

TECHNICAL DATASHEET

| Code | Description | Size | Colour |
|-------|----------------------------|-------|--------|
| 20165 | Soudal Fire Silicone B1 FR | 300ml | Grey |

1. Description

Soudal Fire Silicone B1 FR is a high quality, neutral, elastic, one-component sealant based on silicones which conforms to the DIN4102 B1 standard for fire retardancy and has a fire rating of up to 4 hours in certain joint configurations (EN 1366 part 4 – NN713.020 – BS 476/20).

2. Characteristics

- · Very easy to apply
- · Colourfast and UV-resistant
- · Remains permanently elastic after full cure
- · Very good adhesion on most surfaces
- · Low modulus
- · DIN 4102-Part 2: Class B1
- · Up to 4 hours fire rating with normal PE Backing material refer to www.soudal.co.nz for specific details

3. Technical Data

| Base: | Polysiloxane |
|-------------------------|---------------------------|
| Consistency: | Stable Paste |
| Curing System: | Moisture Cure |
| Skin Forming: | Ca 20 min. (20°C/65% R.H) |
| Curing Rate: | 1mm/24h |
| Shore A Hardness: | 16 Shore A |
| Specific Gravity: | Ca 1,17g/cm3 |
| Temperature Resistance: | -40°C until +140°C |
| Elongation at Break: | 900% (DIN52455) |
| E-Modulus 100%: | 0,20N/mm2 (DIN52455) |
| Elastical Recovery: | >90% (DIN52455) |
| Maximum Deformation: | +25% |

^{*} This can vary according to environmental circumstances such as temperature, humidity, substrate, etc.

4. Applications

- $\cdot\,$ All linear building and glazing joints which require a fire rating
- · Fire rated expansion joints

5. Packaging

Cartridge 300ml (net content)

Soudal Fire Silicone B1 FR Updated: March 2024

6. Shelf Life

12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C. Do not expose to frost.

7. Building Product Information

Manufactured By Soudal NV Distributed By Soudal Ltd

Relevant Building Code Clauses

- Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years and B2.3.1 (c) 5 years
- Clause C3 Fire Affecting Areas Beyond the Fire Source. Performance clauses C3.1, C3.2, C3.3
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2.
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

Contribution to compliance With NZBC

- Performance B2.3.1 (b) 15 years and (c) 5 years: This product achieves these durability requirements and will remain serviceable for 15 years, or more, when installed and maintained in accordance with the relevant Soudal product technical information. soudal.co.nz. Soudal maintains management and production records within its ISO9001:2015 Quality Management System.
- Performance C3.1, C3.2, C3.3: This product has been fire tested in various combinations of sealed joints and /or penetrations with different dimensions and different building components. It contributes to meeting the requirements of C3 only when used in these tested combinations. All fire-rated joints must be designed and specified by a registered fire engineer. For more information, such as test certificates, refer to soudal.co.nz.
- Performance E2.3.1, E2.3.2: In accordance with E2/AS1 and E2/AS3 (CCANZ CP 01:2014) this product has been tested and is compliant with the ISO11600:2002 Type F, Class 25LM classification, soudal.co.nz. When used to seal flexible joints, as part of a wall cladding system, or around external openings, such as windows and doors, the product contributes to meeting the E2.3.1 and E2.3.2 weather-tightness requirements.
- Performance F2.3.1: This product meets this requirement when used and applied in accordance with Soudal's product installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Soudal Product Technical Data sheet and product Safety Data Sheet soudal.co.nz for further information if required.

8. Application Instructions

Surfaces

Type: All usual porous and non-porous building materials

State: Clean, dry, free of dust and grease

Preparation: Porous substrates; Surfaces such as lightweight aerated concrete, masonry plasters and other surfaces

regarded as very porous should be primed with Primer 150. Non-porous substrates; due to the wide range of materials, coatings and surface finishes we recommend to test to verify adhesion to determine the correct adhesion promoter. Preparing the surface with Gorilla 696 Surface Activator will maximise

adhesion.

Due to the range of substrates on the market recommend preliminary compatibility tests prior to commencement of application.

Joint Size

Minimum Width: 5mm Maximum Width: 30mm

Joint Configuration: width = 2xdepth

Application

Method: Caulking Gun

Backing Material: PE backer rods for correct joint dimension

Soudal Fire Silicone B1 FR Updated: March 2024

Application Temperature: +1°C to +30°C

Clean: With Gorilla Solvent Cleaner
Repair: With Soudal Fire Silicone B1 FR

Finish: With soapy solution

Approvals

to AS1530.4 and AS4072.1

- · EWFA Report No. 23751-02
- · EWFA Report No. 45717-02
- · Various applications with fire doors

Linier Joints - Vertical & Horizontal - Aerated Concrete

| Wall Thickness (mm) | Gap Width (mm) | Seal Depth (mm) | Backing Material | Seal | FRL |
|---------------------------|-------------------|--------------------|------------------|---------|-----------|
| (111111) | | | | | |
| 200 | 10 | 10 | Gorilla PEF | Exposed | -/240/240 |

Linier Joints - Vertical - Aerated Concrete

| Wall Thickness (mm) | Gap Width (mm) | Seal Depth (mm) | Backing Material | Seal | FRL |
|---------------------------|-------------------|--------------------|------------------|------------|-----------|
| 200 | 11 | 10 | Gorilla PEF | Both Faces | -/240/240 |
| 200 | 31 | 20 | Gorilla PEF | Both Faces | -/240/180 |
| 100 | 33 | 20 | Gorilla PEF | Both Faces | -/180/90 |
| 100 | 11 | 10 | Gorilla PEF | Both Faces | -/180/120 |

9. Health and Safety Recommendation

- · Apply the usual industrial hygiene.
- · For more detailed information, please refer to the SDS.

Remark

The directives and data contained in this documentation is provided in good faith and accurately reflect Soudal's knowledge when its products are properly stored, handled and applied under normal conditions in accordance with Soudal's recommendations. In practice, the diversity of the materials, substrates, environments, site conditions, product storage, handling and application are such that no warranty can be given in respect to the merchantability or fit for purpose, of any product. All users must determine the product suitability for their purposes through testing. This technical data sheet and product properties may change without notice so users, suppliers and retailers of Soudal products should always check that the data sheets they have are the latest. To the maximum extent permitted by law, Soudal disclaims all warranties in relation to either the manufacture, storage and end use of the product. All orders are accepted subject to our current terms of trade. If any clarification is required, please contact Soudal Technical Services or email info@soudal.co.nz.

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Soudal Fire Silicone B1 FR Updated: March 2024