

# fireshield acoustic intumescent acrylic

## Technical Data Sheet

### Description

Fireshield Acoustic Intumescent Acrylic is a halogen free, polymer emulsion-based sealant that swells when subjected to temperatures in excess of 125°C and forms a char coat that restricts the passage of smoke and fire. It is easily applied and dries to a flexible and smooth surfaced material which is readily over paintable. It has excellent adhesion to a wide range of substrates and will not harden or crack with age.

### Colours

White or grey

### Packaging Options

310ml cartridge  
900ml jumbo cartridge  
600ml foil sausage

### Limitations

Fireshield Acoustic Intumescent Acrylic is not suitable in joints where movement exceeds  $\pm 7.5\%$  of joint width, or in external joints.

### Specification Compliance

- BS EN 1366-3: 2004 & BS EN 1366-4: 2006 Tested at Bodycote Warrington Fire, report No. 173658A achieving 4 hour integrity and insulation rating for a range of linear and penetration seals.
- BS 476 Part 20 at Warrington Fire Research achieving a 4 hour fire rating (integrity) for a range of vertical and horizontal joints up to 35mm wide between various non-combustible construction materials. A 1 hour fire rating (integrity) was achieved for a range of vertical joints up to 25mm wide between combustible materials (timber)[see Appendix A].
- BS EN ISO 10140-2: 2010 Measurement of Airborne Sound Insulation of Building elements. University of Salford reports 2612 - 76, 77, 79 - 81. The sealant maintained the integrity of a plasterboard partition wall with a Sound Reduction Index of 55 dB.
- Classification of fire resistance data from test report FIRES-CR-199-16AUPE in accordance with EN 13501-2:2007+A1:2009 when tested as penetration seals around metal pipes and cables according to EN 1366-3 in a flexible wall.
- VOC test report classification - M1 and Indoor Air Comfort GOLD®



### Usage/Purpose

Fireshield Acoustic Intumescent Acrylic forms a fire and smoke seal in joints up to 35mm wide without slumping. It is ideal for joint sealing in and around internal partitions and for sealing between door frames and fire-rated walls (see Appendix A).

### Important Notes

- A sealant depth of at least 8mm is recommended
- If the sealant is overpainted, building regulations may require a fire-resistant coating

## Application Instructions

To achieve a high quality joint, clean all surfaces, remove dust and ensure surfaces are dry. Non-porous surfaces should be degreased using a suitable degreasing agent. Highly porous surfaces should be sealed with a suitable primer. Apply masking tape to each side of joint and gun sealant firmly into joint, smoothing off with a wetted spatula. Masking tape should be removed within 10 minutes of application.

## Technical Details

Properties	Result
movement accomodation	± 7.5 % conforms to ISO 11600 7.5P
skinning time	15 mins to 1 hour depending on conditions
cure time	5 to 15 days for 15mm x 20mm bead
hardness shore A	40-50
tensile strength (100%)	0.2 MPa
temperature resistance	-20°C to +60°C (intermittant)
paintability	with most paints
shore D hardness	+5°C to +40°C
cleaning	uncured sealant with water
shelf life	min. 18 months when stored in unopened containers as recommended
specific gravity	1.60 - 1.68

## Storage

Store in cool dry conditions. PROTECT FROM FROST.

## Coverage

A 310ml tube is sufficient to produce a joint approx. 1m long of 20mm x 15mm

## Health & Safety

Fireshield Acoustic Intumescent Acrylic presents no known health hazards when used as recommended. Consult MSDS for further information. Care should be taken during use and storage to avoid contact with foodstuffs, skin, eyes and mouth. If accidentally ingested, seek medical attention do not induce vomiting and give copious amounts of water to drink. KEEP AWAY FROM CHILDREN AND ANIMALS.

## Product Range

Product Code	Description	Pack Type	Colour	Size
19500090	Fireshield Acoustic Intumescent Acrylic	cartridge	white	310ml
19500100	Fireshield Acoustic Intumescent Acrylic	cartridge	grey	310ml
19500125	Fireshield 600 Acoustic Intumescent Acrylic	foil sausage	white	600ml
19500190	Fireshield 900 Acoustic Intumescent Acrylic	jumbo cartridge	white	900ml

## Appendix A

To simulate a test of the fire resistance of Fireshield Acoustic Intumescent Acrylic when used to seal between certain types of timber fire door frame and supporting wall, the sealant was tested according to BS 476 Part 20 in linear gaps between sections of timber fixed in a solid wall. The performance data, which is shown below, is taken from Warrington Fire test report 59021 and assessed in BRE report P113222-1000.

Substrate	Backing material	Seal location	Gap width range (mm)	Sealant depth (mm)	Integrity & insulation
<b>SINGLE SEAL VERTICAL JOINTS IN 100mm TIMBER SOLID WALL</b>					
hardwood/hardwood	PE foam rod	either face	≤ 25	25	EI30
hardwood/hardwood	PE foam rod	either face	12 to 25	35	EI60
softwood/softwood	PE foam rod	either face	≤ 25	35	EI60
<b>SINGLE SEAL HORIZONTAL JOINTS IN 100mm TIMBER SOLID WALL</b>					
hardwood/hardwood	PE foam rod	either face	≤ 25	25	EI60
softwood/softwood	PE foam rod	either face	≤ 25	35	EI60
<b>DOUBLE SEAL VERTICAL JOINTS IN 100mm TIMBER SOLID WALL</b>					
hardwood/hardwood	PE foam rod	both faces	≤ 25	12.5	EI30
hardwood/hardwood	PE foam rod	both faces	12 to 25	17.5	EI60
softwood/softwood	PE foam rod	both faces	≤ 25	17.5	EI60
<b>DOUBLE SEAL HORIZONTAL JOINTS IN 100mm TIMBER SOLID WALL</b>					
hardwood/hardwood	PE foam rod	both faces	≤ 25	12.5	EI60
softwood/softwood	PE foam rod	both faces	≤ 25	17.5	EI60

### Important Note

When installing fire doors as part of passive fire protection it is most important to check the specification of the fire door rating to ensure the perimeter frame seal gives the same degree of protection and also the recommendation of the fire door manufacturer and/or the specifier for the detail of the perimeter frame sealing method.

All product specifications and data are subject to change without notice.

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