PROTECTA® FR FOAM

TECHNICAL DATA SHEET

General Product Description

Protecta® FR Foam is designed to maintain the fire resistance in walls by filling linear gaps in concrete or masonry walls.

Supplied as a single component polyurethane foam, Protecta® FR Foam cures by moisture absorption. Boasting excellent adhesion to most materials used in construction with high durability during service once cured.

Fire Classification - Table

MASONRY OR CONCRETE WALLS ≥ 150MM

Joint type Max width	Installation Min seal depth	Classification
Horizontal joints ≤ 20mm	1 x 150mm	EI 60
Vertical joints ≤ 10mm	1 x 150mm	EI 180
Vertical joints ≤ 20mm	1 x 150mm	EI 60
Vertical joints ≤ 20mm [1)]	2 x 25mm	EI 240
Joints ≤ 20mm surrounding timber frames	1 x 150mm	EI 120
Joints ≤ 20mm surrounding steel frames	1 x 150mm	EI 30

MASONRY OR CONCRETE WALLS ≥ 200MM

Joint type Max width	Installation Min seal depth	Classification
Horizontal joints ≤ 10mm	1 x 200mm	EI 120
Horizontal joints ≤ 20mm	1 x 200mm	EI 90
Horizontal joints ≤ 20mm [2)]	1 x 200mm	EI 120

[1)] The FR Foam must be applied double sided onto a 100mm stone-wool backing ≥ 87 kg/m^3.
[2)] Joints towards timber frames.

Sound Insulation

Description	Sound reduction
Single sided seal ≥ 50mm depth	Rw 61 dB

Same or higher sound reduction will be achieved with greater depth. The sound insulation value is only valid for the foam and not for other elements in the building construction. The test report is available upon request.

General Guide

Rigid walls must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m^3. The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

Test Standards

This Technical Data Sheet and the Installation Instructions are based on the product's European Technical Assessment issued in accordance with regulation (EU) No 305/2011 on the basis of EAD 350141-00-1106, tested to EN 1366-4 in conjunction with EN 1363-1. The product hold the following approval marks; CE-mark for Europe.



Installation

1. The foam is hazardous and the propellant is extremely flammable. Please read the Safety Data Sheet and use the recommended protective measurements for transport, storage and use of this product.
2. Remove all loose debris in the seal, any contaminants such as grease and oil from the surfaces to be sealed.
3. Moisture is necessary to ensure a fast and even curing of the foam. Spray surfaces with water to moisten them when foam is applied (a spray bottle for plants can be used). This is especially important in warm and dry areas.
4. The tin must be shaken well (approx. 15-20 times) before use. Attach the gun to the tin but do not overtighten or activate the release valve.
5. The tin should be turned upside down for foam application so that the gun is under the tin.
6. Depending on the joint orientation and size, best results will be obtained by building up multiple layers from the bottom, thus allowing each individual layer to part cure. Do not attempt to insert excessive wet foam, as rapid expansion will cause wasteful overspill of curing foam in the joint and may apply pressure to soft materials and push them out of position. Foam extrusion can be controlled by depressing the trigger on the gun more or less, reducing the pressure on the valve.
7. Once the gap or joint is completely filled, excessive overspill should be removed by cutting with a knife or similar.
8. After sealing, the foam should be covered by a substrate resistant to mechanical damage and UV-radiation.

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.

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Emission Data (indoor air quality)

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	< 5 µg/m³	< 5 µg/m³
TSVOC	< 5 µg/m³	< 5 µg/m³
VOC w/o NIK	< 5 µg/m³	< 5 µg/m³
R Value	< 1	< 1
Formaldehyde	< 3 µg/m³	< 3 µg/m³
Acetaldehyde	< 3 µg/m³	< 3 µg/m³
Sum for+ace	< 5 ppb	-
Carcinogenic	< 1 µg/m³	< 1 µg/m³

Regulation or Protocol	Conclusion
French VOC Regulation	A+
ABG / AgBB to the guidelines of DIBt	Pass
Belgian Regulation	Pass
EMICODE	EC 1 PLUS
Indoor Air Comfort GOLD®	Pass
BREEAM-NOR	Pass
LEED v4.1	Compliant

Protecta® FR Foam has been tested by Eurofins Product Testing; reports available upon request.

Technical Data

Condition	Ready for use, polyurethane foam
Reaction to fire	Class E
Dimensional stability	+/- 5%
Non-sticky	Max. 10 minutes
Cutting time	Max. 40 minutes
Curing time	Approx. 12 hours
Volume	Up to 48 LTR foam from each can
Durability	Y_2 - Intended for use at temperatures below 0°C, but with no exposure to rain nor UV. Includes lower classes.
Storage	12 months stored in unopened cans. To be stored upraised in dry environments preferably between 10 °C and 20 °C. Do not store in direct sunlight
Working life	10 years
Application temp.	+ 5 to + 35 °C
Temp. after full cure	- 40 to + 80 °C
Classification	CE-marked - Fire Stopping and Sealing Product: Linear Joint and Gap Seals
Colour	Pink
Packaging	Box containing 12 cans, each 750 ml

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