B1=B2=B3=B4=B6=B7=B8=B9=B10=B11=B13=B14
=B15=B17=B18=B19=B21=B22=B23=B24=B25
=B38=B39=B46=B47=B48=B49=B50=B51=B52
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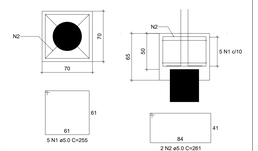

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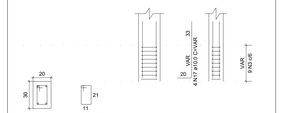

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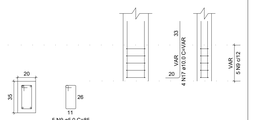

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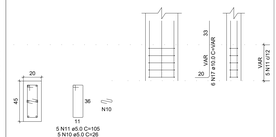

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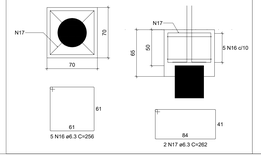

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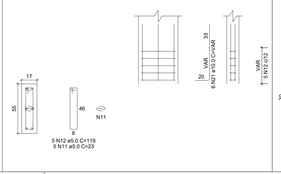

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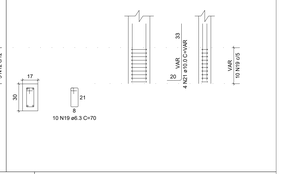


RELAÇÃO DO AÇO

3ø820		3ø832		836	
6ø837		6ø844		3ø845	
8ø8		8ø10		2ø1018	
3ø706		3ø727		2ø728	
P29		2ø P33		P36	
3ø740		3ø741			

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	6	241	1446
	2	5.0	10	490	7423
	3	5.0	12	185	2268
	4	5.0	12	189	2268
	5	5.0	10	255	10322
	6	5.0	18	261	4698
	7	5.0	10	69	690
	8	5.0	10	50	500
	9	5.0	15	79	1185
	10	5.0	15	75	1123
	11	5.0	10	73	730
	12	5.0	13	113	1469
	13	5.0	14	85	1190
	14	5.0	10	26	260
	15	5.0	10	55	550
CA50	16	6.3	51	256	13056
	17	6.3	18	262	4716
	18	6.3	2	252	504
	19	6.3	12	70	840
	20	8.0	12	268	3216
	21	10.0	82	VAR	VAR
	22	10.0	72	67	4824
	23	10.0	12	VAR	VAR
	24	12.5	4	VAR	VAR

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	190	51.1
	8.0	32.2	16
	10.0	140	95
	12.5	4	3.8
CA60	5.0	465.4	78.6
PESO TOTAL (kg)			
CA50	164.5		
CA60	78.6		

Volume de concreto (C-30) = 8,37 m³
Área de forma = 57,04 m²

RELAÇÃO DO AÇO

4ø8ø66		2ø P1	P2
P4		P8	P9
P8		P9	2ø P10
7ø P13		P22	P23
P24		2ø P25	2ø P39
5ø P48		3ø P49	2ø P53
P60		P65	P66

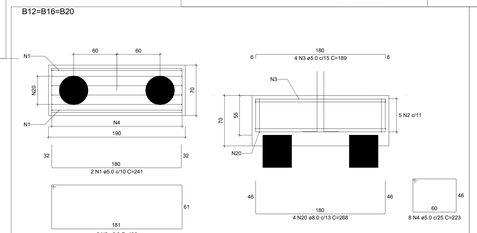
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	220	255	56100
	2	5.0	68	291	20568
	3	5.0	19	75	1425
	4	5.0	35	55	1925
	5	5.0	5	55	275
	6	5.0	47	79	3713
	7	5.0	10	69	690
	8	5.0	10	50	500
	9	5.0	10	65	650
	10	5.0	5	26	130
	11	5.0	10	105	525
	12	6.3	10	86	860
	13	6.3	10	99	990
	14	6.3	9	96	864
	15	8.0	16	80	1280
	16	8.0	5	65	325
	17	10.0	162	VAR	VAR
	18	10.0	19	77	1463
	20	10.0	4	67	268
	21	12.5	49	65	3312

RESUMO DO AÇO

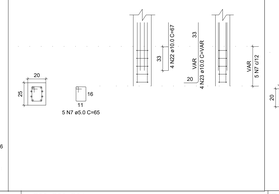
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	59.8	5.3
	8.0	18.9	8.2
	10.0	220.8	148.6
	12.5	84	109.5
CA60	5.0	941	159.1
PESO TOTAL (kg)			
CA50	166.8		
CA60	159.5		

Volume de concreto (C-30) = 13,18 m³
Área de forma = 103,36 m²

B12=B16=B20



P12



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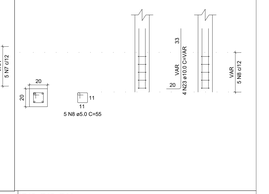

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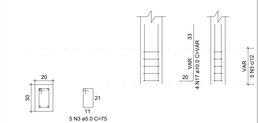

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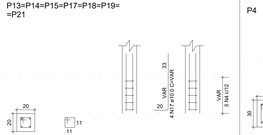

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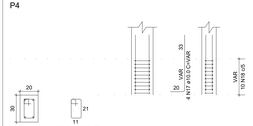

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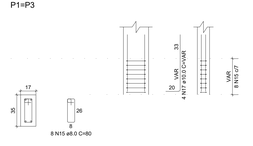

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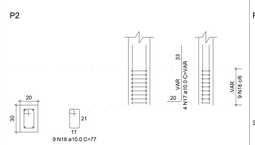

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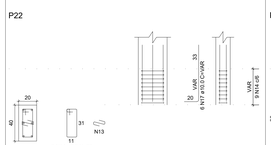

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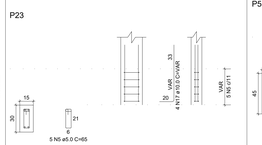

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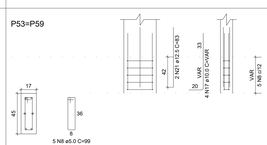

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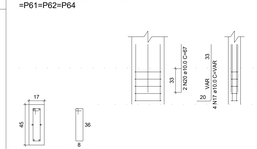

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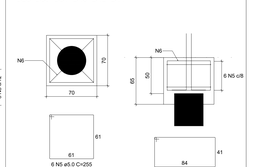

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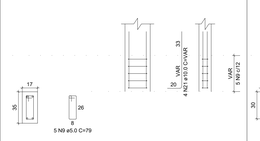

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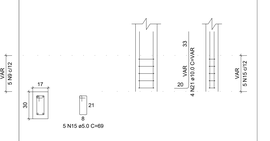

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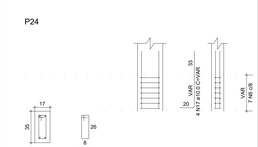

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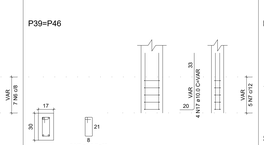

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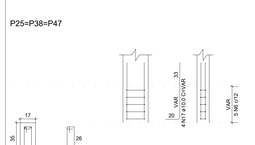

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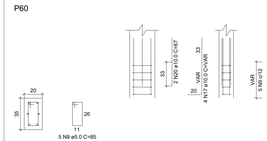

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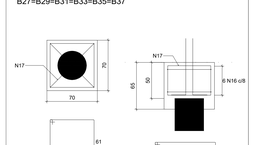

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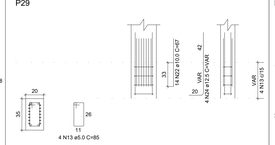

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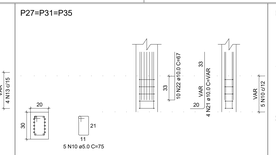

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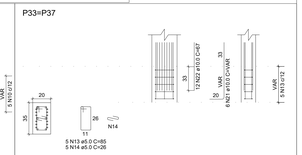

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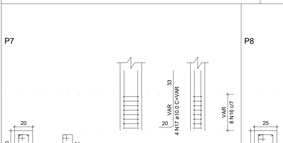

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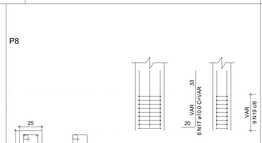

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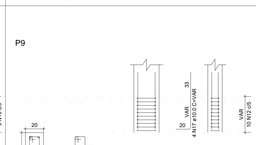

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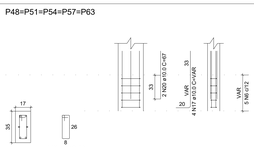

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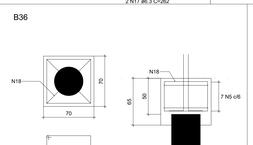

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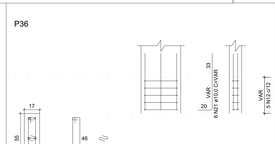

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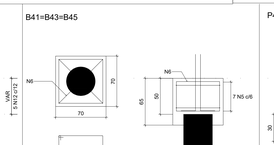

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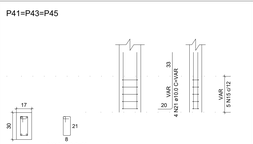
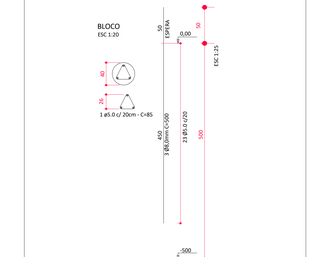


69 ESTACAS Ø 40CM



Resumo do aço - ESTACAS

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)	
CA50	6,0	1035	449,71	395Gr/M
CA60	5,0	1348,95	228,51	154Gr/M
PESO TOTAL (kg)				
CA50	449,71			
CA60	228,51			

Volume de concreto (C-25) = 41,47 m³

ANDRÉ MADEIRA ENGENHARIA
(51) 98555-4410
CENTRO - GRAVATAÍ - RS
WWW.ANDREMADEIRA.COM.BR
ANDRELUSMADEIRA@GMAIL.COM

PROJETO AMPLIAÇAO EMEF EDMUNDO EST.
RUA TRES CORDAS
CAMPO BOM - RS

PROPRIETÁRIO: PREFEITURA DE CAMPO BOM - SEC EDUCAÇAO

RESPONSÁVEL TÉCNICO: ANDRÉ LUIS MADEIRA - CREA 173063

ESTRUTUTURAL BLOCOS, PILARES DE ARRANQUE E ESTACAS

PRANCHA: E-4

AREA: -m²

DATA: OUT/2021

ESCALA: INDICADA