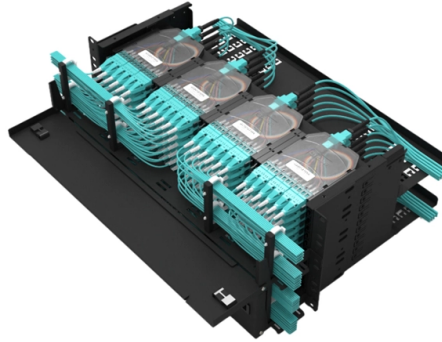


Cable trays installed on the construction site



Overview

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Key Takeaways

Cable trays are installed at construction sites to support and route electrical cables safely, following approved drawings, proper material handling, and strict safety and quality procedures. Overview of Cable Tray Installation

Cable trays are used in electrical rooms, plant rooms, service corridors, and commercial or industrial buildings to organize and support electrical cables efficiently. They provide a safe pathway for power, control, and communication cables while allowing easy access for maintenance and future expansion.

Material Handling and Preparation

- **Inspection:** All cable trays, ladders, and accessories must be inspected upon delivery to ensure they match approved material submittals and are free from damage.
- **Storage:** Store trays horizontally on a flat surface with timber supports at intervals of about 1 meter, protecting them from moisture and sunlight.



- Approval: Material samples should be submitted to the consultant for approval before installation .

Installation Procedure

- Review Shop Drawings: Confirm tray routes, lengths, and locations as per approved drawings .
- Site Preparation: Ensure the area is clean, safe, and free from obstructions. Mark horizontal and vertical tray routes, coordinating with other services to avoid clashes .
- Support and Hanging Systems: Install supports such as C-channels, cleats, or brackets at regular intervals based on tray load and specifications. Vertical trays require load-bearing cleats .
- Fixing Trays: Secure trays, ladders, and trunking using appropriate bolts and fasteners. Ensure alignment is horizontal, vertical, or parallel to building features .
- Accessories: Provide supports for tees, elbows, reducers, and joints within 300 mm of connections. Maintain minimum bending radius for cables .
- Grounding: Install earth continuity strips at all joints and connect separate grounding cables to the earth bar .
- Finishing: Remove sharp edges, apply approved galvanized paint on cut edges, and ensure neat installation .

Safety and Quality Assurance

- Safety Induction: All operatives must attend safety training and provide proof of competency .
- Site Safety: Inspect the work area for unsafe conditions and install warning signs or barriers .
- QA/QC: Supervisors and inspectors must verify compliance with approved drawings, specifications, and inspection checklists .

Material Selection

Cable trays are available in galvanized steel, stainless steel, aluminum, and pultruded fiberglass, chosen based on environmental conditions, corrosion resistance, and mechanical strength . Galvanized coatings protect steel from rust, while aluminum offers a high strength-to-weight ratio and corrosion resistance .

Key Considerations

- Maintain clearance for cable pulling and future maintenance.
- Coordinate with other trades to prevent interference.
- Follow project-specific technical scope, IFC drawings, and HSE requirements .

- Ensure proper documentation of inspections, tests, and approvals. By following these procedures, cable tray installations at construction sites can achieve safety, reliability, and compliance with engineering standards, while facilitating efficient cable management and future maintenance.

Article Content

METHOD STATEMENT FOR CABLE TRAY INSTALLATION

In case of discrepancy of cable tray layout against site conditions, shall be informed for final disposition. 7.1.5 Install cable tray as per

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