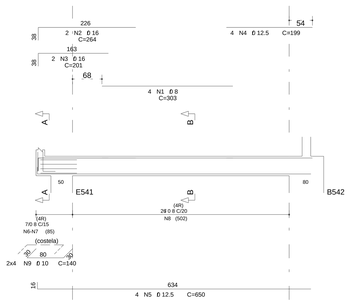
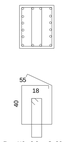
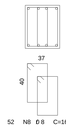
VE101I 60/45



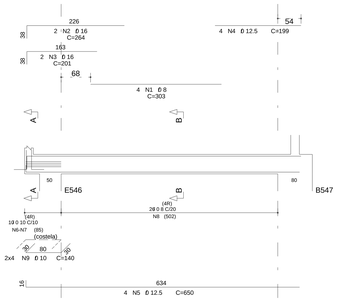
Corte A



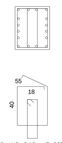
Corte B



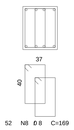
VE102I 60/45



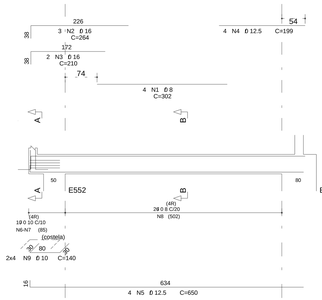
Corte A



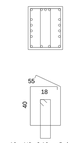
Corte B



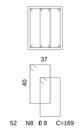
VE103I/VE104I 60/45



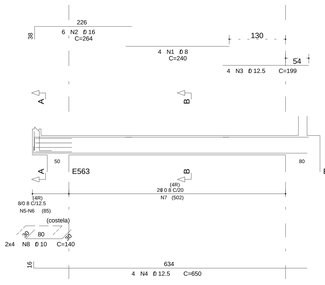
Corte A



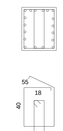
Corte B



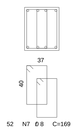
VE105I 60/45



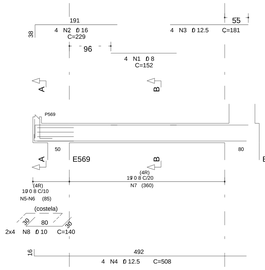
Corte A



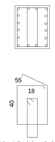
Corte B



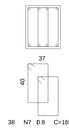
VE106I 60/45



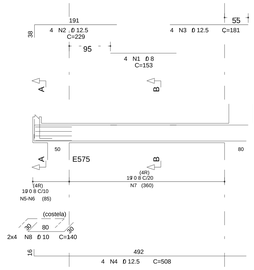
Corte A



Corte B



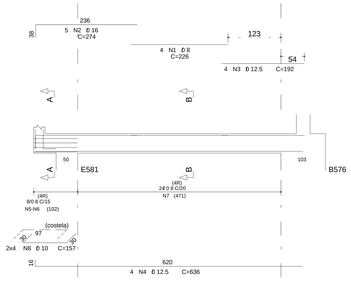
VE107I 60/45



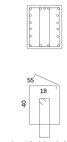
Corte A

Corte B

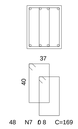
VE108I 60/45



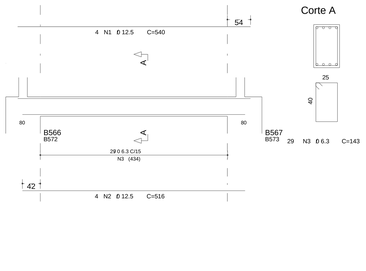
Corte A



Corte B

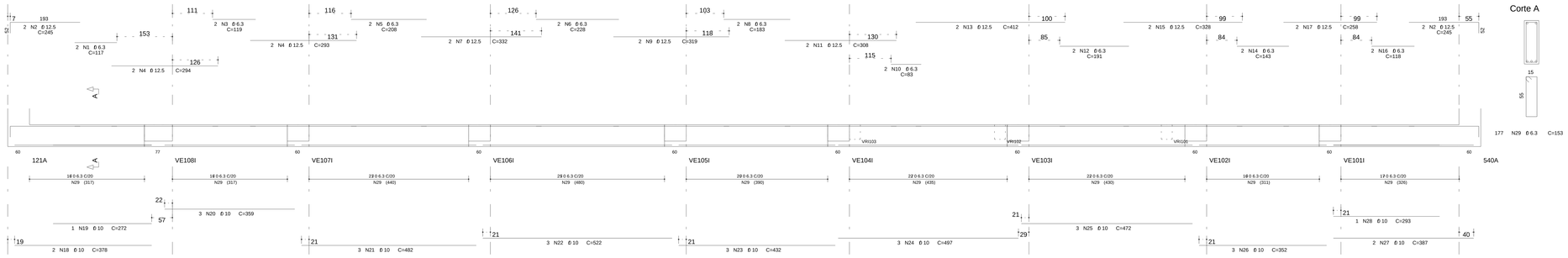


VE109I/VE110I 30/45 (2x)



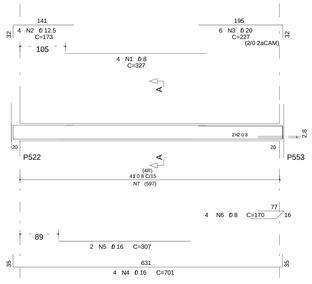
Corte A

VI101 20/60

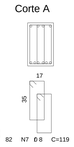


Corte A

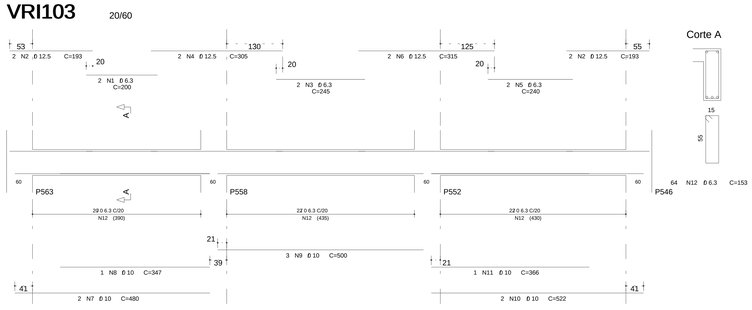
VRI101/VRI102 30/40



Corte A

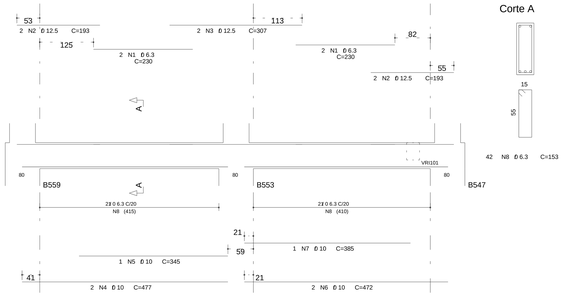


VRI103 20/60



Corte A

VRI104 20/60



Corte A

	ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VE101I						
	50A	1	8	4	303	1212
	50A	2	16	2	264	528
	50A	3	16	2	201	402
	50A	4	12.5	4	199	796
	50A	5	12.5	4	261	1044
	50A	6	10	7	261	1827
	50A	7	8	7	133	931
	50A	8	8	52	169	8788
	50A	9	10	8	140	1120
VE102I						
	50A	1	8	4	303	1212
	50A	2	16	2	264	528
	50A	3	16	2	201	402
	50A	4	12.5	4	199	796
	50A	5	12.5	4	261	2600
	50A	6	10	10	265	2650
	50A	7	10	10	137	1370
	50A	8	8	52	169	8788
	50A	9	10	8	140	1120
VE103I/VE104I (X2)						
	50A	1	8	8	302	2416
	50A	2	16	6	264	1584
	50A	3	16	4	210	840
	50A	4	12.5	8	199	1592
	50A	5	12.5	8	650	5200
	50A	6	10	20	265	5300
	50A	7	10	20	137	2740
	50A	8	8	104	169	17576
	50A	9	10	16	140	2240
VE105I						
	50A	1	8	4	240	960
	50A	2	16	6	264	1584
	50A	3	12.5	4	199	796
	50A	4	12.5	4	650	2600
	50A	5	8	8	261	2088
	50A	6	8	8	133	1064
	50A	7	8	52	169	8788
	50A	8	10	8	140	1120
VE106I						
	50A	1	8	4	152	608
	50A	2	16	4	229	916
	50A	3	12.5	4	181	724
	50A	4	12.5	4	508	2032
	50A	5	8	10	261	2610
	50A	6	8	10	133	1330
	50A	7	8	38	169	6422
	50A	8	10	8	140	1120
VE107I						
	50A	1	8	4	153	612
	50A	2	12.5	4	229	916
	50A	3	12.5	4	181	724
	50A	4	12.5	4	508	2032
	50A	5	8	10	261	2610
	50A	6	8	10	133	1330
	50A	7	8	38	169	6422
	50A	8	10	8	140	1120
VE108I						
	50A	1	8	4	226	904
	50A	2	16	5	274	1370
	50A	3	12.5	4	192	768
	50A	4	12.5	4	636	2544
	50A	5	8	8	261	2088
	50A	6	8	8	133	1064
	50A	7	8	48	169	8112
	50A	8	10	8	157	1256
VE109I (X2)						
	50A	1	12.5	8	540	4320
	50A	2	12.5	8	516	4128
	50A	3	6.3	58	143	8294
VI101						
	50A	1	6.3	2	117	234
	50A	2	12.5	4	245	980
	50A	3	6.3	2	119	238
	50A	4	12.5	4	294	1176
	50A	5	6.3	2	208	416
	50A	6	6.3	2	228	456
	50A	7	12.5	2	332	664
	50A	8	6.3	2	183	366
	50A	9	12.5	2	319	638
	50A	10	6.3	2	83	166
	50A	11	12.5	2	308	616
	50A	12	6.3	2	118	236
	50A	13	12.5	2	412	824
	50A	14	6.3	2	143	286
	50A	15	12.5	2	328	656
	50A	16	6.3	2	118	236
	50A	17	12.5	2	258	516
	50A	18	10	2	378	756
	50A	19	10	1	272	272
	50A	20	10	3	359	1077
	50A	21	10	3	482	1446
	50A	22	10	3	522	1566
	50A	23	10	3	432	1296
	50A	24	10	3	497	1491
	50A	25	10	3	472	1416
	50A	26	10	3	352	1056
	50A	27	10	2	387	774
	50A	28	10	1	293	293
	50A	29	6.3	177	153	27081
VRI101/VRI102 (X2)						
	50A	1	8	8	327	2616
	50A	2	12.5	8	173	1384
	50A	3	20	12	227	2724
	50A	4	16	8	701	5608
	50A	5	16	4	307	1228
	50A	6	8	8	170	1360
	50A	7	8	164	119	19516
VRI103						
	50A	1	6.3	2	200	400
	50A	2	12.5	4	193	772
	50A	3	6.3	2	245	490
	50A	4	12.5	2	305	610
	50A	5	6.3	2	240	480
	50A	6	12.5	2	315	630
	50A	7	10	2	480	960
	50A	8	10	1	347	347
	50A	9	10	3	500	1500
	50A	10	10	2	522	1044
	50A	11	10	1	366	366
	50A	12	6.3	64	153	9792
VRI104						
	50A	1	6.3	4	230	920
	50A	2	12.5	4	193	772
	50A	3	12.5	2	307	614
	50A	4	10	2	477	954
	50A	5	10	1	345	345
	50A	6	10	2	472	944
	50A	7	10	1	385	385
	50A	8	6.3	42	153	6426

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
50A	6.3	567	142
50A	8	1133	453
50A	10	394	248
50A	12.5	460	450
50A	16	150	240
50A	20	27	68
Peso Total 50A =			1611 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

FCK= 30 MPa
EC = 26 GPa (MODULO DE ELASTICIDADE SECANTE AOS 28 DIAS).
A/C = 0.65 (FATOR AGUA CIMENTO)

REV	DATA	DESCRICAO
1	19/03/2010	INCLUSAO DAS VIGAS VE109 E VE110I
0	12/02/2010	EMISSAO INICIAL

Simetria Engenharia
simetria PROJETOS ESTRUTURAIS
SIA QUADRA AC Nº 52 SALAS 203 a 205
BRASILIA-DF CEP: 71200-045
FAEX: (0XX61) 3036-9610
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE:	DISCO INCORPORADORA IMOBILIARIA LTDA.		
OBRA:	EDIFICIO RESIDENCIAL OLYMPIC	No OBRA:	001
ENDEREGO OBRA:	SRIA AREA ESPECIAL 04 LOTES G e H -GUARA DF.		
DESCRICAO:	ARMACAO VIGAS 2o.SUBSOLO E RAMPA JUNTA I	DESENHO No:	240-XXX

DESENHISTA:	DATA:	ESCALA:	UNIDADE	No PROJ. SIMETRIA:
TQS/ DENI	12/02/2010	1:50	CM	421

ARQUIVO PLT
421 -EST-240-XXX-R01 .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 P:\ C:\TQS\WINDOWS\TMP\CPAN7X-R02-SIGABSOLOOVGA\SPGAS-2SGABSOLPLT 19/03/2010 10:39:58