KNAUF FIRE PROTECTION COATING

Knauf Fire Protection Coating - FPC spray grade, is an ablative sealant coating designed to enhance, seal and fire protect mineral fibres.

Mineral fibres coated with Knauf Fire Protection Coating are designed to prevent the spread of fire and smoke through openings in fire rated walls and floors, also where openings are formed to allow the installation of multiple building services. The system will also maintain the acoustic design performance.

Properties:

- Simple and very quick to install
- Easy to retrofit additional building services after installation
- Permanently flexible - will accommodate movements during fire and smaller movements in the construction it has been fitted within
- Suitable for most surfaces, including concrete, bricks, masonry, steel, wood, gypsum, glass, plastics and most non-porous surfaces
- May be used in unlimited lengths in walls with heights up to 1200 mm and in floors with widths up to 120 mm

Supporting constructions:

Flexible walls:

The wall must have a minimum thickness of 100 mm and comprise steel studs or timber studs*) lined on both faces with minimum 2 layers of 12.5 mm thick boards.

Rigid walls:

The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m^3.

Rigid floors:

The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m^3.

*) Timber studs: no part of the penetration seal may be closer than 100mm to a stud, and minimum 100mm of insulation of class A1 or A2 according to EN 13501-1 must be provided within the cavity between the penetration seal and the stud.

Installation Instructions

1. Before installing the stonewool core, please ensure that the surface of all surrounding constructions is free from all loose contaminants, dust and grease. The stonewool should be dry and sound, and any large loose pieces should be brushed off before spraying.
2. Knauf Fire Protection Coating is water based, so in cases where corrosion protection is a problem, some metals may require a barrier between the seal and the surface prior to this installation.
3. Select the type of stonewool core and friction fit into the seal according to the fire resistance table on page 1. To secure high density stonewool boards, please seal between the stonewool and the surface of all surrounding constructions on both sides with Knauf FPA Acrylic which will act as an adhesive.
4. When fitting stonewool boards into gypsum walls the side of the boards should be flush with the surface of the gypsum on both sides.
5. When fitting double layer stonewool boards in masonry or concrete constructions, the boards should be flush with the surface of the construction on both sides to maximize the fire resistance. If this is not possible, there should be an air gap of at least 30mm between the boards.
6. When fitting single layer stonewool in masonry or concrete constructions, it can be positioned to either side of the construction or anywhere in between.
7. When installing stonewool in hollow floor slabs, fire seals should be installed from the soffit side of the floor assuming there is sufficient thickness of concrete below the void. 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.
8. Spray apply Knauf Fire Protection Coating to the stonewool according to the fire resistance table on page 1. Spraying pressures will depend on the type of pump and nozzle used approximately 1700 to 2300 psi using a 25 to 35 thou' tip. Apply the coating in smooth strokes and with the minimum of overspray to achieve an even film thickness and consistent drying across the stonewool.
9. The required wet film thickness (WFT) is usually achieved when the surface is to a satisfactory proper white finish when dry.
10. Overspray can increase drying times. Drying times will be dependent on film thickness, ambient temperature and humidity and may be reduced by using drying ovens and/or fans.
11. Knauf Fire Protection Coating can be over-painted with most emulsion or alkyd (gloss) paints.

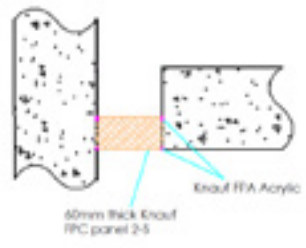
LINEAR JOINT AND GAP SEALS | RIGID FLOOR CONSTRUCTIONS

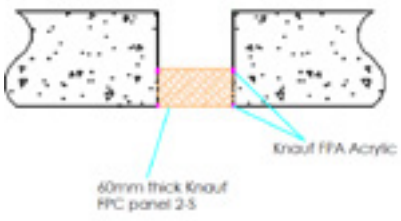
WITH FLOOR THICKNESS OF MINIMUM 150 MM

› Linear joint or gap seal, between floor slabs or between floor slab and wall with coating to the both faces of seal

Joint Seal: 60mm thick Knauf FPC panel 60 2-S friction fitted at any position fully within the cavity and sealed at the joint and along the top and bottom edges with Knauf FPA Acrylic.

Substrate	Depth (mm)	Backing	Classification
masonry/ concrete	1 mm WFT min. both sides	60 mm stone wool, mineral fibre batt	E 240 – H – X – F – W30-120 EI 120 – H – X – F – W30-120

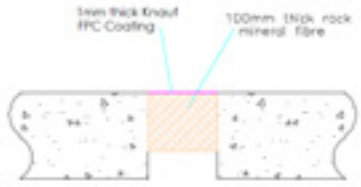


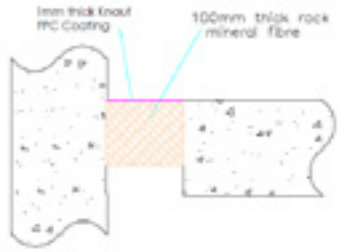


› Linear joint or gap seal, between floor slabs or between floor slab and wall with coating to the top face of seal only

Joint Seal: 100mm thick Stone wool, mineral fibre insulation friction fitted at least 50 mm above the soffit and coated on the top face with Knauf FPC Coating.

Substrate	Depth (mm)	Backing	Classification
masonry/ concrete	1 mm WFT min. both sides	100 mm stone wool, mineral fibre min. 33 kg/m³	E 240 – H – X – F – W120 EI 180 – H – X – F – W120





› Linear joint or gap seal, between the head of walls (min. 150 mm thick) and the soffit of floor slabs or in walls (min. 150 mm thick) with coating to both faces

Joint Seal: 100mm thick Stone wool, mineral fibre insulation compression fitted to either face of the wall or at any position in between and coated on both faces with Knauf FPC Coating.

Substrate	Depth (mm)	Backing	Classification
masonry/ concrete	1.2 mm WFT min. both faces overlapped by 15 mm onto wall surface	100 mm stone wool, mineral fibre min. 35 kg/m³, compressed into gap by 40%	E 240 – T – X – F – W120 EI 180 – T – X – F – W120