Firestop Compound

Tools required
• Paddle mixer
• Measuring jug or container
• Mixing bucket
• Trowel
• Float trowel
• Insulation knife or saw

Ancillary products
Tested ROCKWOOL Fire Stopping solution dependent upon penetrating service - see standard detail pack or Firepro App

Fixing and application
Floor installations
In floors, a permanent shuttering made from 50mm ROCKWOOL slab (minimum density 140kg/m³) 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 (See Figure 1).

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

1. ROCKWOOL Firestop Compound is used to seal around services penetrating a concrete floor and to provide a load bearing seal for maintenance traffic.

2. Brush and remove all loose material from the perimeters of the hole to be filled.

3. If the hole in the floor slab has an area in excess of 750mm x 750mm free of service penetrations, then it will have to be reinforced to become load bearing.

4. Cut and friction fit the shuttering panel between the edges of the floor and the services to form a lightweight permanent shutter.

5. Fit ROCKWOOL Intumescent Pipe Wraps around the plastic pipework and push down on to the top of the shutter. Ensure that the face of the Wrap can be seen from below.

6. Remove lagging on insulated pipework where it passes through the Firestop Compound and replace with ROCKWOOL Insulated Firesleeve.

7. Remove cable trunking lids and fill their interiors with ROCKWOOL Intumescent Pillows or ROCKWOOL Multi Cable Firestop.

8. Mix a bag of compound to 10 litres of water (3:1) by volume. Vary to suit site conditions.

9. Mix either by hand or by power mixer into a thick ‘porridgy’ trowelling grade.

10. 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.

11. Trowel ROCKWOOL Firestop Compound over the permanent shuttering to a depth of approximately 25mm.

12. Add the ROCKWOOL Firestop Compound to clean water in a ratio of 2.5 parts:1 part water (by volume).

13. Mix by hand or by power mixer into pouring grade.

14. Pour into void to the required thickness.

15. Smooth off the surface with a float trowel.
Wall installations

Reinforcing requires 12mm diameter steel bars either suspended on a 50mm x 50mm Dexion angle frame fixed to the sides of the walls (short span only) and concrete slab (short span only) at 200mm centres.

Alternatively, 12mm diameter steel reinforcing bars can be inserted into the slab/walls by drilling out holes (15mm diameter) and sealing them in with Firestop Compound.

The bars must be positioned about 30mm above the surface of the shuttering to provide adequate fire protection to the bars.

In wall applications (See Figure 2), Firestop Compound is mixed into a stiff consistency for trowelling into openings.

<table>
<thead>
<tr>
<th>Fire rating</th>
<th>Blockwork wall</th>
<th>Concrete floor</th>
<th>Loadbearing fire seals*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 hour</td>
<td>75mm/2 x 40mm</td>
<td>75mm</td>
<td>Up to 500mm x 500mm Clear of Services</td>
</tr>
<tr>
<td>2 hour</td>
<td>75mm/2 x 40mm</td>
<td>75mm</td>
<td>Up to 500mm x 500mm Clear of Services</td>
</tr>
<tr>
<td>3 hour</td>
<td>100mm/2 x 50mm</td>
<td>100mm</td>
<td>Up to 500mm x 500mm Clear of Services</td>
</tr>
<tr>
<td>4 hour</td>
<td>100mm/2 x 50mm</td>
<td>100mm</td>
<td>Up to 500mm x 500mm Clear of Services</td>
</tr>
</tbody>
</table>

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

Installation instructions – walls

1. Mix a bag of compound to 10 litres of water (3:1) by volume. Vary to suit site conditions.

2. Apply the compound using the specified shuttering method (See Figure 3).

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 the shuttering panel is set at the centre, repeat the process on the other side.

<table>
<thead>
<tr>
<th>Thickness of compound (mm)</th>
<th>Number of bags/m²</th>
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</thead>
<tbody>
<tr>
<td>75</td>
<td>3.15</td>
</tr>
<tr>
<td>100</td>
<td>4.20</td>
</tr>
<tr>
<td>150</td>
<td>6.30</td>
</tr>
</tbody>
</table>

The above calculations are approximate and based on 22kg bags. The coverage rates shown do not take into account the area of service penetrations within the aperture.

Health & safety

The mechanical effect of fibres in contact with skin may cause temporary itching.

- Cover exposed skin
- When working in unventilated area wear disposable face mask.
- Clean area using vacuum equipment.
- Waste should be disposed of according to local regulations.
- Rinse in cold water before washing.
- Ventilate working area if possible.
- Wear goggles when working overhead.