

Stainless Steel Cable Tray Specifications Table

Article Overview

Stainless steel cable trays are available in 304 and 316 grades, designed for industrial and corrosive environments, with standardized widths, rung spacing, and load capacities.

Material and Grades

Stainless steel cable trays are typically manufactured from AISI 304 or 316 stainless steel. Type 304 is widely used for its high resistance to rust and general corrosion, suitable for factory, food, and kitchen installations, while Type 316 contains 2-3% molybdenum, enhancing resistance to chlorides and industrial solvents, making it ideal for outdoor, coastal, and chemical processing environments . All components, including side rails, rungs, and hardware, are often made from the same stainless steel grade to ensure uniform corrosion resistance .

Tray Types and Construction

- o Ladder trays consist of two longitudinal side rails with transverse rungs welded at standard spacing of 6, 9, or 12 inches, capable of supporting a 200 lb concentrated load per rung with a safety factor of 1.5 .
- o Solid or ventilated trays provide additional protection for sensitive instrumentation and control cables, with solid covers used where heat buildup is minimal .
- o Return flange trays are available in light, medium, and heavy-duty ranges for various industrial applications .

Dimensions

- o Widths: 50mm, 75mm, 100mm, 150mm, 225mm, 300mm, 450mm, 600mm, 750mm, 900mm .
- o Depths: Typically 3, 4, or 5 inches per NEMA VE 1 standards .
- o Lengths: Standard straight sections are supplied in 10, 12, 20, or 24-foot sections .
- o Rung spacing in radiused fittings: Industry standard 9 inches at the center of the tray width .

Load and Mechanical Specifications

- o Each rung must support a 200 lb concentrated load at the center with a safety factor of 1.5 .
- o Splice plates are high-strength steel, secured with 8 nuts and bolts per plate, with electrical resistance not exceeding 0.00033 ohm .
- o Straight sections are fabricated as I-beams for structural integrity .

Standards and Compliance

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- o Installation should follow NEMA VE 1 and VE 2 standards .
- o Stainless steel trays comply with ASTM 9108-94 (2015) or BS EN 10088-1:2014 for chemical composition and corrosion resistance .
- o CE marking and third-party certifications (UL, IMQ, LCIE) ensure compliance with European and international directives .

Applications

Stainless steel cable trays are extensively used in oil, gas, petrochemical, rail, offshore, marine, nuclear, food processing, and heavy industry applications due to their durability and corrosion resistance . They are suitable for environments with high salinity, chemical exposure, or de-icing salts.

Accessories

A full range of couplers, bends, tees, and risers is available to configure cable routing systems for complex installations . These specifications ensure that stainless steel cable trays provide reliable cable support, corrosion resistance, and compliance with industry standards for a wide range of industrial and commercial applications.

HOW TO SELECT CABLE TRAY MATERIAL AND FINISH CODE Tray is offered in a variety of material types and finishes -

Product Overview Achieve a clean, professional cable management system with the Kable Kontrol®;

Description: This product category covers metal cable trays and metal cable tray systems intended for field assembly and for use in

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

Couplers: The loading and deflection tables for Atkore Unistrut Cable Tray assume that the couplers are located at the most onerous

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

B. Cable tray systems are defined to include, but are not limited to straight sections of [ladder type] [trough

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type] [solid bottom type]

Tray components must be accurately formed to tolerances with rounded edges. Cable trays installed in hazardous environments

Durable Stainless Steel Construction - Made from high-quality 304 stainless steel with a chrome finish, ensuring long-lasting

With the new Swiftclip, lengths and fittings of Swifts cable tray can be fitted without the use of specialist tools - making it even

CABLE TRAY SPECIFICATIONS Cable Tray Design & Manufacture Niedax's Cable Tray Systems are designed and manufactured

WIRE MESH CABLE TRAY Surface Finish: ? Electro zinc plated-for indoor use to BS EN 12329-2000, 12microns thick. ? Hot Dipped

-- One-piece tray Selection guide Ventilated trough o Formed from a pre-punched sheet to produce a one-piece ventilated trough o

A practical guide to product selection and installation This guide for engineers and installers has been developed by ABB as a

The flexible coupler provides easy installation without measuring and cutting cable tray side rails. Once installed, the coupler allows

We manufacture a wide range of products capable of providing the characteristics which respond to the proposed application, along

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