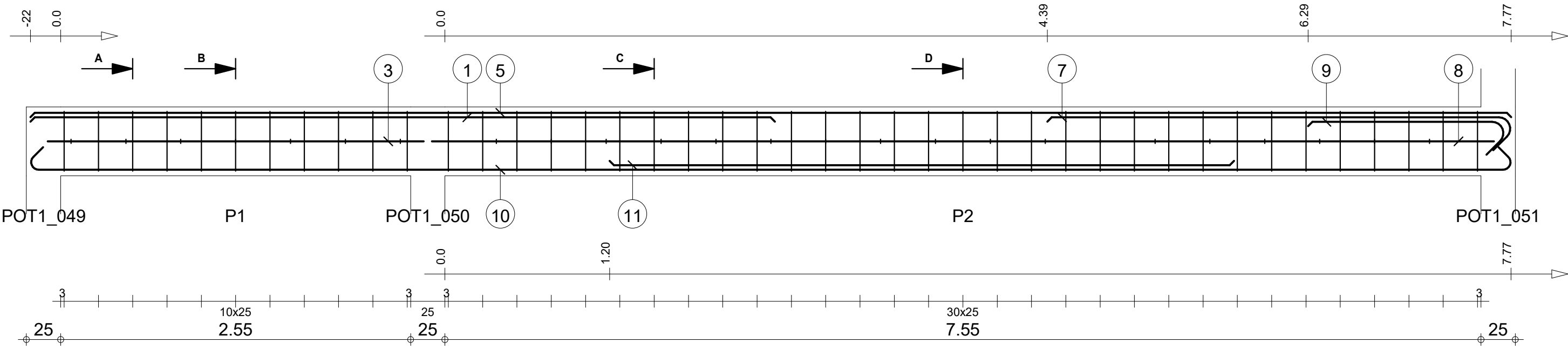
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	l=2.65	00	④	2HA 10	l=1.01	00	⑦	9HA 6	l=1.47	31
②	2HA 12	l=2.16	00	⑤	2HA 10	l=1.02	00	⑧	2HA 10	l=2.14	00
③	2HA 12	l=1.61	00	⑥	2HA 10	l=1.84	00	⑨	5HA 6	l=26	00

STRUCTURE BATIMENT CEA/ITECH-MTV				A 41: P1				Nombre 1				Béton : BETON20 = 0.279 m3		Acier HA 400 = 16.1 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 78.85 kg/ m3		Echelle pour la vue 8.17cm/m	
												Surface du coffrage = 3.45 m2		Echelle pour la section 6.58cm/m	
														Page 41/48	



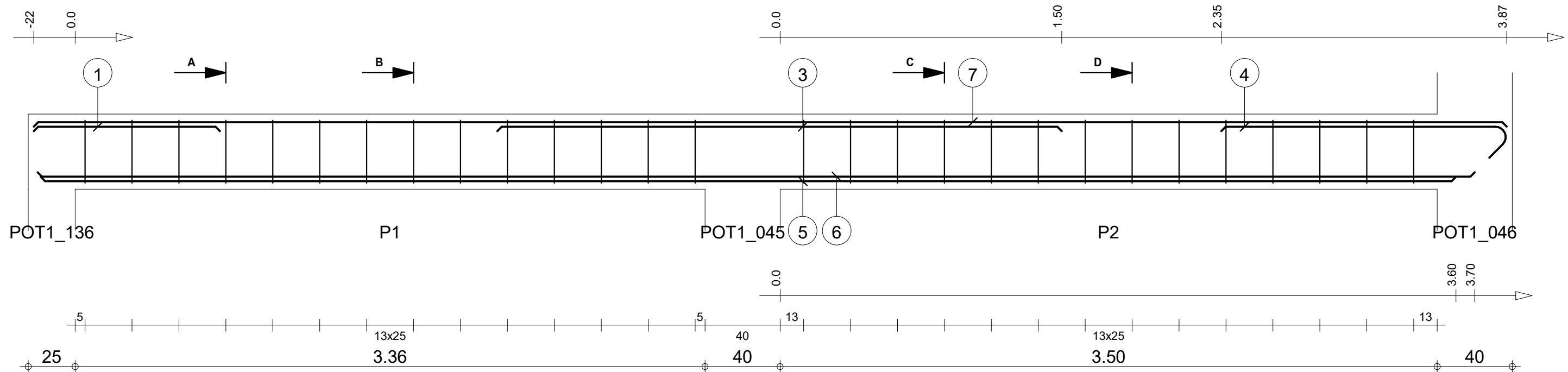
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	2HA 10	I=3.51	00	⑤	12HA 6	I=1.08	31
③	2HA 10	I=2.35	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		A 42: P1		Nombre 1		Béton : BETON20 = 0.276 m3		Acier HA 400 = 14.4 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 62.68 kg/ m3		Echelle pour la vue 10.1cm/m	
						Surface du coffrage = 3.51 m2		Echelle pour la section 9.34cm/m	
								Page 42/48	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 14	I=5.42	00	④	7HA 6	I=26	00	⑦	2HA 14	I=3.62	00	⑩	2HA 10	I=11.13	00
②	11HA 6	I=1.27	31	⑤	2HA 10	I=10.79	00	⑧	2HA 10	I=7.74	00	⑪	2HA 10	I=4.55	00
③	2HA 10	I=2.74	00	⑥	31HA 6	I=1.27	31	⑨	2HA 14	I=1.67	00	⑫	18HA 6	I=26	00

Tél. Fax										Acier HA 400 = 58.6 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV A 43										Acier HA 400 = 26.2 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A										Enrobage inférieur 3 cm	
Section 20x50										Enrobage supérieur 3 cm	
Nombre 1										Enrobage latéral 3 cm	
Densité = 77.8 kg/ m3										Echelle pour la vue 3.37cm/m	
Surface du coffrage = 13.1 m2										Echelle pour la section 7.8cm/m	
										Page 43/48	

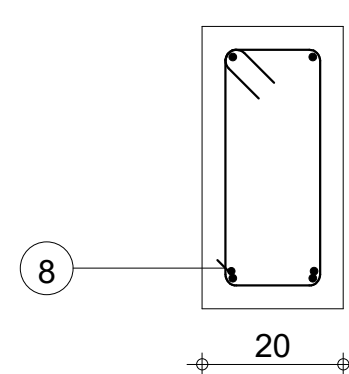
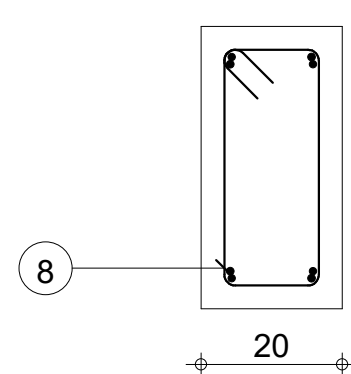
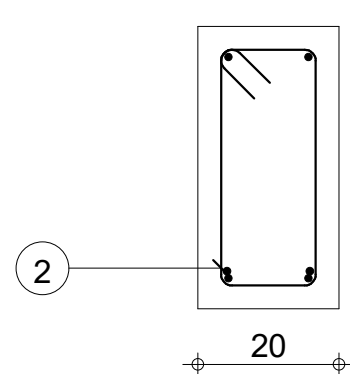
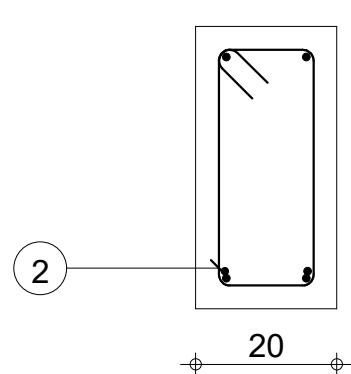


A-A

B-B

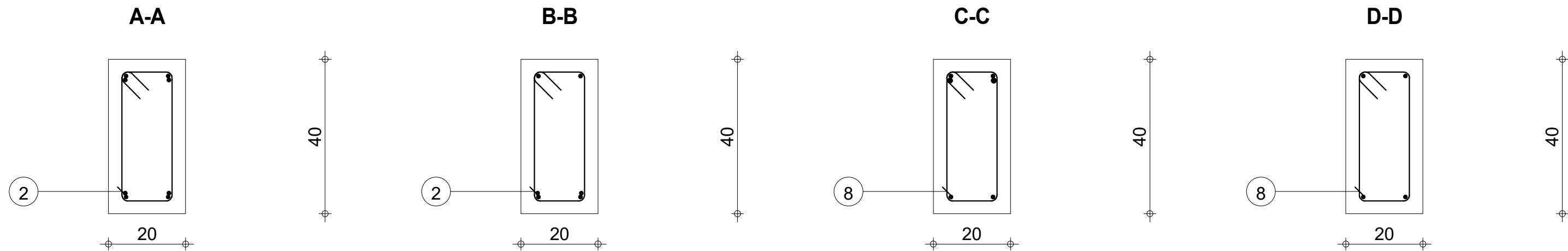
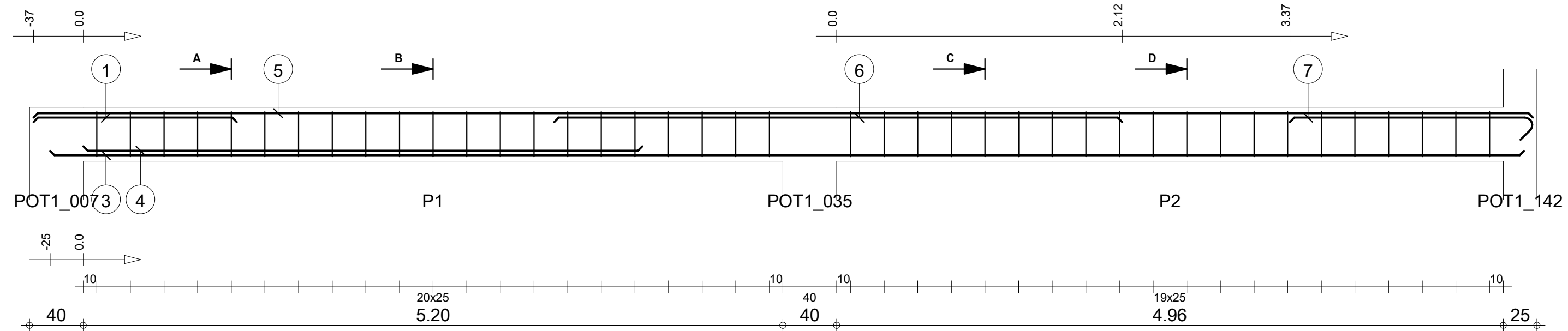
C-C

D-D



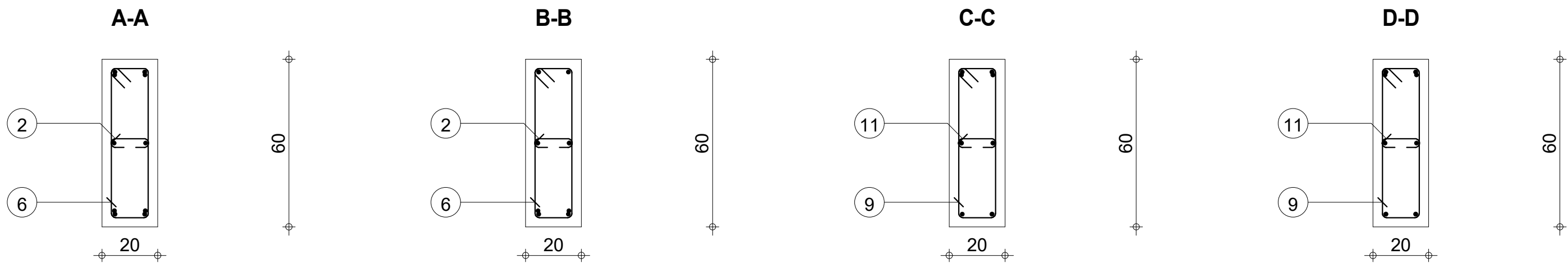
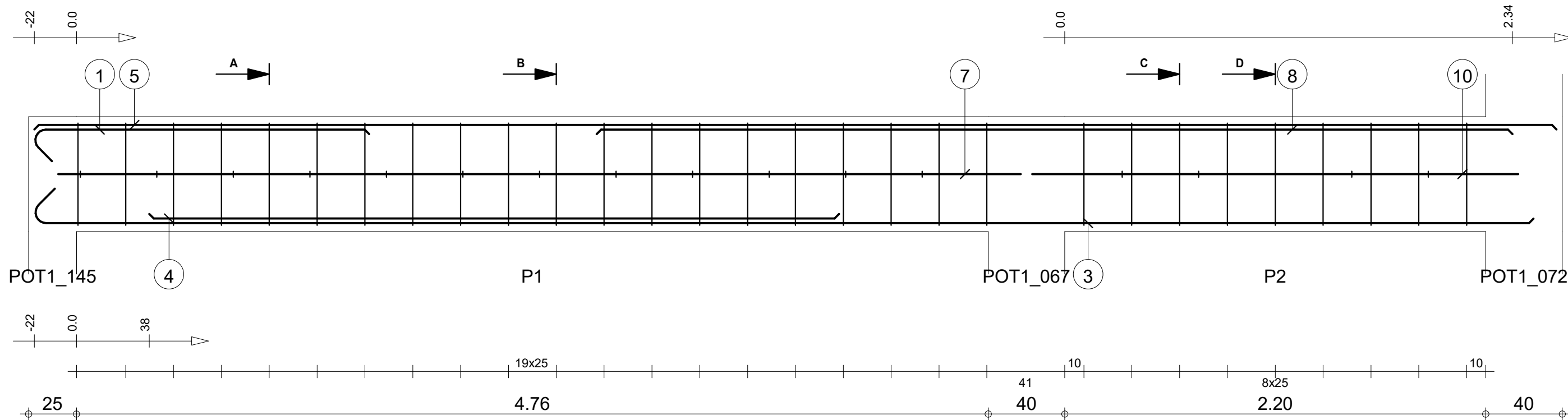
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	2HA 10	I=99	00	99	④	2HA 10	I=1.69	00	1.52	⑦	2HA 10	I=7.84	00	7.85
②	14HA 6	I=1.08	31	14 34 24 14	⑤	2HA 10	I=7.54	00	7.54	⑧	14HA 6	I=1.08	31	14 34 24 14
③	2HA 10	I=3.01	00	3.01	⑥	2HA 10	I=7.66	00	7.66					

STRUCTURE BATIMENT CEA/ITECH-MTV A 44				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Béton : BETON20 = 0.632 m3			
								Acier HA 400 = 35.4 kg			
								Acier HA 400 = 6.7 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 66.61 kg/ m3			
								Echelle pour la vue 4.58cm/m			
								Surface du coffrage = 7.86 m2			
								Echelle pour la section 9.34cm/m			
								Page 44/48			



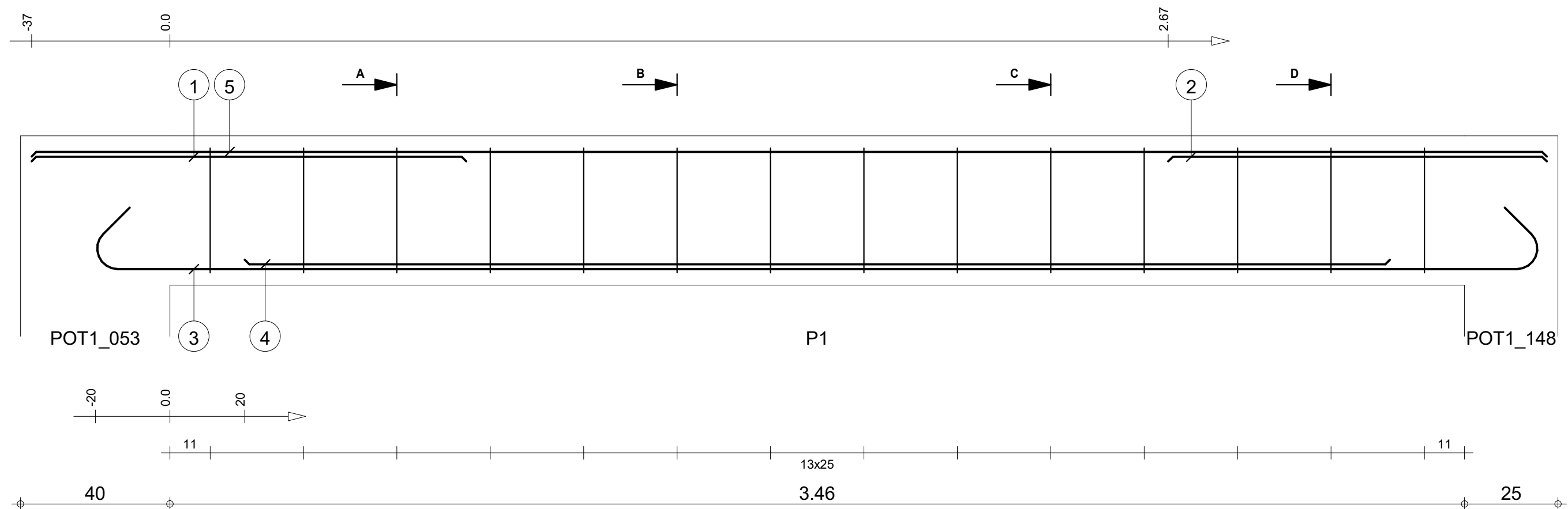
Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme	Pos.	Armature		Code	Forme
①	2HA 10	l=1.51	00	1.51	④	2HA 10	l=4.16	00	4.16	⑦	2HA 10	l=1.98	00	1.81
②	21HA 6	l=1.07	31	14 24 34	⑤	2HA 10	l=11.15	00	11.15	⑧	20HA 6	l=1.07	31	14 24 34
③	2HA 10	l=10.95	00	10.95	⑥	2HA 14	l=4.22	00	4.22					

		Tél.	Fax			Acier HA 400 = 46.9 kg		
STRUCTURE BATIMENT CEA/ITECH-MTV	A 45	Nombre 1	Béton : BETON20 = 0.896 m3		Acier HA 400 = 9.74 kg			
			Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
			Densité = 63.17 kg/ m3		Echelle pour la vue 3.26cm/m		Page 45/48	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A	Section 20x40	Surface du coffrage = 11.2 m2		Echelle pour la section 9.34cm/m				



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=1.92	00	④	2HA 12	l=3.61	00	⑦	2HA 10	l=5.03	00	⑩	2HA 10	l=2.54	00
②	12HA 6	l=26	00	⑤	2HA 10	l=7.96	00	⑧	2HA 14	l=4.79	00	⑪	5HA 6	l=26	00
③	2HA 12	l=8.03	00	⑥	20HA 6	l=1.47	31	⑨	9HA 6	l=1.47	31				

STRUCTURE BATIMENT CEA/ITECH-MTV A 46										Nombre 1		Béton : BETON20 = 0.962 m3		Acier HA 400 = 44.4 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 66.74 kg/ m3		Echelle pour la vue 4.52cm/m	
												Surface du coffrage = 11.3 m2		Echelle pour la section 6.58cm/m	
														Page 46/48	

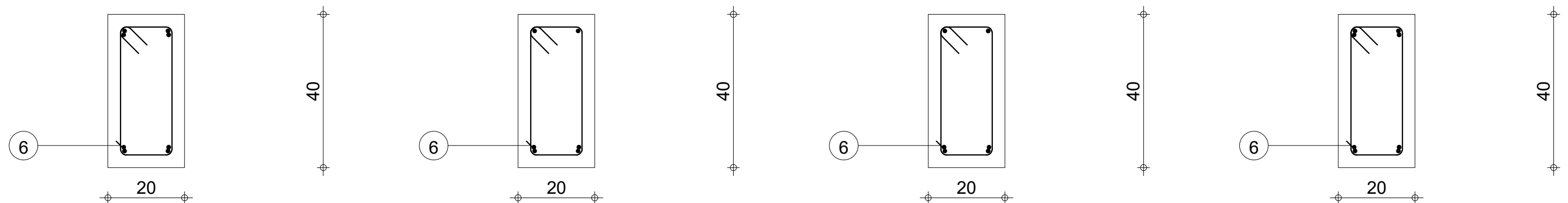


A-A

B-B

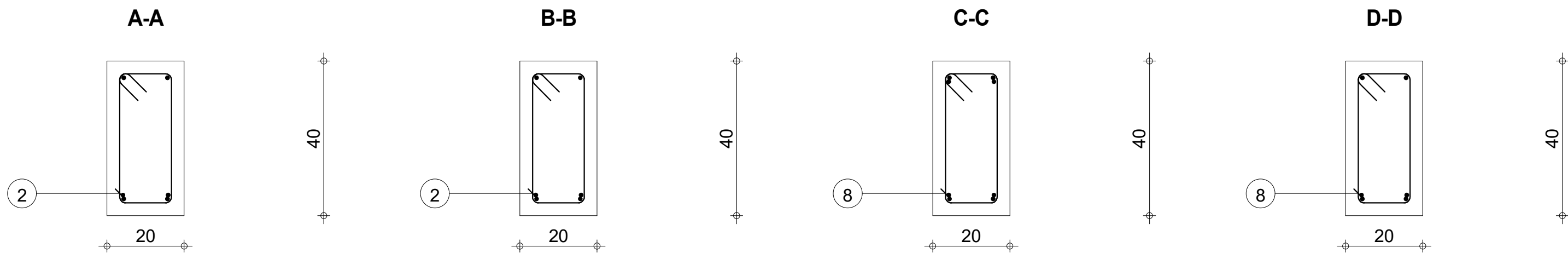
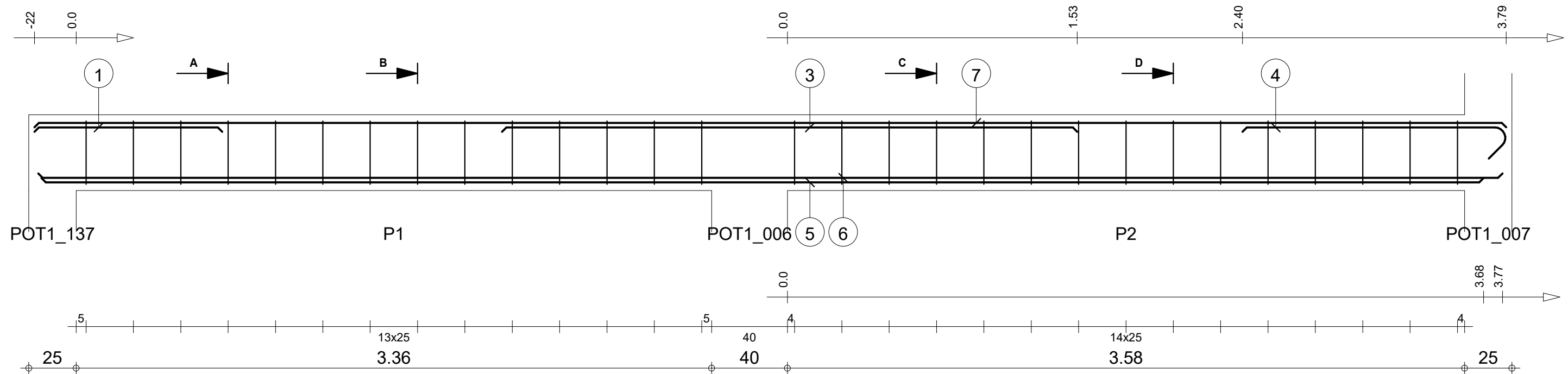
C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.16	00	④	2HA 10	I=3.06	00
②	2HA 10	I=1.01	00	⑤	2HA 10	I=4.05	00
③	2HA 10	I=4.20	00	⑥	14HA 6	I=1.08	31

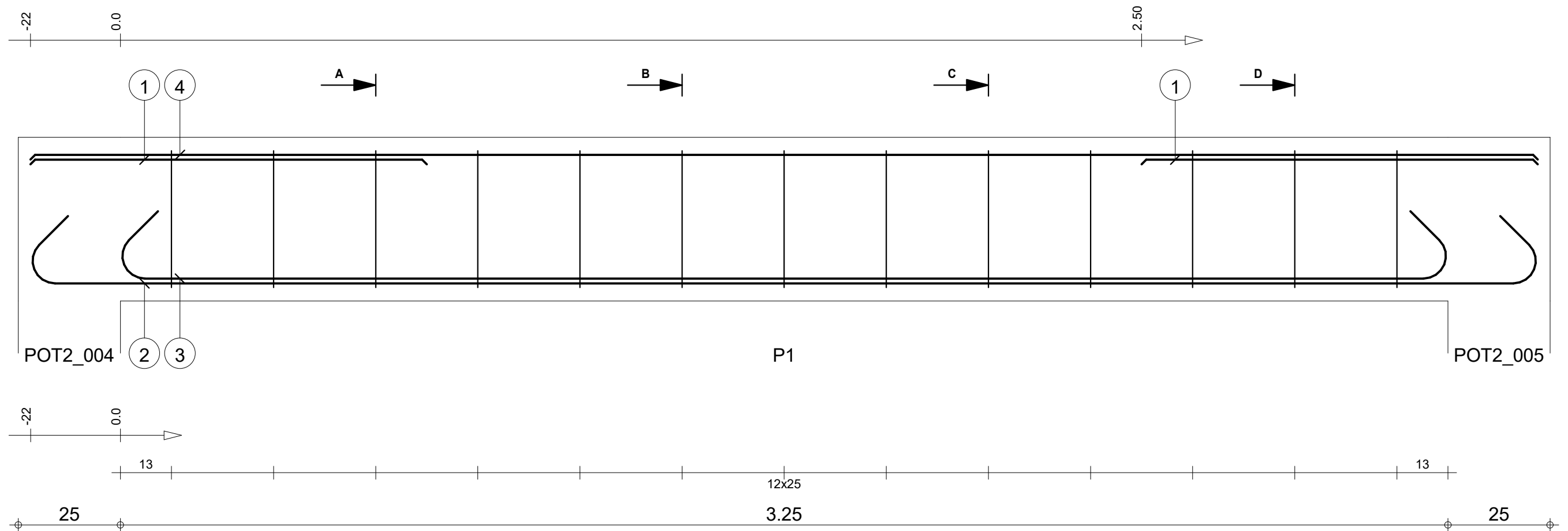
STRUCTURE BATIMENT CEA/ITECH-MTV				A 47: P1				Nombre 1				Béton : BETON20 = 0.329 m3				Acier HA 400 = 16.6 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
												Densité = 60.79 kg/ m3				Echelle pour la vue 8.58cm/m			
												Surface du coffrage = 4.15 m2				Echelle pour la section 9.34cm/m			
																Page 47/48			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	2HA 10	I=99	00	99	④	2HA 10	I=1.56	00	1.39	⑦	2HA 10	I=7.77	00	7.77
②	14HA 6	I=1.08	31	14 3.2 2.4 1.6	⑤	2HA 10	I=7.61	00	7.61	⑧	15HA 6	I=1.08	31	14 3.2 2.4 1.6
③	2HA 10	I=3.04	00	3.04	⑥	2HA 10	I=7.73	00	7.73					

Tél.				Fax							
STRUCTURE BATIMENT CEA/ITECH-MTV				A 48				Nombre 1			
								Béton : BETON20 = 0.626 m3			
								Acier HA 400 = 35.4 kg			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-A				Section 20x40				Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 67.57 kg/ m3			
								Surface du coffrage = 7.81 m2			
								Echelle pour la vue 4.62cm/m			
								Echelle pour la section 9.34cm/m			
								Page 48/48			

POUTRES PH RDC-B

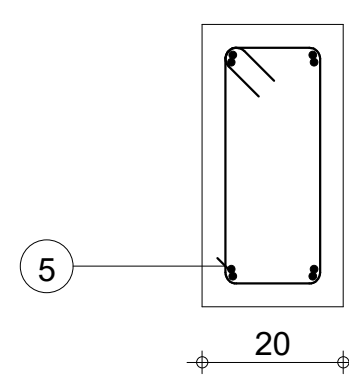
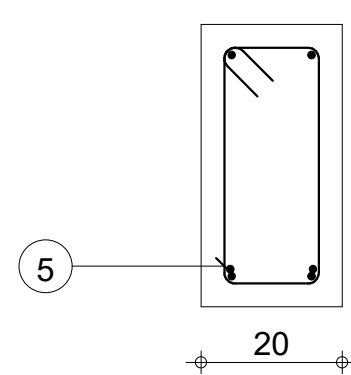
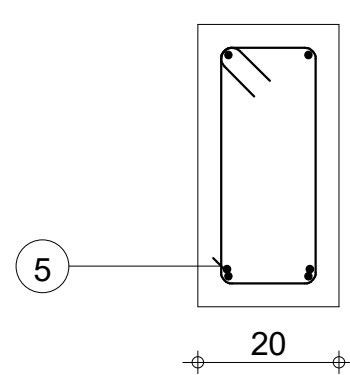
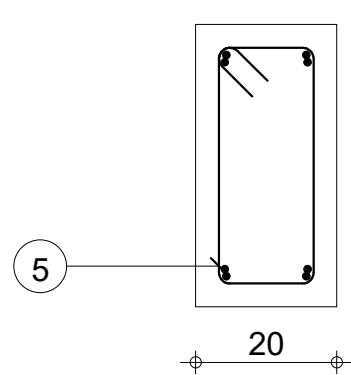


A-A

B-B

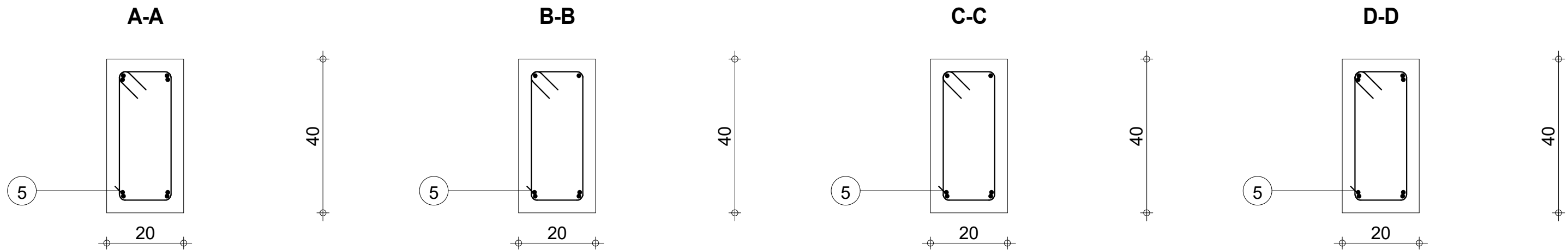
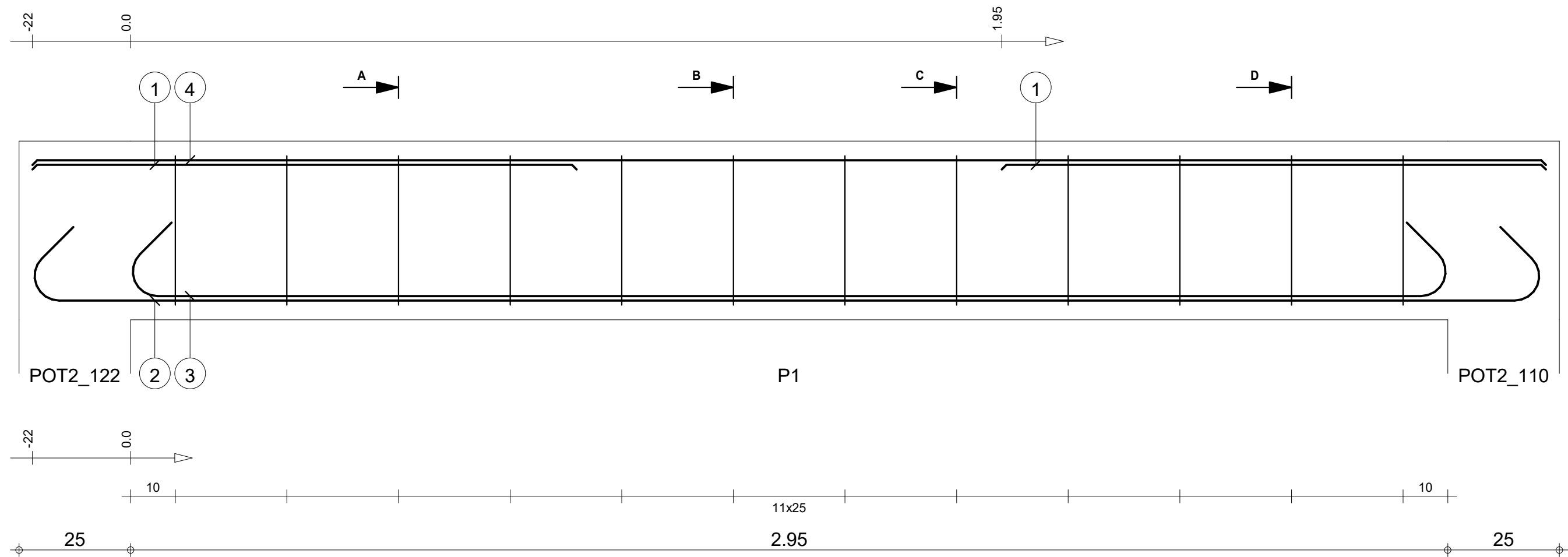
C-C

D-D



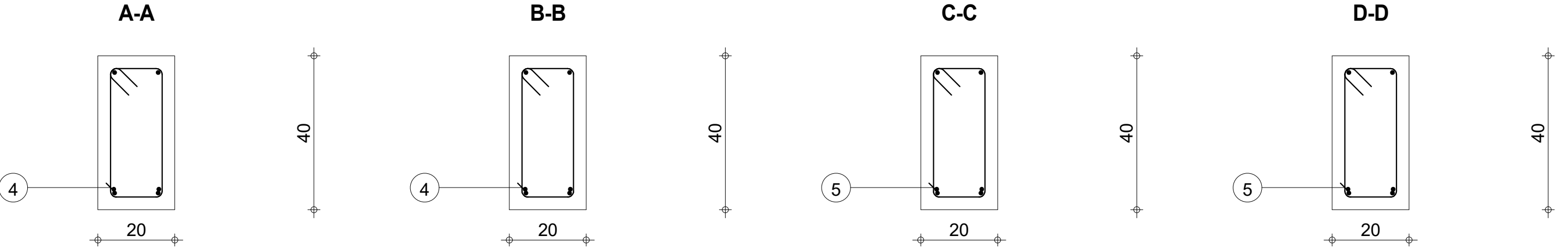
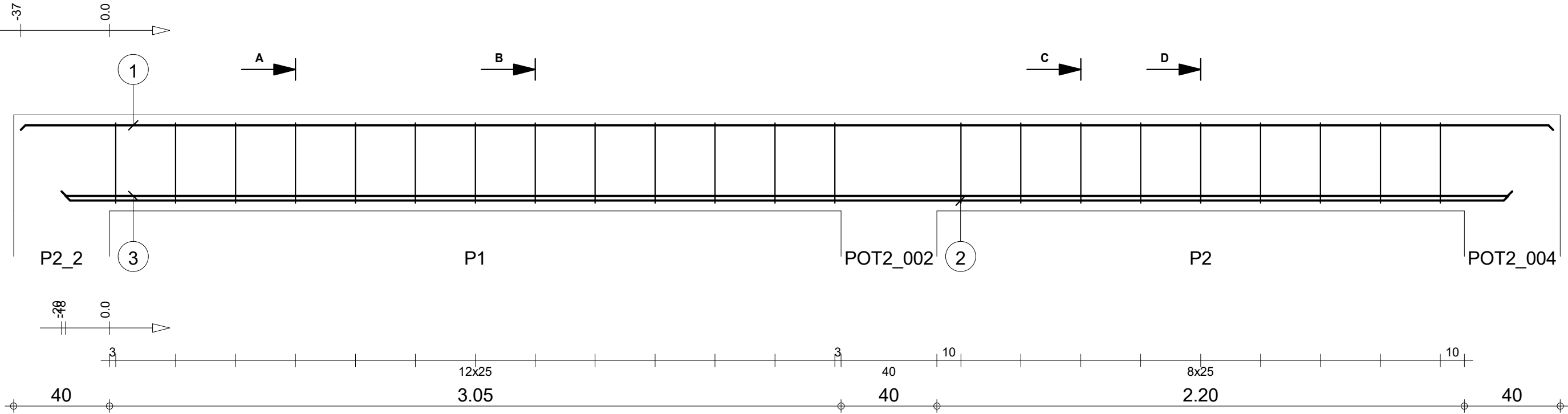
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	I=97	00	④	2HA 10	I=3.69	00
②	2HA 10	I=4.03	00	⑤	13HA 6	I=1.08	31
③	2HA 10	I=3.59	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		B 01: P1		Nombre 1		Béton : BETON20 = 0.3 m3		Acier HA 400 = 16.3 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 64.67 kg/ m3		Echelle pour la vue 9.37cm/m	
						Surface du coffrage = 3.81 m2		Echelle pour la section 9.34cm/m	
								Page 1/45	



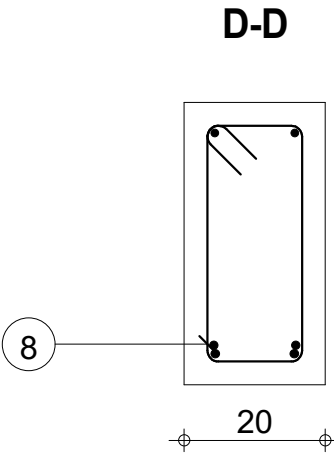
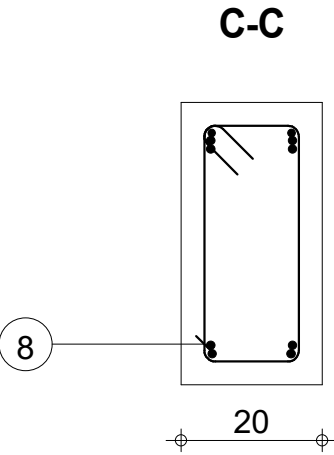
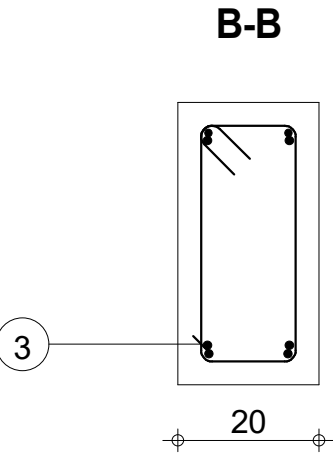
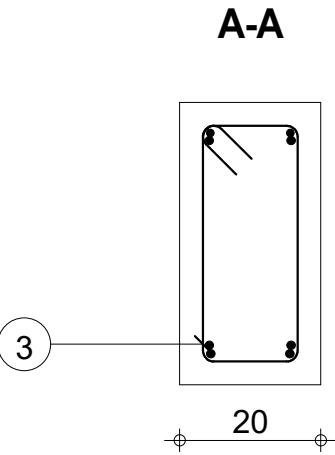
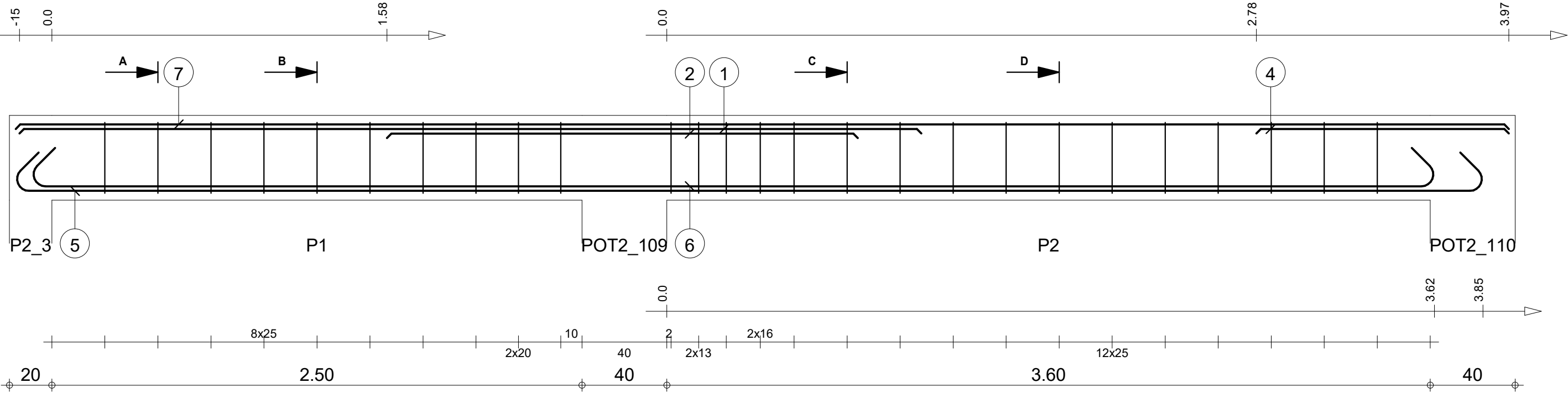
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	I=1.22	00	④	2HA 10	I=3.39	00
②	2HA 10	I=3.72	00	⑤	12HA 6	I=1.08	31
③	2HA 10	I=3.29	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		B 02: P1		Nombre 1		Béton : BETON20 = 0.276 m3		Acier HA 400 = 15.8 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 67.75 kg/ m3		Echelle pour la vue 10.1cm/m	
						Surface du coffrage = 3.51 m2		Echelle pour la section 9.34cm/m	
								Page 2/45	



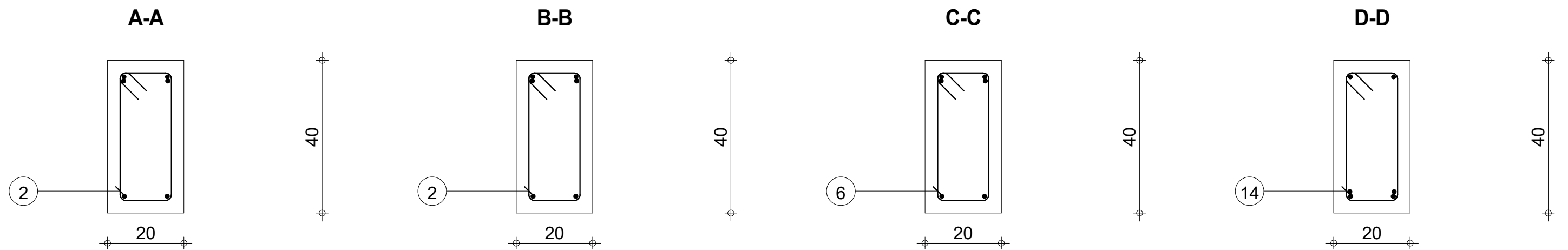
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=6.39	00	④	13HA 6	I=1.08	31
②	2HA 10	I=6.02	00	⑤	9HA 6	I=1.08	31
③	2HA 10	I=6.05	00				

STRUCTURE BATIMENT CEA/ITECH-MTV B 03		Tél.		Fax		Nombre 1	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x40		Béton : BETON20 = 0.516 m3		Acier HA 400 = 22.8 kg	
				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
				Densité = 54.26 kg/ m3		Echelle pour la vue 5.57cm/m	
				Surface du coffrage = 6.37 m2		Echelle pour la section 9.34cm/m	
						Page 3/45	

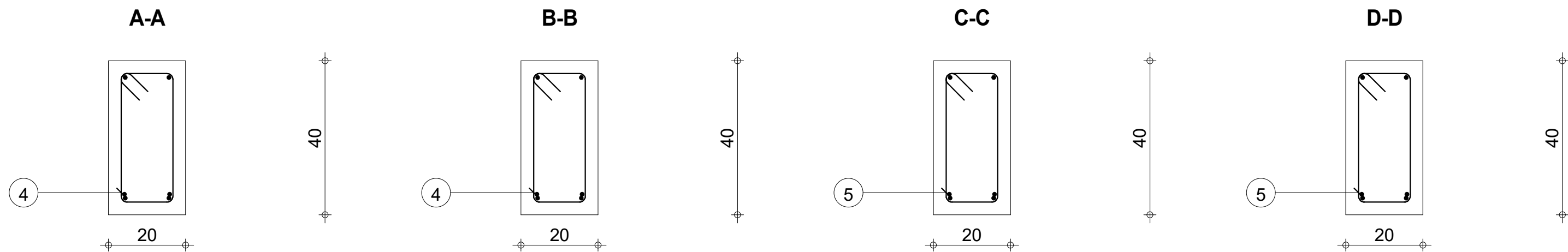
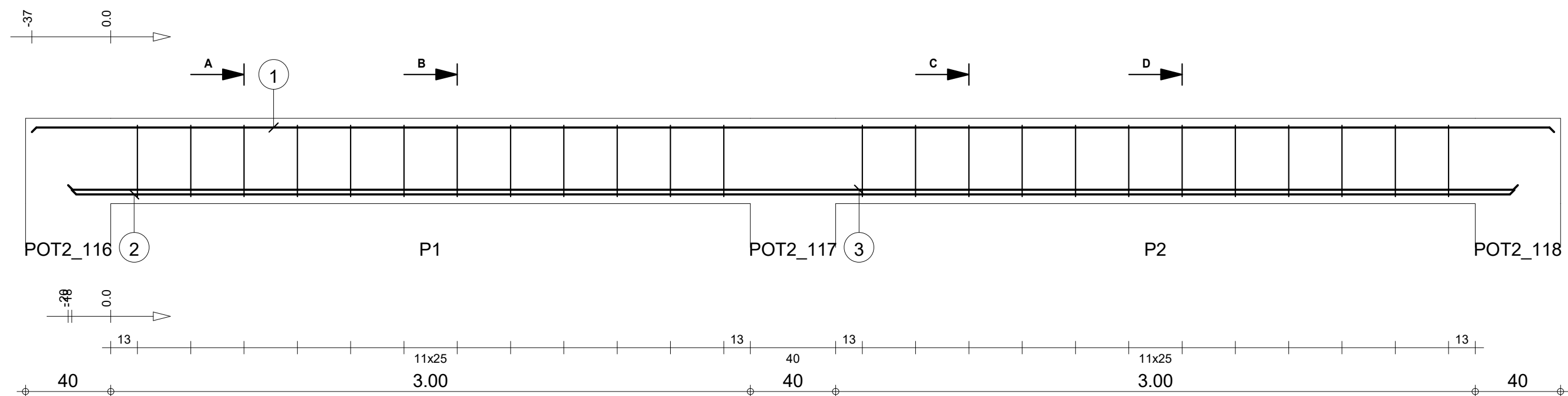


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	l=4.25	00	④	2HA 10	l=1.19	00	⑦	2HA 10	l=7.04	00
②	2HA 12	l=2.22	00	⑤	2HA 12	l=7.30	00	⑧	16HA 6	l=1.08	31
③	10HA 6	l=1.08	31	⑥	2HA 12	l=6.99	00				

STRUCTURE BATIMENT CEA/ITECH-MTV B 04				COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x40				Nombre 1			
Tél.				Fax				Béton : BETON20 = 0.568 m3				Acier HA 400 = 47 kg			
Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm				Acier HA 400 = 6.22 kg			
Densité = 93.66 kg/ m3				Echelle pour la vue 5.08cm/m				Echelle pour la section 9.34cm/m				Page 4/45			
Surface du coffrage = 7.06 m2															

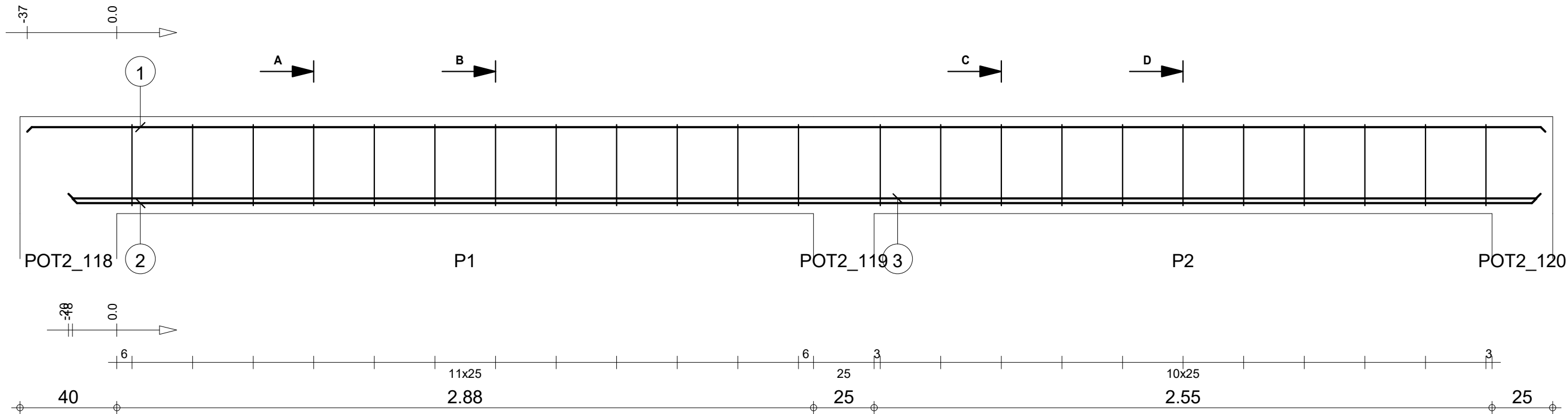


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	2HA 10	l=3.81	00	④	2HA 10	l=2.08	00	⑦	2HA 12	l=5.83	00	⑩	2HA 12	l=4.40	00	⑬	2HA 10	l=2.76	00				
②	12HA 6	l=1.08	31	⑤	2HA 12	l=8.47	00	⑧	2HA 12	l=2.44	00	⑪	2HA 12	l=4.11	00	⑭	19HA 6	l=1.08	31				
③	2HA 12	l=3.02	00	⑥	12HA 6	l=1.08	31	⑨	2HA 10	l=1.26	00	⑫	2HA 10	l=4.65	00								
Tél.												Fax											
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				B 05 Section 20x40												Acier HA 400 = 68.1 kg							
												Béton : BETON20 = 0.97 m3				Acier HA 400 = 10.3 kg							
												Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
												Densité = 80.82 kg/ m3 Surface du coffrage = 12 m2				Echelle pour la vue 3.02cm/m Echelle pour la section 9.34cm/m				Page 5/45			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=7.14	00	④	12HA 6	I=1.08	31
②	2HA 10	I=6.77	00	⑤	12HA 6	I=1.08	31
③	2HA 10	I=6.80	00				

STRUCTURE BATIMENT CEA/ITECH-MTV B 06		Tél.		Fax		Nombre 1	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x40		Béton : BETON20 = 0.576 m3		Acier HA 400 = 25.5 kg	
				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
				Densité = 54.34 kg/ m3		Echelle pour la vue 5.01cm/m	
				Surface du coffrage = 7.12 m2		Echelle pour la section 9.34cm/m	
						Page 6/45	

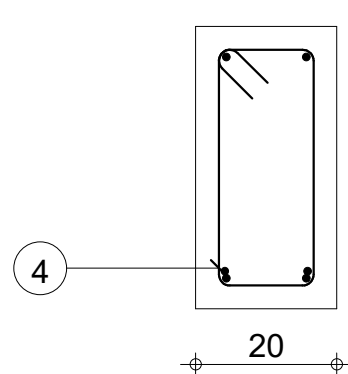


A-A

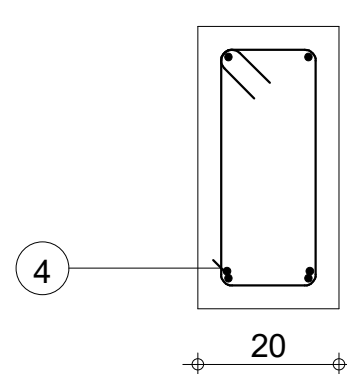
B-B

C-C

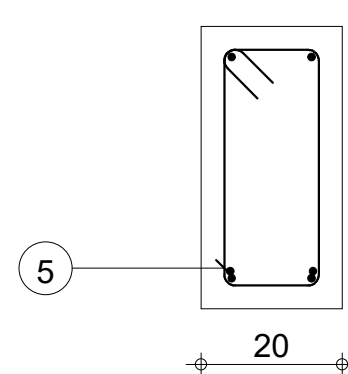
D-D



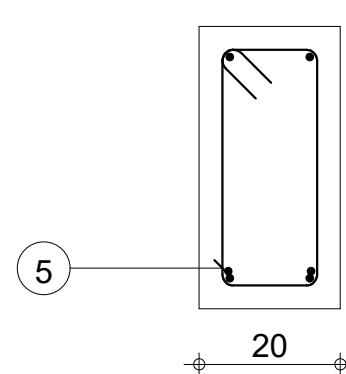
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40



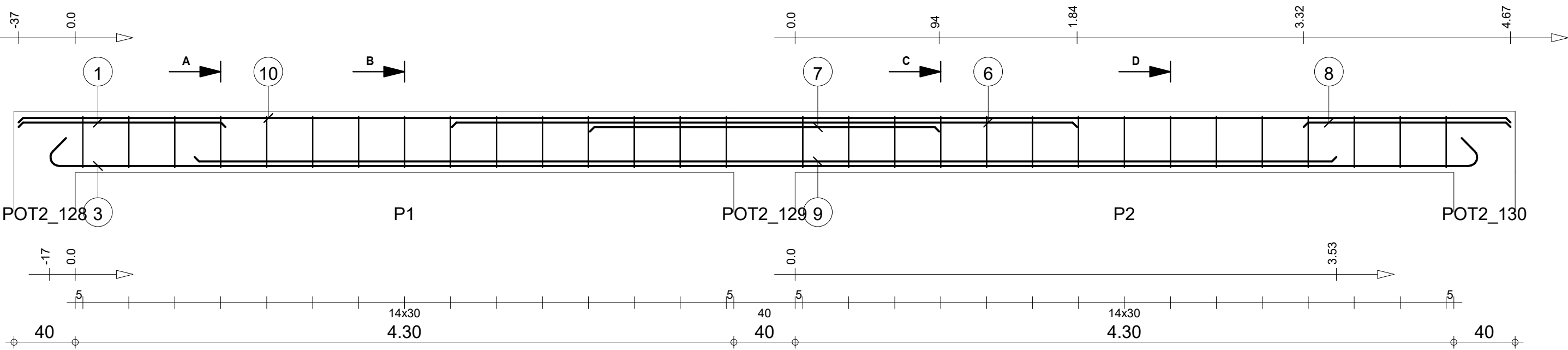
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40

Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=6.27	00	④	12HA 6	I=1.08	31
②	2HA 10	I=6.04	00	⑤	11HA 6	I=1.08	31
③	2HA 10	I=6.08	00				

STRUCTURE BATIMENT CEA/ITECH-MTV B 07		Tél.		Fax		Nombre 1		Béton : BETON20 = 0.506 m3		Acier HA 400 = 22.7 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
								Densité = 55.73 kg/ m3		Echelle pour la vue 5.67cm/m	
								Surface du coffrage = 6.3 m2		Echelle pour la section 9.34cm/m	
										Page 7/45	

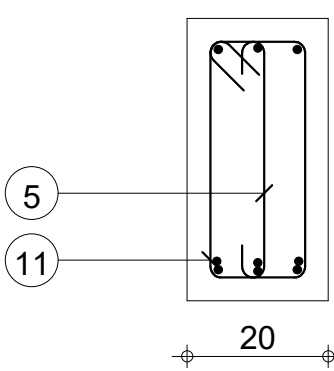
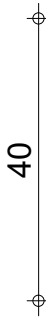
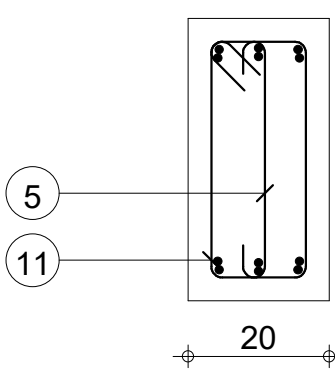
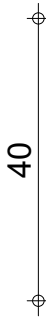
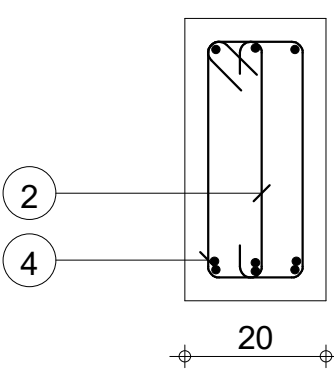
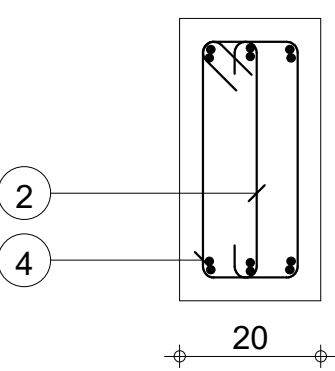


A-A

B-B

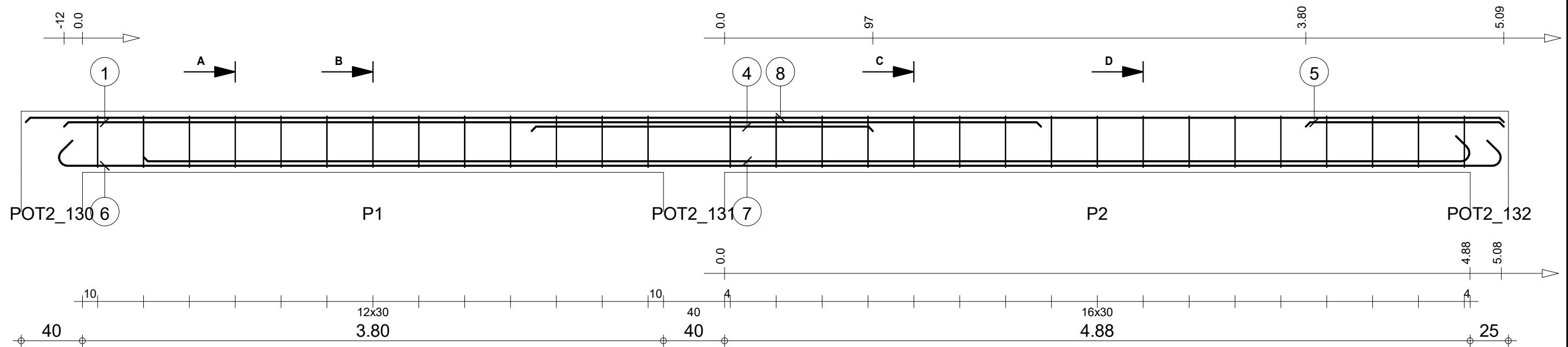
C-C

D-D

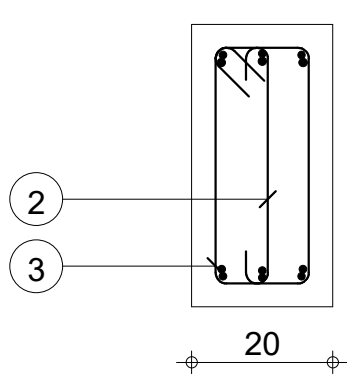


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12	I=1.35	00	④	15HA 6	I=1.08	31	⑦	3HA 12	I=2.28	00	⑩	3HA 12	I=9.74	00
②	15HA 6	I=46	00	⑤	15HA 6	I=46	00	⑧	3HA 12	I=1.35	00	⑪	15HA 6	I=1.08	31
③	3HA 12	I=9.71	00	⑥	3HA 12	I=4.08	00	⑨	3HA 12	I=7.45	00				

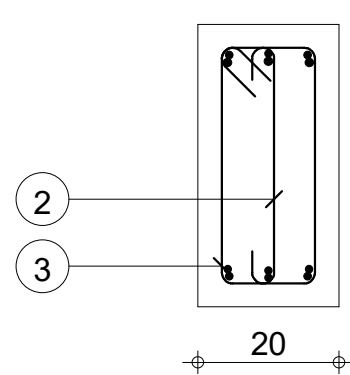
STRUCTURE BATIMENT CEA/ITECH-MTV B 08				COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x40				Nombre 1			
Tél.				Fax				Béton : BETON20 = 0.784 m3				Acier HA 400 = 95.8 kg			
								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
								Densité = 135.2 kg/ m3				Echelle pour la vue 3.72cm/m			
								Surface du coffrage = 9.72 m2				Echelle pour la section 9.34cm/m			
												Page 8/45			



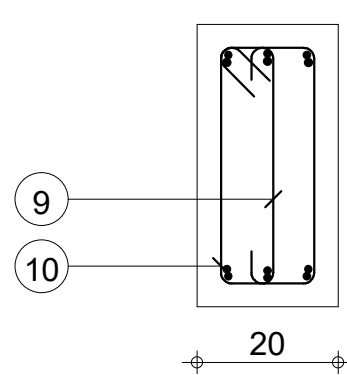
A-A



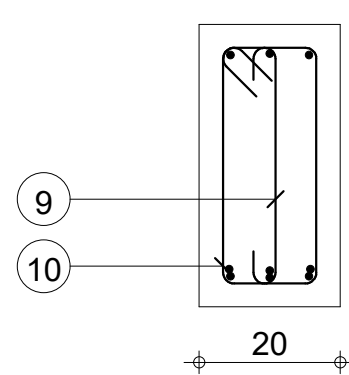
B-B



C-C

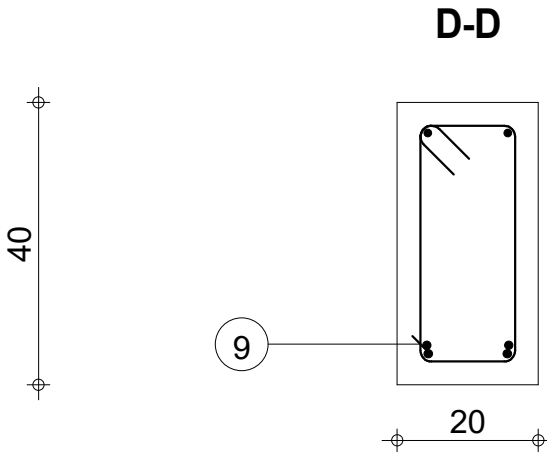
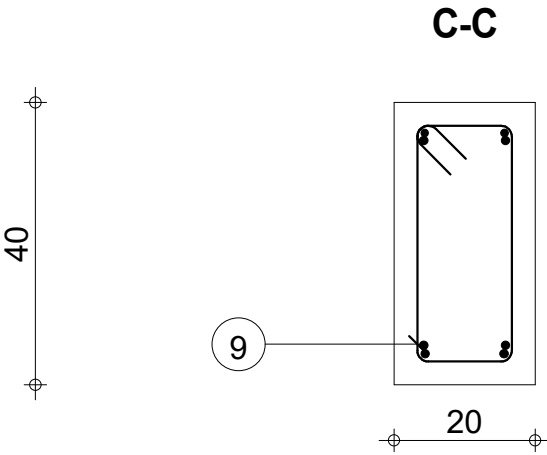
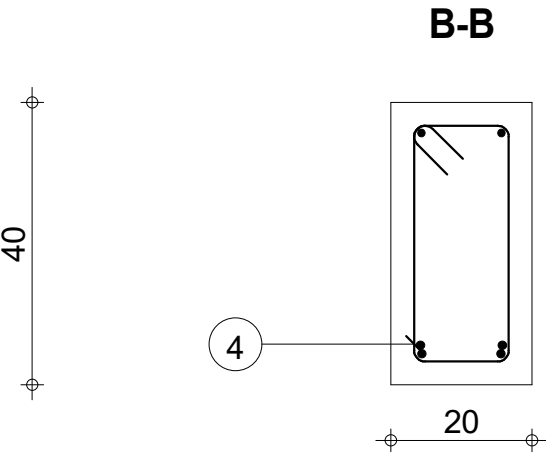
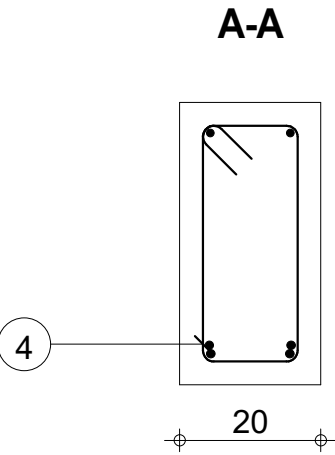
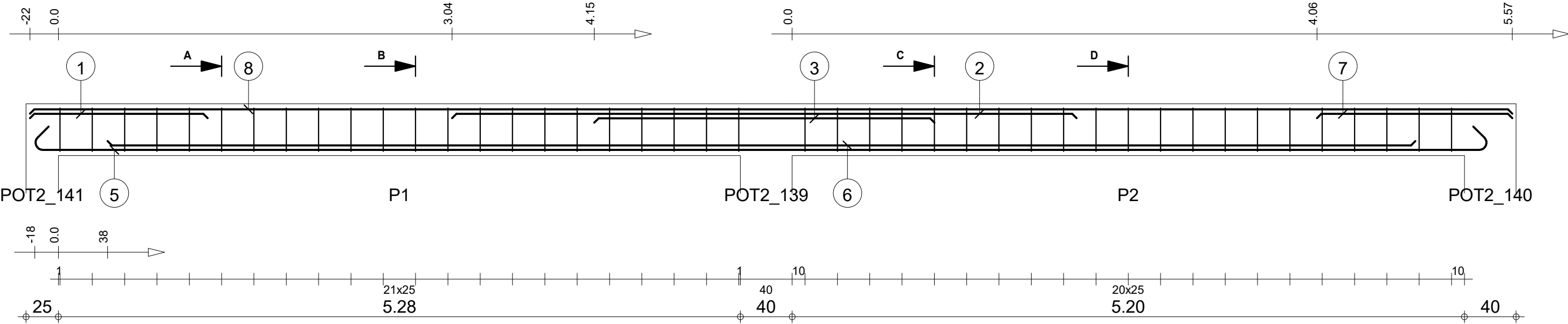


D-D



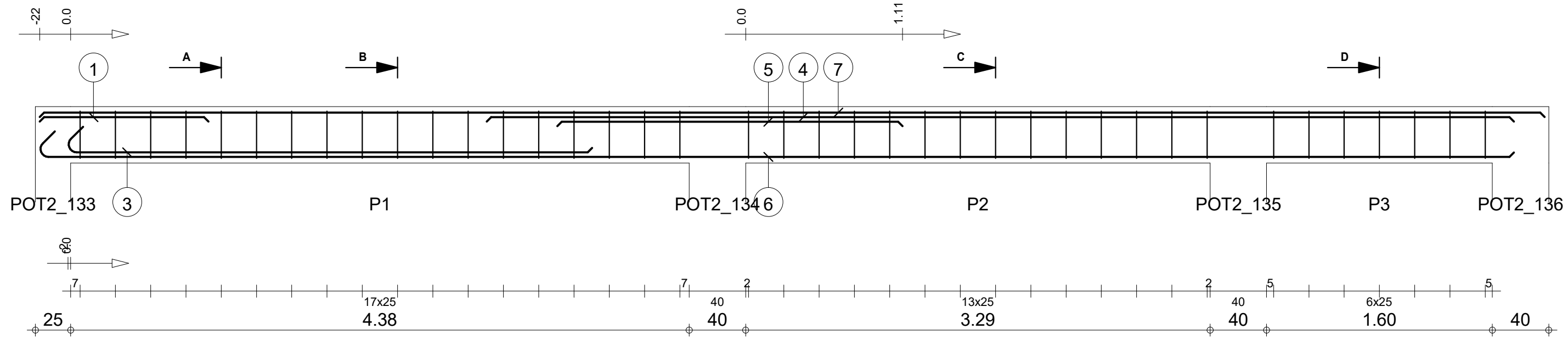
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①	3HA 12	I=6.39	00	④	3HA 12	I=2.23	00	⑦	3HA 10	I=8.85	00	⑩	17HA 6	I=1.07	31
②	13HA 6	I=46	00	⑤	3HA 10	I=1.29	00	⑧	3HA 10	I=9.67	00				
③	13HA 6	I=1.07	31	⑥	3HA 10	I=9.78	00	⑨	17HA 6	I=46	00				

STRUCTURE BATIMENT CEA/ITECH-MTV B 09										Nombre 1		Béton : BETON20 = 0.778 m3				Acier HA 400 = 77.7 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B												Enrobage inférieur 3 cm				Enrobage supérieur 3 cm	
Section 20x40												Densité = 113 kg/ m3				Echelle pour la vue 3.75cm/m	
												Surface du coffrage = 9.68 m2				Echelle pour la section 9.34cm/m	
																Page 9/45	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=1.38	00	④	22HA 6	l=1.08	31	⑦	2HA 10	l=1.51	00
②	2HA 12	l=4.83	00	⑤	2HA 12	l=11.61	00	⑧	2HA 10	l=11.47	00
③	2HA 12	l=2.63	00	⑥	2HA 12	l=10.12	00	⑨	21HA 6	l=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV B 10				Section 20x40				Nombre 1		Béton : BETON20 = 0.922 m3		Acier HA 400 = 69.5 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B										Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 86.55 kg/ m3		Echelle pour la vue 3.18cm/m	
										Surface du coffrage = 11.5 m2		Echelle pour la section 9.34cm/m	
												Page 10/45	

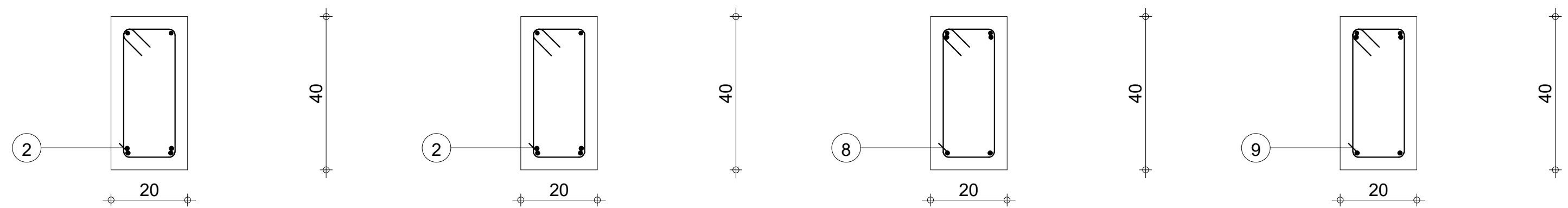


A-A

B-B

C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.20	00	④	2HA 12	I=7.28	00	⑦	2HA 10	I=10.67	00
②	18HA 6	I=1.08	31	⑤	2HA 12	I=2.45	00	⑧	14HA 6	I=1.08	31
③	2HA 12	I=3.91	00	⑥	2HA 12	I=10.64	00	⑨	7HA 6	I=1.08	31

STRUCTURE BATIMENT CEA/ITECH-MTV

COFFRAGE & FERRAILLAGE POUTRES PH RDC-B

B 11

Section 20x40

Tél.

Fax

Nombre 1

Béton : BETON20 = 0.858 m3

Enrobage inférieur 3 cm

Densité = 78.21 kg/ m3

Surface du coffrage = 10.6 m2

Acier HA 400 = 57.7 kg

Acier HA 400 = 9.33 kg

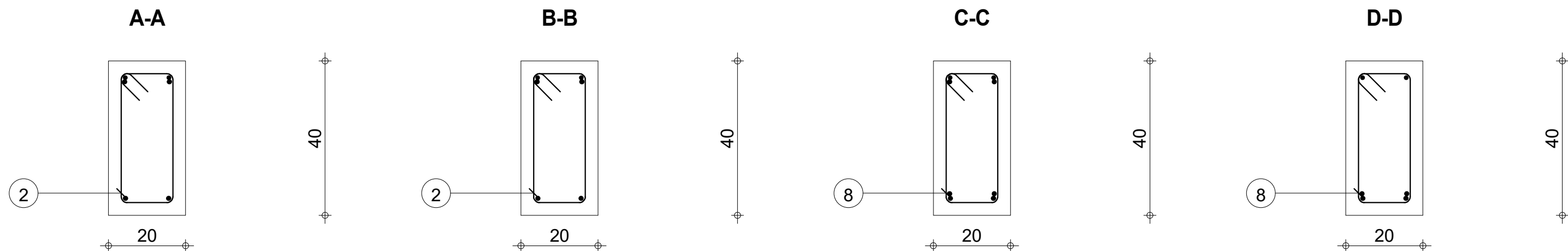
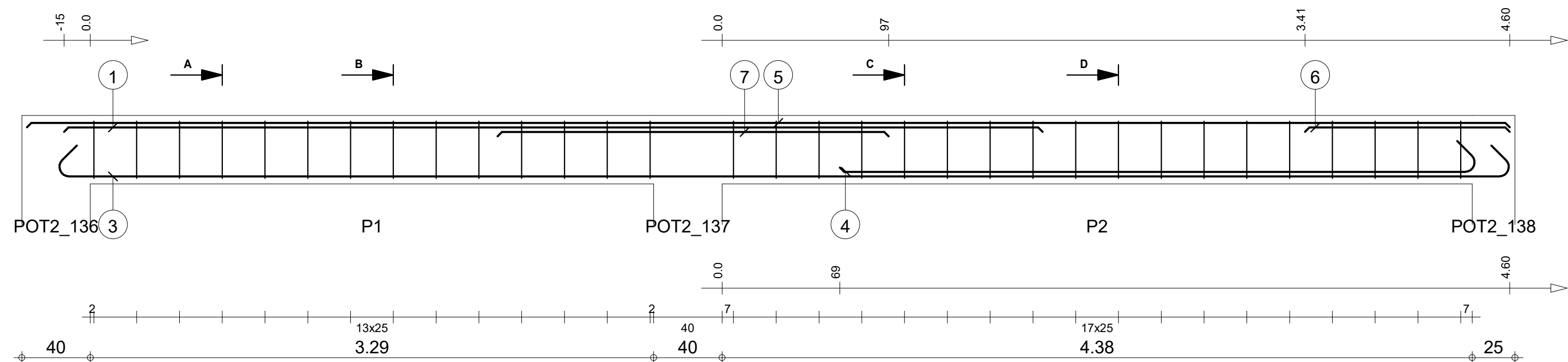
Enrobage supérieur 3 cm

Echelle pour la vue 3.41cm/m

Enrobage latéral 3 cm

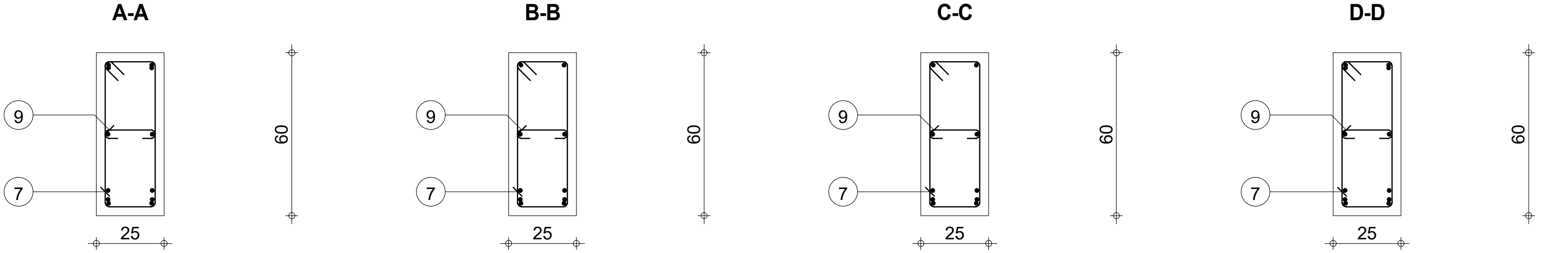
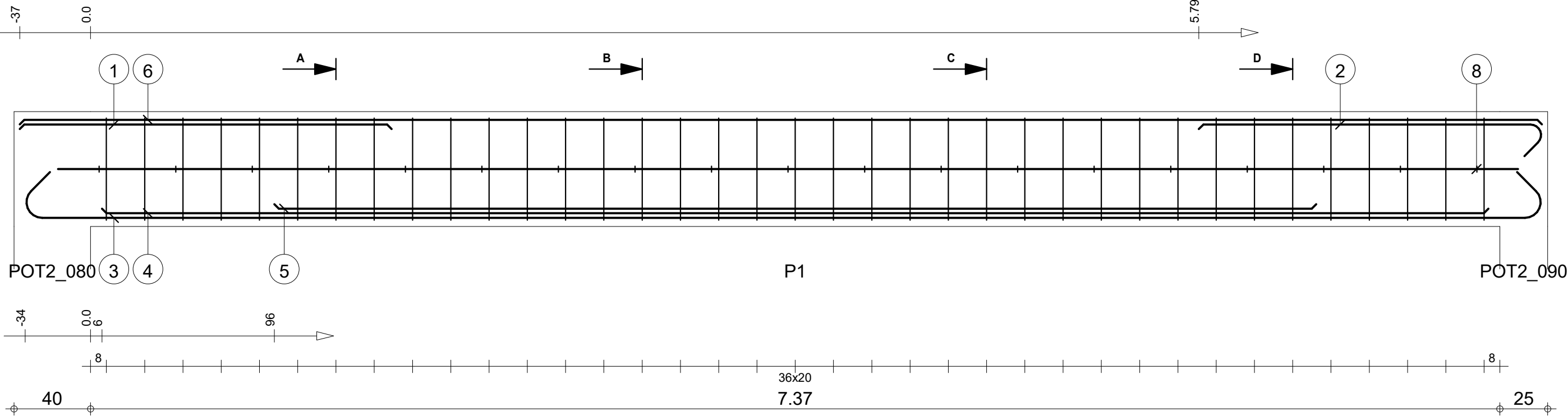
Echelle pour la section 9.34cm/m

Page 11/45



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 12	l=5.72	00	④	2HA 12	l=3.91	00	⑦	2HA 12	l=2.29	00
②	14HA 6	l=1.08	31	⑤	2HA 10	l=8.67	00	⑧	18HA 6	l=1.08	31
③	2HA 12	l=8.86	00	⑥	2HA 10	l=1.20	00				

STRUCTURE BATIMENT CEA/ITECH-MTV B 12				Section 20x40				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Tél.				Fax			
								Béton : BETON20 = 0.698 m3			
								Acier HA 400 = 49 kg			
								Acier HA 400 = 7.66 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 81.23 kg/ m3			
								Echelle pour la vue 4.16cm/m			
								Echelle pour la section 9.34cm/m			
								Page 12/45			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=1.94	00	④	2HA 14	l=7.25	00	⑦	37HA 6	l=1.58	31
②	2HA 10	l=1.96	00	⑤	2HA 14	l=5.45	00	⑧	2HA 10	l=7.63	00
③	2HA 14	l=8.42	00	⑥	2HA 10	l=7.96	00	⑨	19HA 6	l=31	00

STRUCTURE BATIMENT CEA/ITECH-MTV

COFFRAGE & FERRAILLAGE POUTRES PH RDC-B

B 13: P1

Section 25x60

Tél.

Fax

Nombre 1

Béton : BETON20 = 1.2 m3

Enrobage inférieur 3 cm

Densité = 74.42 kg/ m3

Surface du coffrage = 11.8 m2

Acier HA 400 = 65.6 kg

Acier HA 400 = 23.7 kg

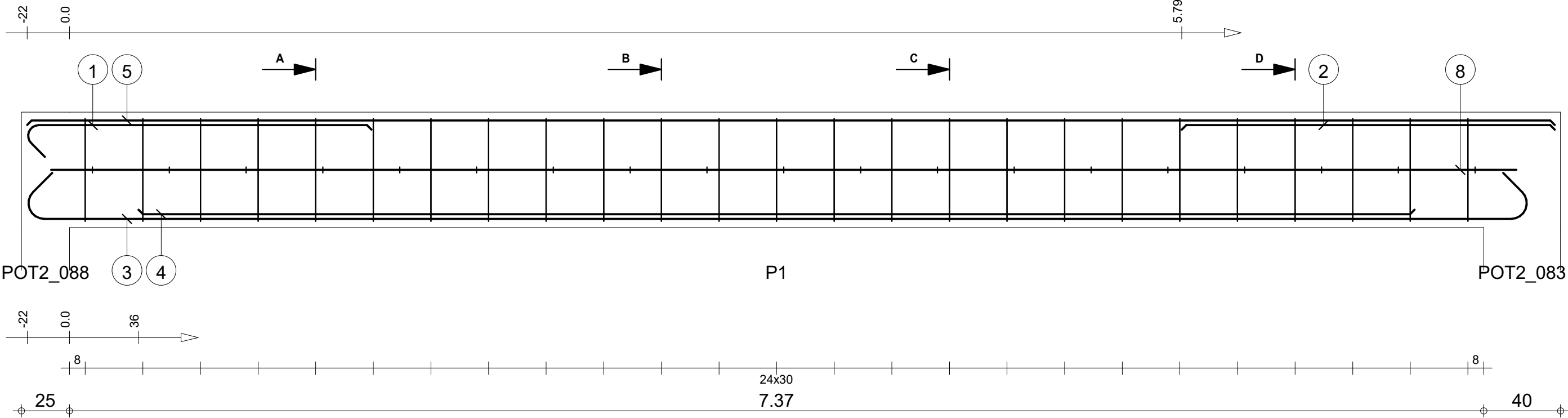
Enrobage supérieur 3 cm

Echelle pour la vue 4.52cm/m

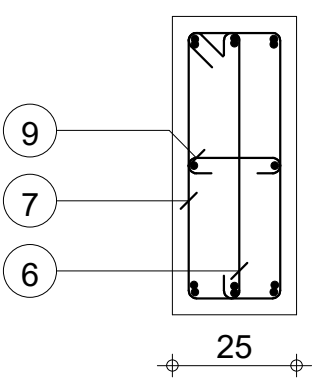
Echelle pour la section 6.58cm/m

Enrobage latéral 3 cm

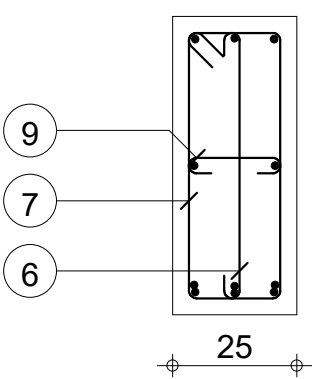
Page 13/45



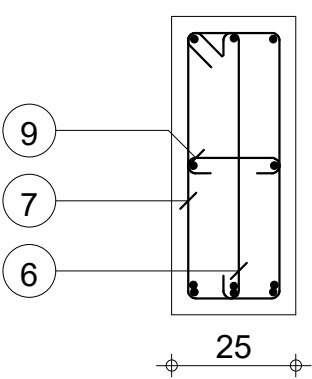
A-A



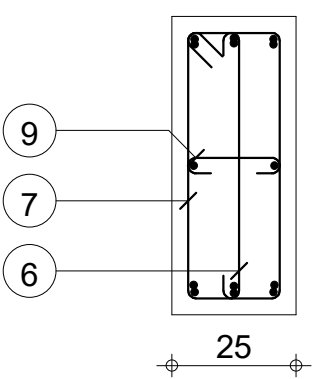
B-B



C-C

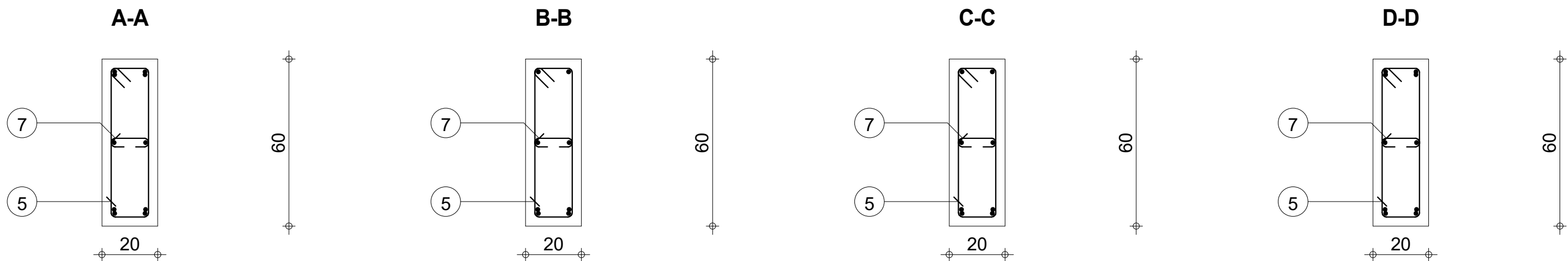
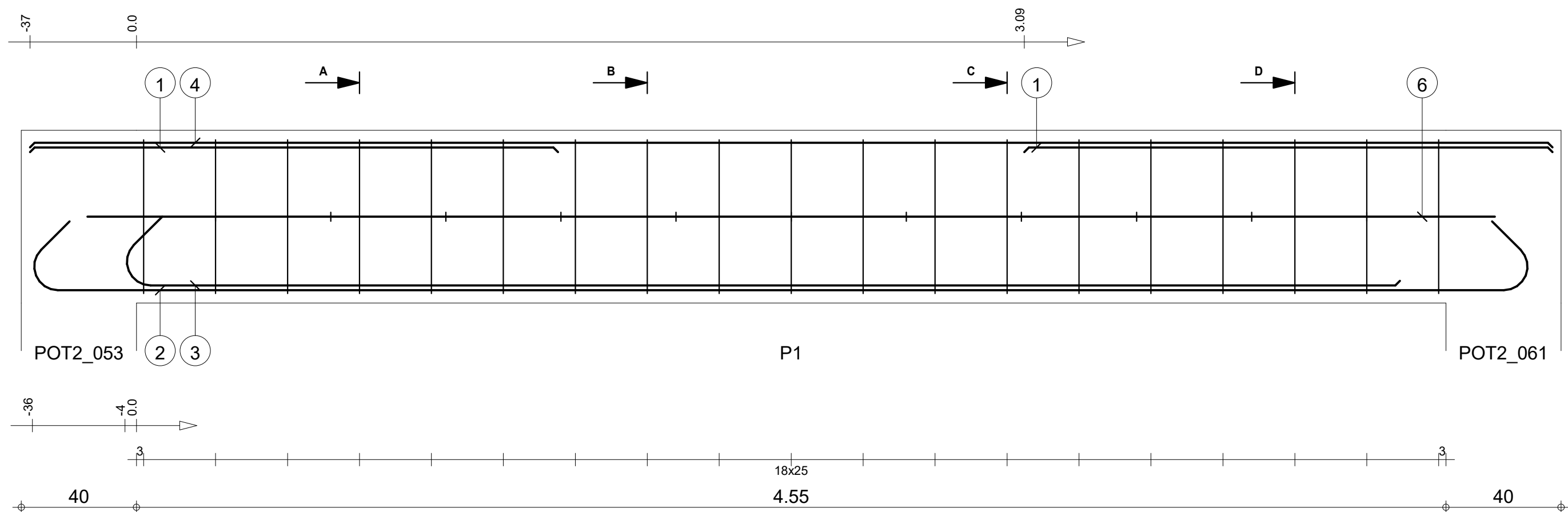


D-D



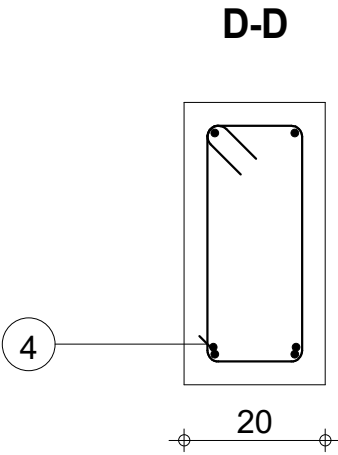
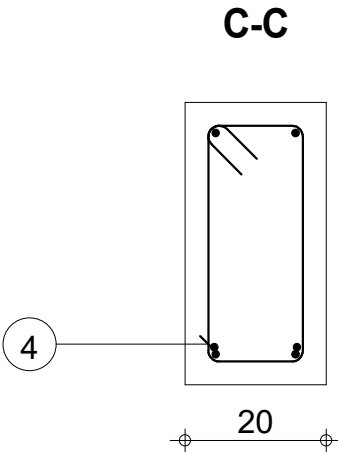
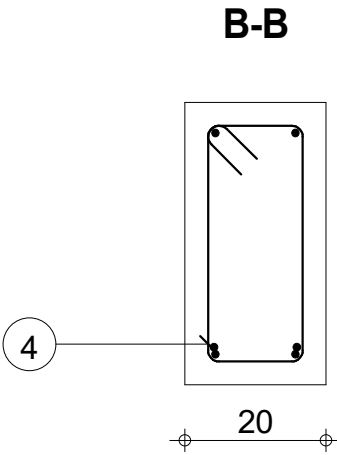
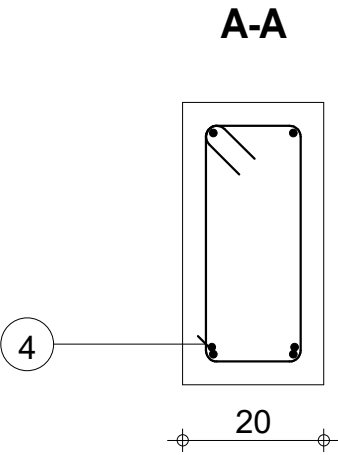
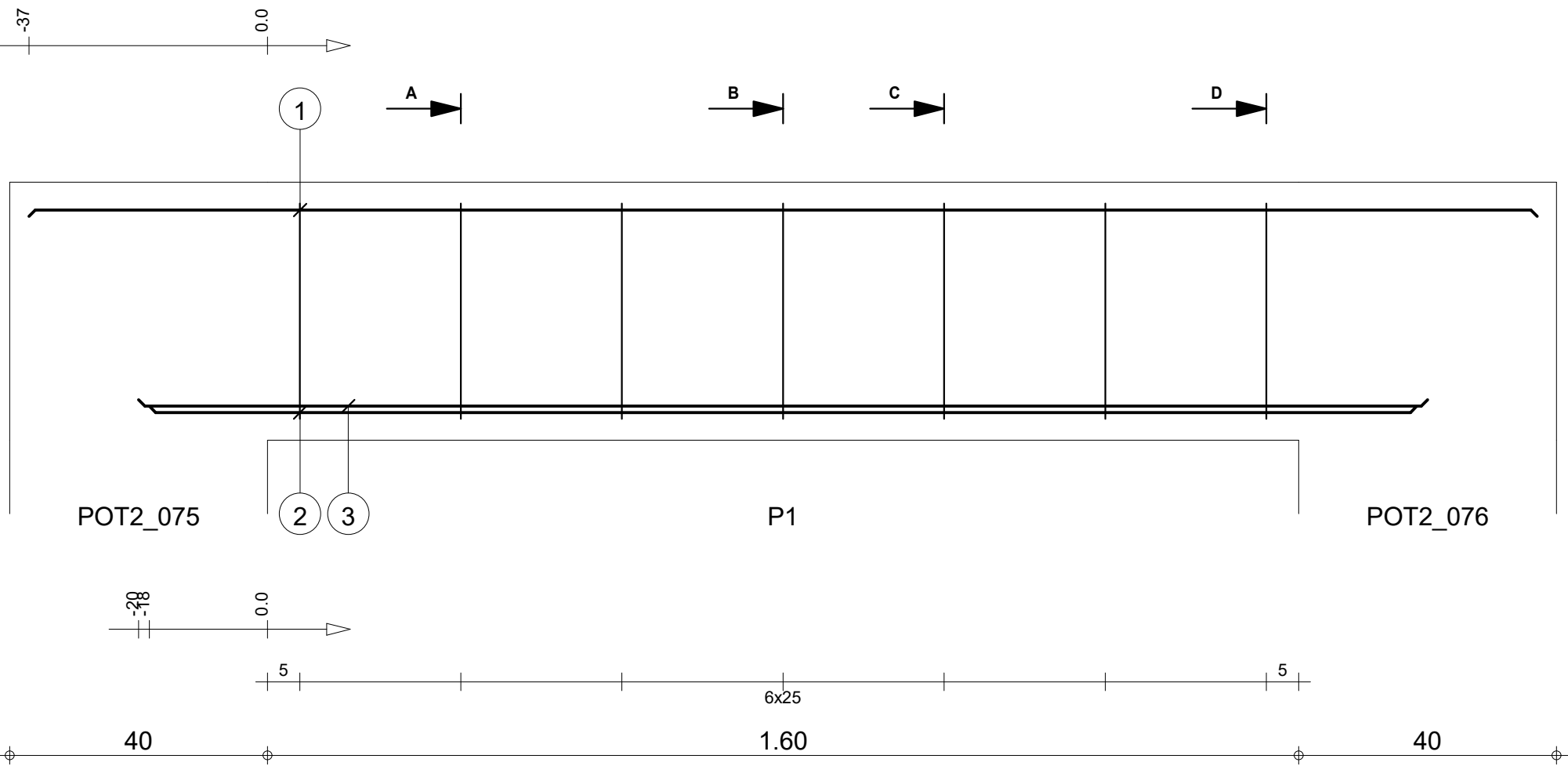
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	3HA 10	I=1.94	00	⑤	3HA 10	I=7.96	00	⑧	2HA 10	I=7.63	00
③	3HA 14	I=8.30	00	⑥	25HA 6	I=66	00	⑨	19HA 6	I=31	00

STRUCTURE BATIMENT CEA/ITECH-MTV				B 14: P1				Nombre 1				Béton : BETON20 = 1.2 m3		Acier HA 400 = 76.1 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 25x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 82.75 kg/ m3		Echelle pour la vue 4.52cm/m	
												Surface du coffrage = 11.8 m2		Echelle pour la section 6.58cm/m	
														Page 14/45	



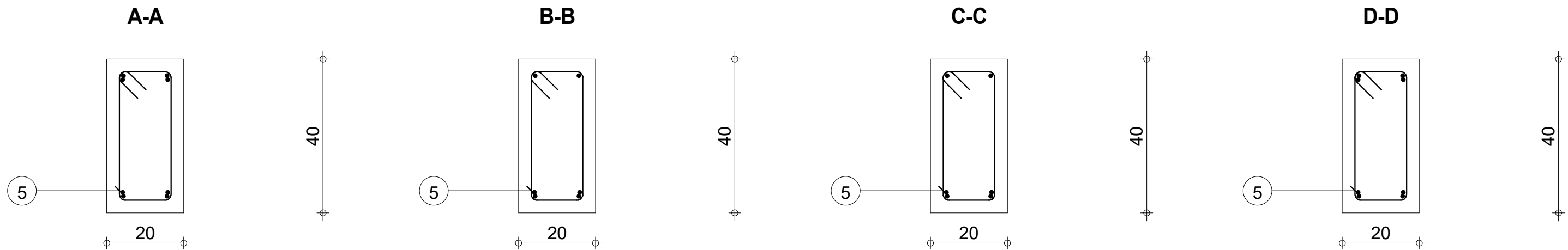
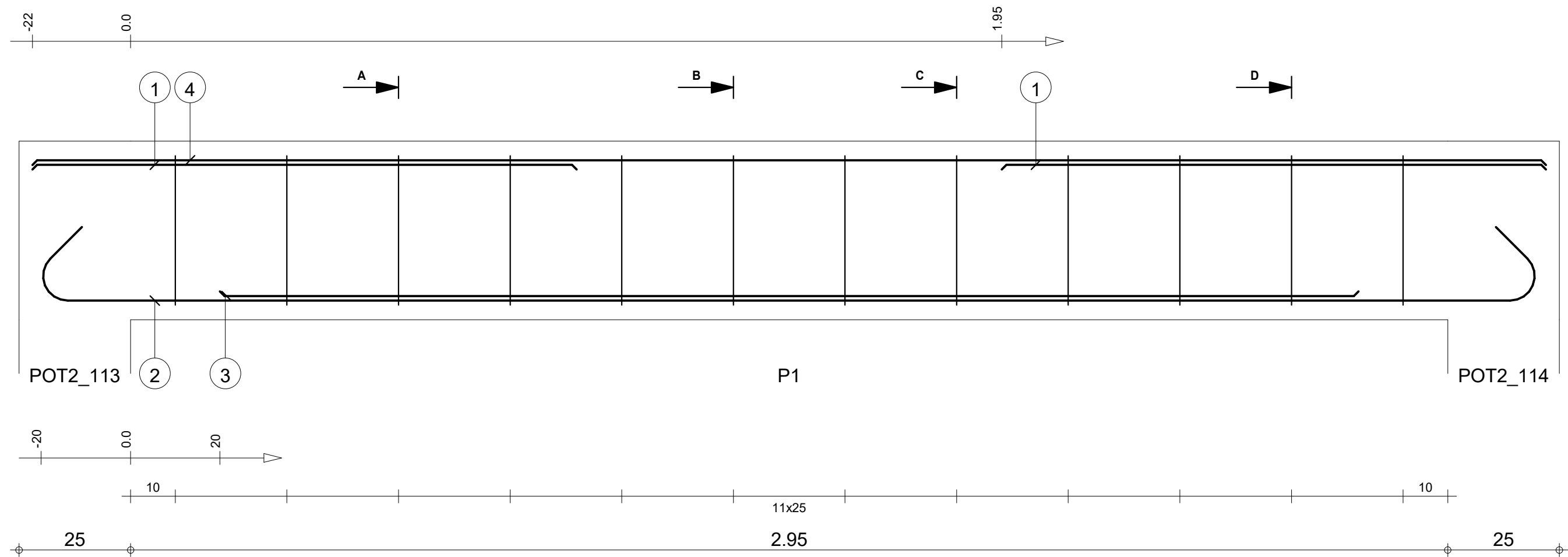
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①	4HA 10	l=1.84	00	④	2HA 10	l=5.29	00	⑦	11HA 6	l=26	00
②	2HA 14	l=5.69	00	⑤	19HA 6	l=1.48	31				
③	2HA 14	l=4.67	00	⑥	2HA 10	l=4.89	00				

STRUCTURE BATIMENT CEA/ITECH-MTV				B 15: P1				Nombre 1				Béton : BETON20 = 0.642 m3		Acier HA 400 = 36.1 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 76.32 kg/ m3		Echelle pour la vue 6.67cm/m	
												Surface du coffrage = 7.57 m2		Echelle pour la section 6.58cm/m	
														Page 15/45	

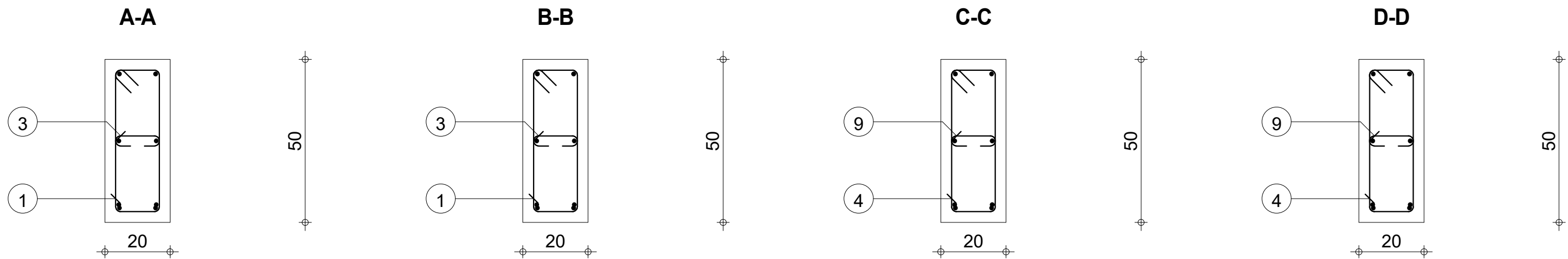
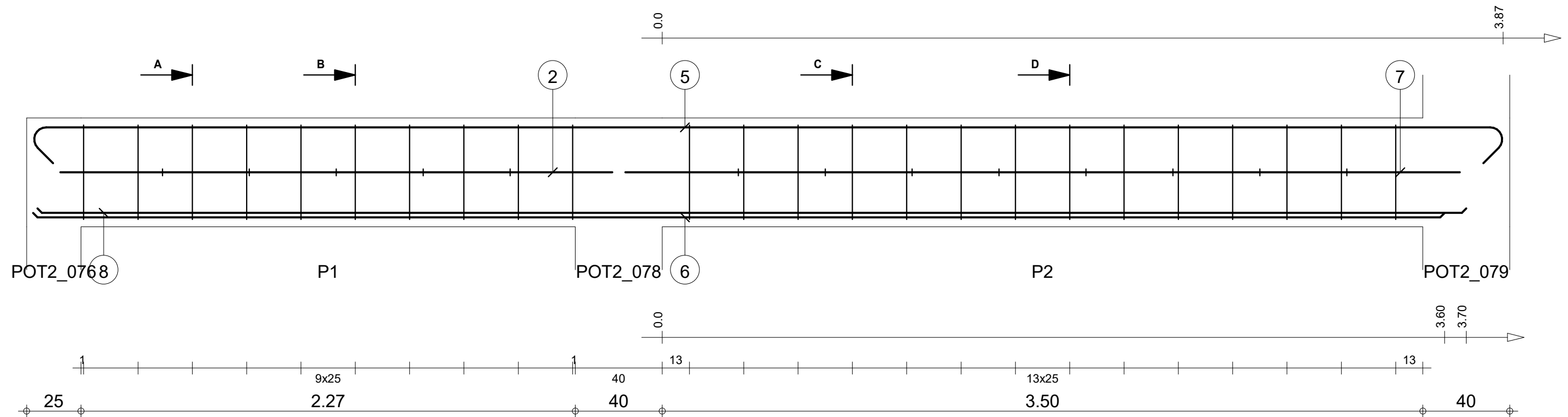


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=2.34	00	④	7HA 6	I=1.08	31
②	2HA 10	I=1.97	00				
③	2HA 10	I=2.00	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		B 16: P1		Nombre 1		Béton : BETON20 = 0.192 m3		Acier HA 400 = 7.78 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x40				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 49.22 kg/ m3		Echelle pour la vue 10.9cm/m	
						Surface du coffrage = 2.4 m2		Echelle pour la section 9.34cm/m	
								Page 16/45	

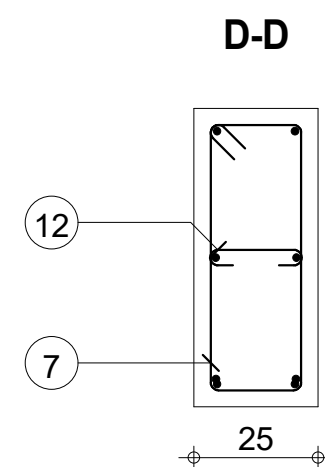
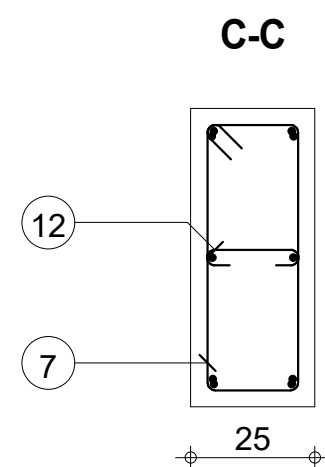
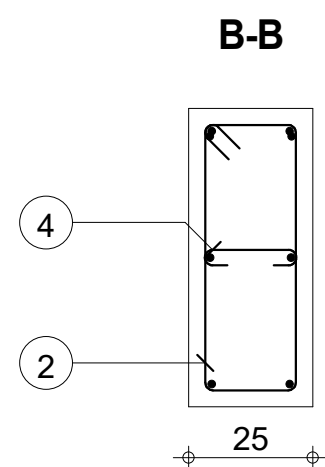
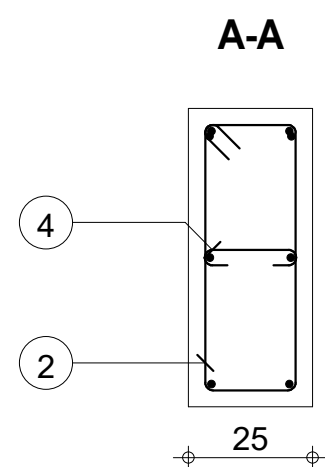
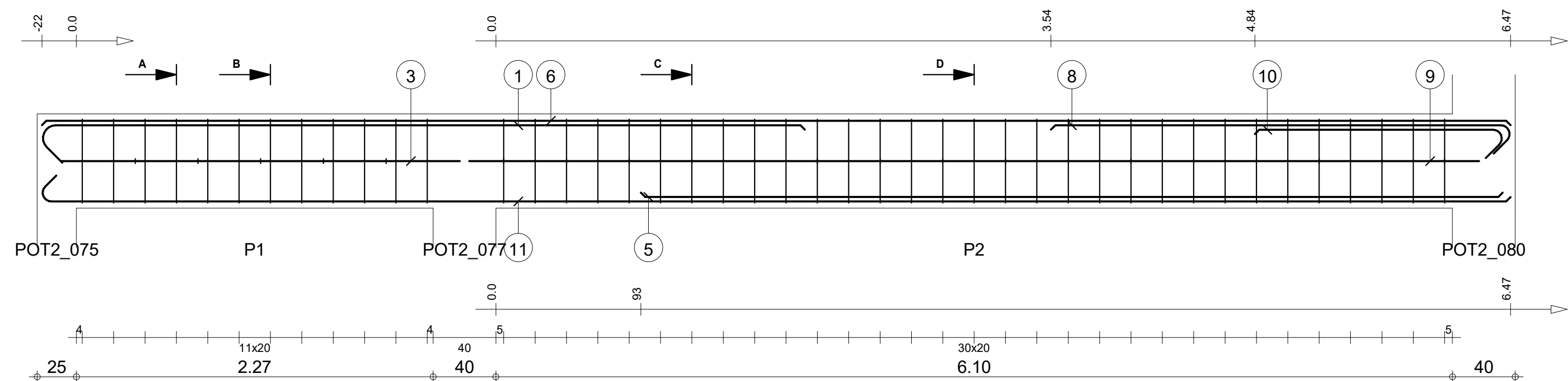


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	4HA 10	I=1.22	00	④	2HA 10	I=3.39	00
②	2HA 10	I=3.69	00	⑤	12HA 6	I=1.08	31
③	2HA 10	I=2.55	00				



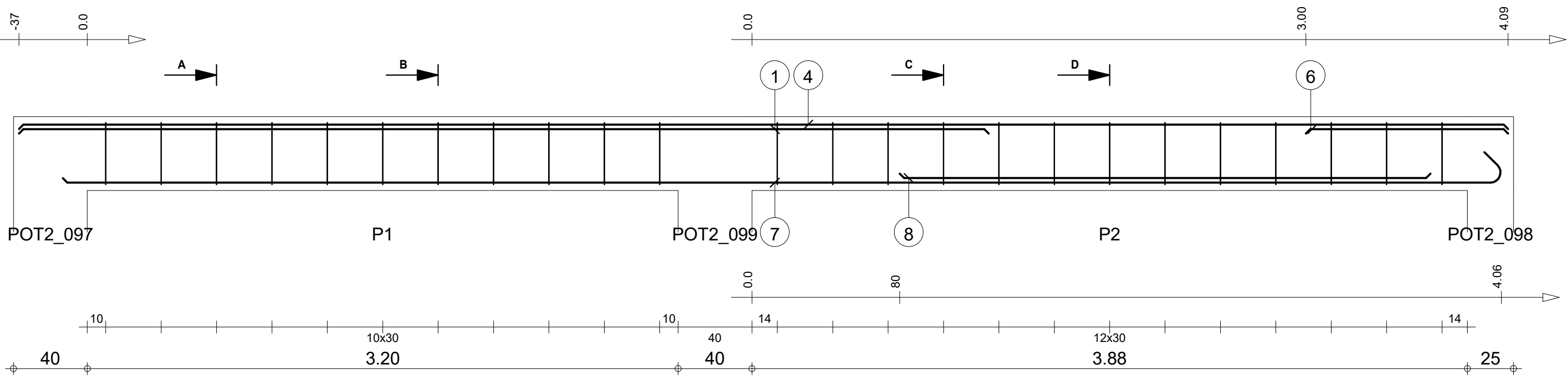
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	10HA 6	I=1.28	31	④	14HA 6	I=1.28	31	⑦	2HA 10	I=3.84	00
②	2HA 10	I=2.54	00	⑤	2HA 10	I=7.10	00	⑧	2HA 10	I=6.58	00
③	5HA 6	I=26	00	⑥	2HA 10	I=6.50	00	⑨	8HA 6	I=26	00

STRUCTURE BATIMENT CEA/ITECH-MTV B 18				COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x50			
Tél.				Fax				Nombre 1			
Béton : BETON20 = 0.683 m3				Acier HA 400 = 24.9 kg				Acier HA 400 = 15.4 kg			
Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
Densité = 59 kg/ m3				Echelle pour la vue 5.27cm/m				Echelle pour la section 7.8cm/m			
Surface du coffrage = 8.18 m2								Page 18/45			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 14	l=5.11	00	④	5HA 6	l=31	00	⑦	31HA 6	l=1.57	31	⑩	2HA 12	l=1.77	00
②	12HA 6	l=1.57	31	⑤	2HA 10	l=5.50	00	⑧	2HA 12	l=3.12	00	⑪	2HA 10	l=9.54	00
③	2HA 10	l=2.54	00	⑥	2HA 10	l=9.37	00	⑨	2HA 10	l=6.44	00	⑫	16HA 6	l=31	00

STRUCTURE BATIMENT CEA/ITECH-MTV B 19										Tél.		Fax		Nombre 1		Acier HA 400 = 51.1 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B										Béton : BETON20 = 1.41 m3		Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm	
Section 25x60										Densité = 55.82 kg/ m3		Surface du coffrage = 13.7 m2		Echelle pour la vue 3.86cm/m		Echelle pour la section 6.58cm/m	
																Page 19/45	

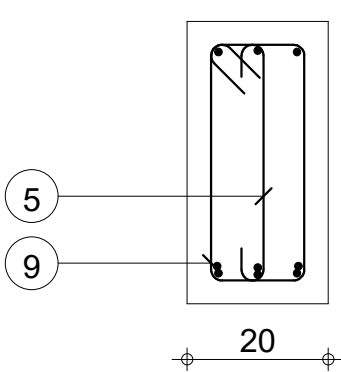
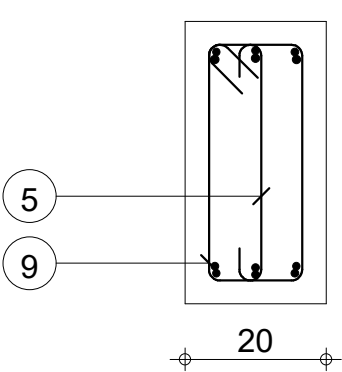
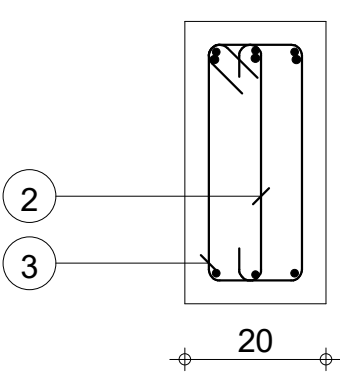
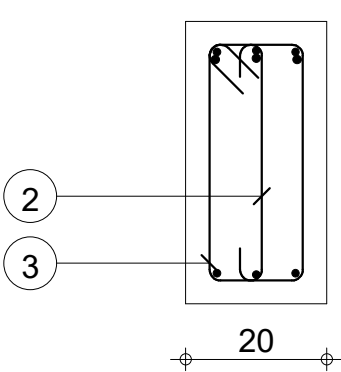


A-A

B-B

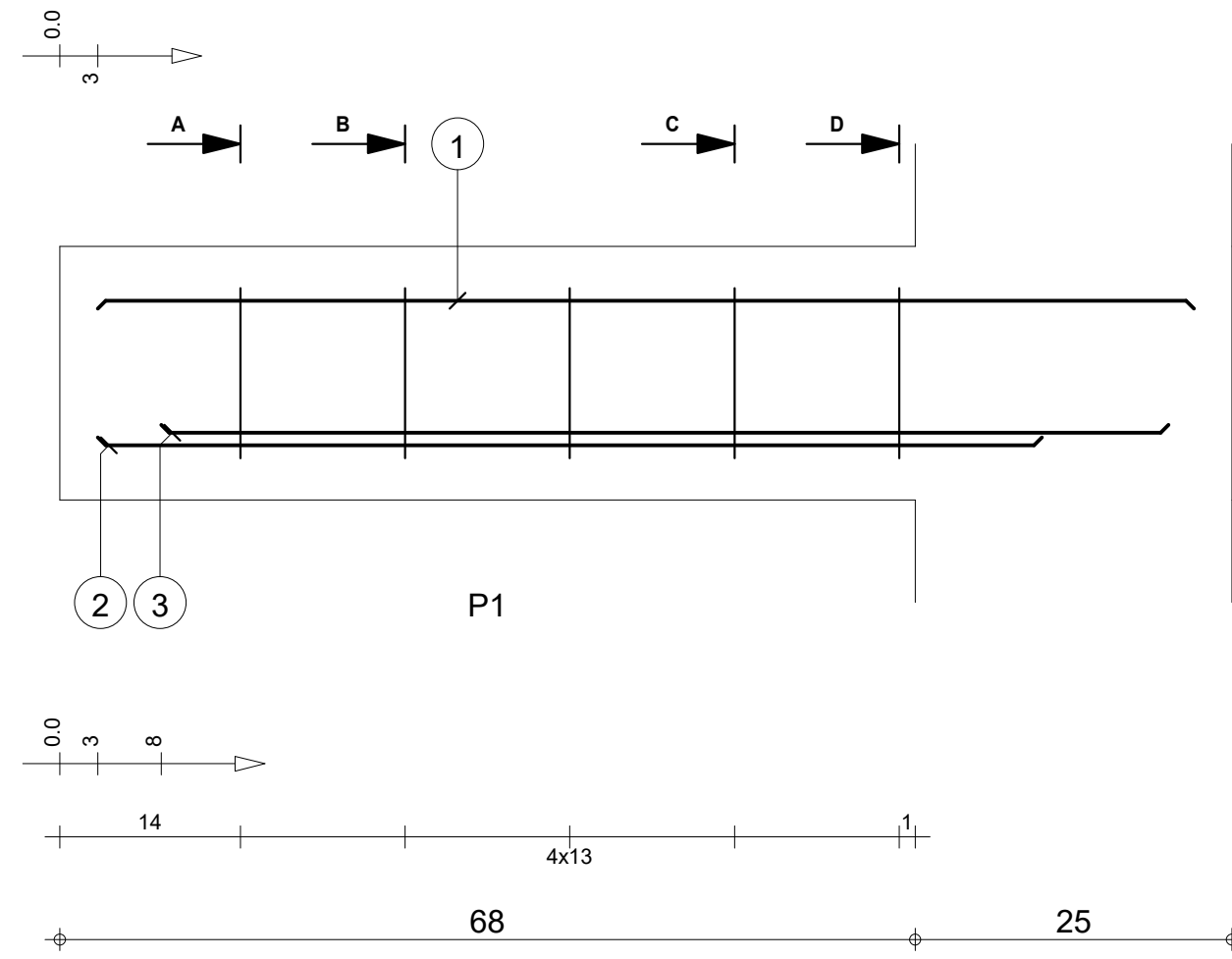
C-C

D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 12	I=5.25	00	④	3HA 10	I=8.06	00	⑦	3HA 10	I=7.96	00
②	11HA 6	I=46	00	⑤	13HA 6	I=46	00	⑧	3HA 10	I=2.88	00
③	11HA 6	I=1.07	31	⑥	3HA 10	I=1.10	00	⑨	13HA 6	I=1.07	31

STRUCTURE BATIMENT CEA/ITECH-MTV B 20				Section 20x40				Nombre 1		Béton : BETON20 = 0.65 m3		Acier HA 400 = 51 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B										Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 90.92 kg/ m3		Echelle pour la vue 4.46cm/m	
										Surface du coffrage = 8.08 m2		Echelle pour la section 9.34cm/m	
												Page 20/45	



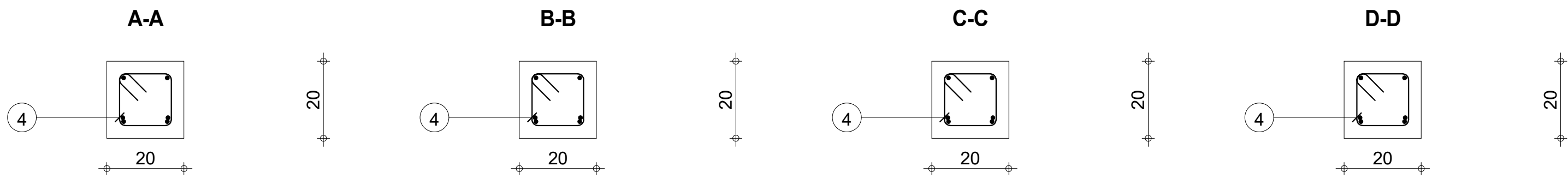
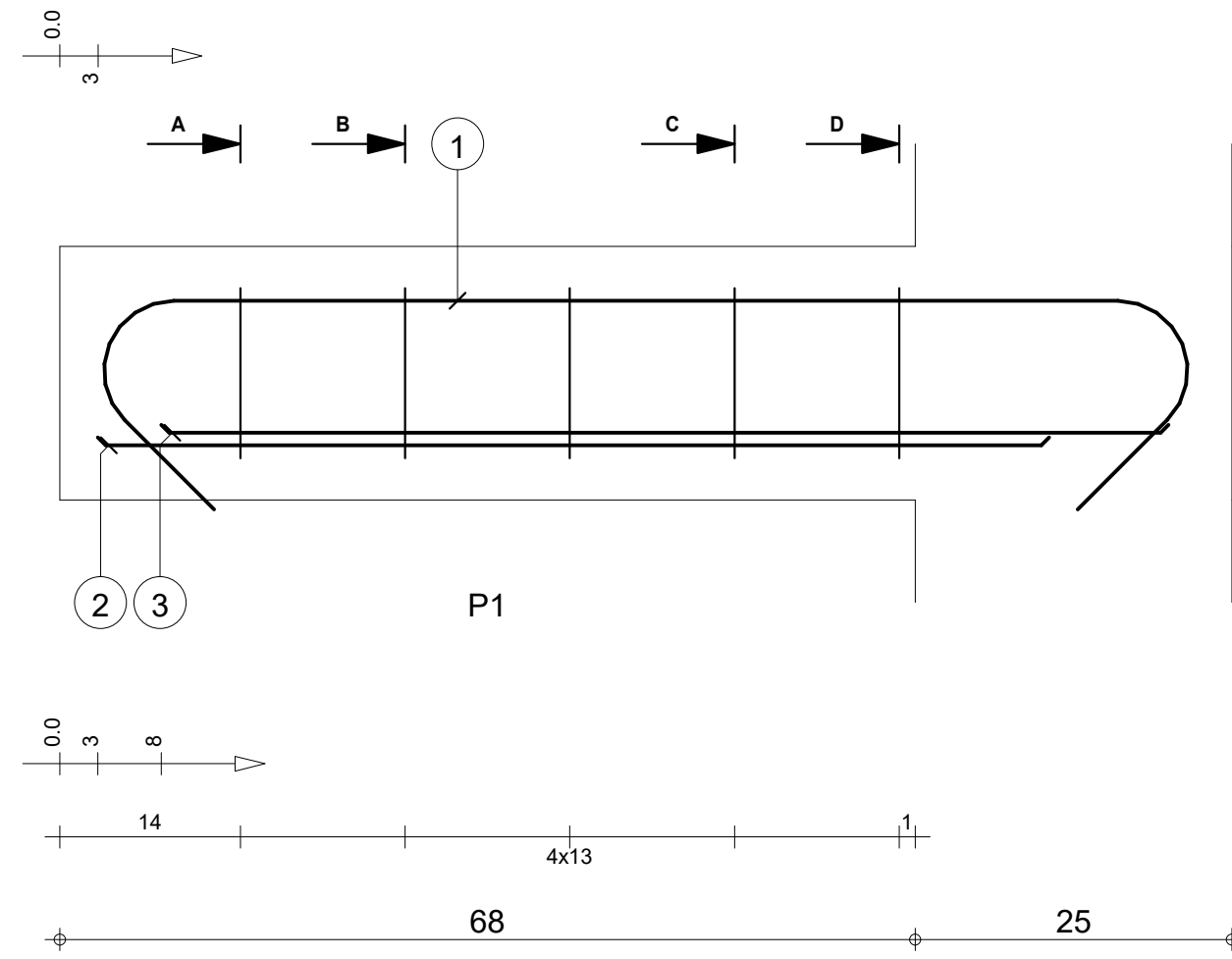
A-A

B-B

C-C

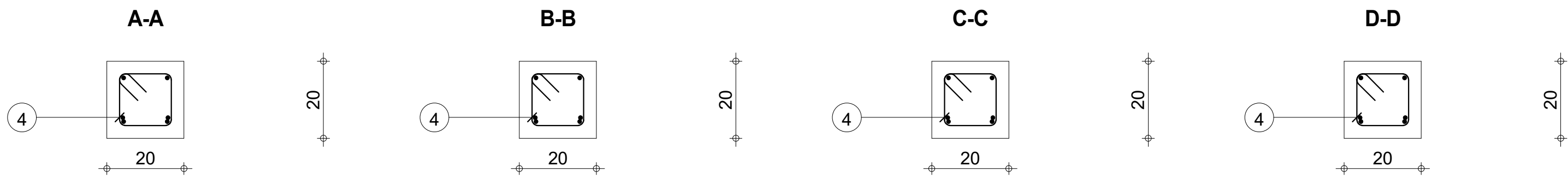
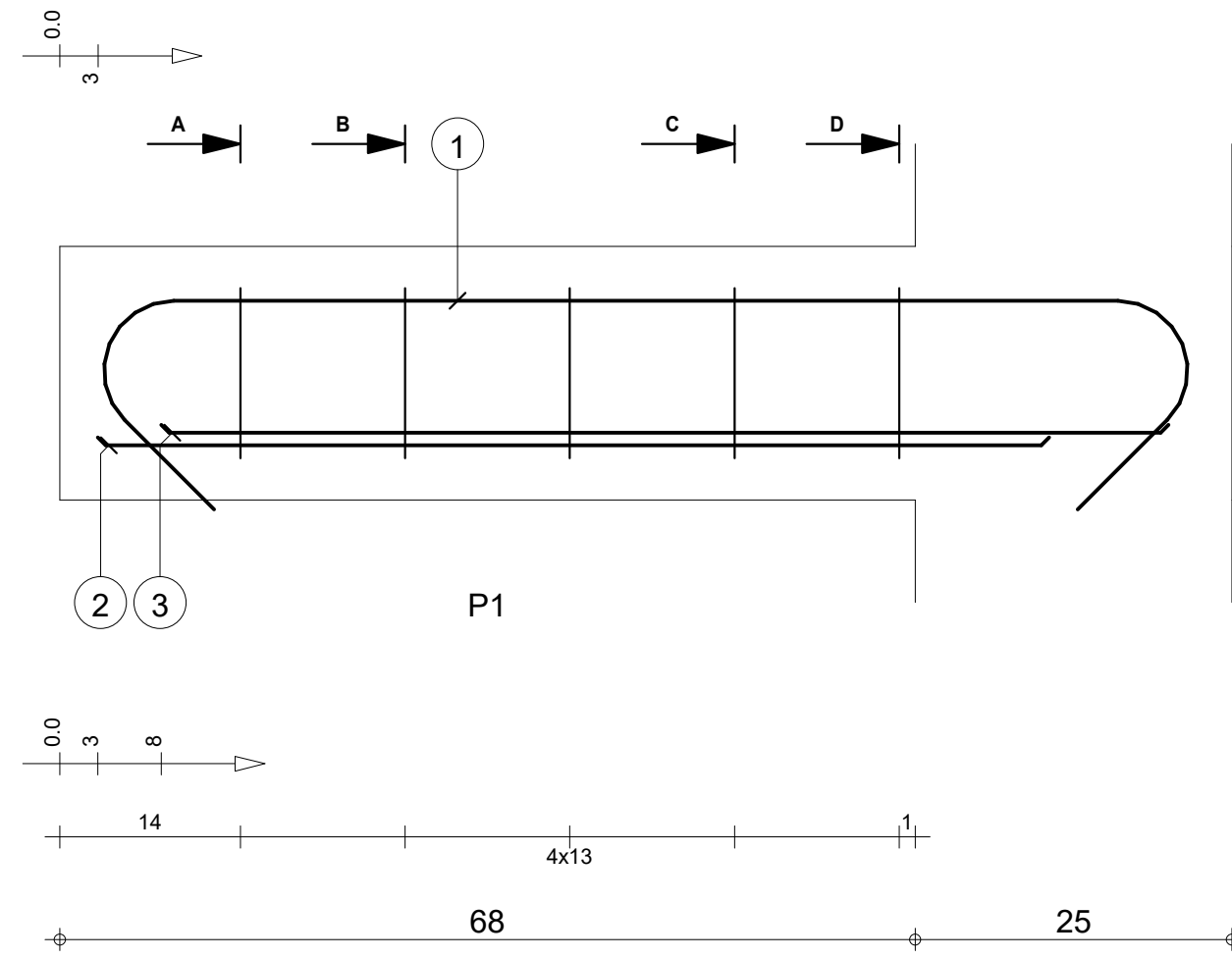
D-D

Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=87	00	④	5HA 6	I=68	31
②	2HA 10	I=75	00				
③	2HA 10	I=80	00				



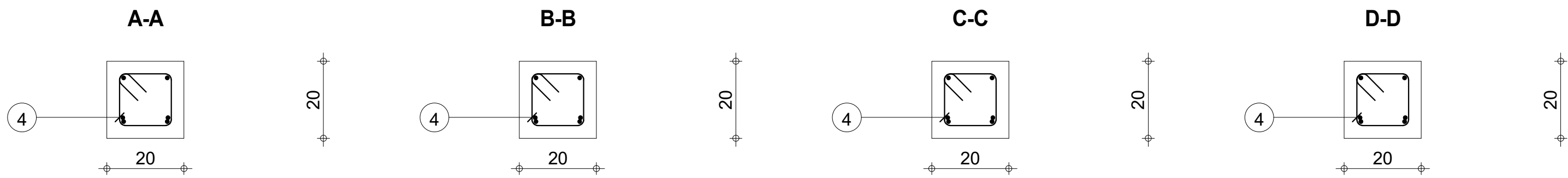
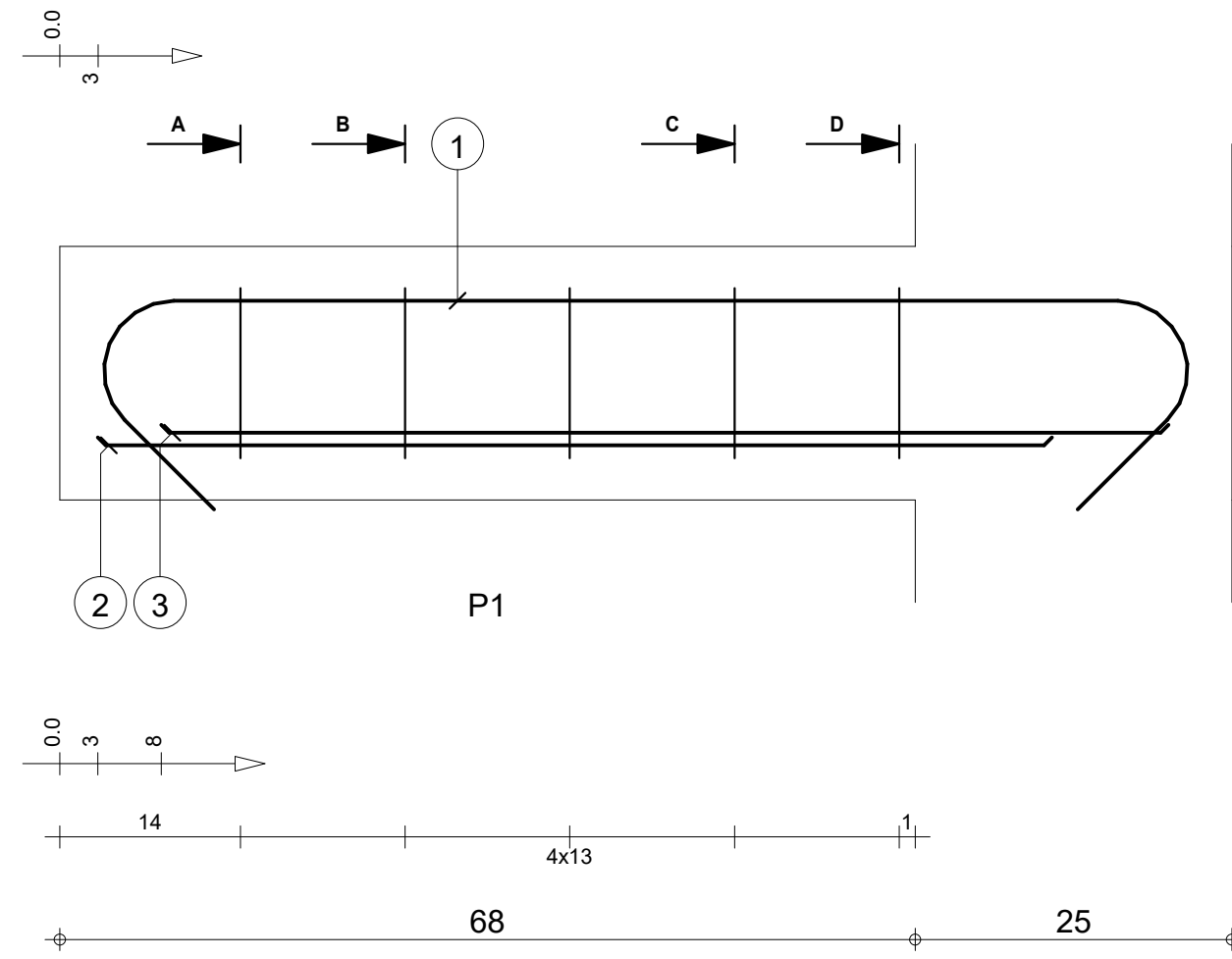
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10 l=1.20	00		④	5HA 6 l=68	31	
②	2HA 10 l=75	00					
③	2HA 10 l=80	00					

STRUCTURE BATIMENT CEA/ITECH-MTV		B 22: P1		Nombre 1		Béton : BETON20 = 0.037 m3		Acier HA 400 = 3.39 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x20				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 111.9 kg/ m3		Echelle pour la vue 17.1cm/m	
						Surface du coffrage = 0.585 m2		Echelle pour la section 9.34cm/m	
								Page 22/45	



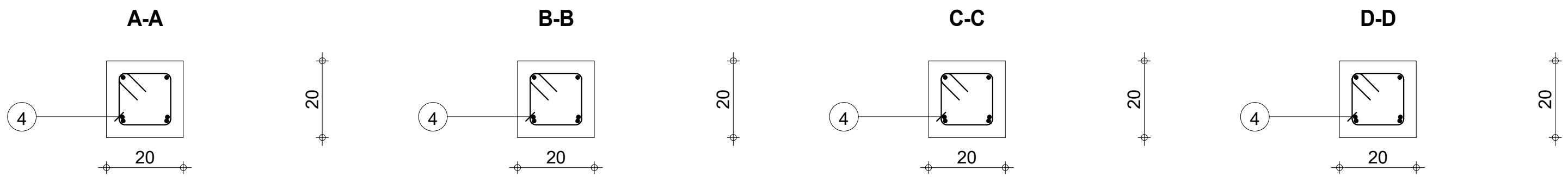
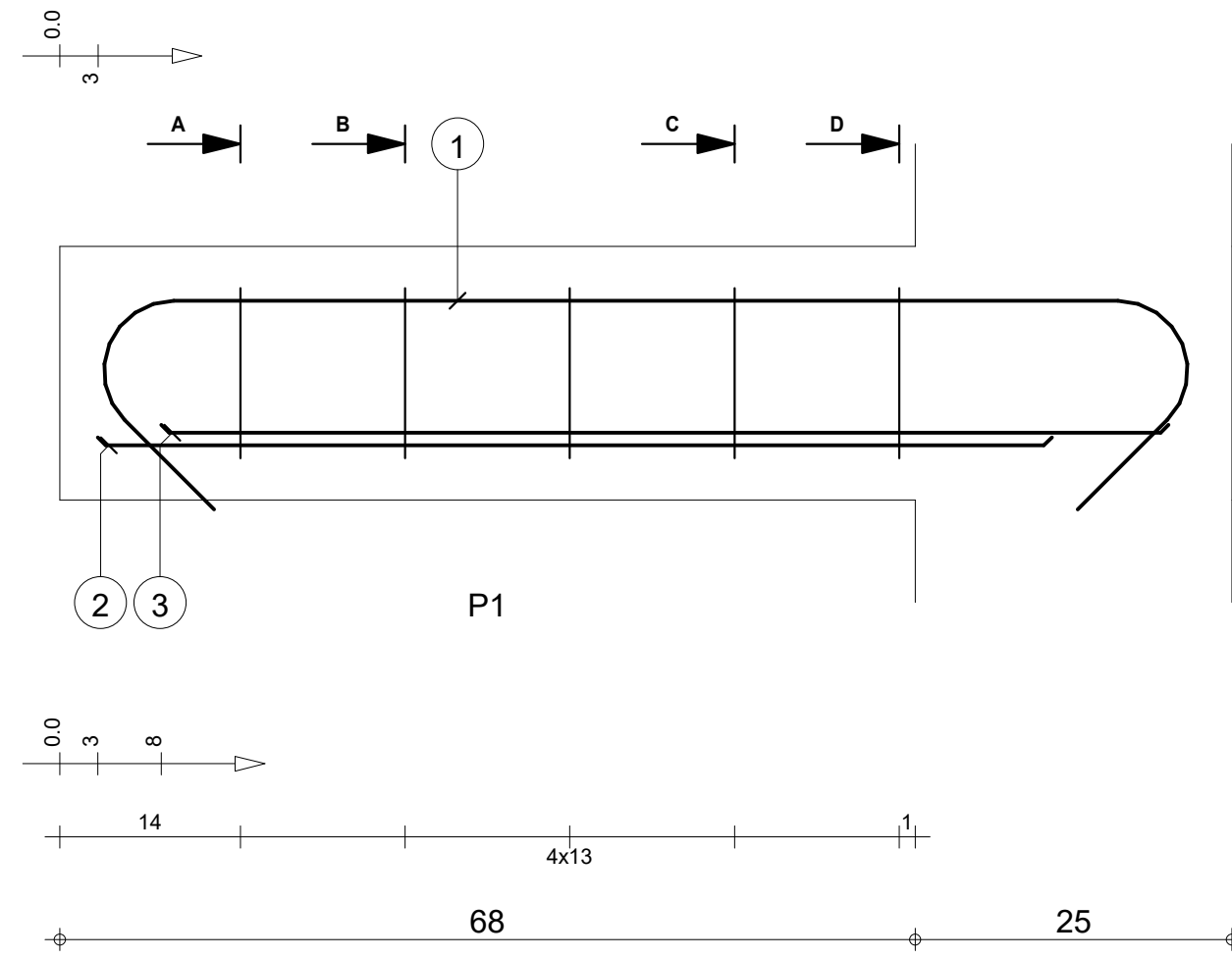
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10 l=1.20	00		④	5HA 6 l=68	31	
②	2HA 10 l=75	00					
③	2HA 10 l=80	00					

STRUCTURE BATIMENT CEA/ITECH-MTV		B 23: P1		Nombre 1		Béton : BETON20 = 0.037 m3		Acier HA 400 = 3.39 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x20				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 111.9 kg/ m3		Echelle pour la vue 17.1cm/m	
						Surface du coffrage = 0.585 m2		Echelle pour la section 9.34cm/m	
								Page 23/45	



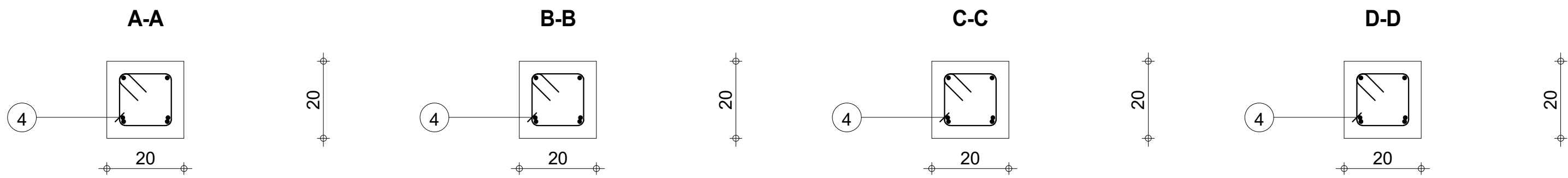
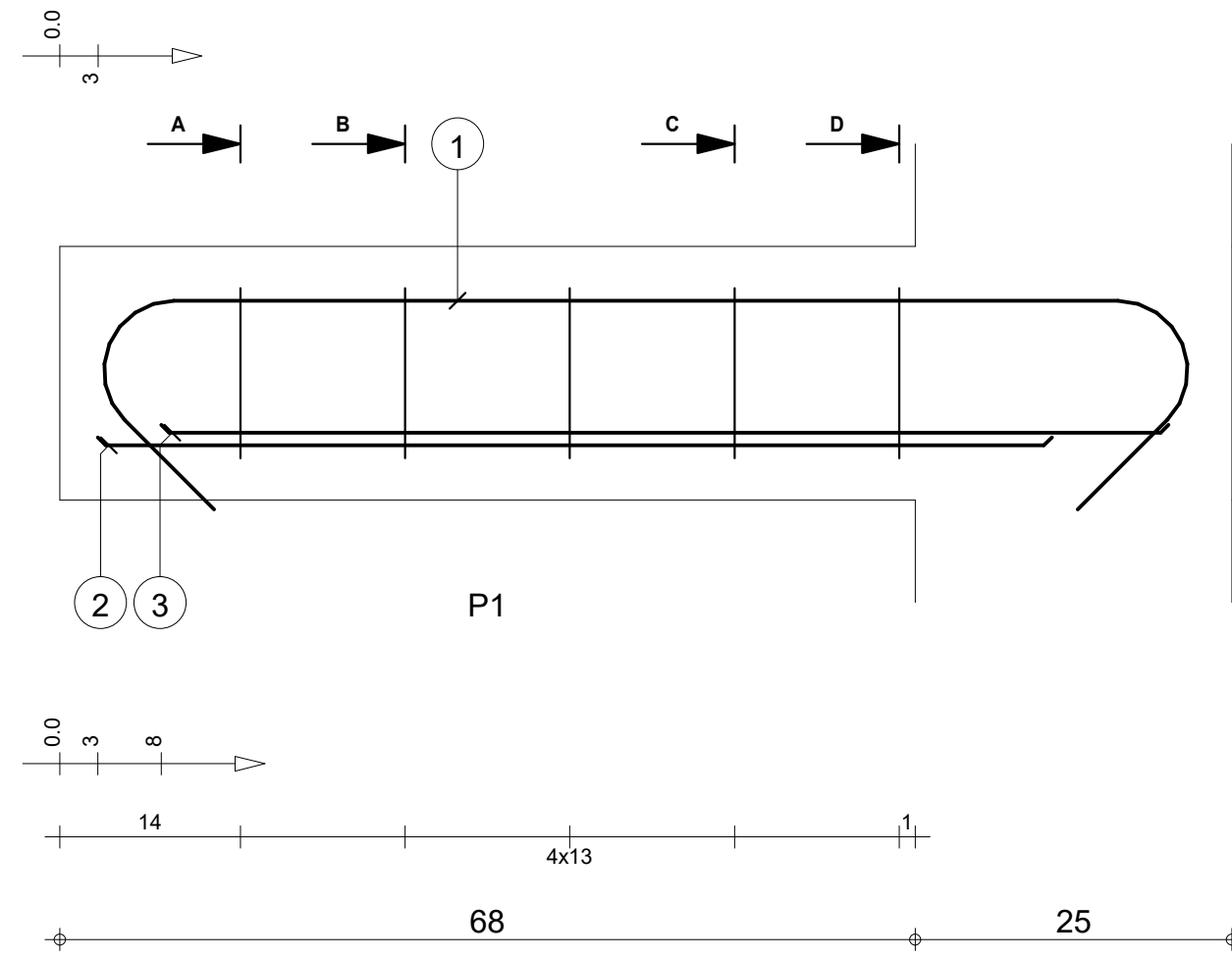
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
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②	2HA 10 l=75	00					
③	2HA 10 l=80	00					

Tél.		Fax		Nombre 1		Béton : BETON20 = 0.037 m3		Acier HA 400 = 3.39 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV		B 24: P1		Section 20x20		Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 112.2 kg/ m3		Echelle pour la vue 17.1cm/m	
						Surface du coffrage = 0.585 m2		Echelle pour la section 9.34cm/m	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B								Page 24/45	



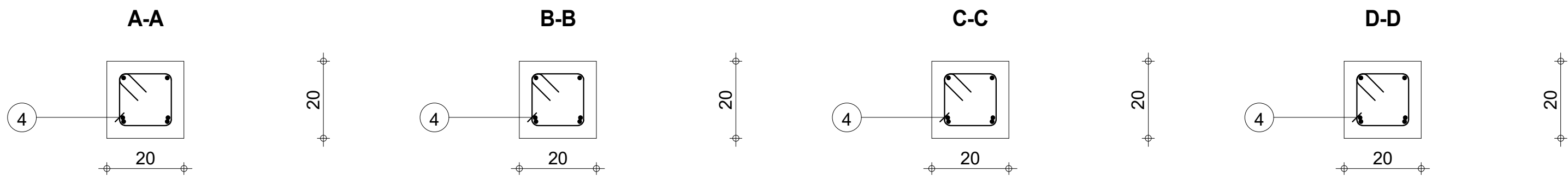
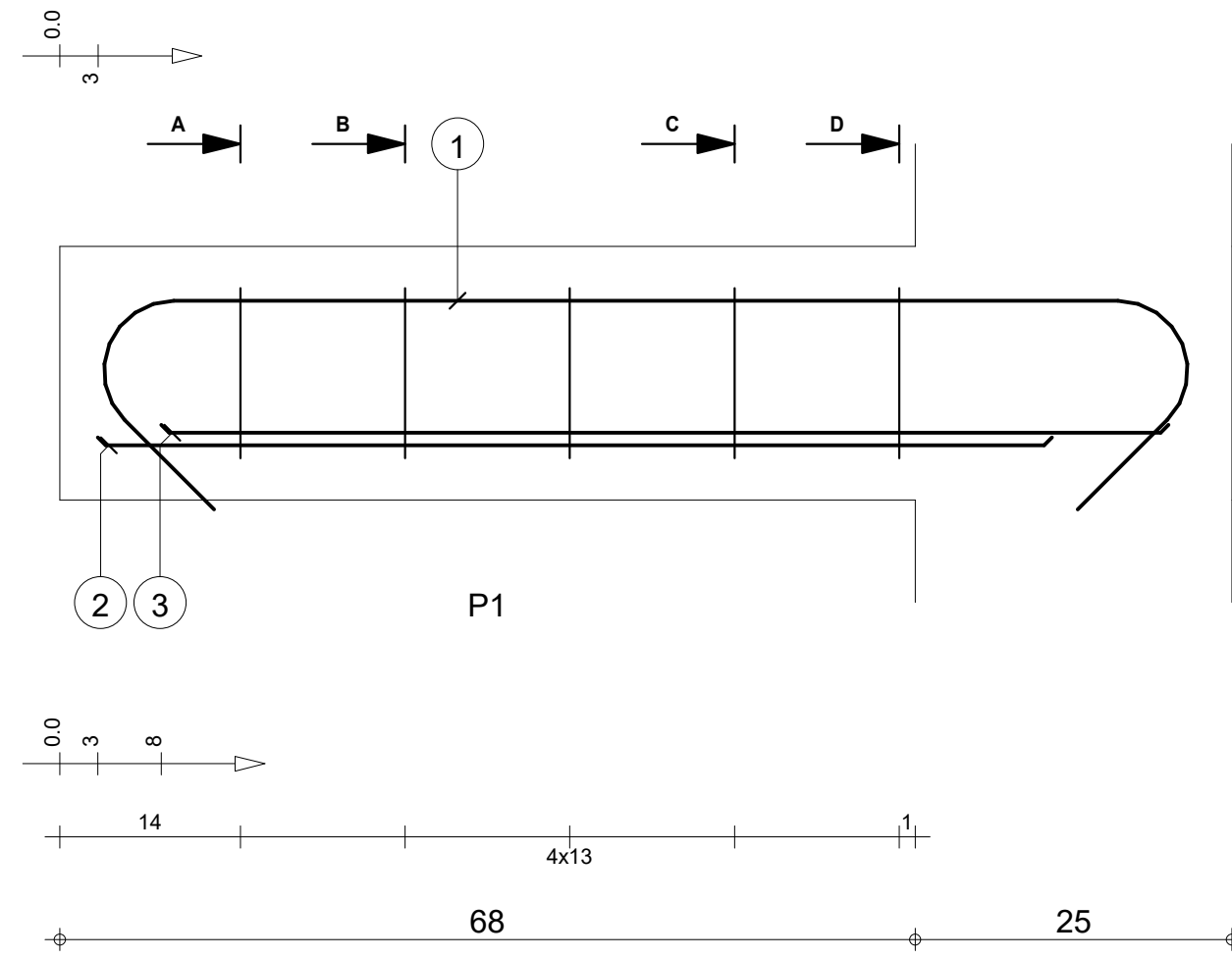
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme		
①	2HA 10	I=1.20	00		④	5HA 6	I=68	31	
②	2HA 10	I=75	00						
③	2HA 10	I=80	00						

Tél.		Fax		Nombre 1		Acier HA 400 = 3.39 kg							
STRUCTURE BATIMENT CEA/ITECH-MTV		B 25: P1				Béton : BETON20 = 0.037 m3		Acier HA 400 = 0.753 kg					
						Enrobage inférieur 3 cm		Enrobage supérieur 3 cm		Enrobage latéral 3 cm			
						Densité = 112.2 kg/ m3		Echelle pour la vue 17.1cm/m		Page 25/45			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x20		Surface du coffrage = 0.585 m2		Echelle pour la section 9.34cm/m							



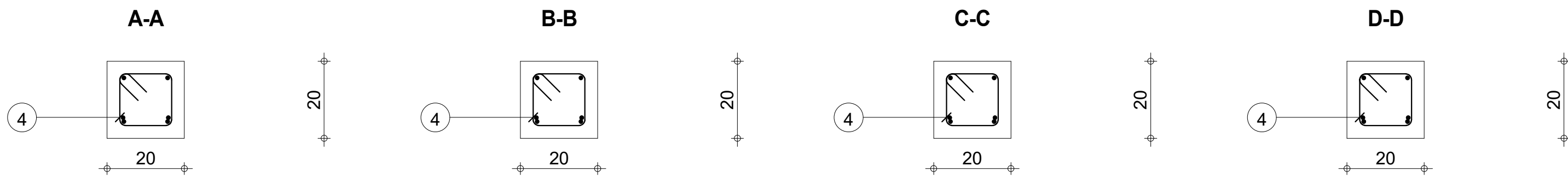
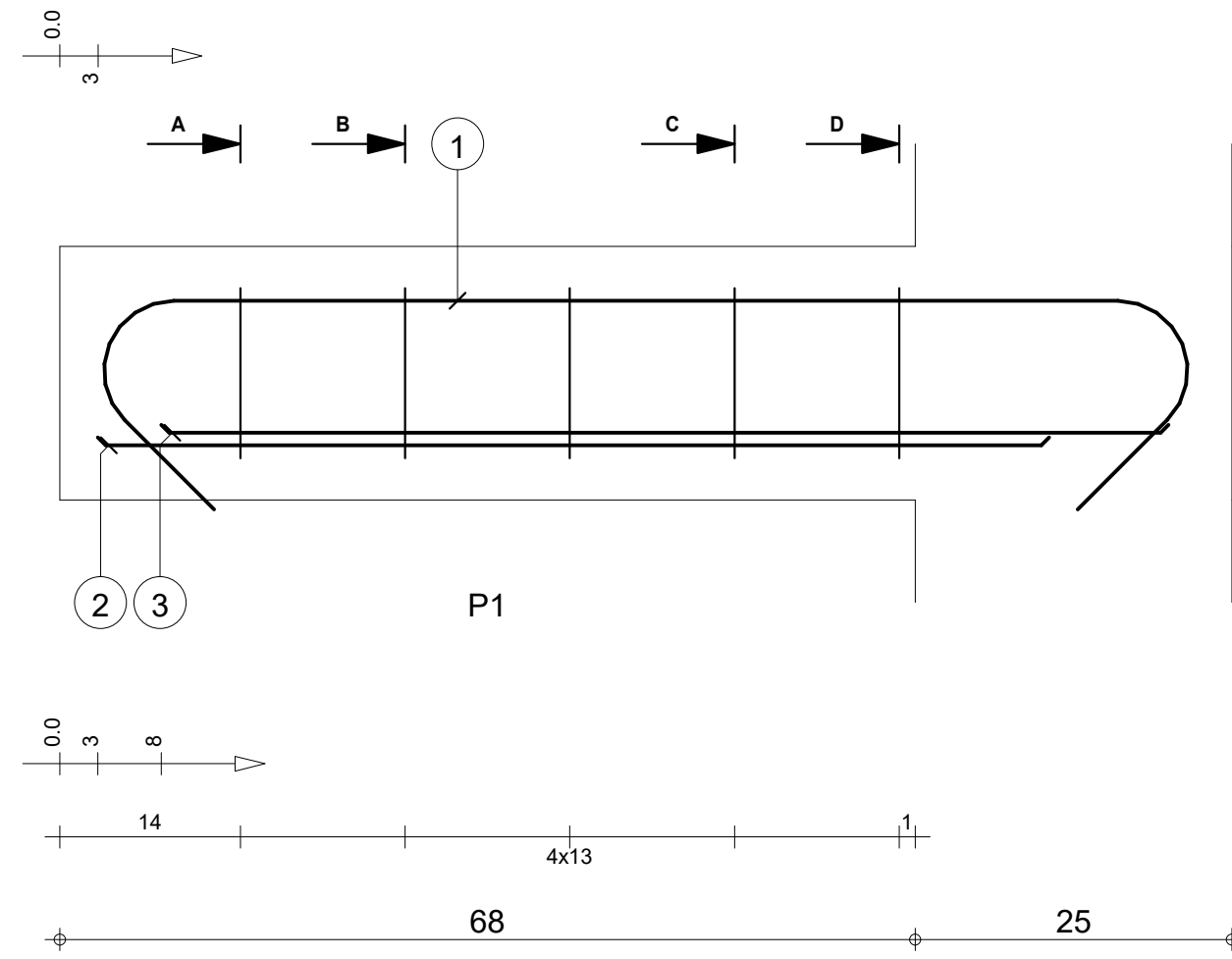
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.20	00	④	5HA 6	I=68	31
②	2HA 10	I=75	00				
③	2HA 10	I=80	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		B 26: P1		Nombre 1		Béton : BETON20 = 0.037 m3		Acier HA 400 = 3.39 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x20				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 112.2 kg/ m3		Echelle pour la vue 17.1cm/m	
						Surface du coffrage = 0.585 m2		Echelle pour la section 9.34cm/m	
								Page 26/45	



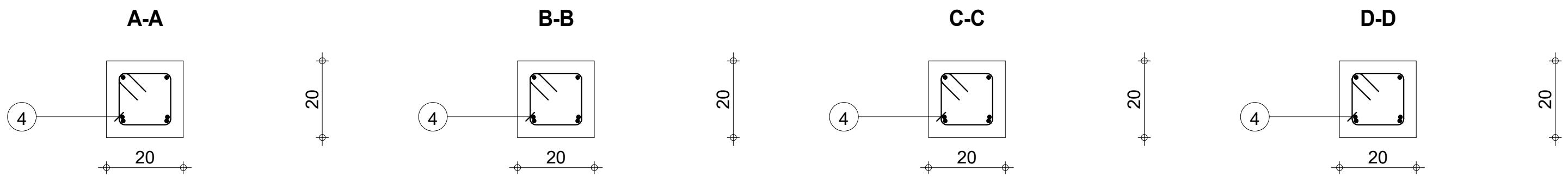
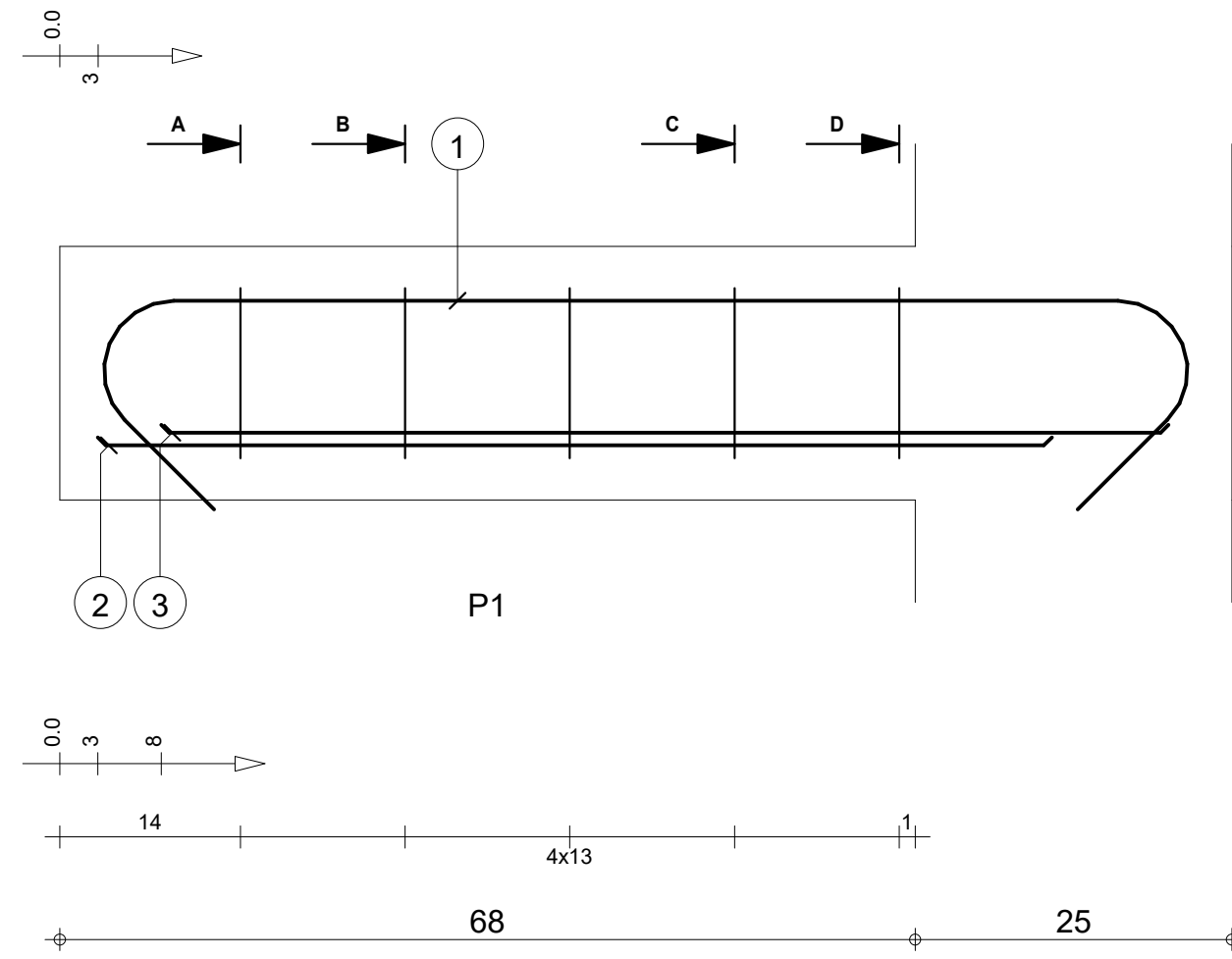
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①	2HA 10 l=1.20	00		④	5HA 6 l=68	31	
②	2HA 10 l=75	00					
③	2HA 10 l=80	00					

STRUCTURE BATIMENT CEA/ITECH-MTV		B 27: P1		Nombre 1		Béton : BETON20 = 0.037 m3		Acier HA 400 = 3.39 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x20				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 112.2 kg/ m3		Echelle pour la vue 17.1cm/m	
						Surface du coffrage = 0.585 m2		Echelle pour la section 9.34cm/m	
								Page 27/45	



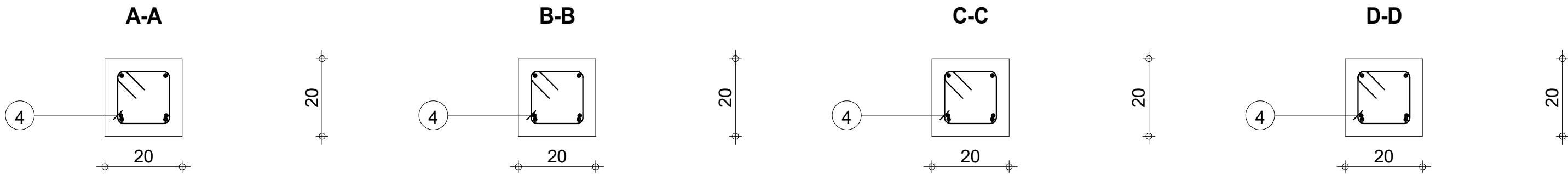
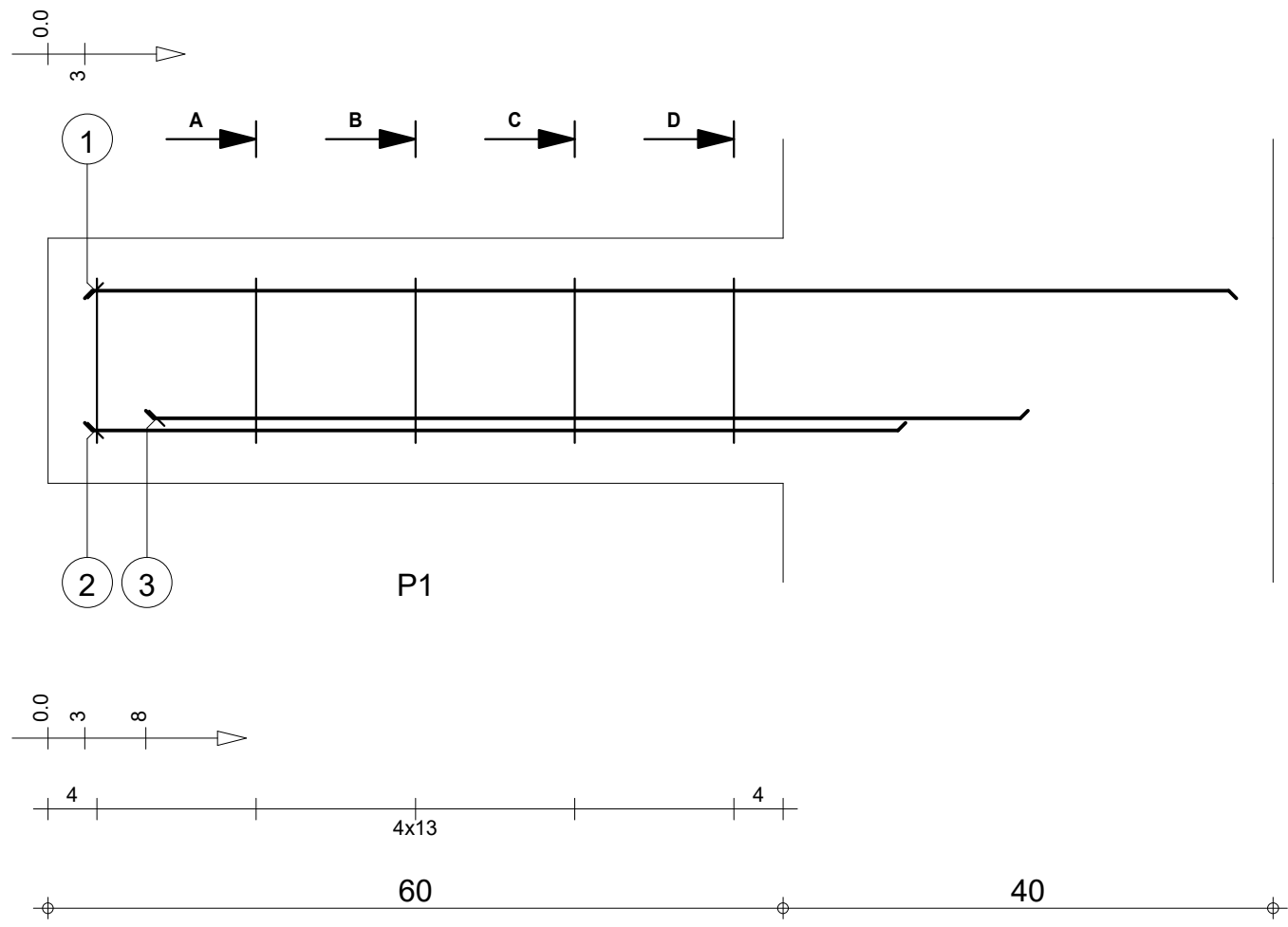
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②	2HA 10	I=75	00				
③	2HA 10	I=80	00				

STRUCTURE BATIMENT CEA/ITECH-MTV		B 28: P1		Nombre 1		Béton : BETON20 = 0.037 m3		Acier HA 400 = 3.39 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 20x20				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 111.9 kg/ m3		Echelle pour la vue 17.1cm/m	
						Surface du coffrage = 0.585 m2		Echelle pour la section 9.34cm/m	
								Page 28/45	



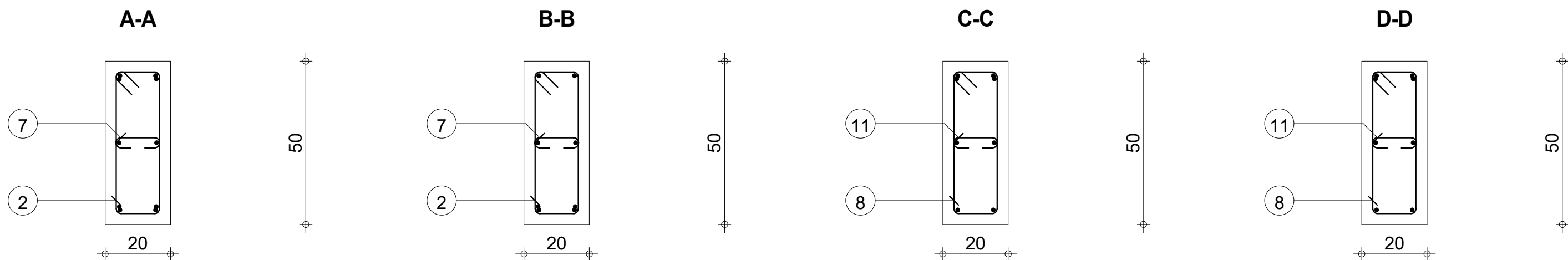
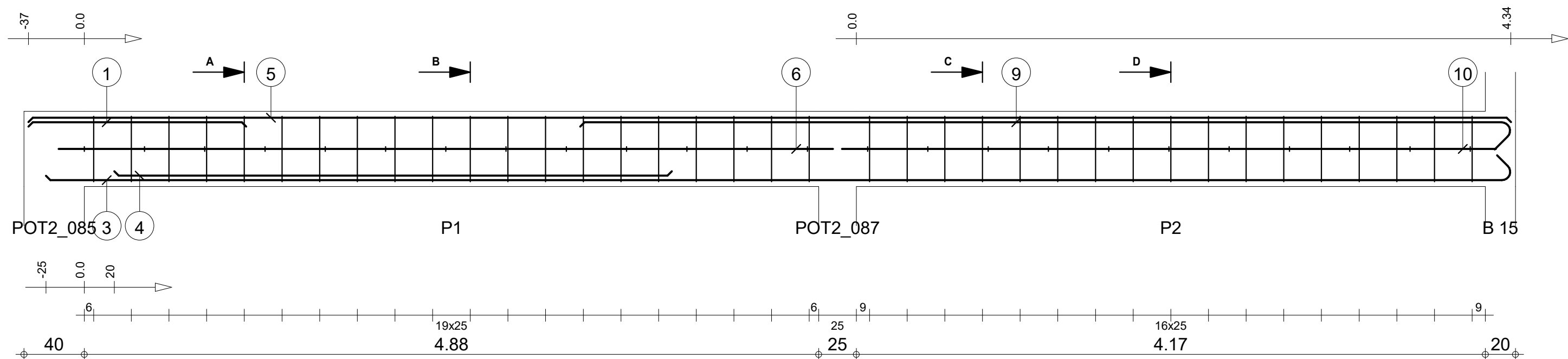
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②	2HA 10	I=75	00	_____ 75 _____					
③	2HA 10	I=80	00	_____ 80 _____					

Tél.		Fax		Nombre 1		Béton : BETON20 = 0.037 m3		Acier HA 400 = 3.39 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV		B 29: P1		Section 20x20		Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 112.2 kg/ m3		Echelle pour la vue 17.1cm/m	
						Surface du coffrage = 0.585 m2		Echelle pour la section 9.34cm/m	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B								Page 29/45	



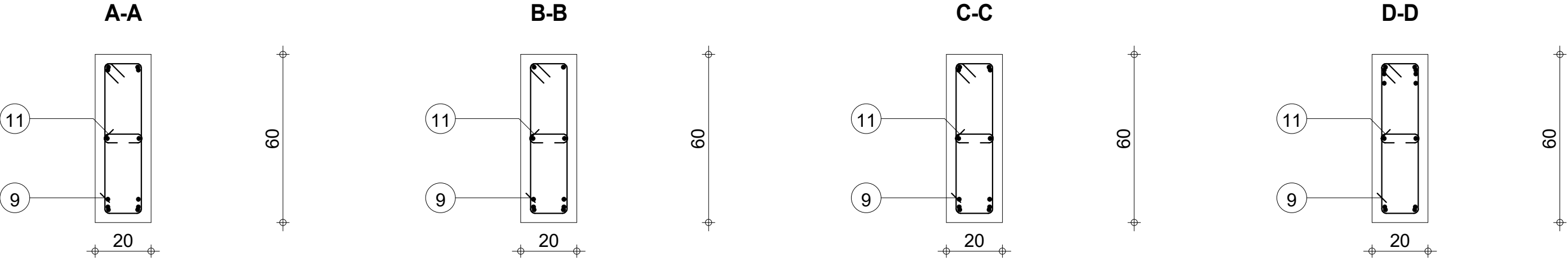
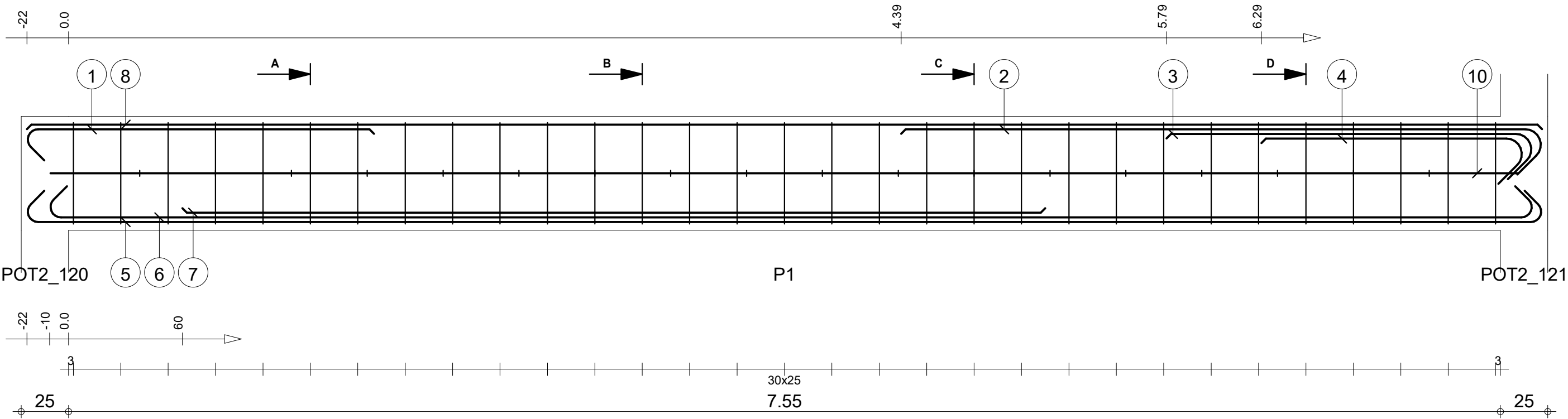
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②	2HA 10	I=67	00	_____67_____					
③	2HA 10	I=72	00	_____72_____					

Tél.		Fax		Nombre 1		Béton : BETON20 = 0.04 m3		Acier HA 400 = 2.87 kg	
STRUCTURE BATIMENT CEA/ITECH-MTV		B 30: P1		Section 20x20		Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 90.75 kg/ m3		Echelle pour la vue 17.1cm/m	
						Surface du coffrage = 0.6 m2		Echelle pour la section 9.34cm/m	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B								Page 30/45	



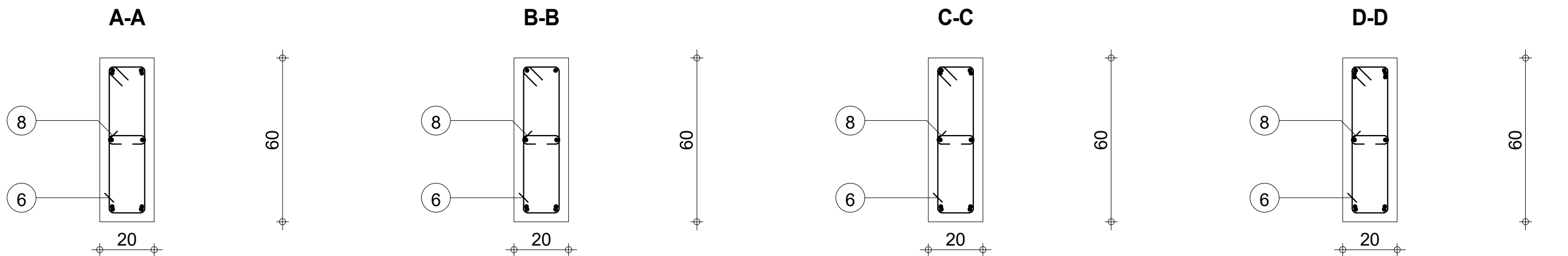
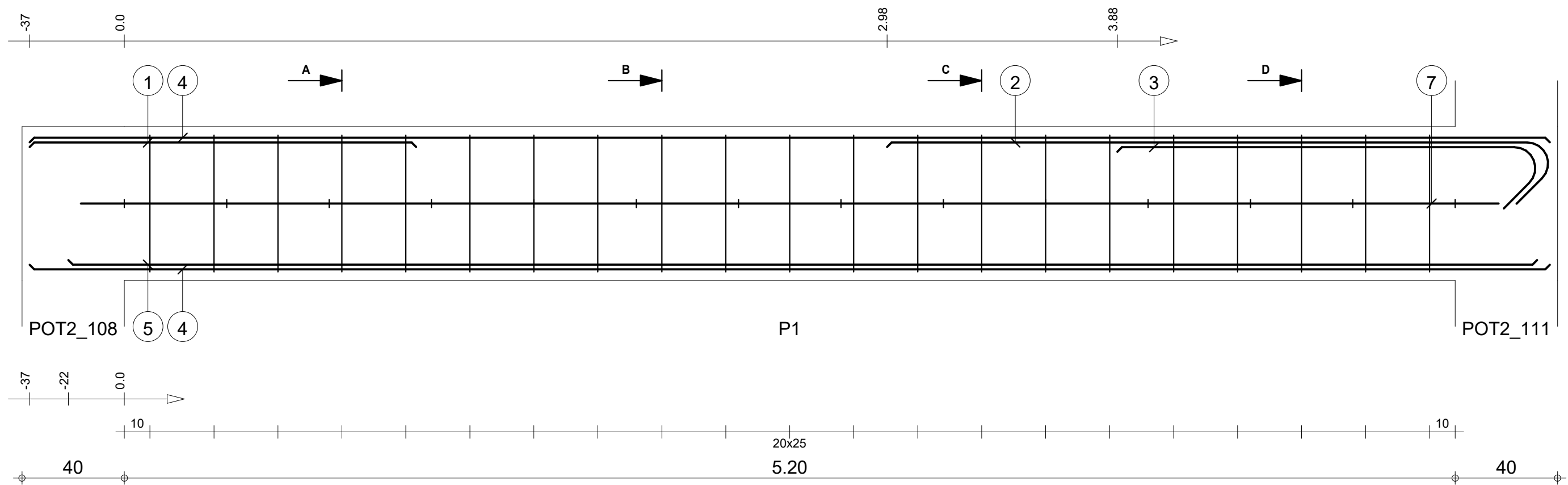
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②	20HA 6	I=1.27	31	⑤	2HA 10	I=9.84	00	⑧	17HA 6	I=1.27	31	⑪	11HA 6	I=26	00
③	2HA 10	I=9.89	00	⑥	2HA 10	I=5.14	00	⑨	2HA 12	I=6.37	00				

STRUCTURE BATIMENT CEA/ITECH-MTV B 31				COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x50				Nombre 1			
Tél.				Fax				Béton : BETON20 = 0.99 m3				Acier HA 400 = 42 kg			
								Enrobage inférieur 3 cm				Enrobage supérieur 3 cm			
								Densité = 66.16 kg/ m3				Echelle pour la vue 3.68cm/m			
								Surface du coffrage = 11.9 m2				Echelle pour la section 7.8cm/m			
												Page 31/45			



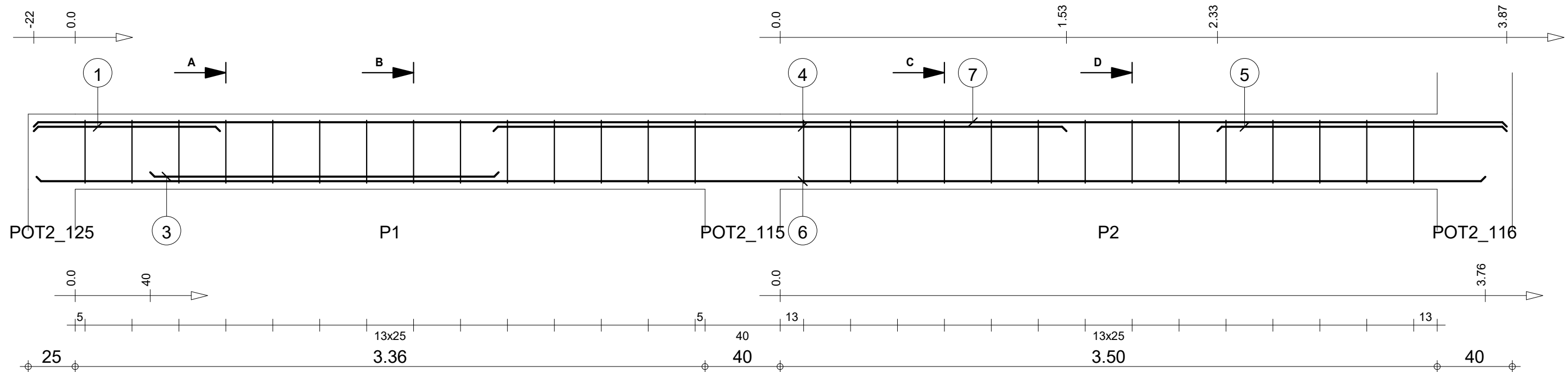
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①	2HA 10	l=2.00	00	1.83	④	2HA 14	l=1.62	00	1.38	⑦	2HA 10	l=4.55	00	4.55	⑩	2HA 10	l=7.74	00	7.74
②	2HA 14	l=3.62	00	3.38	⑤	2HA 10	l=8.33	00	7.99	⑧	2HA 10	l=7.99	00	7.99	⑪	18HA 6	l=26	00	14
③	2HA 14	l=2.17	00	1.93	⑥	2HA 10	l=8.16	00	7.82	⑨	31HA 6	l=1.47	31	14					

STRUCTURE BATIMENT CEA/ITECH-MTV B 32: P1										Nombre 1		Béton : BETON20 = 0.966 m3		Acier HA 400 = 56.2 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B												Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 79.61 kg/ m3		Echelle pour la vue 4.5cm/m	
												Surface du coffrage = 11.4 m2		Echelle pour la section 6.58cm/m	
														Page 32/45	



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme			
①	2HA 10	l=1.51	00	1.51	④	4HA 10	l=5.94	00	5.94	⑦	2HA 10	l=5.54	00	5.54
②	2HA 14	l=2.83	00	2.59	⑤	2HA 10	l=5.74	00	5.74	⑧	14HA 6	l=26	00	5 14
③	2HA 14	l=1.88	00	1.64	⑥	21HA 6	l=1.47	31	14 1.47 31					

STRUCTURE BATIMENT CEA/ITECH-MTV				B 33: P1				Nombre 1				Béton : BETON20 = 0.72 m3		Acier HA 400 = 35 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 68.75 kg/ m3		Echelle pour la vue 5.97cm/m	
												Surface du coffrage = 8.48 m2		Echelle pour la section 6.58cm/m	
														Page 33/45	

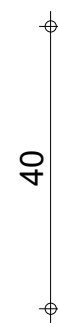
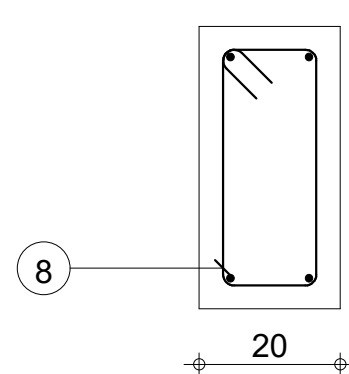
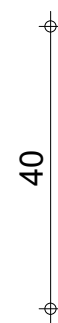
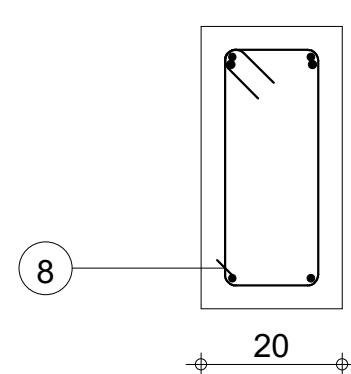
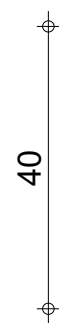
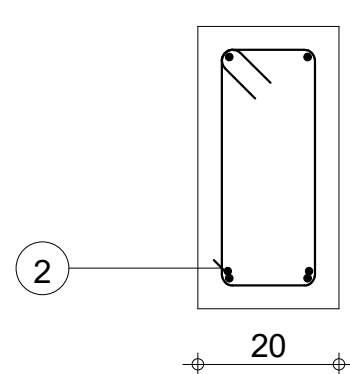
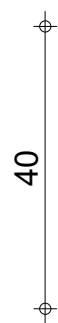
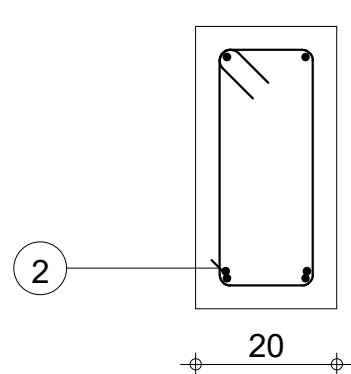


A-A

B-B

C-C

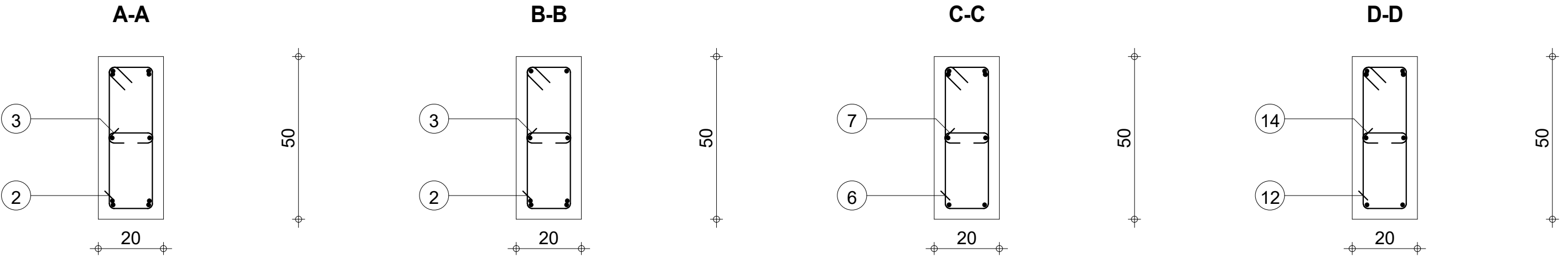
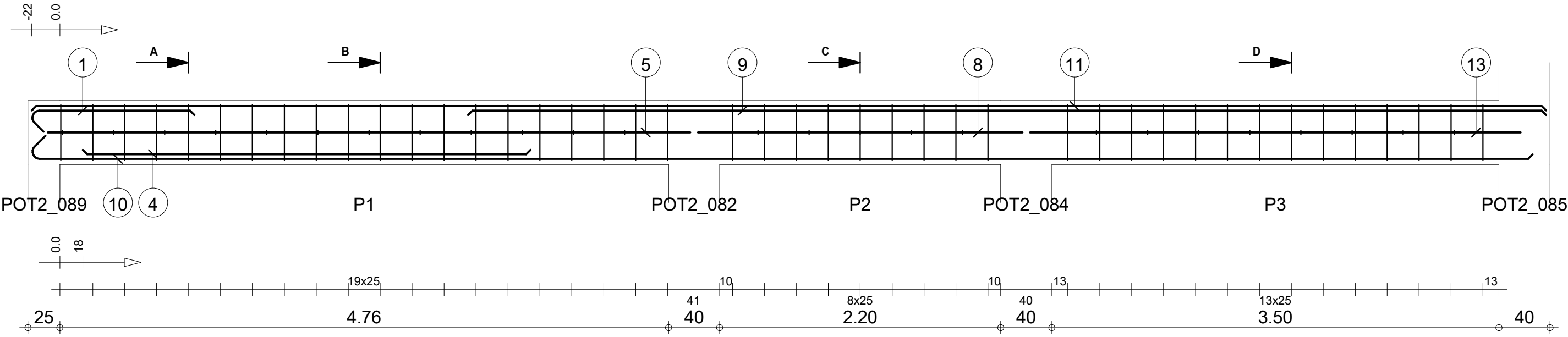
D-D



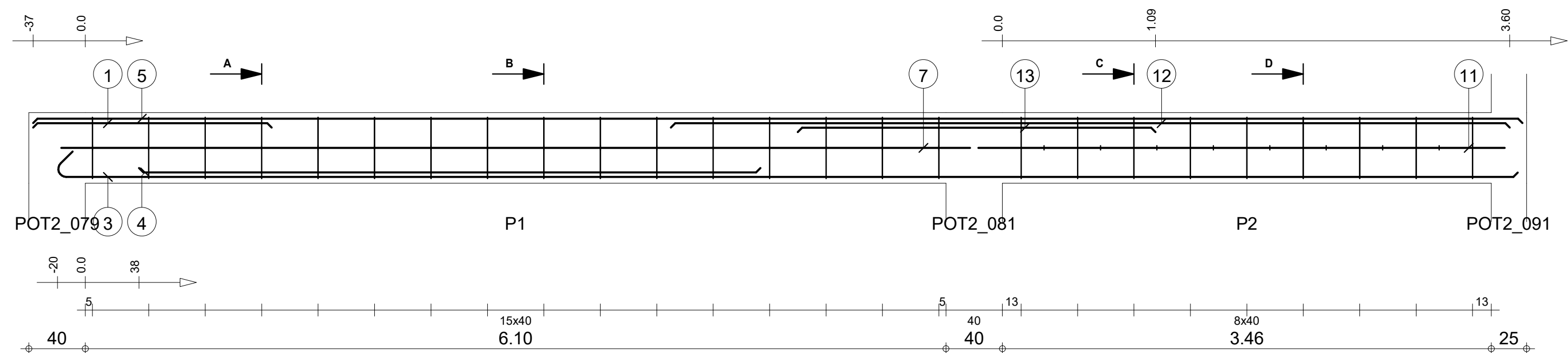
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②	14HA 6	I=1.07	31	14 31 1.07	⑤	2HA 12	I=1.54	00	1.54	⑧	14HA 6	I=1.07	31	14 31 1.07
③	2HA 10	I=1.86	00	1.86	⑥	2HA 10	I=7.72	00	7.72					

STRUCTURE BATIMENT CEA/ITECH-MTV B 34				Tél.		Fax		Nombre 1		Béton : BETON20 = 0.632 m3		Acier HA 400 = 30.9 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B										Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
										Densité = 59.34 kg/ m3		Echelle pour la vue 4.58cm/m	
										Surface du coffrage = 7.86 m2		Echelle pour la section 9.34cm/m	
												Page 34/45	

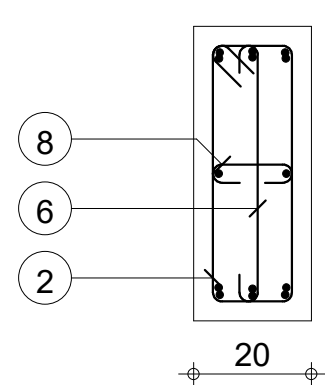
Section 20x40



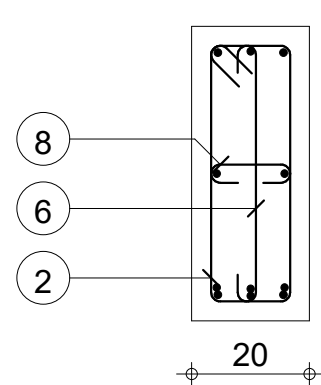
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①	2HA 10	I=1.44	00	④	2HA 12	I=3.50	00	⑦	5HA 6	I=26	00	⑩	2HA 12	I=11.94	00	⑬	2HA 10	I=3.84	00
②	20HA 6	I=1.27	31	⑤	2HA 10	I=5.03	00	⑧	2HA 10	I=2.54	00	⑪	2HA 10	I=11.86	00	⑭	8HA 6	I=26	00
③	12HA 6	I=26	00	⑥	9HA 6	I=1.27	31	⑨	2HA 14	I=8.44	00	⑫	14HA 6	I=1.27	31				
Tél.								Fax											
STRUCTURE BATIMENT CEA/ITECH-MTV B 35								Nombre 1								Acier HA 400 = 64.2 kg			
																Acier HA 400 = 27.7 kg			
																Enrobage inférieur 3 cm			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B																Enrobage supérieur 3 cm			
																Enrobage latéral 3 cm			
																Densité = 77.23 kg/ m3			
																Surface du coffrage = 14.2 m2			
																Echelle pour la vue 3.07cm/m			
																Echelle pour la section 7.8cm/m			
																Page 35/45			



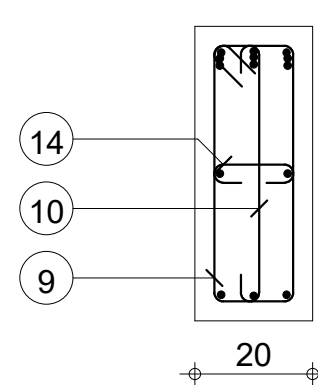
A-A



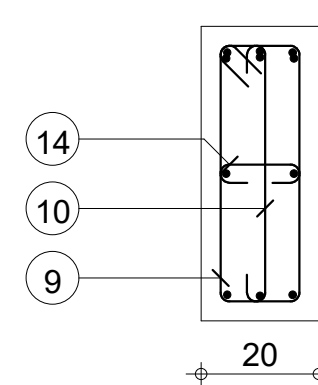
B-B



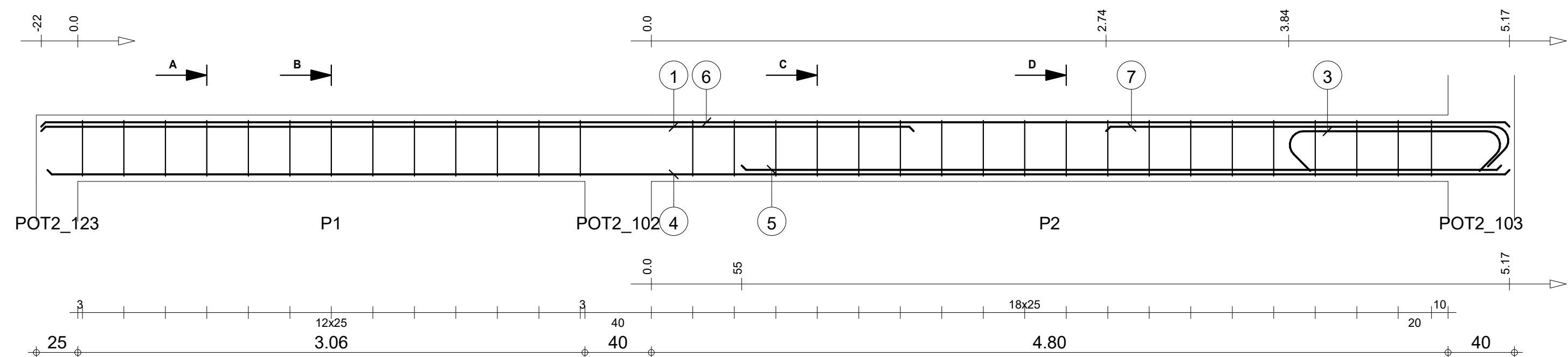
C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	3HA 10	I=1.69	00	1.69	④	3HA 12	I=4.41	00	4.41	⑦	2HA 10	I=6.44	00	6.44	⑩	9HA 6	I=56	00	5 44
②	16HA 6	I=1.28	31	14 6	⑤	3HA 10	I=10.56	00	10.56	⑧	16HA 6	I=26	00	5 14	⑪	2HA 10	I=3.73	00	3.73
③	3HA 12	I=10.54	00	5 10.35	⑥	16HA 6	I=56	00	5 44	⑨	9HA 6	I=1.28	31	14 6	⑫	3HA 12	I=5.95	00	5.95
Tél.								Fax								Acier HA 400 = 85 kg			
STRUCTURE BATIMENT CEA/ITECH-MTV B 36								Nombre 1								Béton : BETON20 = 1.06 m3			
																Acier HA 400 = 24.1 kg			
																Enrobage inférieur 3 cm			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B																Enrobage supérieur 3 cm			
																Enrobage latéral 3 cm			
																Densité = 102.8 kg/ m3			
																Echelle pour la vue 3.44cm/m			
																Echelle pour la section 7.8cm/m			
																Page 36/45			

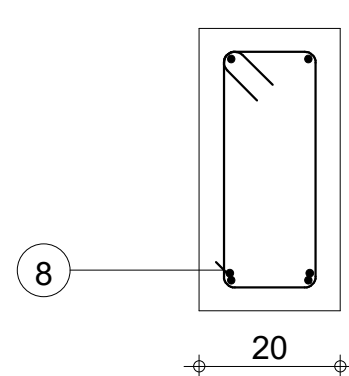
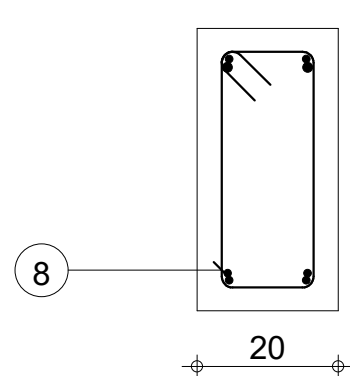
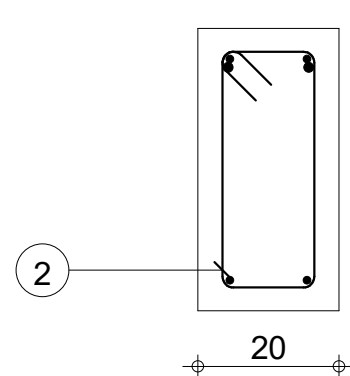
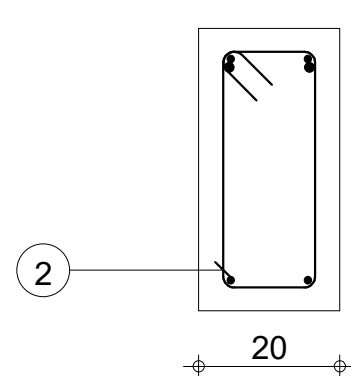


A-A

B-B

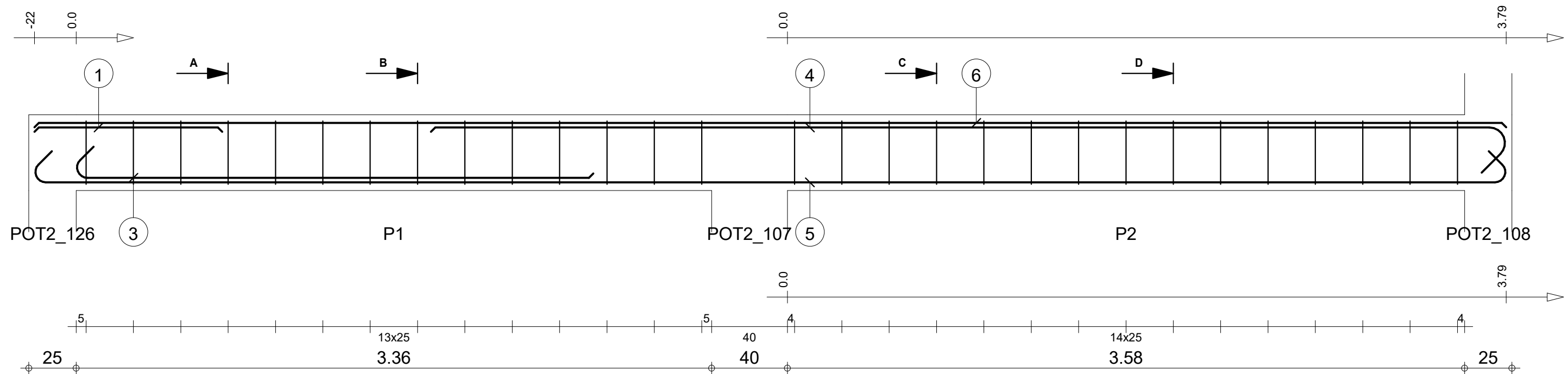
C-C

D-D



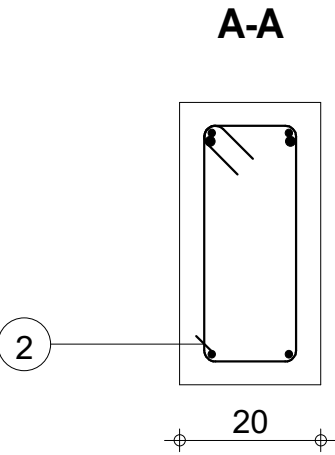
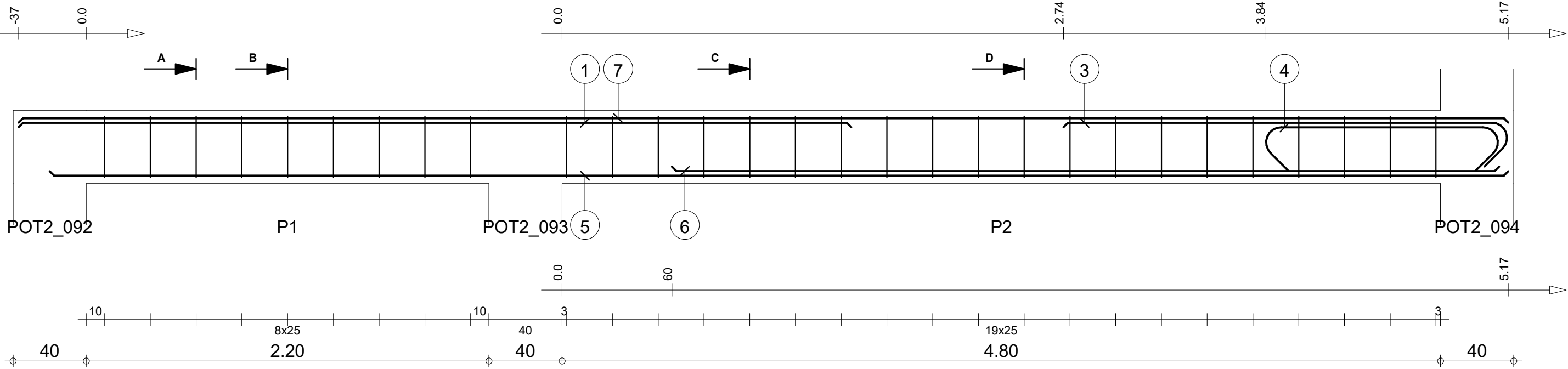
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 14	I=5.25	00	④	2HA 10	I=8.81	00	⑦	2HA 14	I=2.67	00
②	13HA 6	I=1.07	31	⑤	2HA 10	I=4.58	00	⑧	19HA 6	I=1.07	31
③	2HA 14	I=1.77	00	⑥	2HA 10	I=8.85	00				

STRUCTURE BATIMENT CEA/ITECH-MTV B 37				COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x40			
Tél.				Fax				Nombre 1			
Béton : BETON20 = 0.712 m3				Acier HA 400 = 50.8 kg				Acier HA 400 = 7.6 kg			
Enrobage inférieur 3 cm				Enrobage supérieur 3 cm				Enrobage latéral 3 cm			
Densité = 82.02 kg/ m3				Echelle pour la vue 4.08cm/m				Page 37/45			
Surface du coffrage = 8.86 m2				Echelle pour la section 9.34cm/m							

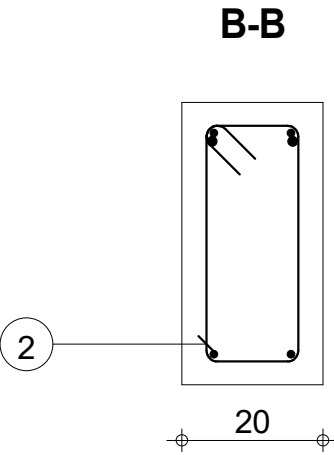


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=99	00	④	2HA 14	I=5.92	00	⑦	15HA 6	I=1.07	31
②	14HA 6	I=1.07	31	⑤	2HA 10	I=8.11	00				
③	2HA 10	I=2.90	00	⑥	2HA 10	I=7.77	00				

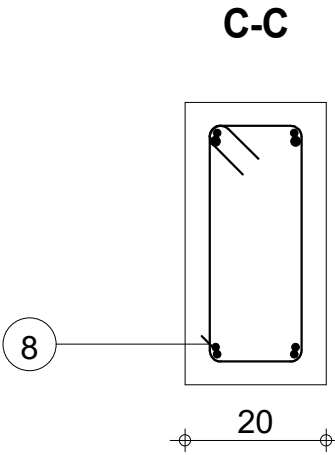
STRUCTURE BATIMENT CEA/ITECH-MTV B 38				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x40				Béton : BETON20 = 0.626 m3			
								Acier HA 400 = 38.7 kg			
								Acier HA 400 = 6.89 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 72.84 kg/ m3			
								Surface du coffrage = 7.81 m2			
								Echelle pour la vue 4.62cm/m			
								Echelle pour la section 9.34cm/m			
								Page 38/45			



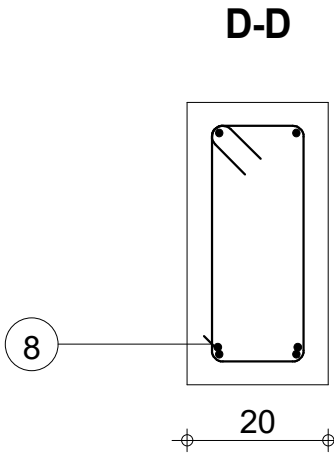
40



40



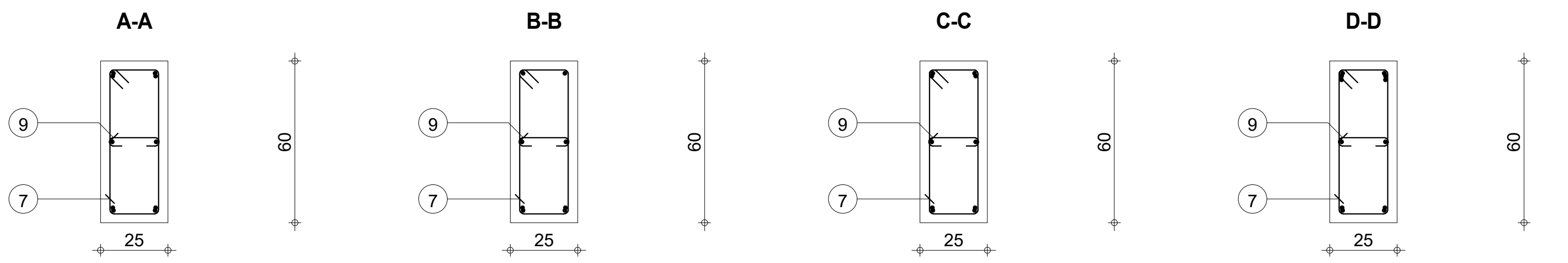
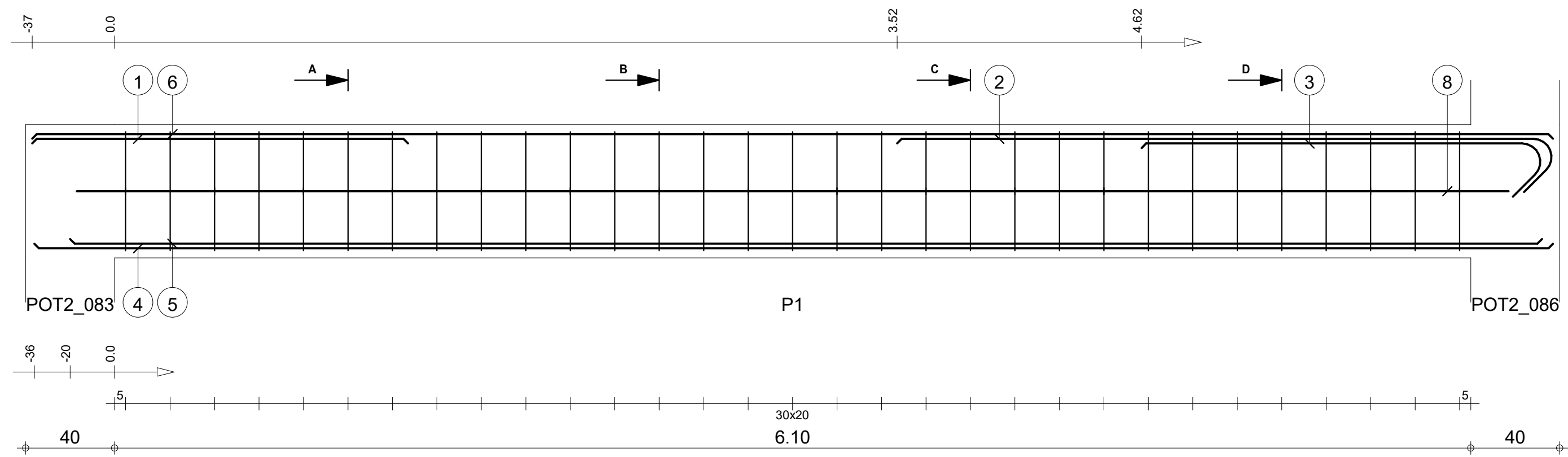
40



40

Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 14	l=4.55	00	④	2HA 14	l=1.77	00	⑦	2HA 10	l=8.14	00
②	9HA 6	l=1.07	31	⑤	2HA 10	l=7.97	00	⑧	20HA 6	l=1.07	31
③	2HA 14	l=2.67	00	⑥	2HA 10	l=4.52	00				

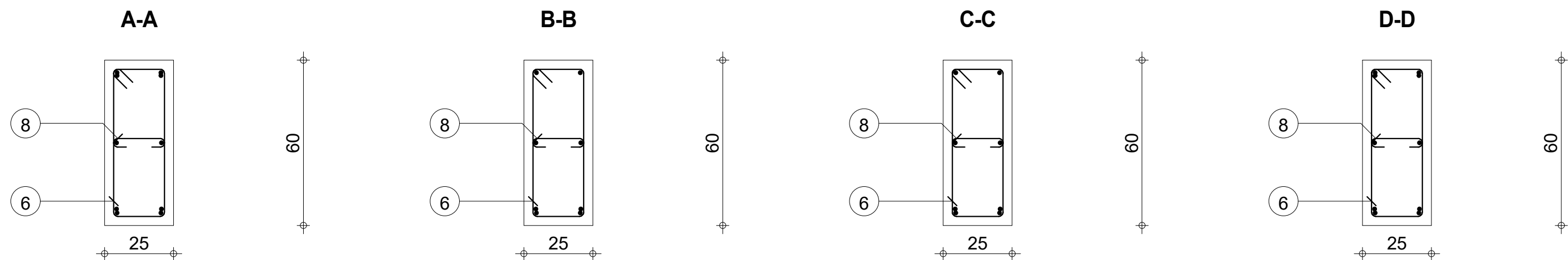
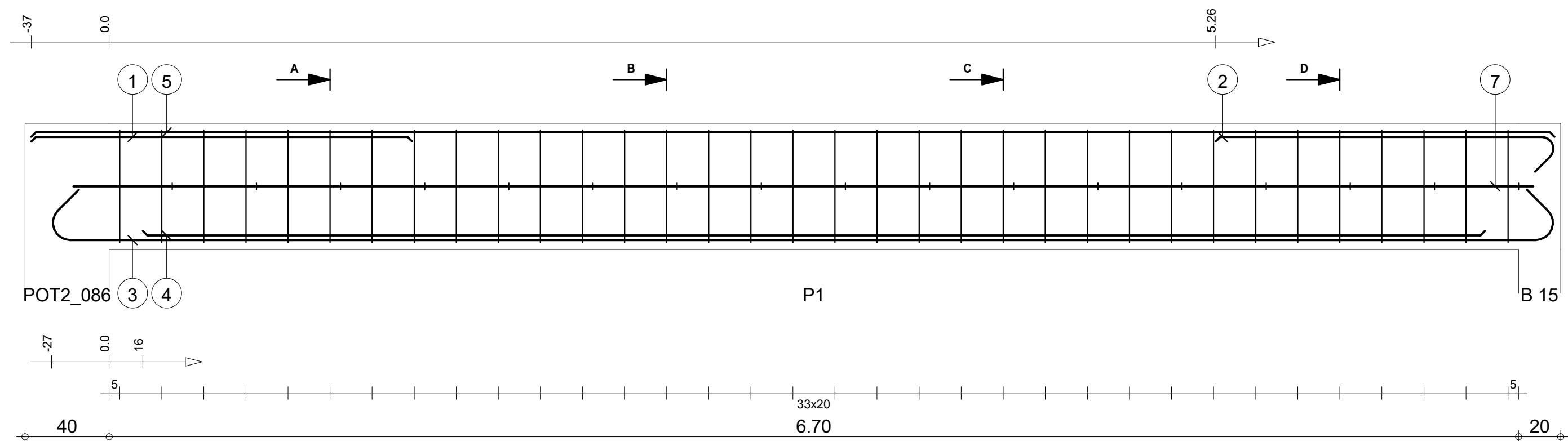
STRUCTURE BATIMENT CEA/ITECH-MTV B 39				Tél. Fax				Nombre 1			
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x40				Béton : BETON20 = 0.656 m3			
								Acier HA 400 = 47.2 kg			
								Acier HA 400 = 6.89 kg			
								Enrobage inférieur 3 cm			
								Enrobage supérieur 3 cm			
								Enrobage latéral 3 cm			
								Densité = 82.47 kg/ m3			
								Echelle pour la vue 4.42cm/m			
								Surface du coffrage = 8.12 m2			
								Echelle pour la section 9.34cm/m			
								Page 39/45			



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	l=1.69	00	④	2HA 10	l=6.83	00	⑦	31HA 6	l=1.57	31
②	2HA 14	l=3.19	00	⑤	2HA 10	l=6.62	00	⑧	2HA 10	l=6.44	00
③	2HA 14	l=2.04	00	⑥	2HA 10	l=6.84	00	⑨	16HA 6	l=31	00

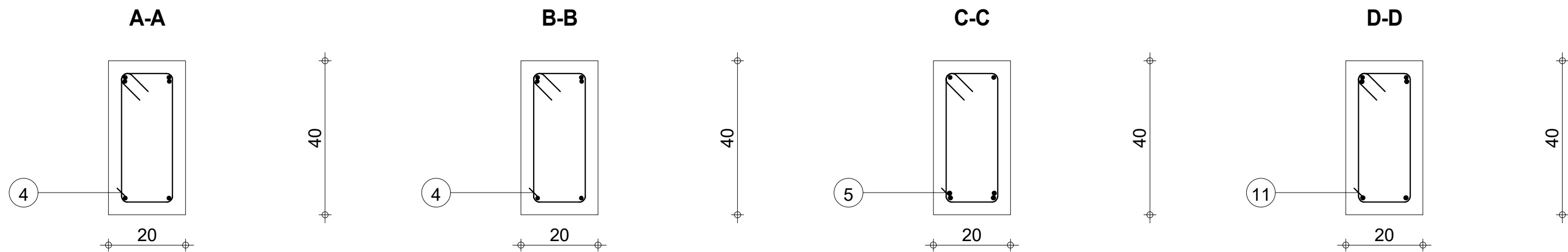
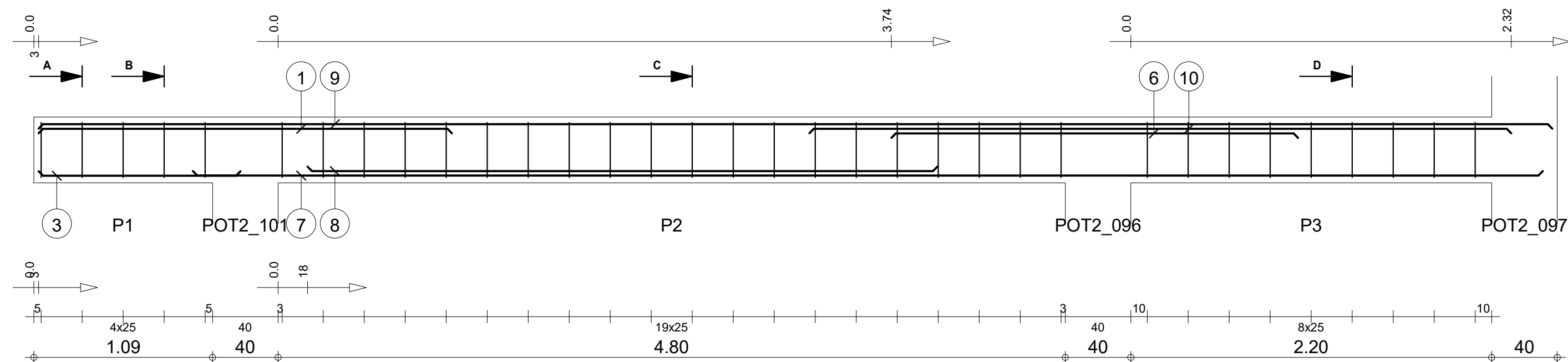
STRUCTURE BATIMENT CEA/ITECH-MTV		B 40: P1		Nombre 1	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 25x60			

Tél.		Fax	
Béton : BETON20 = 1.03 m3		Acier HA 400 = 39.8 kg	
Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
Densité = 57.86 kg/ m3		Echelle pour la vue 5.22cm/m	
Surface du coffrage = 10.1 m2		Echelle pour la section 6.58cm/m	
		Page 40/45	



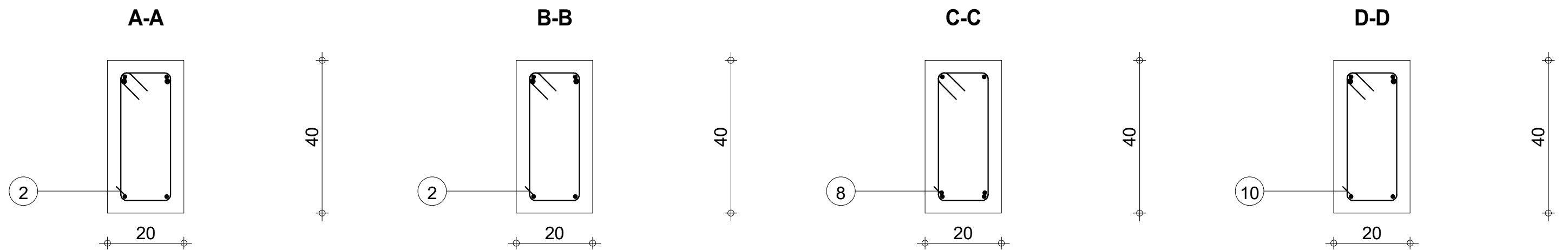
Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.81	00	④	2HA 14	I=6.38	00	⑦	2HA 10	I=6.94	00
②	2HA 10	I=1.78	00	⑤	2HA 10	I=7.24	00	⑧	17HA 6	I=31	00
③	2HA 14	I=7.63	00	⑥	34HA 6	I=1.58	31				

		Tél.	Fax	Nombre 1		Acier HA 400 = 47.2 kg		
STRUCTURE BATIMENT CEA/ITECH-MTV	B 41: P1				Béton : BETON20 = 1.1 m3	Acier HA 400 = 21.6 kg		
					Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm	
					Densité = 62.64 kg/ m3	Echelle pour la vue 4.94cm/m	Page 41/45	
					Surface du coffrage = 10.7 m2	Echelle pour la section 6.58cm/m		
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B	Section 25x60							

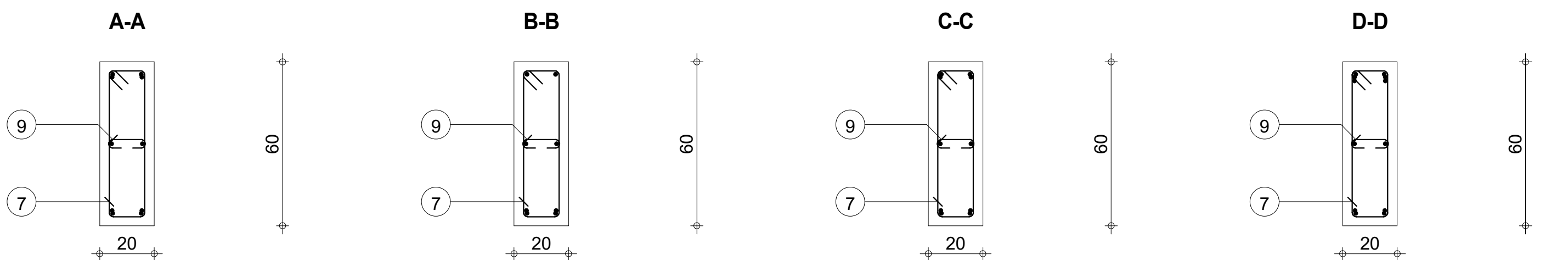
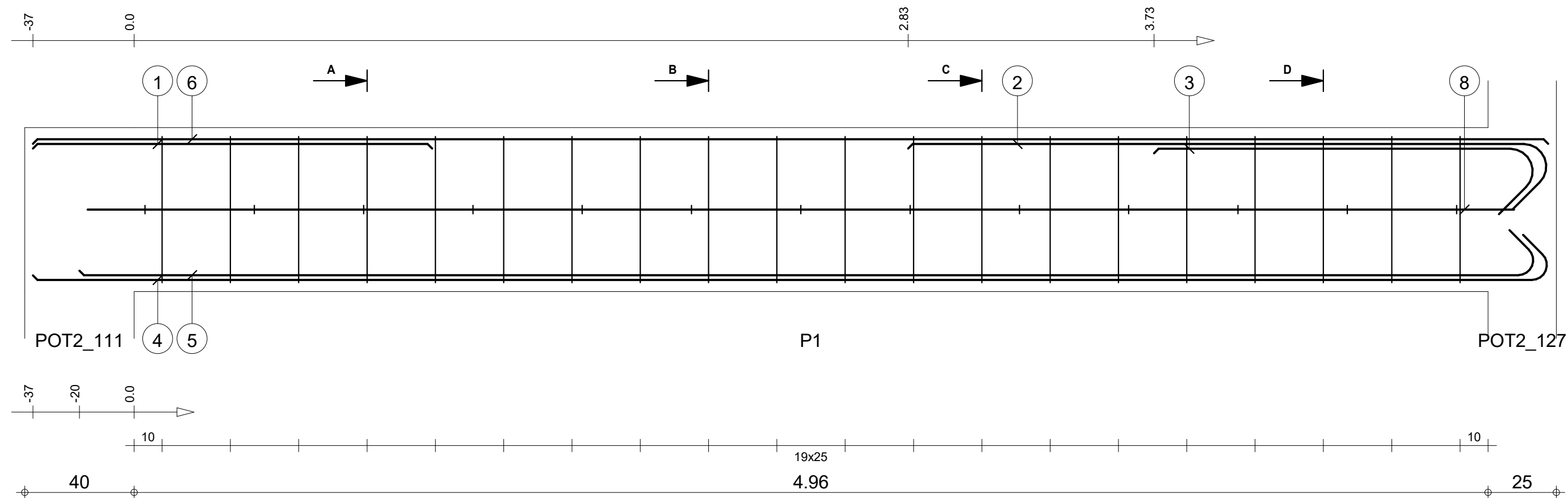


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme				
①	2HA 10	I=2.52	00	2.52	⑤	20HA 6	I=1.08	31		⑧	2HA 12	I=3.84	00	3.84	⑪	9HA 6	I=1.08	31	
③	2HA 10	I=1.23	00	1.23	⑥	2HA 12	I=2.48	00	2.48	⑨	2HA 10	I=9.23	00	9.23					
④	5HA 6	I=1.08*	31		⑦	2HA 12	I=8.23	00	8.23	⑩	2HA 12	I=4.28	00	4.28					

		Tél.	Fax	Nombre 1		Acier HA 400 = 49.4 kg		
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-B	B 42 Section 20x40				Béton : BETON20 = 0.743 m3	Acier HA 400 = 8.13 kg		
					Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm	
					Densité = 77.52 kg/ m3	Echelle pour la vue 3.92cm/m	Page 42/45	
					Surface du coffrage = 9.21 m2	Echelle pour la section 9.34cm/m		

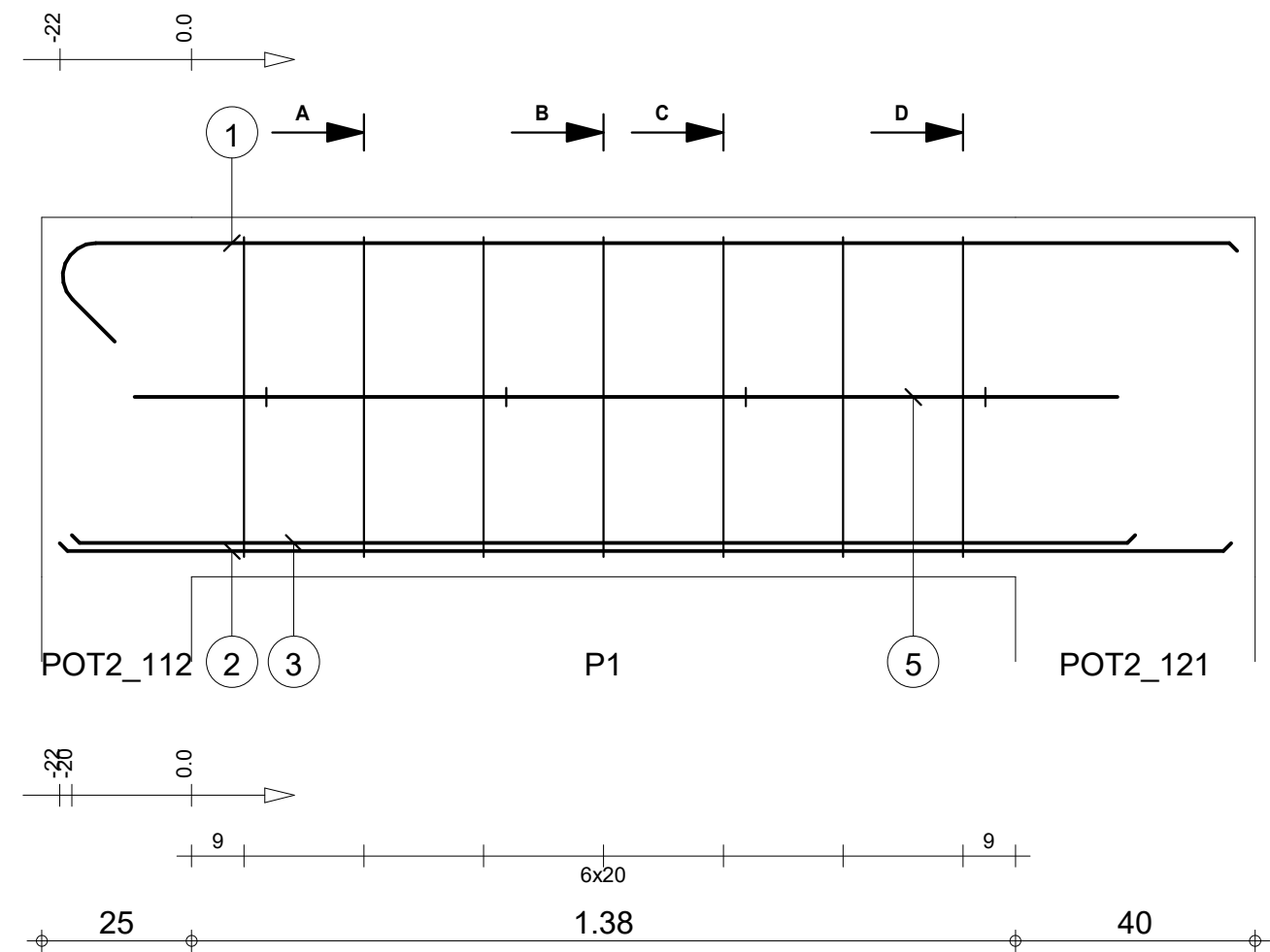


		Tél.	Fax		
STRUCTURE BATIMENT CEA/ITECH-MTV COFFRAGE & FERRAILLAGE POUTRES PH RDC-B	B 43 Section 20x40	Nombre 1		Acier HA 400 = 50.3 kg Acier HA 400 = 8.08 kg	
			Béton : BETON20 = 0.743 m3		
			Enrobage inférieur 3 cm	Enrobage supérieur 3 cm	Enrobage latéral 3 cm
			Densité = 78.47 kg/ m3 Surface du coffrage = 9.21 m2	Echelle pour la vue 3.92cm/m Echelle pour la section 9.34cm/m	Page 43/45

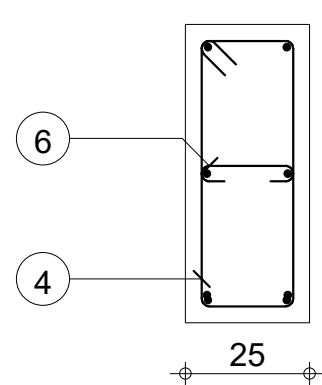


Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=1.46	00	④	2HA 10	I=5.71	00	⑦	20HA 6	I=1.47	31
②	2HA 14	I=2.59	00	⑤	2HA 10	I=5.50	00	⑧	2HA 10	I=5.22	00
③	2HA 14	I=1.64	00	⑥	2HA 10	I=5.54	00	⑨	13HA 6	I=26	00

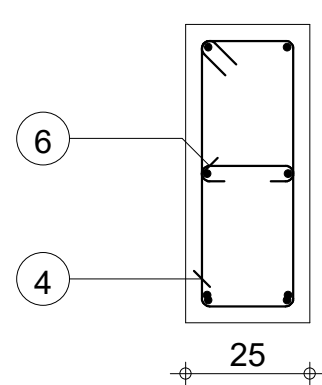
STRUCTURE BATIMENT CEA/ITECH-MTV				B 44: P1				Nombre 1				Béton : BETON20 = 0.673 m3		Acier HA 400 = 32.7 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B				Section 20x60								Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
												Densité = 68.94 kg/ m3		Echelle pour la vue 6.38cm/m	
												Surface du coffrage = 7.96 m2		Echelle pour la section 6.58cm/m	
														Page 44/45	



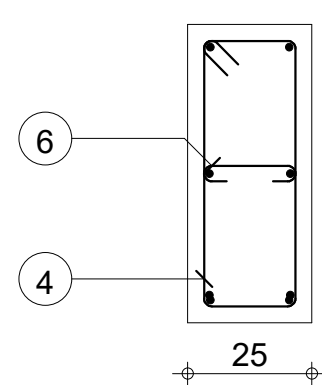
A-A



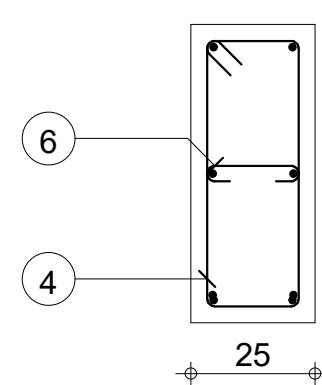
B-B



C-C



D-D



Pos.	Armature	Code	Forme	Pos.	Armature	Code	Forme
①	2HA 10	I=2.14	00	④	7HA 6	I=1.58	31
②	2HA 10	I=1.96	00	⑤	2HA 10	I=1.64	00
③	2HA 10	I=1.78	00	⑥	4HA 6	I=31	00

STRUCTURE BATIMENT CEA/ITECH-MTV		B 45: P1		Nombre 1		Béton : BETON20 = 0.304 m3		Acier HA 400 = 7.23 kg	
COFFRAGE & FERRAILLAGE POUTRES PH RDC-B		Section 25x60				Enrobage inférieur 3 cm		Enrobage supérieur 3 cm	
						Densité = 39.47 kg/ m3		Echelle pour la vue 8.17cm/m	
						Surface du coffrage = 3.07 m2		Echelle pour la section 6.58cm/m	
								Page 45/45	