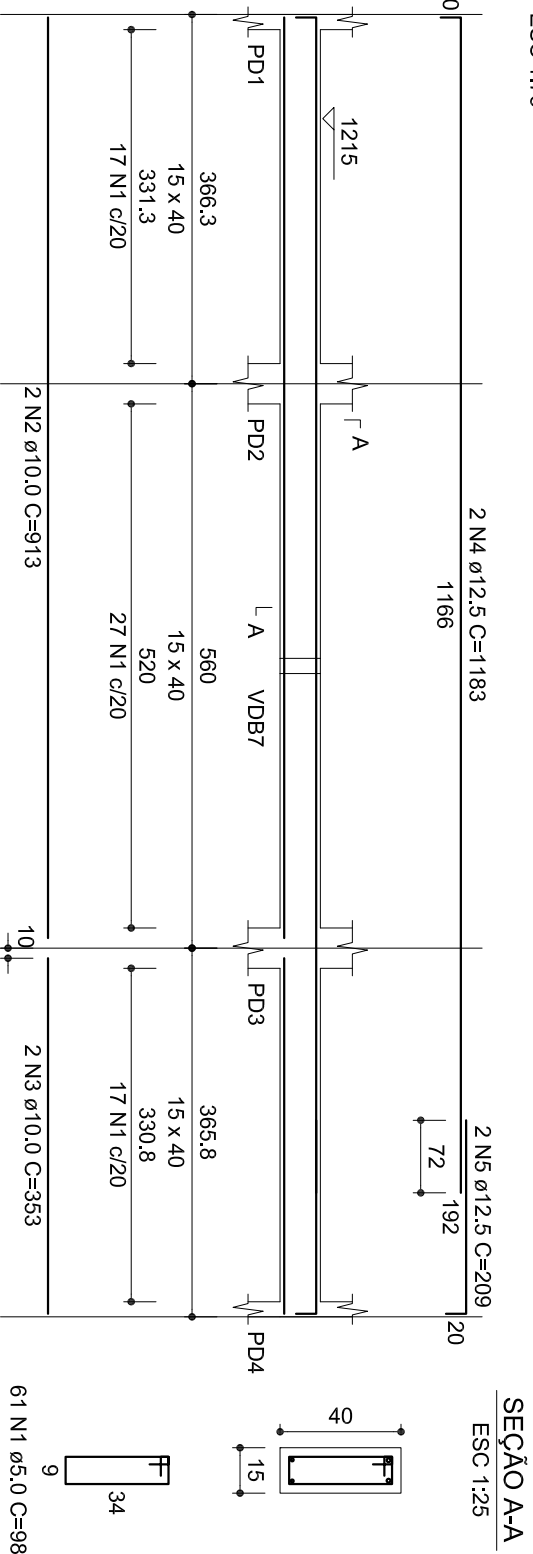
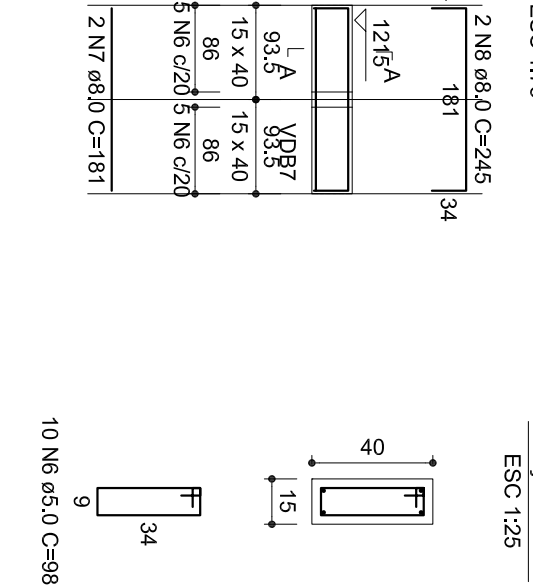


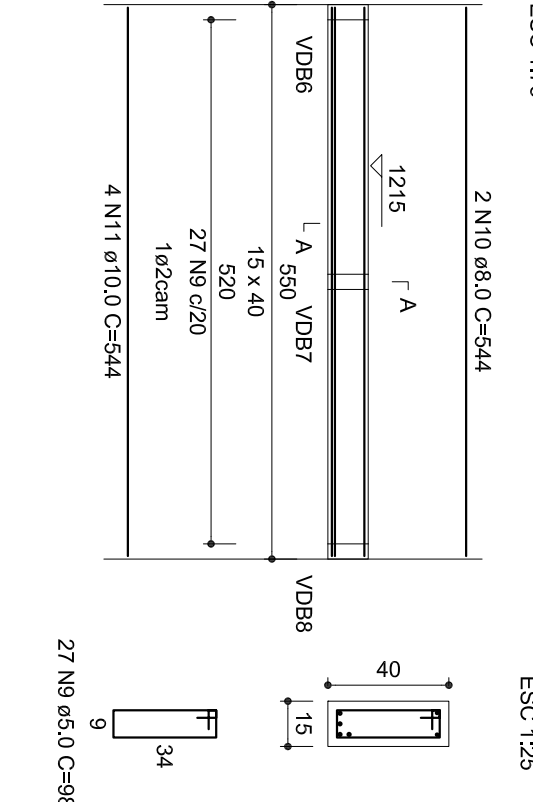
### VDB1 (15 x 40)



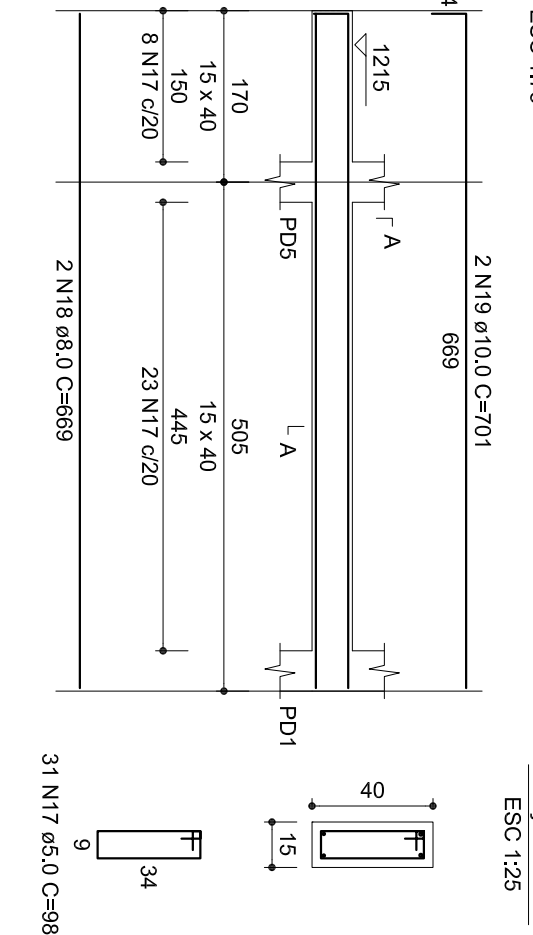
### VDB2 (15 x 40)



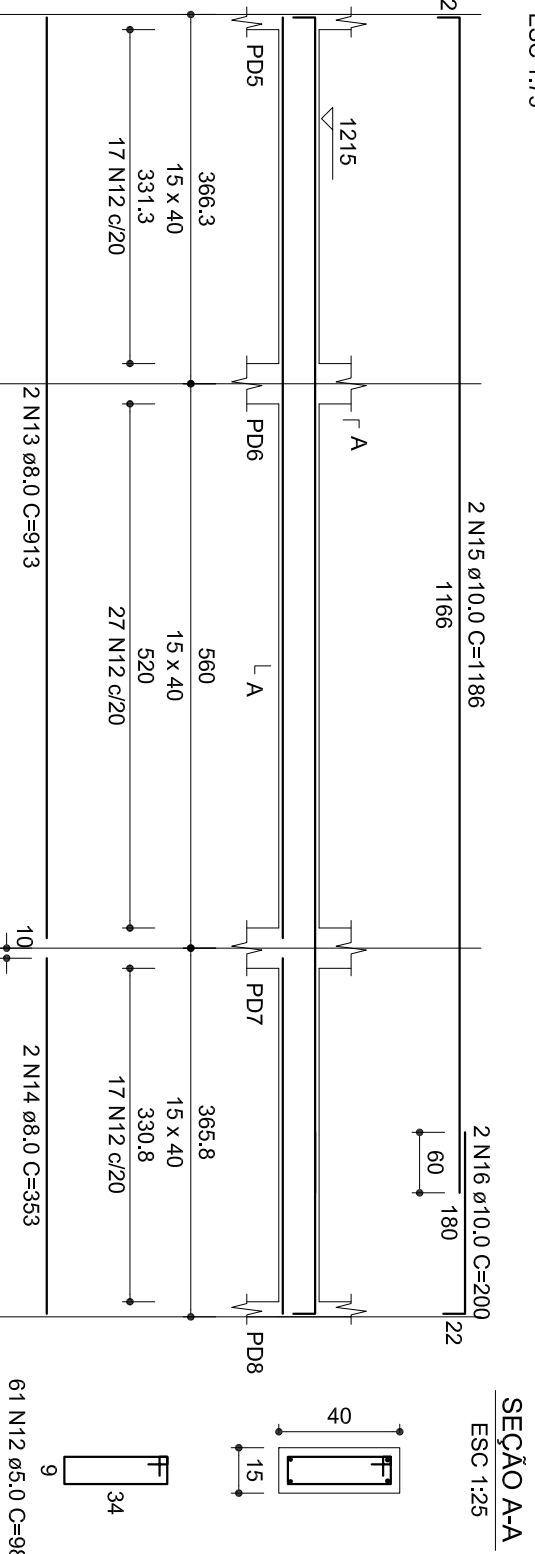
### VDB3 (15 x 40)



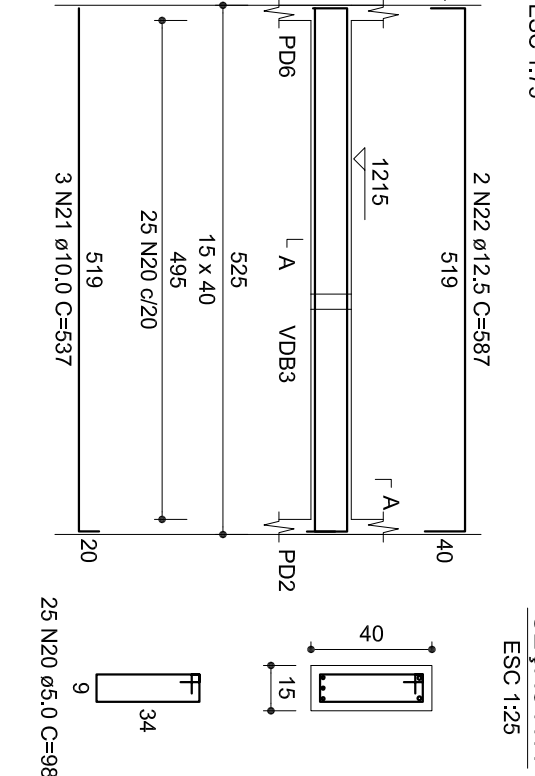
### VDB5 (15 x 40)



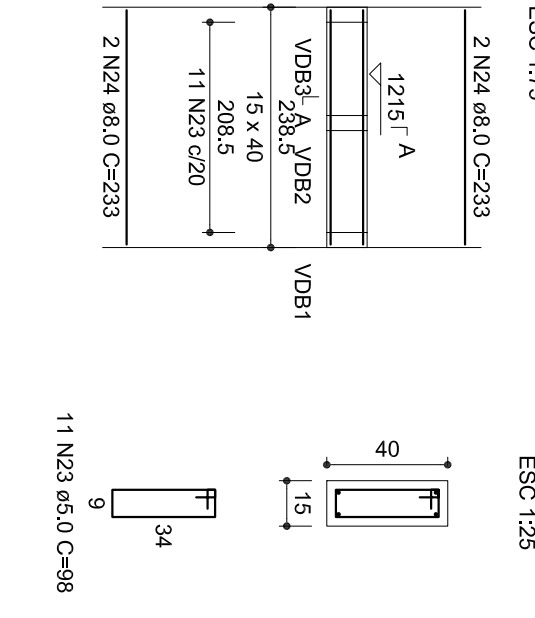
### VDB4 (15 x 40)



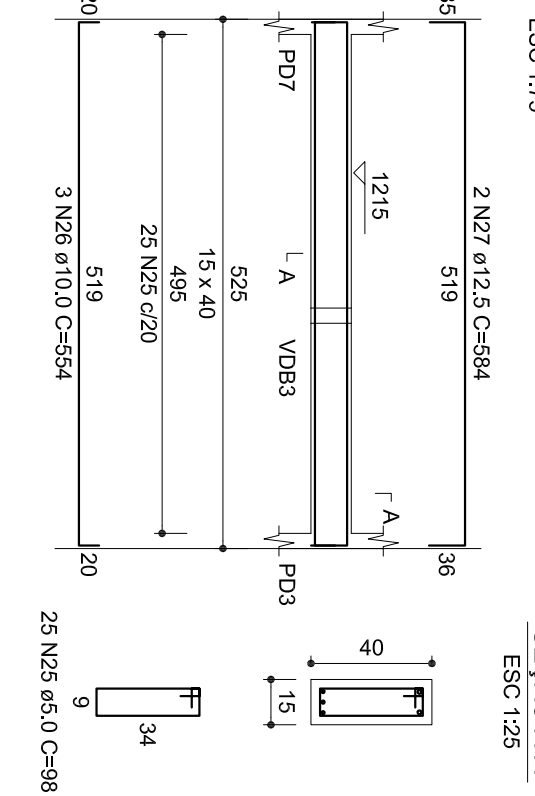
### VDB6 (15 x 40)



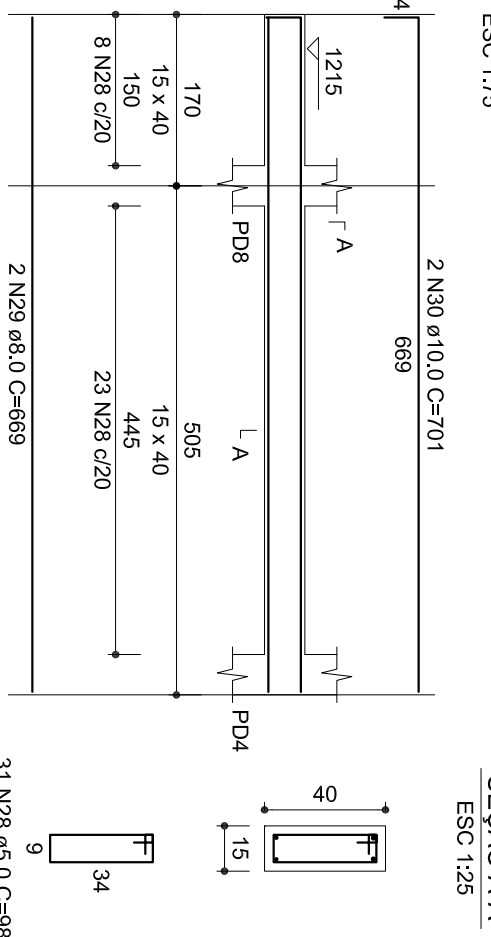
### VDB7 (15 x 40)



### VDB8 (15 x 40)



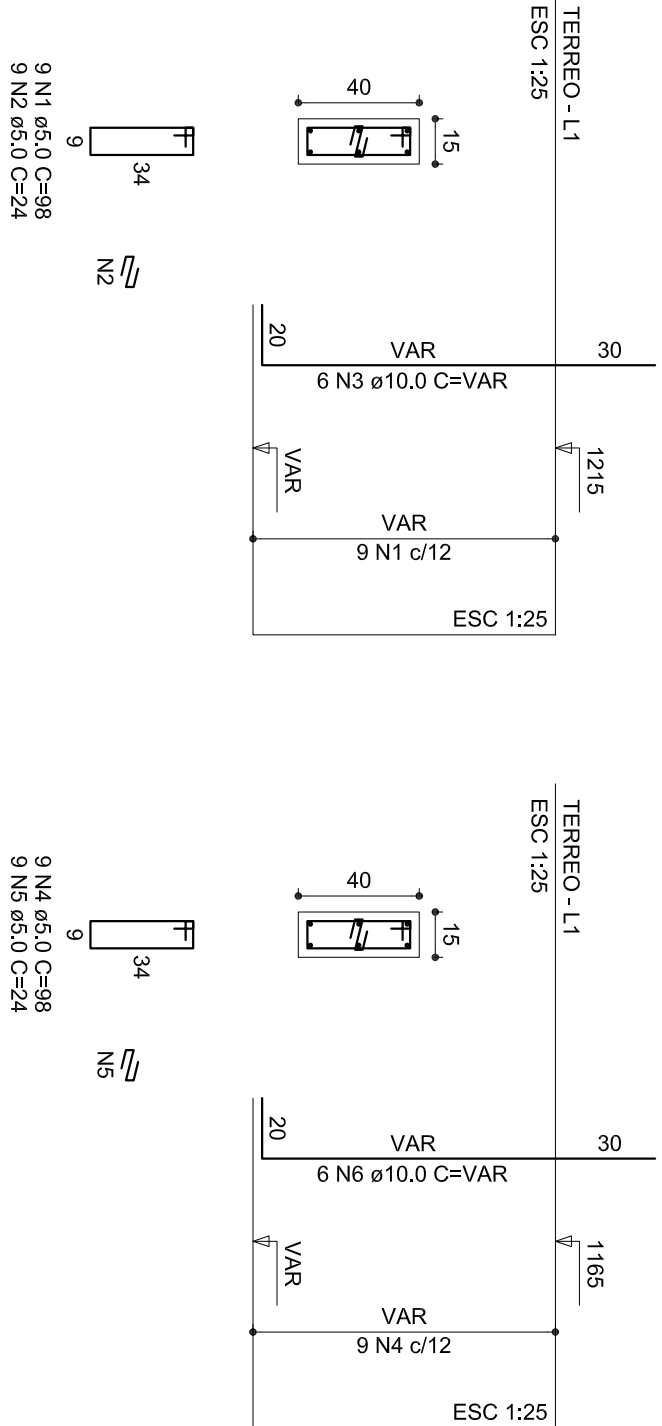
### VDB9 (15 x 40)



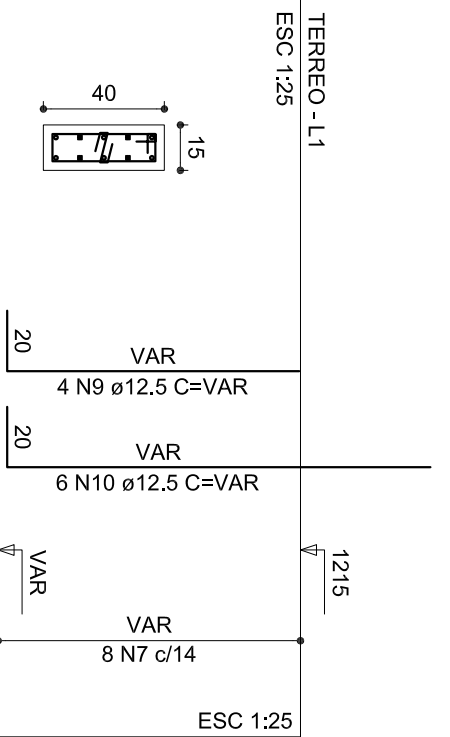
## Detalhamento das Sapatas e Esperas

PD1=PD5=PD8

PD4

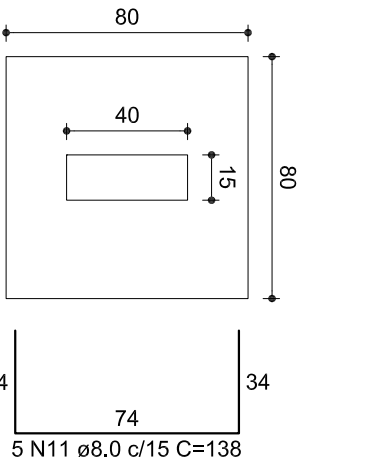


PD2=PD3=PD6=PD7

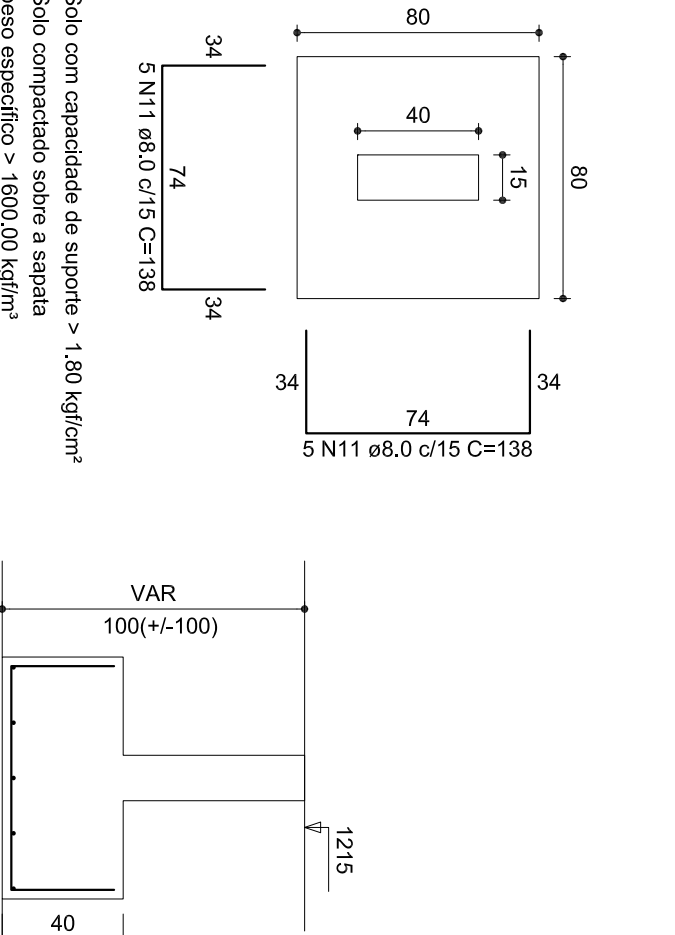


SD1=SD4=SD5=SD8

PLANTA  
ESC 1:25

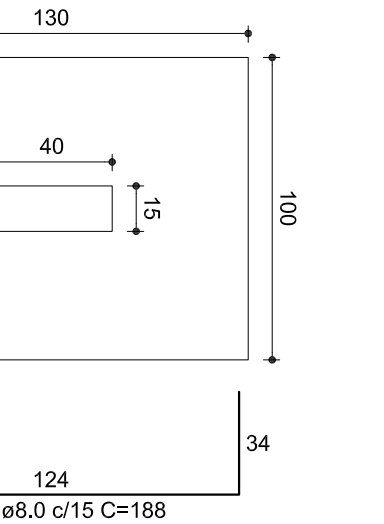


CORTE  
ESC 1:25

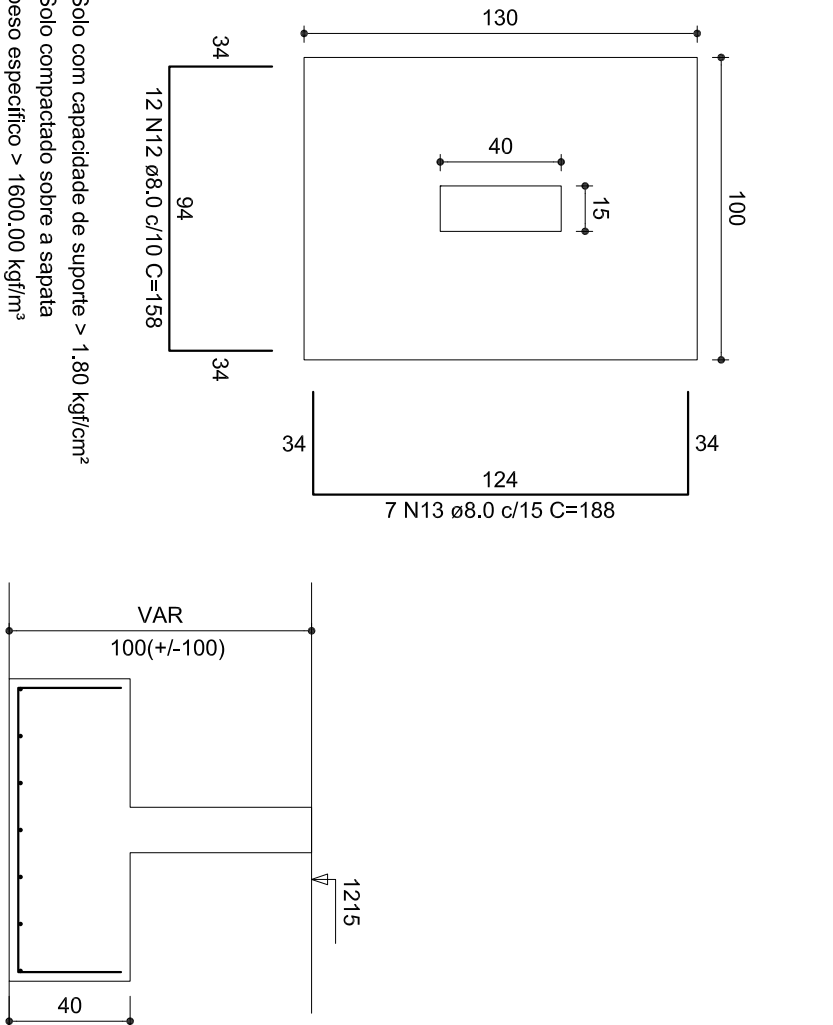


SD2=SD3=SD6=SD7

PLANTA  
ESC 1:25



CORTE  
ESC 1:25



#### Relação do aço

ELEMENTO	AÇO	N	DIAM	QUANT	UNIT	C TOTAL
SAPO1	C460	1	5.0	27	24	648
PD4	C460	2	5.0	18	24	432
PD4	C460	4	10.0	9	24	216
PD4	C460	5	5.0	9	24	216
PD4	C460	7	10.0	6	24	144
PD4	C460	8	5.0	32	24	768
PD4	C460	10	12.5	16	24	384
PD4	C460	11	8.0	40	138	5520
PD4	C460	12	8.0	48	138	6624
PD4	C460	13	8.0	50	138	6900

#### Resumo do aço

AÇO	DIAM	C TOTAL	PREÇO
C460	10.0	138.6	83.8
C460	12.5	88	53.8
C460	13	80	13.0
C460	14.2		

Volume de concreto (C-25) = 3.58 m³  
Área da forma = 21.28 m²

#### Relação do aço

	ELEMENTO	AÇO	N	DIAM	QUANT	UNIT	C TOTAL
VD81	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	
VD82	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	
VD83	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	
VD84	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	
VD85	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	
VD86	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	
VD87	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	
VD88	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	
VD89	C460	2	10,0	31	96	5878	
	C460	4	12,5	2	1183	2986	
	C460	5	5,0	2	208	418	
	C460	7	8,0	2	181	382	
	C460	8	8,0	2	248	480	
	C460	10	8,0	2	544	1088	
	C460	11	10,0	4	544	2176	
	C460	13	8,0	6	913	1826	
	C460	14	8,0	2	358	716	
	C460	17	5,0	31	96	3038	

#### Resumo do aço

AÇO	DIAM	C TOTAL	PREÇO
C460	10.0	138.6	83.8
C460	12.5	51.3	48.4
C460	13	278.4	42.5
C460	14.2		

Volume de concreto (C-25) = 3.58 m³  
Área da forma = 56.02 m²

#### NOTAS

1º > O CONCRETO ADOPTADO  
CLOOSE 25 (C25) - FCK(25)MPa  
Consumo mínimo de cimento = 280kg/m³  
Relação água/cimento < 0.50  
2º > VERIFICAR TODAS AS MEDIDAS NA OBRA  
3º > CONSULTAR EM CASO DE DÚVIDAS

#### LEGENDA DOS PILARES

▨ PILARES QUE CONTINUAM  
▨ PILARES QUE NASCEM  
▨ PILARES COM MUDANÇA DE SEÇÃO



**Associação de Municípios do Nordeste do Estado de Santa Catarina**  
RUA JOÃO DE CARVALHO, 100 - JARDIM NÍQUEL, 13050-000 - FONE: (047) 433.3422  
ASSOCIADORIA E CONDOMÍNIO DE FRAQUELAMENTO URBANO MUNICIPAL E REGIONAL  
CNEA, S/C 4B-25-4

**TRABALHO CUSTEADO E REALIZADO ATRAVÉS DA ASSOCIAÇÃO DE MUNICÍPIOS DO NORDESTE DE SANTA CATARINA**

**PRONTO ATENDIMENTO 24 HORAS SUL - PA SUL**

Endereço: RUA JOÃO DA COSTA JR. ESO. MONSENHOR G. - BAIRRO JOÃO COSTA, JOINVILLE/SC

Projeto: PROJETO ESTRUTURAL

Elaborado por: DORMITÓRIOS - FORMAS E DETALHAMENTOS

Projeto: JULIANO PERAZZOLI  
Elaborado por: LUCIO MARCELO DE MOURA  
Engenheiro Civil - CREA 099.184-2

EST 24/28