



Technical Data Sheet

DOWSIL™ FIRESTOP 800 Self Levelling Silicone

One-part silicone rubber

Features & Benefits

- Excellent adhesion to most porous and non-porous construction substrates
- Self-levelling
- Neutral cure
- Halogen-free
- Joint movement capability +100/50%
- Meets BS 476 Part 22
- A fire rating of up to 4 hours can be achieved
- No tooling required
- Excellent weathering characteristics, including resistance to ozone, UV radiation and temperature extremes
- Long service life

Applications

- For use in sealing horizontal joints between curtain walling facades and floor slabs in conjunction with fire resistant backing material. It can also be used in vertical joint applications as a pre-formed seal.

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
As Supplied		
Slump		Self-levelling
Working Time	minutes	15
Extrusion Rate	g/minute	460
Joint Movement Capability	%	+100/-50
Application Temperature	°C °F	+5 to +40 +41 to +104
Cure Rate	mm	After 1 day: 2

Description

DOWSIL™ FIRESTOP 800 Self Levelling Silicone is a one-part, flowable, neutral curing, fire rated silicone sealant. It is designed to seal horizontal and vertical construction joints where a fire rating is required. It is ideally suited for sealing joints between curtain walling facades and floor slabs in conjunction with a fire resistant backing material.

Technical Specifications And Standards

DOWSIL FIRESTOP 800 Self Levelling Silicone has been tested to BS 476 Part 22/1987 in expansion joint configurations, W.F.R.C. Test Report No. 49822.

It has also been tested in expansion joint configurations Yarsley Test Report No.:

- J86464/2 (assessment) for horizontal seals
- J86464/3 (assessment) for horizontal seals
- J86464/4 (assessment) for vertical seals
- J86464/5 for vertical seals

Fire Ratings

Fire test data is available showing that DOWSIL FIRESTOP 800 Self Levelling Silicone can achieve up to a 4 hour fire rating at specified joint configurations.

The fire ratings achieved have been tested according to BS 476 Part 22/1987 and are specific to the conditions of test. They do, however, provide a good indication of the expected performance of the sealant in fire situations. Users should satisfy themselves that DOWSIL FIRESTOP 800 Self Levelling Silicone is suitable for their specific application. Testing of a particular system may be required.

Substrate Preparation

Cleaning

Ensure that all surfaces are clean, dry, sound and free from frost. Clean all joints of release agents, water repellents, laitance, dust, dirt, old sealants and other contaminants which could impair adhesion. Metal surfaces should be cleaned and degreased by wiping with a suitable solvent using an oil- and lint-free cloth. For further advice on cleaning specific substrates please contact the technical services department.

Adhesion

DOWSIL FIRESTOP 800 Self Levelling Silicone has excellent adhesion to most common construction substrates. If in doubt, or if unusual substrates are involved, please contact the technical services department.

Back-Up Materials

Two backer materials have been evaluated in various joint designs: ceramic fiber and mineral wool. Depending on the rating required and the joint designs, the most suitable system can be selected.

Masking

Areas adjacent to the joints should be masked with tape to prevent contamination of the substrates and to ensure a neat sealant line. Masking tape should be removed immediately after application.

Finishing

Due to the self-levelling properties of this sealant, there is normally no need to tool the material.

Clean-Up

Excess sealant should be cleaned off tools and non-porous surfaces whilst in an uncured state using a suitable solvent. Sealant adhering to porous surfaces should be left until just cured and then removed by abrasion or other mechanical means.

Joint Design

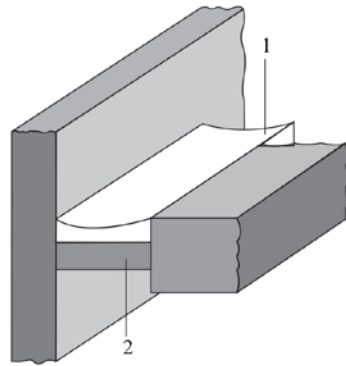


Figure 1
Horizontal Floor Joint

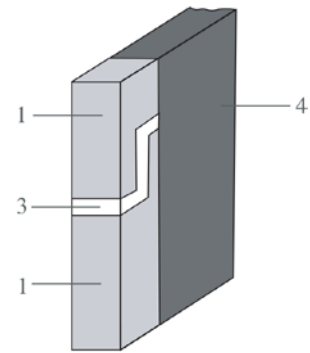


Figure 2
Pre-Formed Vertical Seals

Legend

1. DOWSIL FIRESTOP 800 Self Levelling Silicone
2. Backing material
3. DOWSIL™ FIRESTOP 700 Silicone Sealant
4. Mineral Wool

This product has been designed to seal joints that are wider than typical construction joints. Therefore, the technical services department should be contacted for specific recommendations. A variety of joint configurations have been fire tested and test data is available on request.

In the manufacture of horizontal seals, it is recommended that steel clips are used to retain the backing material. The clips should be embedded in the backing material and clipped on to the floor slab. Under no circumstances should the steel clips be placed directly on to the fire side of the seal, as this could cause excessive transfer of heat to the non-fire side of the seal.

These clips should be positioned at approximately 1 meter intervals. Seek advice on specific backing material and fixing methods from the manufacturer.

Pre-formed seals using DOWSIL FIRESTOP 800 Self Levelling Silicone have been tested and can be used in situations where vertical joints are wider than normally anticipated. The pre-formed battens can be sealed into position using DOWSIL FIRESTOP 700 Silicone Sealant. In situations where several battens are used to produce a seal, the mineral wool should overlap at the joint to give a continuous cover of mineral wool (see Figure 2.) For further assistance, please contact the technical services department.

Note: DOWSIL FIRESTOP 800 Self Levelling Silicone should not be used in an uncured state for sealing vertical joints.

Attainment of specific fire ratings is dependent on the joint configuration. Detailed information is given in Table 1.

Table 1: Fire Rating

DOWSIL FIRESTOP 800 Self Levelling Silicone Dimension	Backing Material	Integrity Rating	Insulation Rating	Sealant Position
50 mm x 10 mm	100 mm Mineral Wool ¹	4 hours	4 hours	NFS ²
100 mm x 10 mm	100 mm Mineral Wool ¹	4 hours	4 hours	NFS ²
50 mm x 10 mm	50 mm Ceramic Fiber ³	4 hours	4 hours	NFS ²
100 mm x 10 mm	50 mm Ceramic Fiber ³	4 hours	4 hours	NFS ²
50 mm x 6 mm	100 mm Mineral Wool ⁴	2 hours	2 hours	NFS ²
100mm x 6 mm	100 mm Mineral Wool ⁴	2 hours	2 hours	NFS ²
150 mm x 6 mm	100 mm Mineral Wool ⁴	2 hours	2 hours	NFS ²
200 mm ⁵ x 6 mm	100 mm Mineral Wool ⁴	1.5 hours		NFS ²
200 mm ⁵ x 6 mm	100 mm Mineral Wool ⁴	2 hours		FS ⁶
Assessments (J 86464/3 & 4)				
150 mm x 6 mm (Horizontal Position)	100 mm Mineral Wool ⁴	2 hours		FS ⁶
150 mm x 6 mm ⁵ (Vertical Position)	100 mm Mineral Wool ⁴	2 hours		FS ⁶

1. 200 kg/m³ nominal density
2. Sealant on non-fire side of furnace
3. 96 kg/m³ nominal density
4. 140 kg/m³ nominal density
5. Sealant/mineral wool were pre-fabricated and then installed into the opening once the sealant had cured.
6. Sealant on fire side of furnace

Handling
Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life And
Storage

When stored in cool, dry conditions below 30°C (86°F) in the original unopened containers, DOWSIL FIRESTOP 800 Self Levelling Silicone has a usable life of 12 months from the date of production.

Packaging
Information

DOWSIL FIRESTOP 800 Self Levelling Silicone is available in 10 liter pails.

Once the sealing work is completed, the plastic disc should be replaced over any remaining material to reduce the risk of skin formation.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

DOWSIL FIRESTOP 800 Self Levelling Silicone should not be used against surfaces that bleed oils, plasticisers or solvents.

Consult the technical services departments for further advice in specific applications.

DOWSIL FIRESTOP 800 Self Levelling Silicone is not intended to be commercialized in the United States.

Health And Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

Table 2: Estimating Sealant Requirements

Linear meters per 10 liter pack

Width	50 mm	100 mm	150 mm	200 mm
Depth 6 mm:	33.4	16.6	11.2	8.4
Depth 10 mm:	20.0	10.0	6.6	5.0

<http://www.consumers.dow.com>

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

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