

What is the meaning of horizontal support for cable trays

Article Overview

Horizontal supports for cable trays include wall brackets, suspended supports, and center suspensions that mechanically hold the tray and maintain proper spacing.

Types of Horizontal Supports

Wall and Support Brackets: These are mounted directly to walls or structural surfaces to hold cable trays horizontally. They provide stable support for trays running along walls or vertical surfaces and are commonly used in both industrial and commercial installations . **Suspended Supports:** These supports hang from ceilings or overhead structures using rods, chains, or straps. They are ideal for long horizontal runs where wall mounting is not feasible. Suspended supports help maintain the tray's level and prevent sagging under cable weight . **Center Suspensions:** Used for wide or heavy cable trays, center suspensions provide support at the midpoint of the tray span. This prevents bending or deflection in the middle of long horizontal runs and ensures even load distribution .

Support Spacing and Load Considerations

The support distance is the spacing between adjacent horizontal supports. Proper spacing is critical to prevent excessive sagging and mechanical strain on cables. The distance depends on tray type, material, cable weight, and environmental factors. Standards such as BS EN 61537 provide guidance on support intervals, but engineers must also consider additional loads like wind, snow, or vibration .

Mounting and Materials

Horizontal supports are typically made from steel, stainless steel, or aluminum, chosen based on strength requirements and environmental conditions. Mounting elements like screws, bolts, or J-bolts attach the supports to the building structure. Accessories such as covers or barrier strips may be added to protect cables .

Practical Notes

- o Supports must be installed to avoid undue mechanical strain on cables and terminations .
- o For ladder-type trays, rung spacing of 150-230 mm is recommended to maintain cable position and prevent sagging .
- o All supports should be compatible with the tray system to ensure safe and reliable installation . By selecting the appropriate type of horizontal support and spacing, cable trays can safely carry electrical and communication cables while maintaining structural integrity and compliance with standards.



What is the meaning of horizontal support for cable trays

Supports should be located so that connectors (splice joints) between horizontal runs fall between the support point and quarter point

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

Horizontal cross A cable tray fitting that is suitable for joining cable trays in four directions at 90° intervals in the same plane.

A cable tray system is a unit assembly of sections and fittings that forms a rigid structural system used to securely

Cable ladder and cable tray systems The following recommendations are intended to be a practical guide to ensure

Cable trays are available in different configurations, straight sections are available to route cables in a horizontal or vertical plane.

A cable tray is a structural system used to support and manage electrical cables in various settings, such as industrial, commercial,

Cable Tray Support Brackets: Tray support brackets are wall-mounted to masonry, steel frames or concrete to carry the tray laterally

Different types of cable trays offer key benefits, optimizing cable management and

Cable trays are systems that distribute bundles of insulated electrical cables from power supplies to electrical equipment, consisting

Welcome to our step-by-step guide on installing cable trays! In this video, we'll explore the

Support Methods: Common support methods include trapeze hangers, which are used for ceiling

Cable tray supports should be strategically positioned so that connectors between horizontal straight sections of the tray fall between

Cable tray systems are engineered support structures designed to route, support, and protect insulated electrical

What is the meaning of horizontal support for cable trays

Horizontal elbows change direction of a tray in the same plane as the bottom of the tray and are made in 30, 45 and 90 degree

NEC Article 392 explains cable trays, their components, appropriate wiring methods for

Web: <https://www.millstraining.co.za>

