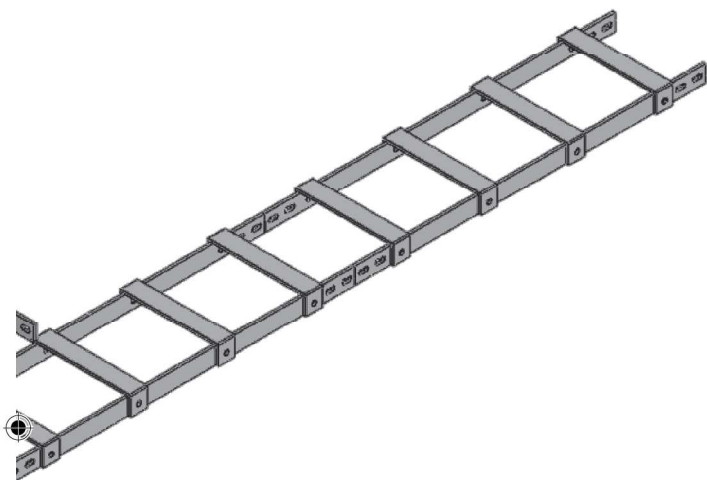
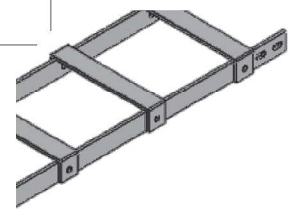


Esteira para telecomunicações

Esteiramento tipo "RACK" para telecomunicações suporte para condução de cabos, constituído em barra chata de aço carbono ou alumínio conforme as normas:

- NBR 5907 - Define valores dimensionais
- ASTM A-36 - Indica composição química e suas propriedades mecânicas
- SAE 1012/1016 - Indica teor de carbono



The telecommunication cable trays

The telecommunication cable trays, "RACK" type used to support for electrical cable wires, manufactured in steel bars or Aluminium according to the following rules

- NBR 5907 – Sets dimensional values;*
- ASTM A -36 : chemical composition and mechanical properties of steel bars*
- SAE 1012/1016 – Indicates the carbon content in the steel*

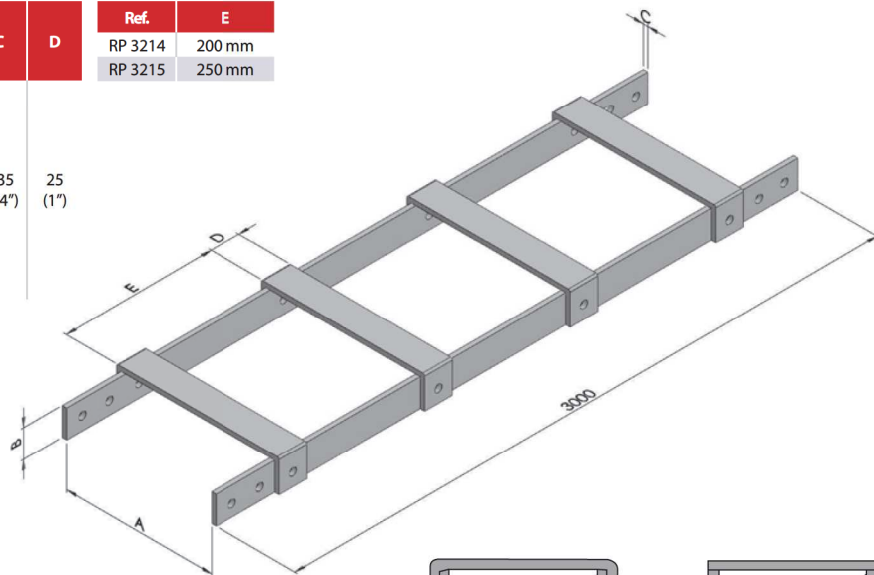
Esteira para telecomunicações

The telecommunication cable trays

Esteira para telecomunicações: trecho reto
The telecommunication cable trays: straight section

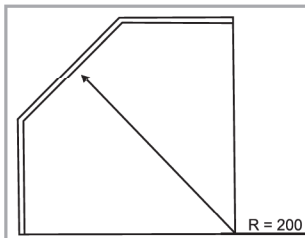
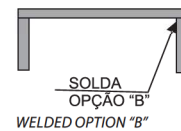
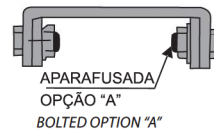
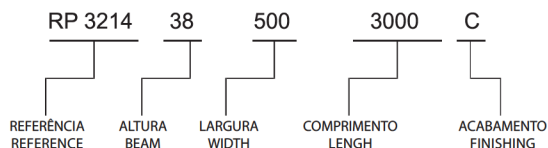
carga admissível	flexa	A	B	C	D	Ref.	E
maximum distributed load	maximum deflection						
52	7	100				RP 3214	200 mm
52	8,5	200	32			RP 3215	250 mm
77	16	300	(1.1/4")				
77	18	350					
80	20	400		6,35			
80	21	500		(1/4")	25		
80	80	600	38				
82	82	700	(1.1/2")				
86	86	800					

- 1) Acabamento alumínio extrudado (AL)
 - 2) Acabamento: galv. eletrolítico: azulado ou amarelado (bicromatizado)
 - 3) Acabamento: galv. a fogo (GF)
 - 4) Pintura: eletrostática a pó (PT)
- 1) Extruded aluminum finish
 - 2) Finishing: Electrolytic galvanization or bichromatization (yellow type)
 - 3) Finishing hot dip galvanized NBR 6323
 - 4) Painted electrostatic process



COMO SOLICITAR

HOW TO REQUEST



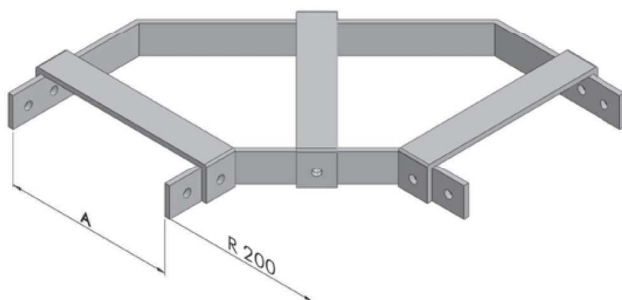
Esta seção destina-se a curvas e derivações de todos os tipos de esteira p/ telefonia fabricados. Os desenhos são ilustrativos, acompanhando a esteira solicitada conforme sua referência, tipo, largura e espaçamento entre travessas. O raio segmentado é de fornecimento normal.

This section is intended to curves and derivations to all kinds of cable trays manufactured by telecommunication actual profile. The drawings are only for illustration and will be in accordance with the type of reference specifications, ie, width, and spacing between cross bars and finishing. The segmented radius is our standard delivery.

Curva horizontal

Horizontal Bend

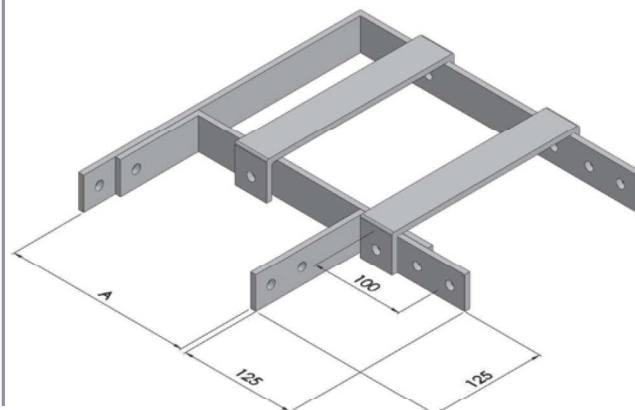
30°	45°	60°	90°
RP 3216	RP 3217	RP 3218	RP 3219



Cotovelo reto

90° straight elbow

Ref. RP 3285

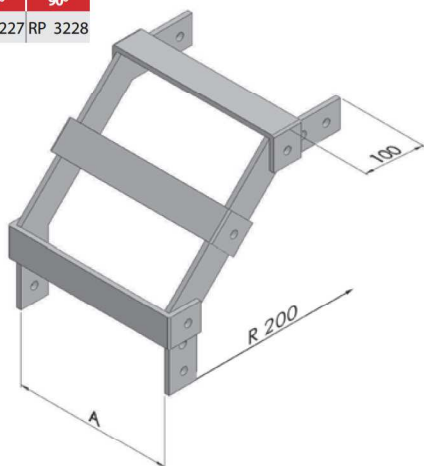


Esteira para telecomunicações

The telecommunication cable trays

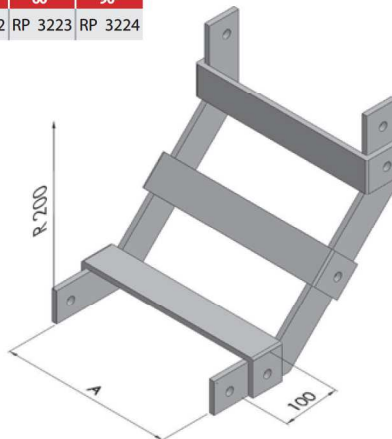
Curva vertical externa
Vertical external Bend

30°	45°	60°	90°
RP 3225	RP 3226	RP 3227	RP 3228

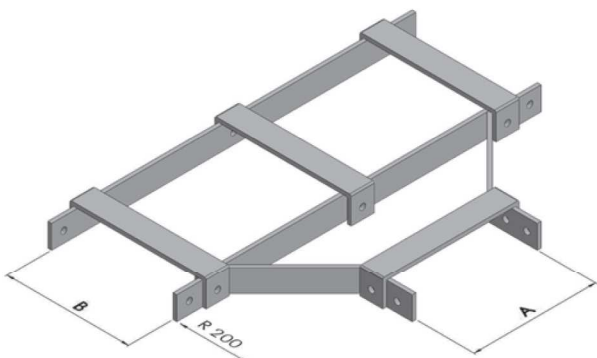


Curva vertical interna
Vertical internal Bend

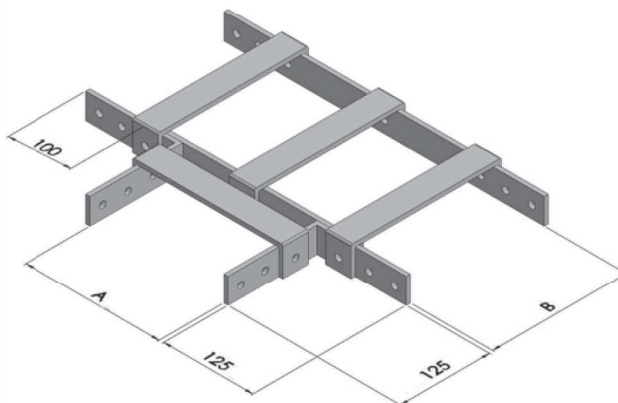
30°	45°	60°	90°
RP 3221	RP 3222	RP 3223	RP 3224



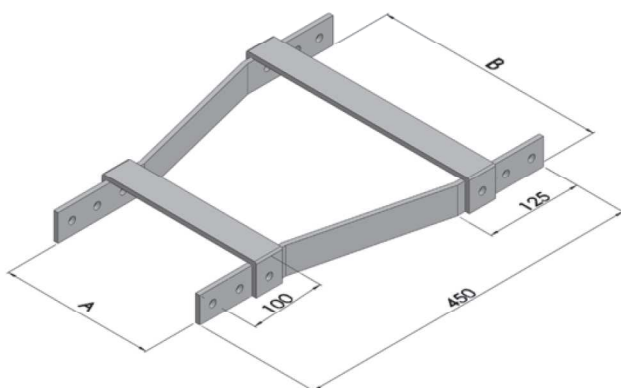
"T" horizontal 90°
90° horizontal tee
Ref. RP 3220



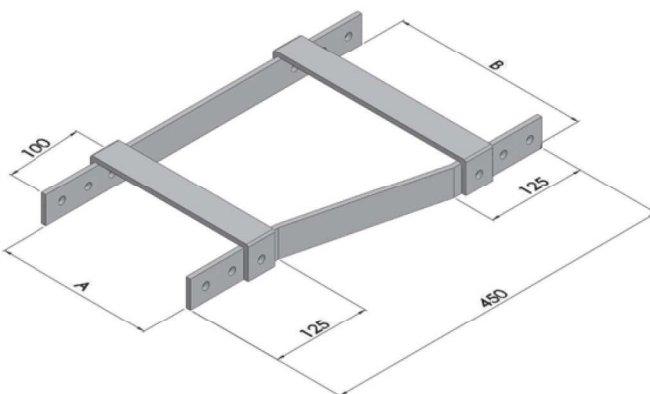
"T" reto
90° straight tee
Ref. RP 3282



Redução concêntrica
Concentric reduction
Ref. RP 3286



Redução excêntrica (direita e esquerda)
Excentric reduction (left and right)
Ref. RP 3287

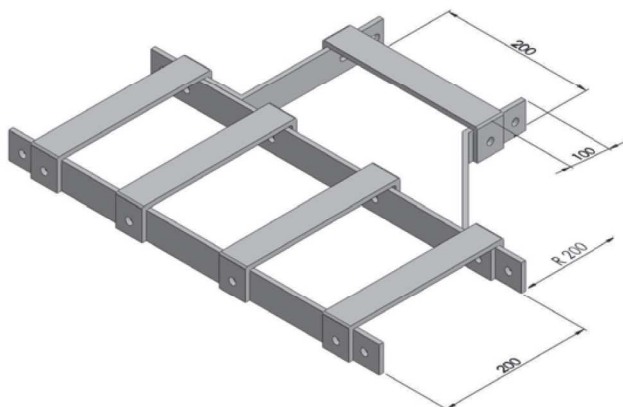


Esteira para telecomunicações

The telecommunication cable trays

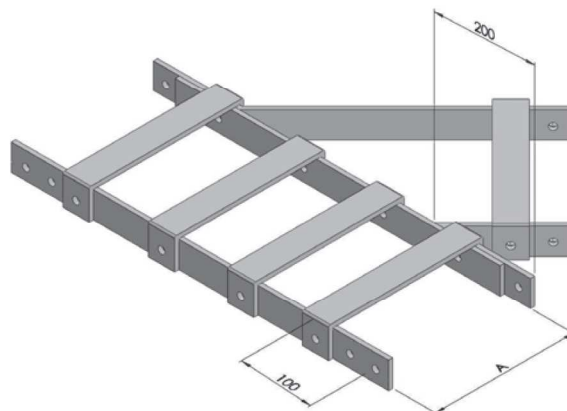
Junção direta 90°
Right 90° junction

Ref. RP 3283



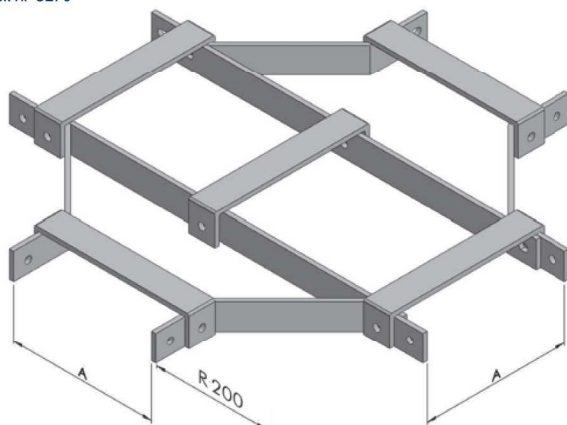
Junção direta 45°
Left 90° junction

Ref. RP 3284



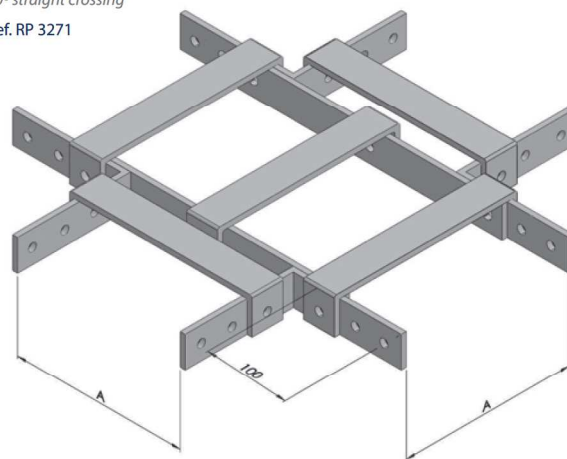
Cruzeta 90°
90° crossing

Ref. RP 3270



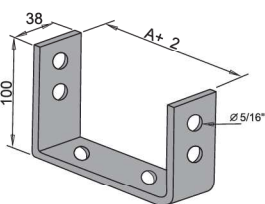
Cruzeta reta
90° straight crossing

Ref. RP 3271



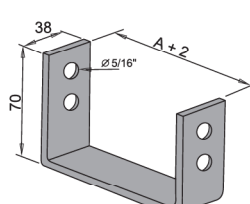
Suporte de fixação descida
Fixing bracket descent

Ref.	A
RP 3229	100
RP 3230	200
RP 3231	300
RP 3232	350
RP 3233	400
RP 3234	500
RP 3235	600
RP 3236	700
RP 3237	800



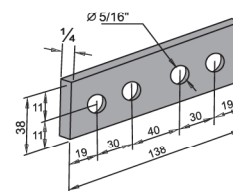
Terminal
End plate

Ref.	A
RP 3238	100
RP 3239	200
RP 3240	300
RP 3241	350
RP 3242	400
RP 3243	500
RP 3244	600
RP 3245	700
RP 3246	800



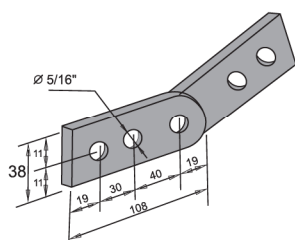
Tala de Emenda
Splicing plate 4 holes

Ref. RP 3247



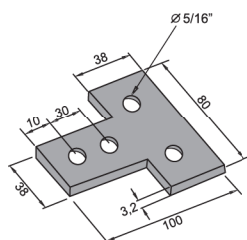
Tala Articulável
Articulated splicing

Ref. RP 3248



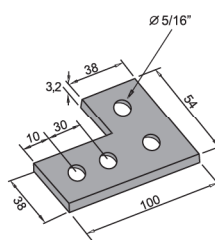
Junção tipo "T"
Junction in "T"

Ref. RP 3250



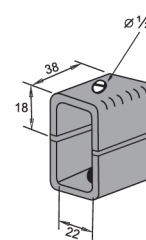
Emenda "L"
Junction in "L"

Ref. RP 3250L



Grampo reforçado
Reinforced clamps

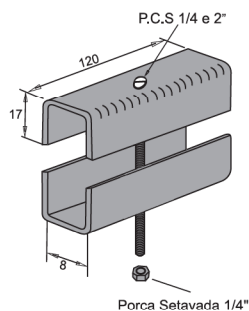
Ref. RP 3251



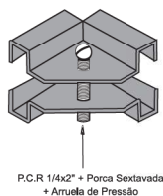
Esteira para telecomunicações

The telecommunication cable trays

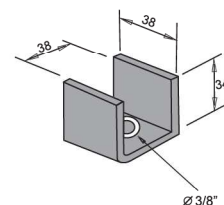
Emenda reta
Straight junction
Ref. RP 3252



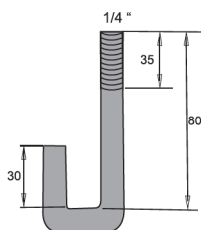
Junção horizontal
Horizontal Junction
Ref. RP 3253



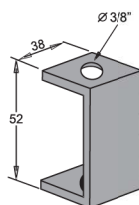
Junção externa
External junction
Ref. RP 3254



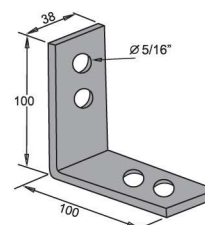
Grampo tipo "J"
Clamp type "J"
Ref. RP 3255



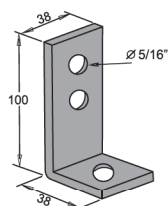
Suporte para suspensão
Support for hanging
Ref. RP 3256



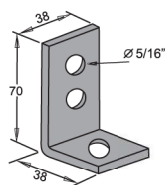
Junção "LL"
LL junction
Ref. RP 3257



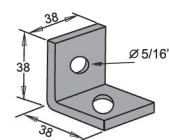
Junção "L"
L junction
Ref. RP 3258



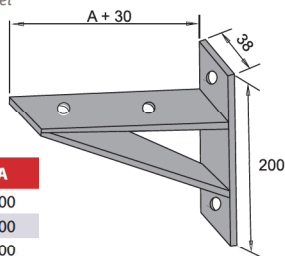
Junção tipo "LA"
LA type junction
Ref. RP 3259



Junção tipo "LC"
LC type junction
Ref. RP 3260

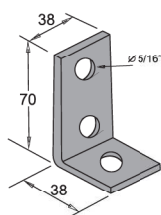


Mão francesa
Reinforced bracket
Ref. RP 3261-3268

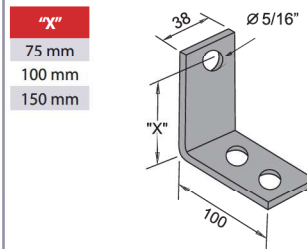


Ref.	A
RP 3261	100
RP 3262	200
RP 3263	300
RP 3264	400
RP 3265	500
RP 3266	600
RP 3267	700
RP 3268	800

Junção de parede
Junction wall
Ref. RP 3269



Junção vertical de parede
Vertical junction wall
Ref. RP 3272

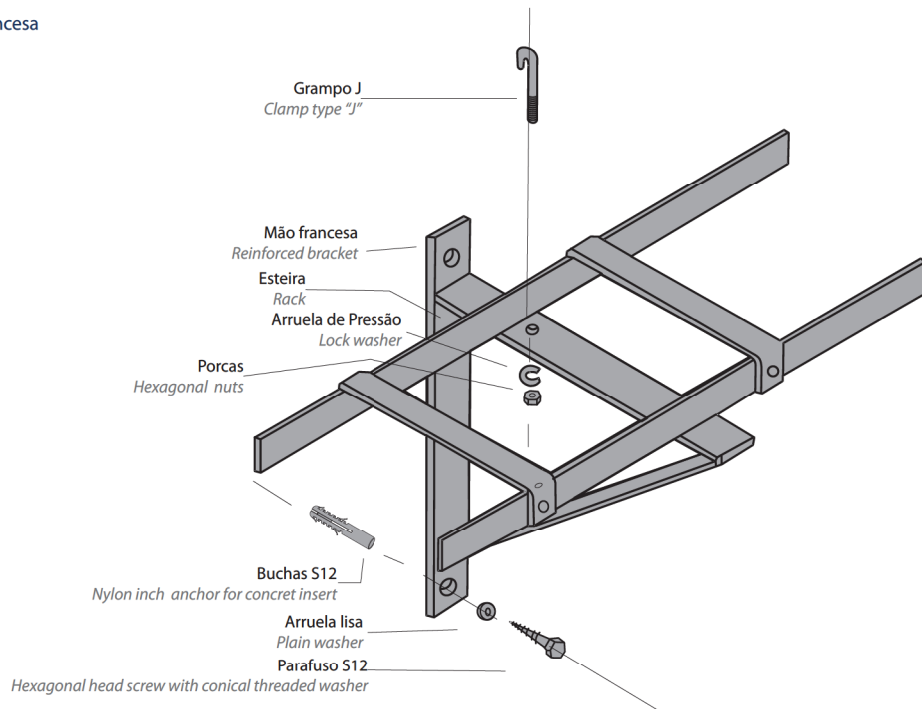


"X"
75 mm
100 mm
150 mm

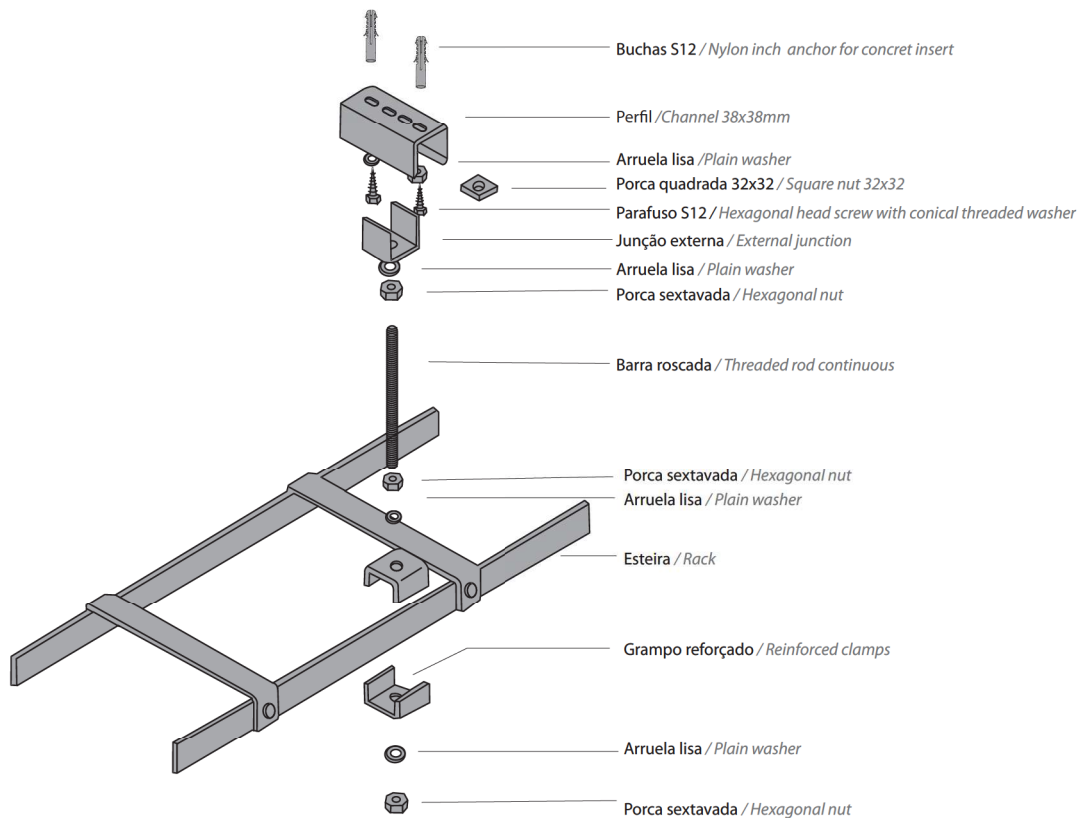
Demonstrativo de montagem

Diagram of assembly

Instalação com mão francesa Bracket installations



Instalação com tirante Threaded rod continuous installations



Observações técnicas

Technical notes

MATERIA PRIMA

A Materia Prima a ser utilizada na fabricação da esteira para telecomunicações pode variar de operadora para operadora conforme segue:

1 - LONGARINAS: Denomina-se longarinas as duas barras laterais onde serão fixadas por meio de solda ou parafusos as travessas. Podem ser:

- 1.1/4 X 1/4 (aço carbono)
- 1.1/2 X 1/4 (aço carbono)
- 2 X 1/4 (aço carbono)
- 1.1/2 X 1/4 (alumínio)

2 - TRAVESSAS: Denomina-se travessas as barras onde serão apoiados os cabos, cuja largura especificada pela letra "A" deverá ser indicada pelo cliente juntamente com a medida "E" que é a distância entre as mesmas.

NOTA: Na tabela da página XX, observar que as longarinas demonstradas para tabela de cargas foram 1.1/4 x 1/4 e 1.1/2 x 1/4, pois são as mais utilizadas. E com relação ao comprimento foi considerada 3000mm; mas podem ter outras medidas até o máximo de 6000mm.

ACABAMENTO

O acabamento das esteiras para telecomunicações será sempre feito de acordo com o especificado pelo usuário, conforme segue:

GALVANIZAÇÃO A FOGO

Norma ABNT - NBR 6323. Utilizada em ambientes externos ou internos onde a corrosão é intensa.

GALVANIZAÇÃO ELETROLITICA

Norma ABNT- NBR 10476:

- Coloração branca meio azulada
- Coloração amarela (Bicromatizada)

Utilizada em ambientes internos onde a corrosão é considerada de média a branda.

PINTURA ELETROSTÁTICA A PÓ

Após limpeza das peças pelo processo de fosfatização é aplicada a tinta através de pistola que adere ao produto por meio eletrostático e em seguida a peça vai a estufa para fixação e secagem e sua espessura varia entre 50 e 70 microns. É utilizada em ambientes internos ou externos onde a corrosão é considerada média.

NOTA: Para ambientes externos é aconselhado a pintura sobre galvanização eletrolítica (coloração branca meio azulada).

RAW MATERIAL

The raw material to be used in manufactured of telecommunication cable rack can vary as following

1- SIDE RAILS: the two lateral side rails where the cross bars will be welded or fixed using hexagonal head bolts. Could be:

- 1 ¼ x ¼ (Carbon steel)
- 1 ½ x ¼ (carbon steel)
- 2 x ½ (Carbon steel)
- 1 ½ x ¼ (Aluminium)

2- CROSS BARS: Called cross bars will be supported where electrical cables, which width represented by "A" and rung spacing "E" should indicated by client on request of quotation.

NOTE: Please note that the side rails demonstrated to load table were 1.1 / 4 x 1/4 to 1.1 / 2 x 1/4, because they are the most used. And with respect to 3000mm length were considered, but may have other measures to a maximum of 6000mm.

FINISHING

The finishing of telecommunication cable trays will be according to client request, as follows:

HOT DIP GALVANIZED

According to NBR 6323 . Used in areas with intensive corrosive (internal ou external areas)

ELECTROLITIC GALVANIZATION

According to NBR ABNT-NBR 10476

- White colour
- Yellow type (bichromatized)

It is used in indoor and outdoor environments where corrosion is considered average.

ELECTROSTATIC POWDER PAINTING

After cleaning of the parts of the phosphating process is applied to ink by using pistolaque adheres by electrostatic the product then goes into oven for fixation and drying and its thickness ranges from 50 to 70 µ. It is used in indoor and outdoor environments where corrosion is considered average.

Note: Outdoor painting is advised on the electrolytic galvanizing