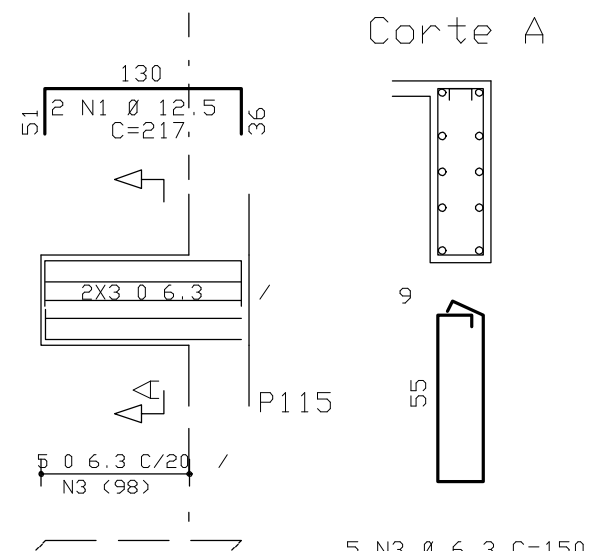
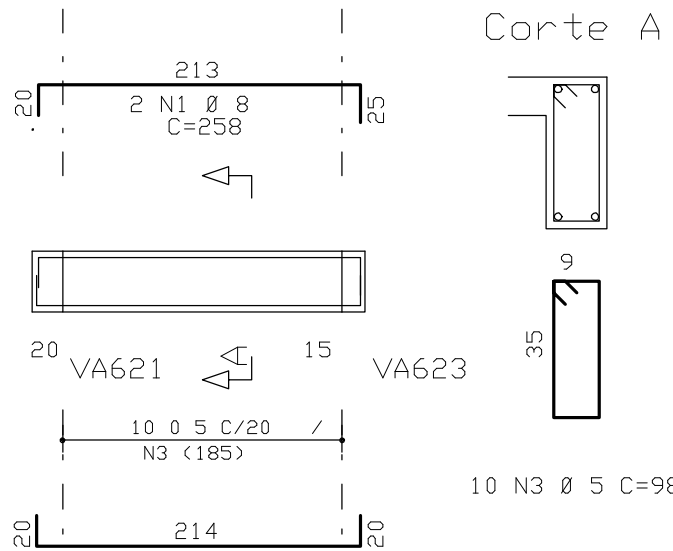
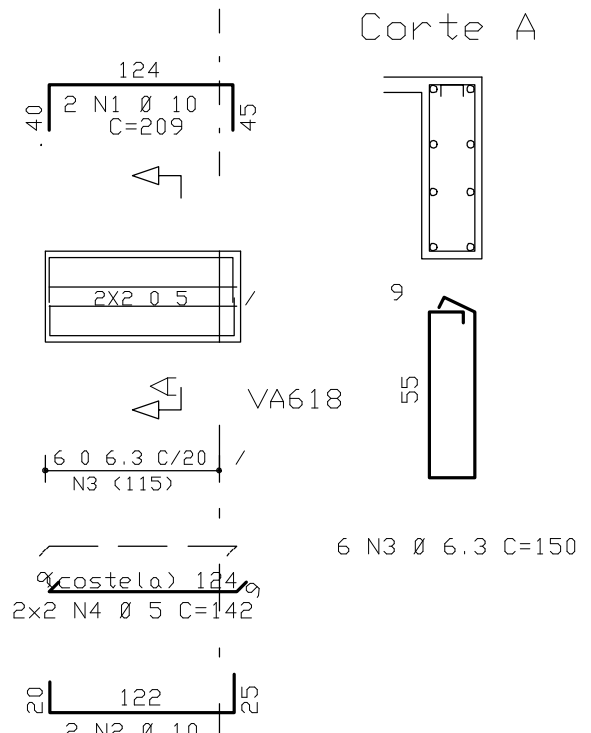
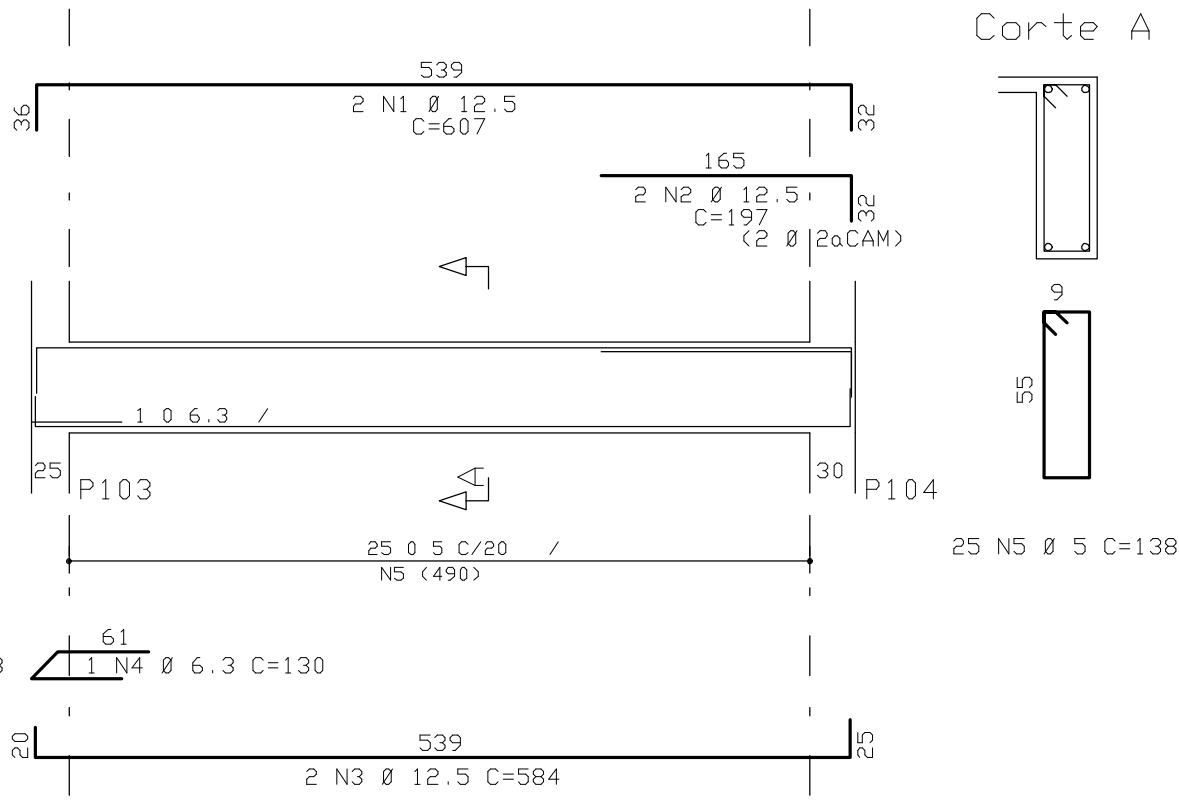
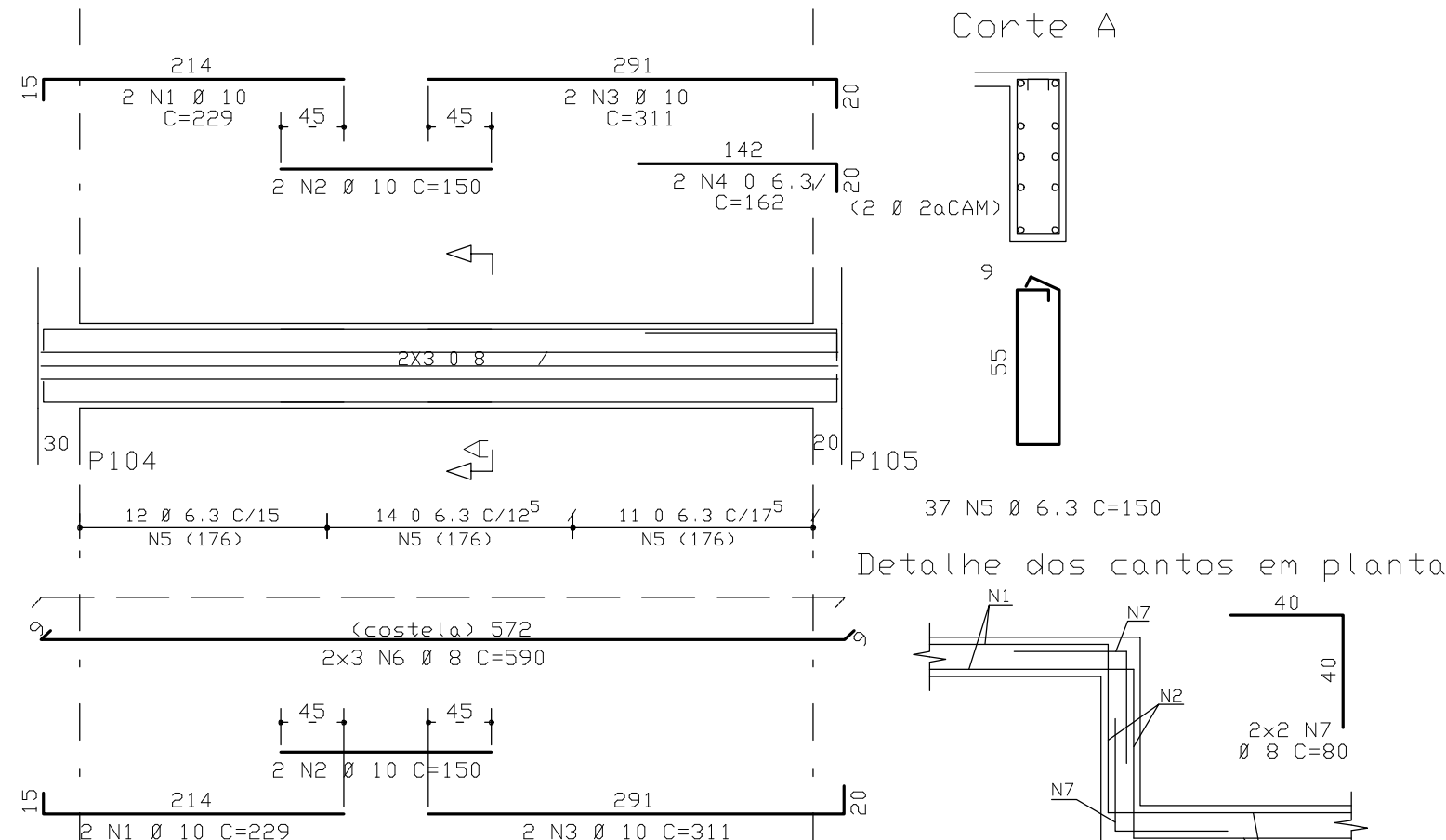
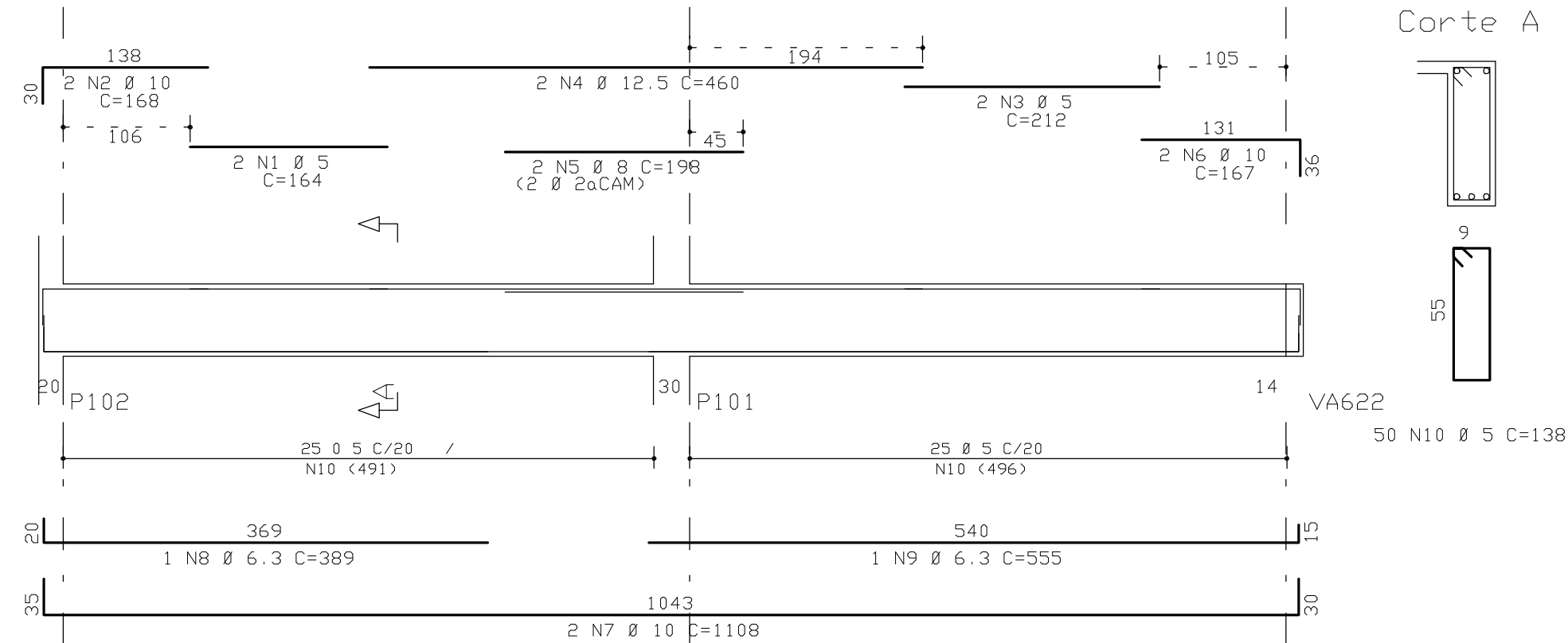




	ACQ	POS	BIT		QUANT		COMPLEMENT		ACQ	POS	BIT		QUANT		COMPLEMENT		
			(mm)	(mm)	UNIT	TOTAL	(mm)	(mm)			UNIT	TOTAL	(mm)	(mm)	UNIT	TOTAL	
							(cm)	(cm)							(cm)	(cm)	
VA681	68B	1	5	2	164	389			50A	1	6, 3	2	145	290			
	68B	2	10	2	165	424			50A	2	10	2	223	446			
	68B	3	15	2	181	459			50A	3	15	2	238	481			
	68A	4	12, 5	2	160	950			50A	4	16	2	238	476			
	68A	5	8	4	198	986			50A	5	12, 5	2	271	1145			
	50A	6	10	2	167	324			50A	6	10	2	460	460			
	50A	7	10	2	1188	1216			50A	7	6, 3, 3	20	450	4500			
	50A	8	6, 3	2	389	389			50A	8	6, 3, 3	4	540	2160			
VA682	68B	9	6, 3	1	955	955			50A	9	6, 3	2	62	94			
	68B	10	5	50	138	6550			50A	10	6, 3	2	44	86			
									50A	11	9, 3	2	94	276			
									50A	12	6, 3	2	80	160			
									50A	13	6, 3	4	58	350			
VA683	50A	1	10	4	229	916			50A	1	10	4	125	250			
	50A	2	10	4	150	650			50A	2	20	2	198	1976			
	50A	3	10	4	311	1244			50A	3	10	4	239	2956			
	50A	4	6, 3	2	162	324			50A	4	10	4	168	672			
	50A	5	6, 3	2	30	150	5050			50A	5	10	4	279	279		
	50A	6	6	6	590	3540			50A	6	16	2	456	912			
									50A	7	16	2	273	273			
									50A	8	4, 3	1	130	130			
VA684	68B	1	5	25	138	2450			50A	10	8	36	153	2460			
									50A	11	8	36	173	2462			
	50A	1	10	4	209	836			50A	11	8	17	144	2440			
	50A	2	10	6	147	167			50A	12	10	8	108	1635			
	50A	3	6, 3	12	150	1800			50A	13	8	4	173	1506			
	68B	4	10	8	142	135			50A	14	8	4	290	1650			
									50A	15	10	8	175	700			
									50A	16	12, 5	10	240	240			
VA685	50A	1	16	2	631	631			50A	17	17	8	3	83	249		
	50A	2	16	2	352	735			50A	18	17	8	72	89			
	50A	3	16	1	521	321			50A	19	9	8	153	918			
	50A	4	10	821	821			50A	20	9	8	83	249				
	50A	5	20	4	311	1244			50A	21	8	3	83	249			
	50A	6	10	721	721			50A	22	10	4	264	264				
	50A	7	20	4	887	3368			50A	23	6	6	153	918			
	50A	8	16	4	456	1824			50A	24	10	4	264	264			
	50A	9	6, 3	2	245	484			50A	25	24	10	93	279			
	50A	10	6, 3	1	130	130			50A	26	8	2	104	104			
	50A	11	13	153	153	6273			50A	27	10	3	123	1038			
	50A	12	8	14	173	2425			VA610								
	50A	13	14	14	173	2445			50A	2	12, 5	2	127	434			
	50A	14	8	13	173	1038			50A	2	8	2	150	300			
	50A	15	6	250	1000			50A	3	5	5	150	300				
	50A	16	8	590	1950	1950			50A	4	17, 3	3	148	388			
	50A	17	9	90	1160	90											
	50A	18	10	4	175	760			VA612								
	50A	19	10	5	264	264			50A	1	12, 5	2	507	1214			
	50A	20	8	73	83	249			50A	2	8	2	185	370			
50A	21	8	83	249	83			50A	3	13	10	568	1126				
50A	22	8	6	153	918			68B	4	5	25	138	3450				
VA614	50A	23	8	3	83	249											
	50A	24	8	83	249	83			68B	1	5	25	107	414			
	50A	25	8	123	123	918			50A	2	10	2	168	336			
	50A	26	10	120	480	120			68B	3	3	200	410	410			
	50A	27	8	93	93	279			50A	4	12, 5	2	413	826			
	50A	28	6	193	385	193			50A	5	10	2	167	334			
	50A	29	8	6	173	1038			50A	6	10	2	1097	2194			
	50A	30	8	6	173	1038			50A	7	6, 3, 3	20	357	357			
VA616	68B	1	8	4	258	1032			50A	8	8	1	383	383			
	50A	2	8	4	254	1016			50A	9	8	35	38	6500			
	68B	3	8	36	180	26			VA615								
									50A	1	10	10	4	487	1948		
VA615									50A	2	10	10	4	437	1748		
									50A	3	6, 3	40	150	6000			
									50A	4	10	4	195	780			

RESUMO ACO CA 50-60				
ACO	BIT (mm)	CMR (mm)	PESO (kg)	
60B		254		41
50A	6.3	261		65
50A	8	504		202
50A	10	201		127
50A	12.5	79		79
50A	16	90		144
50A	20	87		219
Peso Total		60B =	41	kg
Peso Total		50A =	834	kg
Peso Total	(x5)	60B =	205	kg
Peso Total	(x5)	50A =	4170	kg

COBRIMENTO DA ARMADURA:

- LAJES = 2,0 cm
- VIGAS E PILARES = 2,5 cm
- BLOCOS, BALDRAMES E CONTENÇÕES (FACE EM CONTATO COM A TERRA) = 3,0 cm

1. ESSES COBRIMENTOS DEVERÃO SER GARANTIDOS COM O USO DE ESPACADORES OU PASTILHAS.

COBRIMENTOS ESPECIFICOS EM CONTRARIO AOS VALORES INDICADOS ACIMA, ESTAO INDICADOS NOS DESENHOS DE
FORMAS DOS PAVIMENTOS.

NORMAS UTILIZADAS:

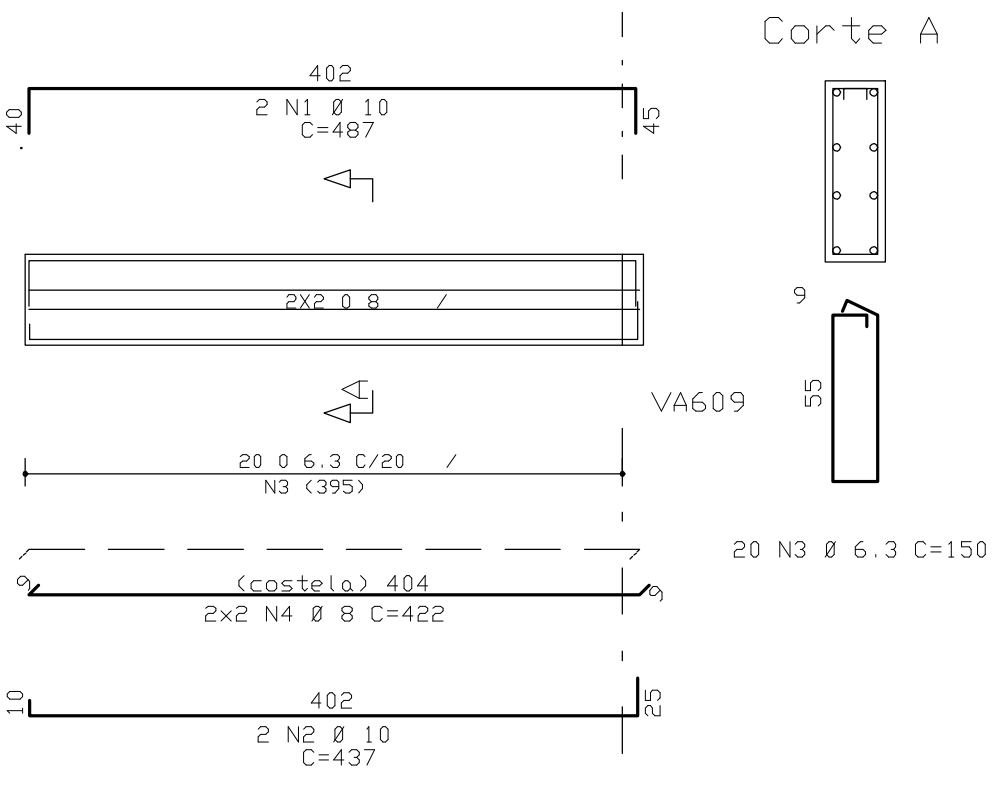
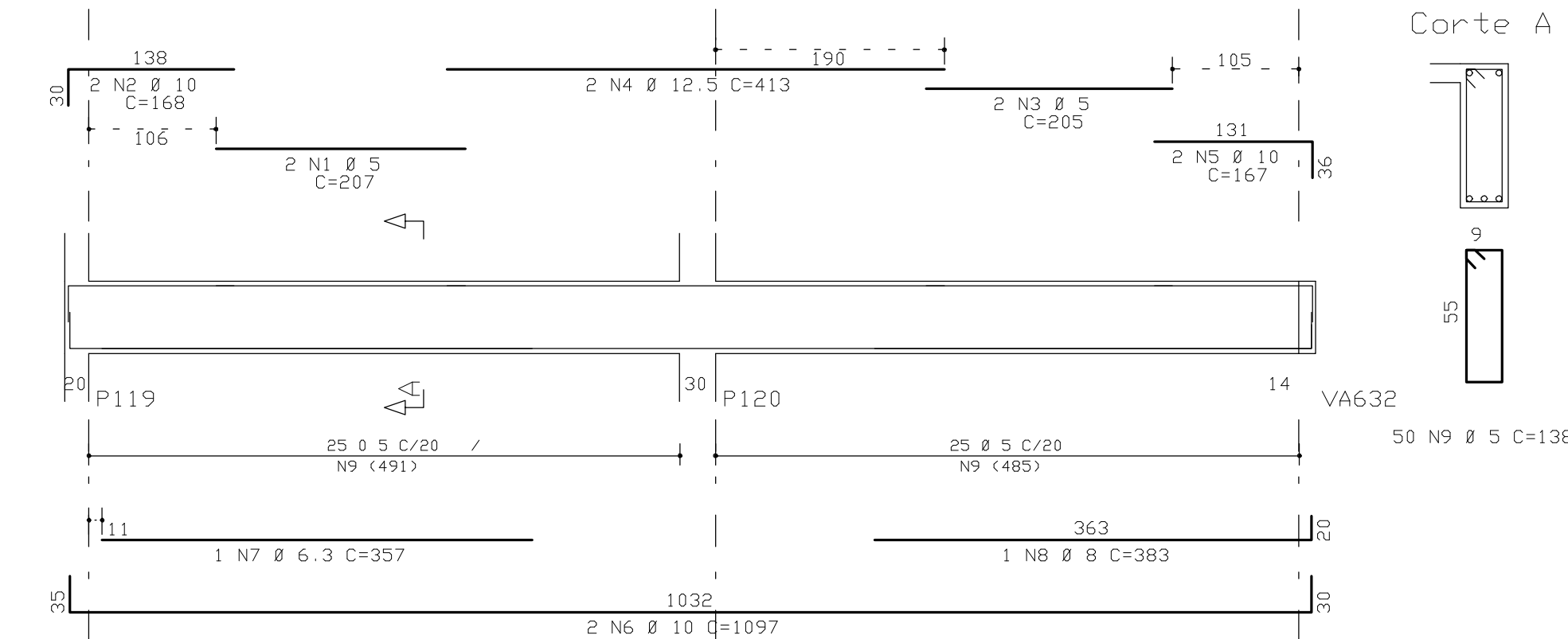
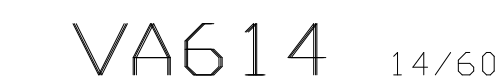
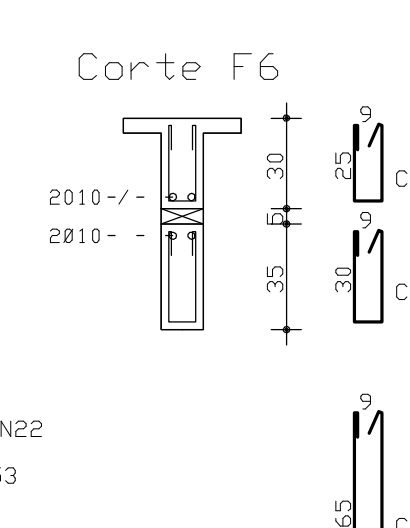
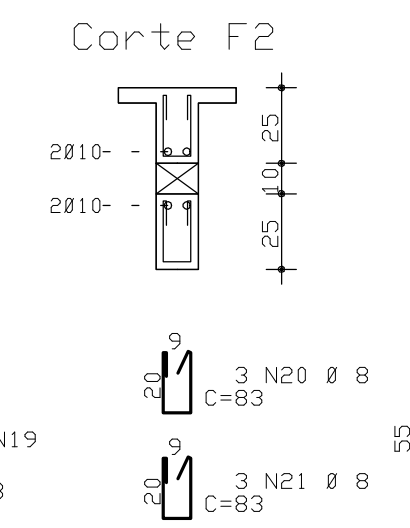
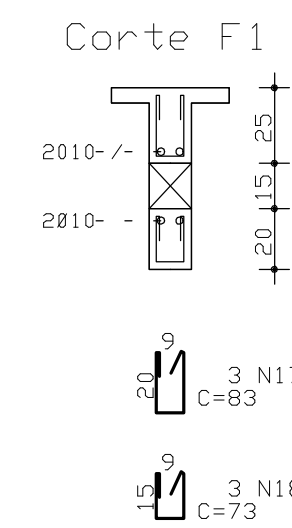
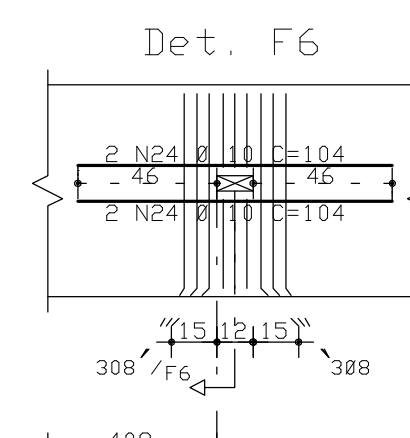
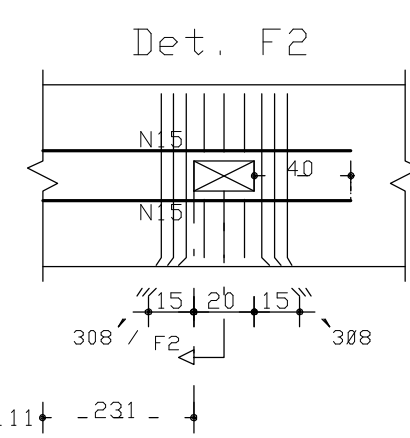
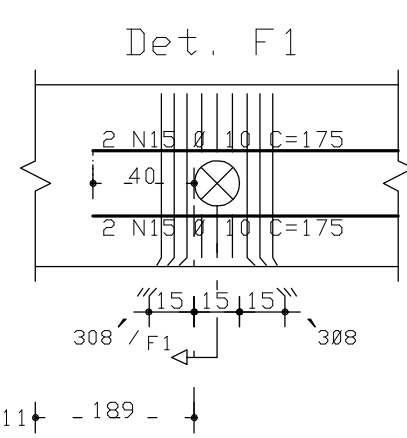
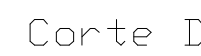
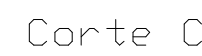
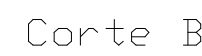
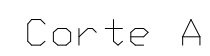
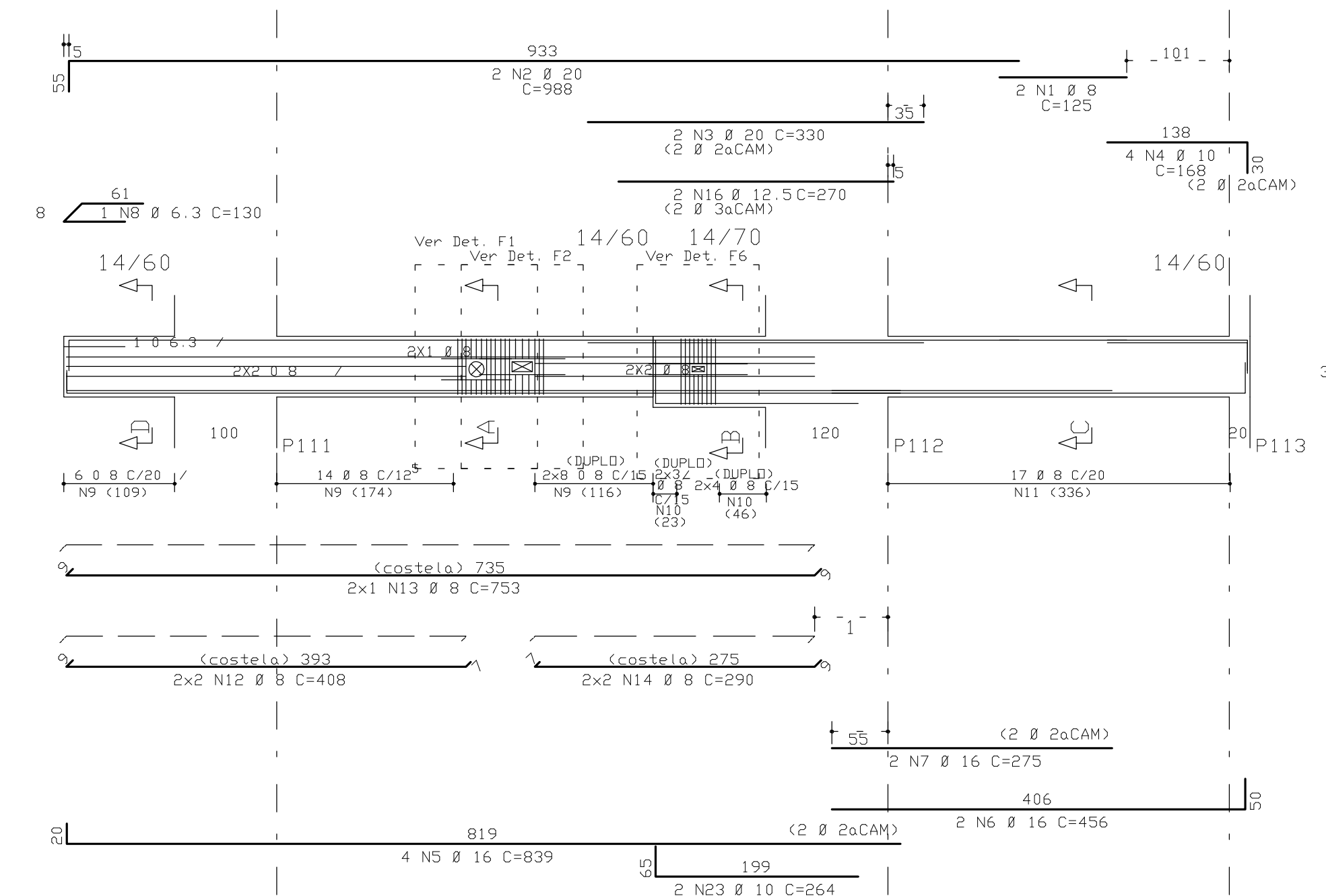
NBR-6118/2003 - PROJETO E EXECUCAO DE OBRAS DE CONCRETO ARMADO
NBR-6120/1980 - CARGAS PARA O CALCULO DE ESTRUTURAS DE EDIFICACOES

INDICE:

VA601 A VA612 / VA614 A VA616

$$F_{CK} = 30 \text{ MPa}$$

$E_C = 26 \text{ GPa}$ (MÓDULO DE ELASTICIDADE SECANTE
AOS 28 DIAS).

$$A/C = 0,65 \quad (\text{FATOR AGUA CIMENTO})$$


0	27/08/2009	EMISSÃO INICIAL			
REV.	DATA:	DESCRICÇÃO			
Simetria Engenharia PROJETOS E ESTUDIOS SUA QUADRA CAD Nº 01 SALAS 201 e 203 BRASILIA-DF CEP: 71200-040 FAX: (061) 3008-9633 e-mail:saba@simetria.com.brpg.08"					
PROJECTO ESTRUTURAL					
CLIENTE: DISCO INCORPORADORA E IMOBILIARIA LTDA					
UBIA: EDIFICIO RESIDENCIAL OLYMPIQUE			No OBRA: 001		
ENDECHO OBRA: SRIA AREA ESPECIAL 04 LOTES G e H - GUARA/DF					
DESCRICO:			DESCHDO No:		
ARMACAO DAS VIGAS DO 2o ao 6o PAVIMENTOS			159-XXX		
TURRE A - JUNTA A (01/02)					
DESENHISTA: TOSI/AELINA		DATA: 27/08/2009	ESCALA: 1:50	UNIDADE cm	No PROJ.: SIMETRIA 421
ARGUMENTO PLT: 421-EST-159-XXX-R00_PLT					
PROPRIETARIO:			RESPONSABIL TECNICO		

RESPONSÁVEL TÉCNICO PELO PROJETO ESTRUTURAL					
SIMETRIA ENGENHARIA E PROJETOS S/C LTDA CREA 0725/RP					

