

TECHNICAL DATA SHEET

FLAMEBAR Intumescent Acrylic Sealant

PRODUCT DESCRIPTION

FLAMEBAR Intumescent Acrylic Sealant is a one part, ready to use, intumescent acrylic sealant designed for FLAMEBAR BW11 and BW18 fire rated ductwork systems. Intumescent qualities enable the material to swell under heat conditions, producing a fire and smoke resistant seal.

FLAMEBAR Intumescent Acrylic Sealant has been tested in accordance with BS 476 part 22, 24 and BS EN 1366-4, for FLAMEBAR BW11 and BW18 fire rated ducts to BS EN 1366-1, 8 and 9, in a number of different configurations. The results of these tests are assessed and classified in accordance with BRE and BS EN 13501-2 achieving 4 hour integrity and insulation rating for a range of linear and penetration seals.

FLAMEBAR Intumescent Acrylic Sealant does not emit halogenated by-products under fire conditions and contains no raw materials known to have an oestrogenic effect in the environment. It has excellent adhesion to a wide variety of common building substrates and will not harden or crack with age.

Additionally, it is used for joints in compartment walls and floors, fire sealing expansion joints, seals around lightweight partitioning and around fire rated doors and in service penetration seals, where integrity of fire walls or partitions needs to be maintained.



PHYSICAL PROPERTIES

DESCRIPTION	A one part water-based acrylic emulsion
SPECIFIC GRAVITY	1.62 – 1.66
COLOUR	White
PH	7.7 – 8.5

CURE TIME	3 to 5 days
SHORE (A) HARDNESS	25 – 30
MOVEMENT CAPABILITY	Up to 7.5 % of original joint size
APPLICATION TEMPERATURE	+5°C to +40°C
STORAGE TEMPERATURE	+5°C to + 60°C
SHELF LIFE	18 months when unopened and stored in a cool and dry environment
COVERAGE	310ml tube is sufficient to produce approximately 3m seal using a 10mm bead
FIRE PERFORMANCE	<p>Tested for over 4 hours rating - Stability, Integrity & Insulation.</p> <p>Tested in accordance with BS 476 part 22, 24, ISO 6944 and BS EN 1366-4, fire resistance tests for linear joint seals, for FLAMEBAR BW11 and BW18 fire rated ducts to BS EN 1366-1, 8 and 9</p> <p>Satisfies the performance requirements for the following periods. (see performance table)</p>

PERFORMANCE

FLAMEBAR INTUMESCENT ACRYLIC SEALANT: GAPS IN WALLS								
Substrate	Minimum Substrate Thickness (mm)	Maximum Gap Size (mm)	Seal Position	Minimum Seal Depth (mm)	Backing Material	Minimum Backing Depth (mm)	Fire Resistance (mins.)	
							E	EI
Masonry/Concrete	150	20	Both Sides	10	PE	N/A	240	180
Masonry/Concrete	150	30	Both Sides	15	PE	N/A	240	180
Masonry/Concrete	150	40	Both Sides	20	PE	N/A	240	240
Masonry/Concrete	100	30	Both Sides	15	PE	N/A	240	120
Partition to Partition	100	25	Both Sides	10	Stone Mineral Wool*	80	120	120
Masonry/Concrete to Steel	150	30	Both Sides	10	PE	N/A	240	90
Masonry/Concrete to Steel	150	50	Both Sides	25	Stone Mineral Wool***	50	240	240
Masonry/Concrete to Timber	150	30	Both Sides	20	PE	N/A	120	120
Masonry/Concrete to Timber	150	30	Both Sides	15	Stone Mineral Wool*	120	180	180
Masonry/Concrete to Timber	150	50	Both Sides	25	Stone Mineral Wool***	50	120	120
Masonry/Concrete	150	100	Both Sides	10	Stone Mineral Wool*	130	240	240

FLAMEBAR INTUMESCENT ACRYLIC SEALANT: HORIZONTAL GAPS IN FLOORS								
Substrate	Minimum Substrate Thickness (mm)	Maximum Gap Size (mm)	Seal Position	Minimum Seal Depth (mm)	Backing Material	Minimum Backing Depth (mm)	Fire Resistance (mins.)	
							E	EI
Masonry/Concrete	150	10	Non-Fire Side	10	PE	N/A	240	120
Masonry/Concrete	150	20	Non-Fire Side	10	PE	N/A	240	60
Masonry/Concrete	150	30	Non-Fire Side	15	PE	N/A	90	45
Masonry/Concrete	150	30	Non-Fire Side	10	Stone Mineral Wool*	25	240	180
Masonry/Concrete	150	30	Both Sides	10	PE	N/A	240	180
Masonry/Concrete to Steel	150	30	Both Sides	10	PE	N/A	240	90

- * Denotes 90 kg/m3
- ** Denotes 110 kg/m3
- PE Denotes Polyethylene Rod

APPLICATION

This product is for professional use only. The applicators and operators shall be trained and certified by Firespray International and will apply the system according to our technical standards and method statement.

Before applying the FLAMEBAR Intumescent Acrylic Sealant, all surfaces must be free from oil, grease, dirt, dust or other materials or conditions likely to impair adhesion.

Remove tip of cartridge and cut nozzle to desired size.

Gun the sealant into the joint or gap. With a smooth spatula or stick dipped in clean water (do not use soap), smooth the surface of the sealant to ensure a good bond is made between substrates.

LIMITATIONS

FLAMEBAR Intumescent Acrylic Sealant is not suitable in joints where movement exceeds + or - 7.5 % of joint width, or in external joints. Do not use against substrates that bleed oils, plasticisers or solvents.

APPROVALS and CERTIFICATES

FLAMEBAR BW11 and BW18 fire rated ductwork system, including FLAMEBAR BW11 and BW18 coating, FLAMEBAR sealant and FLAMEBAR gasket, has been successfully tested for international use under cellulosic fire conditions in excess of 4 hours and 2 hours duration respectfully. The completed system has been tested and accredited by the Building Research Establishment (BRE) Global UK to BS 476 part 24. It has also been tested to EN 1366 and is classified by UL and ISO 6944. Additional certificates and approvals may be available on request.

HEALTH and SAFETY PRECAUTIONS

Provided that the correct standards of hygiene are maintained and safe working practice followed, there are no known hazards in the handling of FLAMEBAR Intumescent Acrylic Sealant. Recommended safety precautions to follow are:

1. Avoid skin and eye contact and inhalation. Wearing of gloves, goggles, face mask and chemical protective clothing recommended for applications. Barrier cream can be used when the exposure is prolonged.
2. Provide good ventilation and call a doctor if feeling unwell. Remove person to fresh air and keep comfortable.
3. If product comes into contact with skin, wash with water and soap or a proprietary hand cleanser. Seek medical attention if irritation persists.
4. In case of eye contamination, rinse eyes continuously with clean water. Remove contact lenses if present and easy to do so. Continue rinsing. Seek medical attention if irritation persists.
5. If swallowed, rinse mouth and throat with water. Dilute stomach contents with water. Seek immediate medical attention.
6. Do not eat, drink or smoke in the work place. Always wash hands and take off contaminated clothing during breaks and after work.
7. In case of fire, exercise caution, keep upwind and evacuate area. Wear breathing apparatus. Provide fresh air to victims of smoke inhalation and seek immediate medical attention.

A detailed Health and Safety Data Sheet is available on request.

DISCLAIMER

This Technical Data Sheet supersedes those previously issued.

CONS-FSI-ALL-GEN-BRO-09 rev B

Date of issue: 27 August 2021

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