

Sound Insulation

Description	Sound reduction
Single sided seal ≥12mm depth	Rw 62 dB
Double sided seal ≥12mm depth	Rw >62 dB

Protecta® FR Acrylic - tested at EXOVA 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.

Pipe End Configurations

When testing pipes, one can choose not to cap (or close) the pipe, or cap the pipe inside the furnace, or outside the furnace, or on both sides. The configuration chosen depends on the intended application of the pipe and/or the installation environment.

The code defining if a pipe is capped is stated after the fire classification. For instance, EI 60 C/U which means the pipe was capped inside the furnace, and uncapped outside the furnace. The test configuration defines the approvals possible.

Our engineering judgment based on EN 1366-3:2022 are:

Intended use of pipe	Pipe end condition ³⁾	
Rainwater pipe, plastic	At drainage	U/U ¹⁾
	Not at drainage	C/C ²⁾
Drainage or sewage pipe, plastic	Ventilated drain	C/U ¹⁾
	Unventilated drain	U/C ²⁾
	Drain w/water trap	U/C ¹⁾
	Not at drainage	C/C ²⁾
Metal or plastic pipe in closed system (water, gas, air etc.)	C/C ¹⁾	
Metal pipe in ventilated system (sewage etc.)	U/C ¹⁾	
Flue gas recovery system pipe, plastic	U/C ¹⁾	
Pipe with open ends and ≥ 50cm length on both sides, plastic	U/U ²⁾	
Waste disposal shaft pipe, metal	U/C ²⁾	

¹⁾ Suggested in EN 1366-3:2022. ²⁾ Polyseam's judgment based on tests.

³⁾ U/U classified fire seals cover C/U, U/C and C/C. C/U classified fire seals cover U/C and C/C. U/C classified fire seals cover C/C.

Analysis of cPVC Pipes e.g. BlazeMaster

Analysed using Fourier Transform Infrared (FTIR) Spectroscopy; examination of the sealant contact regions of the cPVC pipe after removal of the sealant showed no evidence of visible discolouration or changes at the pipe surface.

Protecta® FR Acrylic has also been tested for chemical resistance of a sealant when applied to a cPVC pipe. The sealant does not affect cPVC pipes; the tests showed no difference between the control and exposed results at Yield.

Tested by Intertek, report numbers IWTN/W000009628ARL001 and WTN/W000009628RLM001.

Air Permeability

Positive Pressure (Pa)	Leakage (m ³ /h/m ²)	Negative Pressure (Pa)	Leakage (m ³ /h/m ²)
25	0.00	25	0.00
50	0.00	50	0.00
100	0.00	100	0.00
200	0.00	200	0.00
300	0.00	300	0.56
450	1.11	450	1.67
600	6.94	600	6.11

Protecta® FR Acrylic - tested at Warringtonfire Testing and Certification Ltd (UKAS accredited); according to EN 1026: 2016.

Technical Data

Condition	Ready for use, acrylic based filler
Specific gravity	1.58 – 1.64
Flash point	None
Reaction to fire	B – s1, d0
Air permeability	Air, smoke and gas tight tested to EN 1026: 2016
Expansion in fire	1 : 2-3
Non-sticky	Max. 75 minutes
Film forming	Max. 25 minutes
Totally hardened	3 to 5 days depending on thickness and temperature
Flexibility	12.5% in mortar/concrete/masonry to EN ISO 9046
Durability	Z ₂ intended for use in internal conditions with humidity classes other than Z ₁ , excluding temperatures below 0 °C
BWR 3	Use category IA1, S/W3
Electrical conductivity	None (tested)
Thermal conduct.	0.845 W/mK (+/- 3%) @ 20mm depth
Storage	24 months if stored in unopened cartridges and temperatures between 10 °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, but should not be used in direct contact with bituminous materials
Limitations	Should not be used in permanently damp areas or in joints with high movement
Standard colours	Standard white, pure white, grey or red. Different batches may have minor colour deviations.
Colour codes	White: RAL 9002 / NCS S1002-Y Grey: NCS: S5500-N
Packaging	Box containing 25 foils/cartridges each 300/310 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

Test Standards

This Technical Data Sheet and the Installation Instructions are based on the product's ETAs and UKTAs issued in accordance with regulation (EU) No 305/2011 on the basis of EAD 350454-00-1104, September 2017, tested to EN 1366-3, -4 & -12 in conjunction with EN 1363-1. The product hold the following approval marks; CE-mark for Europe, UKCA-mark for UK, UL-EU Certificate Internationally, UAE Certificate of Compliance & AS assessment for Australia and New Zealand.