

## Article Overview

Network cable trays come in various models such as wire mesh trays, ladder trays, and solid-bottom trays, each designed to support and organize cables while meeting industry standards for load, safety, and installation flexibility.

## Types of Cable Trays

1. **Wire Mesh Trays** Wire mesh trays are constructed from welded steel wire and are ideal for low-voltage, data, and communication cables. They feature a Safe-T-Edge design to prevent cable fraying and protect installers from sharp edges. Wire mesh trays are lightweight, allow excellent airflow, and are available in multiple widths (e.g., 700mm, 750mm, 900mm) and side rail heights (e.g., 6 inches) while complying with NEMA VE-1 and CSA C22.2 No.126 standards . 2. **Ladder Trays** Ladder trays consist of tubular steel rails connected by rungs, providing strong mechanical support for heavy cable bundles. They are commonly used in data centers, equipment rooms, and industrial installations. Ladder trays allow smooth cable bends and strain relief, and are available in various finishes such as gray or black. The NEXTFRAME(R) Ladder Tray system, for example, is modular and can be mounted on floors, walls, ceilings, or racks, with load class designations defining the maximum supported weight over a given span . 3. **Solid-Bottom Trays** Solid-bottom trays provide full support for cables, protecting them from dust, debris, and electromagnetic interference. They are suitable for sensitive or high-density cabling environments but are less flexible for airflow compared to wire mesh trays.

## Key Specifications

- o **Material:** Steel, stainless steel, or aluminum, often with powder-coated or galvanized finishes for corrosion resistance.
- o **Dimensions:** Widths typically range from 100mm to 900mm, with side rail heights from 50mm to 150mm. Lengths are usually 2-3 meters per section.
- o **Load Capacity:** Defined by the tray type, material, and support span. Ladder trays generally support heavier loads than wire mesh trays.
- o **Standards Compliance:** CE marking, UL, NEMA, CSA, and RoHS compliance ensure safety, quality, and environmental standards are met .
- o **Accessories:** Fittings, bends, tees, reducers, and covers allow flexible routing and protection of cables.

## Design Considerations

- o **Support Spacing:** Proper spacing of supports is critical to prevent sagging and maintain load capacity.
- o **Cable Type:** Choose trays based on cable weight, type, and heat dissipation requirements.

# Specifications and Models of Network Cable Trays

- o Installation Environment: Consider exposure to moisture, chemicals, or high temperatures when selecting materials and finishes.
- o Modularity: Modular systems allow easy expansion or reconfiguration of cable routes.
- o Cost Efficiency: Reducing the number of supports can lower installation costs without compromising structural integrity .

## Popular Models and Systems

- o Legrand Cablofil CF150 Wire Mesh Tray: Patented design, multiple widths, Safe-T-Edge, RoHS compliant .
- o Hubbell NEXTFRAME(R) Ladder Tray: Tubular steel, modular, suitable for data centers and industrial applications .
- o Eaton B-Line Series Cable Ladder Systems: High strength-to-weight ratio, compatible with CAD/BIM tools, designed for industrial and commercial installations . These trays provide reliable cable management solutions for network infrastructure, ensuring safety, accessibility, and compliance with industry standards.

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

Wire Mesh Cable Tray Engineered for optimal airflow, this adaptable system minimizes heat

Explore standard sizes by tray type, understand width and depth limits, and see how to calculate and choose compliant

AS/NZS 4680:2006 FDG CABLE TRAY FDG Cable Tray is designed to continuously support cable systems includ. ng; Power, Data,

Flextray wire mesh basket is ideal for commercial and data center cable management, providing a flexible

Explore various cable tray types and sizes for electrical installations. Learn about ladder, perforated, solid-bottom, wire mesh, and

Types of Cable Trays and Sizes Explore various cable tray types and sizes for electrical installations. Learn about ladder, perforated,

Cable tray is alternatives to wire ways and electrical conduits, which completely enclose cables. Study types of cable

EAE Electric cable tray systems have been designed to and easy to install. Supply a complete range of cable

# Specifications and Models of Network Cable Trays

tray including medium

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

Often unheralded, cable trays play a vital role in tray cable installations throughout industrial, commercial, and residential projects.

Wire Mesh Cable Tray Installation Notice: Bends, Risers, T Junctions, Crosses and Reducers can be made from wire mesh cable

NEMA VE 1-2017 Specifies requirements for metal cable trays and associated fittings designed for use in accordance with the rules

Hubbell's NEXTFRAME® Ladder Tray is the effective and widely used cable runway that supports and delivers bundles of cable

Cablofil wire mesh cable tray, a high-quality, reliable cable management solution for data centers. Benefit from easy installation,

Tailored Cable Solutions Our range of components lets you configure a cable tray to route cables through unused space, while

Web: <https://bssoda.pl>

