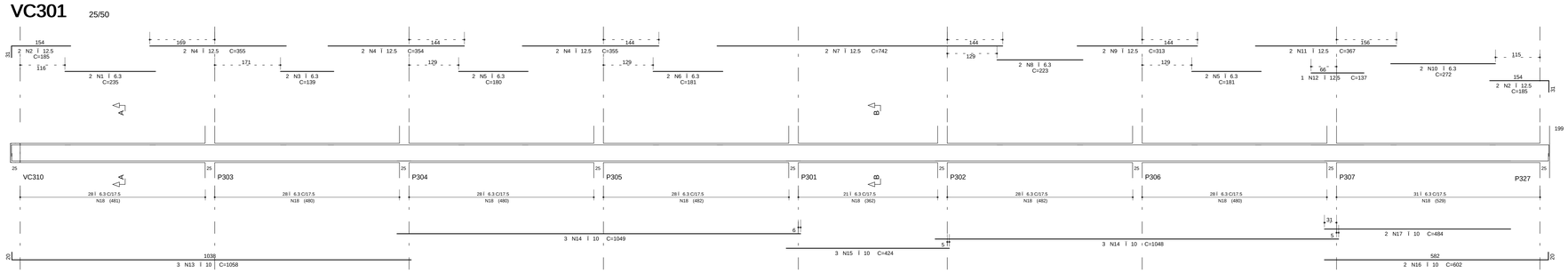
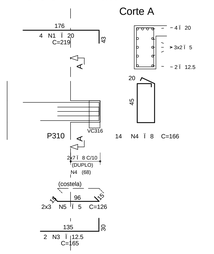
VC301 25/50



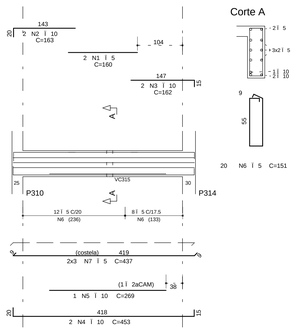
	A¢O	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VC301						
	50A	1	6.3	2	235	470
	50A	2	12.5	4	185	740
	50A	3	6.3	2	139	278
	50A	4	12.5	6	355	2130
	50A	5	6.3	4	180	720
	50A	6	6.3	2	181	362
	50A	7	12.5	2	742	1484
	50A	8	6.3	2	223	446
	50A	9	12.5	2	313	626
	50A	10	6.3	2	272	544
	50A	11	12.5	2	367	734
	50A	12	12.5	1	137	137
	50A	13	10	3	1058	3174
	50A	14	10	6	1049	6294
	50A	15	10	3	424	1272
	50A	16	10	2	602	1204
	50A	17	10	2	484	968
	50A	18	6.3	220	144	31680
VC302						
	50A	1	20	4	219	876
	50A	3	12.5	2	165	330
	50A	4	8	14	166	2324
	60B	5	5	6	126	756
VC303						
	60B	1	5	2	160	320
	50A	2	10	2	163	326
	50A	3	10	2	162	324
	50A	4	10	2	453	906
	50A	5	10	1	269	269
	60B	6	5	20	151	3020
	60B	7	5	6	437	2622
VC304						
	50A	1	10	2	278	556
	50A	2	10	1	163	163
	50A	3	10	2	277	554
	60B	4	5	10	142	1420
VC305						
	50A	1	12.5	2	289	578
	50A	2	12.5	1	192	192
	50A	3	10	2	277	554
	60B	4	5	10	142	1420
VC306						
	50A	1	10	2	277	554
	50A	2	10	1	163	163
	50A	3	10	2	277	554
	50A	4	6.3	1	130	130
	60B	5	5	10	142	1420

	A¢O	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VC307						
	50A	1	16	4	215	860
	50A	2	16	4	192	768
	50A	3	8	7	156	1092
VC308						
	50A	1	6.3	2	497	994
	50A	2	12.5	3	207	621
	50A	3	10	2	668	1336
	50A	4	20	2	721	1442
	50A	5	20	2	442	884
	50A	6	25	1	759	759
	50A	7	25	4	347	1388
	50A	8	25	1	711	711
	50A	9	25	1	649	649
	50A	10	25	1	629	629
	50A	11	6.3	2	619	1238
	50A	12	25	1	841	841
	50A	13	8	1	711	711
	50A	14	12.5	3	205	615
	50A	15	16	2	1064	2128
	50A	16	16	1	702	702
	50A	17	20	1	1176	1176
	50A	18	20	1	780	780
	50A	19	20	1	605	605
	50A	20	10	4	749	2996
	50A	21	20	2	1150	2300
	50A	22	20	2	901	1802
	50A	23	6.3	1	141	141
	50A	24	6.3	115	204	23460
	50A	25	6.3	90	224	20160
	50A	26	10	72	235	16920
	50A	27	8	8	1058	8464
	50A	28	8	14	1191	16674
	50A	29	8	8	801	6408
	50A	30	8	8	1122	8976
	50A	31	20	1	920	920
	50A	32	20	1	462	462
VC309						
	50A	1	10	2	1200	2400
	50A	2	10	8	1200	9600
	50A	3	10	2	695	1390
	50A	4	10	4	908	3632
	50A	5	6.3	198	134	26532
VC312						
	50A	1	25	2	440	880
	50A	2	25	1	264	264
	50A	3	16	2	382	764
	50A	4	16	2	143	286
	50A	5	6.3	16	144	2304

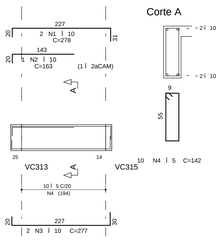
VC302 25/50



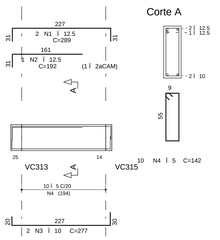
VC303 14/60



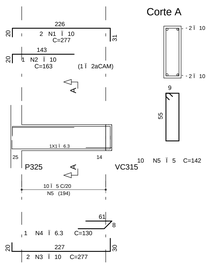
VC304 14/60



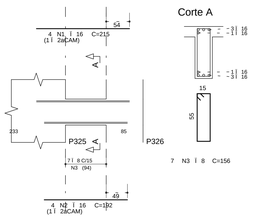
VC305 14/60



VC306 14/60

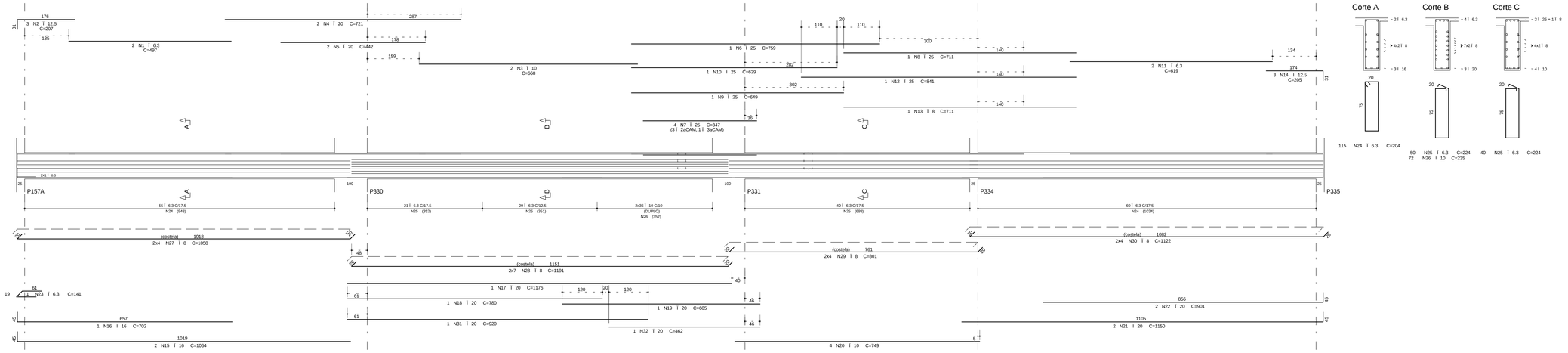


VC307 20/60



RESUMO A¢O CA 50-60			
A¢O	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	110	18
50A	6.3	1095	274
50A	8	446	179
50A	10	561	353
50A	12.5	82	82
50A	16	55	88
50A	20	112	281
50A	25	61	245
Peso Total	60B =		18 kg
Peso Total	50A =		1502 kg

VC308 25/80



COBRIMENTO DA ARMADURA:

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

1. ESSES COBRIMENTOS DEVERAO 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:

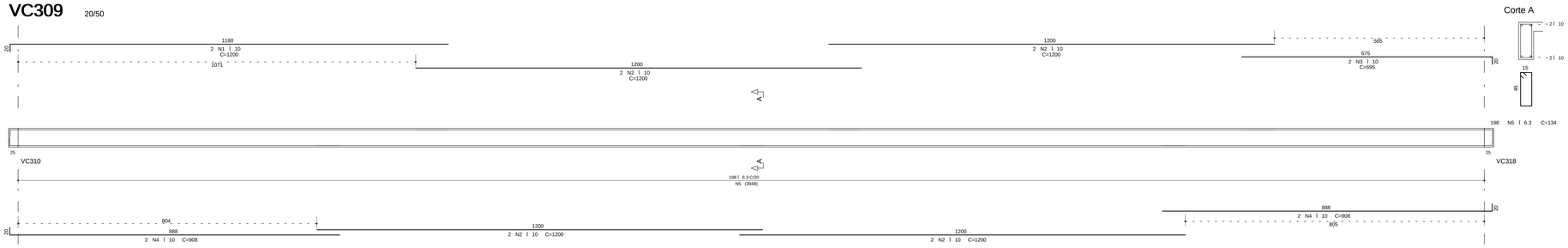
VC301 A VC309, VC312

FCK= 35 MPa

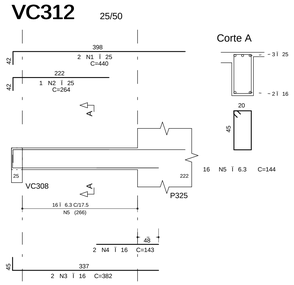
EC = 28 GPa (MODULO DE ELASTICIDADE SECANTE AOS 28 DIAS).

A/C = 0,65 (FATOR AGUA CIMENTO)

VC309 20/50



VC312 25/50



REV	DATA	DESCRICAO
1	29/08/2014	NUMERACAO FINAL
0	14/12/2012	EMISSAO INICIAL

Simetria Engenharia
SIA QUADRA 07 lote 23 SALAS 201 e 203
BRASILIA-DF CEP: 71200-045
FONE: (0XX61) 3036-9915
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE:	GENT INCORPORADORA LTDA		
OBRA:	ED. RESIDENCIAL/COMERCIAL COSMOPOLITAN	No OBRA:	XXX
ENDERECO OBRA:	RUA 30 NORTE LOTE 03 - RUA DAS PAINEIRAS - AGUAS CLARAS DF		
DESCRICAO	ARMACAO DAS VIGAS - TORRE 3 - JUNTA C TERREO (01/02)	DESENHO No:	BL3 025-076
DESENHISTA: TQSz THIAGO	DATA: 14/12/2012	ESCALA: 1:50	UNIDADE: CM
No PROJ. SIMETRIA: 478			
ARQUIVO PLT: 478 -EST-BL3- 025-076 -R01 -VIG.PLT			

PROPRIETARIO: RESPONSAVEL TECNICO

RESPONSAVEL TECNICO PELO PROJETO ESTRUTURAL

SIMETRIA ENGENHARIA E PROJETOS S/C LTDA
CREA:2705/RF

SIMETRIA ENGENHARIA DE PROJETOS S/C LTDA PL C:\TQSWIN\478 - COSMOPOLITAN - TORRE 3 - JUNTA C\DESENHOS\VIGAS\VIGAS.PLT 29/08/2014 15:13:57