Horizontal cable trays converted to lateral cable trays

Article Overview

Converting horizontal cable trays to lateral trays requires careful attention to support spacing, load distribution, cable securing, and compliance with standards such as BS EN 61537 and NEMA VE 1.

Key Requirements

1. Structural Support and Load Considerations When converting to lateral trays, ensure that the tray supports can handle the combined weight of the tray and cables, including any imposed loads such as wind, ice, or short-circuit forces. Support spacing may need adjustment; for horizontal runs, typical spans are 1.5-3 meters, while lateral or vertical runs often require supports every 1-2 meters to prevent sagging and maintain stability . Fixed supports should be installed at tray ends, corners, T-junctions, and spans exceeding 30 meters . 2. Tray Orientation and Fittings Lateral trays may require special fittings or brackets to maintain proper alignment and prevent cable stress at bends. Ensure that all components are compatible with the original system and designed for lateral mounting . Modular systems like ladder trays can be reconfigured for wall or side mounting using appropriate mounting kits . 3. Cable Securing and Spacing Cables must be secured at the start, end, and turns, and along straight sections every 3-5 meters. Maintain adequate spacing between power and signal cables to minimize electromagnetic interference (EMI), typically at least 0.5 meters, or 0.3 meters if shielded . Vertical clearance between trays should be at least 150 mm to allow airflow, heat dissipation, and future expansion . 4. Compliance with Standards All modifications should comply with BS EN 61537 for cable trays and NEMA VE 1 for metal trays, ensuring proper construction, testing, and performance. Nonmetallic trays must follow NEC or CEC rules if applicable . Ensure that the system maintains electrical continuity, grounding, and short-circuit protection as required . 5. Installation Best Practices

o Use non-metallic banding for bundled trays to prevent corrosion or contamination .
o Ensure trays are level and properly aligned when mounted laterally.
o Install hangers symmetrically at corners or bends to distribute weight evenly .
o Verify that the lateral orientation does not exceed the tray's load class or design limits . 6. Safety Considerations Only competent personnel familiar with electrical installation practices should perform the conversion. Lateral trays are not designed to support personnel; avoid using them as walkways . Ensure PPE is used during installation and that all modifications maintain system integrity and cable protection . By following these requirements, horizontal cable trays can be safely converted to lateral trays while maintaining structural integrity, proper cable management, and compliance with relevant standards.

After doing a work around, we got a section of tray to run along the wall, but any alterations to it will flip it

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The cable trays from SILTEC are made of first-class stainless steel that prevents corrosion and ensures a good level of resistance.

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The cable trays are ran along the side of the conveyor platforms. However, the general manager is presently

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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

When selecting cable trays, enterprises often prioritize performance metrics, particularly safe working load. But how are

Introducing the Helix cable tray fitting. Efficiency is in its DNA.,, Making transitions from horizontal to vertical cable tray runs has

Cable Tray, trunking and ladder will be properly supported and stacked in a flat surface. Tray, trunking and ladder will

Cable tray system shall be used for laying of MV and LV power, control, instrumentation and special cables in

the

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