

Correct marking of cable trays



Overview

Cooper B-Line has recognized the need for a complete cable tray reference source for electrical engineers and designers.

Key Takeaways

Cable trays must be marked to indicate voltage hazards, grounding suitability, and compliance with safety standards, with labels placed at regular intervals and designed according to NEC and ANSI guidelines. High-Voltage Markings

Cable trays carrying conductors rated over 600 volts must be labeled “DANGER — HIGH VOLTAGE — KEEP AWAY”. These labels should be placed at intervals no greater than 10 feet along the tray and must comply with NEC Section 110.21(B), which requires effective warning through words, colors, and symbols. Labels cannot be handwritten except for variable information, and should follow ANSI Z535.4-2011 standards for product safety signs, including font, capitalization, and symbol usage to clearly communicate the hazard .

Grounding and Equipment Markings

If a cable tray is used as an Equipment Grounding Conductor (EGC), the manufacturer should provide a permanent label on the tray's side rail indicating the tray's cross-sectional metal area and UL classification for use as an EGC. This ensures that the tray meets NEC requirements for electrical continuity and fault current capacity. If the tray cannot serve as an EGC, a separate conductor must be installed, and the tray should be marked accordingly .

Compliance and Certification Labels

Cable trays may also carry UL, CE, or other certification marks to indicate compliance with national or international standards. These markings confirm that the tray meets mechanical, electrical, and safety requirements, and may include information about material, finish, and environmental suitability .

Placement and Visibility

- Labels should be clearly visible and durable under environmental conditions.
- Hazard warnings should be placed at entry points, junctions, and along the tray at regular intervals.
- Grounding and certification labels should be permanent and legible, typically on the side rails or other accessible surfaces.

Summary

Proper cable tray markings include:

- High-voltage warning labels for trays carrying >600V circuits.
- Grounding suitability labels if the tray is used as an EGC.
- Certification marks (UL, CE, etc.) for compliance verification.
- Placement at regular intervals and in visible locations to ensure safety and code compliance . These markings help ensure electrical safety, regulatory compliance, and proper identification of cable tray functions in industrial and commercial installations.

Article Content

392.18 (H) Cable Trays. Marking.

Code Change Summary: New marking requirements were added for cable trays. When cable trays contain conductors rated over

392.18 (H) Marking.

Cable trays containing conductors operating over 600 volts shall have a permanent, legible warning notice carrying the wording

Cable tray manual

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

Cooper B-Line

Cooper B-Line has recognized the need for a complete cable tray reference source for electrical engineers and designers. The

How to Read Tray Cable Markings and Labels?

The answer is affirmative, provided that the correct type of tray cable is selected. It is essential to recognize that not

Electrical Labeling - A Quick Primer

Cable Tray Tagging Power comes in from the electric utility on either a cable tray or some other raceway. According

THE BEST PRACTICE GUIDE TO: Wire and Cable Marking

contents Contents of the Best Practice Guide to Wire and Cable Marking by Graphic Products, Inc. 3 Have you Identified all

Cable Tray Technical Guide A practical guide to product selection

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

Complete cable tray manual for electrical engineers and designers

The final drawings for a cable tray wiring system may be completed and sent out for bid or construction more quickly

Cable Marking: How to Label Wires & Cables

In this blog post, we will show you the importance of cable labelling, the different cable labelling solutions available as

How to Read Cable Certification Markings?

The ability to correctly interpret these markings directly impacts installation safety, code compliance, and long-term

Electrical Identification Labels

Triala, manufacture Electrical identification Labels for Cable Trays, Trunking, Raceways, and Conduits are essential for ensuring

392.18 (H) Cable Trays. Marking.

392.18 (H) Marking. Cable trays containing conductors rated over 600 volts shall have a permanent, legible warning notice carrying

Instrumentation Cable Tray Installation Checklist and

Proper cable tray installation is critical for ensuring the safety, reliability, and performance of industrial instrumentation

Cable tray manual

INTRODUCTION The B-Line series Cable Tray Manual was produced by our technical staff. We recognize the need for a complete

Cable Tray Technical Guide A practical guide to product selection

Cable tray length is selected based on the load to be supported, the distance between the supports (also referred to as the span),

B-Line series Cable Tray Design Considerations

Is your cable tray system optimized for safety, dependability, space and cost savings? Cable tray (or cable ladder) systems are a

Cable Tray Construction Pt1: marking and cutting (subscribe for Pt 2)

In this video, we'll cover the essential steps of marking and cutting cable trays. We'll explore: 1. Measuring and

Related Video Reference

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

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

