

Weight of 1 2mm Thick Cable Tray

Article Overview

The weight of a 1.2mm thick steel cable tray typically ranges from 2.5 to 5 kg per meter, depending on tray type, width, and material density.

Factors Affecting Cable Tray Weight

Material Density: Steel is commonly used, with a density around 7,850 kg/m³, while aluminum is lighter at approximately 2,700 kg/m³, and FRP trays range from 1,800-2,000 kg/m³. **Tray Type:**

- o Ladder trays consist of two side rails and rungs; rung spacing (usually 200-300 mm) affects total weight.
- o Perforated trays reduce metal volume by 10-35% depending on the open area, lowering weight.
- o Solid trays are heavier due to full metal coverage. **Dimensions:** Wider trays and taller side rails increase the developed sheet width, which directly increases weight per meter. **Thickness:** Increasing thickness from 1.2 mm to 1.6 mm can raise weight by roughly 25% for the same profile.

Estimating Weight

The general formula for tray weight per meter is: $\text{Weight (kg/m)} = \text{Material Density} \times \text{Tray Volume per Meter}$
For a 1.2mm thick steel tray:

- o Example: A 300mm x 50mm perforated steel tray with 1.2mm thickness has an approximate cross-sectional metal area of 0.0005 m².
- o Weight per meter: $0.0005 \times 7,850 = 3.9 \text{ kg/m}$. For ladder trays, the weight includes side rails and rungs:
- o Side rails: $2 \times (\text{height} \times \text{thickness}) \times \text{density}$
- o Rungs: $(\text{rung area} \times \text{number of rungs per meter}) \times \text{density}$
- o Total weight per meter typically falls between 3-5 kg/m for standard steel trays with 1.2mm thickness.

Practical Considerations

- o Covers and coatings (e.g., HDG) add 2-4% to the weight.
 - o Safety factors are often applied in structural calculations to account for installation and cable load.
 - o Always verify with manufacturer catalogs for precise weights, especially for long spans or heavy cable loads.
- . In summary, a 1.2mm thick steel cable tray generally weighs around 3-4 kg per meter for standard ladder or perforated types, with variations depending on width, side height, and perforation.

Need the cable tray weight chart? Find accurate per-meter weights for steel, aluminum, and FRP trays. [Click](#)

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to explore

Calculate cable weight from length and weight per meter, or estimate total weight by cable size, material, core count,

This document contains details of galvanized iron perforated cable trays including tray size, color, thickness, tray length, weight of

We will first explain standard cable tray dimensions used across the industry, then examine how dimensions vary by

This document summarizes the cable tray size and loading calculation for transporting 27.5kV 1C x 240 Sqmm cables over a

Cable Tray Weight Calculator Estimate physical weight of ladder, perforated, solid-bottom, and wire mesh trays using material

Cable tray size calculation is important for ensuring safe cable installation, proper heat

Even though a 900 mm wide tray has six (6) times the volume of a 150 mm wide tray, it cannot carry any more cable weight. When

Calculate electrical wire weight for copper and aluminum conductors. Free tool for cable tray loading and shipping estimates.

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Calculate Size of Cable Tray for Following Cable Schedule. Cable Tray should be perforated and 20% spare Capacity.

Cable Tray Weight Calculator Estimate cable tray self weight quickly for planning and procurement accurately. Choose materials and

GENERAL SPECIFICATIONS OF CABLE TRAYS Material Of :GI Sheet, MS Sheet. SS Sheet, 1.2mm. 1.6mm, 2mm, 2.5mm

Ladder Cable Tray - Weights, kg/m ... Values are applicable to all resin systems, where possible. 0710

Cable Tray Load Calculation Cable weight per meter (daN / m) = useful cross-section of the cable support system (mm²) x is based



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EAE cable tray types are mass produced with the "Roll Forming" method and product types that will meet all your needs. Cable tray

Web: <https://www.kremgroup.co.za>

