

Article Overview

Use splice plates and nuts/bolts to join cable tray sections end-to-end, ensuring proper alignment and secure fastening.

Step 1: Plan and Align

Begin by tracing a straight line along the path where the cable trays will be installed. Using a laser level is recommended to ensure the line is perfectly straight on the ceiling or wall before drilling any holes . Proper alignment prevents the trays from appearing misaligned or "snaking" along the installation path.

Step 2: Install Supports

Decide on the type of support based on the installation location:

- o Wall Mounts: Use cantilever arms that extend from the wall to hold the tray .
- o Ceiling Mounts: Use trapeze hangers, which consist of metal rods and a flat bar to suspend the tray . Ensure fasteners are appropriate for the building material--metal anchors for concrete or special clamps for steel structures .

Step 3: Connect Tray Sections

The most common method for straight-line connections is using splice plates:

- o Place a flat metal splice plate with pre-drilled holes at the ends of two tray sections .
- o Secure the plate with nuts and bolts, tightening them to the proper torque to prevent loosening due to vibration .
- o Ensure the trays are aligned straight before fully tightening the bolts . Alternative methods include quick connect systems, which snap, slide, or twist together with minimal tools, offering faster installation but often limited to a single manufacturer's brand .

Step 4: Final Checks

- o Verify that all tray sections are level and aligned .
- o Use cable tray rollers for long runs to lay cables smoothly and avoid kinks .
- o Ensure proper grounding and bonding across all metal trays for safety .
- o Label and document the installation for future maintenance . By following these steps, you can achieve a secure, straight, and reliable cable tray installation suitable for industrial or commercial applications .



Straight-line installation of cable trays

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

Core rules for selecting, installing, grounding, and filling cable trays--clearances, materials, separation, and bonding

Center hung tray supports allow for quicker and easier cable installation by allowing cables to be deposited into tray systems from

Cable ladder and cable tray systems The following recommendations are intended to be a practical guide to ensure

To limit damage, straight lengths should be bundled and shipped on a flat deck trailer. Straight lengths are shipped without exterior

Choosing the correct tray ensures the system remains reliable and reduces the need for

Learn the best practices for installing cables in trays. This guide covers essential steps,

Cable trays are available in different configurations, straight sections are available to route cables in a horizontal or vertical plane.

1. Route Planning and Layout Principles Coordinate with Building Structure: Cable tray routing should align

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

Submittals for cable ladder and tray Eaton's submittal builder tool for B-Line series cable ladder and tray allows you to easily filter,

A practical guide to product selection and installation This guide for engineers and installers has been developed by ABB as a

Installation of Cable in Cable Trays ensures proper routing, cable management, NEC compliance, grounding, fire safety, and load

Cable Tray Systems Guide HUBBELL Hubbell Wiring Device-Kellems and Hubbell Premise Wiring are divisions of Hubbell

Straight-line installation of cable trays

These documents: ANSI/NEMA VE-1, Metal Cable Tray Systems; NEMA VE-2, Cable Tray Installation Guidelines; and NEMA FG-1,

This guide for engineers and installers has been developed by ABB as a practical reference regarding cable tray characteristics,

Web: <https://www.supremeacademicresearch.co.za>

