

Technical Requirements for Aluminum Alloy Cable Trays



Summary of Content

Aluminum alloy cable trays are lightweight, corrosion-resistant, and mechanically robust, typically fabricated from alloys 6063 and 5052, with standardized dimensions, load capacities, and installation features.

Material and Alloy Specifications

Aluminum alloy cable trays are primarily made from Aluminum Association Alloy 6063 for straight sections and side rails, and Alloy 5052 for fabricated parts such as fittings and splice plates . These alloys are chosen for their high strength-to-weight ratio, corrosion resistance, and durability in harsh environments, including coastal and industrial sites . Anodizing or powder coating further enhances corrosion resistance, making them suitable for outdoor applications .

Mechanical Properties

- Load Capacity: Each rung is designed to support a 200 lb concentrated load at the center, with a safety factor of 1.5 over the cable load .
- Rung Spacing: Standard rung spacing is 6, 9, or 12 inches, with radiused fittings typically using 9-inch spacing .
- Cable Tray Depth: Depths range from 3 to 6 inches, depending on the design and NEMA VE 1 standards .
- Electrical Resistance: Fixed splice connections maintain a resistance of ≤ 0.00033 ohm .

Dimensions and Configurations

Article Content

Aluminum Alloy Cable Tray for Corrosion-Resistant Systems

This article explores the design, benefits, installation practices, and real-world applications of aluminum alloy cable

Aluminum Cable Tray Specifications | PDF | Mechanical Engineering

The document provides detailed specifications for aluminum cable trays, including features, accessories, material compliance, and

Aluminum Cable Tray

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

GUIDE CABLE TRAYS TECHNICAL

Specifies requirements for metal cable trays and associated fittings designed for use in accordance with the rules of Canadian

Aluminum Cable Tray – RXL

Made from aluminum alloy, these rugged components bolt together to form a solid and reliable cable pathway. To secure and protect

Aluminum Cable Tray FAQ: Selection and Technical Specifications

This article compiles frequently asked questions regarding the selection and technical specifications of aluminum cable trays,

CableTray Book English

All calculations and data for AH3-7 and AH4-7 series are based on 42" wide cable tray with rungs spaced on 12" centers with tray

Aluminum Cable Tray Guide: How to Choose the Right One

A practical, no-fluff aluminum cable tray guide covering material specs, load classes, installation trade-offs, and real

B-Line series Cable Tray Design Considerations

A properly designed and installed cable tray system will provide outstanding reliability for a facility's control, communication, data,

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

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

Contact Us

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