CATÁLOGO TÉCNICO

PRODUCT CATALOGUE

REAL PERFIL

Sumário

Summaary


REAL PERFIL

Apresentação

Introduction

A Real Perfil Indústria e Comércio Ltda, empresa que, desde a sua fundação em 18 de dezembro de 1992, tem como objetivo a dinâmica que sempre norteou o seu desenvolvimento e sucesso. Dedica-se em fases sucessivas às diversas atividades do ramo metalúrgico, além de contar com 7000m^2 de área, com capacidade produtiva de 2000 ton/mês e um estoque permanente de 1500 ton. Realiza pesquisas constantemente junto às empresas ligadas direta ou indiretamente ao mercado de instalação elétrica, hidráulica, mecânica, instrumentação, automação industrial ou predial. Os produtos da Real Perfil são utilizados praticamente por todos os desdobramentos da construção civil: indústrias, hotéis, hospitais, montadoras, aviação, naval, bancos, etc. Após analisar as necessidades constatadas através de um árduo trabalho junto a esses clientes e parceiros, a Real Perfil aprimorou sua linha de produtos e, em conseqüência, lança uma nova edição de seu catalogo técnico.

Real Perfil Industria e Comercio Ltda, is a company that, since its foundation on the 18th of december, 1992 has always directed its development and consecutive progress in the different activities of the metallurgical field. It is installed on an area 700 sq. meter has a production capacity of 800 metric ton per month and counts on a permanent inventory of 500 metric ton. Almost every area of the civil engineering such as industry, hotels, hospitals, car manufactures, aviation, navy, banks, etc now uses Real Perfil's products. The true key for this success has been the constant contact with all companies that are directly or indirectly bound to the market of the eletric, hydraulic, mechanical installations, gauges industrial or building automation. This has converted Real Perfil's customers into partners with the sound consequence of a constant increase in its products line now presented in a new edition of Real Perfil technical catalogue.

Acabamento

Finishing

Os produtos da Real Perfil Ind. e Com. Ltda. são fabricados em aço SAE 1006/1012, recebendo posteriormente um acabamento superficial anti-corrosivo que pode ser:

• Galvanização eletrolítica;
• Galvanização á fogo;

ou fabricadas com chapas de aço pré-galvanizadas conforme NBR 7008.

Estes acabamentos são solicitados através da inclusão de seu código GE, GF ou PZ, respectivamente, ao final da referência do produto. Todavia, além dos acabamentos acima descritos, podem ser solicitados outros tipos de matéria prima, como por ex. alumínio, latão, aços inoxidáveis, pintura, etc. Com base nestas situações, deixamos em aberto a possibilidade do emprego de outros materiais e opções de acabamento superficiais, tendo como base a eficiência técnica e econômica diante das mais variadas situações de instalações, visando uma perfeita utilização de nossos produtos em relação à qualidade.

Galvanização eletrolítica

• Processo: Eletrodeposição à frio de moléculas de zinco sobre materiais de aço com posterior passivação em banhos de solução de cromatos;
• Norma para execução: NBR 10476;
• Norma para ensaios (salt-spray);
• Aplicação: ambientes internos e não agressivos;
• Tipos: Cromatizada, coloração "azul";
Bicromatizada, coloração "amarela".

The products of Real Perfil Ind. Com. Ltda., are produced in SAE 1008/1010 steel, afterwards finished with an optional anticorrosise surface coating as follows:

• Electrolytic galvanization (GE);
• Fire galvanizing or hot dip galvanized (GF);
• Pre- galvanized (PZ).

The desired coating may be easily ordered by mentioning its respective code (GE GF or PZ) at the end of the product reference code. Other raw materials having been requested from us such as, for instance aluminum, brass, stainless steel, painting, etc. Besides the above mentioned coatings we have the possibility of using these other materials and suface finishing options aiming to offer the necessary technical and economical effciency for the perfect use of our products that the great variety of our customer's installations require. This is what we call REAL PERFIL QUALITY.

Electrolytic galvanization

• Process: Cold Electrodeposition of zinc molecules upon steel materials with further passivation in chromate solution baths.
• Process standard NBR 10476;
• Quality standard: (salt-spray);
• Application: inner and non aggressive environment;
•Types: Chromed "blue" colored;
bichromatized "yellow" colored.

Acabamento

Finishing

Galvanização à fogo

1. Processo: descrição sumária;
2. Desengraxamento em banho alcalino e remoção de sujeiras orgânicas;
3. Decapagem em banho ácido para remoção de carepas ou ferrugem;
4. Fluxagem para ativação superficial com cloretos;
5. Galvanização por imersão em banho de zinco fundido à +/- 430º C, o qual se ligará metalurgicamente à peça.
6. Norma para execução: NBR 6323;
7. Norma para ensaios: NBR MB-25;
8. Aplicação: Ambientes externos, internos sujeitos à ação de agentes químicos e maresia.

Pré-galvanizado

No material pré-galvanizado, o processo de zincagem já foi feito pela própria usina. Normas aplicadas no produto:

• NBR 7008 - Chapa de aço carbono zincada pelo processo continuo de imersão a quente.
• NBR 7013 - Chapa de aço carbono zincada pelo processo de imersão a quente.

OBS: Esta matéria-prima possibilita a fabricação do produto final com maior rapidez, sem afetar a qualidade.

Fire Galvanizing or hot dip galvanized

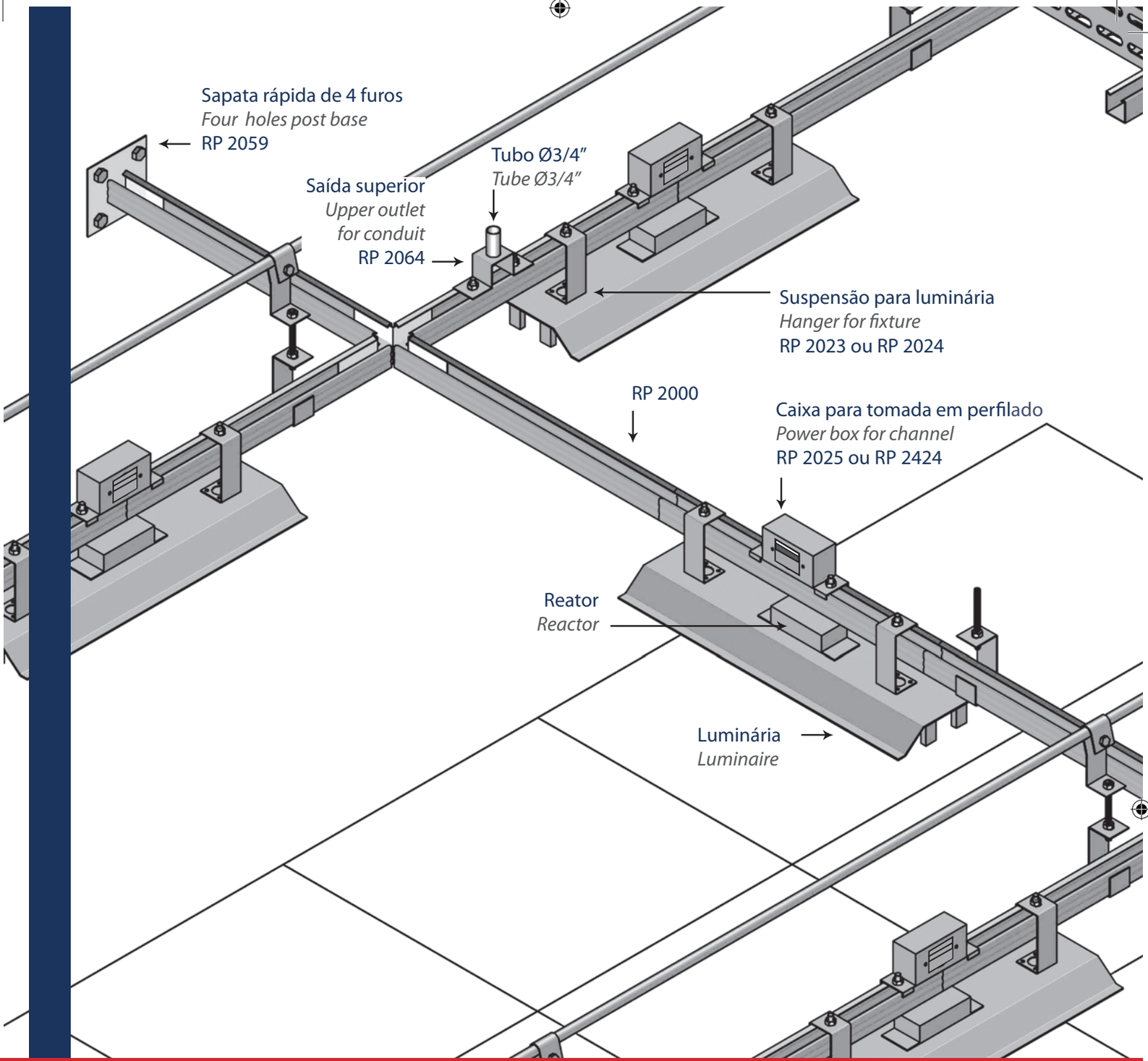
1. *Process: condensed description;*
2. *Degrease in alkaline bath and removal of organic dirt;*
3. *Acid pickling to remove scurf or rust;*
4. *Fluxing for surface activation with chloride;*
5. *Galvanization by immersion in cast zinc at 430° C approx. that shall metallurgically bind to the part;*
6. *Process standard: NBR 6323;*
7. *Quality standard: NBR MB-25;*
8. *Application: external environments or inner areas subject to chemical agents and offshore application.*

Pre-coated

In the pre-croated material the zinc plating process is made at the mil. Standards applied the product:

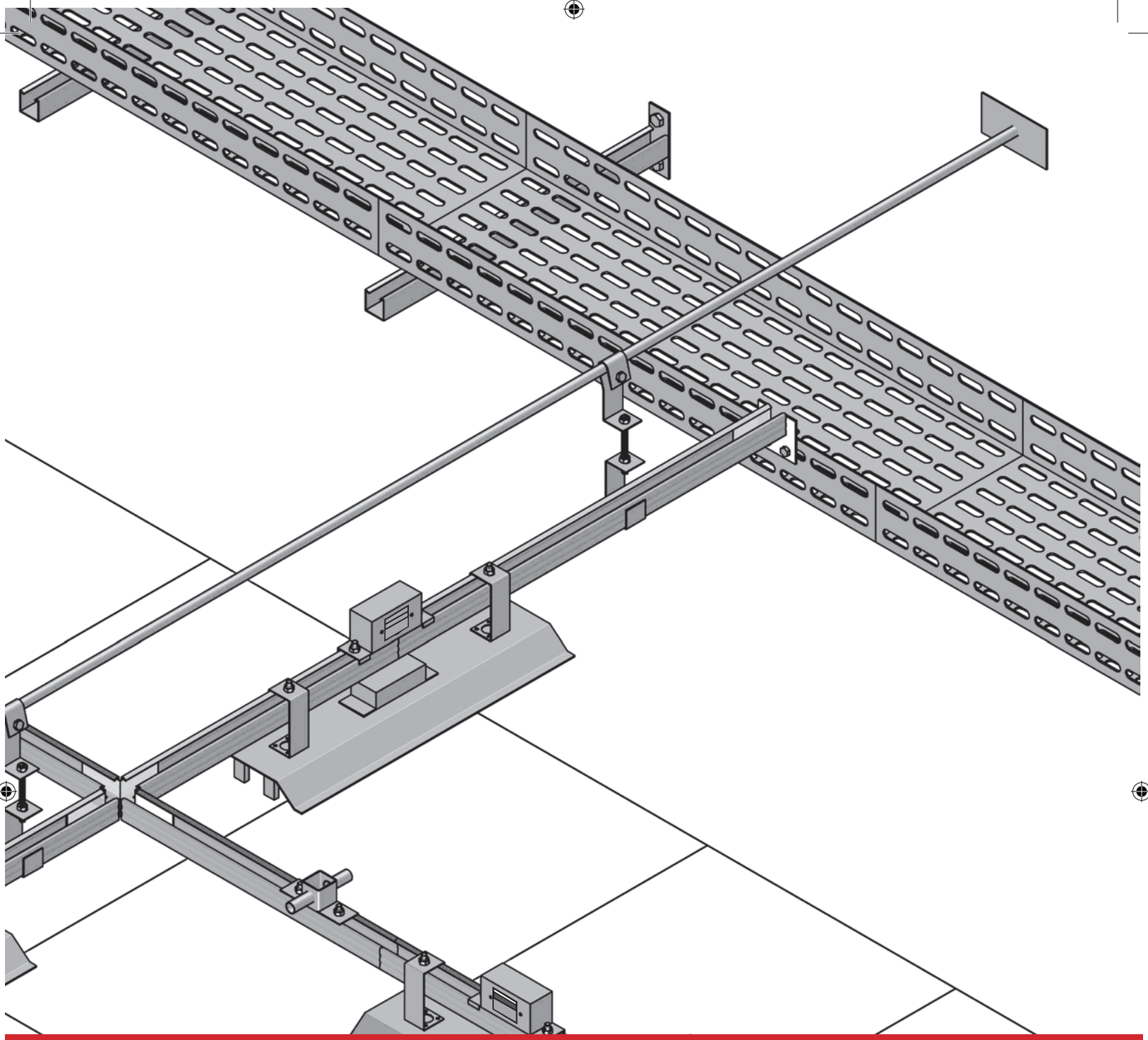
• NBR 7008 - Carbon steel plate zinc plated through continued process of heat immersion;
• NBR 7013 - Carbon steel plate zinc plated through heat immersion process.

NOTE: *This raw material pre-coated allows producing more quickly without loosing its quality.*



Perfilados e acessórios

A linha de perfilados e acessórios fabricados pela Real Perfil é composta por uma vasta quantidade de peças padronizadas e intercambiáveis quanto ao seu sistema de aplicação, porém com as mais variadas possibilidades de utilização. O emprego dessas peças permite a formação de um sistema completo, que será empregado na condução e derivação da rede elétrica, lógica e telefonia, garantindo assim versatilidade, rapidez de montagem e economia.



Profiles and fittings

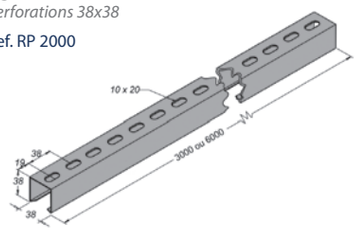
The line profiles and fittings produced by Real Perfil, is constituted by a large number of standard parts interchangeable on what concerns its mounting way with the most different possibilities of use. The use of these parts allows to assemble a complete system aiming to conduce and diverse the Electric, and telephone nets warranting versatility, quickness and economy in its assembling.

Perfilados e acessórios

Profiles and fittings

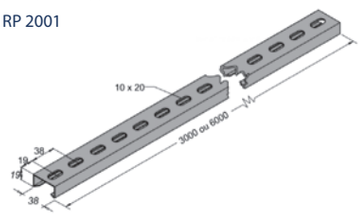
Perfilado perfurado 38x38 mm
High channel with perforations 38x38

Ref. RP 2000



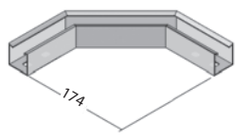
Perfilado perfurado 19x38 mm
Low channel with perforations 19x38

Ref. RP 2001



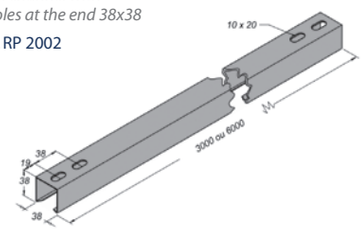
Curva horizontal
Horizontal bend

Ref. RP 2381/90 - 90º
Ref. RP 2381/45 - 45º



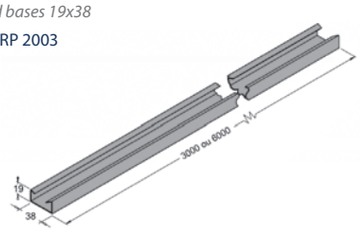
Perfilado liso com 2 furos 38x38 mm
High channel with 2 holes at the end 38x38

Ref. RP 2002



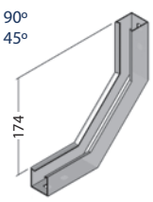
Perfilado liso 19x38 mm
Low channel with solid bases 19x38

Ref. RP 2003



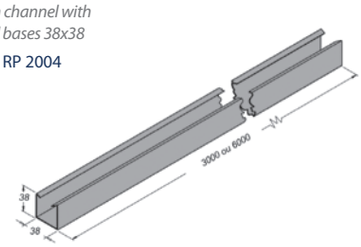
Curva vertical interna
Internal vertical bend

Ref. RP 2382/90 - 90º
Ref. RP 2382/45 - 45º



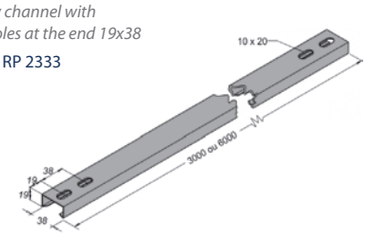
Perfilado liso 38x38 mm
High channel with solid bases 38x38

Ref. RP 2004



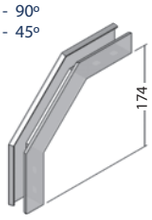
Perfilado liso com 2 furos 19x38 mm
Low channel with 2 holes at the end 19x38

Ref. RP 2333



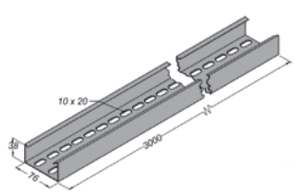
Curva vertical externa
External vertical bend

Ref. RP 2383/90 - 90º
Ref. RP 2383/45 - 45º



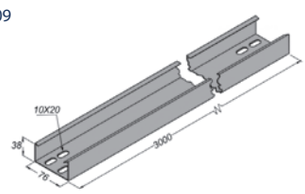
Perfilado perfurado 38x76 mm
Double channel with perforations 38x76

Ref. RP 2008



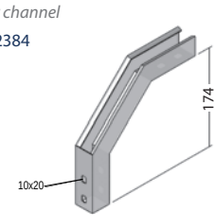
Perfilado liso com 4 furos 38x76 mm
Double channel with 4 holes at the end 38x76

Ref. RP 2009



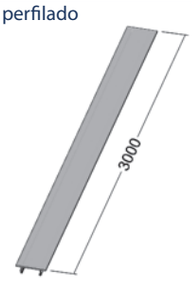
Curva de inversão 90°
90° Reversal vertical bend for channel

Ref. RP 2384



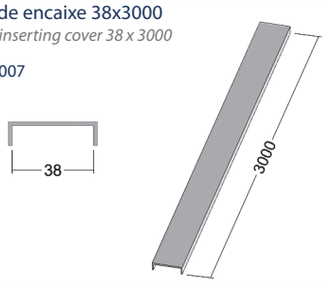
Tampa de pressão para perfilado
Channels pressure covers

Ref. RP 2006 - Perfil 38
Ref. RP 2300 - Perfil 76



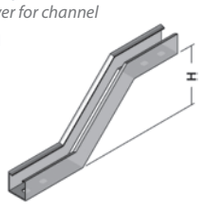
Tampa de encaixe 38x3000
Channel inserting cover 38 x 3000

Ref. RP 2007



Desnível para perfilado 38x38 mm
Vertical crossover for channel

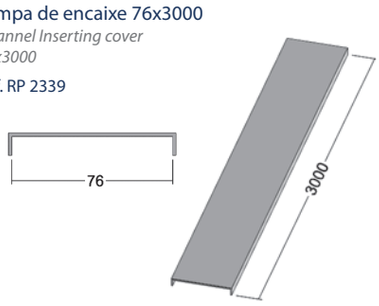
Ref. RP 2432/H



Obs: Informar a altura "H"
Note: Inform the height "H"

Tampa de encaixe 76x3000
Channel Inserting cover 76x3000

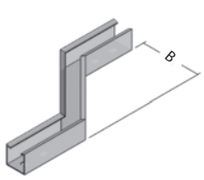
Ref. RP 2339



Desvio horizontal
Horizontal crossover for channel

Direita */right*
Ref. RP 2433/B

Esquerda */left*
Ref. RP 2434/B

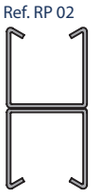


Obs: Informar o desvio "B"
Note: Inform the deviation "B"

Perfilados Conjugados 38x38 mm
Welded channel combinations

Ref. RP 01

Ref. RP 02



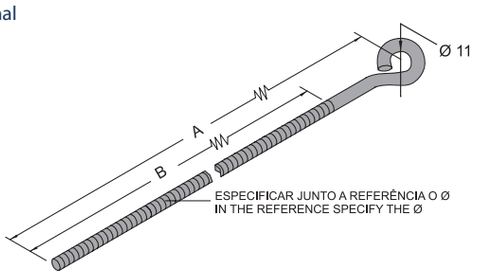
Obs: Informar Perfilado Liso ou Perfurado
Note: Inform plain or perforated profiled

Perfilados e acessórios

Profiles and fittings

Parafuso olhal
Eye screw

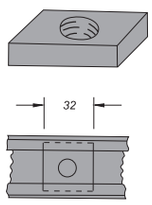
Ref. RP 2371



A	B
250	200
200	150
150	100

Porca quadrada sem mola
Square nut without spring

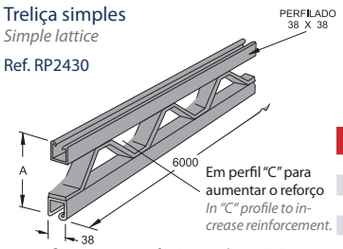
Ref. RP 2429



Rosca *Thread*	Espessura *Thickness*
1/4"	1/8"
5/16"	3/16"
3/8"	1/4"
1/2"	5/16"

Treliça simples
Simple lattice

Ref. RP2430



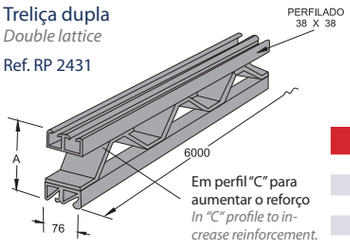
Em perfil "C" para aumentar o reforço
In "C" profile to increase reinforcement.

A
114
152
190
228
266
304

Especificar junto a referência altura "A"
In the reference, specify the height "A"

Treliça dupla
Double lattice

Ref. RP 2431



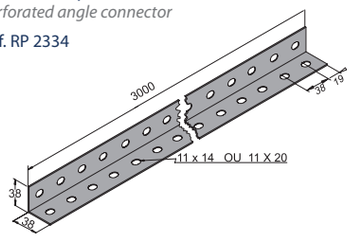
Em perfil "C" para aumentar o reforço
In "C" profile to increase reinforcement.

A
114
152
190
228
266
304

Especificar junto a referência altura "A"
In the reference, specify the height "A"

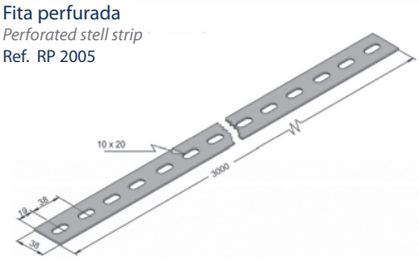
Cantoneira perfurada
Perforated angle connector

Ref. RP 2334



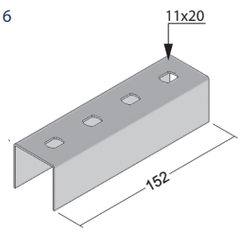
Fita perfurada
Perforated stell strip

Ref. RP 2005



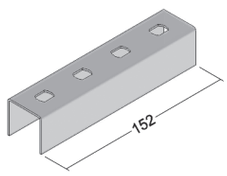
Junção externa I
External junction

Ref. RP 2016



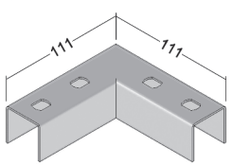
Junção interna I
Internal junction

Ref. RP 2017



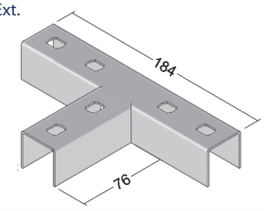
Junção interna "L"
"L" Internal junction

Ref. RP 2018 - Int.
Ref. RP 2328 - Ext.



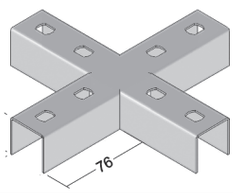
Junção interna "T"
"T" Internal junction

Ref. RP 2019 - Int.
Ref. RP 2330 - Ext.



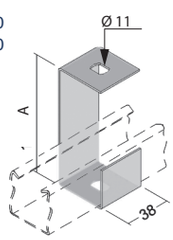
Junção interna "X"
"X" Internal junction

Ref. RP 2020 - Int.
Ref. RP 2338 - Ext.



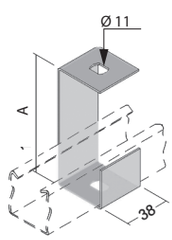
Gancho curto
Clamp for channel

Ref. RP 2021 - 38x38 - A=100
Ref. RP 2026 - 38x76 - A=100



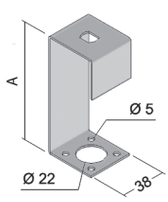
Gancho longo para perfilado
Long clamp for fixtture

Ref. RP 2022
38x38 ou 38x76
A= 165 mm



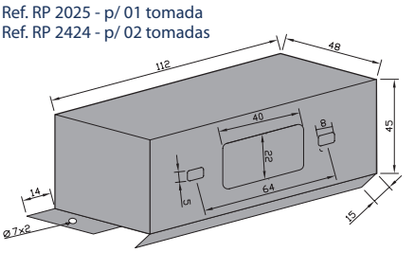
Gancho para luminária
Hanger for fixture

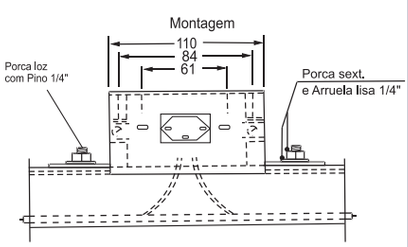
Ref. RP 2023 - A=100
Ref. RP 2024 - A=165



Caixa para tomada em perfilado
Power box for channel

Ref. RP 2025 - p/ 01 tomada
Ref. RP 2424 - p/ 02 tomadas

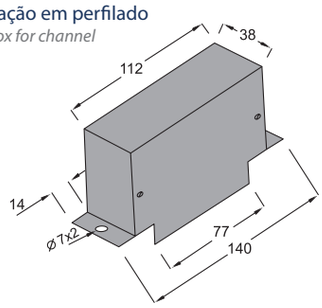




Tomada não incluida
power not included

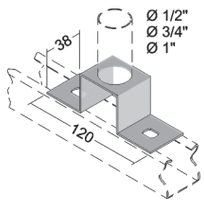
Caixa de ligação em perfilado
Connection box for channel

Ref. RP 2027



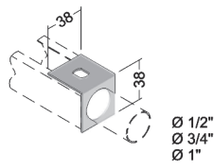
Saída superior
Upper outlet for conduit

Ref. RP 2064



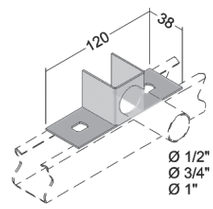
Saída final
End outlet for conduit

Ref. RP 2063



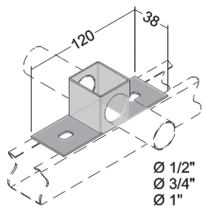
Saída lateral
Lateral outlet for conduit

Ref. RP 2065



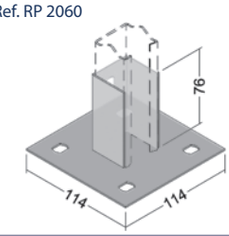
Saída lateral dupla
Lateral double outlet for conduit

Ref. RP 2066



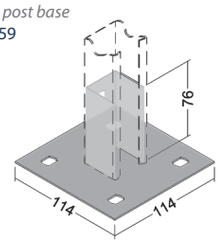
Sapata externa de 4 furos 38x38 mm
Simple external post base

Ref. RP 2060



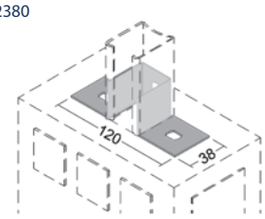
Sapata interna de 4 furos 38x38 mm
Four holes post base

Ref. RP 2059



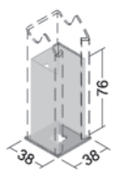
Base para ligação em painel 38x38 mm
Panel adapter

Ref. RP 2380



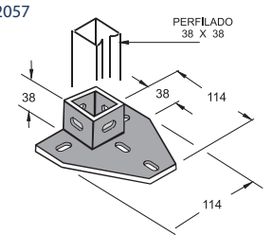
Sapata interna de 1 furo 38x38 mm
One hole post base

Ref. RP 2058



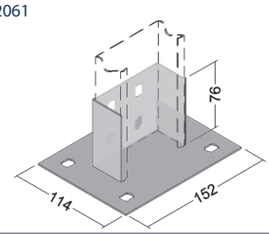
Sapata reforçada
Reinforced post base

Ref. RP 2057



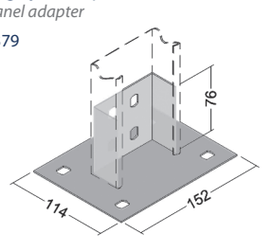
Sapata externa 4 furos 38x76 mm
External post base for double channel

Ref. RP 2061



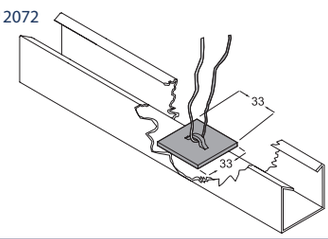
Base p/ ligação em painel 38x76 mm
Double panel adapter

Ref. RP 2379



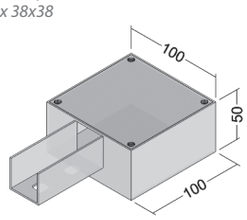
Suspensor para cabo de aço ø 1/8"
Suspender for ø 1/8" stell cable

Ref. RP 2072



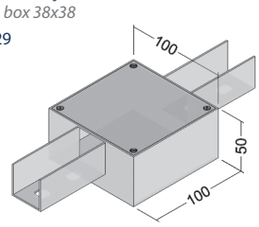
Caixa de derivação "I" 38x38
"I" Juntion box 38x38

Ref. RP 2028



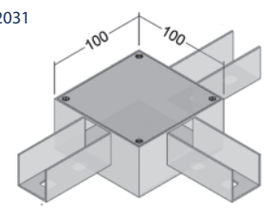
Caixa de derivação "C" 38x38
"C" Juntion box 38x38

Ref. RP 2029



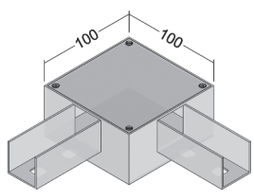
Caixa de derivação "T" 38x38
"T" Juntion box 38x38

Ref. RP 2031



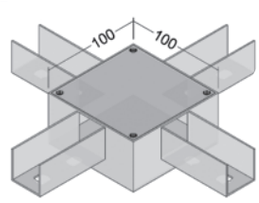
Caixa de derivação "L" 38x38
"L" Juntion box 38x38

Ref. RP 2030



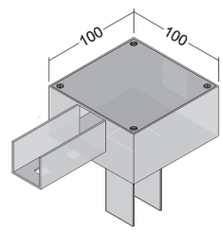
Caixa de derivação "X" 38x38
"X" Juntion box 38x38

Ref. RP 2032



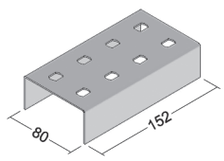
Caixa de derivação "I" c/ saída inf.
"I" Juntion box with bottom outlet

Ref. RP 2388



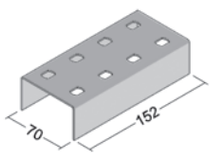
Junção externa "I" 38x76
"I" External junction 38x76

Ref. RP 2434



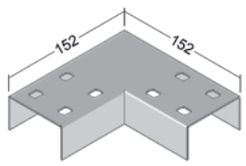
Junção interna "I" 38x76
"I" Internal junction 38x76

Ref. RP 2435



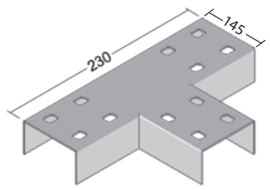
Junção interna "L" 38x76
"L" Internal junction 38x76

Ref. RP 2436



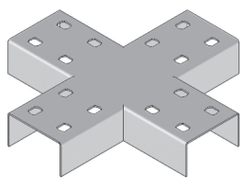
Junção interna "T" 38x76
"T" Internal junction 38x76

Ref. RP 2437



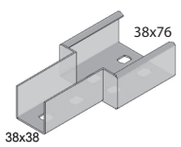
Junção interna "X" 38x76
"X" Internal junction 38x76

Ref. RP 2438



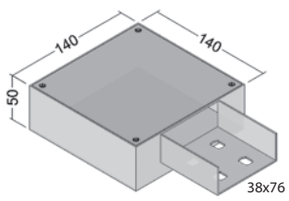
Redução da caixa para perfilado
Reduction for channel

Ref. RP 2395



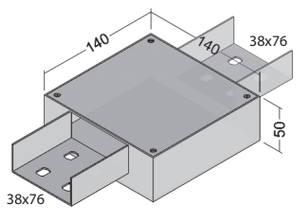
Caixa derivação "I" 38x76
"I" Junction box for double channel

Ref. RP 2288



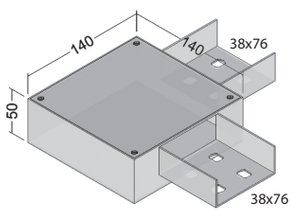
Caixa derivação "C" 38x76
"C" Junction box for double channel

Ref. RP 2299



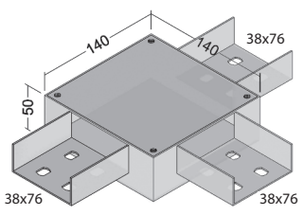
Caixa derivação "L" 38x76
"L" Junction box for double channel

Ref. RP 2284



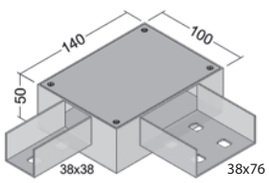
Cx. derivação "T" 38x76
"T" Junction box for double channel

Ref. RP 2281



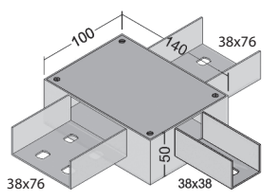
Cx. derivação "L" esquerda 38x76 - 38x38
"L" Left junction box for channel 38x76 - 38x38

Ref. RP 2390



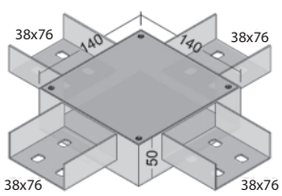
Cx. derivação "T" 2x38x76 - 38x38
"T" Junction box for channel 2x38x76 - 38x38

Ref. RP 2392



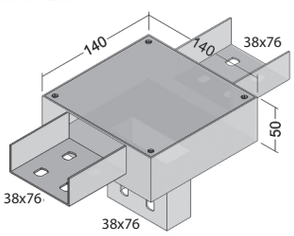
Cx. derivação "X" 38x76
"X" Junction box for double channel

Ref. RP 2282



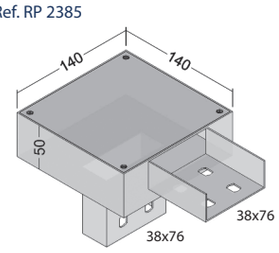
Cx derivação "C" saída inf. 38x76
"C" Junction box for double channel with one bottom outlet

Ref. RP 2386



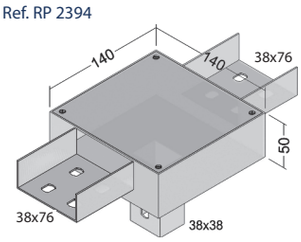
Cx derivação "I" saída inf.38x76
"I" Junction box for double channel with one bottom outlet

Ref. RP 2385



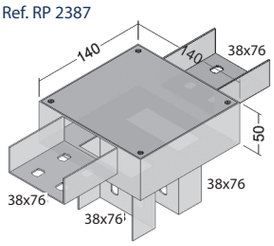
Cx derivação "C" 38x76 com saída inf. 38x38
"C" Junction box for double channel with one bottom outlet for 38x38 channel

Ref. RP 2394



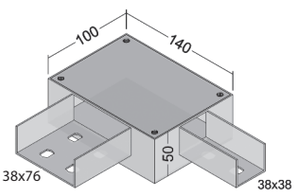
Cx derivação "C" 2 saídas inf. 38x76
"C" Junction box for double channel with two bottom outlets

Ref. RP 2387



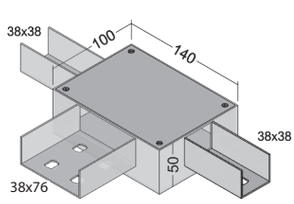
Cx derivação "L" direita 38 e 76
"L" Rigth junction box for 38 and 76 channel

Ref. RP 2389



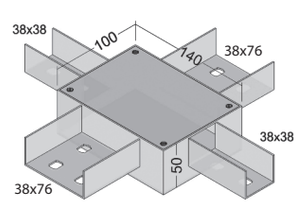
Cx derivação "T" 2x38x38 - 38x76
"T" Junction box for 2x38x38 and 1x38x76 channel

Ref. RP 2391

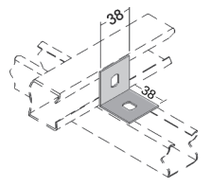


Cx derivação "X" 2x38x76 - 2x38x38
"X" Junction box for 2x38x76 and 2x38x38 channel

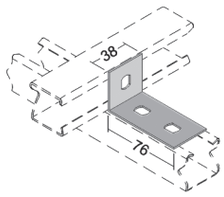
Ref. RP 2393



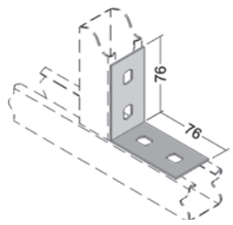
Cantoneira com 2 furos
Two holes angle connector
Ref. RP 2037



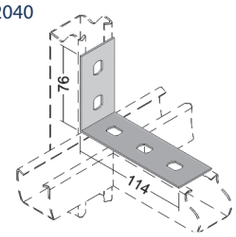
Cantoneira com 3 furos
Three holes angle connector
Ref. RP 2038



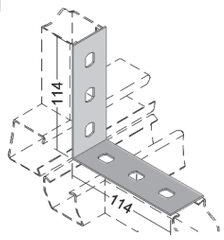
Cantoneira com 4 furos
Four holes angle connector
Ref. RP 2039



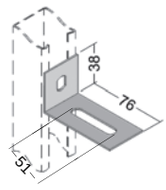
Cantoneira com 5 furos
Five holes angle connector
Ref. RP 2040



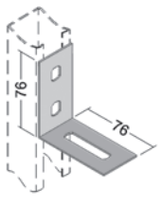
Cantoneira com 6 furos
Six holes angle connector
Ref. RP 2041



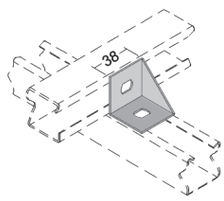
Cantoneira 1 furo e rasgo
One hole and slot angle connector
Ref. RP 2042



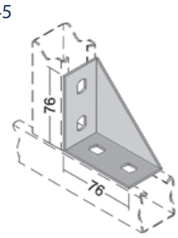
Cantoneira 2 furos e rasgo
Two holes and slot angle connector
Ref. RP 2043



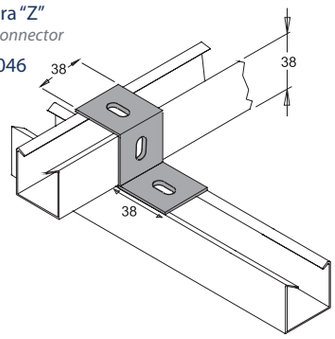
Cantoneira reforçada com 2 Furos
Two holes reinforced angle connector
Ref. RP 2044



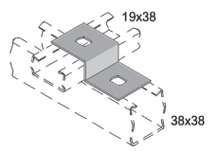
Cantoneira reforçada com 4 furos
Four holes reinforced angle connector
Ref. RP 2045



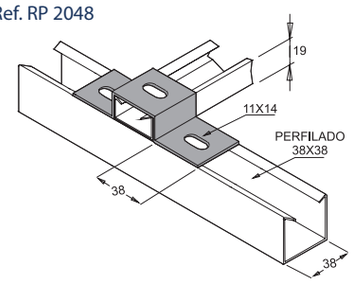
Cantoneira "Z"
"Z" angle connector
Ref. RP 2046



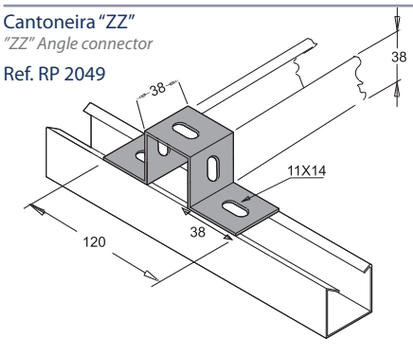
Cantoneira "Z" baixa
Low "Z" angle connector
Ref. RP 2047



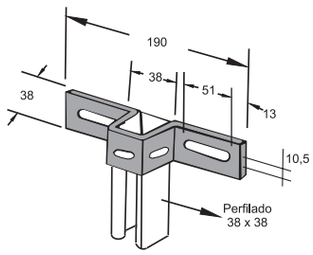
Cantoneira "ZZ" baixa
Low "ZZ" angle connector
Ref. RP 2048



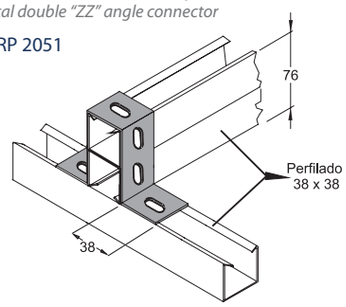
Cantoneira "ZZ"
"ZZ" Angle connector
Ref. RP 2049



Cantoneira "ZZ" com rasgo
"ZZ" angle connector with slot
Ref. RP 2050

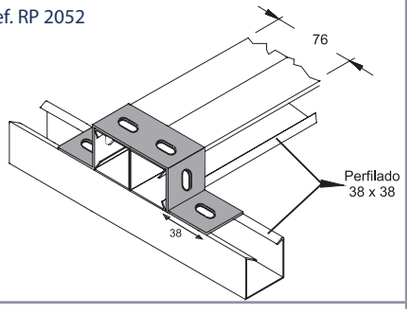


Cantoneira "ZZ" vertical dupla
Vertical double "ZZ" angle connector
Ref. RP 2051



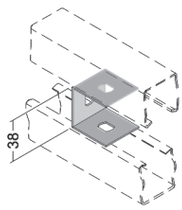
Cantoneira "ZZ" dupla horizontal
Horizontal double "ZZ" angle connector

Ref. RP 2052



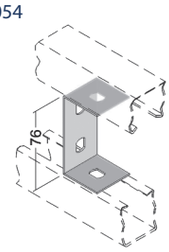
Distanciador "U" simples
Simple "U" distance piece

Ref. RP 2053



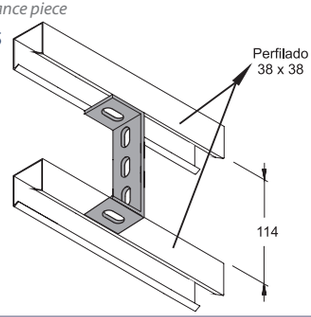
Distanciador duplo
Double "U" distance piece

Ref. RP 2054



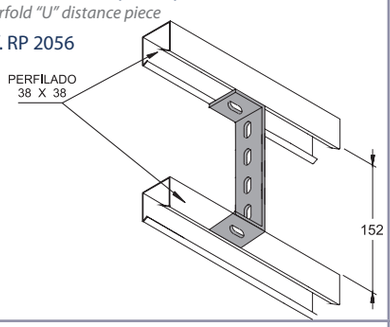
Distanciador "U" triplo
Triple "U" distance piece

Ref. RP 2055



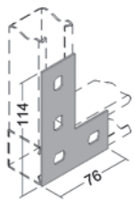
Distanciador "U" quádruplo
Fourfold "U" distance piece

Ref. RP 2056



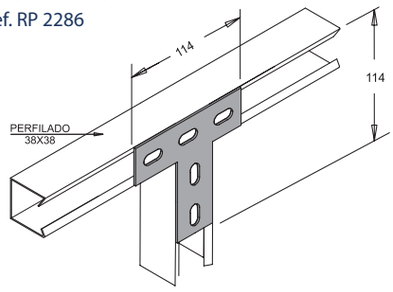
Junção "L" reta
Straight "L" plate junction

Ref. RP 2285



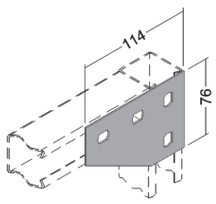
Junção "T" reta
Straight "T" plate junction

Ref. RP 2286



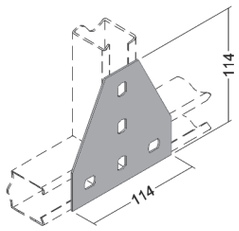
Junção plana "L" reforçada
"L" Plate reinforced junction

Ref. RP 2412



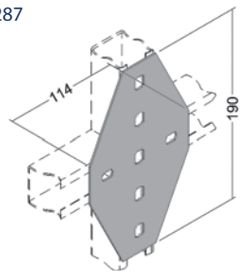
Junção plana "T" 5 furos
Five hole "T" plate junction

Ref. RP 2414



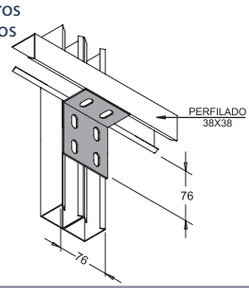
Junção plana "X" 7 furos
Seven hole "X" plate junction

Ref. RP 2287



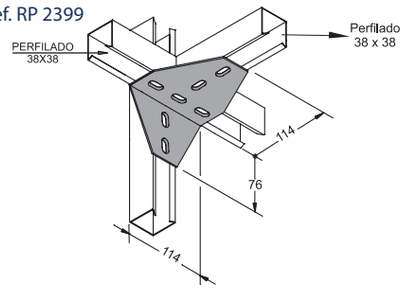
Cantoneira dupla com furos
Ten holes doubles angle connector

Ref. RP 2397 - 4 furos
Ref. RP 2398 - 6 furos



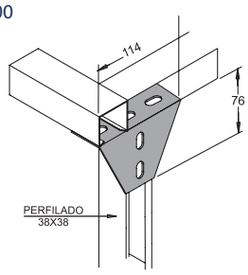
Cantoneira dupla "T"
Double "T" angle connector

Ref. RP 2399



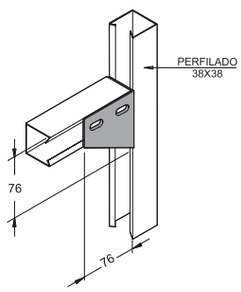
Cantoneira "T" com 5 furos
Five holes "T" angle connector

Ref. RP 2400



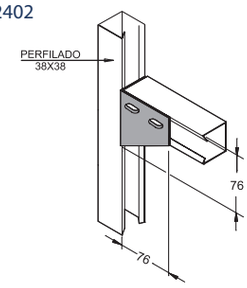
Cantoneira "LL"
"LL" angle connector

Ref. RP 2401



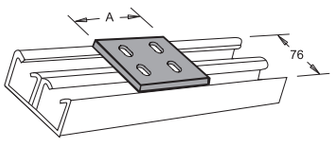
Cantoneira "LR"
"LR" angle connector

Ref. RP 2402



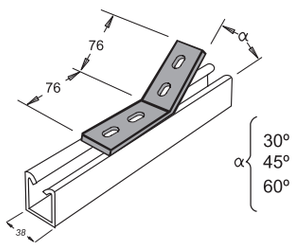
Tala dupla com furos
Eight holes double plate connector

Ref. RP 2406 - 4 furos *(holes)* - A= 76
Ref. RP 2407 - 6 furos *(holes)* - A= 114
Ref. RP 2408 - 8 furos *(holes)* - A= 152
Ref. RP 2409 - 10 furos *(holes)* - A= 190
Ref. RP 2410 - 12 furos *(holes)* - A= 228



Cantoneira angular
Angular angle connector

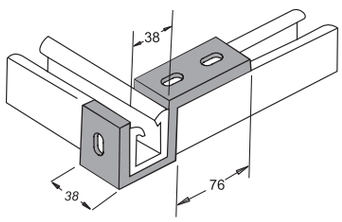
Ref. RP 2415



Especificar no pedido o ângulo α
In the order especify the angle α

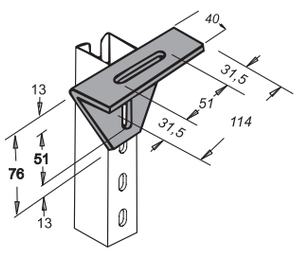
Cantoneira "ZU"
"ZU" angle connector

Ref. RP 2416



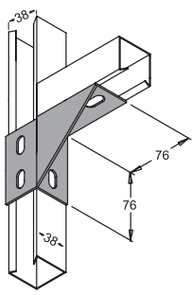
Cantoneira "T" com rasgos
"T" angle connector with slots

Ref. RP 2417



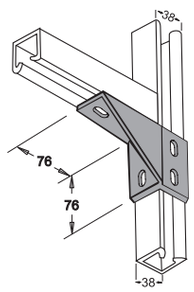
Cantoneira reforçada "LL" reversa
Reverse reinforced "LL" angle connector

Ref. RP 2418



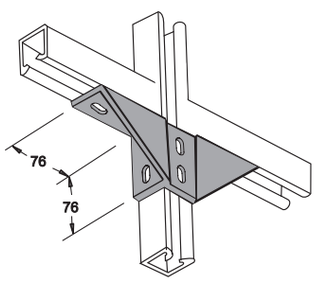
Cantoneira reforçada "LR" reversa
Reverse reinforced "LR" angle connector

Ref. RP 2419



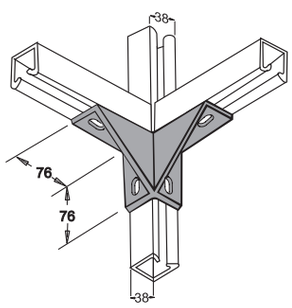
Cantoneira reforçada "T" reversa
Reverse reinforced "T" angle connector

Ref. RP 2420



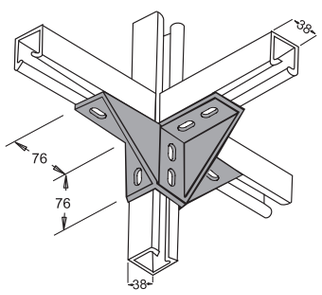
Cantoneira reforçada "C" reversa dupla
Reverse reinforced "C" angle connector

Ref. RP 2421



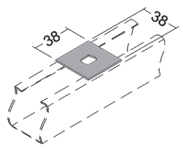
Cantoneira reforçada "T" reversa tripla
Reverse reinforced "T" angle connector

Ref. RP 2422



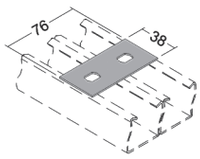
Tala com furo
One hole plate junction

Ref. RP 2010



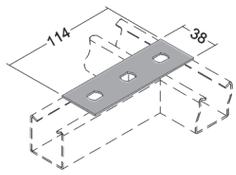
Tala com 2 furos
Two holes plate junction

Ref. RP 2011



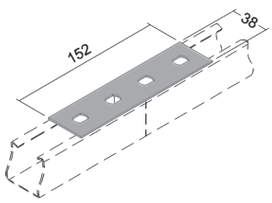
Tala com 3 furos
Three holes plate junction

Ref. RP 2012



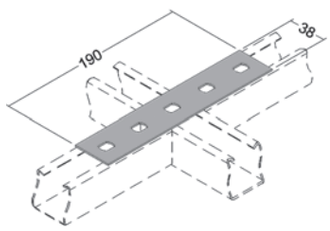
Tala com 4 furos
Four holes plate junction

Ref. RP 2013



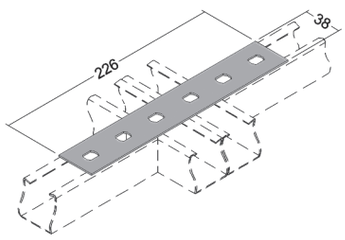
Tala com 5 furos
Five holes plate junction

Ref. RP 2014



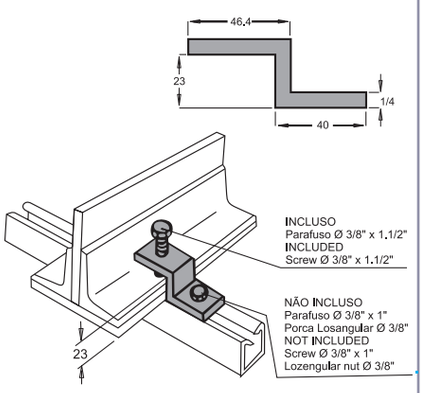
Tala com 6 furos
Six holes plate junction

Ref. RP 2015



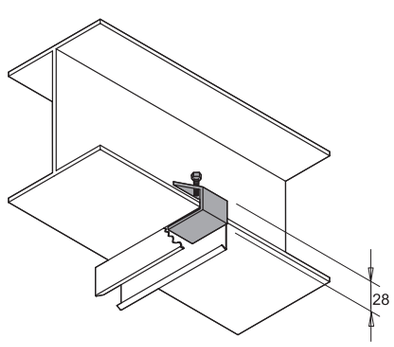
Tala compressora
Compressor fishplate

Ref. RP 2403



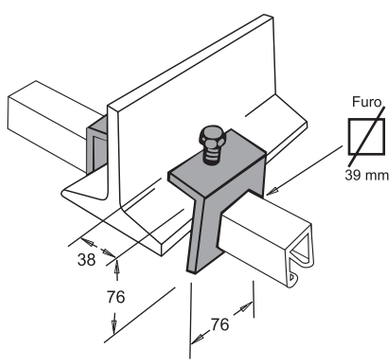
Fixador interno transversal
Internal transverse support

Ref. RP 2404



Fixador transversal
Transverse support

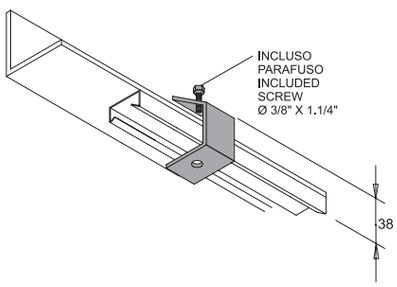
Ref. RP 2405



INCLUSO
Parafuso Ø 3⁄8" x 1.1/4
INCLUDED
Screw Ø 3/8" x 1.1/4"

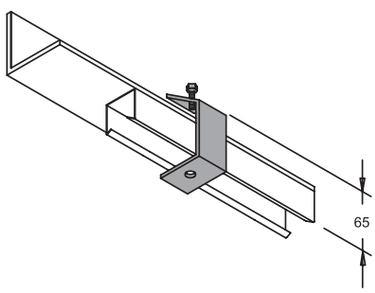
Fixador externo longitudinal p/ perfilado 19 x 38
External longitudinal support for 19 x 38 channel

Ref. RP 2411



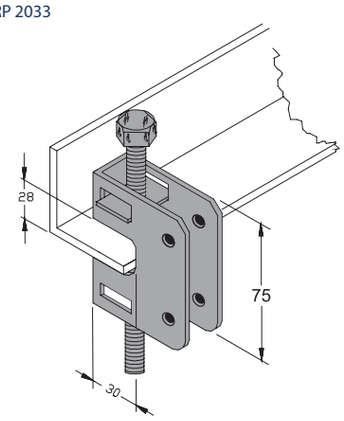
Fixador externo longitudinal p/ perfilado 38 x 38
External longitudinal support for 38 x 38 channel

Ref. RP 2413



Grampo "C"
Beam Clamp

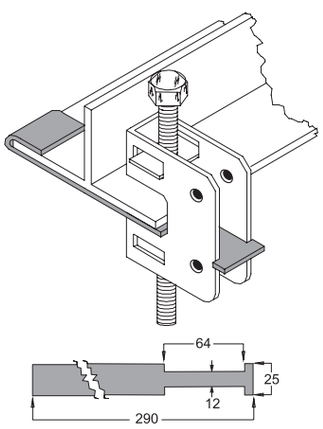
Ref. RP 2033



Inclusos: 01 parafuso ø 3/8" x 2 1/2"
01 porca quadrada ø 3/8"
Included: 01 screw ø 3/8" x 2 1/2"
01 square nut ø 3/8"

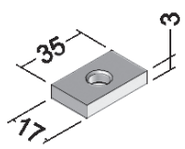
Presilha para grampo "C"
Anchor clip for "C" beam clamp

Ref. RP 2035



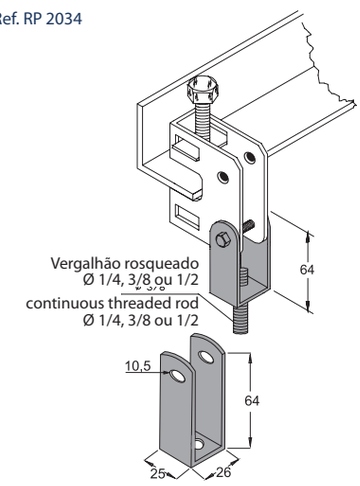
Porca retang. p/ grampo "C"
Retangular nut for beam clamp

Ref. RP 2367



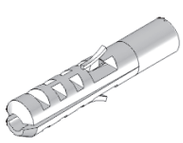
Balancim p/ grampo "C"
Swing connector for beam clamp

Ref. RP 2034



Bucha de nylon
Nylon inch anchor for concrete insert

Tipo RP S6, S8, S10, S12



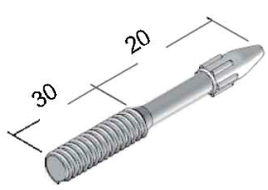
Ref.	Tipo	Comp.	Paraf.	Tração
Ref.	*Type*	*Length*	*bolt*	*Traction*
RP 2217	S6	30	4,2x30	65 Kg
RP 2218	S8	40	1/4"x45	90 Kg
RP 2219	S10	50	5/16"x50	170 Kg
RP 2220	S12	60	3/8"x60	220 Kg

Chumbador "CB" com rosca interna
CBA anchor bolt

Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2362	1/4"	35	12	10
RP 2364	3/8"	40	18	14
RP 2365	1/2"	50	20	18
RP 2363	5/16"			
RP 2366	5/8"			

Pino com rosca 1/4"
Threaded pin 1/4"

Ref. RP 2368

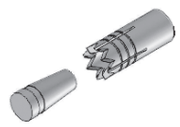


* Outras medidas sob consulta.

Acessórios para fixação e suportação

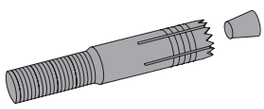
Accessories for fixing and support

Chumbador "UR" com rosca interna
"UR" Internal-thread anchor bolt



Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2354	1/4"	25	35	6,35
RP 2356	3/8"	30	45	9,5
RP 2357	1/2"	35	55	12,7
RP 2355	5/16"			
RP 2358	5/8"			

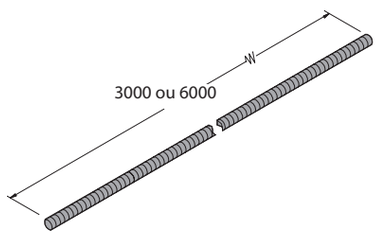
Chumbador rosca externa
External-thread anchor bolt



Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2426	5/16"	35	12	11
RP 2425	1/4"	40	18	14
RP 2359	3/8"	52	20	18
RP 2360	1/2"			
RP 2361	5/8"			

Suporte RT
Continuous threaded rod

Ref. RP 2075

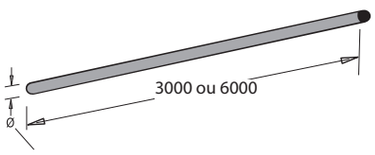


Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

Especificar junto à referência o ø e o comprimento "L"
In the reference, specify the ø and length "L"

Suporte LT
Plain rod

Ref. RP 2074

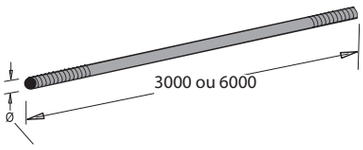


Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

Especificar junto à referência o ø e o comprimento "L"
In the reference, specify the ø and length "L"

Suporte com haste
Plain rod threaded at the end

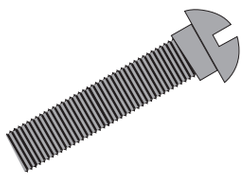
Ref. RP 2074



Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

Especificar junto à referência o ø e o comprimento "L"
In the reference, specify the ø and length "L"

Parafuso cabeça redonda
Round head mach screw



comp. *length*	Ø 3/16	Ø 1/4
1/4"	RP 2206	
3/8"	RP 2310	
1/2"	RP 2311	RP 2321
5/8"	RP 2312	RP 2322
3/4"	RP 2313	RP 2323
1"	RP 2314	RP 2325
1.1/4"	RP 2316	RP 2326
1.1/2"	RP 2317	RP 2327

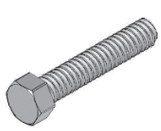
Parafuso cabeça lentilha
Lentil head bolt

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2340	1/4" x 1/2"
RP 2999	1/4" x 5/8"
RP 2215	1/4" x 3/4"
RP 2342	1/4" x 1"
RP 2344	5/16" x 1/2"
RP 2346	5/16" x 3/4"
RP 2350	3/8" x 1/2"
RP 2216	3/8" x 3/4"

Parafuso auto travante
Self lock bolt

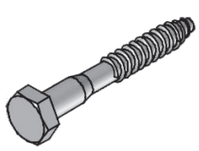
Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2341	1/4" x 1/2"
RP 2319	1/4" x 5/8"
RP 2315	1/4" x 3/4"
RP 2343	1/4" x 1"
RP 2345	5/16" x 1/2"
RP 2347	5/16" x 3/4"
RP 2351	3/8" x 1/2"
RP 2318	3/8" x 3/4"

Parafuso cabeça sextavada
hexagonal head bolt



Comp.	Ø1/4"	Ø5/16"	Ø3/8"	Ø1/2"
Length	*Ø1/4"*	*Ø5/16"*	*Ø3/8"*	*Ø1/2"*
1/2"	2200	2201	2202	2203
5/8"	2240			
3/4"	2242	2252	2262	2272
1"	2244	2254	2264	2274
1.1/4"	2245	2255	2265	2275
1.1/2"	2246	2256	2266	2276
2"	2248	2258	2268	2278
2.1/2"	2249	2259	2269	2279
3"	2250	2260	2270	2280

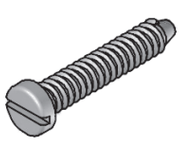
Parafuso cab. sextavada rosca soberba
hexagonal head screw with conical thread



Ref.	Ø x comp.	Bucha
Ref.	*Ø x length*	*bucha*
RP 2209	5/16" x 2"	S-10
RP 2210	3/8 x 2.1/2"	S-12

Parafuso cabeça redonda rosca soberba
Round head screw with conical thread

.



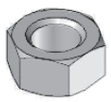
Ref.	Ø x comp.	Bucha
Ref.	*Ø x length*	*bucha*
RP 2211	4,2 x 30mm	S-6
RP 2212	4,8 x 45mm	S-8
RP 2213	6,1 x 50mm	S-10

Acessórios para fixação e suportação

Accessories for fixing and support

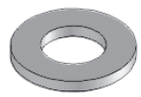
Porca sextavada
Hexagonal nut

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2222	3/16″
RP 2223	1/4″
RP 2335	5/16″
RP 2224	3/8″
RP 2225	1/2″



Arruela lisa
Plain washer

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2227	3/16″
RP 2228	1/4″
RP 2331	5/16″
RP 2229	3/8″
RP 2230	1/2″



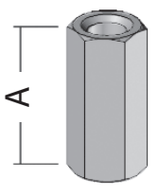
Arruela de pressão
Lock washer

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2232	3/16″
RP 2233	1/4″
RP 2336	5/16″
RP 2234	3/8″
RP 2235	1/2″

Prolongador para suspensão
Hanger rod extension

Ref. RP 2073 - A=25mm
Ref. RP 2283 - A=50mm

Ø	1/4″
Ø	5/16″
Ø	3/8″
Ø	1/2″ (somente RP 2283)

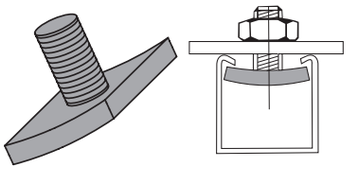


Obs: Comp. de 50mm sob consulta.
Note: Lenght of 50mm under request.

Porca losangular com pino
Lozengular stud nut

Ref. RP 2078

Ø	1/4″
Ø	5/16″
Ø	3/8″
Ø	1/2″

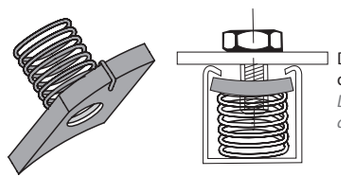


Demonstrativo de montagem
Diagram of assembly

Porca losangular com mola
Lozengular spring nut

Ref. RP 2077

Ø	1/4″
Ø	5/16″
Ø	3/8″
Ø	1/2″

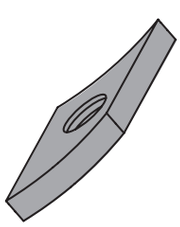


Demonstrativo de montagem
Diagram of assembly

Porca losangular com rosca
Lozengular nut without spring

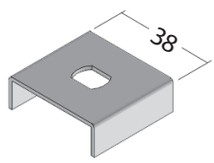
Ref. RP 2076

Ø	1/4″
Ø	5/16″
Ø	3/8″
Ø	1/2″



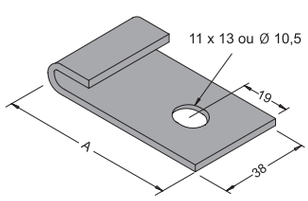
Adaptador de segurança com furo de 1/4 ou 3/8″
Saddle type washer

Ref. RP 2062



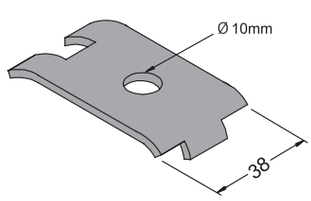
Grapa guia
Guide bearing

Ref. RP 2554 - A= 60 mm
Ref. RP 2599 - A= 85 mm



Grapa fixa
Beam clamps

Ref. RP 2068

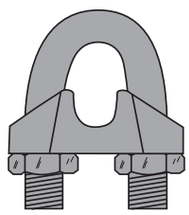


Acessórios para fixação e suportação

Accessories for fixing and support

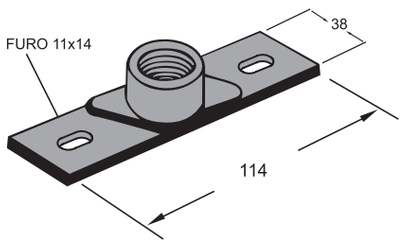
Grampo crosby p/ cabo de aço ø 1/8"
Crosby clamp for steel cable ø 1/8"

Ref. RP 2440



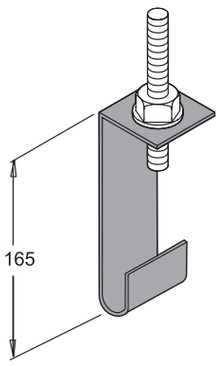
Saída com luva ø 1/2", 3/4" e 1"
Outlet with coupling pipe ø 1/2", 3/4" e 1"

Ref. RP 2067



Suporte "J " 1/2", 3/4" e 1"
Support "J " 1/2", 3/4" e 1"

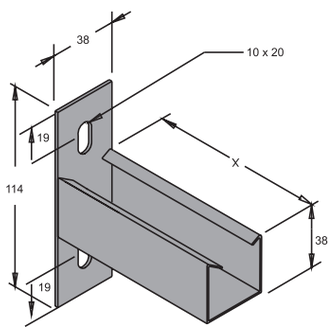
Ref. RP 2441



Mão francesa simples
Simple bracket

Ref.	X	P	F
RP 2069	100	120	0,6
RP 2069	200	80	0,8
RP 2069	300	58	0,9
RP 2069	400	44	1,6
RP 2069	500	35	2,5
RP 2069	600	29	3,6

F= Flexão (mm)
F=Deflection (mm)
P= Carga concentrada na ponta (kg)
P= Concentrated load on extreme (kg)
Carga total uniformemente distribuída = 2 x P
Total load uniformly distributed = 2 x P

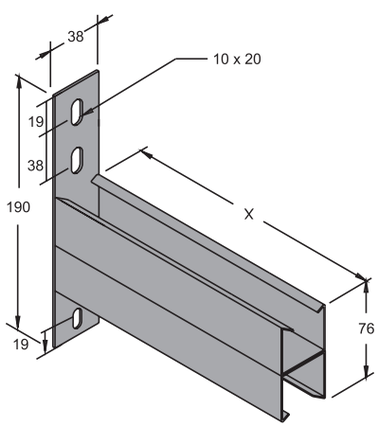


Medida "X" pode ser fornecida de 100 mm a 600 mm
The measure "X" could be supllied from 100 mm to 600 mm width

Mão francesa dupla
Double bracket

Ref.	X	P	F
RP 2070	300	255	0,5
RP 2070	400	169	0,9
RP 2070	500	135	1,5
RP 2070	600	112	2,2
RP 2070	650	104	2,6
RP 2070	700	95	3
RP 2070	800	84	3,9
RP 2070	900	75	4,9

F= Flexão (mm)
F= Deflection (mm)
P= Carga concentrada na ponta (kg)
P= Concentrated load on extreme (kg)
Carga total uniformemente distribuída = 2 x P
Total load uniformly distributed = 2 x P

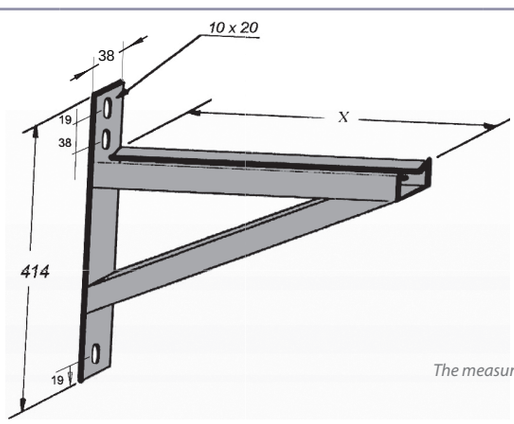


Medida "X" pode ser fornecida de 100 mm a 900mm
The measure "X" could be supllied from 100 mm to 900 mm width

Mão francesa reforçada
Reinforced bracket

Ref.	X	P	W
RP 2071	500	700	1400
RP 2071	600	600	1200
RP 2071	800	455	910
RP 2071	900	406	799
RP 2071	1150	318	654
RP 2071	1400	261	552
RP 2071	1650	221	478

P= Carga concentrada na ponta (kg)
P= Concentrated load on extreme (kg)
W= Carga total uniformemente distribuída = 2 x P
W= Total load uniformly distributed = 2 x P



Medida "X" pode ser fornecida de 100 a 1650 mm
The measure "X" could be supllied from 100 mm to 1650 mm width

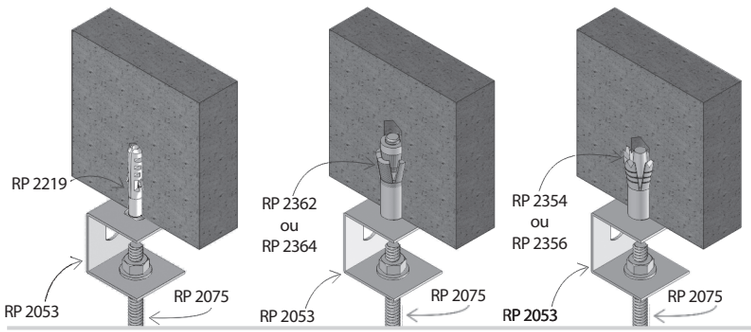
Sugestões para instalações de perfilado

Suggestions for fixing channels

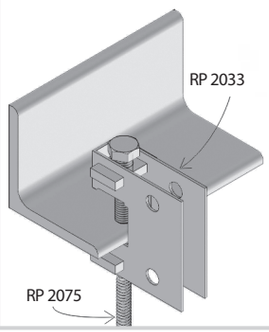
FIXAÇÕES SUPERIORES

UPPER ANCHORAGE

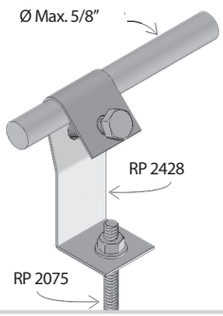
Simples
Simple



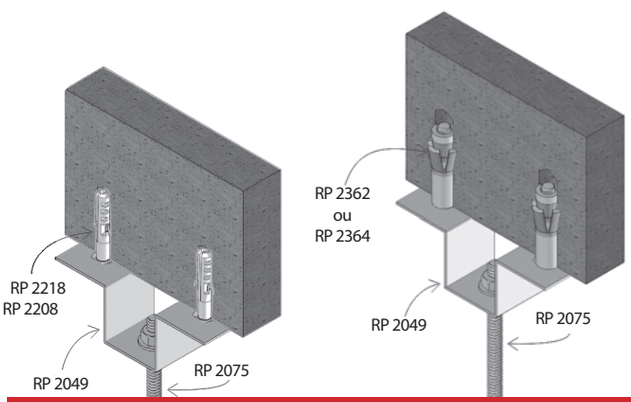
Grampo "C"
Beam clamp



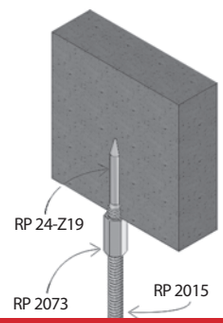
Cabo de aço ou vergalhão
Steel wire or continuous thereaded rod



Dupla
Double



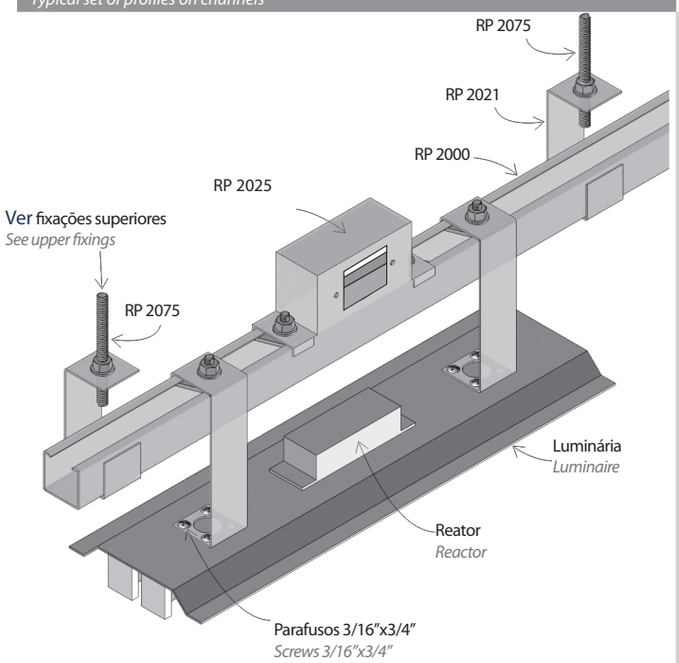
Pino com rosca
Threaded pin



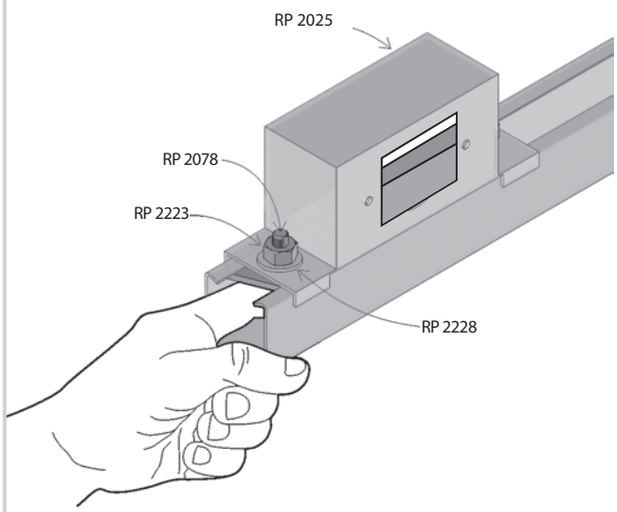
EXEMPLOS DE MONTAGEM

MOUNTING EXAMPLES

Montagem típica de luminárias em perfilados
Typical set of profiles on channels



Detalhe de instalação da caixa de tomadas em perfilados
Installation detail of outlet box in channels



Obs: Os perfilados 38x19 são usados como elemento estrutural (suportes) e não para passagem de fios e cabos, devido a pequena seção.

Note: The low channels 38x19 are used as a structural element (as support) and not for passage of wires and cables due to the small section.

Observações técnicas para perfilados

Technical notes for channels

Para fixação das juntas retas (RP 2017) e "L" (RP 2018), que unem trechos retos entre si, utilizar em cada uma 4(quatro) jogos de parafusos cabeça lentilha Ø3/8"x3/4" (RP 2216), porcas sextavadas Ø3/8" (RP 2224) e arruelas lisas Ø3/8" (RP 2229). Como alternativa podem ser utilizados parafusos com cabeça lentilha auto travante Ø5/16"x3/4" (RP 2347) com porcas e arruelas 5/16".
Em locais sujeitos a vibrações mecânicas, recomendamos usar arruelas de pressão Ø3/8" (RP 2234) ou 5/16" (RP 2336).
Para fixação das juntas internas "T" (RP 2019) e "X" (RP 2020) proceder conforme descrito acima, com a quantidade adequada de parafusos.

ATENÇÃO: Recomendamos instalar os parafusos com as cabeças voltadas para o interior dos perfilados para evitar danos aos fios e cabos durante o lançamento e ganhar espaço interno.

For placement of the straight (RP 2017) and "L" (RP 2018) joints, which connect straight sections between each other, use on each 4 (four) sets of lentil head bolt Ø3/8"x3/4" (RP 2216), hexagonal nut Ø3/8"(RP 2224) and plain washers Ø3/8" (RP 2229). Alternatively, it may be used self lock bolt Ø5/16"x3/4" (RP 2347) hexagonal nuts and washers 5/16".
In places subject to mechanical vibrations, we recommend the use of Ø3/8" (RP 2234) or 5/16" (RP 2336) pressure washers.
For placement of the "T" (RP 2019) and "X" (RP 2020) internal joints proceed as described above, with the appropriate number of screws.

ATTENTION: *We recommended to use of the screws with the heads turned to the channels' interior to avoid damages during the lauching of electrical cable and to increase internal space.*

ACABAMENTOS SUPERFICIAIS

Acrescentar sempre ao término das referências o tipo de acabamento superficial ou material desejado:

- **PZ** pré-galvanizado a quente - padrão CSN conf. NBR 7008
- **GF** pós-galvanizada conf. NBR 6323
- **AL** alumínio
- **AI** aço inox
- **PT** pintado
- **GE** galvanizada eletrolítica

ATENÇÃO: Especificações sem a indicação do tratamento superficial serão consideradas como materiais pré galvanizado a quente (PZ).

SUPERFICIAL FINISHING

Always add to reference ends the desired surface treatment or finishing type:

- **PZ** *pre galvanized steel according to NBR 7008*
- **GF** *hot dip galvanized according NBR 6323*
- **AL** *aluminum*
- **AI** *stainless steel*
- **PT** *painted*
- **GE** *eletrolitic galvanization*

ATTENTION: *Specifications without indication of surface treatment shall be considered as pre galvanized steel according to NBR 7008 (PZ).*

ESPECIFICAÇÕES

PERFILADOS: Indicar sempre as dimensões (38x38 ou 38x19 mm), se perfurado ou liso, o acabamento superficial e o comprimento das peças (3000 ou 6000 mm).

EXEMPLO: RP 2002/18/GF, perfilado liso 38x38 mm #18 com dois furos nas pontas, galvanizado a fogo, conforme NBR 6323, em peças de 6000 mm.

ATENÇÃO: Na falta de informações nas especificações dos perfilados, consideraremos como 38x38 mm, perfurada, pré-galvanizado a quente - padrão CSN conf. NBR 7008 em peças de 6000 mm.

ACESSÓRIOS: Indicar as referências e o tipo de acabamento superficial desejados.

EXEMPLO: RP 2017-GF, junta interna reta para perfilado 38x38 pós-galvanizado conf. NBR 6323.

ATENÇÃO: RECOMENDAMOS ATERRAR TODO SISTEMA DE PERFILADOS.

SPECIFICATIONS

CHANNELS: *Always indicate the dimensions (38x38 or 38x19 mm), if perforated or smooth, surface finish and length of pieces (3000 or 6000 mm).*

EXAMPLE: *RP 2002/18/GF, 38x38mm smooth channel, with two holes at the ends, hot dip galvanized according to NBR 6323, in pieces of 6000 mm.*

ATTENTION: *In the absence of information on channel specifications, we will consider as 38x38 mm, perforated, pre galvanized steel according to NBR 7008 in pieces of 6000 mm.*

ACCESSORIES: *Please indicate after references the desired finishing or surface treatment.*

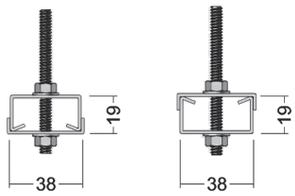
EXAMPLE: *RP 2017-GF, straight internal joint for 38x38 channel hot dip galvanized acording NBR 6323.*

ATTENTION: WE RECOMMEND TO GROUND ANY CHANNEL SYSTEMS.

Tabelas de cargas: perfilados 38x19 / 38x38 mm

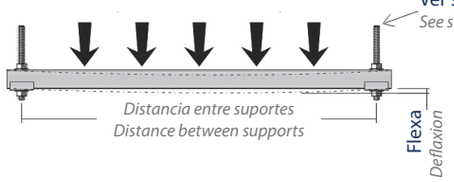
Load tables: channels 38x19 / 38x38 mm

Perfilado 38x19 (largura 38 x aba 19)
Channel 38x19 (width 38 x beam 19)



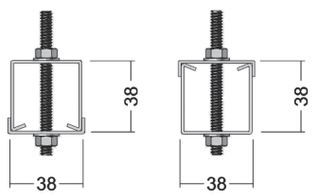
Carga uniformemente distribuida (fios ou cabos elétricos)
Load uniformly distributed (wires or eletrical cables)

Ver sugestões para instalação (pág. 20)
See suggestions of instalations (page 20)



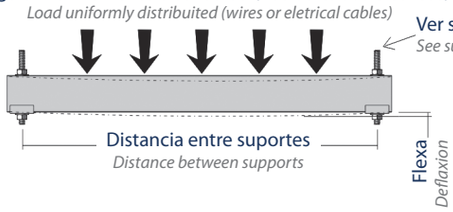
chapa / *plate*	distância entre suportes (mm) / cargas (Kg) *distance between supports (mm) / loads (Kg)*									
	200 mm	300 mm	400 mm	500 mm	600 mm	800 mm	900 mm	1000 mm	1200 mm	1500 mm
#20	175	158	145	125	107	85				
#18	212	187	170	148	132	110	89	69		
#16	241	206	181	168	151	132	108	81	62	45
#14	295	232	198	184	176	152	123	93	74	62
flexa relação 1/300 *relation of deflexion 1/300*	**0,7 mm**	**1 mm**	**1,3 mm**	**1,7 mm**	**2,0 mm**	**2,7 mm**	**3,0 mm**	**3,5 mm**	**4,0 mm**	**5,0 mm**

Perfilado 38x38 (largura 38 x aba 38)
Channel 38x38 (width 38 x beam 38)



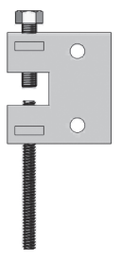
Carga uniformemente distribuida (fios ou cabos elétricos)
Load uniformly distributed (wires or eletrical cables)

Ver sugestões para instalação (pág. 20)
See suggestions of instalations (page 20)



chapa / *plate*	distância entre suportes (mm) / cargas (Kg) *distance between supports (mm) / loads (Kg)*				
	1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
#20	78	45	38	25	15
#18	87	60	54	42	25
#16	98	72	64	52	31
#14	108	87	75	63	40
flexa relação 1/300 *relation of deflexion 1/300*	**3.5 mm**	**5 mm**	**6.5 mm**	**8.5 mm**	**10 mm**

Grampo "C" com suportação através da porca retangular
Beam clamp using rectangular nut



Caso 1: Utilizando-se porca retangular de 1/4
Case 1: Using retangular nut ø 1/4

RP 2033

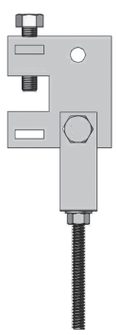
Carga concentrada=80 kg
Concentrated load=80 kg

Caso 2: Utilizando-se porca retangular de 3/8
Case 2: Using retangular nut ø 3/8

RP 2033

Carga concentrada=120 kg
Concentrated load=120 kg

Grampo "C" com balancim
Beam clamp with swing connector



Utilizando-se balancim
Using swing connector

RP 2033 + RP 2034

Carga concentrada=150 kg
Concentrated load=150 kg

Nota: Poderá ser fabricado com garra mediante solicitação.
Note: Can be manufectured with claw under request.

Abraçadeiras metálicas

Metallic clamps

Braçadeira "U" Perfil
U pipe clamp

Ref.	Ø
RP 2079	3/8"
RP 2080	1/2"
RP 2081	3/4"
RP 2082	1"
RP 2083	1.1/4"
RP 2084	1.1/2"
RP 2085	2"
RP 2086	2.1/2"
RP 2087	3"
RP 2088	3.1/2"
RP 2089	4"
RP 2289	6"

Parafusos e porcas inclusos
Screws and nuts included

Braçadeira "U" perfil com cunha
"U" Clamp with clamping wedge

Ref.	Ø
RP 2480	1/2"
RP 2481	3/4"
RP 2482	1"
RP 2483	1.1/4"
RP 2484	1.1/2"
RP 2485	2"
RP 2486	2.1/2"
RP 2487	3"
RP 2488	3.1/2"
RP 2489	4"

Abraçadeira "D" com parafuso
"D" Pipe clamp with fixing bolts

Ref.	Ø
RP 2091	1/2"
RP 2092	3/4"
RP 2093	1"
RP 2094	1.1/4"
RP 2095	1.1/2"
RP 2096	2"
RP 2097	2.1/2"
RP 2098	3"
RP 2373	3.1/2"
RP 2375	4"

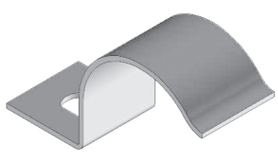
Parafusos e porcas inclusos
Screws and nuts included

Abraçadeira "D" com cunha
"D" Clamp with clamping wedge

Ref.	Ø
RP 2290	3/8"
RP 2291	1/2"
RP 2292	3/4"
RP 2293	1"
RP 2294	1.1/4"
RP 2295	1.1/2"
RP 2296	2"
RP 2297	2.1/2"
RP 2298	3"
RP 2374	3.1/2"
RP 2376	4"

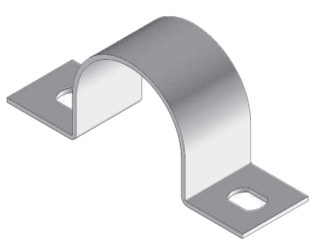
Unha
Snap type strap

Ref.	Ø nom.	Ø A	Ø B
RP 2189	3/8"	17,5	3/8"
RP 2190	1/2"	22	3/8"
RP 2191	3/4"	27,5	3/8"
RP 2192	1"	34	3/8"
RP 2193	1.1/4"	43	3/8"
RP 2194	1.1/2"	49	3/8"
RP 2195	2."	61	3/8"
RP 2196	2.1/2"	74	3/8"
RP 2197	3"	90	3/8"
RP 2198	3.1/2"	102	3/8"
RP 2199	4"	114	3/8"



Ômega
Omega type strap

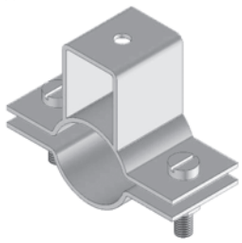
Ref.	p/ tubo Ø
Ref.	*for tube Ø*
RP 2099	3/8"
RP 2100	1/2"
RP 2101	3/4"
RP 2102	1"
RP 2103	1.1/4"
RP 2104	1.1/2"
RP 2105	2"
RP 2106	2.1/4"
RP 2107	3"
RP 2108	3.1/2"
RP 2109	4"
RP 2110	5"
RP 2111	6"
RP 2112	8"
RP 2113	10"



Abraçadeiras metálicas

Metallic clamps

União horizontal
Adjustable hanger horizontal type



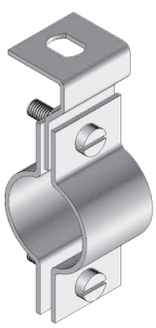
Ref.	Diametro nominal		Ø	B	C	Carga máx.
	Nom. diameter					
Ref.	pol.	mm	mm	mm	mm	Max. load
RP 2127	1/2"	21,3	23,8	25	3/8"	150 Kg
RP 2128	3/4"	26,7	28,6	25	3/8"	150 Kg
RP 2129	1"	33,5	34,9	25	3/8"	150 Kg
RP 2130	1.1/4"	42,3	43,7	25	3/8"	250 Kg
RP 2131	1.1/2"	48,3	50,8	25	3/8"	250 Kg
RP 2132	2"	60,3	61,9	45	3/8"	250 Kg
RP 2133	2.1/2"	75,5	75	45	3/8"	350 Kg
RP 2134	3"	88,3	90,5	45	3/8"	350 Kg
RP 2135	3.1/2"	101,6	104,9	50	3/8"	450 Kg
RP 2136	4"	114,3	116,7	50	3/8"	450 Kg
RP 2137	5"	141,3	142,9	55	3/8"	550 Kg
RP 2138	6"	168,3	171,5	55	3/8"	550 Kg
RP 2139	8"	219,1	222,3	60	3/8"	750 Kg
RP 2140	10"	273	276,2	60	3/8"	900 Kg
RP 2141	12"	324	327	75	3/8"	1100 Kg

Grampo "U"
"U" bolt support

Ref.	Diametro nom.		Ø	B	C	D	Carga máx.
	Nom. diameter						
Ref.	pol.	mm	mm	mm	mm	mm	Max. load
RP 2173	3/8"	16,9	19,1	33,3	58,7	1/4"	280 Kg
RP 2174	1/2"	21,3	23,8	44,5	69,9	5/16"	600 Kg
RP 2175	3/4"	26,7	28,6	44,5	77,8	5/16"	601 Kg
RP 2176	1"	33,5	34,9	47,6	84,1	5/16"	602 Kg
RP 2177	1.1/4"	42,3	43,7	44,5	88,9	5/16"	603 Kg
RP 2178	1.1/2	48,3	50,8	44,5	95,3	5/16"	604 Kg
RP 2179	2"	60,3	61,9	52,4	119,1	3/8"	900 Kg
RP 2180	2.1/2"	75,5	77	52,4	130,2	3/8"	901 Kg
RP 2181	3"	88,3	90,5	50,8	144,5	3/8"	902 Kg
RP 2182	3.1/2"	101,6	104,9	50,8	157,2	3/8"	903 Kg
RP 2183	4"	114,3	116,7	57,2	176,2	3/8"	904 Kg
RP 2184	5"	141,3	142,9	76,2	215,9	1/2"	1600 Kg
RP 2185	6"	168,3	171,5	95,3	257,2	1/2"	1601 Kg
RP 2186	8"	219,1	222,3	69,8	308	1/2"	1602 Kg
RP 2187	10"	273	276,2	76,2	371,5	1/2"	2500 Kg
RP 2188	12"	324	327	95,3	400,1	1/2"	3500 Kg

Acompanha duas porcas e duas arruelas de pressão
Supplied with two sets of nuts and lock washers.

União vertical
Adjustable hanger vertical type

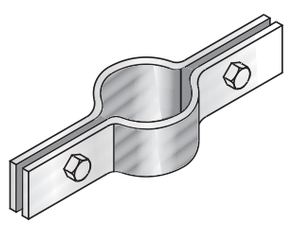


Ref.	Diametro nom.		Ø	B	C	Carga máx.
	Nom. diameter					
Ref.	pol.	mm	mm	mm	mm	Max. load
RP 2142	1/2"	21,3	22	38	3/8"	150 Kg
RP 2143	3/4"	26,7	27	38	3/8"	150 Kg
RP 2144	1"	33,5	34	38	3/8"	150 Kg
RP 2145	1.1/4"	42,3	43	38	3/8"	250 Kg
RP 2146	1.1/2"	48,3	49	38	3/8"	250 Kg
RP 2147	2"	60,3	61	38	3/8"	250 Kg
RP 2148	2.1/2"	75,5	77	38	3/8"	350 Kg
RP 2149	3"	88,3	89	38	3/8"	350 Kg
RP 2150	3.1/2"	101,6	102	50	3/8"	450 Kg
RP 2151	4"	114,3	115	50	3/8"	450 Kg
RP 2152	5"	141,3	142	50	3/8"	550 Kg
RP 2153	6"	168,3	170	50	3/8"	550 Kg
RP 2154	8"	219,1	222	70	3/8"	750 Kg
RP 2155	10"	273	276	70	3/8"	900 Kg
RP 2156	12"	324	327	70	3/8"	1100 Kg

Econômica
Band hanger - economic type

Ref.	Diametro nom.		Ø	C	Carga máx.
	Nom. diameter				
Ref.	pol.	mm	mm	mm	Max. load
RP 2114	1/2"	21,3	22	3/8"	250 Kg
RP 2115	3/4"	26,7	27	3/8"	250 Kg
RP 2116	1"	33,5	34	3/8"	250 Kg
RP 2117	1.1/4"	42,3	43	3/8"	250 Kg
RP 2118	1.1/2"	48,3	49	3/8"	250 Kg
RP 2119	2"	60,3	61	3/8"	250 Kg
RP 2120	2.1/2"	75,5	77	3/8"	250 Kg
RP 2121	3"	88,3	89	3/8"	420 Kg
RP 2122	3.1/2"	101,6	102	3/8"	420 Kg
RP 2123	4"	114,3	115	3/8"	420 Kg
RP 2124	5"	141,3	142	3/8"	420 Kg
RP 2125	6"	168,3	170	3/8"	540 Kg
RP 2126	8"	219,1	222	3/8"	780 Kg

Braçadeira vertical
Vertical riser support



Ref.	Ø nom.	Ø
RP 2157	1/2"	22
RP 2158	3/4"	27
RP 2159	1"	34
RP 2160	1.1/4"	43
RP 2161	1.1/2"	49
RP 2162	2"	61
RP 2163	2.1/2"	77
RP 2164	3"	89
RP 2165	3.1/2"	102
RP 2166	4"	115
RP 2167	5"	143
RP 2168	6"	172
RP 2169	8"	223
RP 2170	10"	277
RP 2171	12"	328

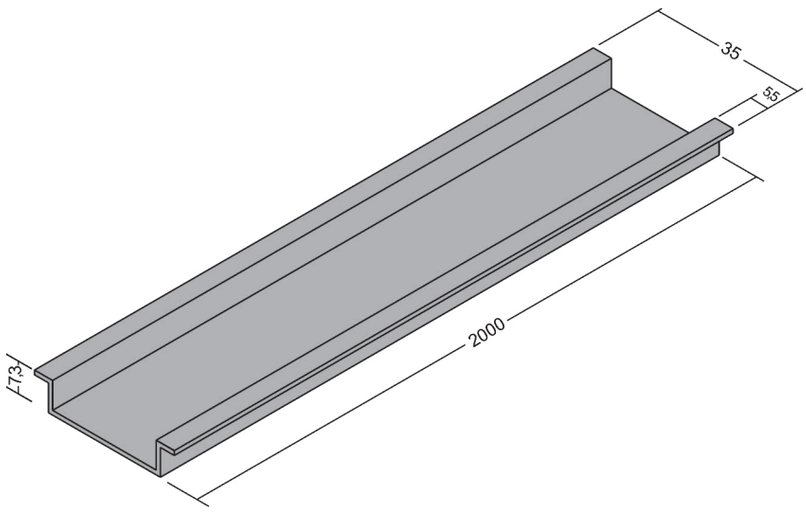
Trilhos para Borne e disjuntores

Borne trails and circuit breakers

Trilho para borne e disjuntores - TS35

Borne trails and circuit breakers - TS35

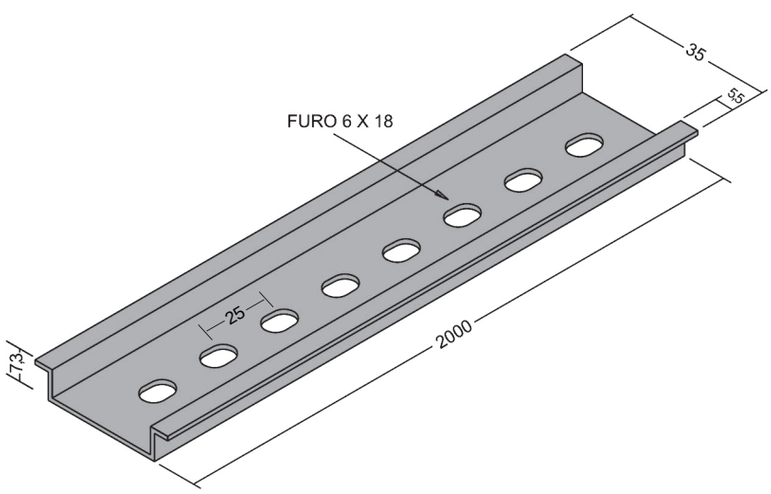
Ref. RP 2332

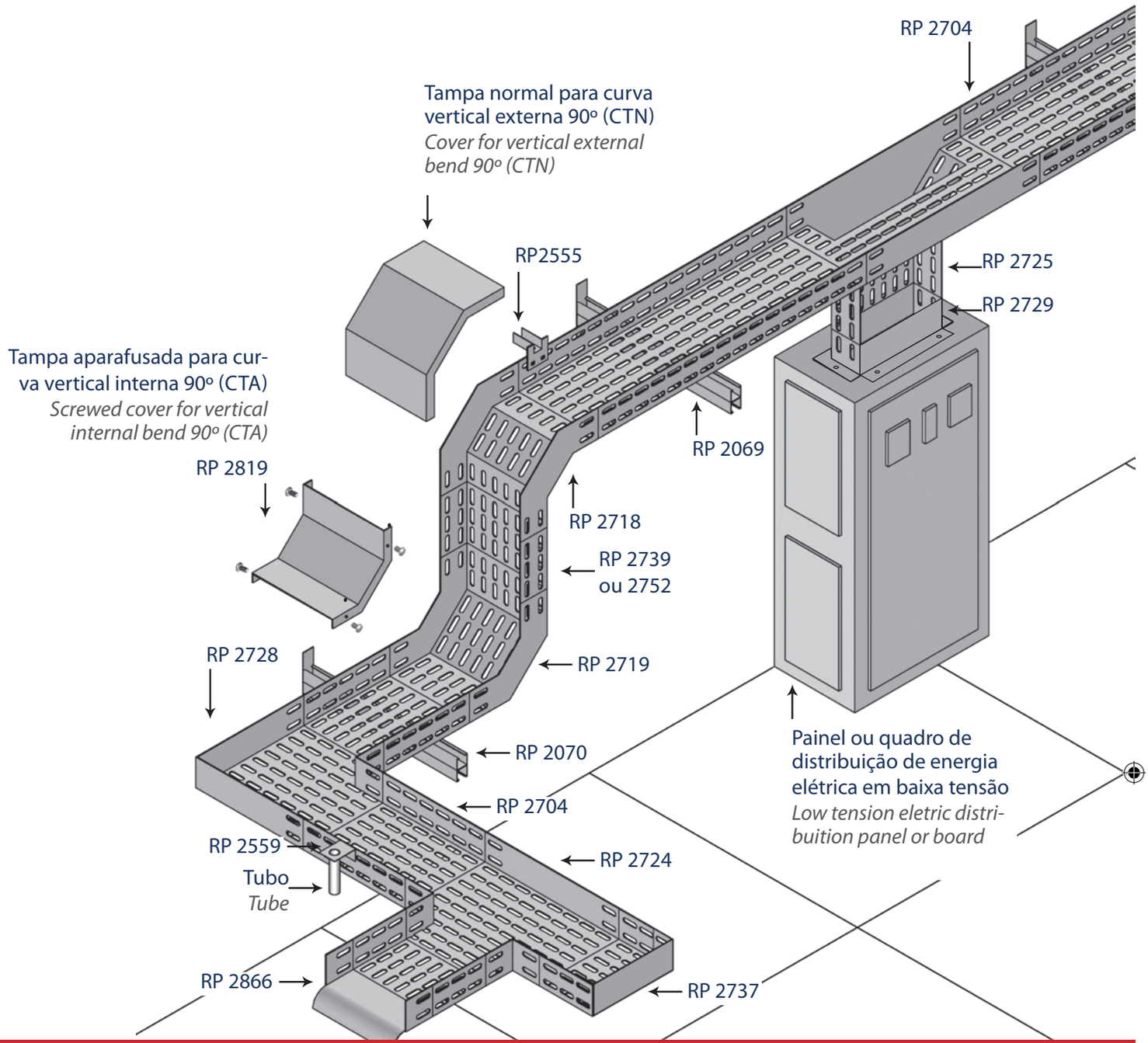


Trilho perfurado para borne e disjuntores - TS35F

Borne trails and circuit breakers - TS35F

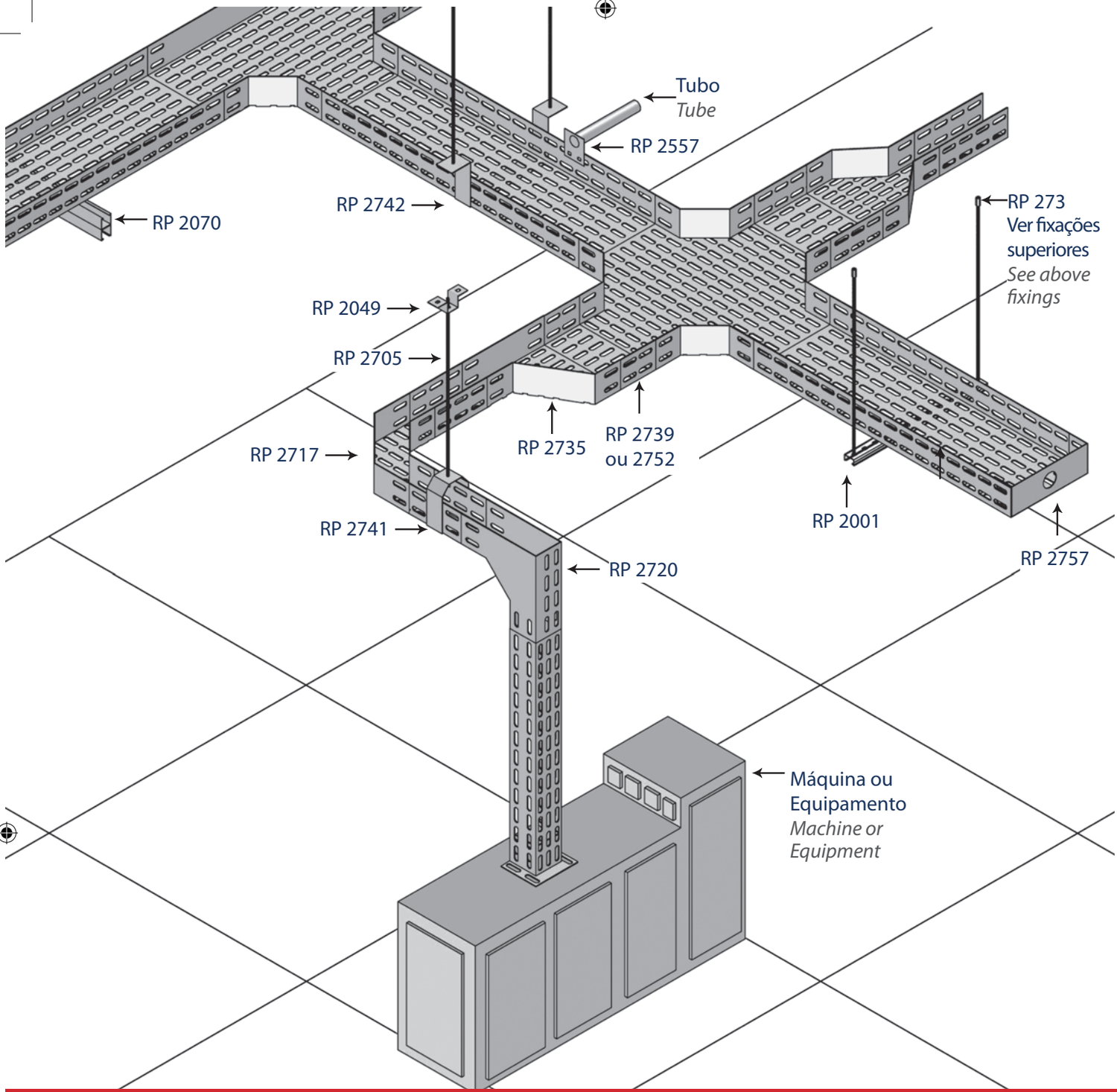
Ref. RP 2352





Eletrocalhas

Apresentamos o sistema de ELETROCALHAS como uma variante para a condução de fios e cabos. Material com total diversificação tanto dimensional quanto funcional, as eletrocalhas podem ser lisas (sem perfuração), com ventilação total (perfuradas totais) ou parcial (perfuradas só na base ou só nas laterais).
Opcionalmente, podem ser fornecidas com tampa de encaixe, de pressão ou de encaixe aparafusada. As derivações e curvas, fabricadas de acordo com o padrão da eletrocalha solicitada, permitem com facilidade a execução de todos os desvios necessários na montagem.



Cable trays channel type

We present the Cable trays channel type system as a variant for the conduction of wires and cables. This material has total variation in sizes and working. It may be with solid bases (without perforations), with total ventilation (totally perforated) or partial ventilation (perforated only at bases or at its side). Optionaly, they may be provided with inserting, pressure or screwed cover. The derivations and bends are made according to the standard of Cable trays channel type asked in order to facilitate the execution of all necessary derivations of assembly.

Eletrocalhas

Cable trays channel type

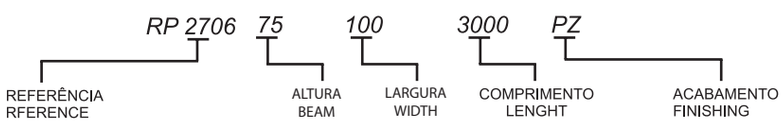
altura (B)	largura (A)															
	width (A)															
beam (B)	50	75	100	125	150	200	250	300	350	400	450	500	550	600	700	800
25	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
50	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
75		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
100			●	●	●	●	●	●	●	●	●	●	●	●	●	●
125				●	●	●	●	●	●	●	●	●	●	●	●	
150					●	●	●	●	●	●	●	●	●	●	●	
200						●	●	●	●	●	●	●	●	●		
250							●	●	●	●	●	●				
300								●	●	●						

● Dimensões recomendadas */ Recommended dimensions*

Comprimento Máximo : 3.000 mm */ Maximum Lenght: 3.000 mm*

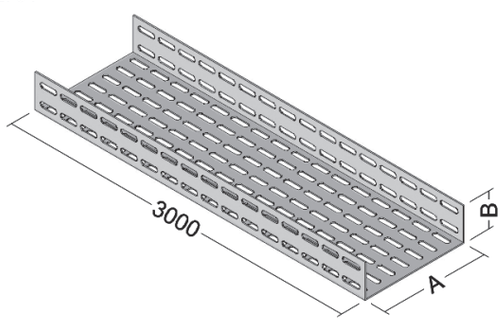
Acabamento					
Finishing					
GE	**GF**	**PZ**	**PT**	**AI**	**AL**
Galvanização eletrolítica *Eletrolytic galvanizing*	Galvanização a fogo *Hot dipped galvanizing*	Pré zincada *Pre galvanized*	Pintada *Painted*	Aço inox *Stainless steel*	Alumínio *Aluminum*

COMO SOLICITAR
HOW TO REQUEST



Calha perfurada s/ virolas
Cable tray perforated "U" channel type

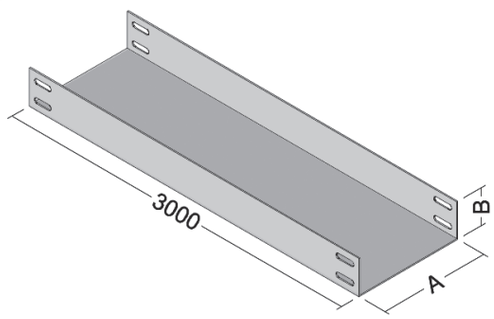
Ref. RP 2704



Obs: Indicar sempre a largura (A) e aba (B).
Note: Please inform the measures (A) and (B).

Calha lisa s/ virolas
Cable tray single "U" channel type

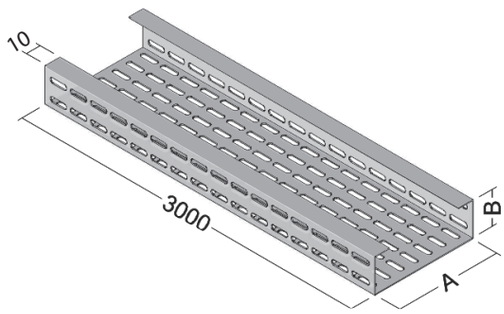
Ref. RP 2700



Obs: Indicar sempre a largura (A) e aba (B).
Note: Please inform the measures (A) and (B).

Calha perfurada c/ virolas
Cable tray perforated "C" channel type

Ref. RP 2710

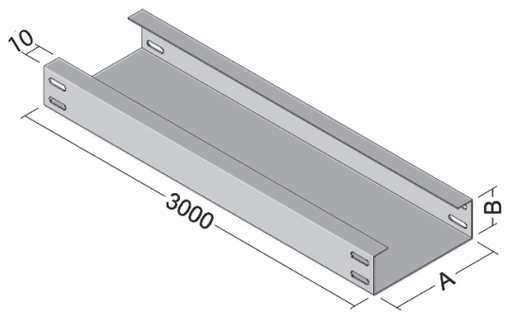


Nota: Poderá ser fabricado com virolas de 25mm mediante solicitação.
Note: Can be manufactured with 25mm under request.

Obs: Indicar sempre a largura (A) e aba (B).
Note: Please inform the measures (A) and (B).

Calha lisa c/ virolas
Cable tray single "C" channel type

Ref. RP 2706

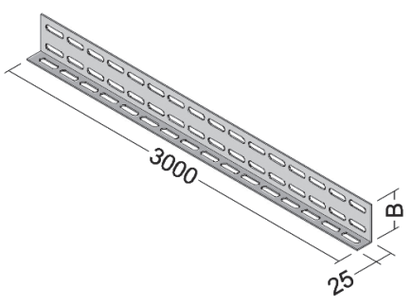


Nota: Poderá ser fabricado com virolas de 25mm mediante solicitação.
Note: Can be manufactured with 25mm under request.

Obs: Indicar sempre a largura (A) e aba (B).
Note: Please inform the measures (A) and (B).

Divisor perfurado
Cable tray perforated channel divider

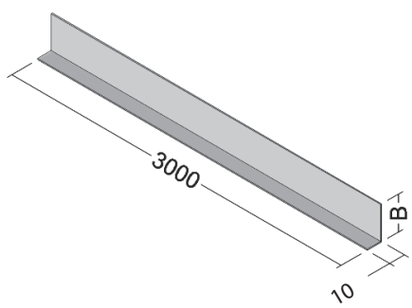
Ref. RP 2764



Obs: Indicar sempre a aba (B).
Note: Please inform the measure (B).

Divisor liso
Cable tray single channel divider

Ref. RP 2765

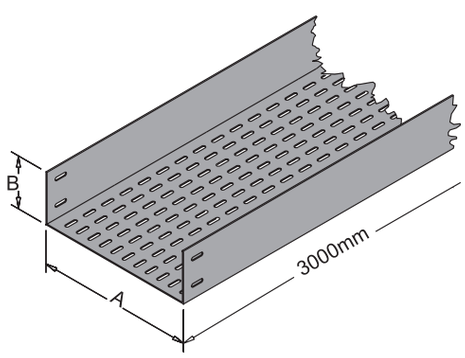


Obs: Indicar sempre a aba (B).
Note: Please inform the measure (B).

Eletrocalha perfurada na base
Cable tray channel type perforated in base

Ref. RP 2708
com virola
"C" channel type

Ref. RP 2702
sem virola
"U" channel type



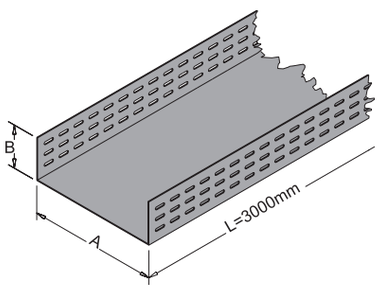
Eletrocalhas e acessórios

Cable trays channel type and accessories

Eletrocalha perfurada na lateral
Cable tray channel type perforated in lateral

Ref. RP 2709
com virola
"C" channel type

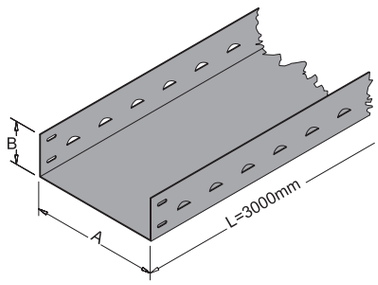
Ref. RP 2703
sem virola
"U" channel type



Eletrocalha com ventilação
Cable tray channel type with ventilation

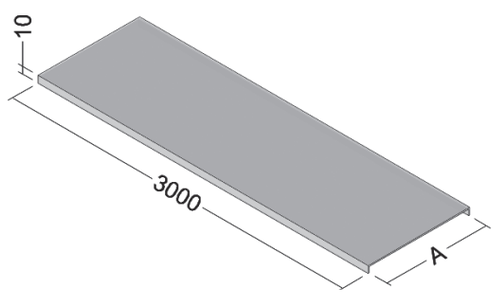
Ref. RP 2707
com virola
"C" channel type

Ref. RP 2701
sem virola
"U" channel type



Tampa de encaixe
Insert cover for channel type

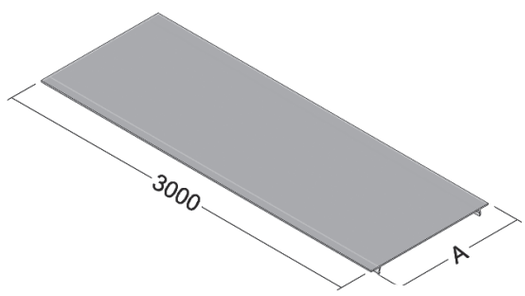
Ref. RP 2705 - encaixe */ insert*
Ref. RP 2715 - encaixe aparafusado */ screwed type*



Obs: Indicar sempre a largura (A).
Note: Please inform the measure (A).

Tampa de pressão
Pressure cover

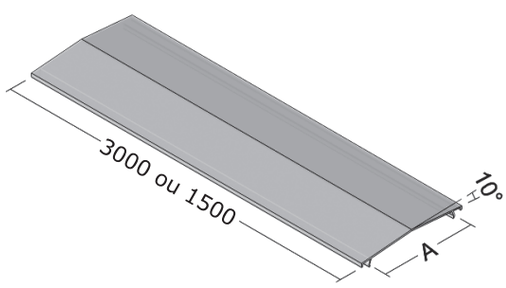
Ref. RP 2716



Obs: Aplicável só em eletrocalhas com virolas.
Note: Aplicable only in cable tray "C" channel type

Tipo duas águas
Angular cover

Ref. RP 2747 - pressão */ pressure*
Ref. RP 2747 E - encaixe */ insert*

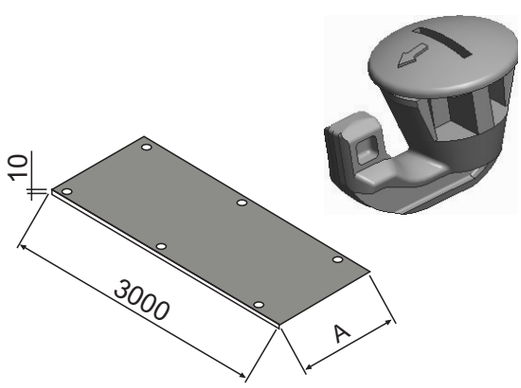


Obs: Largura < 600 mm - peças de 3000 mm
Largura ≥ 600 mm - peças de 1500 mm

Obs: Indicar sempre a largura (A).
Note: Please inform the measure (A).

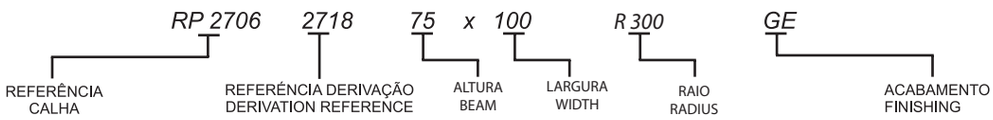
Tampa plana com fecho rápido
cover with quick closing

Ref. RP 2714

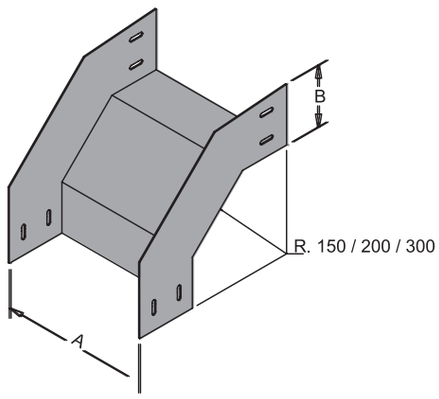


Obs: Indicar sempre a largura (A).
Note: Please inform the measure (A).

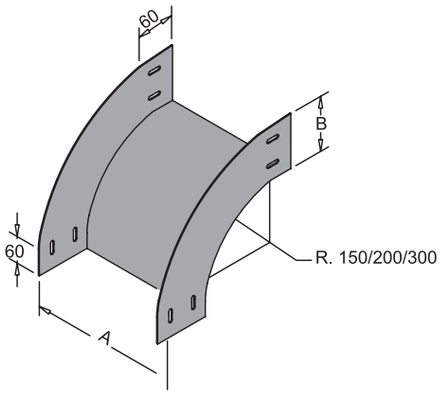
COMO SOLICITAR
HOW TO REQUEST



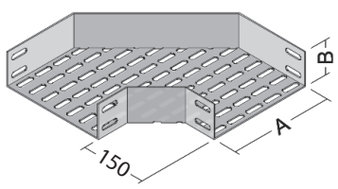
RAIO SEGMENTADO (fornecimento normal)
RADIUS SEGMENTED TYPE (standard supply)



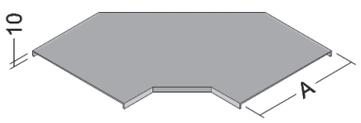
RAIO CURVILÍNEO (fornecimento opcional - mencionar no pedido)
RADIUS CONTINUOUS TYPE (special supply - please, mentioned on order)



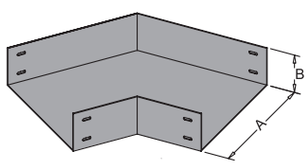
Curva horizontal 90º
90º Horizontal bend
Ref. RP 2717



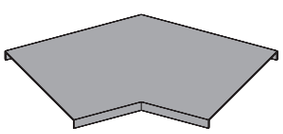
Tampa curva horizontal 90º
90º Cover for horizontal bend
Ref. RP 2817 - encaixe *I insert*
Ref. RP 2917 - pressão *I pressure*
Ref. RP 4017 - aparafusada *I screwed*



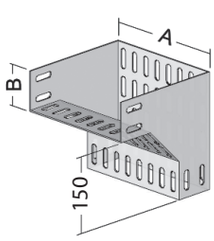
Curva horizontal 45º
45º Horizontal bend
Ref. RP 2767



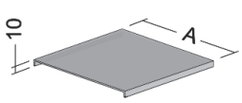
Tampa curva horizontal 45º
45º Cover for horizontal bend
Ref. RP 2867 - encaixe *I insert*
Ref. RP 2967 - pressão *I pressure*
Ref. RP 4067 - aparafusada *I screwed*



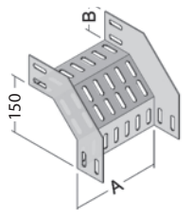
Curva de inversão 90º
90º Inversion bend
Ref. RP 2720



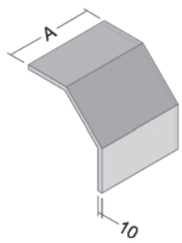
Tampa curva de inversão 90º
90º Cover for inversion bend
Ref. RP 2820 - encaixe *I insert*
Ref. RP 2920 - pressão *I pressure*
Ref. RP 4020 - aparafusada *I screwed*



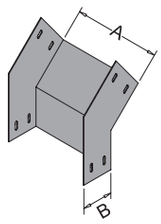
Curva vertical externa 90º
90º Vertical external bend
Ref. RP 2718



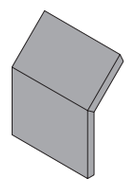
Tampa curva vertical externa 90º
90º Cover for vertical external bend
Ref. RP 2818 - encaixe */ insert*
Ref. RP 2918 - pressão */ pressure*
Ref. RP 4018 - aparafusada */ screwed*



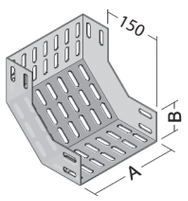
Curva vertical externa 45º
45º Vertical external bend
Ref. RP 2768



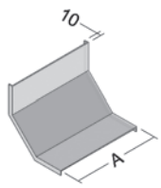
Tampa curva vertical externa 45º
45º Cover for vertical external bend
Ref. RP 2868 - encaixe */ insert*
Ref. RP 2968 - pressão */ pressure*
Ref. RP 4068 - aparafusada */ screwed*



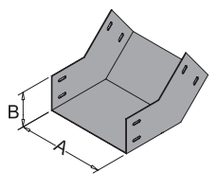
Curva vertical interna 90º
90º Internal vertical bend
Ref. RP 2719



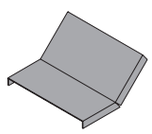
Tampa curva vertical interna 90º
90º Cover for internal vertical bend
Ref. RP 2819 - encaixe */ insert*
Ref. RP 2919 - pressão */ pressure*
Ref. RP 4019 - aparafusada */ screwed*



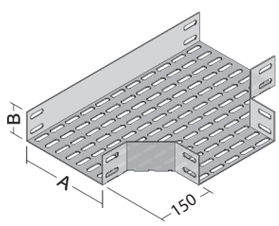
Curva vertical interna 45º
45º Vertical internal bend
Ref. RP 2769



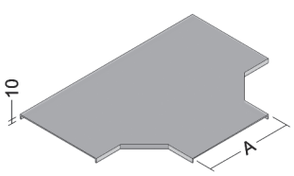
Tampa curva vertical interna 45º
45º Cover for vertical internal bend
Ref. RP 2869 - encaixe */ insert*
Ref. RP 2969 - pressão */ pressure*
Ref. RP 4069 - aparafusada */ screwed*



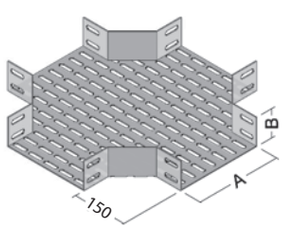
Tê horizontal 90°
90° Horizontal tee
Ref. RP 2723



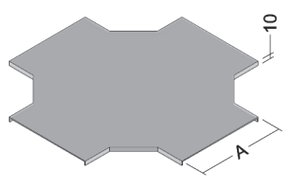
Tampa tê horizontal 90°
Cover for 90° horizontal tee
Ref. RP 2823 - encaixe */ insert*
Ref. RP 2923 - pressão */ pressure*
Ref. RP 4023 - aparafusada */ screwed*



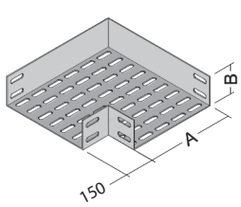
Cruzeta horizontal 90°
90° Horizontal cross
Ref. RP 2731



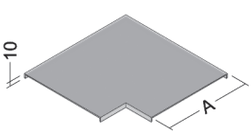
Tampa cruzeta horizontal 90°
Cover for 90° Horizontal cross
Ref. RP 2831 - encaixe */ insert*
Ref. RP 2931 - pressão */ pressure*
Ref. RP 4031 - aparafusada */ screwed*



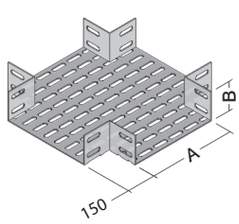
Cotovelo reto
90° Elbow
Ref. RP 2728



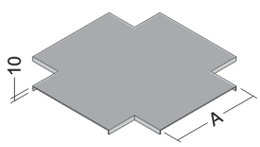
Tampa cotovelo reto
Cover for 90° elbow
Ref. RP 2828 - encaixe */ insert*
Ref. RP 2928 - pressão */ pressure*
Ref. RP 4028 - aparafusada */ screwed*



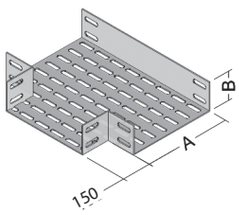
Cruzeta reta
Straight cross
Ref. RP 2730



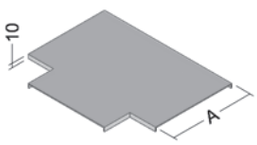
Tampa cruzeta reta
Cover for straight cross
Ref. RP 2830 - encaixe */ insert*
Ref. RP 2930 - pressão */ pressure*
Ref. RP 4030 - aparafusada */ screwed*



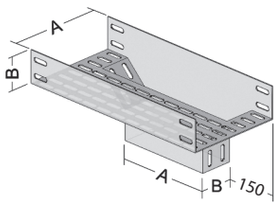
Tê reto
Straight tee
Ref. RP 2724



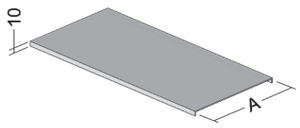
Tampa tê reto
Cover for straight tee
Ref. RP 2824 - encaixe / *insert*
Ref. RP 2924 - pressão / *pressure*
Ref. RP 4024 - aparafusada / *screwed*



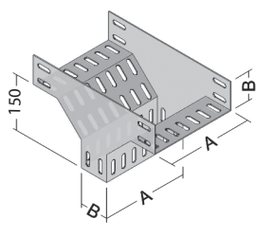
Tê vertical de derivação
Vertical descent lateral tee
Ref. RP 2725



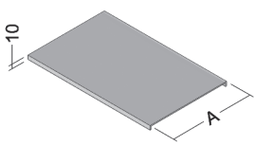
Tampa tê vertical de derivação
Cover for vertical descent lateral tee
Ref. RP 2825 - encaixe / *insert*
Ref. RP 2925 - pressão / *pressure*
Ref. RP 4025 - aparafusada / *screwed*



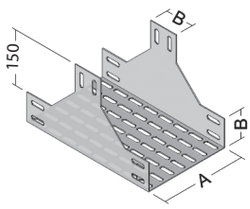
Tê vertical de descida
Vertical descent tee
Ref. RP 2726



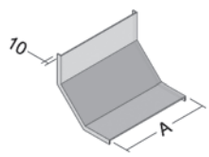
Tampa tê vertical de descida
Cover for vertical descent tee
Ref. RP 2826 - encaixe / *insert*
Ref. RP 2926 - pressão / *pressure*
Ref. RP 4026 - aparafusada / *screwed*



Tê vertical de subida
Vertical ascent tee
Ref. RP 2727

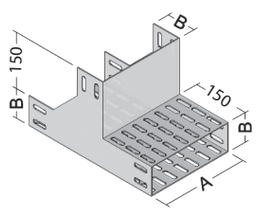


Tampa tê vertical de subida
Cover for vertical ascent tee
Ref. RP 2827 - encaixe / *insert*
Ref. RP 2927 - pressão / *pressure*
Ref. RP 4027 - aparafusada / *screwed*

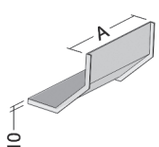


Obs: Fornecido com 2 tampas.
Note: Supplied with 2 covers.

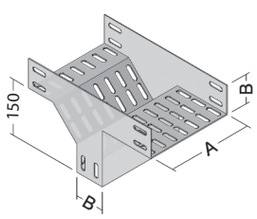
Curva com passagem reta de subida
Bend with ascent straight passage
Ref. RP 2722



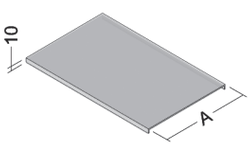
Tampa curva c/ pass. reta de subida
Cover for bend with ascent straight passage
Ref. RP 2822 - encaixe / *insert*
Ref. RP 2922 - pressão / *pressure*
Ref. RP 4022 - aparafusada / *screwed*



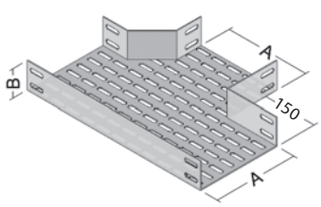
Curva com passagem reta de descida
Bend with descent straight passage
Ref. RP 2721



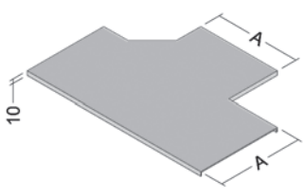
Tampa curva c/ pass. reta de descida
Cover for bend with descent straight passage
Ref. RP 2821 - encaixe / *insert*
Ref. RP 2921 - pressão / *pressure*
Ref. RP 4021 - aparafusada / *screwed*



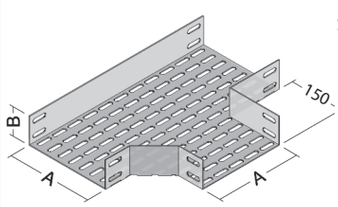
Junção a esquerda 90º
90° left junction
Ref. RP 2733



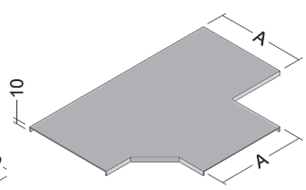
Tampa junção a esquerda 90º
cover for 90° left junction
Ref. RP 2833 - encaixe / *insert*
Ref. RP 2933 - pressão / *pressure*
Ref. RP 4033 - aparafusada / *screwed*



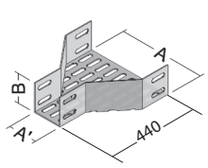
Junção a direita 90º
90° right junction
Ref. RP 2732



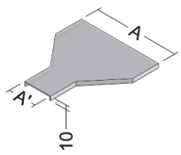
Tampa junção a direita 90º
90° right junction
Ref. RP 2832 - encaixe / *insert*
Ref. RP 2932 - pressão / *pressure*
Ref. RP 4032 - aparafusada / *screwed*



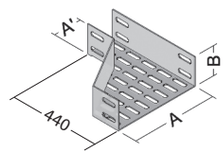
Redução concêntrica
Concentric reduction
Ref. RP 2736



Tampa redução concêntrica
Cover for concentric reduction
Ref. RP 2836 - encaixe / *insert*
Ref. RP 2936 - pressão / *pressure*
Ref. RP 4036 - aparafusada / *screwed*



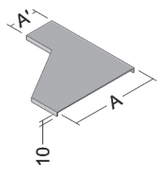
Redução a direita/esquerda
Right/left reduction
Ref. RP 2734 - direita / *right*
Ref. RP 2735 - esquerda / *left*



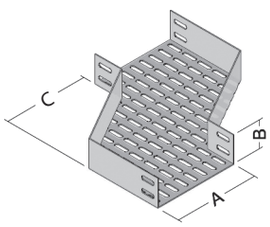
Tampa redução a direita/esquerda
Cover for right/left reduction

Direita / *right*
Ref. RP 2834 - encaixe / *insert*
Ref. RP 2934 - pressão / *pressure*
Ref. RP 4034 - aparafusada / *screwed*

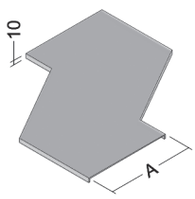
Esquerda / *left*
Ref. RP 2835- - encaixe / *insert*
Ref. RP 2935 - pressão / *pressure*
Ref. RP 4035 - aparafusada / *screwed*



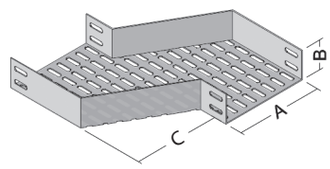
Desvio a direita 45º
45º Right desviation
Ref. RP 2754



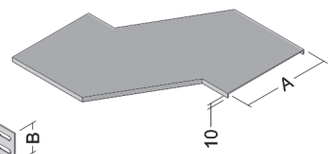
Tampa desvio a direita 45º
45º Cover for right desviation
Ref. RP 2854 - encaixe / *insert*
Ref. RP 2954 - pressão / *pressure*
Ref. RP 4054 - aparafusada / *screwed*



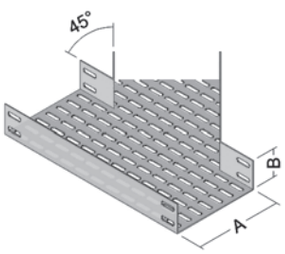
Desvio a esquerda 45º
45º Left desviation
Ref. RP 2756



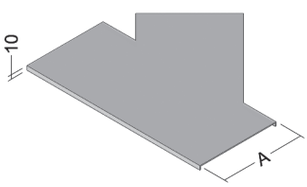
Tampa desvio a esquerda 45º
45º Cover for left desviation
Ref. RP 2856 - encaixe / *insert*
Ref. RP 2956 - pressão / *pressure*
Ref. RP 4056 - aparafusada / *screwed*



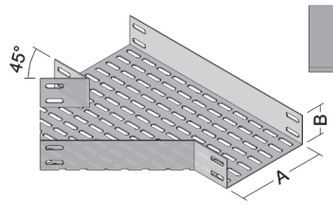
Junção a direita 45°
45° Right junction
Ref. RP 2762



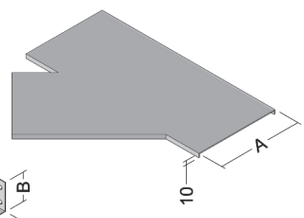
Tampa junção a direita 45°
Cover for 45° right junction
Ref. RP 2862 - encaixe / *insert*
Ref. RP 2962 - pressão / *pressure*
Ref. RP 4062 - aparafusada / *screwed*



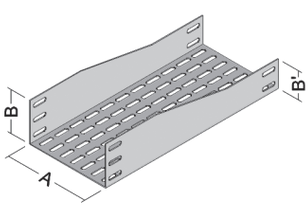
Junção a esquerda 45°
45° Left junction
Ref. RP 2763



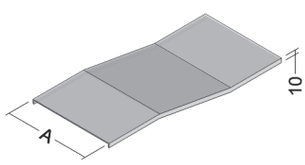
Tampa junção a esquerda 45°
Cover for 45° left junction
Ref. RP 2863 - encaixe / *insert*
Ref. RP 2963 - pressão / *pressure*
Ref. RP 4063 - aparafusada / *screwed*



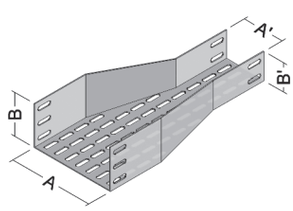
Redução de abas
Beam reduction
Ref. RP 2790



Tampa redução de abas
Cover for beam reduction
Ref. RP 2890 - encaixe / *insert*
Ref. RP 2990 - pressão / *pressure*
Ref. RP 4090 - aparafusada / *screwed*

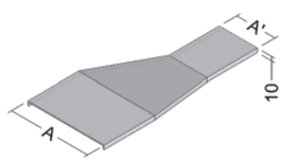


Redução concêntrica
com redução de abas
Concentric reduction
with beam reduction
Ref. RP 2711



B' < B

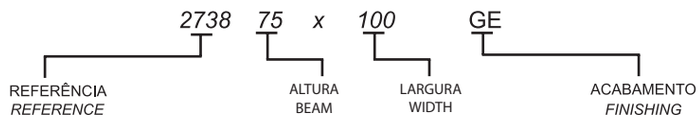
Tampa redução concêntrica
com redução de abas
Cover for concentric reduction
with beam reduction
Ref. RP 2811 - encaixe / *insert*
Ref. RP 2911 - pressão / *pressure*
Ref. RP 4011 - aparafusada / *screwed*



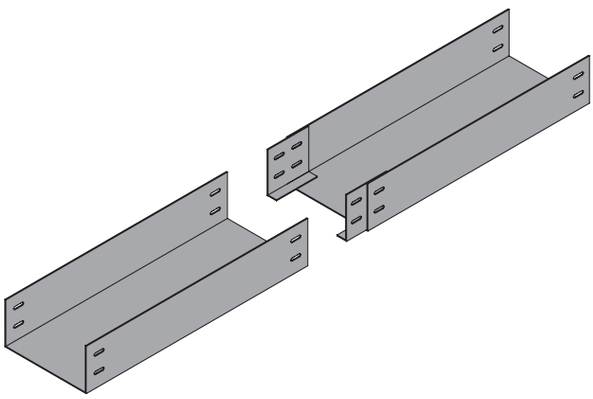
Acessórios para eletrocalhas

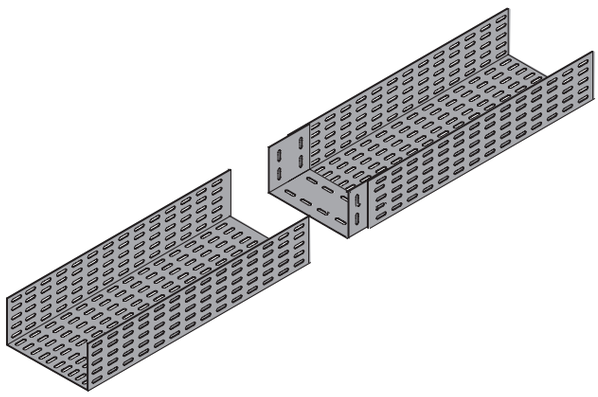
Accessories for cable trays channel type

COMO SOLICITAR
HOW TO REQUEST



DEMONSTRATIVO DE MONTAGEM
DIAGRAM OF ASSEMBLY

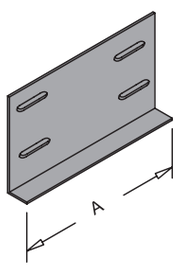




Parafuso recomendado 1/4"x5/8" cab. Lentilha c/ porca sextavada e arruelas lisas.
Recomended screw 1/4"x5/8" lentil head with hex nut and flats washers.

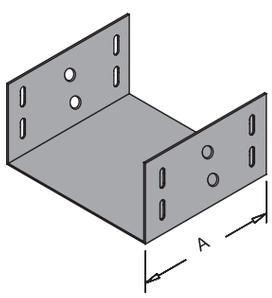
Tala "L"
"L" plate connector

Ref. RP 2766 - A= 100 mm
Ref. RP 2761 - A= 200 mm



Emenda interna com base lisa
Internal joint with solid bases

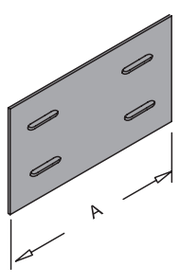
Ref. RP 2738 - A= 85 mm
Ref. RP 2749 - A= 200 mm



Nota: Emenda interna longa com as laterais totalmente perfuradas.
Note: internal joint with sides totally perforated.

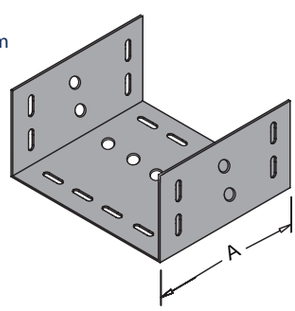
Tala
Plate connector

Ref. RP 2739 - A= 100 mm
Ref. RP 2752 - A= 200 mm



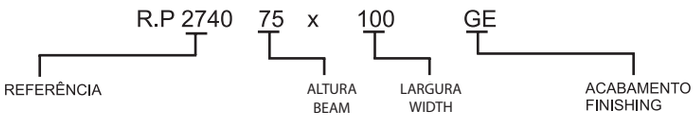
Emenda interna com base perfurada
Internal joint with perfurations bases

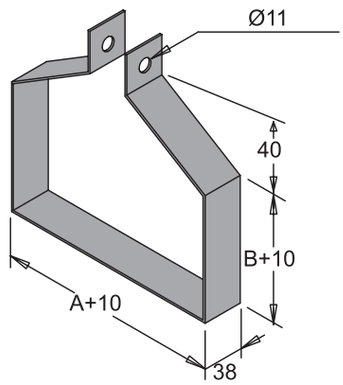
Ref. RP 2774 - A= 85 mm
Ref. RP 2775 - A= 200 mm



Nota: Emenda interna longa com a base totalmente perfurada.
Note: internal joint with base totally perforated.

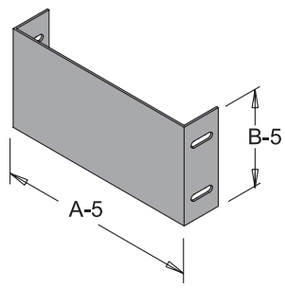
COMO SOLICITAR ACESSÓRIOS
HOW TO REQUEST ACESSORIES





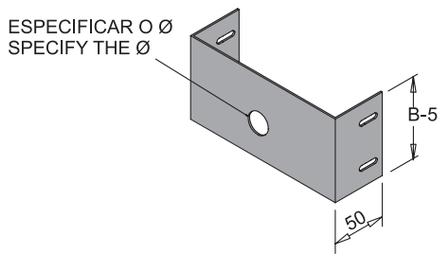
Terminal de fechamento
Closing terminal

Ref. RP 2737



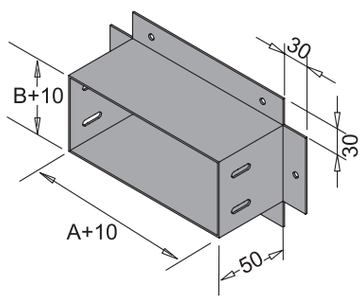
Terminal de fechamento com saida p/ eletroduto
End plate with conduit outlet

Ref. RP 2757



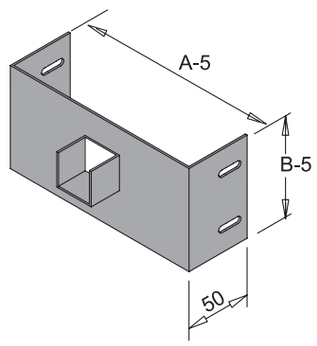
Flange
Flange

Ref. RP 2729



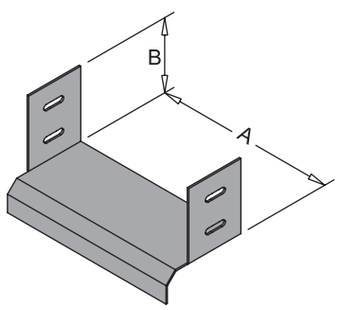
Terminal com saida p/ perfilado
End plate with channel out let

Ref. RP 2758 - 38x38
Ref. RP 2759 - 38x76



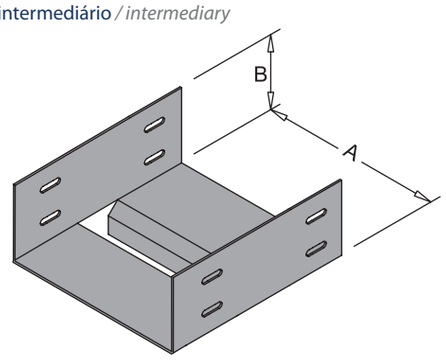
Gotejador final
Dripper final

Ref. RP 2866 - gotejador int. */ internal dripper*



Gotejador intermediário
Dripper intermediate

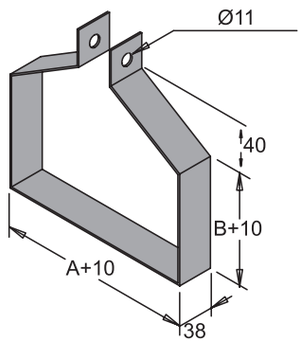
Ref. RP 2748 - intermediário */ intermediary*



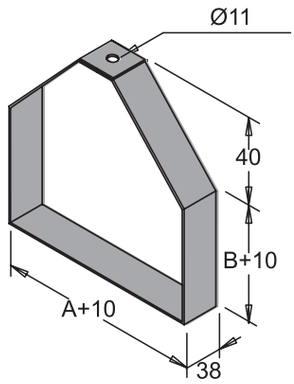
Acessórios para eletrocalhas

Accessories for cable trays channel type

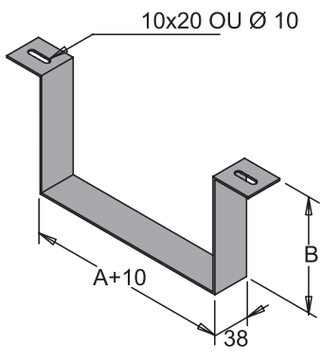
Suporte balanço horizontal
Horizontal clamp
Ref. RP 2740



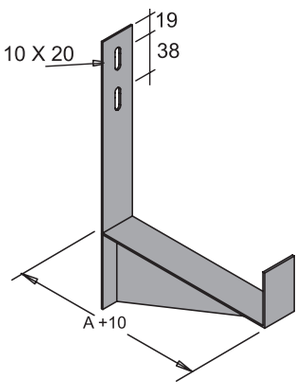
Suporte balanço vertical
Vertical clamp
Ref. RP 2741



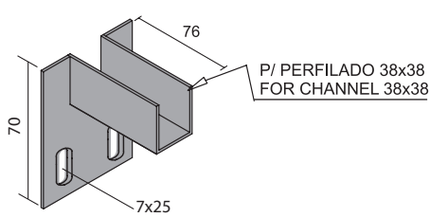
Suporte duplo
Angular bearing
Ref. RP 2742



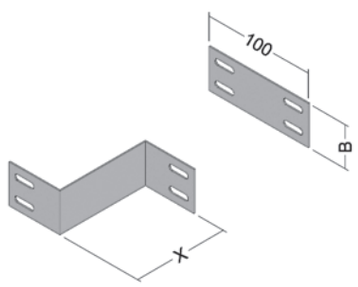
Suporte reforçado
Reinforced support
Ref. RP 2744



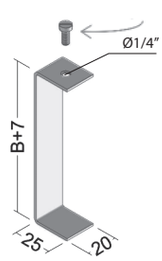
Saida horizontal de calha para perfilado 38x38 mm
Horizontal exit from cable tray to channel
Ref. RP 2746



Junção reta excêntrica para calha
Eccentric right or left straight reduction
Ref. RP 2714



Prendedor de tampa para calha lisa
Hold down clamp for single cable tray channel
Ref. RP 2770



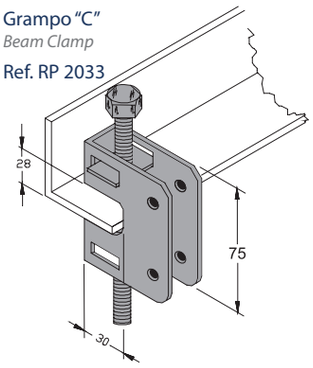
Obs / *Note:* B=50/75/100/150/200

Acessórios para fixação e suportação

Accessories for fixing and support

Grampo "C"
Beam Clamp

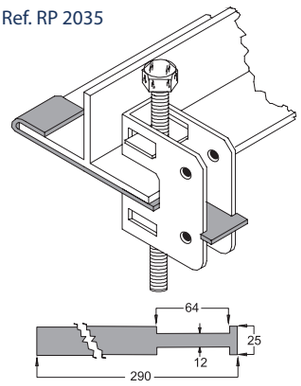
Ref. RP 2033



Inclusos: 01 parafuso ø 3/8" x 2 1/2"
01 porca quadrada ø 3/8"
Included: 01 screw ø 3/8" x 2 1/2"
01 square nut ø 3/8"

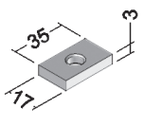
Presilha para grampo "C"
Anchor clip for "C" beam clamp

Ref. RP 2035



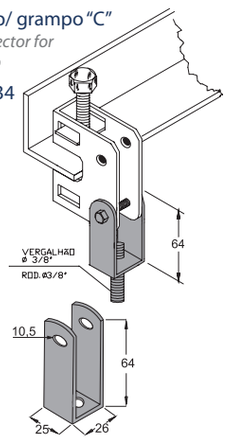
Porca retang. p/ grampo "C"
Retangular nut for beam clamp

Ref. RP 2367



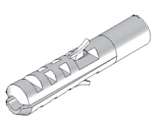
Balancim p/ grampo "C"
Swing connector for beam clamp

Ref. RP 2034



Bucha de nylon
Nylon inch anchor for concrete insert

Tipo RP S6, S8, S10, S12



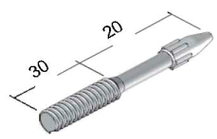
Ref.	Tipo	Comp.	Paraf.	Tração
Ref.	*Type*	*Length*	*bolt*	*Traction*
RP 2217	S6	30	4,2x30	65 Kg
RP 2218	S8	40	1/4"x45	90 Kg
RP 2219	S10	50	5/16"x50	170 Kg
RP 2220	S12	60	3/8"x60	220 Kg

Chumbador "CB" com rosca interna
CBA anchor bolt

Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2362	1/4"	35	12	10
RP 2364	3/8"	40	18	14
RP 2365	1/2"	50	20	18
RP 2363	5/16"			
RP 2366	5/8"			

Pino com rosca 1/4"
Threaded pin 1/4"

Ref. RP 2368

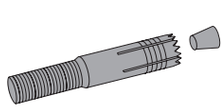


* Outras medidas sob consulta.

Chumbador "UR" com rosca interna
"UR" Internal-thread with anchor bolt

Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2354	1/4"	25	35	6,35
RP 2356	3/8"	30	45	9,5
RP 2357	1/2"	35	55	12,7
RP 2355	5/16"			
RP 2358	5/8"			

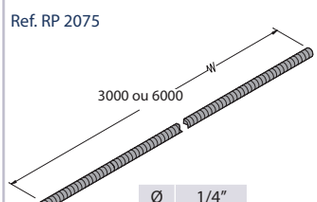
Chumbador rosca externa
External-thread anchor bolt



Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2426	5/16"	35	12	11
RP 2425	1/4"	40	18	14
RP 2359	3/8"	52	20	18
RP 2360	1/2"			
RP 2361	5/8"			

Suporte RT
Continuous threaded rod

Ref. RP 2075

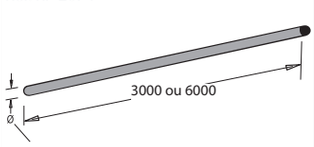


Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

Especificar junto à referência o ø e o comprimento "L"
In the reference, specify the ø and length "L"

Suporte LT
Plain rod

Ref. RP 2074



Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

Especificar junto à referência o ø e o comprimento "L"
In the reference, specify the ø and length "L"

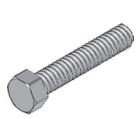
Parafuso cabeça lentilha
Lentil head bolt

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2340	1/4" x 1/2"
RP 2999	1/4" x 5/8"
RP 2215	1/4" x 3/4"
RP 2342	1/4" x 1"
RP 2344	5/16" x 1/2"
RP 2346	5/16" x 3/4"
RP 2350	3/8" x 1/2"
RP 2216	3/8" x 3/4"

Parafuso lentilha auto travante
Self lock bolt

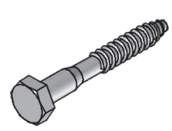
Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2341	1/4" x 1/2"
RP 2319	1/4" x 5/8"
RP 2315	1/4" x 3/4"
RP 2343	1/4" x 1"
RP 2345	5/16" x 1/2"
RP 2347	5/16" x 3/4"
RP 2351	3/8" x 1/2"
RP 2318	3/8" x 3/4"

Parafuso cabeça sextavada
hexagonal head bolt



Comp.	Ø1/4"	Ø5/16"	Ø3/8"	Ø1/2"
Length	*Ø1/4"*	*Ø5/16"*	*Ø3/8"*	*Ø1/2"*
1/2"	2200	2201	2202	2203
5/8"	2240			
3/4"	2242	2252	2262	2272
1"	2244	2254	2264	2274
1.1/4"	2245	2255	2265	2275
1.1/2"	2246	2256	2266	2276
2"	2248	2258	2268	2278
2.1/2"	2249	2259	2269	2279
3"	2250	2260	2270	2280

Parafuso cab. sextavada rosca soberba
hexagonal head screw with conical thread



Ref.	Ø x comp.	Bucha
Ref.	*Ø x length*	*nylon anchor*
RP 2209	5/16" x 2"	S-10
RP 2210	3/8 x 2.1/2"	S-12

Parafuso cabeça redonda rosca soberba
Round head screw with conical thread

.

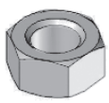
Ref.	Ø x comp.	Bucha
Ref.	*Ø x length*	*nylon anchor*
RP 2211	4,2 x 30mm	S-6
RP 2212	4,8 x 45mm	S-8
RP 2213	6,1 x 50mm	S-10

Acessórios para fixação e suportação

Accessories for fixing and support

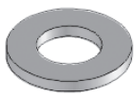
Porca sextavada
Hexagonal nut

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2222	3/16"
RP 2223	1/4"
RP 2335	5/16"
RP 2224	3/8"
RP 2225	1/2" somente RP 2283



Arruela lisa
Plain washer

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2227	3/16"
RP 2228	1/4"
RP 2331	5/16"
RP 2229	3/8"
RP 2230	1/2"



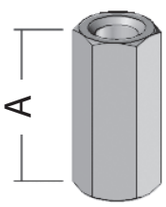
Arruela de pressão
Lock washer

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2232	3/16"
RP 2233	1/4"
RP 2336	5/16"
RP 2234	3/8"
RP 2235	1/2"

Prolongador para suspensão
Hanger rod extension

Ref. RP 2073 - A=25mm
Ref. RP 2283 - A=50mm

Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

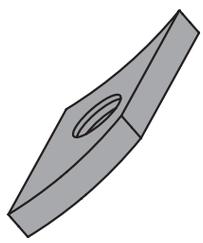


Obs: Comp. de 50mm sob consulta.
Note: Lenght of 50mm under request.

Porca losangular com rosca
Lozengular nut without spring

Ref. RP 2076

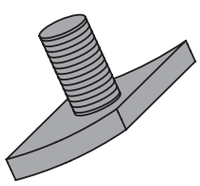
Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

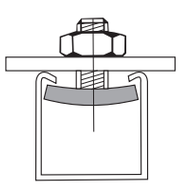


Porca losangular com pino
Lozengular stud nut

Ref. RP 2078

Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"



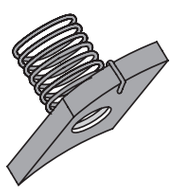


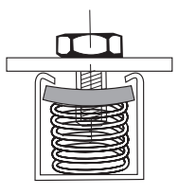
Demonstrativo de montagem
Diagram of assembly

Porca losangular com mola
Lozengular spring nut

Ref. RP 2077

Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"





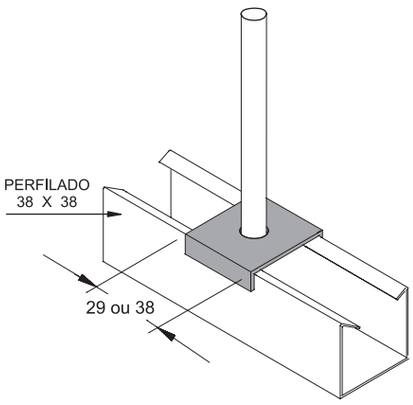
Demonstrativo de montagem
Diagram of assembly

Acessórios para fixação e suportação

Accessories for fixing and support

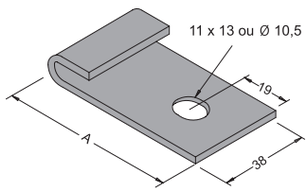
Adaptador de segurança com furo de 1/4 ou 3/8"
Saddle type washer

Ref. RP 2062



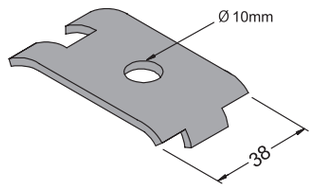
Grapa guia
Guide bearing

Ref. RP 2554 - A= 60 mm
Ref. RP 2599 - A= 85 mm



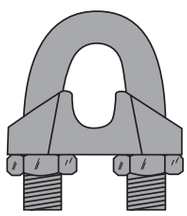
Grapa
Beam clamps

Ref. RP 2068



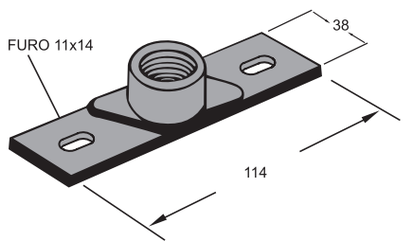
Grampo crosby p/ cabo de aço ø 1/8"
Crosby clamp for steel cable ø 1/8"

Ref. RP 2440



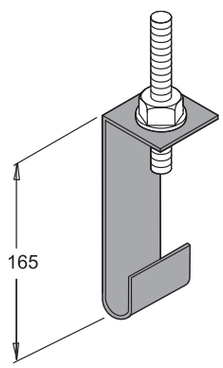
Saída com luva ø 1/2", 3/4" e 1"
Outlet with coupling pipe
ø 1/2", 3/4" e 1"

Ref. RP 2067



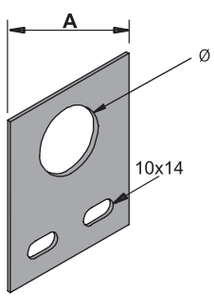
Suporte "J " 1/2", 3/4" e 1"
Support "J " 1/2", 3/4" e 1"

Ref. RP 2441



Saída horizontal para eletroduto
Horizontal exit for conduit

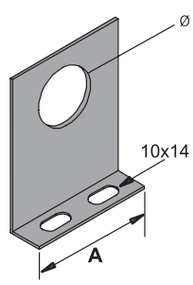
Ref. RP 2557 - ½" a 1½" A= 76
Ref. RP 2558 - 2" a 4" A= 152



Nota: especificar ø
Note: to especify ø

Saída vertical para eletroduto
Vertical exit for conduit

Ref. RP 2559 - ½" a 1½" A= 76
Ref. RP 2560 - 2" a 4" A= 152



Nota: especificar ø
Note: to especify ø

Sugestões de instalações de eletrocalhas

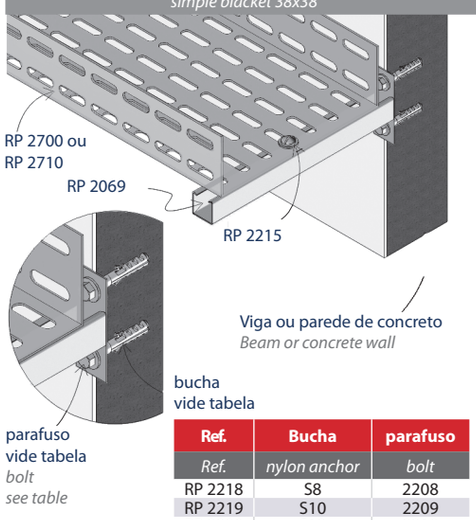
Suggestions for fixing cable trays

SUPORTAÇÕES

SUPPORT

mão francesa simples 38x38

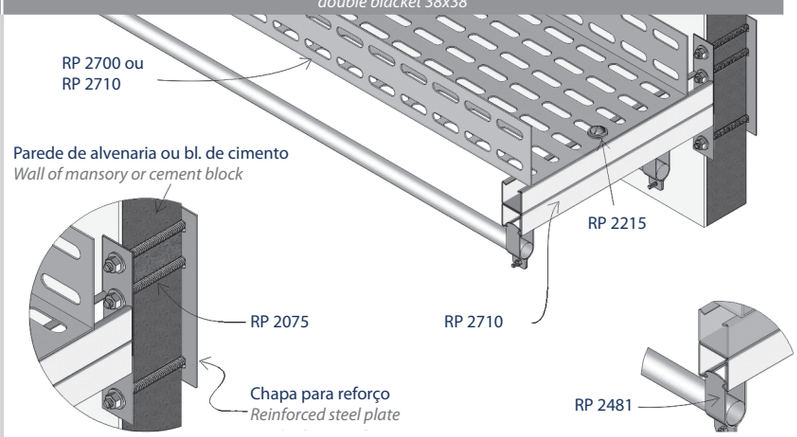
simple blacket 38x38



Ref.	Bucha	parafuso
Ref.	*nylon anchor*	*bolt*
RP 2218	S8	2208
RP 2219	S10	2209
RP 2220	S12	2210

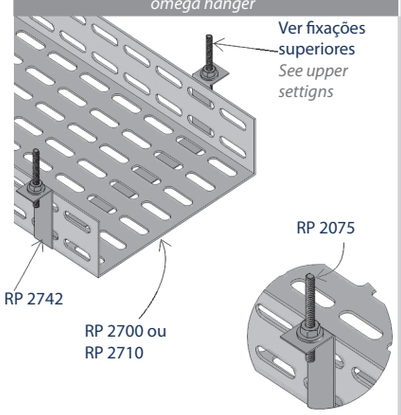
mão francesa dupla 38x38

double blacket 38x38



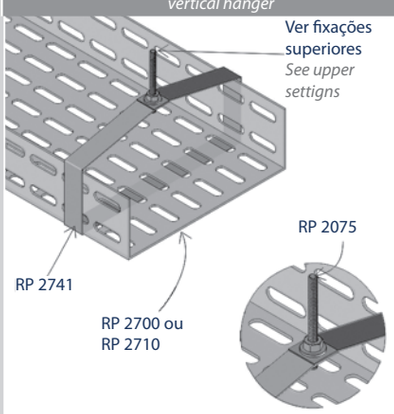
suspensão ômega

omega hanger



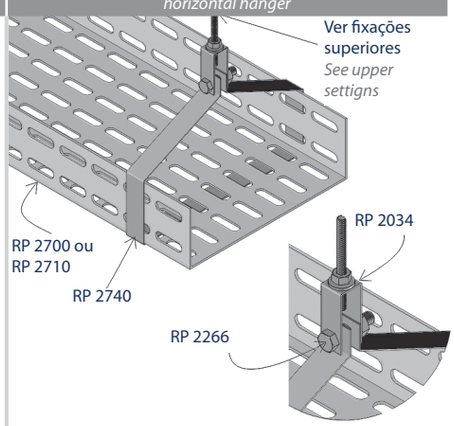
suspensão vertical

vertical hanger



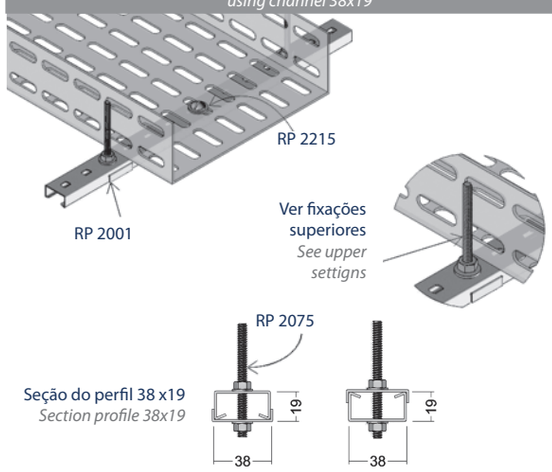
suspensão horizontal

horizontal hanger



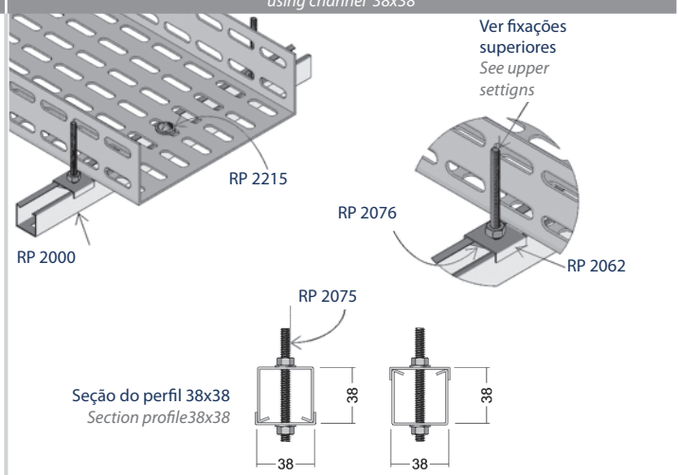
suporte perfil 38x19

using channel 38x19



suporte perfil 38x38

using channel 38x38



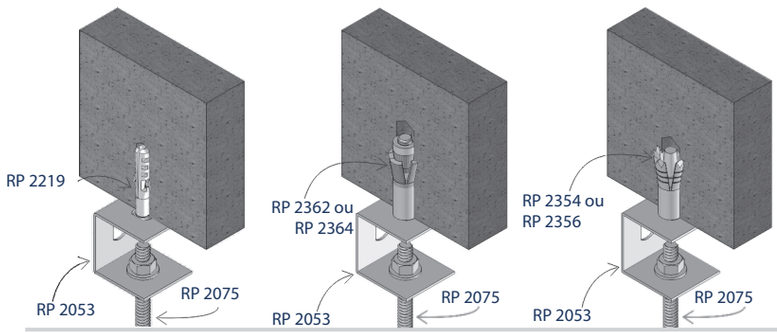
Sugestões de instalações de eletrocalhas

Suggestions for fixing of cable trays

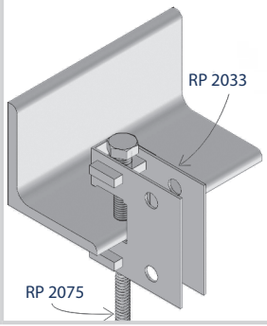
FIXAÇÕES SUPERIORES

UPPER ANCHORAGE

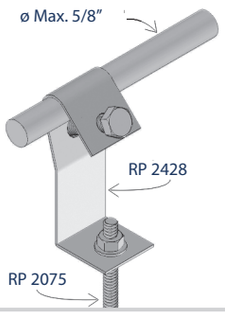
Simples
Simple



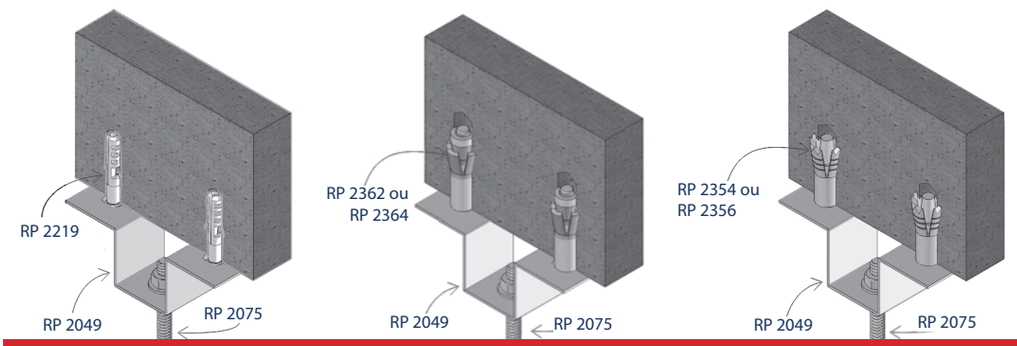
Grampo "C"
Beam clamp



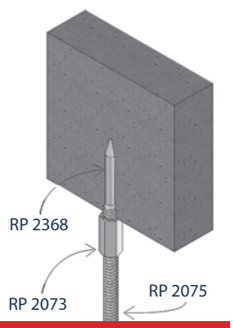
Cabo de aço ou vergalhão
Steel wire or continuous thereaded rod



Dupla
Double



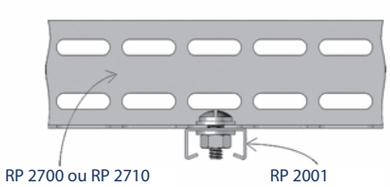
Pino com rosca
Threaded pin

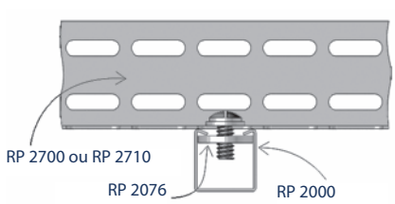


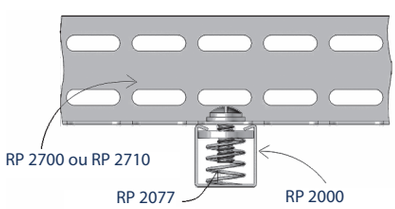
FIXAÇÕES DAS ELETROCALHAS AOS SUPORTES

FIXING CABLE TRAY ON SUPPORTS

parafuso, arruela e porca	parafuso, arruela e porca losangular com rosca	parafuso, arruela e porca losangular com mola
screw, plain washer and nut	*screw, plain washer and threaded losangular nut*	*screw, plain washer and threaded losangular nut with spring*







OBS: Nas fixações superiores ou laterais, poderão ser utilizadas buchas de nylon, chumbadores ou pino com rosca, em qualquer situação, a critério do projetista.
NOTE: Nylon bushes, threaded bolts and pins may be reused at the upper or side fastening, anytime, at designer's discretion.

Observações técnicas para eletrocalhas

Technical notes for cable trays

TAMPAS

Os trechos curvos também podem ser fornecidos com tampa normal bastando acrescentar CTN (com tampa normal) ao término das referências ou especificar o código do produto desejado.

EXEMPLO: RP 2710 / 2717 / 50x300 / R 300 / GE / CTN, curva horizontal 90° perfurada, largura 300, aba 50, raio segmentado de 300 mm, galvanizado eletroliticamente, com tampa normal RP 2817.

Tampas de pressão (CTP) RP 2716 só se aplicam em eletrocalhas com virolas.

Em casos especiais as tampas normais (RP 2715) poderão ser fornecidas aparafusadas (CTA), sendo as eletrocalhas com dobra normal "U" e aparafusadas lateralmente. Descrição das tampas:

CTN eletrocalha com tampa normal
CTP eletrocalha com tampa de pressão
CTA eletrocalha com tampa aparafusada

DIVISORES

Caso necessite dividir um ou mais circuitos, ou sistemas de alimentação, ou distribuição na mesma eletrocalha, utilizar divisores RP 2764 (perfuradas) ou RP 2765 (lisas), indicando sempre a altura das abas das eletrocalhas.

JUNÇÕES

Para fixação das junções simples (RP 2766 - A=100 / RP 2761 - A=200) que unem trechos retos entre si e trechos curvos perfurados ou lisos, utilizar em cada junção 4 (quatro) jogos de parafusos cabeça lentilha de ø1/4"x3/4" (RP 2215), porcas sextavadas Ø1/4" (RP 2223) e arruelas lisas Ø1/4" (RP 2228). Em locais sujeitos a vibrações mecânicas recomendamos arruelas de pressão Ø1/4" (RP 2233).

Para fixação das junções integrais (RP 2774 - A=85 / RP 2775 - A=200) recomendamos o procedimento acima, sendo que além dos parafusos laterais, utilizar parafusos no fundo das eletrocalhas, cuja quantidade fica a critério do projetista de acordo com a largura. Todas as junções devem ser instaladas pelo lado interno das eletrocalhas.

Recomendamos utilizar os parafusos que fixam as junções com as cabeças voltadas para o interior das eletrocalhas, para evitar danos aos fios e cabos durante o lançamento.

ACABAMENTOS SUPERFICIAIS

Acrescentar sempre ao término das referências o tipo de acabamento superficial ou material desejado:

PZ pré-galvanizado a quente - padrão CSN conf. NBR 7008
GF pós-galvanizada conf. NBR 6323
AL alumínio
GE galvanização eletrolítica
AI aço inoxidável
PT pintado

Atenção: especificações sem a indicação do tratamento superficial serão consideradas como materiais pré galvanizado a quente (PZ).

ESPECIFICAÇÕES

Especificar sempre o tipo de eletrocalha (perfurada ou lisa), a largura (A), aba (B), o tipo de tratamento superficial e o tipo de dobra sem virola ou com virola e, quando for o caso, o raio de curvatura.

EXEMPLO: RP 2704 100 200 3000 PZ
Eletrocalha perfurada total sem virola, 100 (aba), 200 (largura), 3000 (comprimento), PZ (pré-zincada).

SEGURANÇA

Para efeito de segurança e alinhamento recomendamos sempre fixar as eletrocalhas aos suportes e aterrar todo o sistema de eletrocalhas.

Atenção: Fabricamos outros tipos de eletrocalhas e acessórios diferentes dos constantes deste manual, sob consulta, desenho ou outras especificações.

COVERS

Bend sections can also be supplied with regular cover just adding CTN (with regular cover) to references end or specify the code of product you desired.

Example: RP 2710 / 2717 / 300x50 / R 300 / GE / CTN, 90° horizontal bend perforated, 300 width, 50 beam, Internal segmented radius of 300 mm, eletrolitic galvanizing, regular cover RP 2817.

Pressure covers (CTP) RP 2716 apply only to cable trays channel "C" type (only straight sections, since they do not apply to bend sections).

In special cases, regular covers (RP 2715) may be provided screwed (CTA), with the cable trays channel "U" type and side screwed. Description of covers:

CTN *cable trays channel with regular cover*
CTP *cable trays channel with pressure cover*
CTA *cable trays channel with screwed cover*

DIVIDERS

In case you need to divide one or more circuits, or feed systems, or distribution in the same cable trays channel, use RP 2764 (perforated) or RP 2765 (smooth) dividers, always indicating the height of the cable trays channel' beams.

JOINTS

For placement of single(RP 2766 - A=100 / RP 2761 - A=200) joints connecting straight sections between each other and perforated or smooth bent sections, use in each joint 4 (four) sets of lentil head bolt ø1/4"x3/4" (RP 2215) screws, hexagonal nuts Ø1/4" (RP 2223) and plain washers Ø1/4" (RP 2228) . In locations subject to mechanical vibrations we recommend lock washers Ø1/4" (RP 2233).

For fixation of the (RP 2774 - A=85 / RP 2775 - A=200) telescopic splice, we recommend the procedure above, considering that in addition to the side screws, use screws in the cable trays channel bottom, the amount of which is at the designer discretion as per the width. All joints must be set up through the internal side of the cable trays channel.

We recommend the use of screws fixing the joints with the heads turned to the cable trays channel' interior, to avoid damages to threads and cables during the deployment.

SUPERFICIAL FINISHES:

Always add to reference ends the desired surface or material finish type:

PZ *pre galvanized steel according to NBR 7008*
GF *hot dip galvanized according NBR 6323*
AL *aluminum*
GE *eletrolitic galvanizing*
AI *stainless steel*
PT *painted*

Attention: Specifications without indication of surface treatment shall be considered as pre galvanized steel according to NBR 7008 (PZ).

SPECIFICATIONS:

Always specify the cable trays channel perforated or single type, width (A), beam (B), surface treatment type and folding "U" or "C" type, and when applicable the bending radius.

Example: RP 2704 100 200 3000 PZ
Perfurated cable tray "U" type 100 beam, 200 width, 300 lenght, pre galvanized.

SECURITY:

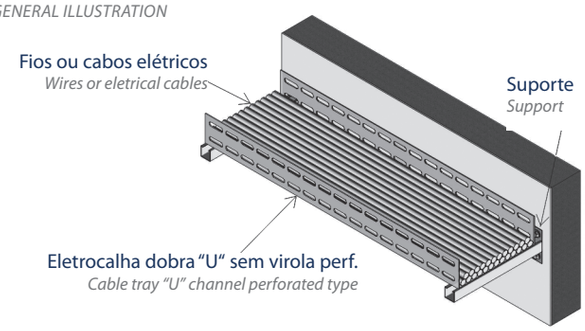
For lining up and safety purposes we always recommend fixing the electric channels to the brackets and grounding the entire electric channel system.

Attention: We manufacture other types of electric channels and fittings distinct from the ones hereinto, upon consultation, drawing or other specifications.

Tab. de cargas: eletrocalhas “U” s/ virolas perf.

Load tables: “U” perforated cable trays channel type

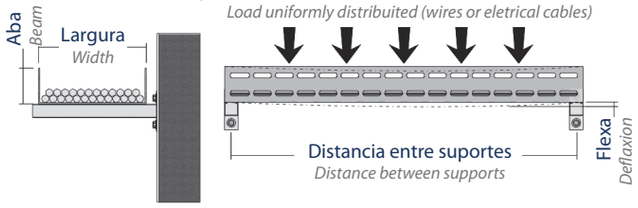
ILUSTRAÇÃO GERAL
GENERAL ILLUSTRATION



VISTA LATERAL
SIDE VIEW

VISTA FRONTAL
FRONT VIEW

Carga uniformemente distribuida (fios ou cabos elétricos)
Load uniformly distribuited (wires or eletrical cables)



ABA 100 (B)

BEAM 100 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	5,97	#20	72	54	40	33	20
	5,82	#18	83	62	47	38	22
	9,63	#16	105	79	59	48	29
200	7,96	#20	78	59	44	36	21
	10,42	#18	91	68	52	41	25
	12,84	#16	116	87	65	53	32
300	13,05	#18	99	75	57	45	27
	16,05	#16	115	86	65	53	30
	20,85	#14	147	110	83	67	40
400	11,93	#19	99	75	56	45	27
	15,64	#18	107	80	61	49	29
	19,26	#16	123	93	70	57	34
500	18,25	#18	116	88	66	54	32
	22,47	#16	135	102	77	62	38
	29,19	#14	173	131	98	79	48
600	20,86	#18	126	95	72	58	35
	25,68	#16	148	112	84	68	40
	33,36	#14	192	144	109	88	53
700	23,46	#18	135	102	78	62	38
	28,89	#16	161	121	92	75	44
	37,53	#14	109	157	118	97	58
800	32,10	#16	175	133	99	80	48
	41,70	#14	230	173	131	105	63
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 50 (B)

BEAM 50 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
50	2,52	#22	57	38	31	23	13
	2,98	#20	63	42	34	25	15
	3,91	#18	78	51	40	31	19
100	3,36	#22	59	42	33	26	15
	3,98	#20	68	45	37	27	16
	5,21	#18	83	77	50	40	28
150	4,20	#22	61	46	35	28	17
	4,97	#20	66	50	38	30	18
	6,52	#18	76	57	43	35	21
200	5,04	#22	67	49	38	28	19
	5,97	#20	72	53	40	30	20
	7,82	#18	84	61	47	35	23
300	7,96	#20	76	57	43	32	21
	10,43	#18	89	65	50	38	25
	12,84	#16	109	79	81	46	30
400	9,95	#20	88	64	50	37	24
	13,04	#18	102	75	57	43	29
	16,05	#16	125	92	70	53	35
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 150 (B)

BEAM 150 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
150	11,73	#18	94	71	54	43	26
	14,45	#16	119	90	68	55	33
200	13,04	#18	103	78	59	47	28
	16,05	#16	131	98	75	60	36
300	15,64	#18	112	84	63	52	31
	19,26	#16	129	97	73	59	36
	25,02	#14	165	124	94	76	45
400	18,25	#18	121	91	69	56	33
	22,47	#16	139	105	78	64	39
	29,19	#14	178	135	101	82	49
500	25,68	#16	153	115	86	70	41
	33,36	#14	195	147	111	90	54
600	28,89	#16	167	126	95	77	46
	37,53	#14	215	162	122	99	59
700	32,10	#16	182	137	103	83	50
	41,70	#14	235	177	134	108	65
800	35,31	#16	197	149	113	91	55
	45,87	#14	258	194	147	119	71
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 75 (B)

BEAM 75 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	4,97	#20	65	49	37	30	18
	6,52	#18	76	57	42	35	21
	8,03	#16	96	72	55	44	26
150	5,97	#20	69	52	40	32	19
	7,82	#18	80	60	45	37	21
	9,63	#16	102	77	58	47	28
200	6,96	#20	74	56	41	34	21
	9,12	#18	85	64	48	40	23
	11,24	#16	109	81	61	50	30
300	11,73	#18	91	69	52	41	25
	14,45	#16	98	74	56	45	27
	18,77	#14	125	94	71	58	35
400	14,34	#18	105	79	59	48	29
	17,66	#16	113	85	64	52	31
	22,94	#14	144	108	81	66	40
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 200 (B)

BEAM 200 (B)

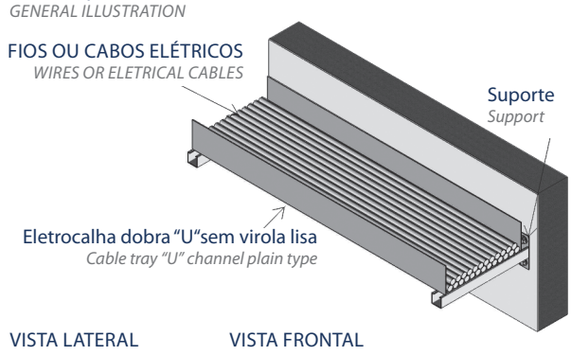
largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
200	15,64	#18	112	84	63	51	31
	19,26	#16	128	96	73	58	35
	25,02	#14	164	123	93	76	45
300	18,25	#18	121	91	65	53	33
	22,47	#16	139	105	74	64	39
	29,19	#14	178	134	101	82	49
400	20,86	#18	131	98	74	60	36
	25,68	#16	150	113	85	69	41
	33,36	#14	192	145	109	89	53
500	28,89	#16	164	124	94	76	45
	37,53	#14	210	158	119	96	57
600	32,10	#16	180	135	102	83	50
	41,70	#14	232	175	133	107	64
700	35,31	#16	196	148	112	91	54
	45,87	#14	253	191	144	116	70
800	38,52	#16	213	161	121	98	58
	50,04	#14	286	215	162	132	78
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

OBS: Pesos em kg para peças de 3000 mm. Para obter pesos (kg) de eletrocalhas fabricadas em alumínio, multiplicar por 0,33.
NOTE: Weights in kg for pieces of 3000 mm .For get the weights (kg) of cable trays made of aluminum, multiply by 0.33.

Tabelas de cargas: eletrocalhas “U” s/ virolas lisas

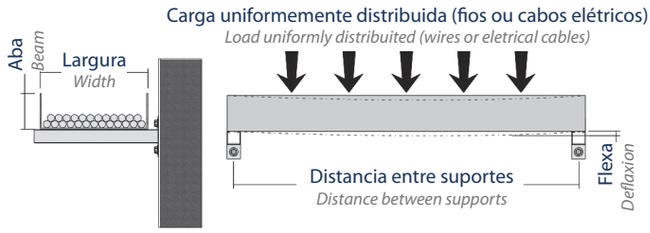
Load tables: “U” single cable trays channel type

ILUSTRAÇÃO GERAL
GENERAL ILLUSTRATION



VISTA LATERAL
SIDE VIEW

VISTA FRONTAL
FRONT VIEW



ABA 100 (B)

BEAM 100 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	6,90	#20	76	57	43	35	21
	9,00	#18	88	66	50	40	24
	11,07	#16	111	84	63	51	31
200	9,20	#20	83	62	47	38	23
	12,00	#18	96	72	55	44	27
	14,76	#16	122	92	69	56	34
300	15,00	#18	105	79	60	48	29
	18,45	#16	121	91	69	56	33
	22,95	#14	155	116	88	71	43
400	18,00	#18	113	85	65	52	31
	22,14	#16	130	98	74	60	36
	27,54	#14	167	126	95	77	46
500	21,00	#18	123	93	70	57	34
	25,83	#16	143	108	81	66	40
	32,13	#14	183	138	104	84	51
600	24,00	#18	133	100	76	61	37
	29,52	#16	156	118	89	72	43
	36,72	#14	202	152	115	93	56
700	27,00	#18	143	108	82	66	40
	33,21	#16	170	128	97	79	47
	41,31	#14	220	166	125	102	61
800	36,90	#16	185	140	105	85	51
	45,90	#14	242	182	138	112	67
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 50 (B)

BEAM 50 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
50	2,90	#22	60	40	33	25	14
	3,43	#20	67	45	36	27	16
	4,50	#18	82	54	43	33	20
100	3,87	#22	63	45	35	28	16
	4,58	#20	72	48	39	29	17
	6,00	#18	88	82	53	43	30
150	4,84	#22	65	49	37	30	18
	5,73	#20	70	53	40	32	19
	7,50	#18	81	61	46	37	22
200	5,81	#22	71	52	40	35	20
	6,87	#20	76	56	43	32	22
	9,00	#18	89	65	50	37	25
300	9,16	#20	81	60	46	34	23
	12,00	#18	94	69	53	40	27
	14,76	#16	115	84	65	49	32
400	11,45	#20	93	68	53	39	26
	15,00	#18	108	79	61	46	31
	18,45	#16	132	97	74	56	37
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 150 (B)

BEAM 150 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
150	13,50	#18	99	75	57	46	28
	16,60	#16	126	95	72	58	35
200	15,00	#18	109	82	62	50	30
	18,45	#16	138	104	79	64	38
300	18,00	#18	118	89	67	55	33
	27,14	#16	136	102	77	63	38
	28,80	#14	174	131	99	80	48
400	21,00	#18	128	96	73	59	35
	25,83	#16	147	111	83	68	41
	33,60	#14	188	142	107	87	52
500	29,52	#16	161	121	91	74	44
	38,40	#14	206	155	117	95	57
600	33,21	#16	176	133	100	81	49
	43,20	#14	227	171	129	105	63
700	36,90	#16	192	145	109	88	53
	48,00	#14	248	187	141	114	69
800	40,59	#16	208	157	119	96	58
	52,80	#14	272	205	155	126	75
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 75 (B)

BEAM 75 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	5,73	#20	69	52	39	32	19
	7,50	#18	80	60	45	37	22
	9,23	#16	101	76	58	47	28
150	6,87	#20	73	55	42	54	20
	9,00	#18	85	64	48	39	23
	11,01	#16	108	81	61	50	30
200	8,01	#20	78	59	44	36	22
	10,50	#18	90	68	51	42	25
	12,92	#16	115	86	65	53	32
300	13,50	#18	96	73	55	44	27
	16,61	#16	104	78	59	48	29
	21,60	#14	132	99	75	61	37
400	16,50	#18	111	84	63	51	31
	20,30	#16	119	90	68	55	33
	26,40	#14	152	114	86	70	42
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 200 (B)

BEAM 200 (B)

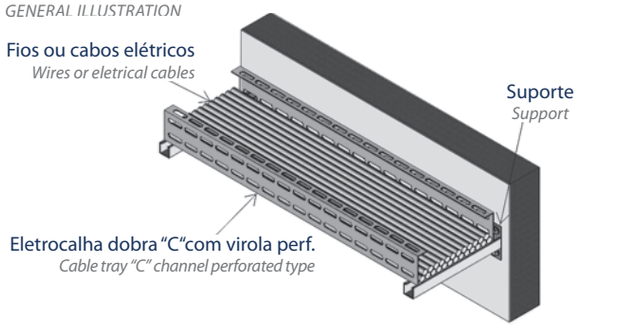
largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
200	18,00	#18	118	89	67	54	33
	22,14	#16	135	102	77	62	37
	28,80	#14	173	130	98	80	48
300	21,00	#18	128	96	73	59	35
	25,83	#16	147	111	83	68	41
	33,60	#14	188	141	107	87	52
400	24,00	#18	138	104	78	64	38
	29,52	#16	158	119	90	73	44
	38,40	#14	203	153	115	94	56
500	33,21	#16	173	131	99	80	48
	43,20	#14	222	167	126	102	61
600	36,90	#16	190	143	108	88	53
	48,00	#14	245	185	140	113	68
700	40,59	#16	207	156	118	96	57
	52,80	#14	267	202	152	123	74
800	44,28	#16	225	170	128	104	62
	57,80	#14	301	227	171	139	83
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

OBS: Pesos em kg para peças de 3000 mm. Para obter pesos (kg) de eletrocalhas fabricadas em alumínio, multiplicar por 0,33.
NOTE: Weights in kg for pieces of 3000 mm .For get the weights (kg) of cable trays made of aluminum, multiply by 0.33.

Tab. de cargas: eletrocalhas “C” c/ virolas perf.

Load tables: “C” perforated cable trays channel type

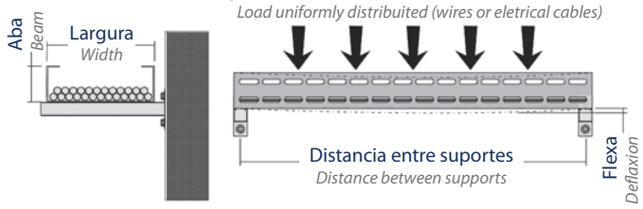
ILUSTRAÇÃO GERAL
GENERAL ILLUSTRATION



VISTA LATERAL
SIDE VIEW

VISTA FRONTAL
FRONT VIEW

Carga uniformemente distribuida (fios ou cabos elétricos)
Load uniformly distribuited (wires or eletrical cables)



ABA 100 (B)

BEAM 100 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	6,96	#20	76	59	44	35	22
	9,12	#18	88	68	51	40	25
	11,24	#16	112	86	65	52	32
200	8,95	#20	83	64	48	39	23
	11,73	#18	97	74	56	44	28
	14,45	#16	122	94	71	57	36
300	14,34	#18	105	81	61	49	30
	17,66	#16	121	93	70	56	35
	22,94	#14	155	119	90	72	45
400	16,95	#18	114	87	66	53	33
	20,87	#16	131	100	76	60	38
	27,11	#14	168	129	97	78	48
500	19,55	#18	124	95	72	58	36
	24,08	#16	144	110	83	66	41
	31,28	#14	184	141	106	85	53
600	22,16	#18	134	102	78	61	39
	27,29	#16	157	120	91	73	45
	35,45	#14	203	156	117	94	59
700	24,77	#18	144	111	83	67	41
	30,50	#16	171	132	99	79	49
	39,62	#14	222	170	128	102	64
800	33,71	#16	187	145	108	86	54
	43,79	#14	244	187	141	113	70
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 50 (B)

BEAM 50 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
50	2,86	#22	60	40	34	25	14
	3,38	#20	68	45	36	27	16
	4,43	#18	89	55	43	34	21
100	4,20	#22	59	42	33	26	15
	4,97	#20	74	49	39	29	17
	6,52	#18	96	78	50	40	28
150	5,04	#22	65	50	38	30	19
	5,97	#20	70	54	40	32	21
	7,82	#18	81	62	47	38	23
200	5,88	#22	72	53	40	30	22
	6,96	#20	78	57	43	32	23
	9,12	#18	90	66	51	38	27
300	8,95	#20	82	60	46	35	24
	11,73	#18	96	71	54	41	29
	14,45	#16	116	86	66	49	35
400	10,94	#20	95	70	54	40	28
	14,34	#18	110	80	62	46	33
	17,66	#16	134	98	76	57	40
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 150 (B)

BEAM 150 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
150	13,04	#18	100	77	58	46	29
	16,05	#16	127	97	74	59	37
200	14,34	#18	110	84	63	51	31
	17,66	#16	139	107	80	64	40
300	16,95	#18	118	91	69	55	34
	20,87	#16	136	105	79	63	40
	27,11	#14	175	135	101	81	50
400	19,55	#18	128	98	74	59	37
	24,08	#16	148	114	85	68	42
	31,28	#14	189	145	110	87	55
500	27,29	#16	162	124	94	75	46
	35,45	#14	207	159	120	96	59
600	30,50	#16	177	135	102	82	51
	39,62	#14	229	176	133	106	66
700	33,71	#16	193	148	112	89	56
	43,79	#14	249	191	144	116	72
800	36,92	#16	210	161	121	97	60
	47,96	#14	274	210	158	127	79
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 75 (B)

BEAM 75 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	5,97	#20	69	53	40	32	20
	7,82	#18	79	61	46	37	23
	9,63	#16	101	78	59	47	29
150	6,96	#20	74	57	42	34	21
	9,12	#18	85	65	49	40	24
	11,24	#16	108	83	62	50	31
200	7,96	#20	78	59	45	36	23
	10,43	#18	91	70	53	41	26
	12,84	#16	116	88	67	53	33
300	13,04	#18	97	75	56	44	28
	16,05	#16	104	80	60	47	30
	20,85	#14	133	101	77	61	39
400	15,64	#18	112	85	64	52	32
	19,26	#16	120	92	69	56	35
	25,02	#14	152	117	88	71	44
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 200 (B)

BEAM 200 (B)

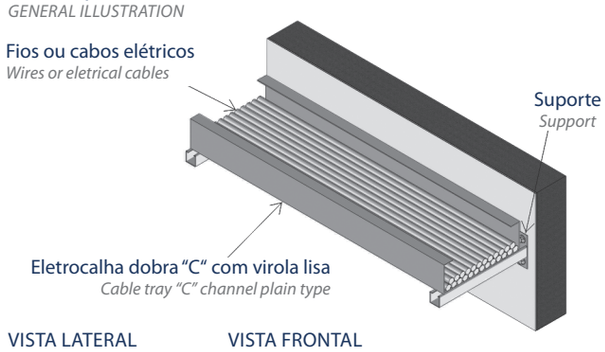
largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
200	16,95	#18	118	91	68	55	34
	20,87	#16	135	104	78	63	40
	27,11	#14	174	134	101	80	50
300	19,55	#18	128	98	74	59	37
	24,08	#16	148	114	85	68	42
	31,28	#14	189	145	110	87	55
400	22,16	#18	138	106	80	64	40
	27,29	#16	159	122	92	74	46
	35,45	#14	204	156	112	95	59
500	30,50	#16	174	134	96	80	50
	39,62	#14	224	172	130	98	64
600	33,71	#16	191	147	111	88	55
	43,78	#14	247	190	143	115	71
700	36,92	#16	109	160	120	97	60
	47,96	#14	269	207	156	125	78
800	40,13	#16	227	173	131	105	65
	52,13	#14	304	232	175	140	88
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

OBS: Pesos em kg para peças de 3000 mm. Para obter pesos (kg) de eletrocalhas fabricadas em alumínio, multiplicar por 0,33.
NOTE: Weights in kg for pieces of 3000 mm .For get the weights (kg) of cable trays made of aluminum, multiply by 0.33.

Tabelas de cargas: eletrocalhas “C” c/ virolas lisas

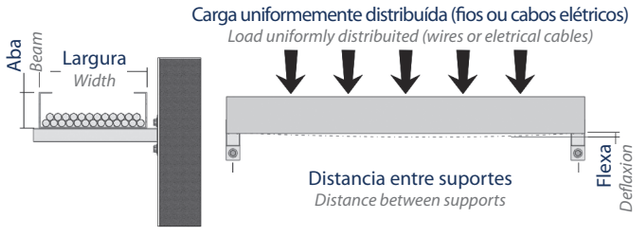
Load tables: “C” single cable trays channel type

ILUSTRAÇÃO GERAL
GENERAL ILLUSTRATION



VISTA LATERAL
SIDE VIEW

VISTA FRONTAL
FRONT VIEW



ABA 100 (B)

BEAM 100 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	7,55	#20	80	62	47	37	23
	9,90	#18	93	72	54	43	27
	12,18	#16	118	91	69	55	34
200	9,84	#20	88	68	51	41	25
	12,90	#18	102	78	59	47	30
	15,87	#16	129	99	75	60	38
300	15,90	#18	111	86	65	52	32
	19,56	#16	128	98	74	59	37
	25,44	#14	164	126	95	76	48
400	18,90	#18	120	92	70	56	35
	23,25	#16	138	106	80	64	40
	30,24	#14	177	136	103	82	51
500	21,90	#18	131	100	76	61	38
	26,94	#16	152	116	88	70	44
	35,04	#14	194	149	112	90	56
600	24,90	#18	141	108	82	65	41
	30,63	#16	166	127	96	77	48
	39,84	#14	214	165	124	99	62
700	27,90	#18	152	117	88	71	44
	34,32	#16	181	139	105	84	52
	44,64	#14	234	179	135	108	68
800	38,01	#16	197	151	114	91	57
	49,44	#14	257	197	149	119	74
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 50 (B)

BEAM 50 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
50	3,29	#22	64	43	36	27	15
	3,89	#20	72	48	38	29	17
	5,10	#18	94	58	46	36	22
100	4,45	#22	63	45	35	28	16
	5,26	#20	78	52	41	31	18
	6,90	#18	101	82	53	43	30
150	5,42	#22	69	53	40	32	20
	6,41	#20	74	57	43	34	22
	8,40	#18	86	66	50	40	25
200	6,39	#22	76	56	43	32	23
	7,55	#20	82	60	46	34	25
	9,90	#18	95	70	54	40	29
300	9,84	#20	87	64	49	37	26
	12,90	#18	101	75	57	43	31
	15,87	#16	123	91	70	52	37
400	12,13	#20	100	74	57	42	30
	15,90	#18	116	85	66	49	35
	19,56	#16	141	104	80	60	43
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 150 (B)

BEAM 150 (B)

largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
150	14,40	# 18	106	81	61	49	31
	17,71	# 16	134	103	78	62	39
200	15,90	#18	116	89	67	54	33
	19,56	# 16	147	113	85	68	43
300	18,90	# 18	125	96	73	58	36
	23,25	# 16	144	111	84	67	42
	30,24	# 14	185	142	107	86	53
400	21,90	# 18	135	104	78	63	39
	26,94	# 16	156	120	90	72	45
	35,04	#14	199	153	116	92	58
500	30,63	#16	171	131	99	79	49
	39,84	#14	218	168	127	101	63
600	34,32	# 16	187	143	108	87	54
	44,64	# 14	241	185	140	112	70
700	38,01	# 16	204	156	118	94	59
	49,44	# 14	263	202	152	122	76
800	41,70	# 16	221	170	128	103	64
	54,24	#14	289	222	167	134	84
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 75 (B)

BEAM 75 (B)

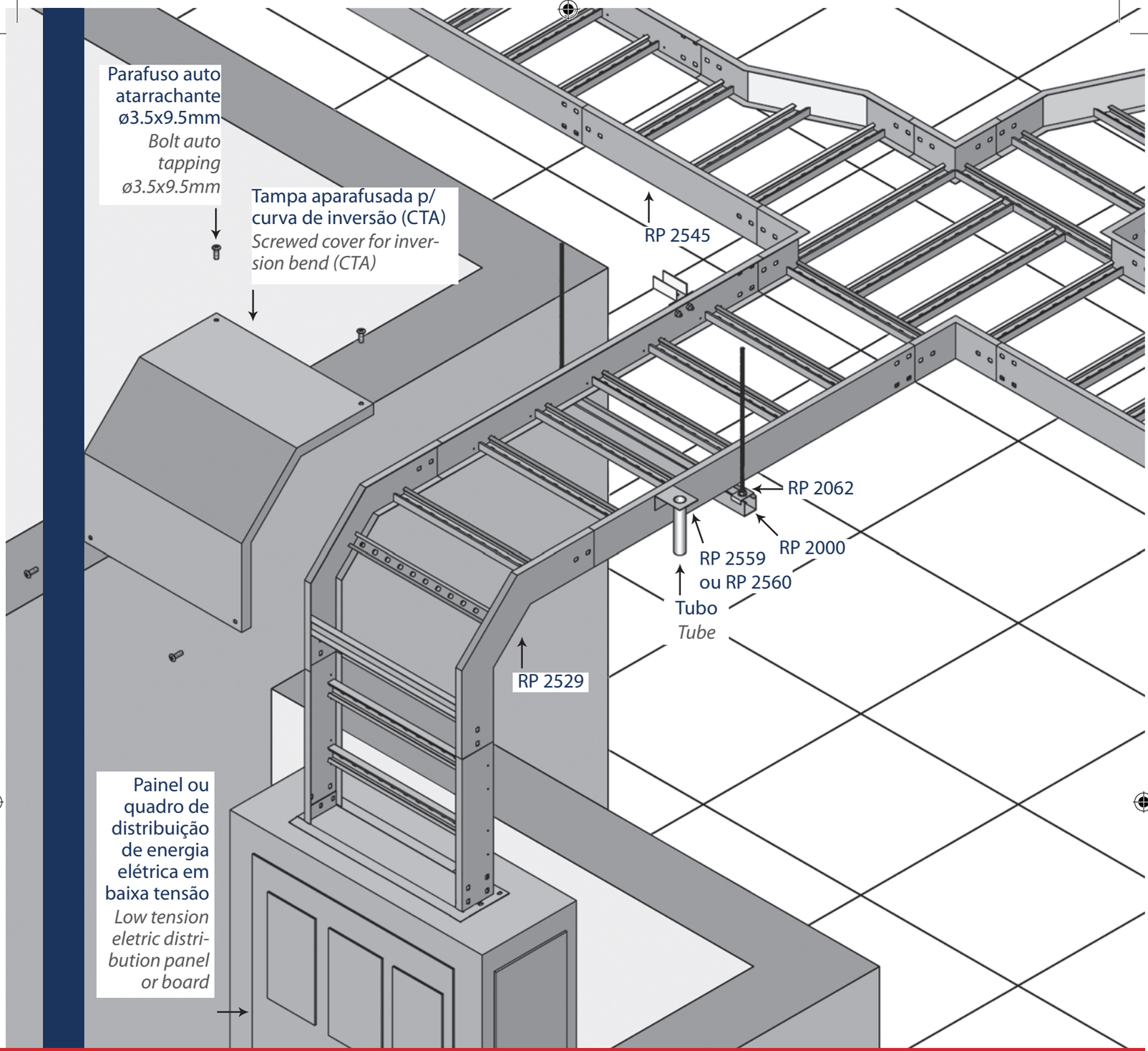
largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	6,41	#20	73	56	42	34	21
	8,40	#18	84	65	49	39	24
	10,33	#16	107	82	62	50	31
150	7,55	#20	78	60	45	36	22
	9,90	#18	90	69	52	42	26
	12,18	#16	114	88	66	53	33
200	8,70	#20	83	63	48	38	24
	11,40	#18	96	74	56	44	28
	14,02	#16	122	93	71	56	35
300	14,40	#18	102	79	59	47	30
	17,71	#16	110	85	64	51	32
	23,04	#14	140	107	81	65	41
400	17,40	#18	118	90	68	55	34
	21,40	#16	127	97	73	59	37
	27,84	#14	161	124	93	75	47
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

ABA 200 (B)

BEAM 200 (B)

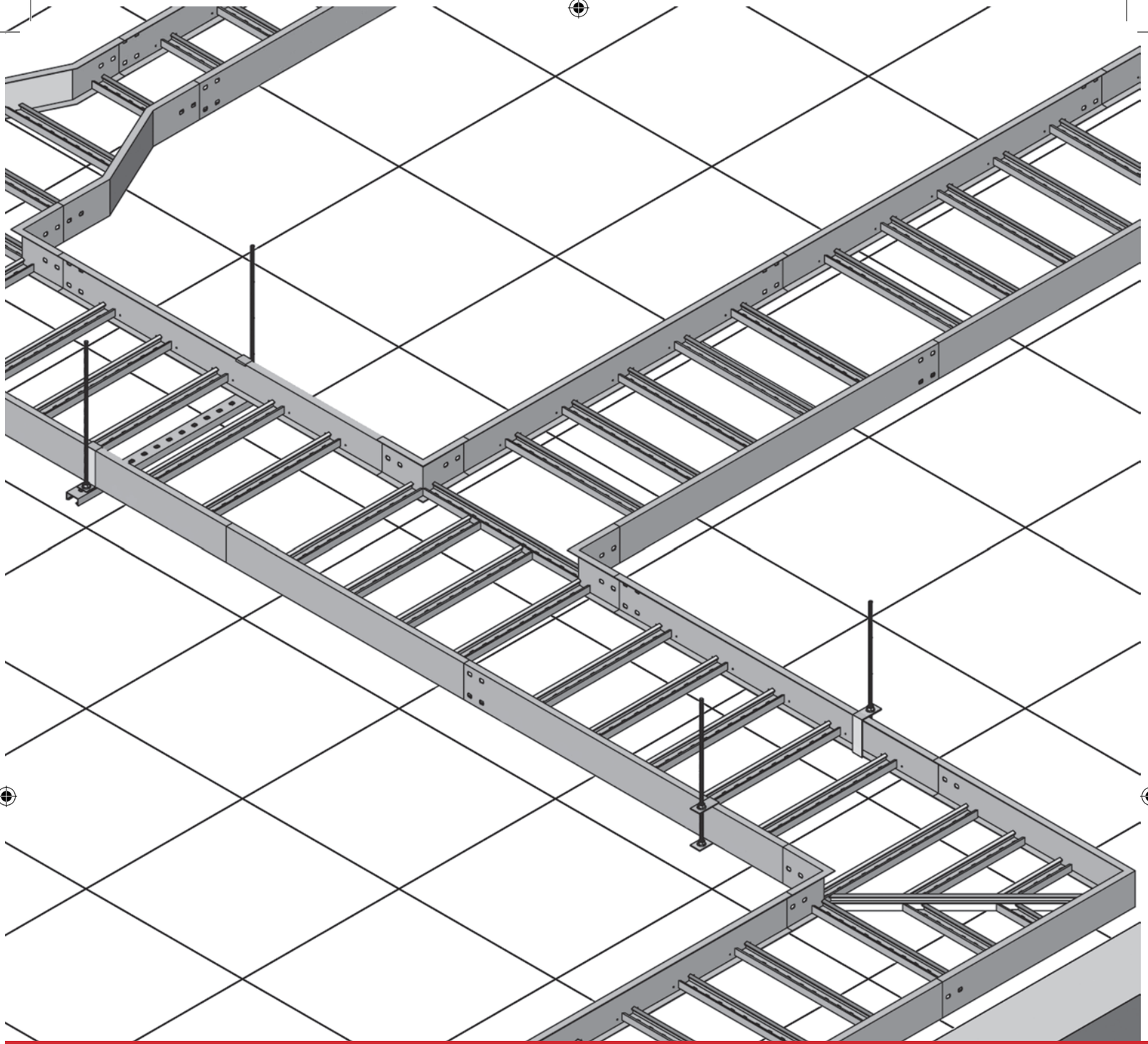
largura (A)	peso	chapa	distância entre suportes (mm) / cargas (Kg)				
width (A)	*weight*	*plate*	*distance between supports (mm) / loads (Kg)*				
			1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
200	18,90	#18	125	96	72	58	36
	23,25	#16	145	110	83	67	42
	30,24	#14	184	141	106	85	53
300	21,90	#18	135	104	78	63	39
	26,94	# 16	156	120	90	72	45
	35,04	#14	199	153	116	92	58
400	24,90	#18	146	112	85	68	42
	30,63	#16	168	129	97	78	49
	39,84	#14	215	165	125	100	62
500	34,32	#16	184	141	107	85	53
	44,64	#14	236	181	137	109	68
600	38,01	#16	202	155	117	93	58
	49,44	#14	260	200	151	121	75
700	41,70	#16	220	169	127	102	64
	54,24	#14	284	218	165	132	82
800	45,39	#16	239	183	138	111	69
	59,04	#14	320	245	185	148	93
flexa relação 1/300 *relation of deflexion 1/300*			3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

OBS: Pesos em kg para peças de 3000 mm. Para obter pesos (kg) de eletrocalhas fabricadas em alumínio, multiplicar por 0,33.
NOTE: Weights in kg for pieces of 3000 mm .For get the weights (kg) of cable trays made of aluminum, multiply by 0.33.



Leitos para cabos

Os Leitos para cabos fabricados pela Real Perfil, são recomendados para a condução e distribuição de cabos leves e pesados, com caracterísiícas dimensionais projetadas para diversas cargas e vãos, cujos gráficos são fornecidos nas páginas. Como principais vantagens de uso dos leitos, podemos citar a completa ventilação dos cabos, inspeção visual permitida pela instalação aparente e fácil acesso para a manutenção. Contando com variada linha de derivações e acessórios para união, fixação e sustentação, permitem qualquer tipo de ramificação, oferecendo segurança, estética, funcionábilidade e uma rápida montagem.



Cable trays ladder type

The Cables tray mabe by Real Perfil, are recomended for conduction and distribuition of light and heavy cables, with dimentional characteristics projected for various loads and spaces, which graphics are. As principal advantages of using the cables tray we could mention the total ventilation of cables, visual inspection permited by apparent installation and easy acess for maintenance. Counting with a varied line of derivations and accessories for union, fixation and support, it permits any kind of branch off ering security, beauty, functionability and fast assembly.

Leitos para cabos

Cable trays ladder type

COMO ESPECIFICAR TRECHOS RETOS:
HOW TO SPECIFY STRAIGHT CABLE TRAYS:

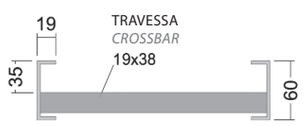
EXEMPLO/ *EXAMPLE:* **Ref RP 2500/T20/400/E/43/GF**

TIPO DE LEITO	DIST. ENTRE TRAVESSAS	LARGURA	ABAS	BITOLA	ACABAMENTO
TYPE OF CABLE TRAY	*DIST. BETWEEN CROSSBARS*	*WIDTH*	*TURNED*	*MSG*	*FINISHING*
RP 2500	**T 20**	**400**	**E**	**43**	**GF**
Leito econômico *economic cable ladder*	200 mm	400 mm	externas *outwards*	4 (longarina #14) e 3 (travessas #16) *4 (side rail flanges #14) and 3 (cross-bars #16)*	pós-galvanizado *hot dip galvanized*

TIPO DE LEITO / *TYPE OF CABLE TRAY*

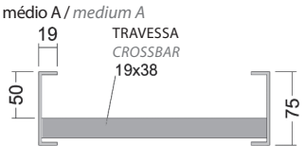
RP 2500 (TIPO 1)

econômico / *economical*

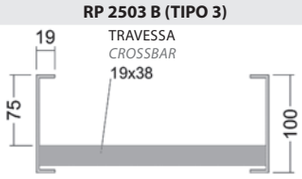


RP 2503 A (TIPO 2)

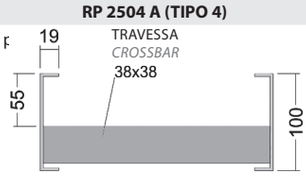
médio A / *medium A*



RP 2503 B (TIPO 3)

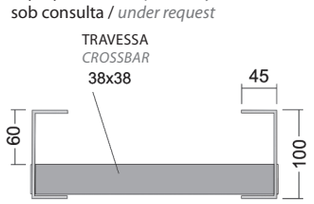


RP 2504 A (TIPO 4)



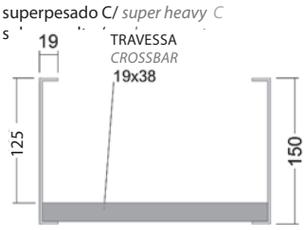
RP 2504 B (TIPO 5)

superpesado B/ *super heavy B*
sob consulta / *under request*



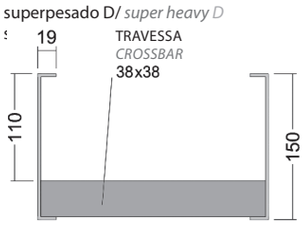
RP 2504 C (TIPO 6)

superpesado C/ *super heavy C*



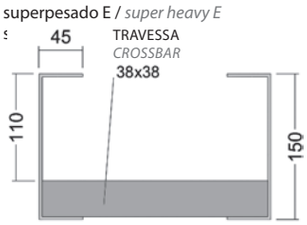
RP 2504 D (TIPO 7)

superpesado D/ *super heavy D*



RP 2504 E (TIPO 8)

superpesado E / *super heavy E*



LARGURA (A) mm
WIDTH (A) mm

100	200	300	400	500	600	700	800	900	1000	1100	1200	1500

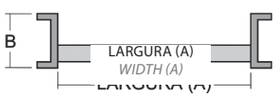
Nº DE TRAVESSAS
Nº OF CROSSBARS

6	10	12	15	20	24	30
RP 2504 B RP 2504 A	Todos os tipos	Todos os tipos	Todos os tipos	Todos os tipos	Todos os tipos	Todos os tipos

ABAS
TURNED

I (ABAS INTERNAS / *TURNED INWARS***)**

E (ABAS EXTERNAS / *TURNED OUTWARDS***)**



BITOLA
MSG

2	3	4	5
#18 (1,2 mm)	#16 (1,5 mm)	#14 (2,0 mm)	#12 (2,65 mm)

Atenção: As travessas são fabricadas nas espessuras de 1,2mm a 2,00mm. / *Note: The crossbars are manufactured in the thickness of 1.2mm to 2.00mm.*

TRATAMENTO
FINISHING

PZ	GE	AL	I3	I4	I6	I6/L	PT
pré-galvanizado a quente - padrão CSN conf. NBR 7008 *pre galvanized steel according to NBR 7008*	pós-galvanizada conf. NBR 6323 *hot dip galvanized according NBR 6323*	alumínio *aluminum*	aço inox AISI 430 *stainless steel AISI 430*	aço inox AISI 304 *stainless steel AISI 304*	aço inox AISI 316 *stainless steel AISI 316*	aço inox AISI 316L *stainless steel AISI 316L*	pintado* *painted**

Atenção: Especificações sem a indicação do tratamento superficial serão consideradas como materiais pré galvanizado a quente (PZ).
Note: Specifications without the indication of surface treatment materials shall be considered as pre-dip galvanized (PZ).

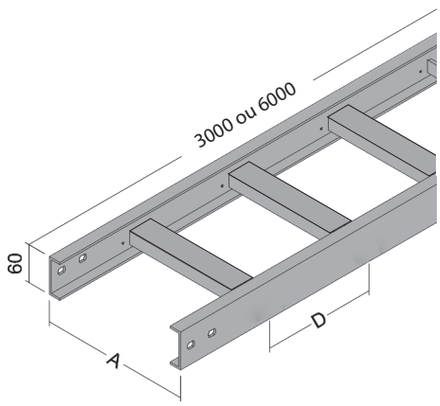
Leitos para cabos

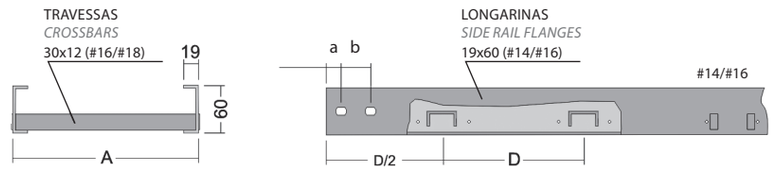
Cable trays ladder type

Leito tipo 1 - leve
Cable tray - light type

Ref. RP 2500

distância entre travessas *distance between crossbars*	3000 / 6000 mm
D=200	RP 2500 / T20 / A / I/E



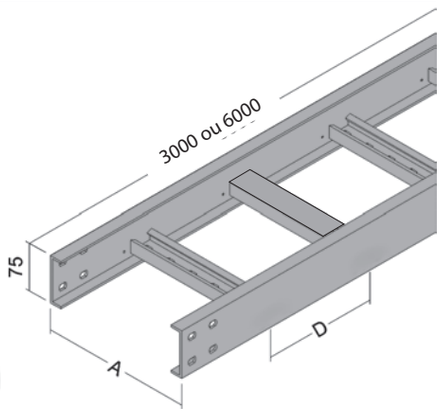


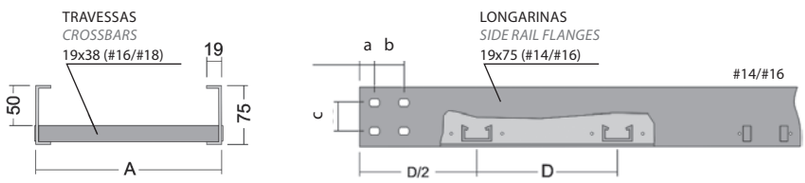
Leito tipo 2 - médio
Cable tray - medium type

Ref. RP 2503A

tipo *type*	a	b	c
75	30	25	35

distância entre travessas *distance between crossbars*	3000 / 6000 mm
D=500	RP 2503A / T50 / A / I/E
D=300	RP 2503A / T30 / A / I/E
D=250	RP 2503A / T25 / A / I/E
D=200	RP 2503A / T20 / A / I/E



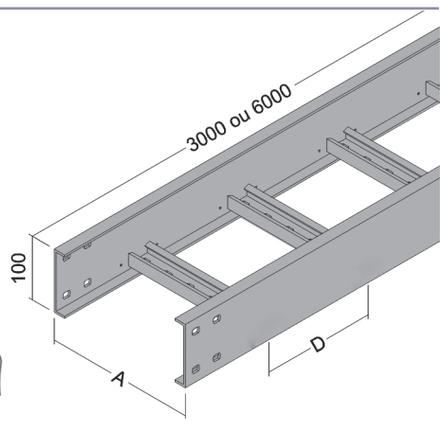


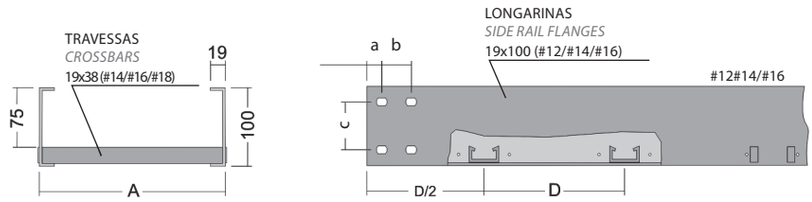
Leito Tipo 3 - semi-pesado
Cable tray - semi heavy type

Ref. RP 2503B

tipo *type*	a	b	c
100	35	25	50

distância entre travessas *distance between crossbars*	3000 / 6000 mm
D=500	RP 2503B / T50 / A / I/E
D=300	RP 2503B / T30 / A / I/E
D=250	RP 2503B / T25 / A / I/E
D=200	RP 2503B / T20 / A / I/E



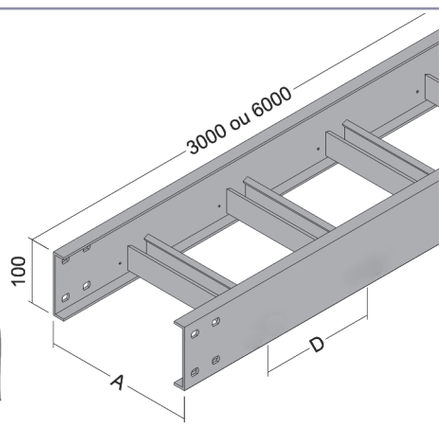


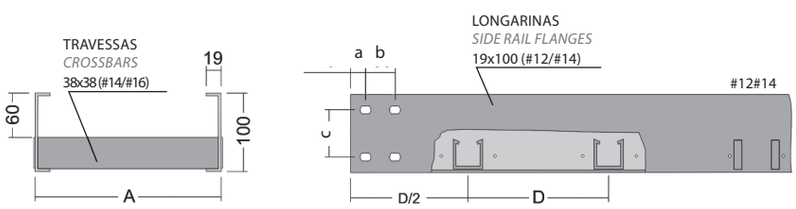
Leito tipo 4 - pesado
Cable tray - heavy type

Ref. RP 2504A

tipo *type*	a	b	c
100	35	25	50

distância entre travessas *distance between crossbars*	3000 / 6000 mm
D=500	RP 2504A / T50 / A / I/E
D=300	RP 2504A / T30 / A / I/E
D=250	RP 2504A / T25 / A / I/E
D=200	RP 2504A / T20 / A / I/E





Leitos para cabos

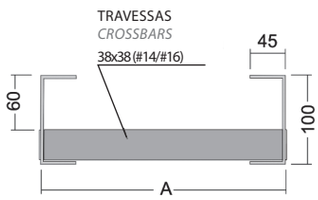
Cable trays ladder type

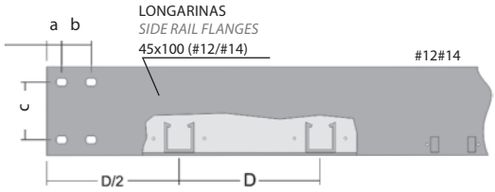
Leito tipo 5- pesado - classe B
Cable tray type 5 - heavy - class B

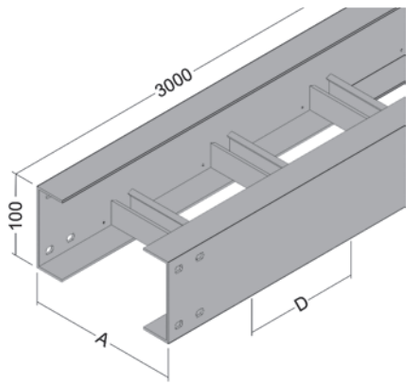
Ref. RP 2504B

tipo / type	a	b	c
100	35	25	50

distância entre travessas / distance between crossbars	3000 / 6000 mm
D=500	RP 2504B / T50 / A / I/E
D=300	RP 2504B / T30 / A / I/E
D=250	RP 2504B / T25 / A / I/E
D=200	RP 2504B / T20 / A / I/E







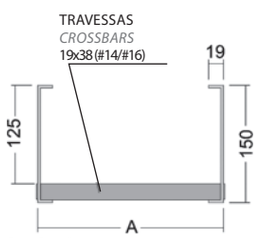
Obs: Padrão com travassas soldadas às longarinas. / *Note: The crossbars are welded on side rails.*

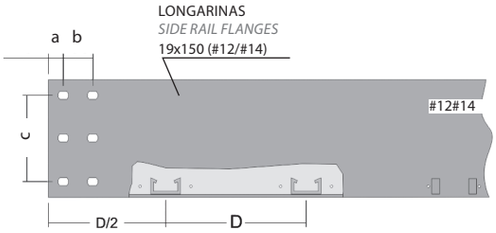
Leito tipo 6 - super pesado - classe C
Cable tray type 6 - super heavy - class C

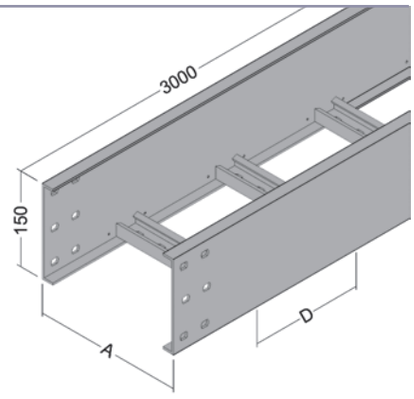
Ref. RP 2504C

tipo / type	a	b	c
150	35	25	100

distância entre travessas / distance between crossbars	3000 / 6000 mm
D=300	RP 2504C / T30 / A / I/E
D=250	RP 2504C / T25 / A / I/E
D=200	RP 2504C / T20 / A / I/E







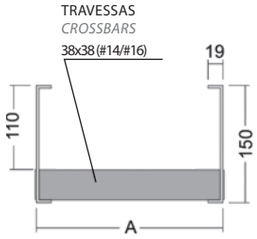
Obs: Padrão com travassas soldadas às longarinas. / *Note: The crossbars are welded on side rails.*

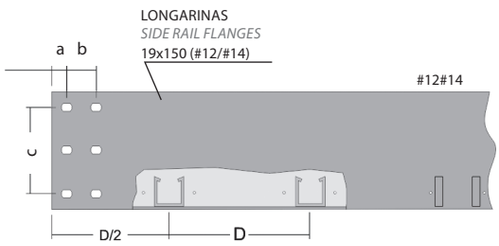
Leito tipo 7 - super pesado - classe D
Cable tray type 7 - super heavy - class D

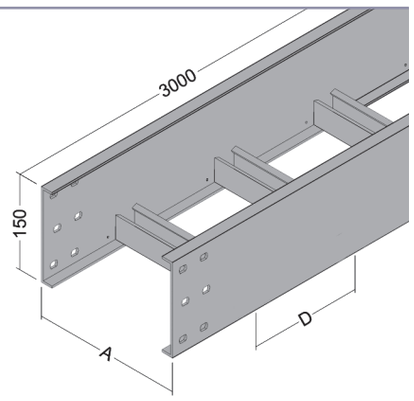
Ref. RP 2504D

tipo / type	a	b	c
150	35	25	100

distância entre travessas / distance between crossbars	3000 / 6000 mm
D=300	RP 2504D / T30 / A / I/E
D=250	RP 2504D / T25 / A / I/E
D=200	RP 2504D / T20 / A / I/E







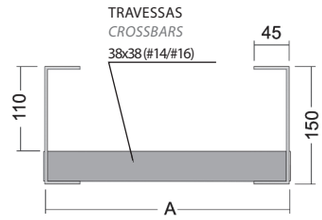
Obs: Padrão com travassas soldadas às longarinas. / *Note: The crossbars are welded on side rails.*

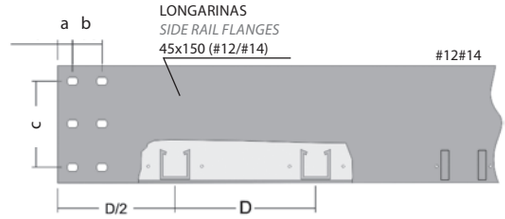
Leito tipo 8 - super pesado - classe E
Cable tray type 8 - super heavy - class E

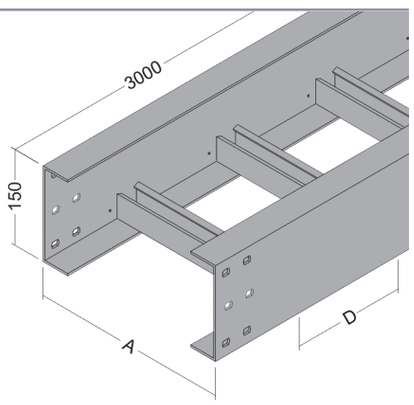
Ref. RP 2504E

tipo / type	a	b	c
150	35	25	100

distância entre travessas / distance between crossbars	3000 / 6000 mm
D=500	RP 2504E / T50 / A / I/E
D=300	RP 2504E / T30 / A / I/E
D=250	RP 2504E / T25 / A / I/E
D=200	RP 2504E / T20 / A / I/E







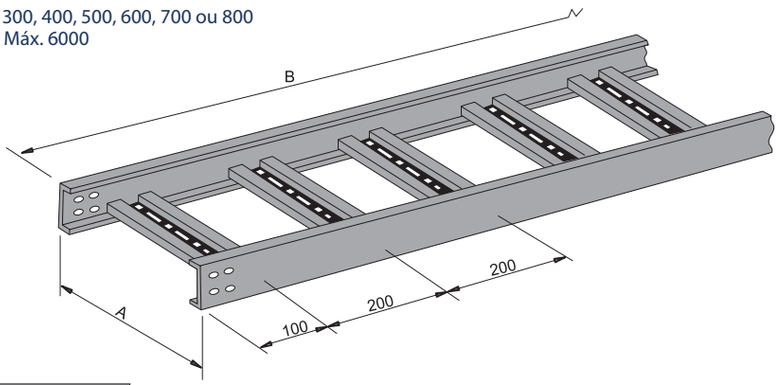
Obs: Padrão com travassas soldadas às longarinas. / *Note: The crossbars are welded on side rails.*

Leitos para cabos

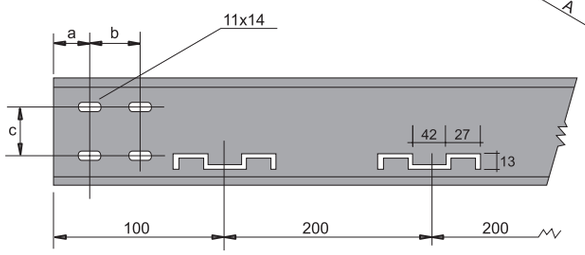
Cable trays ladder type

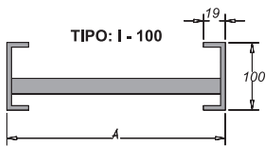
Leito para cabos tipo ventilado
Cable tray ventilated type

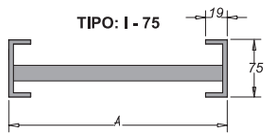
A= 300, 400, 500, 600, 700 ou 800
B = Máx. 6000



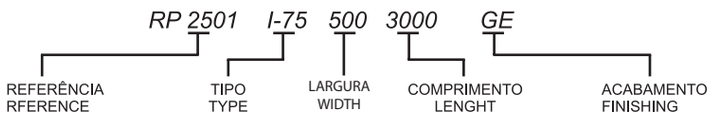
tipo / *type*	a	b	c
100	35	25	50
75	30	25	35





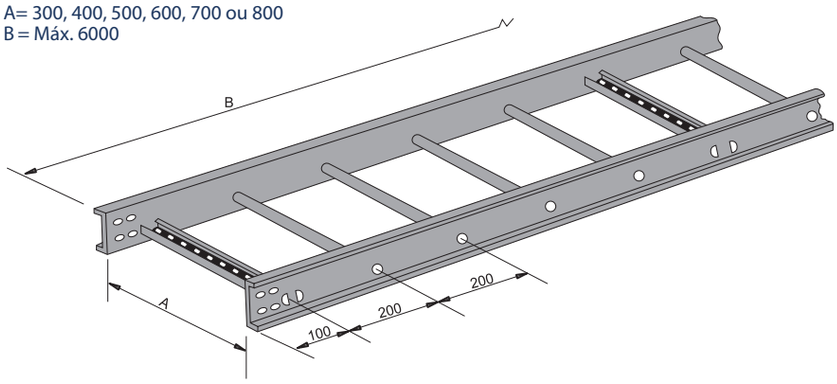


COMO SOLICITAR
HOW TO REQUEST

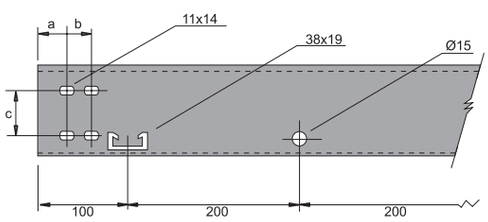


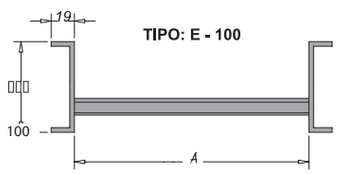
Leito para cabos tipo médio
cables Tray Medion Type

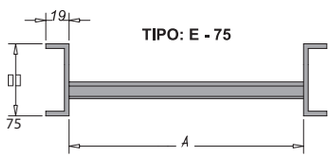
A= 300, 400, 500, 600, 700 ou 800
B = Máx. 6000

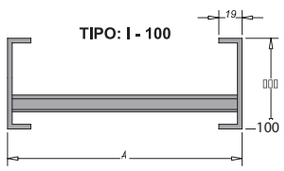


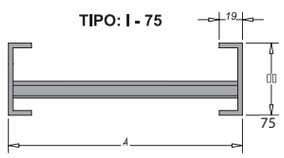
tipo / *type*	a	b	c
100	35	25	50
75	30	25	35



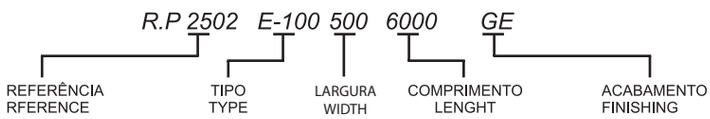








COMO SOLICITAR
HOW TO REQUEST

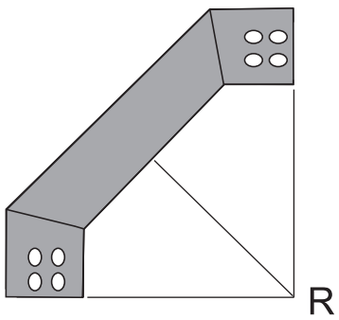


Leitos para cabos

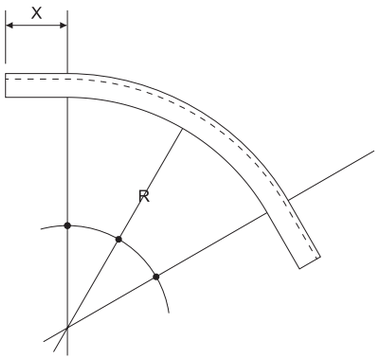
Cable trays ladder type

Esta secção destina-se a curvas e derivações de todos os tipos de leitos fabricados. Os desenhos são ilustrativos, acompanhando o leito solicitado conforme sua referência, tipo, largura e espaçamento entre travessas. E raio segmentado fornecimento normal, para raio curvilineo favor especificar.
This section is intended for bends and derivations of all kinds of produced trays. The drawings are representative following the requested tray, according to its reference, type, breadth and pitch between crossbars

RAIO SEGMENTADO (fornecimento normal)
RADIUS SEGMENTED TYPE (standard supply)



RAIO CURVILÍNEO (fornecimento opcional - mencionar no pedido)
RADIUS CONTINUOUS TYPE (special supply - please, mentioned on order)



Ref.	RS	RC	X
RP 2500	320	320	125
RP 2501	520	520	
RP 2502	320	320	125
RP 2503	520	520	
RP 2504 A	645	645	
RP 2504 C	895	895	
RP 2504 D			
RP 2504 B	320	N/A	125
RP 2504 E	520		
	645		
	895		

RS= Raio segmentado/ *segmented radius*
RS= Raio contínuo/ *continuous radius*
N/A= Não aplicável / *not available*

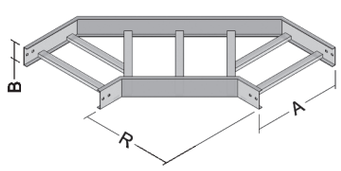
COMO SOLICITAR
HOW TO REQUEST

2510 / 3E / T25 / 300 / 320 / GF

CH90	Leito tipo 3 - semi-pesado - abas externas *Cable tray type 3 - semi heavy - turned outwards.*	*Trav. a cada 250 mm* *Rung spacing 250 mm*	Largura *Width*	Raio *Radius*	Acabamento *Finishing*

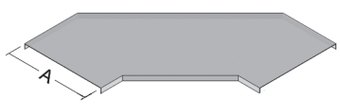
OBS: Para especificação de tampas, inserir no final do código CTN, CTP ou CTA.
NOTE: To specify covers, insert at the end of the code CTN, CTP or CTA.

Curva horizontal
Horizontal bend

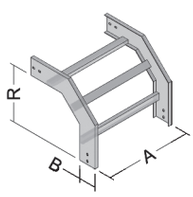


curva *bend*	ângulo *angle*	tampa *cover*
RP 2505	15º	RP 2605
RP 2506	30º	RP 2606
RP 2507	45º	RP 2607
RP 2508	60º	RP 2608
RP 2509	75º	RP 2609
RP 2510	90º	RP 2610

Tampa curva horizontal
Cover for horizontal bend

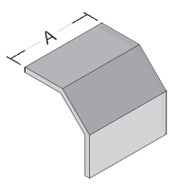


Curva vertical externa
Vertical external bend

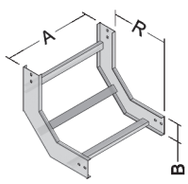


curva *bend*	ângulo *angle*	tampa *cover*
RP 2511	15º	RP 2611
RP 2512	30º	RP 2612
RP 2513	45º	RP 2613
RP 2514	60º	RP 2614
RP 2515	75º	RP 2615
RP 2516	90º	RP 2616

Tampa curva vertical interna
Cover for vertical internal bend

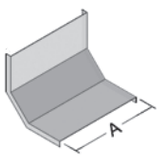


Curva vertical interna
Vertical internal bend



curva *bend*	ângulo *angle*	curva *bend*
RP 2517	15º	RP 2617
RP 2518	30º	RP 2618
RP 2519	45º	RP 2619
RP 2520	60º	RP 2620
RP 2521	75º	RP 2621
RP 2522	90º	RP 2622

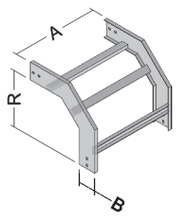
Tampa curva vertical interna
Cover for vertical internal bend



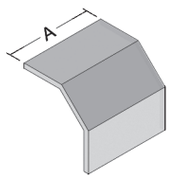
Leitos para cabos

Cable trays ladder type

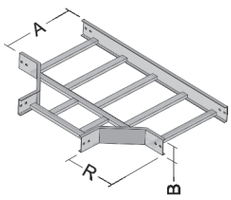
Curva de inversão 90º
90° Inversion bend
Ref. RP 2529



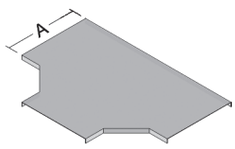
Tampa curva de inversão 90º
Cover for 90° inversion bend
Ref. RP 2629



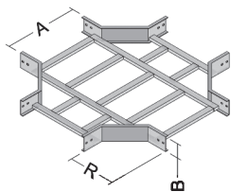
Tê horizontal 90°
90° horizontal tee
Ref. RP 2532



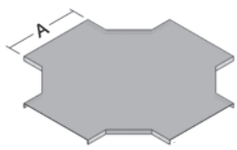
Tampa tê horizontal 90°
Cover for 90° horizontal tee
Ref. RP 2632



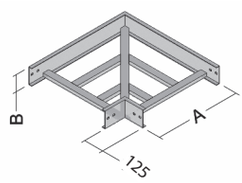
Cruzeta horizontal 90°
90° horizontal cross
Ref. RP 2537



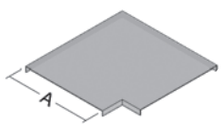
Tampa cruzeta horizontal 90°
Cover for 90° horizontal cross
Ref. RP 2637



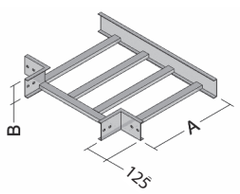
Cotovelo reto
90° Straight elbow
Ref. RP 2536



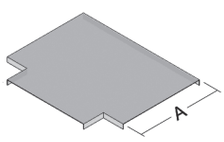
Tampa cotovelo reto
Cover for 90° straight elbow
Ref. RP 2636



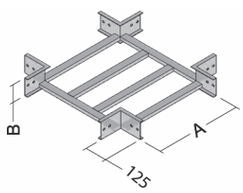
"T" reto
90° Straight tee
Ref. RP 2533



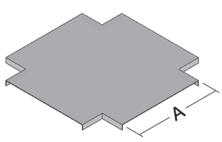
Tampa "T" reto
Cover for 90° straight tee
Ref. RP 2633



Cruzeta reta
90° Straight cross
Ref. RP 2538



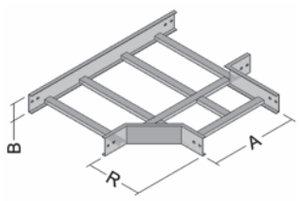
Tampa cruzeta reta
Cover for 90° straight cross
Ref. RP 2638



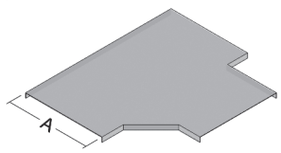
Leitos para cabos

Cable trays ladder type

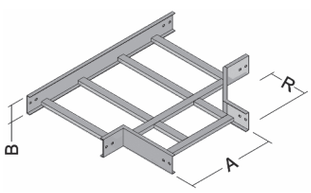
Junção à direita 90º
90º Right junction
Ref. RP 2540



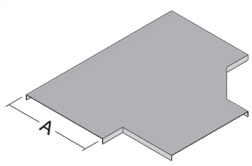
Tampa junção à direita 90°
Cover for 90° right junction
Ref. RP 2640



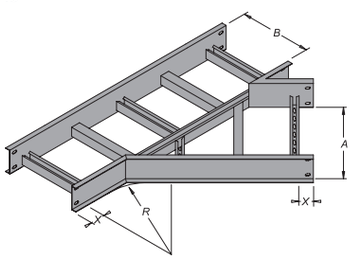
Junção à esquerda 90°
90° Left junction
Ref. RP 2542



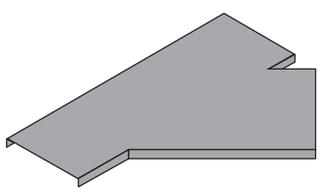
Tampa junção à esquerda 90°
Cover for 90° left junction
Ref. RP 2642



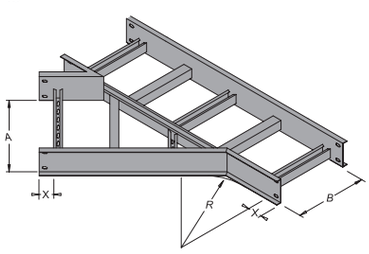
Junção à direita 45º
45º Right junction
Ref. RP 2539



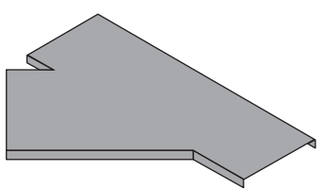
Tampa junção à direita 45º
45º Right junction
Ref. RP 2639



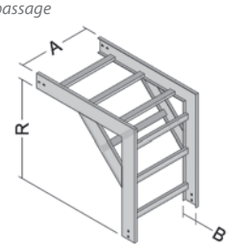
Junção à esquerda 45º
45º Left junction
Ref. RP 2541



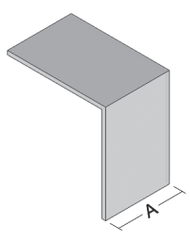
Tampa junção à esquerda 45º
45º Left junction
Ref. RP 2641



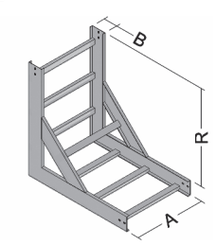
Curva 90° de passagem reta descida
90° Bend with descent straight passage
Ref. RP 2530



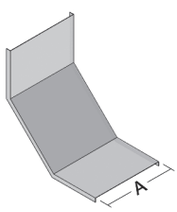
Tampa curva 90° de passagem reta descida
Cover for 90° bend with descent straight passage
Ref. RP 2630



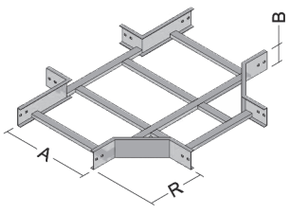
Curva 90° de passagem reta subida
90° Bend with ascent straight passage
Ref. RP 2531



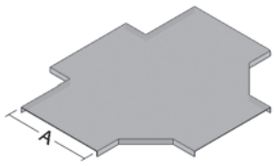
Tampa curva 90° de passagem reta subida
Cover for 90° bend with ascent straight passage
Ref. RP 2631



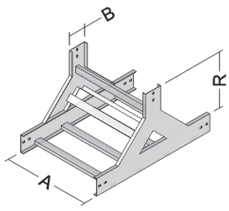
Cruzeta horizontal 90° com uma saída reta
90° horizontal cross with one straight outlet
Ref. RP 2570



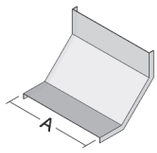
Tampa cruzeta horizontal 90° com uma saída reta
Cover for Horizontal cross with one straight outlet
Ref. RP 2670



Tê vertical subida
90° Ascent vertical tee
Ref. RP 2535

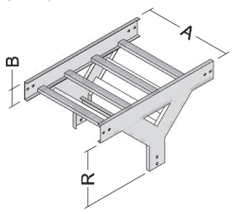


Tampa tê vertical subida
Cover for 90° ascent vertical tee
Ref. RP 2635

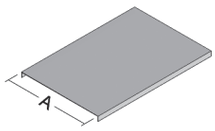


OBS: Fornecido com duas tampas.
NOTE: Supplied with two covers.

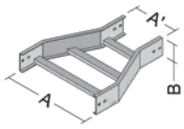
Tê vertical descida
90° Descent vertical tee
Ref. RP 2534



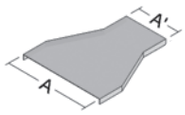
Tampa tê vertical descida
Cover for 90° descent vertical tee
Ref. RP 2634



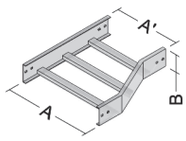
Redução concêntrica
Concentric reduction
Ref. RP 2543



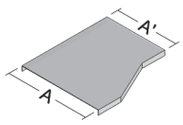
Tampa redução concêntrica
Cover for concentric reduction
Ref. RP 2643



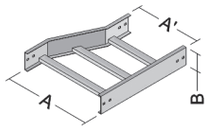
Redução à esquerda
Left reduction
Ref. RP 2545



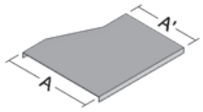
Tampa redução à esquerda
Cover for left reduction
Ref. RP 2645



Redução à direita
Right reduction
Ref. RP 2544



Tampa redução à direita
Cover for right reduction
Ref. RP 2644

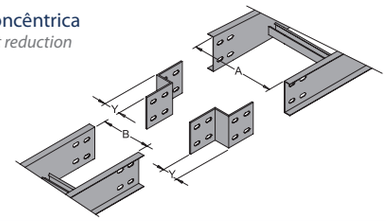


Leitos para cabos

Cable trays ladder type

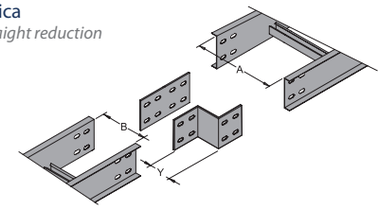
Redução reta concêntrica
Concentric straight reduction

Ref. RP 2547



Redução reta excêntrica
Eccentric right or left - straight reduction

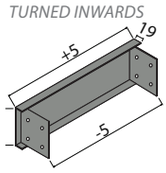
Ref. RP 2548



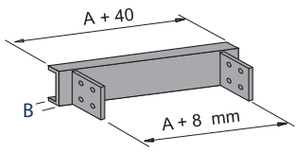
Terminal de fechamento
End plate

Ref. RP 2549

ABA INTERNA
TURNED INWARDS

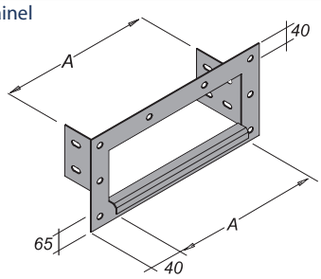


ABA EXTERNA
TURNED OUTWARDS

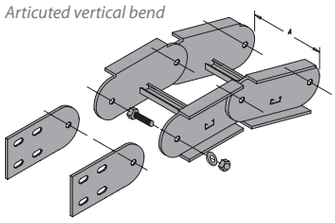


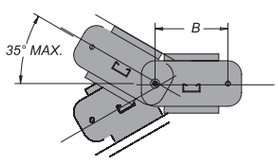
Proteção para ligação em painel
Protection for panel connection

Ref. RP 2550



Curva vertical articulada
Articuted vertical bend





*Fornecido com 4 junções
* to be supplied with 4 pieces.*

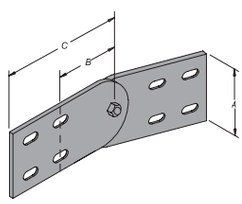
Para aba 75x19 - B=160mm
Para aba 100x19 - B=160mm
Para aba 100x45 - B=250mm

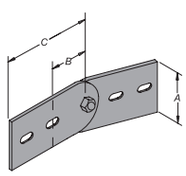
For beam 75x19 - B=140mm
For beam 100x19 - B=160mm
For beam 100x45 - B=250mm

		NÚMERO DE GOMOS / CURVA			
		NUMBER OF PIECES / BEND (B=160)			
ângulo	Ref.	Raio 320	Raio 520	Raio 645	Raio 895
angle	*Ref.*	*Radius 320*	*Radius 520*	*Radius 645*	*Radius 895*
15°	RP 2523		2	2	2
30°	RP 2524	1	3	2	3
45°	RP 2525	2	4	3	4
60°	RP 2526	3	5	4	5
75°	RP 2527	4	6	4	6
90°	RP 2528	5	7	5	7

Junção articulada
Articulated junction

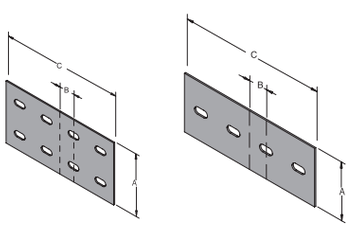
Ref.	Aba	A	B	C
Ref.	*Beam*			
RP 2551	75mm	65	70	115
RP 2551	100mm	90	90	135
RP 2551	60mm	50	53	110





Junção simples
Simple junction

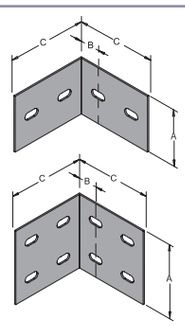
Ref.	Aba	A	B	C
Ref.	*Beam*			
RP 2552	100mm	90	35	160
RP 2552	75mm	65	30	150
RP 2552	60mm	50	19	152



Junção reta
Right - angle junction

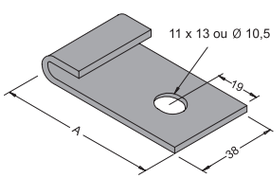
Ref. RP 2574 - A= 75mm
Ref. RP 2575 - A= 100mm

Ref.	Aba	A	B	C
Ref.	*Beam*			
RP 2574	75mm	65	27	75
RP 2574	60mm	50	19	75
RP 2574	100mm	90	32	80



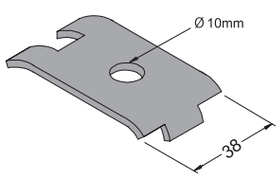
Grapa guia
Guide bearing

Ref. RP 2554 - A= 60 mm
Ref. RP 2599 - A= 85 mm



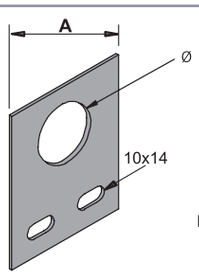
Grapa fixa
Beam clamps

Ref. RP 2068



Saída horizontal para eletroduto
Horizontal exit for conduit

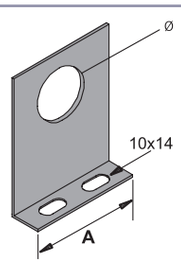
Ref. RP 2557 - ½" A 1½" A= 76
Ref. RP 2558 - 2" A 4" A= 152



Nota: especificar ø
Note: to especify ø

Saída vertical para eletroduto
Vertical exit for conduit

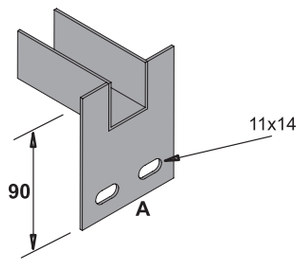
Ref. RP 2559 - ½" A 1½" A= 76
Ref. RP 2560 - 2" A 4" A= 152



Nota: especificar ø
Note: to especify ø

Saida horizontal de leito para perfilado
Horizontal exit from cable ladder to channel

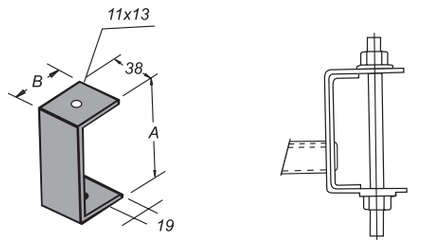
Ref. RP 2555 - p/ 38x38 A= 76
Ref. RP 2556 - p/ 38x76 A= 114



Suporte de suspensão
Bearing of suspension

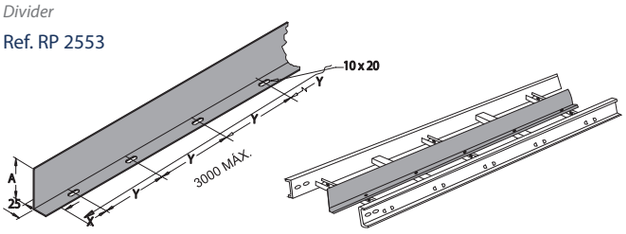
Ref. RP - 2546

Ref.	A x B
RP 2546	60x19
RP 2546	75x19
RP 2546	100x19
RP 2546	100x45



Divisor
Divider

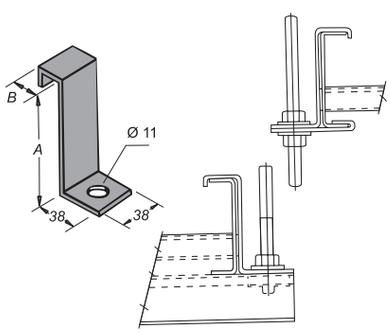
Ref. RP 2553



Obs: Especificar altura A e distância das travessas do leito.
Note: Specify the distance between crossbars ande the height.

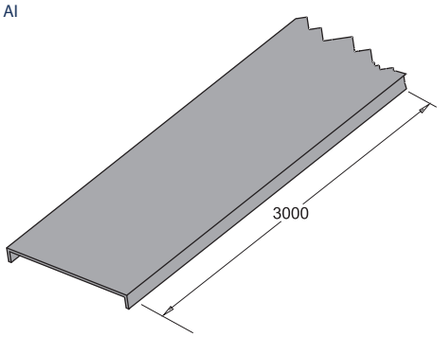
Suporte simples
Simple bearing

Ref.		
Ref.		
c/ trava *with lock*	s/ trava *without lock*	A x B
RP 2594	RP 2590	60x19
RP 2595	RP 2591	75x19
RP 2596	RP 2592	100x19
RP 2597	RP 2593	100x45



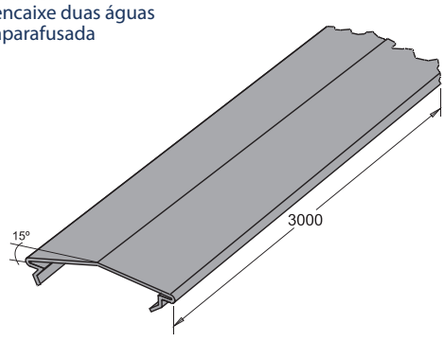
Tampa de encaixe - TE
Inserting cover - TE

Ref. RP 2564 - AE
Ref. RP 2563 - AI



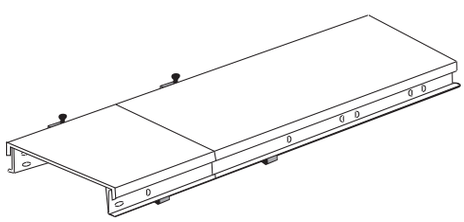
Tampa de pressão 2 águas - TP
Angular pressure cover - TP

Ref. RP 2566 - pressão
Ref. RP 2570 - encaixe duas águas
Ref. RP 2567 - aparafusada



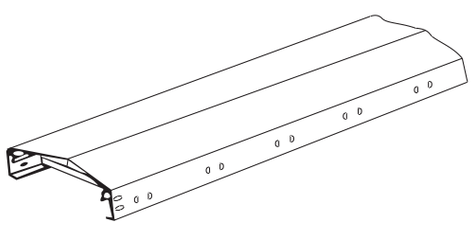
Obs: As tampas com larguras acima de 650 mm com 3 águas.
Note: Covers with width greater then 650 mm with 3 angles.

Demonstrativo de montagem
Diagram of assembly



Obs: para solicitação das tampas, acrescer o código "TE" ou "TP" anterior à referência do leito ou derivação correspondente. Ex.: TP 2500 I 100 500 3000 GF.
Note: for request the covers, increase the code "te" or "tp" before the reference of the cables tray or corresponding derivation. Ex.: Tp 2500 I 100 500 3000 GF.

Demonstrativo de montagem
Diagram of assembly



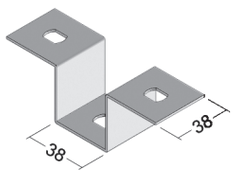
Obs 1: Somente para leitos tipo aba interna.
Note 1: Aplicable only in cable trays with side rails turned.
Obs 2: para solicitação das tampas, acrescer o código "TE" ou "TP" anterior à referência do leito ou derivação correspondente. Ex.: TP 2500 I 100 500 3000 GF.
Note 2: for request the covers, increase the code "te" or "tp" before the reference of the cables tray or corresponding derivation. Ex.: Tp 2500 I 100 500 3000 GF.

Acessórios para fixação e suportação

Accessories for fixing and support

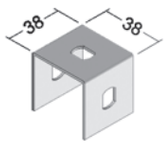
Cantoneira "ZZ"
"ZZ" angle connector

Ref. RP 2049



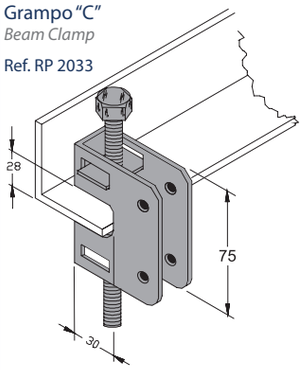
Distanciador U simples
Simple "U" distance piece

Ref. RP 2053



Grampo "C"
Beam Clamp

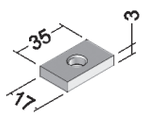
Ref. RP 2033



Inclusos: 01 parafuso ø 3/8" x 2 1/2"
01 porca quadrada ø 3/8"
Included: 01 screw ø 3/8" x 2 1/2"
01 square nut ø 3/8"

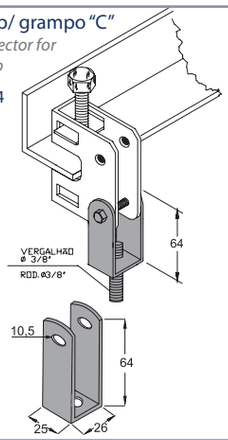
Porca retang. p/ grampo "C"
Retangular nut for beam clamp

Ref. RP 2366



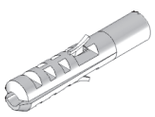
Balancim p/ grampo "C"
Swing connector for beam clamp

Ref. RP 2034



Bucha de nylon
Nylon inch anchor for concrete insert

Tipo RP S6, S8, S10, S12



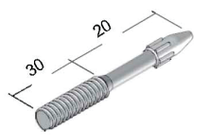
Ref.	Tipo	Comp.	Paraf.	Tração
Ref.	*Type*	*Length*	*bolt*	*Traction*
RP 2217	S6	30	4,2x30	65 Kg
RP 2218	S8	40	1/4"x45	90 Kg
RP 2219	S10	50	5/16"x50	170 Kg
RP 2220	S12	60	3/8"x60	220 Kg

Chumbador "CB" com rosca interna
CBA anchor bolt

Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2362	1/4"	35	12	10
RP 2364	3/8"	40	18	14
RP 2365	1/2"	50	20	18
RP 2363	5/16"			
RP 2366	5/8"			

Pino com rosca 1/4"
Threaded pin 1/4"

Ref. RP 2368

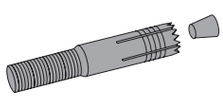


* Outras medidas sob consulta.

Chumbador rosca interna AP
AP Internal-thread anchor bolt

Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2354	1/4"	25	35	6,35
RP 2356	3/8"	30	45	9,5
RP 2357	1/2"	35	55	12,7
RP 2355	5/16"			
RP 2358	5/8"			

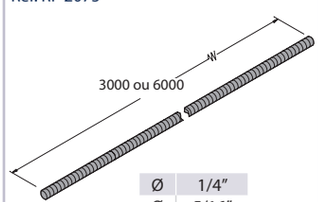
Chumbador rosca externa
External-thread anchor bolt



Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2426	5/16"	35	12	11
RP 2425	1/4"	40	18	14
RP 2359	3/8"	52	20	18
RP 2360	1/2"			
RP 2361	5/8"			

Suporte RT
Continuous threaded rod

Ref. RP 2075



Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

Especificar junto à referência o ø e o comprimento "L"
In the reference, specify the ø and length "L"

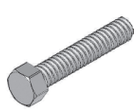
Parafuso cabeça lentilha
Lentil head bolt

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2340	1/4" x 1/2"
RP 2215	1/4" x 3/4"
RP 2342	1/4" x 1"
RP 2344	5/16" x 1/2"
RP 2346	5/16" x 3/4"
RP 2350	3/8" x 1/2"
RP 2216	3/8" x 3/4"
RP 2999	1/4" x 5/8"

Parafuso lentilha auto travante
Self lock bolt

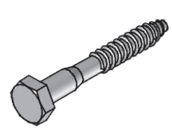
Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2341	1/4" x 1/2"
RP 2319	1/4" x 5/8"
RP 2315	1/4" x 3/4"
RP 2343	1/4" x 1"
RP 2345	5/16" x 1/2"
RP 2347	5/16" x 3/4"
RP 2351	3/8" x 1/2"
RP 2318	3/8" x 3/4"

Parafuso cabeça sextavada
hexagonal head bolt



Comp.	Ø1/4"	Ø5/16"	Ø3/8"	Ø1/2"
Length	*Ø1/4"*	*Ø5/16"*	*Ø3/8"*	*Ø1/2"*
1/2"	2200	2201	2202	2203
5/8"	2240			
3/4"	2242	2252	2262	2272
1"	2244	2254	2264	2274
1.1/4"	2245	2255	2265	2275
1.1/2"	2246	2256	2266	2276
2"	2248	2258	2268	2278
2.1/2"	2249	2259	2269	2279
3"	2250	2260	2270	2280

Parafuso cab. sextavada rosca soberba
hexagonal head screw with conical thread



Ref.	Ø x comp.	Bucha
Ref.	*Ø x length*	*bucha*
RP 2209	5/16" x 2"	S-10
RP 2210	3/8 x 2.1/2"	S-12

Parafuso cabeça redonda rosca soberba
Round head screw with conical thread

.

Ref.	Ø x comp.	Bucha
Ref.	*Ø x length*	*bucha*
RP 2211	4,2 x 30mm	S-6
RP 2212	4,8 x 45mm	S-8
RP 2213	6,1 x 50mm	S-10

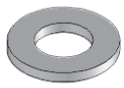
Acessórios para fixação e suportação

Accessories for fixing and support

Porca sextavada
Hexagonal nut

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2222	3/16"
RP 2223	1/4"
RP 2335	5/16"
RP 2224	3/8"
RP 2225	1/2"

Arruela lisa
Plain washer



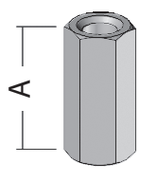
Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2227	3/16"
RP 2228	1/4"
RP 2331	5/16"
RP 2229	3/8"
RP 2230	1/2"

Arruela de pressão
Lock washer

Ref.	Ø x comp.
Ref.	*Ø x length*
RP 2232	3/16"
RP 2233	1/4"
RP 2336	5/16"
RP 2234	3/8"
RP 2235	1/2"

Prolongador para suspensão
Hanger rod extension

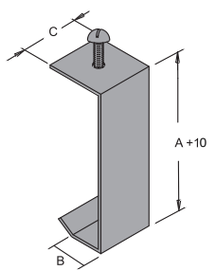
Ref. RP 2073 - A=25mm
Ref. RP 2283 - A=50mm



Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2" (somente RP 2283)

Obs: Comp. de 50mm sob consulta.

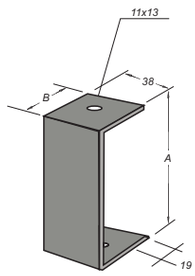
Presilha para tampa de encaixe
Anchor clip for inserting cover



Ref.	A	B	C
RP 2580	60	19	19
RP 2581	75	19	19
RP 2582	100	19	19
RP 2583	100	45	25

Suporte de suspensão
"C" Type support

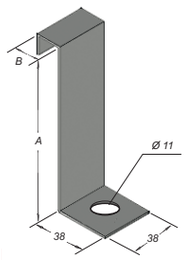
Ref. RP 2546



Ref.	A	B
RP 2546	60	19
RP 2546	75	19
RP 2546	100	19
RP 2583	100	45

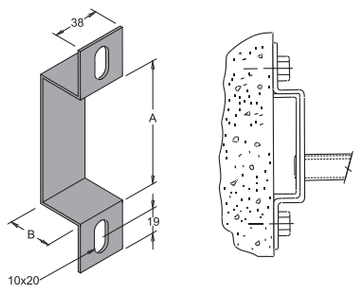
Suporte simples
Simple bearing

Ref. RP 2594



c/ Trava	s/ Trava		
Ref.	Ref.	A	B
RP 2594	RP 2590	60	19
RP 2595	RP 2591	75	19
RP 2596	RP 2592	100	19
RP 2597	RP 2593	100	45

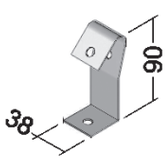
Suporte de fixação lateral
Bearing of lateral fixing



Ref.	A x B
RP 2586	60x19
RP 2587	75x19
RP 2588	100x19
RP 2589	100x45

Suporte p/ cabo de aço
Cable wire support

Ref. RP 2428



Ø	1/4"
Ø	5/16"
Ø	3/8"

Obs.: Favor informar o ø do Cabo de Aço.

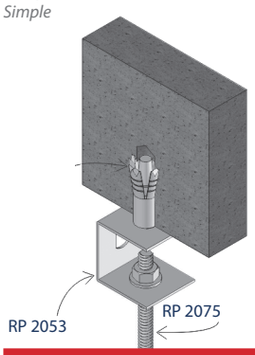
Sugestões de instalações de leitos p/ cabos

Suggestions for fixing cable trays ladder type

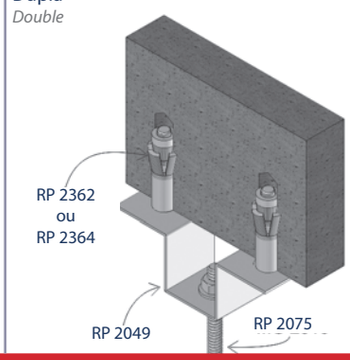
FIXAÇÕES SUPERIORES

UPPER SETTINGS

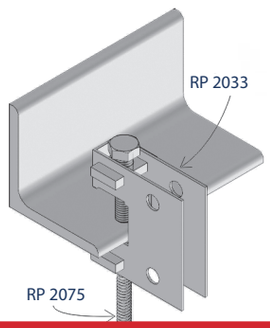
Simples
Simple



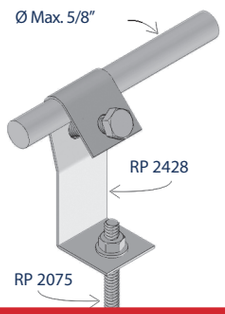
Dupla
Double



Grampo "C"
Beam clamp



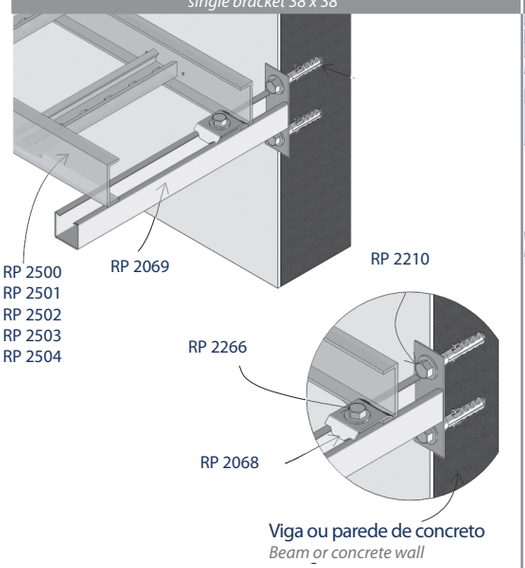
Cabo de aço ou vergalhão
Steel wire or continuous thereaded rod



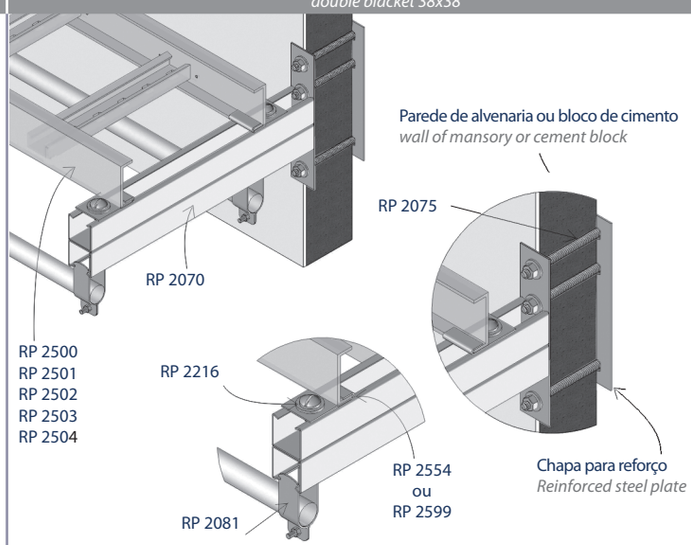
SUPORTAÇÕES

SUPPORTS

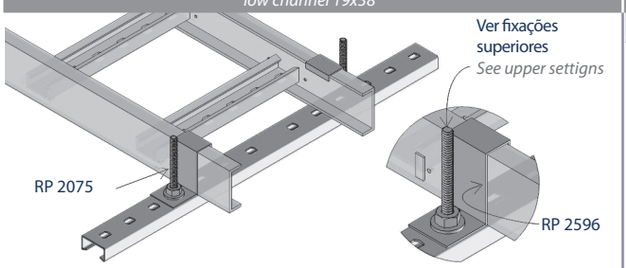
mão francesa simples 38 x 38
single bracket 38 x 38



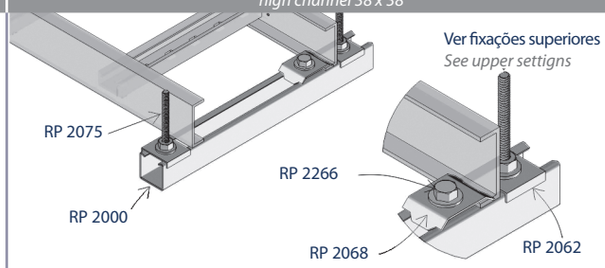
mão francesa dupla 38 x 38
double blacket 38x38



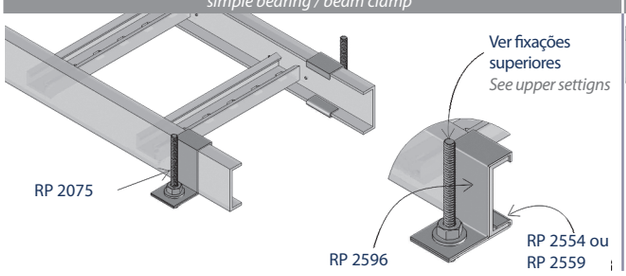
suspensão perfil 19 x 38
low channel 19x38



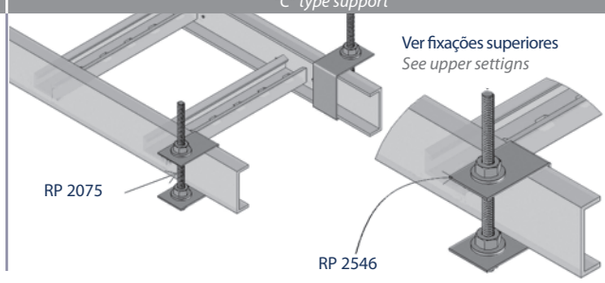
suspensão perfil 38 x 38
high channel 38 x 38



suporte unha / grapa fixa
simple bearing / beam clamp



Suporte "C"
"C" type support



Observações técnicas de leitos para cabos

Technical notes for cable trays ladder type

ESCOLHA DO LEITO

Para escolha do leito adequado, calcular o peso por metro (Kg/m) dos fios e cabos a serem lançados e verificar nas tabelas de cargas. Não esquecer de considerar o agrupamento desejado e o diâmetro externo dos cabos para determinar a largura (A).

TAMPAS

Os trechos curvos também podem ser fornecidos com tampa normal, bastando acrescentar CTN (com tampa normal) ao término das referências.

EXEMPLO: RP 2516/3I/T25/400/320/43/GF/CTN = curva vertical externa 90º p/ leito semi-pesado 100mmx400mm, abas internas, raio segmentado de 320 mm, #14/#16, galvanizada a fogo nbr 6323 e com tampa normal.

Em casos especiais as tampas normais (CTN) poderão ser fornecidas aparafusadas (CTA).

Tampas normais (CTN) ou tampas aparafusadas (CTA) para curvas, tem virola de somente 70 mm a partir das extremidades, restante dos arcos das curvas sem virola. Ver exemplo de aplicação.

DIVISORES

Caso necessite dividir um ou mais circuitos ou sistemas de alimentação ou distribuição no mesmo leito, usar divisor RP 2553 indicando sempre em que tipo de leito será utilizado.

JUNÇÕES

Para fixação das junções RP 2552, RP 2551 e RP 2574, que unem trechos retos entre si e trechos curvos, utilizar em cada uma 4 jogos de parafusos cabeça lentilha Ø3/8"x3/4" (RP 2216), porcas sextavadas Ø3/8" (RP 2224) e arruelas lisas (RP 2229). Em locais sujeitos a vibrações mecânicas, recomendamos utilizar arruelas de pressão (RP 2234).

Como alternativa podem ser utilizados parafusos com cabeça lentilha auto travante Ø5/16"x3/4" (RP 2347) equivalentes.

Recomendamos utilizar os parafusos com a cabeça voltada para o interior dos leitos, para evitar danos ao lançamento.

ACABAMENTOS SUPERFICIAIS

Acrescentar sempre ao término das referências o tipo de acabamento superficial ou material desejado:

- **PZ** pré-galvanizado a quente - padrão CSN conf. NBR 7008
- **GF** pós-galvanizada conf. NBR 6323
- **AL** alumínio
- **GE** galvanização eletrolítica
- **AI** aço inoxidável
- **PT** pintado

ATENÇÃO: especificações sem a indicação do tratamento superficial serão consideradas como materiais pré galvanizado a quente (PZ).

ESPECIFICAÇÕES

Indicar sempre o tipo de material desejado, a largura, o tratamento superficial e a disposição das abas e, quando for o caso, o raio de curvatura.

EXEMPLO:

Vide páginas 34 e 35.

ATENÇÃO: Especificações de leito sem a clara observação de A/I (abas internas) ou A/E (abas externas) serão consideradas como abas internas.

Especificações de curvas para leitos sem determinação do raio de curvatura, serão consideradas como raio de 320.

Recomendamos aterrar todo o sistema de leitos.

CHOICE OF CABLE TRAY

To select the appropriate cable tray, calculate the weight by meter (Kg/m) of threads and cables to be deployed and check the load charts. Do not forget to consider the desired grouping and the cables outer diameter to establish the width (A).

COVERS

Bent sections can also be provided with regular cover, just adding CTN (with regular cover) to reference ends.

EXAMPLE: *RP 2516/3I/T25/400/320/43/GF/CTN = 90º external vertical bend for semi-heavy cable tray 100mmx400mm, turned inwards, with internal segmented radius of 320mm, #14/#16, hot dip galvanized according to nbr 6323 and with insert cover.*

In special cases the regular covers (CTN) may be provided screwed (CTA).

Regular covers (CTN) or screwed cover (CTA) for bent have ferrule of just 70 mm from the ends, remainder of bents' arches without ferrule. Refer to application example.

DIVIDERS

In case you need to divide one or more feed or distribution circuits or systems in the same cable tray, use RP 2553 divider always indicating in which cable tray type it will be used.

JOINTS

For placement of RP 2552, RP 2551 and RP 2574 joints, connecting straight sections between each other and bent sections, uses in each one 4 sets of lentil head screws Ø3/8"x3/4" (RP 2216), hexagonal nuts Ø3/8" (RP 2224) and plain washers Ø3/8" (RP 2229). In places subject to mechanical vibrations, we recommend to use pressure washers Ø3/8" (RP 2234).

Alternatively it can be used Ø 5/16" x 3/4" (RP 2347) auto locking round head screws.

We recommend the use of screws with head turned to the cable trays interior, to avoid damage to the deployment.

SUPERFICIAL FINISHES:

Always add to reference ends the desired surface or material finish type:

- **PZ** *pre galvanized steel according to NBR 7008*
- **GF** *hot dip galvanized according NBR 6323*
- **AL** *aluminum*
- **GE** *eletrolitic galvanizing*
- **AI** *stainless steel*
- **PT** *painted*

ATTENTION: *Specifications without indication of surface treatment shall be considered as hot pre galvanized material (PZ).*

SPECIFICATIONS:

Always indicate the type of desired material, width, surface treatment and brims arrangement and when applicable, bending radius.

EXAMPLE:

Refer to pages 34 and 35.

ATTENTION: *Cable tray specifications without clear observation of A/I (turned inwards) or A/E (turned outwards) shall be considered as turned inwards.*

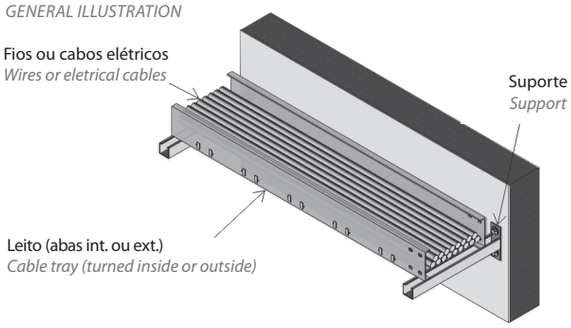
Bends specifications for cable trays with no bending radius established shall be considered as 320 radius.

We recommend grounding the entire cable tray system.

Tabelas de cargas: leitos para cabos

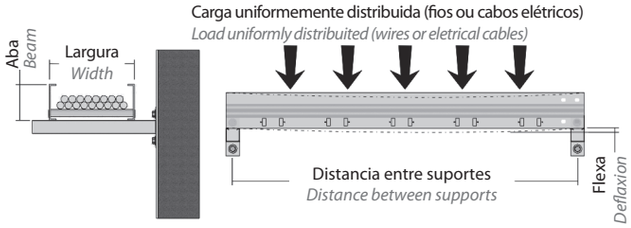
Load tables: cable trays ladder type

ILUSTRAÇÃO GERAL
GENERAL ILLUSTRATION



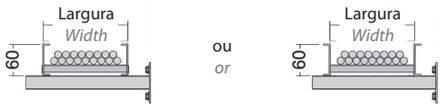
VISTA LATERAL
SIDE VIEW

VISTA FRONTAL
FRONT VIEW



ECONÔMICO - ABA 60

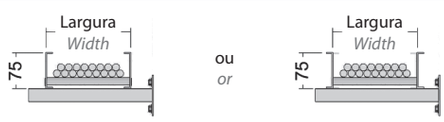
ECONOMIC TYPE - BEAM 60



largura / *width*	peso / *weight*	distância entre suportes (mm) / cargas (Kg) / *distance between supports (mm) / loads (Kg)*				
		1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
100	10,12	370	326	288	213	188
200	11,30	355	318	281	208	183
300	12,48	340	304	269	199	175
400	13,66	327	293	259	192	169
500	14,84	307	282	250	185	163
600	16,02	290	267	236	175	154
flexa relação 1/300 *relation of deflexion 1/300*		3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

MÉDIO - ABA 75

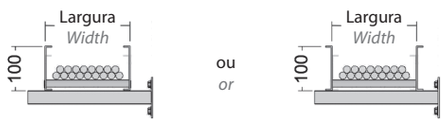
MEDIUM TYPE - BEAM 75



largura / *width*	peso / *weight*	distância entre suportes (mm) / cargas (Kg) / *distance between supports (mm) / loads (Kg)*				
		1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
200	12,74	642	575	443	345	269
300	13,92	631	565	441	344	268
400	15,10	607	544	424	331	258
500	16,28	567	508	396	309	241
600	17,46	530	475	371	289	226
700	18,64	514	461	360	281	219
800	19,82	478	428	334	260	203
900	21,01	437	392	306	239	186
1000	22,18	407	365	285	222	173
flexa relação 1/300 *relation of deflexion 1/300*		3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

SEMI-PESADO - ABA 100

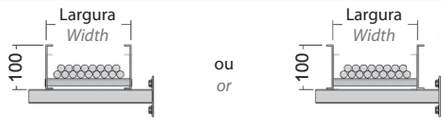
SEMI HEAVY TYPE - BEAM 100



largura / *width*	peso / *weight*	distância entre suportes (mm) / cargas (Kg) / *distance between supports (mm) / loads (Kg)*				
		1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
200	15,14	762	683	526	410	320
300	16,32	749	671	517	403	315
400	17,50	721	646	504	393	307
500	18,70	673	604	471	367	287
600	19,86	630	564	440	343	268
700	21,04	611	548	427	333	260
800	22,22	567	508	397	309	241
900	23,40	520	466	363	283	221
1000	24,58	484	434	338	264	206
1100	25,76	456	409	319	249	194
1200	26,94	435	390	304	237	185
1500	30,49	420	376	293	229	179
flexa relação 1/300 *relation of deflexion 1/300*		3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

PESADO - A - ABA 100

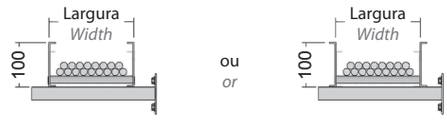
HEAVY TYPE - A - BEAM 100



largura / *width*	peso / *weight*	distância entre suportes (mm) / cargas (Kg) / *distance between supports (mm) / loads (Kg)*				
		1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
300	18,12	1184	1061	817	633	491
400	19,85	1164	1043	803	622	482
500	21,59	1121	1004	773	599	464
600	23,32	1046	937	722	559	434
700	25,06	978	876	675	523	406
800	26,79	949	851	655	507	394
900	28,53	882	790	608	471	365
1000	30,26	807	723	557	432	334
1100	31,99	751	673	519	401	312
1200	33,73	709	636	489	379	293
1500	38,93	676	605	466	361	280
flexa relação 1/300 *relation of deflexion 1/300*		3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

PESADO - B - ABA 100

HEAVY TYPE - B - BEAM 100



largura / *width*	peso / *weight*	distância entre suportes (mm) / cargas (Kg) / *distance between supports (mm) / loads (Kg)*				
		1000 mm	1500 mm	2000 mm	2500 mm	3000 mm
300	15,30	1097	983	757	587	455
400	16,17	1078	966	744	576	447
500	17,03	1038	930	716	555	430
600	17,90	969	868	669	518	402
700	18,77	906	812	625	485	376
800	19,64	879	788	607	470	365
900	20,50	817	732	563	437	338
1000	21,37	748	670	516	400	310
1100	22,24	696	624	481	372	289
1200	23,11	657	589	453	351	272
1500	25,71	626	561	432	335	260
flexa relação 1/300 *relation of deflexion 1/300*		3,5 mm	5 mm	6.5 mm	8.5 mm	10 mm

Tabelas teóricas e informativas distribuição de cabos em leitos

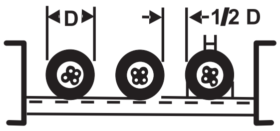
Tables and informative theoretical distribution of electrical cables in cable trays

CORRENTES MÁXIMA ADMISSÍVEIS EM AMPÊRES POR CONDUTOR

PERMISSIBLE MAXIMUM CURRENT IN AMPERES PER CONDUTOR

CABOS EM LEITO OU BANDEJA

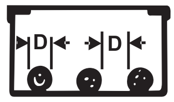
ELECTRICAL CABLE IN CABLE TRAYS LADDER TYPE



BITOLA *AWG/MCM*	CONDUTOR SINOELO / *SIMPLE CONDUCTOR* 5000 V		8000 V		15000 V	
	30º C	40º C	30º C	40º C	30º C	40º C
	TEMPERATURA AMBIENTE / *AMBIENT TEMPERATURE*					
6	97	86	99	89	93	85
4	127	114	131	117	127	113
2	171	152	172	154	164	145
1	197	177	198	177	189	167
1/0	228	204	230	205	218	193
2/0	263	235	264	237	251	222
3/0	305	272	305	273	289	256
4/0	354	317	353	316	334	296
250	393	351	392	351	370	327
300	433	387	438	392	413	365
350	488	437	485	434	456	404
400	530	474	535	479	486	431
500	613	549	608	544	570	505

CABOS EM DUTO OU ELETROCALHA

ELECTRICAL CABLE IN DUCTS AND CABLE TRAY CHANNEL TYPE



BITOLA *AWG/MCM*	CONDUTOR SINOELO / *SIMPLE CONDUCTOR* 5000 V		8000 V		15000 V	
	30º C	40º C	30º C	40º C	30º C	40º C
	TEMPERATURA AMBIENTE / *AMBIENT TEMPERATURE*					
6	90	81	92	83	88	79
4	118	106	121	109	117	105
2	157	141	158	142	150	132
1	176	158	177	159	172	152
1/0	208	187	209	188	198	174
2/0	237	213	238	214	227	200
3/0	274	247	275	248	206	229
4/0	316	284	316	284	300	264
250	349	314	348	313	330	290
300	384	346	388	349	367	323
350	429	386	427	384	403	355
400	464	418	467	420	430	378
500	531	478	528	475	498	438

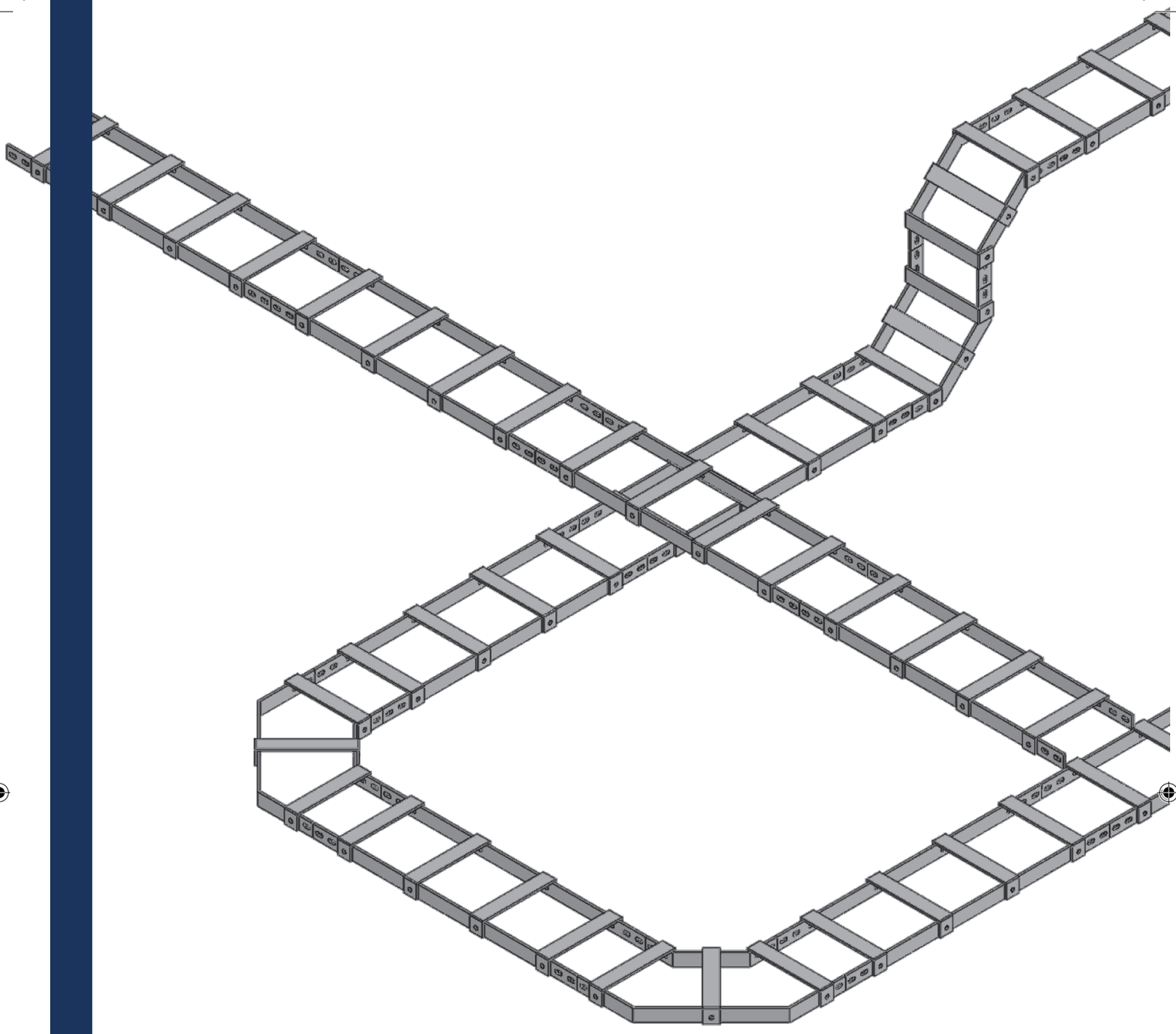
OBS: Esta tabela foi baseada pelos cabos SINTENAX - 0 a 5000V. 8000V. e 15000V -1 condutor
NOTE: This table was based on electrical cable SINTENAX - 0 a 5000V. 8000V. e 15000V - 1 conductor

QUANTIDADE DE CABOS DISTRIBUIDOS NOS LEITOS

QUANTITY OF ELECTRICAL CABLE IN CABLE TRAYS

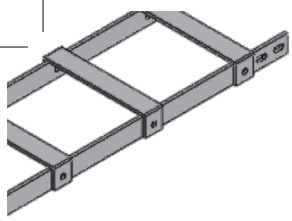
BITOLA *AWG/ MCM*	LARGURA DO LEITO / *CABLE TRAY WIDTH* 200		300		400		500		600		700		800		1000		1200	
	Qtd. de cabos	Peso Kg/m	Qtd. de cabos	Peso Kg/m	Qtd. de cabos	Peso Kg/m	Qtd. de cabos	Peso Kg/m	Qtd. de cabos	Peso Kg/m	Qtd. de cabos	Peso Kg/m	Qtd. de cabos	Peso Kg/m	Qtd. de cabos	Peso Kg/m	Qtd. de cabos	Peso Kg/m
	QTD. DE CABOS	*PESO Kg/m*	*QTD. DE CABOS*	*PESO Kg/m*	*QTD. DE CABOS*	*PESO Kg/m*	*QTD. DE CABOS*	*PESO Kg/m*	*QTD. DE CABOS*	*PESO Kg/m*	*QTD. DE CABOS*	*PESO Kg/m*	*QTD. DE CABOS*	*PESO Kg/m*	*QTD. DE CABOS*	*PESO Kg/m*	*QTD. DE CABOS*	*PESO Kg/m*
6	5	4,5	7	6,3	10	9,0	12	10,8	15	13,5	18	17,9	20	18,0	24	21,6	30	27,0
4	4	4,2	6	6,3	9	9,45	11	11,5	14	14,7	17	19,6	19	20,0	23	24,0	29	30,5
2	4	4,6	6	6,9	9	10,4	11	11,7	14	16,1	17	21,3	19	21,9	23	26,5	29	33,4
1	4	5,0	6	7,5	9	11,3	11	13,8	14	17,5	17	23,8	19	23,8	23	28,8	29	36,3
1/0	4	5,6	6	8,4	9	12,6	11	15,4	14	19,6	17	23,2	19	26,6	23	32,2	29	40,6
2/0	4	6,2	6	9,3	9	14,0	11	17,0	13	20,1	15	24,5	17	26,4	21	32,6	25	38,8
3/0	4	7,0	6	10,5	8	14,0	10	17,5	12	21,0	14	28,7	16	28,0	20	35,0	25	43,8
4/0	4	8,2	6	12,3	8	16,4	10	20,5	12	24,6	14	31,5	16	32,8	20	41,0	25	51,3
250	4	9,0	6	13,5	8	18,0	10	22,5	12	27,0	14	33,0	15	33,8	19	42,8	23	51,8
300	3	7,7	5	12,8	7	17,4	9	23,0	11	28,0	13	36,4	14	35,7	18	46,0	22	56,1
350	3	8,4	5	14,0	7	19,6	9	25,2	11	30,8	13	37,2	14	39,2	18	50,4	21	50,8
400	3	9,3	5	15,5	7	21,7	9	28,0	11	34,1	12	40,2	14	43,4	17	52,7	21	65,1
500	3	11,0	5	18,3	7	25,6	8	29,2	10	36,5	11	16,2	13	47,5	16	58,4	20	73,0

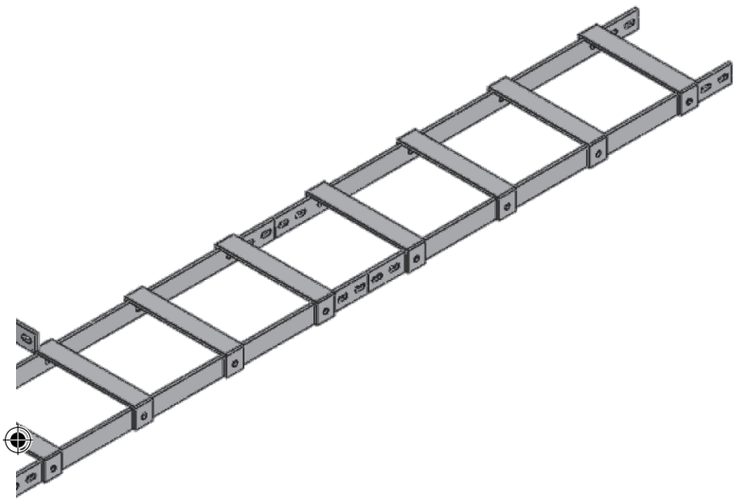
OBS. Esta tabela foi baseada pelo cabo SINTENAX - 15.000V-1 CONDUTOR
NOTE: This table was based on electrical cable SINTENAX - 0 a 5000V. 8000V. e 15000V - 1 conductor



Esteira para telecomunicações

Esteiramento tipo "RACK" para telecomunicações suporte para condução de cabos, constituido em barra chata de aço carbono ou alumÍnio conforme as normas:
- NBR 5907 - Define valores dimensionais
- ASTM A-36 - Indica composição quimica e suas propriedades mecanicas
- 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

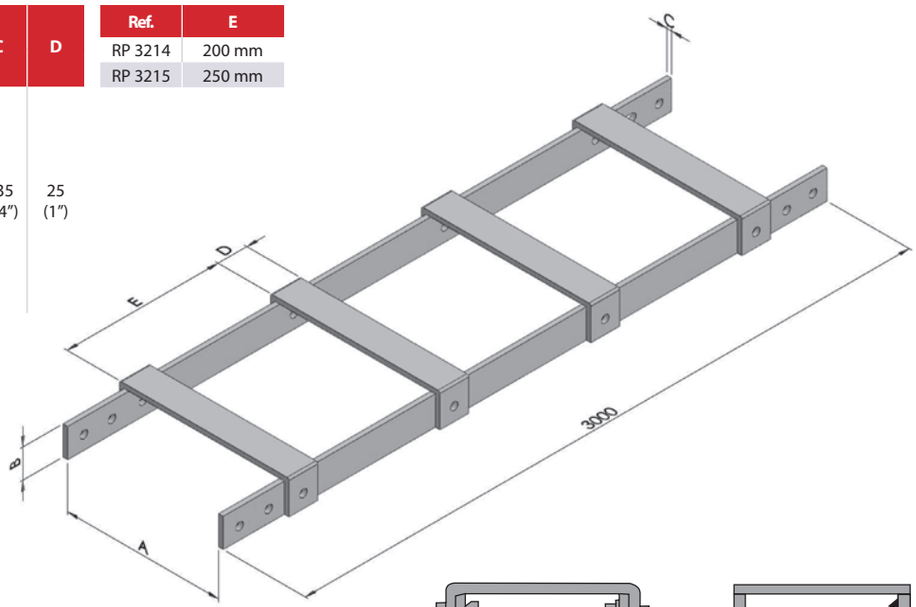
Esteira para telecomunicações

The telecommunication cable trays

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

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

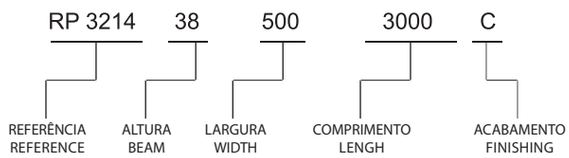
Ref.	E
RP 3214	200 mm
RP 3215	250 mm

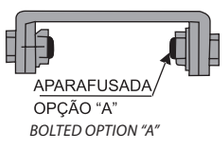


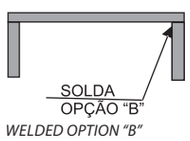
1) Acabamento alumínio extrudado (AL)
2) Acabamento: galv. eletrolitico: azulado ou amarelado (bicromatizado)
3) Acabamento: galv. a fogo (GF)
4) Pintura: eletrostatica a pó (PT)

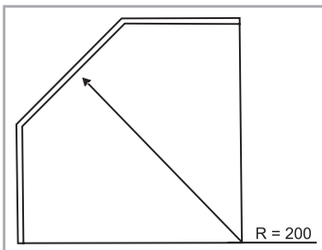
1) Extruded aluminum finish
2) Finishing : Electrolitic galvanization ou bichromatization(yellow type)
3) Finishing hot dip galvanized NBR 6323
4) Painted eletrostatic process

COMO SOLICITAR
HOW TO REQUEST







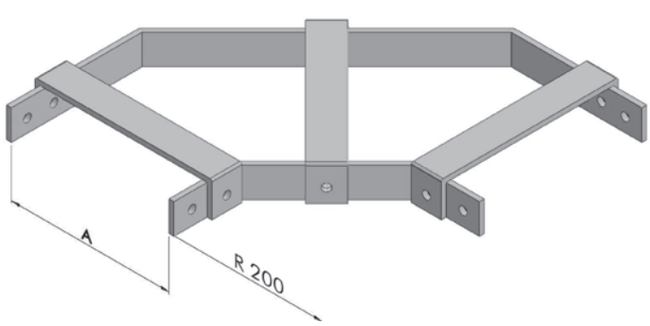


Esta seção destina-se a curvas e derivações de todos os tipos de esteira p/ telefonia fabricados. Os desenhos são ilustrativos, acompanhando a esteira solicitada conforme sua referencia, tipo, largura e espaçamento entre travessas. O raio segmentado é de fornecimento normal.

This section is intended to curves and derivations to all kinds of cable trays manufactured by telecomunnication 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.

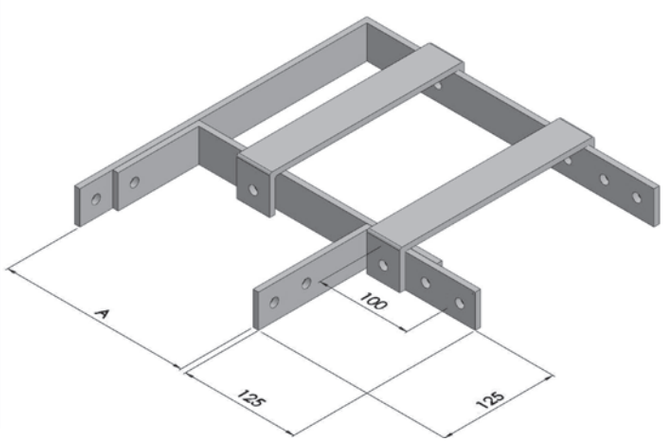
Curva horizontal
Horizontal Bend

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



Cotovelo reto
90º straight elbow

Ref. RP 3285

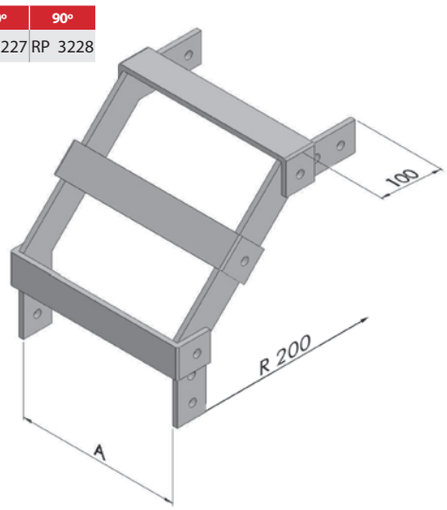


Esteira para telecomunicações

The telecommunication cable trays

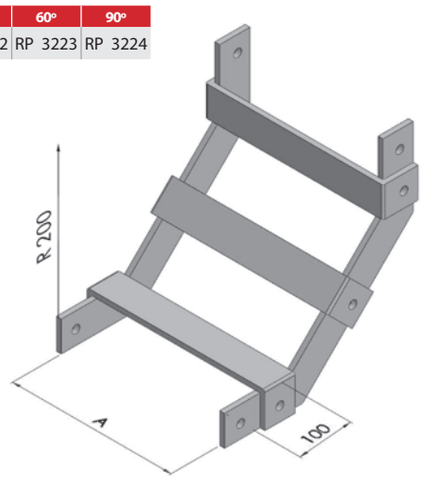
Curva vertical externa
Vertical external Bend

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

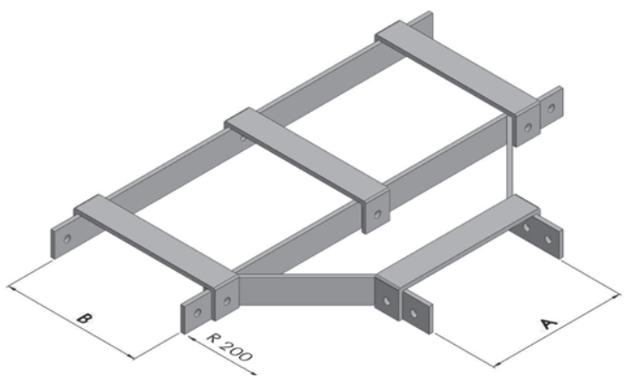


Curva vertical interna
Vertical internal Bend

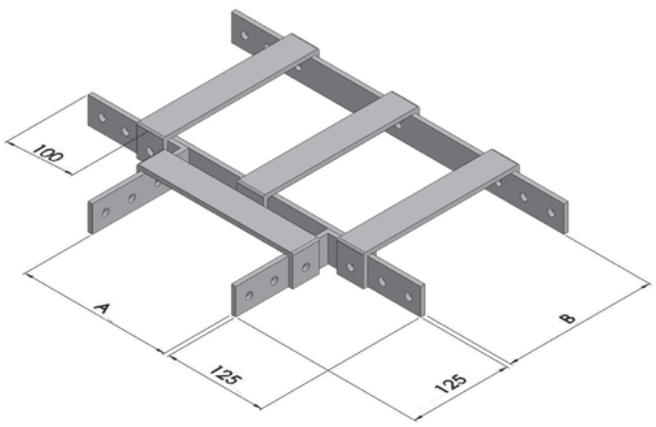
30º	45º	60º	90º
RP 3221	RP 3222	RP 3223	RP 3224



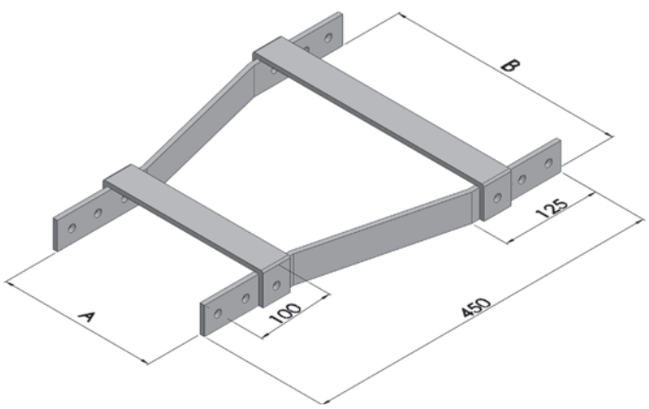
"T" horizontal 90º
90º horizontal tee
Ref. RP 3220



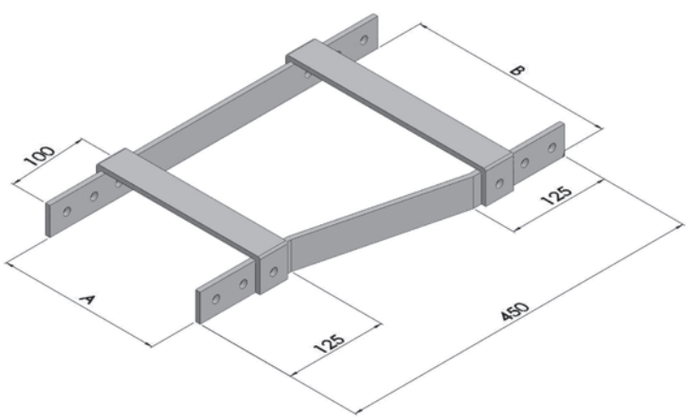
"T" reto
90º straight tee
Ref. RP 3282



Redução concentrica
Concentric reduction
Ref. RP 3286



Redução excentrica (direira e esquerda)
Excentric reduction(left and right)
Ref. RP 3287

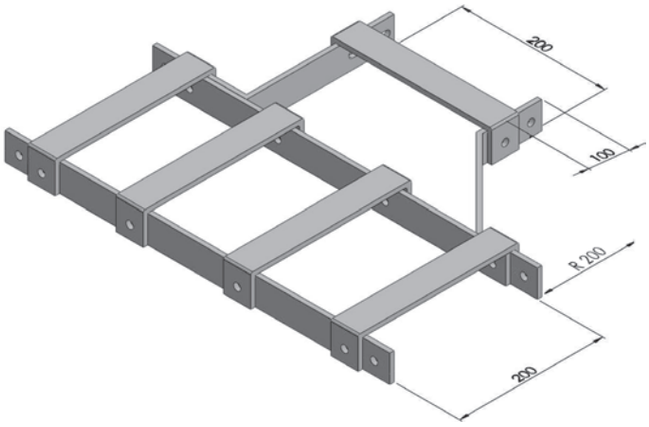


Esteira para telecomunicações

The telecommunication cable trays

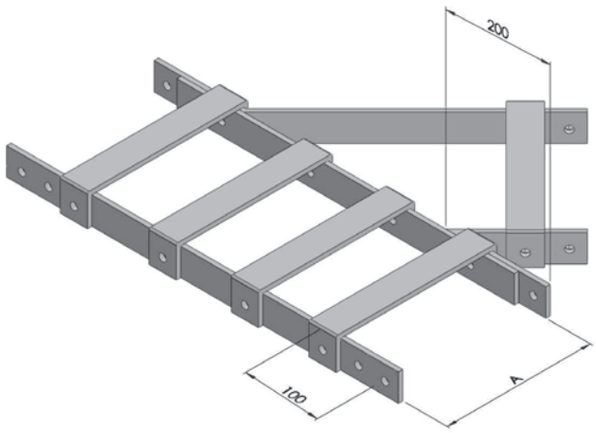
Junção direta 90º
Right 90º junction

Ref. RP 3283



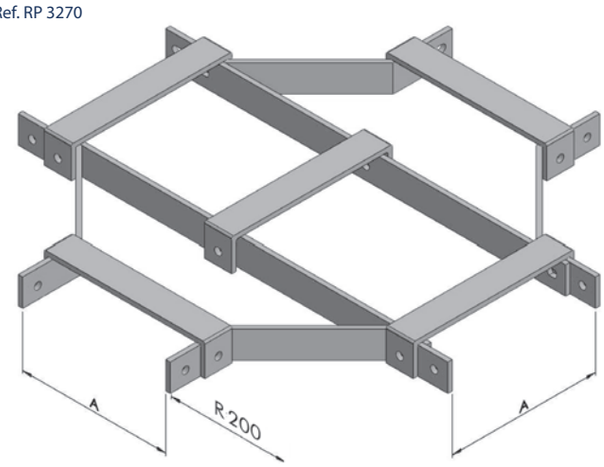
Junção direta 45º
Left 90º junction

Ref. RP 3284



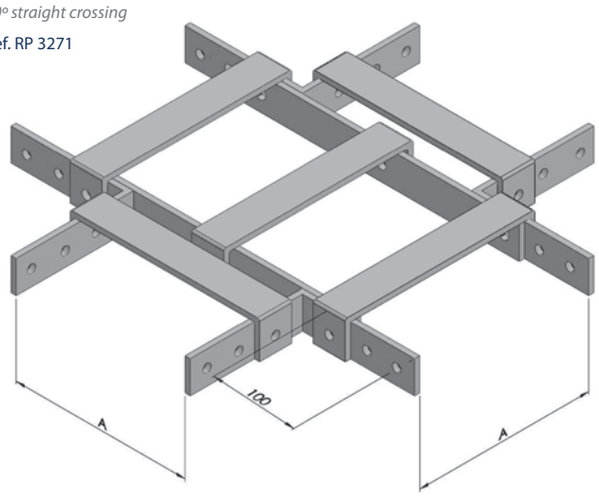
Cruzeta 90º
90º crossing

Ref. RP 3270



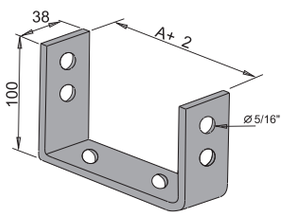
Cruzeta reta
90º straight crossing

Ref. RP 3271



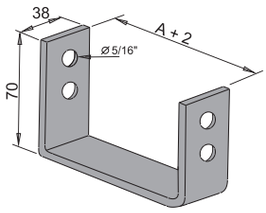
Suporte de fixação descida
Fixing bracket descent

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



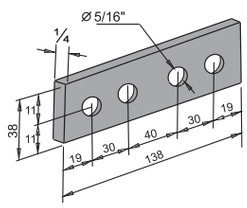
Terminal
End plate

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



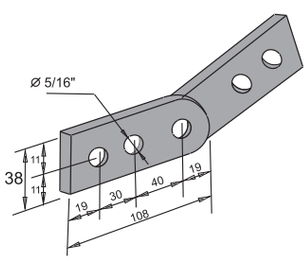
Tala de Emenda
Splicing plate 4 holes

Ref. RP 3247



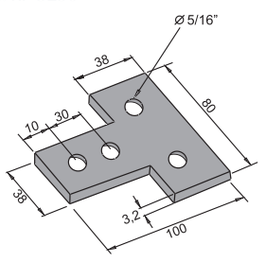
Tala Articulável
Articulated splicing

Ref. RP 3248



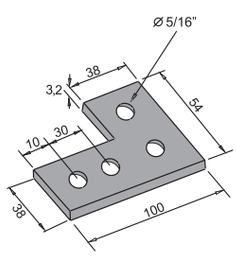
Junção tipo "T"
Junction in "T"

Ref. RP 3250



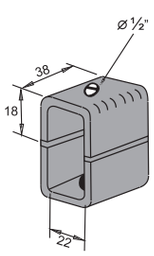
Emenda "L"
Junction in "L"

Ref. RP 3250L



Grampo reforçado
Reinforced clamps

Ref. RP 3251

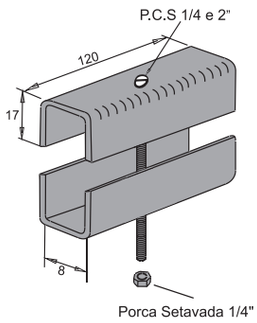


Esteira para telecomunicações

The telecommunication cable trays

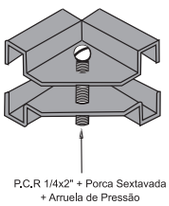
Emenda reta
Straight junction

Ref. RP 3252



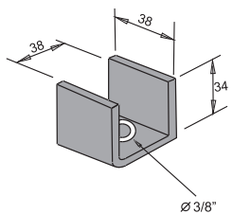
Junção horizontal
Horizontal Junction

Ref. RP 3253



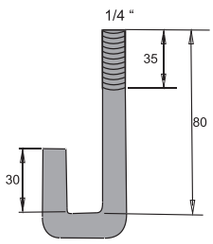
Junção externa
External junction

Ref. RP 3254



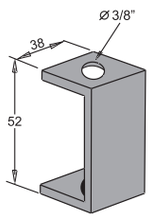
Grampo tipo "J"
Clamp type "J"

Ref. RP 3255



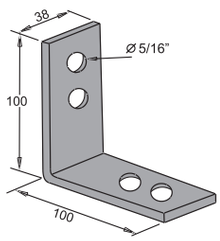
Suporte para suspensão
Support for hanging

Ref. RP 3256



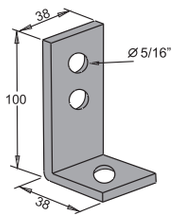
Junção "LL"
LL junction

Ref. RP 3257



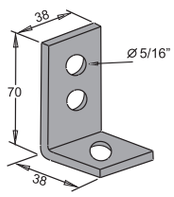
Junção "L"
L junction

Ref. RP 3258



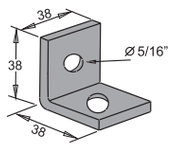
Junção tipo "LA"
LA type junction

Ref. RP 3259

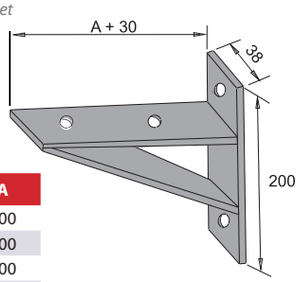


Junção tipo "LC"
LC type junction

Ref. RP 3260



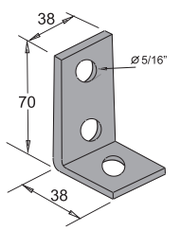
Mão francesa
Reinforced bracket



Ref.	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

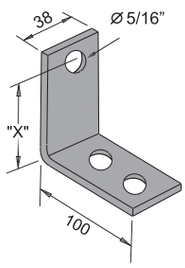
Ref. RP 3269



Junção vertical de parede
Vertical junction wall

Ref. RP 3272

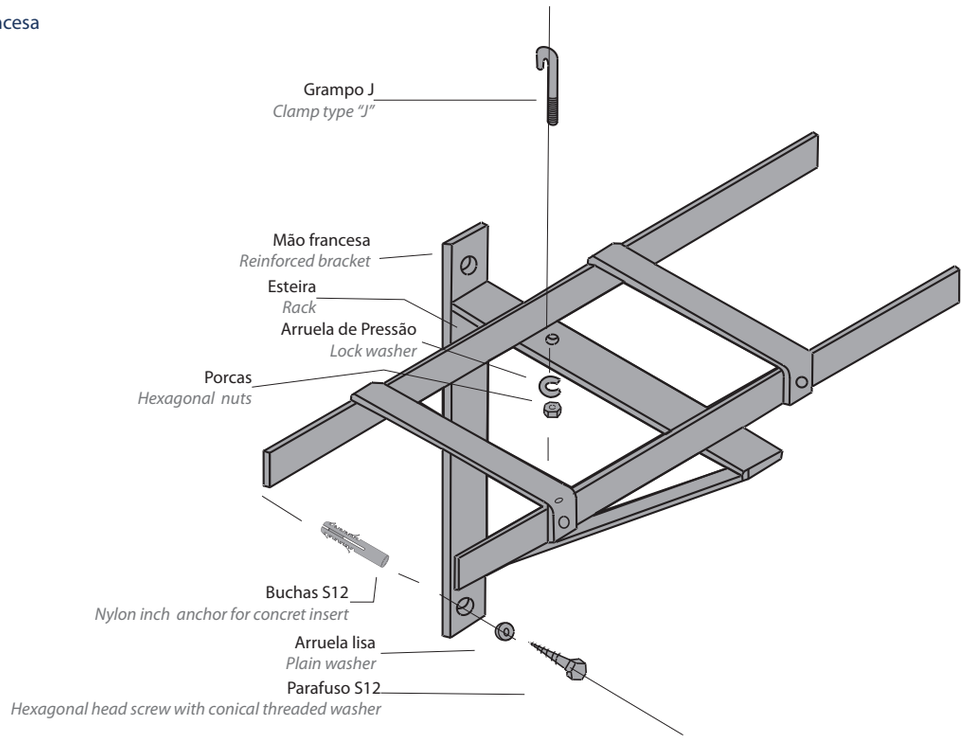
"X"
75 mm
100 mm
150 mm



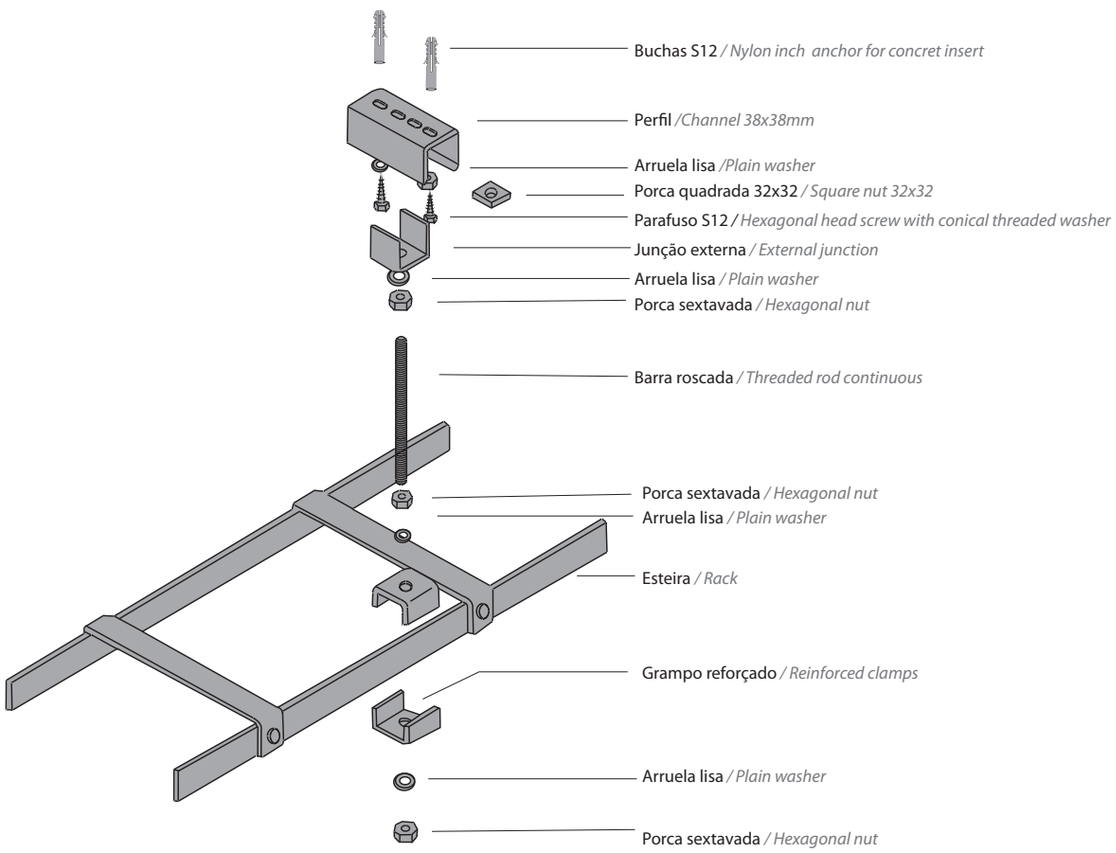
Demonstrativo de montagem

Diagram of assembly

Instalação com mão francesa
Bracket intallations



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)
-1.1/2X 1/4 (aluminio)

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 distancia 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

Noma ABNT- NBR 10476:
- Coloração branca meio azulada
- Coloração amarela (Bicromatizada)

Utilizada em ambientes internos onde a corrosão é considerada de media 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 eletrolitica (coloração branca meio azulada).

RAW MATERIAL

The raw material to be used in manufactured of telecomunicatios 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 telecomunication 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

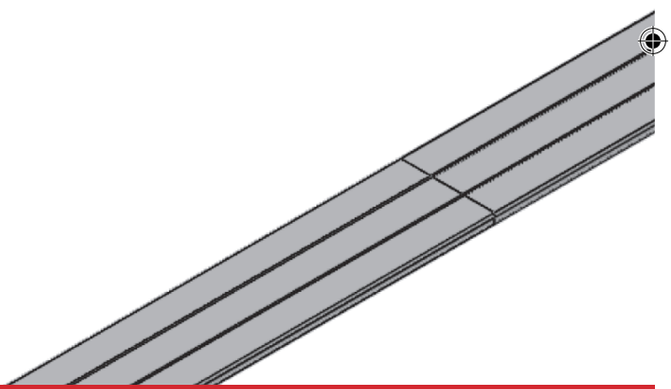
According to NBR ABNT-NBR 10476
- White colour
- Yellow type (bichromatized)

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

ELECTROSTATIC POWDER PAINTING

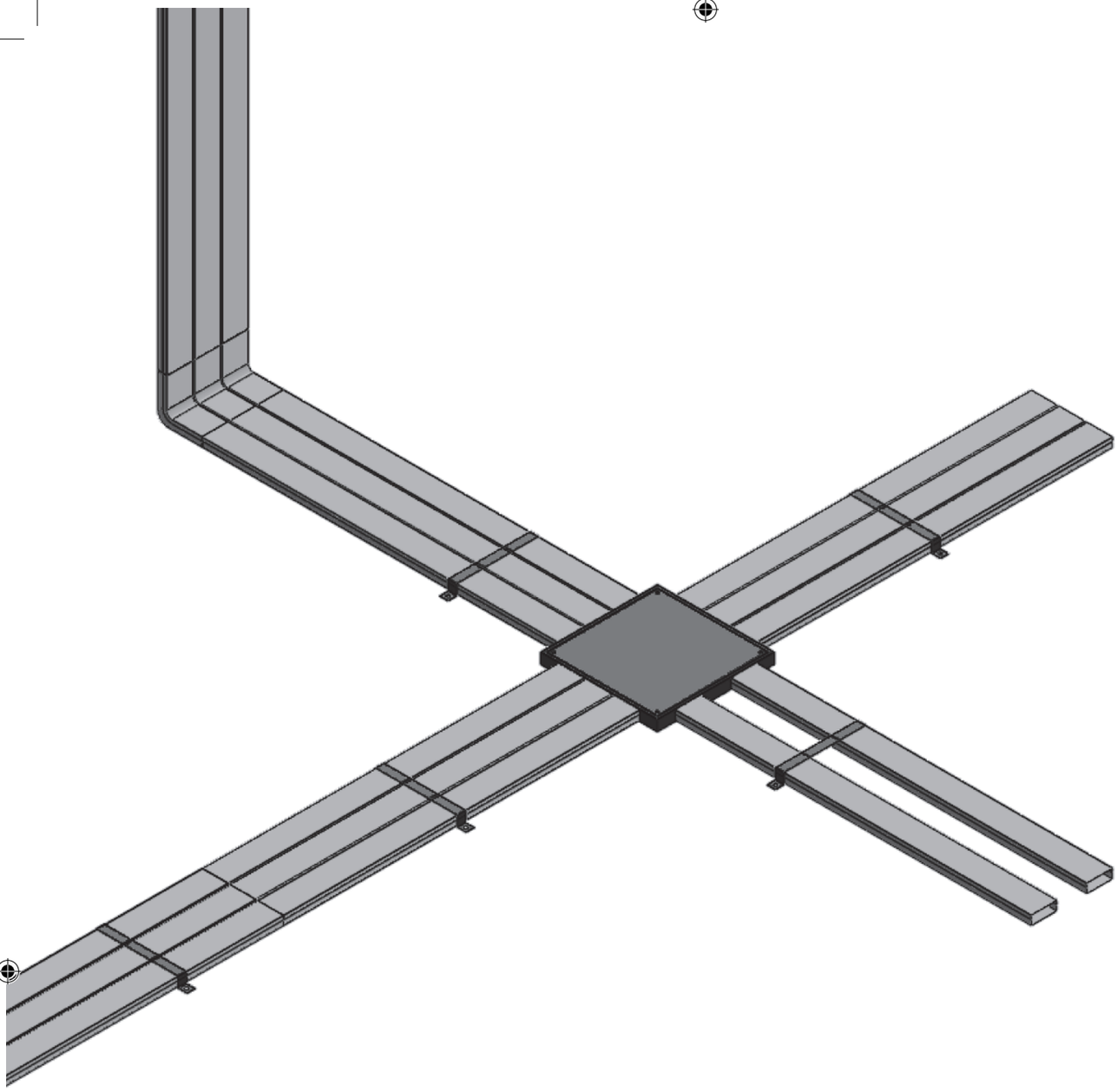
After cleaning of the parts of the phosphating process is applied to ink by using pistolaque adheres by electrostatic the product then goes into oven for fixation and drying and its thickness ranges from 50 to 70 µ. It is used in indoor and outdoor environments where corrosion is considered average.

Note: Outdoor painting is advised on the electrolytic galvanizing



Dutos de piso

O sistema de dutos para piso, representa o que há de mais atual, prático e econômico para condução de fios embutidos sob o piso.Fabricados em dois padrões dimensionais, com seção retangular,os dutos podem ser lisos, para distribuição da fiação, ou modulados com saídas para tomadas, tendo ainda dutos com divisão interna para permitir a passagem de fios de energia e telefonia numa mesma linha. As modulações padronizadas permitem atender a todas as necessidades de pontos de tomada, no momento do projeto, bem como em futuras ampliações, pois poderão ficar com tampões removíveis à qualquer tempo. Completando, aparecem junções, niveladores, curvas, caixas de passagem ou inspeção e várias opções de tomadas para piso.



Floor ducts

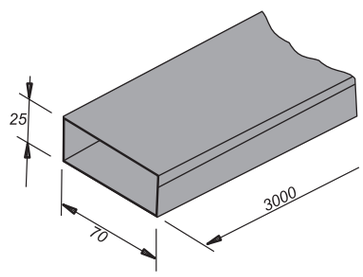
The system of ducts for floor represents what is more modern, practical and economic for wires conduction embedded under floor.They are made in two dimentional standard, with rectangular cross section and may be with solid bases for spinning distribution, or modulated with contact outlet, having ducts with internal division in order to permit the passage of energy and telephony wires at the same line.The standard modulations permits to attend all necessities of contact points during project as well as for future extension, because they may staying with covers, removable at any time.Completing we have joints, bends, passage or inspection boxes and another options of under floor service box.

Dutos de piso

Floor ducts

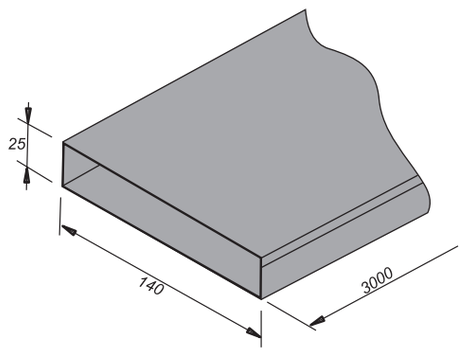
Duto de piso liso de 25x70
25x70 floor duct

Ref. RP 3001



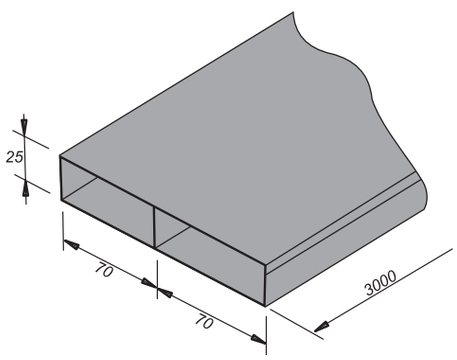
Duto de piso liso de 25x140
25X140 floor duct

Ref. RP 3000



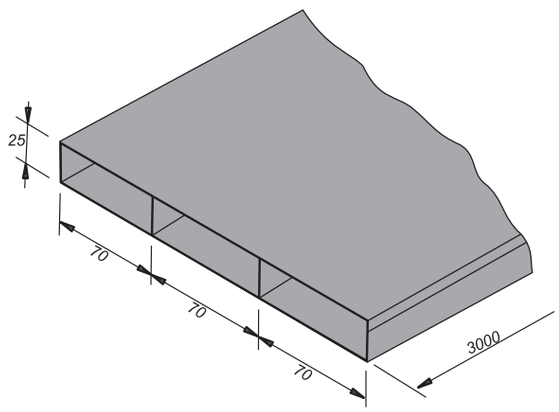
Duto de piso liso duplo de 2x25x70
2X25x70 double floor duct

Ref. RP 3002



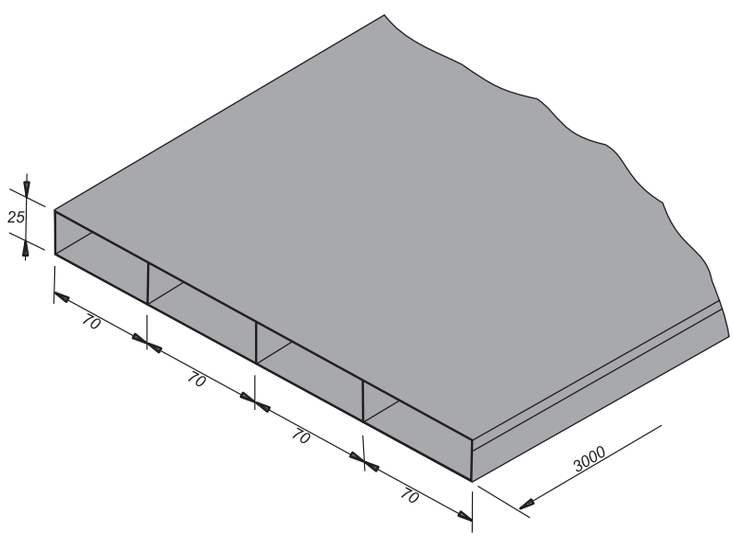
Duto de piso liso triplo 3x25x70
3X25x70 triple floor duct

Ref. RP 3005



Duto de piso liso quadruplo 4x25x70
4X25x70 quadruplo floor duct

Ref. RP 3007

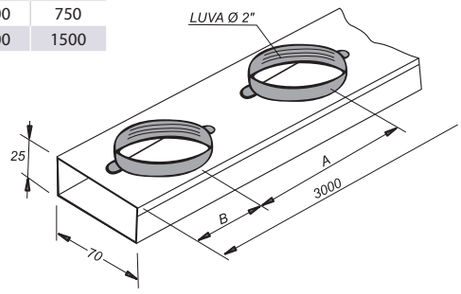


Dutos de piso

Floor ducts

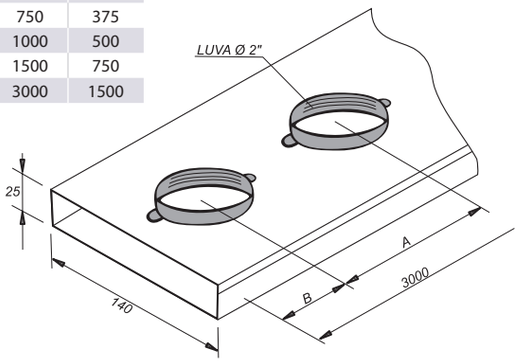
Duto de piso modulado 25x70 com luvas ø2"
25X70 duct with ø2" pre-set out-lets

Ref.	A	B
RP 3003	500	250
RP 3030	600	300
RP 3031	750	375
RP 3004	1000	500
RP 3006	1500	750
RP 3032	3000	1500



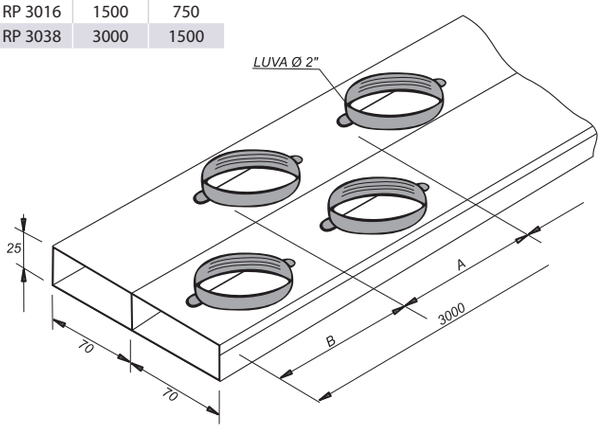
Duto de piso modulado 25x140 com luvas ø2"
25X140 duct with ø2" pre-set out lets

Ref.	A	B
RP 3008	500	250
RP 3033	600	300
RP 3034	750	375
RP 3009	1000	500
RP 3011	1500	750
RP 3035	3000	1500



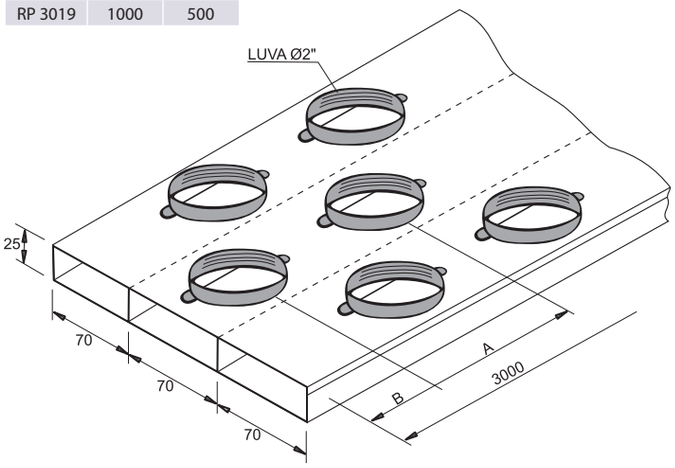
Duto de piso modulado 2x25x70 com luvas ø2"
2X25x70 duct with ø2" pre-set out lets

Ref.	A	B
RP 3013	500	250
RP 3036	600	300
RP 3037	750	375
RP 3014	1000	500
RP 3016	1500	750
RP 3038	3000	1500



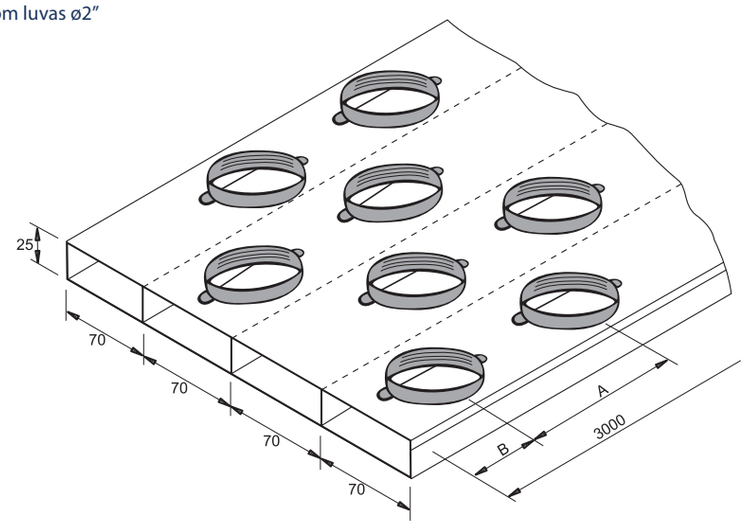
Duto de piso madulado 3 x 25 x 70 com luvas ø2"
3 X 25 x 70 duct with ø2" pre-set outlets

Ref.	A	B
RP 3018	500	250
RP 3080	600	300
RP 3081	750	375
RP 3019	1000	500



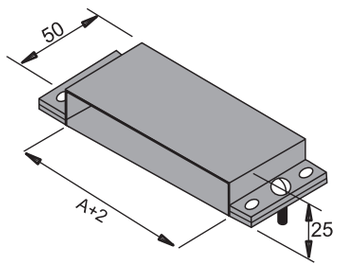
Duto de piso modulado 4 x 25 x 70 com luvas ø2"
4 X 25 x 70 duct with ø2" pre-set outlets

Ref.	A	B
RP 3023	500	250
RP 3082	600	300
RP 3083	750	375
RP 3024	1000	500



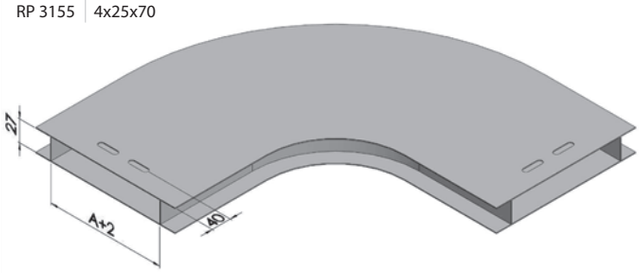
Junção niveladora para duto de piso
Floor duct leveler union coupling

Ref.	Duto
Ref.	*Duct*
RP 3039	25x70
RP 3040	25x140
RP 3041	25x210
RP 3042	25x280
RP 3043	25x350



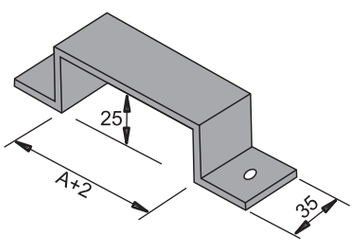
Curva horizontal de 90º
90º horizontal bend

Ref.	Duto
Ref.	*Duct*
RP 3059	25x70
RP 3060	25x140
RP 3153	2x25x70
RP 3154	3x25x70
RP 3155	4x25x70



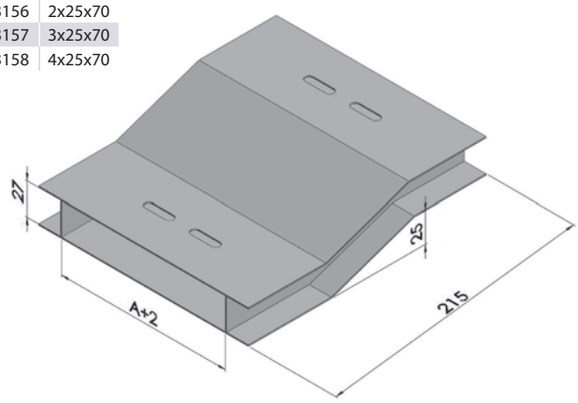
Suporte de fixação para duto
Bearing of fixing for duct

Ref.	Duto
Ref.	*Duct*
RP 3049	25x70
RP 3050	25x140
RP 3051	25x210
RP 3052	25x280
RP 3053	25x350



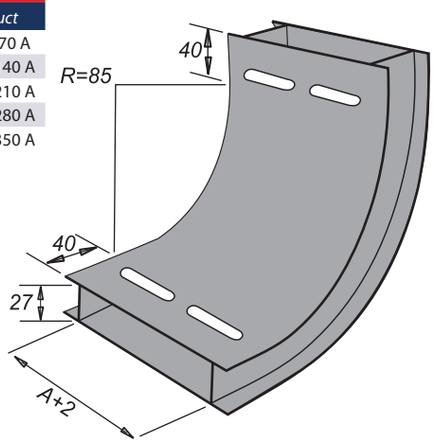
Desnível paralelo
Paralell crossover

Ref.	Duto
Ref.	*Duct*
RP 3061	25x70
RP 3062	25x140
RP 3156	2x25x70
RP 3157	3x25x70
RP 3158	4x25x70



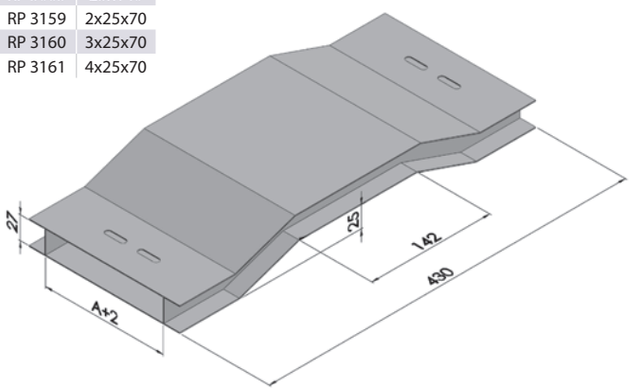
Curva vertical de 90º
90º vertical bend

Ref.	Duto
Ref.	*Duct*
RP 3054	25x70 A
RP 3055	25x140 A
RP 3056	25x210 A
RP 3148	25x280 A
RP 3149	25x350 A



Desnível linear
Linear crossover

Ref.	Duto
Ref.	*Duct*
RP 3064	25x70
RP 3065	25x140
RP 3159	2x25x70
RP 3160	3x25x70
RP 3161	4x25x70

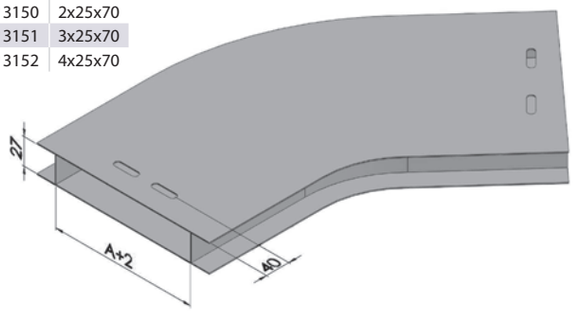


Dutos de piso

Floor ducts

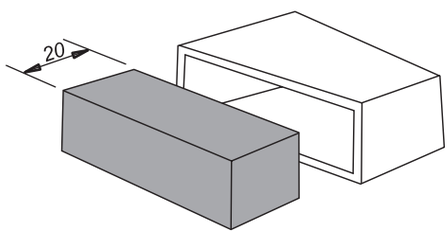
Curva horizontal de 45º
45º horizontal bend

Ref.	Duto
Ref.	*Duct*
RP 3057	25x70
RP 3058	25x140
RP 3150	2x25x70
RP 3151	3x25x70
RP 3152	4x25x70



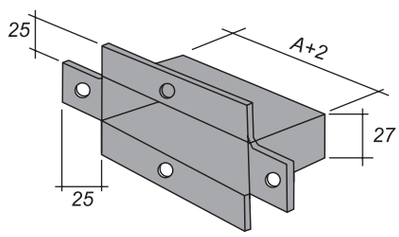
Terminal isopor
Floor duct closure cap

Ref. RP 3067 - 25x70
Ref. RP 3068 - 25x140



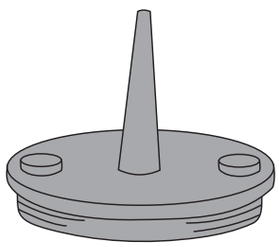
Flange para duto de piso
Cable protector for distributing board

Ref. RP 3102



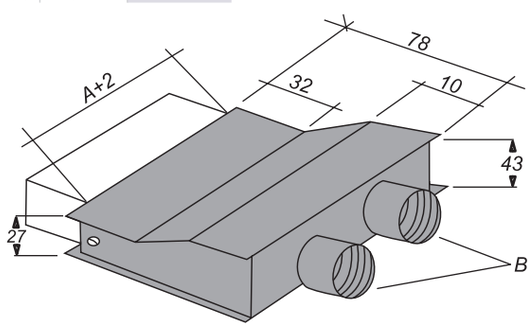
Tampão indicador ø 2"
Ø 2" pointing cover

Ref. RP 3069



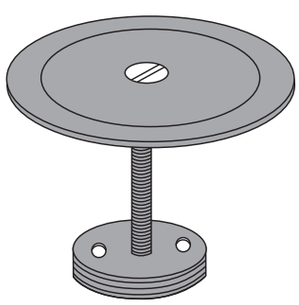
Conector para duto de piso
Floor duct adapter with conduit

Ref.	Saída B	Descrição
Ref.	*Exits B*	*Description*
RP 3169	1 x Ø 3/4"	
RP 3170	1 x Ø 1"	A
RP 3072	2 x Ø 3/4"	25 x 70
RP 3073	2 x Ø 1"	
RP 3171	1 x Ø 3/4"	
RP 3172	1 x Ø 1"	A
RP 3173	2 x Ø 3/4"	25 x 140
RP 3074	2 x Ø 1"	
RP 3083	3 x Ø 3/4"	A
RP 3094	3 x Ø 1"	25 x 210
RP 3095	4 x Ø 3/4"	A
RP 3096	4 x Ø 1"	25 x 280



Arremate de piso p/ luvas
Blanking floor plate with

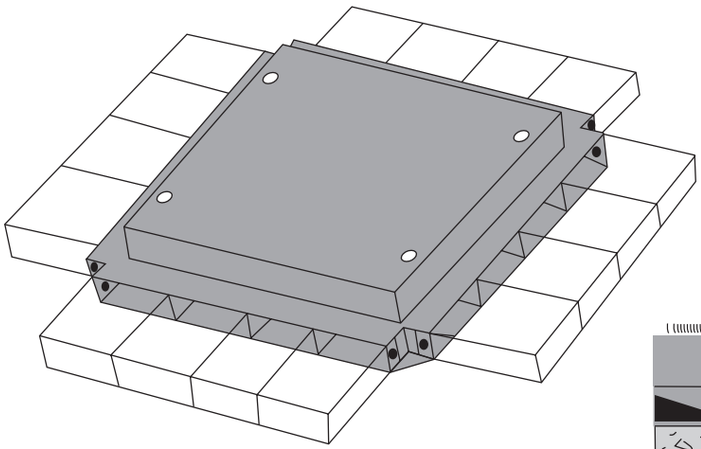
Ref. RP 3070

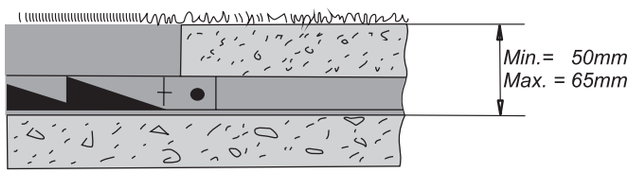


Caixa de passagem

Inspection box

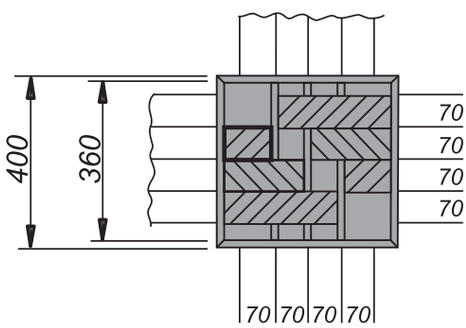
Caixa de passagem
Inspection box





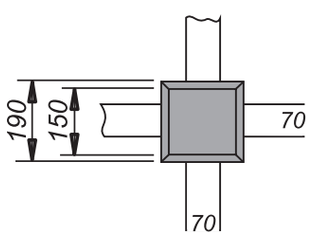
Caixa de passagem 16x25x70
Inspection box 16x25x70

Ref. RP 3091



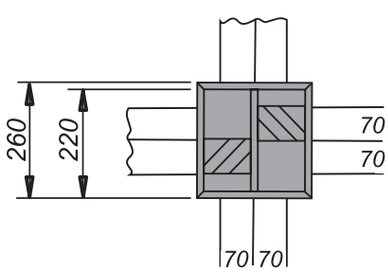
Caixa de passagem 4x25x70
Inspection box 4x25x70

Ref. RP 3084



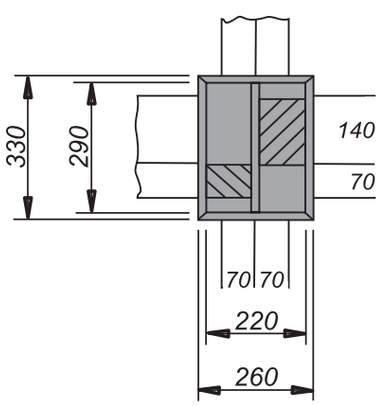
Caixa de passagem 8x25x70
Inspection box 8x25x70

Ref. RP 3087



Caixa de passagem 6x25x70+ 2x25x140
Inspection box 6x25x70+ 2x25x140

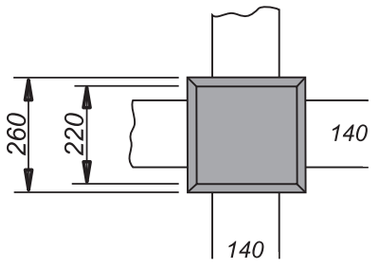
Ref. RP 3088



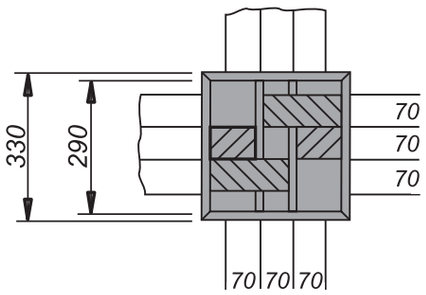
Caixa de passagem

Inspection box

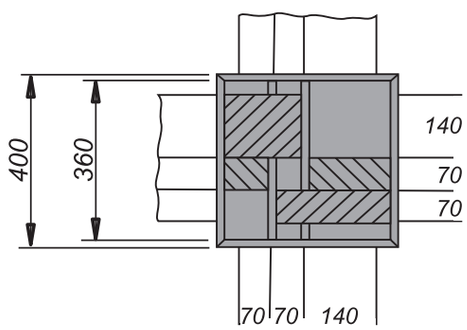
Caixa de passagem 4x25x140
Inspection box 4x25x70
Ref. RP 3086



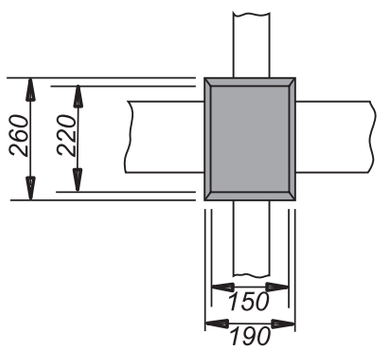
Caixa de passagem 12x25x70
Inspection box 12x25x70
Ref. RP 3089



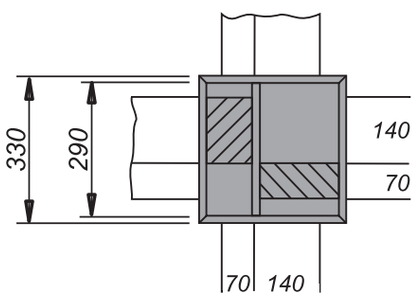
Caixa de passagem 8x25x70 +4x25x140
Inspection box 8x25x70 +4x25x140
Ref. RP 3092



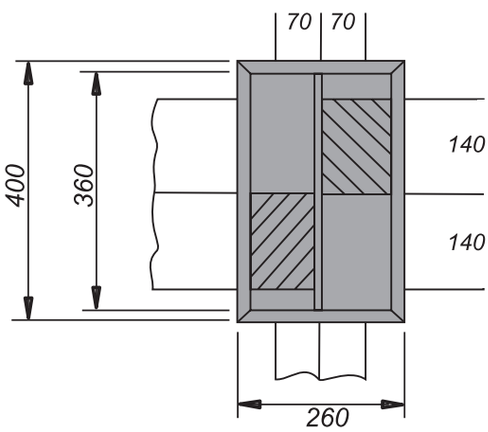
Caixa de passagem 2x25x70 +2x25x140
Inspection box 2x25x70 +2x35x140
Ref. RP 3085



Caixa de passagem 4x25x70 +4x25x140
Inspection box 4x25x70 +4x25x140
Ref. RP 3090



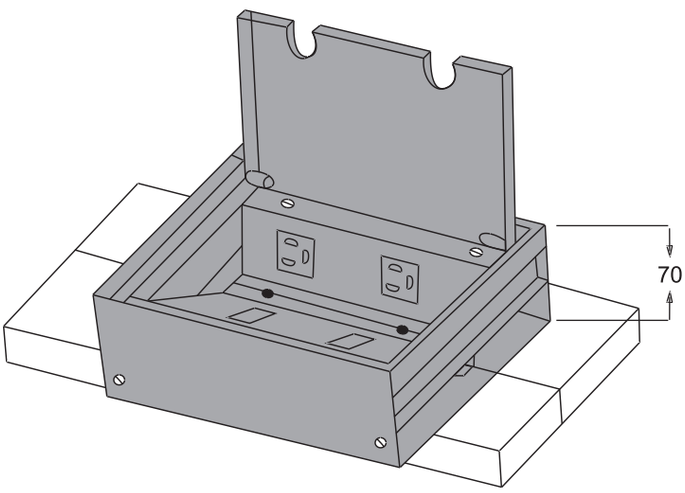
Caixa de passagem 4x25x70 + 4x25x140
Inspection box 4x25x70 + 4x25x140
Ref. RP 3093

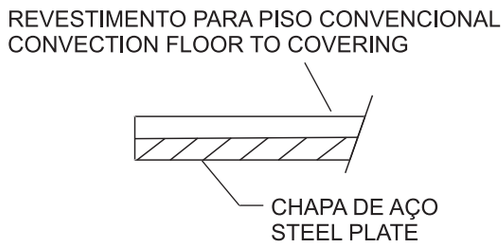


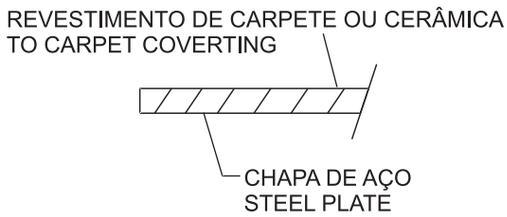
Caixa de tomada com tampa basculante

Black hinge cover service box

Caixa de tomada com tampa basculante
Black hinge cover service box





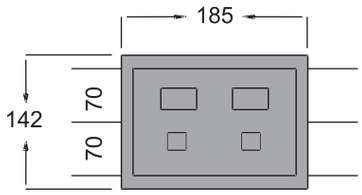


Obs.: Especificar tomadas. Tomadas não inclusas.
Obs.: Drawing to especify. Service box not includ.

Caixa de tomada com tampa basculante 2x25x70
Black hinge cover service box 2x25x70

Ref. RP 3190 B

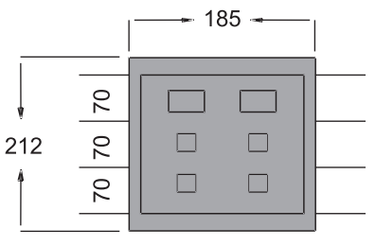
Ref.	Tampa
Ref.	*Cover*
RP 3190 B - CA	Carpete / *Carpet*
RP 3190 B - C	Piso convencional / *Convection floor*
RP 3190 B - CR	Ceramico / *Ceramic*



Caixa de tomada com tampa basculante 3x25x70
Black hinge cover service box 2x25x70

Ref. RP 3190 D

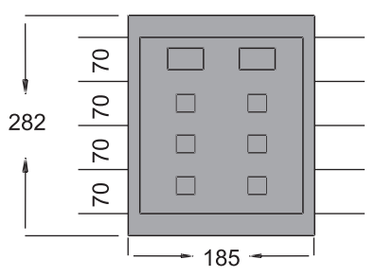
Ref.	Tampa
Ref.	*Cover*
RP 3190 D - CA	Carpete / *Carpet*
RP 3190 D - C	Piso convencional / *Convection floor*
RP 3190 D - CR	Ceramico / *Ceramic*



Caixa de tomada com tampa basculante 4x25x70
Black hinge cover service 4x25x70

Ref. RP 3190 F

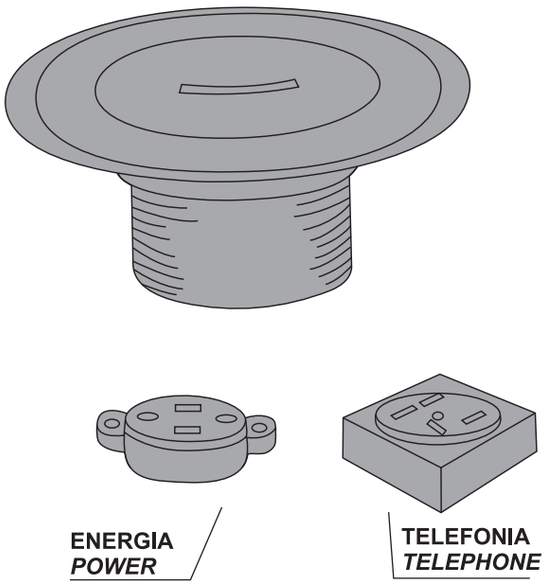
Ref.	Tampa
Ref.	*Cover*
RP 3190 F - CA	Carpete / *Carpet*
RP 3190 F - C	Piso convencional / *Convection floor*
RP 3190 F - CR	Ceramico / *Ceramic*



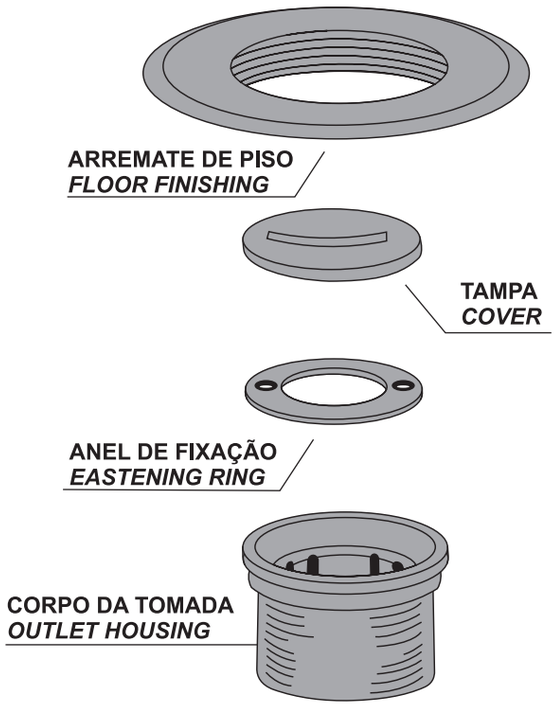
Tomadas de piso

Underfloor service boxs

Tomada de piso para energia e telefonia
Underfloor service box for power and telephone

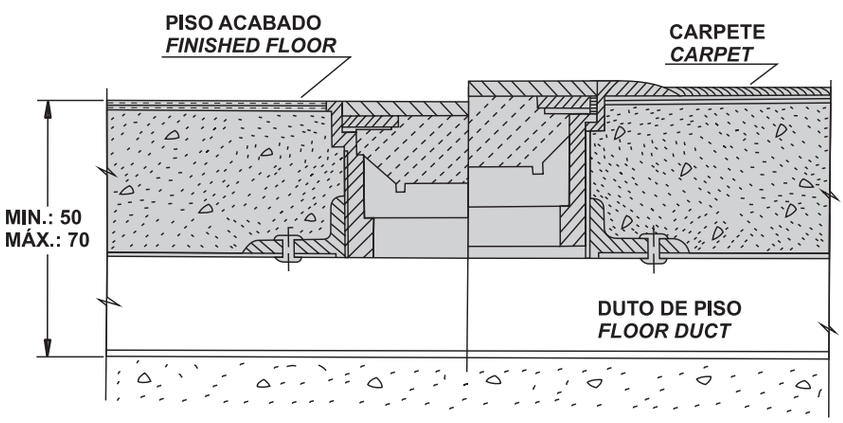


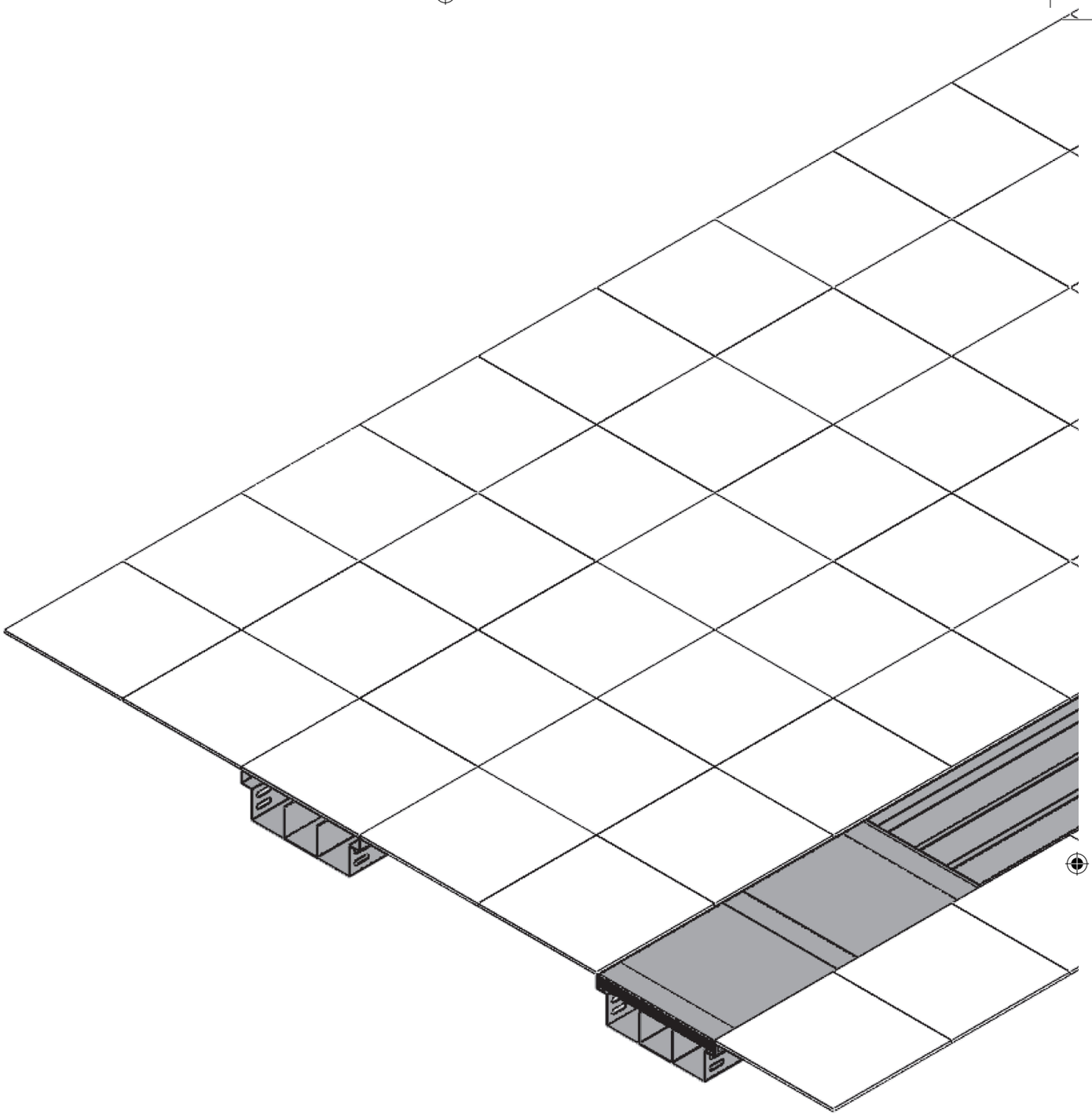
Componentes da tomada de piso
Underfloor service box components



Latão	Mista	Nylon	Pinos	Descrição	Characteristics
Brass	*Mixed*	*Nylon*	*Plugs*	*Description*	*Characteristics*
RP 3071 LT/MU	RP 3071 M/MU	RP 3071 NY/MU		Monofástica universal *Universal single phase*	2P 10A 250V
RP 3071 LT/MP	RP 3071 M/MP	RP 3071 NY/MP		Monofástica polarizada *Polarized single phase*	2P+T 15A 125V
RP 3071 LT/TE	RP 3071 M/TE	RP 3071 NY/TE		Telefone padrão Telebrás *Telephone Telebras standard*	4 Pinos *Four plugs*
RP 3071 LT/L	RP 3071 M/L	RP 3071 NY/L		Logica RJ	11 ou 45
RP 3071 LT/LL	RP 3071 M/LL	RP 3071 NY/LL		Logica duas RJ	11ou 45

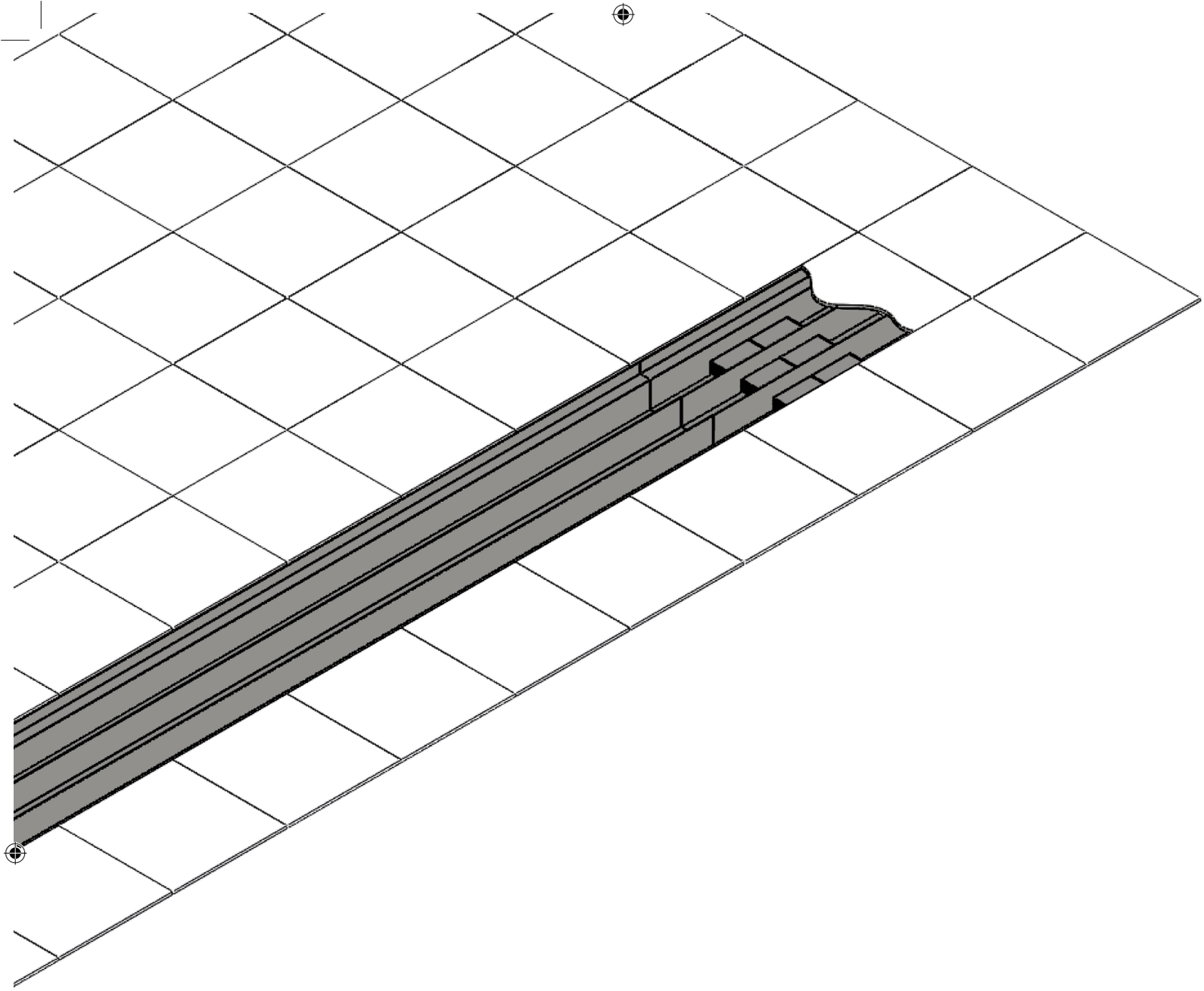
Montagem da tomada de piso
Underfloor service box assembly





Sistema de duto de piso aberto

Suporte para encaminhamento de cabos, embutido no contrapiso, construído em aço carbono, chapa de aço, bitola MSG, conforme as Normas: SAE 1010 - 1020 /ABNT - 6663/ NBR 7013. Tem como característica visual uma espécie de ômega, dobrado em forma de com a largura da base em 180 ou 240 mm e 60 ou 70 mm na altura total e 3000 mm de comprimento, o sistema possui uma "mesa" para o acondicionamento da tampa cega ou basculante, onde poderá ser acondicionado os conjuntos de tomadas com as quantidades e os tipos previstos em projeto. Muito usado em bancos e escritórios comerciais, além de sua versatilidade, vantagem que permite variações de lay-out, com um simples remanejamento das tampas, o sistema também prevê divisores para a separação física entre as linhas de lógica, elétrica, telefonia e sinal de rede. O dimensionamento do sistema de duto de piso aberto, necessita de informações por parte do projetista como o tipo de revestimento se usado paviflex, granito, carpete ou outros. No caso do carpete, é imprescindível a informação sobre a espessura a ser utilizada, bem como os tipos de tomadas (equipamentos) futuramente instalados. As derivações são intercambiáveis e seguirão as mesmas características do trecho reto, porém, geometricamente diferenciadas.



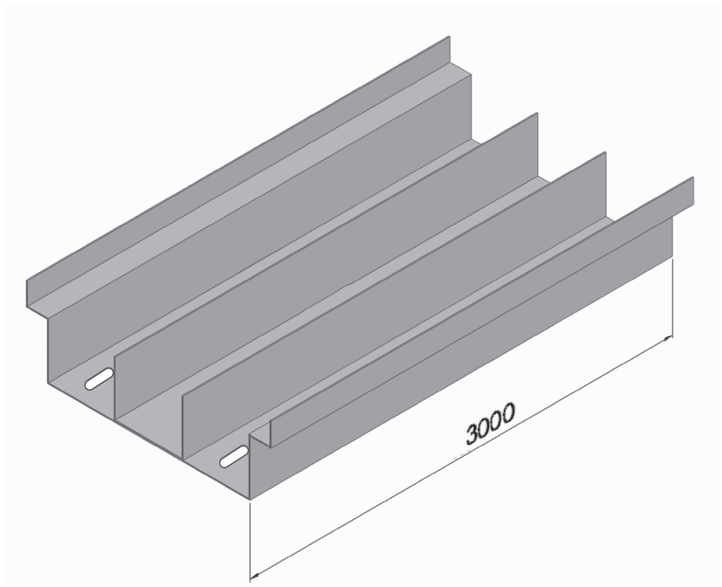
Duct system open f loor

Support for cable routing, built-in underlayment, built in carbon steel, steel plate, gauge MSG as Standards: SAE 1010 - 1020 / ABNT - 6663/7013 NBR. It feature a kind of visual omega-shaped folded to the width of the base 180 or 60 or 240 mm and 70 mm in total height, and 3000 mm in length, the system has a "table" for storing the blind cover or trucks, which may be packaged sets taken with the quantities and types provided in the project. Widely used in o ces and commercial banks, as well as its versatility advantage that allows variations in layout, with a simple rearrangement of the covers, the system also provides dividers for physical separation between the lines of logic, electrical, telephony and signal network. The sizing of the duct system open f loor, needs information by the designer as the type of coating is used pavif lex, granite, carpet, or other. In the case of carpet, it is essential to information about the thickness to be used and the types of outlets (equipment) installed in the future. The derivations are interchangeable and will follow the same characteristics of the straight stretch, but geometrically dif ferent.

Duto de piso aberto

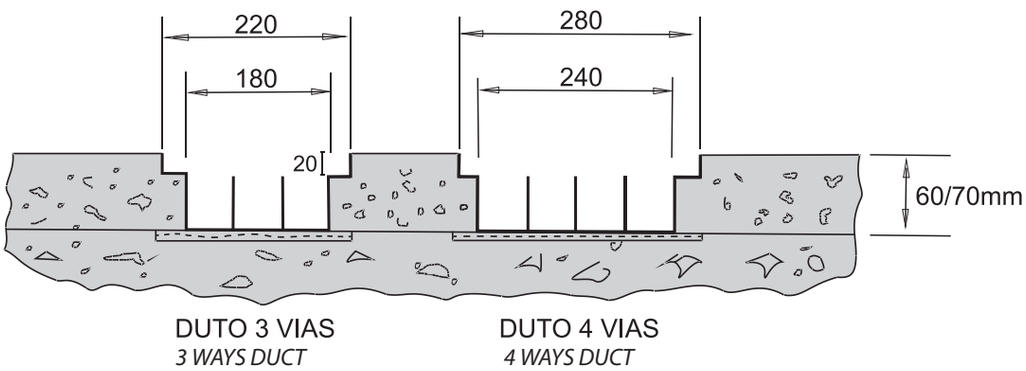
Floor duct flusch

Duto de piso aberto
Floor duct flusch



Trecho reto
Straight section

Ref. Rp 3200-3 - 3 vias */ 3 ways*
Ref. Rp 3200-4 - 4 vias */ 4 ways*



Duto de piso aberto

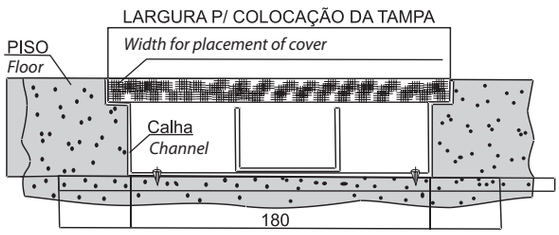
Floor duct flusch

SUGESTÃO DE INSTALAÇÃO (SISTEMA DE PISO CARPETE)

SUGGESTED INSTALLATION (CARPET FLOOR SYSTEM)

Primeira etapa

First step

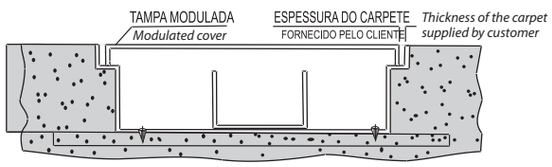


Obs.: Na compactação do concreto, verificar se o duto de piso não esta fechando, ocasionando problemas na colocação da tampa.

Note: In the compaction of concrete, verify that the duct floor is not closing, causing problems fitting the cover.

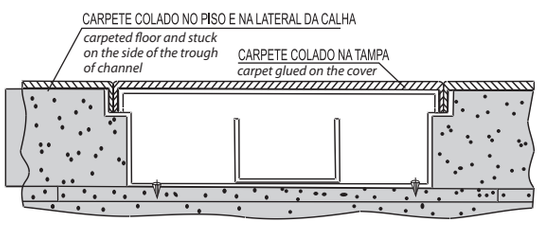
Segunda etapa

Second step



Terceira etapa

Third step

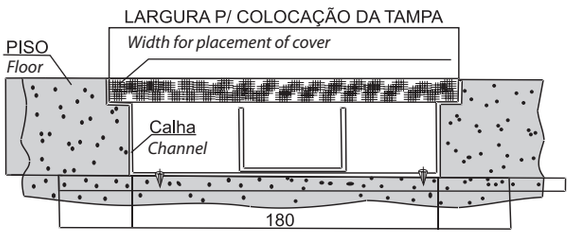


SUGESTÃO DE INSTALAÇÃO EM PAVIFLEX

SUGGESTED INSTALLATION PAVIFLEX

Primeira etapa

First step

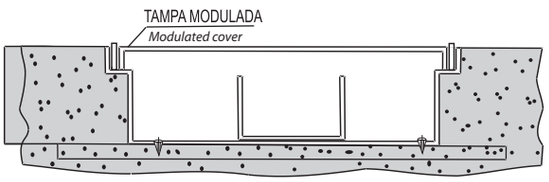


Obs.: Na compactação do concreto, verificar se o duto de piso não esta fechando, ocasionando problemas na colocação da tampa.

Noote: In the compaction of concrete, verify that the duct floor is not closing, causing problems fitting the cover.

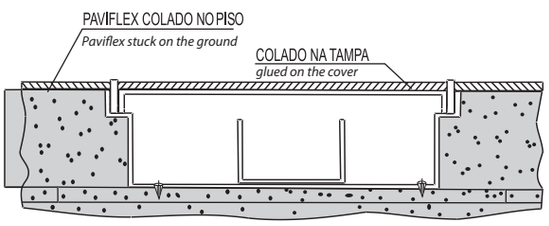
Segunda etapa

Second step



Terceira etapa

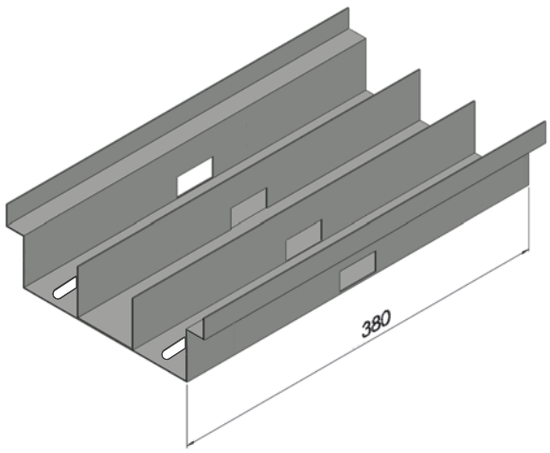
Third step



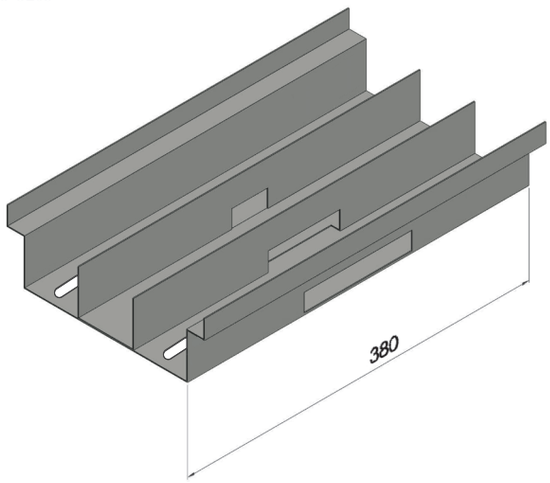
Duto de piso aberto

Floor duct flusch

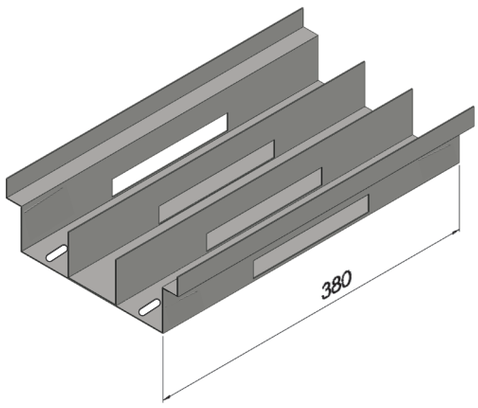
Derivação simples
Single junction
Ref. RP 3201



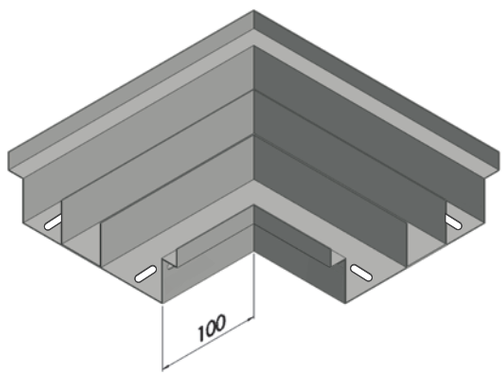
Derivação "T"
"T" junction
Ref. RP 3203



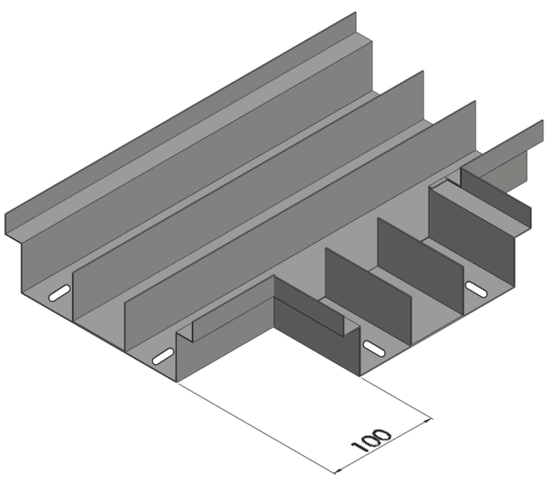
Derivação "X"
"X" junction
Ref. RP 3205



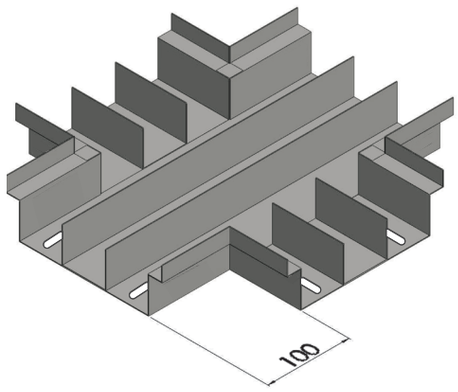
Cotovelo reto 90º
90º elbow
Ref. RP 3202



Tê reto 90º
90º straight tee
Ref. RP 3204



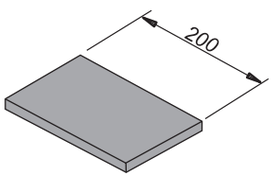
Cruzeta reta 90º
90º straight cross
Ref. RP 3206



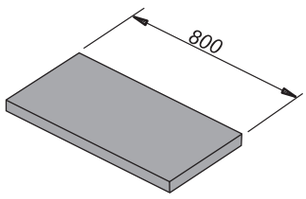
Duto de piso aberto

Floor duct flusch

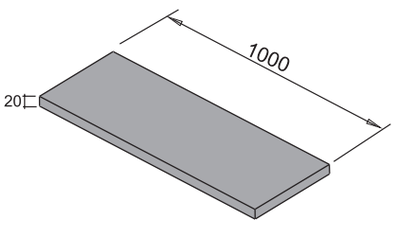
Tampa lisa 200mm
200 mm Cover solid base
Ref. RP 3207-1



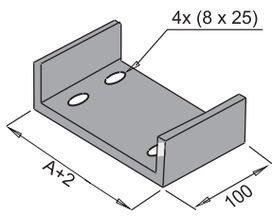
Tampa lisa 800 mm
800 mm Cover solid base
Ref. RP 3207-2



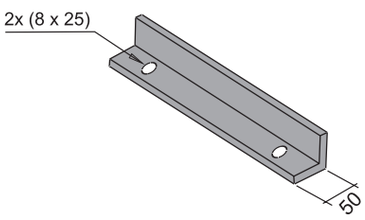
Tampa lisa 1000 mm
1000 mm cover solid base
Ref. RP 3207-3



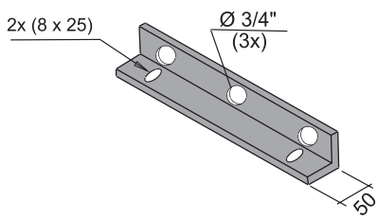
Emenda externa
External jainer
Ref. RP 3209



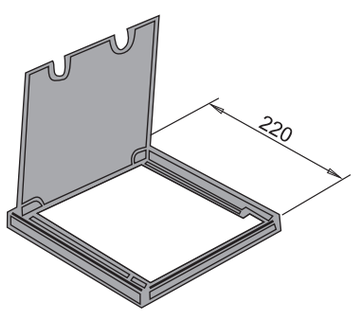
Terminal
End plate
Ref. RP 3210



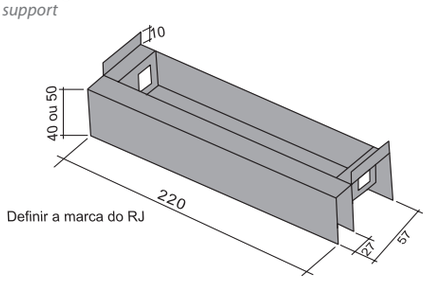
Terminal com saída para tubo
End plate with condnit
Ref. RP 3211



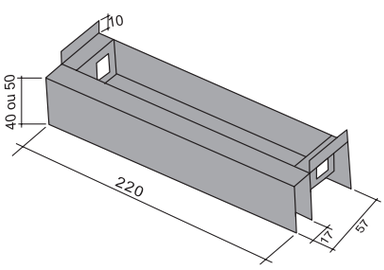
Tampa basculante
Black hinge cover
Ref. RP 3208



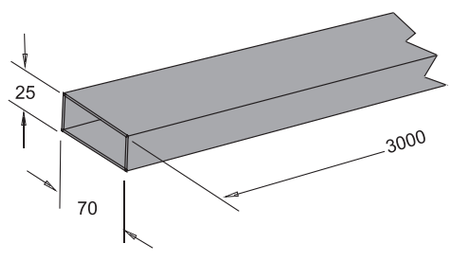
Suporte p/ tomada lógica
Logic service box support
Ref. RP 3212

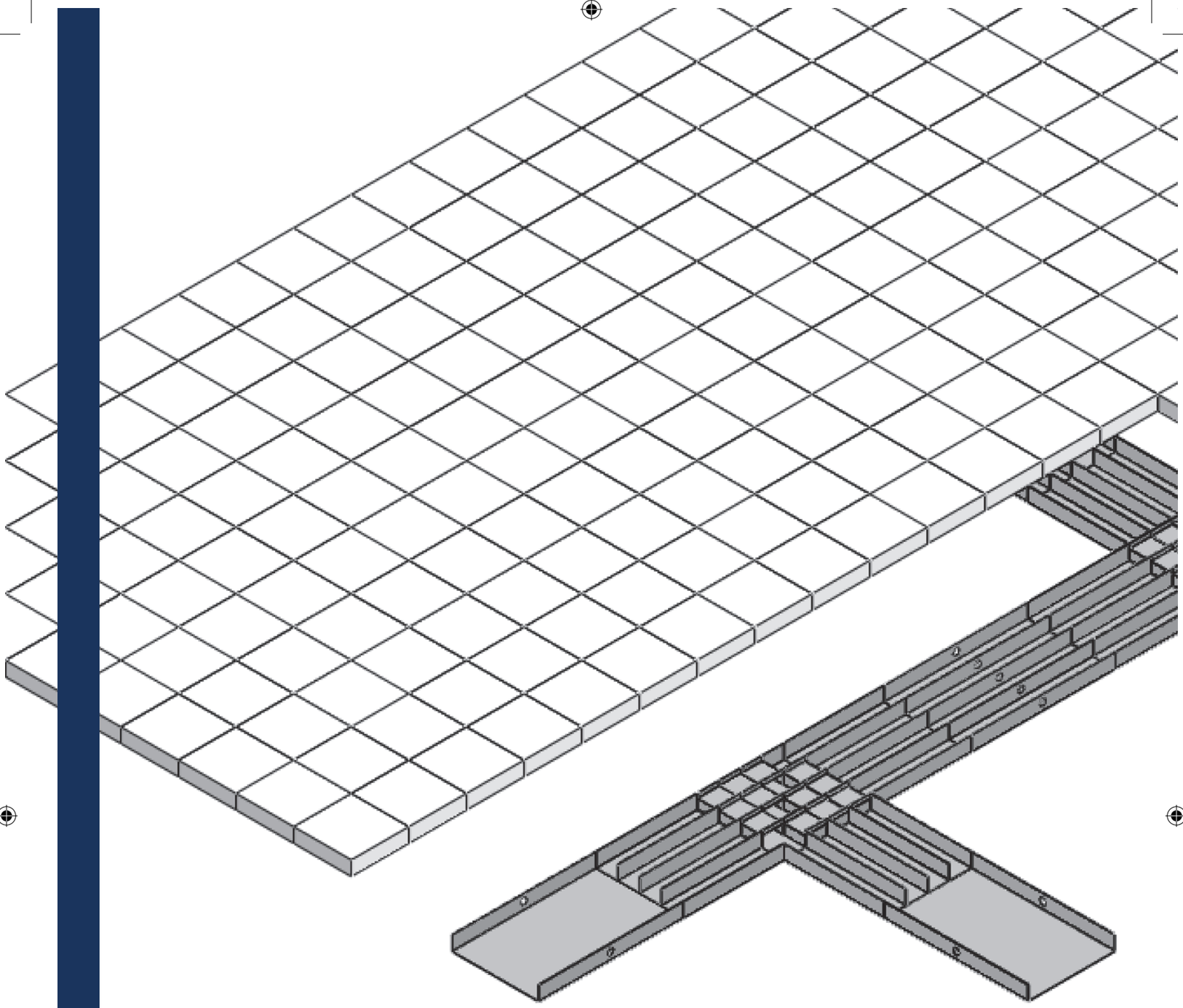


Suporte para tomada de força
Power service box support
Ref. RP 3213



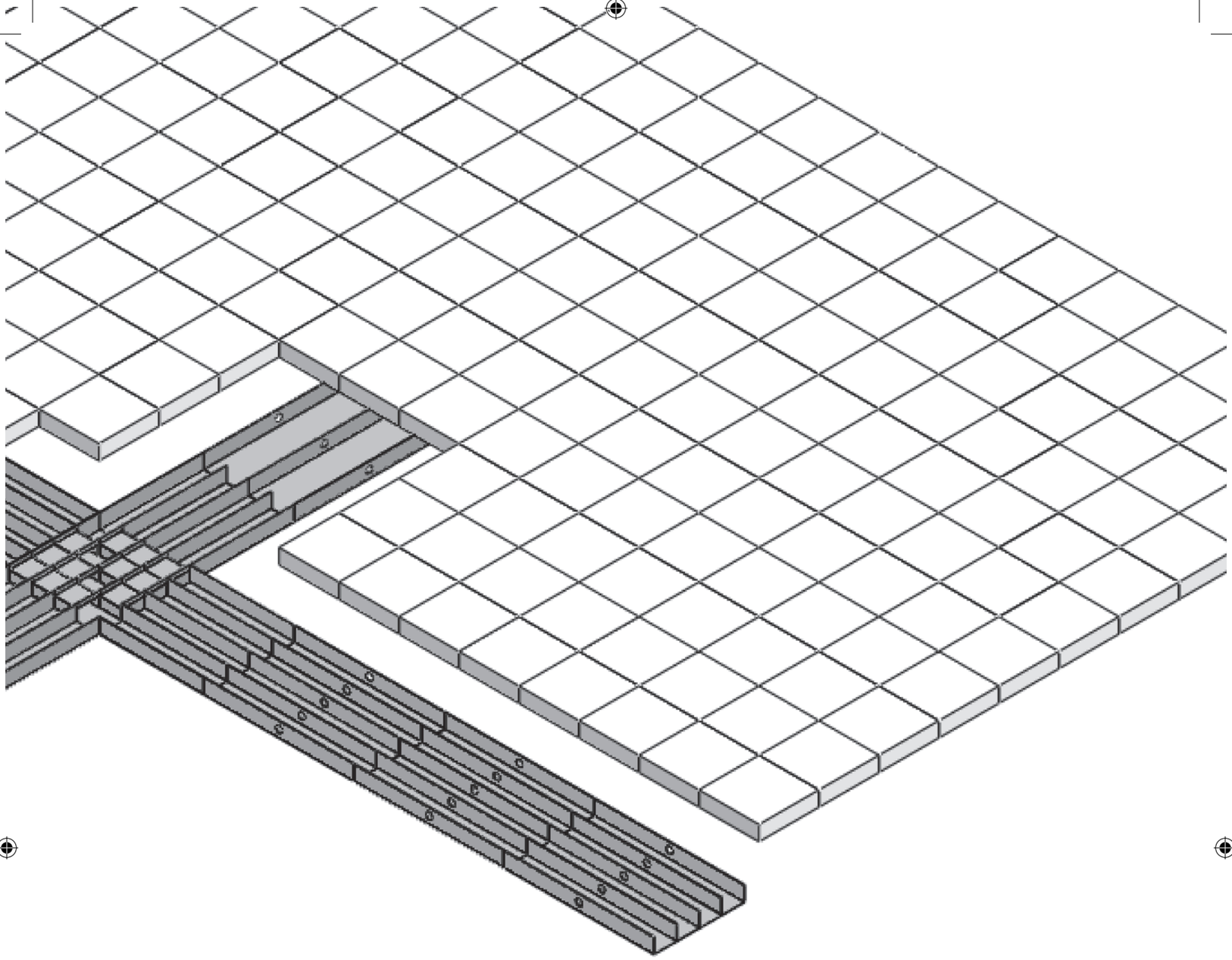
Duto liso 25x70
25X70 black duct
Ref. RP 3001





Duto para piso elevado

Baseado no sistema de funcionamento de eletrocalhas este produto tem como caracteristica principal, de nos cruzamentos, a fiação elétrica não ter contato com a fiação de lógica e dados, pois as cruzetas e os "Tee" possuem divisão de cruzamento, bastando apenas o cliente especificar a largura de cada via.



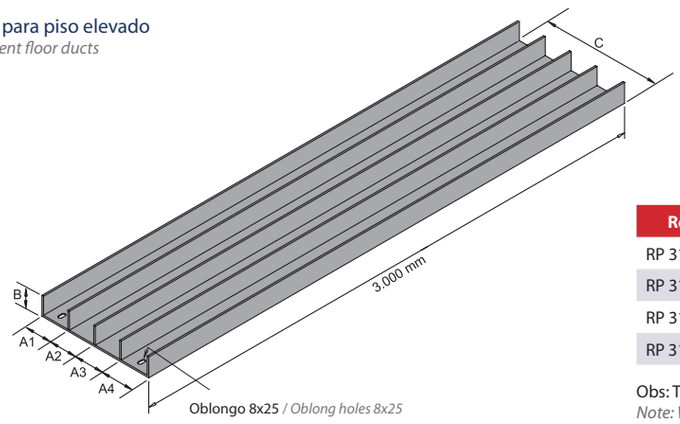
Apparent floor ducts

Based on the operation of cable trays channel type, the characteristic of the crossroads, the wiring does not have contact with the wiring of data and logic, because the crosses and tees have split intersection, the customer simply specify the width of each route.

Duto para piso elevado

Apparent floor ducts

Duto para piso elevado
Apparent floor ducts



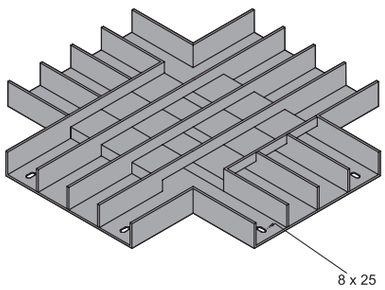
Oblongo 8x25 / *Oblong holes 8x25*

Ref.	A1	A2	A3	A4	B	C
RP 3191-1	75				50	75
RP 3191-2	75	75			50	150
RP 3191-3	75	75	75		50	225
RP 3191-4	75	75	75	75	50	300

Obs: Também fornecemos outras medidas sob consulta.
Note: We can supply others measures under request

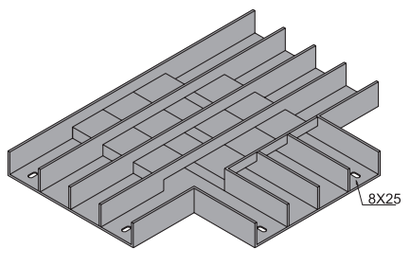
Cruzeta
Crossarm

Ref. RP 3192



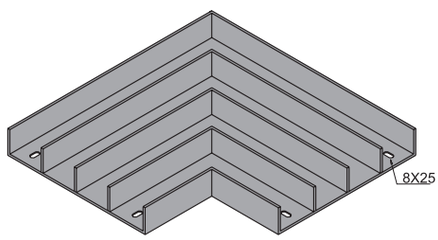
Te horizontal
Horizontal tee

Ref. RP 3193



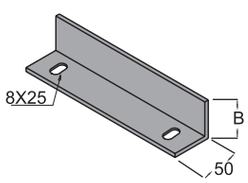
Cotovelo 90°
90° Elbow

Ref. RP 3194



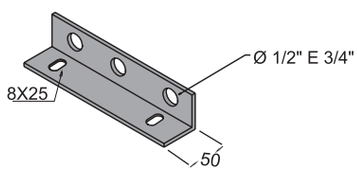
Terminal
Terminal

Ref. RP 3195



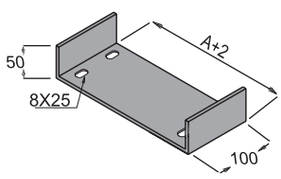
Terminal com saida para eletroduto
Terminal with conduit lead-out

Ref. RP 3196



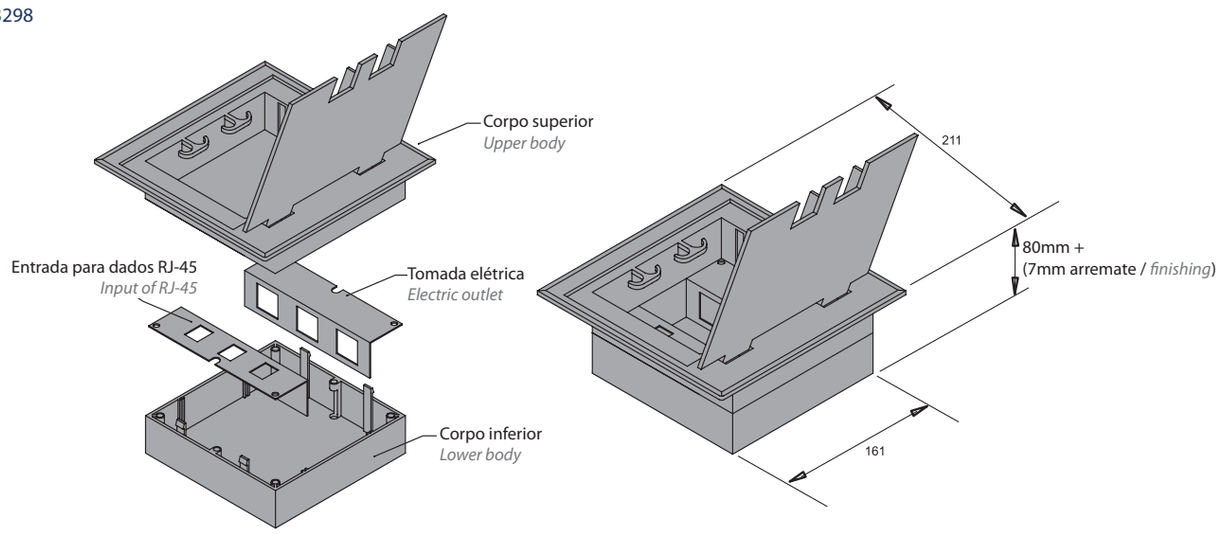
Emenda extena
External joint

Ref. RP 3197



Caixa quadrada em pvc para piso elevado
High floor outlet Box in PVC

Ref. RP 3298

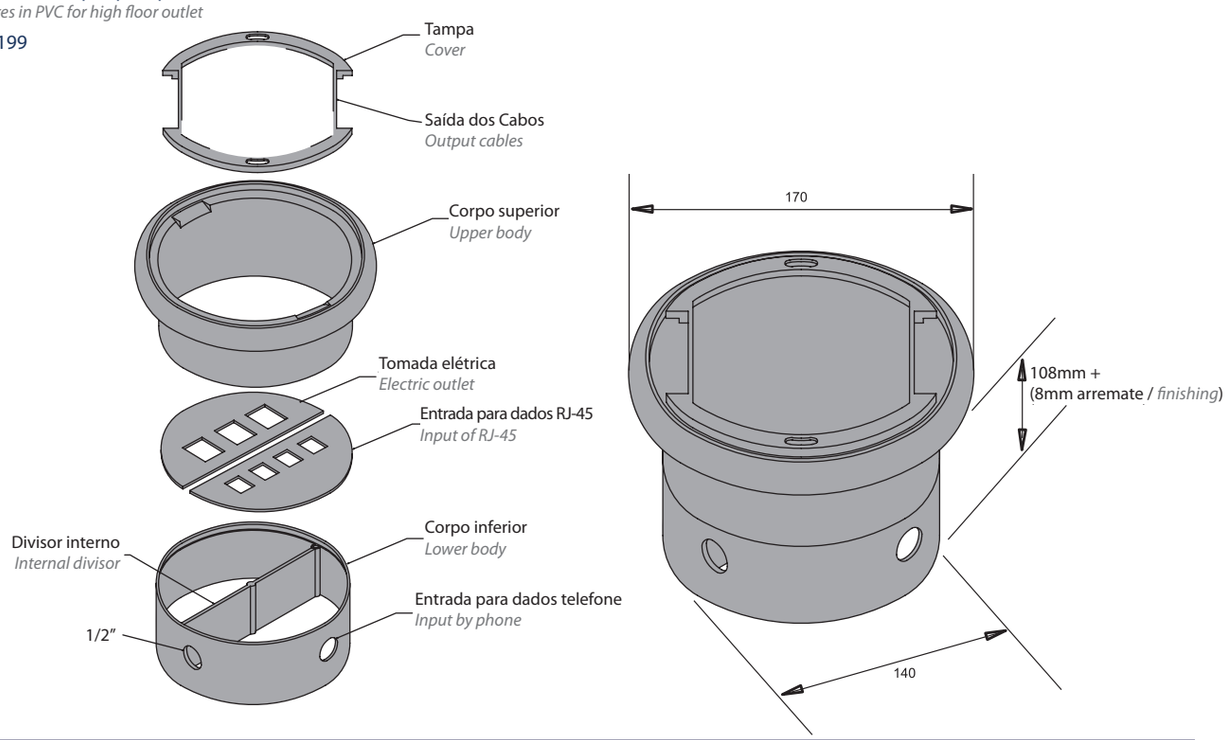


Tomadas de piso

Underfloor service boxs

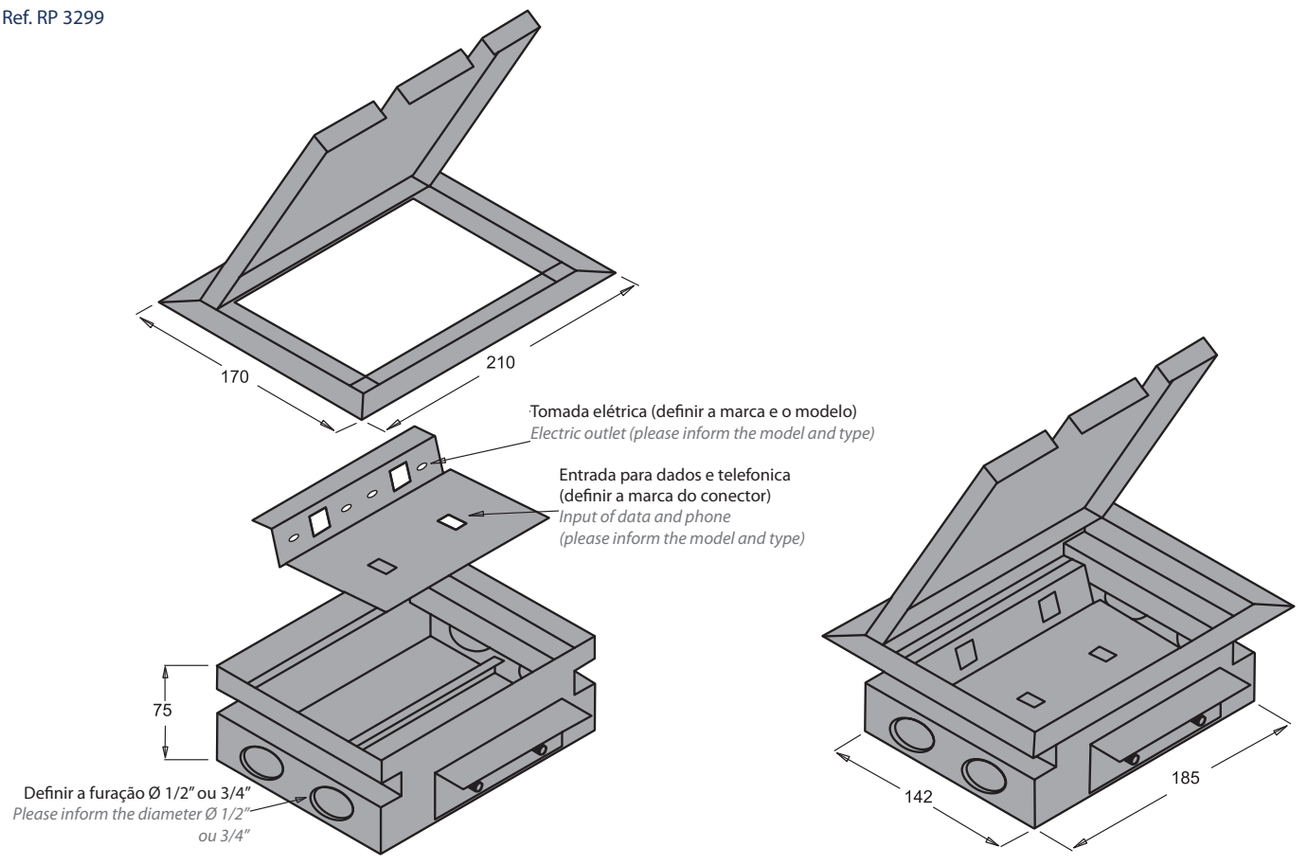
Caixa redonda em pvc para piso elevado
Round boxes in PVC for high floor outlet

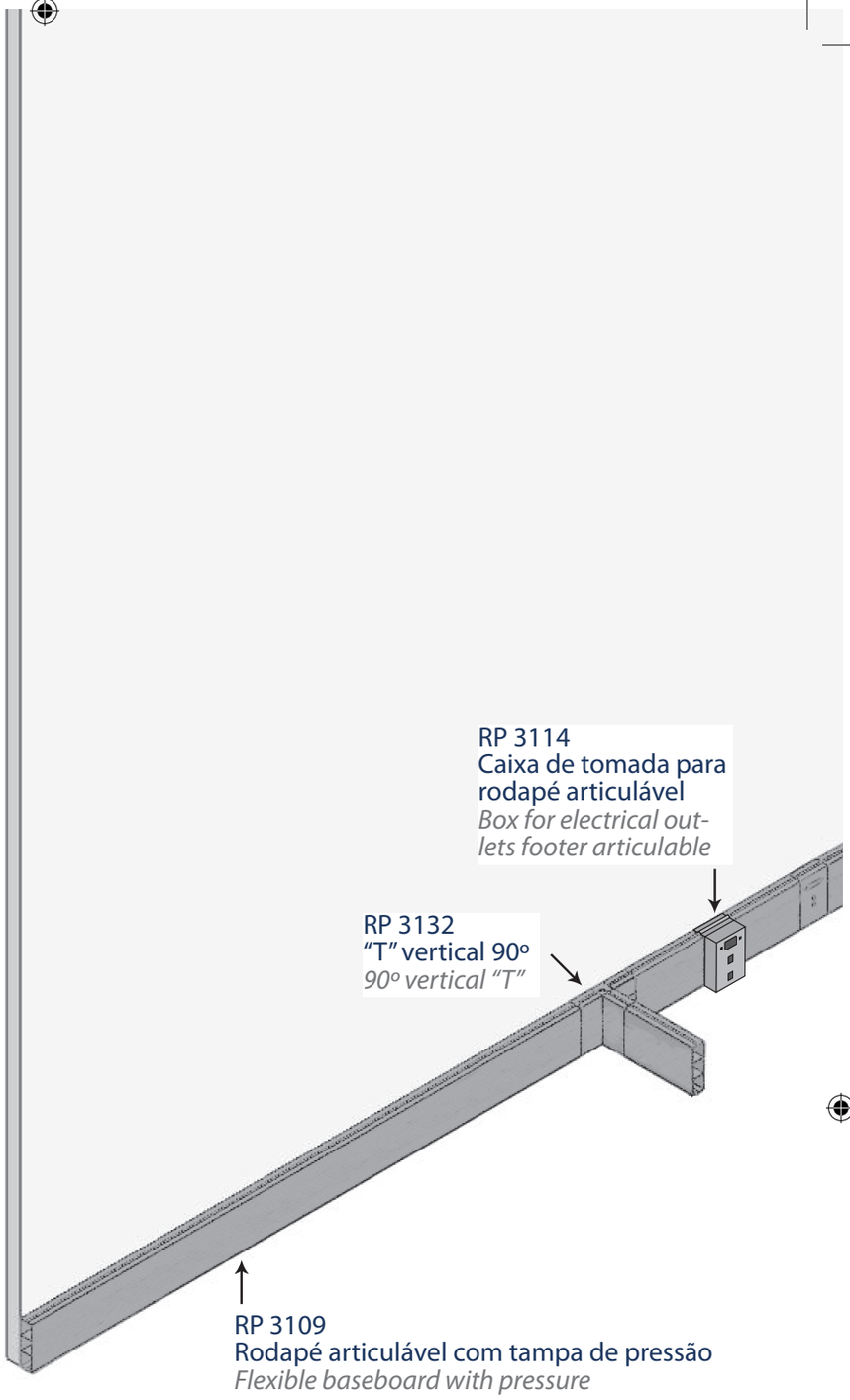
Ref. RP 3199



Caixa quadrada em aço para piso elevado c/ tampa PZ ou PT
Outlet box for high floor with cover painted or galvanized

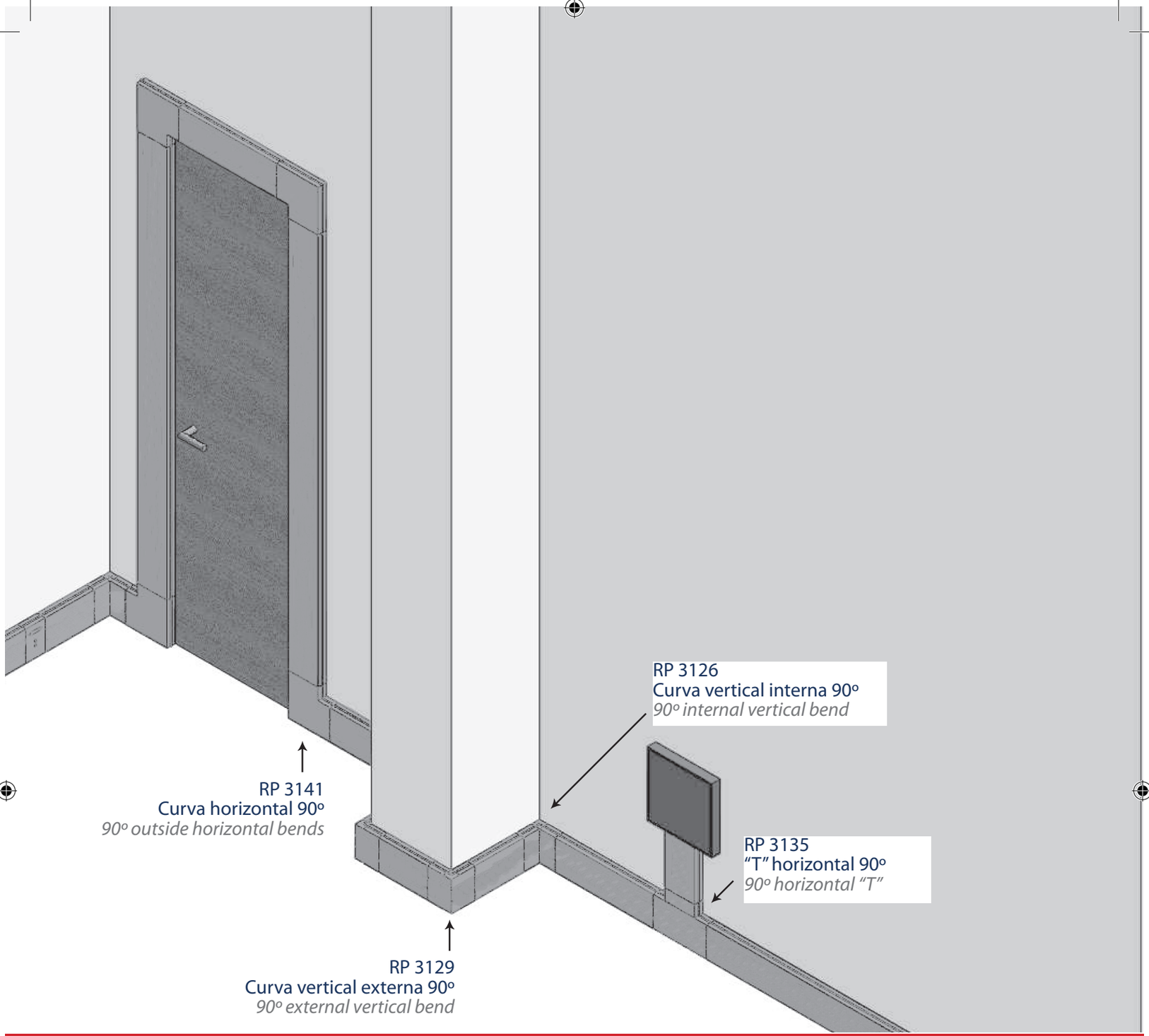
Ref. RP 3299





Sistema de rodape articulável

O sistema de rodapé articulável é utilizado para encaminhamento de cabos e conseqüentemente suprir a necessidade de adaptar tomadas em ambiente, onde não foram projetadas as redes na alvenaria. Construído em chapa de aço carbono : SAE 1006-1010-ABNT 6663/NBR-7013. O rodapé articulável padrão Real Perfil , é o resultado de diversos testes e pesquisas no setor, é constituido de um fundo sem ou com divisor, (podendo este ter um ou mais divisores), tampa de pressão que facilita a montagem na instalação e manutenção, suportes para tomada que podem variar para caixa se a profundidade não atender.
O comprimento padrão do rodapé articulável é de 3000 mm, mas deve ser observado que em instalações prediais sugerimos sua fabricação com comprimento de 2000 mm , para facilitar seu transporte em elevador. O processo para acabamento (pintura) é feito através do sistema eletrostático epóxi pó , tendo como cores mais utilizadas, cinza Munsell N 6,5 e bege Ral 7032, podendo sob consulta ,variar as cores conforme o ambiente a ser instalado. Nota para fixação do rodapé articulável na alvenaria. É aconselhável: Parafuso cabeça redonda rosca soberba 3,8 mm x 30 mm (ref.2050) com bucha S-5 e arruela lisa.



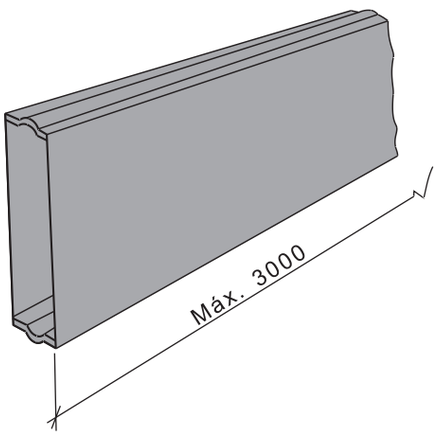
System footer articulable

The system is used for bottom hinged cable routing and thus meet the need to adapt taken in environment where the networks were not designed in the masonry. Built in carbon steel plate: SAE 1006-1010-ABNT 6663/NBR-7013. The default footer articulable Real Perfil is the result of various tests and research sector, consists of a background with or without divider, (this can be one or more dividers) pressure cap assembly that facilitates installation and maintenance supports for decision which may vary for cash if the depth does not meet. The standard length is 3000 mm, but it should be noted that in building installations suggest its manufacture with a length of 2000 mm to facilitate its transport in lift. The process for finishing (painting) is done by the system electrostatic epoxy powder, with the most commonly used colors, gray Munsell N6,5 and beige Ral 7032, may on request, vary the colors as the environment to be installed. Note to fixing footer articulated in masonry. is advisable: round head screw superb thread 3.8 mm x 30 mm (ref.2050) with bushing S-5 and flat washer.

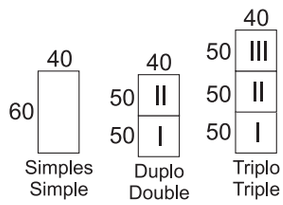
Sistema de rodape articulável

System footer articulable

Rodapé articulável com tampa de pressão
Flexible baseboard with pressure

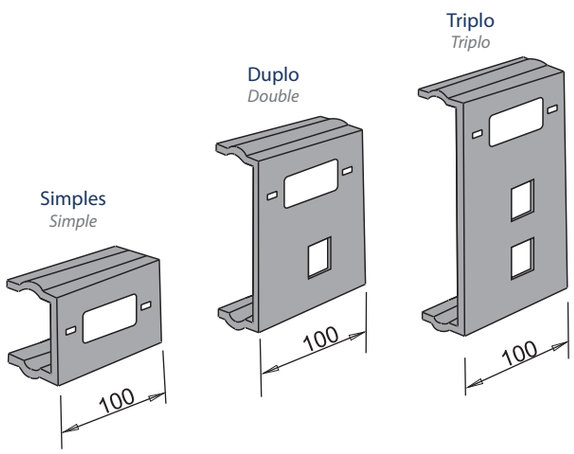


Ref.	Descrição
Ref.	*Description*
RP 3107	1X40X60
RP 3108	2X40X50
RP 3109	3X40X50



NOTA: É importante determinar o tipo da tomada a ser usada, e o posicionamento da malha nas seções do rodapé falso. Para fabricação de acordo com o especificado.
NOTE: It is important to inform what kind of outlet to be used, and the placement of the mesh sections in the footer. To manufacture as specified.

Suporte de tomada para rodapé articulável
Support system for electrical outlets footer articulable

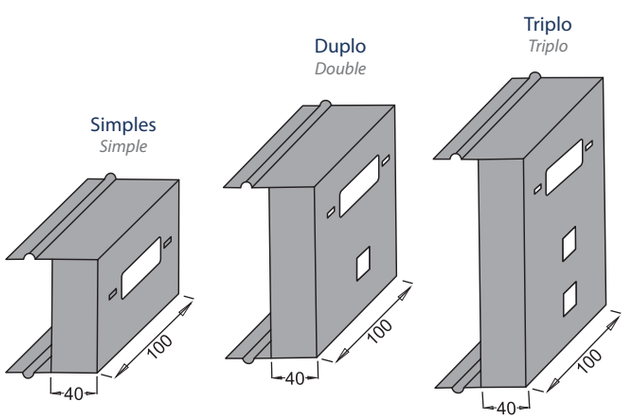


Ref.	Tipo
Ref.	*Type*
RP 3110	I
RP 3111	I
RP 3112	II
RP 3113	III
RP 3114	I
RP 3115	II

Ref.	Type
Ref.	*Type*
RP 3116	I
RP 3117	I
RP 3118	II
RP 3119	III
RP 3120	I

Obs.: Definir a marca do RJ. Tomadas não inclusas.
Note: Please, inform the input of RJ. Outlets not included.

Caixa de tomada para rodapé articulável
Box for electrical outlets footer articulable



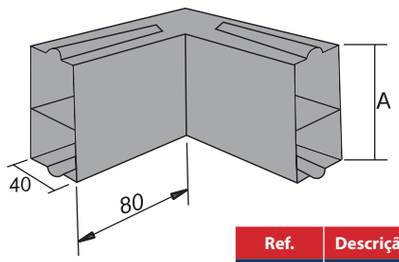
Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3110-C	Simples / *Simple*	1x40x60
RP 3111-C	Duplo / *Double*	2x40x50
RP 3114-C	Triplo / *Double*	3x40x50

Obs.: Definir a marca do RJ. Tomadas não inclusas.
Note: Please, inform the input of RJ. Outlets not included.

Sistema de rodape articulável

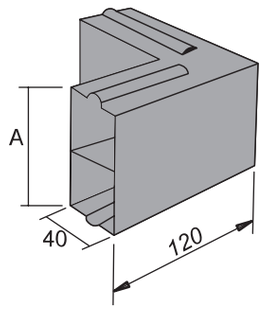
System footer articulable

Curva vertical interna 90º
90º internal vertical bend



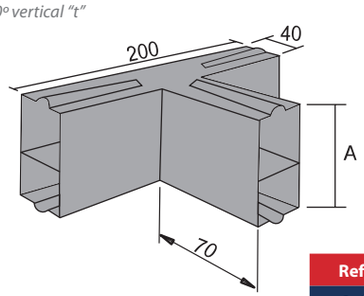
Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3124	Simples	1x40x60
RP 3125	Duplo	2x40x50
RP 3126	Triplo	3x40x50

Curva vertical externa 90º
90º external vertical bend



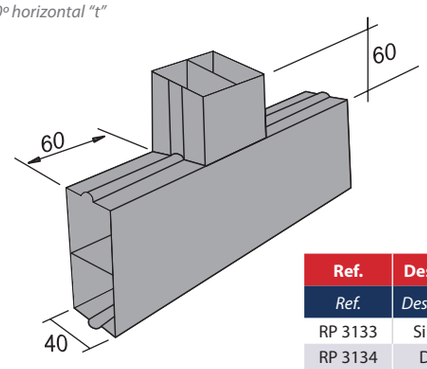
Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3127	Simples	1x40x60
RP 3128	Duplo	2x40x50
RP 3129	Triplo	3x40x50

"T" vertical 90º
90º vertical "t"



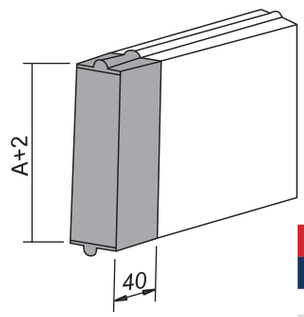
Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3130	Simples	1x40x60
RP 3131	Duplo	2x40x50
RP 3132	Triplo	3x40x50

Tê horinzontal 90º
90º horizontal "t"



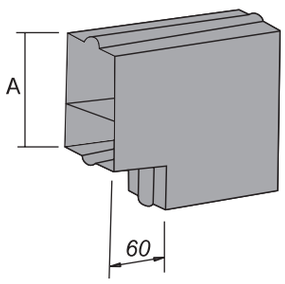
Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3133	Simples	1x40x60
RP 3134	Duplo	2x40x50
RP 3135	Triplo	3x40x50

Terminal
End plate



Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3136	Simples	1x40x60
RP 3137	Duplo	2x40x50
RP 3138	Triplo	3x40x50

Curva horizontal 90º
90º outside horizontal bends



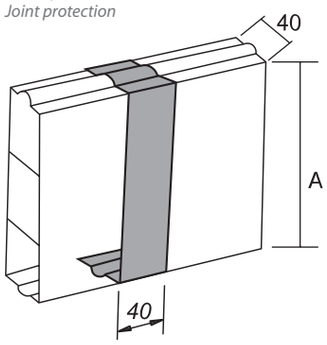
Interna / *internal*

Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3142	Simples	1x40x60
RP 3143	Duplo	2x40x50
RP 3144	Triplo	3x40x50

Externa / *external*

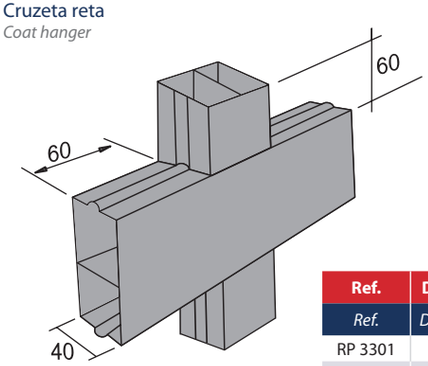
Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3139	Simples	1x40x60
RP 3140	Duplo	2x40x50
RP 3141	Triplo	3x40x50

Mata junta
Joint protection



Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3145	Simples	1x40x60
RP 3146	Duplo	2x40x50
RP 3147	Triplo	3x40x50

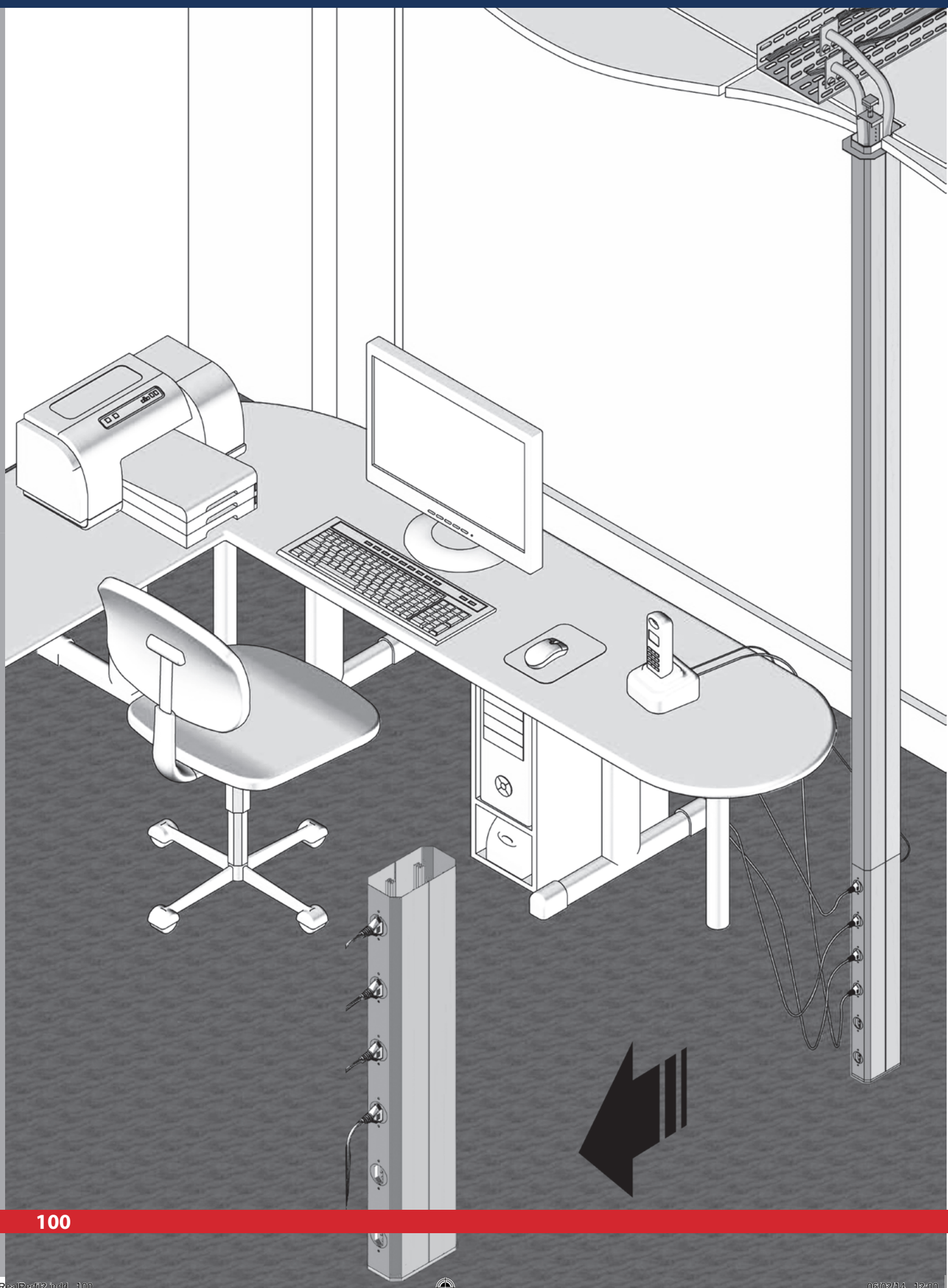
Cruzeta reta
Coat hanger



Ref.	Descrição	Dimensões
Ref.	*Description*	*Dimensions*
RP 3301	Simples	1x40x60
RP 3302	Duplo	2x40x50
RP 3303	Triplo	3x40x50

Poste Condutor

Post conductor

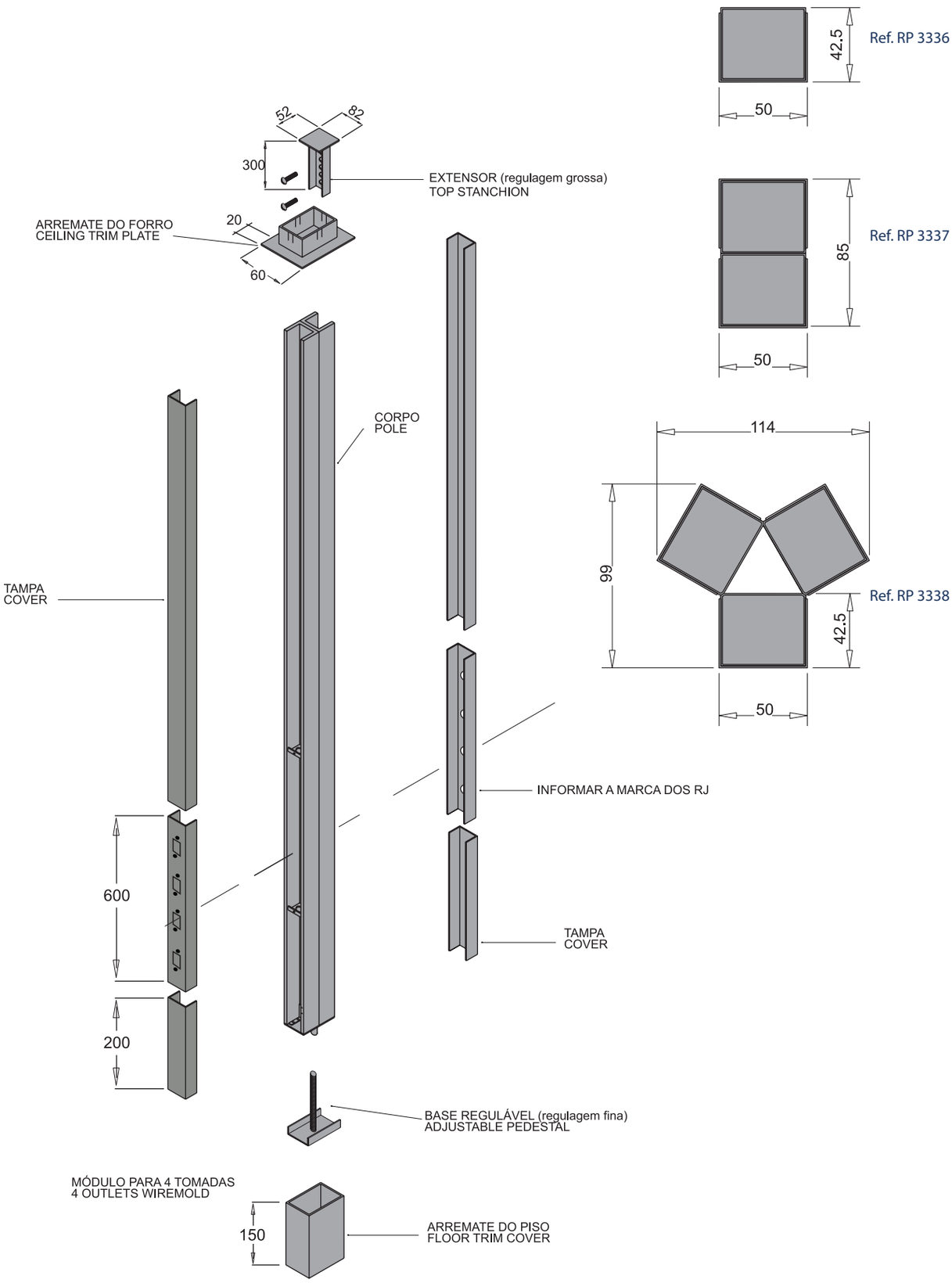


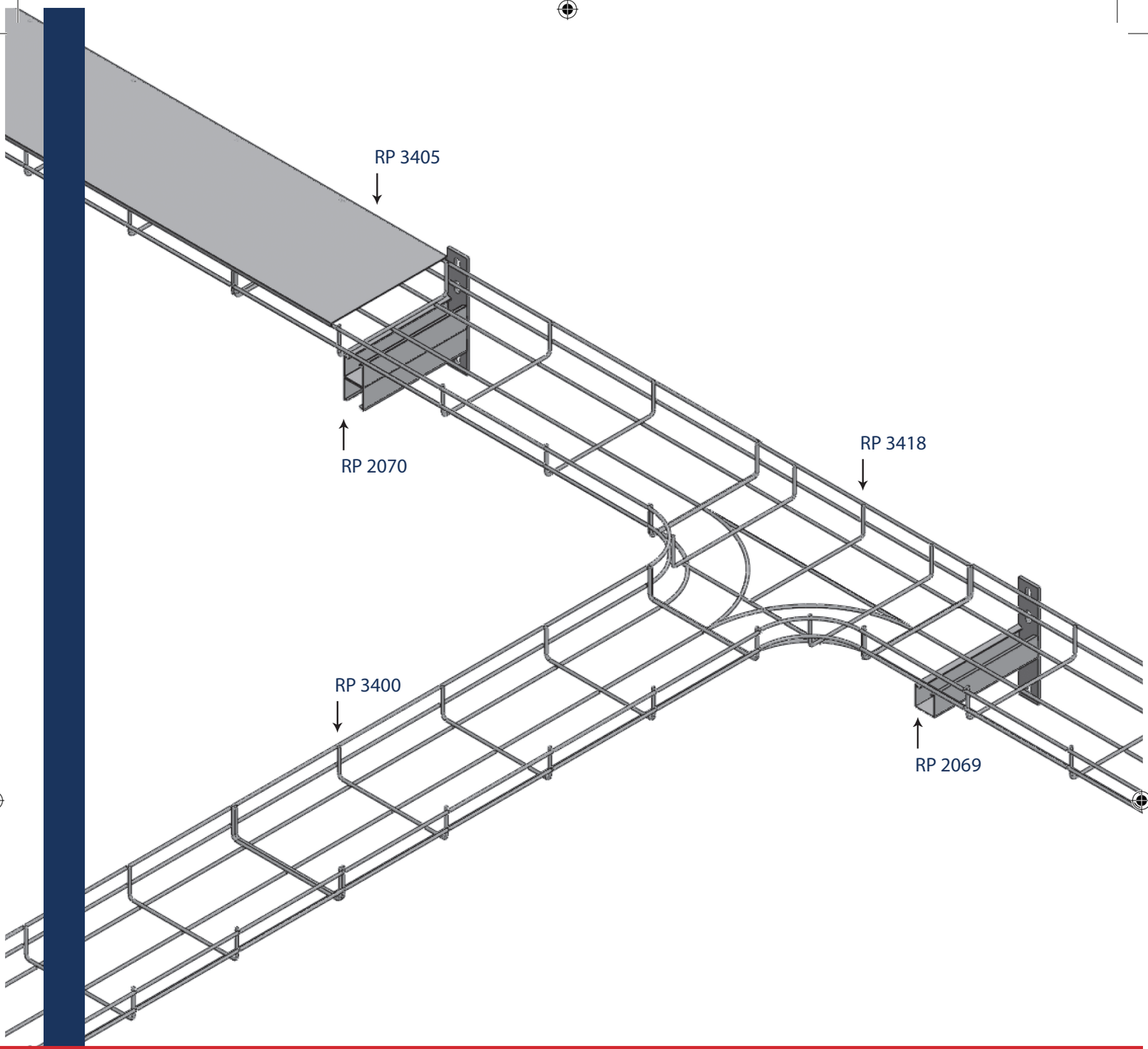
Poste Condutor

Post conductor

Poste condutor para distribuição de eletricidade e telefonia.

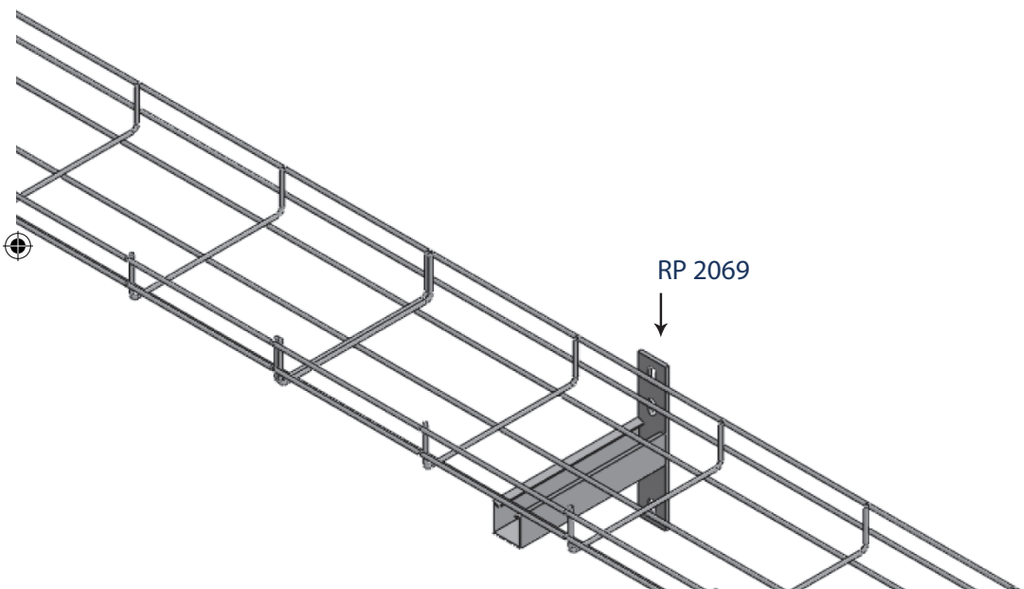
Post conductor for electricity distribution and telephony





Leito aramado

Leito aramado é um sistema prático e moderno, de fácil instalação, que dispensa uso de ferramentas especiais e ainda permite limpeza com lavagem constante.
São usados para passagem de cabeamento e aplicados em diversas áreas da indústrias e construção civil para instalações de energia, telefonia e dados sob piso elevado. Os leitos aramados são fabricados com vergalhões de 3/16" (tipo leve) ou de ¼" (tipo pesado), em diversos acabamentos.



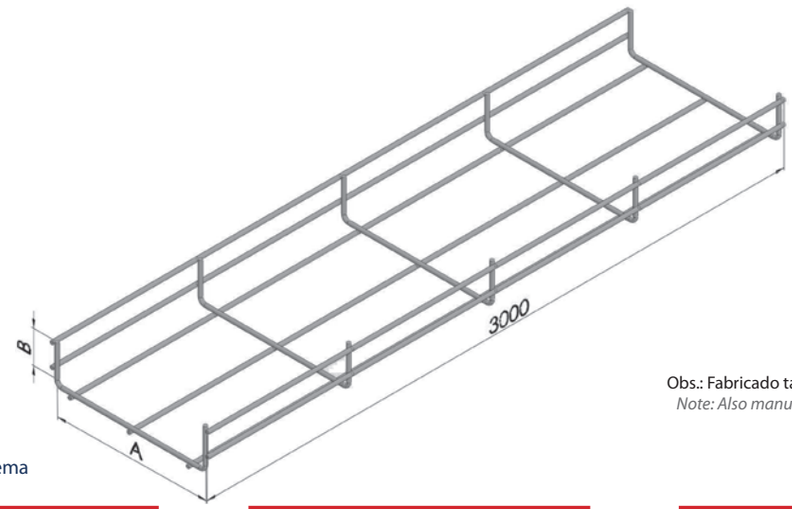
Wired cable tray

Wired cable tray is a modern system and practical, easy installation, not required use of tools and still allows cleanup with constant washing. Are used for passage of wiring and applied in various areas of industries and construction for energy facilities, telephone and data under high floor. The wired cable trays are made with wires of 3/16 "(light type) or ¼" (heavy type) in various finishes.

Leito aramado

Wired cable tray

Leito aramado
Wired cable tray
Ref. RP 3400



Obs.: Fabricado também com arame bitola ø 1/4.
Note: Also manufactured with wired gauge ø 1/4.

Componentes do sistema
System Components

Leitos aramados - altura 50 mm		
Wired cable trays - height 50 mm		
Ref.	**Medida "A"**	**Peso (Kg)**
Ref.	*"A" measure*	*Weight (kg)*
RP 3400 / 50x50	50	3,14
RP 3400 / 50x100	100	3,36
RP 3400 / 50x150	150	3,99
RP 3400 / 50x200	200	4,63
RP 3400 / 50x300	300	5,48
RP 3400 / 50x400	400	8,79
RP 3400 / 50x500	500	10,55
RP 3400 / 50x600	600	10,98

Obs.: Peso calculado para arame bitola 3/16.
Note: Weight calculated for wire gauge 3/16.

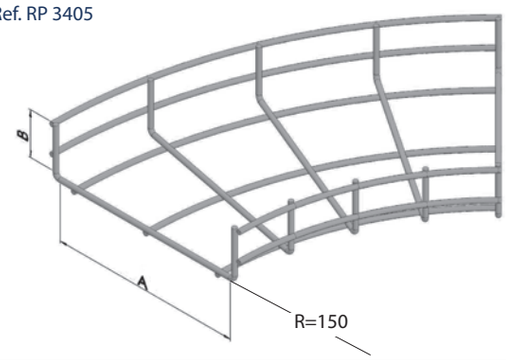
Leitos aramados - altura 75 mm		
Wired cable trays - height 75 mm		
Ref.	**Medida "A"**	**Peso (Kg)**
Ref.	*"A" measure*	*Weight (kg)*
RP 3400 / 75x100	100	3,887
RP 3400 / 75x150	150	4,524
RP 3400 / 75x200	200	4,741
RP 3400 / 75x300	300	6,015
RP 3400 / 75x400	400	7,289
RP 3400 / 75x500	500	8,563
RP 3400 / 75x600	600	9,880

Obs.: Peso calculado para arame bitola 3/16.
Note: Weight calculated for wire gauge 3/16.

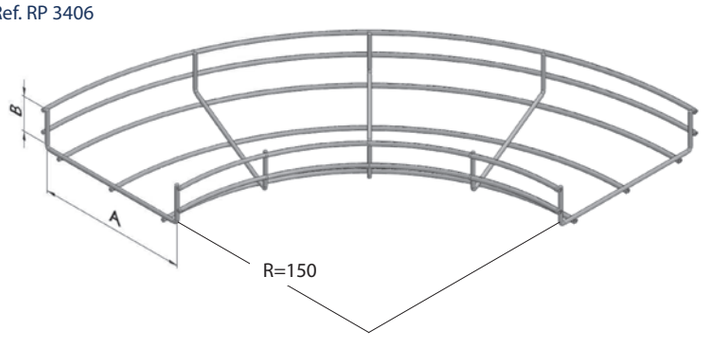
Leitos aramados - altura 100 mm		
Wired cable trays - height 100 mm		
Ref.	**Medida "A"**	**Peso (Kg)**
Ref.	*"A" measure*	*Weight (kg)*
RP 3400 / 100x100	100	3,79
RP 3400 / 100x150	150	4,42
RP 3400 / 100x200	200	5,06
RP 3400 / 100x300	300	5,49
RP 3400 / 100x400	400	9,22
RP 3400 / 100x500	500	10,98
RP 3400 / 100x600	600	11,42
RP 3400 / 100x700	700	11,85

Obs.: Peso calculado para arame bitola 3/16.
Note: Weight calculated for wire gauge 3/16.

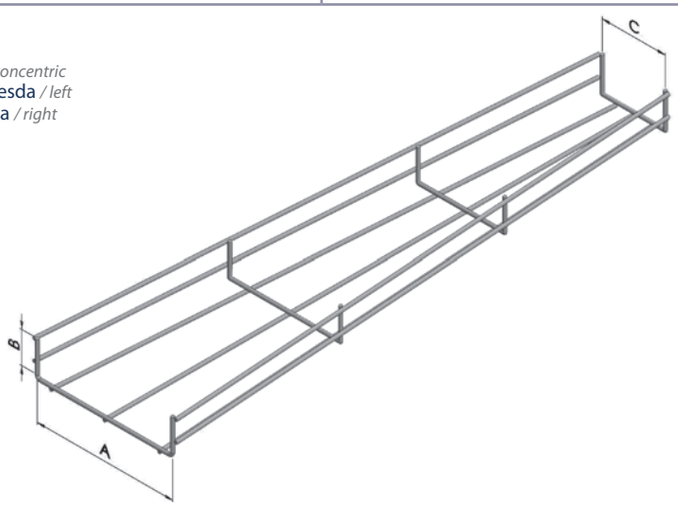
Curva horinzontal 45º
45º Horizontal bend
Ref. RP 3405



Curva horizontal 90º
90º Horizontal bend
Ref. RP 3406



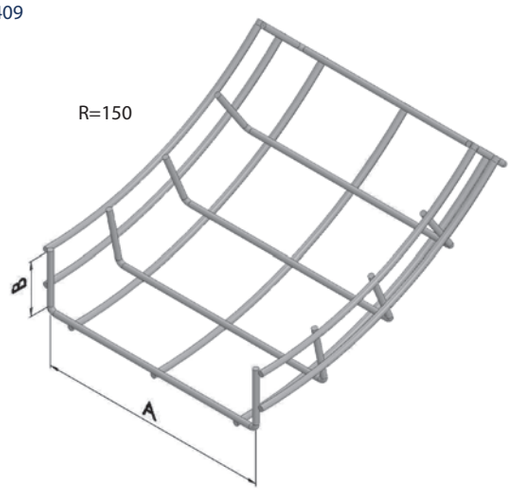
Redução concêntrica
Concentric reduction
Ref. RP 3412 - Concêntrica */ concentric*
Ref. RP 3414 - Redução esquesda */ left*
Ref. RP 3415 - Redução direita */ right*



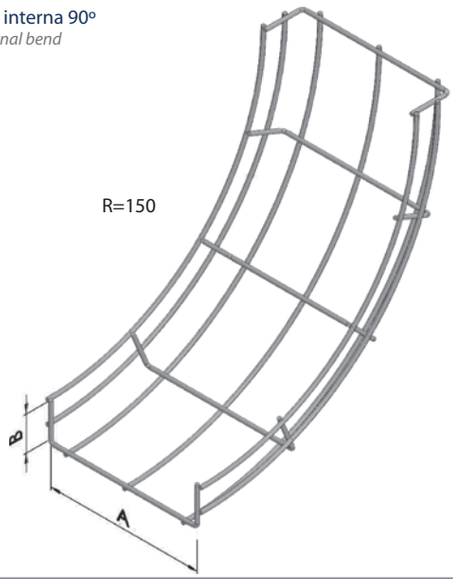
Leito aramado

Wired cable tray

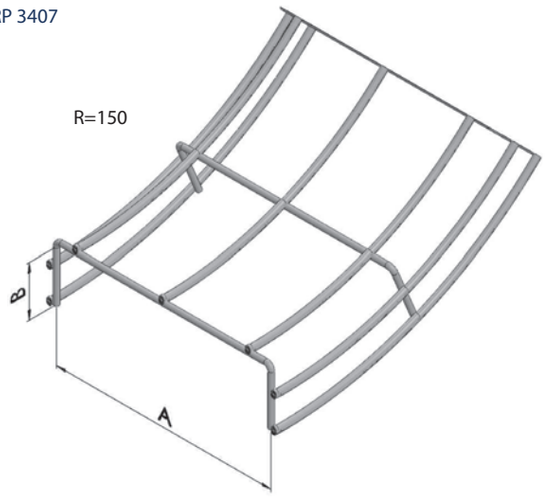
Curva vertical interna 45º
45º Vertical internal bend
Ref. RP 3409



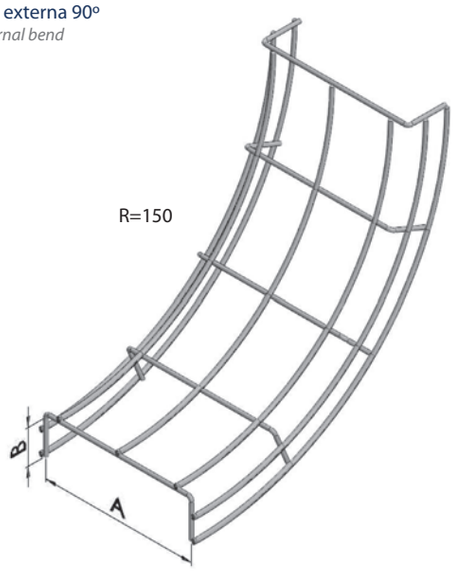
Curva vertical interna 90º
90º Vertical internal bend
Ref. RP 3410



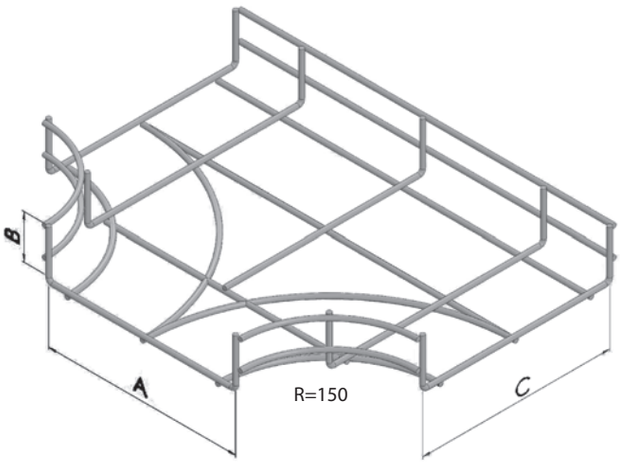
Curva vertical externa 45º
45º Vertical external bend
Ref. RP 3407



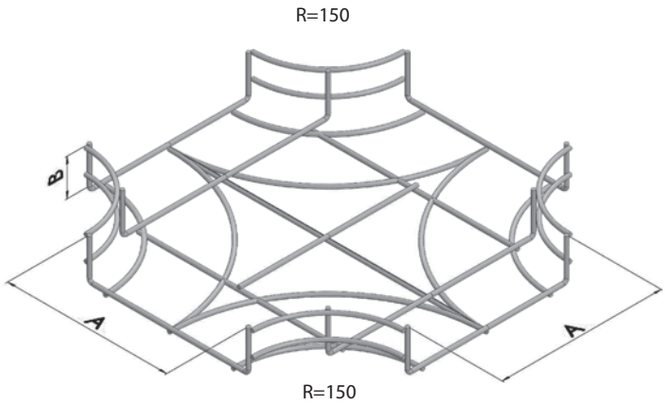
Curva vertical externa 90º
90º Vertical external bend
Ref. RP 3408



Tê horizontal
Horizontal tee
Ref. RP 3418



Cruzeta horizontal 90º
90° Horizontal cross
Ref. RP 3419



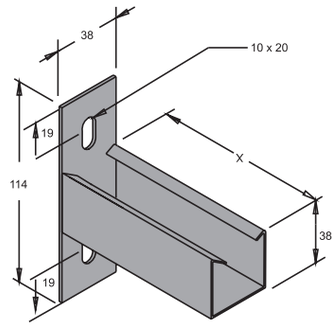
Acessórios para fixação e suportação

Accessories for fixing and support

Mão francesa simples
Simple bracket

Ref.	X	P	F
RP 2069	100	120	0,6
RP 2069	200	80	0,8
RP 2069	300	58	0,9
RP 2069	400	44	1,6
RP 2069	500	35	2,5
RP 2069	600	29	3,6

F= Flexão (mm)
F=Deflection (mm)
P= Carga concentrada na ponta (kg)
P= Concentrated load on extreme (kg)
Carga total uniformemente distribuída = 2 x P
Total load uniformly distributed = 2 x P

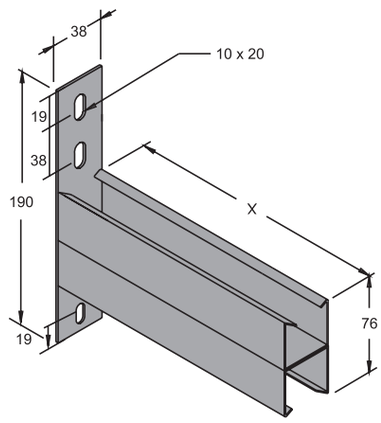


Medida "X" pode ser fornecida de 100 mm a 600 mm
The measure "X" could be supllied from 100 mm to 600 mm width

Mão francesa dupla
Double bracket

Ref.	X	P	F
RP 2070	300	255	0,5
RP 2070	400	169	0,9
RP 2070	500	135	1,5
RP 2070	600	112	2,2
RP 2070	650	104	2,6
RP 2070	700	95	3
RP 2070	800	84	3,9
RP 2070	900	75	4,9

F= Flexão (mm)
F= Deflection (mm)
P= Carga concentrada na ponta (kg)
P= Concentrated load on extreme (kg)
Carga total uniformemente distribuída = 2 x P
Total load uniformly distributed = 2 x P

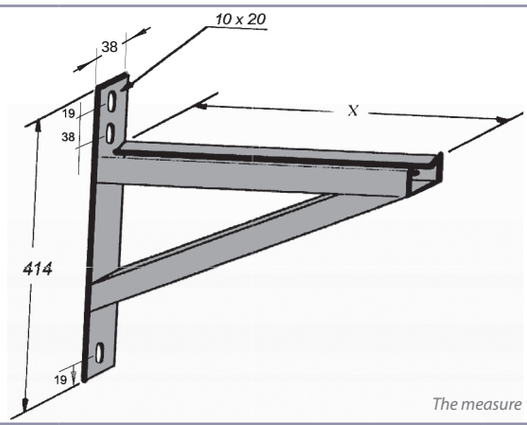


Medida "X" pode ser fornecida de 100 mm a 900mm
The measure "X" could be supllied from 100 mm to 900 mm width

Mão francesa reforçada
Reinforced bracket

Ref.	X	P	W
RP 2071	500	700	1400
RP 2071	600	600	1200
RP 2071	800	455	910
RP 2071	900	406	799
RP 2071	1150	318	654
RP 2071	1400	261	552
RP 2071	1650	221	478

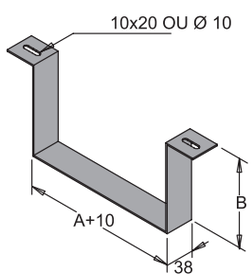
P= Carga concentrada na ponta (kg)
P= Concentrated load on extreme (kg)
W= Carga total uniformemente distribuída = 2 x P
W= Total load uniformly distributed = 2 x P



Medida "X" pode ser fornecida de 100 a 1650 mm
The measure "X" could be supllied from 100 mm to 1650 mm width

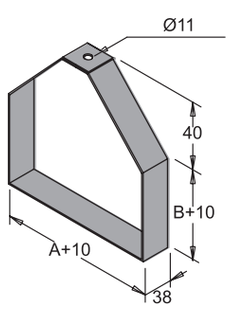
Suporte duplo
Angular bearing

Ref. RP 2742



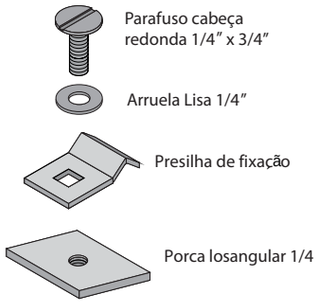
Suporte balanço vertical
Vertical clamp

Ref. RP 2741



Conjunto fixação de aramado em perfilado
Fixing wired together in profiled

Ref. RP 3468

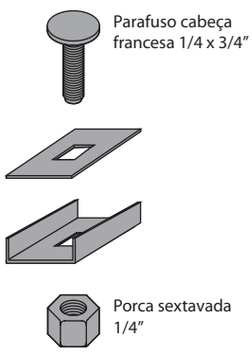


Acessórios para fixação e suportação

Accessories for fixing and support

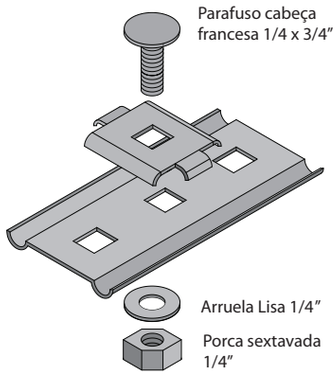
Junção para acessórios
Junction for accessories

Ref. RP 3427



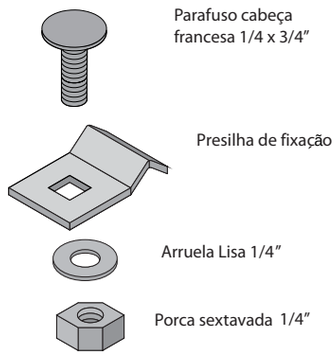
Junção plana para trecho reto
Plain junction for wired cable tray

Ref. RP 3428



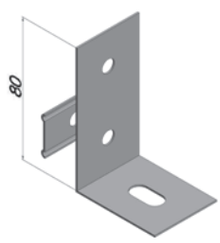
Conjunto Fixação para Divisão em calha aramada
Rail fastening assembly in wireframe

Ref. RP 3469



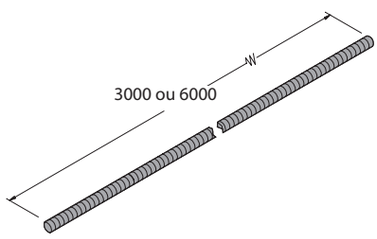
Distanciador para piso
Spacer for floor

Ref.	Dimensões
Ref.	*Dimensions*
RP 3430	80 mm
RP 3433	120 mm



Suporte RT
Continuous threaded rod

Ref. RP 2075

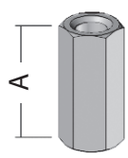


Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2"

Especificar junto à referência o ø e o comprimento "L"
In the reference, specify the ø and length "L"

Prolongador para suspensão
Hanger rod extension

Ref. RP 2073 - A=25mm
Ref. RP 2283 - A=50mm

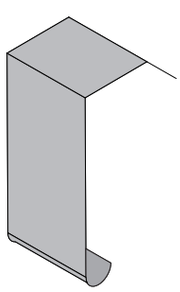


Ø	1/4"
Ø	5/16"
Ø	3/8"
Ø	1/2" somente para RP 2283

Obs: Comp. de 50mm sob consulta.
Note: Lenght of 50mm under request.

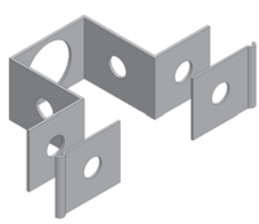
Clips para tampa
Clamp for covers

Ref. RP 3431



Saída para duto
Output for conduit

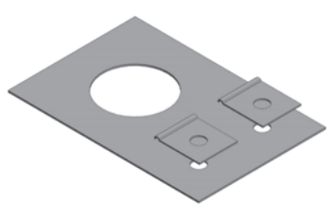
Ref. RP 3434



Ø	1/2"
Ø	3/4"
Ø	1"

Saída horizontal para duto
Horizontal output for conduit

Ref. RP 3432



Ø	3/4"
Ø	1"
Ø	1 . 1/2"
Ø	2"
Ø	3"

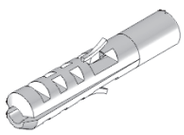
Acessórios para fixação e suportação

Accessories for fixing and support

Bucha de nylon
Nylon inch anchor for concrete insert

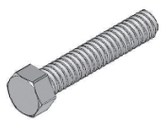
Tipo RP S6, S8, S10, S12

Ref.	Tipo	Comp.	Paraf.	Tração
Ref.	*Type*	*Length*	*bolt*	*Traction*
RP 2217	S6	30	4,2x30	65 Kg
RP 2218	S8	40	1/4"x45	90 Kg
RP 2219	S10	50	5/16"x50	170 Kg
RP 2220	S12	60	3/8"x60	220 Kg



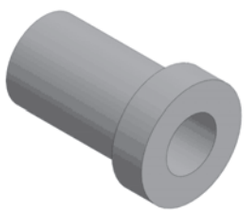
Parafuso cabeça sextavada
hexagonal head bolt

Comp.	Ø1/4"	Ø5/16"	Ø3/8"	Ø1/2"
Length	*Ø1/4"*	*Ø5/16"*	*Ø3/8"*	*Ø1/2"*
1/2"	2200	2201	2202	2203
5/8"	2240			
3/4"	2242	2252	2262	2272
1"	2244	2254	2264	2274
1.1/4"	2245	2255	2265	2275
1.1/2"	2246	2256	2266	2276
2"	2248	2258	2268	2278
2.1/2"	2249	2259	2269	2279
3"	2250	2260	2270	2280



Protetor de pontas
End protector

Ref. RP 3440

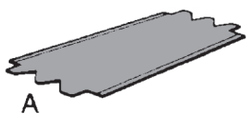


Chumbador "CB" com rosca interna
CBA anchor bolt

Ref.	Ø Rosca	A	Comp. rosca	Broca Ø mm
Ref.	*Ø*	*A*	*Length*	*Ø mm*
RP 2362	1/4"	35	12	10
RP 2364	3/8"	40	18	14
RP 2365	1/2"	50	20	18
RP 2363	5/16"			
RP 2366	5/8"			

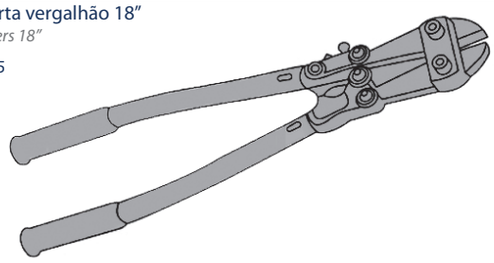
Placa auxiliar
Auxiliar plate

Ref. RP 3441



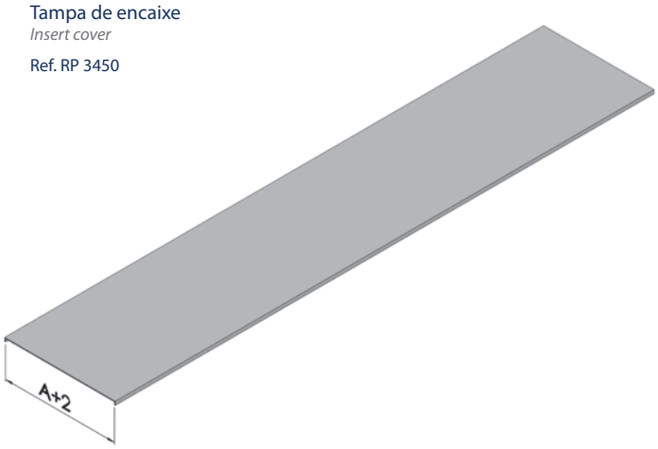
Alicate corta vergalhão 18"
Wire cut pliers 18"

Ref. RP 3445



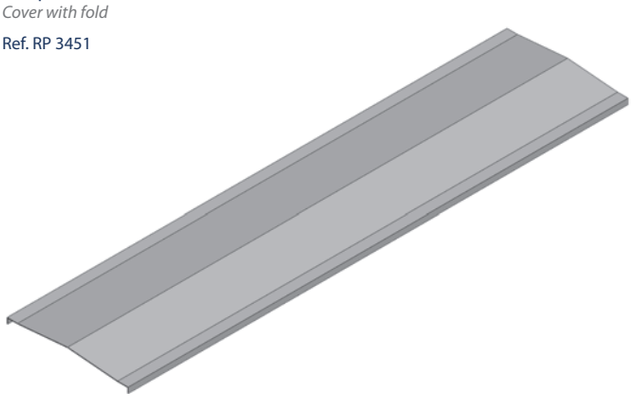
Tampa de encaixe
Insert cover

Ref. RP 3450



Tampa com vinco
Cover with fold

Ref. RP 3451



Informações técnicas
Technical information

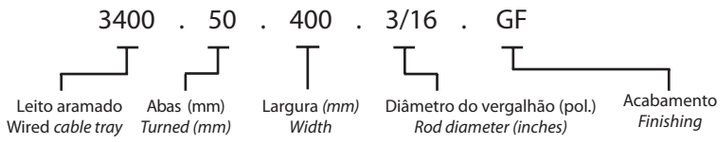
Calhas *Cable trays*	Distância entre apoios / *Distance between supports*					
	2 m		1,5 m		1 m	
	Carga máx. *Max. load*	Capacidade de trabalho *Working capacity*	Carga máx. *Max. load*	Capacidade de trabalho *Working capacity*	Carga máx. *Max. load*	Capacidade de trabalho *Working capacity*
50x50	45	25	60	43	70	50
75x50	90	55	105	70	140	93
100x50	135	85	140	95	220	143
150x50	155	103	162	115	280	185
200x50	175	115	192	128	310	207
300x50	195	130	227	151	320	213
400x50	215	143	262	175	330	220
500x50	235	158	292	200	340	228

Observações técnicas de leito aramado

Technical notes for wired cable tray

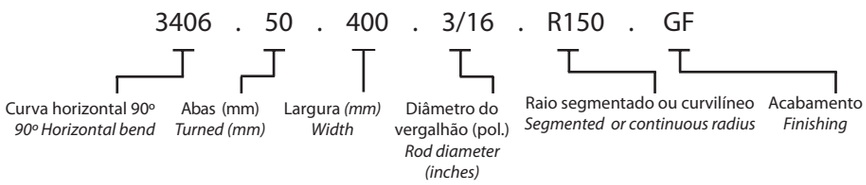
COMO SOLICITAR TRECHO RETO

HOW TO REQUEST STRAIGHT SECTION



COMO SOLICITAR CONEXÕES

HOW TO REQUEST CONNECTIONS



ACABAMENTOS SUPERFICIAIS

Acrescentar sempre ao término das referências o tipo de acabamento superficial ou material desejado:

- **NT** natural, sem acabamento
- **GF** pós-galvanizada conf. NBR 6323
- **AL** alumínio
- **GE** galvanização eletrolítica
- **AI** aço inoxidável
- **PT** pintado

SUPERFICIAL FINISHES:

Always add to reference ends the desired surface or material finish type:

- **NT** *natural, without finish.*
- **GF** *hot dip galvanized according NBR 6323*
- **AL** *aluminum*
- **GE** *eletrolitic galvanizing*
- **AI** *stainless steel*
- **PT** *painted*

Leito naval

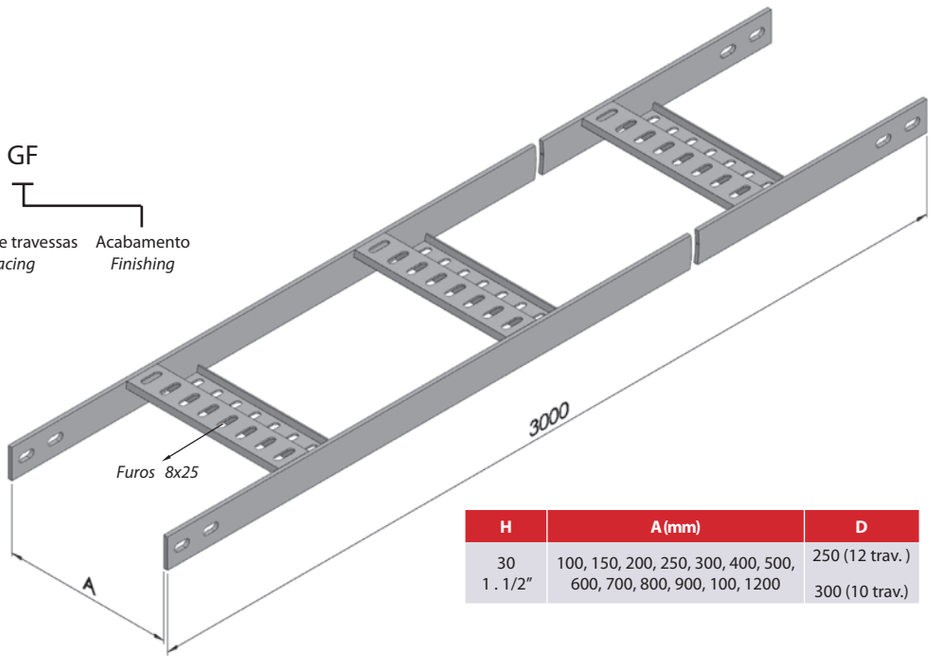
Naval cable tray

Leito naval
Naval cable tray

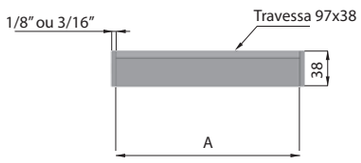
COMO SOLICITAR
HOW TO REQUEST

3500 . 500 . 250 . GF

Leito naval	Largura (mm)	Distância entre travessas	Acabamento
Naval cable tray	*Width (mm)*	*Rung spacing*	*Finishing*

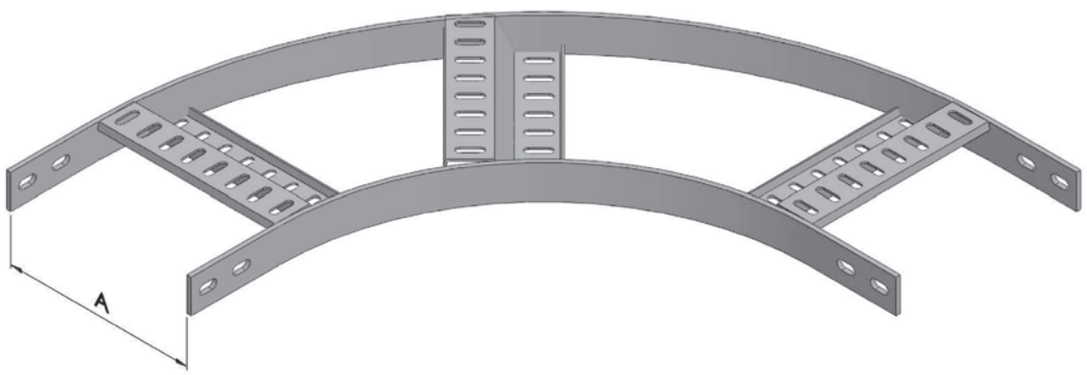


H	A (mm)	D
30 1 . 1/2"	100, 150, 200, 250, 300, 400, 500, 600, 700, 800, 900, 100, 1200	250 (12 trav.) 300 (10 trav.)



Curva Horizontal 90º "Z"
90º horizontal bend for naval cable tray "Z"

Ref.	Ângulo
Ref.	*Angle*
RP 3505	15º
RP 3506	30º
RP 3507	45º
RP 3508	60º
RP 3509	75º
RP 3510	90º



COMO SOLICITAR
HOW TO REQUEST

3510 . 500 . 250 . R300 . GF

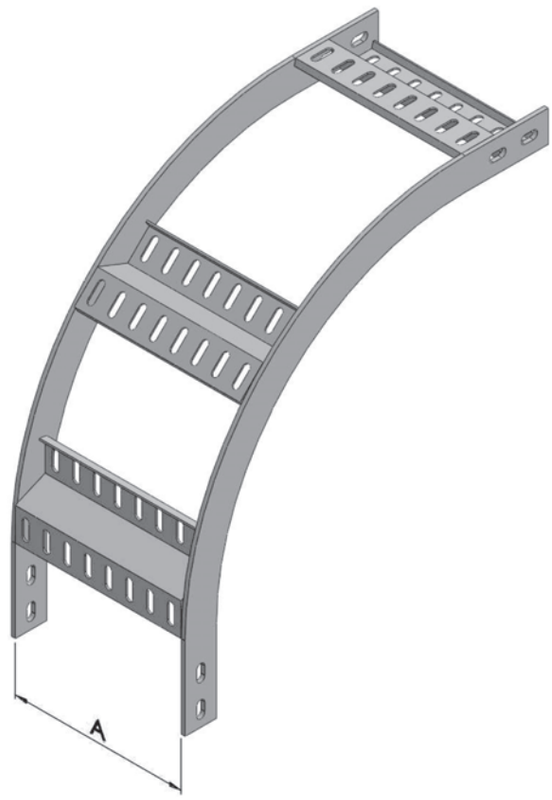
Leito naval	Largura (mm)	Distância entre travessas	Raio de curvatura (mm)	Acabamento
Naval cable tray	*Width (mm)*	*Rung spacing*	*Internal radius (mm)*	*Finishing*

Leito naval

Naval cable tray

Curva vertical 90º "Z"
90º vertical outside bend for naval cable tray "Z"

Ref.	Ângulo
Ref.	*Angle*
RP 3511	15º
RP 3512	30º
RP 3513	45º
RP 3514	60º
RP 3515	75º
RP 3516	90º



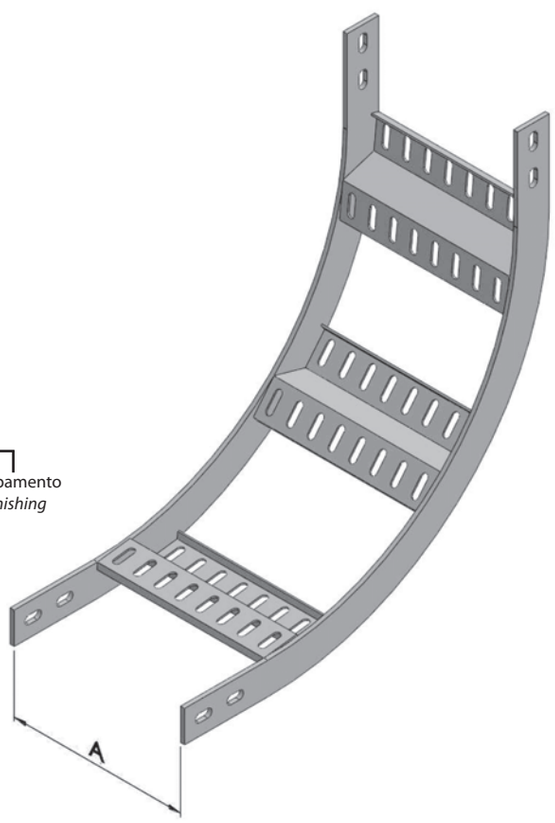
COMO SOLICITAR
HOW TO REQUEST

3516 . 500 . 250 . R300 . GF

Leito naval *Naval cable tray*	Largura (mm) *Width (mm)*	Distância entre travessas *Rung spacing*	Raio de curvatura (mm) *Internal radius (mm)*	Acabamento *Finishing*

Curva vertical interna 90º
90º vertical inside bend for naval cable tray

Ref.	Ângulo
Ref.	*Angle*
RP 3517	15º
RP 3518	30º
RP 3519	45º
RP 3520	60º
RP 3521	75º
RP 3522	90º



COMO SOLICITAR
HOW TO REQUEST

3522 . 500 . 250 . R300 . GF

Leito naval *Naval cable tray*	Largura (mm) *Width (mm)*	Distância entre travessas *Rung spacing*	Raio de curvatura (mm) *Internal radius (mm)*	Acabamento *Finishing*

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