

Fireproof Large-Span Cable Tray Specifications



Overview

Long span fireproof cable tray can span longer distances, generally spanning up to 6 meters and up to 13 meters, which makes them very suitable for use in large factories, tunnels and other occasions.

Key Takeaways

Fireproof large-span cable trays are designed with fire-resistant insulation, structural reinforcement, and ventilation to ensure operational safety and long-span stability under extreme fire conditions.

Fireproofing and Insulation

Fireproof cable trays, such as FireMaster®, use specialized insulation to protect instrument and control cables during fires, providing up to 30 minutes of hydrocarbon fire protection. The system typically consists of a FireMaster® Marine Plus blanket fully encapsulated in aluminum foil, wrapped around the tray and secured with steel banding straps at regular intervals. Overlaps of 50-75 mm at joints and additional mesh linings prevent slumping and ensure continuous coverage.

These systems comply with ASTM E1725-95 fire testing standards and are suitable for hydrocarbon fire scenarios as referenced in API 2218.

The Daken Fire-

Resistant Cable Tray (DFCT) integrates an epoxy-based intumescent fire protection system that forms a dense insulating char under high temperatures, significantly reducing heat transfer to the cables. This system is validated under extreme temperature-rise fire scenarios and is suitable for high-risk environments such as nuclear power facilities.

Structural and Load-

Bearing Features Large-span fireproof trays require internal metal reinforcement to maintain stability and prevent deformation or fracture over long spans. Daken trays include integrated metal support plates and ventilation grilles to enhance structural integrity while allowing heat dissipation. FireMaster® trays rely on stainless steel banding straps and optional corrugated aluminum sheeting for additional weather and mechanical protection.

Materials and Durability FireMaster®: Aluminum-encapsulated fireproof blankets with steel banding; optional weather protection with aluminum sheeting.

Daken DFC

T: Epoxy-based intumescent coating with high-strength materials for long-term durability, chemical resistance, and weather resistance.

Installation Considerations

Banding straps are typically installed at 150 mm centers along the tray edges and at 40 mm from the edge for mesh support. Wraps are overlapped at elbows and bends to ensure tight joints. Ventilation grilles in Daken trays prevent heat accumulation and reduce cable aging.

Both systems allow for long-span installation without compromising fire protection or structural stability.

Compliance and Standards

Fireproof cable trays are tested according to ASTM E1725-95, ASTM E119, ASTM E1529, and UL 1709 standards. They are designed to meet API 2218 fireproofing practices for petroleum and petrochemical plants, ensuring functional equivalence between hydrocarbon fire curves and standard fire tests.

Summary

Fireproof large-span cable trays combine fire-resistant insulation, structural reinforcement, and ventilation to maintain cable integrity during fire events. Systems like FireMaster® and Daken DFCT provide reliable solutions for industrial, nuclear, and high-risk environments, ensuring both operational safety and long-span stability while complying with international fire safety standards.

Article Content

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®

Long Span Fireproof Cable Tray

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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

Various Specifications of Galvanized Spraying, Large-Span Fireproof ...

These trays can accommodate large number of branch lines and have high load-bearing capacity. The cable trays have great mechanical strength and requires minimum maintenance.

Fire resistant cable tray | Hermi-solutions

Cable trays are intended for the construction of fire-resistant cable paths with surface cable laying. Cable paths are constructed as standard or lightweight

Powder Coated/Fireproof Large Span Cable Trays

These trays can accommodate a large number of branch lines and have high load-bearing capacity. The cable trays have great mechanical strength and require minimal maintenance.

Fireproof cable tray Cable fireproof tray with complete specifications ...

Place of Origin: Shandong, China Brand Name: HongFeng Bussiness type: Manufacturer Cable Tray Type: Solid, Perforated, Ladder Type, Wire Mesh, FRP MOQ: For Standard Size, Available for All

FIRE RESISTANT PROOF CABLE TRAY, DIN STANDARD E90

Cablofil fire resistant and fire proof cable trays are increasingly specified in the construction, power, oil, gas, petrochem, rail and utilities industries. Cablofil cable tray has been successfully tested and

grenada-fireproof-galvanized-cable-tray-manufacturer ...

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GUIDE CABLE TRAYS TECHNICAL

In accordance with its continuous improvement policy, Legrand reserves the right to change the specifications and illustrations without notice. All illustrations, descriptions and technical information

Large Span Cable Trays Lay Heavy Cables in Industries

Large span cable trays can be divided into ladder style, channel style, perforated style with galvanized, powder coated surface to resist corrosion. They are widely used in heavy corrosive environment to

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Fireproof Cable Trays Acceptance: Standards for Safety and Longevity

Ensure safety and durability with this comprehensive guide to fireproof cable trays acceptance. Learn coating processes, inspection standards, and maintenance tips.

Fireproof Long-Span Galvanized Steel Cable Tray

Long-Span Capability: The cable tray is designed to support long-span applications, providing a reliable and efficient solution for cable management in large-scale installations.

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

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

Long-Span Channel Cable Tray System

Powder Coated, HDG, Fireproof Painting Length 3m, 6m, 8m, 12m Characteristics
Compared with the common cable tray, the characteristics of the long-span cable tray is that it has a larger single length

Long-Span Ladder Cable Tray System

Powder Coated, HDG, Fireproof Painting Length 3m, 6m, 8m, 12m Characteristics
Compared with the common cable tray, the characteristics of the long-span cable tray is that it has a larger single length

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