

# **FIREPRO<sup>®</sup>** **HIGH EXPANSION** **INTUMESCENT** **SEALANT**

Prevents the spread of smoke and fire





# **FIREPRO® HIGH EXPANSION INTUMESCENT SEALANT**

**FIREPRO® High Expansion Intumescent Sealant is an easy to apply water based acrylic emulsion sealant containing graphite.**

It reacts to temperatures above 135°C which is used to reinstate the Integrity and insulation rating of compartment walls and floors where penetrated by combustible and non-combustible materials.





## Advantages

- Simple solution for sealing cables, combustible pipes and metal pipes with combustible insulation
- Suitable for both walls and floors
- Compatible with cPVC pipes
- Tested in multiple substrates

## Description

ROCKWOOL FIREPRO® High Expansion Intumescent Sealant is water based acrylic sealant containing graphite. In the event of a fire the active components provide a high volume expansion and pressure seal closing off the void left by combustible materials.

ROCKWOOL FIREPRO® High Expansion Intumescent Sealant is supplied in 310ml cartridges.

## Applications

FIREPRO® High expansion Intumescent Sealant is comprehensively tested for a wide range of applications which include:

- Combustible pipes
- Cables (single cables or bunches of cables)
- Metal pipes insulated with combustible insulation
- Other permanent services



## Performance

### Standards and approvals

FIREPRO® High Expansion Intumescent Sealant has been tested to BS EN 1366-3: 2009 and BS EN 1366-4: 2006 +A1:2010 and classified to EN 13501-2, providing up to 4 hours fire protection in joints up to 30mm.

FirePro® High Expansion Intumescent Sealant has been CE marked against ETAG026-2.

“FBC™ System Compatible indicates that this product has been tested, and is monitored on an ongoing basis, to assure its chemical compatibility with FlowGuard Gold®, BlazeMaster® and Corzan® pipe and fittings. FBC™, FlowGuard Gold®, BlazeMaster® and Corzan® are licensed trademarks of The Lubrizol Corporation or its affiliates.”

FIREPRO® High Expansion Intumescent Sealant is third party accredited through IFC and Certifire.

This product has been authorised for use in LUL surface and sub-surface premises when installed in accordance with this datasheet - please refer to the LUL Approved Product Register website [www.LU-apr.co.uk](http://www.LU-apr.co.uk) for specific details. LUL Ref. 2454.

**Table 1**  
2 hour dry wall  
(min. 120mm  
thick)

| Service Penetration                        | Diameter (Ø) | Wall Thickness | Annular Space (mm) | Depth (mm) | Classification  |
|--|--------------|----------------|--------------------|------------|-----------------|
| Cables                                     | 21           | N/A            | 20                 | 25Φ        | EI 120 U/C      |
| PVC Pipes †                                | 40           | 3              | 10                 | 25Φ        | EI 120 U/C      |
| PVC Pipes ††                               | 125          | 7.4            | 16                 | 25Φ        | EI 120 U/C      |
| HDPE                                       | 63           | 7.2            | 20                 | 25Φ        | EI 120 U/C      |
| HDPE                                       | 90           | 9.2            | 12.5               | 25Φ        | EI 120 U/C      |
| ABS  | 90           | 6              | 12.5               | 25Φ        | EI 120 U/C      |
| Copper / Steel Pipe with Armaflex 32mm CS  | 60           | 0.8-14.2       | 20                 | 25Φ        | E 120/EI 90 U/C |
| Copper / Steel Pipes with Armaflex 16mm CS | 15           | 0.8-7          | 15                 | 25Φ        | EI 120 U/C      |

**Table 2**  
Wall with Single  
50mm FIREPRO®  
Ablative Coated  
Batt

| Service Penetration          | Diameter (Ø) | Wall Thickness | Annular Space (mm) | Depth (mm) | Classification |
|------------------------------|--------------|----------------|--------------------|------------|----------------|
| PVC Pipes †                  | 125          | 7.4            | 20                 | 50         | EI 30 U/C      |
| Multi Layer Composite Pipes  | 110          | 10             | 20                 | 50         | E45 EI30 U/C   |
| 500mm perforated cable tray* | N/A          | N/A            | 20                 | 50         | EI 30          |
| Medium Cables*               | 47           | N/A            | 20                 | 50         | EI 45          |

**Table 3**  
Masonry Wall  
(min. 150mm  
thick) with Double  
50mm FIREPRO®  
Ablative Coated  
Batt

| Service Penetration          | Diameter (Ø) | Wall Thickness | Annular Space (mm) | Depth (mm) | Classification |
|------------------------------|--------------|----------------|--------------------|------------|----------------|
| PVC Pipes †                  | 125          | 7.4            | 20                 | 25Φ        | EI 120 U/C     |
| Multi Layer Composite Pipes  | 110          | 10             | 20                 | 25Φ        | EI 120 U/C     |
| 500mm perforated cable tray* | N/A          | N/A            | 20                 | 25Φ        | EI 120         |
| Medium Cables*               | 47           | N/A            | 20                 | 25Φ        | EI 120         |

**Table 4**  
Rigid Floor (min. 150mm thick)

| Service Penetration                              | Diameter (Ø) | Wall Thickness | Annular Space (mm) | Depth (mm)    | Classification  |
|--|--------------|----------------|--------------------|---------------|-----------------|
| Electrical Cables $\phi$                         | 80           | N/A            | N/A                | 25 $\uparrow$ | E120            |
| Non Sheathed Electrical Cables $\phi$            | 24           | N/A            | N/A                | 25 $\uparrow$ | E180            |
| Telecom Cables bundled $\phi$                    | up to 21     | N/A            | N/A                | 25 $\uparrow$ | E180            |
| Copper / Steel Pipe with Armaflex 32mm CS $\phi$ | 159          | 14.2           | 20                 | 25            | EI 120 U/C      |
| Copper / Steel Pipe with Armaflex 16mm CS $\phi$ | 41           | 14.2           | 20                 | 25            | E240/ EI 60 U/C |
| PP Pipes $\phi$ †                                | 110          | 10.7           | 20                 | 25 $\Phi$     | EI 120 U/C      |
| PP Pipes $\phi$ †                                | 50           | 2.1            | 20                 | 25 $\Phi$     | EI 240 U/C      |
| PE Pipe $\phi$ †                                 | 40           | 4.1            | 20                 | 25 $\Phi$     | EI 240 U/C      |
| PE Pipe $\phi$ †                                 | 125          | 11.4           | 20                 | 25 $\Phi$     | EI 90 U/C       |
| PVC Pipe $\phi$ †                                | 40           | 2              | 20                 | 25 $\Phi$     | EI 240 U/C      |
| PVC Pipe $\phi$ †                                | 114          | 8.1            | 20                 | 25 $\Phi$     | EI 120 U/C      |

**Table 5**  
Rigid Floor (min. 150mm thick) with Double 50mm FIREPRO® Ablative Coated Batt

| Service Penetration  | Diameter (Ø) | Wall Thickness | Annular Space (mm) | Depth (mm) | Classification |
|--|--------------|----------------|--------------------|------------|----------------|
| PVC Pipe †   | 50           | 7.4            | 20                 | 25 $\Phi$  | EI 120 U/C     |
| PVC Pipe †   | 125          | 7.4            | 20                 | 25 $\Phi$  | EI 120 U/C     |
| Multi Layer Composite Pipes                                | 110          | 10             | 20                 | 25 $\Phi$  | E120/EI 60 U/C |
| 500mm perforated cable tray*                               | N/A          | N/A            | 20                 | 25 $\Phi$  | EI 120         |
| Medium Cables*   | 47           | N/A            | 20                 | 25 $\Phi$  | EI 120         |
| Multi Service as follows (installed centrally in aperture) |              |                |                    |            |                |
| PE Pipe $\phi$ †   | 125          | 7.6            | N/A                | 25 $\Phi$  | E120/EI 90 U/C |
| 60 Pipe with Cables $\phi$                                 | 21           | N/A            | N/A                | 25 $\Phi$  | E120/EI 90 U/C |

**Table 6**  
Linear Joints

| Service Penetration | Diameter (Ø) | Wall Thickness | Annular Space (mm) | Depth (mm) | Classification |
|---------------------|--------------|----------------|--------------------|------------|----------------|
| pvc Pipe $\omega$   | 50           | 7.4            | 20                 | 25 $\Phi$  | EI 120 U/C     |

**Key to tables**

† = See assessment for other pipe sizes and wall thicknesses within field of application.

\*C= All cables coated with 2mm DFT (Dry Film Thickness) of Firepro®

RW = Rigid Wall

ACB = Ablative Coated Batt

CS = Continuous Sustained

$\Phi$  = Applied to both faces of seal

$\uparrow$  = Applied to upper face only

$\Psi$  = Use RW4 as backing material, minimum 30mm deep.

$\phi$  = Use RWA45 as backing material, minimum 100mm deep.

$\omega$  = Use PE backing rod

## Technical information

### Product information

| Property                      | Description  |
|-------------------------------|--|
| Form                          | Ready to use thixotropic paste   |
| Cartridge size                | 310ml  |
| Curing system                 | Water based  |
| Specific gravity              | 1.5  |
| Extrusion rate                | 350g/min   |
| SAG                           | <3min  |
| Open time                     | 30mins   |
| Tack free time                | 60mins   |
| Curing time                   | 3 to 5 days  |
| Shore (A) hardness            | 50   |
| Solids                        | >80%   |
| Application temperature range | +4°C to +35°C  |
| Service temperature range     | -15°C to 70°C  |
| Shelf life                    | Up to 12 months when stored in unopened cartridges under cool, dry conditions. <b>Avoid Extreme Temperatures</b> |

## Installation

All surfaces must be clean and sound, free from dirt, grease and other contamination.

Prepare joint by cleaning as previously detailed and insert backer if required. Cut nozzle to the desired angle and gun firmly into the joint to give a good solid fill to the required depth. Strike off the sealant flush with the joint sides within five minutes of application, before surface skinning occurs. A small amount of shrinkage will occur on curing. If a flush finish is required, fill the joint slightly proud of the surface to allow for shrinkage.



### Important information

The sealant is not intended for application on bituminous substrates or substrates that can exude certain oils and plasticizers or solvents.

The sealant is not recommended for submerged joints or areas exposed to high abrasion.

The sealant is not suitable for food contact or medical applications.

## Specification clauses

FirePro® High Expansion Intumescent Sealant is associated with the following NBS clauses:

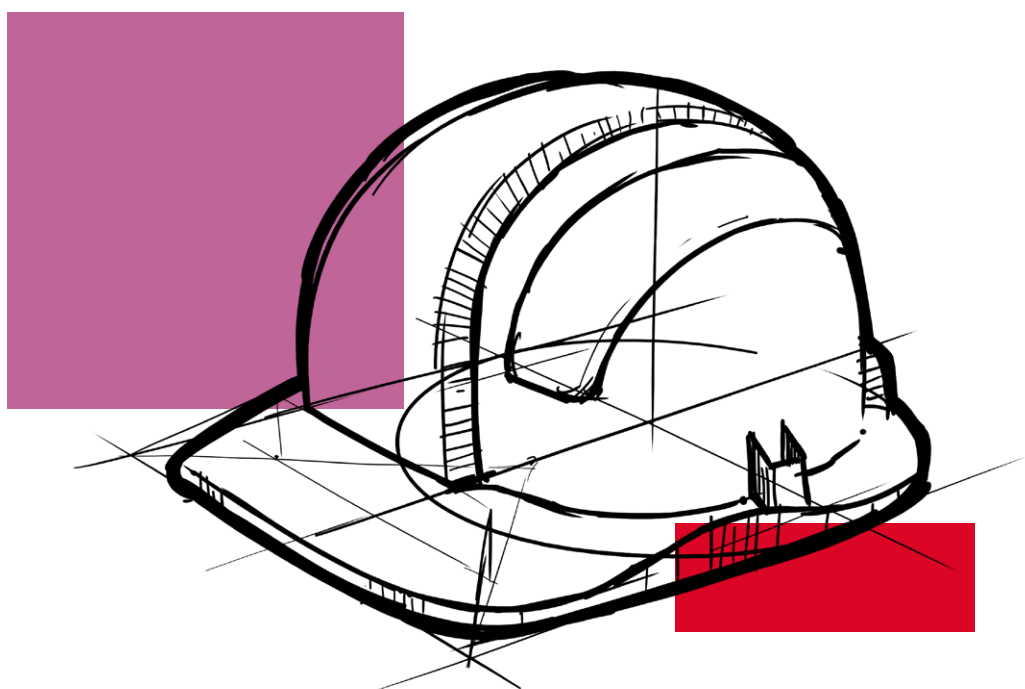
- E40: Designed joints in in-situ concrete – 530 Sealant
- F30: Accessories/sundry items for brick/block/stone walling - 610 Movement joints with sealants
- L10: Windows/rooflights/screens/louvres – 790 Fire resisting frames
- L20: Doors/shutters/hatches – 820 Sealant joints
- P12: Fire stopping systems – 395 Sealant-One part fire resistance acrylic

## 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](http://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](http://www.rockwool.co.uk) or contact the ROCKWOOL technical solution team on 01656 868490 or [technical.solutions@rockwool.co.uk](mailto: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](http://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](mailto:technical.solutions@rockwool.co.uk)

Visit [www.rockwool.co.uk](http://www.rockwool.co.uk) to view our complete range of products and services.

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