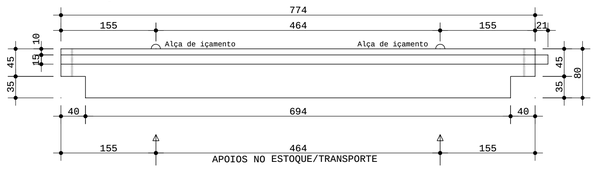
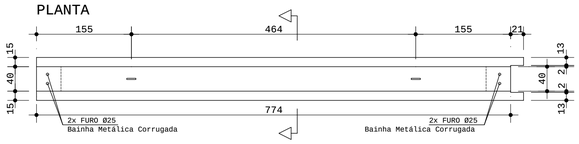
VP104

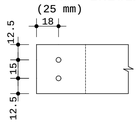
ELEVAÇÃO



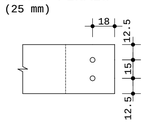
PLANTA



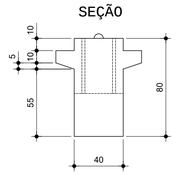
FUROS INICIAIS
(25 mm)



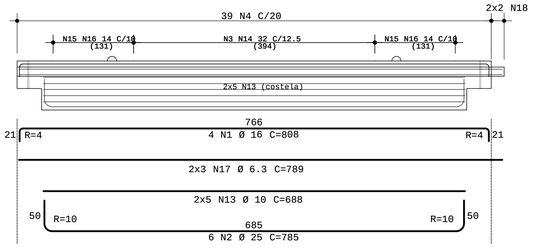
FUROS FINAIS
(25 mm)



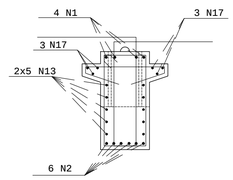
SEÇÃO

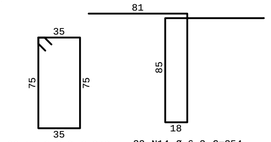


VP104



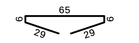
Pavimento	Quant	Volume unit	Volume total	Peso unit	Peso total
Cobertura(1x)	14	2.349	32.886	5.872	82.208
TOTAIS	14		32.886		82.208





32 N3 Ø 6.3 C=246
28 N16 Ø 8 C=273

32 N14 Ø 6.3 C=354
28 N15 Ø 8 C=355



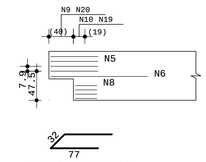
39 N4 Ø 6.3 C/20 C=135

2x2 N18 Ø 6.3
C/20 C=30

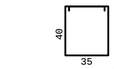
AÇO		POS	BIT mm	QUANT	COMPRIMENTO UNIT cm	COMPRIMENTO TOTAL cm
VP104 (X14)						
	50A	1	16	56	808	45248
	50A	2	25	84	785	65940
	50A	3	6.3	448	246	110208
	50A	4	6.3	546	135	73710
	50A	5	6.3	224	186	41664
	50A	6	20	112	159	17808
	50A	7	20	28	34	952
	50A	8	6.3	224	102	22848
	50A	9	6.3	112	201	22512
	50A	10	10	70	278	19460
	50A	11	6.3	112	201	22512
	50A	12	10	70	278	19460
	50A	13	10	140	688	96320
	50A	14	6.3	448	354	158592
	50A	15	8	392	355	139160
	50A	16	8	392	273	107016
	50A	17	6.3	84	789	66276
	50A	18	6.3	56	30	1680
	50A	19	10	140	357	49980
	50A	20	6.3	224	284	63616

RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
50A	6.3	5836	1430
50A	8	2462	972
50A	10	1852	1143
50A	16	452	714
50A	20	188	463
50A	25	659	2541
Peso Total+10%		50A =	7988 kgf

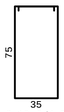
DETALHE INICIAL



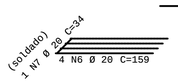
4x2 N5 Ø 6.3 C=186

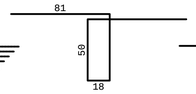


8 N9 Ø 6.3 C/5.5 C=201

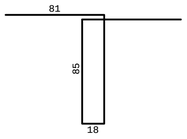


5 N10 Ø 10 C/4.5 C=278





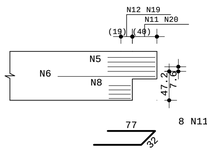
8 N20 Ø 6.3 C/5.5 C=284



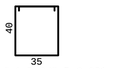
5 N19 Ø 10 C/4.5 C=357

4x2 N8 Ø 6.3 C=102

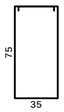
DETALHE FINAL



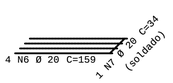
4x2 N5 Ø 6.3 C=186

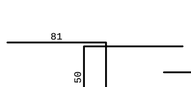


8 N11 Ø 6.3 C/5.5 C=201

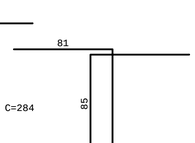


5 N12 Ø 10 C/4.5 C=278





8 N20 Ø 6.3 C/5.5 C=284



5 N19 Ø 10 C/4.5 C=357

4x2 N8 Ø 6.3 C=102

FONTE / DADOS DE BASE

CDHU		
ENG. FERNANDO AREVALILLO LLATA	SUP. PROJETOS	
ARQ°. ANA MARIA ANTUNES COELHO	GERENTE	
ARQ. LUIZ GUSTAVO DELLA NOCE	LÍDER	
ARQ. ALBERTO BUNDUKI	GESTOR	RRT SI10439392100

APOIO CDHU		
JHE		
ENG. LUIZ ROBERTO GUIMARÃES	COORDENADOR	ART 28027230210176583
JHE + GEPRO		
ENG. GERRIVAN DE OLIVEIRA	DESENVOLVIMENTO	ART 28027230211455797

LEGENDA / NOTAS

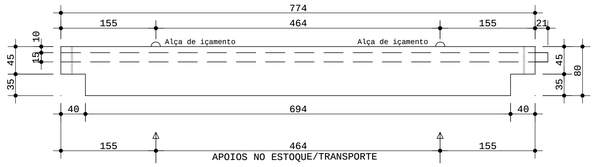
NOTAS :

1 - MEDIDAS EM MILÍMETRO, NÍVEIS EM METRO
2 - CARACTERÍSTICAS DO CONCRETO ESTRUTURAL (CAA II):
VIGAS PRÉ FABRICADAS - fck≥ 40 MPa Ecs ≥30,1 GPa;
PILARES PRÉ FABRICADOS - fck≥ 40 MPa Ecs ≥30,1 GPa;
CONCRETO MOLDADO IN LOCO - fck≥ 30 MPa Ecs ≥26,1 GPa;
3- EXECUTAR O GRAUTEAMENTO DA INTERFACE DAS VIGAS, PILARES E LAJES ALVEOLARES COM O MATERIAL:
GRAUTE:
– fgk ≥ 40 MPa.
– ISENTO DE RETRAÇÃO.
– FLUIDEZ ADEQUADA PARA PERFEITO PREENCHIMENTO DO VÃO ENTRE OS ELEMENTOS.
4- ELASTÔMERO SIMPLES e=10mm, DUREZA 70 SHORE-A.
5 - COBRIMENTO = 2,5 CM.

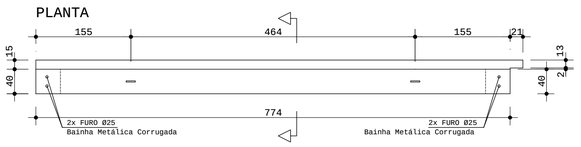
REVISÕES (DISCRIMINAÇÃO)	Nº	DATA	RUBRICA

VP104a

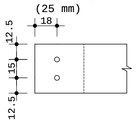
ELEVAÇÃO



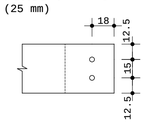
PLANTA



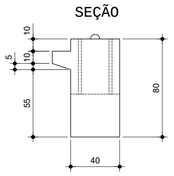
FUROS INICIAIS
(25 mm)



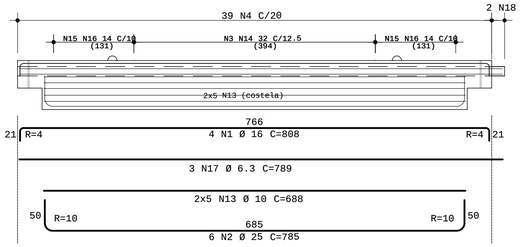
FUROS FINAIS
(25 mm)



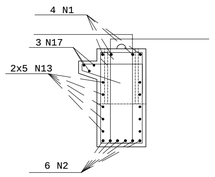
SEÇÃO

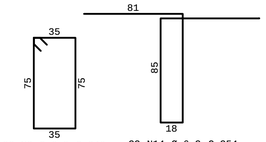


VP104a



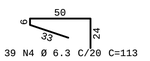
Pavimento	Quant	Volume unit	Volume total	Peso unit	Peso total
Cobertura(1x)	2	2.349	4.698	5.872	11.744
TOTAIS	2	2.349	4.698	5.872	11.744





32 N3 Ø 6.3 C=246
28 N16 Ø 8 C=273

32 N14 Ø 6.3 C=354
28 N15 Ø 8 C=355



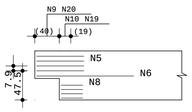
39 N4 Ø 6.3 C/20 C=113

2 N18 Ø 6.3
C/20 C=30

AÇO		POS	BIT mm	QUANT	COMPRIMENTO UNIT cm	COMPRIMENTO TOTAL cm
VP104a (X2)						
	50A	1	16	8	808	6464
	50A	2	25	12	785	9420
	50A	3	6.3	64	246	15744
	50A	4	6.3	78	113	8814
	50A	5	6.3	32	186	5952
	50A	6	20	16	159	2544
	50A	7	20	4	34	136
	50A	8	6.3	32	102	3264
	50A	9	6.3	16	201	3216
	50A	10	10	10	278	2780
	50A	11	6.3	16	201	3216
	50A	12	10	10	278	2780
	50A	13	10	20	688	13760
	50A	14	6.3	64	354	22656
	50A	15	8	56	355	19880
	50A	16	8	56	273	15288
	50A	17	6.3	6	789	4734
	50A	18	6.3	4	30	120
	50A	19	10	20	357	7140
	50A	20	6.3	32	284	9088

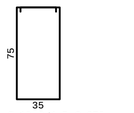
RESUMO DE AÇO			
AÇO	BIT mm	COMPR m	PESO kgf
50A	6.3	768	188
50A	8	352	139
50A	10	265	163
50A	16	65	102
50A	20	27	66
50A	25	94	363
Peso Total+10%		50A =	1123 kgf

DETALHE INICIAL

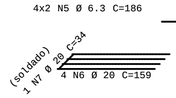


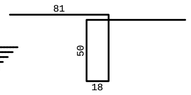
4x2 N5 Ø 6.3 C=186

8 N9 Ø 6.3 C/5.5 C=201

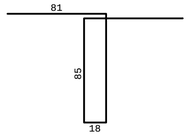


5 N10 Ø 10 C/4.5 C=278





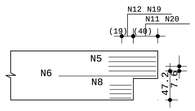
8 N20 Ø 6.3 C/5.5 C=284



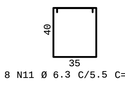
5 N19 Ø 10 C/4.5 C=357

4x2 N8 Ø 6.3 C=102

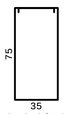
DETALHE FINAL



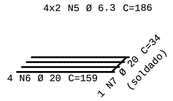
4x2 N5 Ø 6.3 C=186

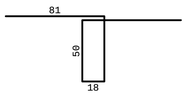


8 N11 Ø 6.3 C/5.5 C=201

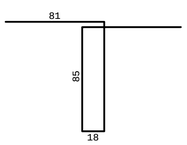


5 N12 Ø 10 C/4.5 C=278





8 N20 Ø 6.3 C/5.5 C=284



5 N19 Ø 10 C/4.5 C=357

4x2 N8 Ø 6.3 C=102

CDHU Companhia de Desenvolvimento Habitacional e Urbano

Rua Boa Vista,170 . São Paulo . Tel.2505.2000 . CNPJ 47.865.597/0001-08

CONTRATO
SECRETARIA DE DESENVOLVIMENTO ECONÔMICO

PROJETO
SDE_074–ETEC JOSÉ MARTIMIANO DA SILVA
REFORMA E AMPLIAÇÃO

ENDEREÇO / MUNICÍPIO
R. Tamandaré,520–Campos Elíseos–Ribeirão Preto

DISCIPLINA
ESTRUTURA

ÁREA | FOLHA
EST | 242/254

ASSUNTO
ESTRUTURA DE CONCRETO
PROJETO EXECUTIVO
ARMAÇÃO DAS VIGAS PRÉ–MOLDADAS 11/21
BLOCO PEDAGOGICO

ESCALA GRÁFICA | ESCALA NOMINAL | DATA
0 1 2 3 (m) | 1:50 | OUT/2021

ESPAÇO PARA APROVAÇÃO

CÓDIGO CDHU EMPREENDIMENTO

Projeto					Região		Município		Versão	Etapa do Projeto	
0	0	0	6	5	0	6	1	3	0	P	E