

Firestop Compound

Fire protection solution for large voids in floors and walls

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

Tested to BS 476 Part 20, FirePro® Firestop Compound provides up to 6 hours fire protection.

Advantages

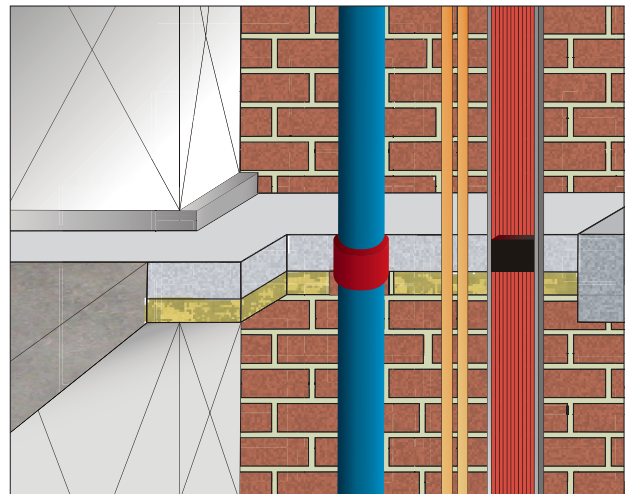
- Smoke seal
- Good acoustic insulation
- Suitable for making good around most types of service penetrations
- Load bearing
- Simple installation
- Allows easy installation of additional services
- Maintenance free
- Unaffected by humidity

Description

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

Installation

In floors, Hardrock Permanent Shuttering Panel, 50mm thick, is cut and friction fitted around the services and the edges of the floor slab. FirePro® Firestop Compound is then trowelled over the Hardrock Permanent Shuttering Panel to a depth of 25mm. This is allowed to start hardening and then the balance of the FirePro® Firestop Compound is mixed to a pouring grade and used to fill the seal to the required depth.



FirePro® Firestop Compound poured onto Hardrock Permanent Shuttering Panel installed in a 2 hour fire rated floor.

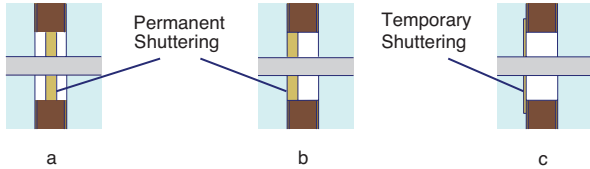
Floor Openings

1. 1 bag of compound to 12 litres water (2.5:1).
2. Cut the Hardrock Permanent Shuttering Panel slightly oversized and friction fit it into the opening. Ensuring that once the required depth of FirePro® Firestop Compound is installed, it finishes flush with the floor slab or screed unless otherwise specified.
3. Mix and pour compound until the required thickness is achieved.

Wall Openings

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

1. A bag of compound to 10 litres water (3:1). Guide only, vary to suit site conditions.
2. Apply compound as specified, see sketches a, b, or 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.



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

* Plastic pipework must be protected by either FirePro® Firestop Pipe Collars, FirePro® Insulated Pipe Sleeve, FirePro® Intumescent Pipe Wraps or FirePro® Universal Wrap. (See data sheets)

Reinforcement

Reinforcing requires 12mm diameter bars placed at a maximum of 200mm centres across the shortest span. The bars may be either recessed into the surrounding structure by minimum 50mm on both sides or supported on an angle securely fixed to the structure, all 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.

Performance and Properties

Fire rating

Fire Rating	Blockwork Wall	Concrete Floor
1 Hour	75mm/2 @ 40mm	75mm
2 Hours	75mm/2 @ 40mm	75mm
3 Hours	100mm/2 @ 50mm	100mm
4 Hours	100mm/2 @ 50mm	100mm

Load bearing fire seals (light foot traffic only)

Thickness of Compound	Max. Load Bearing Area Clear of Service
75mm	500mm x 500mm
100mm	750mm x 750mm

*If clear areas are larger than above, reinforcement bars must be used

Openings larger than 750mm x 750mm clear area need to be reinforced. Please contact Wilhams Insulation Far East Sdn Bhd for details.

Coverage of compound

Thickness of Compound	Number of Bags/m ²
75mm	3.15
100mm	4.2
150mm	6.3

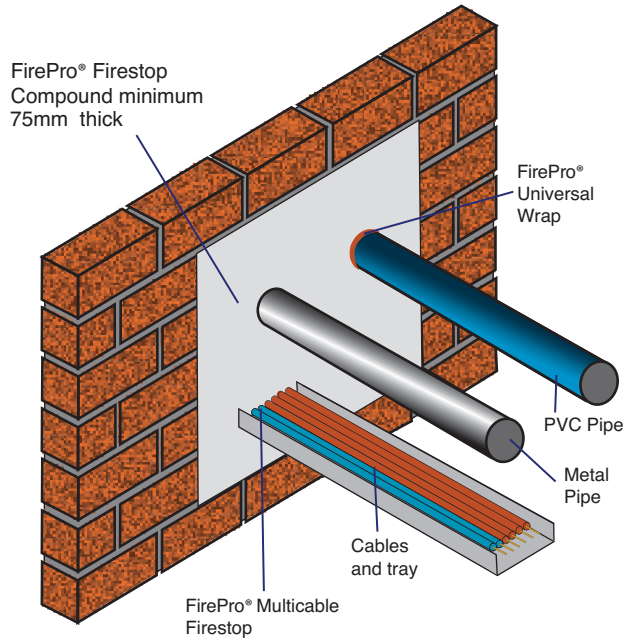
These are the approximate calculations based on 22kg bags. The coverage does not take into account the percentage of the hole filled with services.

Specification

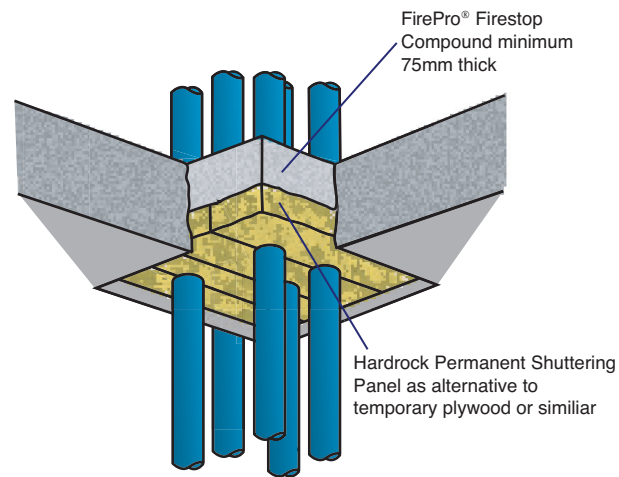
Install FirePro® Firestop Compound to provide 1, 2, 3 or 4 hour fire rating to all service penetrations through all fire rated walls and floors. Installation to be fully in accordance with manufacturer's instructions.

Installation Drawings

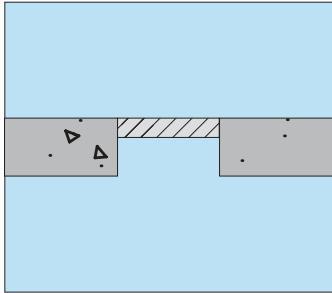
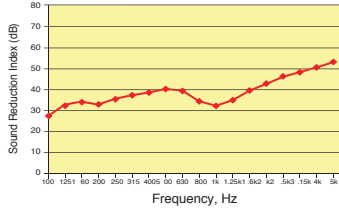
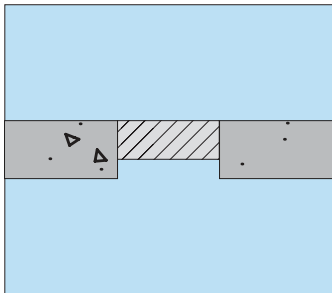
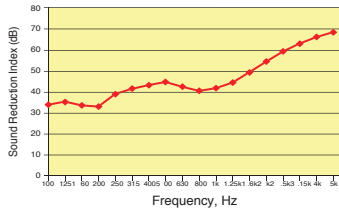
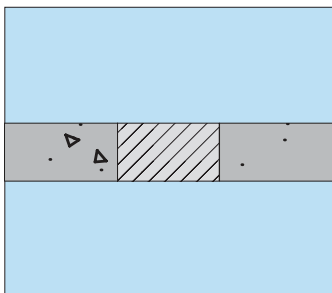
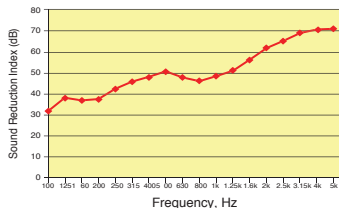
Firestopping at wall penetrations



Firestopping at floor penetrations



FirePro® Firestop Compound

Wall Structures	Specification	Sound Insulation (Rw dB)	Test Report Number Graph
	50mm PRE-CAST FirePro® Firestop Compound Slab.	39	L/2642/1 
	100mm PRE-CAST FirePro® Firestop Compound Slab. (2 x 50mm slabs)	46	L/2642/2 
	150mm PRE-CAST FirePro® Firestop Compound Slab. (3 x 50mm slabs)	51	L/2642/3 

FirePro® is the registered trademark of Wilhams Insulation Far East Sdn Bhd

WILHAMS

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