

# KNAUF FIRE PROTECTION GRAPHITE

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Knauf Fire Protection Graphite is a high specification formulation designed to prevent the spread of fire, smoke and gases through openings in fire rated walls and floors. Knauf Fire Protection Graphite expands when it is subjected to fire and closes openings around penetrations when any combustible or low temperature melting materials have burnt away.

Knauf Fire Protection Graphite is designed to fire seal difficult services which traditional fire rated mastics do not achieve such as large plastic pipes.

Knauf Fire Protection Graphite can be used with a suitable filling material, i.e. stone wool or backing material in order to ensure correct width to depth ratio and to reduce the shrinking of the sealant during curing. Minimum depth and maximum width of the joints are included in the installation instructions. Thermal activation takes place at 150°C when the material will expand (intumesce) to prevent the passage of fire and smoke for periods up to 4 hours.

## Method of delivery

- › Knauf Fire Protection Graphite - FPG 310 ml cartridge, article no. 651094

**Installation Instructions**

1. Before installing Knauf Fire Protection Graphite ensure that the surface of all service penetrations and surrounding construction is free from all loose contaminants, dust and grease.
2. As Knauf Fire Protection Graphite is water based, in cases where corrosion protection is a problem; some metals may require a barrier between the sealant and the metal surface prior to this installation.
3. When installing any backing material, cut this slightly oversize and insert into the gap ensuring a tight friction fit. Ensure correct depth is achieved.
4. Fill the gap or joint with Knauf Fire Protection Graphite to the required depth. Refer to the drawings on following pages for guidance on joint design/dimensions.
5. Apply the sealant generously avoiding air bubbles. Finish the bead with a moist spatula or pallet knife. Avoid excessive tooling/smoothing as this may make the seal surface wet and soft.
6. Knauf Fire Protection Graphite can be over-painted with most emulsion or alkyd (gloss) paints.

**Product description**

Knauf Fire Protection Graphite - FPG is a fire rated single component partly flexible high pressure sealant specially designed for fire sealing. The sealant expands during heating and efficiently seals off against fire, smoke and gas.

**Storage**

Store dry in the original packaging.

Storage temperature: between 5°C and 30°C.

Storage stability: 12 months stored in unopened cartridges, see imprint on cartridge for expiry date.

**Scope of application**

Knauf Fire Protection Graphite - FPG is a high specification formulation designed to prevent the spread of fire, smoke and gases through openings in fire rated walls and floors. It expands when it is subjected to fire and closes openings around penetrations when any combustible or low temperature melting materials have burnt away.

Knauf Fire Protection Graphite - FPG is designed to fire seal difficult services which traditional fire rated mastics do not achieve such as large plastic pipes.

Thermal activation takes place at 150°C when the material will expand and prevent the passage of fire and smoke for up to 4 hours.

**Properties**

- Classified in most constructions for plastic pipes and cables
- Easy to apply
- Movement capability up to 12.5%
- No priming necessary for application to most materials
- 30 years working life
- Minimum 12 months storage time
- High sound insulation
- Certified according to [ETA-18/0922](#)
- EAD 350454-00-1104

**Emission data (indoor air quality)**

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	41 µg/m <sup>3</sup>	< 5 µg/m <sup>3</sup>
TSVOC	n.d.	< 5 µg/m <sup>3</sup>
VOC w/o NIK	n.d.	< 5 µg/m <sup>3</sup>
R Value	n.d.	< 1
Formaldehyde	< 3 µg/m <sup>3</sup>	n.d.
Acetaldehyde	< 3 µg/m <sup>3</sup>	n.d.
Sum for+ace	< 0.002 ppm	n.d.
Carcinogenic	(< 1 µg/m <sup>3</sup> )	n.d.

n.d. means not detected

**Sound insulation**

Description	Sound reduction
Single sided seal ≥ 25mm depth	Rw 53 dB
Double sided seal ≥25mm depth	Rw >53 dB

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

Usage of any backing material is optional, due to the tests being conducted with sealant only.

**Safety**

Please observe the EC Safety Data Sheet.