

Vertical Shaft Cable Tray Support Arm Specifications

Article Overview

Vertical shaft cable tray support arms are designed to securely support vertical cable tray runs, typically using threaded rods, coupler plates, or strut mounts, and are manufactured to meet industry standards for load, material, and corrosion resistance.

Design and Function

Vertical support arms are engineered to support vertical cable tray runs, ensuring safe routing of cables in shafts or risers. They are commonly used in industrial and commercial installations where cable trays must transition vertically between floors or levels . These supports are not intended for human load-bearing but are designed to handle the mechanical load of cables and trays .

Mounting Methods

- o Threaded Rods: Vertical support arms are often suspended using threaded rods, which allow height adjustment and secure attachment to ceilings or structural elements .
- o Coupler Plates: Supports can be bolted directly onto coupler plates at splice points for continuous vertical runs .
- o Field-Drilled Side Rails: Some designs allow bolting anywhere along the cable tray by drilling side rails on-site, providing flexibility in installation .
- o Strut Mounts and Wall Brackets: Certain vertical supports integrate with strut channels or wall mount brackets for easy assembly and alignment .

Materials and Finish

- o Steel or Stainless Steel: Most vertical support arms are made from steel or stainless steel for strength and durability .
- o Electro-Galvanized or Galvanized Coatings: Corrosion protection is provided through electro-galvanization or other galvanic coatings, suitable for indoor and outdoor environments .
- o Surface Treatments: Additional galvanization or powder coating may be applied depending on environmental exposure and project requirements .

Standards and Compliance

- o BS EN 61537: Cable tray and support systems are manufactured in accordance with this standard, ensuring mechanical and electrical safety .
- o DIN EN 61537: European standard for cable support systems, covering material, load capacity, and

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installation requirements .

- o UL and CE Certifications: Many products are certified to UL or CE standards, confirming compliance with safety and quality regulations .

Dimensions and Load Considerations

- o Dimensions vary by manufacturer and load requirements; typical specifications include arm length, width, and thickness to accommodate cable tray sizes and weight .
- o Load capacity depends on the material, mounting method, and spacing of supports. It is essential to consult manufacturer datasheets for exact load ratings and spacing recommendations .

Installation Notes

- o Supports should be installed by qualified personnel familiar with electrical installation practices .
- o Ensure proper alignment and secure fastening to prevent tray sagging or cable damage.
- o Verify compatibility with the cable tray system being used, as components are designed to function as an integrated system . Vertical shaft cable tray support arms provide a reliable solution for vertical cable management, combining flexibility, strength, and compliance with industry standards to ensure safe and efficient cable routing in multi-level installations.

To install the cable tray supports, first find the required elevation from the floor to the bottom of the cable tray and establish a level

Professional guide to cable tray and raceway installation: covers design, materials, step-by-step

Cable tray systems are defined to include, but are not limited to straight sections of of [ladder type] [vented bottom type] [solid bottom

Ventilated trough cable tray is often used when the specifier does not want to use ladder cable tray to support small diameter

These brackets are used to provide extra support to a horizontal run of channel. In addition to the cantilever arms listed, there are

Eaton

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

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Some applications may require the cable tray to support the weight of a single, dead object in addition to the cable loads.

Introduction This publication is intended as a practical guide for the proper and safe* installation of cable ladder systems, cable tray

As demonstrated in the previous paragraph, Optical Cable Corporation's cable can be installed in vertical rises for great distances.

Support trays An even surface is required for reliable unrolling of the unsupported cable carrier. If this is not already provided on site,

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

Vertical cable tray elbows at the top of runs should be supported at each end. At the bottom of runs, they should be supported at the

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

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

Innovative vertical cable support that aides cable pulling with its unique locking mechanism. Combined

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

