

Article Overview

Cable tray specifications vary by material, finish, width, load capacity, and compliance with IEC/NEMA standards.

Typical Cable Tray Specifications

Parameter	Description / Values
Material	Steel (pre-galvanized, hot-dip galvanized), Aluminum (alloy 6063-T6), Stainless Steel (AISI 316L)
Finish / Coating	Powder-coated, painted, pre-galvanized, hot-dip galvanized
Tray Widths	100 mm to 600 mm (common), custom widths available
Tray Depths	50 mm to 150 mm typical, depending on cable volume
Tray Lengths	Standard 3 m sections, splice plates used for joining
Rung / Slot Spacing	150-230 mm for ladder trays; ventilated trays may have perforations for airflow
Load Capacity	Varies by material and span; steel trays typically support 50-200 kg/m depending on span and thickness
Maximum Span	Continuous spans typically 1.5-3 m; longer spans require intermediate supports
Temperature Range	-40°C to +80°C for standard trays; high-temperature trays available
Standards Compliance	IEC 61537, NEMA VE 1, UL 568, CE marking for European markets
Corrosion Resistance	Stainless steel and aluminum provide high corrosion resistance; galvanized steel suitable for indoor/outdoor use
Special Features	Solid covers for heat-sensitive applications, ventilated trays for airflow, wire mesh trays for light instrumentation cables

Notes on Material Selection and Application

- o Steel trays are strong and economical, suitable for heavy power cables and industrial environments. Hot-dip galvanization improves corrosion resistance for outdoor or humid environments .
- o Aluminum trays are lightweight, corrosion-resistant, and ideal for environments where weight reduction is important .
- o Stainless steel trays (AISI 316L) are used in highly corrosive environments, including chemical plants and coastal installations .
- o Ventilated vs Solid Trays: Ventilated trays allow heat dissipation and reduce cable overheating, while solid trays protect sensitive instrumentation cables from dust and electromagnetic interference .

Compliance and Testing

- o Cable trays must meet IEC 61537 for mechanical and electrical performance, including load testing, deflection limits, and corrosion resistance .
- o NEMA VE 1 and UL 568 provide additional guidance for North American installations, ensuring safety and reliability .
- o Deflection and load ratings are typically based on continuous spans; actual installation may require verification for specific project conditions . This table provides a comprehensive overview of power cable tray production specifications, suitable for design, procurement, and installation planning in industrial,

commercial, and utility applications.

Cable Tray Cable trays are mechanical support systems that provide a rigid structural system for electrical cables, raceways, and

Purchase UL 568. FG 1, Fiberglass Cable Tray Systems Covers construction and test requirements for continuous, complete

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

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IEC Standard for Cable Tray: Complete Technical Guide The International Electrotechnical

Description: This product category covers metal cable trays and metal cable tray systems intended for field assembly and for use in

Covers construction and test requirements for continuous, complete nonmetallic systems of ladder, ventilated, solid bottom cable

CONCENTRATED STATIC LOADS: Some applications may require the cable tray to support the weight of a single, dead object in

EAE cable trays are mass produced with the "Roll Forming" method on automatic production lines. The standard tray length is 3m.

This document provides specifications for cable trays, supports, and conduits for a 800 MW supercritical thermal power project. It

Cable Tray Specifications for Power Project This document provides specifications for cable trays, supports, and conduits for a 800

Cable tray must be capable of supporting not just the weight of the cable, but also the weight of any equipment

or materials attached

Cable trays and ladders are standardly produced in 3-meter lengths but can also be manufactured in 6-meter lengths if desired. Fully

Cable Tray and Cord Reels Precision engineered. Constructed from high-quality welded steel wire, Cablofil®; Wire Mesh Cable Tray

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

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