

Sealing holes in cable trays

Article Overview

Cable tray holes can be sealed using fireproof pillows, modular sealing systems, grommets, caulks, and specialized entry plates to ensure fire safety, moisture protection, and dust prevention.

Fireproof and Intumescent Solutions

AF BAGS are intumescent and ablative fireproof pillows designed for cable tray penetrations, certified under EN 1366-3 for up to EI 240 fire resistance. They consist of a non-combustible fiberglass casing filled with intumescent compounds and thermal insulators, allowing easy insertion even in thin structures. These pillows are repositionable, making maintenance or modifications straightforward, and are suitable for cables up to 21 mm in diameter with a sealing depth of 120 mm .

Modular and Multi-Cable Sealing Systems

SLIPSIL Plugs and the RISE(R) System provide fire-safe, gas-tight, and watertight sealing for single or multiple cables. SLIPSIL uses a self-compression design without metallic parts, while RISE(R) combines expanding rubber sleeves with FIWA(R) sealant for high protection. NOFIRNO and FIRSTO firestops are modular systems that can seal multiple cables or pipes through the same penetration, ideal for industrial, marine, or offshore environments .

Cable Entry Plates and Grommets

Cable entry plates and grommets are effective for organizing and sealing multiple cables. Plates can be round or rectangular, with multiple entries, and often feature double membranes for strain relief. Grommets, available in rubber or metal, protect cables and provide a tight seal. Quickseal grommets simplify installation, while blind grommets are suitable for single-cable entries .

Sealants and Caulks

For smaller or irregular holes, fire-rated intumescent caulks or silicone/latex sealants can be applied. Fire-rated caulks expand under heat to maintain fire resistance, while silicone or polyurethane sealants provide moisture and dust protection. For large holes, a backing rod can be used to support the sealant and reduce material usage. Proper surface preparation and curing time are essential for effective sealing .

Key Considerations

- o Cable size and count: Choose a solution that accommodates all cables without excessive gaps.
- o Environment: Consider exposure to moisture, chemicals, or outdoor conditions.

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- o Fire rating: Use intumescent or fireproof solutions for fire-rated walls, floors, or ceilings.
- o Ease of maintenance: Repositionable or modular systems allow future cable modifications.
- o Compliance: Ensure the method meets relevant standards such as EN 1366-3, IP67/IP68, or NEMA 4X .

By selecting the appropriate combination of fireproof pillows, modular systems, grommets, plates, and sealants, cable tray penetrations can be effectively sealed to protect against fire, moisture, dust, and gas ingress while maintaining compliance and ease of maintenance.

Seal all wiring holes through the exterior walls of the house, such as holes for electrical wiring, security system wiring,

Cable tray installed in a hazardous location must contain only those cables that are appropriate for this type of environment as

The next set of holes that require sealing are the ones that contain the non-metallic

Cable changes happen - plan for it future cable changes can be very costly without proper planning. field-based decisions for routing

The product is certified for "small" - "medium" and "large" cable penetrations, to create a

Duct seal. The stuff from the electrical aisle, not the stuff with a similar or identical name from the HVAC aisle. A non

1. Route Planning and Layout Principles Coordinate with Building Structure: Cable tray routing should align

NOFIRNO CABLE DUCT SEAL SYSTEM The NOFIRNO® Duct Seal System is the proven choice for

Duct seal is a non-hardening putty used to seal electrical ducts against water and insects. It

Seal cable penetrations with our modular firestop solutions, designed to create water-, smoke- and gas-tight barriers in energy and

This guide will walk you through how to choose an appropriate sealant and apply it correctly to walls, ceilings, and

Learn how to manage cables in cable trays effectively with our comprehensive guide for cable classification,

Sealing holes in cable trays

Before beginning installation, be sure that the method statement for installation of cable tray, trunking, and

FIRSTO firestops are designed to seal multi-cable and cable tray penetrations of fire-rated walls and floors. FIRSTO fire stops are

They are screwed on, the cable past through, then the grip part is screwed. These prevent the cable from moving in or out, as well as

Seal cable holes in walls, ceilings, and floors with the right sealant. Create drip loops, apply, dry, and finish for a

Web: <https://www.millstraining.co.za>

