

**Corte A-A (LE1)**  
escala 1:25

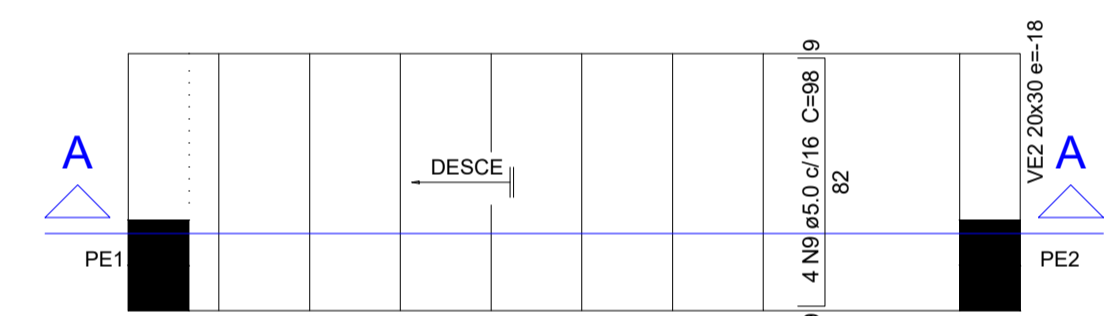
**Relação do aço**

ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
1 SE1	CA60	1	5.0	14	100	1400
	CA50	2	6.3	18	104	1872
	CA50	3	6.3	16	114	1824
	CA50	4	10.0	4	VAR	VAR
	CA50	5	10.0	4	VAR	VAR
VE1	CA60	6	5.0	4	100	400
	CA50	7	8.0	2	82	164
	CA50	8	8.0	2	132	264
2 LE1	CA60	9	5.0	4	98	392
	CA60	10	5.0	13	96	1248
	CA50	11	6.3	10	339	3390
	CA50	12	8.0	5	335	1675
	CA50	13	8.0	5	95	475
PE2	CA60	14	5.0	12	100	1200
	CA50	15	10.0	4	141	564
VE2	CA60	16	5.0	4	100	400
	CA50	17	8.0	2	90	180
	CA50	18	8.0	2	132	264
3 LE1	CA60	19	5.0	21	88	1848
	CA50	20	10.0	5	508	2540

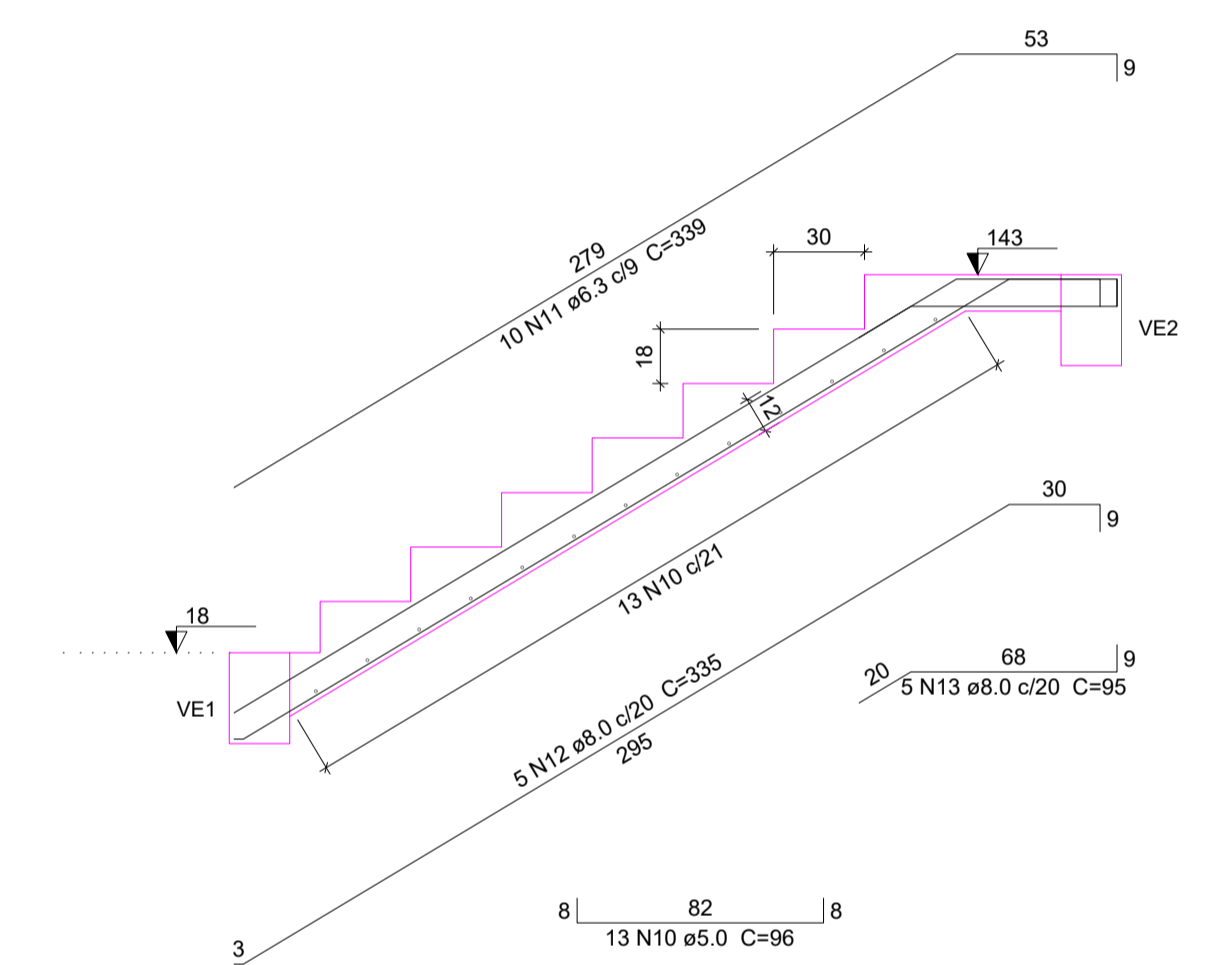
**Resumo do aço**

AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	70.9	19.1
	8.0	30.3	13.1
	10.0	40.4	27.3
CA60	5.0	68.9	11.7
<b>PESO TOTAL</b>			
CA50		59.5	
CA60		11.7	

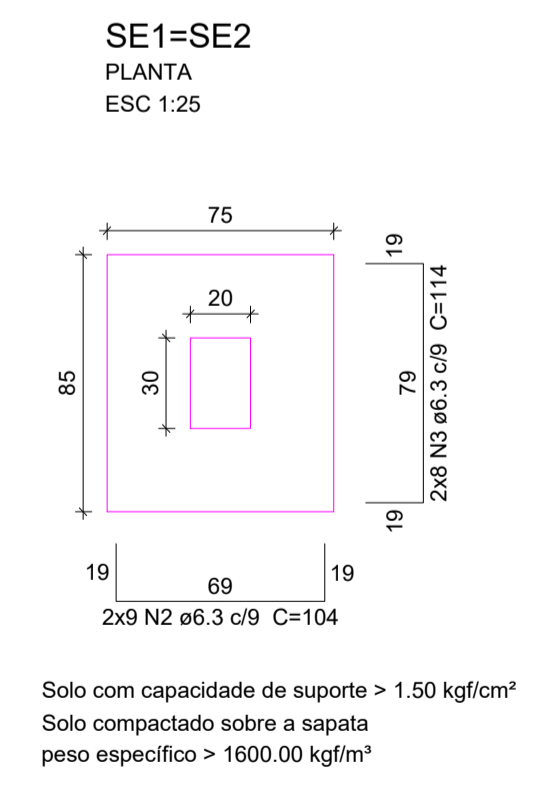
Vol. de concreto total (C-25) = 1.78 m³  
Área de forma total = 19.56 m²



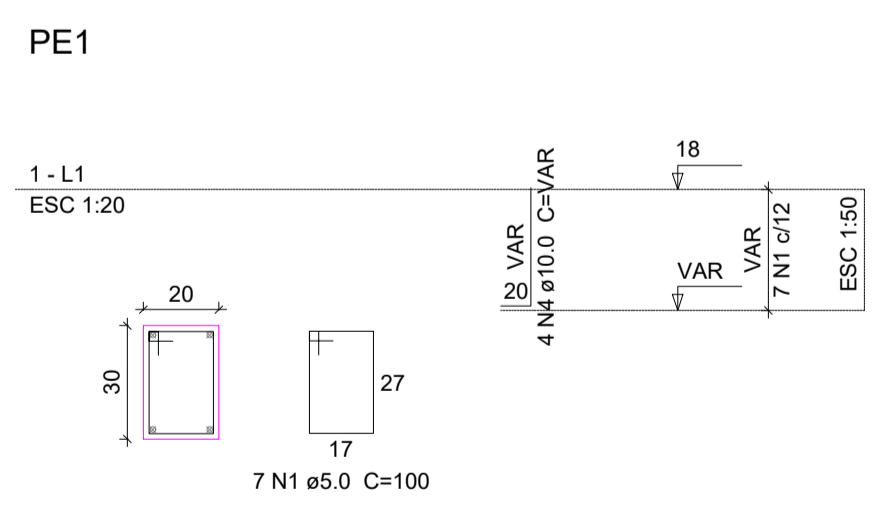
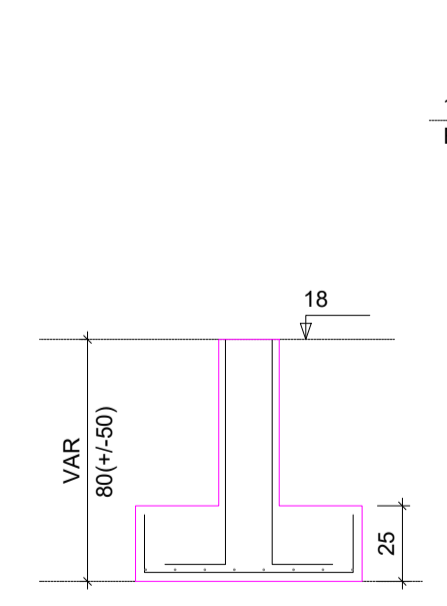
**Armação positiva da escada E1**  
escala 1:25



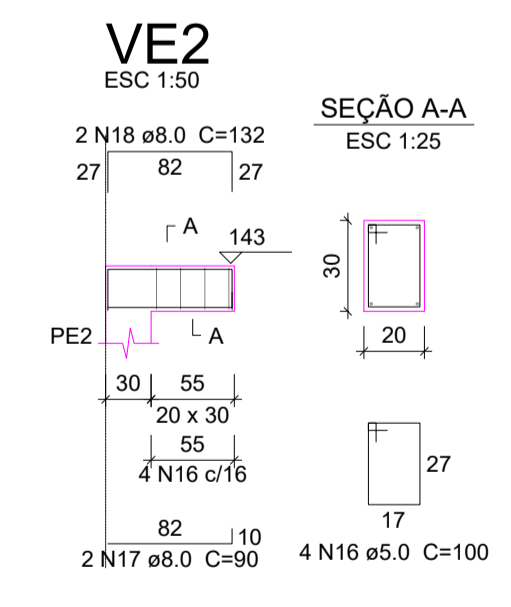
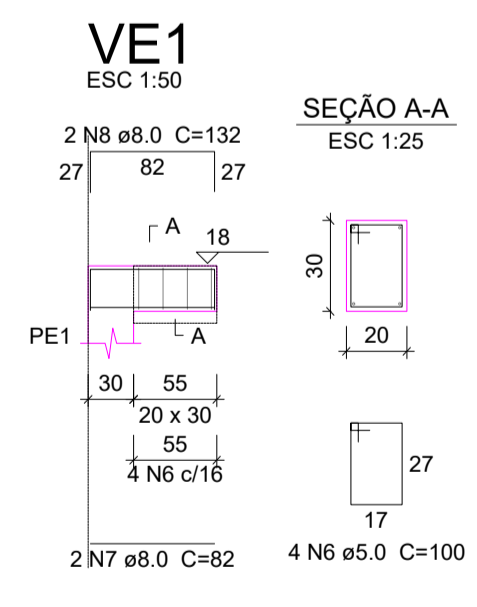
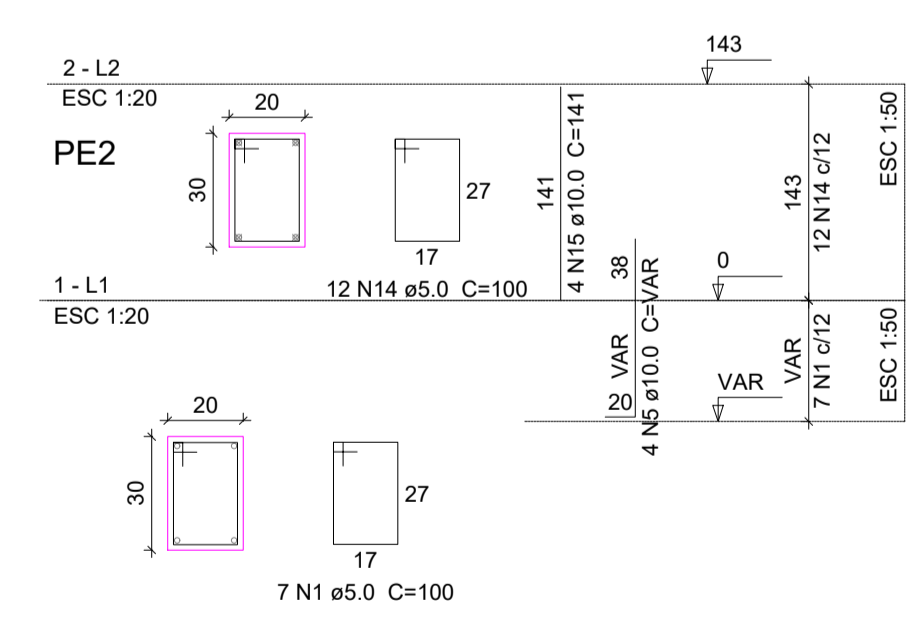
**Corte A-A (LE2)**  
escala 1:25



**CORTE**  
ESC 1:25



**PE2**



# CÁLCULO ESTRUTURAL

PROPRIETÁRIO: **PMS**  
OBRA/LOCAL: **ETE**

PRONCHA Nº: **04/12**  
DATA: FEV/2013