

US Long-Span Cable Tray Specifications

Article Overview

US long-span cable trays are designed to support heavy cable loads over extended distances, constructed from galvanized or stainless steel, and must comply with NEMA VE-1 and UL standards.

Material and Construction

Long-span cable trays in the US are typically made from hot-dipped galvanized steel (ASTM A123), zinc-coated structural steel (ASTM A653), or stainless steel types 304 or 316 for enhanced corrosion resistance . The steel must meet minimum yield and tensile strength requirements, and all trays are labeled for material identification. Covers are solid with turn-bolt locks, and splice plates wrap around side rails to maintain structural integrity .

Types and Configurations

Common long-span cable tray types include:

- Ladder trays: Tubular steel rungs provide mechanical support and strain relief for long cable runs, allowing smooth bends and airflow .
- Trough and solid-bottom trays: Used where heat buildup or visual aesthetics are a concern .
- Channel trays: Protect smaller instrumentation and control cables, often with ventilated or solid bottoms . Fittings such as bends, tees, elbows, and drop-outs are made from the same material as the tray to ensure uniform load capacity

Article Content

Nov 21, 2025

Fittings LONG SP

Solid bottom tray shall incorporate two side rails connected by solid steel metal. Ladder shall consist of two side-rails with rungs riveted to the bottom flange of the side-rails. rungs shall be spaced 8" or 12"

Feb 13, 2026

KwikRail cable tray specification Document

Cable tray systems are defined to include, but are not limited to straight sections of of [ladder type] [vented bottom type] [solid bottom type] cable trays, bends, tees, elbows, drop-outs, supports, and

Jan 22, 2026

Section 17.pdf

2.3 Ladder type tray straight sections shall be 10 -0, 12 -0, 20 -0, 24 -0, or 30 -0 long and shall be of the width indicated on the drawings to provide the planned cable capacity.

Jun 26, 2026

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

Made of one continuous metal sheet, one-piece tray is typically used in applications where visual esthetics are important. It is used in a range of applications with spans of 10 feet (3.0 meters) or less,

Apr 19, 2026

Cable Tray SHIB NAL

Cable trays are not raceways, but they are treated as a structural component of a facility's electrical system. Cable trays are a part of a planned cable management system to support, route, protect and

Apr 17, 2026

PRODUCT BROCHURE T& B® Cable Tray Specialty aluminum solutions

Technical specifications Load ratings: 1.5 safety factor. All tray sections will support an additional 200 lb concentrated load on any portion of tray (side rail, rung, etc.) above and beyond published load class.

May 24, 2026

Technical information

Technical information CSA and NEMA loading classes The standard classes of cable trays, as related to their maximum design loads and to the associated design support spacing based on a simple beam

Aug 06, 2025

Full cable tray systems specification document

The drawings which constitute a part of these specifications indicate the general route of the cable tray systems. Data presented on these drawings is as accurate as preliminary surveys and planning can

Oct 23, 2025

Wire Mesh Tray Technical Guide

Cablofil wire mesh tray and sup-ports are designed to support any cable load allowed by the NEC when supports are spaced on 8" spans. Only the hea-viest cables (750 kcmil mulitconductor power or

Jan 14, 2026

26 05 36 Cable Trays for Electrical Systems

Description: This product category covers metal cable trays and metal cable tray systems intended for field assembly and for use in accordance with Article 392 of NFPA 70.

Jun 15, 2026

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

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

Oct 06, 2025

Long Span Steel Straight Sections | Ladder Trays | Cable ...

This product line is designed for applications with extremely heavy loads and long spans. Tray systems are available in lengths of 30, 40 and 50 feet to accommodate 30-50 foot support spans.

Apr 26, 2026

CABLE TRAY INSTITUTE

The Cable Tray Institute (CTI) was founded in 1991 to support the cable tray industry by engaging in research, development, education, and the dissemination of information designed to promote,

Jan 06, 2026

Cope Wire Basket Master Spec

Atkore - US TRAY This product specification is written according to the Construction Specifications Institute MasterFormat, 2018 Update.

Jun 10, 2026

GUIDE CABLE TRAYS TECHNICAL

NEMA VE 1-2017 Specifies requirements for metal cable trays and associated fittings designed for use in accordance with the rules of Canadian Electrical Code, Part I and the National Electrical Code®

Mar 13, 2026

Cooper B-Line

Cooper B-Line's product offerings also set new standards. Cooper B-Line manufactures cable support product lines that bridge both the electrical and telecom markets. Each of those product lines are

Jun 18, 2026

AF_UnifiedCat_Interior_PRINT.pdf

Our latest innovation is Itray. It's aluminum cable tray that been redesigned with stronger side rails and faster splicing options to streamline the engineering, purchasing and installation of cable tray. And

Oct 28, 2025

PRODUCT BROCHURE T& B® Cable Tray Specialty aluminum solutions

40-foot spans reduce support requirements For cable tray applications lacking sufficient space for the number of supports required for standard-length sections, choose T& B Cable Tray long-span AH1-8

Aug 06, 2025

CABLE TRAY SYSTEMS

All design characteristics, specifications, tolerances and similar information are subject to change without notice.

Sep 21, 2025

Understanding NEMA Standards for Cable Tray Systems

We partnered with the Eaton B-Line series experts for this article detailing the NEMA standards for cable tray systems.

Sep 26, 2025

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

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

Sep 27, 2025

LEGRAND CABLE TRAYS TECHNICAL GUIDE

Not all cable trays are equivalent. The mechanical and electrical characteristics, tests, certifications, overall quality management, recommendations mentioned in this technical guide only apply to our

Apr 18, 2026

Cope Ladder Master Spec

Cable Tray Supports - Shall be placed so that the support spans do not exceed maximum span indicated on drawings. Supports shall be constructed from 12 gauge steel formed shape channel

Apr 09, 2026

Resources for Cable tray and ladder systems

Featured resources Cable tray design considerations guide Our cable tray design considerations guide details key factors to consider when designing cable tray systems for industrial and commercial

Oct 13, 2025

Cable Tray Size and Dimensions: How to Choose the Right Fit for

Learn how to calculate the perfect cable tray size and dimensions for your electrical project. This guide covers load capacity, fill ratios, and industry standards.

Jan 20, 2026

Section 16135

1.1 SUMMARY Work covered under this section consists of the furnishing of all necessary labor, supervision, materials, equipment, tests and services to completely execute a complete wire basket

Apr 10, 2026

CABLE TRAY SYSTEMS

Cable Tray System Products are classified by UL in accordance to nEMA VE1-2009 for USA and CAn/CSA - C22.2 no. 126.1-98 for Canada 9JA9 E 233344 Surface Metal Raceway System Products

Mar 16, 2026

Fittings LONG SP

Long Span Cable Tray and Cable Ladder Specifications: A. CABLE TRAY DESIGN Cable Tray shall be made of straight sections, fittings and accessories as defined in the latest NEMA standards per

Contact Us

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