Northern Fire Engineering Ltd

Technical Data Sheet

Protecta FR Expanding Foam

Product Description

Protecta FR Expanding Foam is a versatile and economic one-part polyurethane foam which cures by moisture absorption. Its fire retardant properties make it an ideal product for rapid fire-stopping of irregular openings and gaps in fire rated solid blockwork and concrete floor and wall assemblies, typically redundant service openings, gaps around door and window frames, linear expansion joints and cavity sealing. In a fire attack situation, Protecta FR Expanding Foam provides a barrier which prevents the passage of flames and hot gases through such openings and gaps and which restricts temperature rise on the non-fire side of the wall or floor.

Protecta FR Expanding Foam can be used with an insulating backing material for enhanced thermal protection. Protecta FR Expanding Foam exhibits excellent adhesion to most building materials and once cured will not age deteriorate.

Protecta FR Expanding Foam is available in 750ml cans.

Typical yields for a 750ml tin:

Can Size	Yield	Depth of Seal	Area, m2
750ml	40 litres	50mm	0.8
		200mm	0.2

Physical Properties

Composition:	Fire retardant aerosol
Colour:	Pink
Density:	0.98 g/ml
Thermal Conductivity:	0.04 W/mK
Tack Free:	6-8 mins
Cuttable:	12-15 mins
Elongation:	25%
Cure:	By water absorption
Water Solubility:	Insoluble
Shelf life:	24 months in unopened tins
	10 weeks once nozzle activated

Protecta FR Expanding Foam is free from CFC's.

This data sheet should be read in conjunction with the MSDS for this product

Installation Instructions

1. Remove all loose debris, grease and oil from the surfaces forming the opening to be sealed.
2. Install any required backing material to the correct depth.
3. To ensure a more rapid cure, it is advisable to 'wet' the surfaces with water prior to application of the foam.
4. Shake the can thoroughly before and in-between applications. The can should be turned upside down for application.
5. 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. Foam extrusion can be controlled by varying the tilt of the can or reducing the pressure on the valve.
6. As the foam cures by moisture absorption, best results will be obtained by 'wetting' individual layers with a light water spray. This will promote better curing of the foam throughout its full dry depth.
7. Once the gap or joint is completely filled, excessive overspill should be removed by cutting with a small saw or similar.

Fire Performance

Tested in accordance with:

BS476: Part 20: 1987

Material	Integrity(mins)*	Insulation(mins)*
Concrete to Concrete	Up to 240	Up to 240
Concrete to Blockwork	Up to 240	Up to 240
Blockwork to Blockwork	Up to 240	Up to 240

* Ratings depend on joint size, depth of seal and use with backing materials

Northern Fire Engineering Ltd, 40 Crompton Road, Heaton, Newcastle upon Tyne, NE6 5QL, UK
Tel: +44 (0)5601 166895 , Fax: +44 (0)191 2652101
Web: http://www.nfe-ltd.co.uk
Email: info@nfe-ltd.co.uk