How to install brackets for vertical cable trays

Article Overview

Vertical cable tray sections are typically supported using wall-mounted U brackets or suspension rods with hoisting frames or cross arms, spaced every 1.5 to 2 meters for stability.

Types of Vertical Support Brackets

Wall-mounted U brackets ("riding horse" type) are ideal for vertical cable tray installations against walls. They provide strong support and allow convenient maintenance, with each bracket typically secured using two iron expansion bolts for robust anchoring . Suspension rods with hoisting frames or cross arms are used when vertical support is needed from ceilings. Hoisting frames are suitable for smaller trays, while cross arms provide stability for larger, heavier trays. Each rod connects the ceiling support to the tray's crossbars, ensuring structural integrity .

Materials and Surface Treatments

Brackets and rods are commonly made from Q235 carbon steel or stainless steel (201, 304, 316 grades). To enhance durability and corrosion resistance, surface treatments include:

o Hot-dip galvanizing
o Fireproofing
o Electrostatic powder coating
o Aluminum-magnesium-zinc plating

Installation Guidelines

o Spacing: Vertical supports should be installed every 1.5 to 2 meters along the cable tray .
o Anchoring: Use appropriate expansion bolts or fasteners suitable for the wall or ceiling material.
o Load Considerations: Ensure the support can handle the weight of the cable tray and cables, including any additional imposed loads such as wind, ice, or short-circuit forces .
o System Integration: Brackets should be compatible with the cable tray system to maintain electrical continuity and grounding .

Best Practices

o Follow relevant standards such as BS EN 61537 for cable tray systems and BS 6946 for channel supports .
o Ensure installation is performed by qualified personnel familiar with electrical safety and local building codes .

o Consider environmental factors like moisture, corrosive substances, or temperature variations when selecting materials and finishes . By selecting the appropriate vertical brackets, spacing, and materials, vertical cable tray sections can be securely installed, ensuring both mechanical stability and long-term durability.

In this essential guide, we will explore the installation process for cable tray support brackets, highlighting their importance in

CABLE TRAY GROUNDING ASSEMBLY ALUMINUM CABLE TRAY HINGED - SPLICE PLATE ASSEMBLY CABLE TRAY CLAMP

Cable Tray Technical Guide A practical guide to product selection and installation This guide for engineers and installers has been

Tired of struggling with cable tray installations? At Direct Channel we have the perfect range of brackets and supports to make things

In this video, we will walk you through the installation process for four different types of wall brackets, specifically

Complete vertical cable tray installation guide: materials, grounding, firestop, and GB standards compliance for

Discover efficient cable tray support structures for optimal cable management. Learn about

NEMA Standards Publication VE 2-2006 Cable Tray Installation Guidelines Published by: National Electrical Manufacturers

General Installation Guidelines: For more information refer to the latest NEMA standards and local building codes. Trough tray field

To ensure that the complete ladder tray wiring system performs as designed, it is important that it is properly installed. Personal

When properly installed, cable trays prevent damage to cabling and the area"s structural integrity. When

This document provides guidance on best practices for installing cable ladder and cable tray systems, including channel support

How to install brackets for vertical cable trays

Wall support brackets (Figures 12) are an effective way of fixing any width of cable ladder or cable tray, running either vertically or

This guide covers the critical steps, from selecting the right electrical cable tray and performing accurate

A cable tray system is used to support insulated electrical cables used for power distribution, control, and communication. Cable

This document provides procedures for installing cable trays according to international standards. It

Web: https://in-au.co.za