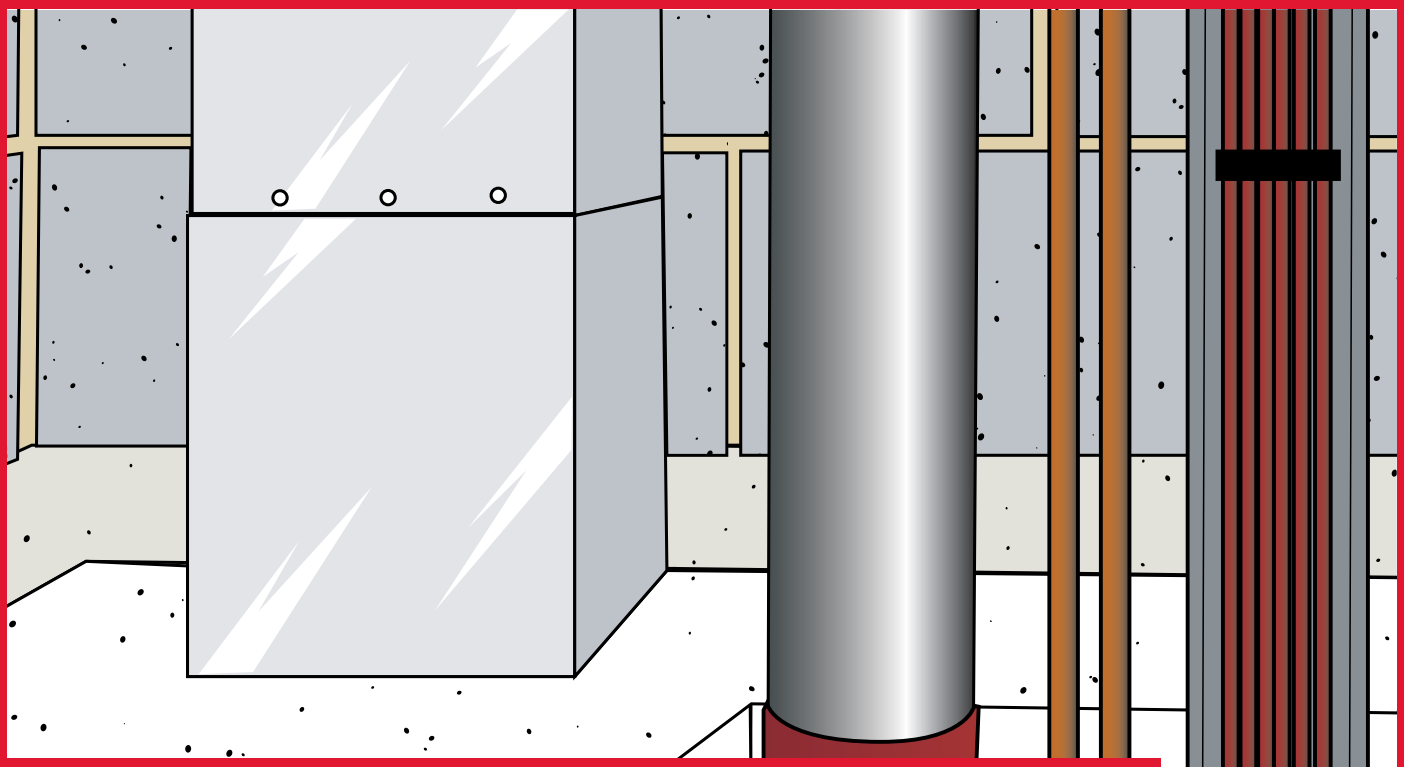

ROCKWOOL®

FIREPRO®

Firestop Compound

Firestop solution for cable pipe and duct penetrations

As part of the comprehensive FIREPRO® range of fire protection products, ROCKWOOL Firestop Compound is used to provide a fire resisting seal around service penetrations in fire rated walls and floors. Tested to BS476 Part 20, 1987, Firestop Compound provides up to 6 hours fire protection.

The following NBS Plus clauses include 'Firestop Compound': P12-37, P12-340

Firestop Compound

Description

Firestop Compound is a specially formulated gypsum based compound, which is mixed with water to be trowelled or poured around service penetrations.*

Installation instructions

In floors, a permanent shuttering made from 50mm ROCKWOOL slab (minimum density 140kg/m^3) is cut and friction fitted between services and the edges of the floor slab. Firestop Compound is then trowelled over the shutter to a depth of 25mm thick. This is allowed to cure. Further Firestop Compound is then mixed to a pouring grade and tops the seal up to the required depth.

Floor Openings Pouring:

1) A bag of compound to 10 litres water (3:1) by volume. Vary to suit site conditions
2) Set the shuttering into the opening ensuring a tight fit so that once the required depth of Compound is installed it finishes flush with the floor slab/screed unless otherwise specified
3) Mix and pour compound until the required thickness is achieved.

Reinforcement

Reinforcing of the compound requires either 12mm diameter bars or 40mm (high)x 60mm steel angle fixed across the short span of the aperture. The bars should be installed at 200mm centres across the aperture and may be installed such that they are recessed into the surrounding structure by minimum 50mm on both sides or supported on an steel angle securely fixed to the structure. Steel angle reinforcement shall be installed at 250mm centres and shall be bolted back to supporting angle, which is fixed back to the structure. The support angle for rod or angle reinforcement shall be 50mm x 50mm x 1.6mm and shall be securely fixed back to the structure with nominally 8mm steel anchor bolts at a maximum of 200mm centres. In all instances the reinforcement shall be positioned approximately 30mm above the bottom surface of the compound to ensure adequate fire protection from below. Existing compound installations can be easily drilled or sawn to allow the provision of additional or replacement services and subsequently re-sealed. Recommended minimum clearance between services and surrounding structure – 50mm or half the diameter, whichever is greater.

General benefits:

- Smoke seal
- Good acoustic barrier
- Suitable for making good around most types of service penetrations
- Load bearing (see Load bearing table for details)
- Simple installation
- No smoke emission
- Maintenance free
- Unaffected by humidity
- Available within 48 hours of order

The product has been authorised for use in LUL surface and sub-surface premises when installed in accordance with this data sheet – please refer to the LUL Approved Product Register website www.LU-apr.uk for specific details

Wall openings

In walls, Firestop Compound is mixed into a stiff consistency for trowelling into openings.*

Trowelling

1) A bag of compound to 10 litres water (3:1) by volume. Vary to suit site conditions.
2) Apply compound as specified (see sketches a, b, c).
3) Trowel the compound, starting at the base of the opening ensuring the correct thickness of material is installed. Work progressively towards the top of the opening until the barrier is complete. If shuttering panel is set at the centre, repeat process on other side.

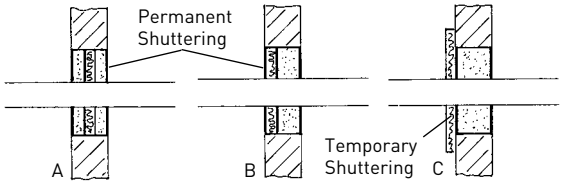

Figure 2

Firestop Compound sets in 30-45 minutes and is capable of accommodating light foot traffic in approximately 72 hours.

Performance in walls and floors

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

When reinforced, Firestop Compound offers up to 360mins* protection for both Integrity and Insulation in masonry/ concrete walls or concrete floors.

When un-reinforced, Firestop Compound offers up to 240mins* protection for both Integrity and Insulation in masonry/ concrete walls or concrete floors.

Table 1 - Acoustic performance

Thickness of Compound (mm)	Weighted Sound Reduction Index (Rw)
75	39db
100	46db
150	51db

Table 2 - Coverage of compound

Thickness of Compound (mm)	Number of bags/m^2
75	3.15
100	4.20
150	6.30

These are approximate calculations based on 22kg bags. The coverage does not take into account the percentage of the hole filled with services.

Table 3 - Load bearing fire seals (light foot traffic only)

Thickness of Compound (mm)	Max. load bearing area free of services
75	500 x 500mm
100	750 x 750mm

Openings larger than 750 x 750mm clear area need to be reinforced. Please see overleaf or contact the ROCKWOOL Technical Solutions Team.

*Plastic pipework must be protected with either ROCKWOOL Firestop Pipe Collars or Intumescent Pipe Wraps. (See separate product information)

*For advice on particular applications and fire performance, please contact ROCKWOOL Technical Services.

Firestop Compound

Specification

Install ROCKWOOL Firestop Compound to provide 1,2,3 or 4 hour fire rating to all service penetrations through all fire rated walls and floors. Installation to be fully in accordance with manufacturer's instructions.

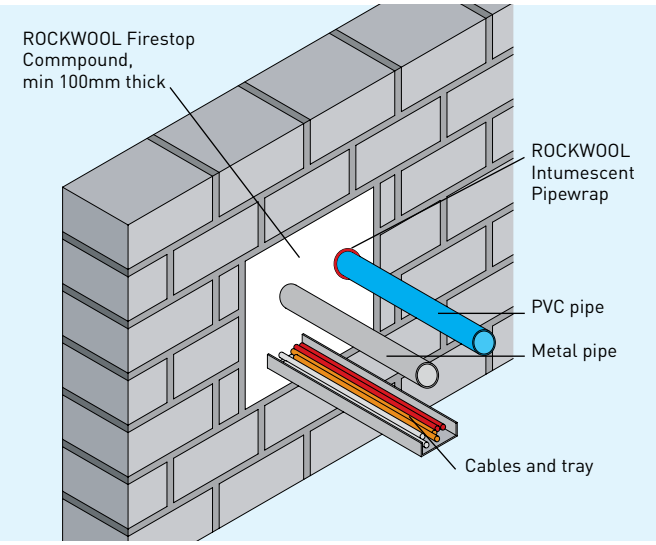

Figure 3 Firestopping at wall penetrations

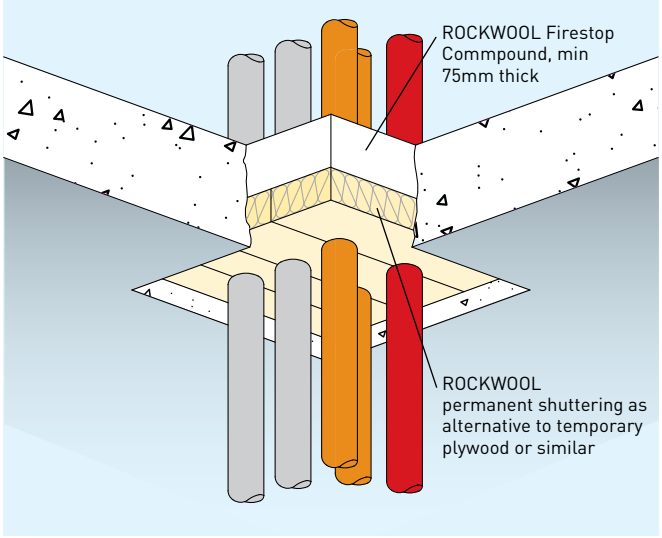

Figure 4 Firestopping at floor penetrations

Firestop Compound – spans with services

Table 4 - Non-reinforced seals

Firestop compound thickness (mm)	Fire rating (hours)	Maximum opening width x any linear length (mm)	Load bearing capacity (kn)
75	2	500	2.5
100	4	750	2.5

Table 5 - Simply reinforced seals

Firestop compound thickness (mm)	Fire rating (hours)	Maximum opening width x any linear length (mm)	Load bearing capacity (kn)
100	4	Up to 1500	2.5

This is general guidance. Advice from ROCKWOOL Technical Solutions should always be obtained.

Figure 33 Section through steel penetration

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