

Trough-type cable tray with partitions

Article Overview

Trough-type cable trays require proper partitioning, ventilation, and adherence to NEC and NEMA standards to ensure safe cable support and separation.

Overview of Trough-Type Cable Trays

Trough-type cable trays, also known as ventilated trough trays, feature a solid bottom with ventilation openings, typically ranging from 1/4-inch to 1-inch slots or holes. They provide moderate ventilation and better support for cables that might sag between rungs, making them suitable for medium-voltage cables or installations requiring some debris protection. These trays are commonly used in industrial and commercial applications where cable protection and organized routing are essential.

Partitioning Requirements

- **Separation of Cable Types:** Partitions are used to separate power, control, and communication cables within the same tray to prevent electromagnetic interference and maintain signal integrity. NEC Article 392 specifies that signal and power cables should be separated when installed in the same tray.
- **Material and Construction:** Partitions are typically made of non-conductive or metallic materials compatible with the tray. They must be rigid enough to maintain separation under cable load and environmental conditions.
- **Height and Placement:** Partitions should extend above the tray bottom sufficiently to prevent cables from crossing over into adjacent sections. The spacing depends on the cable diameter and fill requirements, ensuring that the tray does not exceed its maximum fill capacity.
- **Ventilation Considerations:** Trough trays rely on ventilation slots to dissipate heat....

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Solid Bottom Cable Tray Husky Trough Tray is a cable tray consisting of ventilated or solid bottom contained within longitudinal side

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The only reason to select a ventilated trough cable tray over a ladder type cable tray is aesthetics. No drooping of small cables is

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