

Article Overview

Swiss cable trays must comply with European directives, CE marking, and international standards for materials, load capacity, and corrosion protection.

Standards and Compliance

Cable trays in Switzerland are generally required to meet European and international standards, including CE marking for electrical safety and environmental compliance, as well as ISO 1461 for galvanization and ASTM A123 for steel quality (ABB) . National authorities may enforce additional inspections or certifications, such as IMQ or LCIE, to ensure compliance with safety and performance requirements . Cable trays must also conform to NEMA VE 1-2017 for metal cable tray systems and ANSI/NFPA 70 (National Electrical Code) for electrical safety .

Materials and Surface Treatments

Common materials include:

- o Pre-galvanized steel: Economical, suitable for indoor commercial applications, with sacrificial zinc protection against corrosion .
- o Hot-dip galvanized steel: Thicker zinc coating for outdoor or harsh environments, providing enhanced corrosion resistance .
- o Stainless steel (AISI 316L/316): High corrosion resistance, often used in chemical or marine environments .
- o Aluminum: Lightweight and corrosion-resistant, suitable for specific industrial applications. Surface treatments and finishes are selected based on environmental exposure, with galvanization or stainless steel preferred for high-humidity or corrosive conditions .

Types and Design

Cable trays are available in several configurations:

- o Ladder trays: Open rungs for maximum ventilation and cable support, suitable for high-capacity power cables .
- o Ventilated trays: Perforated or slotted bottoms for airflow and heat dissipation .
- o Solid-bottom trays: Provide protection against dust, debris, and electromagnetic interference .
- o Wire mesh trays: Lightweight, flexible, and ideal for light instrumentation or data cables . Rung spacing typically ranges from 150 to 230 mm, depending on cable type and load requirements . Some trays include Ty-Rap(R) slots for secure cable fastening .

Swiss cable tray specifications

Load Capacity and Installation

Cable trays are designed to support the weight of cables without deformation. Load ratings depend on material, width, and span between supports. Stainless steel and hot-dip galvanized trays offer higher structural strength for heavy-duty applications . Proper installation ensures minimum bend radius for cables and maintains electrical continuity and grounding .

Electrical and Fire Safety

Cable trays must maintain electrical continuity and proper earthing. Fire-resistant materials and coatings are recommended for installations where heat or fire risk is significant. Compliance with short-circuit and electromagnetic performance standards is also required .

Suppliers in Switzerland

Swiss distributors like Distrelec stock a wide range of cable trays, including ladder, ventilated, and solid-bottom types, with next-day delivery and technical support . Major manufacturers such as ABB and Legrand provide detailed technical guides and CAD/BIM models for design and specification . In summary, Swiss cable tray specifications emphasize compliance with European and international standards, material selection for corrosion resistance, structural strength, and proper installation practices to ensure safety and reliability in electrical installations.

Available on the main routing accessories, this new innovative system facilitates the accessories installation, regardless of the cable

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

Cable trays are components of support systems for power and communications cables and wires. A cable tray system supports and

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

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

to cables when correctly inserted. Screwed connections are generally isometric threads fully compliant with
ests in accordance of the

Swiss cable tray specifications

Build a cable management system with Cablofil wire mesh cable tray, ladder cable tray, prefabricated assemblies for branch circuit wiring,

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

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

Supplied singly without fasteners Support horizontal runs of lightly loaded tray up to 1 mm wide from overhead structures see 1

B. Cable tray systems are defined to include, but are not limited to straight sections of [ladder type] [trough type] [solid bottom type]

Distrelec Switzerland stocks a wide range of Ducts, Cable Trays & Trunking. Next Day Delivery Available, Friendly Expert Advice &

This guide covers the critical steps, from selecting the right electrical cable tray and performing accurate cable fill calculations to

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

In accordance with its continuous improvement policy, Legrand reserves the right to change the specifications and illustrations

We provide flexible installation options, including single and multi-conductor tray cables that can be installed in free air, raceways, or

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