



RATAN PROJECTS & ENGINEERING CO. PVT. LTD.

www.ratans.com

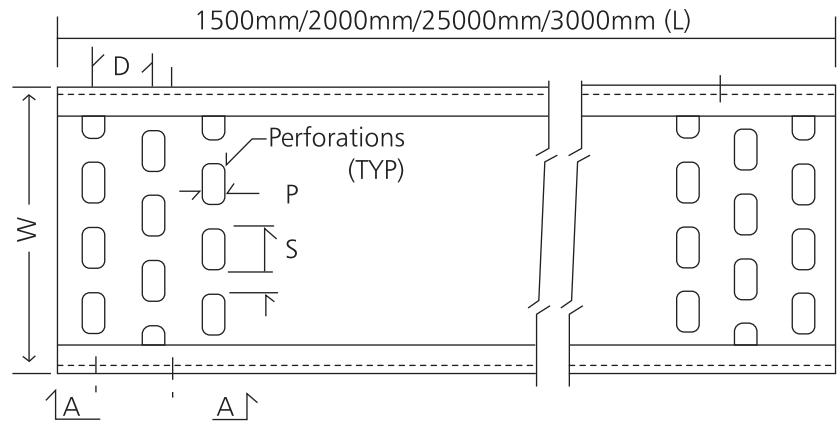
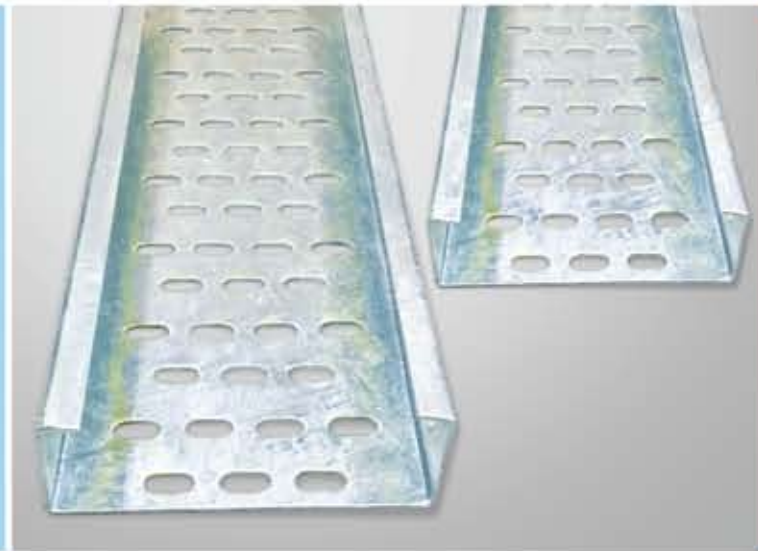
DEPENDABLE 
By World Standards



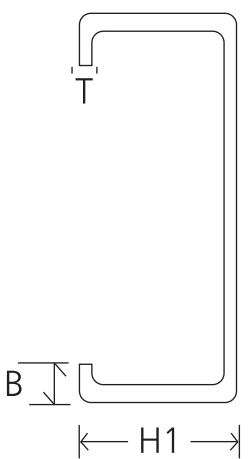
gi pipe electrodes rural electrification transmission line towers
telecom tower switchyards earthing flats and strips
cable trays support system ladder type cable tray ^{earthing} materials
cable tray accessories **products** gi structure
perforated type cable trays/perforated sheets

PERFORATED TYPE CABLE TRAYS

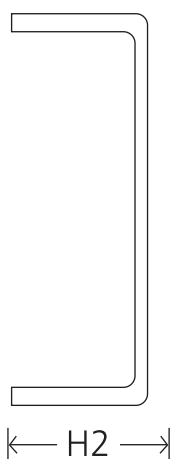
We design and manufacture umpteen types of Perforated Cable Trays for various industries globally, which are marketable in different sizes and specs. Raw materials are of prime quality in our organization. The finish coat is painted / powder coated / galvanized. The performance is guaranteed to excel.



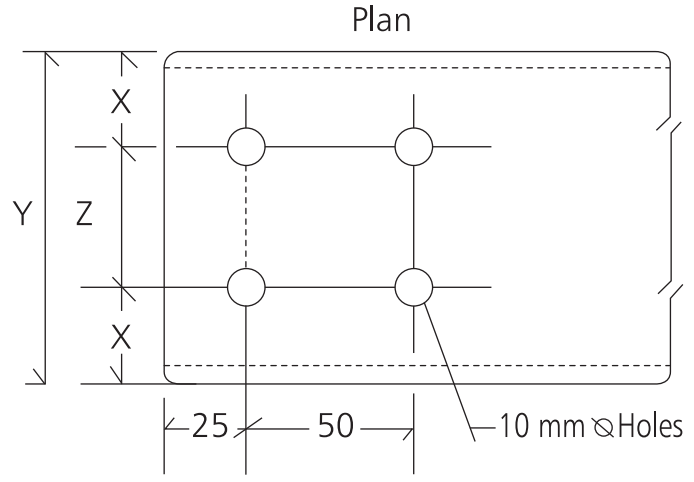
- W from 25mm to 1000mm
- L = 1500/2000/2500/3000/6000 mm
- H1 from 25mm onwards
- H2 12mm onwards
- T from 1mm onwards to 4mm max
- B from 12 mm onward
- S = 16,20mm, P = 16,20mm
- D = 8, 10, 20, 25, 30
- Y = 100, Z = 40, X = 30
- or as per customer specification



End View Double Bended



End View Single Bended

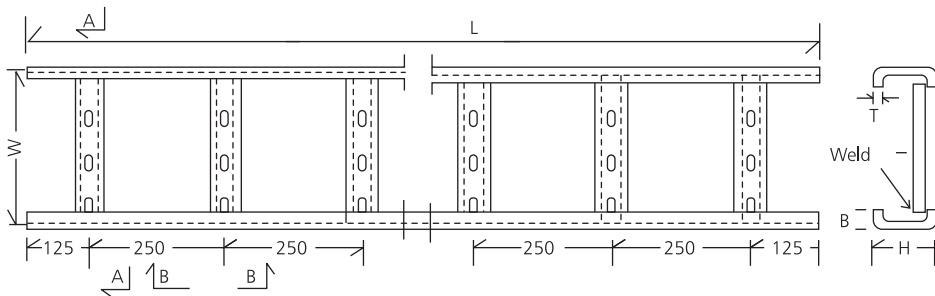


Section A-A

LADDER TYPE CABLE TRAY

We are focused to churn out wide range of Ladder type Cable Trays (GI / Painted / Powder coated) in customised designs.

Ratan's Weld-on and Bolt-on Cable Trays are synonymous to carry Control, Power & Instrumentation Cables successfully with high durability.



L - 1500/2000/2500/3000/6000 mm

W - from 100 mm to 1200 mm

H - from 50 mm to 200 mm

T - 1 mm onwards to 4 mm max

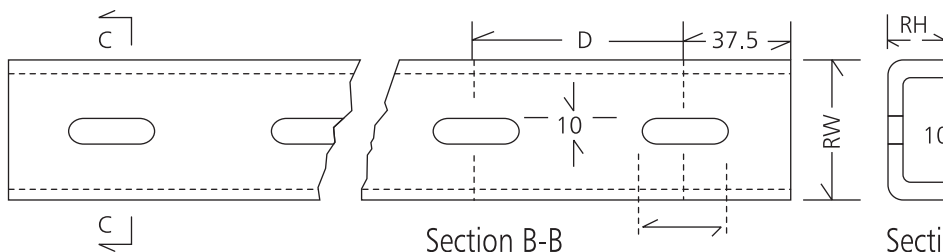
B - from 10 mm to 50 mm

RW - from 30 mm to 100 mm

RH - from 10 mm to 50 mm

D - from 30 mm to 75 mm

or as per customer specifications.



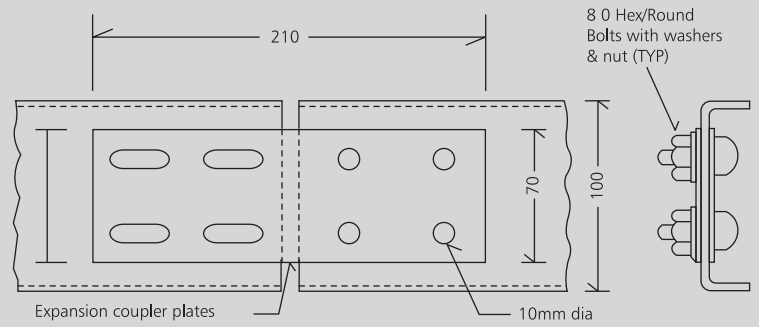
Section B-B
Rung Plan

Section C-C

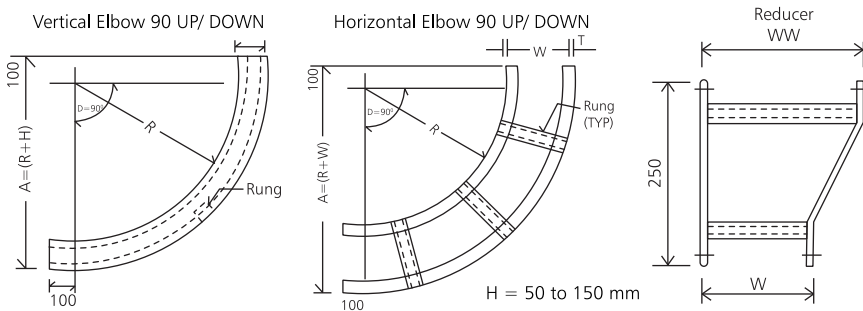
| | |
|---------------------------|--|
| Material | M.S. Sheet & Angles / SS Sheets / Aluminium Sheet & Angles etc. |
| M.S. Items Finish by | Red Oxide / Enamel Paint / Epoxy Paint / Powder Coating / Hot Dip Galvanised (IS/BS Standards) or as per customer specification. |
| Aluminium Items Finish by | Anodised |

CABLE TRAY ACCESSORIES

Cable Trays Accessories include Horizontal & Vertical Bends, Reducers, Cross, Tees, Clamps, Slotted Angles, Flexible Jumpers, Coupler Plates etc. for Trays.



Section A-A (Detail A)



Material : MS Sheet & Angle / SS Sheet/ Aluminium Sheet & Angle etc.

Finish : Red Oxide/ Enamel Paint/ Epoxy Paint/ Powder Coating / Hot Dip Galvanised / Anodised or as per customer specification.

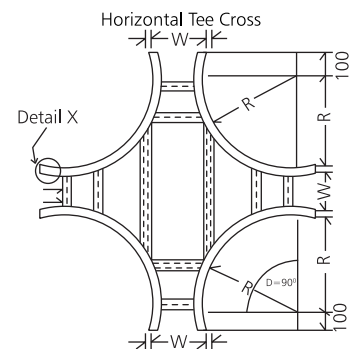
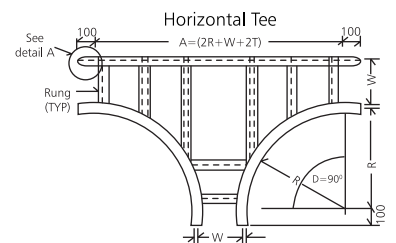
H = 50 to 200 mm
 W/WW = 100 to 1200 mm
 D = 30/45/60/90/120 Deg
 R = 150 to 1200 mm

Accessories can be made as per customer specification too.

Schedule of permissible loads

All figures given represent the maximum permissible uniformly distributed load in kgs. per running meter Unsupported Free Span

| W | Size | H | 600mm | 1200mm | 1800mm | 2500mm |
|-------|-------|--------|-------|--------|--------|--------|
| 100mm | 1.6mm | 50mm | 1430 | 355 | 156 | 87 |
| 150mm | 1.6mm | 50mm | 1458 | 362 | 159 | 88 |
| 225mm | 1.6mm | 50mm | 1498 | 371 | 160 | 89.4 |
| 300mm | 1.6mm | 50mm | 1540 | 380 | 162 | 91.3 |
| 375mm | 2mm | 50mm | 1955 | 483 | 210 | 116.7 |
| 450mm | 2mm | 50mm | 1958 | 483 | 210 | 110.7 |
| 600mm | 2mm | 50mm | 1964 | 481 | 208 | 110.4 |
| 300mm | 2mm | 62.5mm | 2680 | 664 | 290 | 16.1 |
| 375mm | 2mm | 62.5mm | 2685 | 664 | 290 | 161.3 |
| 450mm | 2mm | 62.5mm | 2689 | 664 | 289 | 158.9 |
| 600mm | 2mm | 62.5mm | 2698 | 664 | 289 | 157.1 |
| 750mm | 2mm | 62.5mm | 2707 | 666 | 287 | 155.7 |
| 900mm | 2mm | 62.5mm | 2716 | 667 | 287 | 153.7 |
| 600mm | 2mm | 75mm | 3491 | 861 | 377 | 206.5 |
| 750mm | 2mm | 75mm | 3513 | 868 | 377 | 205.02 |
| 900mm | 2mm | 75mm | 3535 | 874 | 378 | 205.02 |



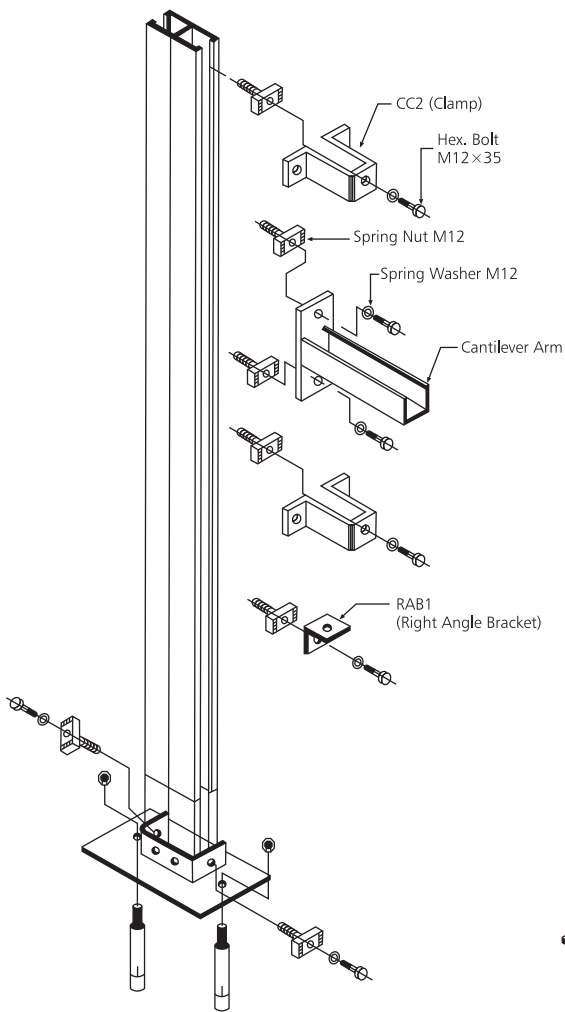
Formula : The maximum permissible point load at-mid-span may be obtained from the formula $P = \frac{1}{2} \times U \times C$

Where P = maximum permissible point load in kgs at mid-span. U = maximum permissible uniformly distributed load in kg per running meter. S = the particular free span in meter

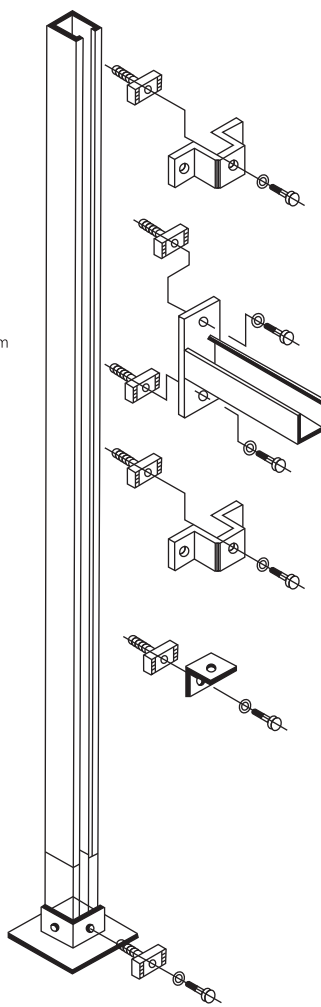
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 rated type cable trays/perforated sheets ladder type cable tray

CABLE TRAY SUPPORT SYSTEM

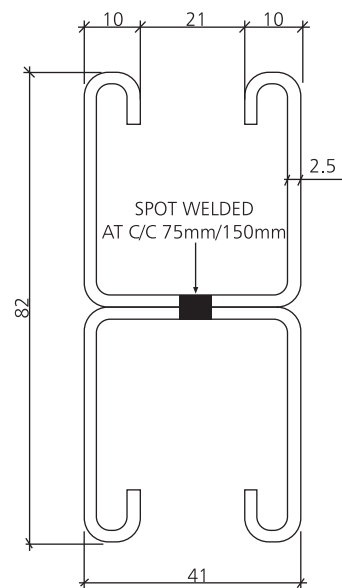
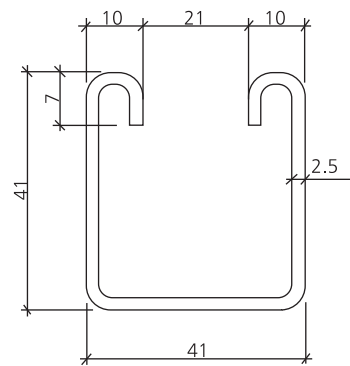
Utility Channel Support Systems and Accessories are used for electrical and mechanical applications. The qualitative aspect of our support system is in the word of mouth.



Double Channel C2



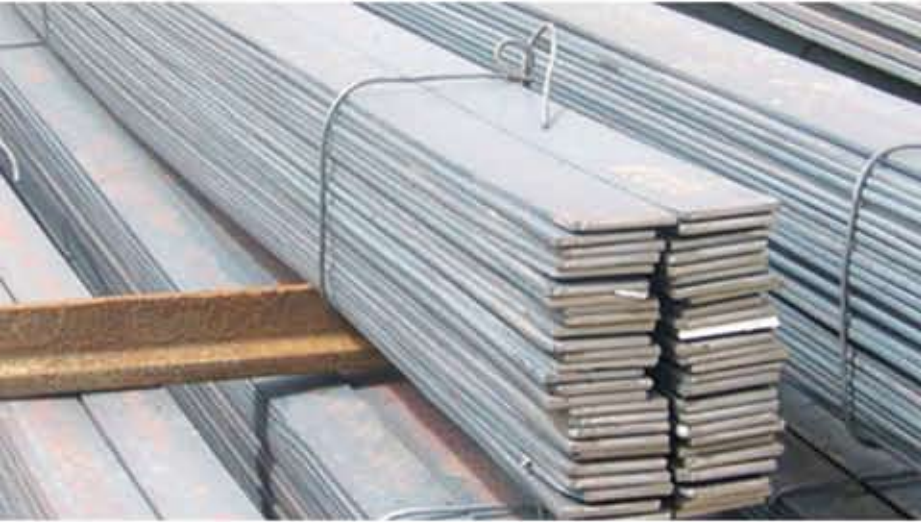
Single Channel C1



Main Support Channel Type C1 & C2

gi structure earthing flats and strips rural elec
ladder type cable tray cable tray accessories telec
earthing materials cable trays support system perfo

EARTHING MATERIALS



The sole focus of the earthing is to provide alternative channel to the flow fault current, so that the impact does not endanger the equipment. Ratan's make high performing Earthing Materials used widely in electrical systems. We manufacture as per spec and to customer needs. Our range includes Earthing Strips / Flats, Copper Flats & Electrodes, GI Pipe / Rod Electrodes, CI Pipe / Plate Electrodes etc. as per IS 3043.



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Earthing Flats / Strips

We provide Earthing Strips / Flats in various dimensions and specifications to meet the diverse requirements of our customers. Our products have good thermal and electrical conductivity.



GI Pipe / Rod Electrode, CI Pipe / Plate Electrode, Copper Rod / Plate Electrode etc.

Our Electrodes are sturdy-built and robust in construction, which provide excellent durability and good earthing. We fabricate the items out of premium quality raw materials. The item is accurate in quality with corrosion resistance. These pipes are widely used in Earthing applications.



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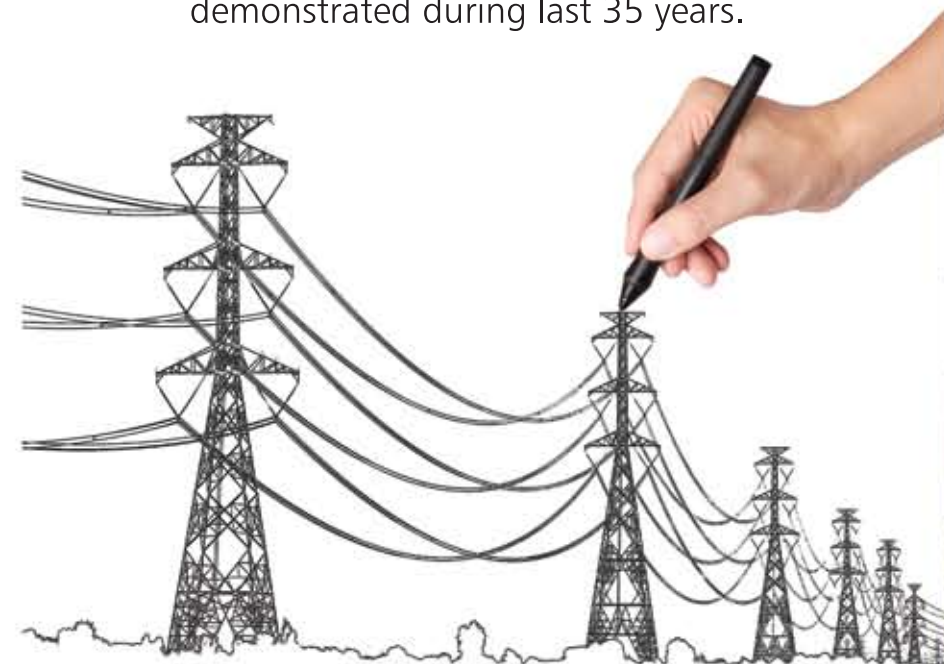
GI STRUCTURE



Transmission Line Towers

Ratan's have a vertical specifically to design, manufacture transmission line towers upto 765 kv. We have in-house testing facilities coupled with knowledgeable engineers to produce matchless products.

Ratan's are one of those few manufacturers of repute in the country to cope with the customers' exact needs in the areas : Transmission, Distribution, Railways, Telecom etc. Ratan's do possess a modern immaculate matchless plant to manufacture its product line. We reassure the same customer satisfaction as already demonstrated during last 35 years.



trification gi pipe electrodes
om tower transmission line towers
rated type cable trays/perforated sheets
switchyards rural electrification
gi structure
ladder type cable tray



Switchyards

We are a prominent supplier of GI Switchyard Structure to the extent of 765 kv. Our strength lies with core competence in design & drawing aspects, specifically in Lattice and Tubular substation structures. We have delivered goods to customers of high repute both Nationally & Internationally.



Telecom Tower

India is one of the fastest and exponentially growing country. We are competent to furnish end to end solution in terms of manufacturing and erection of telecom towers for the utilities. We are equipped to manufacture, install and commissioning of GBT and RTT.

Rural Electrification

Under the aegies of RGGVY, 'Rural Electrification' has gained a new dimension for the BPL population in the rural areas of the country, so that power is ensured to the poorest of poors. We are the partners in process of grid connection to the remotest rural areas through supply of GI structures.



Ratan's
PHOTOSCAPE





Electroforged Gratings & Stair Tread

GI Structure (for Switchyard, Transmission Towers,
Railways & Telecom) & Accessories

Cable Tray Support (Struct Type - C1 / C2 &
Accessories) & Weldable Support

Cable Trays & Accessories

Earthing Materials & Accessories

Cable Glands

Cable Lugs



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