

Common 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.



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

Discover the main cable tray support types: wall-mounted, ceiling-hung, floor-mounted, and cantilever brackets. [Learn](#)

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Cable trays are components of support systems for power and communications cables and wires. A cable tray system supports and

Contact us today for your custom or standard sized support bracket needs. Supports should be located so that connectors (splice

Discover the main components of a cable tray system. [Learn](#) about tray types, fittings,

Often unheralded, cable trays play a vital role in tray cable installations throughout industrial, commercial, and residential projects.

This guide covers cable ladder systems, cable tray systems, channel support systems and associated supports intended for the

Hubbell's NEXTFRAME™ Ladder Tray is the effective and widely used cable runway that supports and delivers bundles of cable

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

SOLID-BOTTOM CABLE TRAY Providing additional cable protection, solid-bottom cable tray is sometimes preferred to support and

Key Factors Impacting Cable Tray Spacing Understanding cable tray spacing is key to

Explore the types of cable trays, their advantages, applications, and standard sizes. [Learn](#) how they improve cable

Vertical-tray supports shall provide secure means, other than friction, for fastening cable trays to supports.

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9.7.4 Supports shall be

In designing supports for a cable tray system, consideration should be given to the loads associated with future cable additions and

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

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