

Requirements for the wall thickness of ladder-type cable trays

Article Overview

The wall thickness of ladder-type cable trays depends on material, tray width, rung spacing, load capacity, and compliance with standards such as IEC 61537 and BS EN 61537.

Material and Structural Considerations

Ladder-type cable trays are typically made from steel, stainless steel, or aluminum, and the wall thickness is a key factor in ensuring mechanical strength and load-bearing capacity. Thicker walls provide higher rigidity and resistance to bending, especially for wider trays or those supporting heavy power cables. Aluminum trays may require slightly thicker walls than steel to achieve equivalent strength due to lower material density.

Standard Compliance

- IEC 61537 specifies that cable trays must withstand the load of cables, environmental factors, and external pressure, with testing methods to validate tray strength.
- BS EN 61537 and related national standards recommend that ladder trays are designed to support cables safely without deformation, considering imposed loads such as cable weight, wind, ice, or short-circuit forces.

Tray Width and Rung Spacing...



Article Content

May 05, 2026

Cope Ladder Master Spec

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

Jul 15, 2026

Safely Installing, Maintaining and Inspecting Cable Trays

The type of cable tray (e.g., solid, ventilated), ampacity (current-carrying limit) requirements, and the type and voltage rating of cable

Nov 04, 2025

Tray and Ladder Sizing by Cable Capacity Calculator – IEC

Proper tray and ladder sizing ensures safe, efficient, and maintainable electrical installations in all engineering applications. IEC

Jun 12, 2026

Cable Tray Spacing Standards for Installation and Safety

Key Factors Impacting Cable Tray Spacing Understanding cable tray spacing is key to

Jun 07, 2026

QCS 2010: Cable Tray Specifications | PDF | Cable | Screw

Tray components must be accurately formed to tolerances with rounded edges. Cable trays installed in hazardous environments

Mar 07, 2026

Document DICOS

To install the cable tray supports, first find the required elevation from the floor to the bottom of the cable tray and establish a level

Apr 04, 2026

Best Practice Guide to Cable Ladder and Cable Tray Systems

Cable ladders, cable trays and their supports should be strong enough to meet the load requirements of the cable

Nov 29, 2025

Types of Cable Trays – Advantages, Applications and Sizes

Explore the types of cable trays, their advantages, applications, and standard sizes. Learn how they improve cable

Jan 08, 2026

CABLE LADDER SYSTEM

C. TRAY TYPES Ladder cable tray. Ladder shall consist of two side-rails with rungs riveted to the bottom flange of the side-rails.

Mar 08, 2026

Cable tray manual

Where cable tray wiring systems with current carrying conductors are installed in a dust environment, ladder type cable trays should

Dec 14, 2025

GUIDE CABLE TRAYS TECHNICAL

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

Feb 27, 2026

IEC 61537:2023 | IEC

Where necessary, cable tray systems and cable ladder systems can be used for the arrangement of cables into groups. This

Mar 14, 2026

910533-3_EN

Cable support systems are generally designed with at least 50 % reserve space available for each tray. Cable tray types, supports

Oct 26, 2025

Method Statement installation of Cable Trays and Ladders

This method statement covers the site installation of the cable tray & ladders and the requirements of checks to be

Sep 30, 2025

B-Line series Cable Tray Design Considerations

For ladder or ventilated trough trays, the total sum of the cross-sectional areas of all the cables to be installed in the cable tray must

Dec 10, 2025

IEC 61537:2023

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

Dec 04, 2025

Cable Tray Standards | Cable Management | Metsec

Cable Management - Cable Tray Systems Standards. Contact Our Dedicated Support Team On +44

Jan 23, 2026

Cable Tray Capabilities

Cable tray is also popular as an option for forward project planning: It is much easier to lay new cables onto a tray system as the

Aug 31, 2025

TECHNICAL AND SIZING DATA

Determine ladder tray types and sizes, rung spacing, covers if required, the span and support locations and types. If possible avoid

Apr 21, 2026

Full cable tray systems specification document

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

Apr 18, 2026

Enduro_Specification_Ladder Cable Tray_04-30-21

Straight section ladder tray shall be prefabricated structures made from fiberglass reinforced plastic, consisting of two longitudinal

Jan 17, 2026

IEC 61537:2023 | IEC

IEC 61537:2023 specifies requirements and tests for cable tray systems and cable ladder systems intended for the support and

Jun 11, 2026

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

Sep 05, 2025

GUIDE CABLE TRAYS TECHNICAL

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

Oct 05, 2025

TECHNICAL AND SIZING DATA

When vertically stacking ladder trays always maintain adequate clearance above each tray run to allow for the installation of the

Sep 17, 2025

Codes and Standards | Cable Tray Institute

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

Aug 18, 2025

LEGRAND CABLE TRAYS TECHNICAL GUIDE

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

Oct 18, 2025

Cable tray systems and cable ladder systems for cable management

Cable tray systems and cable ladder systems shall be so designed and so constructed that in normal use, when installed according

Contact Us

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