Trapezoidal cable tray as a support

Article Overview

A trapeze support for a cable tray can be constructed using slotted strut channels suspended from threaded rods, providing a secure and adjustable framework for the tray.

Materials Needed

o Slotted strut channels (deep channel or standard strut type) sized to match the width of the cable tray
o Threaded rods (M10 or M12 recommended) for suspension from ceilings or beams
o Nuts, washers, and brackets for securing the strut to the rods
o Optional: lightweight tubular rails for easier handling in overhead installations

Step-by-Step Construction
o Measure and Plan Determine the length of the cable tray run and the spacing of supports. Typical spans depend on tray type and load but generally range from 1.5 to 3 meters. Ensure the support spacing complies with NEC Article 392 or local codes .
o Cut and Prepare Strut Channels Cut the strut channels to the required length. If using slotted channels, ensure slots are centered to allow flexible attachment of the tray . For prefabrication, consider cutting multiple pieces in a shop environment to save time .
o Install Threaded Rods Secure threaded rods to the ceiling or structural beams. Use appropriate anchors or fasteners for the building material. Ensure rods are vertical and aligned with the planned support points .
o Assemble the Trapeze Frame Attach the strut channels horizontally to the threaded rods using nuts and washers. The trapeze frame should form a stable "H" or "U" shape, with the cable tray resting on the horizontal strut .
o Mount the Cable Tray Place the trapezoidal cable tray onto the strut channels. Use clamps or brackets to secure the tray to the strut, ensuring it is level and properly supported along its length .
o Check Alignment and Load Verify that the tray is level and that the trapeze supports can handle the expected cable load. Adjust nuts and brackets as needed. For heavy or long runs, consider additional supports or a stronger strut system .

Tips for Efficiency and Safety

o Prefabricate supports in a shop to reduce installation time on-site .
o Use lighter rails where possible to ease handling and reduce risk of injury .
o Ensure compliance with local electrical and structural codes, especially in seismic areas .
o Consider environmental factors such as corrosion; powder-coated or FRP materials may be used in harsh conditions . By following these steps, you can create a secure, adjustable, and code-compliant trapeze support system for trapezoidal cable trays, ensuring safe and efficient cable management.

Trapezoidal cable tray as a support

MP Husky cable tray clamps are the most reliable, highest quality, and cost effective cable tray clamps in the industry. Proper cable

Fast installation with dependable support. Everything you need to build a cable management system, including Cablofil wire mesh

The load capacity of the cable trays according to the support width can be read off in the diagram using load curves - here, shown as

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

Imperial cable tray and ladder Eaton"s B-Line series imperial cable tray system is designed to significantly

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

The cable tray supports shall be designed to support the weight of the cables, and also any loads that may be applied

In accordance with its continuous impro-vement policy, Legrand reserves the right to change the specifications and illus-trations

Cable Management Support Systems Cable Support Systems are well designed to provide necessary support for cable trays, cable

Discover cable tray supports at TechLine Mfg. Choose from hangers, brackets, and clamps for your needs. Contact us today for

Based on slotted deep channel (strut type) to BS6946, the Trapeze Support Channel has 26 x 13 slots at

Attach the bracket to the mounting surface, position tray over bracket and slide tray under tabs. Lock tabs down using a screwdriver.

The Cable Tray Institute (CTI) was founded in 1991 to support the cable tray industry by engaging in research, development,

Cable trays offer continuous support of cables, are lightweight, quick and straight forward to install just about anywhere, and

Trapezoidal cable tray as a support

Steel Ladder System Hubbell"s NEXTFRAME® Ladder Tray is the effective and widely used cable runway that supports and delivers

Grounding and bonding of cable trays There are three wiring options for providing an EGC in

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