

TERMS AND DEFINITIONS

Cable Tray System

Cable tray system is a unit or assembly of units or sections and associated fittings forming a rigid structural system used to hold up the cables and also distributes the cables along the specified path.

Types of Cable Tray

- 1. Ladder Cable Tray
- 2. Perforated Cable Tray
- 3. Trough Cable Tray
- 4. Channel Cable Tray

Ladder Type Cable Tray

A pre-fabricated metal structure consisting of two longitudinal side rails connected by individual transverse members.

Perforated Cable Tray

A pre-fabricated metal structure consisting of one-piece, provided with slot openings for sufficient ventilation. It is generally used for moderate heat generating applications; the reason for selecting a perforated cable tray is aesthetics and no drooping of small cable is visible. It also provides more support than does the ladder type cable tray and the ventilation holes could be used as install holes so that installation becomes more credible.

Trough Cable Tray

A pre-fabricated metal structure greater than 100 mm in width consisting of a ventilated bottom within integral or separate longitudinal side rails.

Channel Cable Tray

A pre-fabricated metal structure consisting of a one-piece ventilated bottom channel section or solid bottom channel, or both, not exceeding 150 mm in width.

Accessories

Devices which are used to supplement the function of straight sections and fittings include such items as Bends, Tee, Cross, Reducer, hold down devices and dividers.

Bends (90° Bend, 45° Bend)

A cable tray fitting which is suitable for routing the cable or joining the cable trays in 90° or 45° direction either in horizontal or vertical planes.

Tee

A cable tray fitting which is suitable for route the cable or joining the cable trays in a tee configuration at 90° in same planes or different planes.

Cross

A cable tray fitting which is suitable for routing the cable or joining the cable trays in four directions at 90° in same planes or different planes.

Reducer

A cable tray fitting which is suitable for joining cable trays of different widths in the same plane.

→ Straight Reducer

A straight reducer has two symmetrical offset sides.

- → Right Reducer When viewed from large end, it has a straight side on the right.
- → Left Reducer When viewed from large end, it has a straight side on the left.

Cable Tray Connector

It is used to join cable tray straight sections or accessories or both.

Types of connector

- ➡ Rigid
- → Expansion
- ➔ Adjustable
- → Reducer





2 Materials

Material selection is mainly based on the environment condition, installation consideration and economic consideration.

I. Mild Steel

Mild steel is the most common used steel, providing good strength and wear resistance. It is available very easily and is also very economical. Mild steel can be coated in many ways to avoid corrosion. This accounts for 90% of cable trays manufactured anywhere in the world.

- ➔ Plain Steel
 - * Hot Rolled Steel Sheet
 - * Cold Rolled Steel Sheet

Advantages

- Low Thermal Expansion
- Limited Deflection
- Good Surface Finishing
- Electric Shielding

→ Galvanized Steel (Continuously Pre-Galvanized Hot-Dip Zinc Coated Steel)

II. Stainless Steel

Stainless steel is used in highly aggressive environments and industrial sites where there are high levels of potent airborne pollution. The fire resistance of stainless steel is very high. It is also ideal for use in environments where special hygiene requirements are required like dairies, abattoirs, food industries and pharmaceutical factories.

Advantages

- It withstands high temperatures
- Offers high corrosion resistance

III. Aluminium

Aluminium is a rust-free alternative to all other basic raw materials. It has a special superficial coating of al_2O_3 to protect from rust. It can also take loads of up to 40kg/m with a safety factor of 1.6. It can be used without any additional coating.

Advantages

- High corrosion resistance
- Excellent strength to weight ratio
- Easy to install
- Excellent grounding conductor



3 SURFACE FINISHING

→ Pre-Galvanized Zinc

Pre-Galvanized steel is produced by coating coils of sheet steel with zinc by continuously rolling the material through molten zinc bath at the mills. This is also known as Mill Galvanized or Hot-Dip Mill Galvanized.

Due to Cathodic effect between Zinc and Iron elements the material plated by Pre Galvanizing method will be protected against corrosion on cut surfaces during fabrication. It is valid and effective up to 2mm thickness. Minimum coating thickness from this process is 12μ m. Pre Galvanized cable trays are suitable for indoor use.

→ Hot-Dip Galvanizing After Fabrication

Cable tray products are fabricated from steel and then completely immersed in a bath of molten zinc. A metallic bond occurs resulting in a zinc coating that completely coats all surfaces, including edges and welds.

The Layer of zinc which bonds to steel provides a dual protection against corrosion. It protects first as an overall barrier coating. If this coating happens to be scratched or gouged, zinc's secondary defence is called upon to protect the steel by galvanic action. Minimum coating thickness from this process is 45µm. Hot-dip Galvanizing cable trays are suitable for both indoor and outdoor use.

Corrosion of zinc plated and unprote

Atmosphere Types	Wear out of zinc coating (Micron/year)	Wear out unprotected steel (Micron/year)
Open field	1.0 - 3.4	6 - 60
Sea side	2.4 - 15.0	20 - 170
City	1.0 - 6.0	30 - 70
Industry	3.8 - 19.0	30 - 160
Tropical climate	1.0 - 9.7	1 - 70

6

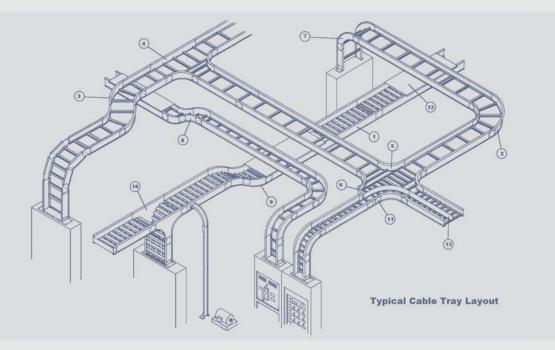
→ Powder Coating

Powder coating is the process of coating a surface in which a powder material is applied using an electrostatic or compressed air method. The applied powder is then heated to its melting point, after which it flows to form a smooth film which dries to a firm, durable finish very resistant to scratches, cracking, peeling, UV rays and rust.

A wide range of specialty effects is easily accomplished which would be impossible to achieve with other coating processes. Minimum coating thickness from this process is 45µm. Powder coated cable trays are more suitable for indoor use.

Surface Finishing	Code
Pre Galvanized	PG
Hot Dip Galvanized	HG
Powder Coating	РС

CABLE TRAY SYSTEMS



- 1. Cable Tray Straight section
- 2. Horizontal 90° Bend
- Horizontal 45° Bend 3.
- Horizontal Tee Bend 4.
- 5. Horizontal Cross Way
- Reducer 6.
- 7. Vertical Outside 90° Bend

- Vertical Outside 45° Bend 8.
- 9. Vertical Inside 45° Bend
- 10. Vertical Tee Bend
- 11. Coupler or Splice Plate or connector
- 12. Cable Tray Cover
- 13. Partition or Divider

ALPHA CABLE TRANS

Alpha CMS Cable Trays are produced to simplify the process of cable installation considering the cable loads and practical site requirements. It comes in a standard size of 3m, also available in different lengths on request.

Types

- a. Light Duty Cable Tray (L Type)
- b. Medium Duty Cable Tray (M Type)
- c. Heavy Duty Cable Tray (H Type)

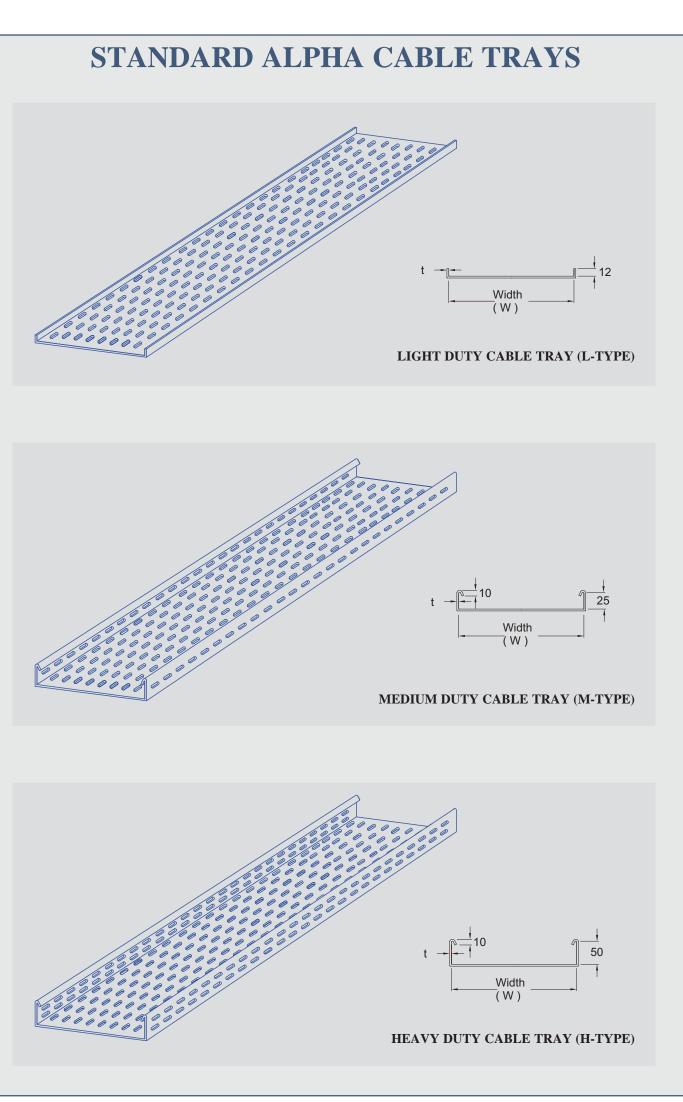
Surface Finishes

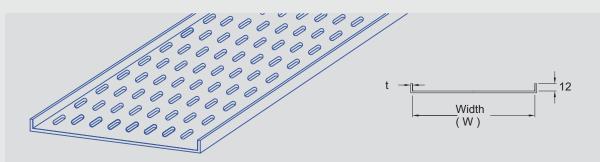
- b. Hot dip galvanized after fabrication as per BSEN ISO 1461:2009
- c. Powder coated

Standard sizes available in heavy duty cable tray

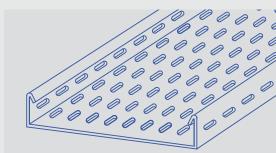
Width x Height in mm			
200 x 5 0	600 x 50		
300 x 5 0	750 x 50		
450 x 50	900 x 50		
	200 x 50 300 x 50		

a. Hot dip galvanized sheet [Pre galvanized] as per BSEN 10327:2004 and BSEN 10142:2000





Description	w (mm)	h (mm)	t (mm)	Weight (Kg/M)
CTL SS 50x1	50	12	1	0.60
CTL SS 100x1	100	12	1	1.00
CTL SS 150x1	150	12	1	1.40
CTL SS 200x1.2	200	12	1.2	2.12
CTL SS 300x1.2	300	12	1.2	3.12
CTL SS 450x1.5	450	12	1.5	4.56
CTL SS 600x1.5	600	12	1.5	7.50



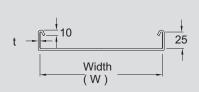
Description	w (mm)	h (mm)	t (mm)	Weight (Kg/M)
CTM SS 50x1	50	25	1	1.04
CTM SS 100x1	100	25	1	1.44
CTM SS 150x1	150	25	1	1.84
CTM SS 200x1.2	200	25	1.2	2.68
CTM SS 300x1.2	300	25	1.2	3.65
CTM SS 450x1.2	450	25	1.2	5.08
CTM SS 600x1.5	600	25	1.5	8.16
CTM SS 750x2	750	25	2	13.28
CTM SS 900x2	900	25	2	15.68

10

LIGHT DUTY CABLE TRAYS

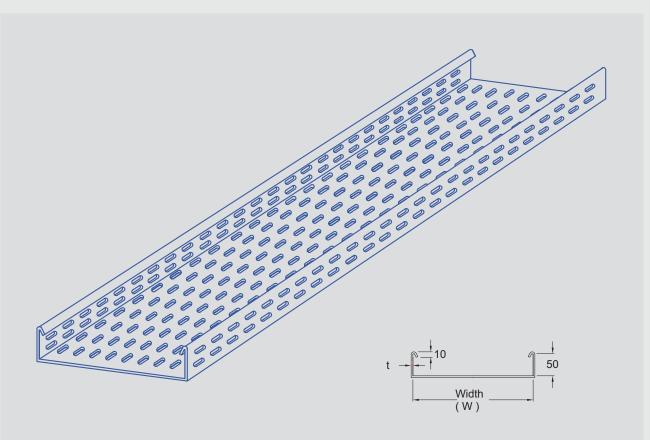
(CTL SS wxt)

MEDIUM DUTY CABLE TRAYS



(CTM SS wxt)

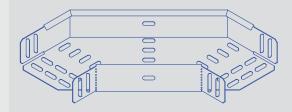
HEAVY DUTY CABLE TRAYS

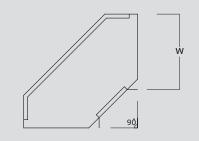


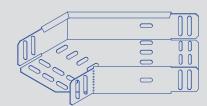
(CTH SS wxhxt)

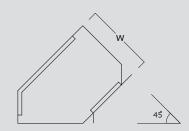
Description	w (mm)	h (mm)	t (mm)	Weight
Description	w (mm)	h (mm)	t (mm)	(Kg/M)
CTH SS 50x1	50	50	1	1.44
CTH SS 100x1.2	100	50	1.2	2.21
CTH SS 150x1.2	150	50	1.2	2.69
CTH SS 200x1.5	200	50	1.5	3.69
CTH SS 300x1.5	300	50	1.5	5.16
CTH SS 450x1.5	450	50	1.5	6.96
CTH SS 600x2	600	50	2	11.68
CTH SS 750x2	750	50	2	14.08
CTH SS 900x2	900	50	2	16.5

HEAVY DUTY CABLE TRAY ACCESSORIES









90° BEND (CTH H90 wxhxt)

Description	w (mm)	h (mm)	t (mm)
CTH 90 50x1	50	50	1
CTH 90 100x1.2	100	50	1.2
CTH 90 150x1.2	150	50	1.2
CTH 90 200x1.5	200	50	1.5
CTH 90 300x1.5	300	50	1.5
CTH 90 450x1.5	450	50	1.5
CTH 90 600x2	600	50	2
CTH 90 750x2	750	50	2
CTH 90 900x2	900	50	2

45° BEND (CTH H45 wxhxt)

Description	w (mm)	h (mm)	t (mm)
CTH 45 50x1	50	50	1
CTH 45 100x1.2	100	50	1.2
CTH 45 150x1.2	150	50	1.2
CTH 45 200x1.5	200	50	1.5
CTH 45 300x1.5	300	50	1.5
CTH 45 450x1.5	450	50	1.5
CTH 45 600x2	600	50	2
CTH 45 750x2	750	50	2
CTH 45 900x2	900	50	2

HEAVY DUTY CABLE TRAY ACCESSORIES

Straight Section

00000

Width (mm) Description h t w1 w2 w3 (**mm**) (mm) CTH ET 50x1 50 50 50 50 1 CTH ET 100x1.2 100 100 100 1.2 50 CTH ET 150x1.2 150 150 150 50 1.2 CTH ET 200x1.5 200 200 200 50 1.5 CTH ET 300x1.5 300 300 300 50 1.5 CTH ET 450x1.5 450 450 450 50 1.5 CTH ET 600x2 600 600 600 2 50 CTH ET 750x2 2 750 750 750 50 900 CTH ET 900x2 900 50 2 900

UNEQUAL TEE (CTH UET w1-w2-w3xhxt)

EQUAL CROSS (CTH EC wxhxt)

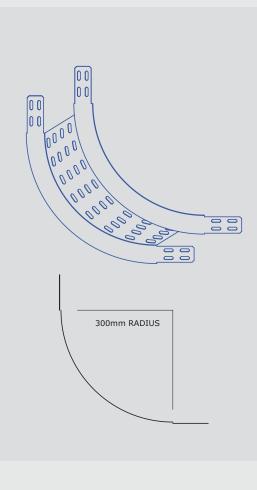
EQUAL TEE (CTH ET wxhxt)

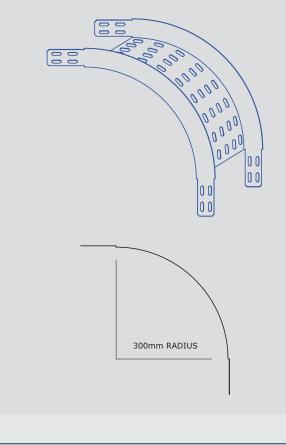
000 0 0 0 0 0 0 0

Г	w1 -	
w2		w4
LL		
	└ w3	

Description		Width	n (mm))	h	t
Ĩ	w1	w2	w3	w4	(mm)	(mm)
CTH EC 50x1	50	50	50	50	50	1
CTH EC 100x1.2	100	100	100	100	50	1.2
CTH EC 150x1.2	150	150	150	50	50	1.2
CTH EC 200x1.5	200	200	200	200	50	1.5
CTH EC 300x1.5	300	300	300	300	50	1.5
CTH EC 450x1.5	450	450	450	450	50	1.5
CTH EC 600x2	600	600	600	600	50	2
CTH EC 750x2	750	750	750	750	50	2
CTH EC 900x2	900	900	900	900	50	2
UNEQUAL CROSS (CTH UEC w1-w2-w3-w4xhxt)						







14

HEAVY DUTY CABLE TRAY ACCESSORIES

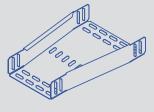
90° INSIDE RAISER BEND (CTH RI90 wxhxt)

Description	w (mm)	h (mm)	t (mm)
CTH RI90 50x1.2	50	50	1.2
CTH RI90 100x1.2	100	50	1.2
CTH RI90 150x1.2	150	50	1.2
CTH RI90 200x1.5	200	50	1.5
CTH RI90 300x1.5	300	50	1.5
CTH RI90 450x1.5	450	50	1.5
CTH RI90 600x2	600	50	2
CTH RI90 750x2	750	50	2
CTH RI90 900x2	900	50	2

90° OUTSIDE RAISER BEND (CTH RO90 wxhxt)

Description	w (mm)	h (mm)	t (mm)
CTH RO90 50x1.2	50	50	1.2
CTH RO90 100x1.2	100	50	1.2
CTH RO90 150x1.2	150	50	1.2
CTH RO90 200x1.5	200	50	1.5
CTH RO90 300x1.5	300	50	1.5
CTH RO90 450x1.5	450	50	1.5
CTH RO90 600x2	600	50	2
CTH RO90 750x2	750	50	2
CTH RO90 900x2	900	50	2

HEAVY DUTY CABLE TRAY ACCESSORIES





STRAIGHT REDUCER (CTH SR w1-w2xhxt)

Description	w1 (mm)	w2 (mm)	h (mm)	t (mm)
CTH SR 100-50x1.2	100	50	50	1.2
CTH SR 150-100x1.2	150	100	50	1.2
CTH SR 200-150x1.2	200	150	50	1.2
CTH SR 300-200x1.5	300	200	50	1.5
CTH SR 450-300x1.5	450	300	50	1.5
CTH SR 600-450x2	600	450	50	2
CTH SR 750-600x2	750	600	50	2
CTH SR 900-750x2	900	750	50	2

RIGHT REDUCER (CTH RR w1-w2xhxt)

Description	w1 (mm)	w2 (mm)	h (mm)	t (mm)
CTH RR 100-50x1.2	100	50	50	1.2
CTH RR 150-100x1.2	150	100	50	1.2
CTH RR 200-150x1.2	200	150	50	1.2
CTH RR 300-200x1.5	300	200	50	1.5
CTH RR 450-300x1.5	450	300	50	1.5
CTH RR 600-450x2	600	450	50	2
CTH RR 750-600x2	750	600	50	2
CTH RR 900-750x2	900	750	50	2

LEFT REDUCER (CTH LR w1-w2xhxt)

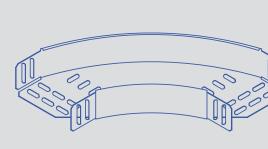
Description	w1 (mm)	w2 (mm)	h (mm)	t (mm)
CTH LR 100-50x1.2	100	50	50	1.2
CTH LR 150-100x1.2	150	100	50	1.2
CTH LR 200-150x1.2	200	150	50	1.2
CTH LR 300-200x1.5	300	200	50	1.5
CTH LR 450-300x1.5	450	300	50	1.5
CTH LR 600-450x2	600	450	50	2
CTH LR 750-600x2	750	600	50	2
CTH LR 900-750x2	900	750	50	2

HOW TO ORDER

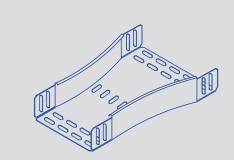
Selection of Trays and Accessories, replace the letters shown in red with your choice from the following options.

- Z: Duty / Type of Tray (L-Type, M-Type, H-Type) w: Widths (50, 100, 150, 200, 300, 450, 600, 750, 900mm)
- h: Height (40, 50, 75, 100)
- t: Thickness (1, 1.2, 1.5, 2mm)
- **F**: Surface Finishing
 - PG (Pre-Galvanized)
 - HG (Hot Dip Galvanized) PC (Powder Coating)

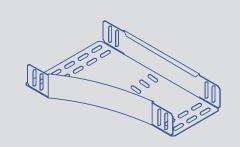




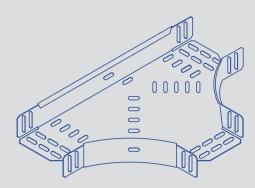
HORIZONTAL 90° BEND (CTR H90 wxhxt)



STRAIGHT REDUCER (CTR SR w1-w2xhxt)



LEFT REDUCER (CTR LR w1-w2xhxt)

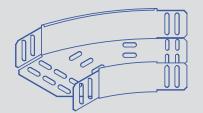


EQUAL TEE (CTR ET wxhxt)

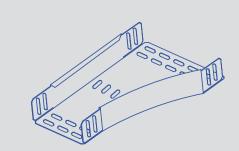
16

PROFILE TYPE CABLE TRAY ACCESSORIES

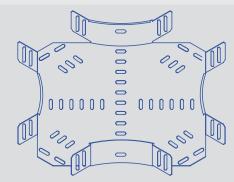




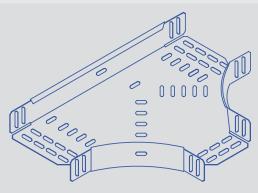
HORIZONTAL 45° BEND (CTR H45 wxhxt)



RIGHT REDUCER (CTR RR w1-w2xhxt)

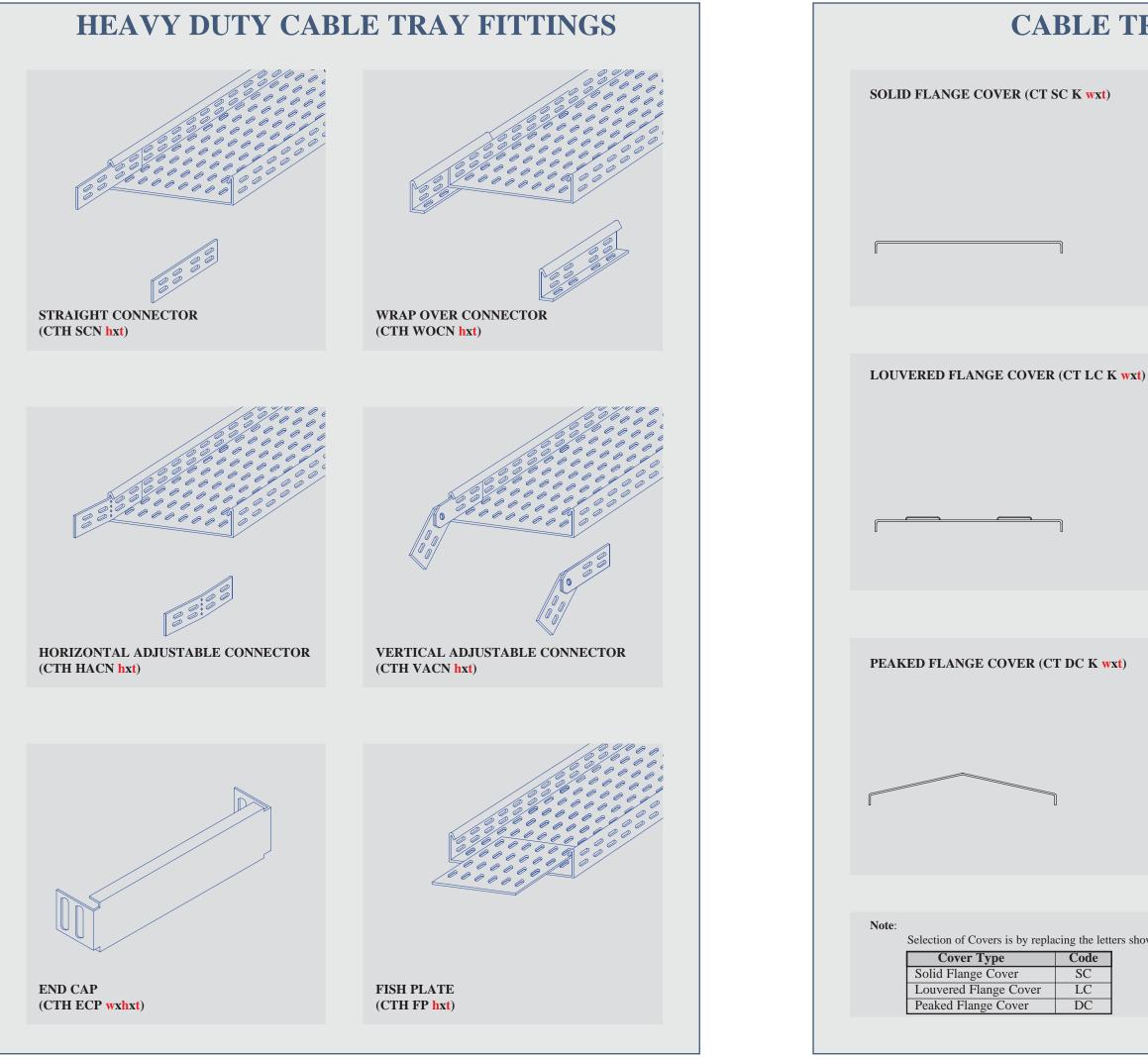


EQUAL CROSS (CTR EC wxhxt) UNEQUAL CROSS (CTR UEC w1-w2-w3-w4xhxt)

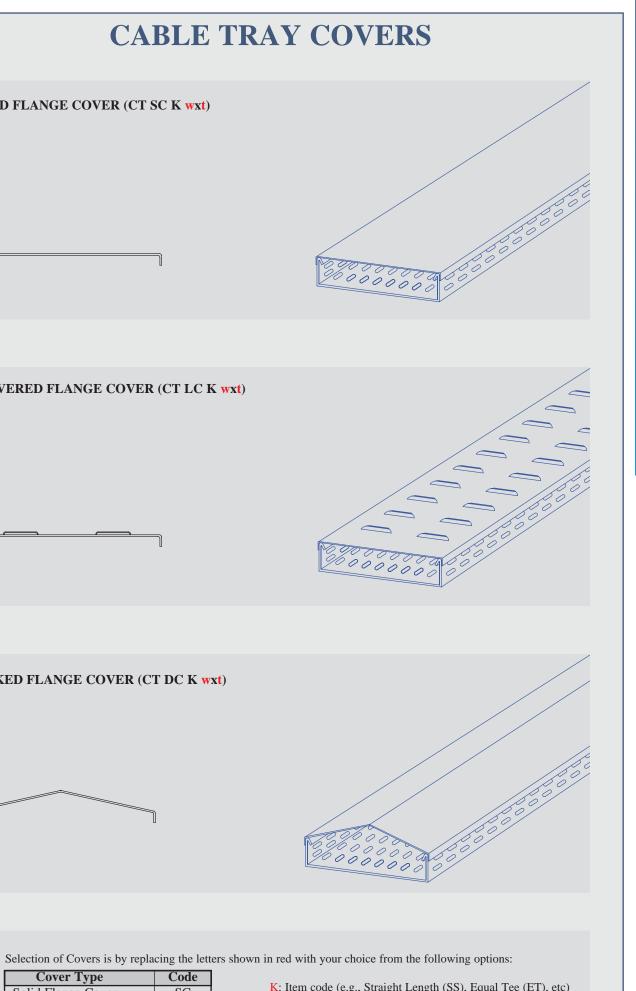


UNEQUAL TEE (CTR UET w1-w2-w3xhxt)

* Manufactured on request only



18



K: Item code (e.g., Straight Length (SS), Equal Tee (ET), etc) w: Widths (50, 100, 150, 200, 300, 450, 600, 750, 900) t: Thickness (0.7, 0.9, 1, 1.2, 1.5, 2)

Code

SC

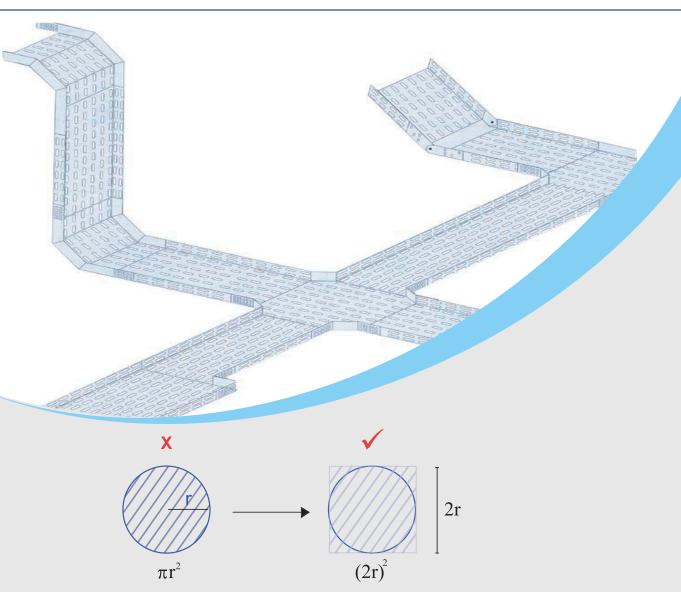
LC

DC

COVERS

CABLE TRAYS

ALPHA (



The selection of trays and ladders is very important. The following way can be considered in practical selection of trays or ladders depending on cables to be used.

- Use $2r^2$ formula instead of πr^2 for calculation of cross section area 1.
- Find out the total cross section by calculating all cables 2.
- Leave 20% reservation allowance from view point of forming ground to supplements 3.
- Select the appropriate cable support system from the following table 4.
- Select the nearest large value to your total cross section while making your selection 5.

			Cable Tray Width (mm)								
			50	100	150	200	300	450	600	750	900
t l		12	600	1200	1800	2400	3600	5400	7200	-	-
Height		25	1250	2500	3750	5000	7500	11250	15000	18750	22500
	n (40	2000	4000	6000	8000	12000	18000	24000	30000	36000
	(mm)	50	2500	5000	750	10000	15000	22500	30000	37500	45000
Cable		75	-	7500	11250	15000	22500	33750	45000	56250	67500
		100	-	10000	15000	20000	30000	45000	60000	75000	90000

Cable Trays Total Cross Section Area (mm²)

	Nominal Cross Section	Cable Outer	Net			► A		A	$\xrightarrow{100}{\underline{100}}$
	mm ²	Diameter	Weight Kg/M	Qty.	Total Weight	Qty.	Total Weight	Qty.	Total Weight
	4 X 1.5	13.0	0.25	12	3				
	4 x 2.5	14.5	0.33	8	2.64				
	4 x 4.0	16.5	0.435	6	2.61				
	4 x 6.0	17.5	0.545	6	3.27				
50	4 X 10	19.5	0.745	3	2.235				
	4 x 16	21.5	1.03	4	4.12				
	4 x 25	27.5	1.61	2	3.22				
	4 x 35	30.0	2.08	1	2.08				
	4 x 50	33.0	2.69	1	2.69				
	4 x 1.5	13.0	0.25	28	7	42	10.5		
	4 x 2.5	14.5	0.33	19	6.27	30	9.9		
	4 x 4.0	16.5	0.435	18	7.83	25	10.875		
	4 x 6.0	17.5	0.545	15	8.175	20	10.9		
100	4 x 10	19.5	0.745	9	6.705	18	13.41		
	4 X 16	21.5	1.03	8	8.24	12	12.36		
	4 x 25	27.5	1.61	5	8.05	6	9.66		
	4 x 35	30.0	2.08	3	6.24	6	12.48		
	4 x 50	33.0	2.69	3	8.07	5	13.45		
	4 x 1.5	13.0	0.25	42	10.5	63	15.75	84	21.00
	4 x 2.5	14.5	0.33	31	10.23	48	15.84	67	22.11
	4 x 4.0	16.5	0.435	24	10.44	40	17.4	48	20.88
	4 x 6.0	17.5	0.545	22	11.99	32	17.44	48	26.16
150	4 x 10	19.5	0.745	15	11.175	28	20.86	36	26.82
	4 x 16	21.5	1.03	12	12.36	19	19.57	30	30.90
	4 x 25	27.5	1.61	5	8.05	9	14.49	18	28.98
	4 x 35	30.0	2.08	6	12.48	8	16.64	14	29.12
	4 x 50	33.0	2.69	4	10.76	8	21.52	11	29.59
	4 x 1.5	13.0	0.25	58	14.5	87	21.75	116	29.00
	4 x 2.5	14.5	0.33	38	12.54	65	21.45	91	30.03
	4 X 4	16.5	0.435	33	14.355	55	23.925	66	28.71
	4 x 6	17.5	0.545	27	14.715	42	22.89	63	34.33
200	4 x 10	19.5	0.745	22	16.39	40	29.8	60	44.7
	4 x 16	21.5	1.03	17	17.51	26	26.78	43	44.29
	4 x 25	27.5	1.61	10	16.1	13	20.93	26	41.86
	4 x 35	30.0	2.08	8	16.64	12	24.96	18	37.44
	4 x 50	33.0	2.69	6	16.14	11	29.59	17	45.73
	4 x 1.5	13.0	0.25	74	18.5	111	27.75	148	37.00
	4 x 2.5	14.5	0.33	51	16.83	83	27.39	117	38.61
250	4 x 4	16.5	0.435	44	19.14	73	31.755	87	37.845
	4 X 6	17.5	0.545	41	22.345	56	30.52	81	44.145

20

MAXIMUM LOADING CAPACITIES OF CABLE TRAYS (SUPPORT DISTANCE 1.5M)

MAXIMUM LOADING CAPACITIES OF CABLE TRAYS (SUPPORT DISTANCE 1.5M)

	Nominal Cross Section	Cable Outer	Net Weight			► A		A	
	mm ²	Diameter	Kg/M	Qty.	Total Weight	Qty.	Total Weight	Qty.	Total Weight
	4 X 10	19.5	0.745	27	20.115	42	31.29	67	49.915
	4 x 16	21.5	1.03	20	20.6	33	33.99	55	56.65
250	4 x 25	27.5	1.61	13	20.93	17	27.37	34	54.74
	4 x 35	30.0	2.08	10	20.8	15	31.20	23	47.84
	4 x 50	33.0	2.69	7	18.83	14	37.66	21	56.49
	4 × 1.5	13.0	0.25	86	21.5	132	33.00	176	44.00
	4 x 2.5	14.5	0.33	59	19.47	100	33.00	140	46.20
	4×4.0	16.5	0.435	53	23.055	87	37.845	94	40.89
	4 × 6.0	17.5	0.545	47	25.615	66	35.97	99	53.955
300	4 X 10	19.5	0.745	32	23.84	62	46.19	91	67.795
	4 X 16	21.5	1.03	26	26.78	39	40.17	65	66.95
	4 x 25	27.5	1.61	14	22.54	24	38.64	36	57.96
	4 x 35	30.0	2.08	12	24.96	18	37.44	29	60.32
	4 x 50	33.0	2.69	8	21.52	17	45.73	26	69.94
	4 x 1.5	13.0	0.25	118	29.5	150	37.50	210	52.50
	4 x 2.5	14.5	0.33	80	26.4	133	43.89	186	61.38
	4 × 4.0	16.5	0.435	71	30.885	118	51.33	141	61.335
	4 x 6.0	17.5	0.545	65	35.425	88	47.96	132	71.94
400	4 x 10	19.5	0.745	46	34.27	82	61.09	112	83.44
	4 x 16	21.5	1.03	35	36.05	54	55.62	90	92.7
	4 x 25	27.5	1.61	19	30.59	32	51.52	56	90.16
	4 x 35	30.0	2.08	17	35.36	25	52.00	38	79.04
	4 x 50	33.0	2.69	11	29.59	23	61.87	35	94.15
	4 x 1.5	13.0	0.25	113	28.25	225	56.25	300	75.00
	4 x 2.5	14.5	0.33	99	32.67	168	55.44	235	77.55
	4 × 4.0	16.5	0.435	87	37.845	118	51.33	177	76.995
	4 X 6.0	17.5	0.545	55	29.975	112	61.04	168	91.56
500	4 x 10	19.5	0.745	49	36.505	102	75.99	156	116.22
	4 X 16	21.5	1.03	44	45.32	68	70.04	113	116.39
	4 x 25	27.5	1.61	26	41.86	53	85.33	70	112.7
	4 x 35	30.0	2.08	20	41.6	32	66.56	48	99.84
	4 x 50	33.0	2.69	14	37.66	29	78.01	44	118.36
	4 x 1.5	13.0	0.25	178	44.5	270	67.50	360	90.00
	4 x 2.5	14.5	0.33	116	38.28	203	66.99	284	93.72
	4 × 4.0	16.5	0.435	105	45.675	178	77.43	213	92.655
	4 x 6.0	17.5	0.545	65	35.425	134	73.03	201	109.545
600	4 x 10	19.5	0.745	58	43.21	126	93.87	158	117.71
	4 x 16	21.5	1.03	53	54.59	81	83.43	135	139.05
	4 x 25	27.5	1.61	31	49.91	53	85.33	84	135.24
	4 x 35	30.0	2.08	25	52	38	79.04	57	118.56
	4 x 50	33.0	2.69	17	45.73	36	96.84	54	145.26

Major Projects supplied

Some of our major projects are:

- Dubai Metro, Dubai.
- Delhi Metro Rail Corporation Ltd, New Delhi.
- Doha International Airport, Doha.
- Cleveland Clinic, Abu Dhabi.
- Sub Station, Mussafaah.
- Sub Station at Port of Fujairah, Fujairah.
- The Beach.
- Barwa Commercial, Doha.
- RD1101K Pot Delining Project Email.
- Ruwais Sulphur Handling Terminal 2 Gasco.
- Jumeriah Beach Hotel Phase II, Dubai.
- Al Ain Stadium, Al Ain.
- Al Sufouh Transit System.
- Burj Al Salam, Dubai.
- Fujairah Commercial Complex, Fujairah.
- · Presidential Flight State Guest Reception Terminal, Abu Dhabi.
- Department of Presidential Affairs, Abu Dhabi.
- Jumeirah Park, Dubai.
- Jafza Convention Centre, Dubai.
- Dheeraj & East Coast LLC.
- Ruwais Palace Construction, Abu Dhabi.
- Al Ghurair City Expansion, Dubai.

GOVERNMENT APPROVALS & CERTIFICATES

- ISO 9001:2008 (Quality Management Systems)
- ADWEA (Abu Dhabi Water & Electricity Authority)
- DEWA (Dubai Electricity & Water Authority)
- SEWA (Sharjah Electricity & Water Authority)
- FEWA (Federal Electricity & Water Authority)
- Ministry of Public Works



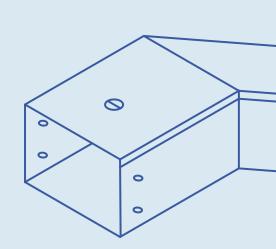
Alpha Cable Management Systems LLC (Alpha CMS) is fully equipped with state-of-the-art production facilities for manufacturing:

CABLE TRAYS I.

II. CAB TRUNKINGS III. CA LADDERS **IV. ALPHA CABLE STRUTS & SUPPORT SYSTEMS**

Alpha CMS is the one of the leading manufacturers of cable support systems in the UAE. We are specialized in the design and manufacturing of a wide range of cable support systems. Our products are under the Quality System that complies with ISO 9001:2008 and our cable support system also meets the required International standards such as NEMA-VE1, BS EN 61537, BS 4678 Part 1, and BS EN 50085-1.

Our factory is located in Al Jurf Industrial Area, Ajman, UAE. The factory operating area is more than 30,000 square feet and it is well equipped with the latest Semi Automatic and Full Automatic machinery to achieve product quality of the highest international standards.



TS a wide Alpha CMS offers a wide range of Trunking Systems from normal cable trunkings to floor distribution systems as per B.S. 4678 PART 1.

0

To enable smooth and easy turning of cables, all fittings are with integral coupler. Covers have quick fix turn which makes locking and unlocking very simple. All fittings are made with single piece wherever possible.

Raw Materials

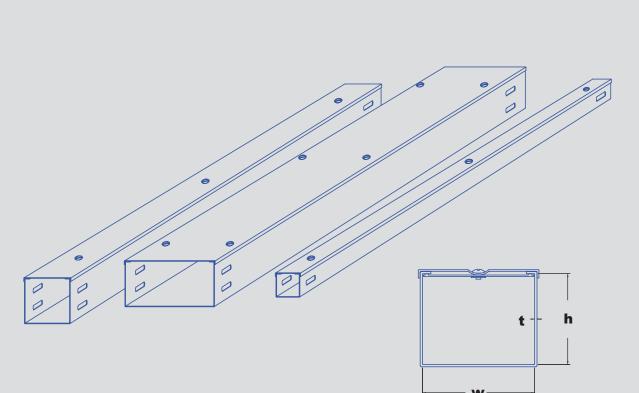
a. Mild Steel b. Stainless Steel c. Aluminium

Surface Finishes

a. Hot Dip Galvanized Sheet (Pre Galvanized) as per BSEN 10142 & BSEN 10327 b. Hot Dip Galvanized After Fabrication as per BSEN ISO 1461 c. Powder Coated



ALPHA STANDARD TRUNKING

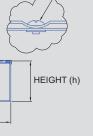


Description	w (mm)	h (mm)	t (mm)
TR SS 50x50x1	50	50	1
TR SS 75x50x1.2	75	50	1.2
TR SS 75x75x1.2	75	75	1.2
TR SS 100x50x1.2	100	50	1.2
TR SS 100x75x1.2	100	75	1.2
TR SS 100x100x1.2	100	100	1.2
TR SS 150x50x1.2	150	50	1.2
TR SS 150x75x1.2	150	75	1.2
TR SS 150x100x1.2	150	100	1.2
TR SS 150x150x1.5	150	150	1.5
TR SS 200x100x1.5	200	100	1.5

TRUNKING STRAIGHT SECTION SINGLE COMPARTMENT TRUNKING (TR SS wxhxt) TURN BUCKLE Thickness (1 HEIGHT (h) WIDTH (w) Standard lenght is 3 meter MULTI COMPARTMENT TRUNKING (TR SSC w(A-B-C)xhxt) in 2, 3, or 4 compartments divider spacing (A, B, C) should be DIVIDER mentioned in the order HEIGHT (h) 50, 75 & 100mm with trunking also available with 2 compartments WIDTH (w) **2 COMPARTMENT TRUNKING** strips also available HEIGHT (h) WIDTH (w) Coupler, Fittings and Fasteners should be ordered separately

3







Trunking with multi compartment available



While ordering multi compartment trunking

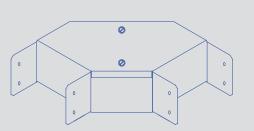


Normally divider strips are spot welded with trunking body for site fixing loose divider



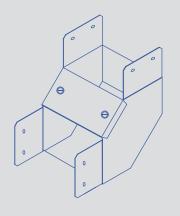
3 COMPARTMENT TRUNKING

TRUNKING ACCESSORIES



90° BEND COVER ON TOP (TR 90CT wxhxt)

Description	w (mm)	h (mm)	t (mm)
TR 90CT 50x50x1	50	50	1
TR 90CT 75x50x1.2	75	50	1.2
TR 90CT 75x75x1.2	75	75	1.2
TR 90CT 100x50x1.2	100	50	1.2
TR 90CT 100x75x1.2	100	75	1.2
TR 90CT 100x100x1.2	100	100	1.2
TR 90CT 150x50x1.2	150	50	1.2
TR 90CT 150x100x1.2	150	100	1.2
TR 90CT 150x150x1.5	150	150	1.5
TR 90CT 200x100x1.5	200	100	1.5

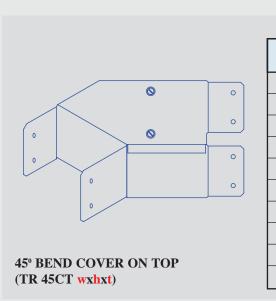


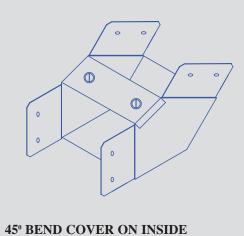
Description	w (mm)	h (mm)	t (mm)
TR 90CI 50x50x1	50	50	1
TR 90CI 75x50x1.2	75	50	1.2
TR 90CI 75x75x1.2	75	75	1.2
TR 90CI 100x50x1.2	100	50	1.2
TR 90CI 100x75x1.2	100	75	1.2
TR 90CI 100x100x1.2	100	100	1.2
TR 90CI 150x50x1.2	150	50	1.2
TR 90CI 150x100x1.2	150	100	1.2
TR 90CI 150x150x1.5	150	150	1.5
TR 90CI 200x100x1.5	200	100	1.5

90° BEND COVER ON INSIDE (TR 90CI wxhxt)

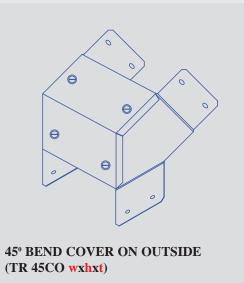
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Description	w (mm)	h (mm)	t (mm)
TR 90CO 50x50x1	50	50	1
TR 90CO 75x50x1.2	75	50	1.2
TR 90CO 75x75x1.2	75	75	1.2
TR 90CO 100x50x1.2	100	50	1.2
TR 90CO 100x75x1.2	100	75	1.2
TR 90CO 100x100x1.2	100	100	1.2
TR 90CO 150x50x1.2	150	50	1.2
TR 90CO 150x100x1.2	150	100	1.2
TR 90CO 150x150x1.5	150	150	1.5
TR 90CO 200x100x1.5	200	100	1.5





(TR 45CI wxhxt)





(TR 90CO wxhxt)

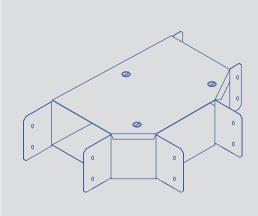
5

90° BEND COVER ON OUTSIDE

Description	w (mm)	h (mm)	t (mm)
TR 45CT 50x50x1	50	50	1
TR 45CT 75x50x1.2	75	50	1.2
TR 45CT 75x75x1.2	75	75	1.2
TR 45CT 100x50x1.2	100	50	1.2
TR 45CT 100x75x1.2	100	75	1.2
TR 45CT 100x100x1.2	100	100	1.2
TR 45CT 150x50x1.2	150	50	1.2
TR 45CT 150x100x1.2	150	100	1.2
TR 45CT 150x150x1.5	150	150	1.5
TR 45CT 200x100x1.5	200	100	1.5

Description	w (mm)	h (mm)	t (mm)
TR 45CI 50x50x1	50	50	1
TR 45CI 75x50x1.2	75	50	1.2
TR 45CI 75x75x1.2	75	75	1.2
TR 45CI 100x50x1.2	100	50	1.2
TR 45CI 100x75x1.2	100	75	1.2
TR 45CI 100x100x1.2	100	100	1.2
TR 45CI 150x50x1.2	150	50	1.2
TR 45CI 150x100x1.2	150	100	1.2
TR 45CI 150x150x1.5	150	150	1.5
TR 45CI 200x100x1.5	200	100	1.5

Description	w (mm)	h (mm)	t (mm)
TR 45CO 50x50x1	50	50	1
TR 45CO 75x50x1.2	75	50	1.2
TR 45CO 75x75x1.2	75	75	1.2
TR 45CO 100x50x1.2	100	50	1.2
TR 45CO 100x75x1.2	100	75	1.2
TR 45CO 100x100x1.2	100	100	1.2
TR 45CO 150x50x1.2	150	50	1.2
TR 45CO 150x100x1.2	150	100	1.2
TR 45CO 150x150x1.5	150	150	1.5
TR 45CO 200x100x1.5	200	100	1.5



TEE COVER ON TOP (TR TCT wxhxt)

Description	w (mm)	h (mm)	t (mm)
TR TCT 50x50x1	50	50	1
TR TCT 75x50x1.2	75	50	1.2
TR TCT 75x75x1.2	75	75	1.2
TR TCT 100x50x1.2	100	50	1.2
TR TCT 100x75x1.2	100	75	1.2
TR TCT 100x100x1.2	100	100	1.2
TR TCT 150x50x1.2	150	50	1.2
TR TCT 150x100x1.2	150	100	1.2
TR TCT 150x150x1.5	150	150	1.5
TR TCT 200x100x1.5	200	100	1.5

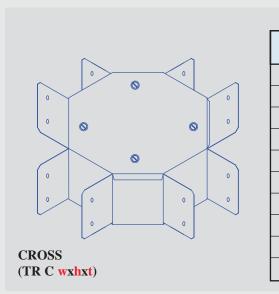
TR TCI 50x50x150501TR TCI 75x50x1.275501.2TR TCI 75x75x1.275751.2TR TCI 100x50x1.2100501.2TR TCI 100x75x1.2100751.2TR TCI 100x100x1.21001001.2TR TCI 150x50x1.2150501.2TR TCI 150x100x1.21501001.2TR TCI 150x100x1.21501001.2TR TCI 150x100x1.21501501.5TR TCI 200x100x1.52001001.5	Description	w (mm)	h (mm)	t (mm)
TR TCI 75x75x1.275751.2TR TCI 100x50x1.2100501.2TR TCI 100x75x1.2100751.2TR TCI 100x100x1.21001001.2TR TCI 150x50x1.2150501.2TR TCI 150x100x1.21501001.2TR TCI 150x100x1.21501001.2TR TCI 150x150x1.51501501.5	TR TCI 50x50x1	50	50	1
TR TCI 100x50x1.2100501.2TR TCI 100x75x1.2100751.2TR TCI 100x100x1.21001001.2TR TCI 150x50x1.2150501.2TR TCI 150x100x1.21501001.2TR TCI 150x100x1.21501001.2TR TCI 150x150x1.51501501.5	TR TCI 75x50x1.2	75	50	1.2
TR TCI 100x75x1.2100751.2TR TCI 100x100x1.21001001.2TR TCI 150x50x1.2150501.2TR TCI 150x100x1.21501001.2TR TCI 150x150x1.51501501.5	TR TCI 75x75x1.2	75	75	1.2
TR TCI 100x100x1.21001001.2TR TCI 150x50x1.2150501.2TR TCI 150x100x1.21501001.2TR TCI 150x150x1.51501501.5	TR TCI 100x50x1.2	100	50	1.2
TR TCI 150x50x1.2150501.2TR TCI 150x100x1.21501001.2TR TCI 150x150x1.51501501.5	TR TCI 100x75x1.2	100	75	1.2
TR TCI 150x100x1.21501001.2TR TCI 150x150x1.51501501.5	TR TCI 100x100x1.2	100	100	1.2
TR TCI 150x150x1.5 150 150 1.5	TR TCI 150x50x1.2	150	50	1.2
	TR TCI 150x100x1.2	150	100	1.2
TR TCI 200x100x1.5 200 100 1.5	TR TCI 150x150x1.5	150	150	1.5
	TR TCI 200x100x1.5	200	100	1.5

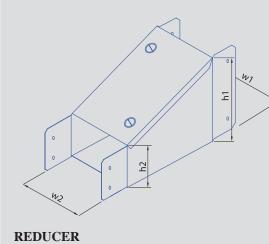
TEE COVER ON INSIDE (TR TCI wxhxt)

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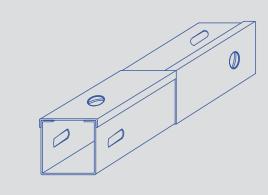
TEE COVER ON OUTSIDE (TR TCO wxhxt)

Description	w (mm)	h (mm)	t (mm)
TR TCO 50x50x1	50	50	1
TR TCO 75x50x1.2	75	50	1.2
TR TCO 75x75x1.2	75	75	1.2
TR TCO 100x50x1.2	100	50	1.2
TR TCO 100x75x1.2	100	75	1.2
TR TCO 100x100x1.2	100	100	1.2
TR TCO 150x50x1.2	150	50	1.2
TR TCO 150x100x1.2	150	100	1.2
TR TCO 150x150x1.5	150	150	1.5
TR TCO 200x100x1.5	200	100	1.5





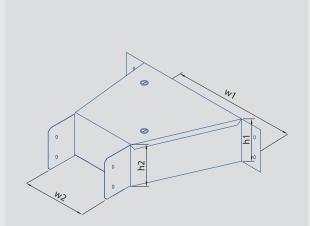
(TR R w1xh1-w2xh2xt)



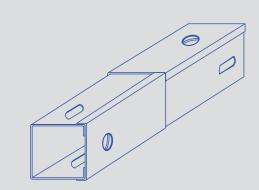
CHANGE FACE RIGHT (TR FR wxhxt)

7

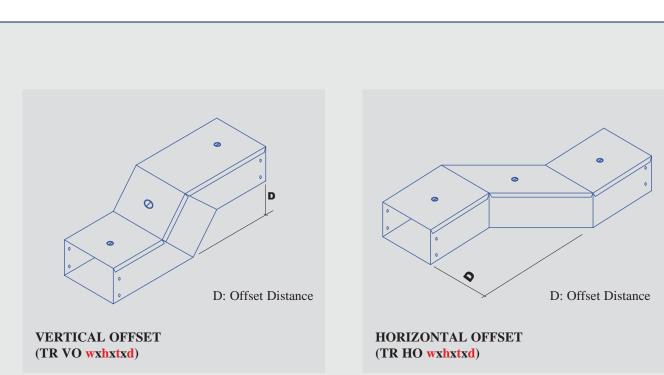
Description	w (mm)	h (mm)	t (mm)
TR C 50x50x1	50	50	1
TR C 75x50x1.2	75	50	1.2
TR C 75x75x1.2	75	75	1.2
TR C 100x50x1.2	100	50	1.2
TR C 100x75x1.2	100	75	1.2
TR C 100x100x1.2	100	100	1.2
TR C 150x50x1.2	150	50	1.2
TR C 150x100x1.2	150	100	1.2
TR C 150x150x1.5	150	150	1.5
TR C 200x100x1.5	200	100	1.5



BELL MOUTH (TR BM w1xh1-w2xh2xt)

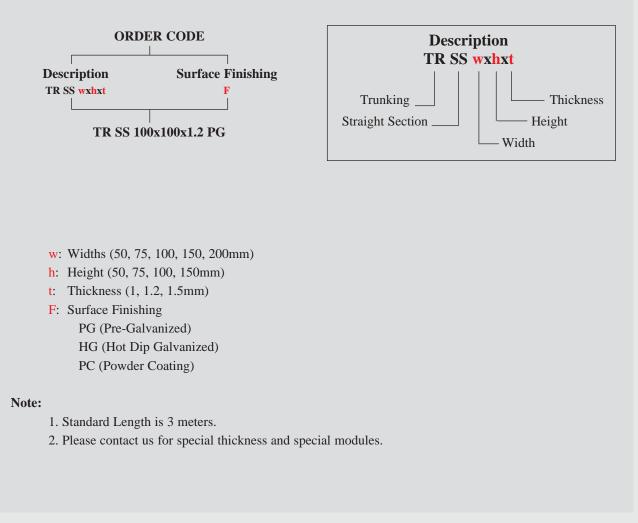


CHANGE FACE LEFT (TR FL wxhxt)

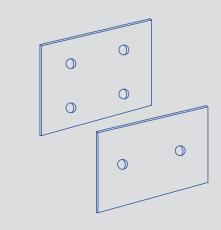


HOW TO ORDER

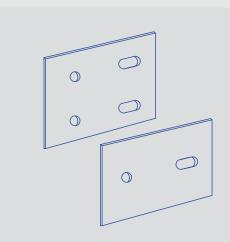
Selection of Trunking and Accessories, replace the letters shown in red with your choice from the following options.



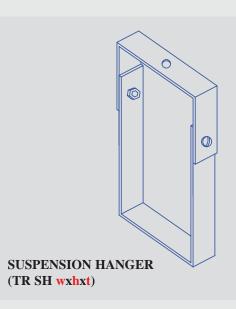
TRUNKING FITTINGS



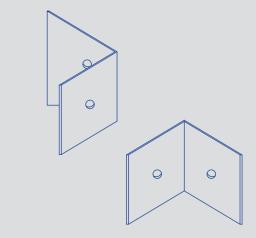
STRAIGHT CONNECTOR (TR SCN hxt)



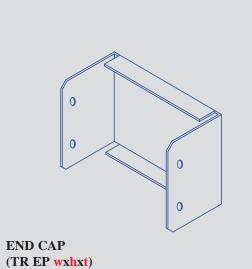
EXPANSION CONNECTOR (TR ECN hxt)



999



ANGLE CONNECTOR (TR ACN hxt)



WALL FLANGE (TR WF wxhxt)

FLUSH FLOOR TRUNKING

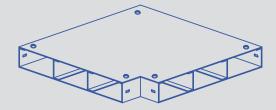
Top of the Trunking will be in flush with screed height and the position of trunking and accessories are pre-determined. It is used in power telecommunication and data cables in a floor system.

SINGLE COMPARTMENT (TRFF SS wxhxt)

MULTI COMPARTMENT (TRFF SSC w(A-B-C)xhxt)

Trunking with multi compartment available in 2, 3 or 4 compartments.

While ordering multi compartment trunking divider spacing (A, B, C) should be mentioned in the order.



HORIZONTAL 90° BEND (TRFF H90 wxhxt)

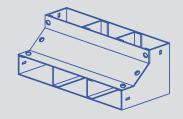
Normally divider strips are spot welded with trunking body for site fixing. Loose divider strips also available.

EQUAL CROSS (TRFF EC wxhxt)

1. Standard Length is 3 meters.

2. Material Specification

- w: Widths (50, 75, 100, 150, 200, 300mm)
- h: Height (50, 75, 100, 150mm)
- t: Thickness (1.2, 1.5, 2mm)
- **F**: Surface Finishing PG (Pre-Galvanized)
 - HG (Hot Dip Galvanized) PC (Powder Coating)

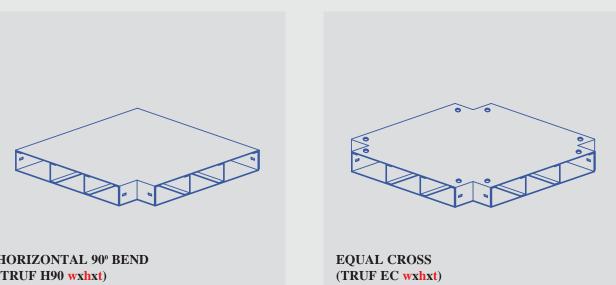


VERTICAL INSIDE 90° BEND (TRFF V90 wxhxt)

Under floor Trunking is used where the Trunking top surface should be beneath surface of the floor. It is used in power, telecommunication and data cables in a floor system where the cable layout is pre-determined

SINGLE COMPARTMENT (TRUF SS wxhxt)

MULTI COMPARTMENT (TRUF SSC w(A-B-C)xhxt)



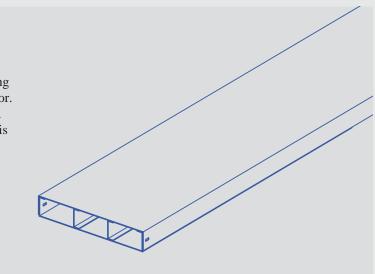
HORIZONTAL 90° BEND (TRUF H90 wxhxt)

options. **ORDER CODE Surface Finishing** Description **TRUF SS wxhxt TRUF SS 300x50x1.5 PG**

> **F**: Surface Finishing PG (Pre-Galvanized) HG (Hot Dip Galvanized) PC (Powder Coating)

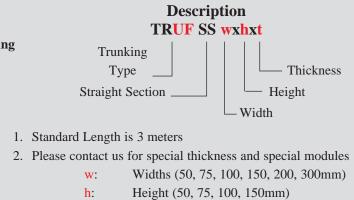
11

UNDER FLOOR TRUNKING

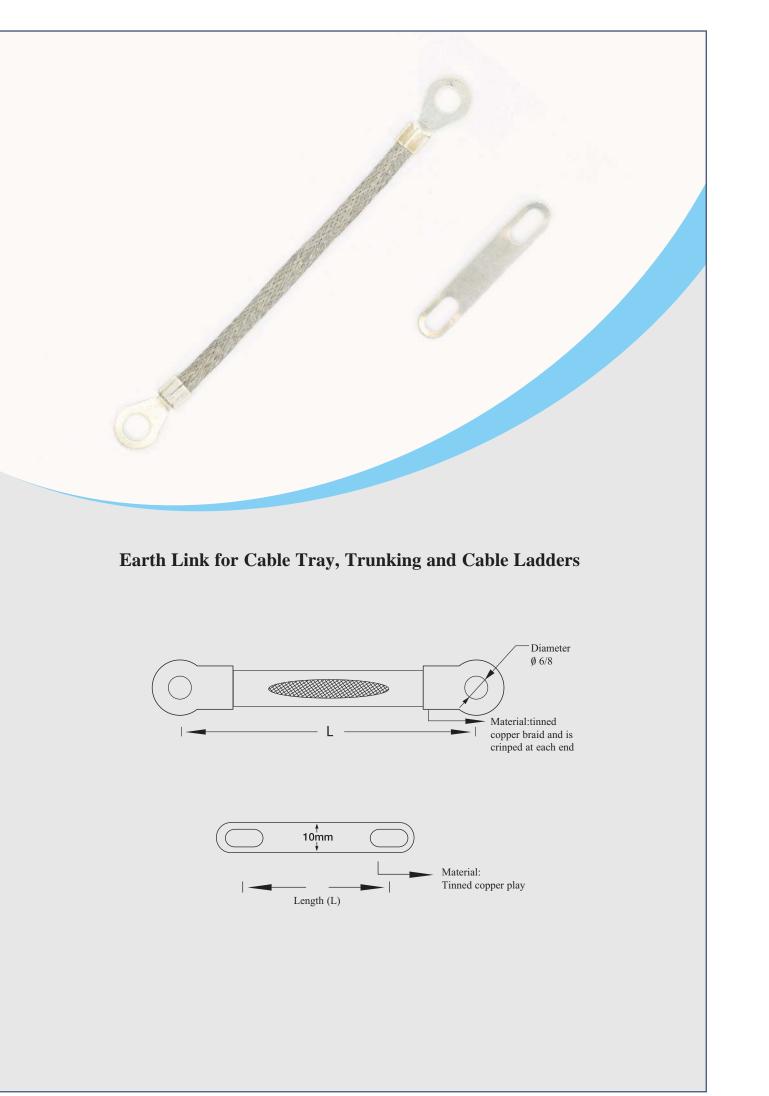


HOW TO ORDER

Selection of Trunking and Accessories, replace the letters shown in red with your choice from the following



- t: Thickness (1.2, 1.5, 2mm)
- FF. Flush Floor UF: Under Floor



Major Projects supplied

Some of our major projects are:

- Dubai Metro, Dubai.
- Delhi Metro Rail Corporation Ltd, New Delhi.
- Doha International Airport, Doha.
- Cleveland Clinic, Abu Dhabi.
- Sub Station, Mussafaah.
- Sub Station at Port of Fujairah, Fujairah.
- The Beach.
- Barwa Commercial, Doha.
- RD1101K Pot Delining Project Email.
- Ruwais Sulphur Handling Terminal 2 Gasco.
- Jumeriah Beach Hotel Phase II, Dubai.
- Al Ain Stadium, Al Ain.
- Al Sufouh Transit System.
- Burj Al Salam, Dubai.
- Fujairah Commercial Complex, Fujairah.
- Presidential Flight State Guest Reception Terminal, Abu Dhabi.
- Department of Presidential Affairs, Abu Dhabi.
- Jumeirah Park, Dubai.
- Jafza Convention Centre, Dubai.
- Dheeraj & East Coast LLC.
- Ruwais Palace Construction, Abu Dhabi.
- Al Ghurair City Expansion, Dubai.

GOVERNMENT APPROVALS & CERTIFICATES

- ISO 9001:2008 (Quality Management Systems)
- ADWEA (Abu Dhabi Water & Electricity Authority)
- DEWA (Dubai Electricity & Water Authority)
- SEWA (Sharjah Electricity & Water Authority)
- FEWA (Federal Electricity & Water Authority)
- Ministry of Public Works