

How to fix the partition plates of the vertical shaft cable tray

Article Overview

Partition plates in vertical cable trays are fixed using bolts or clamps through pre-drilled holes, ensuring proper alignment, secure fastening, and compliance with load and spacing standards.

Step-by-Step Guide

1. **Inspect the Tray and Partition Plate** Before installation, check the vertical cable tray and partition plate for any damage, corrosion, or deformation. Ensure the tray is properly supported and aligned vertically, with deviations not exceeding 3 mm per meter and total deviation ≤ 10 mm.
2. **Align the Partition Plate Position** the partition plate inside the tray at the required location. Ensure it is perpendicular to the tray sides and properly aligned with any existing partitions or cable layers. Maintain the recommended spacing between power and weak-current trays (≥ 150 mm) if applicable.
3. **Select Appropriate Fasteners** Use nuts and bolts compatible with the tray material. Typically, M12 or larger bolts are recommended for vertical trays, especially when supporting heavy cable loads. Ensure bolts are corrosion-resistant if the tray is galvanized or aluminum.
4. **Secure the Partition Plate** Insert bolts through the pre-drilled holes in the partition plate and the tray sides. Tighten nuts using a torque wrench to the manufacturer's recommended torque to prevent loosening due to vibration. For some systems, clamps or quick-connect systems may be used for faster assembly, but bolts provide the most reliable long-term stability.
5. **Verify Stability and Clearance** After fastening, check that the partition plate is firmly fixed and does not move. Ensure there is sufficient clearance for cables and that the plate does not interfere with cable routing or firestop requirements.
6. **Repeat for Additional Plates** If multiple partition plates are required, repeat the alignment and fastening process for each plate, maintaining consistent spacing and alignment throughout the vertical tray.
7. **Final Inspection** Perform a final inspection to ensure all plates are secure, bolts are tightened, and the tray system meets load-bearing and fire-resistance standards. Confirm that the installation complies with relevant codes such as GB 50303 or local electrical standards. By following these steps, partition plates in vertical shaft cable trays will be securely fixed, ensuring mechanical stability, proper cable separation, and long-term system reliability.

We have more than a decade's worth of experience making and designing quality cable tray and cable management systems. Our

On completion of cable tray/ ladder installation including fittings, inspect exposed finish. Remove burrs & construction

This comprehensive guide investigates the most frequent wire management challenges

How to fix the partition plates of the vertical shaft cable tray

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

This section starts out covering areas where cable tray cannot be installed and then covers the basic tools required for cable tray

This guide discusses common cable tray problems, from loosening and corrosion to

Where metal supports for metal cable trays are bolted to the tray and are in good electrical contact with the grounded structural metal

It describes inspecting and storing cable trays upon receipt, installing trays flat or vertically, fixing trays to

Learn common methods for connecting cable trays safely and efficiently. Our guide covers

Nearly every aspect of cable tray design and installation has been explored for the use of the reader. If a topic has not been covered

Cable Tray Installation Method Statement 1. Cable Tray Installation Cable trays should be installed in accordance with the latest

Learn how to avoid common mechanical, corrosion, and electrical issues in steel cable tray installations. Get expert

COVER INSTRUCTIONS:) Use to enclose cable tray and protect cable and wiring from damage or debris.) Provided with self

Vertical adjustable splice plates should be designed and placed to maximize the rigidity of the cable tray, unless vertical adjustable

This guide covers cable ladder systems, cable tray systems, channel support systems and associated supports intended for the

"Cable Tray System" is an assembly of formed metal sections, coupled together by splice plates to provide an economical and rigid

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