Product Guide 7th Edition



TransDelta Int'l Industries L.L.C.

(A Member of TGI Goup, Europe)



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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 22 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 U.A.E markets and it did yield successful results.

We are proud to say that we are the first manufacturer of cable support system in U.A.E commercially and our products are installed in various prestigious projects in and out of U.A.E for the past 22 years.

Being an ISO 9001 company 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 productisdeliveredtocustomer. 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







1. BASIC CONCEPT

2. DELTA CABLE TRAYS

3. DELTA CABLE TRUNKING

4. DELTA CABLE LADDERS



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5. DELTA STRUT SYSTEMS

6. DELTA PULL BOXES



In-house Galvanizing Plant



In-house Powder Coating Plant



Cable Management



Construction Environment in today's modern world demands the use of complex technologies for effective use of resources. Hence Cable Man agement 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 appear ances 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 Cablemana gement system is a rangeof products from Transdelta Int'l Industries having ISO 9001 : 2015, UL and SGS Certification. We have fully equipped factory with Design, produc tion and Quality control Departments. The load capabilities, Support span requirements, Deflection criteria, site installation problems have been carefully considered by our design department while de signing the entire product range. All our products are manufactured using the latest CNC technology Robot assisted welding which help us to maintain auniquequalityproductthroughoutmanufacturing. 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 develope a system which has taken into account all the requirements of construction sites in the Middle East.

Our Product Range

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

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 Molybdinum 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 weightiness 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. semimatt 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 crosslinked 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

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

Sizes other than this also available to customer request

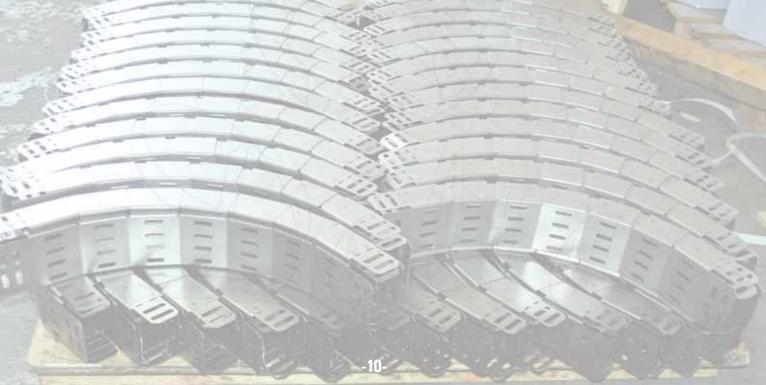
Length

3 Meter as standard. Other lengths are also available.

Slotting Pattern

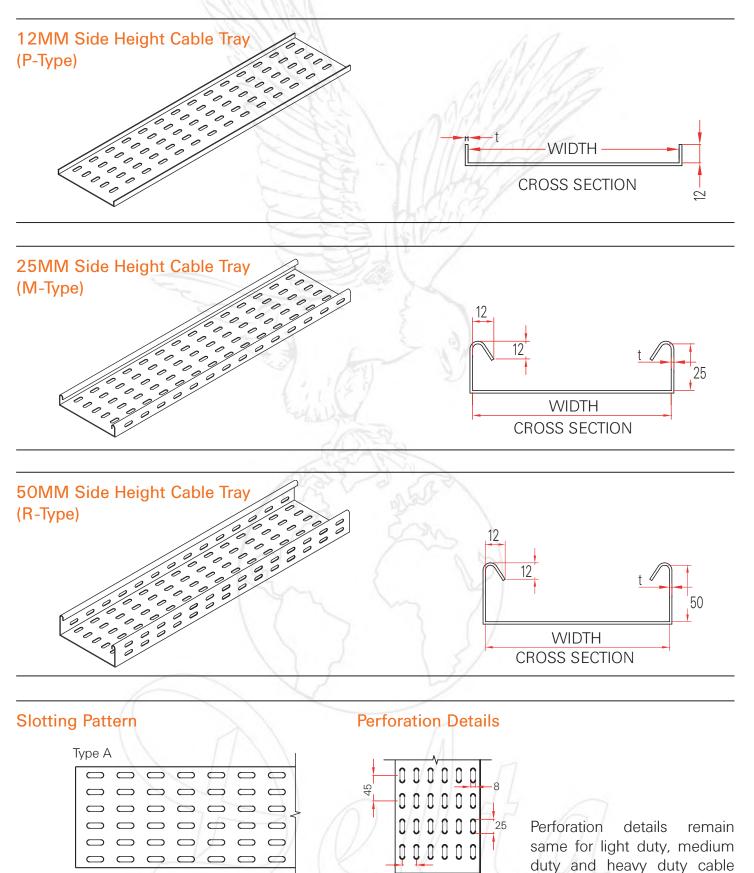
Slots along the length (A) (Standard)

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.



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trays.

Standard Size & Thickness

Pos	Possible Thickness in mm										
1.0	1.2	1.5	2.0								
\checkmark	\sim	~	\checkmark								
\checkmark	~	~	\checkmark								
\checkmark	\checkmark	~	\checkmark								
\checkmark	\checkmark	~	\checkmark								
X	\checkmark	~	~								
X	X	\sim	~								
X	X	×	\checkmark								

12MM Side Height Cable Tray (P-Type)

25MM Side Height Cable Tray (M-Type)

Width in	Possible Thickness								
mm	1.0	1.2	1.5	2.0					
50	\checkmark	\checkmark	~	~~					
100	\checkmark	\checkmark	~	~					
150	\checkmark	\checkmark	~	~					
200	~	~	~	~					
300	X	~	~	~					
450	X	X	~	\checkmark					
600	X	X		\checkmark					
750	X	X	X	\checkmark					
900	X	X	× /	~					

50MM Side Height Cable Tray (R-Type)

Width	Possible Thickness							
vvidtri	1.0	1.2	1.5	2.0				
50	\checkmark	\checkmark	~ /	~				
100	\checkmark	\checkmark	~	~				
150	\checkmark	\checkmark	~	~				
200	\checkmark	\checkmark	~	\checkmark				
300	X	\checkmark	~	\checkmark				
450	X	X	~	\checkmark				
600	Х	X	~	~				
750	X	X	Х	\checkmark				
900	X	X	Х	~				

 The Thickness mentioned are as per our standard thickness. However customer can order different thicknesses as per their requirement.

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.

- Commercial Tolerance on Thickness Apply.
- Contact Sales desk for fitting thickness.

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.

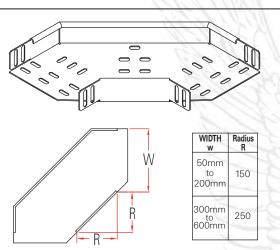
Delta Cable Tray Fittings

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

300mm width

Horizontal Unequal Tee

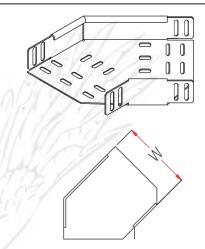


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Bends are available in 30 and 60 degrees also

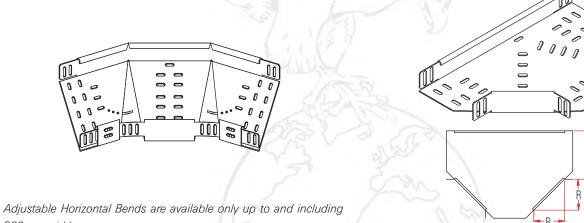
Adjustable Horizontal Bend

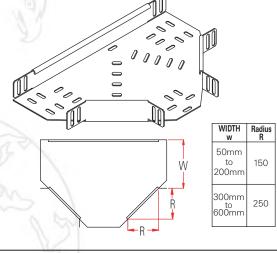




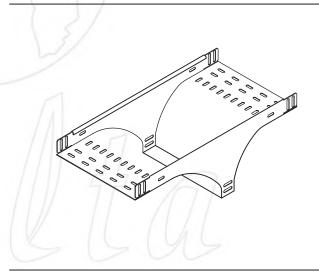
Two 45° bends can be used to achieve offsets in horizontal direction.

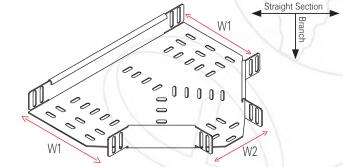
Horizontal Equal Tee





Vertical Tee





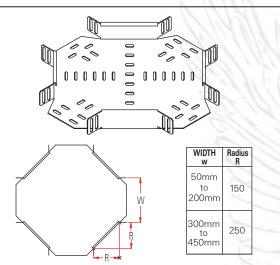
When ordering Horizontal Unequal Tee - Please order in the form of W1-W2 to fill the width column.

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.

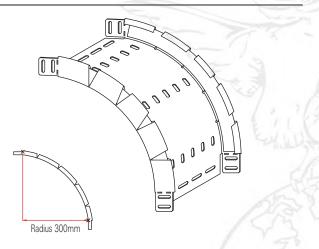
Radius type fittings are also available on request. Put R in the column of type of Curvature. Contact sales desk for various light and medium duty fittings and large radius bends.

Delta Cable Tray Fittings

Horizontal Cross

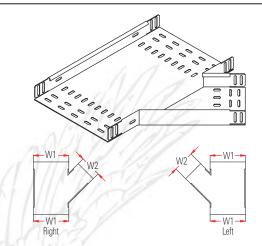


90° Riser Outside



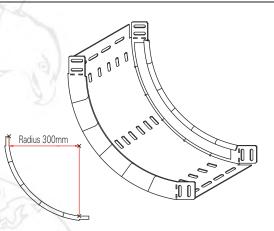
Risers are also available in 30, 45 and 60 degree

Y Branch Left and Right

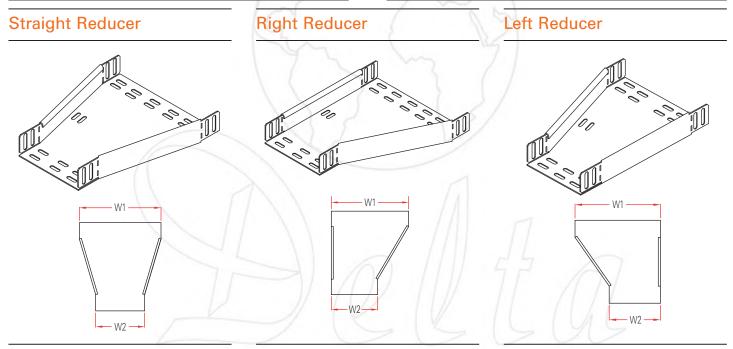


Cable is deviated to 45° from the main line

90° Riser Inside

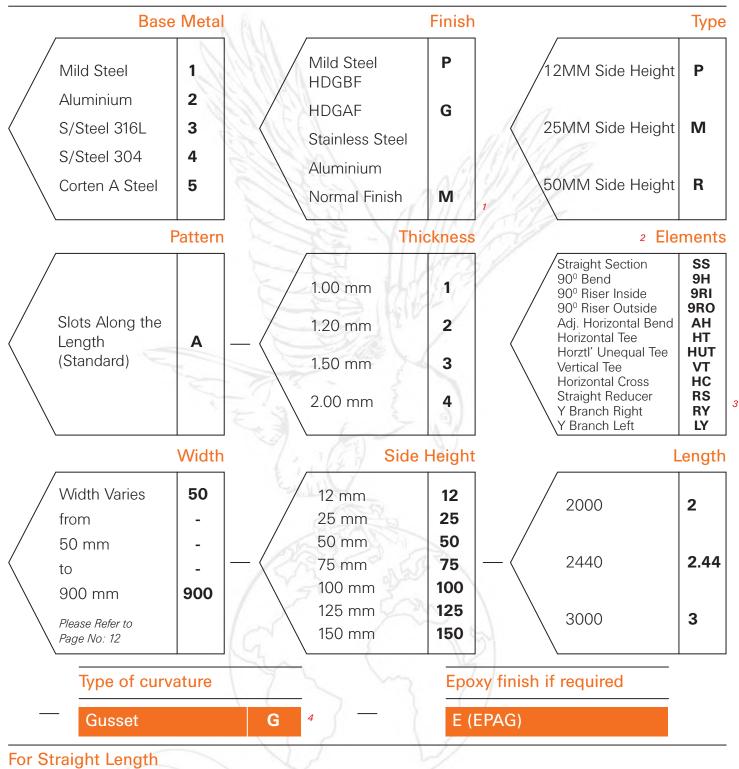


Inside and Outside Riser combination can be used to achieve vertical offsets.



Note : Mention big dimension W1 first followed by W2 to fill the width column while ordering reducers. Two 45^o Inside and Outside riser combination can be used to achieve offsets in vertical direction.

How to Order Perforated Cable Tray & Fittings



Mention first 9 Columns Continuously and Epoxy finish if Required.

Eg. of Straight Section

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

For Fittings

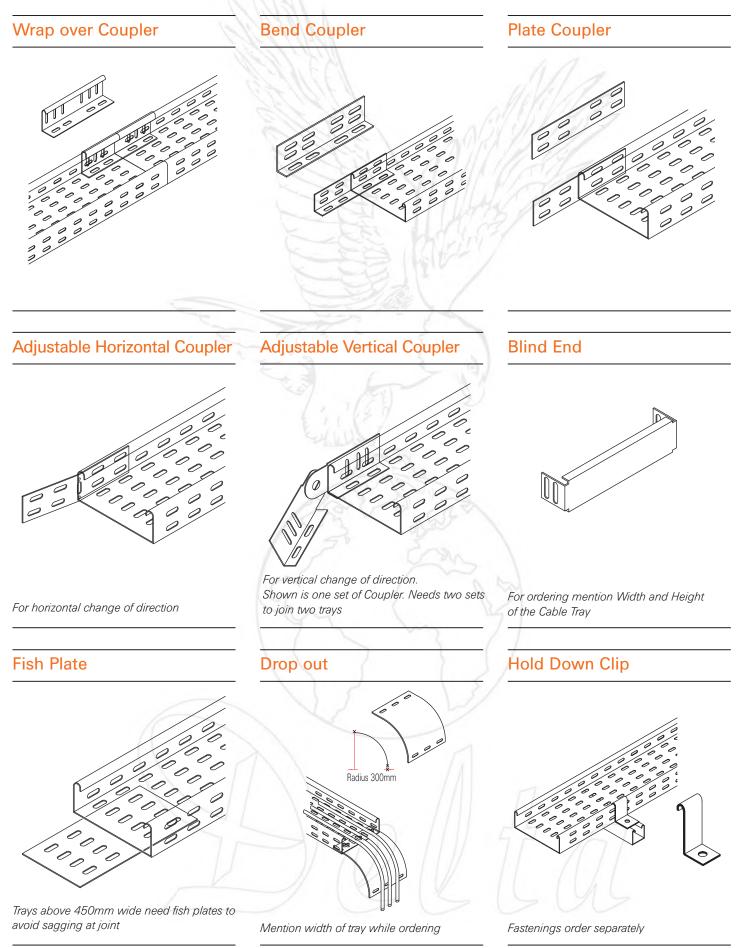
Mention first 4 Columns and then elements, width, side height type of curvature and thickness - Epoxy finish if required.

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.



Cable Tray Accessories

Divider	Fastenings		Earth Continuity Connector
	Hexagon Head Bolts	Flat Washers	
0	Roofing Bolts and Nuts	Threaded Rods	Braided Copper, 4mm 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.

Fastenings

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.

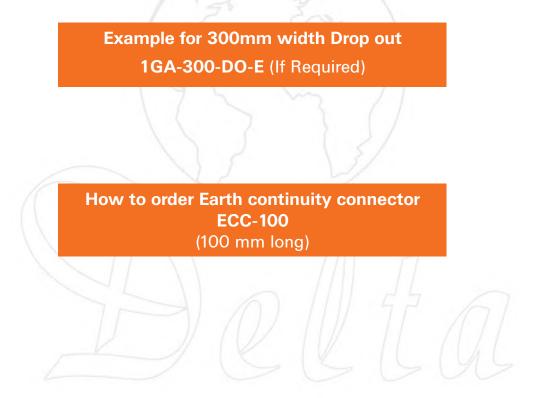
Length between centers: 100mm. Conductor area: 4mm₂.



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	√	~	KY/	-	*	1	CS
Bend Coupler	~	~	1.1101	-	1	1-2	СС
Plate Coupler	~	1	19362	- 7		12	СР
Adjustable Horizontal Coupler	~	~			1	<u></u>	АНС
Adjustable Vertical Coupler	✓	~	A		0/1	-	AVC
Blind End	\checkmark	\checkmark	22	- 1	1	-	BE
Fish Plate	1	~		~~~	-	-	FP
Drop Out	✓	~	13 -	~	-	-	DO
Hold Down Clip	✓	12	3		~	-	HDL
Divider	√	✓	9.1	1 - 2	~	3	DI

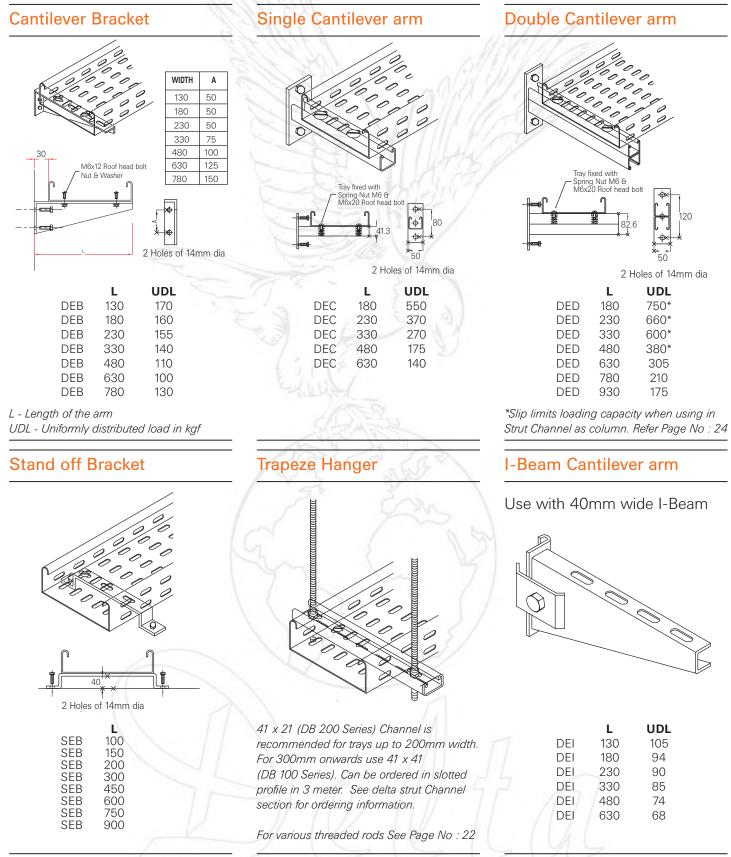
Tick mark shows the relevant parameters against each products.



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



• Please note that above given loads are for general guidelines only.

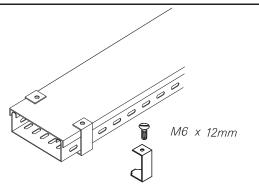
• For Cable trays above 600mm width order double cantilever arm to increase safe working load.

• Trapeze Hanger is only shown to convey the idea of hanging tray from ceiling.

Cable Tray Covers and Fixing Details

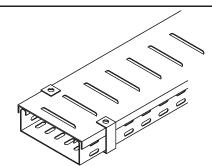
- Straight Covers up to 300mm needs four sets of Clamps.
- 450mm and above needs six Clamps to fix cover.
- Normal flange height of cover is 15mm.

Solid Flange cover



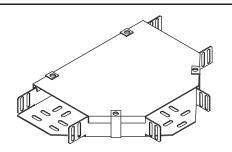
Order Side Cover Clamp (SFA) and M6 x 12mm Roofing bolt separately. Minimum possible width is100mm for straight section & fittings

Louvered cover



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

Solid Flange cover for fittings

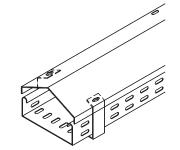


Order Side Cover Clamp (SFA) and M6 x 12mm Roofing bolt separately.

Catalogue No. of Side Cover Clamp (SCC)

- Fittings normally needs four Clamps. For wider ones 5 Clamps needed.
- Reinforcing type of profile is used in wider covers.

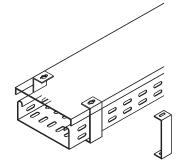
Dome Type cover



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

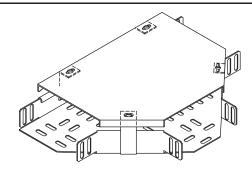
*Maximum size - 600mm width *Not available for fittings

Raised Ventilated cover



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

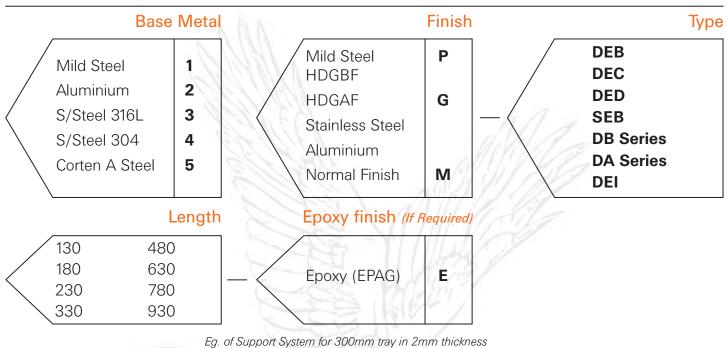
Raised Ventilated Cover for fittings



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

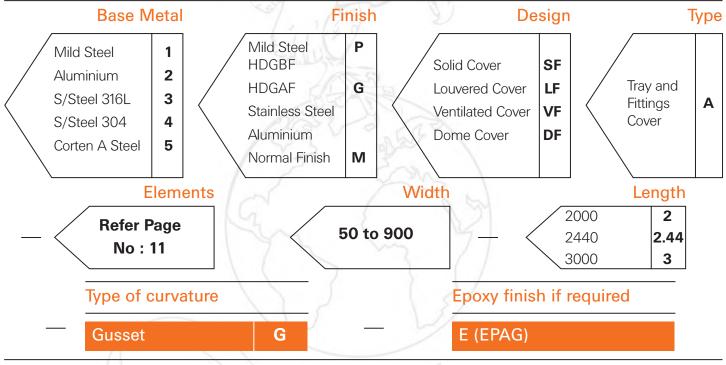
0		1 1 1			
ltem / Des.	Material	Finish	Туре	Side Height	Abbreviation
Solid Flange	√	\checkmark	SFA	√	SCC
Dome Type	\checkmark	\checkmark	DFA	✓	SCC
Raised Ventilated	✓	\checkmark	VFA	✓	SCC
Louvered	\checkmark	\checkmark	LFA	\checkmark	SCC

How to order Support system for Cable tray



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

How to Order Straight Section and Fittings Cover



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 a	and fastenir	ngs	Hot Dip Galvanized M6	pack 500	HN06HG
Fastenings		1 11611 1	Stainless Steel (A4) M6	pack 100	HN06A4
	1	111111111	M8	pack 100 pack 100	HN08A4
Hexagonal Head	Roofing Bolts	Spring Washer	M10	pack 100	HN10A4
Bolts	and Nuts		M12	pack 100	HN12A4
		$(\mathcal{O}))$	Stainless Steel (A2)		
			M6	pack 100	HN06A2
Hexagonal Nuts	Flat Washers	Threaded Rods	M8	pack 100	HN08A2
	\bigcirc		M10 M12	pack 100 pack 100	HN10A2 HN12A2
	(\mathbb{O})			pack too	11111272
		1999	Roofing Bolts Electroplated Zinc		
Hexagonal Head E	Bolts		M6 x 12	pack 200	RB0612EG
Electro Plated Zinc			M6 x 16	pack 200	RB0616EG
M6 x 16	pack 100	HB0616EG	M6 x 20 M6 x 25	pack 200 pack 200	RB0620EG
M6 x 20 M6 x 25	pack 100 pack 100	HB0620EG HB0625EG	M6 x 30	pack 200 pack 100	RB0625EG RB0630EG
M8 x 16	pack 100	HB0816EG	M6 x 40	pack 100	RB0640EG
M8 x 20	pack 100	HB0820EG	M6 x 50	pack 100	RB0650EG
M8 x 25	pack 100	HB0825EG	Hot Dip Galvanized		
M8 x 30 M8 x 35	pack 100 pack 100	HB0830EG HB0835EG	M6 x 12	pack 100	RB0612HG
M8 x 40	pack 100	HB0840EG	M6 x 16	pack 100	RB0616HG
M10 x 20	pack 100	HB1020EG	Stainless Steel (A4)		
M10 x 25	pack 100 <	HB1025EG	M6 x 12	pack 100	RB0612A4
M10 x 30 M10 x 35	pack 100 pack 100	HB1030EG HB1035EG	M6 x 16 M6 x 20	pack 100 pack 100	RB0616A4 RB0620A4
M10 x 40	pack 100	HB1040EG		Pack TOO	MD0020A4
M10 x 50	pack 100	HB1050EG	Stainless Steel (A2) M6 x 12	pack 100	RB0612A2
M12 x 20	pack 100	HB1220EG	M6 x 16	pack 100 pack 100	RB0616A2
M12 x 25 M12 x 30	pack 100 pack 100	HB1225EG HB1230EG	M6 x 20	pack 100	RB0620A2
M12 x 35	pack 100	HB1235EG	EL CARCOL		
M12 x 40	pack 100	HB1240EG	Flat Washers		
M12 x 50	pack 100	HB1250EG	Electro Plated Zinc M6	pack 500	FW06EG
Hot Dip Galvanized			M8	pack 500	FW08EG
M6 x 12	pack 100	HB0612HG	M10	pack 500	FW10EG
M6 x 16	pack 100	HB0616HG HB0620HG	M12	pack 200	FW12EG
M6 x 20 M6 x 35	pack 100 pack 100	HB0635HG	Stainless Steel (A2)		
		nbooonia	M6	pack 100	FW06A2
Stainless Steel (A4) M6 x 20	pack 100	HB0620A4	M8 M10	pack 100 pack 100	FW08A2 FW10A2
M6 x 25	pack 100	HB0625A4	M12	pack 100	FW12A2
M8 x 25	pack 100	HB0825A4			
M8 x 35	pack 100	HB0835A4	Spring Washer		
M8 x 40 M10 x 16	pack 100 pack 100	HB0840A4 HB1016A4	Electro Plated Zinc M6	pack 400	SW06EG
M10 x 25	pack 100	HB1025A4	M8	pack 400 pack 400	SW08EG
M10 x 40	pack 100	HB1040A4	M10	pack 400	SW10EG
M12 x 25	pack 100	HB1225A4	M12	pack 400	SW12EG
Stain less Steel (A2)	1.400		Threaded Rods in	2 matara an atandard	
M6 x 20	pack 100 pack 100	HB0620A2 HB0625A2	Electro Plated Zinc		
M6 x 25 M8 x 25	pack 100	HB0825A2	M6 x 2m		TR06EG
M8 x 35	pack 100	HB0835A2	M8 x 2m		TR08EG
M8 x 40	pack 100	HB0840A2	M10 x 2m		TR10EG
M10 x 16	pack 100	HB1016A2	M12 x 2m		TR12EG
M10 x 25 M10 x 40	pack 100 pack 100	HB1025A2 HB1040A2	Stainless Steel (A4)		TDOGA
M12 x 25	pack 100	HB1225A2	M6 x 2m M8 x 2m		TR06A4 TR08A4
			M10 x 2m		TR10A4
Hexagonal Nuts			M12 x 2 m		TR12A4
Electro Plated Zinc			Stainless Steel (A2)		
M6	pack 500	HN06EG	M6 x 2m		TR06A2
M8 M10	pack 500 pack 200	HN08EG HN10EG	M8 x 2m		TR08A2
M12	pack 200	HN12EG	M10 x 2m M12 x 2m		TR10A2 TR12A2
• For threaded rods of 2			Fa M6v2 Meters TR 0		1111272

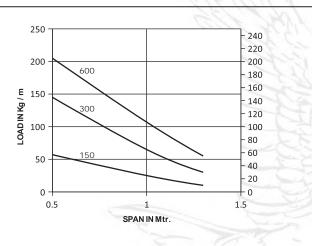
• For threaded rods of 2 meter length add /2 after the code.

Eg. M6x2 Meters - TR 06EG /3

Load Graphs for Cable Tray



12MM Side Height Cable Tray

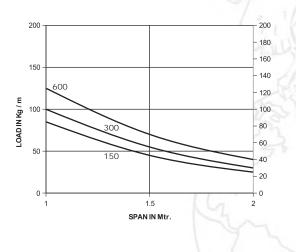


Results shown is for continuous, horizontally run, uniformly distributed load with a multiple span environment.

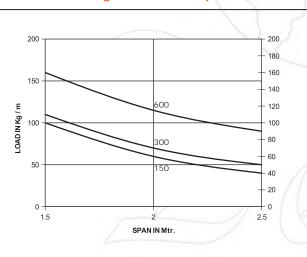
The loads above the graph line is unacceptable and below the line is safe.

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

25MM Side Height Cable Tray



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.

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

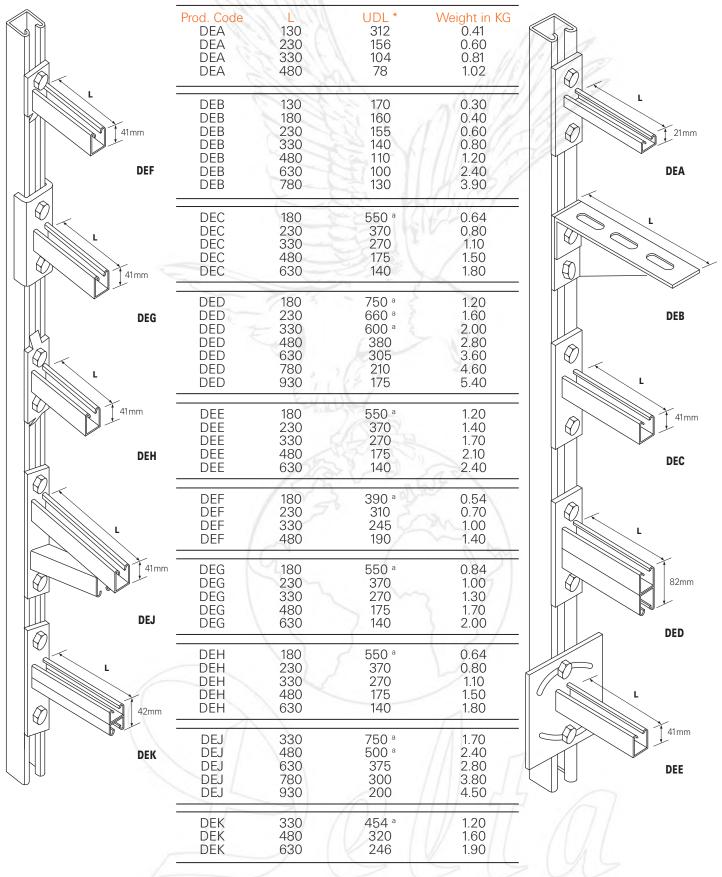
Note : For guidelines only. Any claim for varied performance is not accepted.

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.



* Uniformly Distributed Load in Kgf

^a Slip Limit Loading Capacity

Note : Cantilever arms longer than 930mm is available with supporting members to increase safe working load. Contact Sale 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
	F.07	

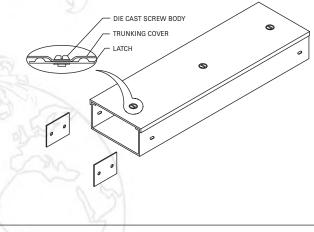
Length

3 mtr as standard. Other lengths are also available.

Туре

Single or multi compartment Trunking

Standard truking 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	655	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			10	DELTA - Cable Trunking STANDARD THICKNESS AS PER BS 4			
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	5	225 x 50	1.6	1.4	
75 x 75	1.2	1.2	6	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	
				225 x 225	1.6	1.4	
100 x 100	1.2	1.2		300 x 50	1.6	1.6	
150 x 50	1.2	1.2		300 x 75	1.6	1.6	
150 x 75	1.2	1.2		300 x 100	1.6	1.6	
150 x 100	1.2	1.2		300 x 150	1.6	1.6	
150 x 150	1.4	1.2		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

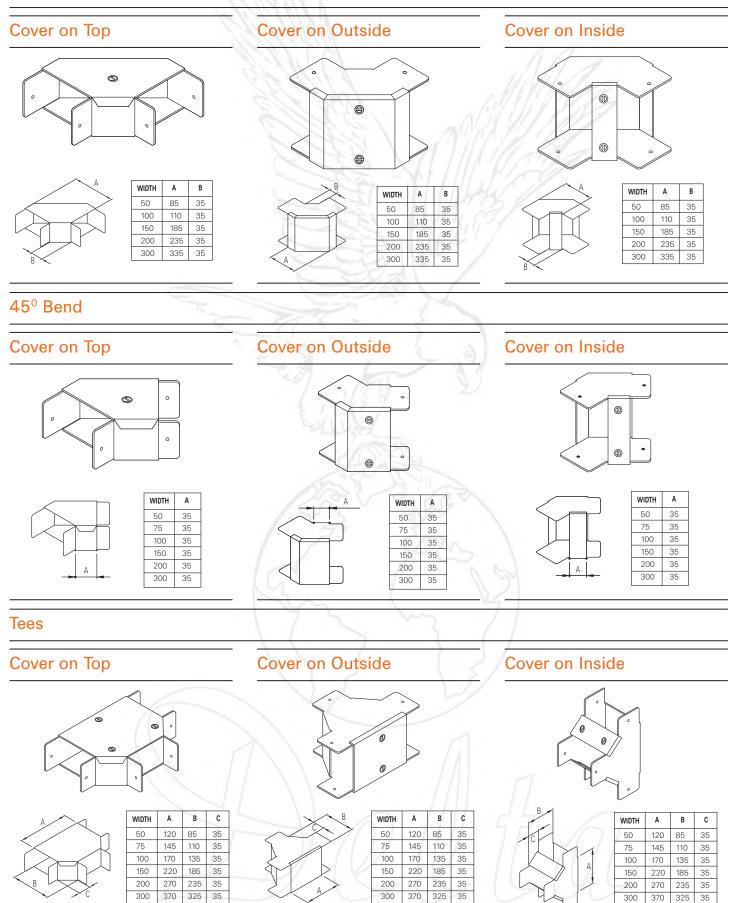
Commercial tolerance on Sheet thickness apply.

Contact Sales Desk for Various fitting thickness.

Delta Cable Trunking Fittings

All fittings shown are gusset type construction

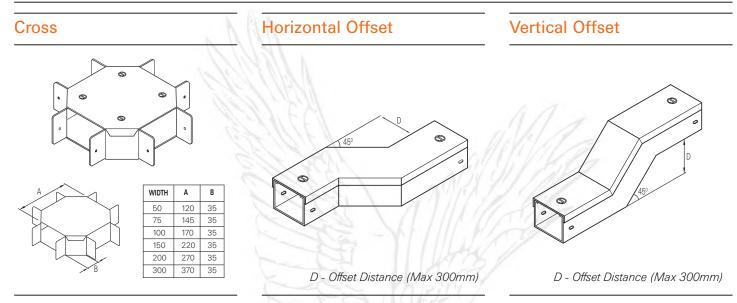
90° Bend



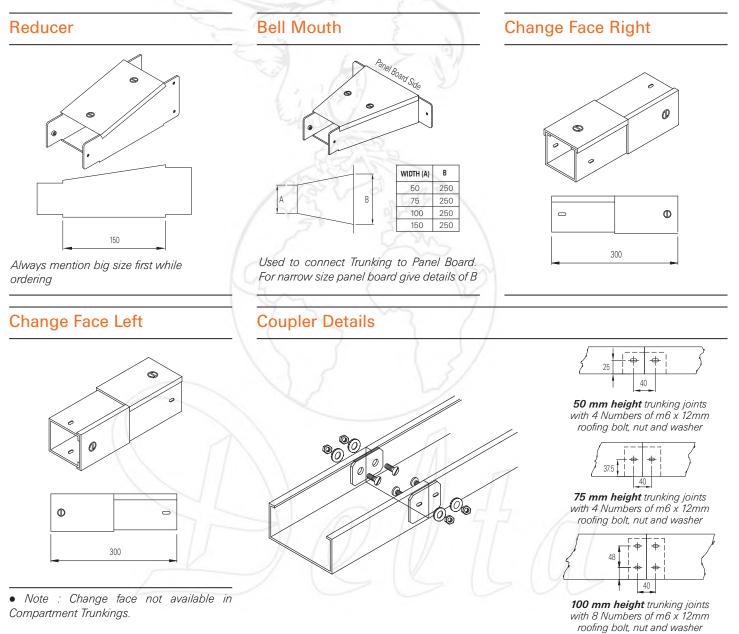
• Note 1 Square type fittings are also available on request.

• 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



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.



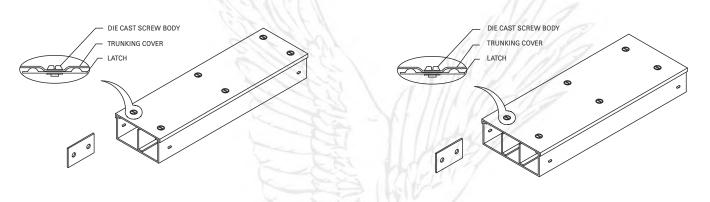
-29-

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

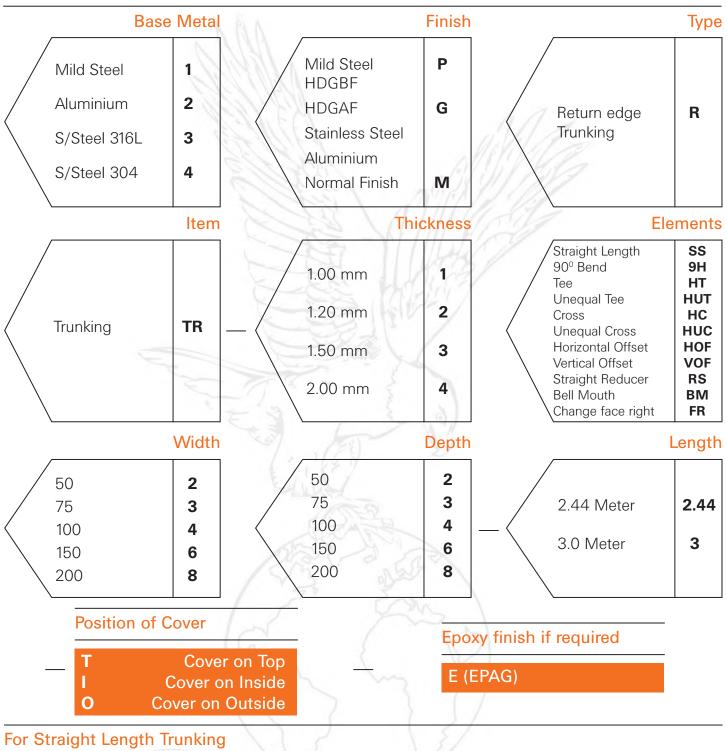
Divider can be fixed through new metal locking system where a little unevenness of the surface is not a problem. This system is having less expose area.

Please specify the No. of Compartment in the Catalogue.

Example IPRTR /\$\$-3\$\$64-3

No. of Compartments.

How to Order Straight Length & Fitting



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

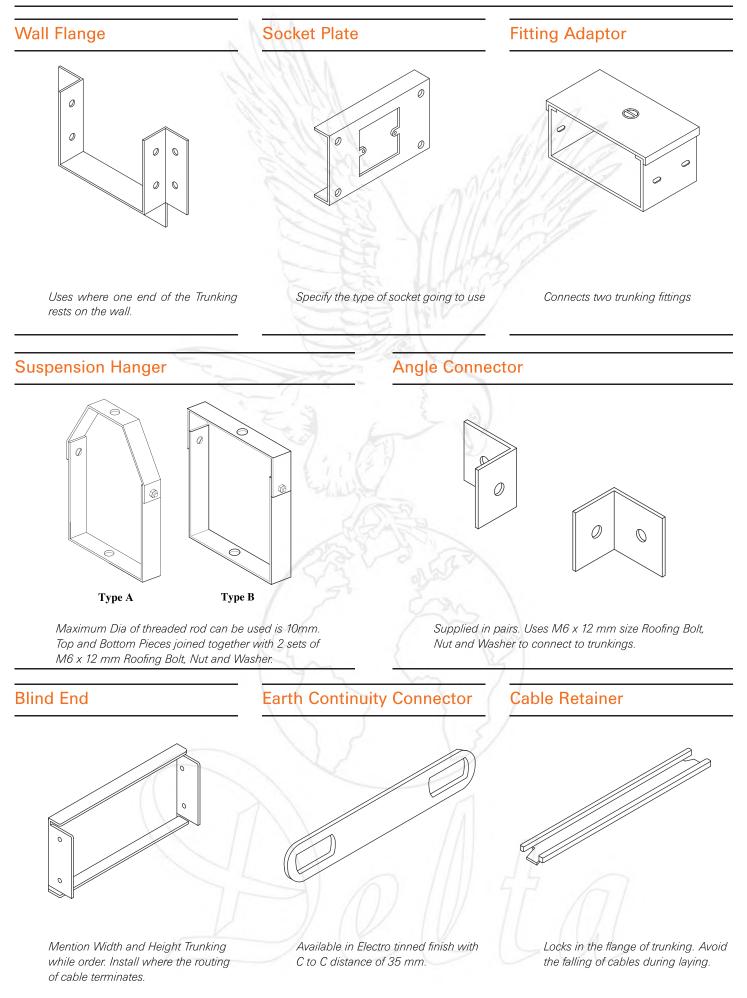
1PRTR-9H22-T-1-E (If Required)

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



How to Order - Accessories

Product	Base Metal (1,2,3,4&5) Ref. Page 15	Finish (P,G,M)	Туре	ltem	Width (Ref. Page31)	Depth (Ref. Page31)	Abbreviation
Wall Flange	~	~	102		~	1	WF
Socket Plate	~	\checkmark	132		*	11-	SP
Fitting Adaptor	~	~	1947		1	1	FA
Suspension Hanger	~	~	R	TR	1	1	SH
Angle Connector	✓	~			4.50	~	AC
Blind End	~	16	-8	EM	-	✓	BE
Cable Retainer	~	1			1	-	CR

Tick mark shows the relevant parameters against each products.

Example of Accessories 1PRTR-22-BE-E (If Required)

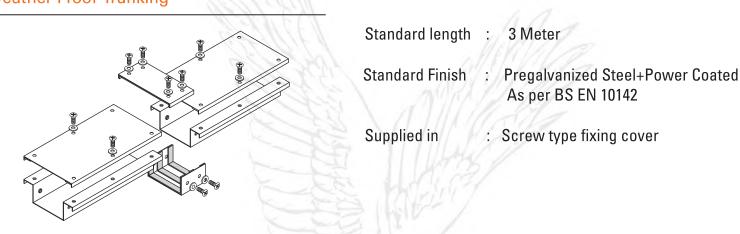
How to order Earth continuity connector ECC-50

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



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

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	
Body	Standard Finish : Pregalvanized S As per BS EN	
	: Epoxy Coated RAL Color	to any
Closure Strip	Standard:1 mm for BodyThicknessClosure strip	' and
	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)

Ċ,

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

Standard length: - 3 mtr. Side Height:- 50 mm No. of compartments:- 2, 3 & 4 knockout of 20 & 25mm can be

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

90° Horizontal Bend

	Width	Height	Catalogue No.
\frown	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 Compartmen	t	

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 RFT/*-HT 450-50 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.

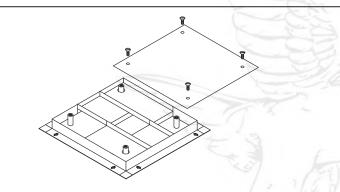
300 to 450mm width - 1.2mm thick body and 1mm cover

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	NY	

Junction Box



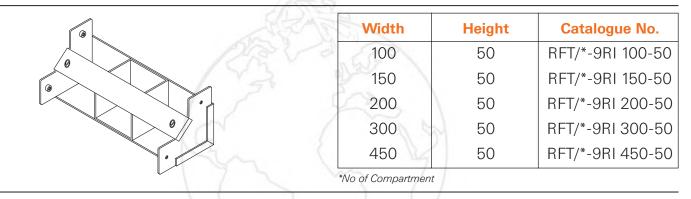
	Width	Height	Catalogue No.
l	200	50	RFT/*-JB 200-50
ģ	300	50	RFT/*-JB 300-50
	450	50	RFT/*-JB 450-50

*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



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
0	300	50	RFT/*-TB 300-50
•	450	50	RFT/*-TB 450-50
	*No of Compartme	nt	/

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

	Туре	Catalogue No.
	Data	RFT / * - SP - D
	Power	RFT / * - SP - D RFT / * - SP - P
\leq	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

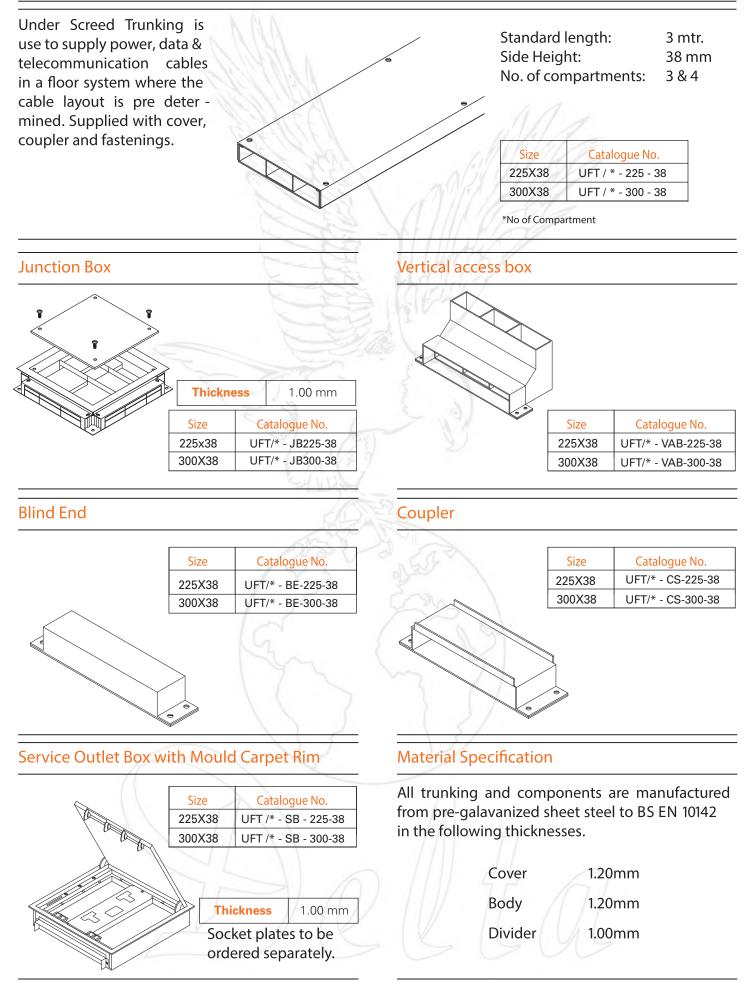
6	(D)	I	
\sim	Width	Height	Catalogue No.
0	100	50	RFT/*-WF 100-50
AS	150	50	RFT/*-WF 150-50
	200	50	RFT/*-WF 200-50
	300	50	RFT/*-WF 300-50
	450	50	RFT/*-WF 450-50
	1m	1	

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.

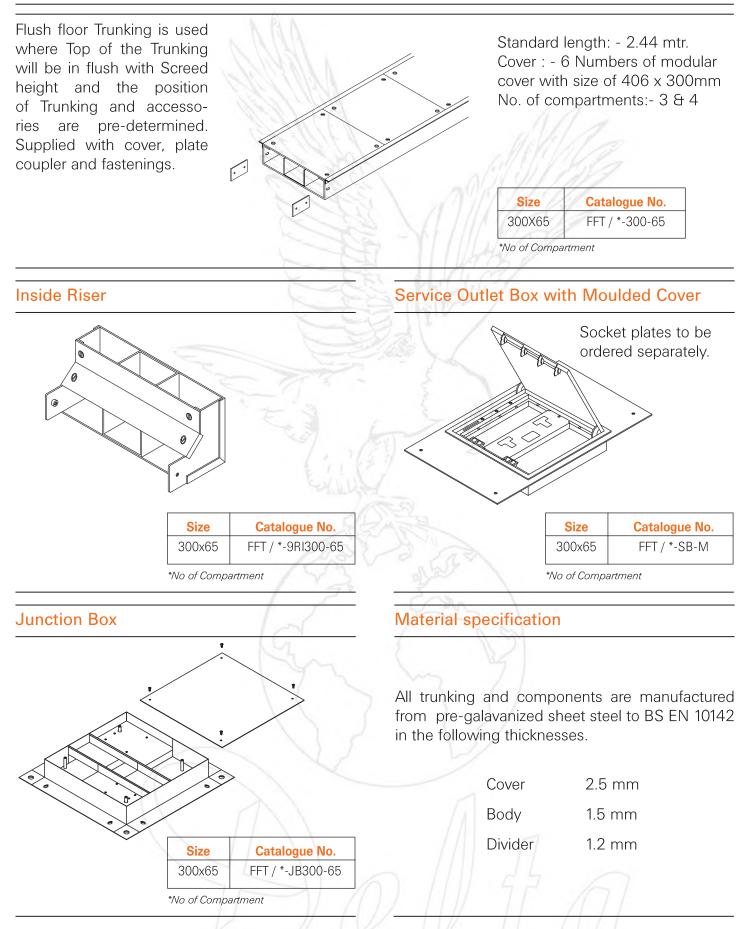
Jak .	No. of Comp.	Catalogue No.
	3 Comp.	RFT / 3 - SB - M
	4 Comp.	RFT / 4 - SB - M
	Thickness	1.00 mm

Under Screed / Buried Screed Trunking



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

Flush Floor Trunking



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

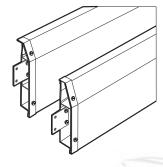
Skirting / Dado / Bench Trunking

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 completed 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.



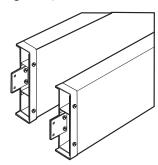
Width mm	Depth mm	Thickness mm	Two Compartment	Three Compartment
150	38	1.20	ST / 2 - 150 - 38	ST / 3 - 150 - 38
200	38	1.20	ST / 2 - 200 - 38	ST / 3 - 200 - 38

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.

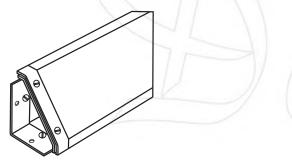


Width mm	Depth mm	Thickness mm	Two Compartment	Three Compartment
100	30	1.20	DT / 2 - 100 - 38	DT / 3 - 100 - 38
150	38	1.20	DT / 2 - 150 - 38	DT / 3 - 150 - 38
200	38	1.20	DT / 2 - 200 - 38	DT / 3 - 200 - 38

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

The Success Story Continues...

10

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FRITT



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 substract 25 mm. This is the usage height for the cable laying. A clearance of \pm 3mm 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

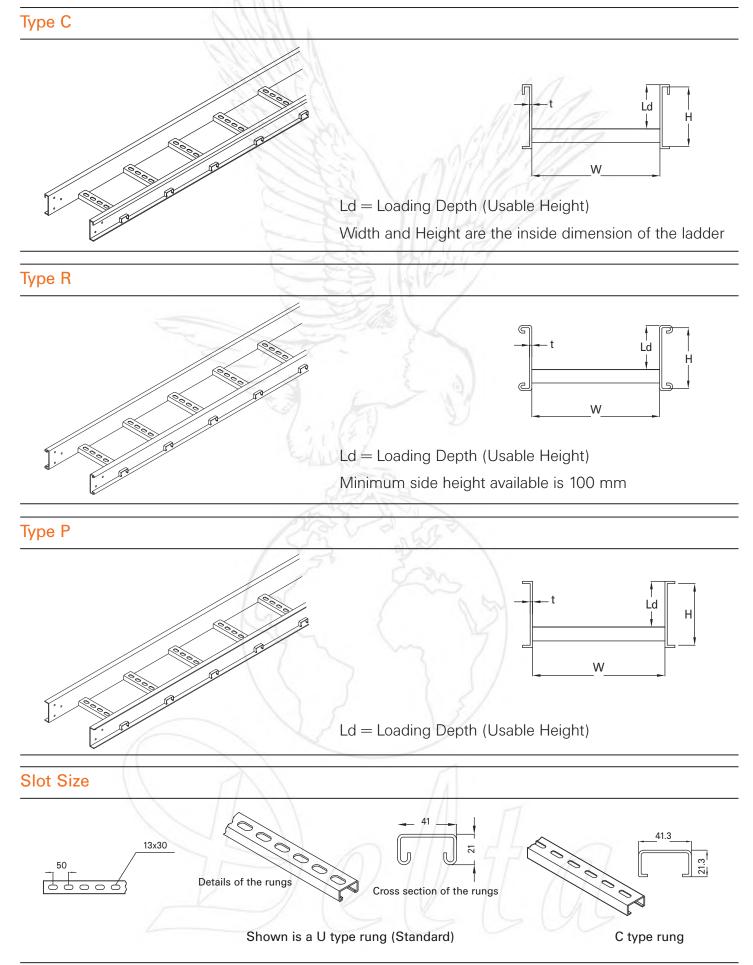
Refer Page No: 49 for various other rungs spacing.

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

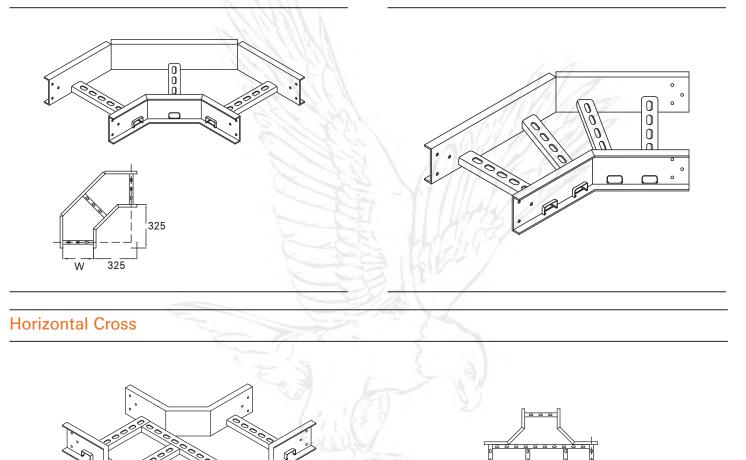


We have Marine Ladder also in our product range. Contact Sales Desk for Details

Delta Cable Ladder Fittings

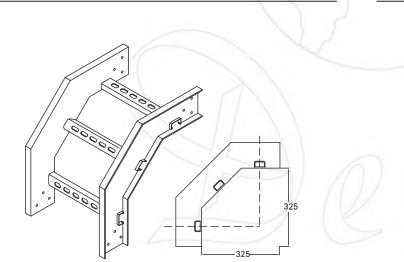
90° Horizontal Bend

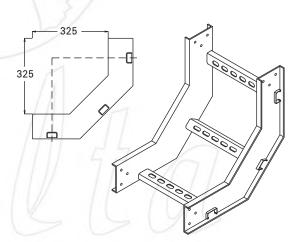
45° Horizontal Bend



90° Riser Outside







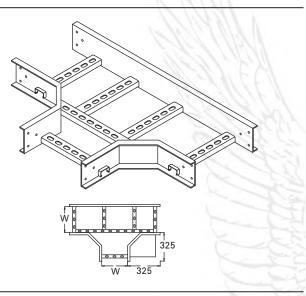
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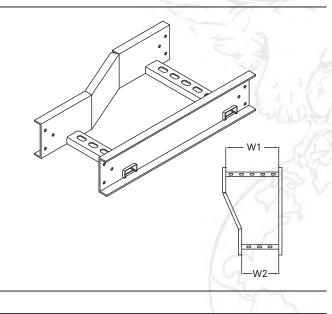
325

Delta Cable Ladder Fittings

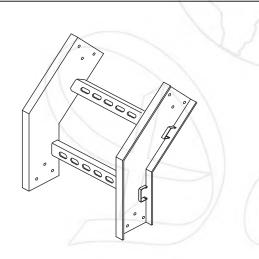
Horizontal Tee



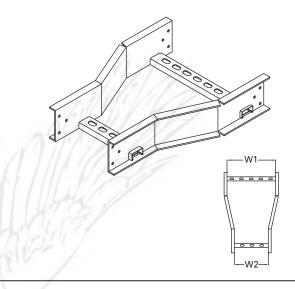
Left Hand Reducer



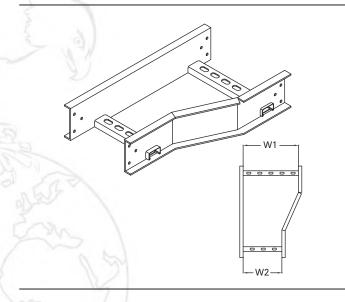
45° Riser Outside



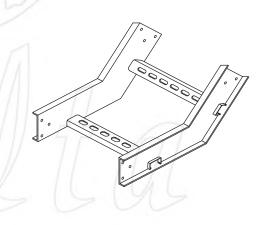
Straight Reducer



Right Hand Reducer

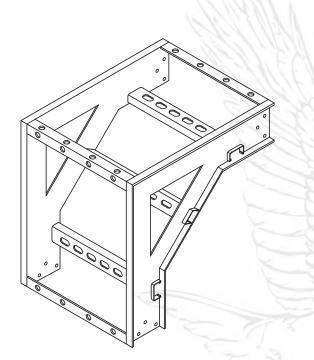


45° Riser Inside



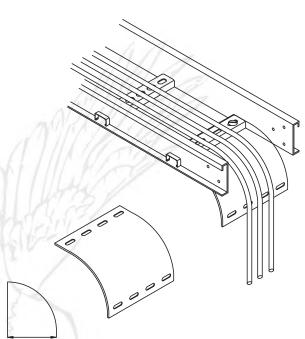
Delta Cable Ladder Fittings

90° Vertical Support Elbow



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

Dropout

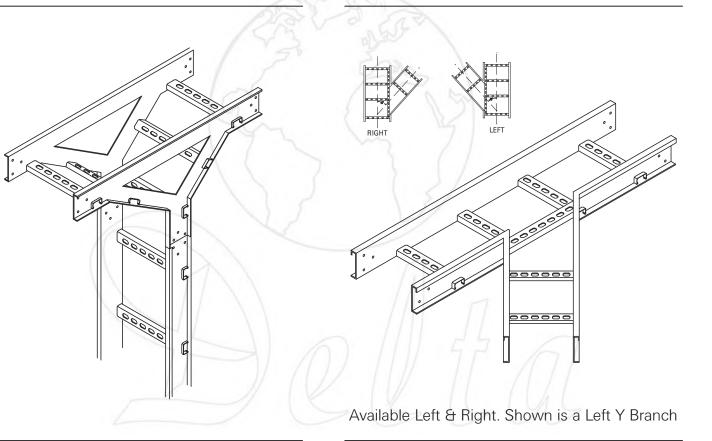


Radius 300mm

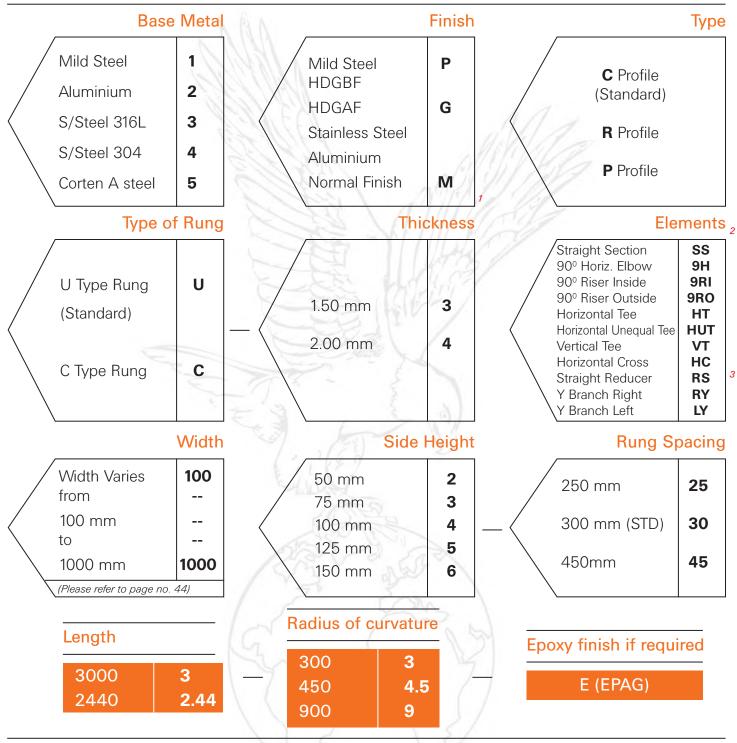
45° 'Y' Branch

Material Thickness is 2 or 1.5 mm Depending on width

Vertical Tee



How to Order Delta Cable Ladder and Fittings



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 $4H 45^{\circ}$, $6H 60^{\circ}$

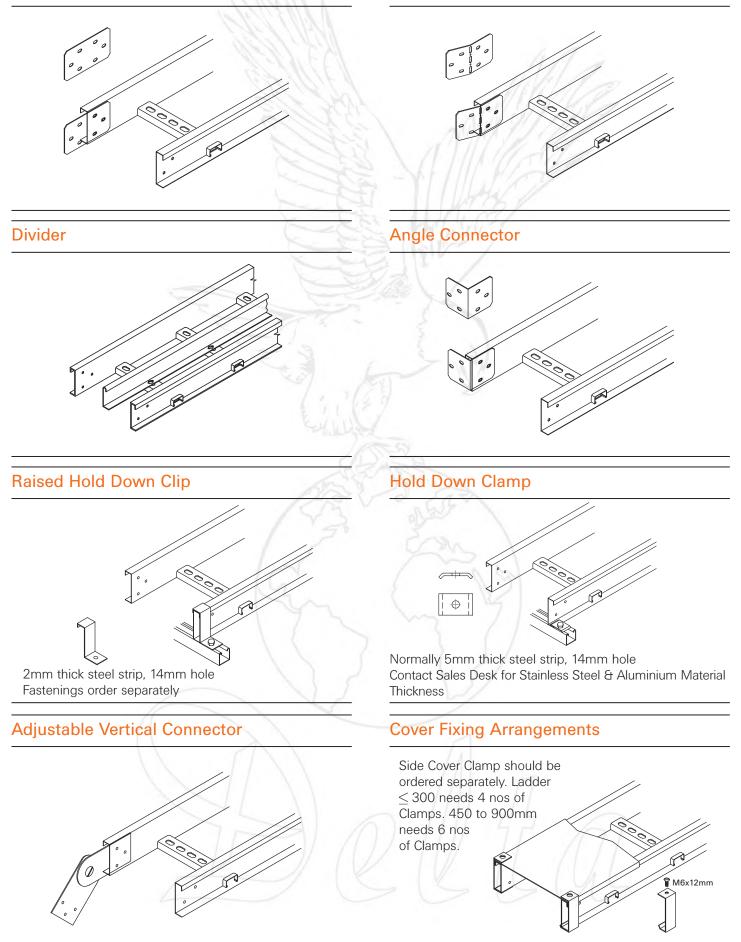
3. For left reducer - LR. Right reducer - RR

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

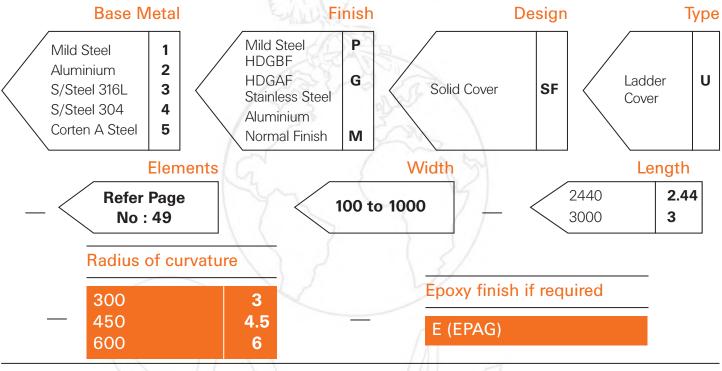


How to order Cable Ladder Accessories

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	~	~	113	-	1	-	CS
Angle Coupler	✓	~	1751	-	4	1 -	FC
Adj. Horizontal Coupler	~	~	132	- /		G	АНС
Adjustable Vertical Coupler	~	~	U	11/	v	2-	AVC
Blind End	✓	1	62	✓	101	-	EC
Drop Out	✓	1	121	×	11/	-	DO
Divider	✓	10	-13	1 no	~	3	DI
Raised Hold down Clip	~	~ {		(RIEL)	~	-	HDL
Hold down Clamp	v	~			-	-	HDC

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

How to Order Straight Section and Fittings Cover



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)

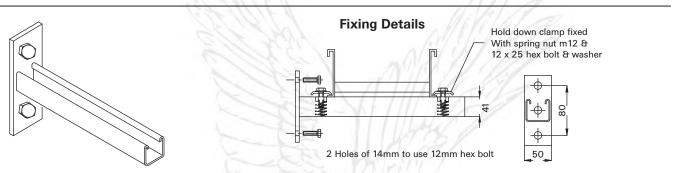
Delta Cable Ladder Support System

Cantilever arms

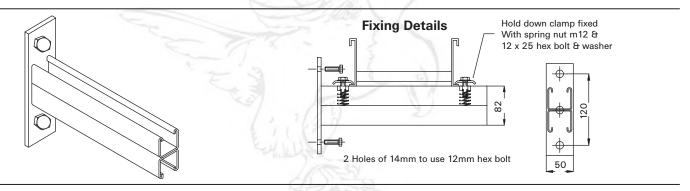
Note : While Ordering Cantilever arm for Ladder Add a Distance fo 150mm to the width of Ladder. E.g : For 300mm Ladder DEC 450. More support options are available in

Page No: 24. Supplied without fastenings. Choose various type of fastenings from Page No: 61.

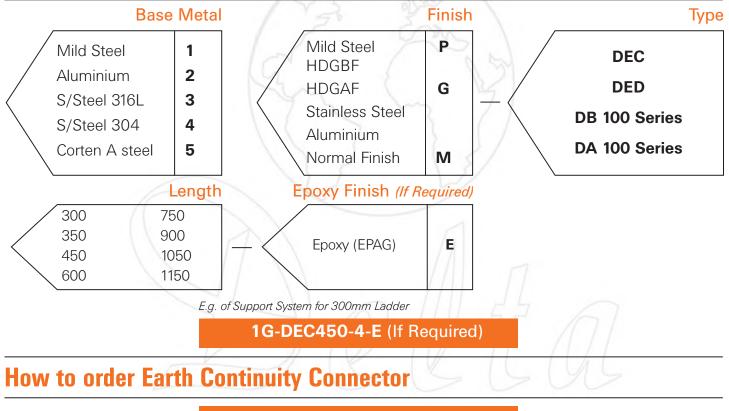
Type DEC (Single Cantilever arm)



Type DED (Double Cantilever arm)



How to order Support System for Cable Ladder

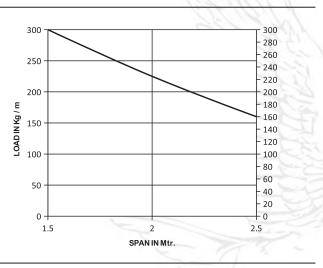


ECC-200 (200 mm long)

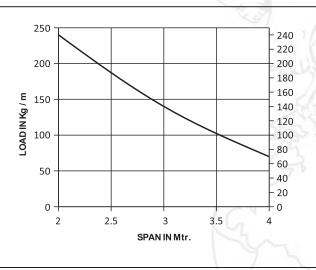
Load Graphs for Cable Ladder



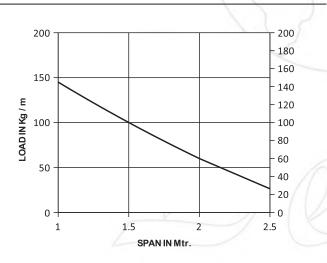
C Type Cable Ladder



R Type Cable Ladder



P Type Cable Ladder



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

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 wherever possible.

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...

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with Brackets As per BS 6946

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

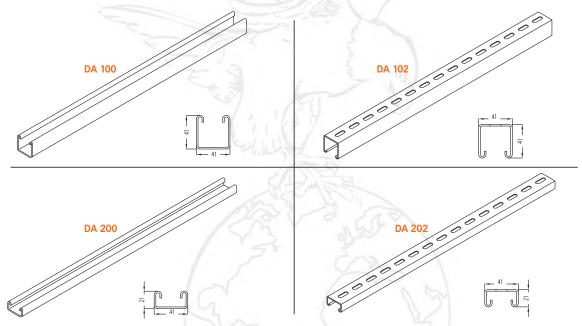
- Pregalvanized Steel or hot dip galvanized before fabrication (HDGBF) as per BS EN 10327
- Hot dip Galvanized after fabrication (HDGAF) as per BS EN 1461
- Epoxy polyester Powder coated to any RAL colour,
- Aluminium Strut Channel
- Stainless Steel Strut Channel to AISI 304 and AISI 316L

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	41 x 21	41 x 21	41x42	41x21	41x21	41x21	41X41	41X82	41 X 41	41 X 41	41X82	41 X 41
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
Туре	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



• Commercial Tolerance on Thickness Apply.

• Dimensional tolerance is applicable on all product dimensions

Slotting Pattern 13x30 50 **Combination Channels in DB 100 Series** C ſ C \supset ₹ 5 DB 101 DB 104 DB 105 DB 106 DB 107 DB 108 DB 100 DB 103 C ſ C

DB 111

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

DB 110

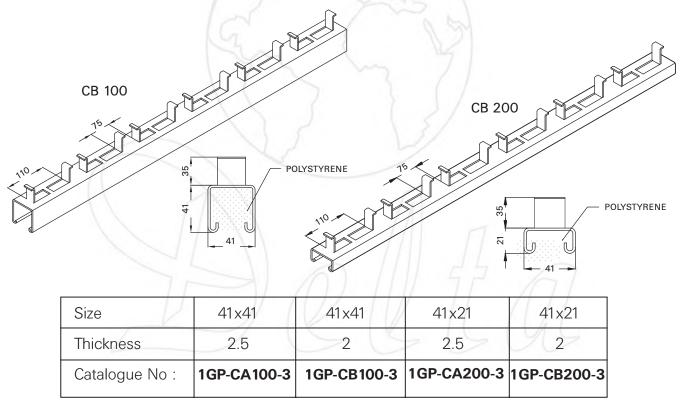
Concrete Inserts

DB 109

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

Standard Length - 3 Meter.

Supplying filled with Polystyrene in fill.



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

$x \bigoplus_{y}^{Y} x x \xrightarrow{y}_{DA200} x \xrightarrow{y}_{DA201} x \xrightarrow{y}_{DA201} x$	× ×-C	¥ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓			¥ ↓ ↓ ↓ ↓	$x + \underbrace{\bigcup_{y}^{Y}}_{DA102} x$
Elements of Section	DA-100	DA-101	DA-102	DA-200	DA-201	DA-202
Axis x-x	4	MALL 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
Noment 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
Noment (Nm)	496	1403	460	156	436	142
Axis y-y	In		1	2.1		
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

				DD 100	DD 100	DA 100
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
		6	5 //	1 5	5	0

Delta Strut Channel Load Capabilities

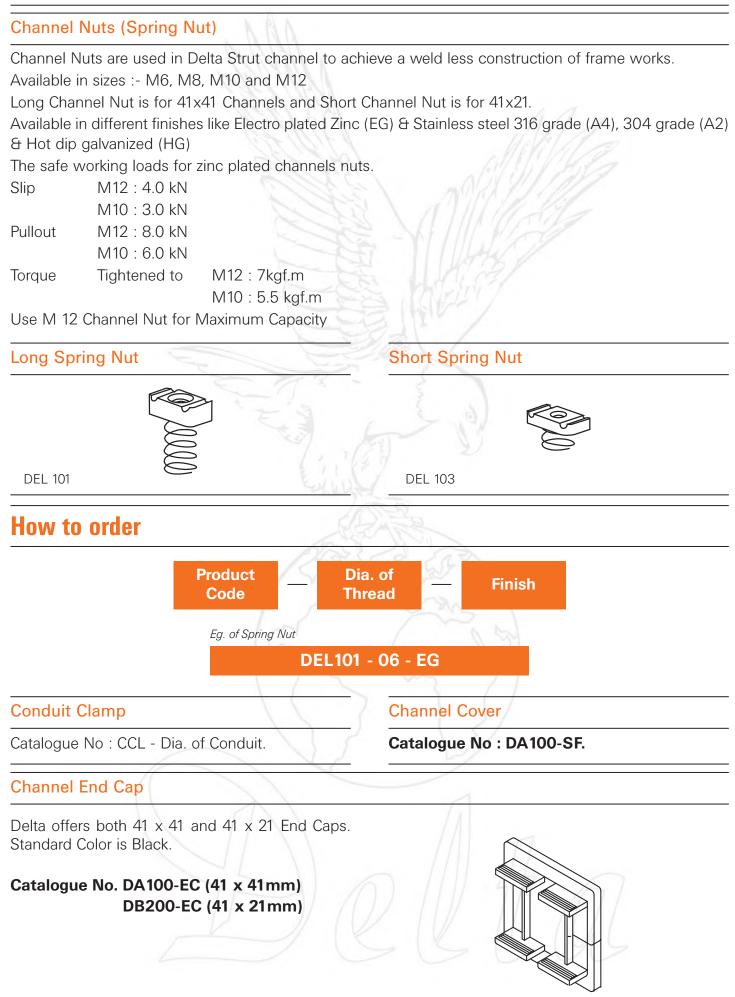
			Delta Str	ut Cha	nnel Load	d Capabili	ties			Colum	n Load
		Late	rally Unlo	ck Conc	lition	Fully Lat	erally Locl	ndition	a Maximum AXIAL		
		Safe Maximum Loads Maximum Deflection of Span/200			Safe Maximum Loads Maximum Deflection of Span/200				n Load		
Section	Distance Between Supports	Uniformly Distributed Across	Point Load at Mid-Span	UD Load	Point Load at Mid-Span	Uniformly Distributed Across	Point Load at Mid-Span	UD Load	Point Load at Mid-Span	Column Height	
	m	Span kgf	kgf	kgf	kgf	Span kgf	kgf	kgf	kgf	m	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	[▶] 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		[▶] 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	[▶] 800	548	[▶] 1015	582	1015	582		10035
DA201		337	168	337	168	363	181	363	181		5010
DA100	1.20	336	168	336	168	303	186	303	186	1.20	4346
DA100	1.20	101	50	58	36	113	56	58	36	1.20	891
		^b 800	440	⁵⁰	440	969		969			9193
DA101							484		484		
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
	2 20									2 20	
DA100 DA200	2.20	142 44	71 22	106 14	66 9	199 59	100 29	106	66 9	2.20	1625 a276
							29	14 521			
DA101		371	186	371	186	521	261	521	261		a4131
DA201	2 40	116	58	76	47	159	80	76	47	2.40	1255
DA100	2.40	123	61	87	55	182	91 27	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
0A100	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
~~~UI		00	54	54	41	110	50	54	21		a009

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.



Standard Fixing and Fastenings						
Fastenings		A DIEU				
		(J)				
Hexagon Head Bolts	Roofing Bolts and Nuts	Spring Washer				
	$\bigcirc$	000000000000000000000000000000000000000				
Hexagon Nuts	Flat Washers	Threaded Rods				
Hexagonal Head	Bolts					
Electro Plated Zinc $M6 \times 16$ $M6 \times 20$ $M6 \times 25$ $M8 \times 16$ $M8 \times 20$ $M8 \times 25$ $M8 \times 30$ $M8 \times 35$ $M8 \times 40$ $M10 \times 20$ $M10 \times 25$ $M10 \times 30$ $M10 \times 35$ $M10 \times 40$ $M10 \times 50$ $M12 \times 20$ $M12 \times 25$ $M12 \times 20$ $M12 \times 50$ Hot Dip Galvanized	pack 100 pack 100	Catalogue No. HB0616EG HB0620EG HB0625EG HB0816EG HB0830EG HB0835EG HB0835EG HB1020EG HB1020EG HB1025EG HB1035EG HB1035EG HB1040EG HB1020EG HB1020EG HB1225EG HB1225EG HB1235EG HB1235EG HB1240EG HB1250EG				
M6 x 12 M6 x 16 M6 x 20 M6 x 35 Stainless Steel (A4	pack 100 pack 100 pack 100 pack 100	HB0612HG HB0616HG HB0620HG HB0635HG				
M6 x 20 M6 x 25 M8 x 25 M8 x 35 M8 x 40 M10 x 16 M10 x 25 M10 x 40 M12 x 25	pack 100 pack 100 pack 100 pack 100 pack 100 pack 100 pack 100 pack 100 pack 100	HB0620A4 HB0625A4 HB0825A4 HB0835A4 HB0840A4 HB1016A4 HB1025A4 HB1040A4 HB1225A4				
Stainless Steel (A2       M6 × 20       M6 × 25       M8 × 25       M8 × 35       M8 × 40       M10 × 16       M10 × 25       M10 × 25       M10 × 25       M12 × 25	pack 100 pack 100 pack 100 pack 100 pack 100 pack 100 pack 100 pack 100 pack 100 pack 100	HB0620A2 HB0625A2 HB0825A2 HB0835A2 HB0840A2 HB1016A2 HB1025A2 HB1040A2 HB1225A2				
Hexagonal Nuts	7.	ALA				
Electro Plated Zinc M6 M8 M10 M12	pack 500 pack 500 pack 200 pack 200	HN06EG HN08EG HN10EG HN12EG				

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

M6 Stainlage Steel (A4)	pack 500	HN06HG
Stainless Steel (A4) M6 M8 M10 M12 Steipless Steel (A2)	pack 100 pack 100 pack 100 pack 100	HN06A4 HN08A4 HN10A4 HN12A4
Stainless Steel (A2) M6 M8 M10 M12	pack 100 pack 100 pack 100 pack 100	HN06A2 HN08A2 HN10A2 HN12A2
Roofing Bolts		
Electroplated Zinc M6 × 12 M6 × 16 M6 × 20 M6 × 25 M6 × 30 M6 × 40 M6 × 50 Hot Dip Columinad	pack 200 pack 200 pack 200 pack 200 pack 100 pack 100 pack 100	RB0612EG RB0616EG RB0620EG RB0625EG RB0630EG RB0640EG RB0650EG
Hot Dip Galvanized M6 x 12 M6 x 16	pack 100 pack 100	RB0612HG RB0616HG
Stainless Steel (A4) M6 x 12 M6 x 16 M6 x 20 Stainless Steel (A2)	pack 100 pack 100 pack 100	RB0612A4 RB0616A4 RB0620A4
M6 x 12 M6 x 16 M6 x 20	pack 100 pack 100 pack 100	RB0612A2 RB0616A2 RB0620A2
Flat Washers		
Electro Plated Zinc M6 M8 M10 M12	pack 500 pack 500 pack 500 pack 200	FW06EG FW08EG FW10EG FW12EG
Stainless Steel (A2) M6 M8 M10 M12	pack 100 pack 100 pack 100 pack 100	FW06A2 FW08A2 FW10A2 FW12A2
Spring Washers		
Electro Plated Zinc M6 M8 M10 M12	pack 400 pack 400 pack 400 pack 400	SW06EG SW08EG SW10EG SW12EG
Threaded Rods in	2 meters as	standard
Electro Plated Zinc M6 x 2m M8 x 2m M10 x 2m M12 x 2m Stainless Steel (A4)		TR06EG TR08EG TR10EG TR12EG
M6 x 2m M8 x 2m M10 x 2m M12 x 2 m Stainless Steel (A2)		TR06A4 TR08A4 TR10A4 TR12A4
M6 x 2m M8 x 2m M10 x 2m M12 x 2m		TR06A2 TR08A2 TR10A2 TR12A2
_		

Hot Dip Galvanized

pack 500

M6

Catalogue No.

HN06HG

### **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.



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)

Shown is the assembly ceiling anchor

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.



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

Shown is the assembly Sleeve Anchor fixed with Hexagonal bolt

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 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

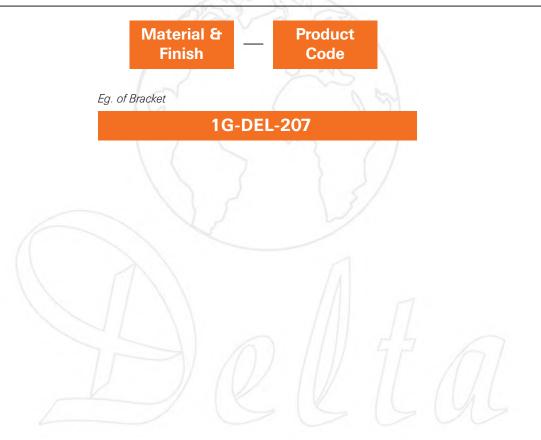
For Maximum capacity use Channel Nuts of M12 size. In most cases the mode of failure will be slippage of the bracket along the channel. However there are few channel / bracket combinations where the maximum load is dependent upon the strength of the bracket itself.

Commercial tolerance on dimensions apply.

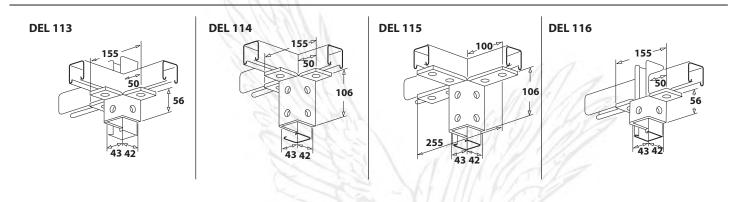
#### Materials and Finishes Available

- 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.

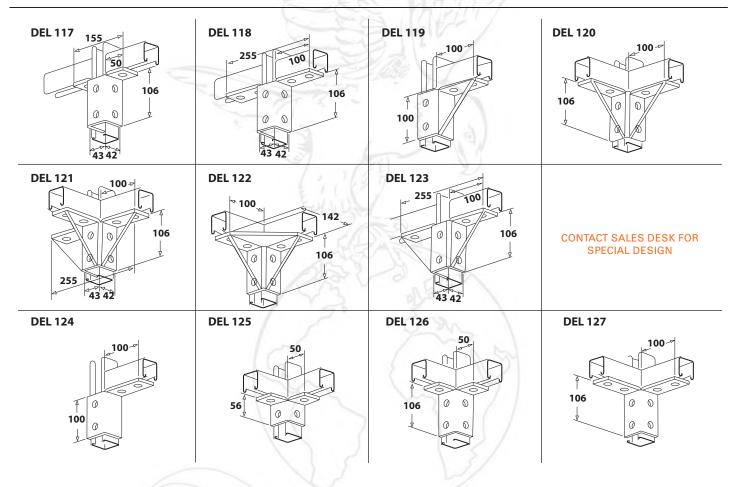
### How to order



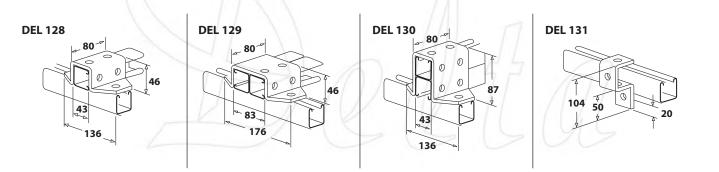
### Wing Shape Fittings (For 41 mm Width Series Channel)



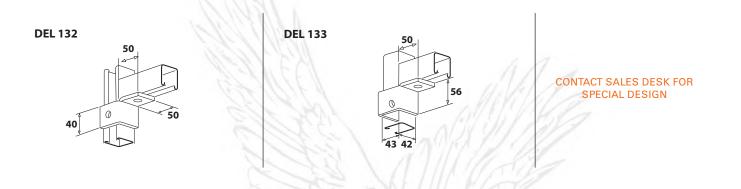
Wing Shape Fittings (For 41 mm Width Series Channel)



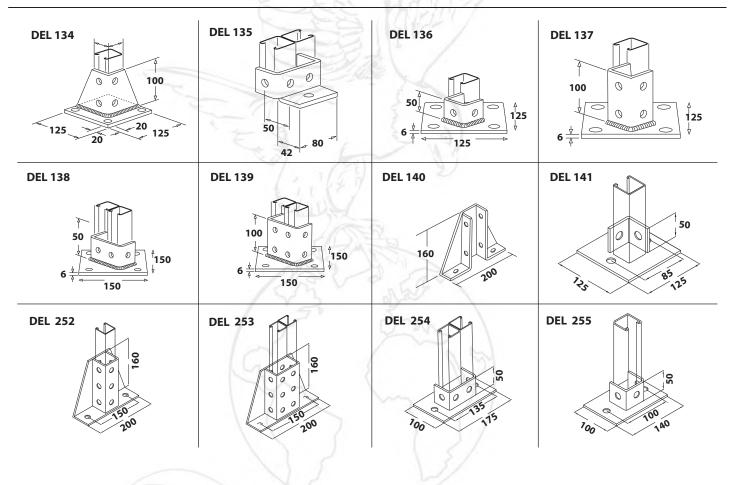
"U" And Wing Shape Fittings (For 41 mm Width Series Channel)



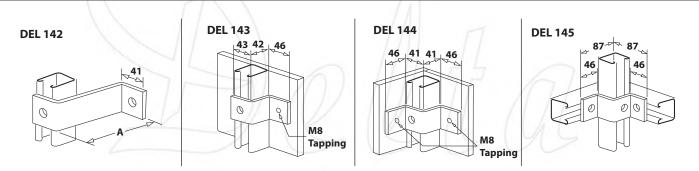
### "U" And Wing Shape Fittings (For 41 mm Width Series Channel)

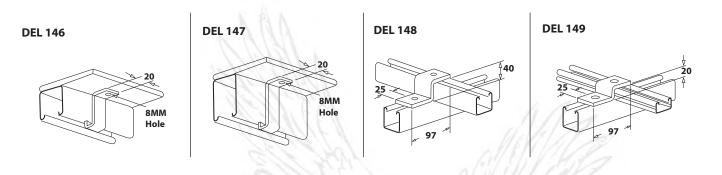


#### Post Bases (For 41 mm Width Series Channel)

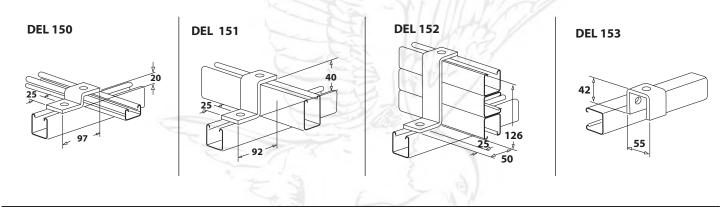


#### "Z" Shape Fittings (For 41 mm Width Series Channel)

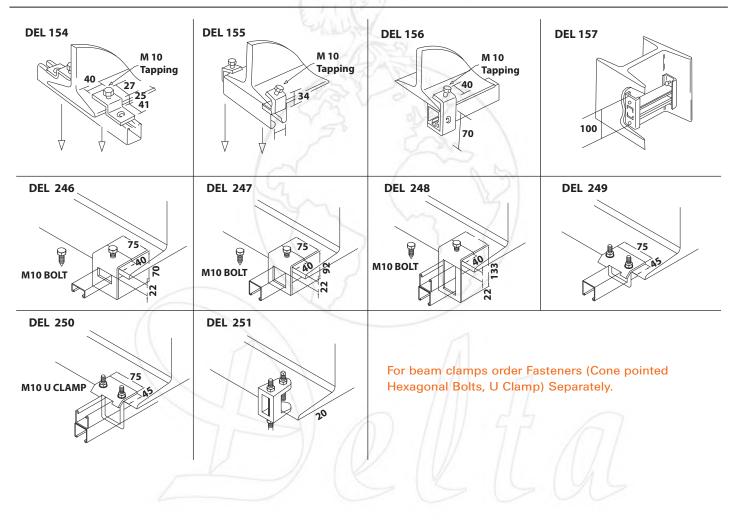




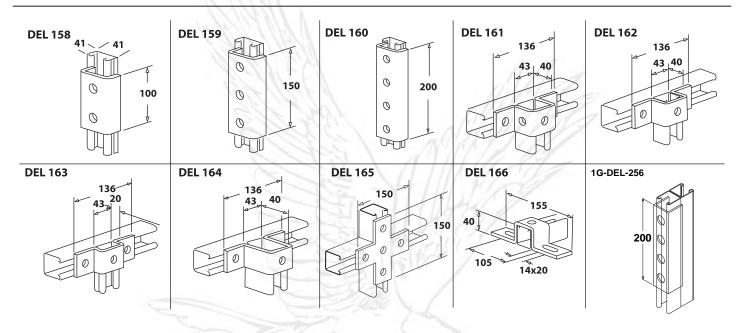
### "Z" & "U" And Wing Shape Fittings (For 41 mm Width Series Channel)



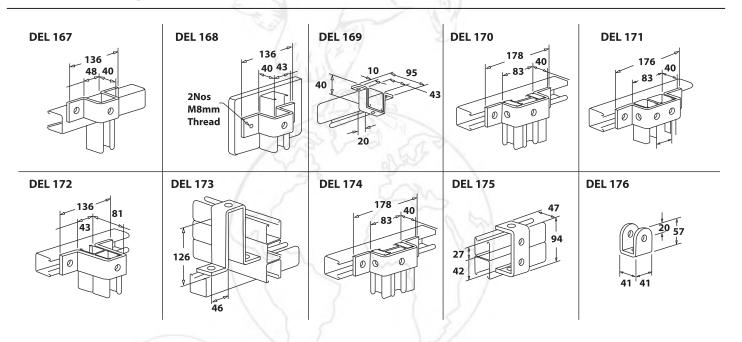
#### Beam Clamps



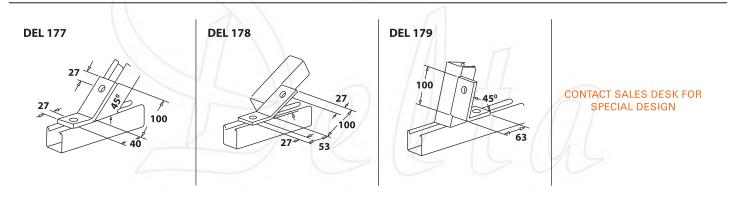
#### "U" Shape Fittings (For 41 mm Width Series Channel)



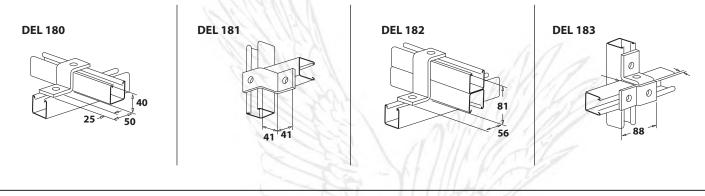
"U" Shape Fittings (For 41 mm Width Series Channel)



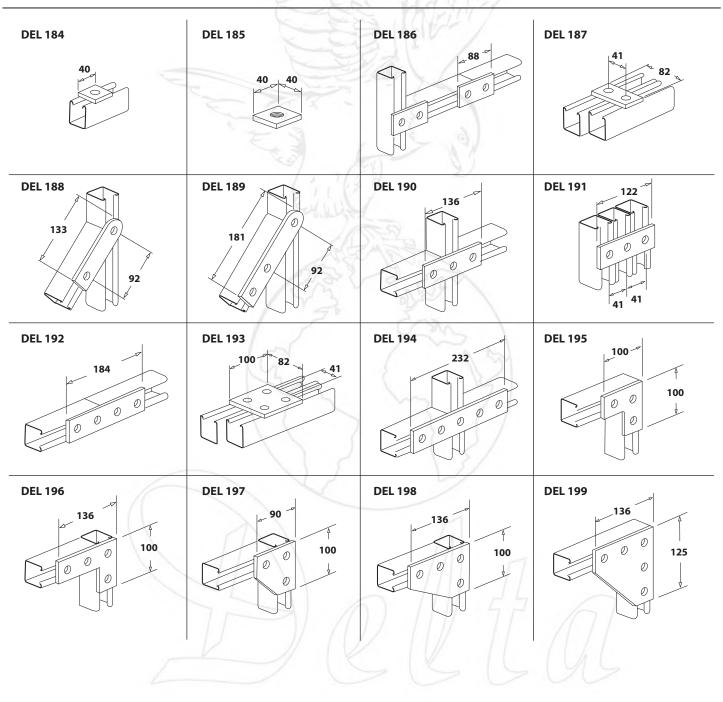
Angular Fittings (For 41 mm Width Series Channel)

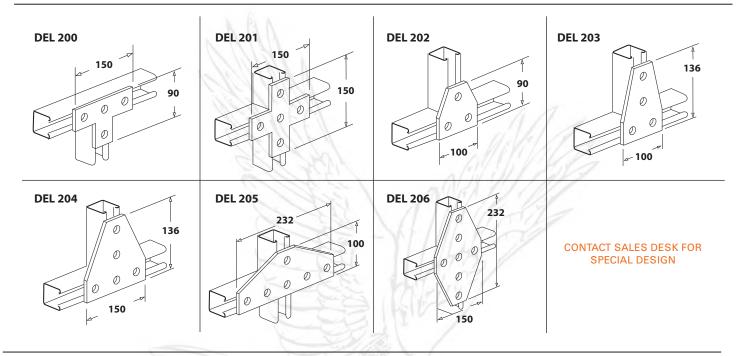


### "Z" Shape Fittings (For 41 mm Width Series Channel)

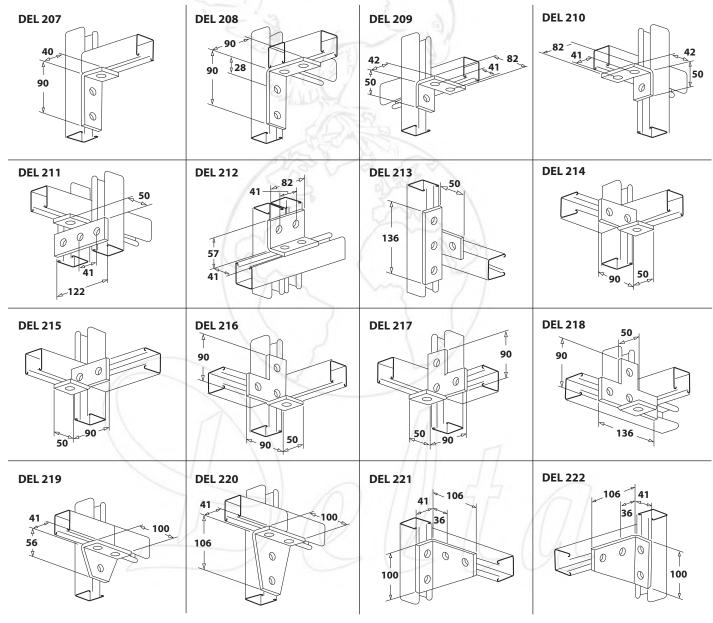


#### **Flat Shape Fittings**



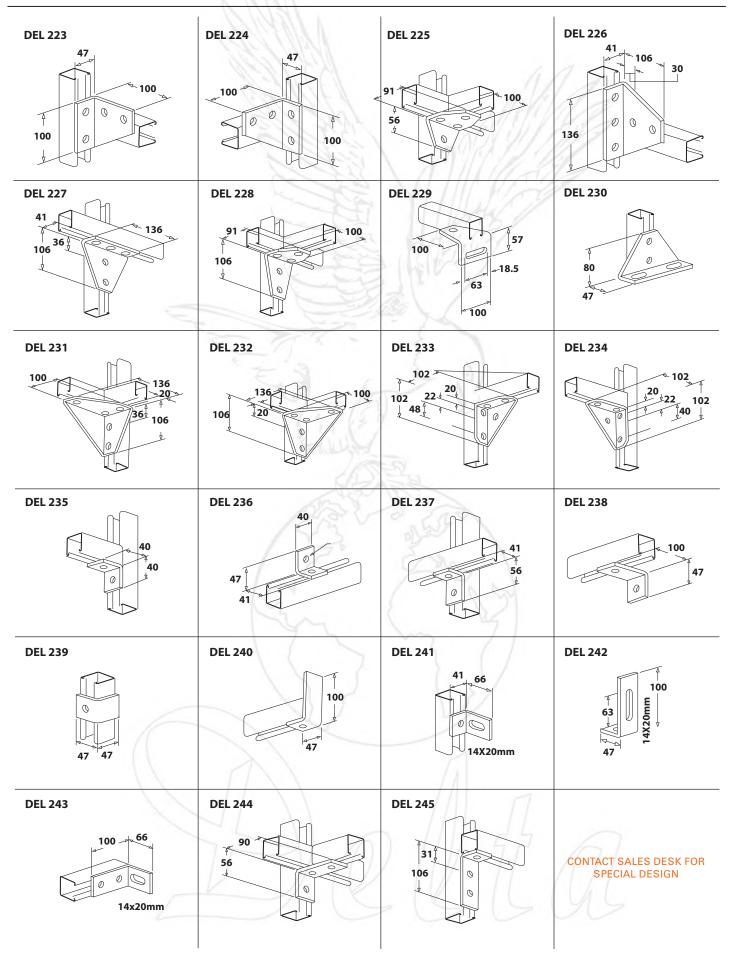


Ninety Degree Angle Fittings (For 41 mm Width Series Channel)



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



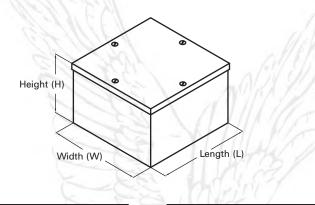
#### Flat Brackets



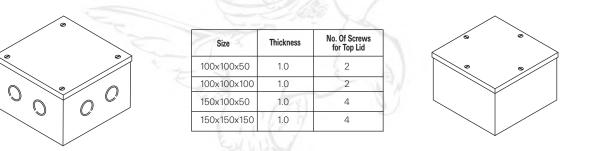
### **Delta Pull Boxes**

#### 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.



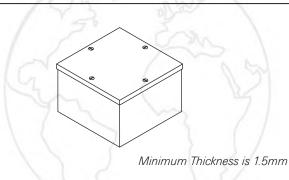
#### SCP - A



SCP - B

Screw cover, without knockouts.

### SCP - C



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

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	То	Multiply	To Convert		Multiply
		Ву	From	То	Ву
Length	11/11	1.1			
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
		1.609 347			
Mile (U.S. Statute) (mi)	Kilometer (kiss)	1.009 347	kilometer (km)	Mile (US. Statute) (mi)	0.621 370
Area		04540			0.004550
Square Inch (in ² )	Square Millimeter (mm)	645.16	Square Millimeter (mm ² )	Square Inch (in ² )	0.001550
Square Foot (ft²)	Square Meter (m)	0.092 903	Square Meter (m ² )	Square root (ft ² )	10.763 915
Square Yard (yd²)	Square Meter (rn)	0.836 127	Square Meter (m ² )	Square Yard (yd ² )	1.195 991
Square Mile (m²)	Square Kilometer (1 cm²)	2.589 998	Square Kilometer (km²)	Square Mile (mi ² )	0.386 101
(U.S. Statute)				(U. S. Statute)	
Acre	Square Meter (m ² )	4046.873	Square Meter (rn ² )	Acre	0.000 247
Acre	Hectare	0.404 687	Hectare	Acre	2.471 046
		0.101007			2.171 010
<mark>/olume</mark> Cubic Inch (in ³ )	Cubio Millimotor (mm3)	16387.06	Cubic Millimeter (mm3)	Cubic Inch (in3)	0.000061
Cubic Inch (in ³ )	Cubic Millimeter (mm ³ )		Cubic Millimeter (mm ³ )	Cubic Inch (in ³ )	
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 (yd³)	Cubic Meter (m ³ )	0.764555	Cubic Meter (m ³ )	Cubic Meter (m ³ )	1.307 950
Gallon (U.S. Liquid) (gal)	Litre(I)	3.785 412	Litre (1)	Gallon (U.S. Liquid) (gal)	0.264 172
Quart (.S. Liquid) (QT)	Litre (1)	0.946 353	Litre (1)	Quart (U.S. Liquid) (qt)	1.056 668
Mass	÷±	3	6 6		
Ounce (Avoirdupois (oz)	Gram (g)	28.349 520	Gram (g)	Ounce (Avoirdupois) (oz)	0.035 274
Pound (Avoirdupois) (Ib)	Kilogram (kg)	0.453 592	Kilogram (kg)	Pound (Avoirdupois) ib)	2.204624
Short Ton	Kilogram (kg)	907.185	Kilogram (kg)	Short Ton	0.00110
		307.103			0.00110
Force		Maryer -			
Ounce -Force	Newton (N)	0.278 014	Newton (N)	Ounce -Force	3.596 941
Pound-Force (Ibf)	Newton (N)	4.448 222	Newton (N)	Pound-Force (lbf)	0.224 809
Bending Moment					
Pound-Force-Inch (Ibf-in)	Newton-Meter (N-rn)	0.112985	Newton-Meter (N-rn)	Pound-Force-Inch (Ibf-in)	8.850 7.35
Pound-Force-Foot (Ibf-in)	Newton-Meter (N-rn)	1.355 818	Newton-Meter (N-rn)	Pound-Force-Foot (Ibf-in)	0.737 562
Pressure, Stress	(	1	CON 1		
Pound-Force per	Kilo pascal (kPa)	6.894 757	Kilo pascal (kPa)	Pound-Force per	0.145 038
Square Inch (Ibfin²)		0.001707		Square Inch (Ibfin ² )	0.110 000
	Kila and (IrDa)	2 000 000	Kilo and (ID-)		
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 (3)	kilowatt Hour (kw-h)	2.78-7
Power	11		- 1		
Foot-Pound-Force	watt(W)	1.355 818	Watt(W)	Foot-Pound-Force	0.737 562
	vvdil(vv)	1.000 010	vvall(vv)		U./J/ DUZ
/Second (tool box/s)		0.000.074	M (M)	/Second (ftOlbs/s)	0 4 40 4 40
British Thermal unit	Watt (W)	0.293 071	Watt (W)	British Thermal unit	3.4 12 142
/Hour (Btulh)				fHour (Btu/h)	
Horsepower	Kilowatt (kW)	0.745700	Kilowatt (kW)	Horsepower	1.341 022
(550 Ft. Lbf/s) (hp)				(550 Fi. Lbf/s) (hp)	
Angle	V	11 11/			
degree	Radian (rad)	0.0 17 453	radian (rad)	Degree	57.295 788
- J					
<mark>Temperature</mark> Degree Fahrenheit (F)	Degree Celsius (C)	(FO-32)1 .8	Degree Celsius (C)	Degree Farenheit (F)	1.8xC0+32

### Notes



















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