



# DOW CORNING® Firestop 800 Self-Levelling Silicone Sealant

## FEATURES

- 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

## BENEFITS

- 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

## One-part silicone rubber

### 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. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

| Property                  | Unit     | Value          |
|---------------------------|----------|----------------|
| <b>As supplied</b>        |          |                |
| Slump                     |          | Self-levelling |
| Working time              | minutes  | 15             |
| Extrusion rate            | g/minute | 460            |
| Joint movement capability | %        | +100/-50       |
| Application temperature   | °C       | +5 to +40      |
|                           | °F       | +41 to +104    |
| Cure rate                 | mm       | After 1 day: 2 |

### DESCRIPTION

DOW CORNING Firestop 800 Self-Levelling Silicone Sealant 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

DOW CORNING Firestop 800 Sealant 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 DOW CORNING Firestop 800 Sealant 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

DOW CORNING Firestop 800 Sealant 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 Dow Corning's Technical Services Department.

### Adhesion

DOW CORNING Firestop 800 Sealant has excellent adhesion to most common construction substrates. If in doubt, or if unusual substrates are involved, please contact Dow Corning's 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.

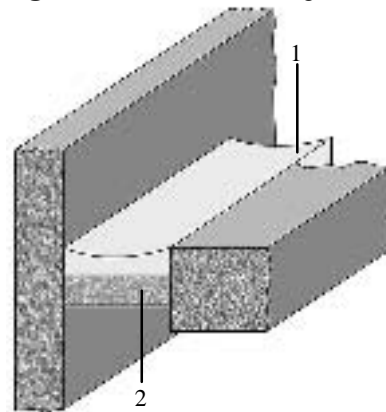
### Clean-up

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.

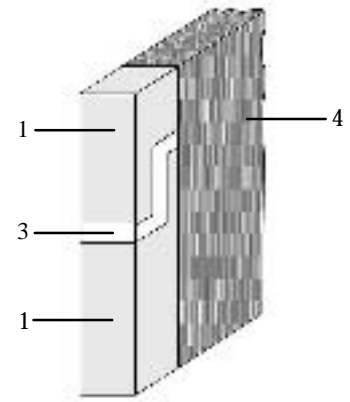


This product has been designed to seal joints that are wider than typical construction joints. Therefore, Dow Corning's Technical Services Department should be contacted for specific recommendations. A variety of joint configurations have been fire tested and test data is available on request.

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.

Figure 2: Pre-formed vertical seals.



### Legend

- 1 DOW CORNING Firestop 800 Self-Levelling Silicone Sealant
- 2 Backing material
- 3 DOW CORNING® Firestop 700 Silicone Sealant
- 4 Mineral Wool

Pre-formed seals using DOW CORNING Firestop 800 Sealant 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 DOW CORNING 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 Dow Corning's Technical Services Department.

Note: DOW CORNING Firestop 800 Sealant 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.

## TECHNICAL SERVICES

Consult Dow Corning's Technical Services departments for further advice on specific applications: Dow Corning S.A.

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## **HANDLING PRECAUTIONS**

**PRODUCT SAFETY**  
INFORMATION REQUIRED FOR  
SAFE USE IS NOT INCLUDED.  
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 FROM YOUR LOCAL  
DOW CORNING SALES  
REPRESENTATIVE.

## **USABLE LIFE AND STORAGE**

When stored in cool, dry conditions  
below 30°C (86°F) in the original  
unopened containers,  
DOW CORNING Firestop 800  
Sealant has a usable life of 12 months  
from the date of production.

## **PACKAGING**

DOW CORNING Firestop 800  
Sealant 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**

DOW CORNING Firestop 800  
Sealant should not be used against  
surfaces that bleed oils, plasticisers or  
solvents.

Consult Dow Corning's Technical  
Services departments for further  
advice in specific applications.

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

pharmaceutical uses.

## **HEALTH AND ENVIRONMENTAL INFORMATION**

To support customers in their product  
safety needs, Dow Corning has an  
extensive Product Stewardship  
organization and a team of Health,  
Environment and Regulatory Affairs  
specialists available in each area.

For further information, please  
consult your local Dow Corning  
representative.

## **WARRANTY INFORMATION - PLEASE READ CAREFULLY**

The information contained herein is  
offered in good faith and is believed  
to be accurate. However, because  
conditions and methods of use of our  
products are beyond our control, this  
information should not be used in  
substitution for customer's tests to  
ensure that Dow Corning's products  
are safe, effective, and fully  
satisfactory for the intended end use.  
Dow Corning's sole warranty is that  
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Dow Corning sales specifications in  
effect at the time of shipment. Your  
exclusive remedy for breach of such  
warranty is limited to refund of  
purchase price or replacement of any  
product shown to be other than as  
warranted. Dow Corning specifically  
disclaims any other express or implied  
warranty of fitness for a particular  
purpose or merchantability. Unless  
Dow Corning provides you with a  
specific, duly signed endorsement of  
fitness for use, Dow Corning  
disclaims liability for any incidental  
or consequential damages.  
Suggestions of use shall not be taken  
as inducements to infringe any patent.

**Table 1: Fire rating**

| <i>DOW CORNING Firestop<br/>800 Sealant<br/>Seal Dimension</i>   | <i>Backing material</i>               | <i>Integrity<br/>rating</i> | <i>Insulation<br/>rating</i> | <i>Sealant<br/>position</i> |
|--|---------------------------------------|-----------------------------|------------------------------|-----------------------------|
| 50mm x 10mm  | 100mm Mineral Wool (1)                | 4 hours                     | 4 hours                      | NFS                         |
| 100mm x 10mm   | 100mm Mineral Wool (1)                | 4 hours                     | 4 hours                      | NFS                         |
| 50mm x 10mm  | 50mm Ceramic Fiber                    | 4 hours                     | 4 hours                      | NFS                         |
| 100mm x 10mm   | 50mm Ceramic Fiber                    | 4 hours                     | 4 hours                      | NFS                         |
| 50mm x 6mm   | 100mm Mineral Wool (2)                | 2 hours                     | 2 hours                      | NFS                         |
| 100mm x 6mm  | 100mm Mineral Wool (2)                | 2 hours                     | 2 hours                      | NFS                         |
| 150mm x 6mm  | 100mm Mineral Wool (2)                | 2 hours                     | 2 hours                      | NFS                         |
| 200mm* x 6mm   | 100mm Mineral Wool (2)                | 1.5 hours                   |                              | NFS                         |
| 200mm* x 6mm   | 100mm Mineral Wool (2)                | 2 hours                     |                              | FS                          |
| <b>Assessments (J 86464/3 &amp; 4)</b>   |                                       |                             |                              |                             |
| 150mm x 6mm<br>(Horizontal position)   | 100mm Mineral Wool (2)                | 2 hours                     |                              | FS                          |
| 150mm x 6mm*<br>(Vertical position)  | 100mm Mineral Wool (2)                | 2 hours                     |                              | FS                          |
| * Sealant/mineral wool were pre-fabricated and then installed into the opening once the sealant had cured. |                                       |                             |                              |                             |
| <b>Legend</b>  |                                       |                             |                              |                             |
| Ceramic fiber  | 96kg/m <sup>3</sup> nominal density   |                             |                              |                             |
| Mineral Wool (1)   | 200kg/m <sup>3</sup> nominal density  |                             |                              |                             |
| Mineral Wool (2)   | 140 kg/m <sup>3</sup> nominal density |                             |                              |                             |
| FS   | Sealant on fire side of furnace       |                             |                              |                             |
| NFS  | Sealant on non-fire side of furnace   |                             |                              |                             |

**Table 2: Estimating sealant requirements****Linear meters per 10 liter pack**

| <i>Width</i> | <i>50mm</i> | <i>100mm</i> | <i>150mm</i> | <i>200mm</i> |
|--------------|-------------|--------------|--------------|--------------|
| Depth 6mm:   | 33.4        | 16.6         | 11.2         | 8.4          |
| Depth 10mm:  | 20.0        | 10.0         | 6.6          | 5.0          |