

FIREPRO[®] **INTUMESCENT** **PILLOWS**

Temporary firestop solution for large voids in walls & floors



FIREPRO® INTUMESCENT PILLOWS

ROCKWOOL Intumescent Pillows provide up to 4 hours fire protection.

They are designed to provide fire protection to metal services and cables passing through fire resisting compartment floors and walls.





Advantages

- Easy to install
- Easy to remove and reinstate when changing services
- Maintenance free
- Dry system

Description

FIREPRO Intumescent Pillows consist of intumescent material encased within a glass cloth bag. Intumescent Pillows are simply packed tightly in between penetrating services and the wall. In a floor, pillows are additionally supported by means of a mesh support system (see Figure 3).

Applications

Under fire conditions, Intumescent Pillows expand several times their original volume to form an effective seal around service penetrations.

Intumescent Pillows are suitable for use with:

- Metal pipework
- Cable trays
- Electrical trunking (inside and outside)



Figure 1



Figure 2



Figure 3

Performance

Fire performance

ROCKWOOL Intumescent Pillows to provide up to 4 hours rating where services pass through fire rated walls and floors.

Table 1
Performance in masonry supporting walls

Method of support/ installation	Maximum aperture dimensions	Fire resistance (min)	
		Integrity	Insulation
Friction fitted	850 x 850mm	120	120
Friction fitted	600 x 600mm	240	120

Minimum density masonry supported walls – 650kg/m³ 300mm bag length to be laid horizontally in wall void. Bags should be laid centrally within all wall thicknesses.

Table 2
Performance in drywall systems

Method of support/ installation	Maximum aperture dimensions	Fire resistance (min)	
		Integrity	Insulation
Friction fitted	850 x 850mm	120*	120*

*Product performance is dependent on matching performance of plasterboard wall system. Void in plasterboard should be fully 'framed out' with steel studs or similar 300mm bag length to be laid horizontally in wall void. Bags should be laid centrally within wall thicknesses.

Table 3
Performance in concrete floors

Method of support/ installation	Maximum aperture dimensions	Fire resistance (min)	
		Integrity	Insulation
Wire basket	850 x 850mm	120	120
Wire basket	600 x 600mm	240	120

Approved service penetrations

Steel and copper pipes not exceeding 100mm OD. Multi-core power cables not exceeding 25mm diameter. Multi-core signal PVC sheathed cables not exceeding 11mm diameter. CAT5 or CAT5E communication cables not exceeding 6mm diameter. Fibre optic cables not exceeding 6mm diameter. Perforated steel cable trays carrying single cables (as above) or bunched in bundles, no more than 50mm overall diameter with each bundle separated by at least 40mm. Steel trunking not exceeding 150 x 150mm (through floor seals only) containing single cables (as above) or bunched in bundles, no more than 50mm overall diameter with each bundle separated by at least 40mm. Remaining void within trunking should be fully sealed with Intumescent Pillows.

Technical information

Standards and approvals

FIREPRO Intumescent Pillows have been tested in accordance with BS EN 1366 Part 3: March 2009 achieving fire resistance (integrity) of up to 4 hours and insulation performance of 2 hours.

Product information

Property	Description
Length	300mm
Width	50, 100, 150 & 200mm
Thickness	30mm
Fire Resistance	Up to 4 hours integrity

Installation

Installation in floors

1. Make a basket using galvanised steel mesh (50 x 50mm squares x 2.5mm wire diameter) to sit into the hole in the floor slab. There should be a minimum 50mm overlap onto the surrounding floor slab or wall. Mechanically fix to top of floor slab or wall.
2. Lay Intumescent Pillows standing on end into the wire basket. Pack the pillows tightly into the basket around the penetrating services.
3. For electrical trunking, remove the lid and install a pillow inside so that it aligns with the depth of the floor. Replace the lid on the electrical trunking.
4. Lay a sheet of the galvanised steel mesh over the basket and tie together using steel wire.

Installation in walls

1. Push the first Intumescent Pillow into the hole to be filled, so that the longest dimension (300mm long) spans across the wall.
2. For electrical trunking, remove the lid and install a pillow inside so it aligns with the depth of the wall. replace the lid on the electrical trunking.
3. Pack the hole tightly with additional Intumescent Pillows until it is full.

For plasterboard partitions, the hole must be framed out using suitable stud noggins prior to installing the Intumescent Pillows.

Installation of service penetrations

All penetrating services should be at least 100mm apart and located within the pillows at least 50mm from the surrounding aperture. Due to the nature of the penetrating service eg. steel or copper pipes, the fire insulation performance may be reduced. All penetrating services should be independently supported within 1m of the pillows, either side of the exposed edge / face of the pillows. For cables supported on trays passing through floor seals, the independent supports should be fixed to the trays and the cables clamped securely to the trays. Plastic conduits or trunking should be cut short by at least 100mm either side of pillow seal.

Coverage

Table 4
Estimating quantities

Pillow size (mm)	Approximate number
300 x 200 x 30	165 per m ² opening
300 x 150 x 30	220 per m ² opening
300 x 100 x 30	330 per m ² opening
300 x 50 x 30	660 per m ² opening

Specification clauses

FIREPRO Intumescent Pillows are associated with the following NBS clauses:

P12 Fire stopping systems

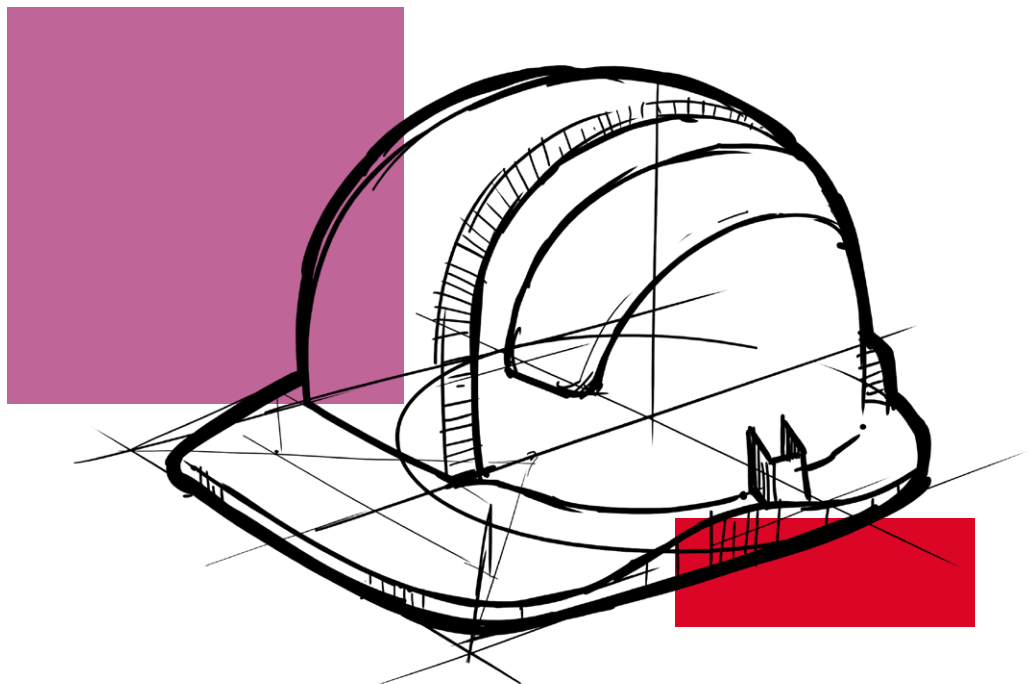
- 345 Intumescent pillows

Disclaimers

This product should only be utilised for applications as outlined in the relevant ROCKWOOL product datasheet and in accordance with the relevant ROCKWOOL Fire Resistance Testing. Additionally, the product must be installed in accordance with the current ROCKWOOL guidelines. For further information please visit www.rockwool.co.uk or contact our Technical Solutions Team on 01656 868490.

Supporting Information

For further information relating to any aspect of the FirePro range, please refer to the applicable ROCKWOOL standard details at www.rockwool.co.uk or contact the ROCKWOOL technical solution team on 01656 868490 or technical.solutions@rockwool.co.uk.



Sustainability

As an environmentally conscious company, ROCKWOOL promotes the sustainable production and use of insulation and is committed to a continuous process of environmental improvement.

All ROCKWOOL products provide outstanding thermal protection as well as four added benefits:



Fire resistance



Acoustic comfort



Sustainable materials



Durability

Health & Safety

The safety of ROCKWOOL stone wool is confirmed by current UK and Republic of Ireland health & safety regulations and EU directive 97/69/EC: ROCKWOOL fibres are not classified as a possible human carcinogen.

A Material Safety Data Sheet is available and can be downloaded from www.rockwool.co.uk to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

Environment

Made from a renewable and plentiful naturally occurring resource, ROCKWOOL insulation saves fuel costs and energy in use and relies on trapped air for its thermal properties.

ROCKWOOL insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

ROCKWOOL is approximately 97% recyclable. For waste ROCKWOOL material that may be generated during installation or at end of life, we are happy to discuss the individual requirements of contractors and users considering returning these materials to our factory for recycling.



Interested?

For further information, contact the Technical Solutions Team on 01656 868490 or email technical.solutions@rockwool.co.uk

Visit www.rockwool.co.uk to view our complete range of products and services.

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