

Cable tray manufacturing standards

Article Overview

Cable tray manufacturing is governed by standards such as NEMA VE 1 and FG 1, UL 568/UL 870, IEC 61537, and ISO 9001 to ensure safety, performance, and quality.

Key Standards

NEMA VE 1 and FG 1: NEMA VE 1 specifies manufacturing requirements for metal cable trays, including ladder, channel, wire mesh, solid bottom, and ventilated types, along with associated fittings, load/span designations, and compliance with the National Electrical Code (NEC) and Canadian Electrical Code (CEC) Part 1. NEMA FG 1 covers nonmetallic (fiberglass) cable trays, including ladder, trough, and solid bottom types, ensuring safe use in electrical installations.

UL Standards: UL 568 and UL 870 provide performance and safety requirements for fiberglass and metal cable trays, respectively, ensuring that trays can safely support cables under operational conditions.

IEC 61537: This international standard specifies requirements and testing methods for both metal and nonmetallic cable trays, including ladder and wire mesh types, for electrical and communication systems. It is widely adopted globally and forms the basis for many national standards, such as BS EN 61537 in the UK and MS IEC 61537 in Malaysia.

ISO 9001: While not specific to cable trays, ISO 9001 ensures that manufacturers implement a quality management system, covering material selection, production processes, testing, and documentation to maintain consistent product quality and reliability.

Additional National Standards

Different countries may have specific standards aligned with IEC or local regulations:

- BS EN 61537 (UK) – design and installation of cable trays
- DIN 43659 (Germany) – mechanical properties and durability
- NF C 32-321 (France) – safety and performance specifications
- TCVN 5637 (Vietnam) – design and installation guidelines

Quality Assurance and Testing...



Article Content

Apr 25, 2026

NEMA Standards Publication VE 2-2018

Attaching a channel cable tray by using the method illustrated in Figure 3-88 maintains the electrical requirements, and the bolted

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Cable tray support locations are defined by the NEMA VE-1 and VE-2 Manufacturing & Installation Standards, which specify the

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Cable Tray Standards | Cable Management | Metsec

Cable Management - Cable Tray Systems Standards. Contact Our Dedicated Support Team On +44 (0)121 6016000.

May 01, 2026

Understanding NEMA Standards for Cable Tray Systems

We partnered with the Eaton B-Line series experts for this article detailing the NEMA

Jul 27, 2025

Cable Tray Regulations: Global Guide to Rules

Understand Cable Tray Regulations worldwide. Learn key standards like NEC (US), BS

Jan 11, 2026

VOLUME II

2.2 It is not the intent to specify herein all the details of design & manufacture of material. However, the material shall, conform in all

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B-Line series Cable Tray Design Considerations

Choosing a cable tray manufacturer with proven success in both NEC and IEC standards, such as Eaton, is crucial to help ensure

Jan 23, 2026

IEC 61537:2023

This document specifies requirements and tests for cable tray systems and cable ladder systems intended for the support and

Jan 08, 2026

CABLE TRAY INSTITUTE

The Cable Tray Institute (CTI) was founded in 1991 to support the cable tray industry by engaging in research, development,

Jul 15, 2026

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

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

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Cable Tray and Reels | Wire and Cable Management

Fast installation with dependable support. Everything you need to build a cable management system, including Cablofil wire mesh

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

The Cable Tray Section committee has published three documents to date: NEMA VE 1, FG 1 and VE 2. - NEMA VE 1 covers

Dec 25, 2025

Codes and Standards | Cable Tray Institute

Provides technical requirements concerning the construction, testing, and performance of metal cable tray systems. It is the first joint

Sep 07, 2025

Cable Tray Specification Overview

This document provides a general specification for cable trays for an electrical project. It outlines technical requirements, codes and

Feb 10, 2026

Understanding IEC 61537: A Comprehensive Guide to Cable Tray

IEC 61537 is a crucial international standard established by the International Electrotechnical Commission (IEC). The Chinese

Jun 09, 2026

Practices for grounding and bonding of cable trays

Grounding and bonding of cable trays There are three wiring options for providing an EGC in

Nov 05, 2025

Cable Tray Standards: A Global Overview of Production and

Explore the cable tray standards of 30 countries across five continents. Learn about the key regulations and

Jun 08, 2026

IEC Standard for Cable Tray: Complete Technical Guide

For proper installation, design, and maintenance, adherence to international standards is

Oct 05, 2025

How Cable Tray Manufacturers Meet Quality Standards

The most important standards include cable tray standards set forth by NEMA (VE 1 and FG 1), UL 870 for product

Nov 06, 2025

GUIDE CABLE TRAYS TECHNICAL

Specifies requirements for metal cable trays and associated fittings designed for use in accordance with the rules of Canadian

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CABLE TRAY SYSTEMS GUIDE

The standard finish for Hubbell Basket Tray is pregalvanized which is a significantly more environment friendly manufacturing

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Cablofil Cable Management | Legrand

Cablofil® Products Cablofil is the global gold standard for total cable management. Explore the one-stop shop for innovative, fast,

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CABLE TRAY INSTITUTE

The Cable Tray Institute has several standards and guidelines for the construction, testing, performance, and installation of cable

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Using IEC Standards in Cable Tray and Conduit System

Cable tray and conduit system planning is a vital aspect of modern electrical infrastructure.

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LEGRAND CABLE TRAYS TECHNICAL GUIDE

Not all cable trays are equivalent. The mechanical and electrical characteristics, tests, certifications, overall quality management,

Nov 01, 2025

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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