

KNAUF FIRE PROTECTION MORTAR

2



Knauf Fire Protection Mortar is a dry white powder consisting of inorganic compounds and perlite. When mixed with water the compounds form a highly thermally insulating fire seal to prevent the spread of fire and smoke through openings in fire rated walls and floors, including openings formed to accommodate building service penetrations.

Knauf Fire Protection Mortar expands by up to 1% by hydraulic action during curing ensuring a very tight seal around service penetrations and the surrounding construction.

Knauf Fire Protection Mortar has a rapid setting time and is easy to sand or drill after cure. The compound dries to an off-white colour which may be painted if required.

Method of delivery

- › Knauf Fire Protection Mortar - FPM Bags of 20 litres, article no. 651116

Installation Instructions

1. Ensure the faces of the aperture opening are free of dust and any other contaminants. The faces may be moistened for better adhesion.
2. If the mortar seal is required to be load bearing, please see instructions in the Technical Data Sheet.
3. Bare metal pipes passing through the seal must be protected against corrosion using a suitable primer/protection system.
4. When sealing drywalls the mortar should be flush with the surface of the wall on both sides.
5. When sealing masonry or concrete constructions, the seal can be positioned to either side of the construction or anywhere in between.
6. When installing Knauf Fire Protection Mortar in hollow floor slabs or boards, level the fire seal with the soffit side. Ensure there is sufficient thickness of concrete below the void for the depth of mortar. Where this is not the case, tubular voids should be filled with stone wool normally the same thickness as the depth of the floor slab. Alternatively, simply fire seal on both sides.
7. Install a stone wool shutter board where is necessary to achieve the required thickness of mortar (see the drawings on pages 2-19). Make sure that this achieves a very tight seal – any small openings should be sealed with Knauf FPA Acrylic.
8. Pour clean water into a suitable mixing vessel and add the mortar to obtain the required consistency. Mix steadily at low speed and ensure that any lumps of powder are fully dispersed. Always add the mortar to the water, do not reverse this mixing process. For different mix ratios and drying times, please refer to the Technical Data Sheet.
9. Once the desired consistency is achieved pour or trowel the mortar onto the shutter board making sure that it flows into all corners and around services. Apply a firm pressure to the mortar to eliminate any trapped air bubbles. Build up to the required depth.

Product description

Knauf Fire Protection Mortar - FPM is a dry white powder consisting of inorganic compounds and perlite.

When mixed with water, the compounds form a highly thermally insulating fire sealing compound to prevent the spread of fire and smoke through openings in fire rated walls and floors, including openings formed around building service penetrations.

Storage

No particular limit for unopened bags in dry places with storage temperatures between 5 °C and 30 °C.

Scope of application

Knauf Fire Protection Mortar - FPM expands approx. 1% by hydraulic action during curing ensuring a very tight seal around the service penetrations and the surrounding opening apertures. It will also maintain the acoustic design performance in walls and floors.

Knauf Fire Protection Mortar - FPM is easy to sand or drill. The compound dries to an off-white colour which may be painted.

Knauf Fire Protection Mortar is fully set within 1 hour, and will prevent the passage of fire and smoke for up to 4 hours.

Properties

- Classified in walls and floors of concrete, brick, gypsum etc
- Suitable for cables, bundled cables, cable racks, cable trays, steel, copper, alupex, plastic pipes and air ventilation ducts
- High degree of mechanical resistance; the seal is load bearing without reinforcement
- Nearly unlimited storage time
- No priming necessary prior to application in most building material substrates however metal services in contact with the seal must be corrosion protected
- Certified according to [ETA-18/0929](#)
- EAD 350454-00-1104

Emission data (indoor air quality)

| Compound | Emission rate after 3 days | Emission rate after 4 weeks |
|--------------|----------------------------|-----------------------------|
| TVOC | 12 µg/m ³ | < 5 µg/m ³ |
| TSVOC | n.d. | < 5 µg/m ³ |
| VOC w/o NIK | n.d. | < 5 µg/m ³ |
| R Value | n.d. | < 1 |
| Formaldehyde | 7.1 µg/m ³ | n.d. |
| Acetaldehyde | < 3 µg/m ³ | n.d. |
| Sum for+ace | < 0.006 ppm | n.d. |
| Carcinogenic | < 1 µg/m ³ | < 1 µg/m ³ |

n.d. means not detected

Sound insulation

| Description | Sound reduction |
|---|-----------------|
| Single sided cast ≥ 50 mm on stone wool board | 64 dB |
| Single sided cast ≥ 100 mm without board | 64 dB |
| Double sided cast ≥ 25 mm on stone wool board | 64 dB |
| Double sided cast ≥ 50 mm without board | 64 dB |

FPM has been tested at BM Trada (UKAS accredited); according to EN ISO 10140-2:2010.

Safety

Please observe the EC Safety Data Sheet.