PREFEITURA DE
PACATUBA

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3223

DETALHES SERRALHERIA

PREFEITURA MUNICIPAL DE PACATUBA
R. Cel. João Carlos, Nº 345 – Centro
CEP. 61.801-215 - Pacatuba-CE

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3224

DETALHES SERRALHERIA

CRECHE TIPO B

CASALTA CONSTRUÇÕES

PADRÕES

DETALHAMENTO DE SERRALHERIA
PORTÕES, GRADIS E BARRAS

REV. 05

01/17

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SERRALHERIA
(SER)
(VERIFICAR MEDIDAS NA OBRA)
EMISSÃO: AGOSTO / 2013

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3225
M

REV.	DATA	FOLHA	DESCRIÇÃO
R00	SETEMBRO/13	-	EMISSÃO INICIAL
R01	13/09/2013	P15	INCLUÍDA PRANCHA P15 COM PORTÕES E GRADIL DE VENTILAÇÃO PARA CENTRAL DE GÁS.
R01	02/10/2013	P03	ALTERADA INDICAÇÃO NA TABELA DOS MATERIAIS DE AÇO PARA FERRO
R02	02/10/2013	P04, P05 P06, P07 P08, P09	ALTERADA INDICAÇÃO DOS MATERIAIS DE AÇO PARA FERRO
R03	28/02/2014	-----	ALTERADA TODAS AS PRANCHAS DE ACORDO COM A REVISÃO ARQUITETÔNICA
R04	06/10/2014	-----	ALTERADA TODAS AS PRANCHAS DE ACORDO COM A REVISÃO ARQUITETÔNICA
R05	17/03/2015	-----	ALTERAÇÃO CADERNO DE DETALHES

ÍNDICE DE DETALHES DE SERRALHERIA

PREFEITURA MUNICIPAL DE PACATUBA - PMP - PR
Nº 3226
M

CÓD.	DIMENSÕES (cm) (COMP x LARG)	MATERIAL	TIPO	LOCAL	QTD.
PORTÕES, GRADIS E BARRAS DE APOIO					
GR1	220 x 220cm	FERRO E ARAME GALVANIZADO	GRADIL C/ PORTÃO - PINTURA COR AZUL FRANÇA	ENTRE BLOCO SERVIÇO E BLOCO PEDAGÓGICO 1	01
GR2	160 x 180cm	FERRO E ARAME GALVANIZADO	GRADIL C/ PORTÃO - PINTURA COR AMARELO OURO	ÁREA DE SERVIÇO	01
GR3	321 x 220cm	FERRO E ARAME GALVANIZADO	GRADIL FIXO - PINTURA COR AZUL FRANÇA	ENTRE BLOCO SERVIÇO E BLOCO ADMINISTRATIVO	01
	150 x 220cm	FERRO E ARAME GALVANIZADO	GRADIL C/ PORTÃO - PINTURA COR AZUL FRANÇA	ENTRE BLOCO SERVIÇO E BLOCO ADMINISTRATIVO	01
GR4	226 x 220cm	FERRO E ARAME GALVANIZADO	GRADIL C/ PORTÃO - PINTURA COR AZUL FRANÇA	ENTRE BLOCO ADMINISTRATIVO E BLOCO MULTIUSO	01
GR5	498 x 180cm	FERRO E ARAME GALVANIZADO	GRADIL C/ PORTÃO - PINTURA COR AMARELO	SOLARIUM PRÉ-ESCOLA	01
GR6	520 x 180cm	FERRO E ARAME GALVANIZADO	GRADIL C/ PORTÃO - PINTURA COR AMARELO	SOLARIUM CRECHE I	01
GR7	498 x 100cm	FERRO E ARAME GALVANIZADO	GRADIL C/ PORTÃO - PINTURA COR AMARELO	SOLARIUM CRECHE III	02
GR8	520 x 100cm	FERRO E ARAME GALVANIZADO	GRADIL C/ PORTÃO - PINTURA COR AMARELO	SOLARIUM CRECHE II	02
GR9	308 x 180cm	FERRO E ARAME GALVANIZADO	GRADIL - PINTURA VERMELHO	ÁREA DE SERVIÇO	01
GR10	1469 x 140cm	FERRO GALVANIZADO	FIXA - PINTURA CONFORME DETALHE	MURO FRONTAL	01
GR11	60 x 140cm	FERRO GALVANIZADO	FIXA - PINTURA CONFORME DETALHE	MURO FRONTAL	03
GR12	8,57 x 140cm	FERRO GALVANIZADO	FIXA - PINTURA CONFORME DETALHE	MURO FRONTAL	01
GR13	6,34 x 140cm	FERRO GALVANIZADO	FIXA - PINTURA CONFORME DETALHE	MURO FRONTAL	01
BR1	307 cm	METÁLICO RESIST. A CORROSÃO	C/ ADERÊNCIA E PINTURA AZUL FRANÇA	CRECHES I, II, III E PRÉ ESCOLA	08
BR2	367cm	METÁLICO RESIST. A CORROSÃO	C/ ADERÊNCIA E PINTURA AZUL FRANÇA	SALA MULTIUSO	01
PT1	160 x 215cm	FERRO GALVANIZADO	2 FOL. DE GIRO - PINTURA CONFORME DETALHE	ACESSO PEDESTRES	02
PT2	330 x 215cm	FERRO GALVANIZADO	1 FOLHA DE CORRER - PINTURA CONFORME DETALHE	ACESSO VEÍCULOS	01

OBSERVAÇÕES

* CONFIRMAR DIMENSÕES NA OBRA.
* TODOS OS DETALHES FORAM REPRESENTADOS NA ESCALA 1/25, EXCETO QUANDO INDICADA.

CASALTA CONSTRUÇÕES

CRECHE TIPO B
CONTROLE DE ALTERAÇÃO DE DETALHES DE SERRALHERIA

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03/17

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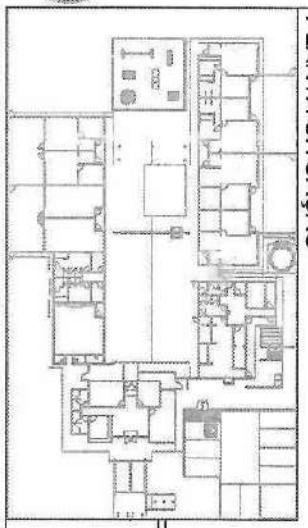
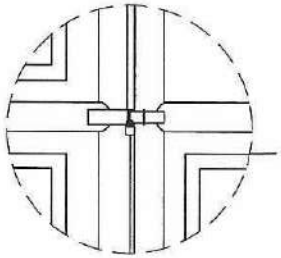
PADRÕES

PLANTA SITUAÇÃO





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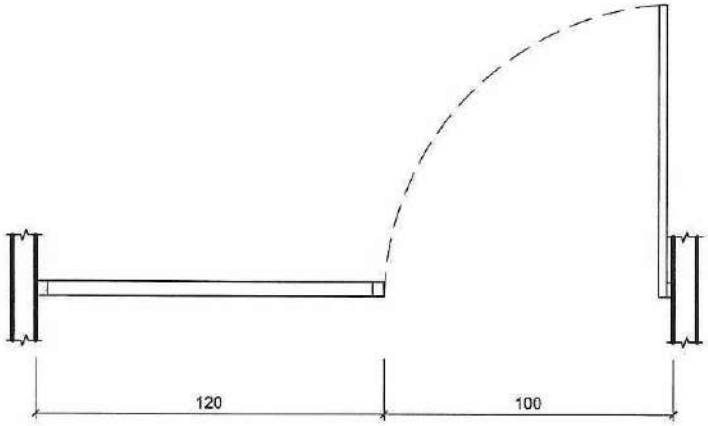
ESCALA 1:10



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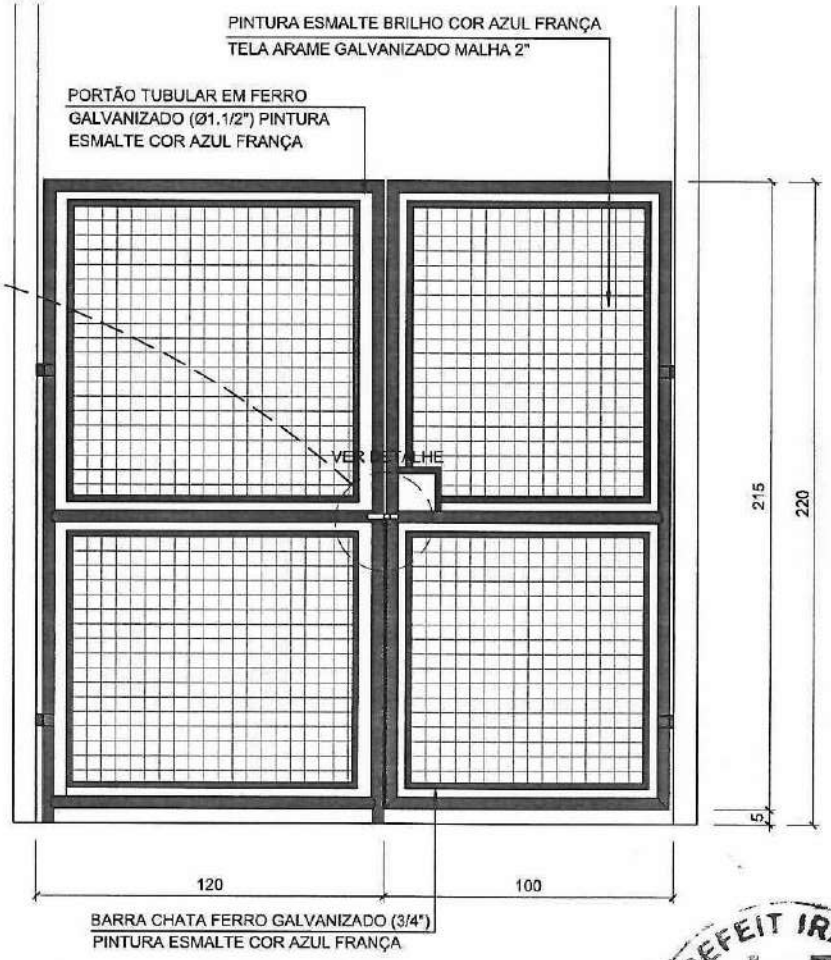

03 ELEVAÇÃO
ESCALA 1:25

CRECHE TIPO B
DETALHE GRADIL GR1 - ENTRE
BL. SERVIÇO E PEDAGÓGICO 1

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04/17

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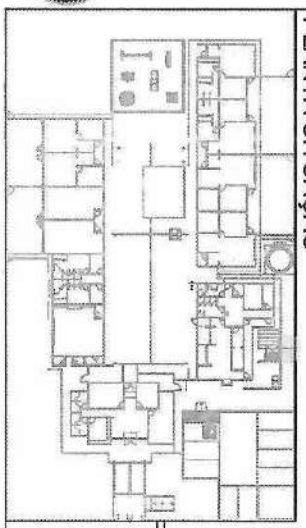
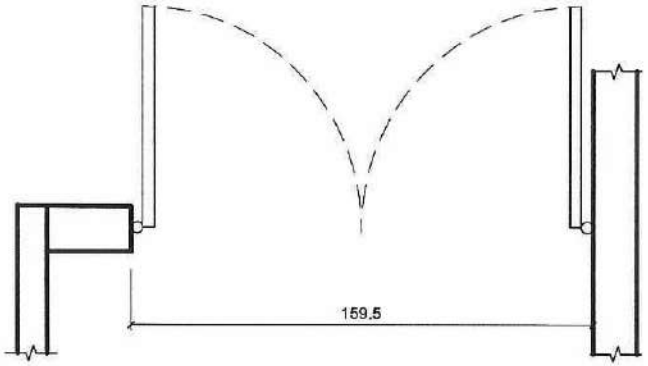
PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3227

PADRÕES

PLANTA SITUAÇÃO





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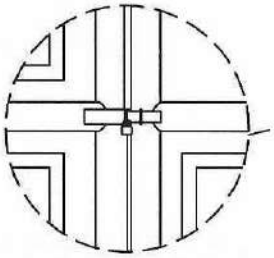

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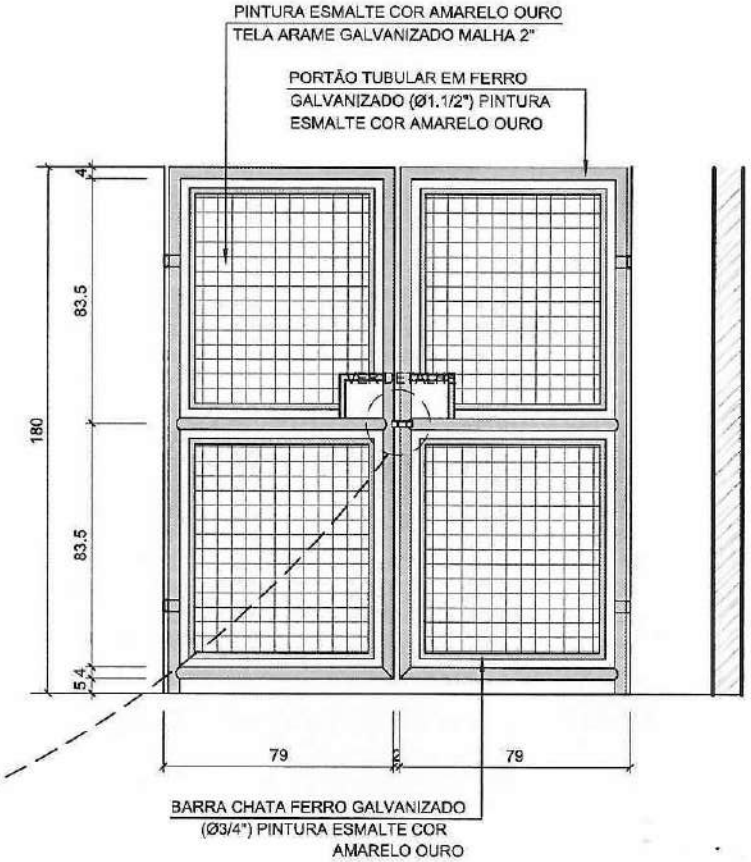

03 ELEVAÇÃO
ESCALA 1:25

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3228

CRECHE TIPO B
DETALHE GRADIL GR2
ÁREA DE SERVIÇO

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05/17

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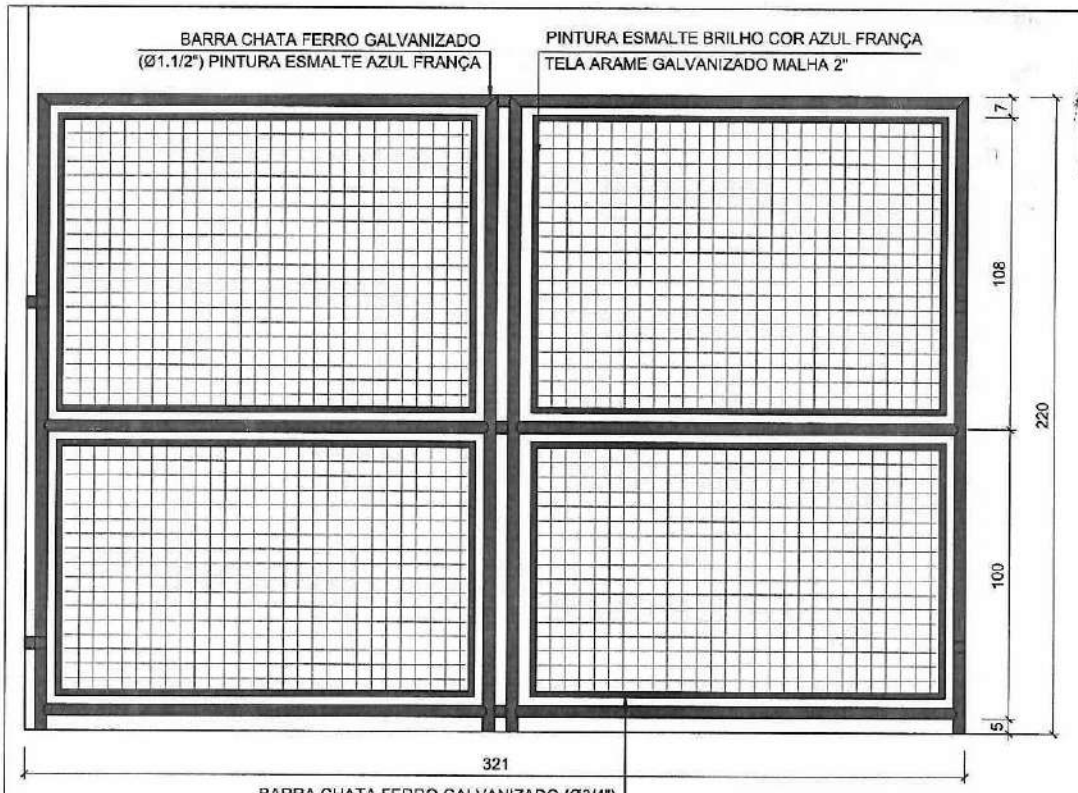

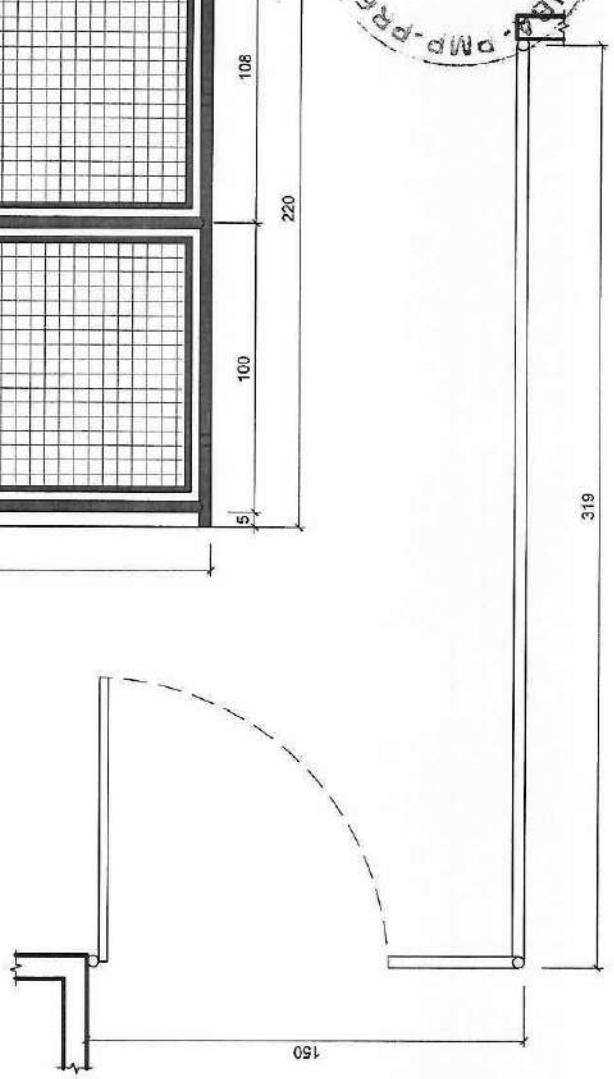

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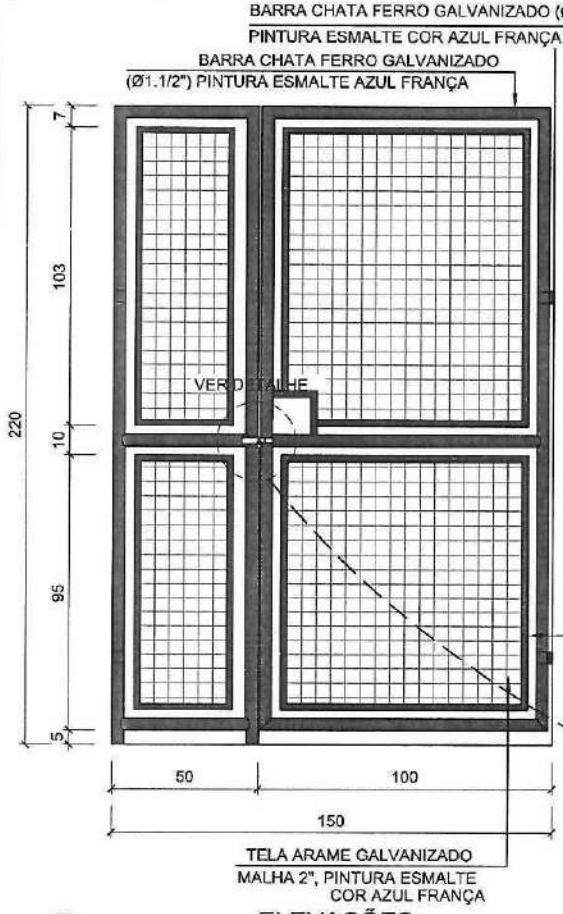

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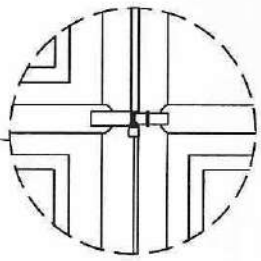

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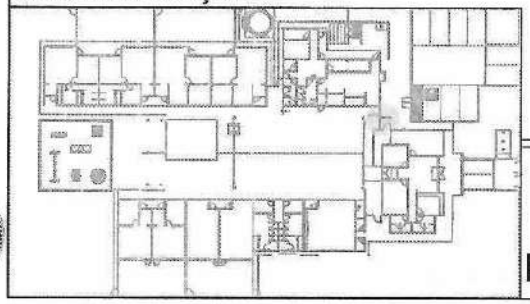
COM PORTA CADEADO
ESCALA 1:10

PLANTA SITUAÇÃO



CRECHE TIPO B DETALHE GRADIL GR3 ENTRE BL. SERVIÇO E ADMINISTR.	REV. 05 06/17

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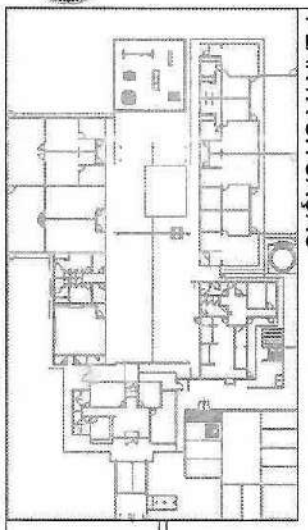
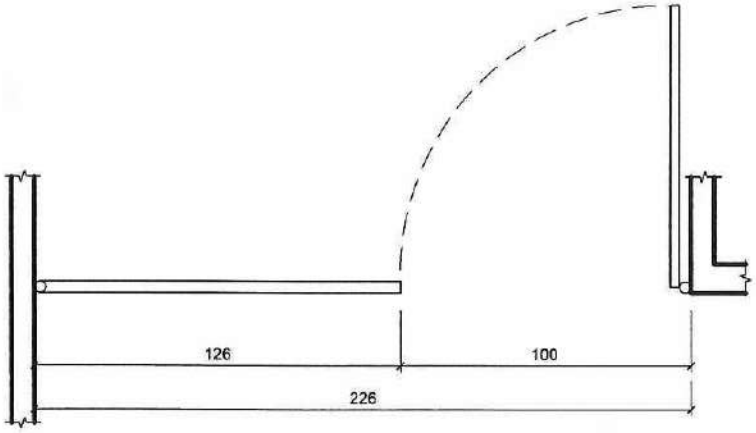
PREFEITURA MUNICIPAL DE PACATUBA
Nº 3229
PMP-

PADRÕES

PADRÕES

PLANTA SITUAÇÃO





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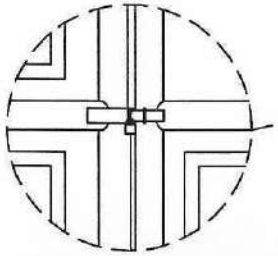
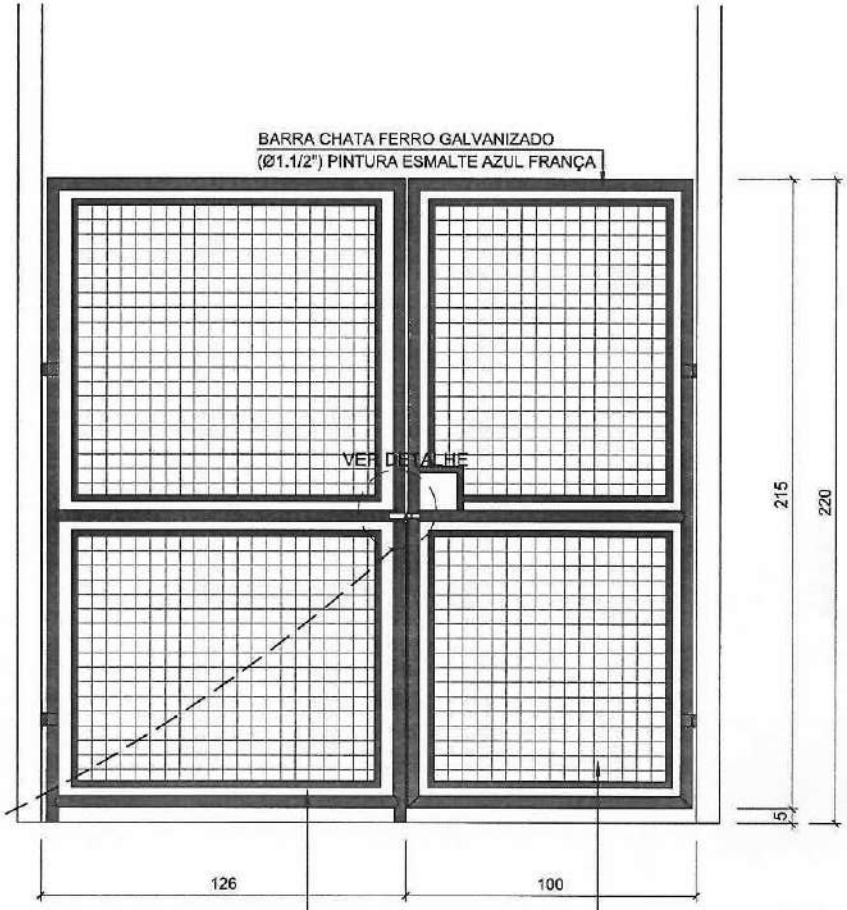
ESCALA 1:25



02 DETALHE TRAVA COM PORTA CADEADO
ESCALA 1:10



03 ELEVAÇÃO
ESCALA 1:25

CRECHE TIPO B
DETALHE GRADIL GR4
ENTRE BL. ADM. E MULTIUSO

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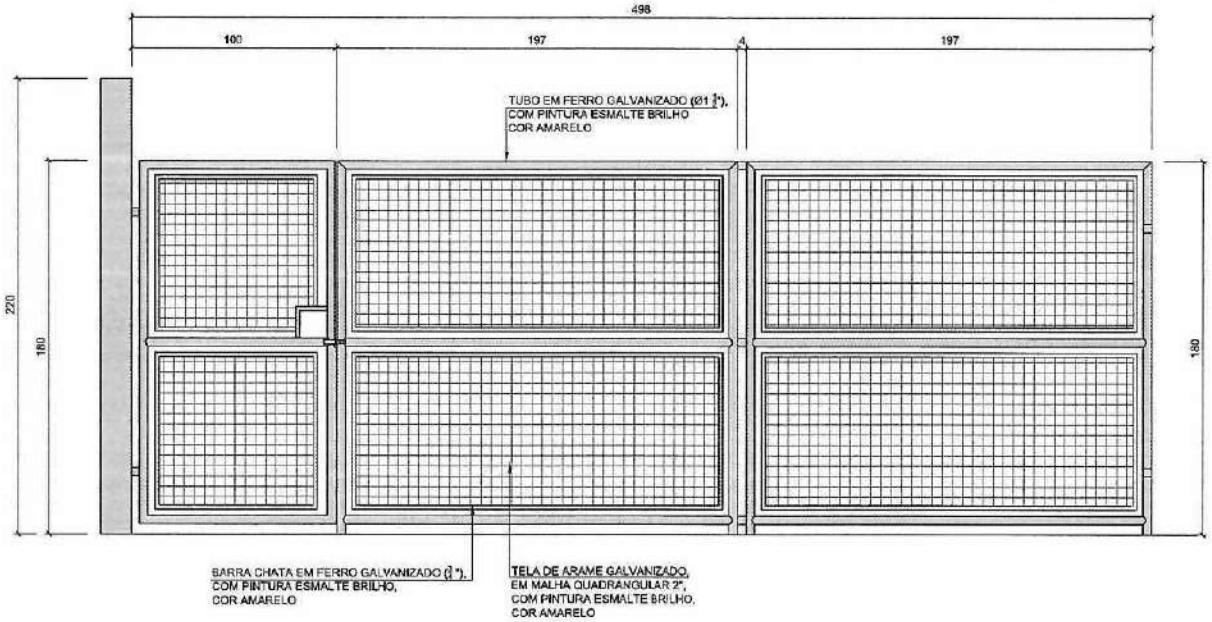
PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 3230



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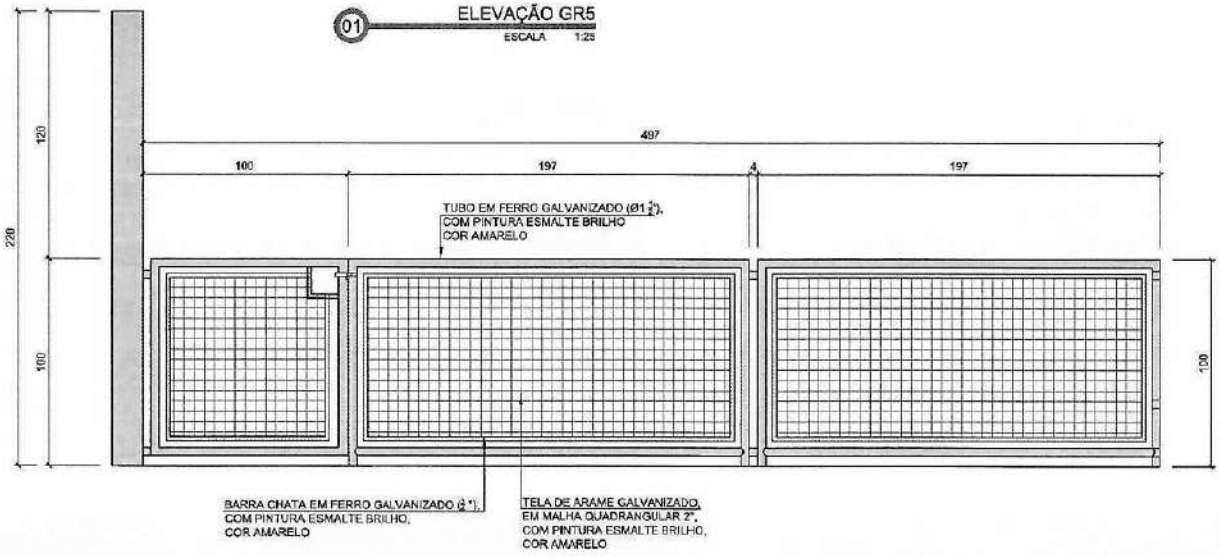

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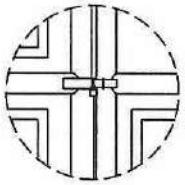

03 DETALHE TRAVA COM PORTA CADEADO
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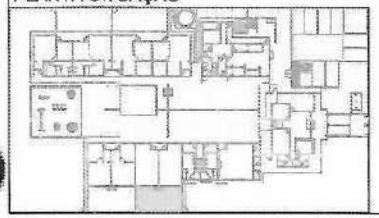
PLANTA SITUAÇÃO



PADRÕES

CASMALTA CONSTRUÇÕES

CRECHE TIPO B
DETALHE GRADIS GR5 E GR7
SOLARIUM PRÉ ESCOLA

REV. 05
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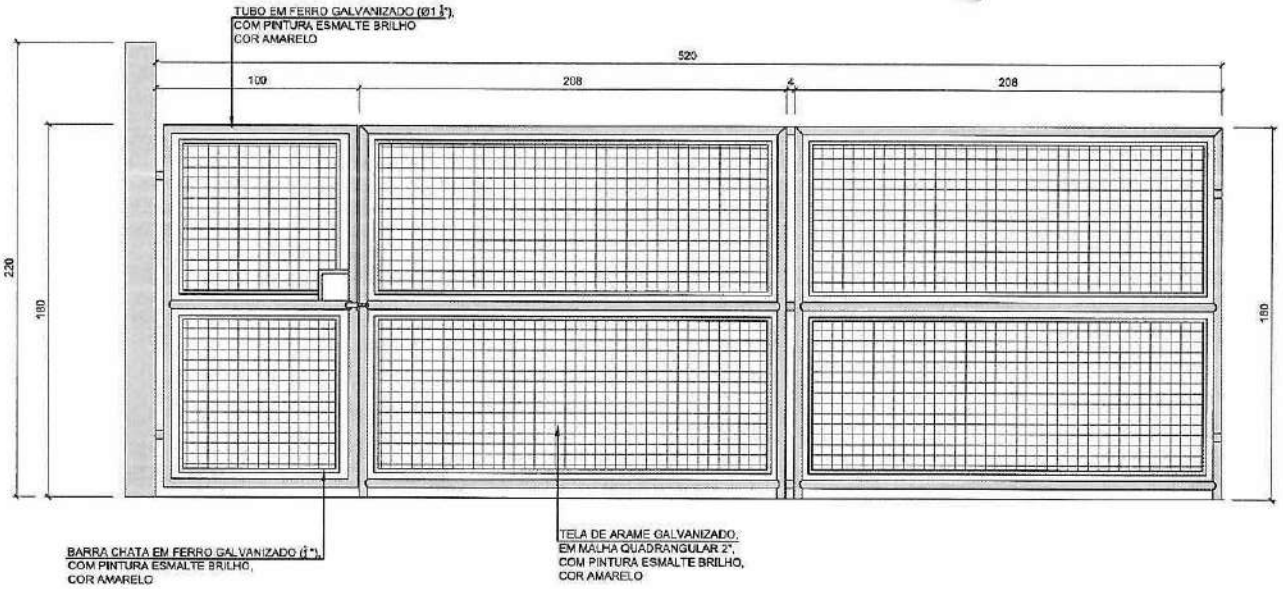
PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3231



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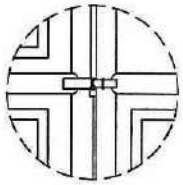

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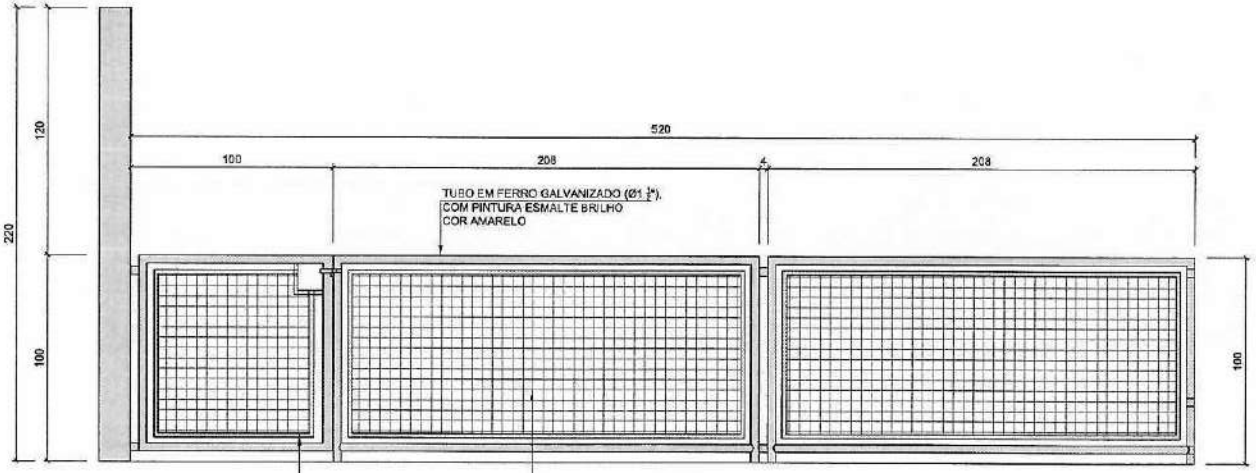

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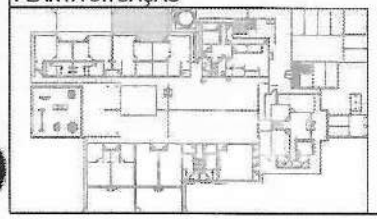
PLANTA SITUAÇÃO



PMP-PREFEITURA MUNICIPAL DE PAÇATUBA
Nº 32232

CASMALTA CONSTRUÇÕES

CRECHE TIPO B
DETALHE GRADIS GR6 E GR8
SOLARIUM CRECHE I E CRECHE II

REV. 05
09/17

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PREFEITURA MUNICIPAL DE PACATUBA-PMP-PREFEITURA
Nº 3233
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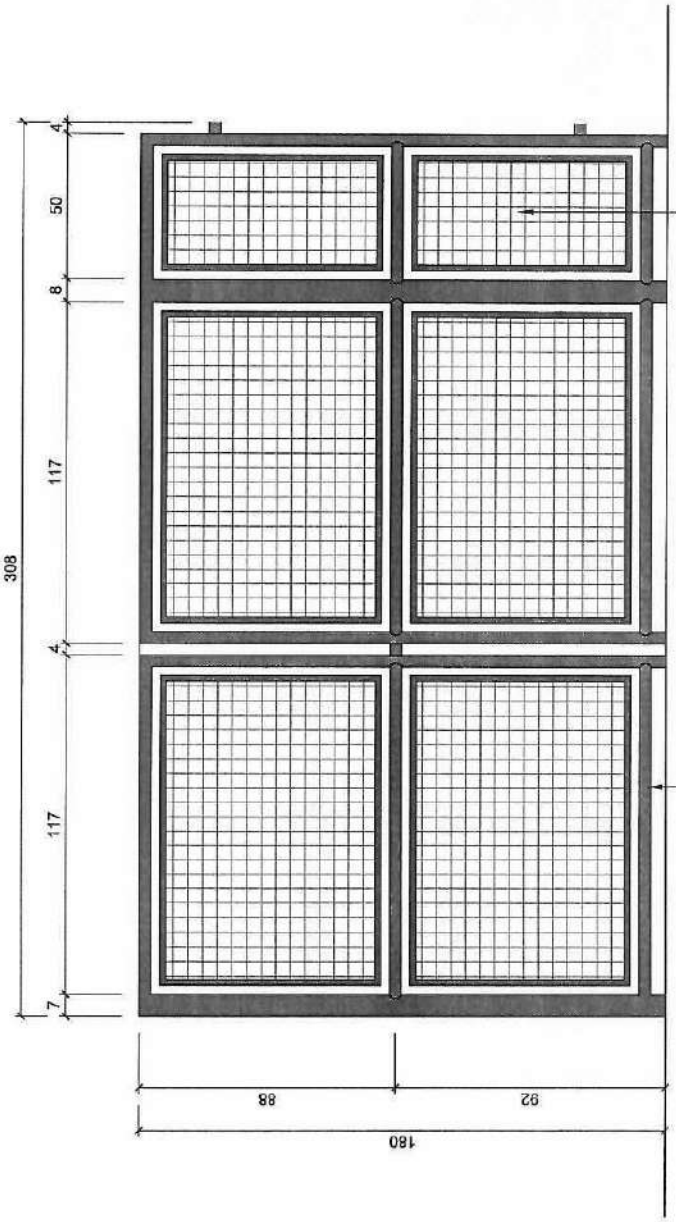
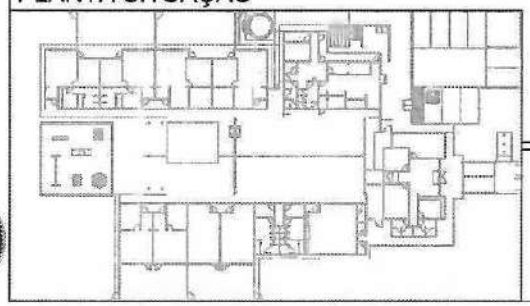


ELEVAÇÃO
01
ESCALA 1:25

PLANTA SITUAÇÃO



PADRÕES

CRECHE TIPO B
DETALHE GRADIL GR9
BLOCO SERVIÇO

REV. 05
10/17

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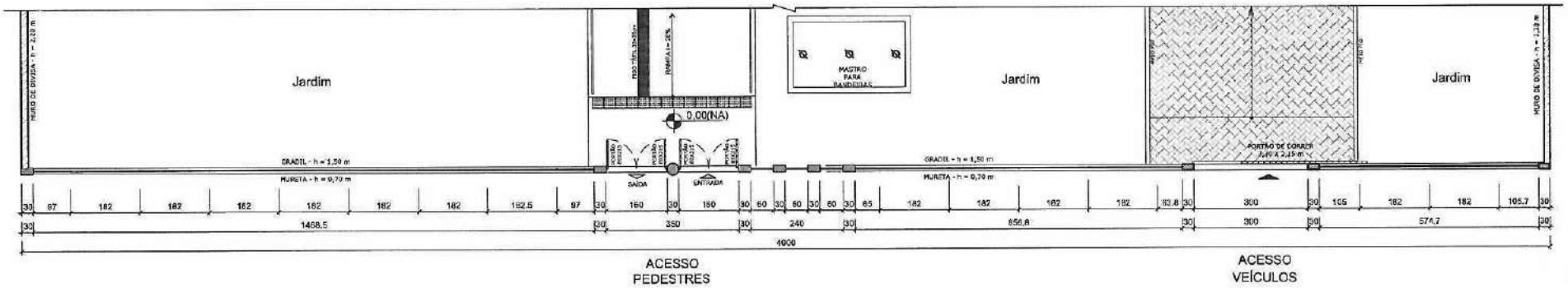
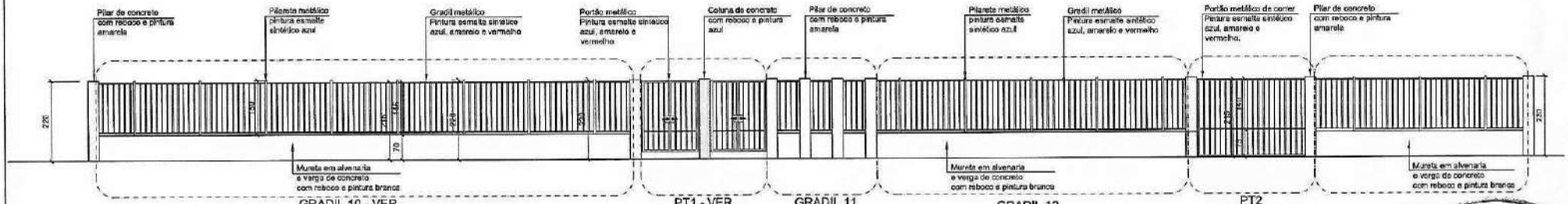
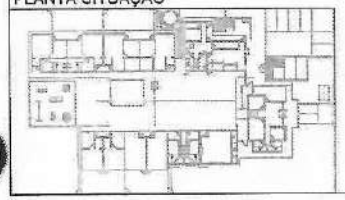




01 MARCAÇÃO DOS GRADIS
ESCALA 1:100

PLANTA SITUAÇÃO



PREFEITURA MUNICIPAL DE PACATUBA - PMP - PR
Nº 3231/17

CASALTA CONSTRUÇÕES

CRECHE TIPO B

DETALHE GRADIS MURO

REV. 05

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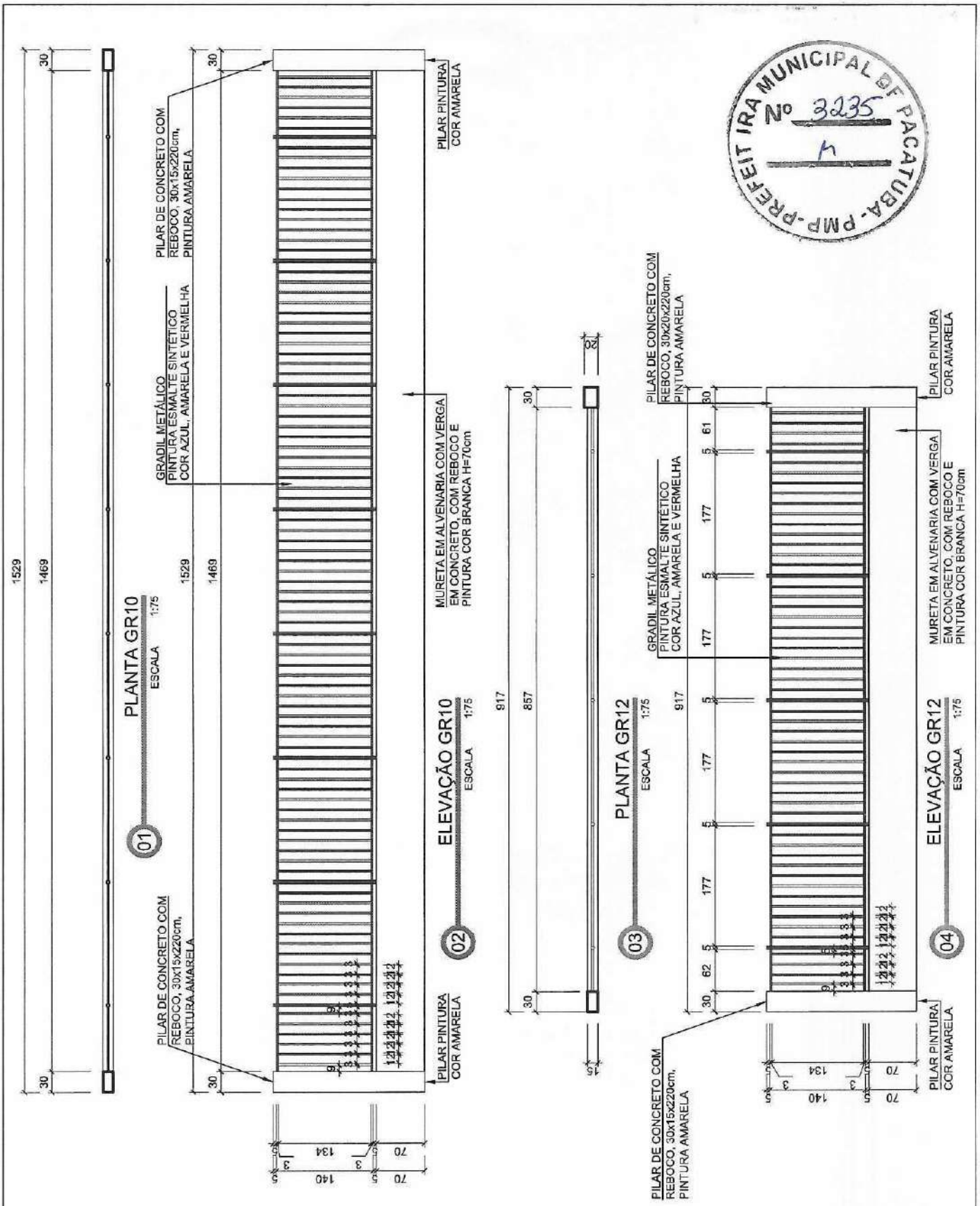
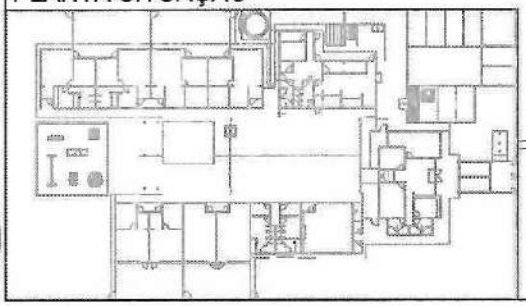


PLANTA SITUAÇÃO



CRECHE TIPO B
DETALHE GRADIS GR10 E GR12
MURO FRONTAL

REV. 05

12/17

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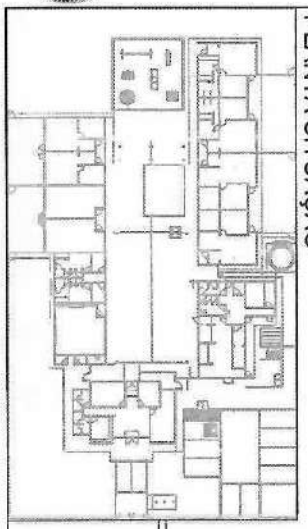
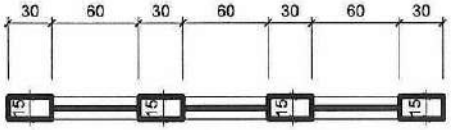
PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3235

PADRÕES

PLANTA SITUAÇÃO





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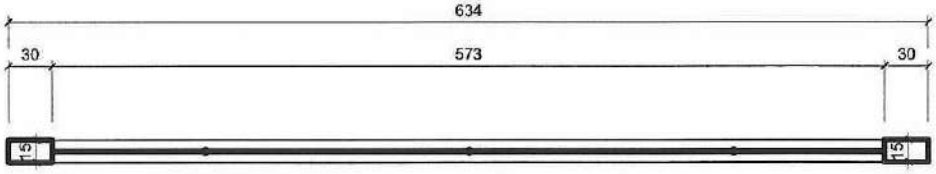
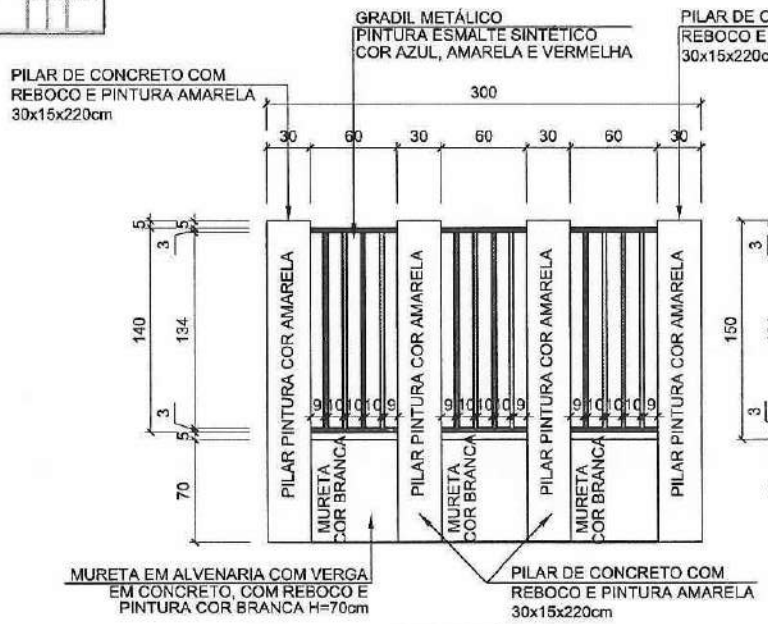
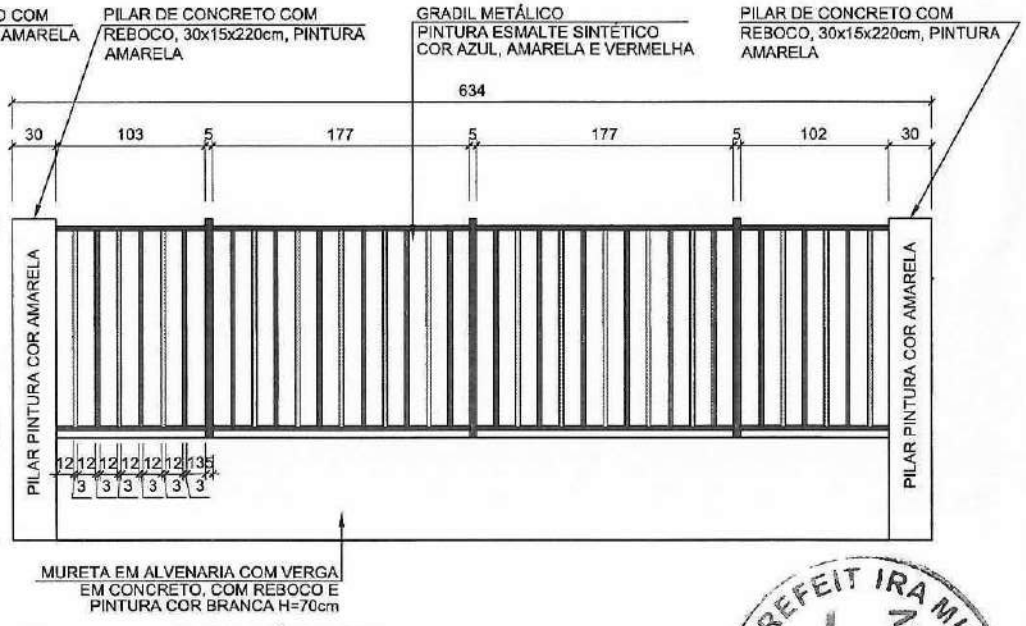
ESCALA 1:50



03 PLANTA GR13
ESCALA 1:50



02 ELEVAÇÃO GR11
ESCALA 1:50



04 ELEVAÇÃO GR13
ESCALA 1:50

PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 3236

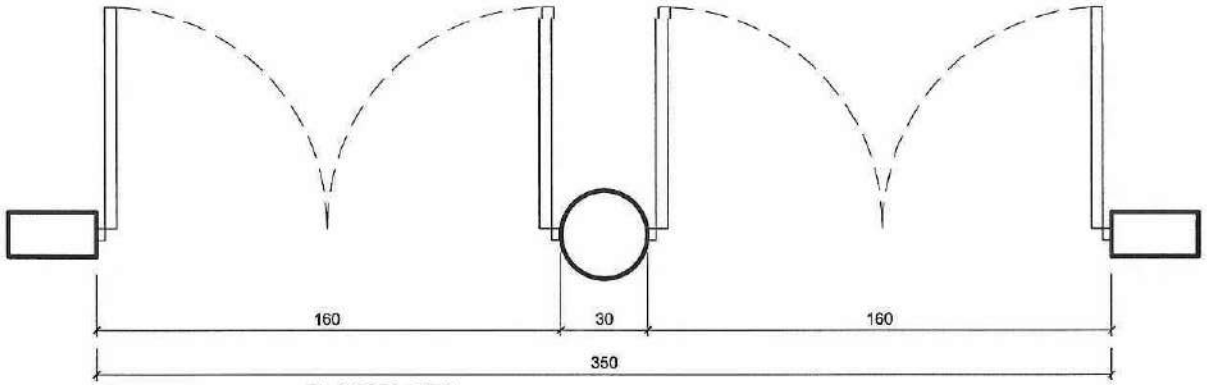
CRECHE TIPO B
DETALHE GRADIS GR11 E GR13
MURO FRONTAL

REV. 05
13/17

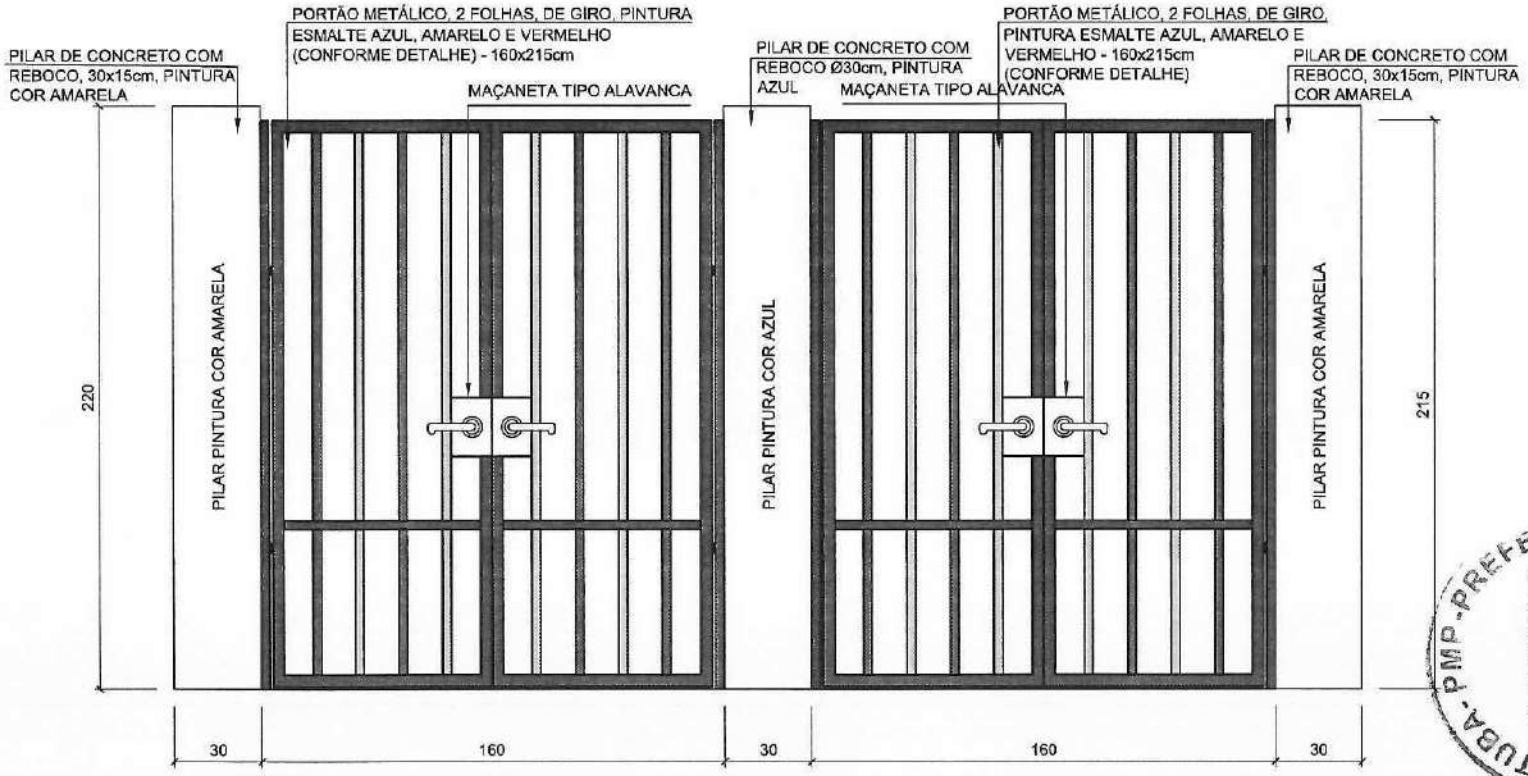
301CRB-DET-PE-003-SER-GER-R05.dwg

PADRÕES

PLANTA SITUAÇÃO



01 PLANTA PT1
ESCALA 1:25



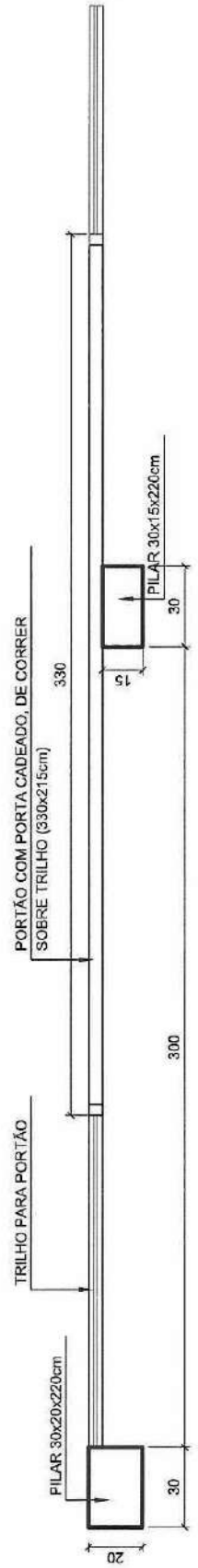
02 ELEVAÇÃO PT1
ESCALA 1:25

CRECHE TIPO B
DETALHE PT1
ACESSO DE PEDESTRE

REV. 05
14/17

301CRB-DET-PE-003-SER-GER-R05.dwg

PREFEITURA MUNICIPAL DE PAÇATUBA - PMP
Nº 3237



PLANTA PT2
ESCALA 1:25
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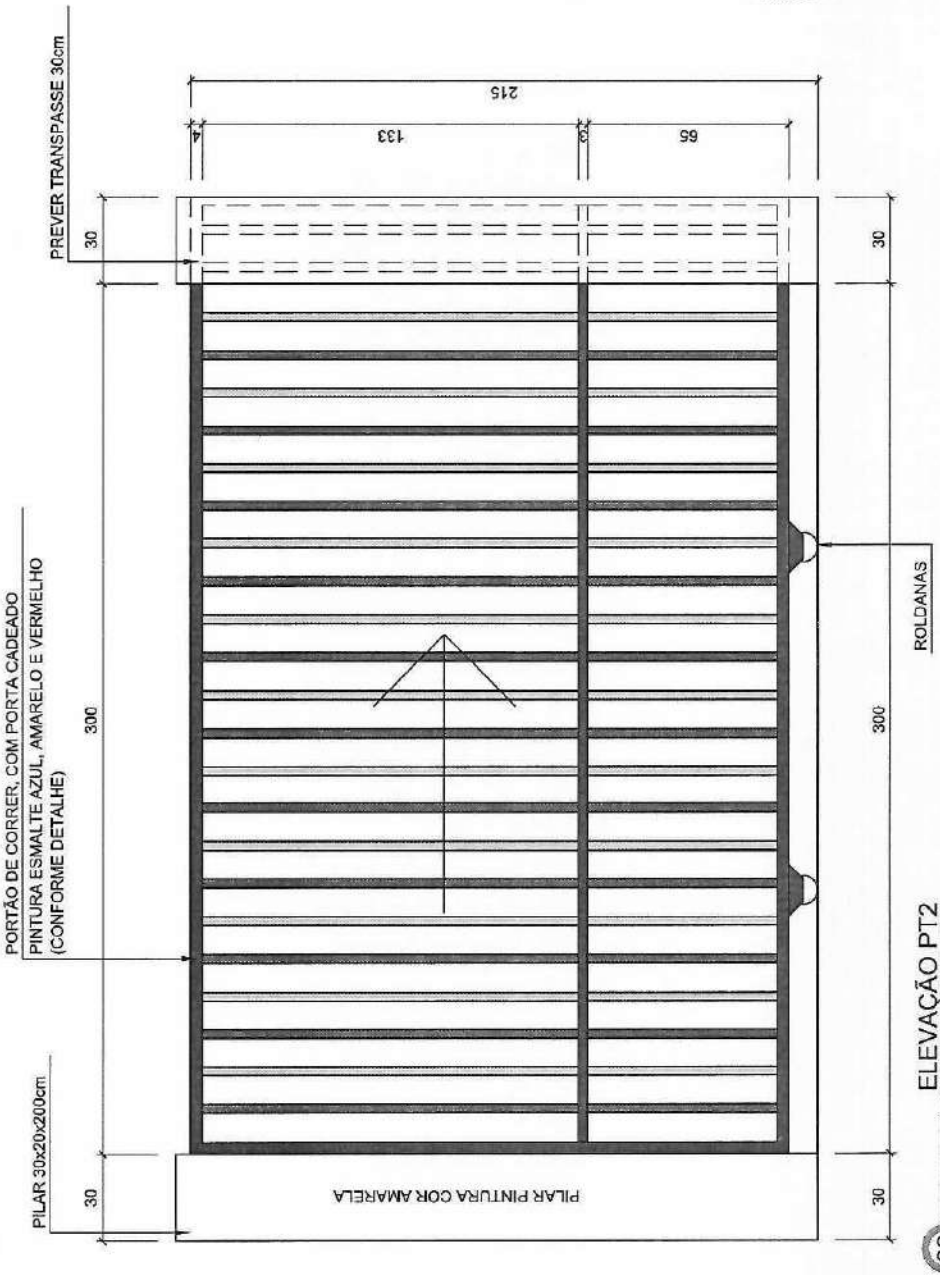
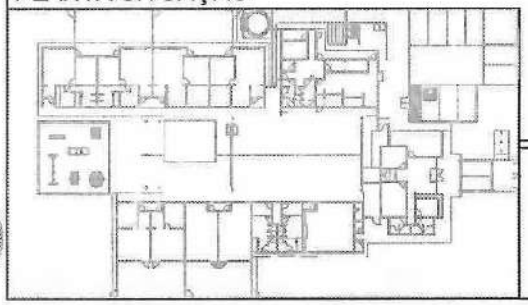


ELEVAÇÃO PT2
ESCALA 1:25
03

PLANTA SITUAÇÃO



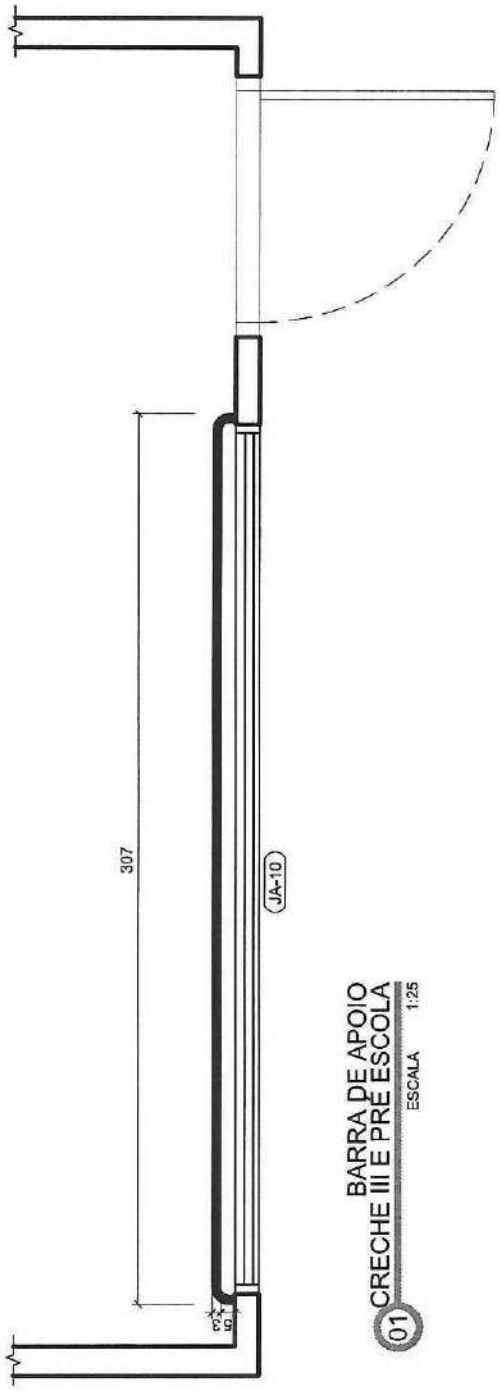
CRECHE TIPO B
DETALHE PT2
ACESSO VEÍCULOS

REV. 05
15/17

301CRB-DET-PE-003-SER-GER-R05.dwg

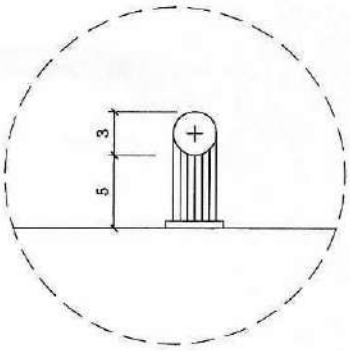
PREFEITURA MUNICIPAL DE PAÇATUBA - PMP - PREFEIT
Nº 3238

PADRÕES



BARRA DE APOIO
CRECHE III E PRÉ ESCOLA
ESCALA 1:25
01

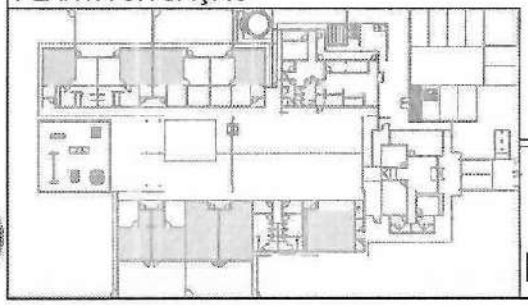
BARRA DE APOIO
CRECHES I, II E MULTIUSO
ESCALA 1:25
02



DET. BARRA DE APOIO
ESCALA 1:5
03

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3239
M

PLANTA SITUAÇÃO



CRECHE TIPO B
DETALHE BARRAS DE APOIO
BL. PEDAGÓGICO 1, 2 E MULTIUSO

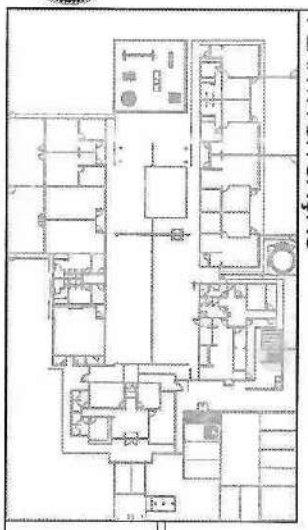
REV. 05
16/17

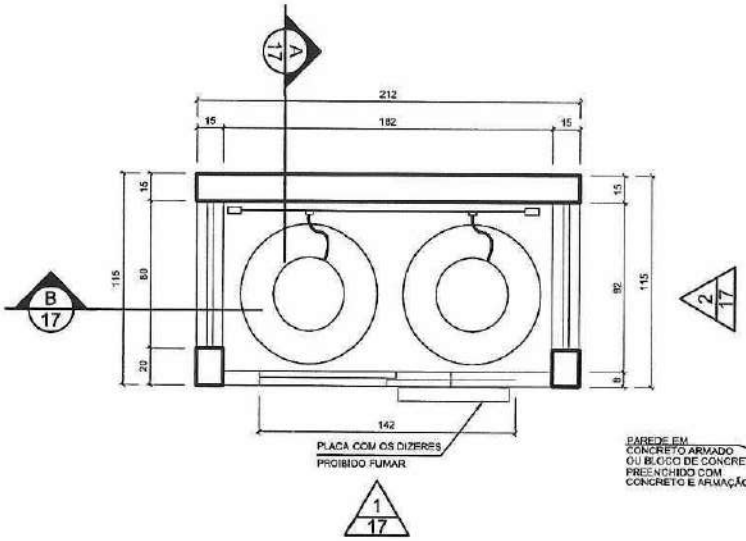
301CRB-DET-PE-003-SER-GER-R05.dwg

PADRÕES

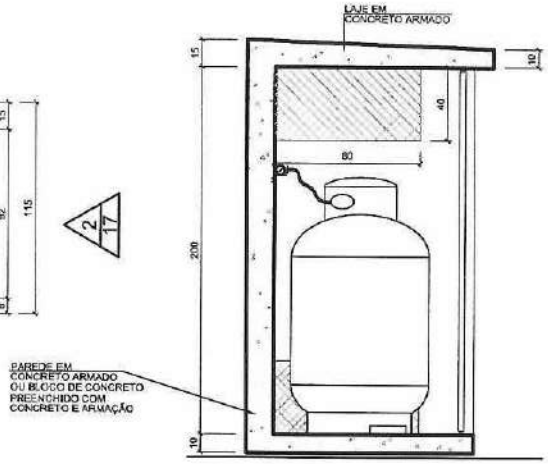
PADRÕES

PLANTA SITUAÇÃO

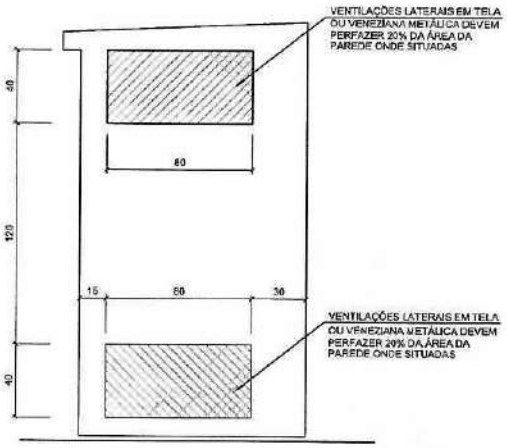




01 PLANTA
ESCALA —



01 CORTE A
ESCALA —



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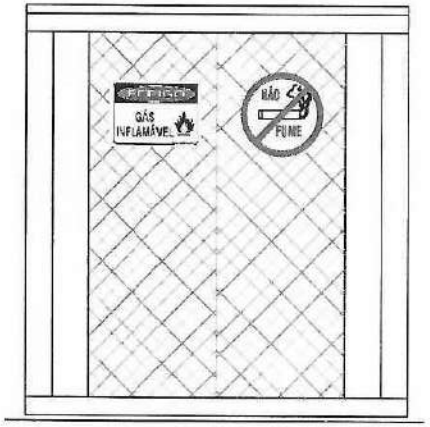
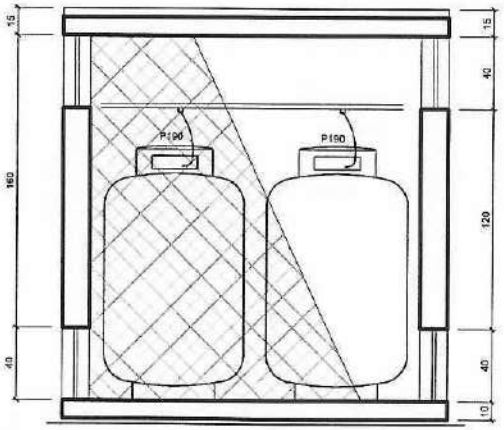
ESCALA —



01 ELEVAÇÃO FRONTAL
ESCALA —



01 CORTE B
ESCALA —

PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 3211
4

CRECHE TIPO B

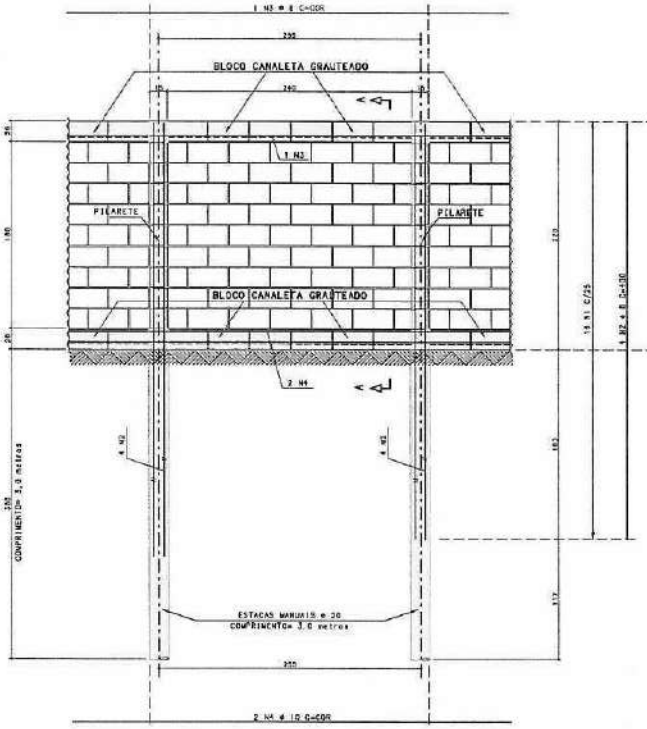
DET. PORTÕES E GRADIL DE VENTILAÇÃO - CENTRAL DE GÁS

REV. 05

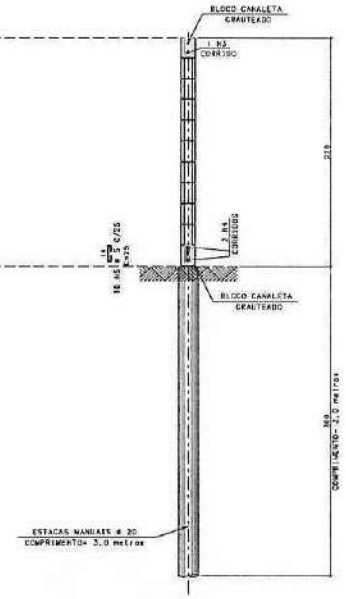
17/17

301CRB-DET-PE-003-SER-GER-R05.dwg

ELEVAÇÃO
ESCALA 1:25



SEÇÃO A-A
ESCALA 1:25



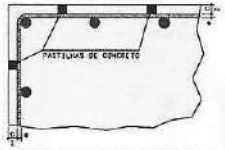
QUANTITATIVOS DO MURO
PARA UM TRECHO DE 2,55 metros

AÇO	POS.	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
60B	1	5	16	52	832
50A	2	8	4	400	1600
50A	3	8	1	-CORR-	270
50A	4	10	2	-CORR-	540
60B	5	5	10	25	250

RESUMO AÇO CA 50-60			
AÇO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	11	2
50A	8	19	7
50A	10	5	3
Peso Total		60B =	2 kg
Peso Total		50A =	10 kg

VOLUME DE CONCRETO fck ≥ 20 MPa	
PARA UMA ESTACA	0,095 m3
PARA UM PILARETE	0,035 m3
CANALETAS TRECHO DE 2,55m	0,080 m3
TOTAL	0,210 m3

DETALHE GENÉRICO PARA GARANTIR O COBRIMENTO DAS ARMADURAS



OBS.: UTILIZAR ESPAÇADORES PARA GARANTIR O COBRIMENTO DAS ARMADURAS "C", CONFORME ESPECIFICADO NAS NOTAS DESTA FOLHA. ESTES ESPAÇADORES SERÃO PREFERENCIALMENTE DE POLIETILENO. ALTERNATIVAMENTE PODERÃO SER UTILIZADAS PASTILHAS DE ARGAMASSA, PORÉM, NESTE CASO, A QUALIDADE DESTA ARGAMASSA DEVERÁ SER IGUAL OU SUPERIOR A DO CONCRETO ESPECIFICADO PARA A ESTRUTURA.

NOTAS:

1)-CONCRETO ADOTADO:
-CLASSE DE RESISTÊNCIA C20, SEGUNDO NBR-8953 E RELAÇÃO ÁGUA/CIMENTO A/C.≤ 0,65.

2)- AS MEDIDAS CONSTANTES NESTE PROJETO SÃO EM CENTÍMETROS, EXCETO AS INDICADAS;

3)- VERIFICAR AS MEDIDAS NO PROJETO E NA OBRA. NA DIVERGÊNCIA COMUNICAR A TECNICALC;

4)- PROJETO ESTRUTURAL ELABORADO CONFORME AS NORMAS MAIS RECENTES DA ABNT NBR-6118/2003, NBR-6120, NBR-6122, NBR-12655 E DEMAIS NORMAS PERTINENTES;

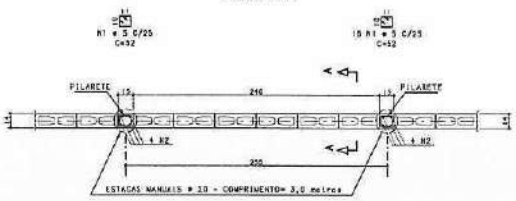
5)- EXECUTAR A ESTRUTURA EM CONFORMIDADE COM AS NORMAS TÉCNICAS DA ABNT E EM CONJUNTO COM O PROJETO ARQUITETÔNICO, FUNDAÇÃO, HIDRÁULICO, ELÉTRICO, ETC;

6)-UTILIZAR ESPAÇADORES NA DENSIDADE SUFICIENTE PARA GARANTIR O COBRIMENTO DAS ARMADURAS DE PROJETO;

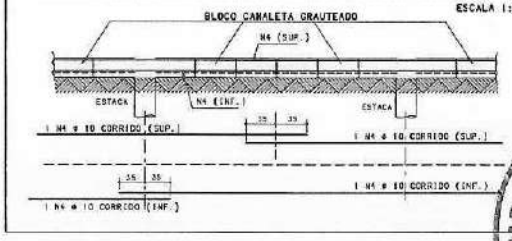
7)- AS BARRAS E FIOS DE AÇO UTILIZADOS DEVEM ATENDER AS ESPECIFICAÇÕES DAS NORMAS BRASILEIRAS DA ABNT (ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS), ESPECIALMENTE A NBR 7480.

8)- NO RESUMO DE AÇO NÃO ESTÃO COMPUTADAS AS PERDAS.

DETALHE EM PLANTA
ESCALA 1:25



DETALHE DE EMENDA DAS BARRAS QUANDO NECESSÁRIO
ESCALA 1:25



REVISÃO	DISCRIMINAÇÃO	DATA
0	EMISSÃO INICIAL	30/01/2014

MOACIR H. INOUE CREA PR-3951/D
JOSÉ AUGUSTO PRAZERES CREA PR-19729/D
FABIO KAZU INOUE CREA PR-70945/D

TECNICALC
CONSULTORIA E PROJETOS ESTRUTURAIS SS LTDA.
AVENIDA SETE DE SETEMBRO, 3487 - CONJ.14
BEBOUÇAS - CURITIBA - PR - CEP 80.230-010
FONE: 55(041)3324-4326 - FAX: 55(041)3224-3337
EMAIL: tecnicalc@tecnicalc.com.br
http: www.tecnicalc.com.br

PROGRAMA PROINFÂNCIA - PROJETO TIPO B
PROJETO DE TRANSPOSIÇÃO

NÚMERO: 010/2013
ARQUIVO: 1913ST000-R00

PROPRIETÁRIO : FUNDO NACIONAL DE DESENVOLVIMENTO DA EDUCAÇÃO - FNDE

ARQUITETURA: arquiteto: crea
RESPONSÁVEL TÉCNICO EXECUÇÃO: engenheiro civil: crea

DATA	ENG. CIVIL:	PROJETISTA:	ESCALA:
30/01/2014	MOACIR	TADEU	INDICADA

REFERÊNCIA:
FORMAS E ARMADURAS DO MURO

FOLHA/REF.: 000 R00

DIREITOS AUTORAIS RESERVADOS - PROIBIDA A REPRODUÇÃO OU UTILIZAÇÃO SEM AUTORIZAÇÃO

PREFEITURA MUNICIPAL DE PACATUBA - PMP - PREFEITURA

PREFEITURA DE
PACATUBA

PREFEITURA MUNICIPAL DE PACATUBA - PMP - Nº 3242

PROJETO ESTRUTURAL

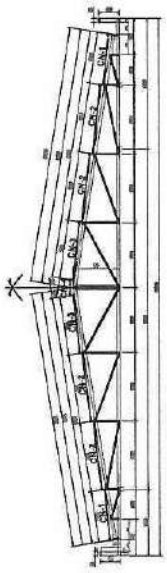
PREFEITURA MUNICIPAL DE PACATUBA
R. Cel. João Carlos, Nº 345 – Centro
CEP. 61.801-215 - Pacatuba-CE

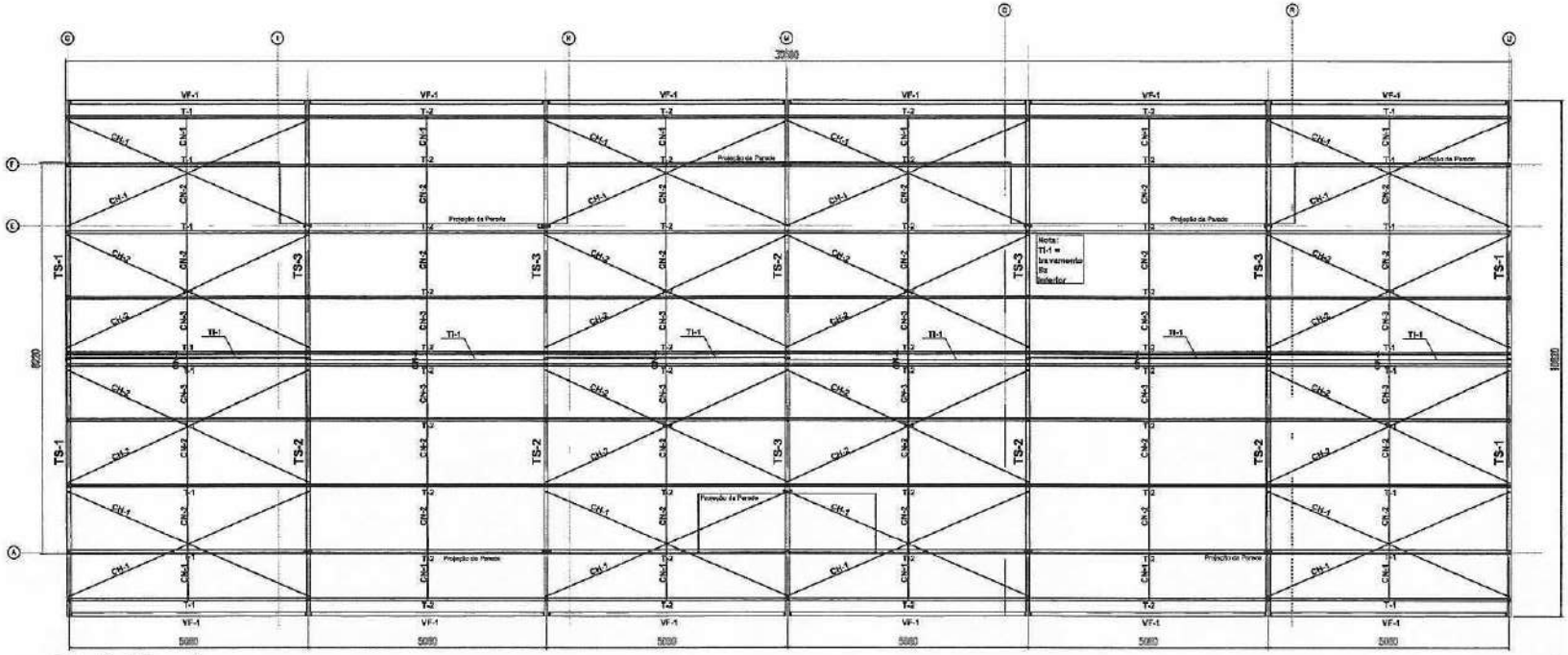
PREFEITURA DE
PACATUBA

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 32212

ESTRUTURA METÁLICA

PREFEITURA MUNICIPAL DE PACATUBA
R. Cel. João Carlos, Nº 345 – Centro
CEP. 61.801-215 - Pacatuba-CE





Prédio 1
Conjunto de Montagem

PMP - PREFEITURA MUNICIPAL DE PACATUBA
Nº 32744

Revisão	Descrição	Data	Responsável
1	xxxxxxxxxxxxxx	xxxxxx	xxxxxxxxxxxxxx

Cliente: CASA ALTA Construções Ltda

LIBER CONSTRUÇÃO METÁLICA

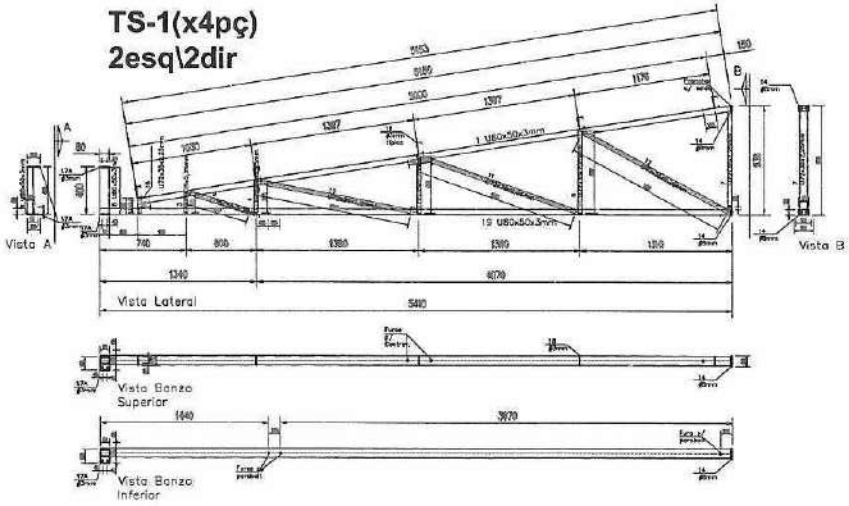
Obra: Creche B Bloco 1 — Número: 651

Projeto: eng. Vilano Vencato — Data: set. 2013 — Escala: s/e

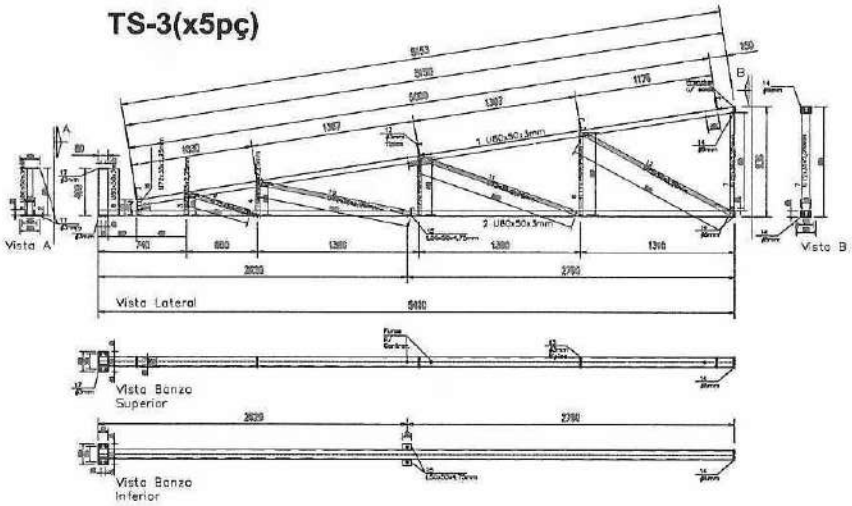
Assunto: CONJUNTO DE MONTAGEM

Lançamento das peças — Desenho: 651.01 Rev 0

TS-1(x4pç)
2esq\2dir



TS-3(x5pç)



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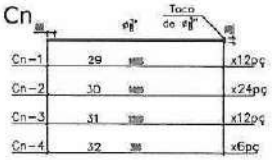
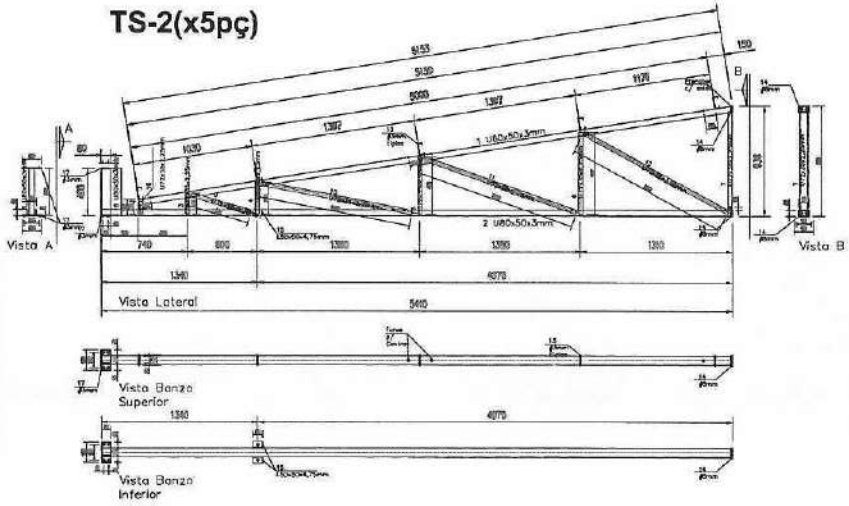
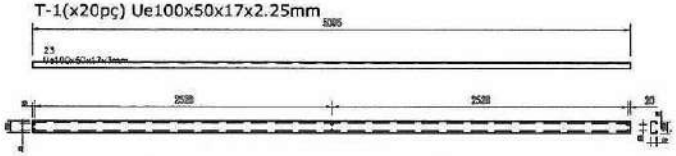


TI-1

TS-2(x5pç)



T-1(x20pç) Ue100x50x17x2.25mm



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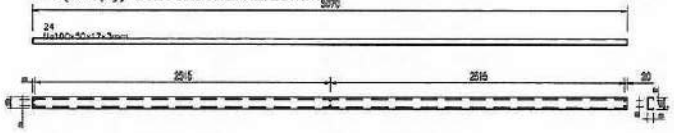

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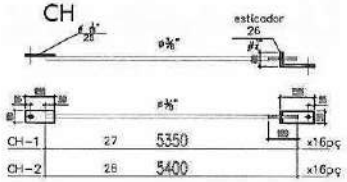
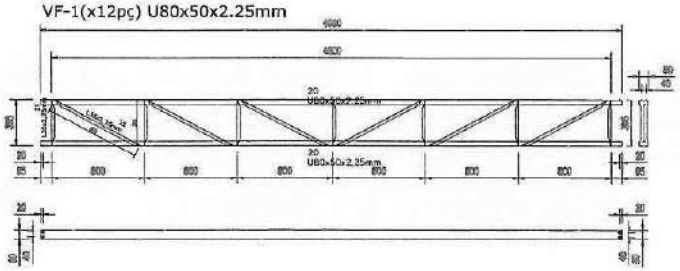


VF-1(x12pç) U80x50x2.25mm



1	Revisão Geral	20Jan2014	Vilson Venceslo
Revisão	Descrição	Data	Responsável

Cliente: CASA ALTA Construções Ltda

LIBER CONSTRUÇÃO METÁLICA

Obra: Creche B - Prédio 1 — Número: 651

Projeto: eng. Vilson Venceslo — Data: Set. 2013 — Escala: s/c

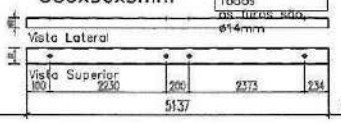
Assunto: TESOURAS, TERÇAS — Fechamento e Contraventos

Desenho: 651.092.Rev 1

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3245

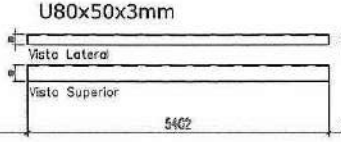
U80x50x3mm

Nota Geral: Todos os furos são ø14mm



1 — x14pç

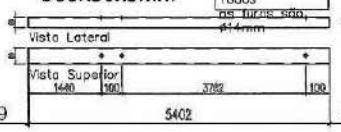
U80x50x3mm



2 — x10pç

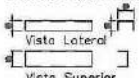
U80x50x3mm

Nota Geral: Todos os furos são ø14mm

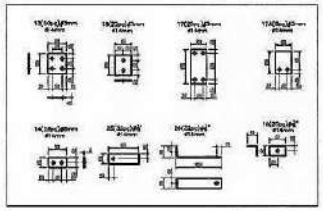


19 — x4pç

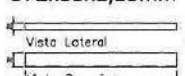
U80x50x3mm



8 — 394 — x14pç

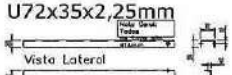


U72x35x2,25mm



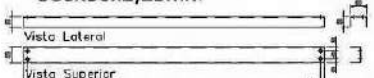
3	170	x14pç
4	265	x14pç
5	485	x14pç
6	700	x14pç
9	530	x14pç
10	1300	x14pç
11	1390	x14pç
12	1417	x14pç
16	185	x14pç

U72x35x2,25mm



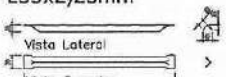
7 — 836 — x14pç

U80x50x2,25mm



20 — 4990 — x24pç

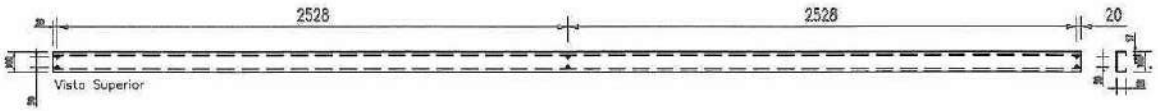
L35x2,25mm



21	388	x84pç
22	832	x72pç

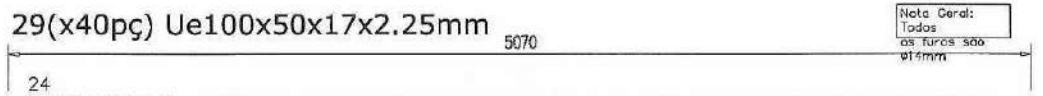
28(20pç) Ue100x50x17x2.25mm

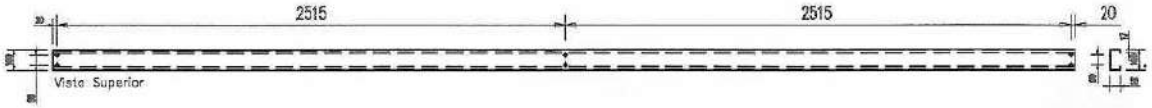
Nota Geral: Todos os furos são ø14mm



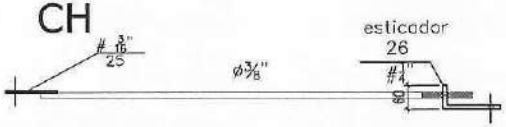
29(x40pç) Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm





CH

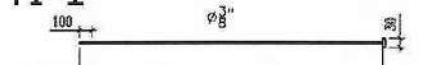


CH-1	27	5350	x16pç
CH-2	28	5400	x16pç

Cn

Cn-1	29	1055	x12pç
Cn-2	30	1425	x24pç
Cn-3	31	1200	x12pç
Cn-4	32	350	x6pç

TI-1



TI-1	33	5130	x6pç

PMP-PREFEITURA MUNICIPAL DE PAÇATUBA
Nº 3246

Revisão	Descrição	Data	Responsável
	Revisão Geral	25dez	Vilson Vencato

Cliente: CASA ALTA Construções Ltda — Jan2014

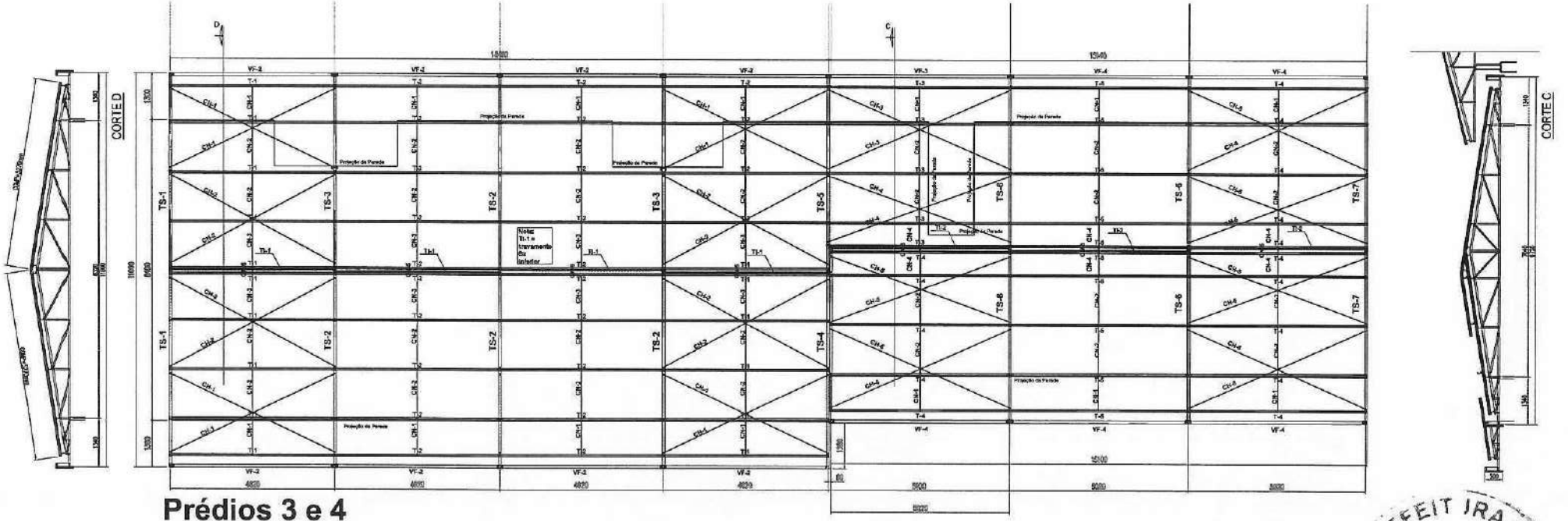
LIBER CONSTRUÇÃO METÁLICA

Obra: Creche B - Prédio 1 — Número: 651

Projeto: eng. Vilson Vencato — Data: set.2013 — Escala: s/e

Assunto: CROQUIS de FABRICAÇÃO

Desenho: 651.03 Rev 1



Prédios 3 e 4
Conjunto de Montagem

Prédios 3 e 4

PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 2247

1	REVISÃO GERAL	30JAN14	Vilson Vencato
Revisão	Descrição	Data	Responsável

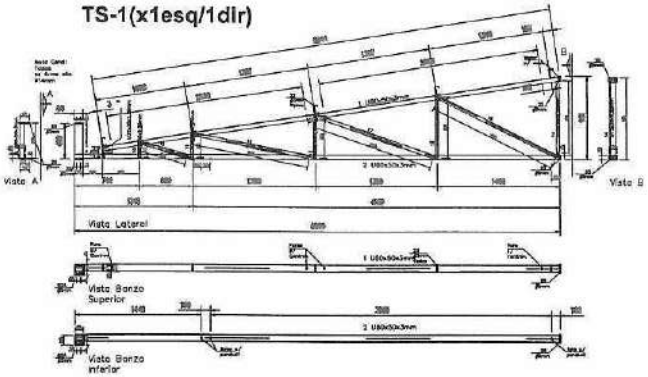
Cliente: CASA ALTA Construções Ltda

LIBER CONSTRUÇÃO METÁLICA

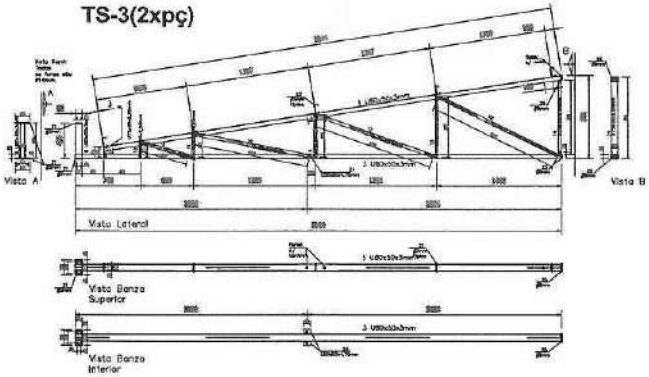
Obra: Creche B Prédios 3 E 4 — NSimaro:
Projeto: eng. Vilson Vencato — Data: set. 2013 — Escala: s/c
Assunto: CONJUNTO DE MONTAGEMN
Lançamento das peças — Desenho: 651.04.Rev. 1

RELAÇÃO SAS PEÇAS	
CODE	CNT
PL2	4
C100	4
UNC75	4
BARRA	4
BL6	4
W13	4
W12x16	4
C20	4
C20	4

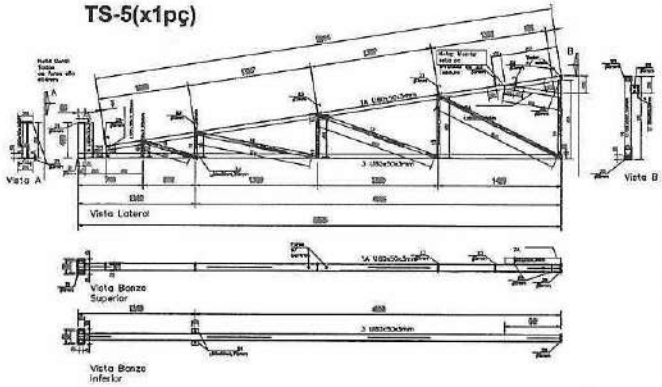
TS-1(x1esq/1dir)



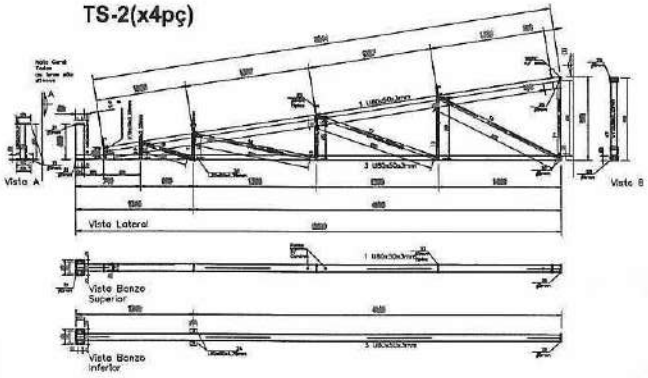
TS-3(2xpç)



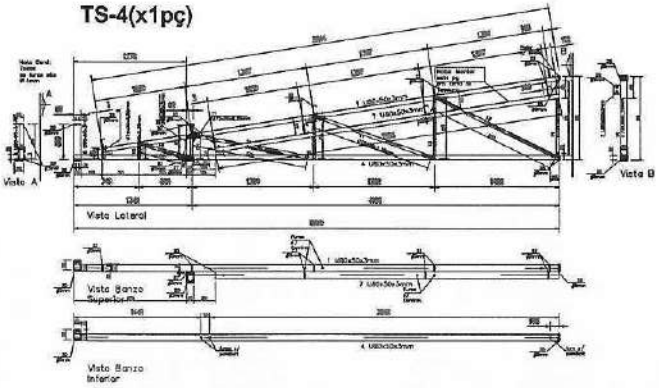
TS-5(x1pç)



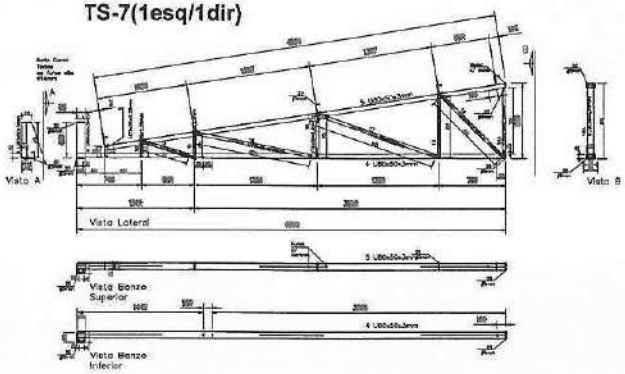
TS-2(x4pç)



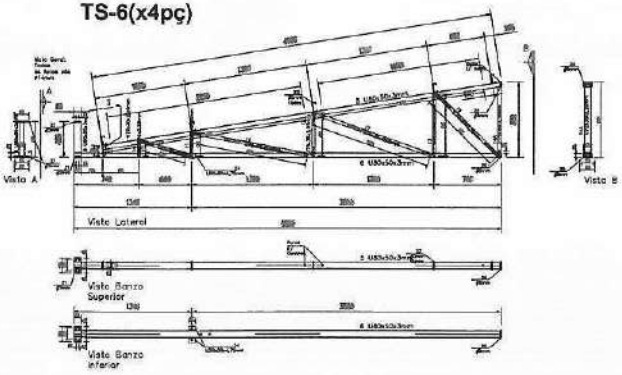
TS-4(x1pç)



TS-7(1esq/1dir)



TS-6(x4pç)



PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 22418

Revisão	Descrição	Data	Responsável
1	REVISÃO GERAL	30JAN14	Vilson Venceto

Cliente: CASA ALTA Construções Ltda

LIBER CONSTRUÇÃO METÁLICA

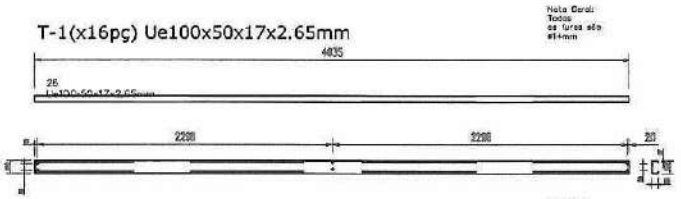
Obra: Creche B Prédios 3 e 4 — Número: 651

Projeto: eng. Vilson Venceto — Data: set. 2013 — Escala: s/e

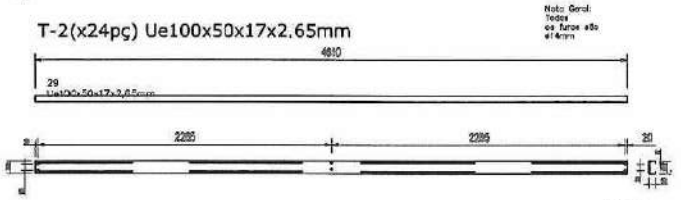
Assunto: Tesouras

Desenho: 651.05 Rev. 1

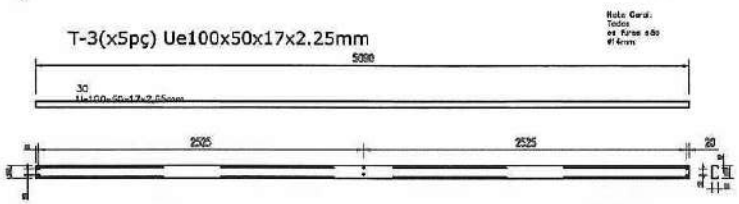
T-1(x16pç) Ue100x50x17x2.65mm



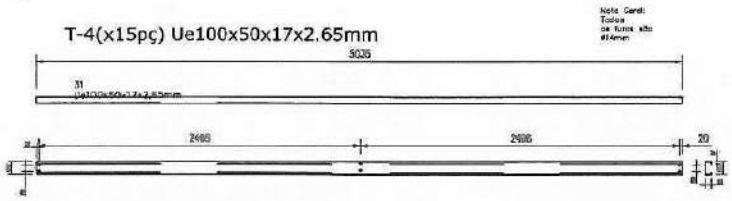
T-2(x24pç) Ue100x50x17x2.65mm



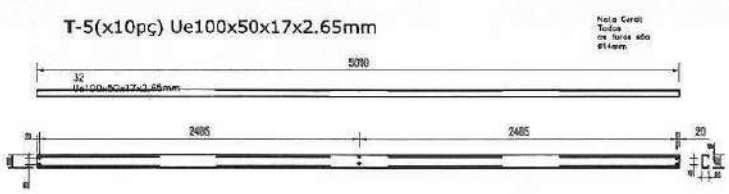
T-3(x5pç) Ue100x50x17x2.25mm



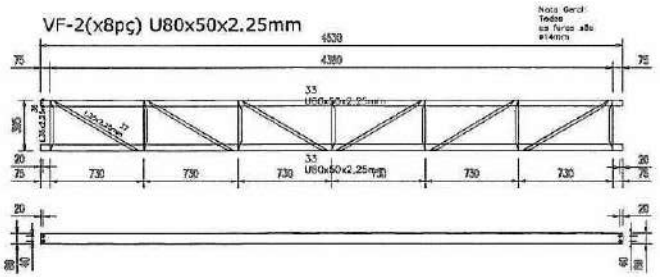
T-4(x15pç) Ue100x50x17x2.65mm



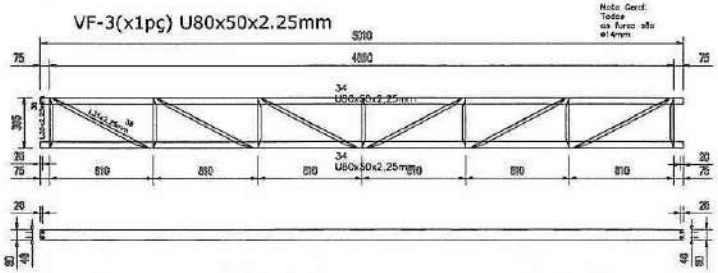
T-5(x10pç) Ue100x50x17x2.65mm



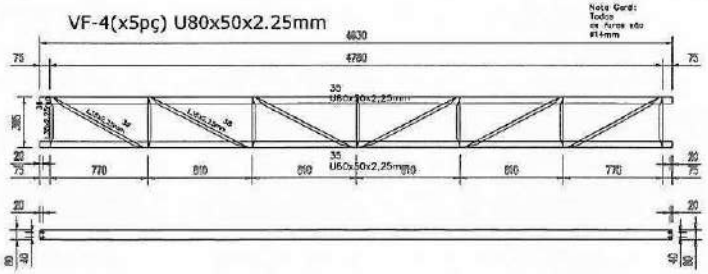
VF-2(x8pç) U80x50x2.25mm



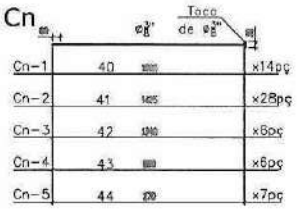
VF-3(x1pç) U80x50x2.25mm



VF-4(x5pç) U80x50x2.25mm

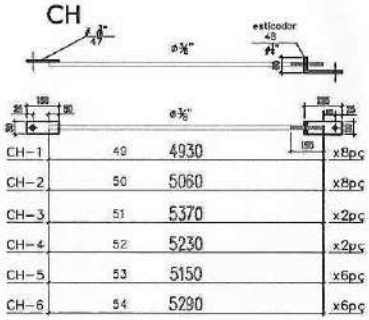


Cn



TI

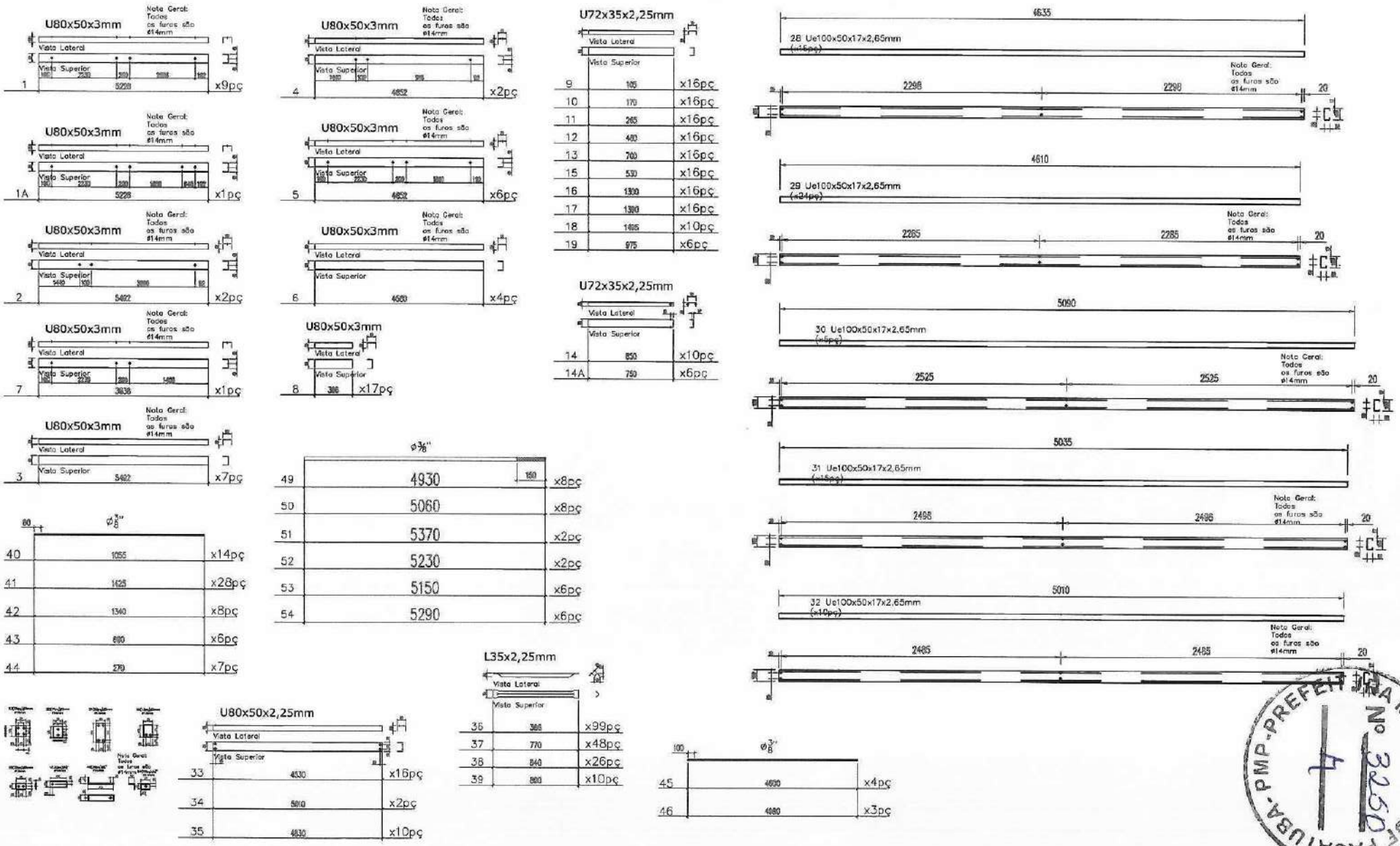
CH

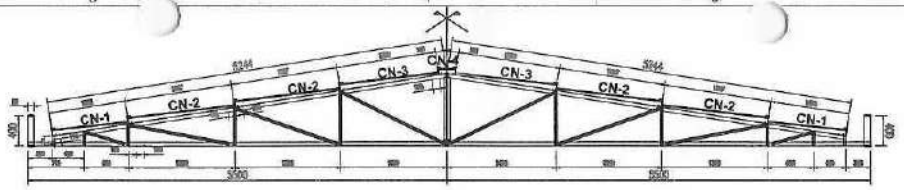


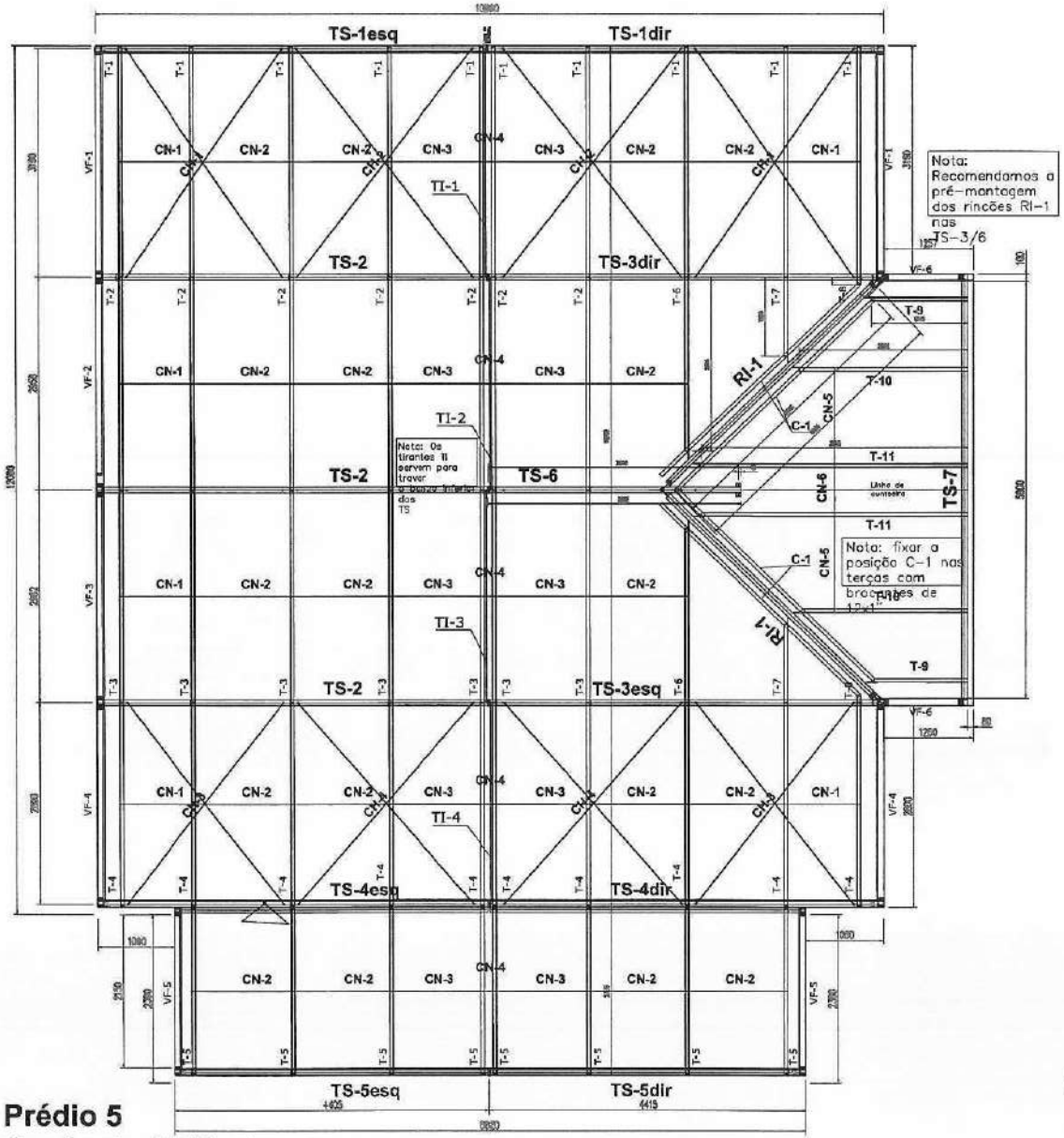
PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3219

Cliente:	CASA ALTA Construções Ltda
Obra:	Creche B Prédios 3 e 4
Número:	651
Projeto:	eng. Vilson Vencato
Data:	set.2013
Escala:	s/e
Assunto:	VF, TERÇAS
	Travamentos
Desenho:	651.06 Rev. 1

LIBER CONSTRUÇÃO METÁLICA


U80x50x3mm
Nota Geral: Todos os furos são ø14mm
Vista Lateral
Vista Superior
1 5228 x9pç
1A 5228 x1pç
2 5492 x2pç
7 3838 x1pç
3 5492 x7pç
4 4852 x2pç
5 4852 x6pç
6 4580 x4pç
8 386 x17pç
U72x35x2,25mm
9 105 x16pç
10 170 x16pç
11 265 x16pç
12 460 x16pç
13 700 x16pç
15 530 x16pç
16 1300 x16pç
17 1300 x16pç
18 1495 x10pç
19 975 x6pç
14 850 x10pç
14A 750 x6pç
ø3/8"
49 4930 150 x8pç
50 5060 x8pç
51 5370 x2pç
52 5230 x2pç
53 5150 x6pç
54 5290 x6pç
ø5/8"
60
40 1055 x14pç
41 1425 x28pç
42 1340 x8pç
43 880 x6pç
44 570 x7pç
U80x50x2,25mm
33 4830 x16pç
34 5010 x2pç
35 4830 x10pç
L35x2,25mm
36 385 x99pç
37 770 x48pç
38 840 x26pç
39 880 x10pç
ø3/8"
100
45 4600 x4pç
46 4080 x3pç
6635
28 Ue100x50x17x2,65mm
2298 2298 20
4610
29 Ue100x50x17x2,65mm
2285 2285 20
5090
30 Ue100x50x17x2,65mm
2525 2525 20
5035
31 Ue100x50x17x2,65mm
2498 2498 20
5010
32 Ue100x50x17x2,65mm
2485 2485 20
PREFEITURA MUNICIPAL DE PAÇATUBA - PMP
Nº 3250
Cliente: CASA ALTA Construções Ltda
LIBER CONSTRUÇÃO METÁLICA
Obra: Creche B Prédios 3 e 4
Número: 651
Projeto: eng Vilson Venceslo
Data: set/2013
Escala: s/e
Assunto: Croquis de Fabricação
Desenho: 651.07 Rev. 1



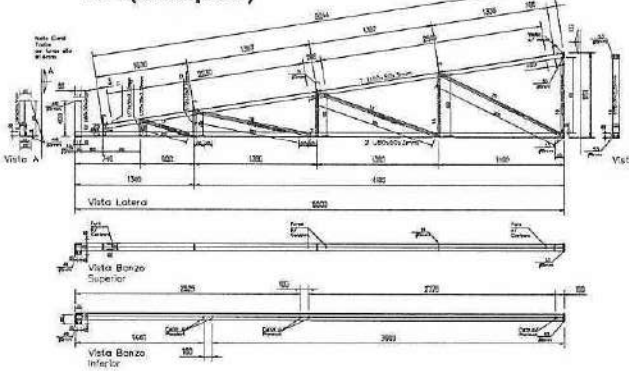


Prédio 5
Conjunto de Montagem

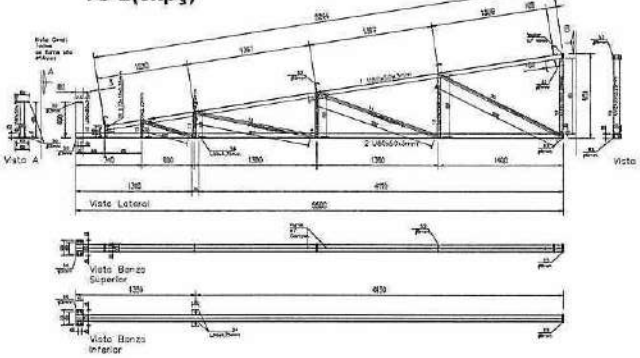
PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3251

Cliente: CASA ALTA Construções Ltda.			
LIBER CONSTRUÇÃO METÁLICA	Obra: Creche B Prédio 5		Número: 651
	Projeto: eng. Vilson Vencato	Data: Nov. 2013	Escala: s/e
	Assunto: COojunto de Montagem		Desenho: 651.08 Rev 1

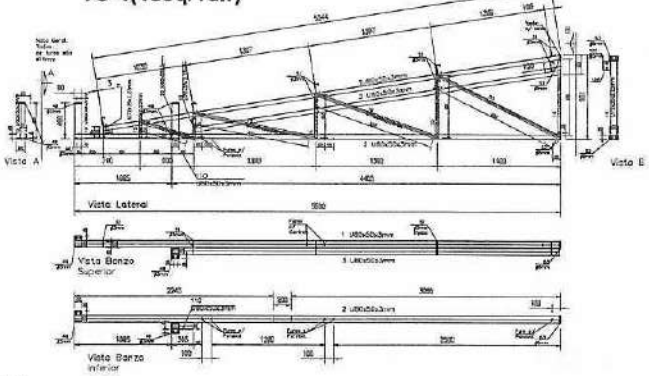
TS-1(x1esq/1dir)



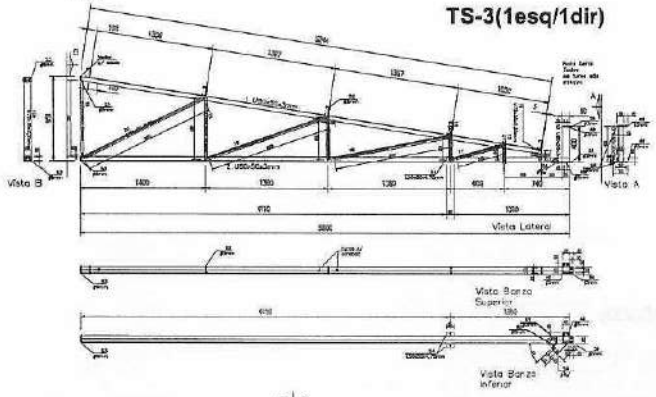
TS-2(3xpç)



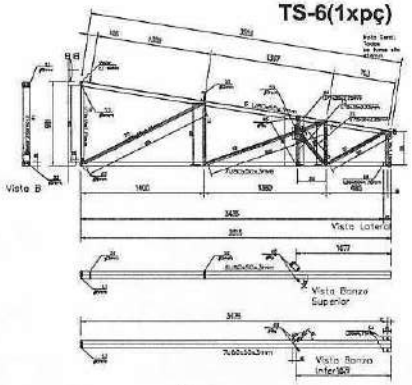
TS-4(1esq/1dir)



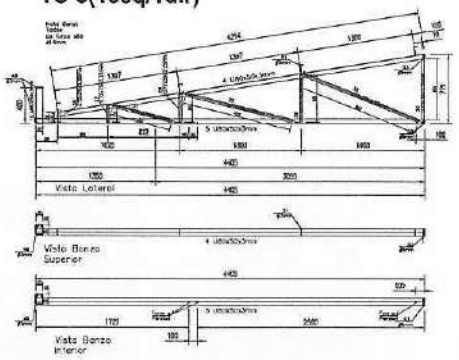
TS-3(1esq/1dir)



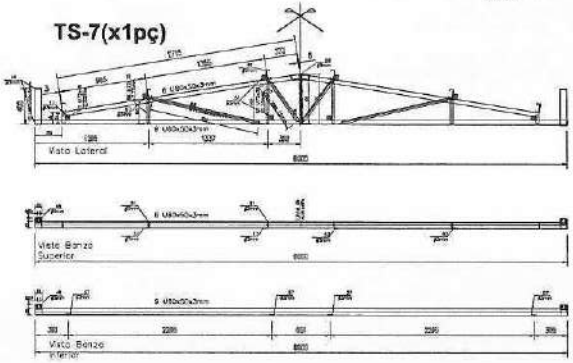
TS-6(1xpç)



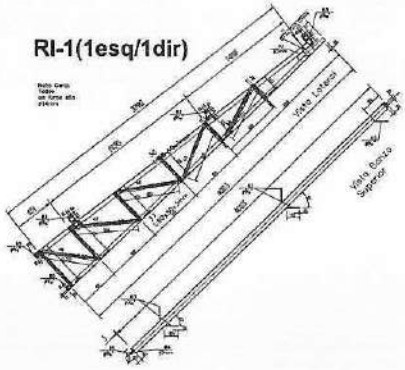
TS-5(1esq/1dir)



TS-7(x1pç)



RI-1(1esq/1dir)



Cn

			Tipo de	
Cn-1	99			x6pç
Cn-2	100			x16pç
Cn-3	101			x10pç
Cn-4	102			x5pç
Cn-5	103			x2pç
Cn-6	104			x1pç

TI

TI-1	105		x1pç
TI-2	106		x1pç
TI-3	107		x1pç
TI-4	108		x1pç

CH

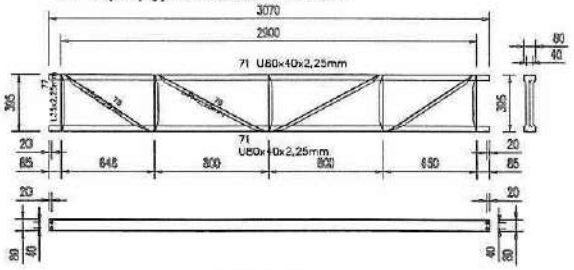
CH-1	05	3067	x4pç
CH-2	06	3530	x4pç
CH-3	07	3180	x4pç
CH-4	08	3560	x4pç

C-1 (x4pç)L50x3mm

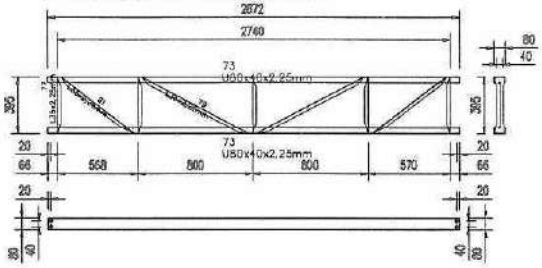
PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 3262

Cliente: CASA ALTA Construções Ltda			
LIBER CONSTRUÇÃO METÁLICA	Obra: Creche B - Prédio 5		Número: 651
	Projeto: eng Vilson Venuto	Data: nov 2013	Escala: s/e
	Assunto: Tesouras Correntes e Contraventos		Desenho: 651.09 Rev 0

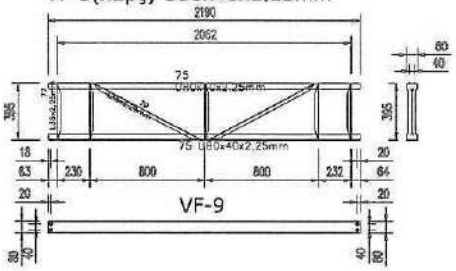
VF-1(x2pç) U80x40x2.25mm



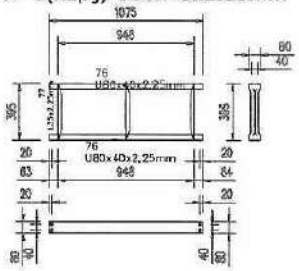
VF-3(x1pç) U80x40x2.25mm



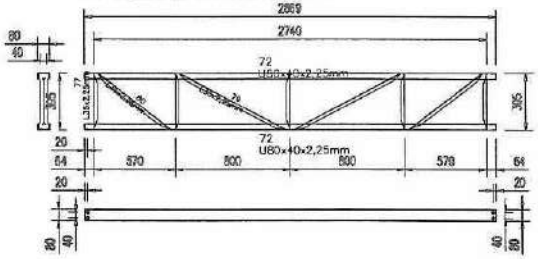
VF-5(x2pç) U80x40x2.25mm



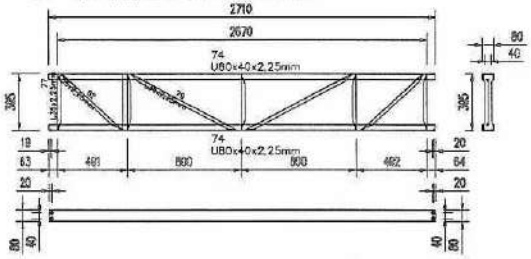
VF-6(x2pç) U80x40x2.25mm



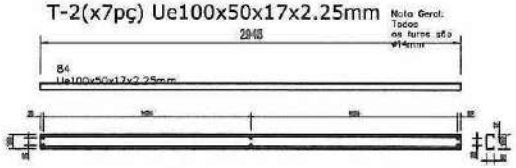
VF-2(x1pç) U80x40x2.25mm



VF-4(x2pç) U80x40x2.25mm

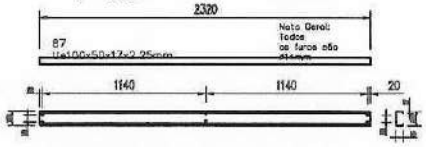


T-2(x7pç) Ue100x50x17x2.25mm

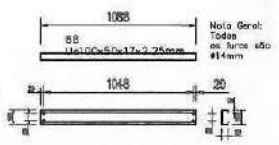


T-8(x2pç)
Ue100x50x17x2.25mm

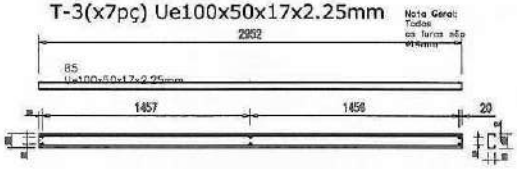
T-5(x8pç) Ue100x50x17x2.25mm



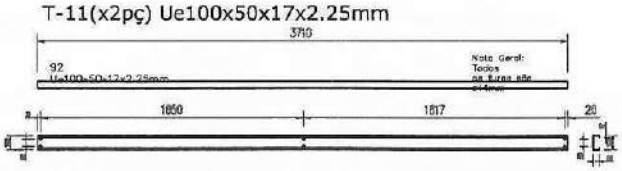
T-7(x2pç)
Ue100x50x17x2.25mm



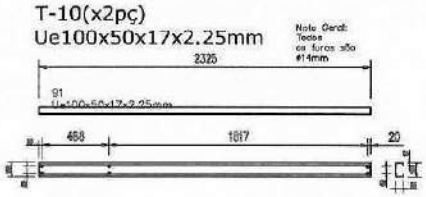
T-3(x7pç) Ue100x50x17x2.25mm



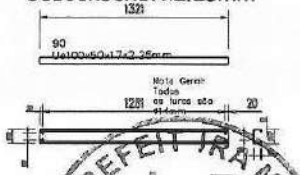
T-11(x2pç) Ue100x50x17x2.25mm



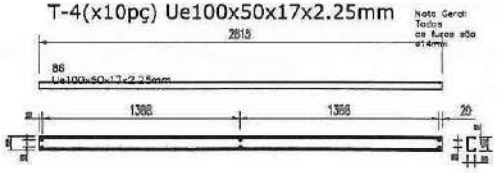
T-10(x2pç)
Ue100x50x17x2.25mm



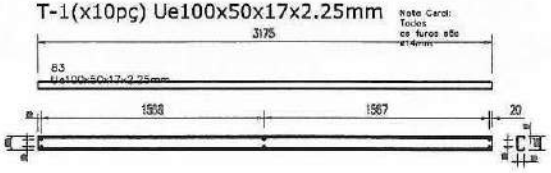
T-9(x2pç)
Ue100x50x17x2.25mm



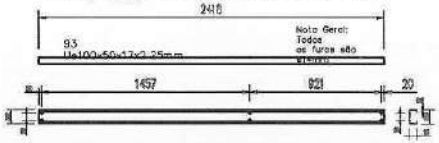
T-4(x10pç) Ue100x50x17x2.25mm



T-1(x10pç) Ue100x50x17x2.25mm



T-6(x2pç) Ue100x50x17x2.25mm



PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3253

RELAÇÃO DAS PEÇAS	
CAP.	CAP.
80	87
100	90
100	93
100	93
100	93
100	93
100	93
100	93
100	93
100	93

Cliente: CASA ALTA Construções Ltda

LIBER CONSTRUÇÃO METÁLICA

Obra: Creche B - Prédio 5 — Número: 651

Projeto: eng Vilson Venceto — Data: Nov 2013 — Escala: s/e

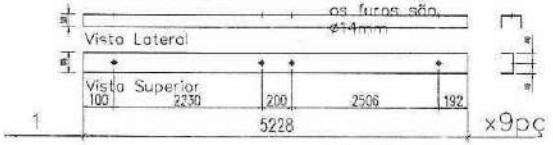
Assunto: Vigas de Fechamento

Terças

Desenho: 651.10 Rev 0

U80x50x3mm

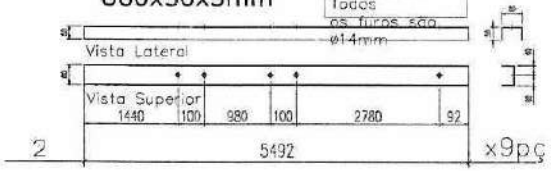
Nota Geral: Todos os furos são, ø14mm



1		x9pç

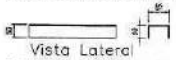
U80x50x3mm

Nota Geral: Todos os furos são, ø14mm



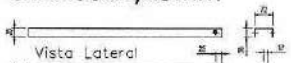
2		x9pç

U80x50x3mm



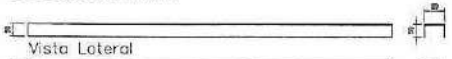
10	396	x15pç
110	245	x2pç

U72x35x2,25mm



16	850	x10pç

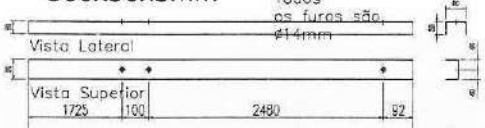
U80x50x3mm



3	4200	x2pç
6	3543	x1pç
7	3507	x1pç
4	4200	x2pç
8	2707	x2pç
9	6000	x2pç
36	3792	x2pç

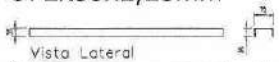
U80x50x3mm

Nota Geral: Todos os furos são, ø14mm



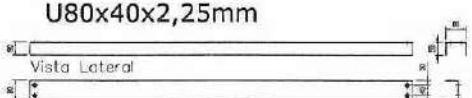
5		x2pç

U72x35x2,25mm



17	530	x9pç
18	1300	x9pç
19	1390	x10pç
20	1500	x10pç
11	105	x13pç
12	170	x9pç
13	270	x9pç
14	480	x10pç
15	700	x10pç
24	140	x1pç
23	345	x1pç
22	405	x1pç
21	720	x1pç
25	375	x1pç

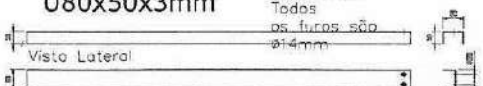
U80x40x2,25mm



71	3070	x4pç
72	2869	x2pç
73	2872	x2pç
74	2710	x4pç
75	2190	x4pç
76	1075	x4pç

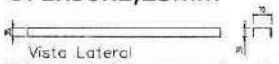
U80x50x3mm

Nota Geral: Todos os furos são ø14mm



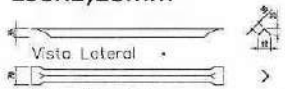
37	4000	x2pç

U72x35x2,25mm



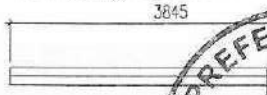
26	90	x2pç
27	180	x2pç
28	310	x2pç
29	530	x2pç
30	680	x2pç
31	685	x2pç
32	1250	x2pç
33	1390	x2pç
66	265	x2pç
67	480	x2pç
68	540	x1pç
69	1220	x2pç
70	555	x2pç

L35x2,25mm

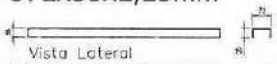


77	388	x46pç
78	700	x4pç
79	830	x16pç
80	640	x2pç
81	630	x2pç
82	570	x4pç

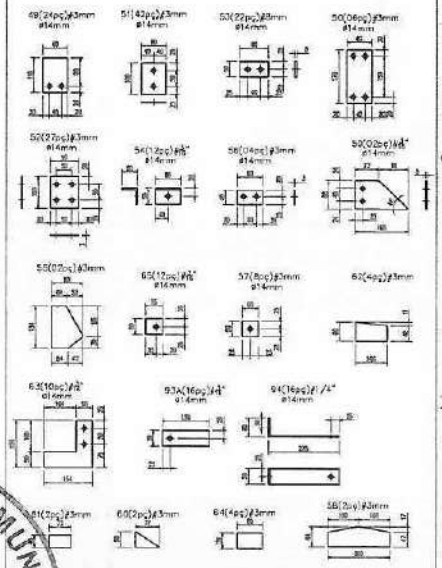
109 (x4pç) L50x3mm



U72x35x2,25mm



43	530	x2pç
42	480	x2pç
41	405	x2pç
40	335	x2pç
39	260	x2pç
38	185	x2pç
48	630	x2pç
47	720	x2pç
46	675	x2pç
45	590	x2pç
44	580	x2pç



PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3254
Fl. 4

Cliente: CASA ALTA Construções Ltda			
LIBER CONSTRUÇÃO METÁLICA	Obra: Creche B - Prédio 5		Número: 651
	Projeto: eng. Vilson Vencato	Data: Nov/2013	Escala: s/e
	Assunto: Croqui de Fabricação		Desenho: 651.11 Rev 0

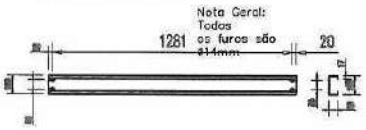
83 (x10pç)
Ue100x50x17x2.25mm
3175
Nota Geral:
Todos
os furos são
ø15mm

84 (7pç)
Ue100x50x17x2.25mm
2948
Nota Geral:
Todos
os furos são
ø14mm

85 (x7pç) Ue100x50x17x2.25mm
2952
Nota Geral:
Todos
os furos são
ø14mm

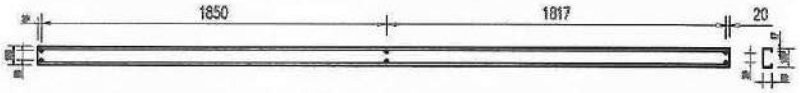
86 (x10pç)
Ue100x50x17x2.25mm
2815
Nota Geral:
Todos
os furos são
ø14mm

90 (x2pç)
Ue100x50x17x2.25mm
1321
Nota Geral:
Todos
os furos são
ø14mm

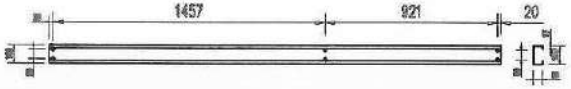


91 (x2pç)
Ue100x50x17x2.25mm
2325
Nota Geral:
Todos
os furos são
ø14mm

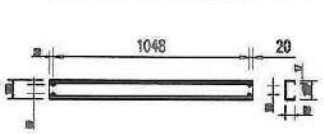
92 (x2pç)
Ue100x50x17x2.25mm
3710
Nota Geral:
Todos
os furos são
ø14mm



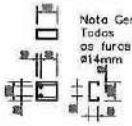
93 (x2pç)
Ue100x50x17x2.25mm
2418
Nota Geral:
Todos
os furos são
ø15mm



88 (x2pç)
Ue100x50x17x2.25mm
1066
Nota Geral:
Todos
os furos são
ø14mm



89 (x2pç) Ue100x50
x17x2.25mm
Nota Geral:
Todos
os furos são
ø14mm

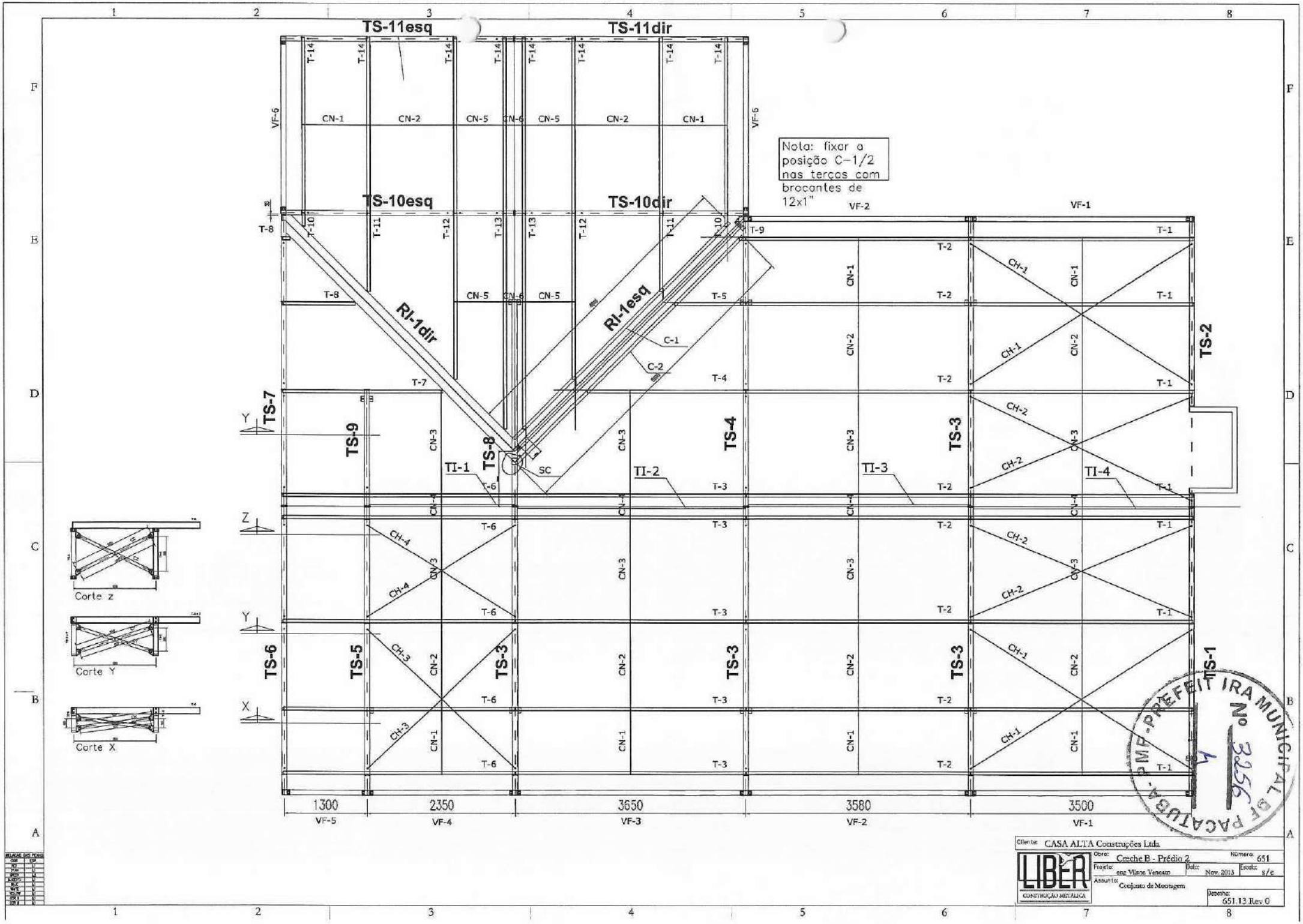


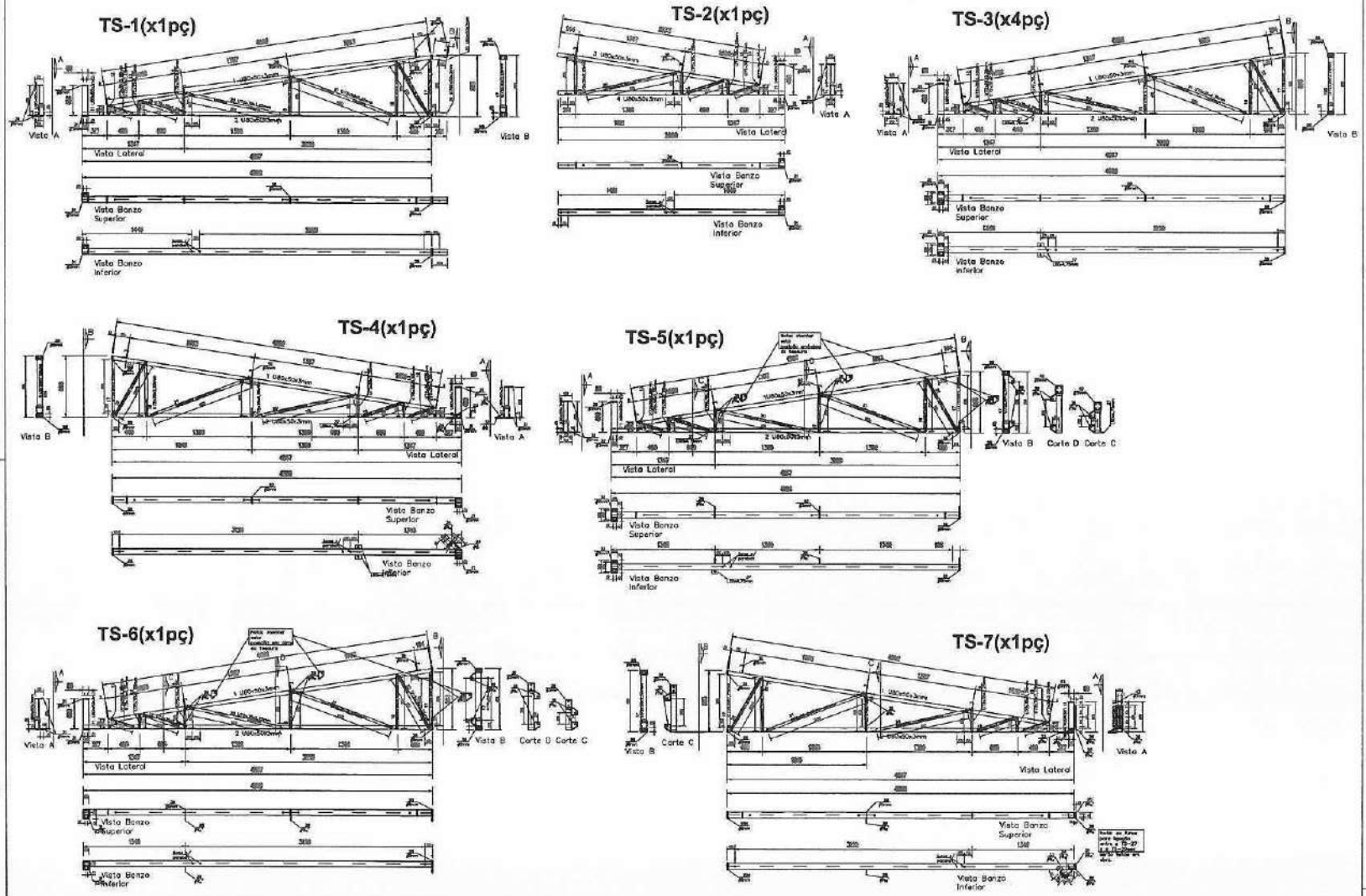
87 (8pç)
Ue100x50x17x2.25mm
2328
Nota Geral:
Todos
os furos são
ø14mm

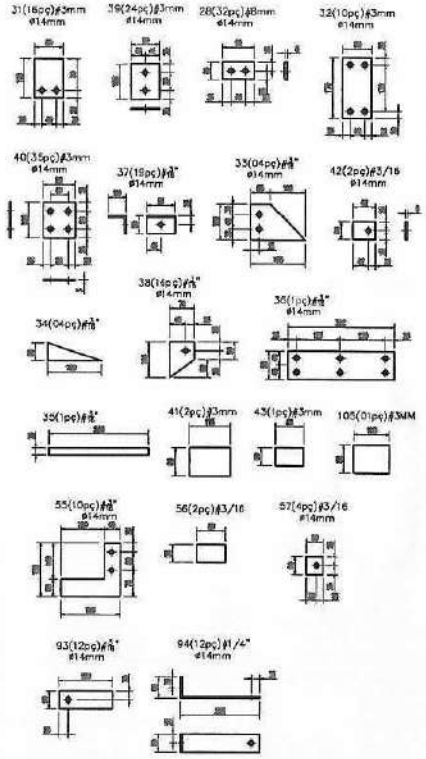
95	3557	x4pç
96	3530	x4pç
97	3380	x4pç
98	3560	x4pç
99	1055	x6pç
100	1425	x18pç
101	1340	x10pç
102	270	x5pç
103	1430	x2pç
104	790	x1pç
105	3120	x1pç
106	2920	x1pç
107	2920	x1pç
108	2760	x1pç

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3255

Cliente: CASA ALTA Construções Ltda.
Obra: Creche B - Prédio 5
Número: 651
Projeto: eng Vilson Vanesto
Data: Nov 2013
Escala: s/e
Assunto: Croquis de Fabricação 1
Desenho: 651.12 Rev 0
LIBER CONSTRUÇÃO METÁLICA


TS-11esq
TS-11dir
TS-10esq
TS-10dir
Nota: fixar a posição C-1/2 nas terças com brocantes de 12x1"
RI-1dir
RI-1esq
TS-1
TS-2
TS-3
TS-4
TS-5
TS-6
TS-7
TS-8
TS-9
TI-1
TI-2
TI-3
TI-4
SC
C-1
C-2
Corte z
Corte Y
Corte X
1300
2350
3650
3580
3500
VF-5
VF-4
VF-3
VF-2
VF-1
Cliente: CASA ALTA Construções Ltda.
Obra: Creche B - Prédio 2
Número: 651
Projeto: eng. Vilane Veneazo
Data: Nov. 2013
Escala: s/e
Assunto: Conjunto de Montagem
Desenho: 651.13 Rev 0
LIBER CONSTRUÇÃO METÁLICA
PREFEITURA MUNICIPAL DE PACATUBA - MP
Nº 3256



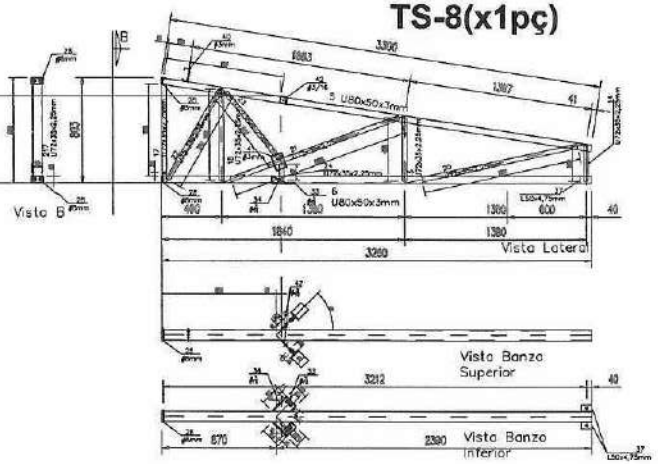


PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 32257

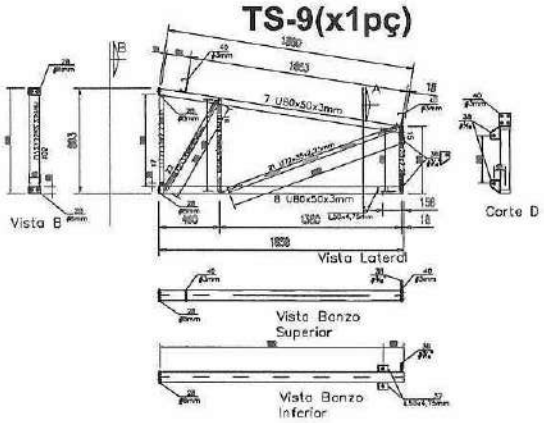
Cliente:	CASA ALTA Construções Ltda
Obra:	Creche B - Prédio 2
Número:	651
Projeto:	eng Vilson Vencato
Data:	Nov. 2013
Escala:	s/e
Assunto:	Tesouras 1
	Chaperia
Desenho:	651.14 Rev 0

LIBER CONSTRUÇÃO METÁLICA

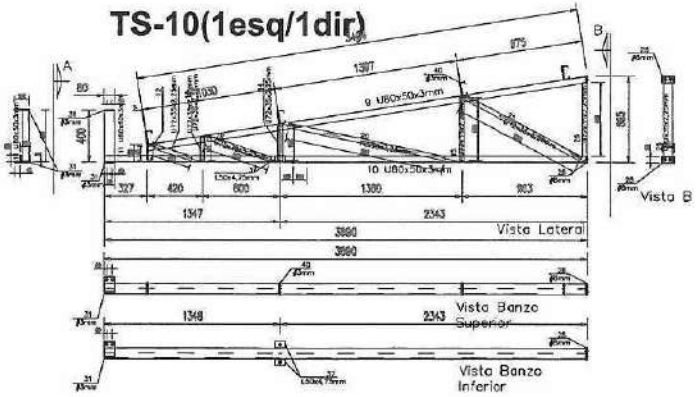
TS-8(x1pç)



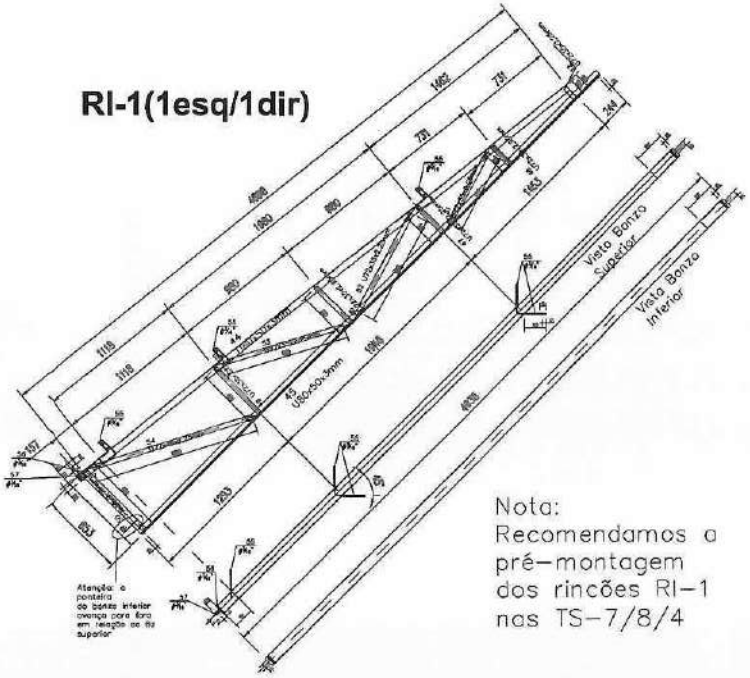
TS-9(x1pç)



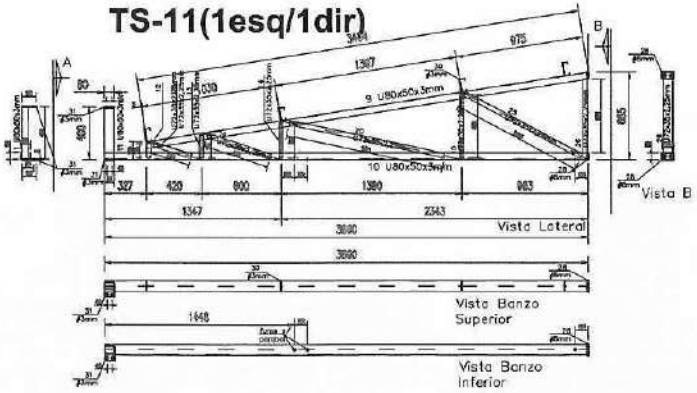
TS-10(1esq/1dir)



RI-1(1esq/1dir)



TS-11(1esq/1dir)



Nota:
Recomendamos a pré-montagem dos rincões RI-1 nas TS-7/8/4

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 8358

RELAÇÃO DAS PEÇAS	
COD	QTD
PL1	2
PL2	2
PL3	2
L40X5	2
L50X4	2
L50X5	2
L50X6	2
L50X7	2
L50X8	2

Cliente: CASA ALTA Construções Ltda

LIBER CONSTRUÇÃO METÁLICA

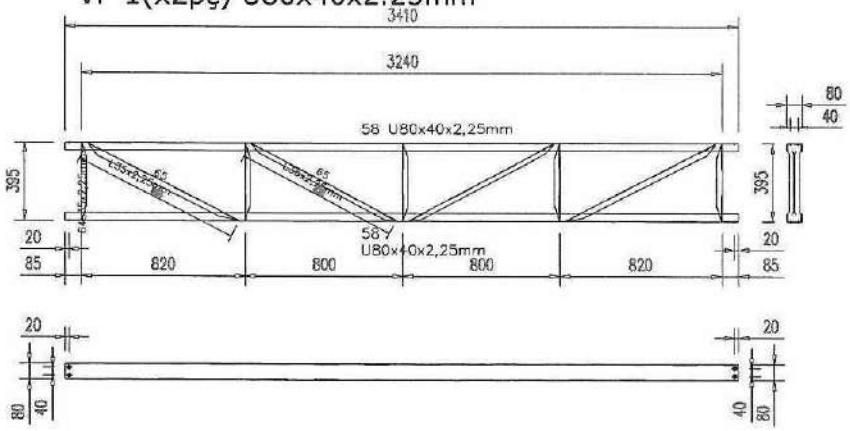
Obra: Creche B - Prédio 2 | Número: 651

Projeto: eng Vilson Vencato | Data: nov 2015 | Escala: s/c

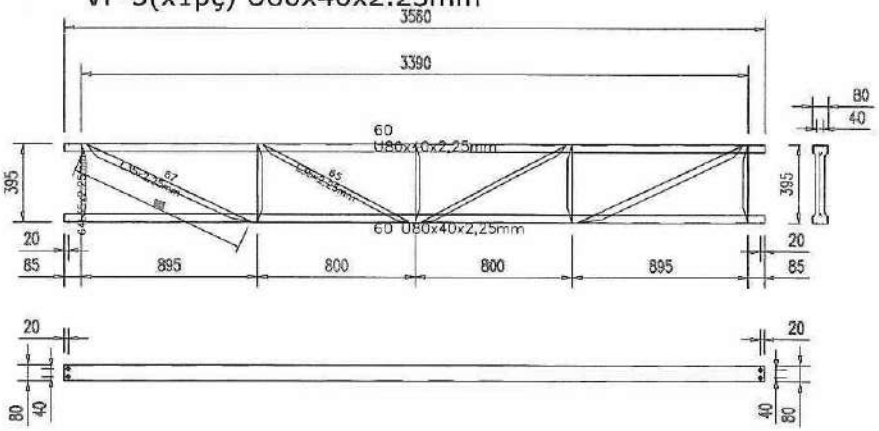
Assunto: Treliças 2

Desenho: 651.15 Rev 0

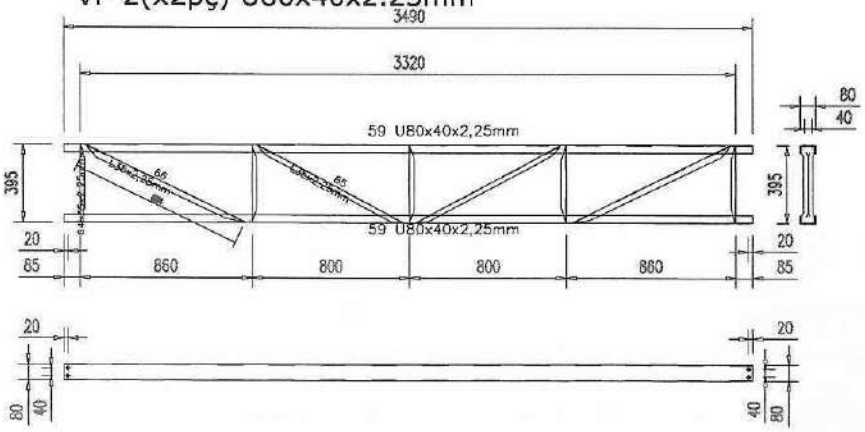
VF-1(x2pç) U80x40x2.25mm



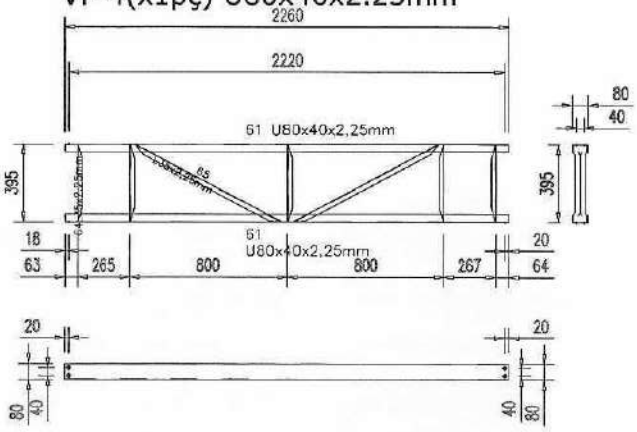
VF-3(x1pç) U80x40x2.25mm



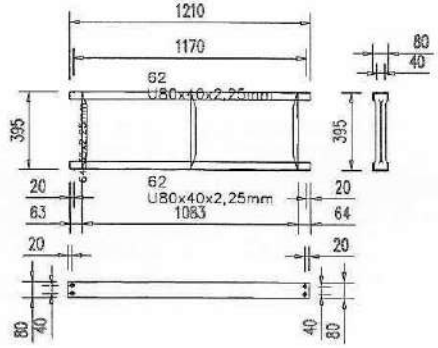
VF-2(x2pç) U80x40x2.25mm



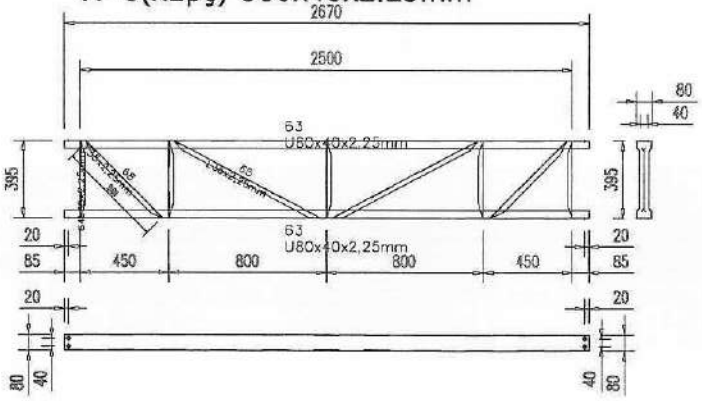
VF-4(x1pç) U80x40x2.25mm



VF-5(x1pç) U80x40x2.25mm



VF-6(x2pç) U80x40x2.25mm



PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 2259

Cliente: CASA ALTA Construções Ltda			
LIBER construção metálica	Obra: Creche B - Prédio 2		Número: 651
	Projeto: eng Vilson Venesio	Data: nov 2013	Escala: s/c
	Assunto: Vigas de Fechamento		
			Desenho: 651.16 Rev 0

T-1(x8pç) Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

3515

69 Ue100x50x17x2.25mm

20 | 1738 | 1737 | 20

T-14(x8pç) Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

2777

75 Ue100x50x17x2.25mm

20 | 1368 | 1369 | 20

T-4(x1pç) Ue100x50x17x2.25mm

2498

72 Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

20 | 658 | 1800 | 20

T-2(x8pç) Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

3570

70 Ue100x50x17x2.25mm

20 | 1765 | 1765 | 20

T-6(x5pç) Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

3665

73 Ue100x50x17x2.25mm

20 | 1275 | 50 | 1150 | 1150 | 20

T-9(x2pç) Ue100x50x17x2.25mm

123

76 Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

20 | 103 ø14mm

T-3(x5pç) Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

3640

71 Ue100x50x17x2.25mm

20 | 1800 | 1800 | 20

T-8(x1pç) Ue100 x50x17x2.25mm

1143

78 Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

20 | 1103 | 20

T-11(x2pç) Ue100x50x 17x2.25mm

1223

79 Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

1183

T-5(x1pç) Ue100 x50x17x2.25mm

1118

80 Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

20 | 1078 | 20

T-12(x2pç) Ue100x50x17x2.25mm

2603

81 Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

20 | 1194 | 1369 | 20

T-13(x2pç) Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

3390

82 Ue100x50x17x2.25mm

20 | 1981 | 1369 | 20

T-7(x1pç) Ue100x50x17x2.25mm

2515

74 Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

20 | 1275 | 50 | 1150 | 20

T-10(x2pç) Ue100x50 x17x2.25mm

203

77 Ue100x50x17x2.25mm

Nota Geral: Todos os furos são ø14mm

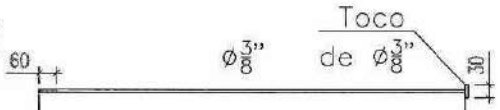
20 | 183

PREFEITURA MUNICIPAL DE PACATUBA - PMP
Nº 3260
4

Cliente:	CASA ALTA Construções Ltda
Obra:	Creche B - Prédio 2
Número:	651
Projeto:	eng. Vilson Vencato
Data:	Nov 2013
Escala:	s/e
Assunto:	Terças
Desenho:	651.17 Rev 0

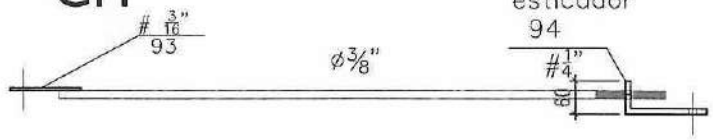
LIBER CONSTRUÇÃO METÁLICA

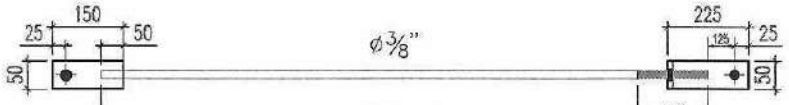
Cn



Cn−1	83	1065	x8pç
Cn−2	84	1430	x8pç
Cn−3	85	1700	x8pç
Cn−4	86	455	x4pç
Cn−5	87	830	x4pç
Cn−6	88	410	x2pç

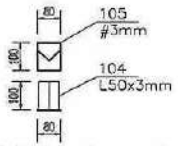
CH





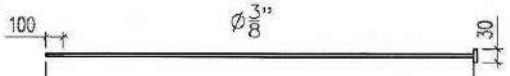
CH−1	95	3940	x4pç
CH−2	96	3600	x4pç
CH−3	97	3030	x2pç
CH−4	98	2570	x2pç

SC(x1pç)



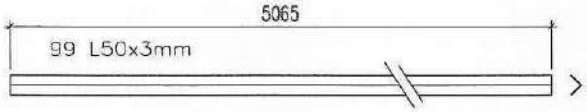
Patinha de apoio das C−2 sobre a TS−8

TI

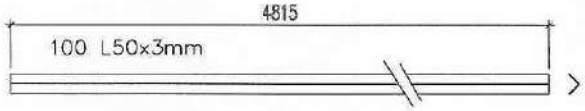


TI−1	89	2310	x1pç
TI−2	90	3610	x1pç
TI−3	91	3540	x1pç
TI−4	92	3460	x1pç

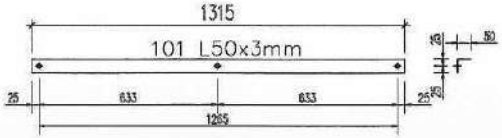
C-1 (x2pç)L50x3mm



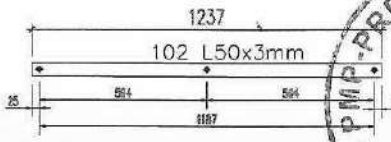
C-2 (x2pç)L50x3mm



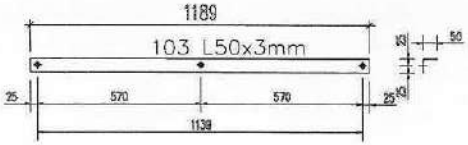
CZ (x2pç)L50x3mm



CY (x4pç)L50x3mm



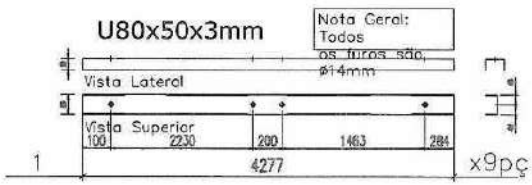
CX (x2pç)L50x3mm

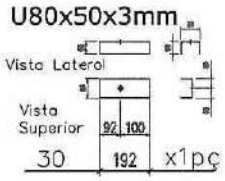


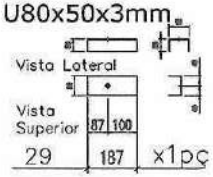
PREFEITURA MUNICIPAL DE PACATUBA - P.M.P.
Nº 3261

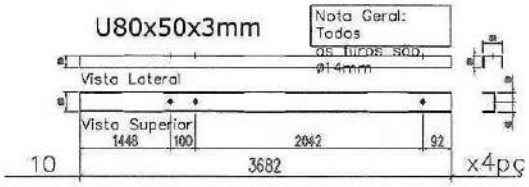
Cliente: CASA ALTA Construções Ltda	
Obra: Creche B - Prédio 2	Número: 651
Projeto: eng. Vilaca Vencato	Data: nov 2013 / Escala: s/e
Assunto: Contraventos Travamentos e Cx	Desenho: 651.18 Rev 0

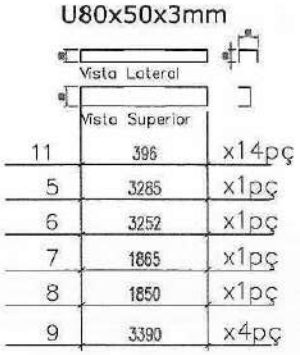
LIBER CONSTRUÇÃO METÁLICA

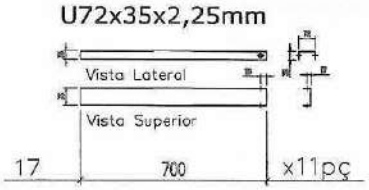


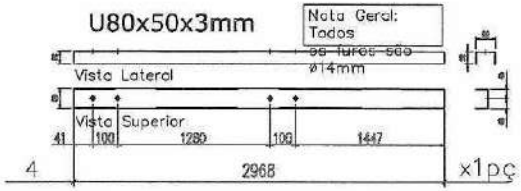


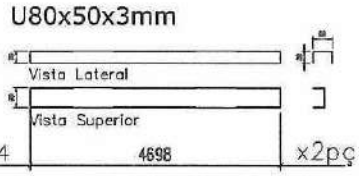


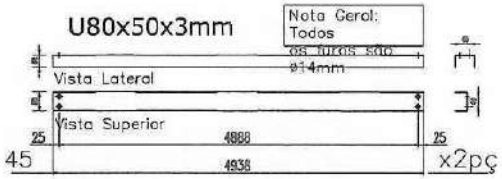


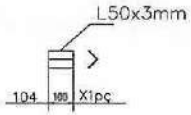


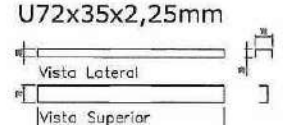




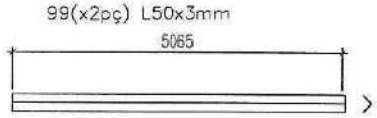


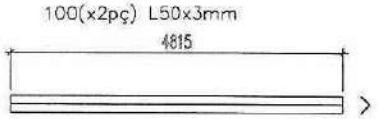


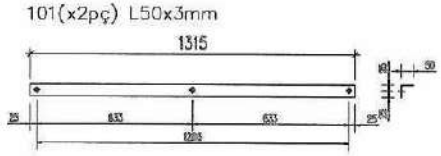


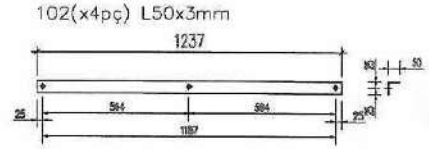


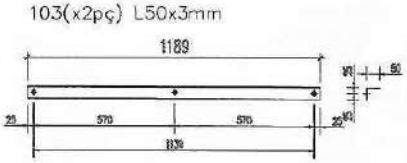
18	300	x13pç
19	505	x14pç
20	1210	x15pç
21	1360	x11pç
22	780	x11pç
12	105	x14pç
13	170	x14pç
14	260	x15pç
15	480	x16pç
16	700	x11pç
25	1000	x4pç
26	565	x4pç
24	125	x1pç
23	645	x1pç
50	619	x2pç
54	1280	x2pç
49	480	x2pç
53	949	x2pç
48	372	x2pç
52	850	x2pç
47	264	x2pç
51	619	x2pç
46	184	x2pç





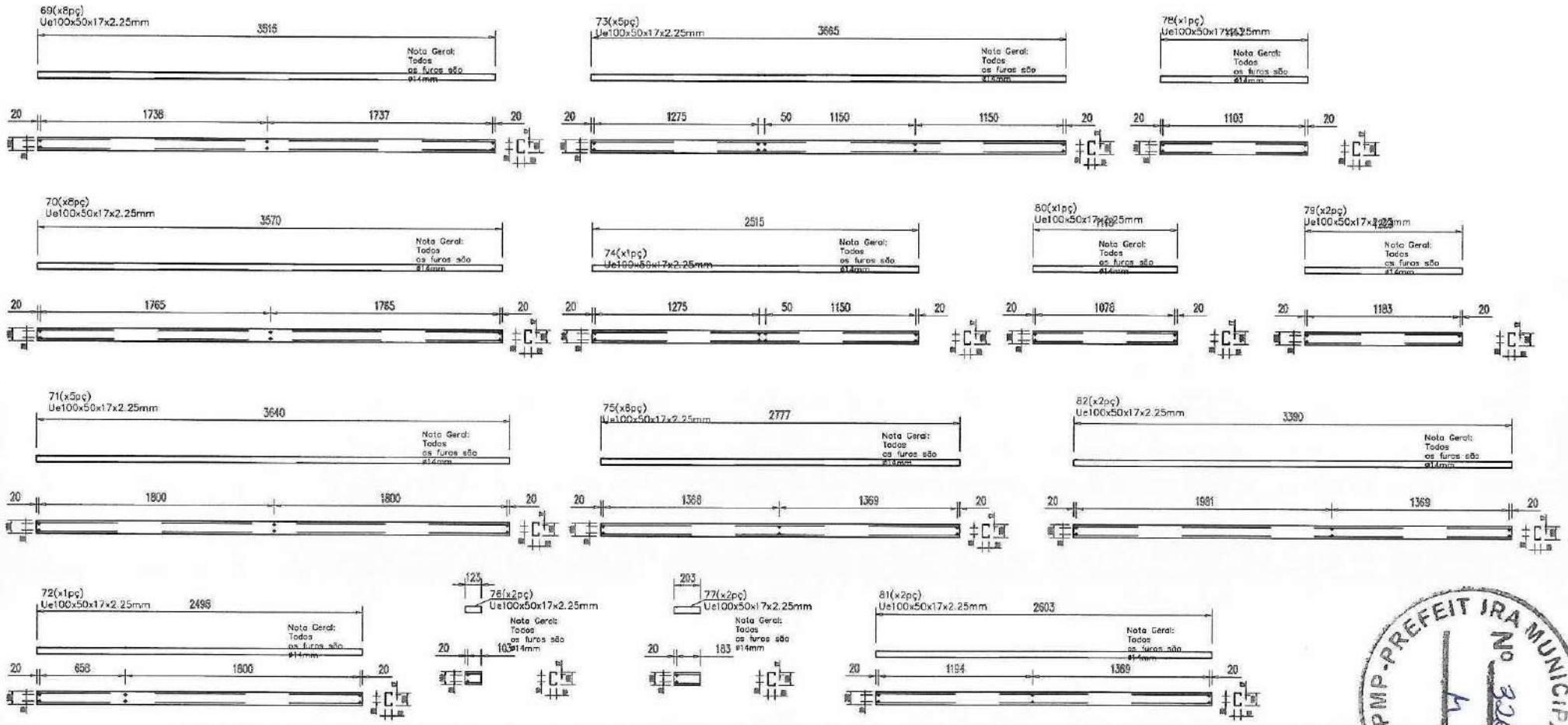






PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 3262

Cliente: CASA ALTA Construções Ltda			
LIBER CONSTRUÇÃO METÁLICA	Obra: Creche B - Prédio 2		Número: 651
	Projeto: eng Vilson Venezio	Data: nov 2013	Escala: s/e
	Assunto: Croquis de Fabricação 1		Desenho: 651.19 Rev 0

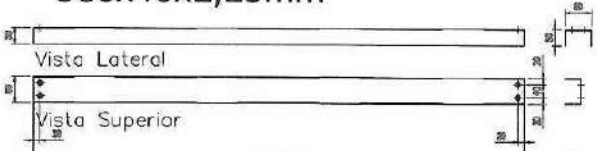


PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 3263

Cliente:	CASA ALTA Construções Ltda
Obra:	Creche B - Prédio 2
Número:	651
Projeto:	eng Vilson Vencato
Data:	nov 2013
Escala:	s/e
Assunto:	Croquis de Fabricação 2
Desenho:	651.20 Rev 0

LIBER CONSTRUÇÃO METÁLICA

U80x40x2,25mm

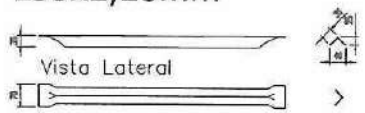


58	3410	x4pç
59	3490	x4pç
60	3560	x2pç
61	2260	x2pç
62	1210	x2pç
63	2670	x4pç

60 Ø 3/8"

83	1065	x8pç
84	1430	x8pç
85	1700	x8pç
86	455	x4pç
87	830	x4pç
88	410	x2pç

L35x2,25mm



64	388	x43pç
65	830	x20pç
66	880	x4pç
67	910	x2pç
68	540	x4pç

Ø 3/8"

95	3940	x4pç
96	3600	x4pç
97	3030	x2pç
98	2570	x2pç

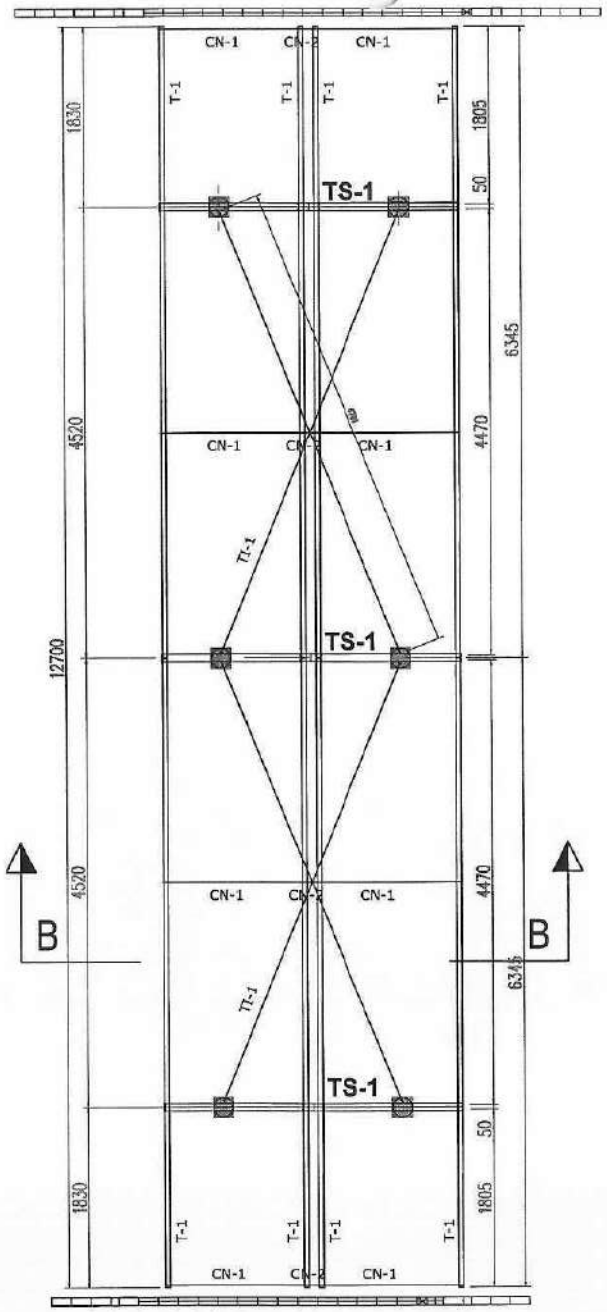
150

100 Ø 3/8"

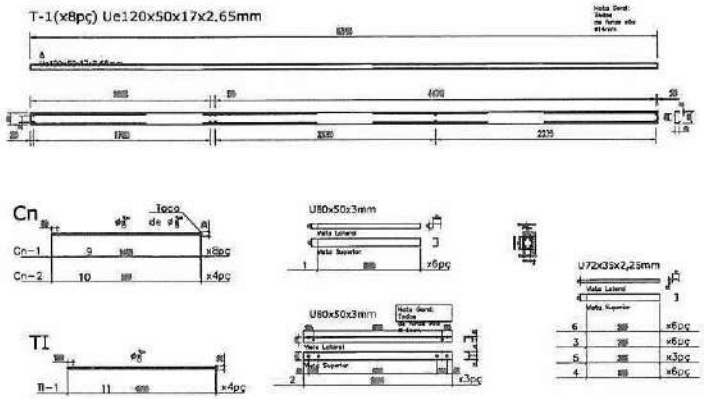
80	2310	x1pç
90	3610	x1pç
91	3540	x1pç
92	3460	x1pç

PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 3264

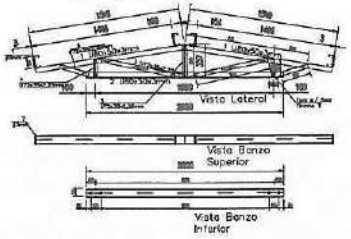
Cliente: CASA ALTA Construções Ltda			
LIBER CONSTRUÇÃO METÁLICA	Obra: Creche B - Prédio 2		Número: 651
	Projeto: eng. Vilson Venceto	Data: nov 2013	Escala: s/c
	Assunto: Croquis de Fabricação 3		
			Desenho: 651.21 Rev 0

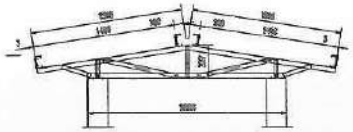


Croquis de fabricação e montagem



TS-1(x3pç)





CORTE BB

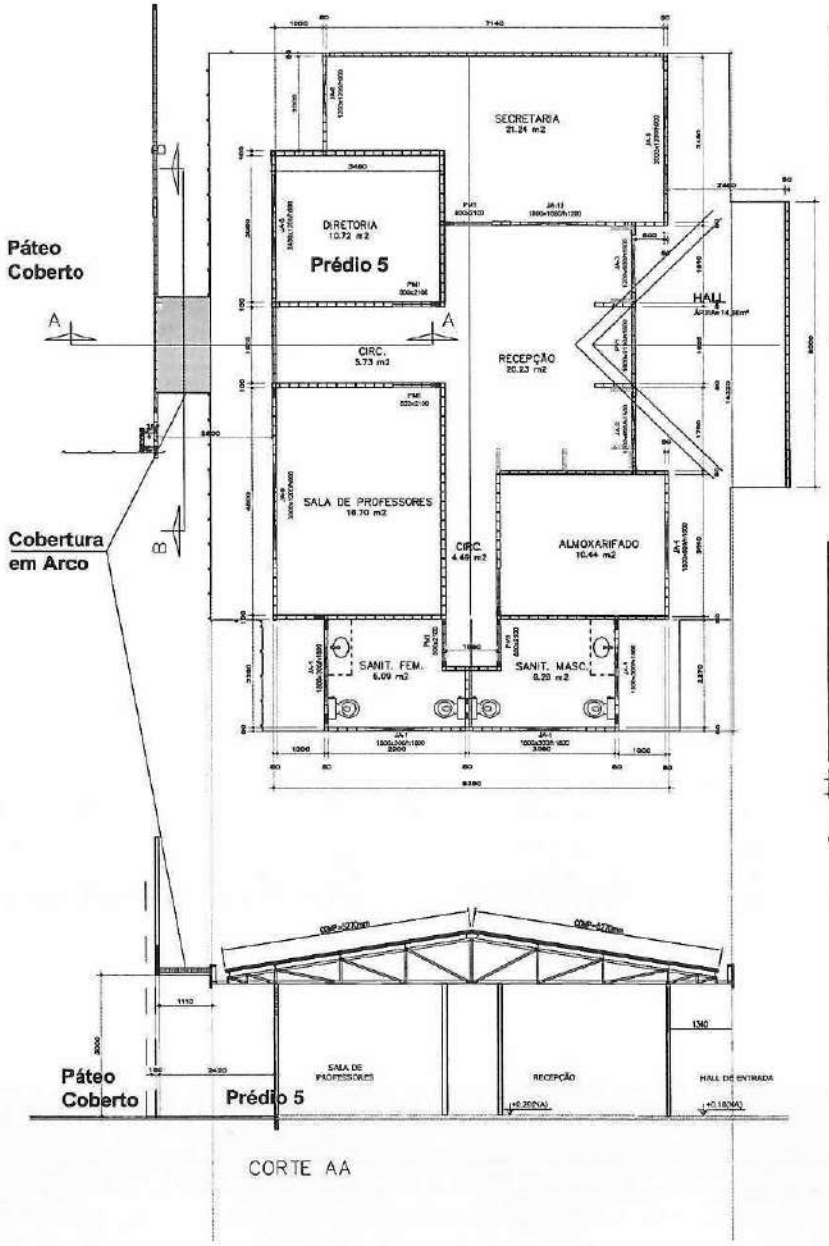
Prédio 7

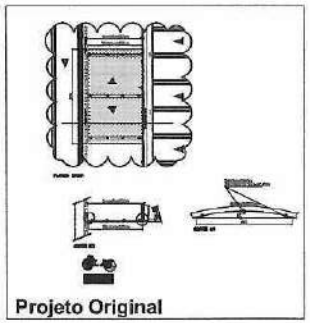
RELAÇÃO DAS PEÇAS	
CODIGO	ESP.
PCT	C/1
PLAN	C/1
PERFIL	C/1
A-ACUTE	C/1
A-OBT	C/1
TRAV	C/1
VELCW	C/1
CG1	C/1
CG2	C/1

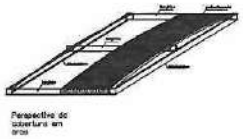
PMP-PREFEITURA MUNICIPAL DE PACATUBA
Nº 2065

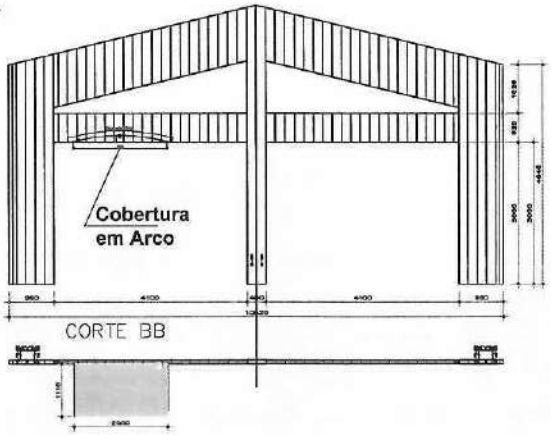
Cliente:	CASA ALTA Construções Ltda
Obra:	Creche B - Prédio 7
Número:	651
Projeto:	eng Vilson Venosto
Data:	Nov. 2013
Escala:	s/c
Assunto:	Conjunto de Montagem
Desenho:	651.22 Rev 0

LIBER CONSTRUÇÃO METÁLICA



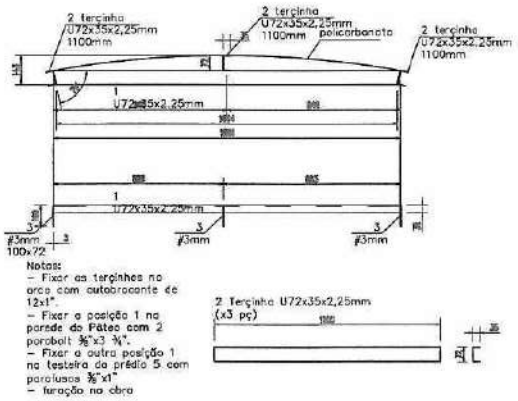




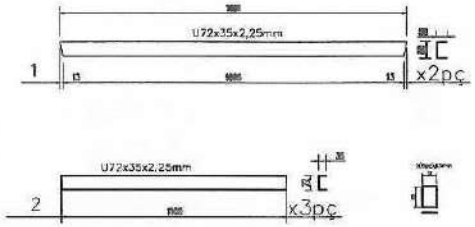


Nota: no prédio 4, na Sala Multiuso sobre a janela JA11 e acima do forro, devem ser instalados dois perfis fixados na parede com chumbadores parabolt.
Idem para a janela JA 9 da Sala de professores do prédio 5.

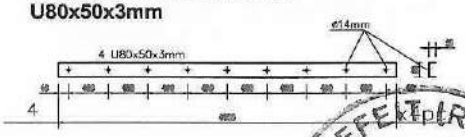
Arco (1esq/1dir)



Croquis de fabricação



Verga Sobre Janela (x4pç) U80x50x3mm



PREFEITURA MUNICIPAL DE PAGATUBA - PMP
Nº 3266

Cliente: CASA ALTA Construções Ltda	
Obra: Creche B - Arco Páteo x prédio 5	Número: 651
Projeto: eng. Vilson Vercato	Data: Nov. 2013 / Escala: s/e
Assunto: Conjunto de Montagem	Desenho: 651.24 Rev 0

LIBER CONSTRUÇÃO METÁLICA