



An ISO 9001:2008 Certified Company

ROY ENGINEERING WORKS



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Explore a variety of easy Installable, dimensional accurate, corrosion & abrasion resistant cable trays.

OUR PRODUCTS :



1. CABLE TRAYS

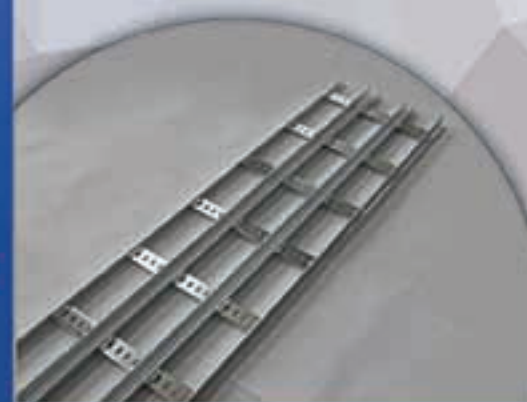
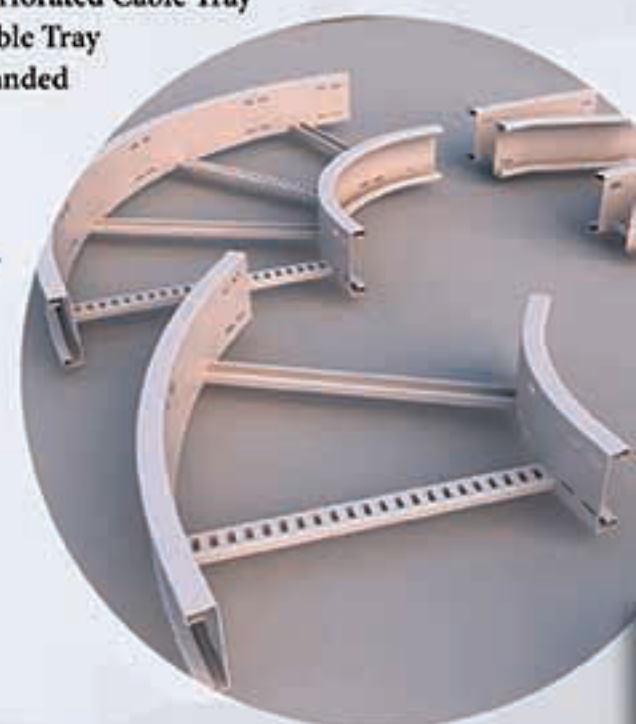
Stainless Steel Perforated Cable Trays
Aluminum Cable Tray
GI Perforated Cable Tray
Stainless Steel Cable Trays
Mild Steel Cable Tray
Galvanized Perforated Cable Tray
Ladder Cable Tray
Aluminum Perforated Cable Tray
Perforated Cable Tray
Hot Dip Galvanized

2. ANGLE RACKS

Slotted Angle racks
Display Angle Racks

Other Products

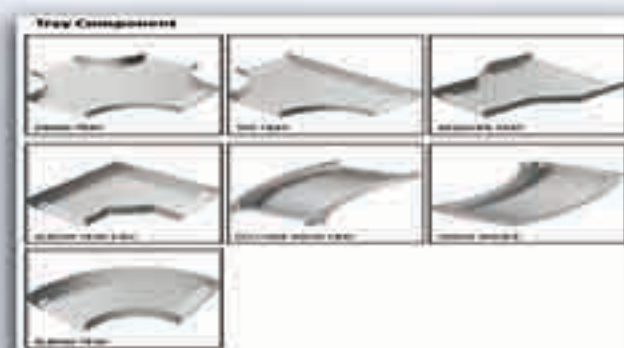
Steel Gratings
Electrical Earthing Material
Agricultural Machineries
All kinds of Cutting, Bending and Fabrications job
Government and General order supplier





Roy Engineering Works an ISO 9001:2008 Certified Company founded in 1994 is company which specializes in industrial products and machinery, with an successful industry experience of more than 21 years in Howrah, West Bengal (India). We are Manufacturer, Supplier & Exporter of wide range of Cable Trays, G I Cable Tray, Galvanized Perforated Cable Tray, Steel Slotted Rack, MS Gratings and Electrical Earthing Materials. We also offer Motor Winner Cum Paddy Thresher Machine, Pulley and many more products. Due to his leadership qualities and motivation, our professionals have been able to efficiently serve the needs of clients from global markets.

The Company is headed by Mr. Shankar Roy with 21 years of experience and market credibility. We offer Supreme Quality Products with competitive pricing policy.



Our products are manufactured through various phrases of rigid quality control and are widely used by different organizations like BHEL, NTPC and MECON.

PERFORATED CABLE TRAYS:

- Perforated Cable Trays are fabricated out of Single Sheet Steel confirming to I.S. 1079 : 1973 / I.S. 513: 1994 in various thickness of 1.6mm, 2.0mm & 2.5mm.
- Perforated Cable Trays are available in standard widths of 50mm, 100mm, 150mm, 300mm, 450mm and 600mm and in standard length of 2500mm.
- If other than the above mentioned widths are required the Trays are fabricated as per the specifications of Customers/ Customer Consultants.

TYPICAL SPECIFICATION OF PERFORATED CABLE TRAY (M.S. & ALUMINIUM)

Standard Length :	2.5 Mtrs.
Perforations :	Slots 10mm x 20mm Width Wise: 10mm gap Length Wise: 20mm, 30mm, 40mmCC
Tray Width (W) :	50mm – 75mm – 100mm – 150mm – 200mm – 300mm – 450mm – 600mm (or any size as per the requirement)
Tray Height (H) :	20mm – 25mm – 40mm – 50mm – 75mm – 100mm (or any height as per the requirement)
Tray Collar (C) :	15mm – 20mm – 25mm
Tray Thickness (TH) :	1.6mm-2mm-2.5mm-3mm
Types of Raw Material :	Mild Steel – Aluminium
Finish :	Hot Dip Galvanized – Electroplated – Powder Coated – Epoxy coated, Enamel Painted – Aluminium Painted.

ACCESSORIES

- Types of Bends: Horizontal, Vertical (Inside / Outside), Tees, (Equal & Un-equal), Crosses, Reducers.
- Radius: 300 / 450 / 600 / 1000 mm or as per the choice of customers
- Degrees: 30° – 45° - 60° – 90° for Bends.

LADDER TYPE

- Ladder Type Cable Trays are fabricated in three methods:
 1. With Steel Sheets
 2. With Angles
 3. Aluminium Sheets
- Ladder type cable trays are fabricated out of steel sheets conforming to I.S. 1079: 1973 & I.S. 513: 1994 with a thickness of 1.6mm 2.0mm, 2.5mm and 3mm.
- All cable trays are of standard lengths of 2500mm for various widths-minimum being 150mm wide and maximum 1200 wide. Slotted rungs are welded to the side runners at every 250mm or 300mm interval. At both the ends of the cable trays three or four circular holes are provided for connecting the adjacent cable trays or accessories/by coupler plates.

ALUMINIUM LADDER TYPE CABLE TRAYS

- Aluminium ladder type cable trays are fabricated out of Aluminium sheets conforming to I.S.737:1986 with thickness varying from 2mm, 2.5mm to 3 mm.

Standard Length :	2.5 Mtrs.
Runner Height (H) :	50mm – 60mm – 75mm – 100mm – 120mm
Runner Collar (C) :	15mm – 20mm – 25mm – 30mm
Rung Size(s) :	25mm x 15mm / 35mm x 15mm / 40mm x 20mm / 50mm x 20mm as per choice.
Thickness (TH) :	1.6mm – 2 mm – 2.5mm – 3 mm
Welding (M.S.) :	C – type Arc / welding
Welding (Aluminium) :	C-type tig welding
Rung slot size :	10mm x 20mm 10mm x 30mm – with spacing 10mm, 15mm or as per choice.
Rung Spacing :	250mm / 300mm interval
Finish :	For M.S.: Hot Dip Galvanized , Electroplated, Powder Coated, Epoxy painted, Enamel Painted ,Aluminium Painted. For Aluminium : Caustic Soda Wash.
Models :	C-type, Z-type & L-type

LADDER TYPE WITH ANGLES

Ladder type cable trays are fabricated of M.S. Angles confirming to I.S. 2062, 1992. M.S. angles are used as Runners and 25 x 0.6mm M.S. Flats as rungs. Rung spacing is 250mm for 2500mm length cable trays and 300mm for 3000mm lengths. Rungs can be provided single/double, as per the customer choice; Double with a cap of 10mm, for clamping the cables.

TYPICAL SPECIFICATION FOR ANGULAR LADDER TYPE CABLE TRAY

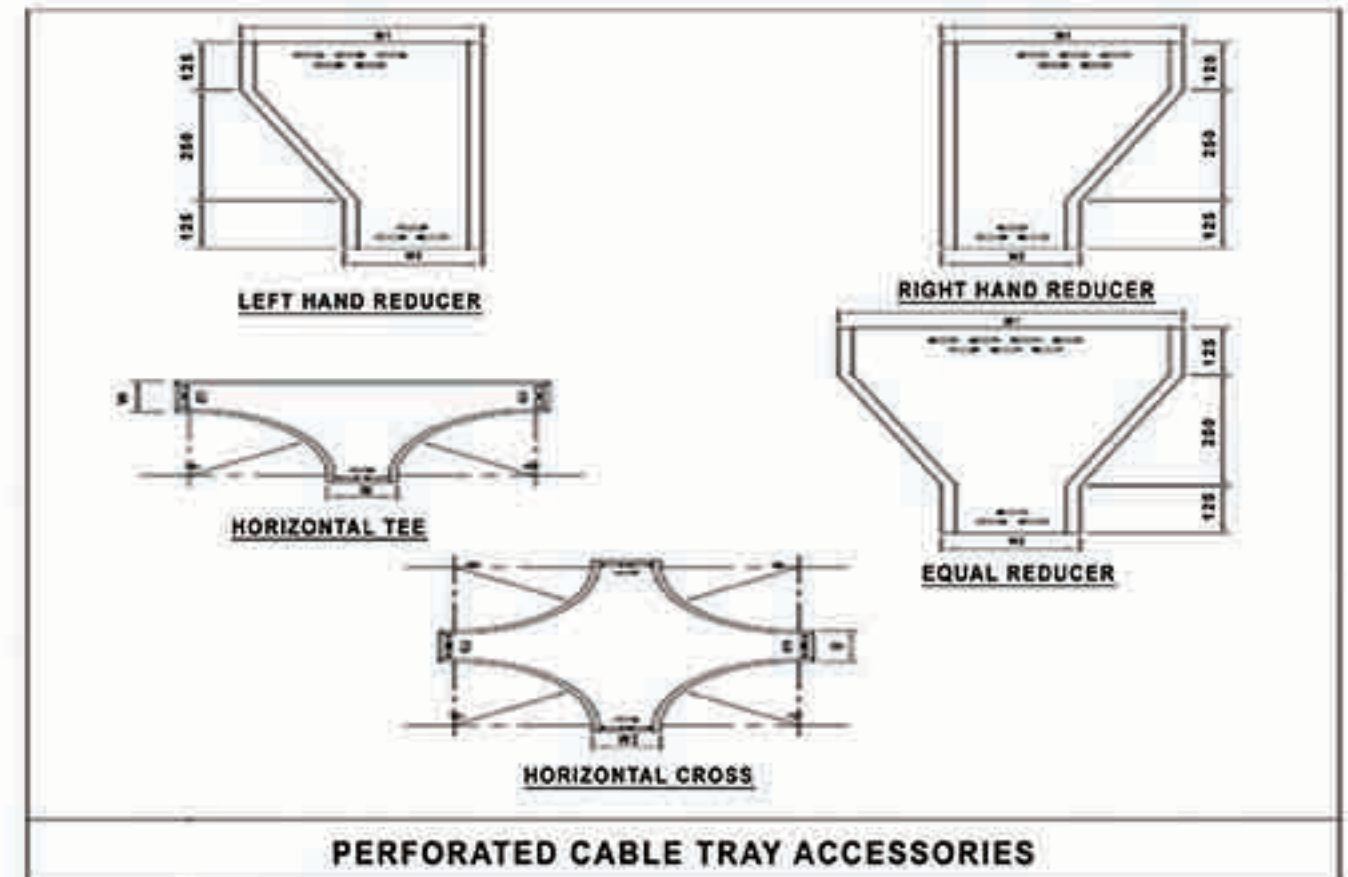
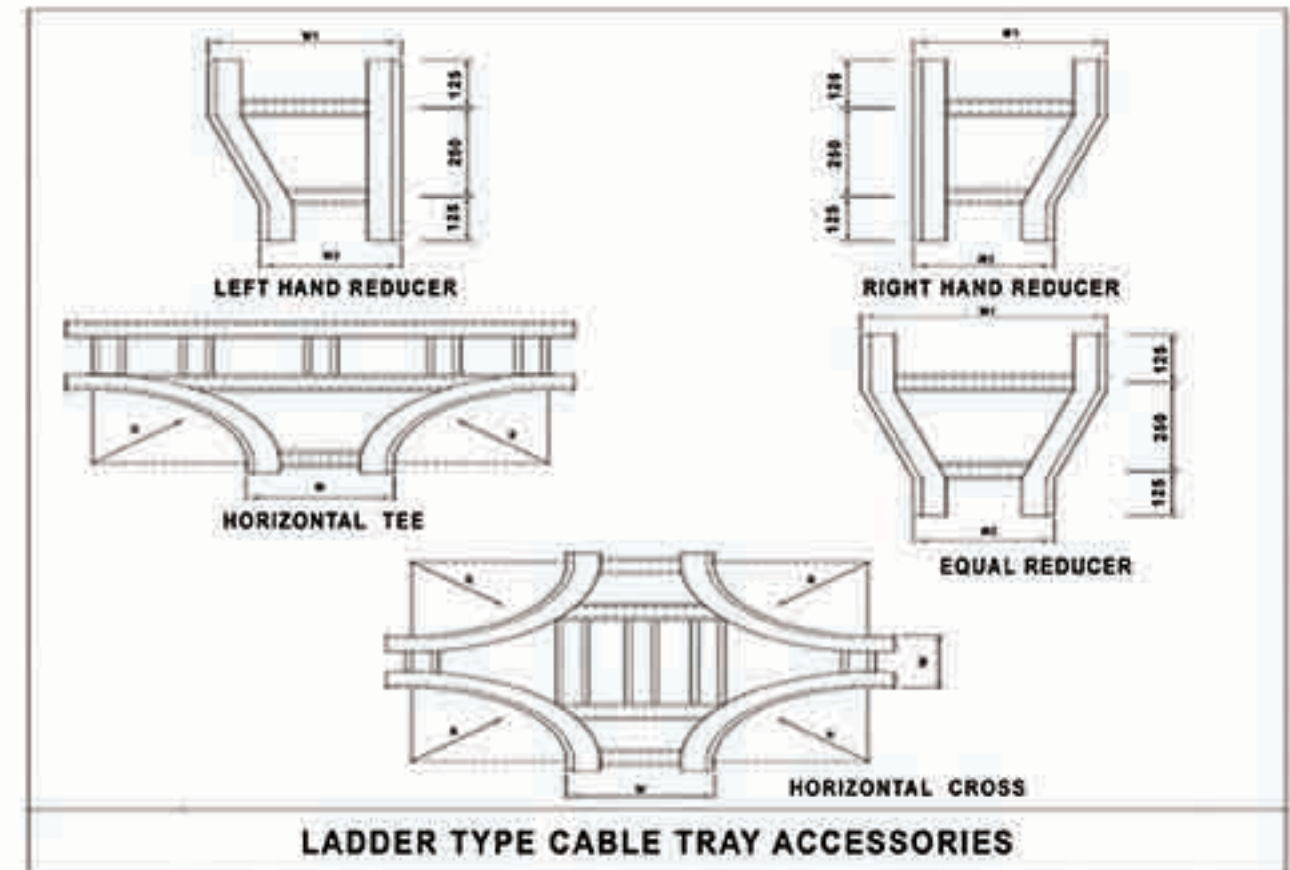
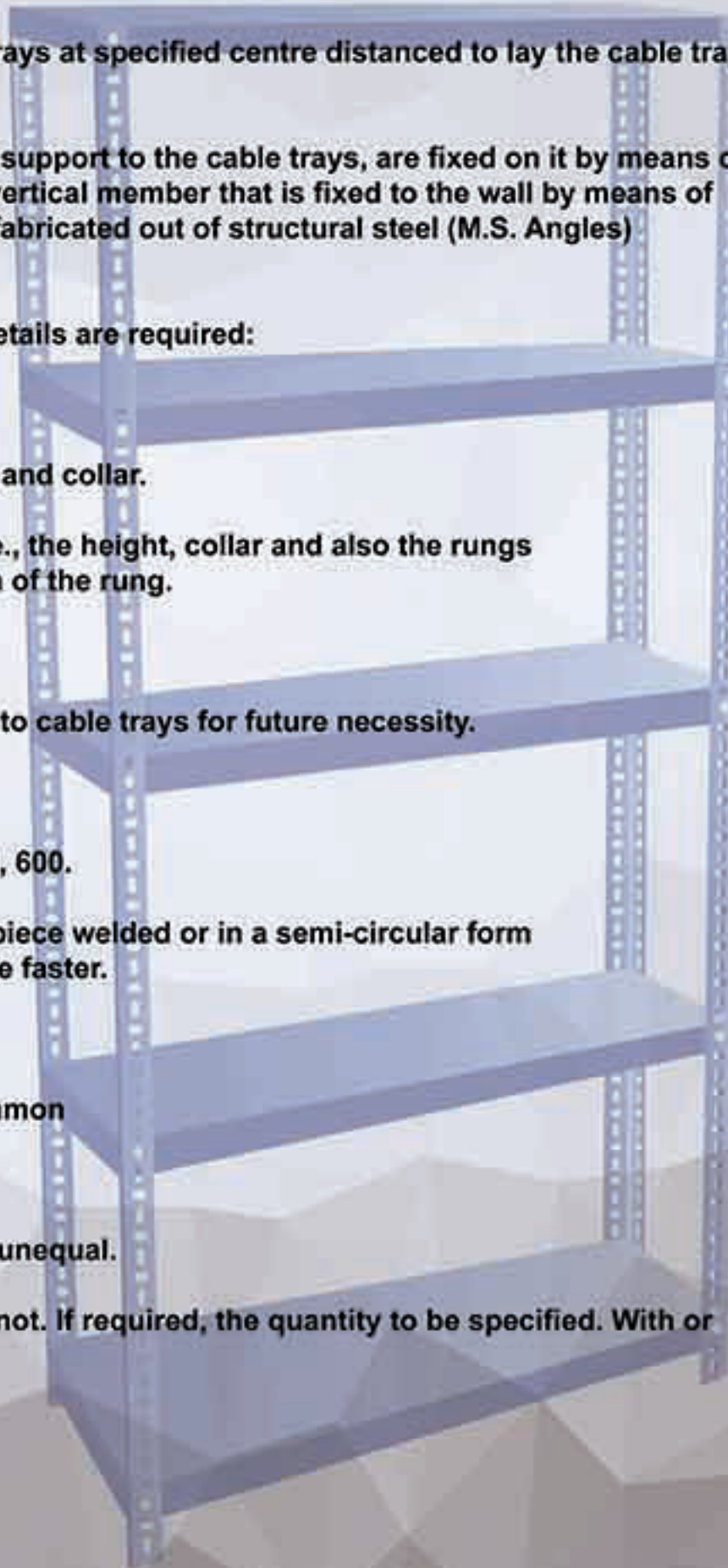
Length (L) :	2.5mtrs / 3mtrs
Widths (W) :	150mm – 300mm – 450mm – 600mm – 1000mm (or as per customers requirement)
Runners (R) :	50mm x 50mm x 6mm – 65mm x 65mm x 6mm
Rungs :	25mm x 3mm – 25mm x 6mm – 32mm x 6mm
Rung spacing:	250mm, 300mm interval (double rung for bolting as per customer specification).
Finish :	Hot dip galvanized, Painted (colour as per choice), powder coated, epoxy painted.

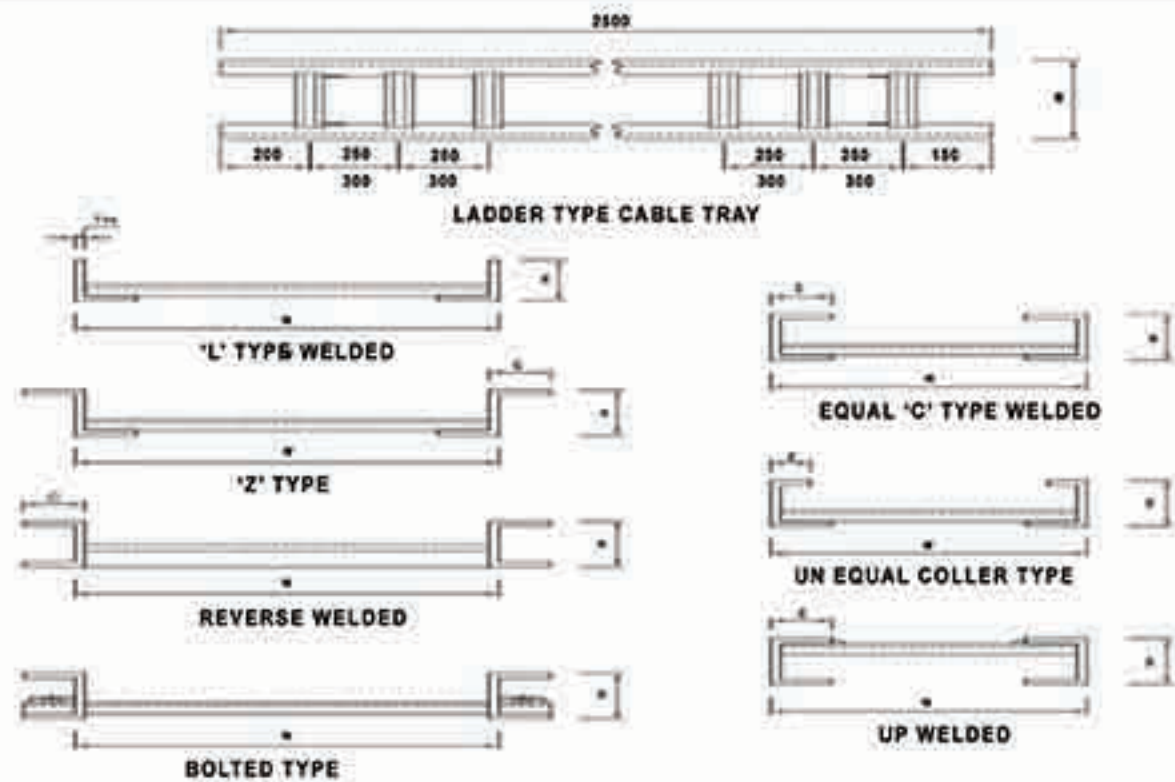
CABLE TRAY SUPPORTS

Type :	Single, Double
Tier :	Available in 1-Tier to 6-Tier
Centre Support :	Angle:50 x 50 x 6mm, Channel:10mm x 50mm x 6mm
Horizontal Support :	50mm x 60mm x 6mm or as per customer choice.
Finish :	Hot dip galvanized or painted
Accessories :	Rawal plug, or expansion bolt for grounding
Welding :	Arc welding
Slots (machine punched):	10mm x 15mm (or as per customers choice)

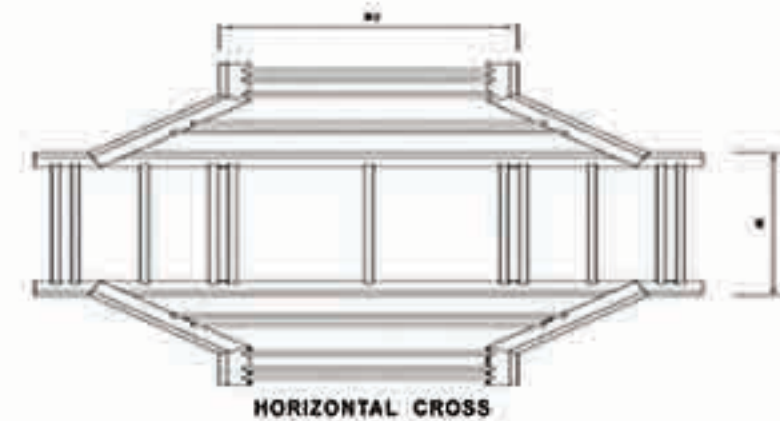
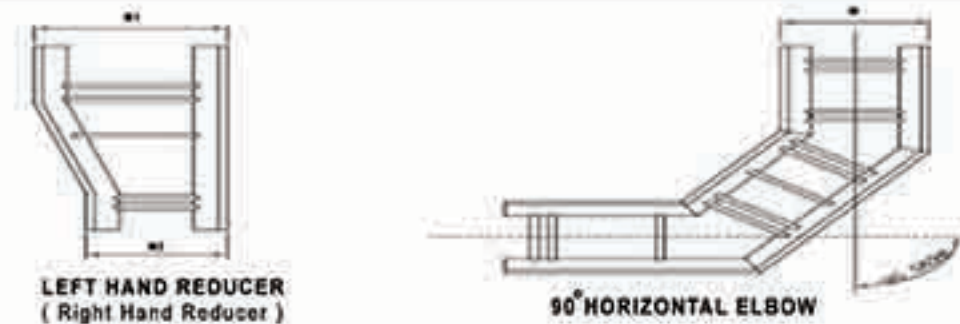
CABLE RACKS:

- These are used to support the cable trays at specified centre distanced to lay the cable tray at different levels.
- The horizontal members which act as support to the cable trays, are fixed on it by means of bolts and nuts and are welded to the vertical member that is fixed to the wall by means of expansion bolts. These are generally fabricated out of structural steel (M.S. Angles) conforming to I.S. 2062: 1992.
- While floating enquiry the following details are required:
 1. Perforated type / ladder type.
 2. For perforated type the width, flange and collar.
 3. The ladder type, size of the runner i.e., the height, collar and also the rungs size, the height of the rung and width of the rung.
 4. Whether with cover
 5. Whether cover provision to be made to cable trays for future necessity.
 6. Gauge of cable trays.
 7. Radius of accessories – i.e., 300, 450, 600.
 8. Whether accessories required are 3 piece welded or in a semi-circular form delivery of welded accessories will be faster.
 9. Vertical bends whether up or down.
 10. Horizontal bends : Left/Right is common
 11. Reducers left or right
 12. Tees and crosses whether equal or unequal.
 13. Whether link plates are required or not. If required, the quantity to be specified. With or without bolts and nuts.
 14. Delivery time.

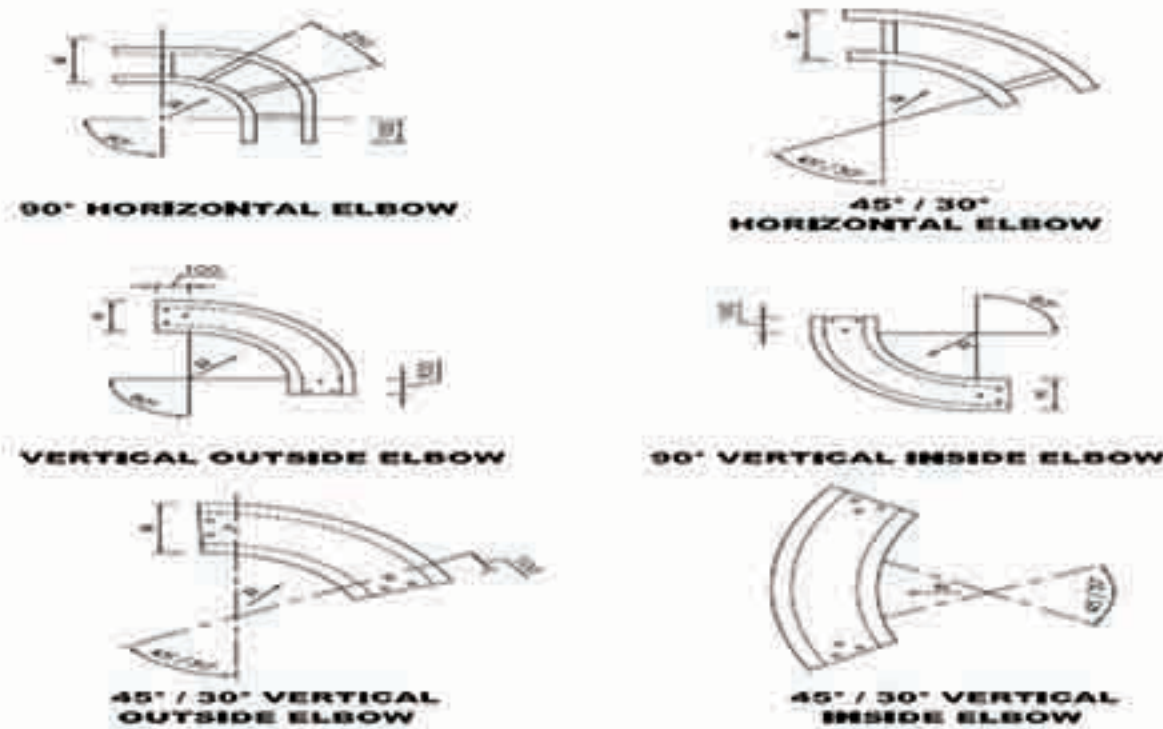




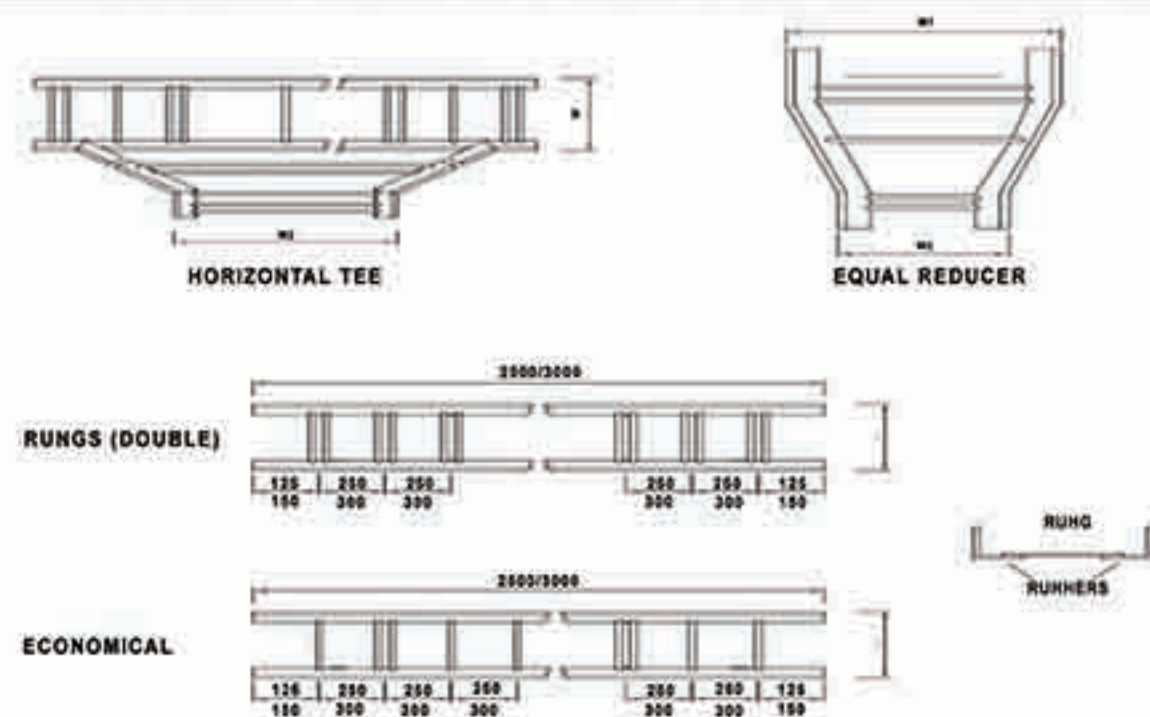
CABLE TRAY ACCESSORIES



PCT ACCESSORIES

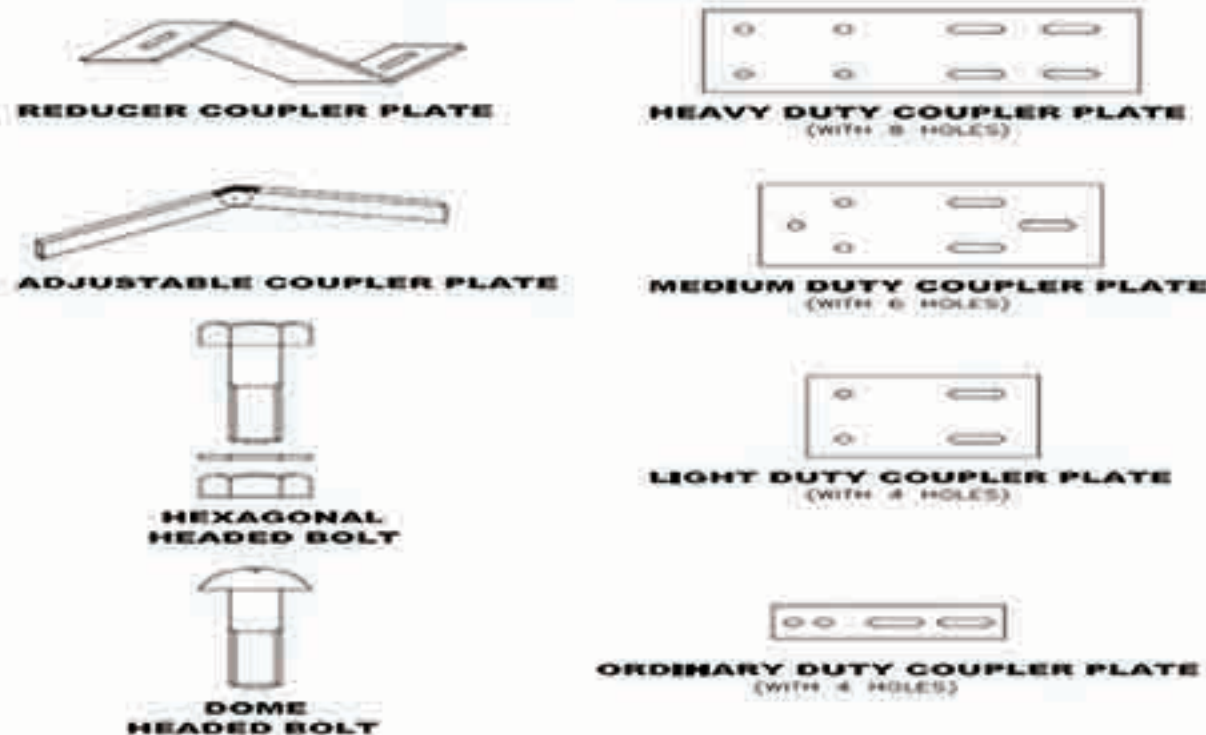


CABLE TRAY ELBOWS



ANGULAR LADDER TYPE CABLE RAYS

COUPLER PLATES



CABLE TRAY ACCESSORIES

TRAY SIZES

Part	DEPTH	WIDTH	LENGTH	WEIGHT
WB1.5X4X10	1.5"	4"	10'	5.8 lbs
WB1.5X6X10	1.5"	6"	10'	7.4 lbs
WB1.5X8X10	1.5"	8"	10'	9 lbs
WB1.5X12X10	1.5"	12"	10'	12.1 lbs
Part	DEPTH	WIDTH	LENGTH	WEIGHT
WB2X2X10	2"	2"	10'	6.8 lbs
WB2X4X10	2"	4"	10'	8.6 lbs
WB2X6X10	2"	6"	10'	10.2 lbs
WB2X8X10	2"	8"	10'	11.8 lbs
WB2X12X10	2"	12"	10'	15 lbs
WB2X16X10	2"	16"	10'	23 lbs
WB2X18X10	2"	18"	10'	25 lbs
WB2X20X10	2"	20"	10'	27 lbs
WB2X24X10	2"	24"	10'	31 lbs
★WB2X30X10	2"	30"	10'	37.5 lbs
★WB2X32X10	2"	32"	10'	39 lbs
Part	DEPTH	WIDTH	LENGTH	WEIGHT
WB4X4X10	4"	4"	10'	11.8 lbs
WB4X6X10	4"	6"	10'	12.8 lbs
WB4X8X10	4"	8"	10'	15 lbs
WB4X12X10	4"	12"	10'	23 lbs
WB4X16X10	4"	16"	10'	27 lbs
WB4X18X10	4"	18"	10'	29 lbs
WB4X20X10	4"	20"	10'	31 lbs
WB4X24X10	4"	24"	10'	35 lbs
★WB4X30X10	4"	30"	10'	41 lbs
Part	DEPTH	WIDTH	LENGTH	WEIGHT
WB6X6X10	6"	6"	10'	23 lbs
WB6X12X10	6"	12"	10'	27 lbs
WB6X16X10	6"	16"	10'	31 lbs
WB6X18X10	6"	18"	10'	33 lbs
WB6X20X10	6"	20"	10'	35 lbs
WB6X24X10	6"	24"	10'	39 lbs



PERFORATED CABLE TRAY



VERTICAL STEM



FLANGE TYPE



NUT TYPE COVER



DIVIDER



"U" TYPE COVER



PLATE COVER

PERFORATED CABLE TRAYS & COVER

5°	10°	15°	22.5°	30°	45°	60°	90°
$K_s = 0.016$ $K_r = 0.024$	$K_s = 0.034$ $K_r = 0.044$	$K_s = 0.042$ $K_r = 0.062$	$K_s = 0.065$ $K_r = 0.154$	$K_s = 0.130$ $K_r = 0.165$	$K_s = 0.236$ $K_r = 0.320$	$K_s = 0.471$ $K_r = 0.684$	$K_s = 1.129$ $K_r = 1.265$
22.5° 1170	30° 1230	30° 2370	20° 1060 20° 20°	30° 1230 30° 2370	30° 2370 30° 1230	30° 1440	60° 1440
$K_s = 0.112$ $K_r = 0.204$	$K_s = 0.150$ $K_r = 0.268$	$K_s = 0.143$ $K_r = 0.227$	$K_s = 0.108$ $K_r = 0.236$	$K_s = 0.188$ $K_r = 0.320$	$K_s = 0.202$ $K_r = 0.323$	$K_s = 0.400$ $K_r = 0.534$	$K_s = 0.400$ $K_r = 0.601$
45°	22.5°	22.5°	22.5°	30°	30°	30°	30°
$K_s = 0.71$ 0.943 1.174 1.42 1.50 1.88 2.58 3.14 3.72 4.89 5.59	$K_s = 0.507$ 0.230 0.335 0.261 0.280 0.269 0.338 0.346 0.356 0.369 0.392	$K_s = 0.510$ 0.415 0.364 0.377 0.376 0.390 0.429 0.426 0.490 0.455 0.444	$K_s = 0.186$ 0.120 0.125 0.150 0.163 0.117 0.124 0.094 0.108 0.130 0.148 0.142	$K_s = 0.0294$ 0.252 0.250 0.266 0.272 0.317 0.317 0.317 0.317 0.317 0.317	$K_s = 0.123$ 0.195 0.196 0.196 0.196 0.196 0.196 0.196 0.196 0.196 0.196	$K_s = 0.347$ 0.320 0.320 0.320 0.320 0.320 0.320 0.320 0.320 0.320 0.320	$K_s = 0.157$ 0.300 0.156 0.378 0.143 0.264 0.160 0.242
K_s = RESISTANCE COEFFICIENT FOR SMOOTH SURFACE K_r = RESISTANCE COEFFICIENT FOR ROUGH SURFACE: $\frac{1}{8} \pm 0.0022$				* OPTIMUM VALUE OF θ INTERPOLATED			