

Product Guide

6th Edition 2018



TransDelta Steel Industries W.L.L.

(A Member of TGI Group, Europe)

SGS



DELTA CABLE MANAGEMENT SYSTEMS



Glimpses of Technology...



Letter from M D



Firstly I would like to express my sincere gratitude to those who have been with us for the past 20 years since our inception. We reckon that your constructive criticism, genuine ideas and factory-site coordination has helped us to develop a unique system for Middle East. As a result, our cable management system has been developed for quick installation and thereby reducing the overall project cost for the contracts. We used European technology to emerging Gulf markets and it did yield successful results.

We are proud to say that we are the first manufacturer of cable support system in Gulf commercially and our products are installed in various prestigious projects in and out of Gulf for the past 20 years.

We believe that quality is not a watchword, but a practical way of engineering a product to perfection. We have put sincere efforts to see that quality is assured at each stage of production and till the final product is delivered to customer. Not only we ensure that we meet the customer specification, quality and delivery, but even exceed beyond their expectation.

Our design department is consistently trying to develop better designs which will make installation very simple as well as aesthetic. In an effort to satisfy the customer, we have started our most modern in-house powder coating plant and galvanizing plant which is custom made for Cable management systems. This will ensure that you will get a final product which is fully controlled by us. This way we are able to supply quality materials at a very reasonable price.

We are looking forward to your continued patronage in the future also as you did in the past.

Yours Sincerely

Chris T Ruddle
Managing Director



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Cable Management



Delta

Our Product Range

1. Delta Cable Trays
2. Delta Cable Trunkings
3. Delta Cable Ladders
4. Delta Strut Systems
5. Delta Pull Boxes

Basic Concept

Construction Environment in today's modern world demands the use of complex technologies for effective use of resources. Hence Cable Management systems have become an integral part of industrial, commercial and utility construction. Cable Management system is a quick economical and user friendly solution to most of the problems faced during cabling in all sort of constructions. This has greatly improved the aesthetic appearances of cable routing inside Modern buildings, Power Plants and Industrial Projects.

Cable Management systems are continuous rigid Metal support systems designed to carry all types of cables. They are used to support various types of cables in Power sector, High rise building as well as telephone cables in offices. They provide a safe way to carry large number of cables & wires over a considerable distance between their starting and termination points. Cable management systems carry a specific number of cables of specific load safely over a span between two supports.

Delta Cable Management - Speciality

Metallic Delta Cable management system is a range of products from Transdelta Int'l Industries having ISO 9001 : 2008, UL and SGS Certification. We have fully equipped factory with Design, production and Quality control Departments. The load capabilities, Support span requirements, Deflection criteria, site installation problems have been carefully considered by our design department while designing the entire product range. All our products are manufactured using the latest CNC technology Robot assisted welding which help us to maintain a unique quality product throughout manufacturing. Entire Delta Cable management system has been designed to minimize welding. Last 20 years of research and development in this field has helped us to develop a system which has taken into account all the requirements of construction sites in the Middle East.

Raw Material

CARBON STEEL

This raw material occupies 90% of Cable trays manufactured through out the world is low carbon mild steel. It combines good strength economy and availability. It has got various coating on top of that to avoid corrosion.

COR-TEN A STEEL

COR-TEN A Steel is a high strength, low-alloy steel produced specially for achieving high galvanized coating. It has got a high Silicon content due to which we can achieve a deep galvanizing compared to normal galvanizing. This is most favoured for industrial plants, under pass and tunnels.

STAINLESS STEEL

Stainless Steel products, manufactured in accordance with AISI 304, or in accordance with AISI 316L are designed for use in highly aggressive environments. It has an extensive use in various areas like refineries, Chemical industries, Fertilizer factories and Industries where hygiene is a major concern like dairies, Abattoirs food industries and

pharmaceutical factories. Apart from the aesthetic appearance it resist fire to a greater extend. Stainless steel can maintain its integrity even in a flame temperature of 1000°C. The main types available are the following,

STAINLESS STEEL AISI 304 AND AISI 316 L

304 is the normal grade used in stainless steel where as 316L is used in highly aggressive environment with high chlorine contents like in marine areas. With the presence of Molybdenum in 316L it has got an improved corrosion resistance against to chlorides.

ALUMINIUM

Aluminum is a rust free alternative to all other basic raw materials. It has got a special superficial coating of Al_2O_3 (alumina) to protect from rust. Due to its good corrosion resistance, it can be used in chemical environment. And light weightness is making it ideal for usage in marine vessels and ships. It does not require any additional top coating to avoid rusting.

Surface Coatings

HOT DIP GALVANIZING AFTER FABRICATION (HDGAF)

This finish is having a considerably longer protection under normal industrial and commercial environments. Hot dip galvanizing is a process where completely manufactured or roll formed steel is chemically cleaned of all contaminants and then dipped in molten zinc. This will allow a coating consists of iron/zinc alloys which are usually over coated with a layer of almost pure zinc. The thickness of zinc coating depends on the thickness of the steel. Local coating thickness varies from 35μ - 55μ depending on thickness. Please note that this is purely a mechanical operation focusing on the degree of protection rather than the aesthetic appearance. More thickness of zinc can be achieved by this method compared to any other process, leaving a light film of zinc on the small holes on the surface of the product.

Corten A steel can be deep galvanized compared to normal coating where the operation remain same as aforesaid. Grey coating is expected due to the high silicon content of this steel.

**British Standard: BS EN ISO 1461
(Formerly BS 729)**

PRE GALVANIZED FINISH OR CONTINUOUSLY HOT DIP GALVANIZED SHEET FINISH (HDGBF)

This finish is an economical solution in the normally dry indoor application where the atmosphere is less corrosive. In this finish zinc coating is applied on both sides of the steel sheet during manufacturing itself, resulting in bright and smooth surface finish. The base metal edges (cut edges) exposing in further manufacturing operations is not a hindrance to the usage in the indoor dry atmosphere application - even though the exposed area may have a slight discoloration which can be mistaken as rust - because of the self repairing cathodic protective effect. Not suitable for any highly corrosive and high humidity atmospheric conditions.

**British standard BS EN 10327
(Formerly BS 10143)**

ELECTRO-GALVANIZING (EG)

In this finish a thin zinc layer is deposited in electrolysis process to product surface. Usage is limited only to dry interior spaces due to very less coating thickness.



Delta Polyester Coating System (EPAG)

A cost effective alternative to stainless steel for cable support systems.

Delta Polyester Coating system consists of Hot-dip galvanized mild steel which is protected by a cross-polymer coating. The polymer is applied in the form of a powder coating through electrostatic spray to ensure an even film build up and good coverage on edges. Delta Polyester Coating System is a cost effective alternative to stainless steel and has greater resistance in corrosive environments especially where chlorides are present.

Delta Polyester Coating System capitalizes on the synergy between hot-dip galvanizing and powder coating. The results are long-term protection of capital assets under harsh marine and chemically aggressive environments.

How the Delta Polyester Coating System Functions

Mild steel applied with Zinc galvanizing counteracts corrosion through cathodic protection. The zinc plays the role of the sacrificial cathode which prevents the substrate from being corroded and thus gradually consumed. Subsequently, an organic coating is applied over the zinc layer in order to extend the life span of the zinc. This organic coating protects the zinc from attack by corrosive chemicals, giving them a greater life expectancy to the system. However, if the organic coating has imperfections (e.g. through mechanical damage), oxides will be formed by the zinc to seal the crevices thus arresting the advancement of corrosion.

The final colour and gloss requirements (e.g. semi-matt black) is achieved through powder coating. But since hot dip galvanizing is a mechanical process some uneven surface is expected in the final product after powder coating. Also, the use of polyester in the specified colour creates maximum resistance to degradation by ultra-violet rays. The specially formulated polyester has the required flow properties to form a continuous layer which is impervious to moisture.

Polyester powder coatings are thermally cross-linked to form a tough and resilient protective film with high degree of mar-resistance. Therefore, there is no threat of the film losing mechanical properties on exposure to elevated temperatures. In the event of a fire, there is no threat of running or dripping as in the case with thermoplastic coatings. The combined zinc and polymer film build creates the desired protective properties without an excessively high loading of organic substance. Delta Polyester Coating System does not promote combustion. Therefore, on exposure to high temperature conditions, there is no liberation of halogens.

For further details on the features, performance and benefits of the Delta Polyester Coating System, a comprehensive brochure is available upon request.

We have in-house powder coating plant to achieve high quality and faster deliveries. Our in house quality person evaluates the lot before despatch. Mention the RAL colour and finish requirements while ordering delta polyester coating system.



Delta Cable Tray

*As per BS EN 61537
&
NEMA VE 1*

Delta Cable Tray

Metallic Delta cable trays are manufactured for the smooth and easy pulling of cable from one point to another to BS EN 61537. We have designed the best cable trays, by taking care of Cable loads and practical site problems. Wherever possible all fitting are made of state of art single piece construction. Slotting Patterns are in such a way that it enables the easy cutting and joining at any point without drilling at site. Design allows greater cable filling capacity and smooth turning at bends.

Product specification

Material and Finish (See Page No : 6 for details)

- Pre galvanized steel or Hot dip galvanized steel before fabrication (HDGBF) as per BS EN 10327
- Hot dip Galvanized after fabrication (HDGAF) as per BS EN 1461
- Epoxy polyester Powder coating to any RAL colour
- Aluminium Cable tray
- Stainless Steel cable tray to AISI 304 and AISI 316L
- Corten A Steel Cable Tray

Note: Dimension mentioned through out in the Catalogue is in mm, Unless otherwise stated.

Types available

1. 12MM Side Height Cable Tray (P Type)
2. 25MM Side Height Cable Tray (M Type)
3. 50MM Side Height Cable Tray (R Type)

Standard sizes available in heavy duty cable tray

Width x Height in MM

50x50	200x50	600x50
100x50	300x50	750x50
150x50	450x50	900x50

Sizes other than this also available to customer request

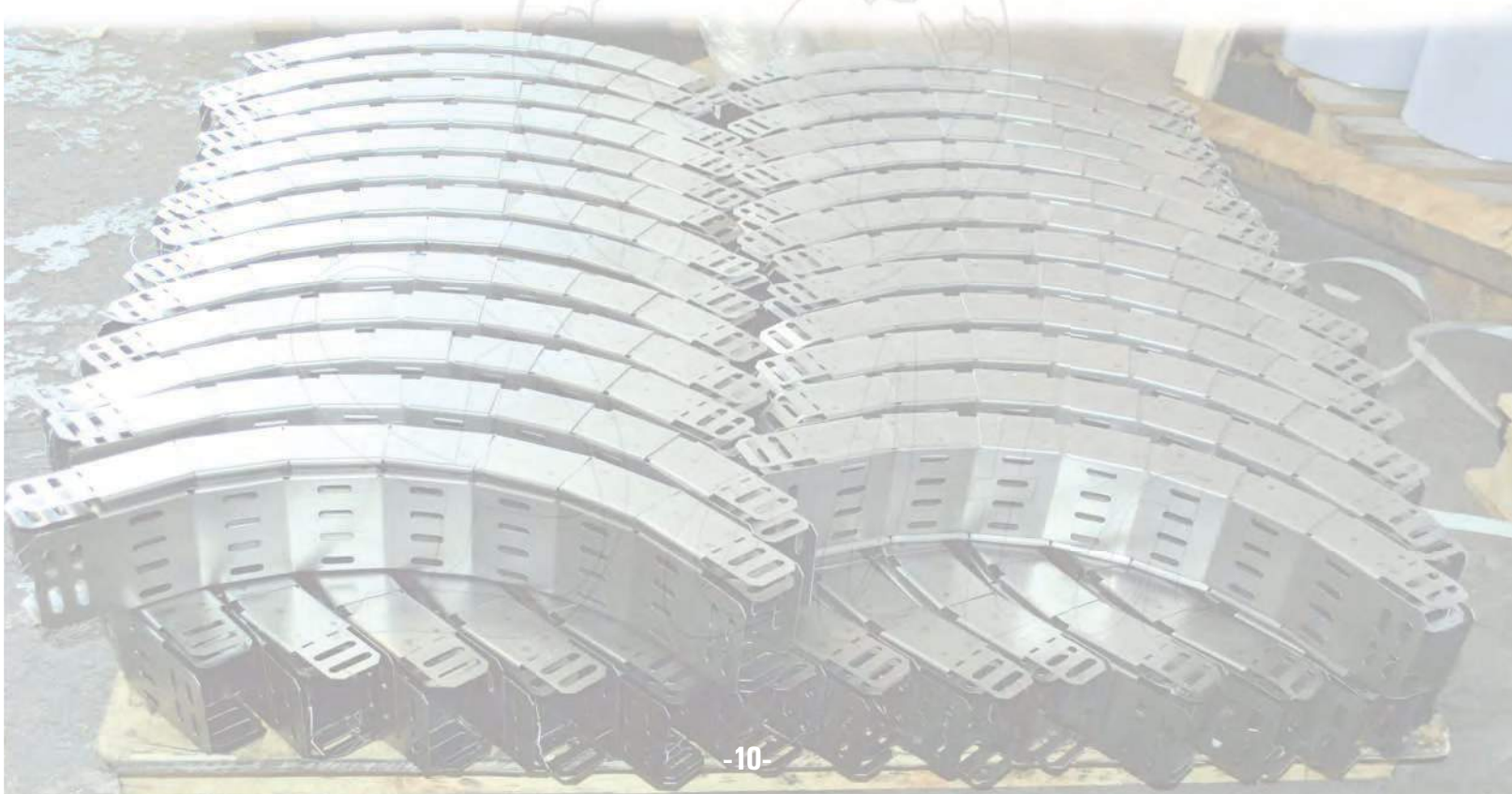
Length

3 Meter as standard. Other lengths are also available.

Slotting Pattern

Slots along the length (A) (Standard)

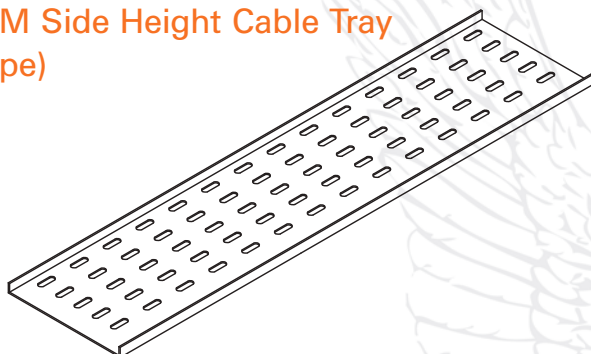
Non Perforated tray also available on request



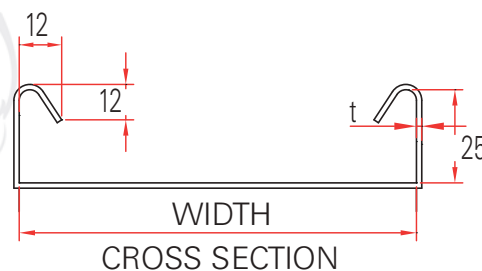
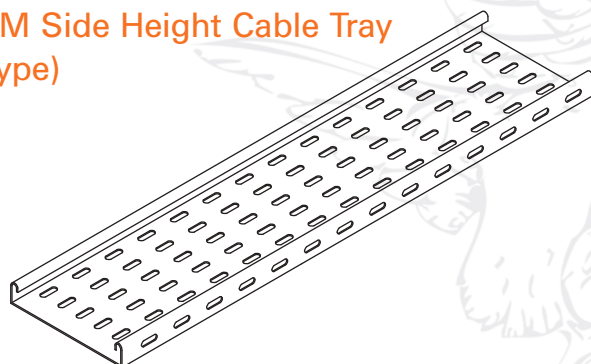
Standard Perforated Delta Cable Tray

The width and height are the inside dimension of the tray. Only straight length needs coupler to join. Couplers Should be ordered separately.

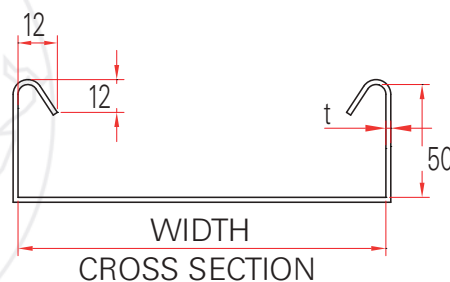
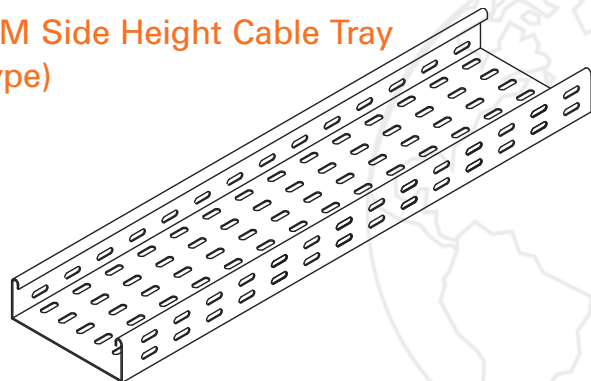
12MM Side Height Cable Tray (P-Type)



25MM Side Height Cable Tray (M-Type)

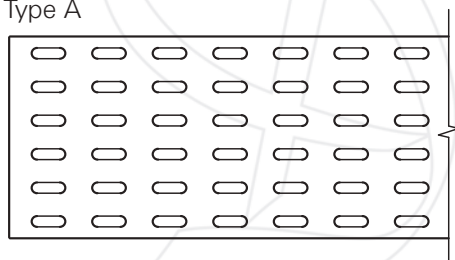


50MM Side Height Cable Tray (R-Type)

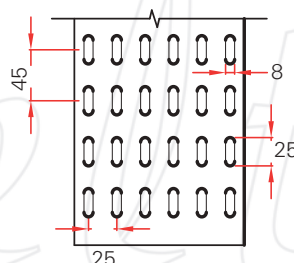


Slotting Pattern

Type A



Perforation Details



Perforation details remain same for light duty, medium duty and heavy duty cable trays.

Standard Size & Thickness

12MM Side Height Cable Tray (P-Type)

Width in mm	Possible Thickness in mm			
	1.0	1.2	1.5	2.0
50	✓	✓	✓	✓
100	✓	✓	✓	✓
150	✓	✓	✓	✓
200	✓	✓	✓	✓
300	X	✓	✓	✓
450	X	X	✓	✓
600	X	X	✓	✓

25MM Side Height Cable Tray (M-Type)

Width in mm	Possible Thickness			
	1.0	1.2	1.5	2.0
50	✓	✓	✓	✓
100	✓	✓	✓	✓
150	✓	✓	✓	✓
200	✓	✓	✓	✓
300	X	✓	✓	✓
450	X	X	✓	✓
600	X	X	✓	✓
750	X	X	X	✓
900	X	X	X	✓

50MM Side Height Cable Tray (R-Type)

Width	Possible Thickness			
	1.0	1.2	1.5	2.0
50	✓	✓	✓	✓
100	✓	✓	✓	✓
150	✓	✓	✓	✓
200	✓	✓	✓	✓
300	X	✓	✓	✓
450	X	X	✓	✓
600	X	X	✓	✓
750	X	X	X	✓
900	X	X	X	✓

- The Thickness mentioned are as per our standard thickness. However customer can order different thicknesses as per their requirement.
- Commercial Tolerance on Thickness Apply.
- Contact Sales desk for fitting thickness.

Handling and Storage

Cable tray cannot be used as a walkway, means not suppose to withstand unusual excessive point loads. And not meant for torsional rigidity.

Delta tray should store in site under the roof in dry, well ventilated conditions and away from dust to preserve appearance for internal installations. And to avoid wet storage stain.

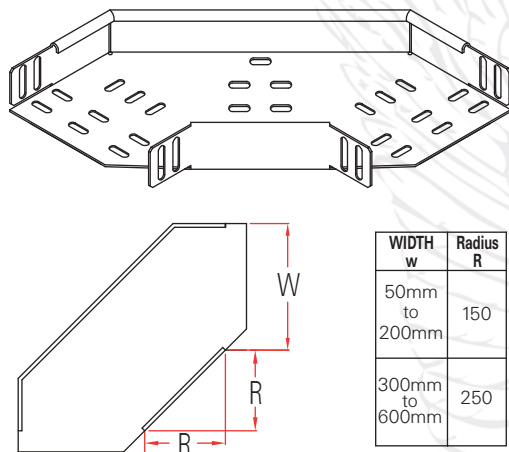
All cut edges of cable tray at site should be protected by applying Zinc rich paint to avoid further corrosion.

Order Zinc rich paint separately.

Delta Cable Tray Fittings

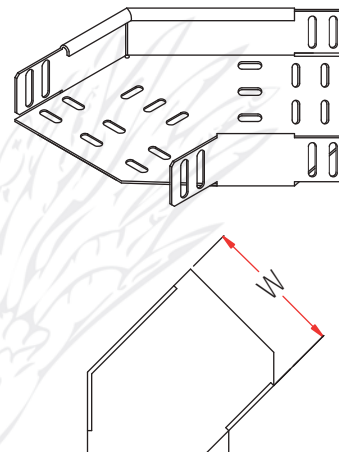
All bends, tees (Except Vertical tee) and crosses shown are gusseted in shape and heavy duty in construction - For Higher width and radius segmented construction method may be used.

90° Bend



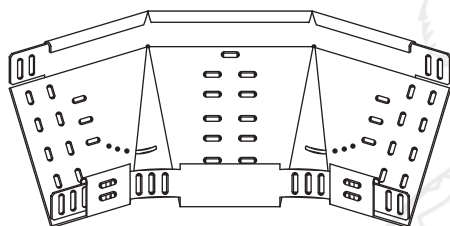
Bends are available in 30 and 60 degrees also

45° Bend



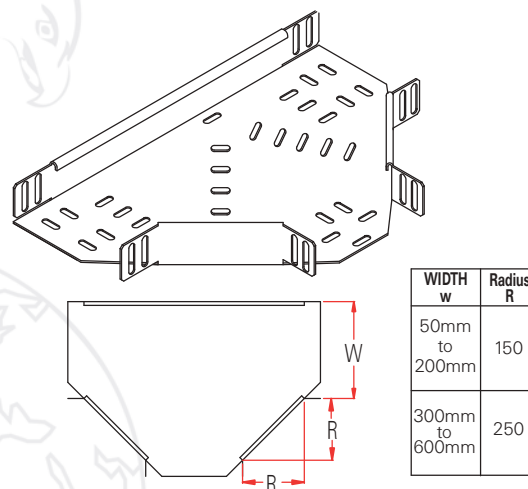
Two 45° bends can be used to achieve offsets in horizontal direction.

Adjustable Horizontal Bend

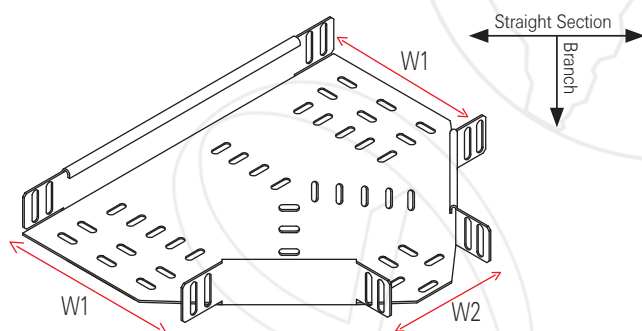


Adjustable Horizontal Bends are available only up to and including 300mm width

Horizontal Equal Tee



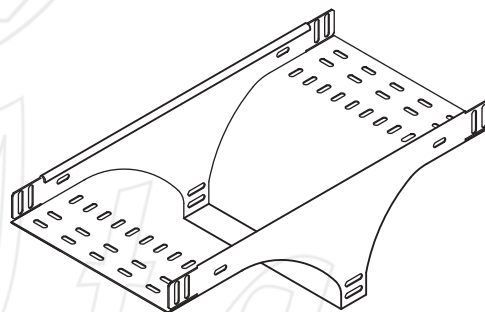
Horizontal Unequal Tee



When ordering Horizontal Unequal Tee - Please order in the form of W1-W2 to fill the width column.

For any unequal Tee order, maintaining width (W1) of the straight section identical by adding appropriate reducer where ever necessary. Width of the branches (W2) can be vary from straight section.

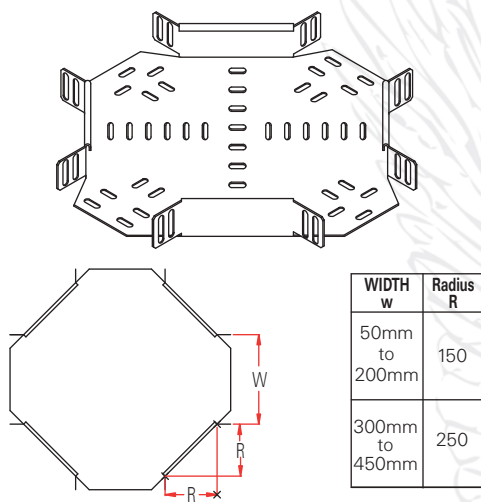
Vertical Tee



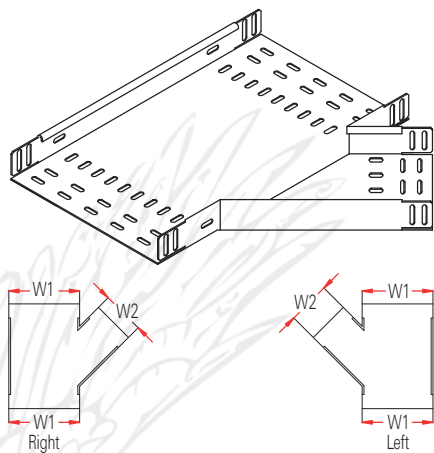
Radius type fittings are also available on request. Put R in the column of type of Curvature. Contact sales desk for various light and medium duty fittings and large radius bends.

Delta Cable Tray Fittings

Horizontal Cross

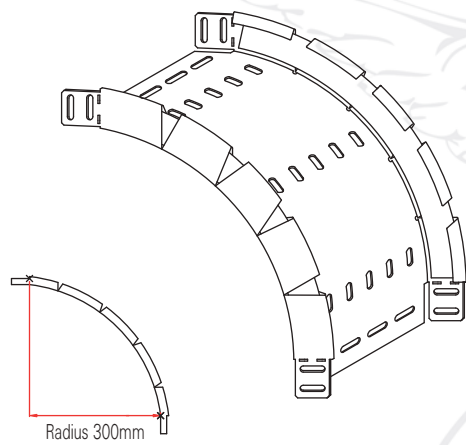


Y Branch Left and Right



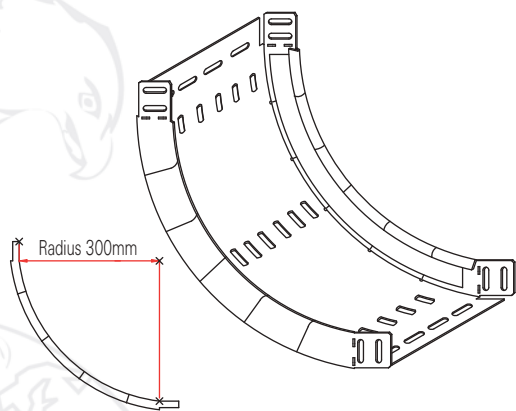
Cable is deviated to 45° from the main line

90° Riser Outside



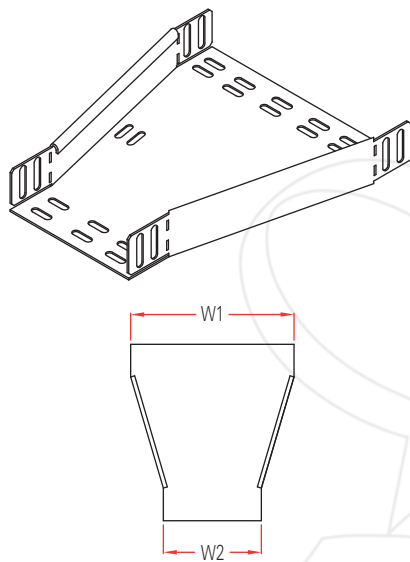
Risers are also available in 30, 45 and 60 degree

90° Riser Inside

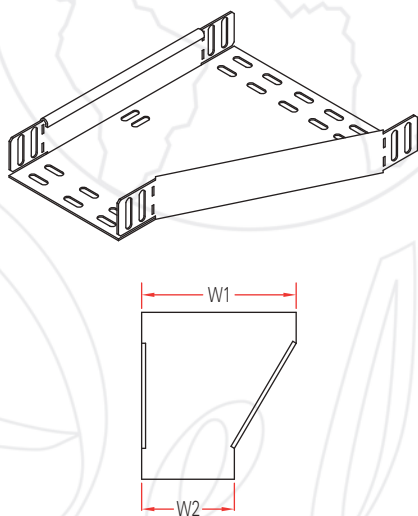


Inside and Outside Riser combination can be used to achieve vertical offsets.

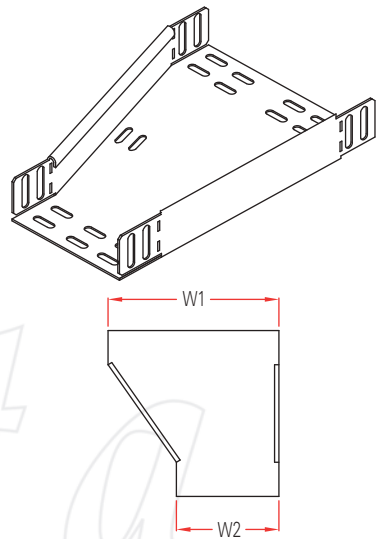
Straight Reducer



Right Reducer



Left Reducer



Note : Mention big dimension W1 first followed by W2 to fill the width column while ordering reducers.

Two 45° Inside and Outside riser combination can be used to achieve offsets in vertical direction.

How to Order Perforated Cable Tray & Fittings

Base Metal		Finish		Type	
Mild Steel	1	Mild Steel HDGBF	P	12MM Side Height	P
Aluminium	2	HDGAF	G	25MM Side Height	M
S/Steel 316L	3	Stainless Steel		50MM Side Height	R
S/Steel 304	4	Aluminium			
Corten A Steel	5	Normal Finish	M		

Pattern		Thickness		2 Elements	
Slots Along the Length (Standard)	A	1.00 mm	1	Straight Section	SS
		1.20 mm	2	90° Bend	9H
		1.50 mm	3	90° Riser Inside	9RI
		2.00 mm	4	90° Riser Outside	9RO
				Adj. Horizontal Bend	AH
				Horizontal Tee	HT
				Horztl' Unequal Tee	HUT
				Vertical Tee	VT
				Horizontal Cross	HC
				Straight Reducer	RS
				Y Branch Right	RY
				Y Branch Left	LY

Width		Side Height		Length	
Width Varies from	50	12 mm	12	2000	2
50 mm	-	25 mm	25		
to	-	50 mm	50	2440	2.44
900 mm	900	75 mm	75		
		100 mm	100	3000	3
		125 mm	125		
		150 mm	150		

Type of curvature		Epoxy finish if required	
Gusset	G	E (EPAG)	

For Straight Length

Mention first 9 Columns Continuously and Epoxy finish if Required.

Eg. of Straight Section

1GRA-3SS300-50-3-E (If Required)

For Fittings

Mention first 4 Columns and then elements, width, side height type of curvature and thickness - Epoxy finish if required.

Eg. of fittings

1GRA-9H300-50-G-3-E (If Required)

1. As it is from the mill, without any further coating

2. For elements other than 90° use 3H - 30°, 4H - 45°, 6H - 60°

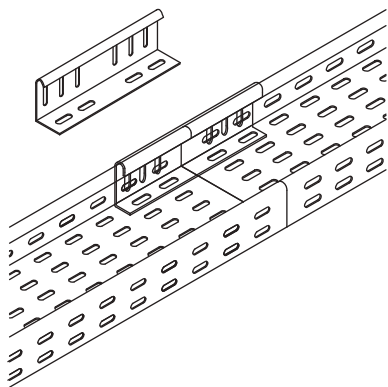
3. For left reducer - LR. Right reducer - RR

4. See Page No : 13 for Gusset type construction

Cable Tray Accessories

Couplers are supplied in pairs. Order eight sets of M6 x 16 mm roofing bolts, nuts & washers Separately. Order the same fastenings to join fittings with cable tray.

Wrap over Coupler



Bend Coupler

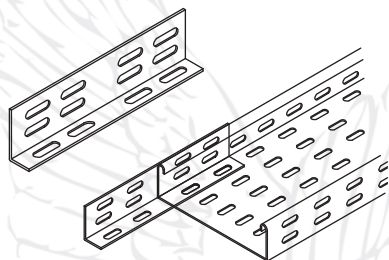
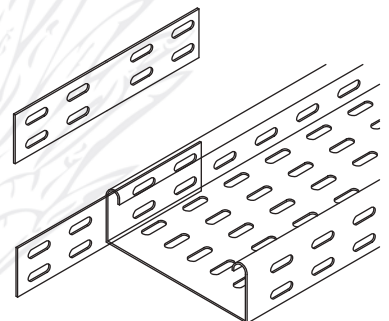
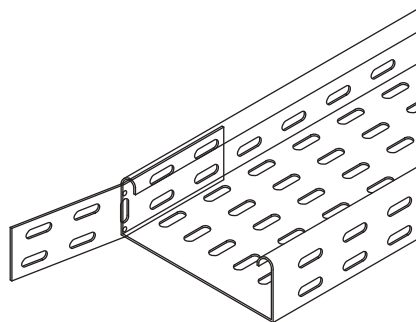


Plate Coupler

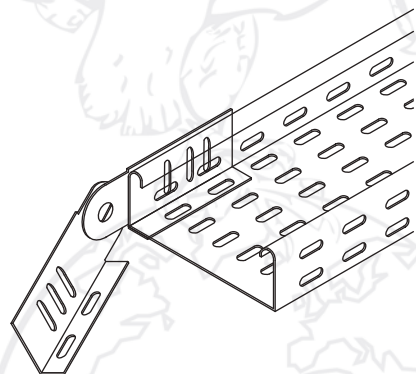


Adjustable Horizontal Coupler



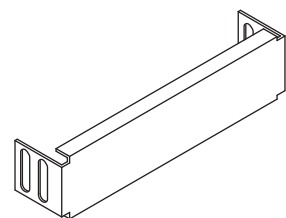
For horizontal change of direction

Adjustable Vertical Coupler



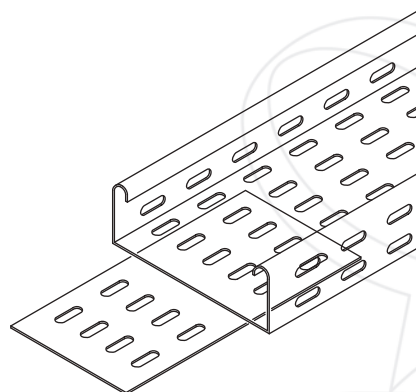
For vertical change of direction.
Shown is one set of Coupler. Needs two sets to join two trays

Blind End



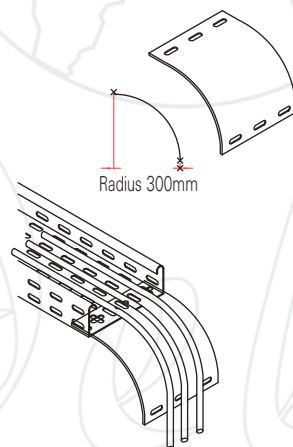
For ordering mention Width and Height of the Cable Tray

Fish Plate



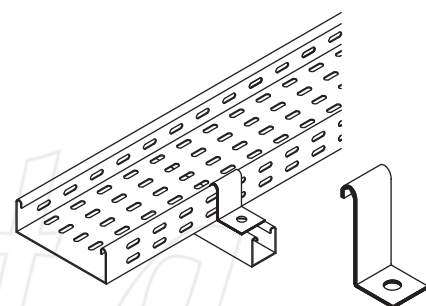
Trays above 450mm wide need fish plates to avoid sagging at joint

Drop out



Mention width of tray while ordering

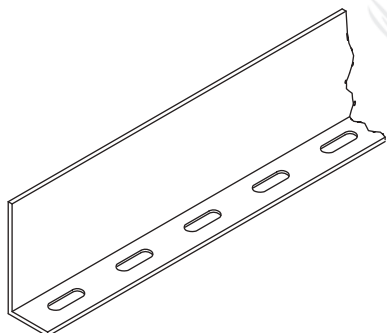
Hold Down Clip



Fastenings order separately

Cable Tray Accessories

Divider



Fasteners

Hexagon Head Bolts



Hexagon Nuts



Roofing Bolts and Nuts



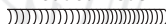
Flat Washers



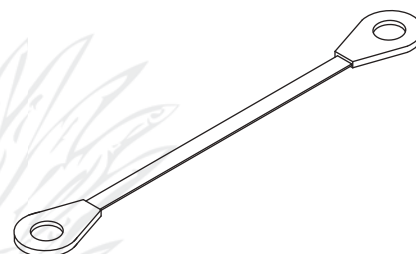
Shakeproof Washers



Threaded Rods



Earth Continuity Connector



Braided Copper, 4mm² Conducting area,
100mm center to center

Dividers

Supplied in single without fasteners in three meter long. Used to divide different types of cables inside a single cable tray run. Order 5 Sets of M6 x 12mm roofing bolt, nut and washer per length.

Fasteners

Select various types of fastenings required from Page No : 22. Uses of threaded rod is limited to a maximum of 12mm dia, if not using proper brackets in Delta Strut Channel.

Earth Continuity Connectors

Fastening not included. Use M6 x 16 mm roofing bolt, nut and washer. Copper braided and copper lugs, both in electro tinned finish.

Length between centers: 100mm. Conductor area: 4mm².



How to Order - Accessories

Product	Base Metal (1,2,3,4&5) Ref. Page 15	Finish (P,G,M)	Item Description	Width (50 - 900) Ref. Page 15	Height (25 - 150)	Length	Abbreviation
Wrap over Coupler	✓	✓	A	-	✓	-	CS
Bend Coupler	✓	✓		-	✓	-	CC
Plate Coupler	✓	✓		-	✓	-	CP
Adjustable Horizontal Coupler	✓	✓		-	✓	-	AHC
Adjustable Vertical Coupler	✓	✓		-	✓	-	AVC
Blind End	✓	✓		✓	✓	-	BE
Fish Plate	✓	✓		✓	-	-	FP
Drop Out	✓	✓		✓	-	-	DO
Hold Down Clip	✓	✓		-	✓	-	HDL
Divider	✓	✓		-	✓	3	DI

Tick mark shows the relevant parameters against each products.

Example for 300mm width Drop out
1GA-300-DO-E (If Required)

How to order Earth continuity connector
ECC-100
(100 mm long)

Manufacturer reserves the right to change the design without any notification.

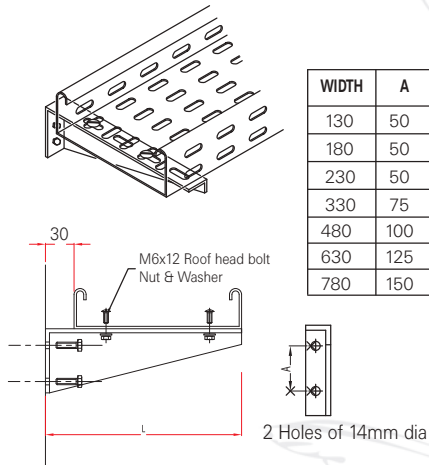
Support Systems for Delta cable tray

- While ordering cantilever bracket and cantilever arm a safe working distance of 30mm is to be added to width of the tray. **E.g : for 100mm tray DEB 130**

Supplied without fastenings. Choose various types of fastenings from Page No : 22

More support options are available in Page No : 24

Cantilever Bracket

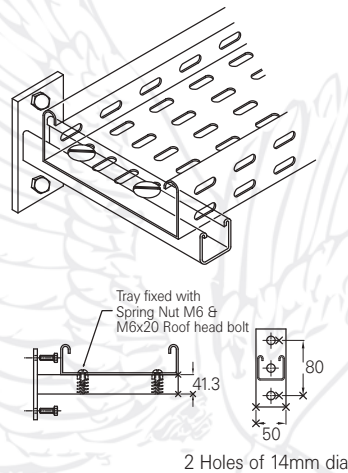


	L	UDL
DEB	130	170
DEB	180	160
DEB	230	155
DEB	330	140
DEB	480	110
DEB	630	100
DEB	780	130

L - Length of the arm

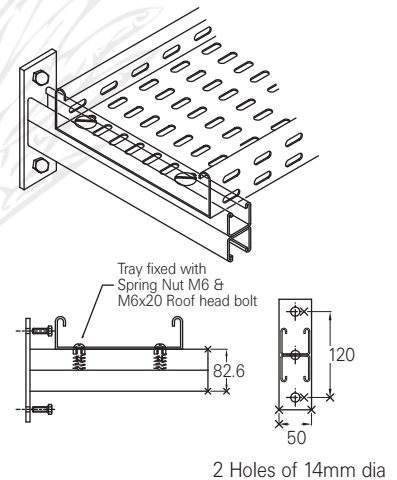
UDL - Uniformly distributed load in kgf

Single Cantilever arm



	L	UDL
DEC	180	550
DEC	230	370
DEC	330	270
DEC	480	175
DEC	630	140

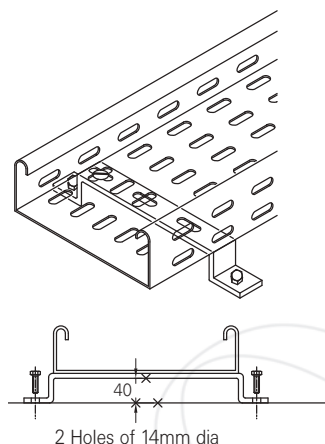
Double Cantilever arm



	L	UDL
DED	180	750*
DED	230	660*
DED	330	600*
DED	480	380*
DED	630	305
DED	780	210
DED	930	175

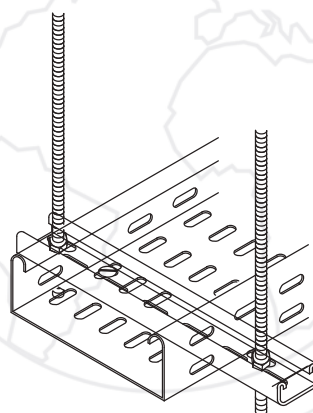
*Slip limits loading capacity when using in Strut Channel as column. Refer Page No : 24

Stand off Bracket



	L
SEB	100
SEB	150
SEB	200
SEB	300
SEB	450
SEB	600
SEB	750
SEB	900

Trapeze Hanger

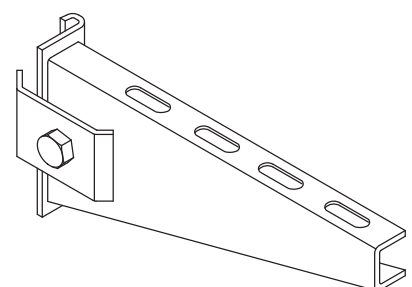


41 x 21 (DB 200 Series) Channel is recommended for trays up to 200mm width. For 300mm onwards use 41 x 41 (DB 100 Series). Can be ordered in slotted profile in 3 meter. See delta strut Channel section for ordering information.

For various threaded rods See Page No : 22

I-Beam Cantilever arm

Use with 40mm wide I-Beam



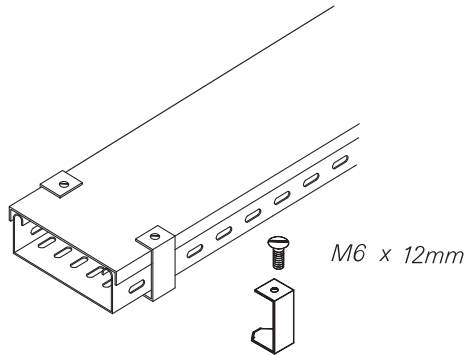
	L	UDL
DEI	130	105
DEI	180	94
DEI	230	90
DEI	330	85
DEI	480	74
DEI	630	68

- Please note that above given loads are for general guidelines only.
- For Cable trays above 600mm width order double cantilever arm to increase safe working load.
- Trapeze Hanger is only shown to convey the idea of hanging tray from ceiling.

Cable Tray Covers and Fixing Details

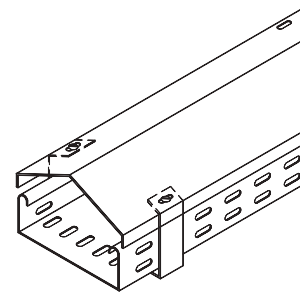
- Straight Covers up to 300mm needs four sets of Clamps.
- 450mm and above needs six Clamps to fix cover.
- Normal flange height of cover is 15mm.
- Fittings normally needs four Clamps. For wider ones 5 Clamps needed.
- Reinforcing type of profile is used in wider covers.

Solid Flange cover



Order Side Cover Clamp (SFA) and M6 x 12mm Roofing bolt separately. Minimum possible width is 100mm for straight section & fittings

Dome Type cover

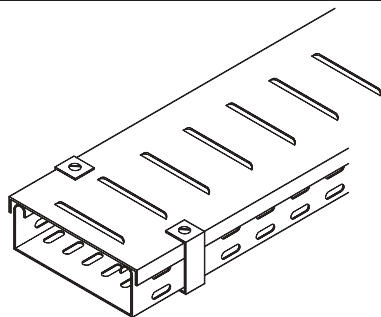


Order Side Cover Clamp (DFA) and 2 sets of M6 x 12mm Roofing bolt, Nut & washer separately.

*Maximum size - 600mm width

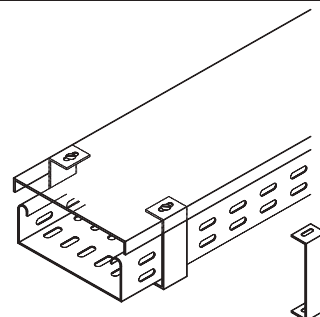
*Not available for fittings

Louvered cover



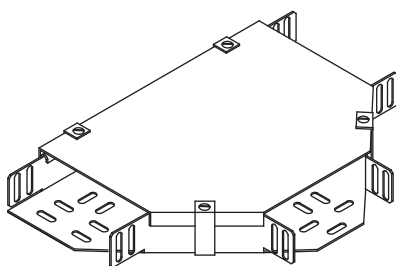
Order Side Cover Clamp (LFA) and M6 x 12mm Roofing bolt separately.

Raised Ventilated cover



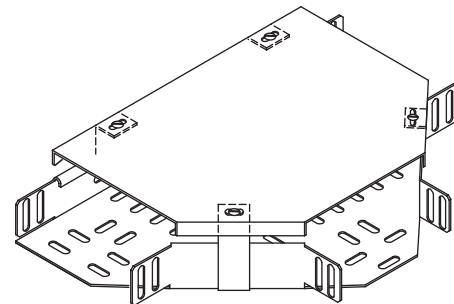
Order Side Cover Clamp (VFA) and 2 Sets of M6 x 12mm Roofing bolt, Nut & Washer separately.

Solid Flange cover for fittings



Order Side Cover Clamp (SFA) and M6 x 12mm Roofing bolt separately.

Raised Ventilated Cover for fittings



Order Side Cover Clamp (DFA) and 2 sets of M6 x 12mm Roofing bolt, Nut & washer separately.

Catalogue No. of Side Cover Clamp (SCC)

Item / Des.	Material	Finish	Type	Side Height	Abbreviation
Solid Flange	✓	✓	SFA	✓	SCC
Dome Type	✓	✓	DFA	✓	SCC
Raised Ventilated	✓	✓	VFA	✓	SCC
Louvered	✓	✓	LFA	✓	SCC

How to order Support system for Cable tray

Base Metal		Finish		Type
Mild Steel	1	Mild Steel	P	DEB DEC DED SEB DB Series DA Series DEI
Aluminium	2	HDGBF	G	
S/Steel 316L	3	HDGAF		
S/Steel 304	4	Stainless Steel		
Corten A Steel	5	Aluminium	M	
		Normal Finish		
Length		Epoxy finish (If Required)		
130	480	Epoxy (EPAG)	E	
180	630			
230	780			
330	930			

Eg. of Support System for 300mm tray in 2mm thickness

1G-DEC330-4-E (If Required)

How to Order Straight Section and Fittings Cover

Base Metal		Finish		Design		Type	
Mild Steel	1	Mild Steel	P	Solid Cover	SF	Tray and Fittings Cover	A
Aluminium	2	HDGBF	G	Louvered Cover	LF		
S/Steel 316L	3	HDGAF		Ventilated Cover	VF		
S/Steel 304	4	Stainless Steel		Dome Cover	DF		
Corten A Steel	5	Aluminium	M				
		Normal Finish					
Elements		Width		Length			
Refer Page No : 11		50 to 900		2000		2	
				2440		2.44	
				3000		3	
Type of curvature		Epoxy finish if required					
Gusset		G		E (EPAG)			

For Straight Length

Mention first 7 Columns Continuously and Epoxy finish if required.

Eg. of Straight Section Cover for 100mm Cable Tray in 2mm thickness

1GSFA-SS100-3-4-E (If Required)

For Fittings

Mention first 4 Columns and then elements, width, side height and type of curvature - Epoxy finish if required.

Eg. of Fittings Cover for 100mm Cable Tray in 2mm thickness

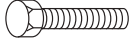
1GSFA-9H100-G-4-E (If Required)

Delta Channel Support system

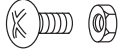
Standard fixing and fastenings

Fastenings

Hexagonal Head Bolts



Roofing Bolts and Nuts



Spring Washer



Hexagonal Nuts



Flat Washers



Threaded Rods



Hexagonal Head Bolts

Electro Plated Zinc

M6 x 16	pack 100	HB0616EG
M6 x 20	pack 100	HB0620EG
M6 x 25	pack 100	HB0625EG
M8 x 16	pack 100	HB0816EG
M8 x 20	pack 100	HB0820EG
M8 x 25	pack 100	HB0825EG
M8 x 30	pack 100	HB0830EG
M8 x 35	pack 100	HB0835EG
M8 x 40	pack 100	HB0840EG
M10 x 20	pack 100	HB1020EG
M10 x 25	pack 100	HB1025EG
M10 x 30	pack 100	HB1030EG
M10 x 35	pack 100	HB1035EG
M10 x 40	pack 100	HB1040EG
M10 x 50	pack 100	HB1050EG
M12 x 20	pack 100	HB1220EG
M12 x 25	pack 100	HB1225EG
M12 x 30	pack 100	HB1230EG
M12 x 35	pack 100	HB1235EG
M12 x 40	pack 100	HB1240EG
M12 x 50	pack 100	HB1250EG

Hot Dip Galvanized

M6 x 12	pack 100	HB0612HG
M6 x 16	pack 100	HB0616HG
M6 x 20	pack 100	HB0620HG
M6 x 35	pack 100	HB0635HG

Stainless Steel (A4)

M6 x 20	pack 100	HB0620A4
M6 x 25	pack 100	HB0625A4
M8 x 25	pack 100	HB0825A4
M8 x 35	pack 100	HB0835A4
M8 x 40	pack 100	HB0840A4
M10 x 16	pack 100	HB1016A4
M10 x 25	pack 100	HB1025A4
M10 x 40	pack 100	HB1040A4
M12 x 25	pack 100	HB1225A4

Stainless Steel (A2)

M6 x 20	pack 100	HB0620A2
M6 x 25	pack 100	HB0625A2
M8 x 25	pack 100	HB0825A2
M8 x 35	pack 100	HB0835A2
M8 x 40	pack 100	HB0840A2
M10 x 16	pack 100	HB1016A2
M10 x 25	pack 100	HB1025A2
M10 x 40	pack 100	HB1040A2
M12 x 25	pack 100	HB1225A2

Hexagonal Nuts

Electro Plated Zinc

M6	pack 500	HN06EG
M8	pack 500	HN08EG
M10	pack 200	HN10EG
M12	pack 200	HN12EG

Hot Dip Galvanized

M6	pack 500	HN06HG
----	----------	--------

Stainless Steel (A4)		
M6	pack 100	HN06A4
M8	pack 100	HN08A4
M10	pack 100	HN10A4
M12	pack 100	HN12A4

Stainless Steel (A2)

M6	pack 100	HN06A2
M8	pack 100	HN08A2
M10	pack 100	HN10A2
M12	pack 100	HN12A2

Roofing Bolts

Electroplated Zinc

M6 x 12	pack 200	RB0612EG
M6 x 16	pack 200	RB0616EG
M6 x 20	pack 200	RB0620EG
M6 x 25	pack 200	RB0625EG
M6 x 30	pack 100	RB0630EG
M6 x 40	pack 100	RB0640EG
M6 x 50	pack 100	RB0650EG

Hot Dip Galvanized

M6 x 12	pack 100	RB0612HG
M6 x 16	pack 100	RB0616HG

Stainless Steel (A4)

M6 x 12	pack 100	RB0612A4
M6 x 16	pack 100	RB0616A4
M6 x 20	pack 100	RB0620A4

Stainless Steel (A2)

M6 x 12	pack 100	RB0612A2
M6 x 16	pack 100	RB0616A2
M6 x 20	pack 100	RB0620A2

Flat Washers

Electro Plated Zinc

M6	pack 500	FW06EG
M8	pack 500	FW08EG
M10	pack 500	FW10EG
M12	pack 200	FW12EG

Stainless Steel (A2)

M6	pack 100	FW06A2
M8	pack 100	FW08A2
M10	pack 100	FW10A2
M12	pack 100	FW12A2

Spring Washer

Electro Plated Zinc

M6	pack 400	SW06EG
M8	pack 400	SW08EG
M10	pack 400	SW10EG
M12	pack 400	SW12EG

Threaded Rods in 2 meters as standard

Electro Plated Zinc

M6 x 2m	TR06EG
M8 x 2m	TR08EG
M10 x 2m	TR10EG
M12 x 2m	TR12EG

Stainless Steel (A4)

M6 x 2m	TR06A4
M8 x 2m	TR08A4
M10 x 2m	TR10A4
M12 x 2m	TR12A4

Stainless Steel (A2)

M6 x 2m	TR06A2
M8 x 2m	TR08A2
M10 x 2m	TR10A2
M12 x 2m	TR12A2

● For threaded rods of 2 meter length add /2 after the code.

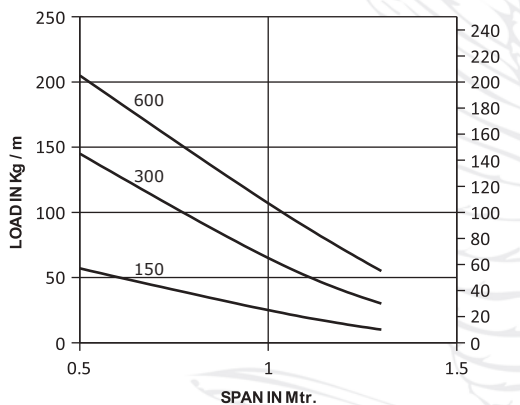
Eg. M6x2 Meters - TR 06EG /3

Load Graphs for Cable Tray



Results shown is for continuous, horizontally run, uniformly distributed load with a multiple span environment.

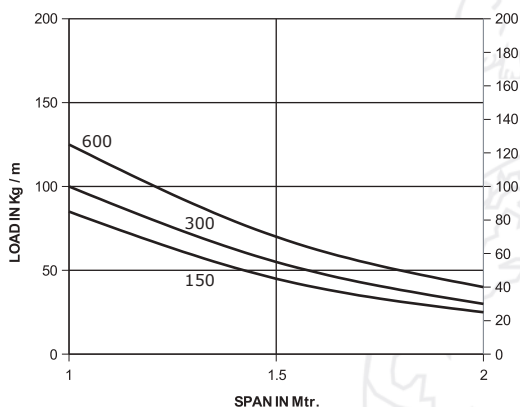
12MM Side Height Cable Tray



The loads above the graph line is unacceptable and below the line is safe.

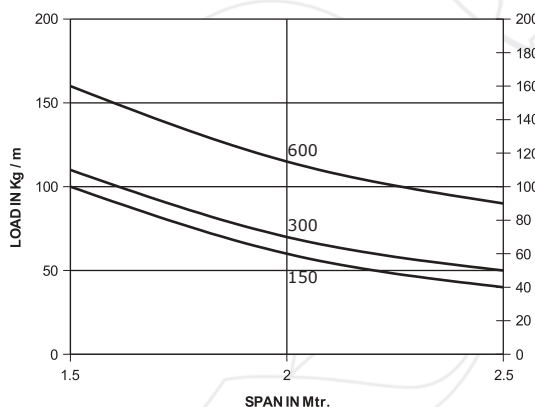
Desired coupler location is one quarter of the span length away from support point where ever possible.

25MM Side Height Cable Tray



Should not extend the graph line to get another span v/s load position.

50MM Side Height Cable Tray



Wider trays are tested with fish plate fitted at the joint.

Load capacity shown excludes the weight of the cover.

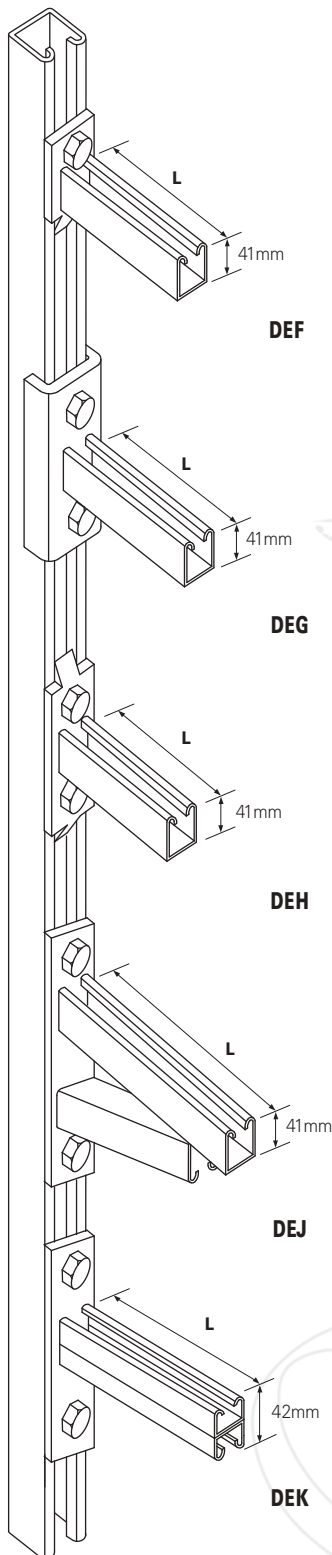
Note : For guidelines only. Any claim for varied performance is not accepted.

More Support Systems

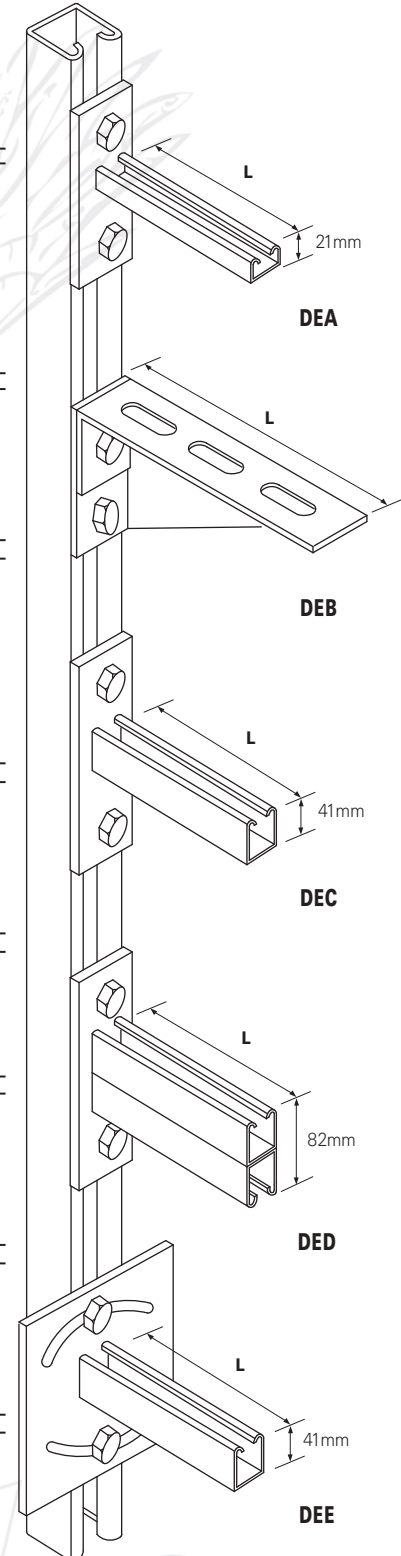
Details shown in more support options using DB100 (41 x 41mm) Series Channels as column.

All holes are 14mm in diameter to use 12mm hex bolt.

All support systems except DEB uses channel nut to fix tray to support. Ref. Page No : 19 for details.



Prod. Code	L	UDL *	Weight in KG
DEA	130	312	0.41
DEA	230	156	0.60
DEA	330	104	0.81
DEA	480	78	1.02
DEB	130	170	0.30
DEB	180	160	0.40
DEB	230	155	0.60
DEB	330	140	0.80
DEB	480	110	1.20
DEB	630	100	2.40
DEB	780	130	3.90
DEC	180	550 ^a	0.64
DEC	230	370	0.80
DEC	330	270	1.10
DEC	480	175	1.50
DEC	630	140	1.80
DED	180	750 ^a	1.20
DED	230	660 ^a	1.60
DED	330	600 ^a	2.00
DED	480	380	2.80
DED	630	305	3.60
DED	780	210	4.60
DED	930	175	5.40
DEE	180	550 ^a	1.20
DEE	230	370	1.40
DEE	330	270	1.70
DEE	480	175	2.10
DEE	630	140	2.40
DEF	180	390 ^a	0.54
DEF	230	310	0.70
DEF	330	245	1.00
DEF	480	190	1.40
DEG	180	550 ^a	0.84
DEG	230	370	1.00
DEG	330	270	1.30
DEG	480	175	1.70
DEG	630	140	2.00
DEH	180	550 ^a	0.64
DEH	230	370	0.80
DEH	330	270	1.10
DEH	480	175	1.50
DEH	630	140	1.80
DEJ	330	750 ^a	1.70
DEJ	480	500 ^a	2.40
DEJ	630	375	2.80
DEJ	780	300	3.80
DEJ	930	200	4.50
DEK	330	454 ^a	1.20
DEK	480	320	1.60
DEK	630	246	1.90



* Uniformly Distributed Load in Kg/m

^a Slip Limit Loading Capacity

Note : Cantilever arms longer than 930mm is available with supporting members to increase safe working load. Contact Sales desk for details. Load Details shown is for guidance only.



Delta Cable Surface Trunkings

To BS 4678 & BSEN 50085

We also offer:

Weather proof trunking | Light trunking | Raised floor trunking | Under floor trunking
Flush floor trunking | Skirting trunking | Dado trunking | Bench trunking

Delta Cable Trunking

Metallic Delta cable Trunking is a quick economical way of carrying electrical wires, telecommunication cables as well as computer cables. Trans Delta offers a variety of trunkings ranging from normal surface trunking to floor distribution system.

Delta cable trunking is made as per BS 4678 part-1. All the covers are fitted with quick turnbuckle for fixing the cover. This enables easy and quick way of fixing covers. All fittings have integral coupler and gusseted construction to allow smooth turning of wires. Where ever possible all fittings are made of state of art single piece construction.

Product specification

Material and Finish (See Page No : 6 for details)

- Pregalvanized steel or hot dip galvanized before fabrication (HDGBF) as per BS EN 10327
- Hot Dip Galvanized after Fabrication (HDGAF) as per BS EN 1461
- Epoxy polyester Powder coated to any RAL colour
- Aluminium Cable trunking
- Stainless Steel cable trunking to AISI 304 and AISI 316L

Aluminium and Stainless Steel Trunking are available in Screw type lid with M4 Pan head screws.

Sizes available

Width x Depth in MM

50×50	150×50	200×100
75×50	150×75	200×150
75×75	150×100	200×200
100×50	150×150	300×100
100×75	200×50	300×150
100×100	200×75	300×300

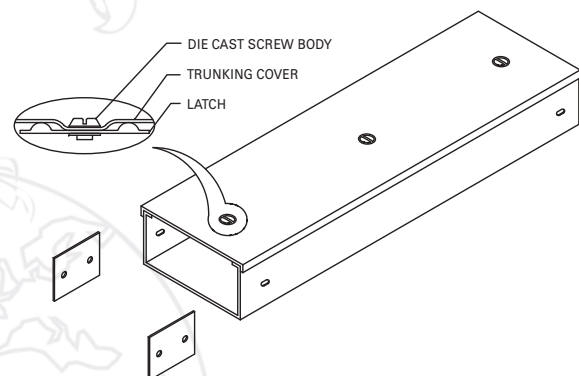
Length

3 mtr as standard. Other lengths are also available.

Type

Single or multi compartment Trunking

Standard trunking with single compartment



Studded type Coupling holes on trunking fittings is available on request.

Supplied with cover, plate coupler in pairs and fastenings of M6x12mm roofing bolt, nut and washer.

Refer page No : 30 for multi compartment trunking

Customers who need any particular spangle design on galvanized sheet should mention it while ordering.

- Commercial Tolerance on Thickness Apply.
- Dimensional tolerance is applicable on all product dimensions

Delta Cable Trunking

Cable Capacities of standard Delta Trunking

Trunking	Conductor size sq. mm											
Size	1.0	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0	50.0	70.0	95.0
50 x 50	138	123	98	67	52	33	24	16	12	9	7	5
75 x 50	208	185	148	101	79	51	37	24	18	13	10	7
75 x 75	312	278	221	152	118	76	65	37	28	20	16	11
100 x 50	277	247	197	135	95	67	49	39	25	18	14	10
100 x 75	516	370	296	203	158	101	74	49	37	27	21	15
100 x 100	555	484	394	271	211	135	98	66	50	37	28	21
150 x 75	624	556	443	304	237	152	111	74	56	41	32	24
150 x 100	833	741	592	406	316	203	148	99	75	55	42	31
150 x 150	1250	1112	888	609	475	305	222	145	112	83	54	47

Material Gauges

DELTA - Cable Trunking STANDARD THICKNESS AS PER BS 4678			DELTA - Cable Trunking STANDARD THICKNESS AS PER BS 4678		
Trunking Size mm	Min. Body Thickness	Min. Cover Thickness	Trunking Size mm	Min. Body Thickness	Min. Cover Thickness
50 x 50	1.0	1.0	200 x 100	1.6	1.4
75 x 50	1.2	1.2	225 x 50	1.6	1.4
75 x 75	1.2	1.2	225 x 75	1.6	1.4
100 x 50	1.2	1.2	225 x 100	1.6	1.4
100 x 75	1.2	1.2	225 x 150	1.6	1.4
100 x 100	1.2	1.2	225 x 225	1.6	1.4
150 x 50	1.2	1.2	300 x 50	1.6	1.6
150 x 75	1.2	1.2	300 x 75	1.6	1.6
150 x 100	1.2	1.2	300 x 100	1.6	1.6
150 x 150	1.4	1.2	300 x 150	1.6	1.6
			300 x 300	2.0	1.6

Subject to the customer requirement other thickness can be manufactured on requests.

Trunking system complies with BS 4678 for minimum thickness of body and cover.

For multi compartment trunking partitions normal thickness is 1.0mm

Commercial tolerance on Sheet thickness apply.

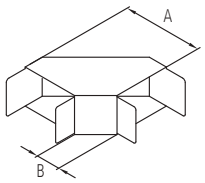
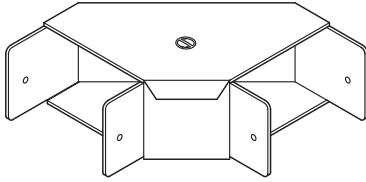
Contact Sales Desk for Various fitting thickness.

Delta Cable Trunking Fittings

All fittings shown are gusset type construction

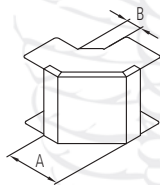
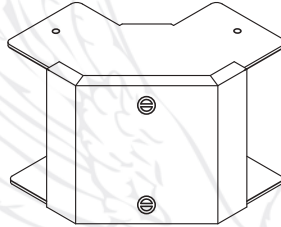
90° Bend

Cover on Top



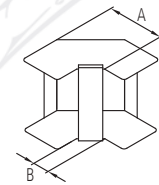
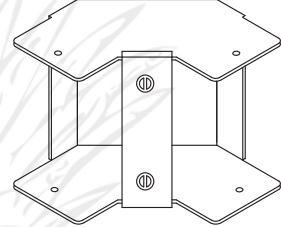
WIDTH	A	B
50	85	35
100	110	35
150	185	35
200	235	35
300	335	35

Cover on Outside



WIDTH	A	B
50	85	35
100	110	35
150	185	35
200	235	35
300	335	35

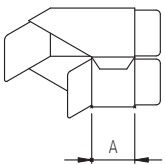
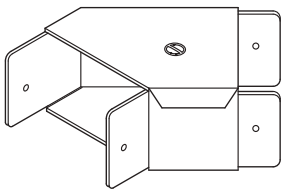
Cover on Inside



WIDTH	A	B
50	85	35
100	110	35
150	185	35
200	235	35
300	335	35

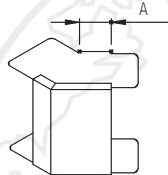
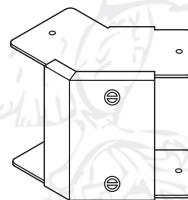
45° Bend

Cover on Top



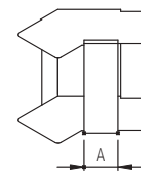
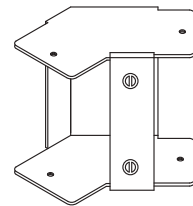
WIDTH	A
50	35
75	35
100	35
150	35
200	35
300	35

Cover on Outside



WIDTH	A
50	35
75	35
100	35
150	35
200	35
300	35

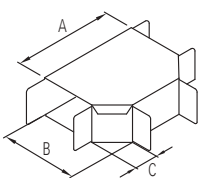
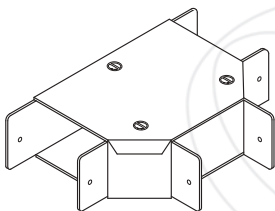
Cover on Inside



WIDTH	A
50	35
75	35
100	35
150	35
200	35
300	35

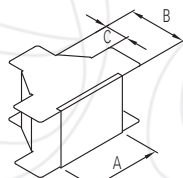
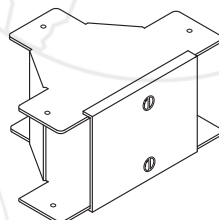
Tees

Cover on Top



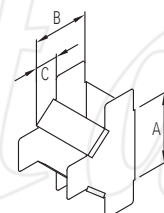
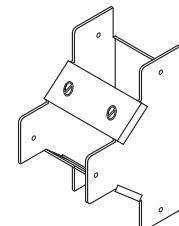
WIDTH	A	B	C
50	120	85	35
75	145	110	35
100	170	135	35
150	220	185	35
200	270	235	35
300	370	325	35

Cover on Outside



WIDTH	A	B	C
50	120	85	35
75	145	110	35
100	170	135	35
150	220	185	35
200	270	235	35
300	370	325	35

Cover on Inside



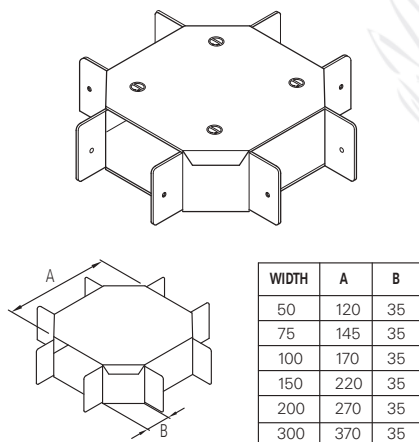
WIDTH	A	B	C
50	120	85	35
75	145	110	35
100	170	135	35
150	220	185	35
200	270	235	35
300	370	325	35

• Note 1 Square type fittings are also available on request.

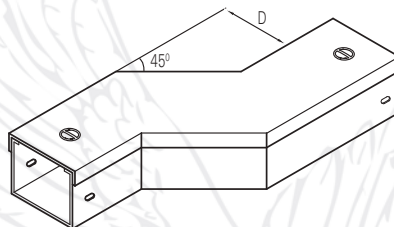
• Note 2 Two 45° Bends can be connected to each other with a fitting Adaptor (Page No : 32) to get a big radius bend.

Delta Cable Trunking fittings and Coupler details

Cross

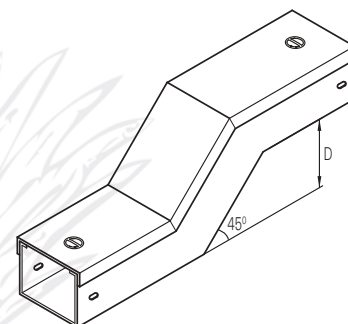


Horizontal Offset



D - Offset Distance (Max 300mm)

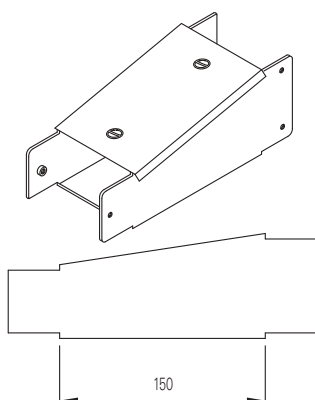
Vertical Offset



D - Offset Distance (Max 300mm)

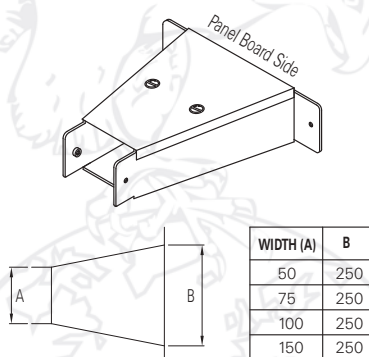
While ordering horizontal and vertical offset mention distance 'D' required. Two 45° bends can be connected together with a fitting adaptor (Page No: 32) to get an offset where offsetting distance is very less. Contact Sales Desk for Long Offset Distance Solution.

Reducer



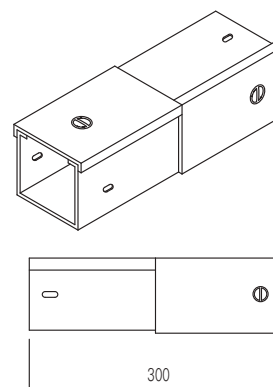
Always mention big size first while ordering

Bell Mouth

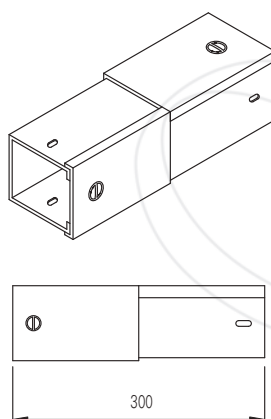


Used to connect Trunking to Panel Board.
For narrow size panel board give details of B

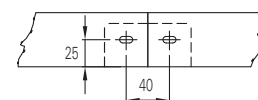
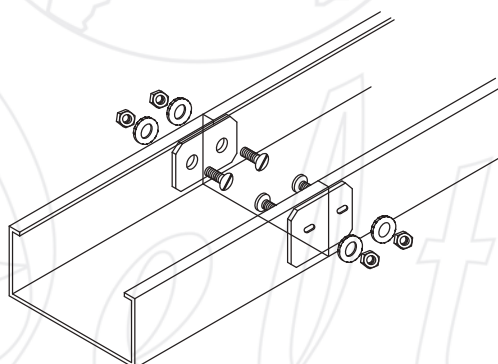
Change Face Right



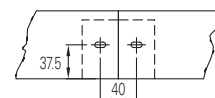
Change Face Left



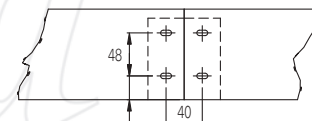
Coupler Details



50 mm height trunking joints
with 4 Numbers of m6 x 12mm
roofing bolt, nut and washer



75 mm height trunking joints
with 4 Numbers of m6 x 12mm
roofing bolt, nut and washer



100 mm height trunking joints
with 8 Numbers of m6 x 12mm
roofing bolt, nut and washer

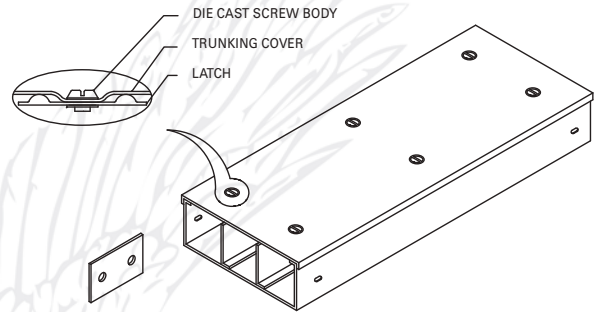
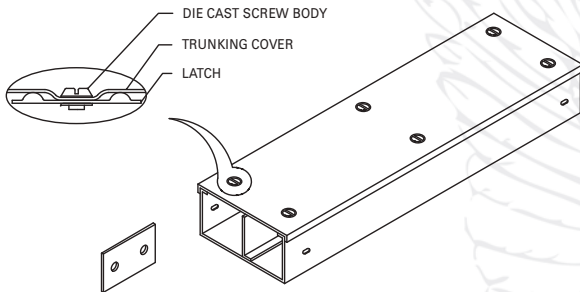
• Note : Change face not available in
Compartment Trunkings.

Standard Multi compartment Trunkings

- Available in 2 or 3 or 4 compartments.
- 100 mm Width trunking available only with 2 compartments.

Can be ordered with beading on divider strip. Divider thickness is 1mm.

For unequal compartment details of spacing is to be given while ordering.



Various Multi Compartment trunking fittings are available on request.

Flyovers are recommended for compartment trunking tee and cross fittings. But should keep in mind that cable carrying capacity is halved in flyovers. Contact sales desk for details.

Divider strips are spotted to body usually. Loose divider strips are also available for site fixing on special request. Contact sales desk for any special design.

New

Divider can be fixed through new metal locking system where a little unevenness of the surface is not a problem. This system is having less expose area.

Please specify the No. of Compartment in the Catalogue.

Example IPRTR / ☆-3SS64-3

No. of Compartments.

How to Order Straight Length & Fitting

Base Metal		Finish		Type	
Mild Steel	1	Mild Steel	P	Return edge Trunking	R
Aluminium	2	HDGBF	G		
S/Steel 316L	3	HDGAF	G		
S/Steel 304	4	Stainless Steel	M		
		Aluminium	M		
		Normal Finish	M		
Item		Thickness		Elements	
Trunking	TR	1.00 mm	1	Straight Length	SS
		1.20 mm	2	90° Bend	9H
		1.50 mm	3	Tee	HT
		2.00 mm	4	Unequal Tee	HUT
				Cross	HC
				Unequal Cross	HUC
				Horizontal Offset	HOF
				Vertical Offset	VOF
				Straight Reducer	RS
				Bell Mouth	BM
				Change face right	FR
Width		Depth		Length	
50	2	50	2	2.44 Meter	2.44
75	3	75	3		
100	4	100	4		
150	6	150	6		
200	8	200	8		
				3.0 Meter	3
Position of Cover		Epoxy finish if required			
T	Cover on Top				
I	Cover on Inside				
O	Cover on Outside				

For Straight Length Trunking

Mention first 9 Columns Continuously and Epoxy finish if required.

Eg. of Straight Section Trunking 50 x 50mm for 1.2mm thickness

1PRTR-2SS22-3-E (If Required)

For Fittings

Mention first 4 Columns and then elements, width, depth and position of cover - Epoxy finish if required.

Eg. of Trunking Fittings for 50 x 50mm in 1mm thickness

1PRTR-9H22-T-1-E (If Required)

Note 1. Please specify offset distance in inches within brackets at the end while ordering offsets.

Note 2. In case of multi compartment trunking, Please mention the number of compartments after RTR in cat. No with "/" and the "number".

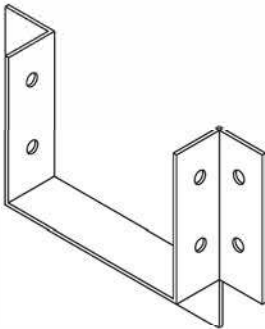
eg. 1PRTR / 3 - 2SS 64 - 3

Note 3. For elements other than 90° use 4H - 45°

Note 4. For change face left - FL

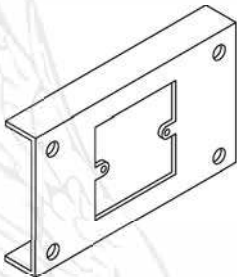
Accessories for installation of cable Trunking

Wall Flange



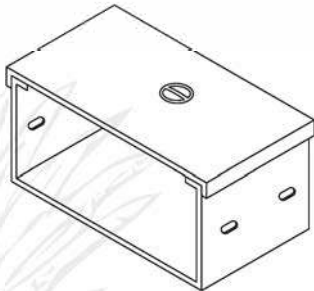
Uses where one end of the Trunking rests on the wall.

Socket Plate



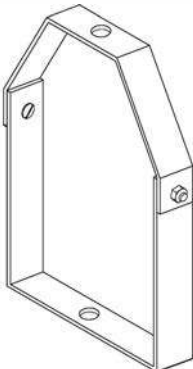
Specify the type of socket going to use

Fitting Adaptor

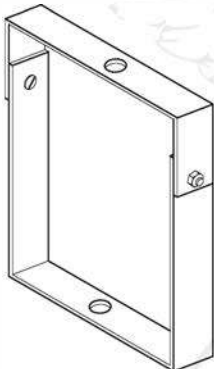


Connects two trunking fittings

Suspension Hanger



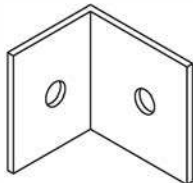
Type A



Type B

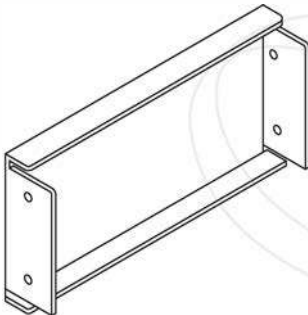
Maximum Dia of threaded rod can be used is 10mm.
Top and Bottom Pieces joined together with 2 sets of
M6 x 12 mm Roofing Bolt, Nut and Washer.

Angle Connector



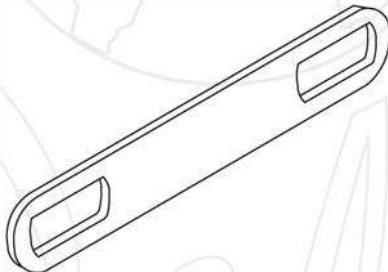
Supplied in pairs. Uses M6 x 12 mm size Roofing Bolt, Nut and Washer to connect to trunkings.

Blind End



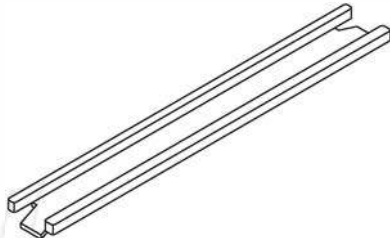
Mention Width and Height Trunking while order. Install where the routing of cable terminates.

Earth Continuity Connector



Available in Electro tinned finish with C to C distance of 35 mm.

Cable Retainer



Locks in the flange of trunking. Avoid the falling of cables during laying.

How to Order - Accessories

Product	Base Metal (1,2,3,4&5) Ref. Page 15	Finish (P,G,M)	Type	Item	Width (Ref. Page31)	Depth (Ref. Page31)	Abbreviation
Wall Flange	✓	✓	R	TR	✓	✓	WF
Socket Plate	✓	✓			✓	-	SP
Fitting Adaptor	✓	✓			✓	✓	FA
Suspension Hanger	✓	✓			✓	✓	SH
Angle Connector	✓	✓			-	✓	AC
Blind End	✓	✓			✓	✓	BE
Cable Retainer	✓	✓			✓	-	CR

Tick mark shows the relevant parameters against each products.

Example of Accessories

1PRTR-22-BE-E (If Required)

How to order Earth continuity connector

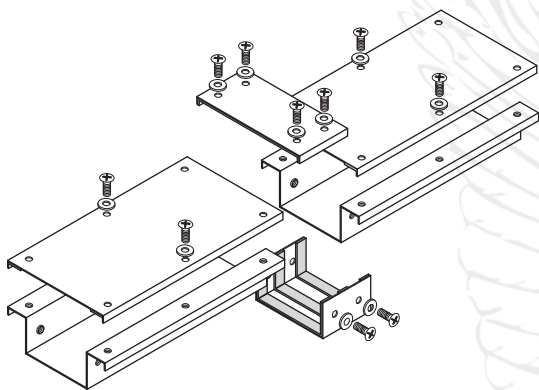
ECC-50

Manufacturer reserves the right to change the design without any notification.

Weather proof and Lighting Trunking

Weather proof trunking and fittings are available where dust and water should be avoided from getting into the system. This trunkings are fitted with gaskets and made with outward flange design enables a tight sealing.

Weather Proof Trunking



- Standard length : 3 Meter
- Standard Finish : Pregalvanized Steel
As per BS EN 10142
- Supplied in : Screw type fixing cover

For Ordering Weather proof Trunking add W P instead of T R in the coding of normal Trunking.
Various Weather Proof Trunking Fittings are available on request.

E.g of Straight Section

1PRWP-1SS44-3-E (If Required)

INGRESS PROTECTION (IP) RATINGS :

IP Ratings consist of 2 or 3 numerals. Each individual numeral indicates a protection level against certain types of attacks. Each numeral is independent of the other. Consult the tables below for explanations of the significance of the 1st Numeral and the 2nd Numeral.

IP 20 Protected against penetration by solid matter with dimensions greater than 12mm dia. It is not protected against liquid penetration.

IP 23 Protected against penetration by solid matter with dimension greater than 12mm dia. Protected against rain.

IP 40 Protected against penetration by solid matter with dimension greater than 12mm dia. It is not Protected against liquid penetration.

IP 41 Protected against penetration by solid matter with dimension greater than 1mm dia. It is protected against transverse rain up to a maximum of 15 degree.

IP 43 Protected against penetration by solid matter with dimension greater than 1mm dia. Protected against rain.

IP 44 Protected against penetration by solid matter with dimension greater than 1mm dia. Protected against sprays of water.

IP 54 Protected against quantities of dust that could interface with satisfactory operation. Protected against sprays of water.

IP 65 Completely dust proof. Protected against jet of water.

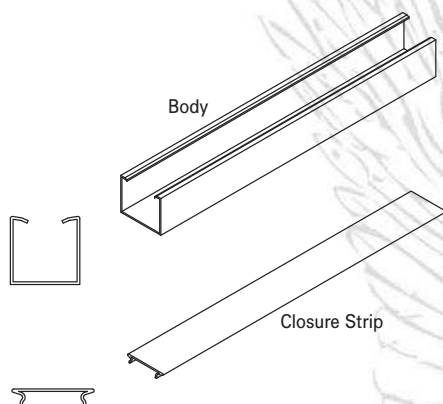
IP 66 Completely dust proof. Protected against high pressure water jets.

IP 67 Completely dust proof. Protected against temporary immersion.

IP 68 Completely dust proof. Waterproof light fixtures for underwater lighting (Allowable depths given in meters)

Lighting Trunking

Lighting Trunking



Standard length : 5 Meter

Standard Finish : Pregalvanized Steel
As per BS EN 10142

: Epoxy Coated to any
RAL Color

Standard Thickness : 1 mm for Body and
Closure strip

Standard Size : 50 x 50 mm

For Ordering Lighting Trunking add L T instead of T R in the coding of normal Trunking.

Closure strip is available in GI and PVC finish in 2 meter length.

E.g of Straight Section

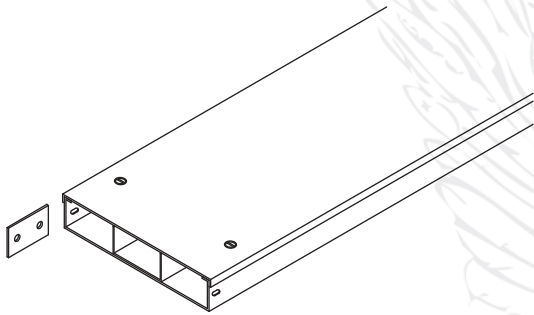
1PRLT-1SS22-3-E (If Required)

Various Lighting Trunking Fittings are available on request.



Raised Floor / Cavity Floor Trunking

Raised floor Trunking gives a high degree of flexibility and uses where frequent design changes and maintenance comes.



Width	Height	Catalogue No.
100	50	RFT/*-100-50
150	50	RFT/*-150-50
200	50	RFT/*-200-50
300	50	RFT/*-300-50
450	50	RFT/*-450-50

*No of Compartment

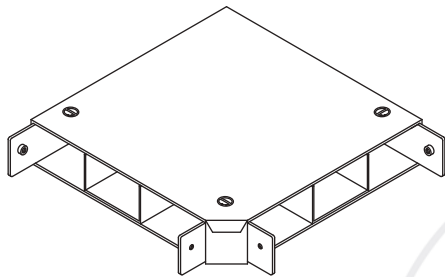
Standard length: - 3 mtr.

Side Height:- 50 mm

No. of compartments:- 2, 3 & 4

knockout of 20 & 25mm can be manufactured to the customer requirement.

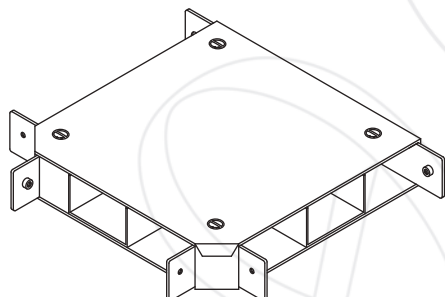
90° Horizontal Bend



Width	Height	Catalogue No.
100	50	RFT/*-9H 100-50
150	50	RFT/*-9H 150-50
200	50	RFT/*-9H 200-50
300	50	RFT/*-9H 300-50
450	50	RFT/*-9H 450-50

*No of Compartment

Horizontal Tee



Width	Height	Catalogue No.
100	50	RFT/*-HT 100-50
150	50	RFT/*-HT 150-50
200	50	RFT/*-HT 200-50
300	50	RFT/*-HT 300-50
450	50	RFT/*-HT 450-50

*No of Compartment

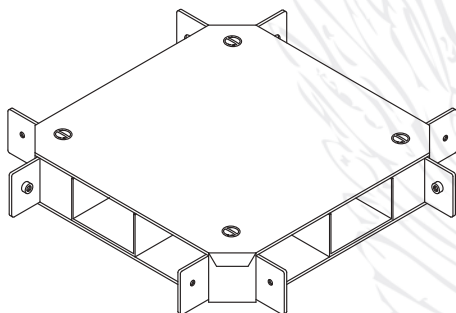
All Trunking and Components are manufactured from pre-galvanized sheet steel to BS EN 10142 in the following thickness.

100 to 200mm width - 1mm thick body and cover.

300 to 450mm width - 1.2mm thick body and 1mm cover

Raised Floor / Cavity Floor Trunking

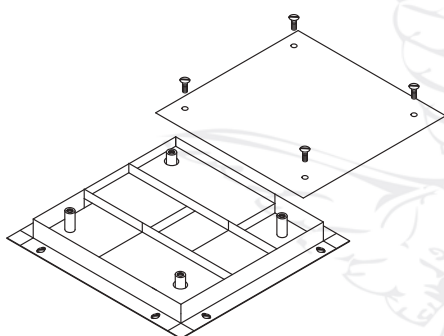
Cross



Width	Height	Catalogue No.
100	50	RFT/*-HC 100-50
150	50	RFT/*-HC 150-50
200	50	RFT/*-HC 200-50
300	50	RFT/*-HC 300-50
450	50	RFT/*-HC 450-50

*No of Compartment

Junction Box



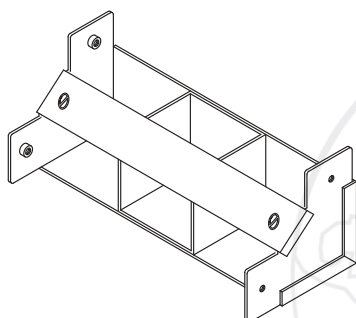
Width	Height	Catalogue No.
200	50	RFT/*-JB 200-50
300	50	RFT/*-JB 300-50
450	50	RFT/*-JB 450-50

*No of Compartment

A Junction Box can act as a bend, Tee and Cross with flyover system fixed inside.

Minimum Material Thickness should be 1.2mm

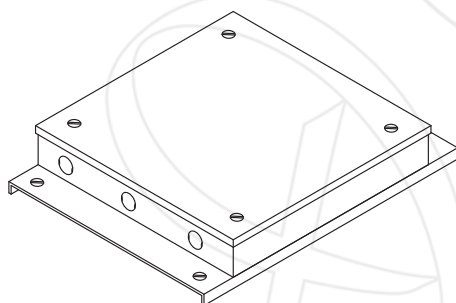
Inside Riser



Width	Height	Catalogue No.
100	50	RFT/*-9RI 100-50
150	50	RFT/*-9RI 150-50
200	50	RFT/*-9RI 200-50
300	50	RFT/*-9RI 300-50
450	50	RFT/*-9RI 450-50

*No of Compartment

Tap of Box



Width	Height	Catalogue No.
100	50	RFT/*-TB 100-50
150	50	RFT/*-TB 150-50
200	50	RFT/*-TB 200-50
300	50	RFT/*-TB 300-50
450	50	RFT/*-TB 450-50

*No of Compartment

All Trunking and Components are manufactured from pre-galvanized sheet steel to BS EN 10142 in the following thickness.

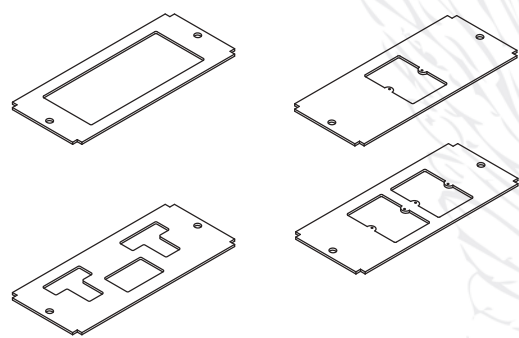
100 to 200mm width - 1mm thick body and cover.

300 to 450mm width - 1.2mm thick body and 1mm cover.

Raised Floor / Cavity Floor Trunking Accessories

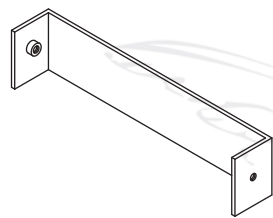
Give details of socket for which socket plate is to be manufactured. Normally available in epoxy finish.

Socket Plates



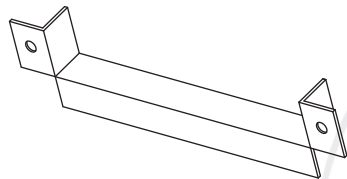
Type	Catalogue No.
Data	RFT / * - SP - D
Power	RFT / * - SP - P
Communication	RFT / * - SP - C

Blind End



Width	Height	Catalogue No.
100	50	RFT/*-BE 100-50
150	50	RFT/*-BE 150-50
200	50	RFT/*-BE 200-50
300	50	RFT/*-BE 300-50
450	50	RFT/*-BE 450-50

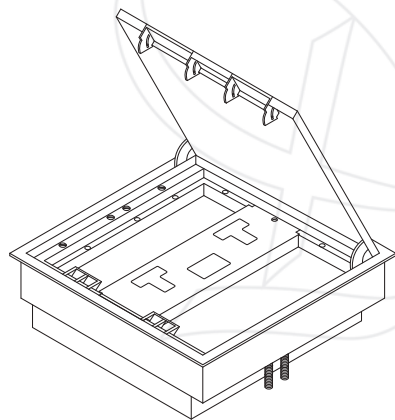
Wall Flange



Width	Height	Catalogue No.
100	50	RFT/*-WF 100-50
150	50	RFT/*-WF 150-50
200	50	RFT/*-WF 200-50
300	50	RFT/*-WF 300-50
450	50	RFT/*-WF 450-50

Service Outlet Box with Moulded Carpet Rim

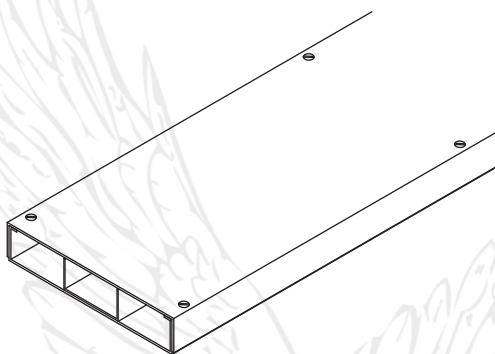
Suitable for 3 compartment & 4 compartment Trunking. Have 7mm Recess on the lid for carpet. Accommodate 87mm width 3 plates and 65mm width 4 plates. Provided with 20 and 25mm knockouts for flexible conduits. Socket plates to be ordered separately.



No. of Comp.	Catalogue No.
3 Comp.	RFT / 3 - SB - M
4 Comp.	RFT / 4 - SB - M

Under Screed / Buried Screed Trunking

Under Screed Trunking is use to supply power, data & telecommunication cables in a floor system where the cable layout is pre determined. Supplied with cover, coupler and fastenings.

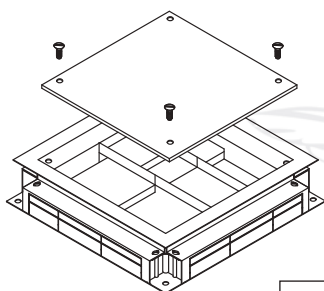


Standard length: 3 mtr.
Side Height: 38 mm
No. of compartments: 3 & 4

Size	Catalogue No.
225X38	UFT / * - 225 - 38

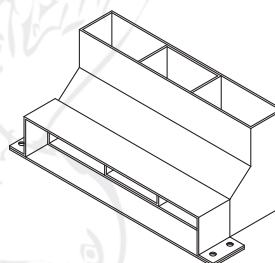
**No of Compartment*

Junction Box



Size	Catalogue No.
225X38	UFT/* - JB225-38

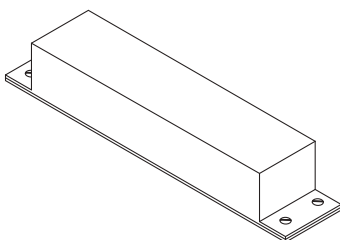
Vertical access box



Size	Catalogue No.
225X38	UFT/* - VAB-225-38

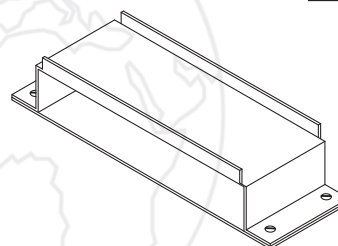
Blind End

Size	Catalogue No.
225X38	UFT/* - BE-225-38



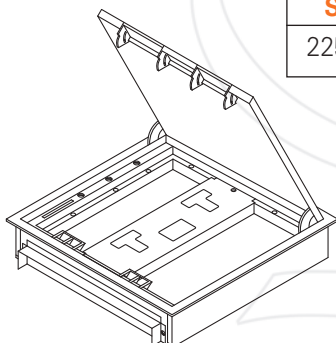
Coupler

Size	Catalogue No.
225X38	UFT/* - CS-225-38



Service Outlet Box with Mould Carpet Rim

Size	Catalogue No.
225X38	UFT / * - SB - 225-38



Socket plates to be ordered separately.

Material Specification

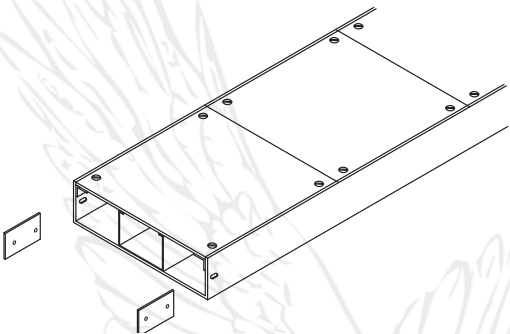
All trunking and components are manufactured from pre-galvanized sheet steel to BS EN 10142 in the following thicknesses.

Cover	1.00mm
Body	1.20mm
Divider	1.00mm

Junction Box can act as Bend, Tee, Cross and a Straight through connection as per situation

Flush Floor Trunking

Flush floor Trunking is used where Top of the Trunking will be in flush with Screed height and the position of Trunking and accessories are pre-determined. Supplied with cover, plate coupler and fastenings.

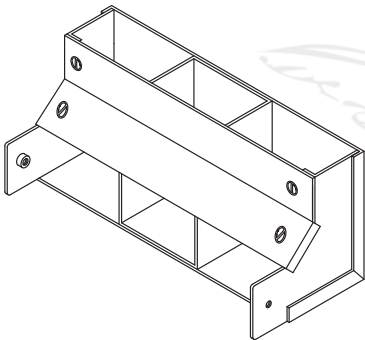


Standard length: - 2.44 mtr.
Cover : - 6 Numbers of modular cover with size of 406 x 300mm
No. of compartments:- 3 & 4

Size	Catalogue No.
300X65	FFT / *-300-65

**No of Compartment*

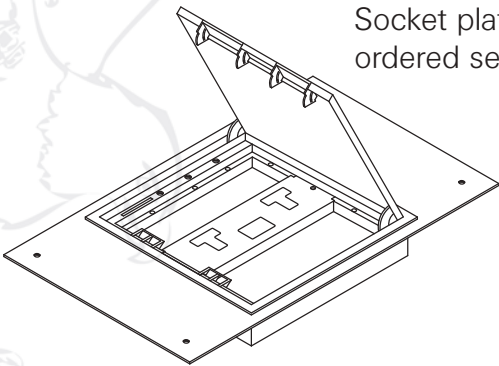
Inside Riser



Size	Catalogue No.
300x65	FFT / *-9RI300-65

**No of Compartment*

Service Outlet Box with Moulded Cover

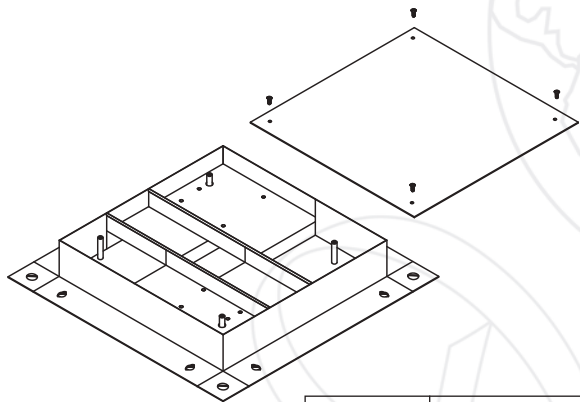


Socket plates to be ordered separately.

Size	Catalogue No.
300x65	FFT / *-SB-M

**No of Compartment*

Junction Box



Size	Catalogue No.
300x65	FFT / *-JB300-65

**No of Compartment*

Material specification

All trunking and components are manufactured from pre-galvanized sheet steel to BS EN 10142 in the following thicknesses.

Cover	2.5 mm
Body	1.5 mm
Divider	1.2 mm

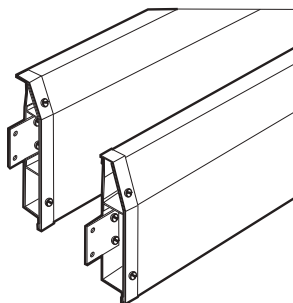
Note : Junction box can act as tee, bend and cross and a straight through connector as per situation.

Skirting / Dado / Bench Trunking

Skirting trunking

Skirting trunking is used to supply power, telephone and data services around the perimeter of office accommodation.

Supplied in standard 3 meter lengths in two and three compartment options, each length is supplied complete with connector, cover and cover fixing strap.



The internal separators are provided with 20mm knockouts at 200mm centers to allow access to the middle compartment. This allows all socket outlets from all compartments to be mounted at the same level.

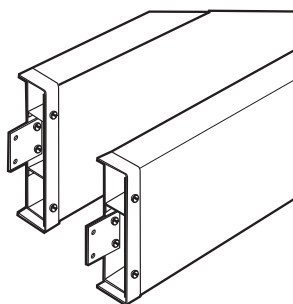
The cover fixing straps allow for easy positioning of socket outlet plates, eliminating the need for drilling when on site cutting is required.

Width mm	Depth mm	Thickness mm	Two Compartment	Three Compartment
150	38	1.20	ST / 2 - 150 - 38	ST / 3 - 150 - 38
200	38	1.20	ST / 2 - 200 - 38	ST / 3 - 200 - 38

Dado trunking

Dado trunking is used to supply power, telephone and data services around the perimeter of office accommodation.

Supplied in standard 3 meter lengths in two and three compartment options, each length is supplied complete with connector, cover and cover fixing strap.



The internal separators are provided with 20mm knockouts at 200mm centers to allow access to the middle compartment. This allows all socket outlets from all compartments to be mounted at the same level.

The cover fixing straps allow for easy positioning of socket outlet plates, eliminating the need for drilling when on site cutting is required.

Width mm	Depth mm	Thickness mm	Two Compartment	Three Compartment
100	30	1.20	DT / 2 - 100 - 38	DT / 3 - 100 - 38
150	38	1.20	DT / 2 - 150 - 38	DT / 3 - 150 - 38
200	38	1.20	DT / 2 - 200 - 38	DT / 3 - 200 - 38

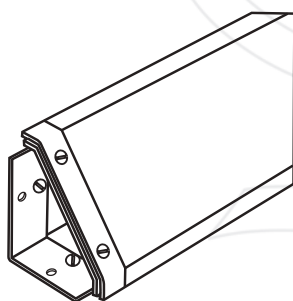
Bench trunking

Bench trunking is used to supply power services to remote bench units mainly in school, university, laboratory and workshop environments.

Supplied in standard 3 meter lengths, each length

is supplied complete with connector, cover and cover fixing strap.

The cover fixing straps allow for easy positioning of socket outlet plates and eliminates the need for drilling when on cutting is required.



Width mm	Depth mm	Thickness mm	Single Compartment
90	90	1.20	BT / 1 - 90 - 90



The Success Story Continues...



Delta Cable Ladder

As per BSEN 61537

Delta Cable Ladder

Metallic Delta cable Ladders are manufactured as per BSEN 61537 for the smooth and easy pulling of cable from one point to another. We have designed the best cable ladders, by taking care of Cable loads and practical site problems. The rungs are heavy duty strut channels which provides a heavy support to the cables even in wider ladders. Delta cable ladder is having maximum Cable loading depth by fixing rungs at the lowest point of side rails. Spacings of rungs are done in such a way that it enables the dropping of any large diameter cables.

Product Specification

Material and Finish (See Page No : 6 for details)

- Pregalvanized Steel or hot dip galvanized before fabrication (HDGBF) as per BS EN 10142
- Hot dip Galvanized after fabrication (HDGAF) as per BS EN 1461
- Epoxy polyester Powder coated to any RAL colour,
- Aluminium Cable ladder
- Stainless Steel cable ladder to AISI 304 and AISI 316L (After welding passivation is done at weld area locally)

Types available

1. C Type
2. R Type
3. P Type

Standard Widths available in Cable Ladder

Width in mm		
100	150	200
300	450	600
750	900	1000

Sizes other than this also available on customer request

Side Heights Available

50, 75, 100, 125, 150 mm

Loading Depth

To get a loading depth of a particular side height subtract 25 mm. This is the usage height for the cable laying. A clearance of ± 3 mm should be considered in loading depth dimension.

Length

3 Meter as standard. Other lengths are also available.

Rungs Spacing

300 mm Standard, with slot size of 13 x 30 mm

Refer Page No: 49 for various other rungs spacing.

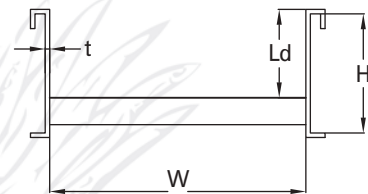
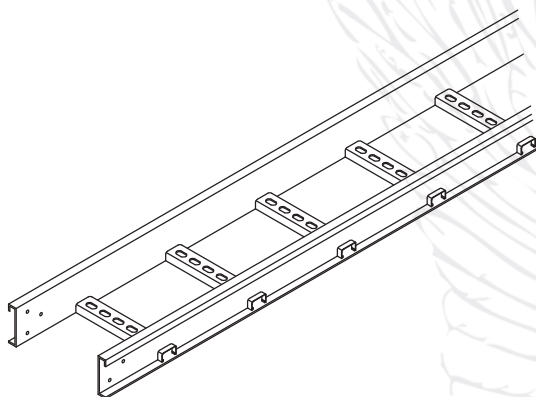
Note : Ladder is not meant for torsional rigidity. Cannot be used as a walkway. Aluminium ladders are available in riveted condition.

- Commercial Tolerance on Thickness Apply.
- Dimensional tolerance is applicable on all product dimensions

Delta Cable Ladder

Couplers should be ordered separately. Available Thickness is 2mm

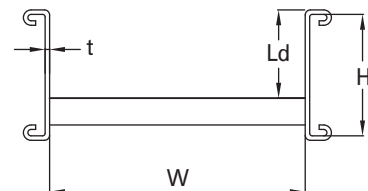
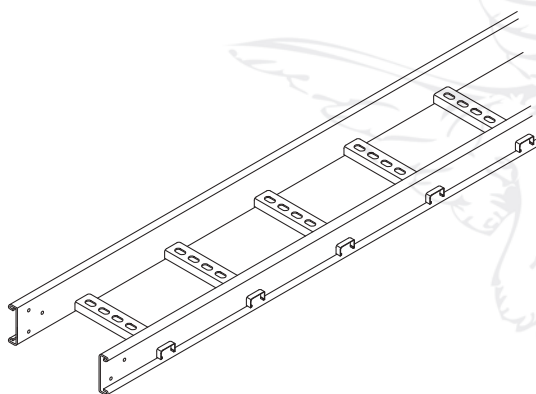
Type C



Ld = Loading Depth (Usable Height)

Width and Height are the inside dimension of the ladder

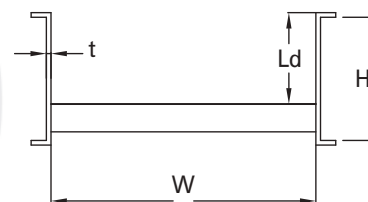
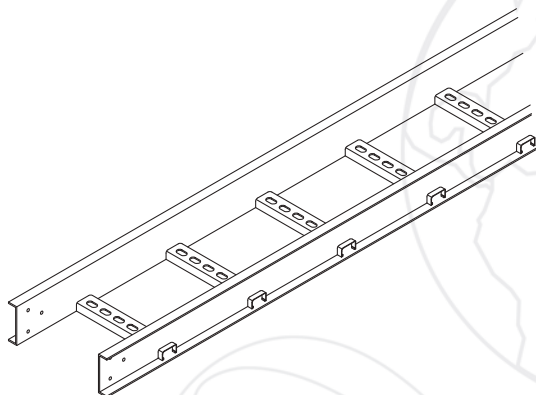
Type R



Ld = Loading Depth (Usable Height)

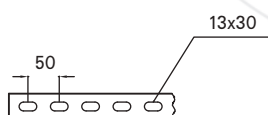
Minimum side height available is 100 mm

Type P

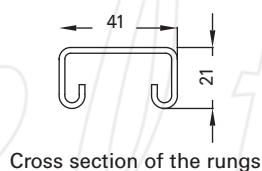
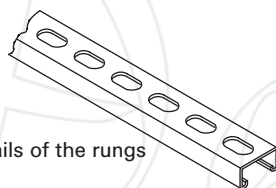


Ld = Loading Depth (Usable Height)

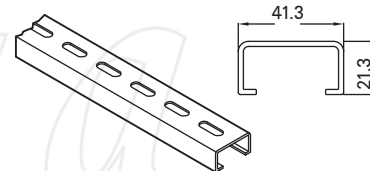
Slot Size



Details of the rungs



Cross section of the rungs



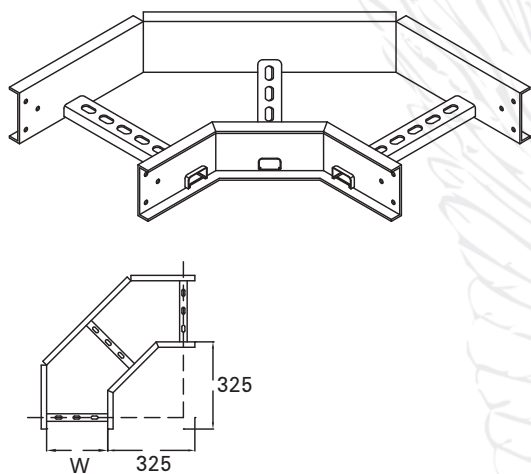
C type rung

Shown is a U type rung (Standard)

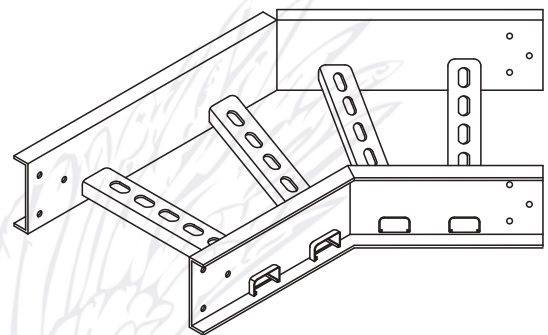
We have Marine Ladder also in our product range. Contact Sales Desk for Details

Delta Cable Ladder Fittings

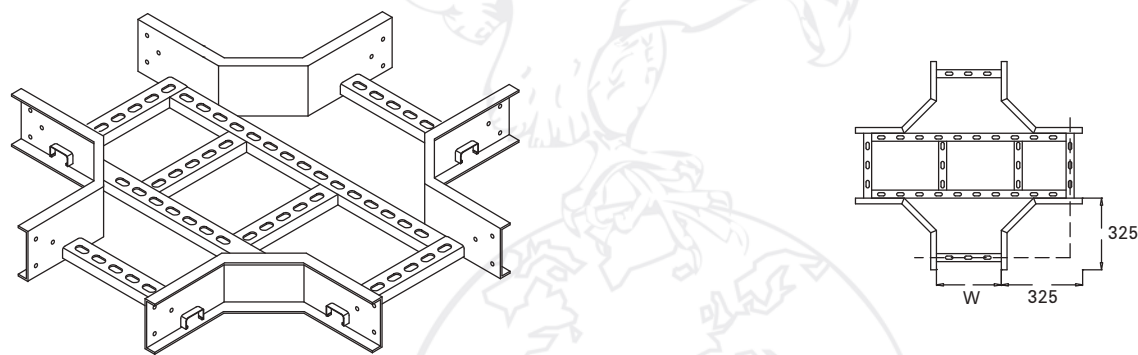
90° Horizontal Bend



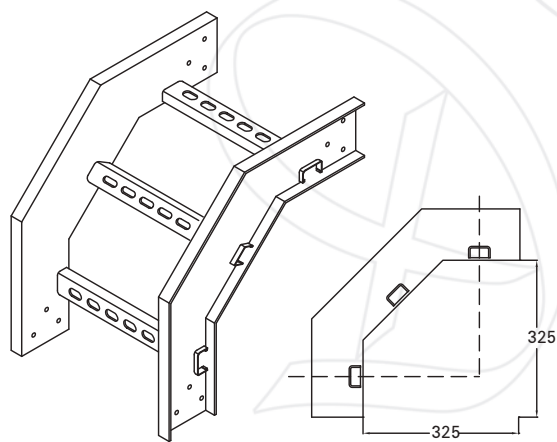
45° Horizontal Bend



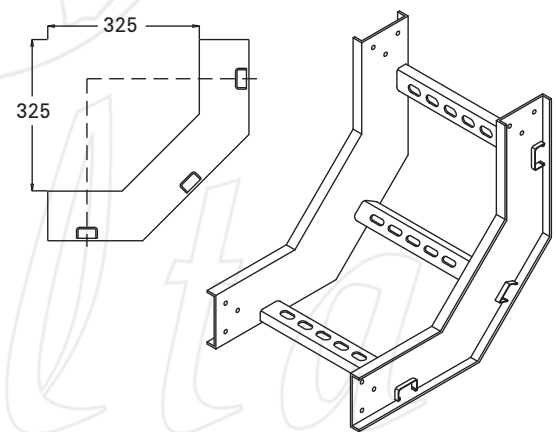
Horizontal Cross



90° Riser Outside

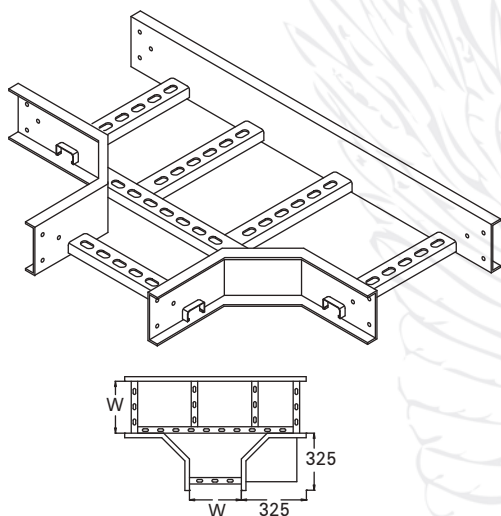


90° Riser Inside

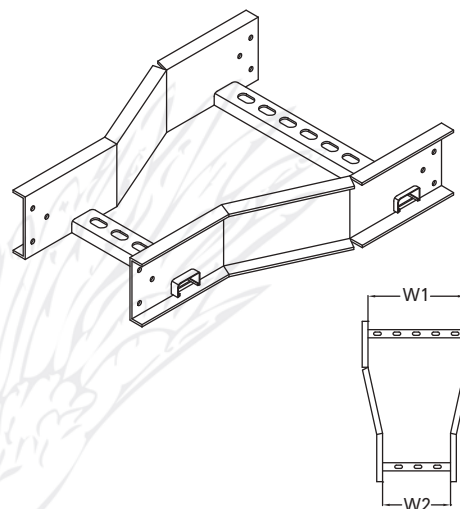


Delta Cable Ladder Fittings

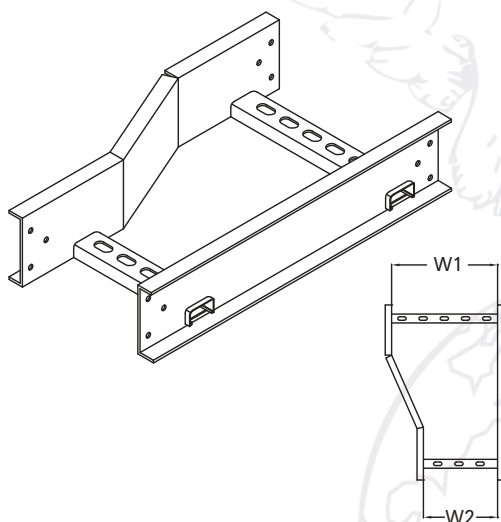
Horizontal Tee



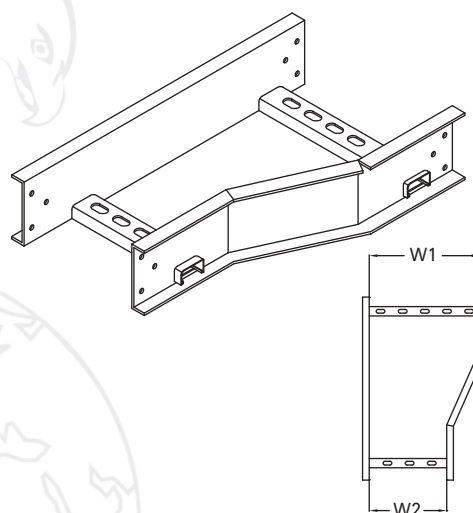
Straight Reducer



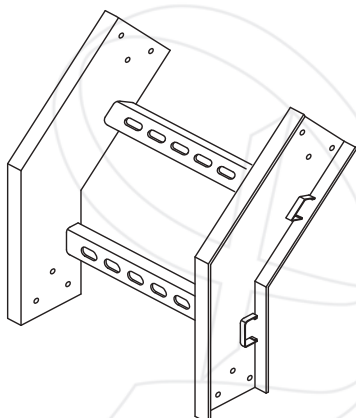
Left Hand Reducer



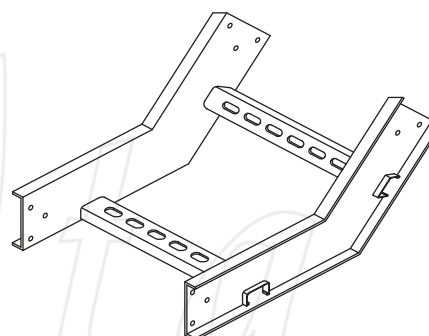
Right Hand Reducer



45° Riser Outside

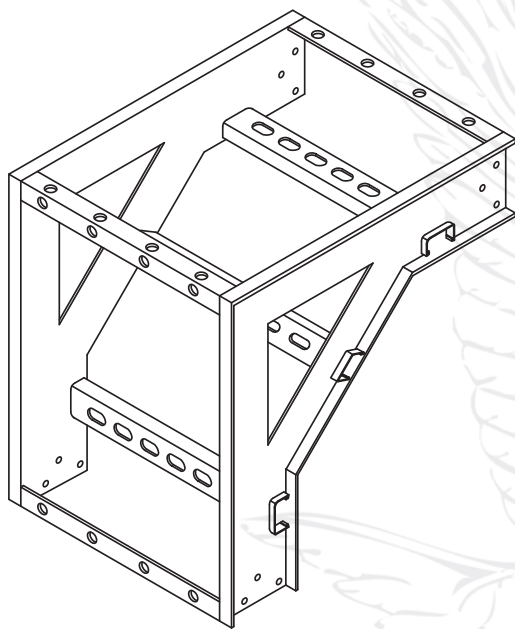


45° Riser Inside



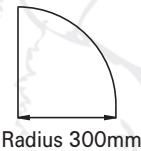
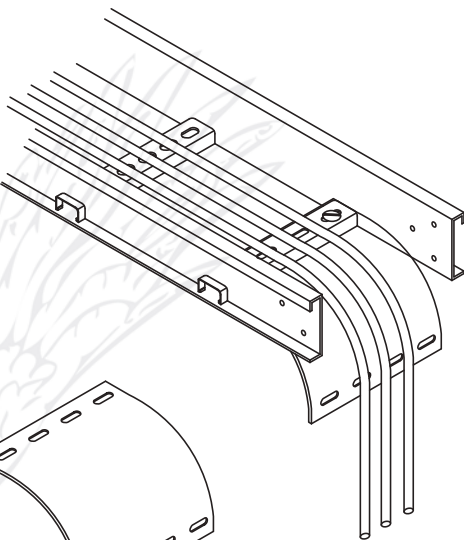
Delta Cable Ladder Fittings

90° Vertical Support Elbow



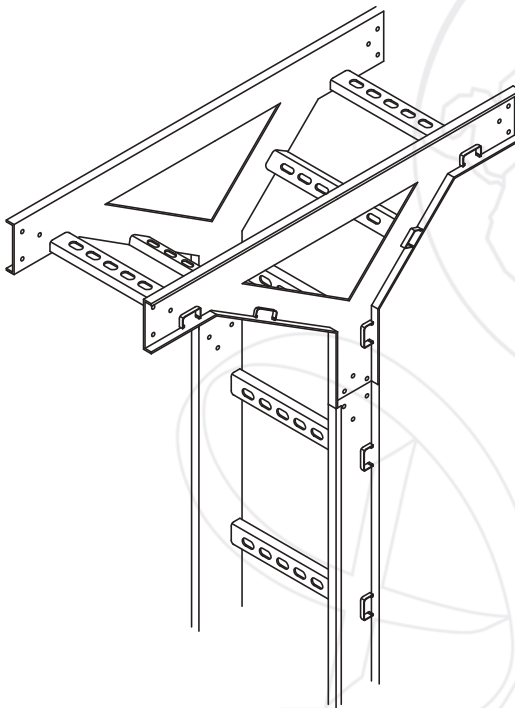
Give a rigid support to cable while dropping down through the wall

Dropout

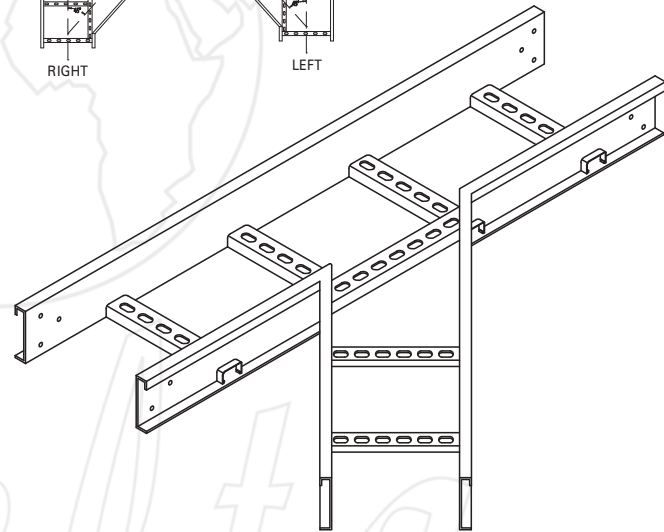
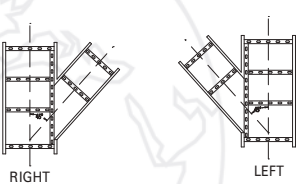


Material Thickness is 2 or 1.5 mm Depending on width

Vertical Tee



45° 'Y' Branch



Available Left & Right. Shown is a Left Y Branch

How to Order Delta Cable Ladder and Fittings

Base Metal		Finish		Type	
Mild Steel	1	Mild Steel	P	C Profile (Standard) R Profile P Profile	
Aluminium	2	HDGBF	G		
S/Steel 316L	3	HDGAF			
S/Steel 304	4	Stainless Steel			
Corten A steel	5	Aluminium			
		Normal Finish	M		
Type of Rung		Thickness		Elements ²	
U Type Rung (Standard)	U	1.50 mm	3	Straight Section	SS
C Type Rung	C	2.00 mm	4	90° Horiz. Elbow	9H
				90° Riser Inside	9RI
				90° Riser Outside	9RO
				Horizontal Tee	HT
				Horizontal Unequal Tee	HUT
				Vertical Tee	VT
				Horizontal Cross	HC
				Straight Reducer	RS
				Y Branch Right	RY
				Y Branch Left	LY
Width		Side Height		Rung Spacing	
Width Varies from	100	50 mm	2	250 mm	25
100 mm	--	75 mm	3	300 mm (STD)	30
to	--	100 mm	4	450mm	45
1000 mm	1000	125 mm	5		
(Please refer to page no. 44)		150 mm	6		
Length		Radius of curvature		Epoxy finish if required	
3000	3	300	3	E (EPAG)	
2440	2.44	450	4.5		
		900	9		

For Straight Section

Mention first 10 Columns Continuously and Epoxy finish if required.

Eg. of Straight Section for 2mm thickness

1GCU-4SS300-4-30-3-E (If Required)

For Fittings

Mention first 4 Columns and then elements, width, side height and Radius of curvature - Epoxy finish if required.

Eg. of fittings for 2mm thickness

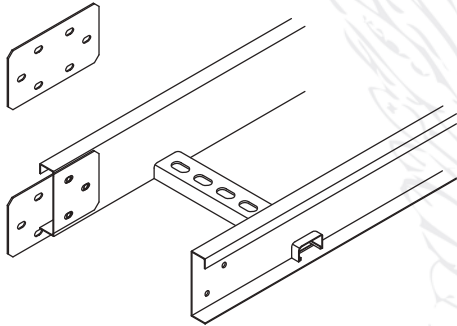
1GCU-9H300-4-3-4-E (If Required)

1. As it is from the mill, without any further coating.
2. For elements other than 90° use 4H - 45°, 6H - 60°
3. For left reducer - LR. Right reducer - RR

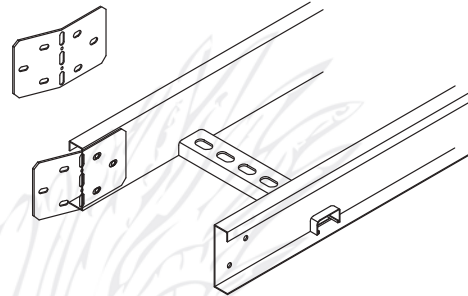
Cable Ladder Accessories and Cover Fixing Arrangements

Couplers are supplied in pairs. Order 12 sets of M8 x 16mm Roofing bolt, Nut and Washer separately.

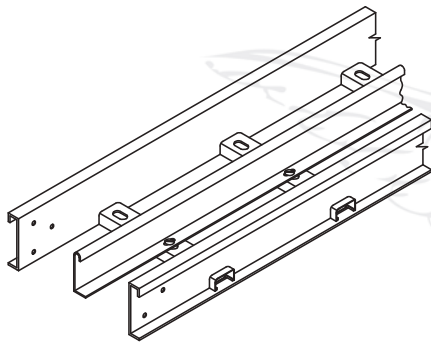
Standard Coupler



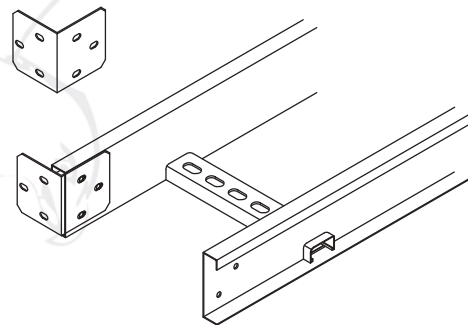
Adjustable Horizontal Coupler



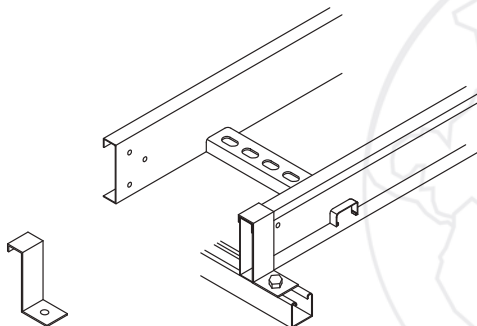
Divider



Angle Connector

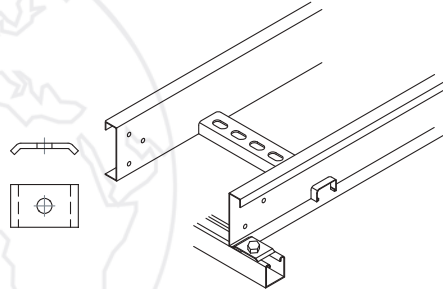


Raised Hold Down Clip



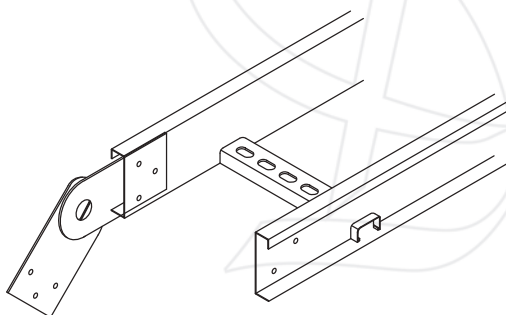
2mm thick steel strip, 14mm hole
Fastenings order separately

Hold Down Clamp



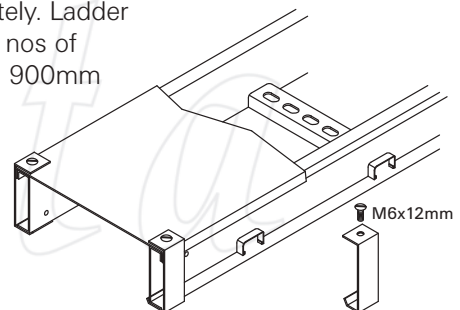
Normally 5mm thick steel strip, 14mm hole
Contact Sales Desk for Stainless Steel & Aluminium Material Thickness

Adjustable Vertical Connector



Cover Fixing Arrangements

Side Cover Clamp should be ordered separately. Ladder ≤ 300 needs 4 nos of Clamps. 450 to 900mm needs 6 nos of Clamps.



How to order Cable Ladder Accessories

Product	Base Metal (1,2,3,4&5) Ref. Page 49	Finish (P,G,M)	Item Description	Width (100 - 1000) Ref. Page 49	Side Height of Ladder (50-150)	Length	Abbreviation
Standard Coupler	✓	✓	U	-	✓	-	CS
Angle Coupler	✓	✓		-	✓	-	FC
Adj. Horizontal Coupler	✓	✓		-	✓	-	AHC
Adjustable Vertical Coupler	✓	✓		-	✓	-	AVC
Blind End	✓	✓		✓	✓	-	EC
Drop Out	✓	✓		✓	-	-	DO
Divider	✓	✓		-	✓	3	DI
Raised Hold down Clip	✓	✓		-	✓	-	HDL
Hold down Clamp	✓	✓		-	-	-	HDC

Example for Accessories
1GU-300-DO-E (If Required)

How to Order Straight Section and Fittings Cover

Base Metal		Finish		Design		Type	
Mild Steel	1	Mild Steel	P	Solid Cover	SF	Ladder Cover	U
Aluminium	2	HDGBF	G				
S/Steel 316L	3	HDGAF					
S/Steel 304	4	Stainless Steel					
Corten A Steel	5	Aluminium					
		Normal Finish	M				

Elements		Width		Length	
Refer Page No : 49		100 to 1000		2440	2.44
				3000	3

Radius of curvature		Epoxy finish if required	
300	3	E (EPAG)	
450	4.5		
600	6		

For Fittings

Mention first 4 Columns and then elements, width, side height and radius of curvature - Epoxy finish if required.

Eg. of Straight Section Cover for 300mm Cable Ladder

1GSFU-SS300-3-4-E (If Required)

Eg. of Fittings Cover for 300mm Cable Ladder

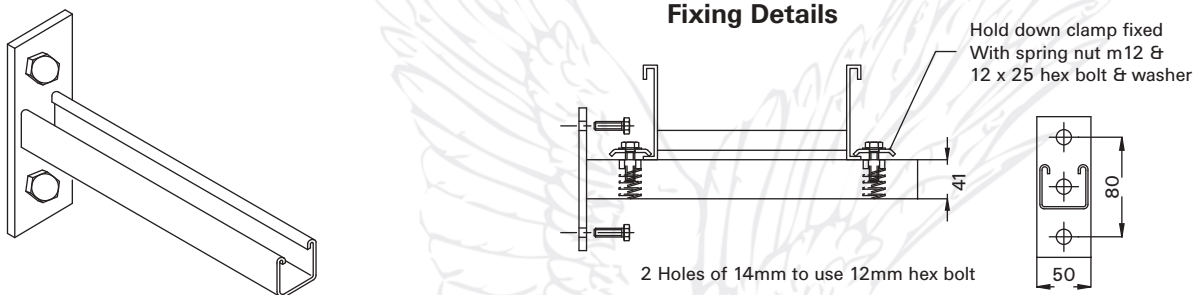
1GSFU-9H300-3-4-E (If Required)

Delta Cable Ladder Support System

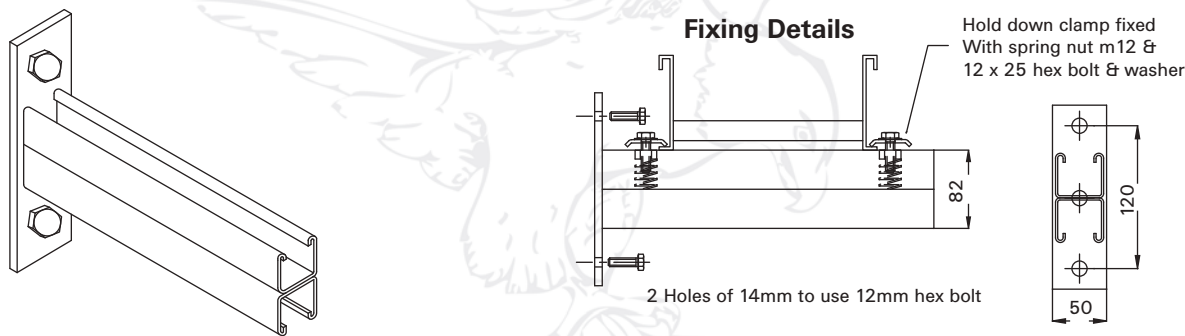
Cantilever arms

Note : While Ordering Cantilever arm for Ladder Add a Distance fo 150mm to the width of Ladder.
E.g : For 300mm Ladder DEC 450. More support options are available in
Page No: 24. Supplied without fastenings. Choose various type of fastenings from Page No: 61.

Type DEC (Single Cantilever arm)



Type DED (Double Cantilever arm)



How to order Support System for Cable Ladder

Base Metal		Finish	Type
Mild Steel	1	Mild Steel	DEC DED DB 100 Series DA 100 Series
Aluminium	2	HDGBF	
S/Steel 316L	3	HDGAF	
S/Steel 304	4	Stainless Steel	
Corten A steel	5	Aluminium	
		Normal Finish	
Length		Epoxy Finish (If Required)	
300	750	Epoxy (EPAG)	E
350	900		
450	1050		
600	1150		

E.g. of Support System for 300mm Ladder

1G-DEC450-4-E (If Required)

How to order Earth Continuity Connector

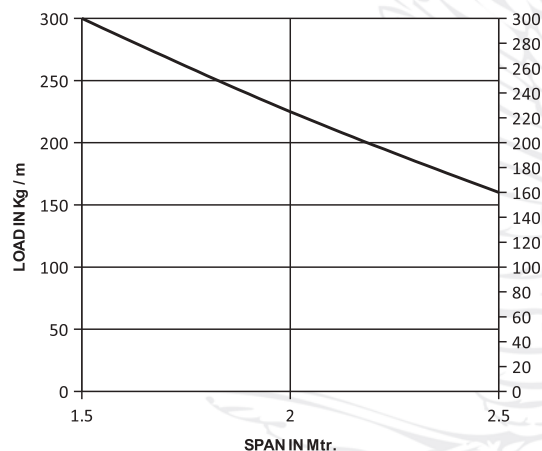
ECC-200 (200 mm long)

Load Graphs for Cable Ladder



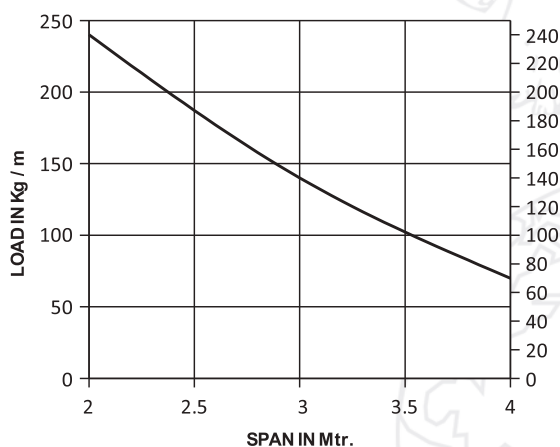
Results shown is for continuous, horizontally run, uniformly distributed load with a multiple span environment.

C Type Cable Ladder



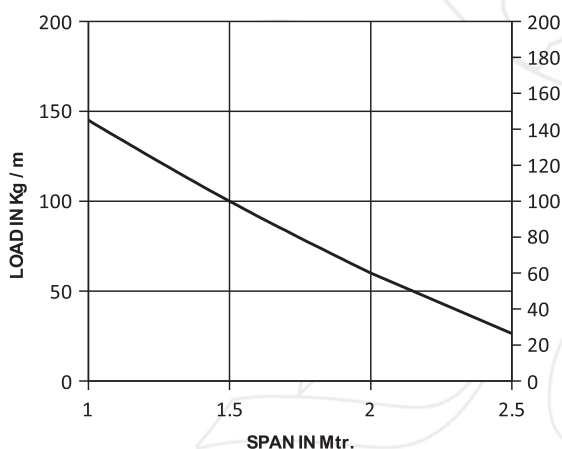
The loads above the graph line is unacceptable and below the line is **safe**.

R Type Cable Ladder



Desired coupler location is one quarter of the span length away from support point wherever possible.

P Type Cable Ladder



Should not extend the graph line to get another span v/s load position.

Load capacity shown excludes the weight of the cover.

Note : For guidelines only. Any claim for varied performance is not accepted.

Reaching beyond
Expectations...



Delta Strut Systems

with Brackets
As per BS 6946

Delta Strut Systems

Delta Strut Channels are cold rolled from strip steel in the range of 2.5mm and 1.5mm to BS 6946. The profile remains through out the length to allow the use of channel nut in any position. This offers a simple, rigid and economical frame work system with the help of Delta Strut Brackets and Channel nut which avoids the welding at site.

Product Specification

Materials and Finishes available

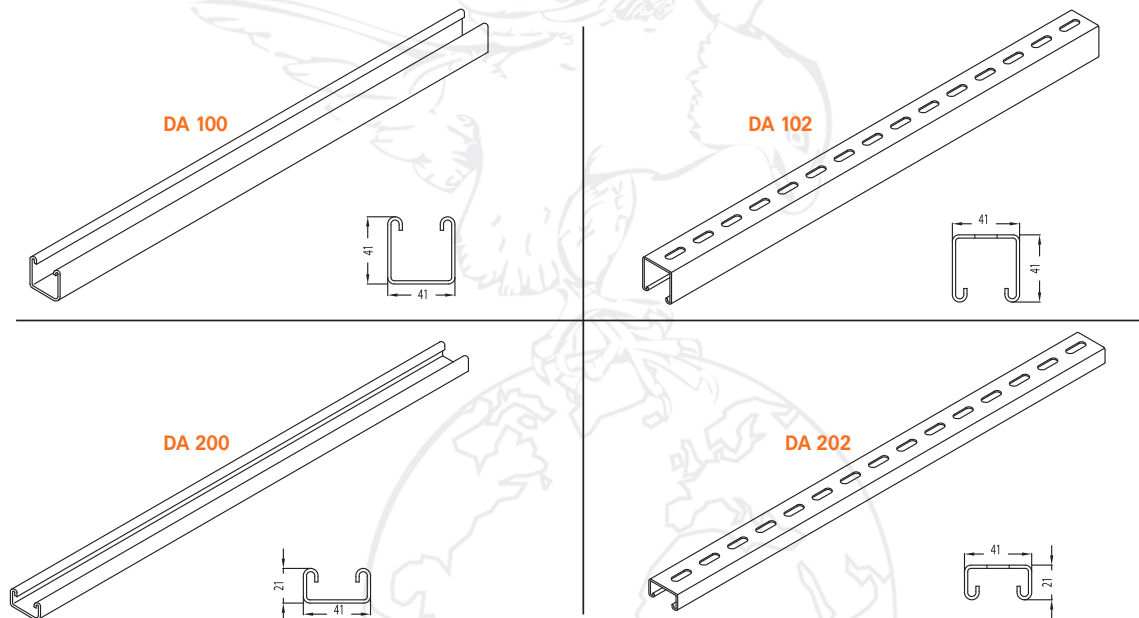
- Pregalvanized Steel or hot dip galvanized before fabrication (HDGBF) as per BS EN 10327
- Hot dip Galvanized after fabrication (HDGAF) as per BS EN 1461
- Epoxy polyester Powder coated to any RAL colour,
- Aluminium Strut Channel
- Stainless Steel Strut Channel to AISI 304 and AISI 316L

Sizes available

- 41 x 21 mm and 41 x 41 mm

Other Profiles also can be achieved through varies combination of the above profiles. Refer Page No : 57

Standard Length 3 Mtr, 6 Mtr Channel also available on request



Product Code

	DA 200	DA 201	DA 202	DB 200	DB 201	DB 202	DC 200	DC 202	DA 100	DA 101	DA 102	DB 100	DB 101	DB 102
Size	41x21	41x42	41x21	41x21	41x42	41x21	41x21	41x21	41X41	41X82	41X41	41X41	41X82	41X41
Thk.	2.50	2.50	2.50	2.00	2.00	2.00	1.50	1.50	2.50	2.50	2.50	2.00	2.00	2.00
Type	Plain	W.B.B*	Slotted	Plain	W.B.B	Slotted	Plain	Slotted	Plain	W.B.B	Slotted	Plain	W.B.B.	Slotted

How to order

Material &
Finish

Slot / Plan
(S) (P)

Product
Code

Length
in Meter

Epoxy Finish
If Required

Eg. of Channel

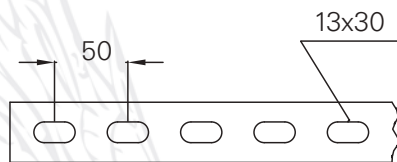
1GP-DB100-3-E (If Required)

- Commercial Tolerance on Thickness Apply.
- Dimensional tolerance is applicable on all product dimensions

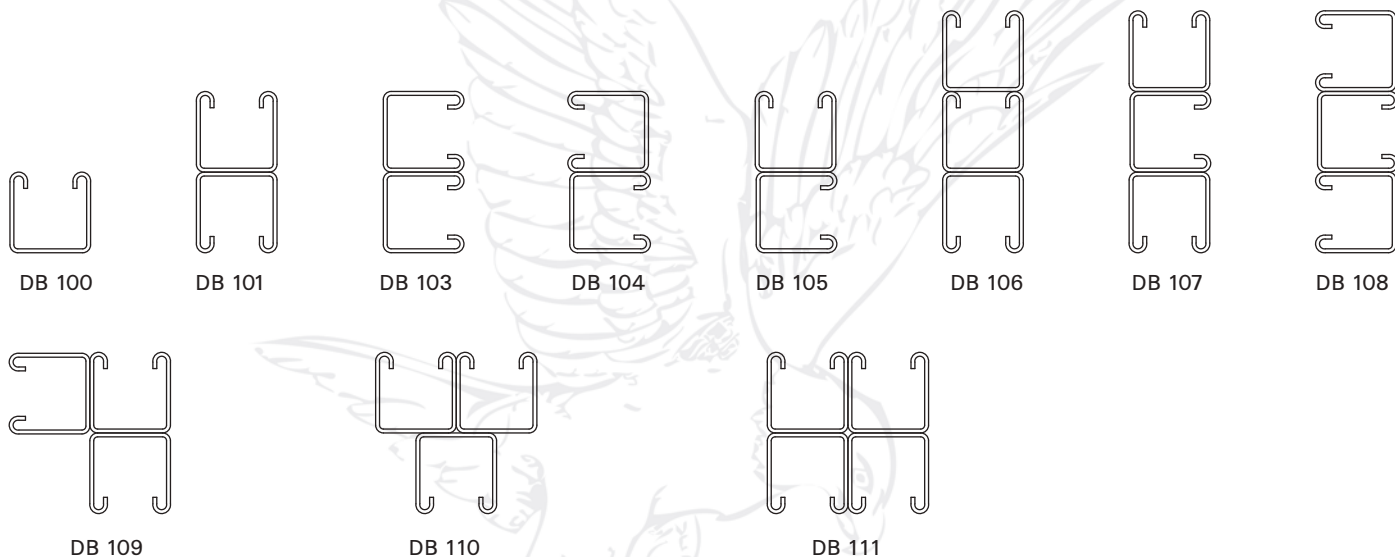
* W.B.B. means welded back to back.

Delta Strut Systems

Slotting Pattern



Combination Channels in DB 100 Series



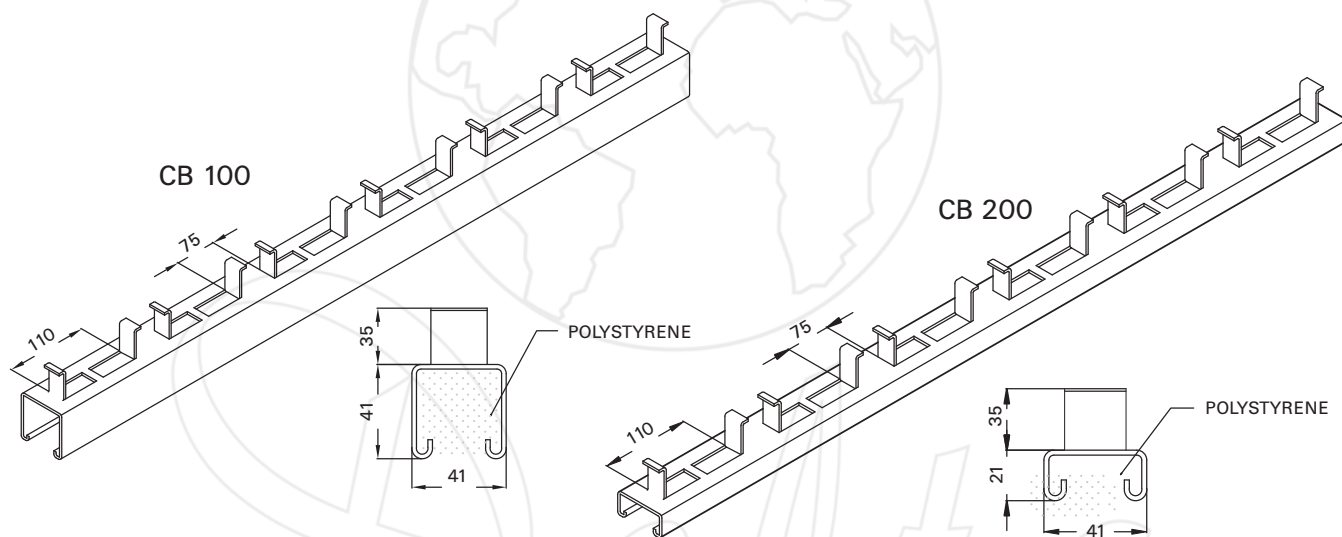
The above combination can be applied to DB 200 series also.

Concrete Inserts

Standard Finish - Hot dip Galvanized after fabrication (HDGAF) as per BS EN 1461.

Standard Length - 3 Meter.

Supplying filled with Polystyrene in fill.



Size	41x41	41x41	41x21	41x21
Thickness	2.5	2	2.5	2
Catalogue No :	1GP-CA100-3	1GP-CB100-3	1GP-CA200-3	1GP-CB200-3

Delta Strut Systems

Engineering Data

Channels

We have heavy gauged channels which are cold rolled from 2.5mm cold rolled steel under DA series

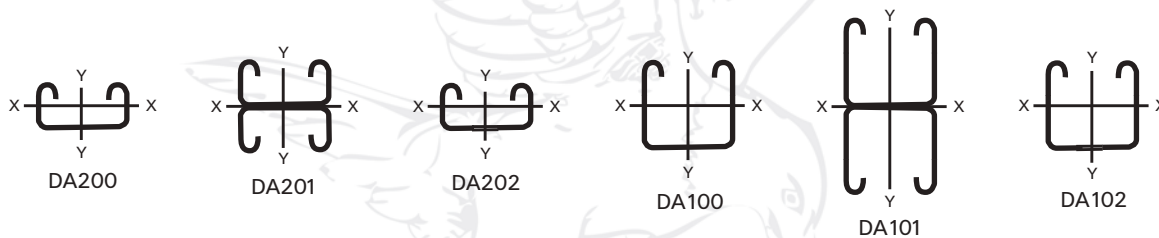
Light gauge channels are cold rolled from 1.5mm mild steel under DC series. However the profile will be the same.

Other than this we have medium gauged channels which are cold rolled from 2.0mm thick cold rolled steel under DB series

Back-to-back channels are formed by welding together two finished single channels under controlled conditions. All welds are suitably protected.

Standard lengths for single or multiple channels are 3m and 6m

Section Properties



Elements of Section	DA-100	DA-101	DA-102	DA-200	DA-201	DA-202
Axis x-x						
Center of Gravity 1 (mm)	23.20	41.30	21.32	12.29	20.60	12.27
Center of Gravity 2 (mm)	18.02	41.30	20.02	8.35	20.62	8.35
Moment of Inertia (cm ⁴)	7.20	36.28	6.11	1.19	0.64	0.98
Section Modulus (cm ³)	3.11	8.78	2.87	0.96	2.72	0.88
Radius of Gyration (cm)	1.45	2.33	1.41	0.72	1.11	0.70
Moment (Nm)	496	1403	460	156	436	142
Axis y-y						
Moment of Inertia	9.22	18.45	9.17	5.32	10.68	5.29
Section Modulus	4.46	8.94	4.45	2.59	5.19	2.56
Radius of Gyration	1.66	1.66	1.74	1.51	1.51	1.62

Weight of Channels in Kg/Mtr

Product Code	DB 200	DB 202	DA 200	DB 100	DB 102	DA 100
Weight in Kg/Mtr	1.5	1.4	1.9	2.2	2.0	2.7

Delta Strut Systems

Delta Strut Channel Load Capabilities

Delta Strut Channel Load Capabilities										Column Load	
Section	Distance Between Supports m	Laterally Unlock Condition				Fully Laterally Locked Condition				a Maximum AXIAL Column Load	
		Safe Maximum Loads		Maximum Deflection of Span/200		Safe Maximum Loads		Maximum Deflection of Span/200		Column Height m	kgf
		Uniformly Distributed Across Span kgf	Point Load at Mid-Span kgf	UD Load kgf	Point Load at Mid-Span kgf	Uniformly Distributed Across Span kgf	Point Load at Mid-Span kgf	UD Load kgf	Point Load at Mid-Span kgf		
DA100	0.60	747	374	747	374	747	374	747	374	0.60	5982
DA200		226	113	226	113	228	114	228	114		2879
DA101		^b 800	^b 800	^b 800	^b 800	^b 1017	973	1017	973		11041
DA201		603	302	603	302	608	304	608	304		7308
DA100	0.80	543	271	543	271	560	280	560	280	0.80	5640
DA200		164	82	134	82	170	85	134	84		1867
DA101		^b 800	708	^b 800	708	1016	729	1016	729		10621
DA201		437	218	437	218	455	227	455	227		6348
DA100	1.00	419	210	419	210	447	223	447	223	1.00	5102
DA200		126	63	85	53	136	68	85	53		1253
DA101		^b 800	548	^b 800	548	^b 1015	582	1015	582		10035
DA201		337	168	337	168	363	181	363	181		5010
DA100	1.20	336	168	336	168	371	186	371	186	1.20	4346
DA200		101	50	58	36	113	56	58	36		891
DA101		^b 800	440	^b 800	440	969	484	969	484		9193
DA201		270	135	270	135	301	151	277	151		3803
DA100	1.40	275	138	271	138	317	159	271	159	1.40	3549
DA200		83	41	42	26	96	48	42	26		664
DA101		723	361	723	361	829	414	829	414		8088
DA201		221	111	202	111	257	128	202	126		2914
DA100	1.60	230	115	206	115	277	139	206	129	1.60	2872
DA200		69	35	31	19	83	42	31	19		513
DA101		604	302	604	302	723	362	723	362		6889
DA201		185	93	153	93	224	112	153	95		2289
DA100	1.80	194	97	162	97	245	123	162	101	1.80	2345
DA200		59	29	23	15	73	37	23	15		408
DA101		510	255	510	255	641	321	641	321		5792
DA201		157	79	119	74	198	99	119	74		1838
DA100	2.00	165	83	130	81	220	110	130	81	2.00	1938
DA200		51	25	18	11	66	33	18	11		a332
DA101		434	217	434	217	575	288	575	288		a4874
DA201		135	67	94	59	177	88	94	59		1506
DA100	2.20	142	71	106	66	199	100	106	66	2.20	1625
DA200		44	22	14	9	59	29	14	9		a276
DA101		371	186	371	186	521	261	521	261		a4131
DA201		116	58	76	47	159	80	76	47		1255
DA100	2.40	123	61	87	55	182	91	87	55	2.40	1381
DA200		38	19	11	7	53	27	11	7		a233
DA101		319	160	319	160	476	238	460	238		3534
DA201		101	50	62	39	145	72	62	39		1062
DA100	2.60	107	53	73	46	167	83	73	46	2.60	1186
DA200		33	17	8	5	49	24	8	5		a199
DA101		276	138	276	138	436	219	389	219		3051
DA201		88	44	51	32	133	66	51	32		910
DA100	2.80	94	47	61	38	154	77	61	38	2.80	1030
DA200		29	15	6	4	45	22	6	4		a172
DA101		240	120	240	120	405	202	333	202		2658
DA201		77	39	42	36	122	61	42	26		a788
DA100	3.00	82	41	52	33	143	71	52	33	3.00	902
DA200		25	13	4	3	41	21	4	3		a150
DA101		209	105	209	105	376	188	286	179		2335
DA201		68	34	34	21	113	56	34	21		a689

a Maximum axial load data is for pure axial load only.

b Load restriction due to slip.

Note : Values given in the safe maximum load column is having the deflection less than L/200. L is the distance between span. Data shown is for pre galvanized channels only. For hot dip galvanized channel load carrying capacity is reduced to 80% due to hot dipping Process.

All load shown are using M12 spring nut and hexagonal bolts for brackets.

Delta Strut Systems

Channel Nuts (Spring Nut)

Channel Nuts are used in Delta Strut channel to achieve a weld less construction of frame works.

Available in sizes :- M6, M8, M10 and M12

Long Channel Nut is for 41x41 Channels and Short Channel Nut is for 41x21.

Available in different finishes like Electro plated Zinc (EG) & Stainless steel 316 grade (A4), 304 grade (A2) & Hot dip galvanized (HG)

The safe working loads for zinc plated channels nuts.

Slip M12 : 4.0 kN

M10 : 3.0 kN

Pullout M12 : 8.0 kN

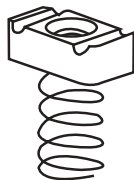
M10 : 6.0 kN

Torque Tightened to M12 : 7kgf.m

M10 : 5.5 kgf.m

Use M 12 Channel Nut for Maximum Capacity

Long Spring Nut



DEL 101

Short Spring Nut



DEL 103

How to order

Product
Code

Dia. of
Thread

Finish

Eg. of Spring Nut

DEL101 - 06 - EG

Conduit Clamp

Catalogue No : CCL - Dia. of Conduit.

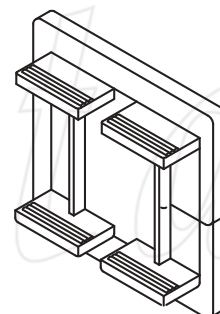
Channel Cover

Catalogue No : DA100-SF.

Channel End Cap

Delta offers both 41 x 41 and 41 x 21 End Caps.
Standard Color is Black.

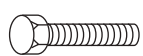
**Catalogue No. DA100-EC (41 x 41mm)
DB200-EC (41 x 21mm)**



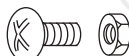
Delta Strut Systems

Standard Fixing and Fastenings

Fastenings



Hexagon Head Bolts



Roofing Bolts and Nuts



Spring Washer



Hexagon Nuts



Flat Washers



Threaded Rods

Hexagonal Head Bolts

Electro Plated Zinc

M6 x 16	pack 100
M6 x 20	pack 100
M6 x 25	pack 100
M8 x 16	pack 100
M8 x 20	pack 100
M8 x 25	pack 100
M8 x 30	pack 100
M8 x 35	pack 100
M8 x 40	pack 100
M10 x 20	pack 100
M10 x 25	pack 100
M10 x 30	pack 100
M10 x 35	pack 100
M10 x 40	pack 100
M10 x 50	pack 100
M12 x 20	pack 100
M12 x 25	pack 100
M12 x 30	pack 100
M12 x 35	pack 100
M12 x 40	pack 100
M12 x 50	pack 100

Catalogue No.

HB0616EG
HB0620EG
HB0625EG
HB0816EG
HB0820EG
HB0825EG
HB0830EG
HB0835EG
HB0840EG
HB1020EG
HB1025EG
HB1030EG
HB1035EG
HB1040EG
HB1050EG
HB1220EG
HB1225EG
HB1230EG
HB1235EG
HB1240EG
HB1250EG

Hot Dip Galvanized

M6 x 12	pack 100
M6 x 16	pack 100
M6 x 20	pack 100
M6 x 35	pack 100

HB0612HG
HB0616HG
HB0620HG
HB0635HG

Stainless Steel (A4)

M6 x 20	pack 100
M6 x 25	pack 100
M8 x 25	pack 100
M8 x 35	pack 100
M8 x 40	pack 100
M10 x 16	pack 100
M10 x 25	pack 100
M10 x 40	pack 100
M12 x 25	pack 100

HB0620A4
HB0625A4
HB0825A4
HB0835A4
HB0840A4
HB1016A4
HB1025A4
HB1040A4
HB1225A4

Stainless Steel (A2)

M6 x 20	pack 100
M6 x 25	pack 100
M8 x 25	pack 100
M8 x 35	pack 100
M8 x 40	pack 100
M10 x 16	pack 100
M10 x 25	pack 100
M10 x 40	pack 100
M12 x 25	pack 100

HB0620A2
HB0625A2
HB0825A2
HB0835A2
HB0840A2
HB1016A2
HB1025A2
HB1040A2
HB1225A2

Hexagonal Nuts

Electro Plated Zinc

M6	pack 500
M8	pack 500
M10	pack 200
M12	pack 200

HN06EG
HN08EG
HN10EG
HN12EG

Hot Dip Galvanized

M6	pack 500
----	----------

Catalogue No.

HN06HG

Stainless Steel (A4)

M6	pack 100
M8	pack 100
M10	pack 100
M12	pack 100

HN06A4
HN08A4
HN10A4
HN12A4

Stainless Steel (A2)

M6	pack 100
M8	pack 100
M10	pack 100
M12	pack 100

HN06A2
HN08A2
HN10A2
HN12A2

Roofing Bolts

Electroplated Zinc

M6 x 12	pack 200
M6 x 16	pack 200
M6 x 20	pack 200
M6 x 25	pack 200
M6 x 30	pack 100
M6 x 40	pack 100
M6 x 50	pack 100

RB0612EG
RB0616EG
RB0620EG
RB0625EG
RB0630EG
RB0640EG
RB0650EG

Hot Dip Galvanized

M6 x 12	pack 100
M6 x 16	pack 100

RB0612HG
RB0616HG

Stainless Steel (A4)

M6 x 12	pack 100
M6 x 16	pack 100
M6 x 20	pack 100

RB0612A4
RB0616A4
RB0620A4

Stainless Steel (A2)

M6 x 12	pack 100
M6 x 16	pack 100
M6 x 20	pack 100

RB0612A2
RB0616A2
RB0620A2

Flat Washers

Electro Plated Zinc

M6	pack 500
M8	pack 500
M10	pack 500
M12	pack 200

FW06EG
FW08EG
FW10EG
FW12EG

Stainless Steel (A2)

M6	pack 100
M8	pack 100
M10	pack 100
M12	pack 100

FW06A2
FW08A2
FW10A2
FW12A2

Spring Washers

Electro Plated Zinc

M6	pack 400
M8	pack 400
M10	pack 400
M12	pack 400

SW06EG
SW08EG
SW10EG
SW12EG

Threaded Rods in 2 meters as standard

Electro Plated Zinc

M6 x 2m	TR06EG
M8 x 2m	TR08EG
M10 x 2m	TR10EG
M12 x 2m	TR12EG

TR06EG
TR08EG
TR10EG
TR12EG

Stainless Steel (A4)

M6 x 2m	TR06A4
M8 x 2m	TR08A4
M10 x 2m	TR10A4
M12 x 2m	TR12A4

TR06A4
TR08A4
TR10A4
TR12A4

Stainless Steel (A2)

M6 x 2m	TR06A2
M8 x 2m	TR08A2
M10 x 2m	TR10A2
M12 x 2m	TR12A2

TR06A2
TR08A2
TR10A2
TR12A2

• For threaded rods of 3 meter length add /3 after the code.
e.g. M6x3 Meters - TR 06EG /3

Anchor Bolts

Various type of Anchor Bolts are available in Electro plated zinc (EG) and Stainless Steel finish (**A4 & A2**)

Ceiling Anchor (Drop in Anchor)

Suitable for Ceiling Application. The Expansion of anchor is done through the hammering of the anchor in the drilled hole.



Shown is the assembly ceiling anchor

Size	Anchor Length	Catalogue No.
M6	25	CLAB - 06 - 25 - EG
M8	30	CLAB - 08 - 30 - EG
M10	40	CLAB - 10 - 40 - EG
M12	50	CLAB - 12 - 50 - EG
M16	65	CLAB - 16 - 65 - EG
M20	80	CLAB - 20 - 80 - EG

Add A4 at the end of the Catalogue No. for Stainless Steel finish.

Sleeve Anchor (Rawl Bolt)

Sleeve Anchor with internal thread is suitable for using with hexagonal bolt. When bolt is tightened the cone is pulled into expansion Sleeve and expand it against the hole wall.



Shown is the assembly Sleeve Anchor fixed with Hexagonal bolt

Size	Anchor Length	Catalogue No.
M6	50	SLAB - 06 - 50 - EG
M8	60	SLAB - 08 - 60 - EG
M10	70	SLAB - 10 - 70 - EG
M12	90	SLAB - 12 - 90 - EG

Add A4 at the end of the Catalogue No. for Stainless Steel finish.

Stud Anchor (Through Bolt)

Stud Anchor with external thread expands when the hexagonal nut is tightened.



Shown is the assembly Stud Anchor fixed with Hexagonal nut

Size	Anchor Length	Catalogue No.
M8	80	STAB - 08 - 80 - EG
M8	100	STAB - 08 - 100 - EG
M10	80	STAB - 10 - 80 - EG
M10	100	STAB - 10 - 100 - EG
M10	120	STAB - 10 - 120 - EG
M12	80	STAB - 12 - 80 - EG
M12	100	STAB - 12 - 100 - EG
M12	150	STAB - 12 - 150 - EG

Add A4 at the end of the Catalogue No. for Stainless Steel finish.

Delta Strut Brackets

Delta Strut Brackets are made to BS 6946 : 1988

Channel Nuts and Fastenings are to be ordered separately.

Unless otherwise stated, all the M.S brackets are made from 6mm thick.

Contact Sales Desk for Stainless Steel Material Thickness

Hole size is 14 mm to allow 12 mm Hexagonal bolt.

Various other brackets can be manufactured to customer request. Refer Page No: 71

Material Properties

Minimum Yield Stress : 170 N/mm²

Maximum Loads

For Maximum capacity use Channel Nuts of M12 size. In most cases the mode of failure will be slippage of the bracket along the channel. However there are few channel / bracket combinations where the maximum load is dependent upon the strength of the bracket itself.

Commercial tolerance on dimensions apply.

Materials and Finishes Available

- Hot dip Galvanized after fabrication (HDGAF) as per BS EN 1461
- Stainless Steel finish to AISI 304 and AISI 316L
- Epoxy Polyester Coated to any RAL Color.

How to order

**Material &
Finish**

**Product
Code**

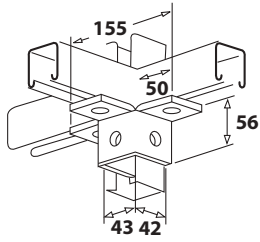
Eg. of Bracket

1G-DEL-207

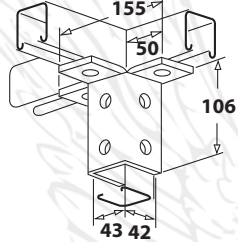
Delta Strut Brackets

Wing Shape Fittings (For 41 mm Width Series Channel)

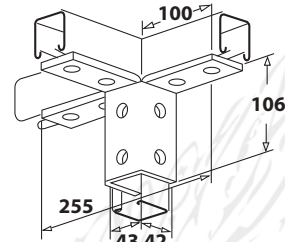
DEL 113



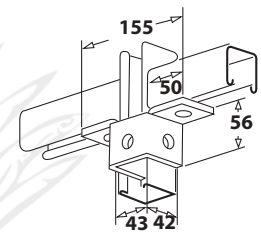
DEL 114



DEL 115

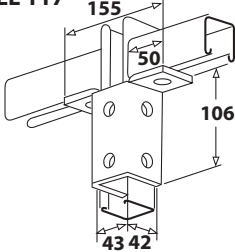


DEL 116

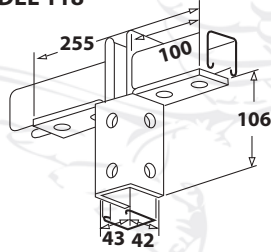


Wing Shape Fittings (For 41 mm Width Series Channel)

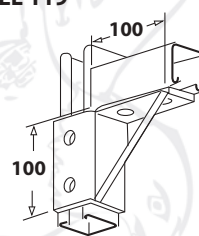
DEL 117



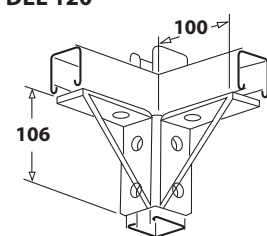
DEL 118



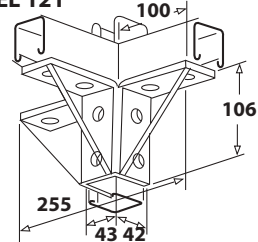
DEL 119



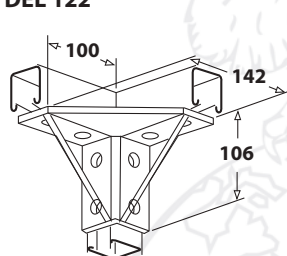
DEL 120



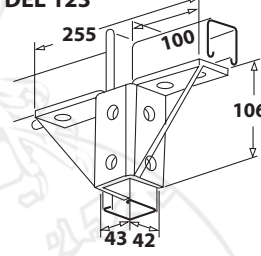
DEL 121



DEL 122

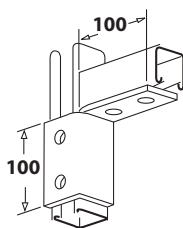


DEL 123

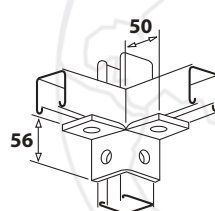


CONTACT SALES DESK FOR
SPECIAL DESIGN

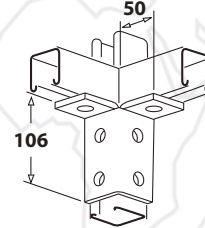
DEL 124



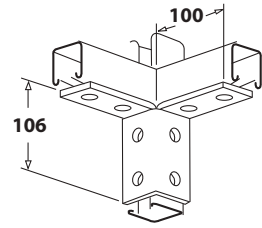
DEL 125



DEL 126

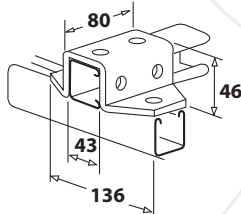


DEL 127

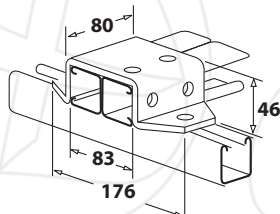


"U" And Wing Shape Fittings (For 41 mm Width Series Channel)

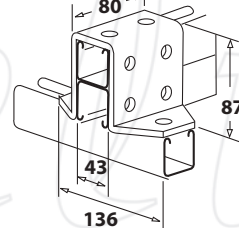
DEL 128



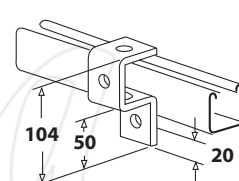
DEL 129



DEL 130



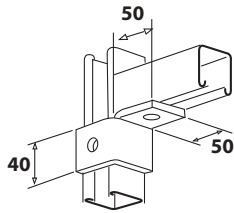
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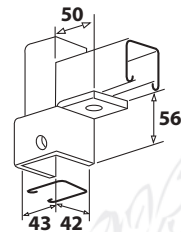
Delta Strut Brackets

"U" And Wing Shape Fittings (For 41 mm Width Series Channel)

DEL 132



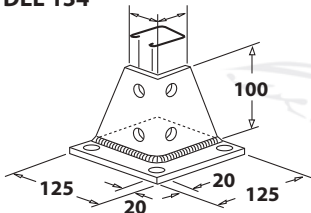
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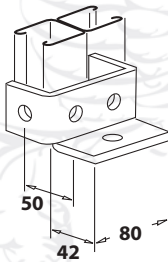
CONTACT SALES DESK FOR
SPECIAL DESIGN

Post Bases (For 41 mm Width Series Channel)

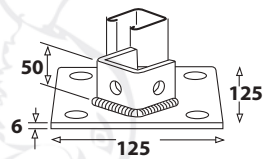
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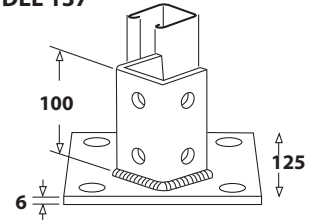
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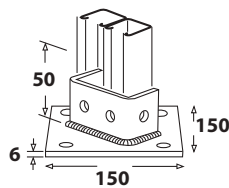
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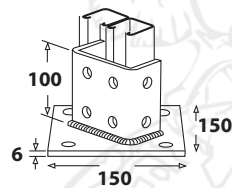
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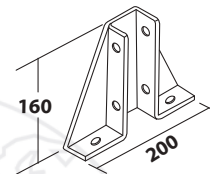
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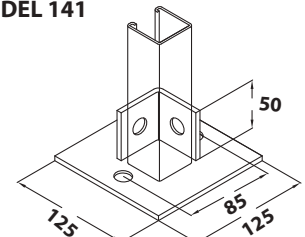
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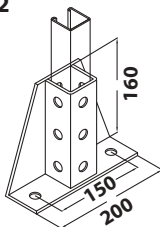
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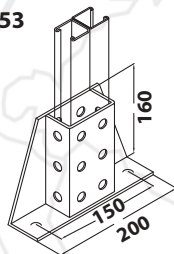
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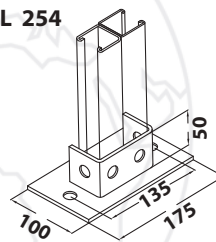
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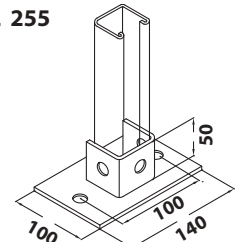
DEL 253



DEL 254

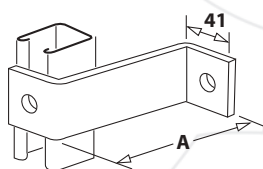


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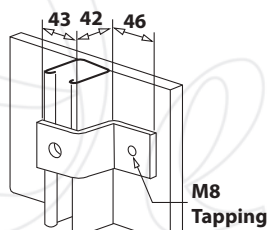


"Z" Shape Fittings (For 41 mm Width Series Channel)

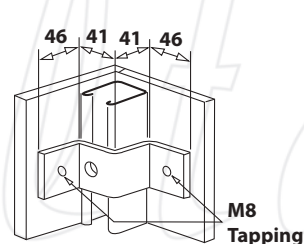
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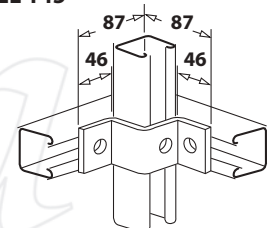
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DEL 144

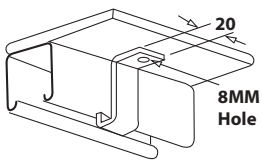


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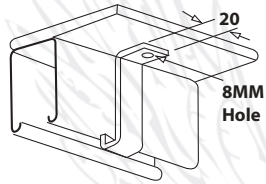


Delta Strut Brackets

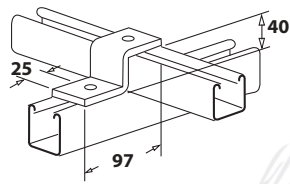
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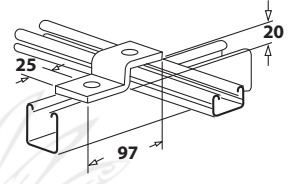
DEL 147



DEL 148

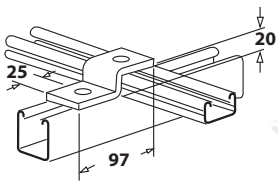


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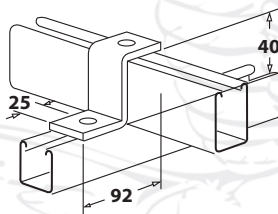


"Z" & "U" And Wing Shape Fittings (For 41 mm Width Series Channel)

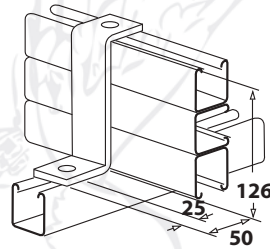
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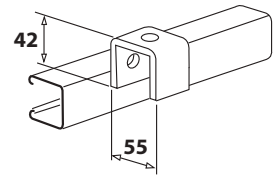
DEL 151



DEL 152

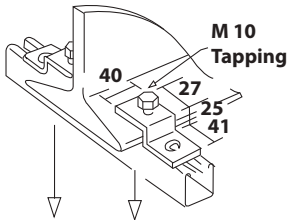


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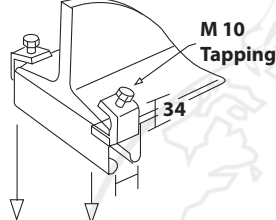


Beam Clamps

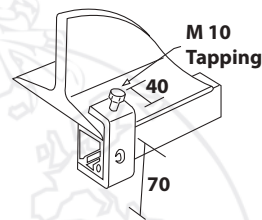
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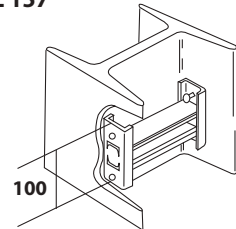
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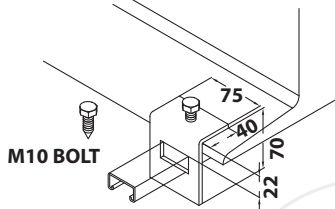
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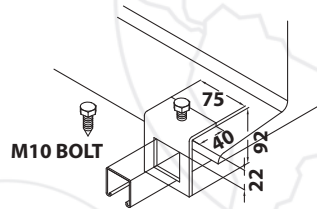
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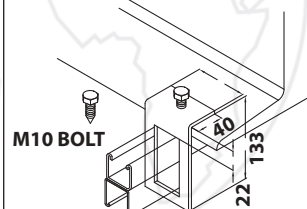
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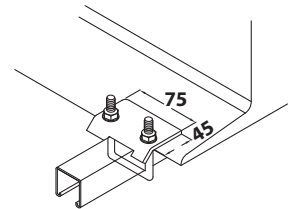
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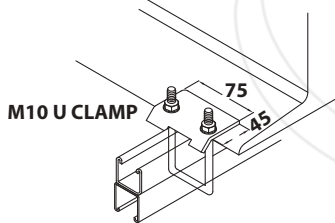
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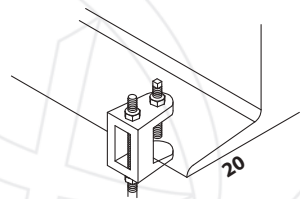
DEL 249



DEL 250



DEL 251



For beam clamps order Fasteners (Cone pointed Hexagonal Bolts, U Clamp) Separately.

Delta Strut Brackets

"U" Shape Fittings (For 41 mm Width Series Channel)

DEL 158 	DEL 159 	DEL 160 	DEL 161 	DEL 162
DEL 163 	DEL 164 	DEL 165 	DEL 166 	DEL 256

"U" Shape Fittings (For 41 mm Width Series Channel)

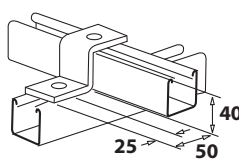
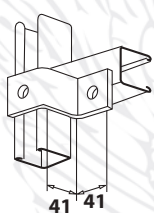
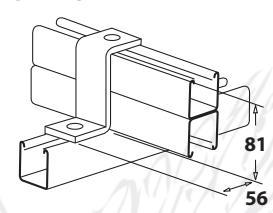
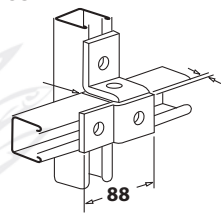
DEL 167 	DEL 168 	DEL 169 	DEL 170 	DEL 171
DEL 172 	DEL 173 	DEL 174 	DEL 175 	DEL 176

Angular Fittings (For 41 mm Width Series Channel)

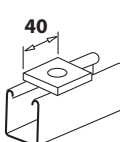
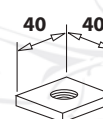
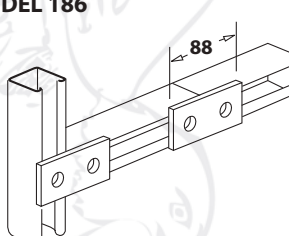
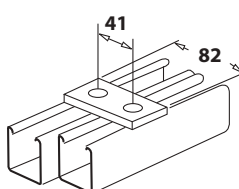
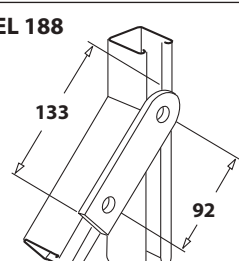
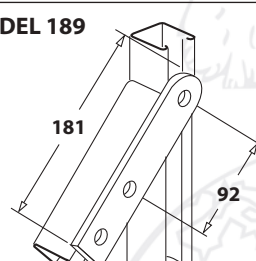
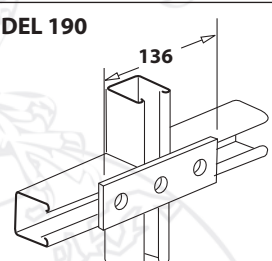
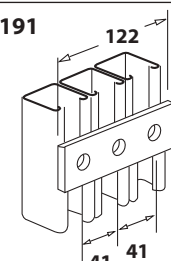
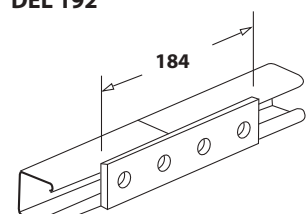
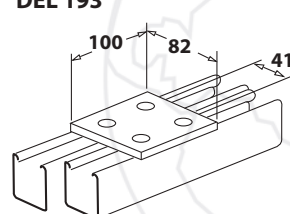
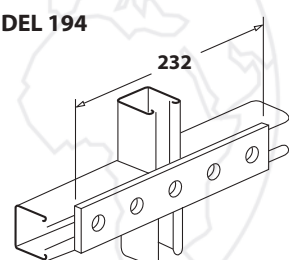
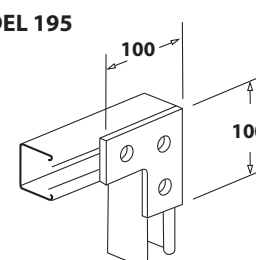
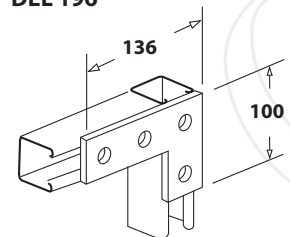
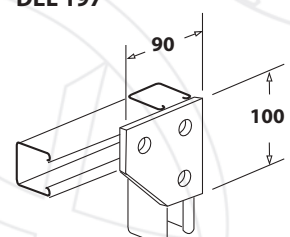
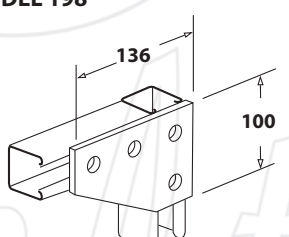
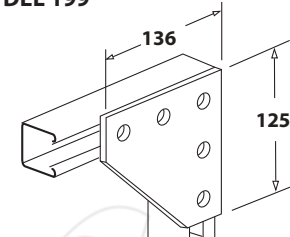
DEL 177 	DEL 178 	DEL 179 	CONTACT SALES DESK FOR SPECIAL DESIGN
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Delta Strut Brackets

"Z" Shape Fittings (For 41 mm Width Series Channel)

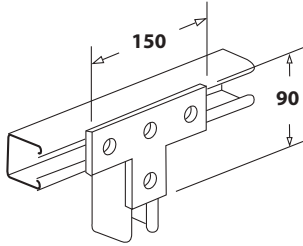
DEL 180 	DEL 181 	DEL 182 	DEL 183 
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Flat Shape Fittings

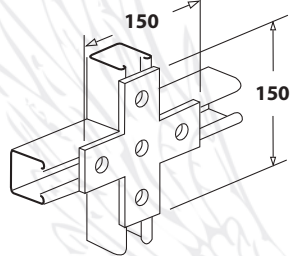
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DEL 188 	DEL 189 	DEL 190 	DEL 191 
DEL 192 	DEL 193 	DEL 194 	DEL 195 
DEL 196 	DEL 197 	DEL 198 	DEL 199 

Delta Strut Brackets

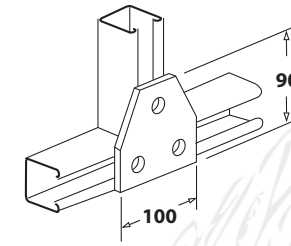
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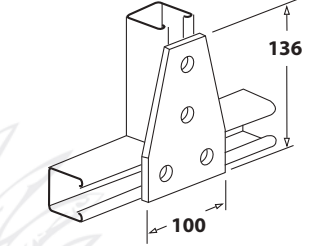
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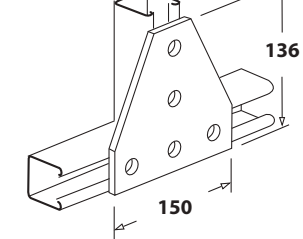
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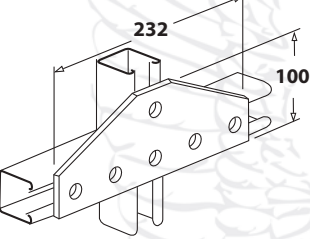
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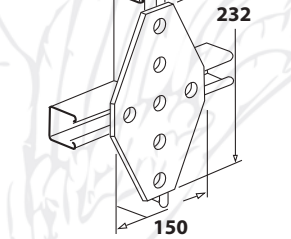
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DEL 205



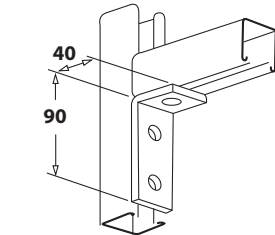
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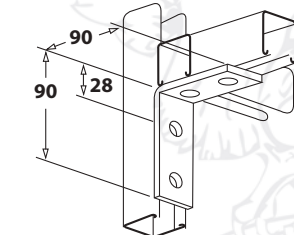
CONTACT SALES DESK FOR
SPECIAL DESIGN

Ninety Degree Angle Fittings (For 41 mm Width Series Channel)

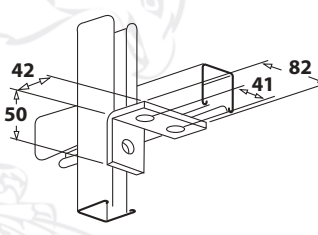
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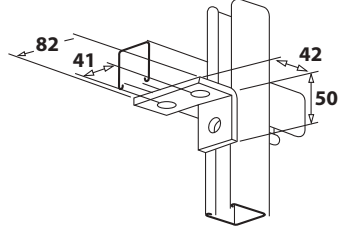
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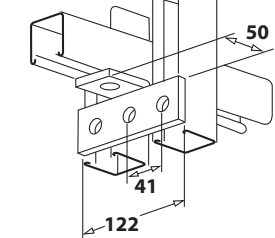
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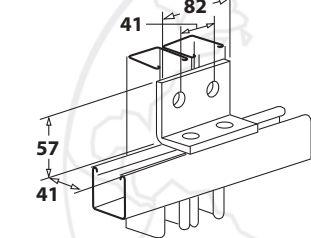
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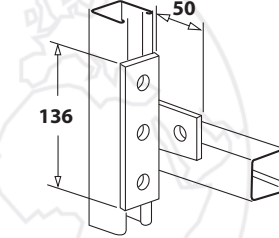
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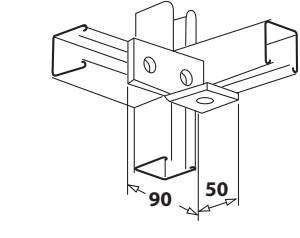
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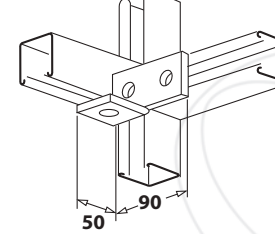
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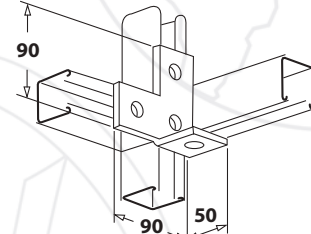
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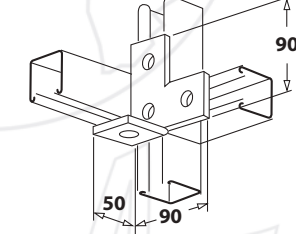
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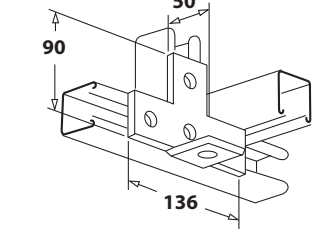
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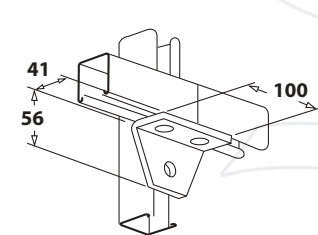
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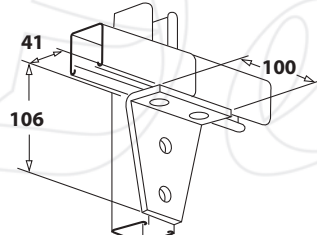
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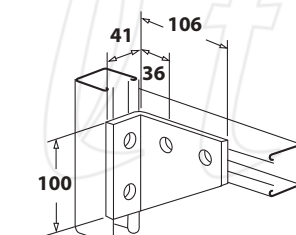
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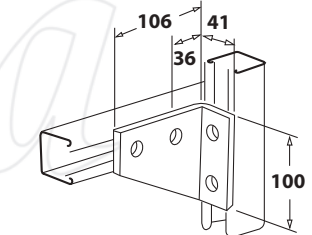
DEL 220



DEL 221



DEL 222



Delta Strut Brackets

Ninety Degree Angle Fittings (For 41 mm Width Series Channel)

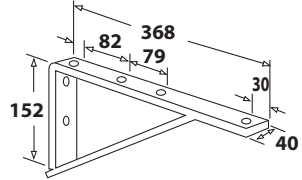
DEL 223 	DEL 224 	DEL 225 	DEL 226
DEL 227 	DEL 228 	DEL 229 	DEL 230
DEL 231 	DEL 232 	DEL 233 	DEL 234
DEL 235 	DEL 236 	DEL 237 	DEL 238
DEL 239 	DEL 240 	DEL 241 	DEL 242
DEL 243 	DEL 244 	DEL 245 	CONTACT SALES DESK FOR SPECIAL DESIGN



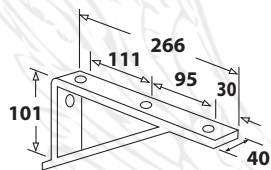
Delta Strut Brackets

Flat Brackets

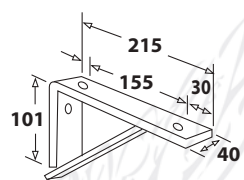
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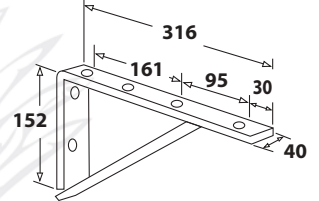
DB 205



DB 206



DB 207

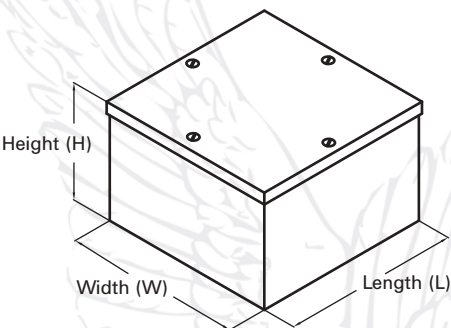



Delta

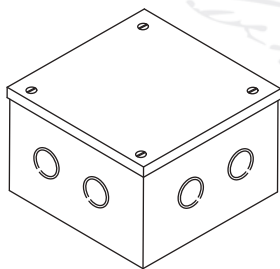
Delta Pull Boxes

Screw Cover Pull Box (Adaptable Boxes)

Available in Pre-Galvanized, Hot dip Galvanized and Stainless Steel Finish.
Standard knockout dimensions are 20, 25mm. For Weather proof boxes rubber gaskets are available.

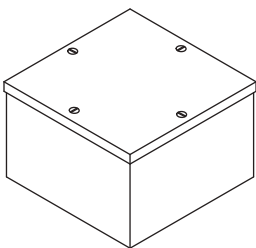


SCP - A



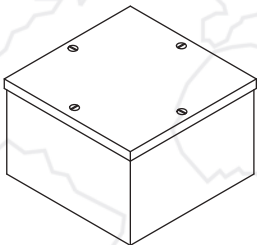
Size	Thickness	No. Of Screws for Top Lid
100x100x50	1.0	2
100x100x100	1.0	2
150x100x50	1.0	4
150x150x150	1.0	4

SCP - B



Screw cover, without knockouts.

SCP - C



Screw cover, Weather - Proof, No Knockouts.
Entirely seam welded with gasket

Minimum Thickness is 1.5mm

We make various enclosures and socket box according to customer requirement.

Other than this We do light engineering products such as custom made brackets, Clamps and light structural frames.

Manufacturer reserves the right to change the design without any notification.

Conversion Factors

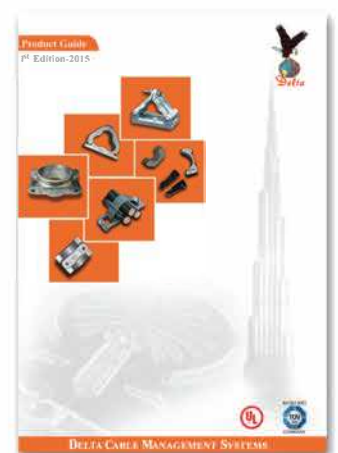
To Convert From	To	Multiply By	To Convert From	To	Multiply By
Length					
Inch (in)	Millimeter (mm)	25.400 000	Millimeter (mm)	Inch (in)	0.039 370
Foot (ft)	Meter (m)	0.304 800	Meter (m)	Foot (ft)	3.280 840
Yard (yd)	Meter (m)	0.9 14 400	Meter (m)	Yard (yd)	1.093 613
Mile (U.S. Statute) (mi)	Kilometer (km)	1.609 347	kilometer (km)	Mile (U.S. Statute) (mi)	0.621 370
Area					
Square Inch (in ²)	Square Millimeter (mm ²)	645.16	Square Millimeter (mm ²)	Square Inch (in ²)	0.001550
Square Foot (ft ²)	Square Meter (m ²)	0.092 903	Square Meter (m ²)	Square foot (ft ²)	10.763 915
Square Yard (yd ²)	Square Meter (m ²)	0.836 127	Square Meter (m ²)	Square Yard (yd ²)	1.195 991
Square Mile (mi ²) (U.S. Statute)	Square Kilometer (km ²)	2.589 998	Square Kilometer (km ²)	Square Mile (mi ²) (U. S. Statute)	0.386 101
Acre	Square Meter (m ²)	4046.873	Square Meter (m ²)	Acre	0.000 247
Acre	Hectare	0.404 687	Hectare	Acre	2.471 046
Volume					
Cubic Inch (in ³)	Cubic Millimeter (mm ³)	16387.06	Cubic Millimeter (mm ³)	Cubic Inch (in ³)	0.000061
Cubic Foot (ft ³)	Cubic Meter (m ³)	0.028 317	Cubic Meter (m ³)	Cubic Foot (ft ³)	35.3 14 662
Cubic Yard (yd ³)	Cubic Meter (m ³)	0.764555	Cubic Meter (m ³)	Cubic Meter (m ³)	1.307 950
Gallon (U.S. Liquid) (gal)	Litre (l)	3.785 412	Litre (l)	Gallon (U.S. Liquid) (gal)	0.264 172
Quart (U.S. Liquid) (qt)	Litre (l)	0.946 353	Litre (l)	Quart (U.S. Liquid) (qt)	1.056 668
Mass					
Ounce (Avoirdupois) (oz)	Gram (g)	28.349 520	Gram (g)	Ounce (Avoirdupois) (oz)	0.035 274
Pound (Avoirdupois) (lb)	Kilogram (kg)	0.453 592	Kilogram (kg)	Pound (Avoirdupois) (lb)	2.204624
Short Ton	Kilogram (kg)	907.185	Kilogram (kg)	Short Ton	0.00110
Force					
Ounce -Force	Newton (N)	0.278 014	Newton (N)	Ounce -Force	3.596 941
Pound-Force (lbf)	Newton (N)	4.448 222	Newton (N)	Pound-Force (lbf)	0.224 809
Bending Moment					
Pound-Force-Inch (lbf-in)	Newton-Meter (N-m)	0.112985	Newton-Meter (N-m)	Pound-Force-Inch (lbf-in)	8.850 735
Pound-Force-Foot (lbf-ft)	Newton-Meter (N-m)	1.355 818	Newton-Meter (N-m)	Pound-Force-Foot (lbf-ft)	0.737 562
Pressure, Stress					
Pound-Force per Square Inch (lbf/in ²)	Kilo pascal (kPa)	6.894 757	Kilo pascal (kPa)	Pound-Force per Square Inch (lbf/in ²)	0.145 038
Foot of Water (39.2F)	Kilo pascal (kPa)	2.988 980	Kilo pascal (kPa)	Foot of Water (39.2F)	0.334 562
Inch of Mercury (32 F)	Kilo pascal (kPa)	3.386 380	Kilo pascal (kPa)	Inch of Mercury (32 F)	0.295 301
Energy, Work, Heat					
Foot-Pound-Force (ft-lbf)	Joule (J)	1.355 818	Joule (J)	Foot-Pound-Force (ft-lbf)	0.737 562
British Thermal Unit (Btu)	Joule (J)	1055.056	Joule (J)	British Thermal Unit (Btu)	0.000948
Calorie (cal)	Joule (J)	4.186 800	Joule (J)	Calorie (cal)	0.238 846
Kilowatt Hour (kW-h)	Joule (J)	3600000	Joule (J)	kilowatt Hour (kW-h)	2.78-7
Power					
Foot-Pound-Force /Second (ft-lbf/s)	watt(W)	1.355 818	Watt(W)	Foot-Pound-Force /Second (ft-lbf/s)	0.737 562
British Thermal unit /Hour (Btu/h)	Watt (W)	0.293 071	Watt (W)	British Thermal unit /Hour (Btu/h)	3.4 12 142
Horsepower (550 Ft. Lbf/s) (hp)	Kilowatt (kW)	0.745700	Kilowatt (kW)	Horsepower (550 Ft. Lbf/s) (hp)	1.341 022
Angle					
degree	Radian (rad)	0.0 17 453	radian (rad)	Degree	57.295 788
Temperature					
Degree Fahrenheit (F)	Degree Celsius (C)	(F-32)/1.8	Degree Celsius (C)	Degree Fahrenheit (F)	1.8xC0+32



Notes







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