

HOW TO PROTECT TECHNICAL PENETRATIONS? PASSIVE FIRE PROTECTION



All building typologies have to consider fire safety issues, depending on the regulations in force and the intended use. This was done in order to minimise the causes of fire, ensure the stability of the structure and limit the spread of flames both inwards and towards neighbouring buildings, guaranteeing the safety of the occupants and access for rescue teams. In order to minimise this type of risk, it is essential to rely on the right components and to carefully design them. Our ventilated façade solutions minimise risks by limiting the spread of flames in the event of an internal or external fire.

FIRE PROTECTION: WHAT IS IT?

It involves implementing **preventive measures** to lower the probability of a fire starting and possibly minimise damage in the event of a fire.

Fire protection safeguards people, property and the environment through safety measures and protective actions.

RISK ASSESSMENT, IS IT NECESSARY?

Passive protection involves measures designed to contain and limit the spread of fire without the need for human intervention or activation of automatic systems.

Vice versa, **active protection** involves direct human intervention or the activation of a system (e.g. extinguisher, sprinkler or other).

WHAT IS THE DIFFERENCE BETWEEN PASSIVE AND ACTIVE PROTECTION?

Passive protection involves measures designed to contain and limit the spread of fire without the need for human intervention or activation of automatic systems.

Vice versa, **active protection** involves direct human intervention or the activation of a system (e.g. extinguisher, sprinkler or other).

PASSIVE PROTECTION, IMPORTANT OR NOT?

Absolutely, because it addresses two key factors: **time** and **space**.

Passive protection is integrated into the building's structure and ensures safety for a specified period without the need for external intervention.

Fire resistance is the core characteristic of passive protection. One of the rules is to create fire compartments to separate risk areas.

SEPARATE TO PROTECT?

Poor separation and inadequate compartmentalisation can facilitate the spread of fire, increasing the risk to occupants and complicating fire-fighting efforts.

Compartmentalisation involves the use of **partitions** resistant to the effects of fire (temperature, smoke and heat), supplemented by the sealing of technical penetrations.

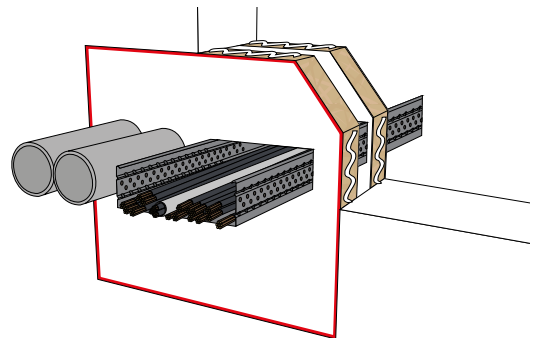
The seals used on technical installations, which change state during a fire, are part of passive protection as they operate independently of human intervention or system activation.

WHAT ABOUT PENETRATIONS?

Walls and floors often contain pipes and cables that can exacerbate the spread of fire.

Our specific products are needed to:

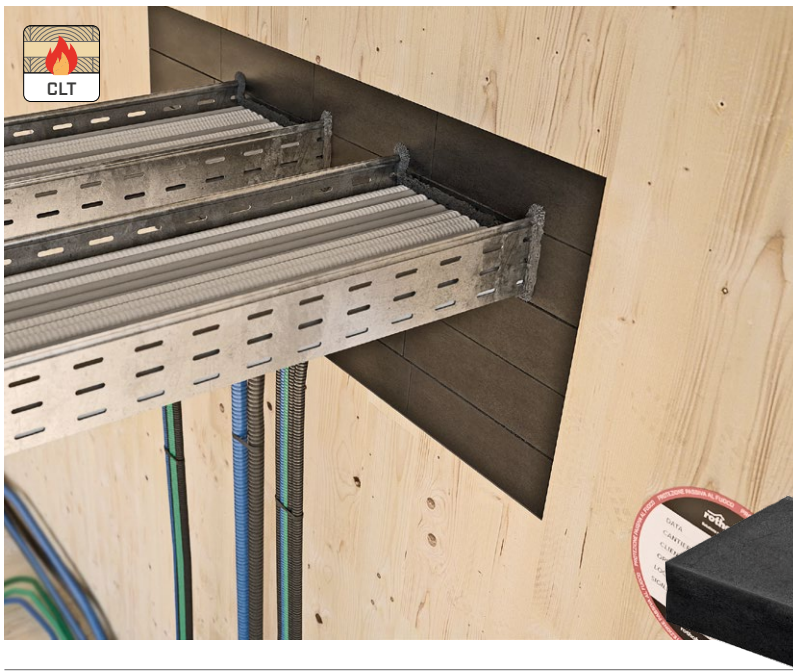
- seal holes of various sizes
- provide insulating barriers
- counteract the spread of flames
- facilitate construction due to their practicality and functionality



Fire-safe service penetrations Tested up to EI 120

Download the
complete report.





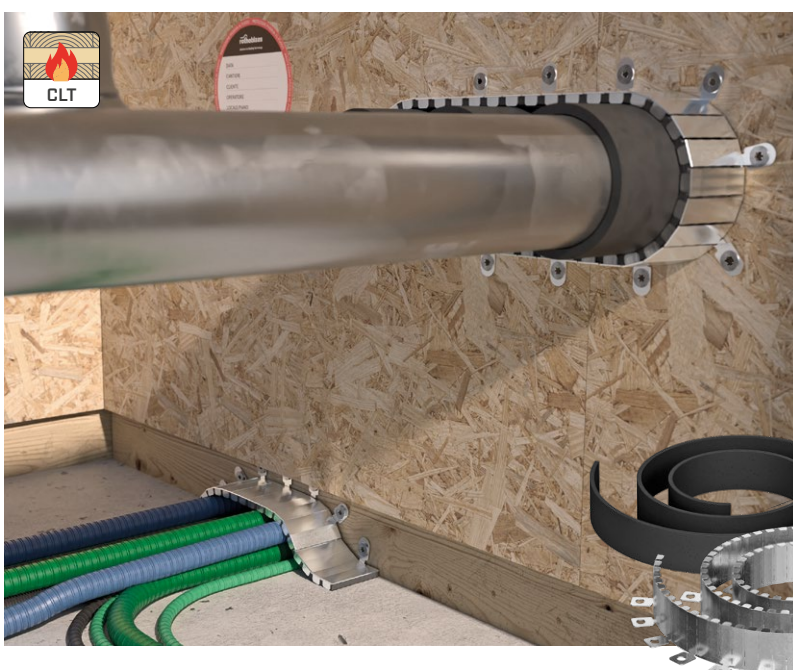
MASS

INTUMESCENT BRICK FOR MECHANICAL TECHNICAL PENETRATIONS

Made of polyurethane foam, MASS expands on contact with fire and forms an insulating barrier that counteracts the spread of flames.

Easily compressible, it is ideal for use in cable, pipe and mixed penetrations in various-shaped crossings. Easily shapeable with a simple cutter, it is ideal for construction sites where the design specifications are unknown.

In case of maintenance or changes to the installation, MASS can be easily removed and repositioned.



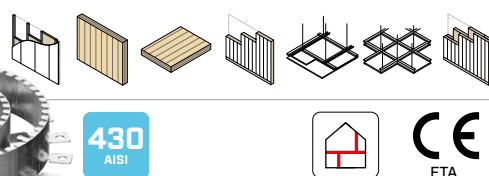
UNICOLLUM

ROLL OF FIRESTOP COLLAR FOR MECHANICAL AND ELECTRICAL TECHNICAL PENETRATIONS

A universal solution, UNICOLLUM can be cut directly on-site and adapted to accommodate large diameters.

It is certified for sealing mechanical and electrical penetrations in walls and ceilings.

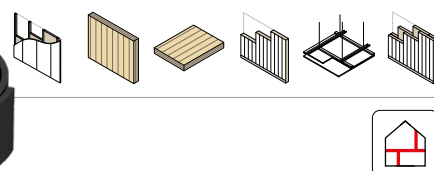
Featuring a stainless steel outer structure and a highly expansive intumescent strip, it provides protection for both wet environments and large elements.

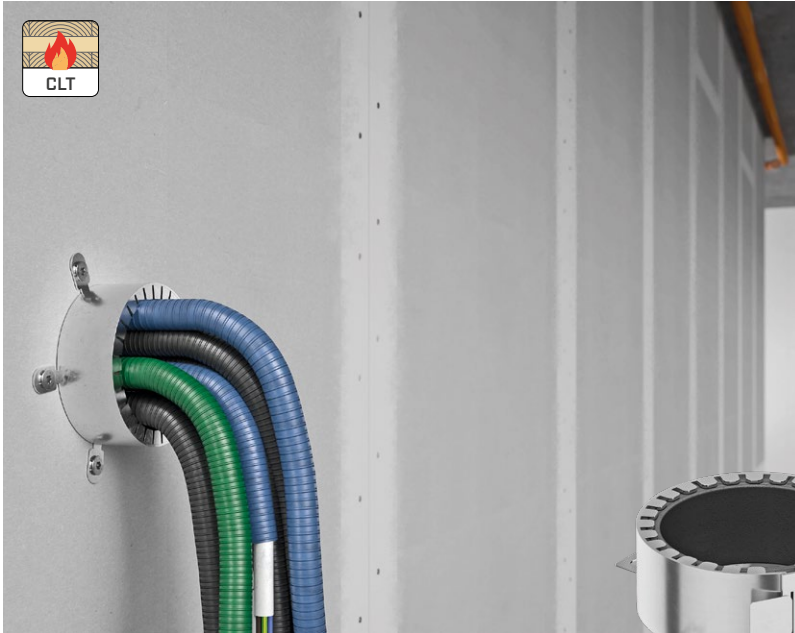


FIRE STRIPE GRAPHITE PRO

FIREPROOF TAPE FOR INSULATED METAL PIPES AND ELECTRICAL CABLES

- Thin profile (4 mm)
- Ideal for applications inside the rigid support
- It is not necessary to remove the pipe insulation cup on which FIRE STRIPE GRAPHITE PRO is applied



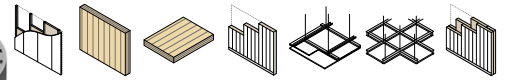


COLLUM

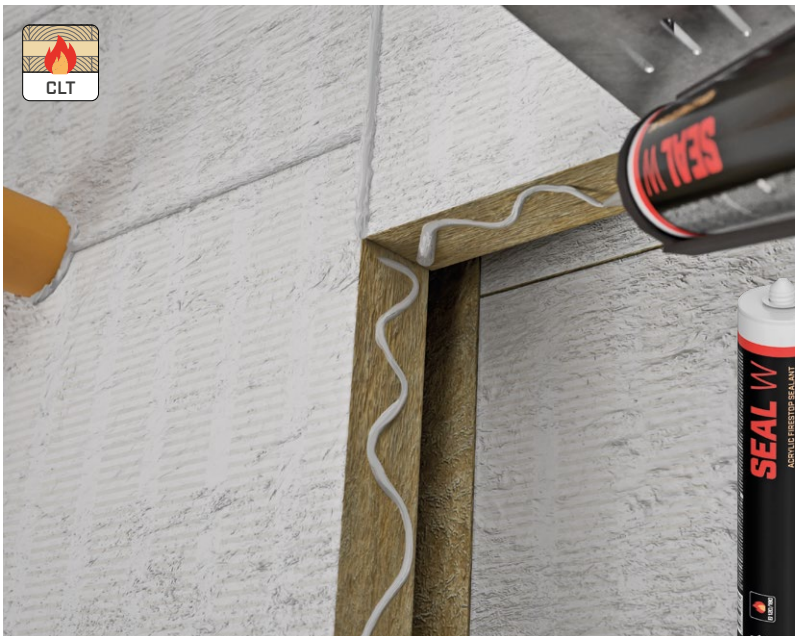
FIRESTOP COLLAR FOR MECHANICAL AND ELECTRICAL TECHNICAL PENETRATIONS

It can be applied to penetrations of specific types and diameters. Quick and easy installation.

The outer stainless steel structure allows its application in wet environments, and the highly expansive intumescent strip ensures protection for large-sized elements.



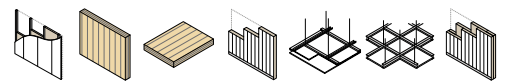
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SEAL W

FIREPROOF ACRYLIC SEALANT

- Used as a glue between PANEL product sections
- Seals small joints, formwork holes and small cable penetrations
- It has good permanent elasticity



SACCUS

FIREPROOF BAG FOR CABLE TRAY PENETRATIONS

Easy installation with optimised dimensions for more efficient use and main types of openings. It is repositionable, facilitating maintenance and modifications to installations. It minimises the sealing depth required to contain heat transfer.

Suitable for installation in any environment, impervious to humidity and resistant to mould and bacteria. It contains no harmful materials or fibres.



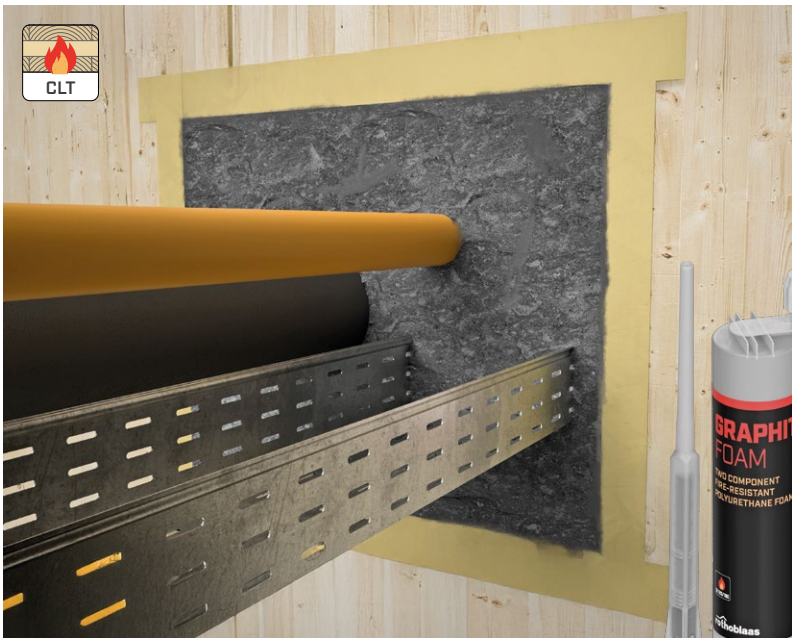
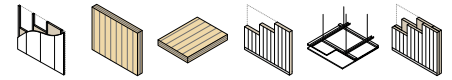


PANNUS

FIREPROOF COVER FOR METAL PIPE PENETRATIONS

Lightweight and adaptable, PANNUS can be configured directly on-site, even without knowing the design dimensions and positions of the penetrations.

Certified in accordance with EN 1366-3 for non-insulated metal pipe and busbar penetrations. The non-combustible mineral wool fabric and ablative cooling treatment on the side in contact with the pipe prevent the spread of induction fires between compartments.

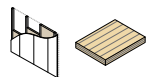


GRAPHIT FOAM

TWO-COMPONENT FIREPROOF POLYURETHANE FOAM SUPPLEMENTED WITH GRAPHITE

The foam is made from a two-component intumescent polyurethane polymer that can expand up to 3 to 5 times its original volume. Graphite aids the foam's expansion, both during application and when exposed to fire.

Easily seals small cracks and openings, maximising the performance of other complementary products. Ideal for crossings with multiple penetrating elements.

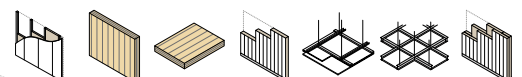


PANEL

PANEL WITH FIREPROOF COATING

The panel is suitable for a wide range of wall and floor penetrations and crossings. Ready to use, no additional surface coatings required.

Semi-rigid but extremely lightweight, the panel can be shaped directly on-site with a cutter. It is often used as a support on which to install other protective products such as SACCUS and COLLUM.



- FASTENING
- AIRTIGHTNESS AND WATERPROOFING
- SOUNDPROOFING
- FALL PROTECTION
- TOOLS AND MACHINES

Rothoblaas is the Italian multinational company that has made innovative technology its mission, making its way to the forefront for timber buildings and construction safety in just a few years. Thanks to its comprehensive product range and the technically-prepared and widespread sales network, the company promotes the transfer of its know-how to the customers and aims to be a prominent and reliable partner for developing and innovating products and building methods. All of this contributes to a new culture of sustainable construction, focused on increasing comfortable living and reducing CO₂ emissions.

Rotho Blaas Srl

Via dell'Adige N.2/1 | 39040, Cortaccia (BZ) | Italia
Tel: +39 0471 81 84 00 | Fax: +39 0471 81 84 84
info@rothoblaas.com | www.rothoblaas.com



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