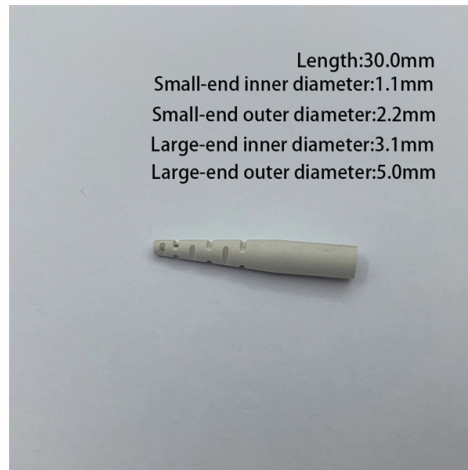


Spacing of Aluminum Alloy Cable Tray Crossarms



AI Overview

Standard aluminum alloy ladder cable trays typically use crossarm (rung) spacing of 6, 9, 12, or 18 inches, depending on load and cable type, with long-span trays requiring supports every 40 feet for heavy-duty applications. Standard Rung Spacing Aluminum ladder-type cable trays consist of two longitudinal side rails connected by transverse members (rungs). Common rung spacings are 6", 9", 12", and 18", measured from the center of one rung to the center of the next. The choice of spacing depends on:

- Cable size and type: Heavier or larger cables may require closer spacing to prevent sagging.
- Load requirements: Higher loads may necessitate shorter spans between rungs.
- Tray width: Wider trays may need closer rung spacing to maintain structural integrity.

For ventilated bottom trays, maximum opening is typically 52 mm, while solid bottom trays often use 12" spacing.

Long-Span Aluminum Cable Trays

For long straight runs, such as industrial or commercial installations, extruded aluminum alloy trays with H-beam side rails can span up to 40 feet (12.2 meters) between supports. These long-span trays reduce the number of supports required, but the rung spacing within the tray still follows standard 6", 9", or 12" centers depending on the load and tray width. Deflection calculations are based on simple spans, and continuous spans can reduce deflection by up to 50%.

Installation and Compliance Considerations

Support spacing: Standard support intervals for typical trays are shorter than long-span trays, often every 8-10 feet, depending on load and manufacturer recommendations.

Welding or fastening: Rungs are either heliarc welded, resistance welded, or mechanically fastened to side rails, ensuring structural integrity.

Standards: Aluminum cable trays should comply with NEMA VE-1, NEC Article 392, and UL classifications for safety and performance.

Su...

Article Content

Aluminum Ladder Tray

Cope aluminum swage ladder tray offers superior rigidity and easy cable installation for high vibration environments.

Aluminum Cable Ladder Specifications | PDF | Screw

The document discusses aluminum cable ladder products from series 2, 3, 4, and 5. It provides information on straight sections, accessories, fittings, and fitting covers.

CableTray Book English

The maximum open spacings between cable support surfaces of transverse elements do not exceed 102 mm (4 in.) in the direction parallel to the tray side rails (rung edge to rung edge).

Section 17.pdf

3.1 Aluminum Trough type cable tray longitudinal members shall be 4-1/2, 6, 7,8, or 10 deep extruded aluminum channels or I-Beams of 6063-T6 aluminum alloy.

Cable Tray / Ladder / Aluminum NEMA Load Class: 20C+ CSA

ORDERING DATA EXAMPLE: PowerTray, 6.24" High Ladder, Aluminum, 12" Rung Spacing, 24" Wide, 25" Long

Cable tray support spacing calculator

Not sure how far apart to space your cable tray supports? Use our free cable tray support spacing calculator to find the precise spacing.

Trough Cable Trays for PV Solar Installations

Trough Cable Trays for PV Solar Installations Our Cable tray, designed for photovoltaic power plants for safe laying and protection of DC/AC cables. Made of corrosion-resistant materials (e.g. galvanized

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

A practical guide to product selection and installation This guide for engineers and installers has been developed by ABB as a practical reference regarding cable tray characteristics, installation, and

Aluminum Cable Tray

Because of their lighter weight aluminum cable trays are easier to install than steel cable tray.

Cable Tray / Ladder / Aluminum NEMA Load Class: 20C CSA Load

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted

Series 1, 2, 3, 4, 5 Alum Specification Document.pdf

Rung spacing in radiused fittings shall be industry standard 9" and measured at the center of the tray's width. Each rung must be capable of supporting a 200 lb. concentrated load at the center of the cable

S00004107-56a-aluminum-straight-section-56-standard-rung-ladder

RESULTS WILL BE IN INCHES OR MILLIMETERS. THIS DRAWING AND/OR THE TECHNICAL INFORMATION CONTAINED HEREON IS THE PROPERTY OF EATON CORPORATION

GUIDE CABLE TRAYS TECHNICAL

Not all cable trays are equivalent. The mechanical and electrical characteristics, tests, certifications, overall quality management, recommendations mentioned in this technical guide only apply to our

12-SDMS-06

Cable tray straight sections, fitting side rails and rungs made from 6063-T6 aluminum extrusions shall be of heat-treated alloys for further strengthening and shall be copper free suitable for salt laden

Aluminum Cable Tray Specifications | PDF | Mechanical

The document provides detailed specifications for aluminum cable trays, including features, accessories, material compliance, and load ratings. It outlines various

TECHNICAL AND SIZING DATA

The cable ampacity installed in solid tray will be similar to cable installed without spacing in accordance with CEC Rule 12-1210 (3). Solid tray will carry the same type of conductors as ventilated trays.

AH4636L09144H | Channel Cable Tray Straight Sections | T& B Cable

Made or assembled in Canada. Series 4 aluminum straight section H-beam cable tray 6 inches side rail height 36 inches width ladder 9 inches rung spacing 144 inches length with hardware. For more info

B-Line series Cable Tray Design Considerations

Is your cable tray system optimized for safety, dependability, space and cost savings? Cable tray (or cable ladder) systems are a popular alternative to electrical conduit systems, as they have an

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 rungs can represent 40% of your cable tray system. Rung A - Standard

CableTray Book English

T& B channel tray systems are fabricated from a corrosion-resistant metal (low-carbon steel, stainless steel or an aluminum alloy) or from a metal with a corrosion-resistant finish (zinc or epoxy). The

SECTION 260536

Install cable trays as a complete system, including fasteners, hold-down clips, support systems, barrier strips, adjustable horizontal and vertical splice plates, elbows, reducers, tees,

Full cable tray systems specification document

B. Cable tray systems are defined to include, but are not limited to straight sections of [ladder type] [trough type] [solid bottom type] [channel type] cable trays, bends, tees, elbows, drop-outs, supports

5" REDI

5" NOMINAL SIDE RAIL HEIGHT, 4" CABLE FILL 6063-T6 COPPER FREE ALUMINUM ALLOY CABLE TRAY WILL SUPPORT 200 lb. CONCENTRATED LOAD EACH RUNG WILL SUPPORT A

Contact Us

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