Fire Silicone B1 FR

Technical data

Basis	Polysiloxane
Consistency	Stable paste
Curing system	Moisture curing
Skin formation* (23°C/50% R.H.)	Ca. 9 min
Curing speed * (23°C/50% R.H.)	Ca. 2 mm/24h
Density	Ca. 1,26 g/ml
Elastic recovery (ISO 7389)**	> 90 %
Maximum allowed distortion	± 25 %
Elasticity modulus 100% (ISO 37)**	Ca. 0,38 N/mm²
Elongation at break (ISO 37)**	> 900 %
Temperature resistance**	-40 °C → 180 °C
Application temperature	1 °C → 30 °C
Fire resistance (EN 13501-2) **	≤ 240 min

* These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. ** This information relates to fully cured product.
(**) this value is dependent on the joint- or penetration seal configuration and the joint- or penetration seal dimensions

Product description

Fire Silicone B1 FR is a high-quality, fire-resistant, smoke-tight, neutral, elastic, one component joint sealant based on silicones.

Properties

- High level of fire retardation
- Sealant for preventing the passage of smoke and gas.
- MEKO free
- Very good adhesion on many materials
- Permanently elastic after curing (without fire load)
- Very easy to apply.
- Excellent UV stability.
- Not paintable

Applications

- Fire retardant expansion and connection joints in the construction industry.
- Fire-resistant sealing of connection joints.
- As part of the 'Soudal Fire Range' assortment for penetration seals and joints.

Packaging

Colour: grey, white, black
Packaging: 300 ml cartridge, 600 ml foil bag

Shelf life

12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C.

Substrates

Substrates: Various porous and non-porous surfaces such as wood, concrete, stone and other materials commonly used in construction.
Nature: rigid, clean, dry, free of dust and grease.
Surface preparation: Porous surfaces should be treated with Soudal Primer 150. Prepare non-porous surfaces with a Soudal activator or cleaner (see Technical Data Sheet).
We recommend a preliminary adhesion and compatibility test on every surface. Not suitable for PE, PP, PTFE (eg. Teflon®) and bituminous substrates.

Joint dimensions

Consult the 'Fire Range Installation Instructions Openings and Sealing' on the Soudal website for the correct joint dimensions depending on the required fire resistance.

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Application method
Application method: With a manual, pneumatic or accu caulking gun.
Cleaning: Clean with Soudal Surface Cleaner or with Soudal Swipex, immediately after use Cured Fire Silicone B1 FR can only be removed mechanically.
Finishing: With a soapy solution or Soudal Finishing Solution before skinning.
Repair: With the same material.

Health- and Safety Recommendations
Take the usual labour hygiene into account. Consult label and material safety data sheet for more information.

Remarks
- Fire Silicone B1 FR is not paintable.
- Fire Silicone B1 FR cannot be used on natural stone.
- A total absence of UV can cause a color change of the sealant.
- Discoloration due to chemicals, high temperatures, UV-radiation may occur. A change in color does not affect the technical properties of the product.
- In an acid environment or in a dark room, a white sealant can slightly turn yellow. Under the influence of sunlight it will turn back to its initial colour.
- We strongly recommend not to apply the product in full sunlight as it will dry very fast.
- When finished with a finishing solution or soapy solution, make sure that the surfaces are not touched by this solution. This will cause the sealant not to adhere to that surface. Therefore we recommend to only dip the finishing tool in this solution.
- Do not use in applications where continuous water immersion is possible.
- Not suitable for bonding aquariums.
- When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.
- Contact with bitumen, tar or other plasticizer releasing materials such as EPDM, neoprene, butyl, etc. is to be avoided since it can give rise to discolouration and loss of adhesion.

Standards and certificates
- Various test and classification reports in various accredited testing institutes: IFT Rosenheim, ITB Poland, Warrington Fire Gent, Warrington Fire Australia, Efectis Netherlands, Efectis France, CSTB France, CSI Italy.
- Testresults for penetration seals and/or joints with Fire Silicone B1 FR are freely accessible in the ‘Fire Range Application manual Penetration seals and Joints’ on the Soudal Website. The corresponding certificates can be obtained through the Soudal sales representatives or trough the Soudal Website.