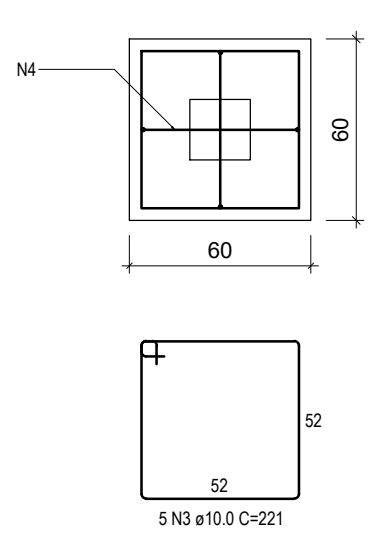
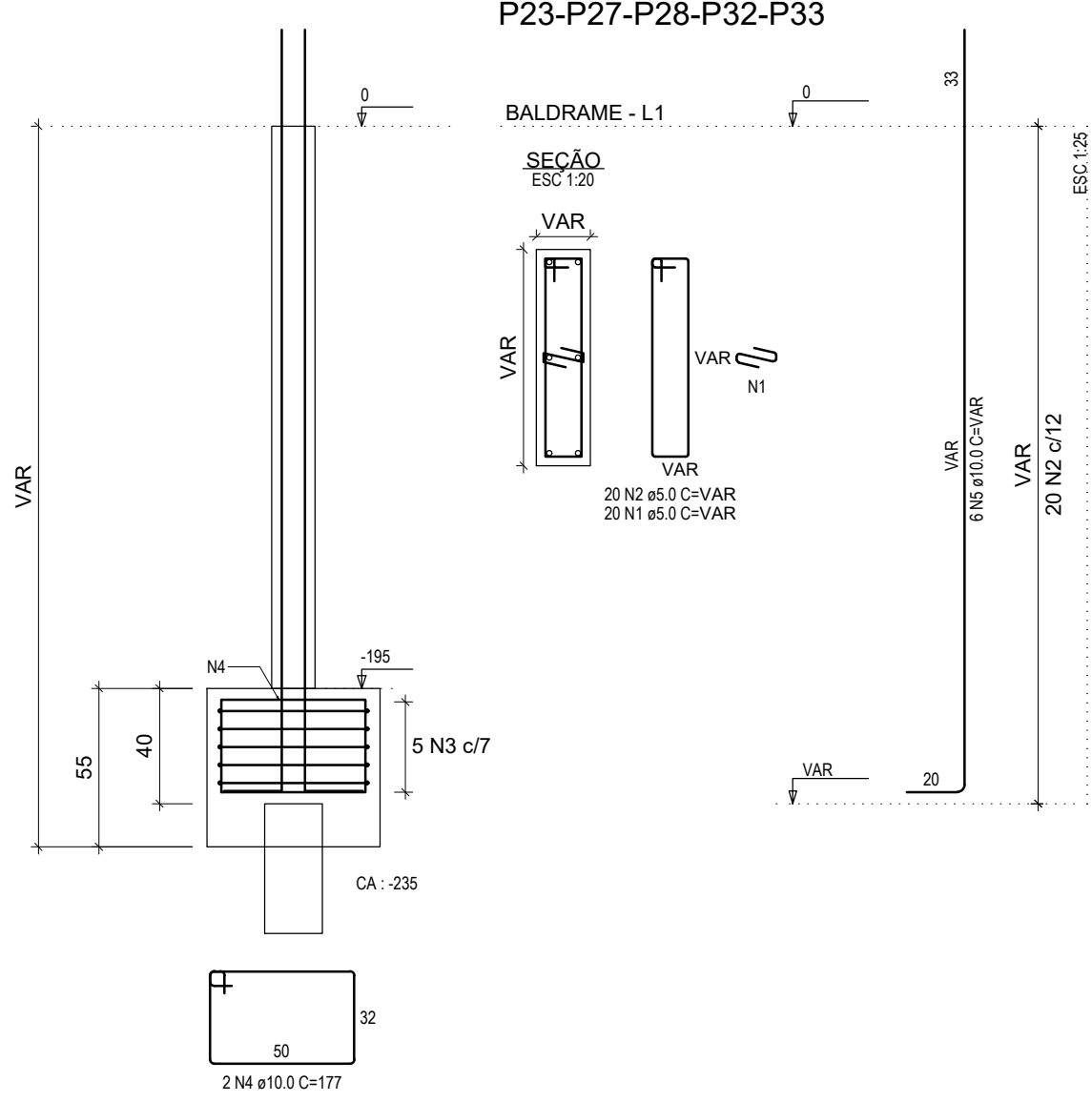


B1 (x10)

1xEST  
PLANTA  
ESC 1:25



CORTE  
ESC 1:25



P9-P10-P11-P21-P22  
P23-P27-P28-P32-P33

RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	200	25	5000
CA60	2	5.0	200	141	28200
CA50	3	10.0	90	221	11000
CA50	4	10.0	20	177	3540
CA50	5	10.0	60	VAR	VAR

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	315.1	213.7
CA60	5.0	332	56.3

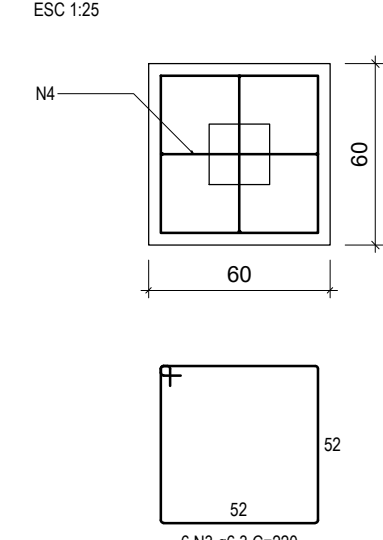
PESO TOTAL (kg)

CA50	213.7
CA60	56.3

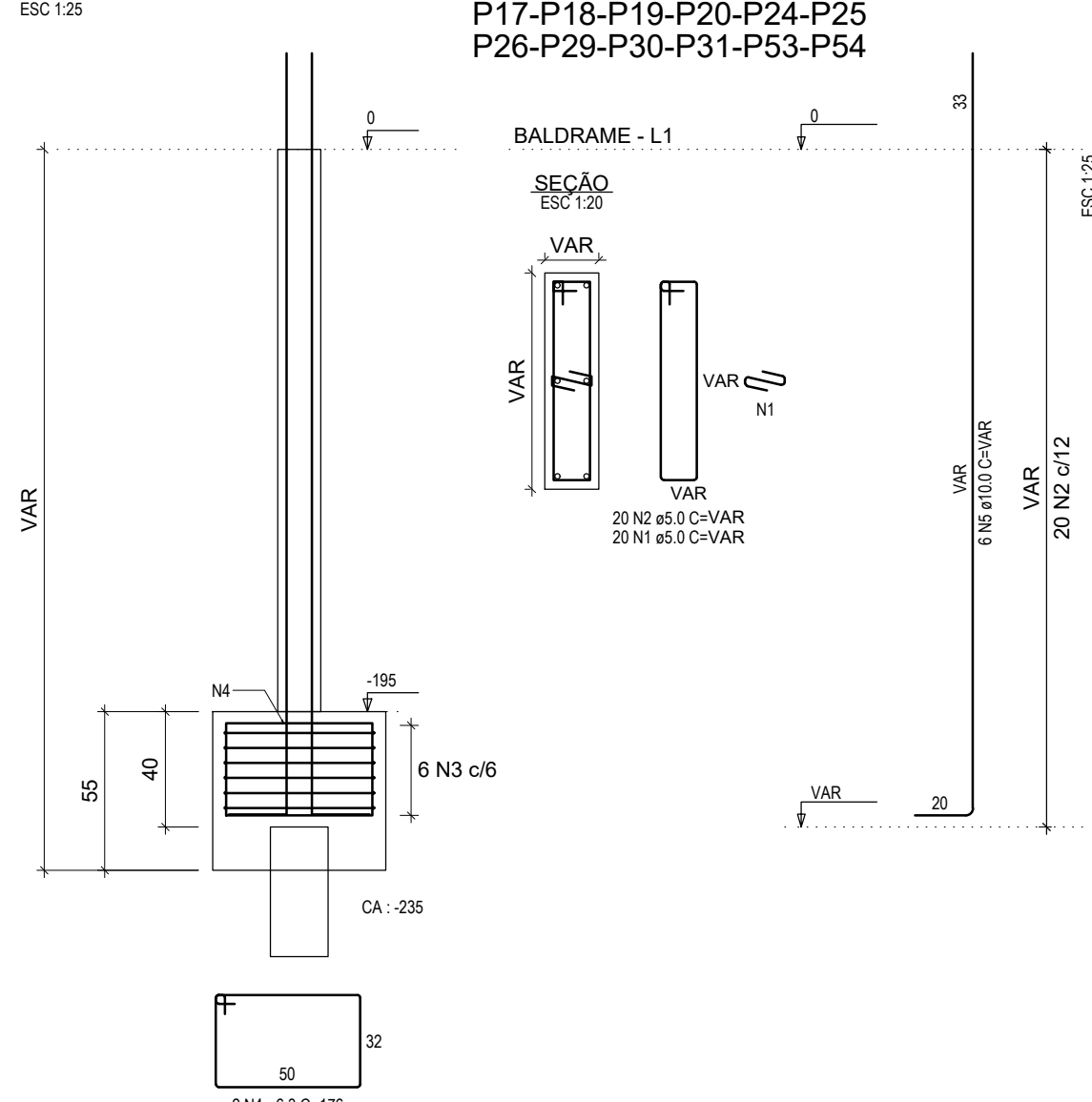
Volume de concreto (C-30) = 4.04 m³  
Área de forma = 48.45 m²

B2 (x23)

1xEST  
PLANTA  
ESC 1:25



CORTE  
ESC 1:25



P1-P2-P3-P4-P5-P6  
P7-P8-P12-P15-P16  
P17-P18-P19-P20-P24-P25  
P26-P29-P30-P31-P53-P54

RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	460	25	11500
CA60	2	5.0	460	141	64960
CA50	3	6.3	138	220	30360
CA50	4	6.3	46	176	8096
CA50	5	10.0	138	VAR	VAR

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	384.8	103.5
CA50	10.0	389.2	263.9
CA60	5.0	763.6	129.5

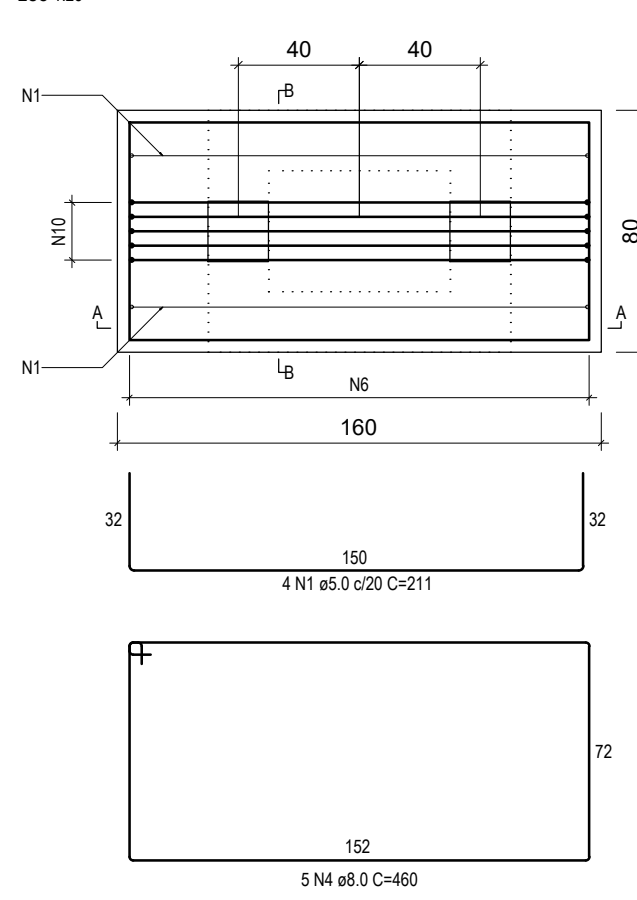
PESO TOTAL (kg)

CA50	367.4
CA60	129.5

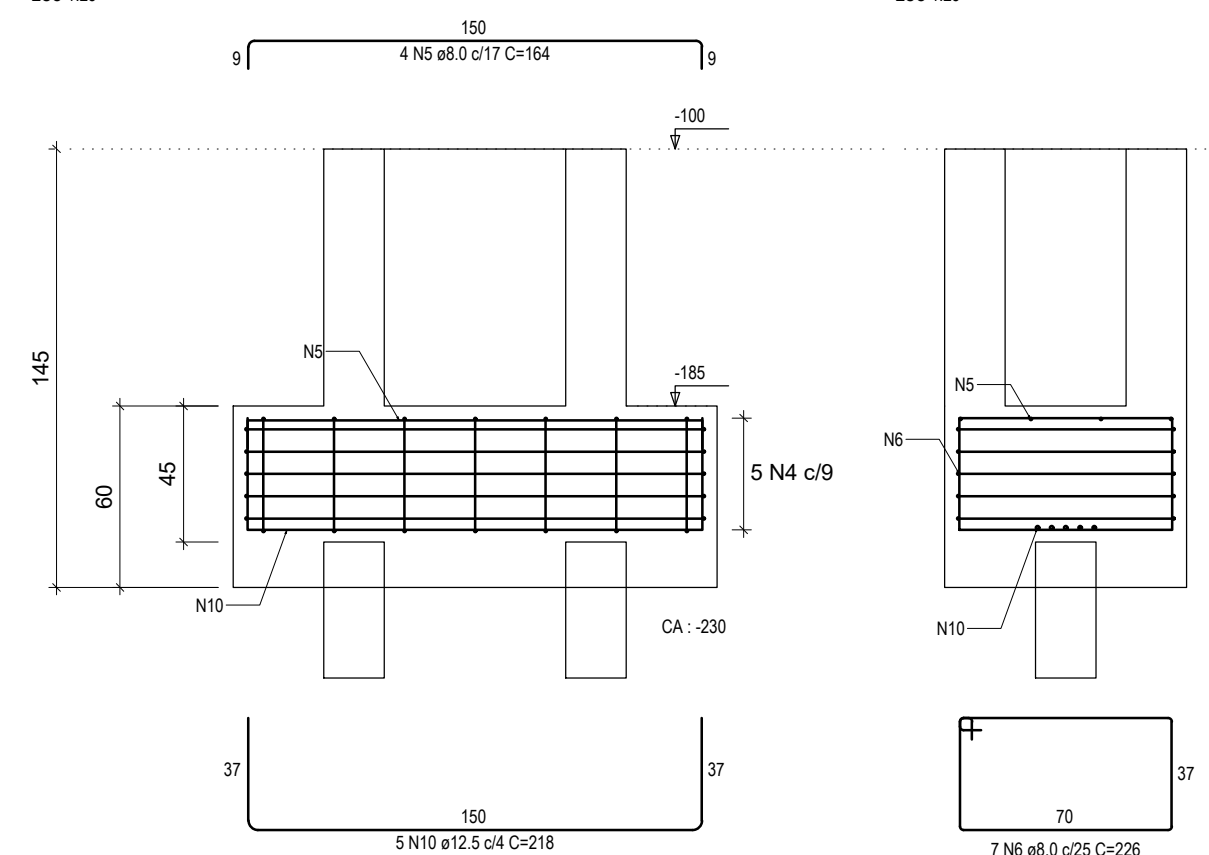
Volume de concreto (C-30) = 9.28 m³  
Área de forma = 111.44 m²

B3 (x29)

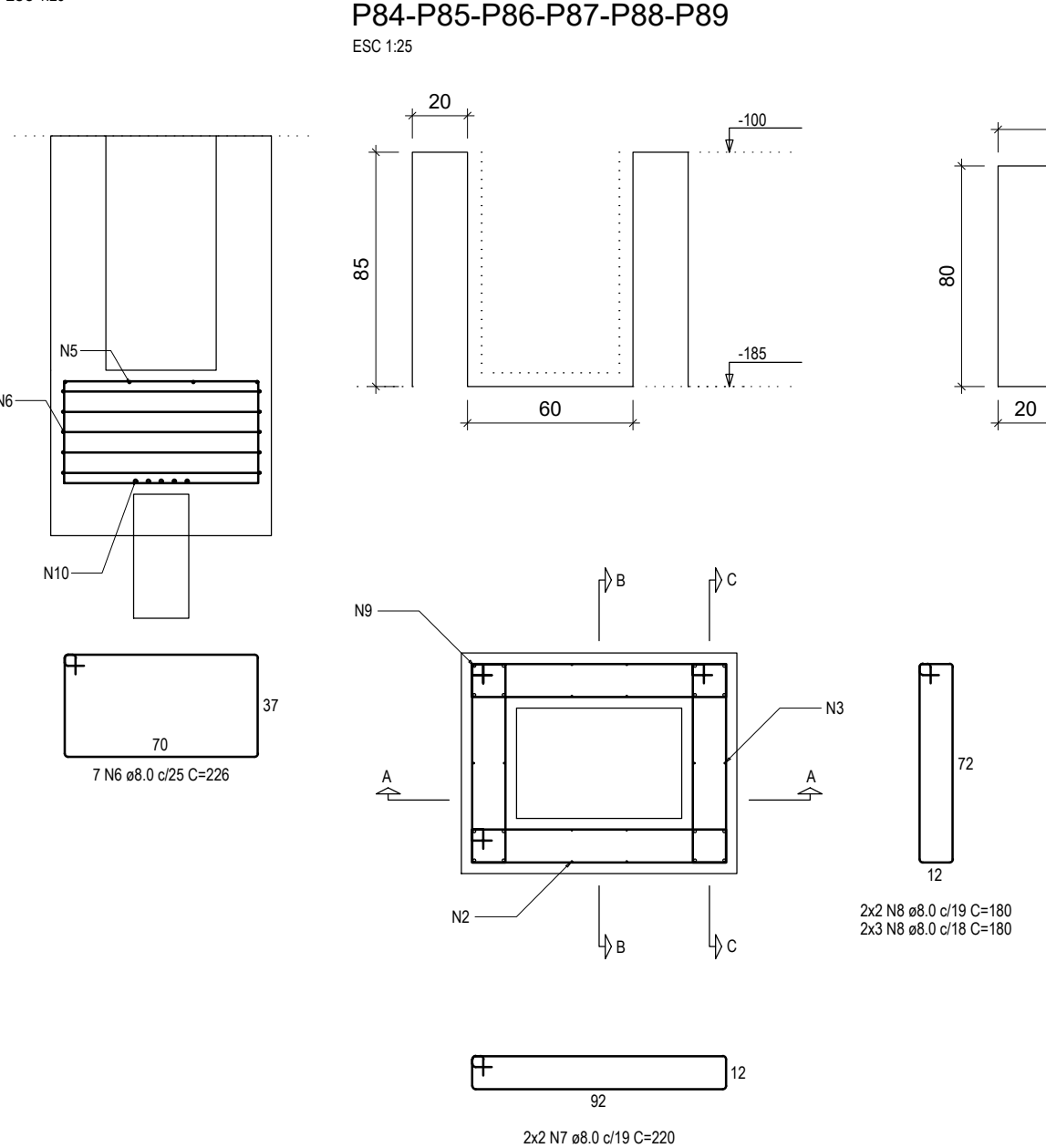
2xEST  
PLANTA  
ESC 1:25



CORTE A-A  
ESC 1:25



CORTE B-B  
ESC 1:25



Cálculo  
P36-P37-P38-P39-P40-P41  
P42-P44-P45-P46-P47-P48  
P49-P50-P51-P52-P55-P63  
P64-P72-P73-P81-P83  
P84-P85-P86-P87-P88-P89

RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	116	211	24476
CA60	2	5.0	58	533	32074
CA50	3	6.3	29	550	15950
CA50	4	8.0	145	460	66700
CA50	5	8.0	116	164	19024
CA50	6	8.0	203	205	41678
CA50	7	8.0	290	220	63800
CA50	8	8.0	290	180	52200
CA50	9	10.0	116	549	63684
CA50	10	12.5	145	218	31610

RESUMO DO AÇO

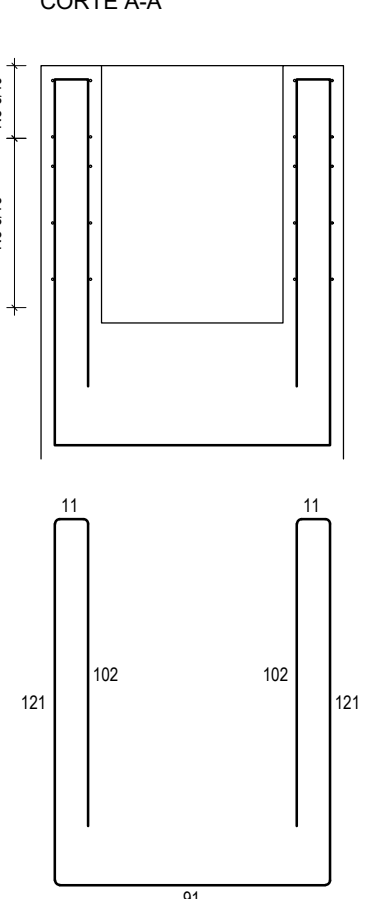
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	159.5	42.9
CA50	8.0	2476	1074.7
CA50	10.0	636.8	431.9
CA50	12.5	316.1	335
CA60	5.0	955.5	95.9

PESO TOTAL (kg)

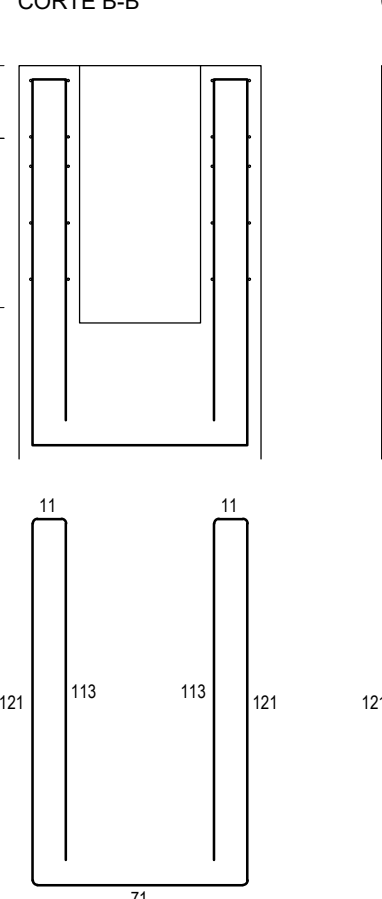
CA50	1864.5
CA60	95.9

Volume de concreto (C-30) = 35.73 m³  
Área de forma = 241.28 m²

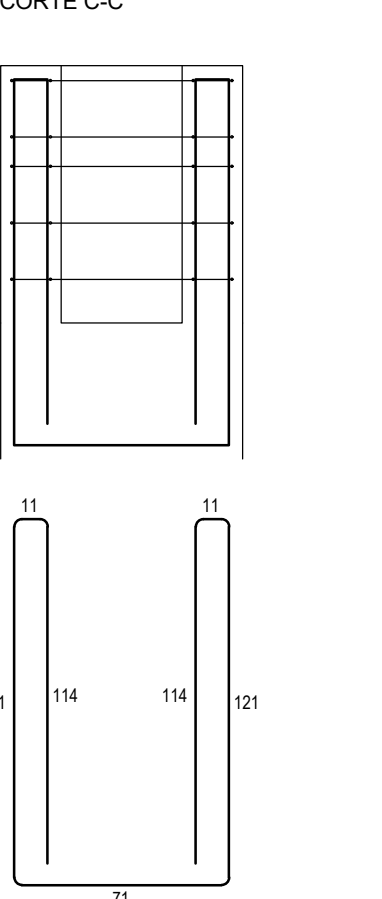
CORTE A-A



CORTE B-B



CORTE C-C



## PROJETO ESTRUTURAL

Halla arquitetura

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**CONSTRUÇÃO INSTITUCIONAL EM ALVENARIA - GINÁSIO ESCOLAR**  
Rodovia Estadual - SC, 416 - São Roque  
Timbó - SC

**Autor do Projeto:** Anderson Halla  
Arquiteto e Urbanista - CAU nº 176063-7

**Proprietário:** Fundo Municipal de Educação - FMDE de Timbó  
CNPJ: 32.257.384/0001-19

**Escala:** Indicada **Revisão:** 00 **Data:** Maio 2020

**Especificação:** DETALHAMENTO DOS BLOCOS DE COROAMENTO  
B1 - B2 - B3

**E** 02