



Northern Fire Engineering Ltd

Product Description

Protecta FR WB Silicone is a new generation one component, low modulus water-based fire rated silicone sealant. It is particularly suitable for fire-stopping high movement construction linear joints (expansion & compression joints, seismic joints etc) and curtain-walling applications up to 80mm wide. Protecta FR WB Silicone is also suitable for use in fire rated drywall assemblies for gaps up to 30mm wide. Due to its advanced formulation Protecta FR WB Silicone is recommended for external applications or those in damp or humid environments. The product contains a fungicide, so it is mildew resistant and it has a high resistance to UV radiation. In a fire attack situation, a carbonaceous char is formed on the surface of the Protecta FR WB Silicone which provides a physical barrier to the flames and hot gases for a defined exposure period. When used with a thermally insulating backing material, Protecta FR WB Silicone will restrict temperature rise on the non-fire side of the wall or floor. Protecta FR WB Silicone can be used with thin layers of mineral wool or alumina silicate backing materials.

Protecta FR WB Silicone offers excellent adhesion to most building materials and can be applied onto damp surfaces. It can be overpainted.* The product has additionally undergone 'reaction-to-fire' testing and shown to have low smoke and toxic properties upon combustion.

* A compatibility trial should be undertaken on an unseen area before major painting

Physical Properties

Cure system:	Emulsion
Colour:	To suit requirements
Sg:	1.35
Elastic recovery:	>80%
Movement capability:	25%
Shrinkage:	12% approx when dry
Application temperature:	+2°C - +40°C
Service temperature:	-50°C - +120°C
Limitations:	Do not use in areas of continuous immersion or in areas of abrasion
Shelf life:	12 months in unopened tubes

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

Technical Data Sheet

Protecta FR WB Silicone

Installation Instructions

1. The joint faces should be clean and free from dust, oil or other obvious contaminants that may affect adhesion.
2. Install any required backing material to the correct depth.
3. For small gaps (<=5mm), cut a small nozzle and extrude sealant into the gap to achieve a depth of 10mm (if possible). Finish with a fillet bead with a throat depth of 7mm approx (10x10mm fillet).
4. For larger gaps (>5mm<=12mm), a width to depth ratio of sealant of 1:1 is required, with a minimum depth of 12mm. Larger gaps should have a width to depth ratio of 2:1. This is especially important for high movement joints.
5. Cut nozzle to desired angle/bead size and extrude into the annular space. Remove air voids by applying light pressure and ensure the sealant is adequately adhered to the substrates within the joint on all faces. Smooth sealant with a water-wet spatula or flat tool.
6. Porous surfaces should be 'wetted' before application to promote better adhesion.
7. Tools can be cleaned down with water.

Fire Performance

Tested in accordance with:

EN1363-1:1999 & EN1366-3:2004

Material	Integrity(mins)*	Insulation(mins)*
Concrete to Concrete**	Up to 240	Up to 120
Concrete to Blockwork**	Up to 240	Up to 120
Blockwork to Blockwork**	Up to 240	Up to 240
Gypsum to Blockwork or Concrete***	90	90

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

** Gaps up to 80mm wide

*** Gaps up to 30mm wide

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

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