

Specifications of Multi-hole Horizontal Cable Trays



Overview

Tray-rated cables are required for cable tray installation, so using a channel cable tray system or wire mesh system for exits may be more convenient and economical.

Key Takeaways

Multi-hole horizontal cable trays are designed for flexible cable support, ventilation, and load distribution, typically made from steel, aluminum, or stainless steel with perforated bottoms for airflow and drainage. Design and Construction Multi-hole horizontal cable trays feature a perforated or ventilated bottom, allowing heat dissipation, cable ventilation, and drainage of liquids. The holes are usually uniformly spaced to maintain structural integrity while providing flexibility for cable ties and attachments.

These trays are commonly used for instrumentation, control, and power cables in commercial and industrial installations. The tray is typically horizontal, with side rails and a bottom panel containing multiple holes. Materials include: Steel: Pre-galvanized or hot-dip galvanized for corrosion resistance.

Aluminum: Lightweight, corrosion-resistant, and suitable for harsh environments.

Stainless steel (AISI 316L): High corrosion resistance, especially in chemical or marine environments.



Dimensions and Load Capacity

Width and height: Vary depending on cable volume and load requirements; width is measured outside-to-outside of side rails. Rung or perforation spacing: Typically 6–9 inches (150–230 mm) to support cables while maintaining airflow. Load class: Defined by NEMA or CSA standards, indicating the maximum weight per foot the tray can support over a given span.

Span: Horizontal trays are supported at intervals according to load class, with longer spans requiring stronger materials or additional supports.

Installation Considerations

Can be mounted on floors, walls, ceilings, or equipment racks. Modular design allows easy configuration for new or existing cable routes. Perforations allow cable ties, grounding, and strain relief without compromising structural integrity.

Covers can be added for EMI protection or environmental shielding.

Standards and Compliance

Designed to meet NEMA, UL, and CE standards for electrical safety and mechanical performance. Material selection and finish are chosen based on environmental conditions, such as indoor, outdoor, or corrosive environments. Multi-hole trays are preferred in applications where heat buildup is minimal and visual aesthetics or cable organization is important.

Applications

Data centers and telecom rooms: For structured cabling and network hardware support. Industrial plants: For power, control, and instrumentation cables.

Commercial buildings: For flexible routing of multiple cable types with ventilation and drainage.

In summary, multi-hole horizontal cable trays provide a versatile, ventilated, and structurally sound solution for cable management, with specifications tailored to load, span, material, and environmental requirements.

Article Content

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

In designing supports for a cable tray system, consideration should be given to the loads associated with future cable additions and any additional loading that may be applied to the cable tray system (e.g.,

GUIDE CABLE TRAYS TECHNICAL

NEMA VE 1-2017 Specifies requirements for metal cable trays and associated fittings designed for use in accordance with the rules of Canadian Electrical Code, Part I and the National Electrical Code®

LEGRAND CABLE TRAYS TECHNICAL GUIDE

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

Document DICOS

Tray-rated cables are required for cable tray installation, so using a channel cable tray system or wire mesh system for exits may be more convenient and economical.

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 piling cable in tray, the required air separation between cables can be

MP Husky Cable Tray Systems Technical Catalog

Explore MP Husky's cable tray systems catalog for technical data, specs, and ordering info on ladder, trough, channel, and wire mesh trays.

A T&B Cable Tray Metallic cable tray

Cable tray systems offer unsurpassed reliability, resulting in less maintenance and down time – important considerations for all installations and especially for industries such as data

CABLE TRAY

We manufacture a wide range of products capable of providing the characteristics which respond to the proposed application, along with quality of assembly, speed of installation, and cost-saving cable trays.

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

Network Cable Management: Complete Guide

Horizontal cable management organizes patch cords within individual rack units, guiding cables between equipment on the same rack level. Vertical

Cable Tray Installation Procedure Guide

This document provides procedures for installing cable trays according to international standards. It describes inspecting and storing cable trays upon

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 today with its B-Line series portfolio. With unmatched quality and service, we

CABLE TRAY SYSTEMS GUIDE

CONCENTRATED STATIC LOADS: Some applications may require the cable tray to support the weight of a single, dead object in addition to the cable loads. Specifications typically require this to be

Document DICOS

A channel cable tray can be added to an existing cable tray system using the method illustrated in Figure 3-89 to add approved cabling systems. Refer to the loading information of the existing cable

Cable Tray and Reels | Wire and Cable Management

Fast installation with dependable support. Everything you need to build a cable management system, including Cablofil wire mesh cable tray, ladder cable tray, prefab assemblies for brand circuit wiring,

Telecommunications Horizontal Cabling and Support Structure

The maximum horizontal distance shall be 76-meters (250 ft). For ease of cable installation and future expansion in hallway or major distribution routes, cable trays are the preferred method for distributing

Cable Tray Horizontal Supplier | Leading Manufacturer

Cable Tray Horizontal We manufacture a comprehensive range of Horizontal type cable trays. Our product range is extensively used for managing cables in a building or other places. With Horizontal

SECTION 260536

Include scaled cable tray layout and relationships between components and adjacent structural, electrical, and mechanical elements. Show the following: Vertical and horizontal offsets and

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: <https://cgweb.co.za>

Technical inquiry: <https://cgweb.co.za/project-enquiry.html>

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

