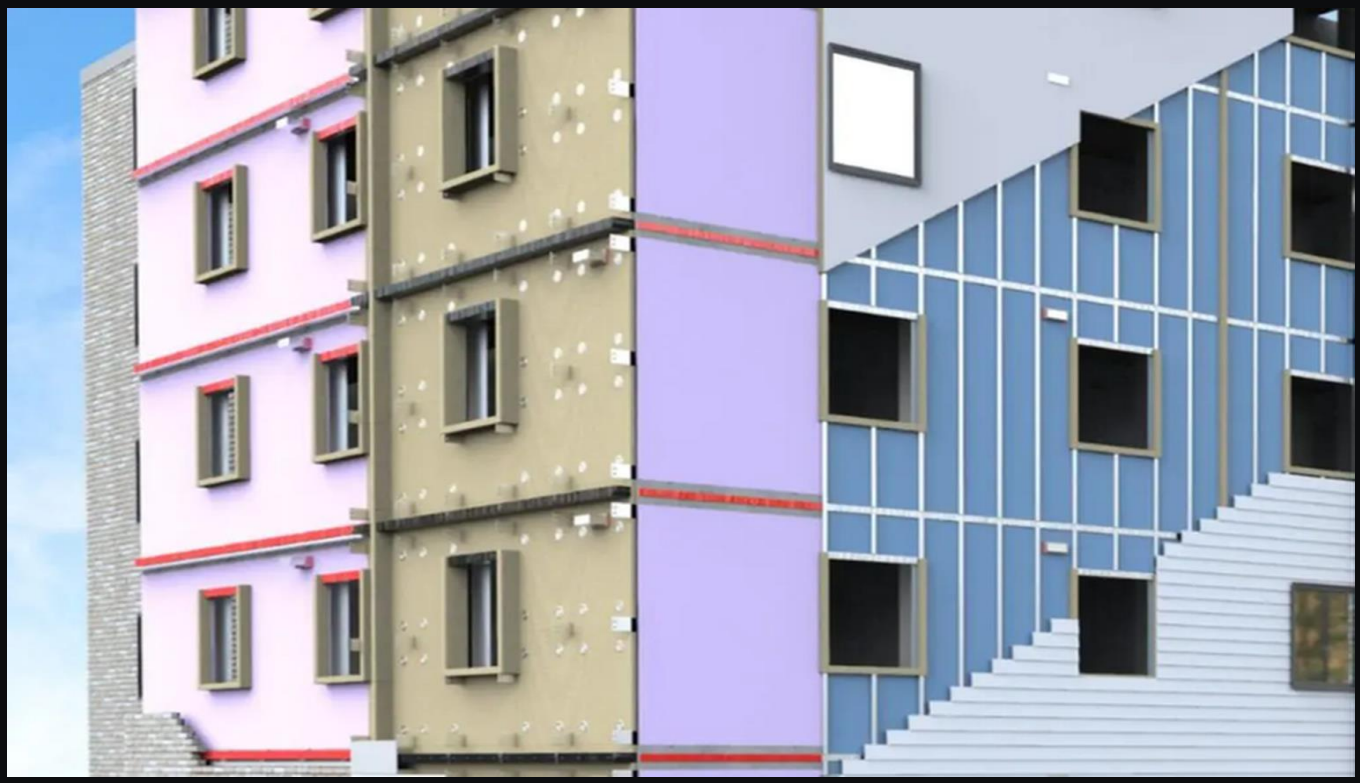
AGNIMATIC
TECHNOLOGIES LLP

PRODUCT CATALOGUE

Passive Fire Protection

Facade protection · Intumescent coatings · Firestopping



01
FACADE PROTECTION
Curtain wall fire barriers, and cavity barriers for ventilated and non-ventilated facades.

02
INTUMESCENT COATINGS
Coatings for structural steel, data centres, tunnels and industrial plant.

03
FIRESTOPPING
Seals for pipes, cables, ducts and joints crossing fire-rated walls and floors.

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OVERVIEW

Three areas of fire protection

A building loses its fire compartments in three places: the gap behind the facade, the structure itself, and every pipe, cable and duct that crosses a rated wall or floor. This catalogue covers all three.

01 **Facade protection** PAGE 03

Curtain wall fire barriers and cavity barriers

Curtain wall and unitised facades, rainscreen and SFS, masonry cavities

02 **Intumescent coatings** PAGE 05

Protection applied to structure and linings

Structural steel, data centres, tunnels, industrial and process plant

03 **Firestopping** PAGE 07

Seals for services, joints and gaps

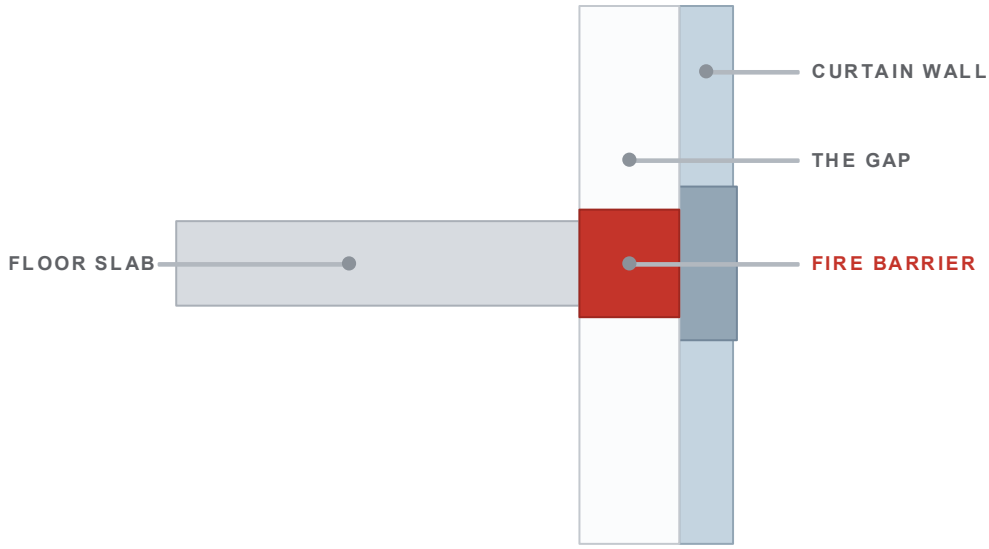
Plumbing, electrical, HVAC and data services, linear joints and gaps

Everything shown here carries fire test evidence and third-party certification. Details on request.

Curtain wall fire barrier

The gap between the floor slab and the facade

A curtain wall runs past the edge of every floor slab, leaving a continuous gap that goes right around the building on every level. Fire and smoke travel straight up through it. The barrier fills that gap and keeps each floor separate from the one above.



Section at the floor slab. The barrier is compressed into the gap so the floor line carries through to the facade.

UP TO	GAP WIDTH	MATERIAL	TESTED TO
120 minutes	Up to 225 mm	Coated stone wool	BS EN 1364-4

Where it is used

- High-rise commercial and mixed-use towers
- Curtain wall and unitised facade systems
- Hotels, hospitals and data centres
- Spandrel panel junctions at every floor

Cavity barriers

Cladding is held away from the building, which leaves a cavity running the full height of the facade. In a fire that cavity behaves like a chimney. A cavity barrier closes it along each floor line.

Ventilated cavity barrier

Up to 450 mm · 120 minutes

Used where the cavity has to stay open so the facade can drain and breathe. The barrier leaves a set air gap in normal use and closes it under heat.

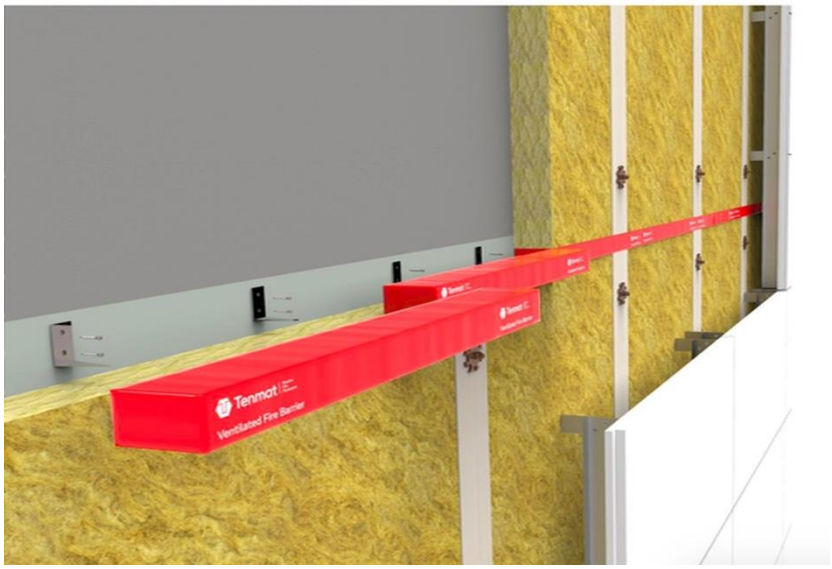
- Rainscreen and SFS facades
- Wide cavities up to 450 mm
- Ventilation kept in normal conditions

Non-ventilated cavity barrier

Up to 225 mm · 120 minutes

Used where the cavity does not need to ventilate. The barrier fills the cavity and stays closed.

- Masonry and brickwork cavities
- Cavities up to 225 mm
- Full-fill, nothing left open



HOW IT WORKS

The barrier sits horizontally on the floor line, inside the cavity, behind the cladding.

In normal use it leaves the facade to ventilate as designed.

When heat reaches it, the front edge expands and closes the cavity, so fire cannot run up behind the cladding.

Also available: vertical barriers, and seals for linear joints and movement gaps.

Where coatings are used

An intumescent coating is painted or sprayed onto structure. In a fire it swells into an insulating layer and buys the structure time. What suits one building will not suit another, and the fire it has to survive is what decides.

Tunnels

RWS · HC

Road and metro tunnel linings, cross passages and service ducts.

- A tunnel fire is far hotter than a building fire
- Protects concrete from breaking up in the heat

Data centres

BS 476 · ISO 834

Structural steel, riser walls and plant rooms.

- Standard building fire exposure
- Low smoke matters around equipment

Structural steel and walls

BS 476 · ISO 834

Beams, columns, bracing and rated wall build-ups in commercial and high-rise.

- Standard building fire exposure
- Thickness depends on the steel size and the rating needed

Industrial and process

HC · UL 1709

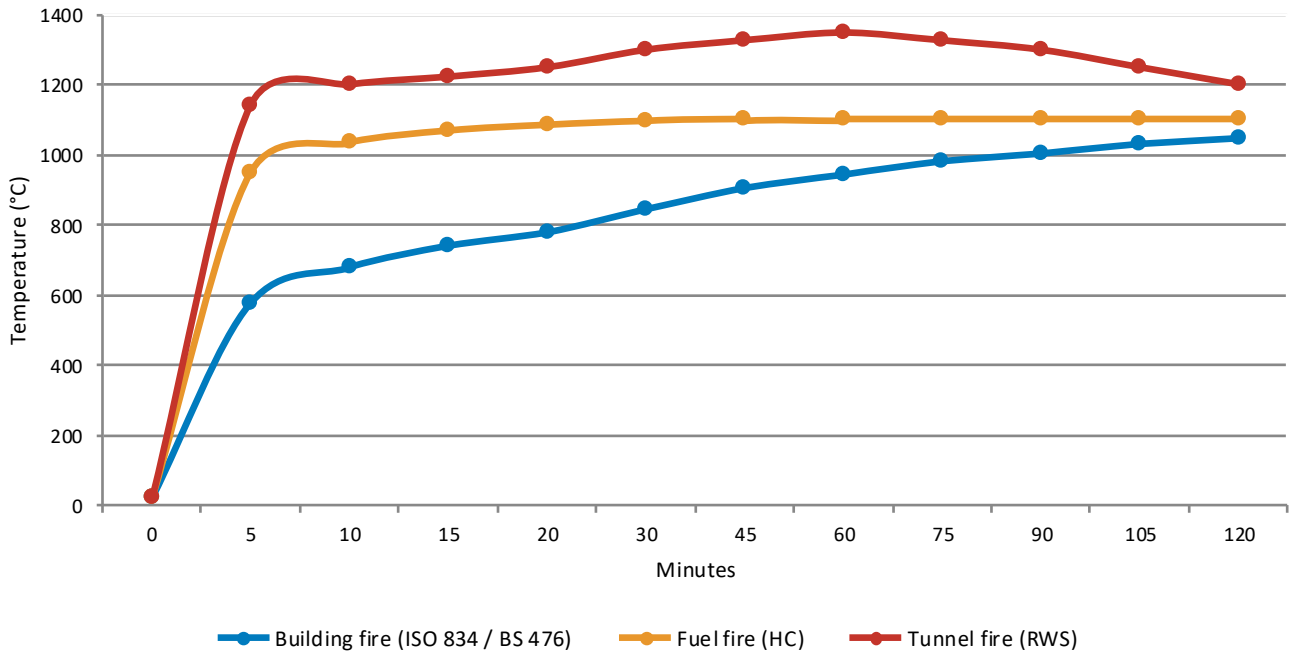
Process plant, storage, jetties and anywhere a fuel fire is possible.

- Fuel fires get hot very fast
- Has to survive weather and chemicals too

One coating does not cover everything. A coating made for a building fire will not hold up in a tunnel or a fuel fire, however thickly it goes on. Those are different products. It also matters what it is going onto, because a thickness worked out for steel does not carry across to concrete or ductwork.

Not every fire is the same

Fire tests heat a furnace to a set pattern. A building fire, a fuel fire and a tunnel fire follow very different patterns, so a coating tested against one says nothing about the others.



TYPE OF FIRE	STANDARD	WHERE IT APPLIES
Building fire	BS 476 Part 20/21, ISO 834, EN 13381-8	Offices, towers, data centres. Structural steel and rated walls.
Fuel fire	Hydrocarbon (HC), UL 1709	Process plant, storage, jetties. Reaches full heat within minutes.
Tunnel fire	RWS	Road and metro tunnels. Peaks around 1350 °C.

A number on its own is not a rating. A "120 minute" claim can come from a surface spread of flame test, which is a different thing from structural fire resistance. Worth checking which test any figure came from before it is relied on.

03 · FIRESTOPPING

Sealing services through walls and floors

Every pipe, cable and duct crossing a fire-rated wall or floor needs a hole cut through it. Firestopping closes that hole back up, and deals with the service itself, which may melt, collapse or carry heat through.

Fire collars

For plastic pipes. Closes the opening as the pipe softens and collapses.

EI 120

Pipe wraps and tapes

Wrapped around the service before the opening is closed.

EI 120

Cable duct seals

For cable ducts and bundled cabling through walls and floors.

EI 120

Intumescent paste

Brushed or trowelled around mixed services in a shared opening.

EI 120

Ablative paste and coating

Coating for cable trays, batts and larger openings.

EI 120

Sealant and fire-rated foam

For linear joints, construction gaps and door and window perimeters.

EI 120 – 240

What gets sealed

Plastic pipes

Soil, waste and water pipes that soften and collapse in a fire.

Metal pipes and cables

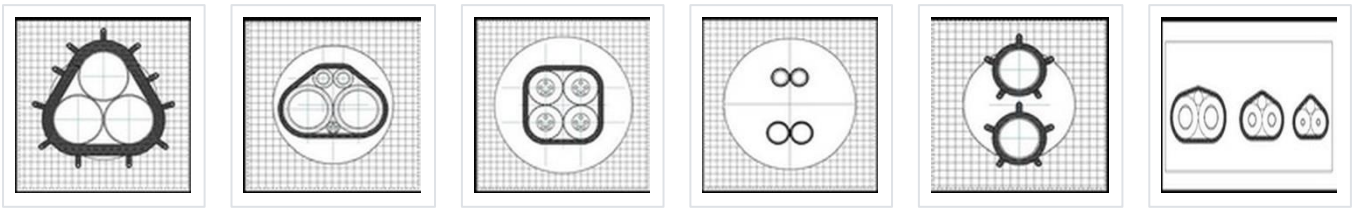
Carry heat along their length, so the seal has to account for the run.

Joints and gaps

Movement joints, construction gaps, door and window perimeters.

Real openings

On site a penetration is rarely one pipe in a clean hole. Services come in groups, at awkward centres, through openings that are not square. Each one is worked out as its own arrangement.



Arrangements worked out to suit the services, the opening and the wall or floor either side.

On site



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IN THIS CATALOGUE

Facade protection

Curtain wall fire barrier
Ventilated cavity barrier
Non-ventilated cavity barrier
Vertical barriers and joint seals

Intumescent coatings

Structural steel and rated walls
Data centre steel and plant rooms
Tunnel linings and cross passages
Industrial and process plant

Firestopping

Fire collars, wraps and tapes
Cable duct seals
Intumescent and ablative coatings
Sealant and fire-rated foam

Want more detail on any of this?

This catalogue is a short overview. Fire test evidence, certification, technical datasheets and drawings are all available for anything shown here. Send a drawing, a BOQ line or a photograph of the condition and we can take it from there.

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