

Standard Requirements for Aluminum Alloy Cable Tray Profiles



Article Overview

Aluminum alloy cable trays are typically made from AA 6063 for side rails and AA 5052 for fabricated parts, with standardized rung spacing, load ratings, and compliance with NEMA, UL, and CSA standards.

Material and Construction

Aluminum cable trays are constructed using Aluminum Association Alloy 6063 for straight section and fitting side rails, while all fabricated parts are made from Alloy 5052 for enhanced corrosion resistance and mechanical strength. Ladder-type trays consist of two longitudinal side rails with transverse rungs welded to the rails. All edges and welds are rounded and smooth to prevent cable damage. The trays are lightweight, making them easier to handle and install compared to steel trays.

Dimensions and Rung Spacing

- Rung spacing: Standard spacing is 6, 9, or 12 inches, with radiused fittings typically using a 9-inch center measurement.
- Tray widths: Common widths include 6, 9, 12, 18, 24, 30, and 36 inches.
- Tray depths: Standard depths range from 3 to 6 inches per NEMA VE 1 guidelines.
- Tray lengths: Straight sections are supplied in 10, 12, 20, or 24-foot lengths.

Load Ratings and Safety...

Article Content

Sep 05, 2025

IEC 61537:2023 | IEC

IEC 61537:2023 specifies requirements and tests for cable tray systems and cable ladder systems intended for the support and

May 17, 2026

Cable Tray SHIB NAL

The type of cable tray (e.g., solid, ventilated), ampacity (current-carrying limit) requirements, and the type and voltage rating of cable

Oct 07, 2025

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

May 11, 2026

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

Mar 30, 2026

Metallic Cable Tray | PDF Catalogues | ABB Electrification Canada

Browse our T& B galvanized metallic cable tray systems. More adaptable and easier to maintain than conduit pipe,

Apr 18, 2026

NB/T 10292-2019: (Aluminum alloy cable tray) (PDF English)

Aluminum alloy cable tray. This standard specifies the terms and definitions, classification and marking, requirements,

Mar 05, 2026

Aluminium Cable Trays | EAE Electric

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

Jul 11, 2026

Aluminum Alloy Cable Tray is Lightweight to Install

Aluminum alloy cable trays are made of aluminum. They are lighter and resist corrosion widely used in power plant, petroleum

Dec 04, 2025

IEC Standard for Cable Tray: Complete Technical Guide

Understanding the IEC Standard for Cable Tray Cable trays play a vital role in supporting

Nov 02, 2025

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

Construct units with rounded edges and smooth surfaces; in compliance with applicable standards; and with the following additional

May 21, 2026

Cable Tray

Cable Tray Cable trays are mechanical support systems that provide a rigid structural system for electrical cables, raceways, and

Mar 31, 2026

Codes and Standards | Cable Tray Institute

The Cable Tray Institute is making available the current edition of this practical guide for the proper installation of aluminum or steel

May 11, 2026

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

Jul 12, 2026

What are the standard requirements, specifications and thickness of ...

The plates or profiles used in aluminum alloy cable trays and accessories shall meet the relevant provisions of GB/T 3880.1-2006

Jun 12, 2026

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,

Apr 10, 2026

Channel cable tray specification document

2.05 General: Except as otherwise indicated, provide ventilated metal channel cable trays, of types, classes and sizes indicated with

Nov 30, 2025

Aluminum Cable Tray Specifications | PDF | Mechanical Engineering

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

Aug 30, 2025

Aluminum Cable Tray

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

Apr 08, 2026

26 05 36 Cable Trays for Electrical Systems

SCOPE This section includes: Metal cable trays Nonmetallic cable trays Cable tray accessories Related Requirements: Section

Dec 26, 2025

CableTray Book English

All calculations and data for AH1-8 series are based on cable tray with rungs spaced on 12" centers with tray supported as simple

Jun 24, 2026

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

Dec 15, 2025

B-Line series Cable Tray Design Considerations

Cable tray support locations are defined by the NEMA VE-1 and VE-2 Manufacturing & Installation Standards, which specify the

Mar 31, 2026

What are the standard requirements, specifications and thickness of ...

The 2000 national standard of aluminum alloy cable tray is suitable for the manufacture, test and inspection of aluminum bridge tray

Feb 14, 2026

Microsoft Word

The specification covers the minimum requirements of supply of Perforated Anodized Aluminium Cable Trays, Cover, Coupler plate

Dec 25, 2025

SECTION 260536

3.4 FIELD QUALITY CONTROL After installing cable trays and after electrical circuitry has been energized, survey for compliance

Jun 16, 2026

GUIDE CABLE TRAYS TECHNICAL

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

Mar 11, 2026

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

May 15, 2026

222 MANUFACTURING LTD

Aluminum Aluminum cable trays are fabricated from structural grade "copper free" (marine grade) aluminum extrusions. Aluminum's

Mar 29, 2026

Type of Cable Tray

Cable Tray Materials: Most cable tray systems are fabricated from a corrosion-resistant metal (low-carbon steel, stainless steel or an

Contact Us

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