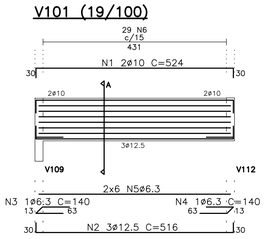
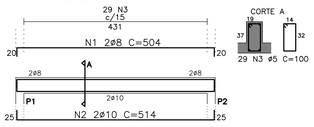
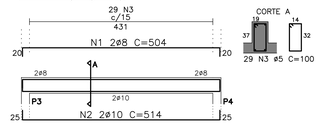
V101 (19/100)



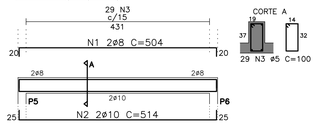
V102 (19/37)



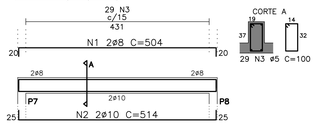
V103 (19/37)



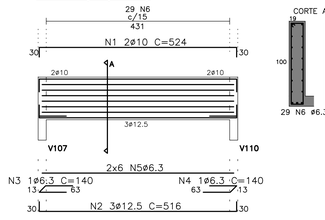
V104 (19/37)



V105 (19/37)



V106 (19/100)



V109				
N	ø	Q	UNI	TOTAL
1	12.5	2	871	1742
2	16	2	852	1704
3	16	1	702	702
4	6.3			6626
5	6.3	51	148	7548

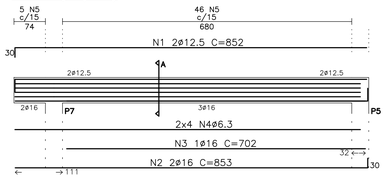
V110				
N	ø	Q	UNI	TOTAL
1	12.5	2	852	1704
2	16	2	853	1706
3	16	1	702	702
4	6.3			6626
5	6.3	51	148	7548

V111				
N	ø	Q	UNI	TOTAL
1	10	2	433	866
2	12.5	3	468	1404
3	5	23	106	2438

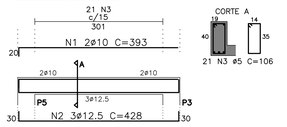
V112				
N	ø	Q	UNI	TOTAL
1	12.5	2	881	1762
2	16	2	852	1704
3	16	1	702	702
4	6.3			6626
5	6.3	51	148	7548

RESUMO VIGAS DA COBERTURA			
ACO	ø	COMPR(cm)	PESO(kg)
50B	5	16264	28
50B	6.3	81496	508
50B	8	4032	20
50B	10	7860	53
50B	12.5	12896	132
50A	16	9628	156
50A	20	–	–
50A	25	–	–
PESO TOTAL (kg)			597

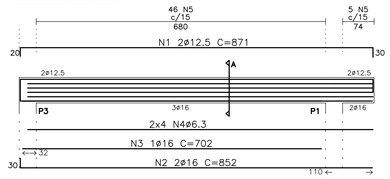
V107 (19/60)



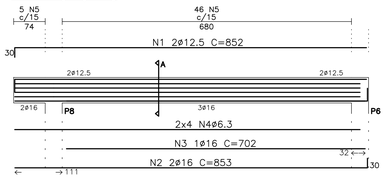
V108 (19/40)



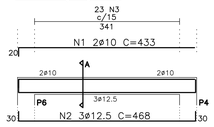
V109 (19/60)



V110 (19/60)



V111 (19/40)



V101				
N	ø	Q	UNI	TOTAL
1	10	2	524	1048
2	12.5	3	516	1548
3	6.3	1	140	140
4	6.3	1	140	140
5	6.3			5508
6	6.3	29	228	6612

V102				
N	ø	Q	UNI	TOTAL
1	8	2	504	1008
2	10	2	514	1028
3	5	29	100	2900

V103				
N	ø	Q	UNI	TOTAL
1	8	2	504	1008
2	10	2	514	1028
3	5	29	100	2900

V104				
N	ø	Q	UNI	TOTAL
1	8	2	504	1008
2	10	2	514	1028
3	5	29	100	2900

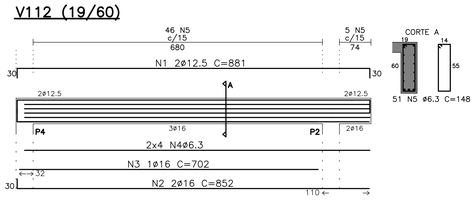
V105				
N	ø	Q	UNI	TOTAL
1	8	2	504	1008
2	10	2	514	1028
3	5	29	100	2900

V106				
N	ø	Q	UNI	TOTAL
1	10	2	524	1048
2	12.5	3	516	1548
3	6.3	1	140	140
4	6.3	1	140	140
5	6.3			5508
6	6.3	29	228	6612

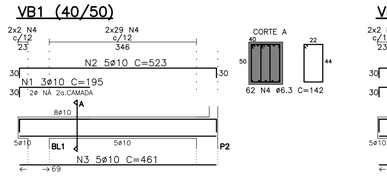
V107				
N	ø	Q	UNI	TOTAL
1	12.5	2	852	1704
2	16	2	853	1706
3	16	1	702	702
4	6.3			6626
5	6.3	51	148	7548

V108				
N	ø	Q	UNI	TOTAL
1	10	2	393	786
2	12.5	3	428	1284
3	5	21	106	2226

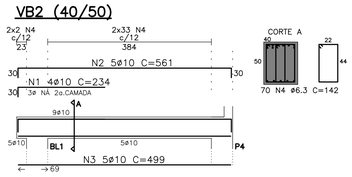
V112 (19/60)



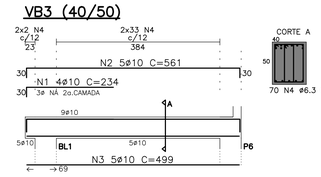
VB1 (40/50)



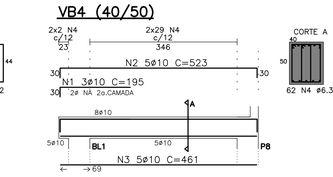
VB2 (40/50)



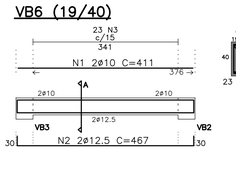
VB3 (40/50)



VB4 (40/50)



VB6 (19/40)



VB6				
N	ø	Q	UNI	TOTAL
1	10	2	411	822
2	12.5	2	467	934
3	5	23	102	2346

VB7				
N	ø	Q	UNI	TOTAL
1	12.5	2	852	1704
2	16	2	807	1614
3	16	2	689	1378
4	6.3	43	124	5332

VB8				
N	ø	Q	UNI	TOTAL
1	12.5	2	852	1704
2	16	2	807	1614
3	16	2	689	1378
4	6.3	43	124	5332

VB1				
N	ø	Q	UNI	TOTAL
1	10	3	195	585
2	10	5	523	2615
3	10	5	461	2305
4	6.3	62	143	8866

VB2				
N	ø	Q	UNI	TOTAL
1	10	4	234	936
2	10	5	561	2805
3	10	5	499	2495
4	6.3	70	143	10010

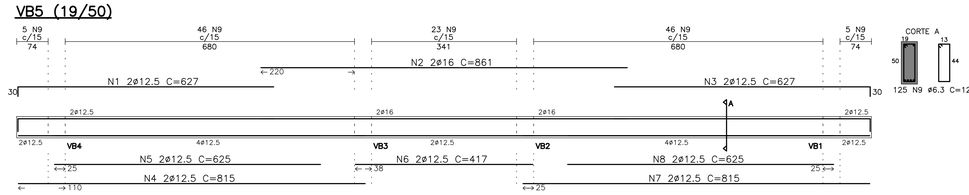
VB3				
N	ø	Q	UNI	TOTAL
1	10	4	234	936
2	10	5	561	2805
3	10	5	499	2495
4	6.3	70	143	10010

RESUMO VIGAS DA FUNDAÇÃO			
ACO	ø	COMPR(cm)	PESO(kg)
50B	5	2346	4
50B	6.3	63916	165
50B	8	–	–
50B	10	24304	156
50B	12.5	13444	138
50A	16	7706	124
50A	20	–	–
50A	25	–	–
PESO TOTAL (kg)			587

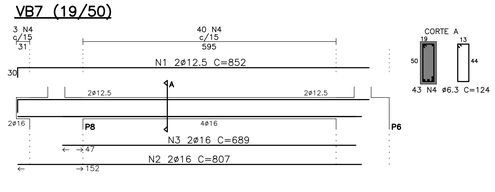
VB4				
N	ø	Q	UNI	TOTAL
1	10	3	195	585
2	10	5	523	2615
3	10	5	461	2305
4	6.3	62	143	8866

VB5				
N	ø	Q	UNI	TOTAL
1	12.5	2	627	1254
2	16	2	861	1722
3	12.5	2	627	1254
4	12.5	2	815	1630
5	12.5	2	625	1250
6	12.5	2	417	834
7	12.5	2	815	1630
8	12.5	2	625	1250
9	6.3	125	124	15500

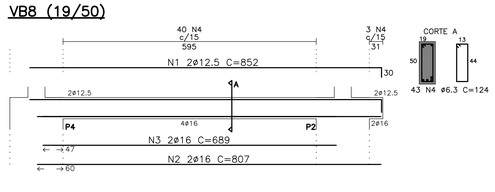
VB5 (19/50)



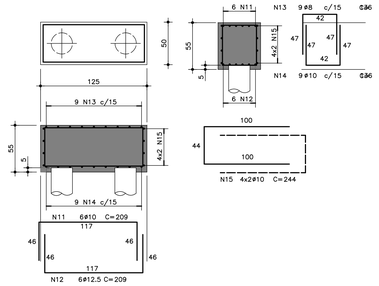
VB7 (19/50)



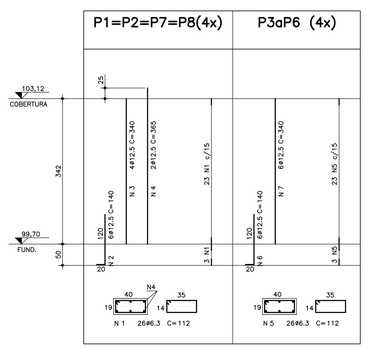
VB8 (19/50)



BL1 (8x)

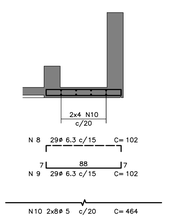


P1=P2=P7=P8(4x) / P3aP6 (4x)



LM101 E LM102 H=12 (2X)

ESC. 1=25



LISTA DE FERROS

POS.	ø	QUANT.	COMPRIMENTO UNIT.	COMPRIMENTO TOTAL
1	6.3	104	112	11648
2	12.5	24	140	3360
3	12.5	16	340	5440
4	12.5	8	365	2920
5	6.3	104	112	11648
6	12.5	24	140	3360
7	12.5	24	340	8160
8	6.3	58	102	5916
9	6.3	58	102	5916
10	5	32	464	14848
11	10	48	209	10032
12	12.5	48	209	10032
13	8	72	136	9792
14	10	72	136	9792
15	10	64	244	15616

RESUMO DE ACO C.A. 50

ø	COMPRIMENTO (m)	PESO (kg)
6.3	351.28	88
8	97.92	39
10	354.40	223
12.5	332.72	333
16		
20		
25		
TOTAL (kg)		683

RESUMO DE ACO C.A. 60

ø	COMPRIMENTO (m)	PESO (kg)
5	148.48	23
6		
TOTAL (kg)		23

PAD CR-5 201

No.	MODIFICAÇÕES	APROVAÇÃO	DATA	APROVAÇÃO	DATA
		AUTOR DO PROJETO		FDE	

OBSERVAÇÕES

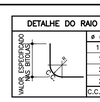
DESENHO DE REFERÊNCIA — No.

APROVAÇÃO	DATA
AUTOR DO PROJETO	
FDE	

NOTAS=

01–CONCRETO= fck ≥ 25 MPa
02–AÇO= CA–50 – fyk=500 MPa
CA–60 – fyk=600 MPa
03–MEDIDAS EM cm, NIVEIS EM m.
04–NÃO TIRAR MEDIDAS EM ESCALA.
05–CONFIRMAR MEDIDAS NO LOCAL.
06– COBRIMENTO=2,5cm.
VIGAS BALDRAMES=3,0cm.

DETALHE DO RAIO DE CURVATURA (R)



ø (mm)	R (cm)	C.C. (cm)
12.5	10	16
16	13	21
20	16	25
25	20	31

C.C.=COMPRIMENTO DA CURVA

FDE
FUNDAÇÃO PARA O DESENVOLVIMENTO DA EDUCAÇÃO

PROJETO DESENVOLVIDO POR ENGECALC ENGENHARIA E PROJETOS ESTRUTURAIS
RESPONSÁVEL TÉCNICO: NELSON SHOTARO YOKOI - CREA: 0600056764-0

FUNDAÇÃO PARA O DESENVOLVIMENTO DA EDUCAÇÃO – F D E

ESCOLA – NOME/LOCAL: –		CÓDIGO: 1 2 0 3 0 2 4
INTERVENÇÃO: MODULO DE AMPLIAÇÃO DE CRECHE 2 SALAS		Nº. LOTE: 01
ETAPA/ÁREA TÉCNICA: PROJETO EXECUTIVO DE ESTRUTURA	TIPO PROJETO: PAD CR-5 / DATA: ABRIL/2021	ETAPA/ÁREA TÉCNICA: PE – EST
CONTEÚDO: ARMAÇÃO DAS VIGAS DA COB. E FUNDAÇÃO, LAJES E PIL.	ESCALA: INDICADA	FOLHA: 02/02 / REVISÃO: 00

1203024_01EP0000200