FIREPRO®

HS FIRESTOP COMPOUND

High strength compound for reinstating the fire performance of floor and wall constructions

ROCKWOOL®

FIREPRO®
HS FIRESTOP COMPOUND

As part of the comprehensive FIREPRO® range of fire protection products, ROCKWOOL HS Firestop Compound is used to provide a fire resisting seal around service penetrations in fire rated walls and floors.

Tested to EN 1366-3 HS Firestop Compound provides up to 4 hours fire resistance.

Advantages

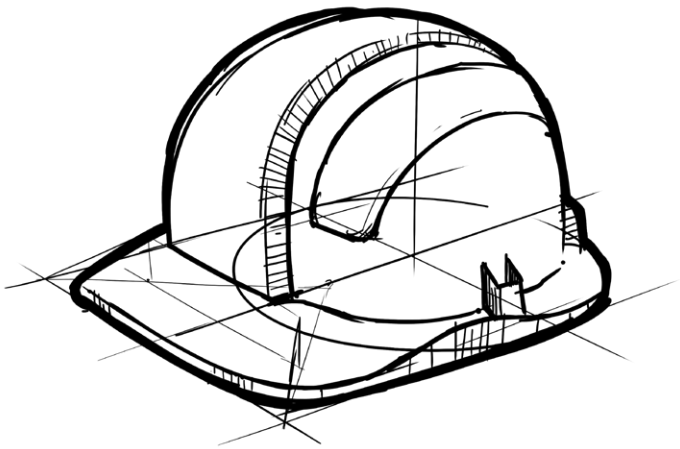
- Unsupported spans of up to 1800mm
- High load bearing capacity
- Suitable for use with multiple service penetrations
- Can be formed into blocks
- Good acoustic barrier
- Effective smoke seal
- Rapid setting

Description

HS Firestop Compound is a specially formulated gypsum based mortar, which is mixed with water to create a workable range from stiff to pourable mix. HS Firestop Compound is also suitable for pre-casting into convenient size blocks for use in wall openings.

Applications

- Re-instating the fire resistance of wall and floor constructions
- Load bearing floors
- Wall penetrations
- Load bearing seals around unsupported fire dampers



Performance

Fire performance

HS Firestop Compound has been independently tested for use in walls and floors.

Plastic pipework must be protected with either ROCKWOOL Firestop Pipe Collars or Intumescent Pipe Wraps. For further advice on specific applications and fire performance, please contact ROCKWOOL Technical Solutions on 01656 868590 or technical.solutions@rockwool.co.uk

Floor Seals - Maximum aperture 1800 x 1800					
Service	Diameter (mm)	Wall thickness (mm)	Min floor thickness (mm)	Classification E	Classification EI
Copper pipe ł	40-107	1.5-14.2	100	60	15
Steel pipe ł	40-115	3.5-14.2	100		120
Steel pipe ł	116-160	5-14.2	100	120	90
Electrical cables Ᵽ	≤80	N/A	100	120	60
Non-sheathed wires Ᵽ	≤24	N/A	100		120
Telecom cables Ᵽ	100mm bundle	N/A	150		120
Floor seals – Maximum aperture Unlagged solutions for cables and conduits					
Cable Trays	≤450mm		100		120
Cable ladders	≤300mm		100		120
Electrical Cables	≤21mm		100		120
Electrical Cables	22-80mm		100	120	90
Non-combustible conduits	≤16mm		100		90

ł - *Service fitted with 50mm thick H&V 500mm above floor (L/I)*
Ᵽ - *Service fitted with 25mm thick Ductwrap 500mm above floor (L/I)*

Rigid walls min 150mm thick - Maximum aperture 2600 x 2600					
Service	Diameter (mm)	Wall thickness (mm)	Min wall thickness (mm)	Classification E	Classification EI
Blank seal 2.6 X 2.6M	No services		150		240
Non-combustible pipe ł	40 - 219Ł	1.0-14.2	150		240
Perforated cable trays	≤500mm	n/a	150		240
Non-perforated cable trays	≤500mm	n/a	150	240	180
Cable ladders	≤350mm	n/a	150	240	120
Cable ladders	≤200mm	n/a	150	240	240
Electrical cables (s)	≤21mm	n/a	150	240	120
Electrical cables (m)	22-50mm	n/a	150	240	120
Electrical cables (l)	51-80mm	n/a	150	240	120
Non combustible conduits	≤16mm	n/a	150	240	240
Combustible conduits	≤16mm	n/a	150	240	180

ł - *Service fitted with 1m long 25mm thick H&V section (C/S) - 0mm separation distance to each other and aperture opening*
Ł - *When installed in opening with cable services, the diameter range reduces to 40 -108 with 10mm spacing*

Acoustic performance

HS Firestop Compound has been tested in accordance with EN 10140 achieving Rw 57dB at a depth of 100mm (with 50mm ROCKWOOL shuttering batt).

For specific information on acoustic performance please contact ROCKWOOL Technical Solutions on 01656 868490 or technical.solutions@rockwool.co.uk

Load bearing capability

HS Firestop Compound in floor spans of up to 1800mm without the need for further reinforcement. For further information on the load bearing capacity of HS Firestop Compound, please contact ROCKWOOL Technical Solutions.

Property	Description
Description	Grey coloured free flowing powder
Pack Size	20kg bag
Density	1750-1900kg/m³
Loadbearing	2.5KN/m² UDL
Fire Resistance	Up to 4 hours
Acoustic Performance	Rw 57dB (100mm Depth)
Max Unsupported Span	1800mm
Thermal Conductivity	0.45W/mK
Setting Expansion (%)	0.1
Typical Yield	±6bags/m² at 100mm depth
Expected Shelf Life	6 months (When stored in accordance with the packaging instructions)

Technical information

Standards and approvals

FIREPRO® HS Firestop Compound has been tested for resistance in accordance with BS 476 Part 20 and EN 1366-3.

HS Firestop Compound has been classified as EI 120 in accordance with EN 13501-2

FIREPRO® Firestop Compound is third party accredited through 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 for specific details.

Installation

Mixing

HS Firestop Compound can be mixed preferably by mechanical paddle or manually if required. Measure out the correct amount of clean water into a clean container to achieve the desired consistency.

HS Firestop Compound: water ratio
Pourable Mix ratio of 3 - 3Vz:1
Trowel Mix ratio of 4:1

Gradually add the HS Firestop Compound stirring continually. Continue mixing until the compound is mixed to a smooth even consistency. *Any spillage should be wiped up with a damp cloth before setting occurs. Mix only enough material sufficient for use within the recommended pot life (20-30 minutes). Pot life and set times will be reduced for lower water content and higher temperatures.

*HS Firestop Compound may stain pipes and services

Installation should not be carried out when temperatures are above 35°C. Setting times are normally between 30 and 90 minutes.

Warning: Do not attempt to extend working time by remixing with additional water once the mortar has started to set, as this will interfere with the setting process. Always mix in clean buckets.

Fit a shuttering board to the bottom of the opening. Shuttering materials must be able to support the wet weight of the compound under pouring conditions. Pour HS Firestop Compound to the required 100mm thickness.

General installation requirements

Ensure that the aperture and services in question are tested with HS Firestop Compound, and the site conditions are within the application specification.

All services and apertures need to be clean and clear of all dust and loose particles. The aperture temperature needs to be at 5°C or above at time of installation. Plastic pipework must be protected with either ROCKWOOL Firestop Pipe Collars or Intumescent Pipe Wraps.

Upon installation make sure that you install the HS Firestop Compound to the recommended ratio for the aperture you are installing, make sure that you fill the full depth in a single pour to create a solid structure. Apply a minimum depth of 100mm in a single pour to achieve loadbearing capabilities.

Once filled, smooth off the HS Firestop Compound to produce a professional finish.

Wall openings (Figure 1)

For small holes and gaps, trowel a stiff mix into the opening to the correct depth. For larger holes, use an appropriate non-combustible shuttering material to support the mix until it sets, or, if a fair faced finish is required to both sides, consider using a sandwich construction. Alternatively, the HS Firesop Compound may be pre-cast into convenient sized blocks, a stiff mix being used as a bedding mortar. All combustible services (Plastic Pipes etc.) should have a ROCKWOOL tested fire rated closure device/material fitted prior to the pouring of the HS Firestop Compound.

Floor openings (Figure 2)

When sealing holes in floor slabs, appropriate shuttering must be installed, cut to fit tightly around any services within the opening, to support the wet mix until it sets. Non-combustible shuttering materials, such as mineral fibre slab, can be left in place, but combustible materials must be removed, after the mix has set. For complex penetrations it may be preferable, to initially form a thin seal around all services, with a nominal 5mm layer of the HS Firestop Compound mix. Once this has set the remaining depth of seal should be poured in one operation. All combustible services (Plastic Pipes etc.) should have a tested fire rated closure device/material fitted prior to the pouring of the HS Firestop Compound.

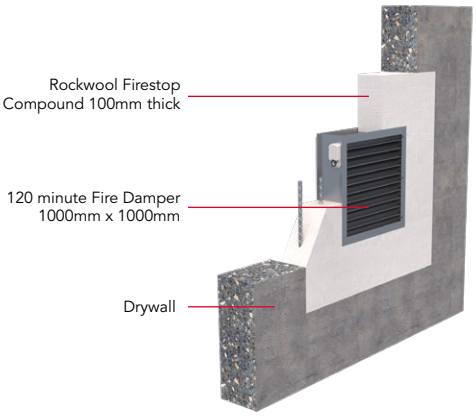


Figure 1

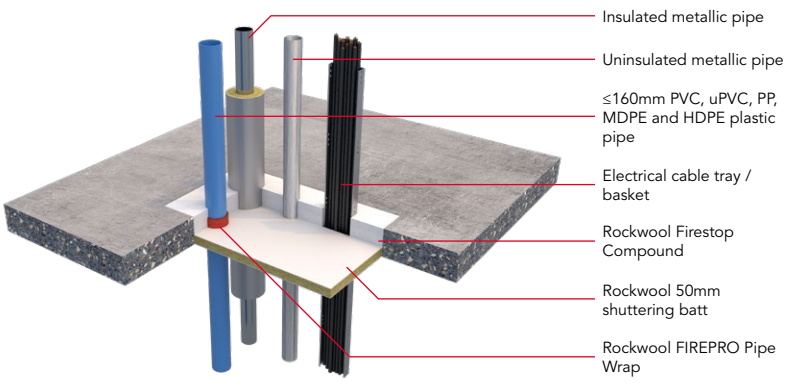


Figure 2

Specification clauses

ROCKWOOL Firestop Compound is associated with the following NBS clauses:
P12 Fire stopping systems
340 Intumescent Mortar

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.

The ROCKWOOL Trademark

ROCKWOOL® - our trademark

The ROCKWOOL trademark was initially registered in Denmark as a logo mark back in 1936. In 1937, it was accompanied with a word mark registration; a registration which is now extended to more than 60 countries around the word.

The ROCKWOOL trademark is one of the largest assets in the ROCKWOOL Group, and thus well protected and defended by us throughout the world.

If you require permission to use the ROCKWOOL logo for your business, advertising or promotion. You must apply for a Trade Mark Usage Agreement. To apply, write to: marketcom@rockwool.com.

Trademarks

The following are registered trademarks of the ROCKWOOL Group:

ROCKWOOL®

ROCKCLOSE®

RAINSCREEN DUO SLAB®

HARDROCK®

ROCKFLOOR®

FLEXI®

BEAMCLAD®

FIREPRO®

Disclaimer

ROCKWOOL Limited reserves the right to alter or amend the specification of products without notice as our policy is one of constant improvement. The information contained in this brochure is believed to be correct at the date of publication. Whilst ROCKWOOL will endeavour to keep its publications up to date, readers will appreciate that between publications there may be pertinent changes in the law, or other developments affecting the accuracy of the information contained in this brochure. The applications referred to within the brochure do not necessarily represent an exhaustive list of applications. ROCKWOOL Limited does not accept responsibility for the consequences of using ROCKWOOL in applications different from those described within this brochure. Expert advice should be sought where such different applications are contemplated, or where the extent of any listed application is in doubt.

Photography and Illustrations

The product illustrations are the property of ROCKWOOL ltd and have been created for indicative purposes only.

Unless indicated below, the photography and illustrations used in this guide are the property of ROCKWOOL Limited. We reserve all rights to the usage of these images.

If you require permission to use ROCKWOOL images, you must apply for a Usage Agreement. To apply, write to: marketcom@rockwool.com.

Notes

Notes

September 2018

ROCKWOOL Limited

Pencoed
Bridgend
CF35 6NY

Tel: 01656 862 621

info@rockwool.co.uk

rockwool.co.uk