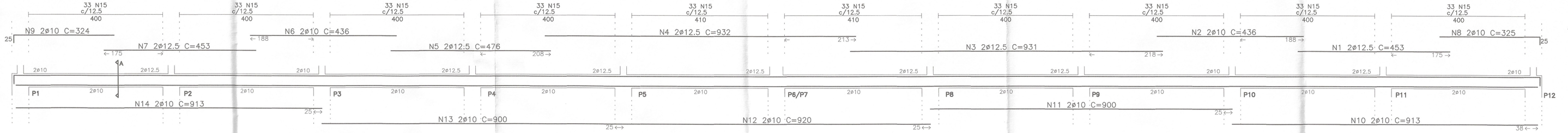
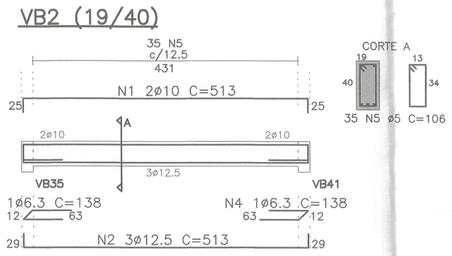
ESC. PLOT. 1:20
A0 841x1189
CORES/ESP.
RED 0,20
YELLOW 0,50
GREEN 0,30
CYAN 0,40
BLUE 0,30
MAGENTA 0,10
WHITE 0,70
COR 8 0,30

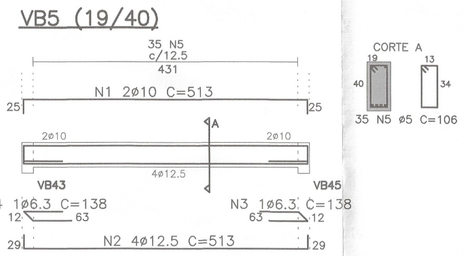
VB1 (19/40)



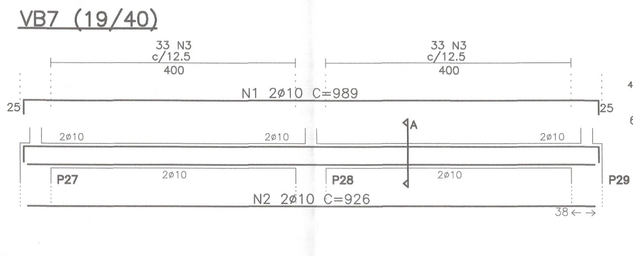
VB2 (19/40)



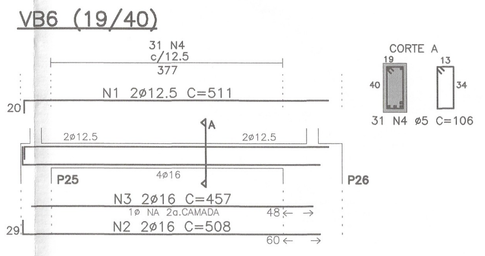
VB5 (19/40)



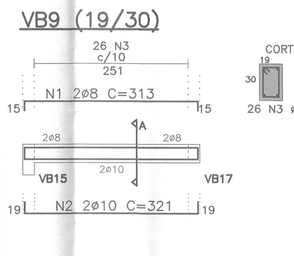
VB7 (19/40)



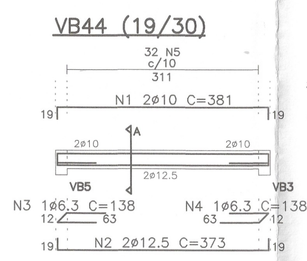
VB6 (19/40)



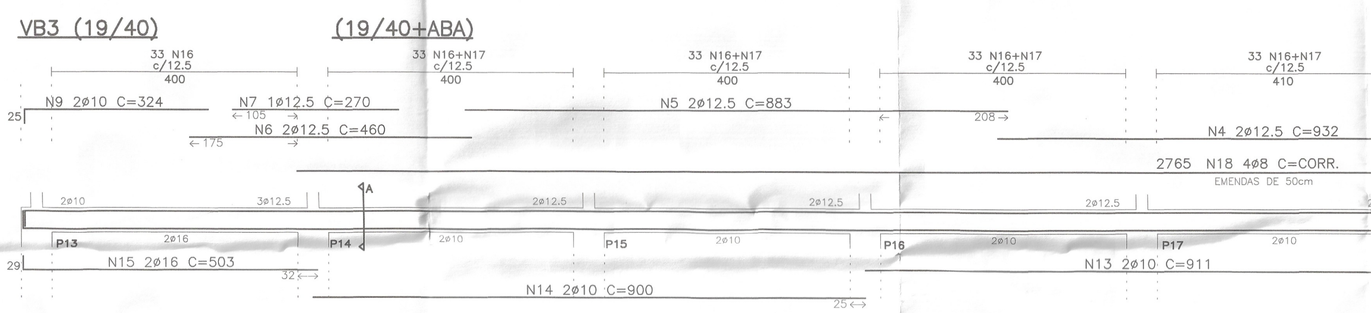
VB9 (19/30)



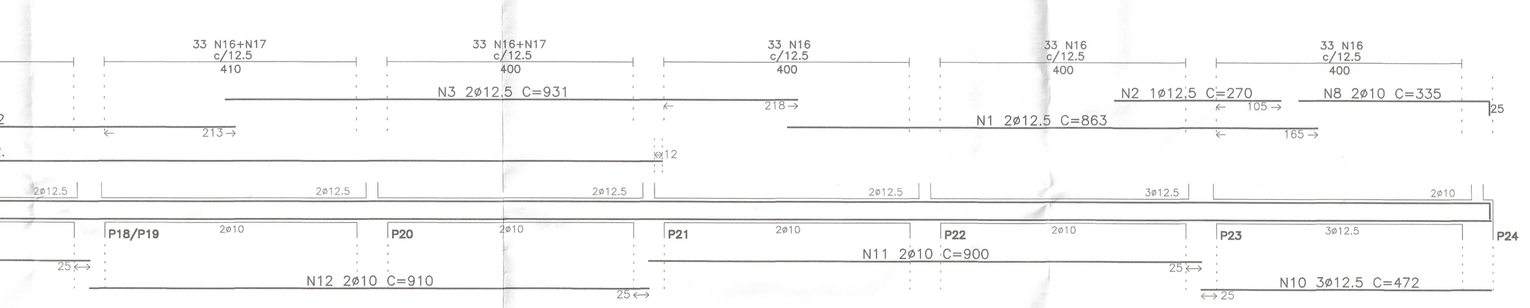
VB44 (19/30)



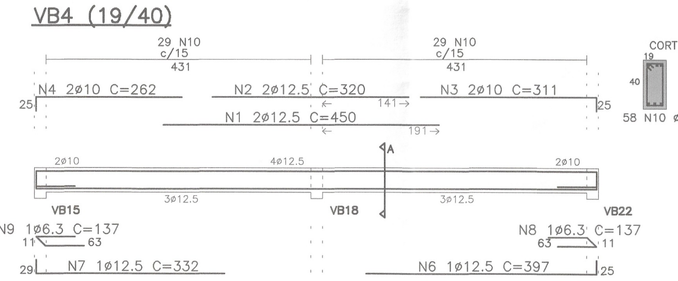
VB3 (19/40)



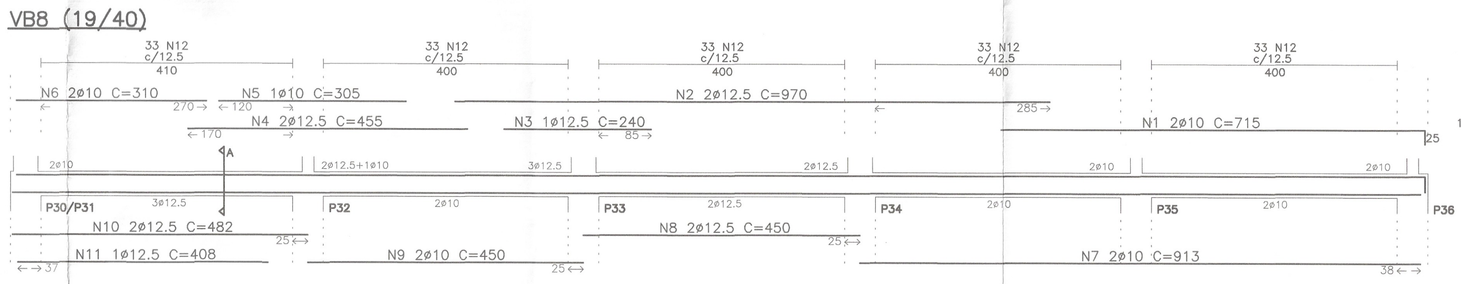
(19/40+ABA)



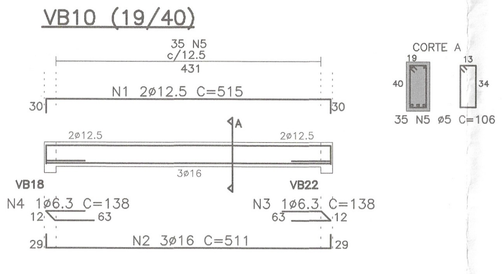
VB4 (19/40)



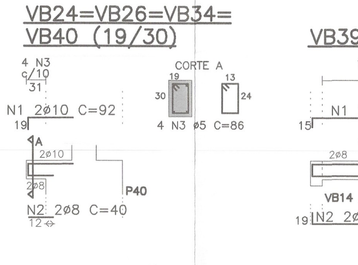
VB8 (19/40)



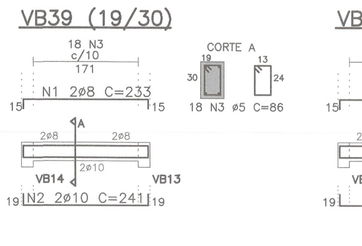
VB10 (19/40)



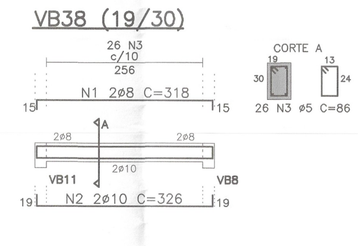
VB24=VB26=VB34= VB40 (19/30)



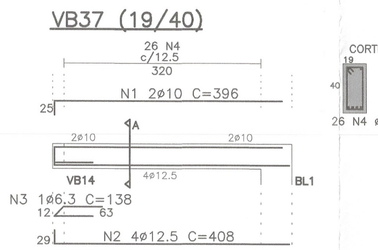
VB39 (19/30)



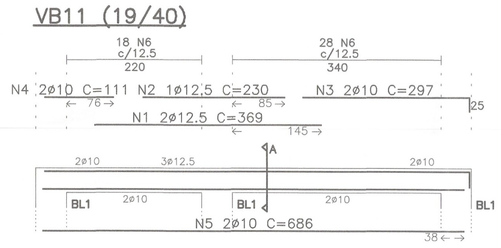
VB38 (19/30)



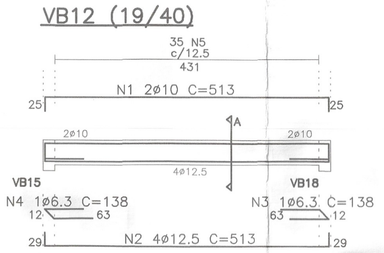
VB37 (19/40)



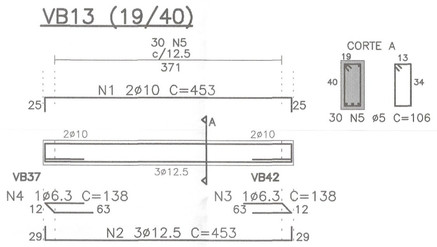
VB11 (19/40)



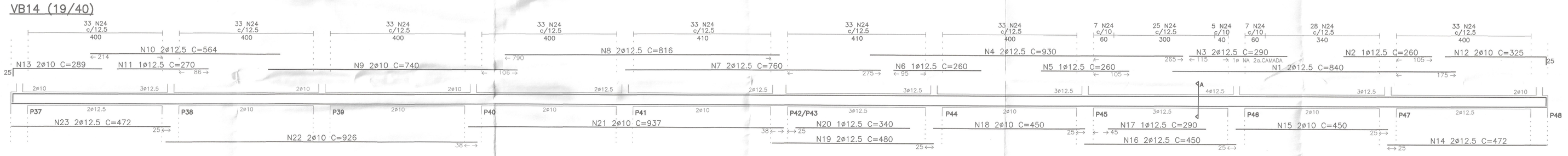
VB12 (19/40)



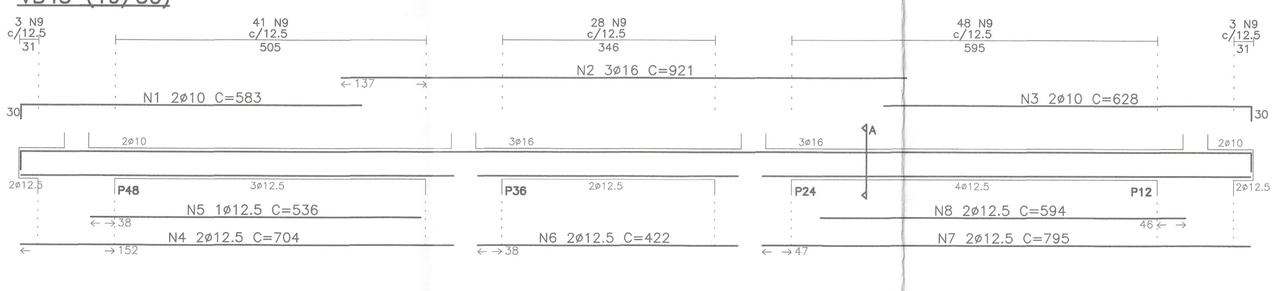
VB13 (19/40)



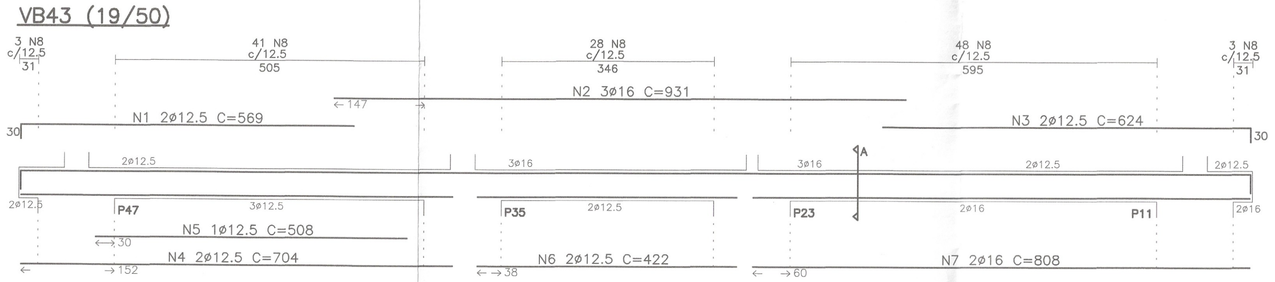
VB14 (19/40)



VB45 (19/50)



VB43 (19/50)



NOTAS:

01–CONCRETO= fck ≥ 25 MPa
02–AÇO= CA–50 – fyk=500 MPa
CA–60 – fyk=600 MPa
03–MEDIDAS EM cm, NÍVEIS EM m.
04–NÃO TIRAR MEDIDAS EM ESCALA.
05–CONFIRMAR MEDIDAS NO LOCAL.
06– COBRIMENTO=3,0cm

DETALHE DO RAIO DE CURVATURA (R)

ø (mm)	R (cm)	C.C. (cm)
12.5	10	16
16	13	21
20	16	25
25	20	31

C.C.=COMPRIMENTO DA CURVA

FUNDAÇÃO PARA O DESENVOLVIMENTO DA EDUCAÇÃO

RESPONSÁVEL PELA IMPLANTAÇÃO DO PROJETO:
apiacás arquitetos
ARQUITETOS | ANDERSON FREITAS, PEDRO BARROS, ACACIA FURUYA
R GENERAL JARDIM 482 GJ.02 VILA BUARQUE CEP 01223-010 SÃO PAULO
apiacas@apiacasarquitetos.com.br PABX (11) 3159 1970
RESPONSÁVEL TÉCNICO: PEDRO AMANDO DE BARROS – CAU A40238-0

No.	MODIFICAÇÕES	APROVAÇÃO AUTOR DO PROJETO	DATA	APROVAÇÃO FDE	DATA

OBSERVAÇÕES

DESENHO DE REFERÊNCIA

No.	APROVAÇÃO	DATA
	AUTOR DO PROJETO	
	FDE	

FUNDAÇÃO PARA O DESENVOLVIMENTO DA EDUCAÇÃO – F D E

ESCOLA – NOME/LOCAL: TERRENO JARDIM TEIXEIRA / ORLÂNDIA – SP		CÓDIGO	1 2 0 2 1 5 6
INTERVENÇÃO: OBRA NOVA DE CRECHE		No. LOTE	01
ETAPA/ÁREA TÉCNICA: PROJETO EXECUTIVO DE ESTRUTURA	TIPO PROJETO: PAD CR–1E	DATA: AGO/2014	ETAPA/ÁREA TÉCNICA: PE – EST
CONTEÚDO: ARMAÇÃO DAS VIGAS DA FUNDAÇÃO (01/02)	ESCALA: INDICADA	FOLHA: 05/08	REVISÃO: 00

DESENHO GERADO PELO SISTEMA CAD – PDR ENGECALC ENGENHARIA E PROJETOS ESTRUTURAIS S/C LTDA 1202156_01EPE0500_01

CR-1E - PADRÃO ESTACA 204

VB37

N	ø	Q	UNI	TOTAL
1	10	2	396	792
2	12.5	4	408	1632
3	6.3	1	138	138
4	5	26	106	2756

VB38

N	ø	Q	UNI	TOTAL
1	8	2	318	636
2	10	2	326	652
3	5	26	86	2236

VB39

N	ø	Q	UNI	TOTAL
1	8	2	233	466
2	10	2	241	482
3	5	18	86	1548

VB43

N	ø	Q	UNI	TOTAL
1	10	2	513	1026
2	12.5	3	569	1138
3	16	3	931	2793
4	12.5	2	624	1248
5	12.5	1	704	1408
6	12.5	1	508	508
7	16	2	422	844
8	5	123	808	1616
			126	15498

VB44

N	ø	Q	UNI	TOTAL
1	10	2	381	762
2	12.5	2	373	746
3	6.3	1	138	138
4	6.3	1	138	138
5	5	32	86	2752

VB45

N	ø	Q	UNI	TOTAL
1	10	2	583	1166
2	16	3	921	2763
3	10	2	628	1256
4	12.5	2	704	1408
5	12.5	1	536	536
6	12.5	2	422	844
7	12.5	2	795	1590
8	12.5	2	594	1188
9	5	123	126	15498

RESUMO GERAL DA FOLHA

AÇO	ø	COMPR(cm)	PESO(kg)
60B	5	218288	350
50A	6.3	8332	21
50A	8	13508	54
50A	10	51645	326
50A	12.5	63081	631
50A	16	11641	187
50A	20	–	–
50A	25	–	–
PESO TOTAL (kg)			1569

VB1

N	ø	Q	UNI	TOTAL
1	12.5	2	453	906
2	10	2	436	872
3	12.5	2	931	1862
4	12.5	2	932	1864
5	12.5	2	476	952
6	10	2	436	872
7	12.5	2	453	906
8	10	2	325	650
9	10	2	324	648
10	10	2	913	1826
11	10	2	900	1800
12	10	2	920	1840
13	10	2	900	1800
14	10	2	913	1826
15	5	330	106	34980

VB2

N	ø	Q	UNI	TOTAL
1	10	2	513	1026
2	12.5	3	513	1539
3	6.3	1	138	138
4	6.3	1	138	138
5	5	35	106	3710

VB3

N	ø	Q	UNI	TOTAL
1	12.5	2	863	1726
2	12.5	1	270	270
3	12.5	2	931	1862
4	12.5	2	932	1864
5	12.5	2	883	1766
6	12.5	2	460	920
7	12.5	2	270	540
8	10	2	335	670
9	10	2	324	648
10	12.5	3	472	1416
11	10	2	900	1800
12	10	2	910	1820
13	10	2	911	1822
14	10	2	921	1842
15	16	2	503	1006
16	5	330	106	34980
17	5	168	108	18144
18	8	4	CORR	11460

VB4

N	ø	Q	UNI	TOTAL
1	12.5	2	450	900
2	12.5	2	320	640
3	10	2	311	622
4	10	2	262	524
5	12.5	2	963	1926
6	12.5	1	397	397
7	12.5	1	332	332
8	6.3	1	137	137
9	6.3	1	137	137
10	6.3	58	108	6264

VB5

N	ø	Q	UNI	TOTAL
1	10	2	513	1026
2	12.5	4	513	2052
3	6.3	1	138	138
4	6.3	1	138	138
5	5	35	106	3710

VB6

N	ø	Q	UNI	TOTAL
1	12.5	2	511	1022
2	16	2	508	1016
3	16	2	457	914
4	5	31	106	3286

VB7

N	ø	Q	UNI	TOTAL
1	10	2	989	1978
2	10	2	926	1852
3	5	66	106	6996

VB8

N	ø	Q	UNI	TOTAL
1	10	2	715	1430
2	12.5	2	970	1940
3	12.5	1	240	240
4	12.5	2	455	910
5	10	1	305	305
6	10	2	310	620
7	10	2	913	1826
8	12.5	2	450	900
9	10	2	450	900
10	12.5	2	482	964
11	12.5	1	408	408
12	5	165	106	17490

VB9

N	ø	Q	UNI	TOTAL
1	8	2	313	626
2	10	2	321	642
3	5	26	86	2236

VB10

N	ø	Q	UNI	TOTAL
1	12.5	2	515	1030
2	16	3	511	1533
3	6.3	1	138	138
4	6.3	1	138	138
5	5	35	106	3710

VB11

N	ø	Q	UNI	TOTAL
1	12.5	2	369	738
2	12.5	1	230	230
3	10	2	297	594
4	10	2	111	222
5	10	2	686	1372
6	5	46	106	4876

VB12

N	ø	Q	UNI	TOTAL
1	10	2	513	1026
2	12.5	4	513	2052
3	6.3	1	138	138
4	6.3	1	138	138
5	5	35	106	3710

VB13

N	ø	Q	UNI	TOTAL
1	10	2	453	906
2	12.5	3	453	1359
3	6.3	1	138	138
4	6.3	1	138	138
5	5	30	106	3180

VB14

N	ø	Q	UNI	TOTAL
1	12.5	2	840	1680
2	12.5	1	260	260
3	12.5	2	290	580
4	12.5	2	930	1860
5	12.5	1	260	260
6	12.5	1	260	260
7	12.5	2	760	1520
8	12.5	2	816	1632
9	10	2	740	1480
10	12.5	2	564	1128
11	12.5	1	270	270
12	10	2	325	650
13	10	2	289	578
14	12.5	2	472	944
15	10	2	450	900
16	12.5	2	450	900
17	12.5	1	290	290
18	10	2	450	900
19	12.5	2	480	960
20	12.5	1	340	340
21	10	2	937	1874
22	10	2	926	1852
23	12.5	2	472	944
24	5	336	106	35616

VB24=VB26=VB34= VB40 (4x)

N	ø	Q	UNI	TOTAL
1	10	2	92	184
2	8	2	40	80
3	5	4	86	344