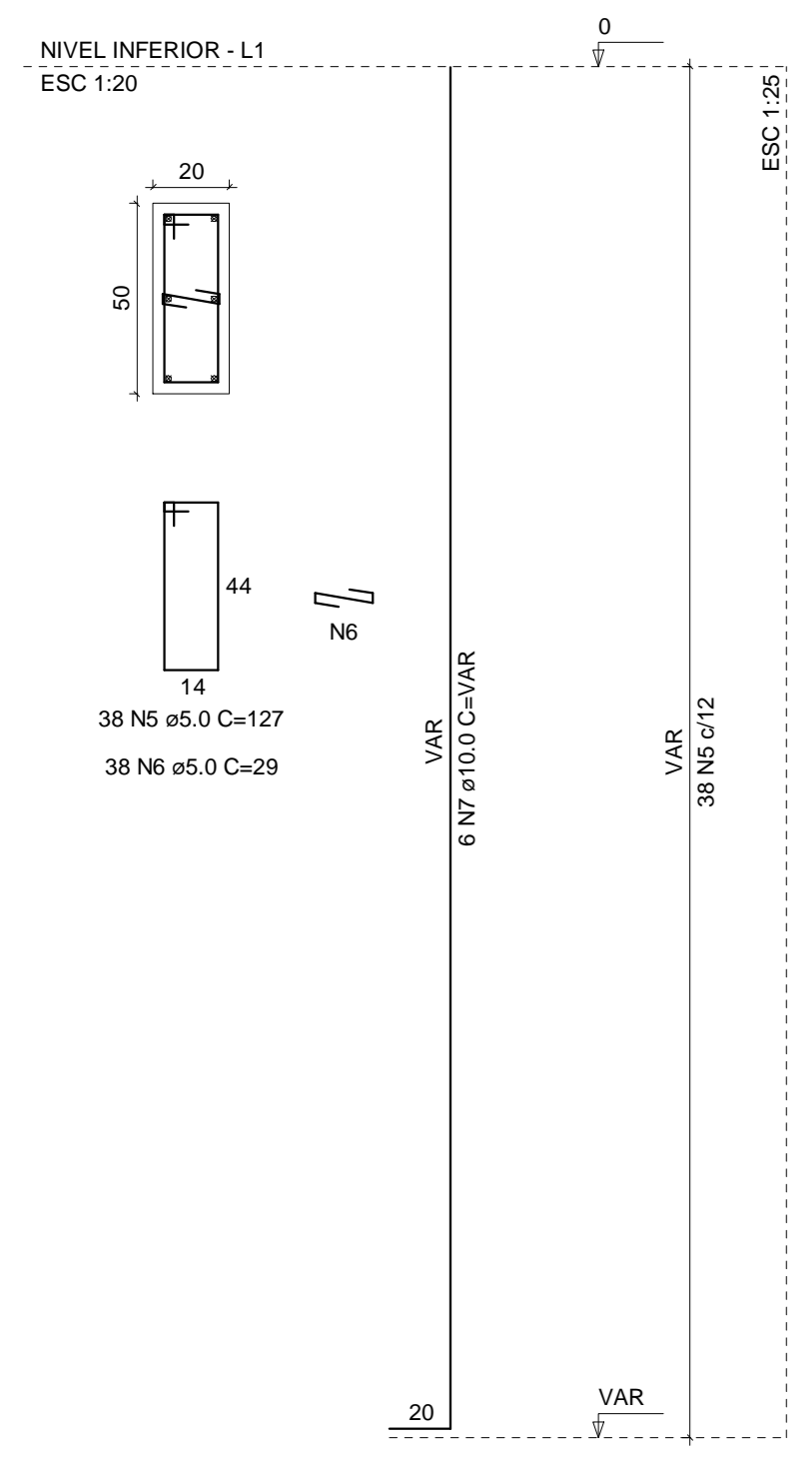
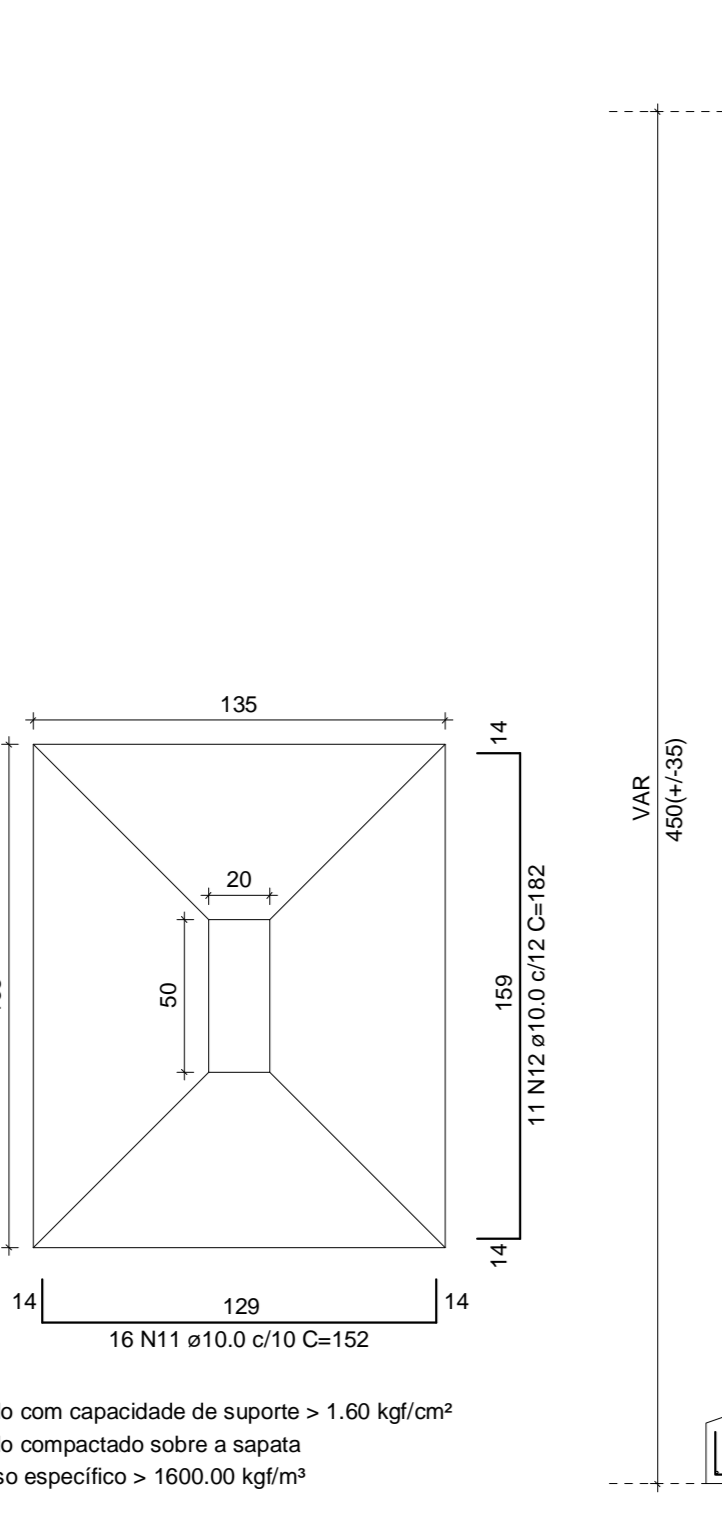


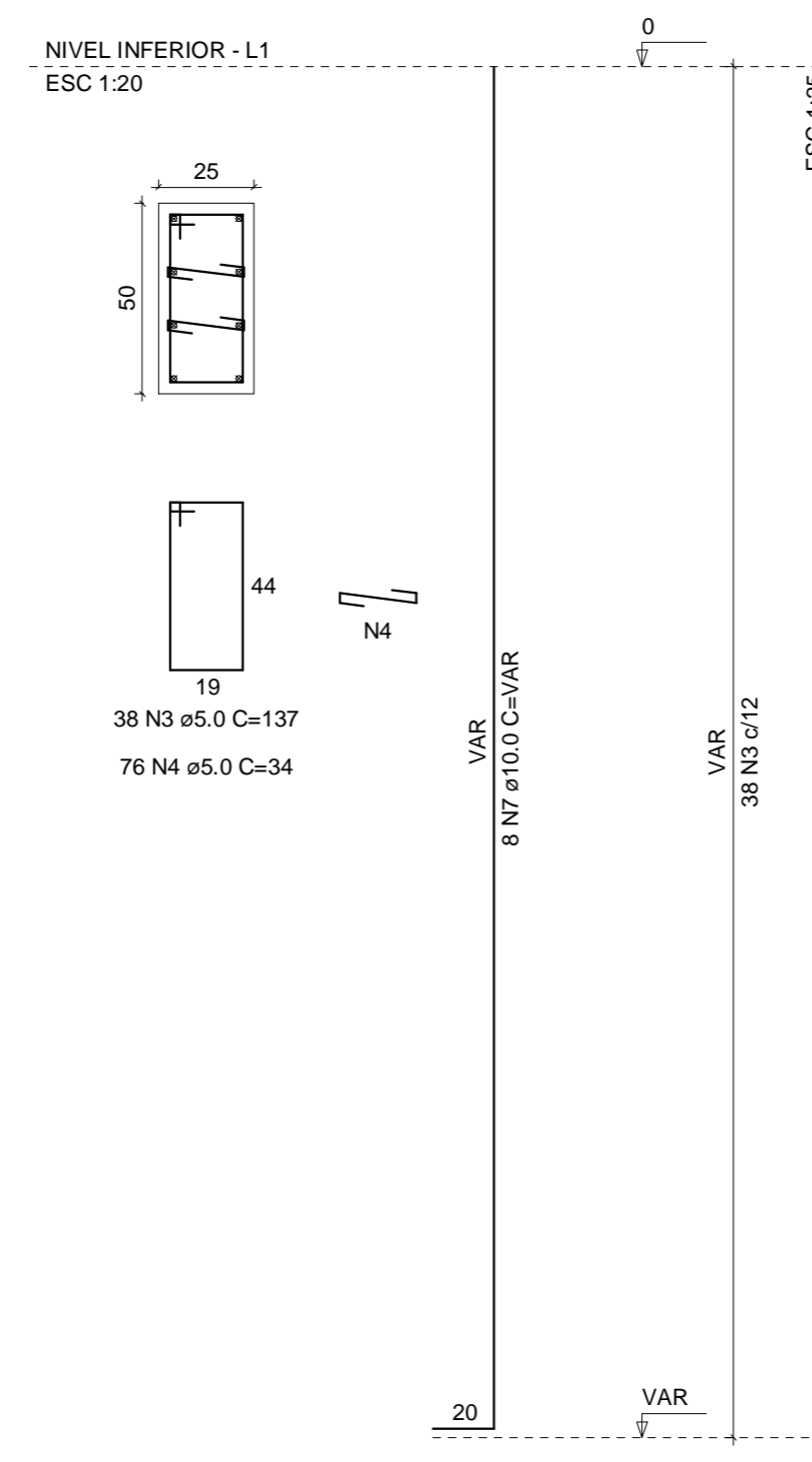
P5=P6=P7=P8=P9



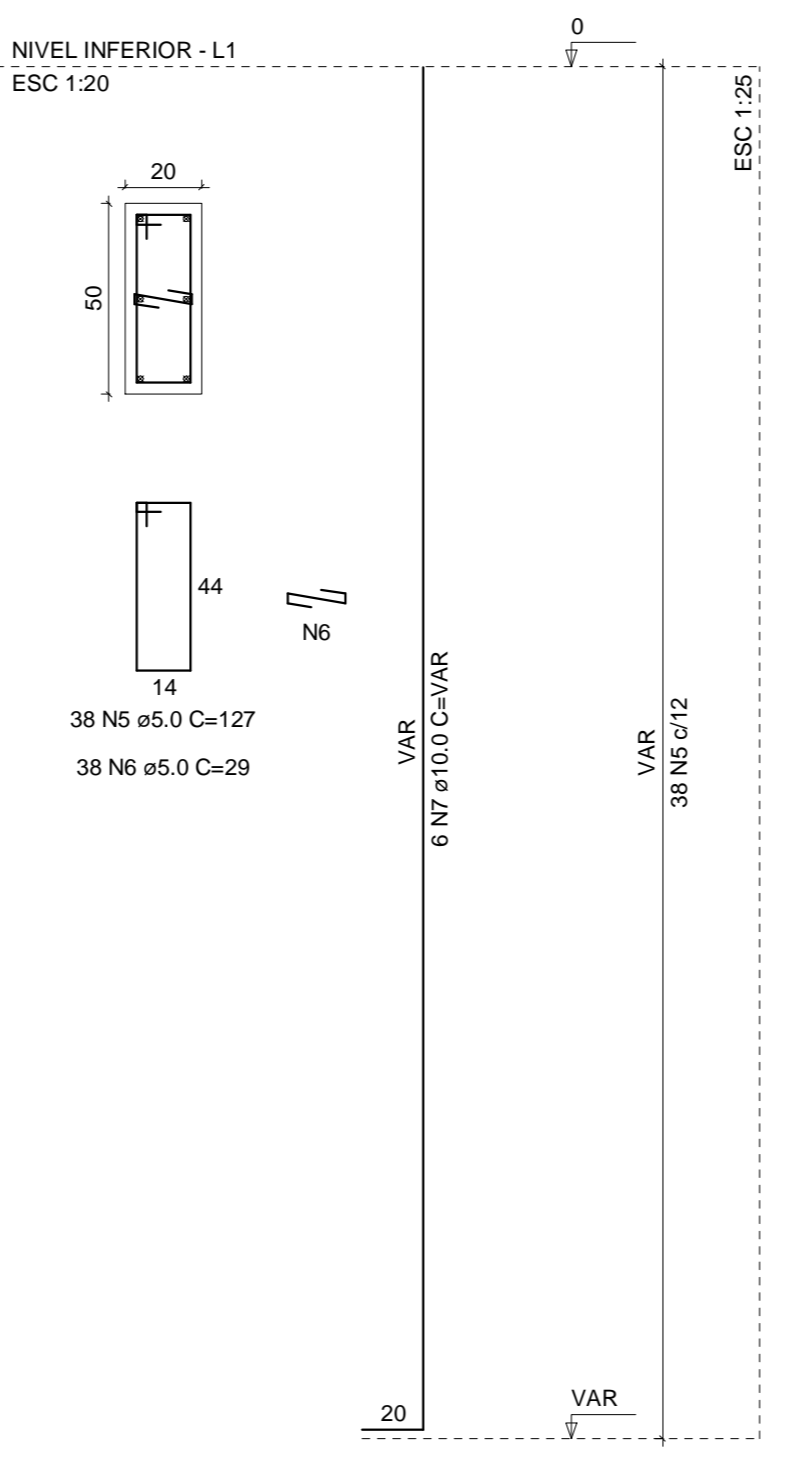
S5=S6=S7=S8=S9



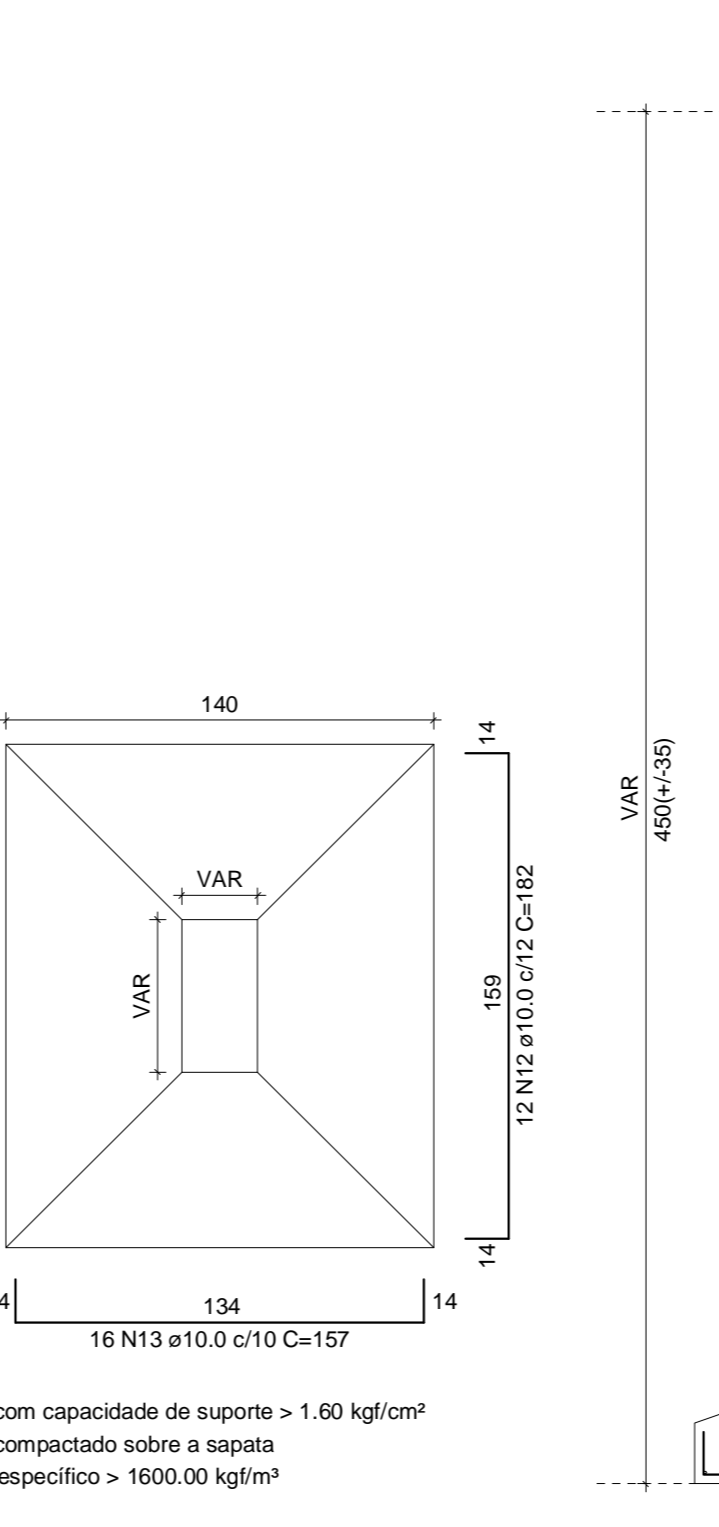
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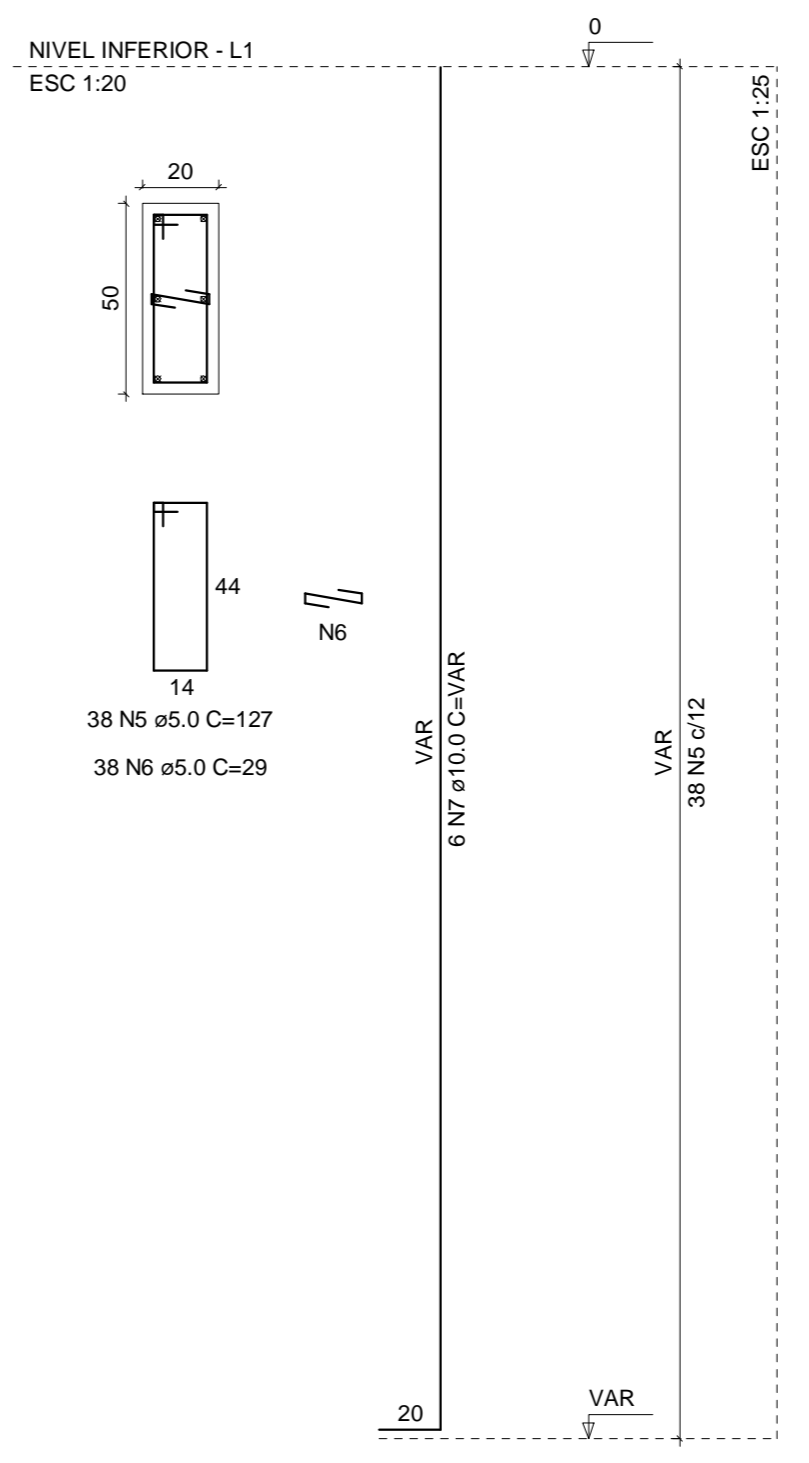
P4



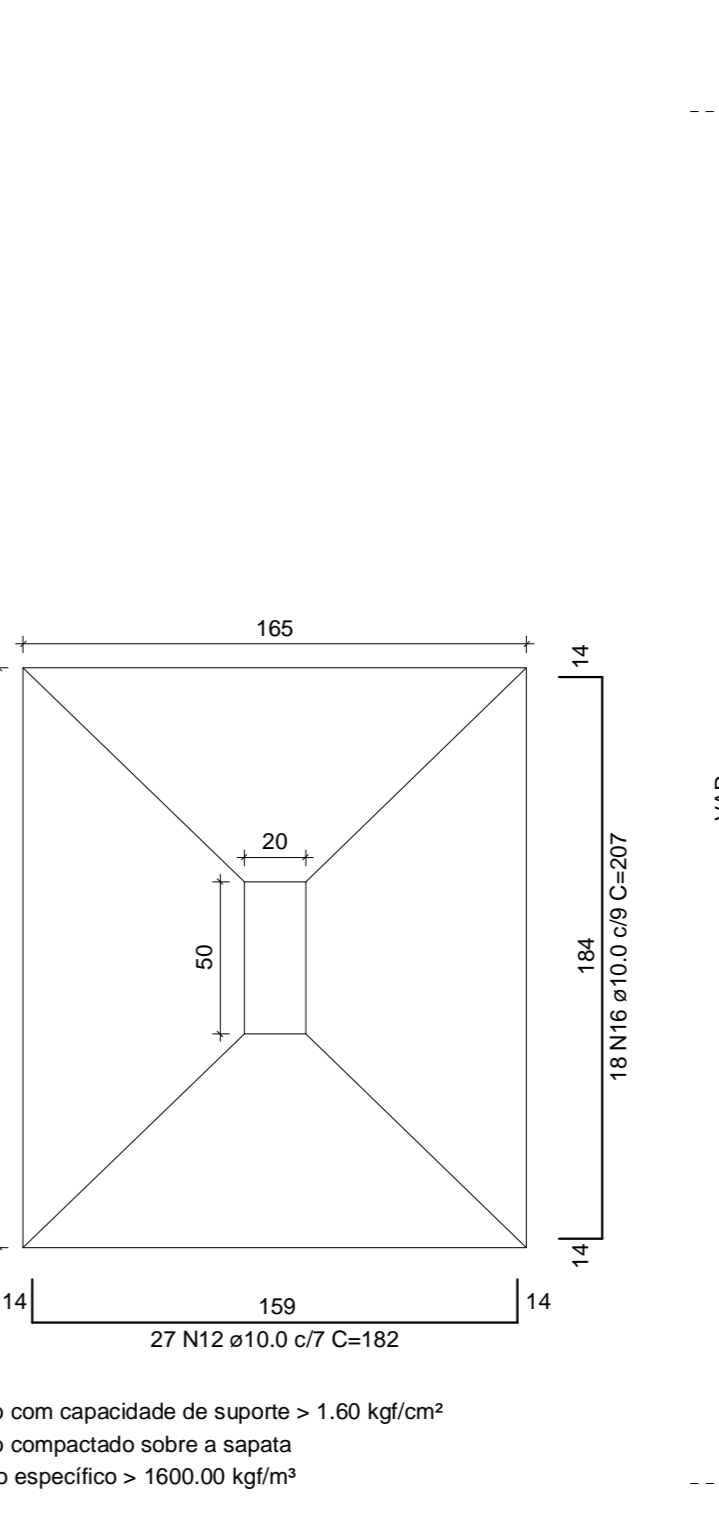
S3=S4=S10



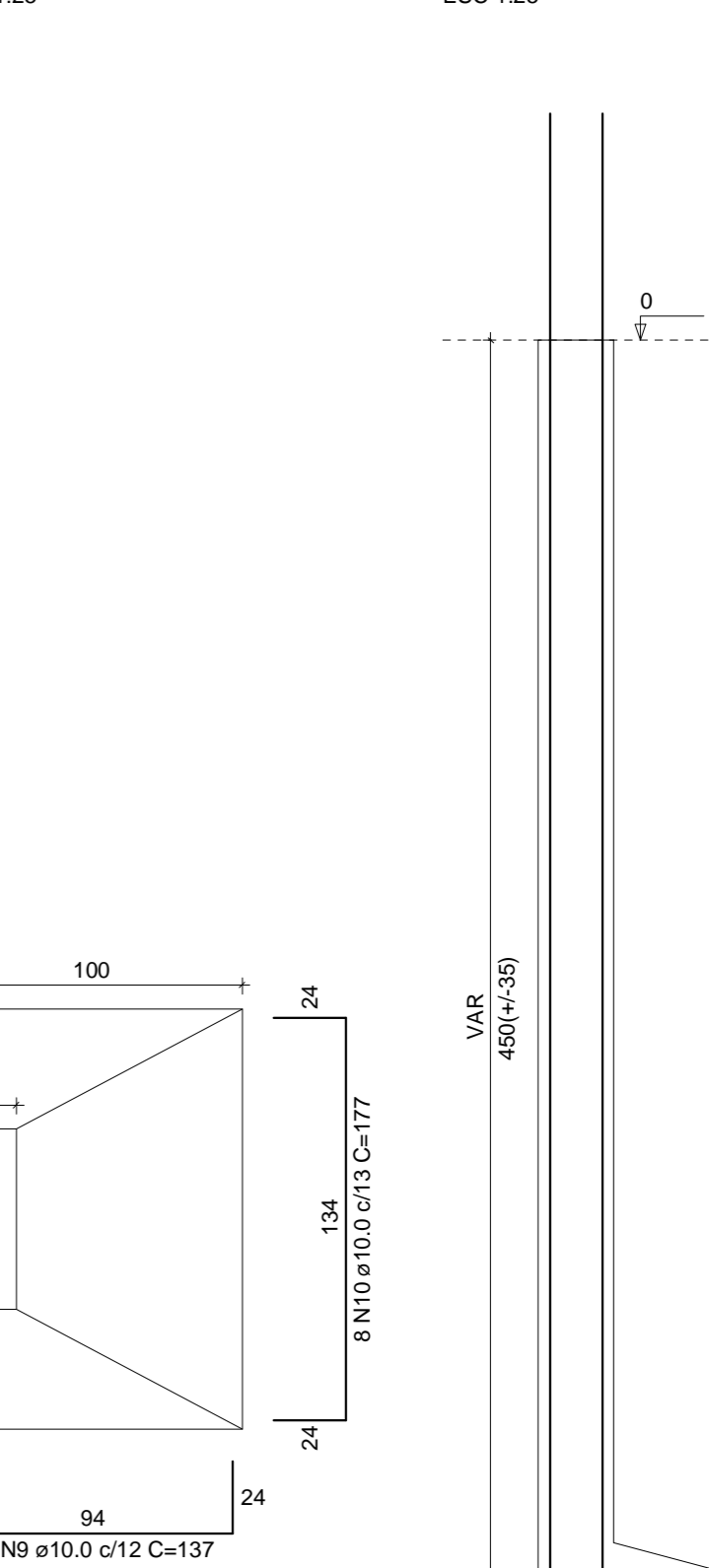
P14



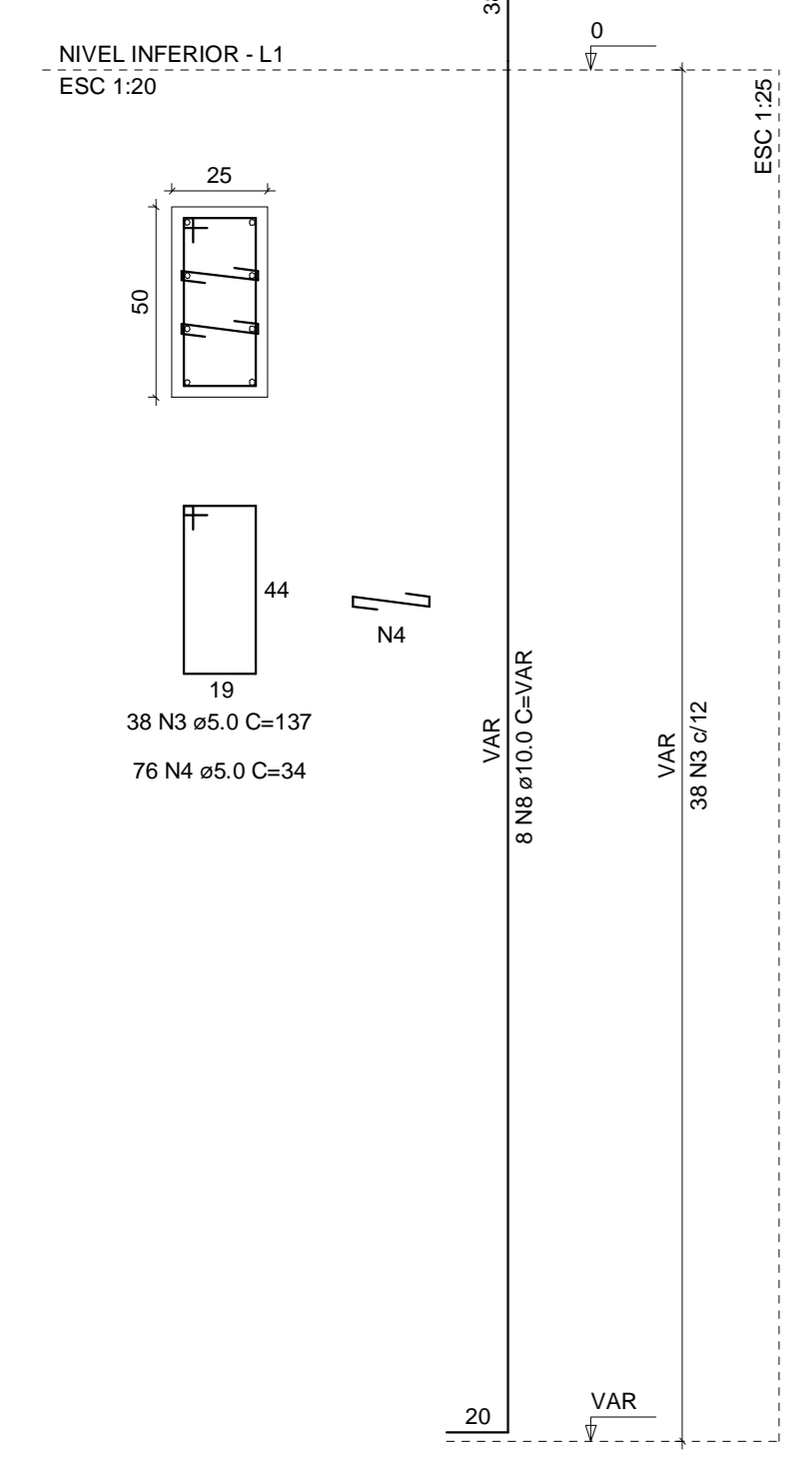
S14



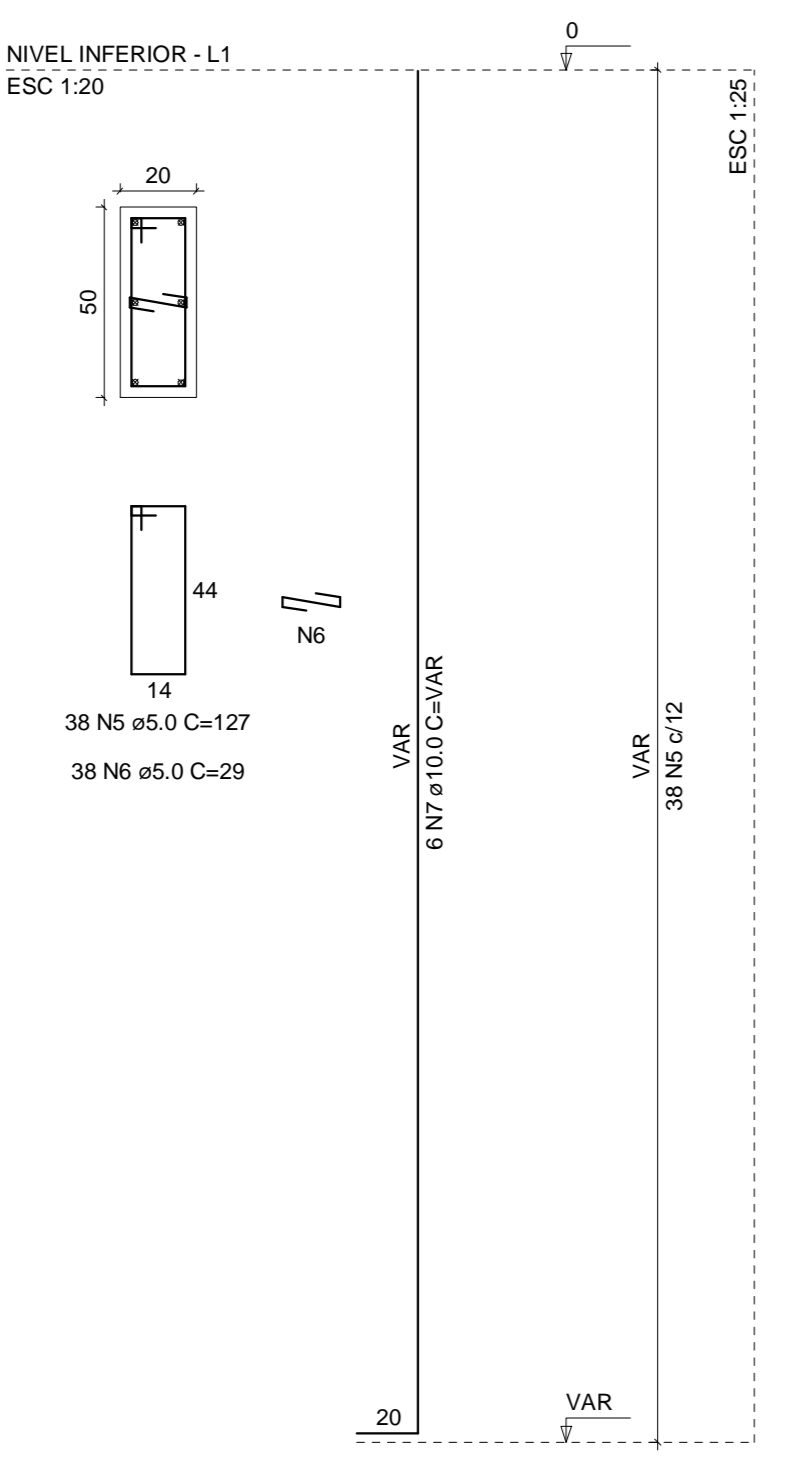
S1=S2



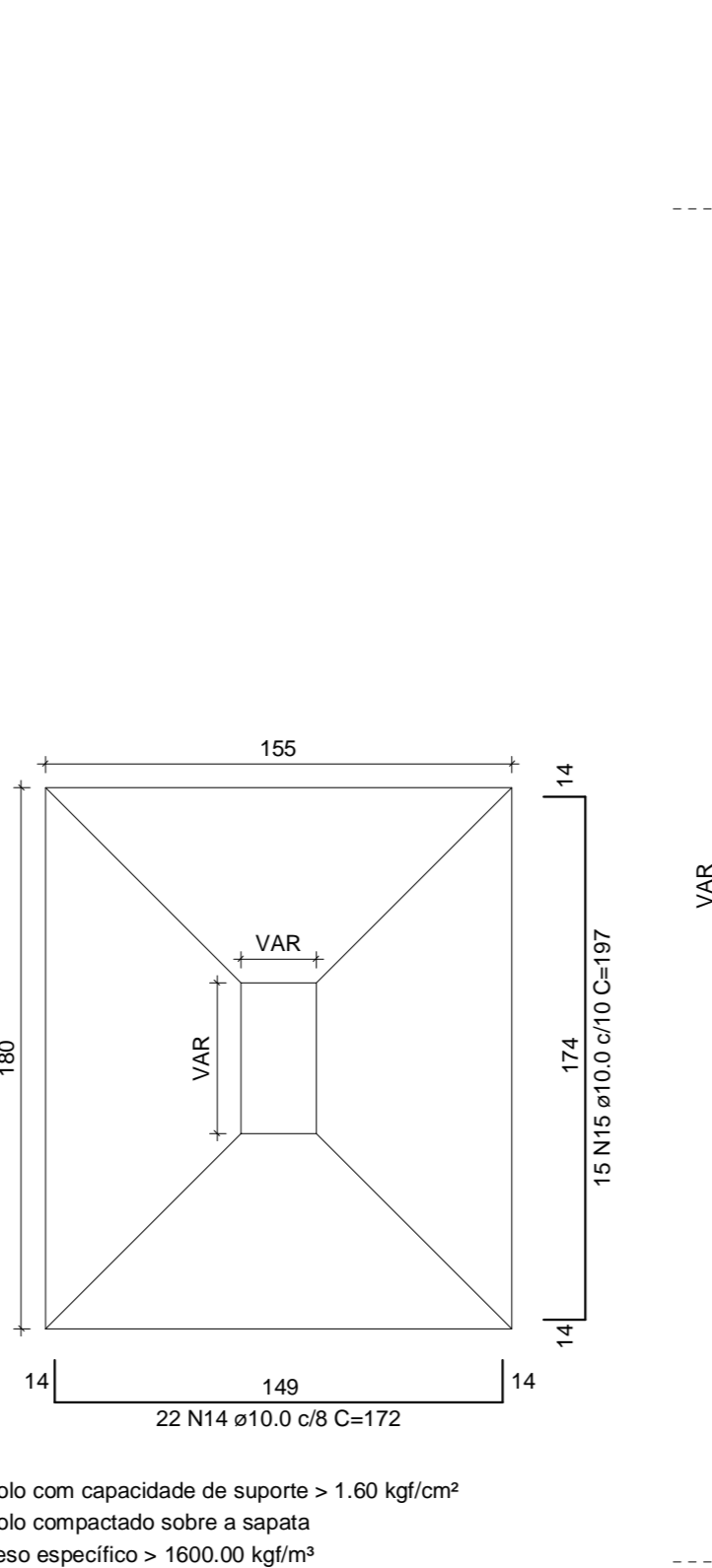
P11=P12



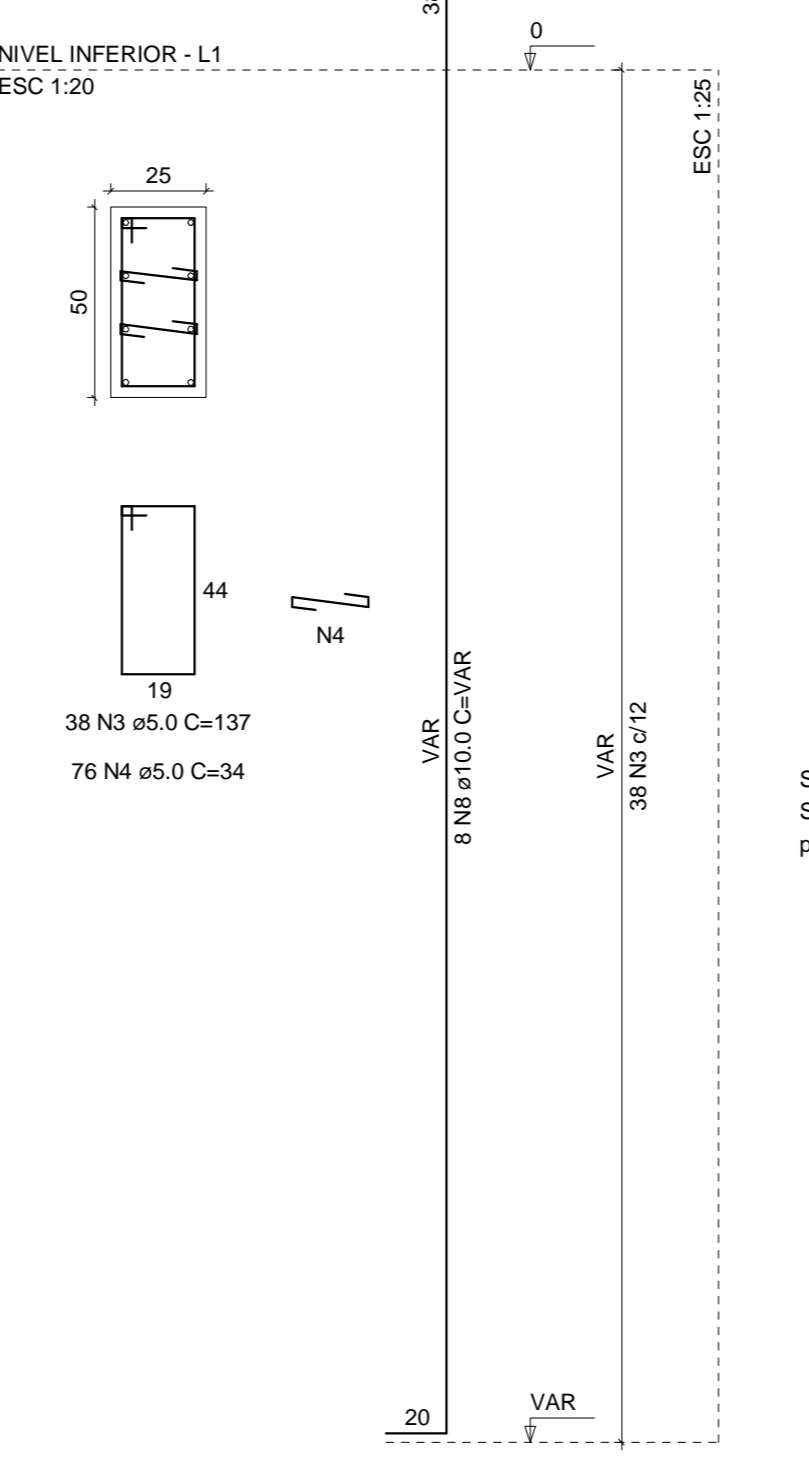
P19=P22



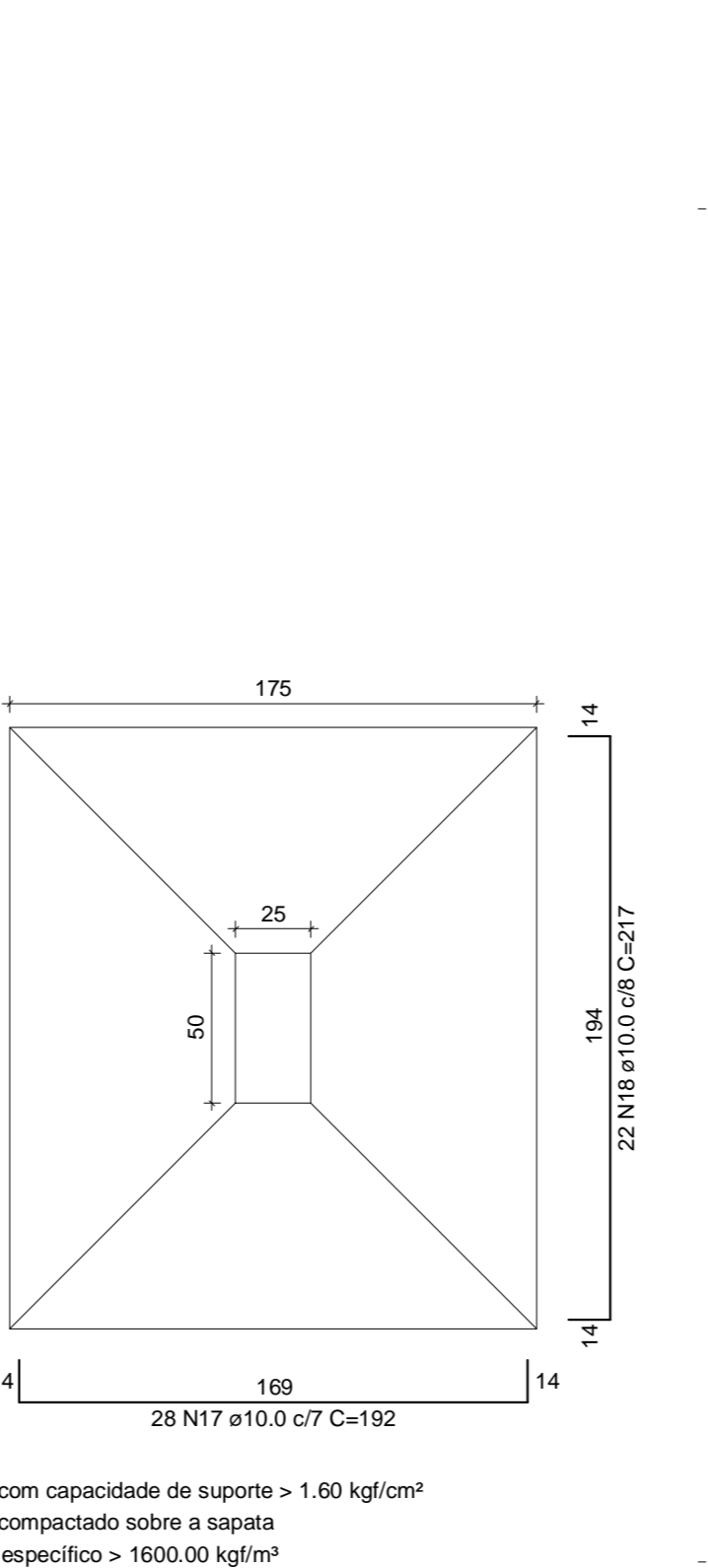
S11=S12=S19=S22



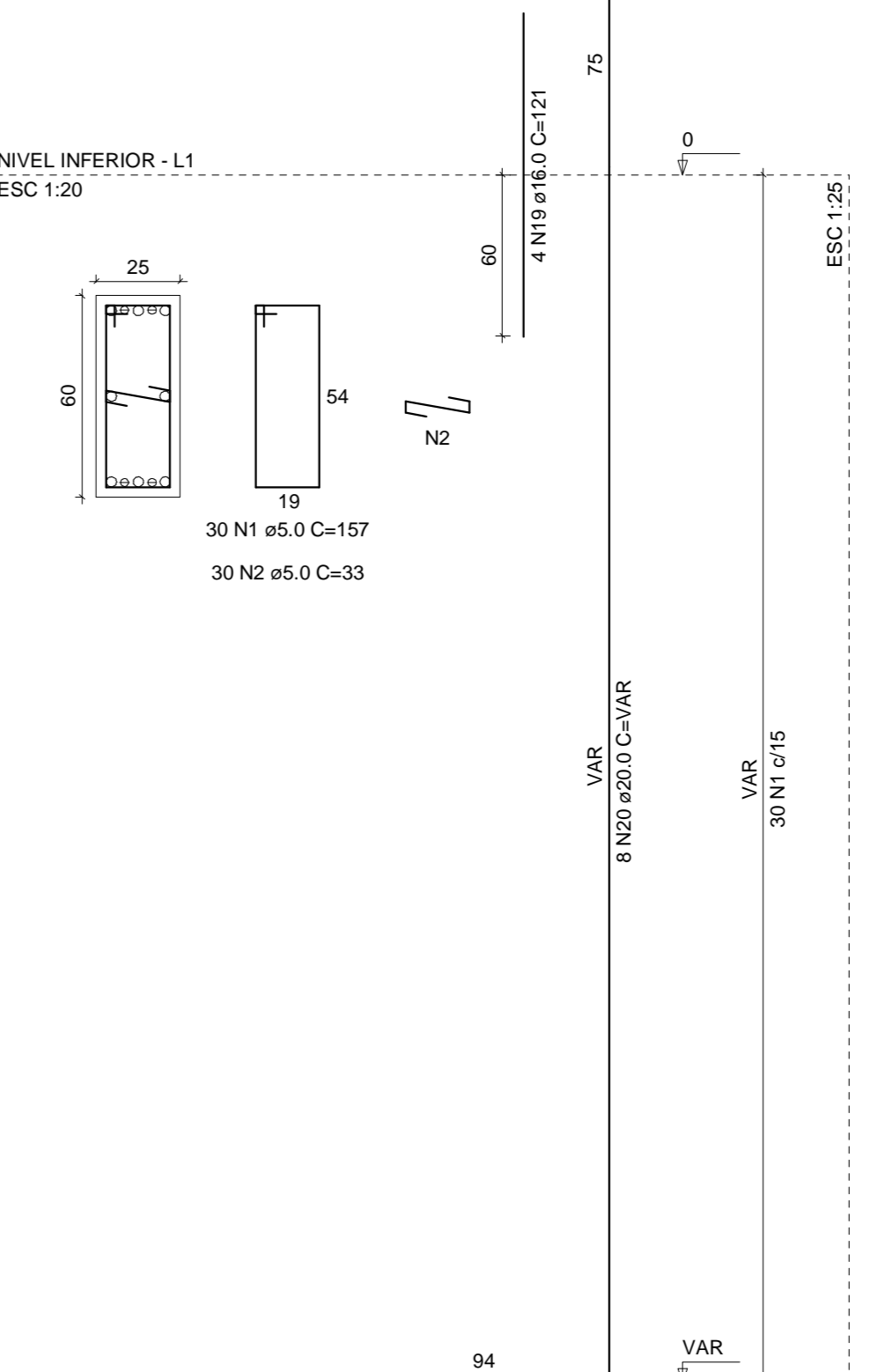
P24=P29



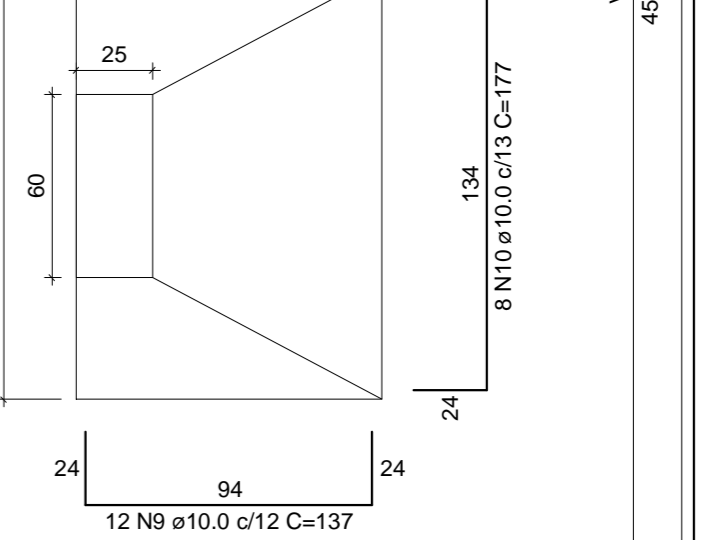
S24=S29



P1=P2



S1=S2



RELAÇÃO DO AÇO

CAÇO	N	DIAM	Q	UNID	C.TOTAL
			(cm)		(cm)
CA60	1	5.0	60	157	9420
	2	5.0	60	33	1980
	3	5.0	228	137	31236
	4	5.0	456	34	15504
	5	5.0	342	127	43434
	6	5.0	342	39	9918
CA50	7	10.0	70	VAR	VAR
	8	10.0	32	VAR	2832
	9	10.0	24	137	3288
	10	10.0	16	177	2932
	11	10.0	80	152	12160
	12	10.0	118	182	21476
	13	10.0	48	157	7536
	14	10.0	88	172	15136
	15	10.0	60	197	11820
	16	10.0	18	207	3736
	17	10.0	58	182	10752
	18	10.0	44	217	9548
	19	16.0	8	121	968
	20	20.0	16	VAR	VAR

RESUMO DO AÇO

AÇO	DIAM	C.TOTAL	PESO+10%
	(mm)	(kg)	(kg)
CA50	10.0	1470.2	997.0
	16.0	97	16.8
CA60	20.0	98.1	266.1
	3.0	1114.9	189.0
PESO TOTAL			
CA50		1279.9	
CA60		189.0	

Vol. concreto (C-25) = 21.69 m³
Área de forma total = 135.38 m²

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Obra/Loc: **Ampliação do Ginásio Municipal**
Parte do Lote Rural (11A) da Seção Floresta Rio Branco,
da Colônia Erechim, perímetro urbano de Centenário/RS

Data: Junho/2016	Descrição:	Planilha:
Desenho: Marco Aurélio	Projeto Estrutural Parte 1	A15
Escala: Indicada		
Proprietário:	Responsável Técnico:	
Município de Centenário		