

Grounding in cable trays



Article Overview

Yes, metallic cable trays must be properly grounded to ensure electrical safety, system reliability, and compliance with NEC and other standards.

Grounding Requirements

All metallic cable trays are required to be grounded according to NEC Article 250.96, regardless of whether the tray itself serves as an equipment grounding conductor (EGC) or not . Grounding ensures that in the event of a fault, the tray does not become energized, preventing electric shocks, equipment damage, or fire hazards . Proper grounding also maintains electrical continuity across tray sections and connections, which is critical for safety and inspection compliance .

Bonding Practices

Cable trays are bonded together through bolting, splice plates, clamps, and bonding jumpers where gaps exist . Mechanical connections alone may not provide reliable electrical continuity, so bonding jumpers are often used to maintain an effective grounding path . For installations with multi-conductor cables, each cable's EGC should be bonded to the tray sections, either at every section or at alternate sections, to ensure fault current paths are maintained . Bare copper conductors should not be used in aluminum trays to avoid electrolytic corrosion; insulated conductors with exposed bonding points are preferred .

Tray as Equipment Grounding Conductor...

Article Content

Jun 06, 2026

NEC Standards for Cable Trays: Grounding, Fill Capacity

Grounding is one of the most critical NEC considerations when installing metallic cable trays. To comply with code

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grounding cable trays | Information by Electrical Professionals for ...

Metal raceways, cable trays, cable armor, cable sheath, enclosures, frames, fittings, and other metal non-current

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Grounding & Bonding Wire Mesh Cable Trays

Learn grounding and bonding requirements for wire mesh cable tray systems. Stay NEC compliant while safely

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Grounding and Bonding of Cable Trays | PDF | Electrical Wiring

cable trays or cable trays of one-piece construction. ** Steel cable trays shall not be used as equipment grounding conductors for

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Earthing & Bonding in Cable Tray Systems

Learn why earthing and bonding in cable tray systems is essential for electrical safety, grounding, compliance, and

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What Are Equipment Grounding Conductors (EGC) for Cable Trays?

6.1 Does every cable tray need a green wire? 6.2 Can stainless steel trays be used for safety grounding? 6.3 What is

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Safely Installing, Maintaining and Inspecting Cable Trays

Grounding of cable trays is so important that it has become the industry practice to use grounding conductors in cable trays for

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Equipment Grounding Conductors for Cable Tray Systems

Cable tray wiring systems have excellent safety and dependability records. These excellent records are the result of cable tray's

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Grounding cable trays: requirements, norms, instructions

How to ground cable trays and what requirements should be considered? Which wire do you need to use to ground the cable

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Grounding Inspection of Steel and Aluminum Cable Tray Systems

Steel and aluminum cable tray systems are excellent equipment grounding conductors if they are properly designed, specified,

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Cable Tray Grounding: Power, Instrumentation, and Telecommunications

Where cable tray systems contain only signal and communication circuits that operate at low energy levels, power grounding per

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Grounding Inspection of Steel and Aluminum Cable Tray Systems

Electrical grounding is essential for personal safety and protection against arcing that can occur in any part of the wiring system,

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Equipment Grounding Conductors for Cable Tray Systems

The intent of this article is to review grounding practices for cable tray wiring systems. The Equipment Grounding Conductors are the

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Types of Cable Typically Used in Cable Tray

Communication Cables – types CMP, CMR, CMG, CM, CMX Fire Alarm Cables – type NPLF – NPLFP, FPL-FPLP (CI) Type TC –

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Equipment Grounding Conductors for Cable Tray Systems

Cable tray have excellent safety and dependability records, because of the result of cable tray's unique features plus

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Practices for grounding and bonding of cable trays

All metallic cable trays shall be grounded as required in Article 250.96 regardless of whether or not the cable tray is being used as an

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NEC Standards for Cable Trays: Grounding, Fill Capacity

The flexibility and scalability of cable trays make them an ideal choice for environments where cable density and

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Cable Tray Grounding: Power, Instrumentation, and

Cable Tray Grounding: Power, Instrumentation, and Telecommunications Richard J. Buschart, Former Technical Director-Cable Tray

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Bonding and Grounding wire mesh cable tray.

Bonding and Grounding wire mesh cable tray. Don't be misled by false advertising claims relating to field cut wire mesh cable tray

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Cable Tray Grounding: Power, Instrumentation, and

Cable tray systems are not required to be mechanically continuous, but shall be electrically continuous. Cable trays are also bonded

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Grounding & Bonding Wire Mesh Cable Trays

However, while wire mesh trays offer mechanical and thermal advantages, proper grounding and bonding are critical

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Cable Tray Technical Guide A practical guide to product selection and ...

Cable Tray Technical Guide A practical guide to product selection and installation This guide for engineers and installers has been

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