

Large-span cable tray installation



Article Overview

Proper installation of large-span cable tray supports requires careful planning of support spacing, hanger selection, structural attachment, and load management to ensure safety and compliance.

Support Span and Load Considerations

The distance between supports is critical for large-span cable trays. Support spans must be calculated based on the manufacturer's load capacity charts and the total anticipated weight of the cables, including future expansion . Overloading a tray can lead to sagging, conductor damage, or code violations. For ladder or ventilated trays, typical rung spacing ranges from 6 to 9 inches (150-230 mm) to maintain cable stability and prevent excessive bending .

Support Methods

Common support methods include:

- **Trapeze Hangers:** Ideal for ceiling suspensions, these consist of two rods supporting a horizontal bar from which the tray is mounted .
- **Cantilever Wall Brackets:** Mounted directly to walls for vertical or horizontal runs along structural surfaces .
- **All-Thread Rods with Nuts:** Used for precise elevation control; pre-threading nuts and cutting rods to length can save installation time . The choice of support method depends on the building structure, tray route, and load requirements....

Article Content

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Cable tray length is selected based on the load to be supported, the distance between the supports (also referred to as the span),

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Cable Tray Installation

Whether you're building a commercial setup or upgrading an industrial plant, proper cable tray installation ensures

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.chromadecksigns-eastrand.co.za>

Email: sales@chromadecksigns-eastrand.co.za

Phone: +32 2 318 5792

Address: Avenue Louise 500, 1050 Brussels, Belgium

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