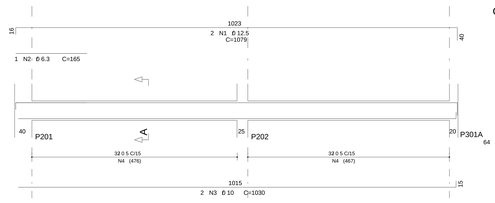
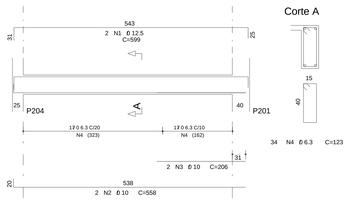
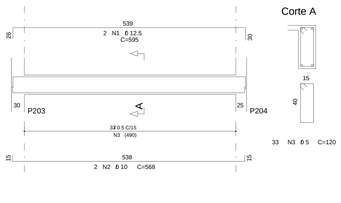
VB201 20/45



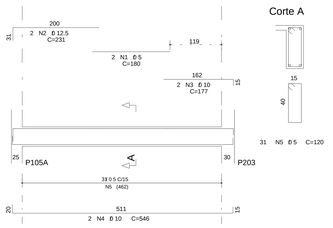
VB202 20/45



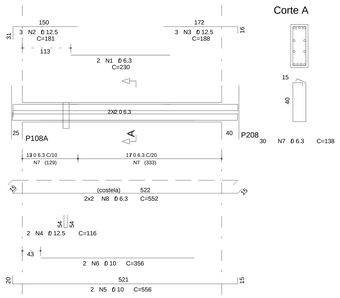
VB203 20/45



VB204 20/45



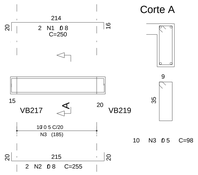
VB205 20/45



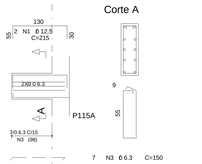
ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VB201					
50A	1	12.5	2	1079	2158
50A	2	6.3	1	165	165
50A	3	10	2	1030	2060
60B	4	5	64	120	7680
VB202					
50A	1	12.5	2	599	1198
50A	2	10	2	558	1116
50A	3	10	2	206	412
50A	4	6.3	34	123	4182
VB203					
50A	1	12.5	2	595	1190
50A	2	10	2	568	1136
60B	3	5	33	120	3960
VB204					
60B	1	5	2	180	360
50A	2	12.5	2	231	462
50A	3	10	2	177	354
50A	4	10	2	546	1092
60B	5	5	31	120	3720
VB205					
50A	1	6.3	2	230	460
50A	2	12.5	3	181	543
50A	3	12.5	3	188	564
50A	4	12.5	2	116	232
50A	5	10	2	556	1112
50A	6	10	2	356	712
50A	7	6.3	30	138	4140
50A	8	6.3	4	552	2208
VB206 (X2)					
50A	1	8	4	250	1000
50A	2	8	4	255	1020
60B	3	5	20	98	1960
VB208					
50A	1	12.5	2	215	430
50A	2	8	2	146	292
50A	3	6.3	7	150	1050
50A	4	6.3	6	143	858
VB209					
60B	1	5	2	203	406
50A	2	12.5	2	199	398
60B	3	5	2	175	350
50A	4	12.5	2	368	736
60B	5	5	2	172	344
50A	6	12.5	2	373	746
50A	7	12.5	2	200	400
50A	8	10	2	535	1070
50A	9	6.3	1	425	425
50A	10	10	3	1051	3153
60B	11	5	97	150	14550
VB210					
50A	1	12.5	2	740	1480
60B	2	5	2	172	344
50A	3	12.5	2	192	384
50A	4	10	3	1060	3180
60B	5	5	64	150	9600
VB211					
60B	1	5	2	217	434
50A	2	10	2	171	342
60B	3	5	4	238	952
50A	4	10	2	293	586
50A	5	10	2	304	608
60B	6	5	2	232	464
50A	7	10	2	301	602
60B	8	5	2	135	270
50A	9	10	2	295	590
50A	10	10	2	148	296
50A	11	10	2	478	956
50A	12	10	4	474	1896
50A	13	10	2	447	894
50A	14	10	2	363	726
60B	15	5	135	110	14850
VB212					
50A	1	10	2	354	708
50A	2	10	2	352	704
60B	3	5	19	110	2090
VB213					
50A	1	16	3	448	1344
50A	2	12.5	4	370	1480
50A	3	6.3	17	133	2261
VB214					
50A	1	6.3	2	150	300
50A	2	16	2	256	512
50A	3	16	3	255	765
50A	4	10	3	566	1698
50A	5	6.3	29	133	3857
VB215					
60B	1	5	2	276	552
50A	2	10	2	163	326
50A	3	10	2	161	322
50A	4	10	3	568	1704
60B	5	5	25	138	3450
VB216					
50A	1	10	2	404	808
50A	2	10	2	402	804
60B	3	5	22	110	2420
VB217					
60B	1	5	2	203	406
50A	2	10	2	195	390
50A	3	10	2	238	476
50A	4	6.3	2	142	284
50A	5	8	2	572	1144
60B	6	5	28	110	3080
60B	7	5	4	599	2396
VB218					
50A	1	10	2	404	808
50A	2	10	2	402	804
60B	3	5	22	110	2420
VB219					
60B	1	5	2	141	282
50A	2	12.5	3	178	534
50A	3	16	2	218	436
50A	4	10	2	468	936
50A	5	8	1	306	306
60B	6	5	26	125	3250
60B	7	5	4	476	1904
VB220					
50A	1	10	2	404	808
50A	2	10	2	402	804
60B	3	5	22	110	2420
VB221					
50A	1	10	2	354	708
50A	2	10	2	352	704
60B	3	5	19	110	2090
VB222					
50A	1	12.5	2	858	1716
50A	2	10	2	200	400
50A	3	6.3	1	87	87
50A	4	10	3	366	1098
60B	5	5	31	150	4650
VB223					
50A	1	12.5	1	538	538
50A	2	12.5	1	225	225
50A	3	12.5	1	463	463
50A	4	12.5	1	749	749
50A	5	12.5	1	192	192
50A	6	12.5	1	824	824
60B	7	5	2	285	570
50A	8	12.5	1	261	261
50A	9	12.5	3	235	705
50A	10	10	2	1011	2022
50A	11	6.3	1	897	897
50A	12	10	2	667	1334
50A	13	6.3	1	526	526
60B	14	5	101	150	15150
VSEB201					
50A	1	12.5	2	215	430
50A	2	8	2	146	292
50A	3	6.3	7	150	1050
50A	4	6.3	6	143	858
VT 201					
50A	1	20	7	543	3801
50A	2	20	7	362	2534
50A	3	8	34	406	13804
50A	4	12.5	24	350	8400
VT 202 (X3)					
50A	1	20	21	548	11508
50A	2	20	21	367	7707
50A	3	8	102	406	41412
50A	4	12.5	72	355	25560

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	1074	172
50A	6.3	236	59
50A	8	593	237
50A	10	413	260
50A	12.5	530	530
50A	16	31	49
50A	20	256	639
Peso Total	60B =		172 kg
Peso Total	50A =		1774 kg

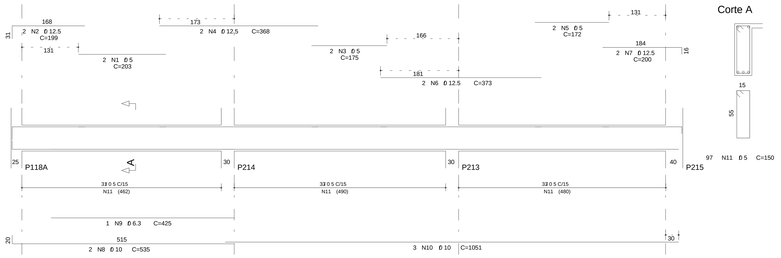
VB206/VB207 14/40



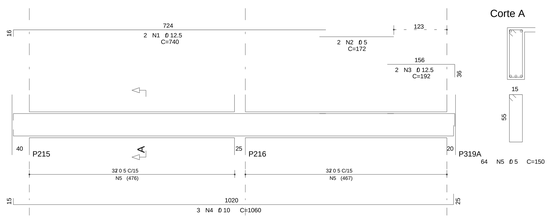
VB208 14/60



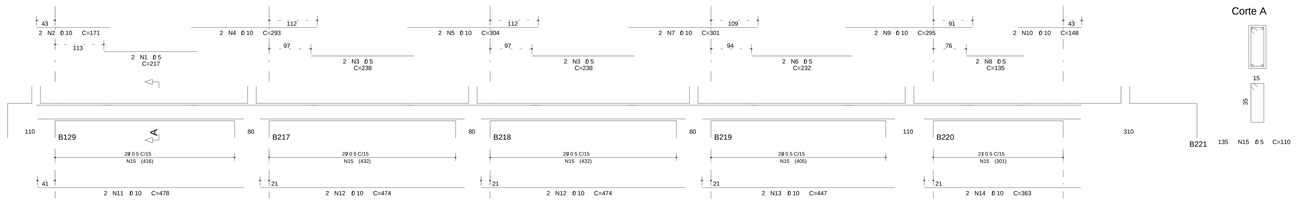
VB209 20/60



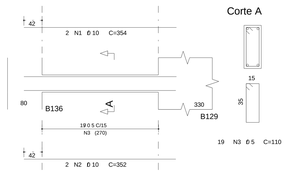
VB210 20/60



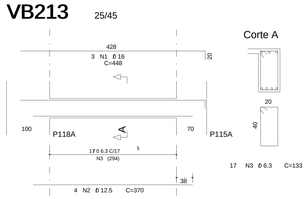
VB211 20/40



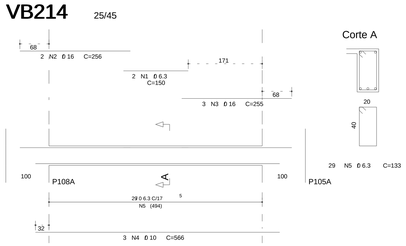
VB212 20/40



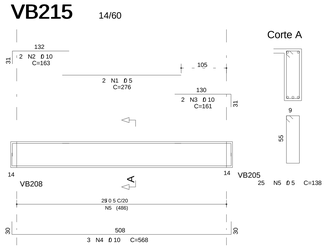
VB213 25/45



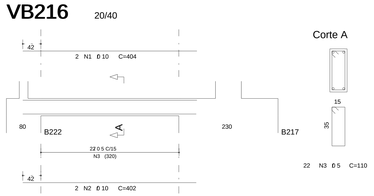
VB214 25/45



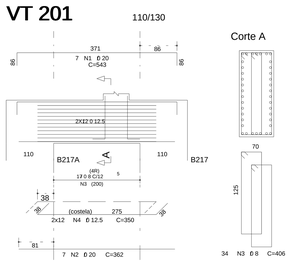
VB215 14/60



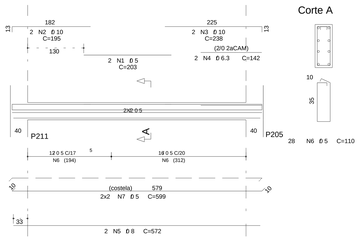
VB216 20/40



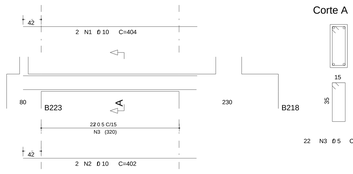
VT 201 110/130



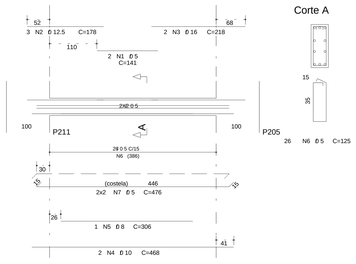
VB217 15/40



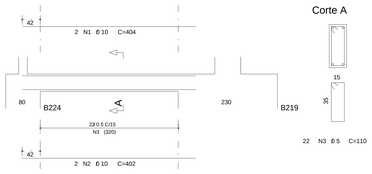
VB218 20/40



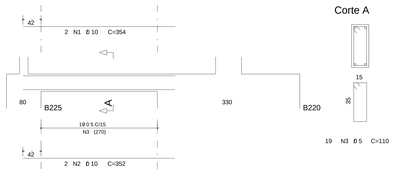
VB219 20/40



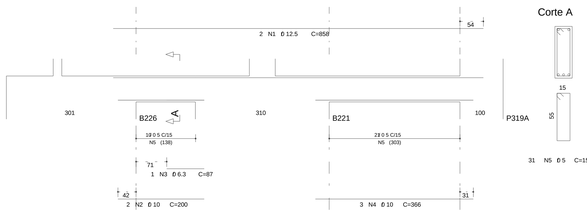
VB220 20/40



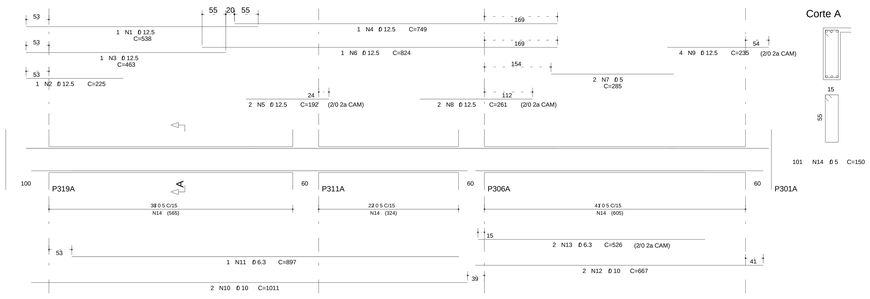
VB221 20/40



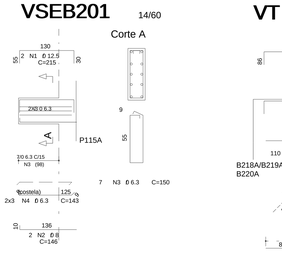
VB222 20/60



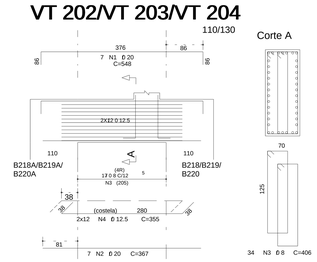
VB223 20/45



VSEB201 14/60



VT 202/VT 203/VT 204 110/130



COBRIMENTO DA ARMADURA:[1]

- 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

FCK= 35 MPa
EC = 28 GPa (MODULO DE ELASTICIDADE SECANTE AOS 28 DIAS).
A/C = 0,65 (FATOR AGUA CIMENTO)

REV	DATA	DESCRICAO
3	23/02/2010	ALTERACAO DA VIGA VB223
2	20/08/2009	INCLUSAO DAS VIGAS VT 201 A VT 204
1	26/06/2009	ALTERACAO DAS VIGAS VB205 E VB208 / ACRESCENTADA VSEB201
0	08/06/2009	EMISSAO INICIAL

simetria engenharia
PROJETOS ESTRUTURAIS
SIA QUADRA 4C No 51 SALA 359 a 399
BRASILIA-DF CEP 71200-045
FAX: (0XX61) 3036-4610
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE:	DISCO INCORPORADORA E IMOBILIARIA LTDA		
OBRA:	EDIFICIO RESIDENCIAL OLIMPIQUE	No OBRA:	001
ENDERECO OBRA:	SRIA AREA ESPECIAL 04 LOTES G e H - GUARA/DF		
DESCRICAO:	ARMACAO DAS VIGAS DO 1o SUBSOLO JUNTA B	DESENHO No:	095-XXX

DESENHISTA:	DATA:	ESCALA:	UNIDADE	No PROJ. SIMETRIA
TQS/ HELENA	08/06/2009	1:50	cm	421

ARQUIVO PLT: 421 -EST- 095-XXX -R03 .PLT

PROPRIETARIO: RESPONSAVEL TECNICO:

RESPONSAVEL TECNICO PELO PROJETO ESTRUTURAL

SIMETRIA ENGENHARIA E PROJETOS S/C LTDA
CREA:2725/RF

SIMETRIA ENGENHARIA DE PROJETOS S/C LTDA PLT:T:\FGW\NZX\TMPC JUNTA B -TORRE A\421-095\R03\DWG\095VXC 15:08 R03 PLT 23/02/2010 12:23:31