

Code	Description	Size	Colour
20165	Gorilla Firesil Silicone	310ml	Grey

1. Description

Gorilla Firesil Silicone 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/cm ³
Temperature Resistance:	-40°C until +140°C
Elongation at Break:	900% (DIN52455)
E-Modulus 100%:	0,20N/mm ² (DIN52455)
Elastical Recovery:	>90% (DIN52455)
Maximum Deformation:	+25%

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

4. Applications

- All linear building and glazing joints which require a fire rating
- Fire rated expansion joints

5. Packaging

Cartridge 310ml (net content)

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. 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
Application Temperature:	+1°C to +30°C
Clean:	With Gorilla Solvent Cleaner
Repair:	With Gorilla Firesil Silicone
Finish:	With soapy solution

Approvals

- General: EN 1366-4 – Test Report 9297, University of Ghent
- General: EN 1366-4 – Test Report 13492, University of Ghent/ Warrington fire
- UK: BS476:Part20:1987 – WRFC N° C113610
- UK: BS476:Part20:1987 – WRFC N° 139271
- France: Rapport d'Essai RS03-007
- Holland: NEN 6069:1997 – TNO Rapport 2000-CVB-R00703
- Belgium: NBN 713.020 – Test Report 9297 – University of Ghent
- Australia: WFRA 45716 \$ 45717 to AS1530.4 and AS4072.1
- Apply the usual industrial hygiene
- BS 476:Part 20 – Warrington Fire Research Report
- DIN4102-B1 – institut für Bautechnik, Berlin

Test Results – Test Report 9297

Wall Thickness	Width of Joint	Depth of Joint	Application	Fire Rating
100mm	11mm	10mm	Doublesided	146 min. TI Rating EI 120 202 min. FR Rating E 180
100mm	33mm	20mm	Doublesided	116 min. TI Rating EI 90 187 min. FR Rating E 180
200mm	11mm	10mm	Doublesided	>240 min. TI >240 min. FR Rating EI 240
200mm	31mm	20mm	Doublesided	225 min TI Rating EI 180 >240 min. FR Rating E 240

TI: Thermal Insulation; the time during which the temperature on the unexposed side of the wall does not rise by more than 180°C

FR: Flame Resistance; the item during which the joints stops flames from penetrating the wall

Fire Rating: Draft European Commission Decision RG N170 REV.1

Test Results – Test Report 9297

Wall Thickness	Joint Dimension	Backing Material	Integrity	Heat Insulation
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200mm	Width: 10mm Depth: 10mm	PE	>240 Minutes	>240 Minutes
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Test Results: Fire Test CSTB – France 2003

Wall Thickness	Joint Dimension	Backing Material	Integrity	Heat Insulation
150mm	Width: 30mm Depth: 20mm	PU	>360 Minutes	>180 Minutes (thermocouple failure)
150mm	Width: 10mm Depth: 10mm	PU	>360 Minutes	251 Minutes 30sec
200mm	Width: 30mm Depth: 20mm	PU	>360 Minutes	180 Minutes (thermocouple failure)
200mm	Width: 10mm Depth: 10mm	PU	>360 Minutes	>360 Minutes

Test Results: Fire Test CSI – Italy 2004

Wall Thickness	Joint Dimension	Backing Material	Integrity	Heat Insulation
200mm	Width: 10mm Depth: 10mm	PE	>180 Minutes	>180 Minutes
100mm	Width: 10mm Depth: 10mm	PE	>180 Minutes	>180 Minutes

8. 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 sales@soudal.co.nz.***

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