

Weight of Aluminum Alloy Cable Tray



Article Overview

The typical weight of an aluminum alloy cable tray is approximately 2.7 kg per liter of metal volume, with actual weight per meter depending on tray type, width, thickness, and perforation.

Calculation Method

The weight of an aluminum cable tray is calculated using the formula: $\text{Weight (kg)} = \text{Volume} \times \text{Material Density}$

- Volume is determined by the tray's cross-sectional area multiplied by its length. For ladder or perforated trays, the cross-sectional area includes side rails, rungs, and bottom sections, adjusted for perforations (typically reducing material by 15–30%) .
- Material Density for aluminum alloy is generally $2,700 \text{ kg/m}^3$. To find the weight per meter, divide the total weight by the tray length: $\text{Weight per meter (kg/m)} = \text{Total Weight} \div \text{Length}$.

Typical Values

- Solid aluminum ladder tray: approximately 4–6 kg/m depending on width (100–600 mm) and side rail height (50–100 mm) .
- Perforated aluminum tray: typically 15–30% lighter than solid trays, often 3–5 kg/m for standard widths .
- Tray covers or additional flanges increase weight slightly, calculated using the same density .

Article Content

Cable Tray Weight Calculator | Steel, SS & Aluminum

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

Aluminum Cable Tray | EAE USA

Aluminum cable tray from 6063-T6 marine-grade alloy. I-beam aluminum cable ladder, NEMA VE-1 & IEC 61537 certified.

Aluminum Alloy Cable Tray for Corrosion-Resistant Systems

Discover aluminum alloy cable trays that are lightweight, corrosion-resistant, and optimize heat dissipation for safe,

KwikRail cable tray specification Document

Cable tray systems are defined to include, but are not limited to straight sections of of [ladder type] [vented bottom type] [solid bottom

CABLE TRAY SYSTEMS GUIDE

The total load supported by the cable tray, uniformly distributed. This will be the combined weight of all of the cables or tray contents,

Cable tray weight and VGM calculate

For accurate results, use our cable tray weight calculator which considers tray dimensions, material type,

PRODUCT BROCHURE T& B® Cable Tray Specialty aluminum solutions

Technical specifications Load ratings: 1.5 safety factor. All tray sections will support an additional 200 lb concentrated load on any

B-Line series Cable Tray Design Considerations

As an industry leader in cable tray, Eaton offers one of the widest ranges of cable management solutions available in the market

653 Series Snake Tray Aluminum Cable Tray | Snake Tray

The 653 Series Aluminum Cable Tray is a ultralight weight, high capacity cable tray system designed to

Hot-Dip Galvanized vs. Aluminum | Cable Tray Institute

Most people know of aluminum's superior strength-to-weight ratio. For example, a 36" wide, 24-foot section of ladder cable tray with

Cable Tray Weight Specifications | PDF | Building Engineering

The document provides reference material on cable tray weights for different tray series and configurations. It lists the weights of

Aluminum Cable Tray, Series 2, 3, 4 & 5

Our I-Beam - the most efficient structural shape Using "Copper-free" 6063-T6 Aluminum Alloy • Rungs- provide system integrity The

Cable Tray Weight Calculator

Compute tray weight from dimensions, thickness, and material density. Include covers, perforation, joints, and safety factor options.

B-Line series pan tray catalog

For approximate solid cable tray weights multiply above steel and aluminum weights by 1.064 NA = Not Available

Aluminum Alloy Cable Tray is Lightweight to Install

Aluminum alloy cable trays have good strength, beautiful appearance, large carrying capacity. Also, they are designed into several

Cable Tray Weight Specifications

The document provides reference material on cable tray weights for different tray series and configurations. It lists the weights of

Cable Tray Technical Guide A practical guide to product selection and ...

Cable Tray Technical Guide A practical guide to product selection and installation This guide for engineers and installers has been

Cope Ladder Master Spec

ASTM A1008 - Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, high-Strength Low-Alloy and high-Strength Low-Alloy

Comparing Electrical Cable Tray Materials-Aluminium, Steel, Plastic

Aluminium, steel, or plastic? Compare key features of electrical cable tray materials to find perfect match for your

CableTray Book English

All tray sections will support an additional 200 lb concentrated load on any portion of tray (side rail, rung, etc.) above and beyond

PRODUCT BROCHURE T& B® Cable Tray Specialty aluminum solutions

40-foot spans reduce support requirements For cable tray applications lacking sufficient space for the number of supports required

Aluminum Cable Tray Weight

Types of Aluminum Cable Tray Weights An aluminum cable tray is a vital component in electrical and industrial installations,

Cable Tray Weight Calculator | Steel, SS & Aluminum

Use this reference table to quickly identify approximate weights per meter for various standard cable tray configurations. Sizing

Cable Tray: Material Properties

In determining the proper aluminum alloy for structural applications such as a ventilated cable tray system, the design engineer

Aluminium Cable Trays | EAE Electric

Aluminum Cable Trays & Ladders deliver lightweight, durable solutions. Aluminum Cable Tray manages cables, while Aluminum Cable

CableTray Book English

Aluminum cable tray Straight lengths — Tray bottom types: ladder, ventilated and solid trough Ladder Extra wide aluminum rungs

Aluminum Cable Tray

Aluminum Cable Tray systems are lighter than steel cable tray and Certified CSA Cable Tray, UL listed, NEMA and certified.

Cable Tray Weight Chart: Accurate Per Meter Weights

Need the cable tray weight chart? Find accurate per-meter weights for steel, aluminum, and FRP trays. Click to explore

Alum Alloy Cable Tray VS Galv Cable Tray: A Comprehensive

Aluminum Alloy Cable Trays: Aluminum alloy trays have a higher initial cost due to the price of raw materials and the

7" Itray Aluminum Straight Sections | Ladder Trays | Cable Tray and ...

The 7" Side Rail PW Aluminum Ladder Cable Tray supports 100 lbs over a 30 ft span, offering unmatched load capacity and strength

26 05 36 Cable Trays for Electrical Systems

Eaton B-Line series Engineer-approved equal METAL CABLE TRAYS Description: This product category covers metal cable trays

Aluminum Cable Tray

Aluminum cable tray with high corrosive resistance performance and durable life is widely used in the corrosive and harsh

WHY: All Aluminum Cable Tray Systems Equals Cable Management

The aluminum alloy used by American cable tray manufacturers is 6063-T6, which is considered copper-free and sometimes referred

TECHNICAL AND SIZING DATA

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

Aluminium Cable Trays | EAE Electric

Aluminium cable trays are lighter than steel, highly resistant to corrosion, and durable in cold climates.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.thebucketlistbook.co.za>

Email: sales@thebucketlistbook.co.za

Phone: +33 1 42 78 39 16

Address: 10 Rue de la Paix, 75002 Paris, France

This document is for informational purposes only. Specifications subject to change without notice.

