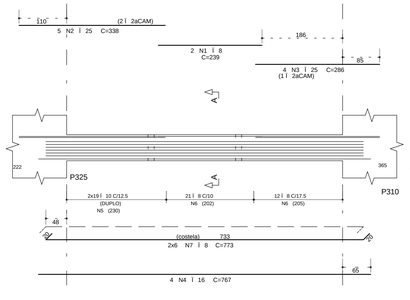
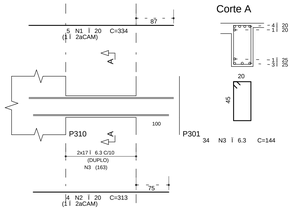
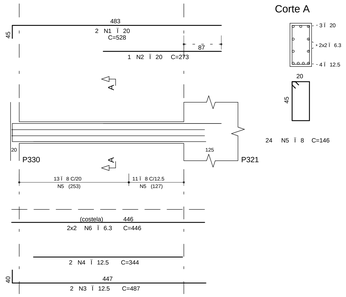
VC313 25/60



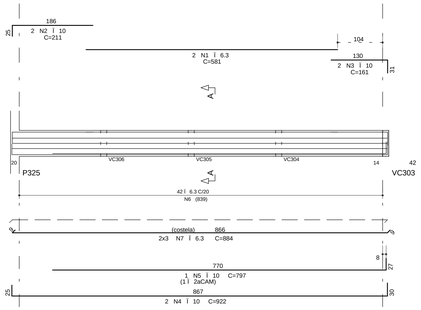
VC314 25/50



VC311 25/50



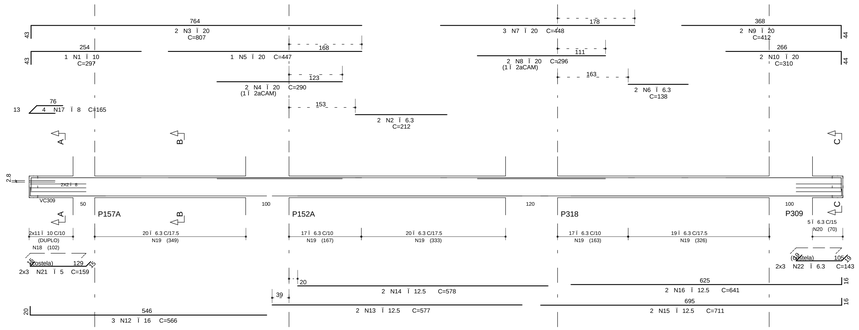
VC315 14/60

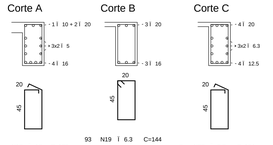


	A¢O	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VC310						
	50A	1	10	1	297	297
	50A	2	6.3	2	212	424
	50A	3	20	2	807	1614
	50A	4	20	2	290	580
	50A	5	20	1	447	447
	50A	6	6.3	2	138	276
	50A	7	20	3	448	1344
	50A	8	20	2	296	592
	50A	9	20	2	412	824
	50A	10	20	2	310	620
	50A	12	16	3	566	1698
	50A	13	12.5	2	577	1154
	50A	14	12.5	2	578	1156
	50A	15	12.5	2	711	1422
	50A	16	12.5	2	641	1282
	50A	17	8	4	165	660
	50A	18	10	22	170	3740
	50A	19	6.3	93	144	13392
	50A	20	6.3	5	164	820
	60B	21	5	6	159	954
	50A	22	6.3	6	143	858
VC311						
	50A	1	20	2	528	1056
	50A	2	20	1	273	273
	50A	3	12.5	2	487	974
	50A	4	12.5	2	344	688
	50A	5	8	24	146	3504
	50A	6	6.3	4	446	1784
VC313						
	50A	1	8	2	239	478
	50A	2	25	5	338	1690
	50A	3	25	4	286	1144
	50A	4	16	4	767	3068
	50A	5	10	38	190	7220
	50A	6	8	33	186	6138
	50A	7	8	12	773	9276
VC314						
	50A	1	20	5	334	1670
	50A	2	20	4	313	1252
	50A	3	6.3	34	144	4896

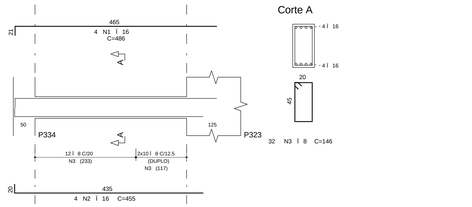
	A¢O	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VC315						
	50A	1	6.3	2	581	1162
	50A	2	10	2	211	422
	50A	3	10	2	161	322
	50A	4	10	2	922	1844
	50A	5	10	1	797	797
	50A	6	6.3	42	151	6342
	50A	7	6.3	6	884	5304
VC316						
	50A	2	25	1	453	453
	50A	3	25	2	325	650
	50A	4	25	1	992	992
	50A	5	25	1	1122	1122
	50A	6	25	1	947	947
	50A	7	16	1	332	332
	50A	8	25	2	480	960
	50A	9	25	1	817	817
	50A	10	16	2	382	764
	50A	11	16	1	270	270
	50A	12	16	3	994	2982
	50A	13	16	2	736	1472
	50A	14	10	4	283	1132
	50A	15	16	2	261	522
	50A	16	16	1	175	175
	50A	17	6.3	128	144	18432
	50A	18	6.3	13	204	2652
	60B	19	5	4	832	3328
	50A	20	8	8	299	2392
	60B	21	5	4	233	932
VC317						
	50A	1	16	4	486	1944
	50A	2	16	4	455	1820
	50A	3	8	32	146	4672
VC318						
	50A	1	20	2	946	1892
	50A	2	20	1	291	291
	50A	3	6.3	2	188	376
	50A	4	20	2	324	648
	50A	5	6.3	2	100	200
	50A	6	20	2	472	944
	50A	7	16	2	358	716
	50A	8	16	4	226	904
	50A	9	12.5	2	653	1306
	50A	10	12.5	1	300	300
	50A	11	12.5	2	612	1224
	50A	12	12.5	2	387	774
	50A	13	10	4	459	1836
	50A	14	8	2	171	342
	50A	15	6.3	11	164	1804
	50A	16	6.3	88	144	12672
	60B	17	5	6	159	954
	60B	18	5	4	546	2184
	60B	19	5	4	483	1932

VC310 25/50





VC317 25/50



RESUMO A¢O CA 50-60			
A¢O	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	103	16
50A	6.3	714	178
50A	8	275	110
50A	10	176	111
50A	12.5	103	103
50A	16	167	267
50A	20	140	351
50A	25	88	351
Peso Total	60B		16 kg
Peso Total	50A		1.478 kg

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.

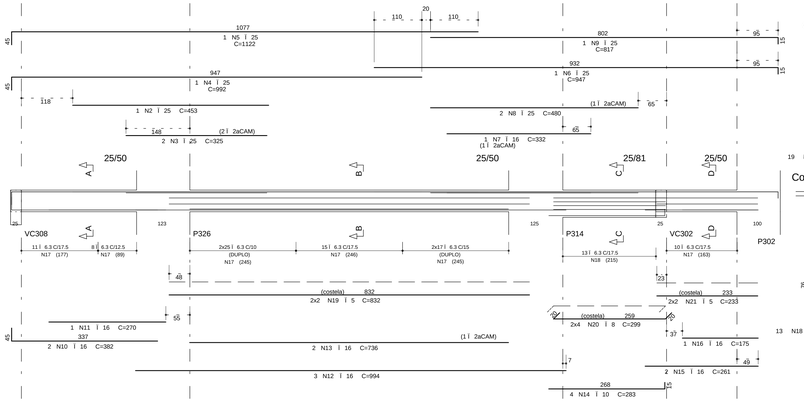
NORMAS UTILIZADAS:

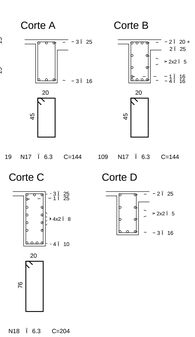
NBR-6118/2003 - PROJETO E EXECUCAO DE OBRAS DE CONCRETO ARMADO
NBR-6120/1980 - CARGAS PARA O CALCULO DE ESTRUTURAS DE EDIFICACOES

INDICE:

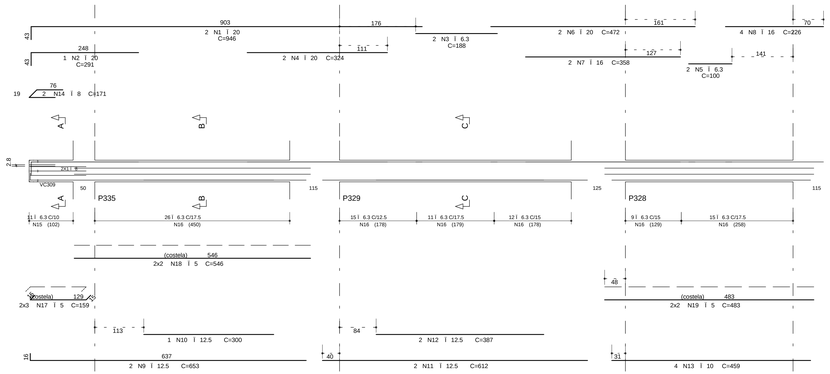
VC310, VC311, VC313 A VC318

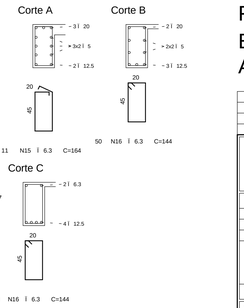
VC316 25/VAR





VC318 25/50





FCK= 35 MPa

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

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

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

Simetria Engenharia
SIA QUADRA 4C lote 51 SALAS 01 a 07/
BRASILIA-DF CEP: 71200-045
FABX: (0XX61) 3356-9610
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE: GENT INCORPORADORA LTDA
OBRA: ED. RESIDENCIAL/COMERCIAL COSMOPOLITAN — No OBRA: XXX
ENDEREOO OBRA: RUA 30 NORTE LOTE 03 - RUA DAS PAINEIRAS - AGUAS CLARAS DF
DESCRICAO: ARMACAO DAS VIGAS - TORRE 3 - JUNTA C TERREO (02/02)
DESENHO No: BL3 026-076
DESENHISTA: TQSz THIAGO — DATA: 14/12/2012 — ESCALA: 1:50 — UNIDADE: CM — No PROJ. SIMETRIA: 478
ARQUIVO PLT: 478 -EST-BL3- 026-076 -R01 -VIG.PLT
PROPRIETARIO: RESPONSAVEL TECNICO
RESPONSAVEL TECNICO PELO PROJETO ESTRUTURAL
SIMETRIA ENGENHARIA E PROJETOS S/C LTDA
CREA 2700/RF

SIMETRIA ENGENHARIA DE PROJETOS S/C LTDA PL C:\TQSWin\WORK - OSGARDO\ALTAN - TORRE 3 - JUNTA C\BD-TERREO\VIGAS\VIGAS.PLT 29/08/2014 15:38:39