



FIRE INTUMESCENT SEALANT

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GENERAL PRODUCT DESCRIPTION

GRAFT® FIRE INTUMESCENT SEALANT is designed to prevent the spread of fire and smoke through joints and openings in fire rated walls and floors including openings formed around building service penetrations. It will also maintain the acoustic design performance in walls and floors.

Acrylic cures when it is subjected to atmospheric conditions, however it will retain a degree of elasticity for joint movement. Under fire exposure, GRAFT® FIRE INTUMESCENT SEALANT creates a robust fire seal by the formation of a durable intumescent char.

GRAFT® FIRE INTUMESCENT SEALANT can be used with a suitable filling material, i.e. stone wool or GRAFT® Backing material in order to secure 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 about 180°C when the material will expand (intumesce) and prevent the passage of fire and smoke for periods up to and beyond 4 hours.

PROPERTIES

- High end formula, certified Worldwide.
- Classified for fire sealing all types of constructions and building service penetrations.
- Very high sound insulation.
- Low emissions - environmentally and user friendly.
- Simple to apply with a smooth surface finish.
- Permanently flexible – will accommodate movement up to 7.5%.
- No priming necessary for application to most materials
- Suitable for most surfaces, included concrete, bricks, Leca, steel, gypsum, glass, plastics and most non-porous surfaces.
- Hardens quickly, tack free after 1 hour (the fire performance specification of the joint filler has been derived when the joint filler has been let to cure for a month).
- Minimum 12 months storage time (under correct conditions).
- 30 years working life.



EMISSION DATA (indoor air quality)

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	83 µg/m³	< 5 µg/m³
TSVOC	n.d	n.d (< 5 µg/m³)
VOC w/o NIK	n.d	n.d (< 5 µg/m³)
R Value	n.d	<1
Formaldehyde	< 0,003 mg/m²h	< 0,003 mg/m²h
Acetaldehyde	< 0,003 mg/m²h	< 0,003 mg/m²h
Sum for+ace	< 0.002 ppm	n.d.
Carcinogenic	< 1 µg/m³	< 1 µg/m³
n.d means not detected		

GRAFT® FIRE INTUMESCENT SEALANT complies with the requirements of GEV and the results correspond to the EMICODE emission class EC 1^{PLUS} which is the best possible environmental and indoor hygiene health protection mark.

Tested by Eurofins Product Testing, report number G12870B.

SOUND INSULATION

Description	Sound Reduction
Single sided seal ≥ 12mm depth	62dB

GRAFT® FIRE INTUMESCENT SEALANT 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.

Remark: As a part of our policy of on-going product development and testing, we reserve the right to modify, alter or change product specifications without giving notice. All information contained in this document is given in good faith and is provided for guidance only. Any drawings provided are for illustrative purposes only. As Polyseam has no control over the methods or competence of installation and of prevailing site conditions, no warranties, expressed or implied, are intended to be given as to the actual performance of the product mentioned or referred to herein and no liability whatsoever will be accepted for any loss, damage or injury arising from the use of the information given.



FIRE INTUMESCENT SEALANT

TECHNICAL DATA

Condition	Ready for use, acrylic based filler
Specific Gravity	1.56 - 1.60
Flash point	None
Reaction to Fire	Class D-s1, d1
Non-Sticky	Max. 75 minutes
Filming foaming	Max. 25 minutes
Totally hardened	3 - 5 days depending on thickness and temp
Flexibility	7.5%
Durability Service	Class Z ₂
BWR 3	Use Category IA1, S/W3
Thermal Conduct	0.845 W/mK (+/-3%) @20mm depth
Storage	At least 12 months stored in unopened cartridges. To be stored in temperatures between 5°C and 30°C
Working Life	30 years
Service Temp	-20 to +70°C
Application Temp	+5 to +30°C
Compatibility	Suitable for use with most materials, should not be used with direct contact with bituminous materials
Limitations	Should not be used in permanently damp areas or in joints with high movement
Classification	CE-marked - Sealant for fire rated joints and penetrations class EI 240
Colour	White
Packaging	Box containing 25 cartridges each 310 ml Box containing 12 foil packed each 600 ml Pallets 310 ml: 64 boxes per pallet equals 1600 pcs Pallets 600 ml: 91 boxes per pallet equals 1092 pcs

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