

SabreSeal™ FRM



SabreSeal FRM Hybrid MS Fire Sealant is a single component sealant designed for fire-rated movement and connection joints. It is high performing with a fast, neutral and odourless cure, resulting in a permanently elastic fire resistant joint.

Advantages

- Superior Performance:** Strong adhesion to most common surfaces and permanent flexibility (±25%)
- Reliable Durability:** Outstanding environmental, UV and corrosion resistance
- Fire Resistance:** Up to 4 hour fire rating according to AS1530.4
- Eco-friendly formulation:** Silicone, isocyanates and solvent free. It will not emit halogenated by-products under fire conditions

Designed for:

- Fire resistant sealing of vertical joints in concrete tilt panel
- Bonding most construction materials
- Applications that have high UV exposure

Physical Properties

Specification	Typical Values
Chemical Base	Hybrid Polymer
Curing system	Moisture
Specific gravity	Approx. 1.5 ± 0.03 g/ml
Tack free time	Approx. 40-50 minutes (at 23°C; 50% R.H.)
Skin forming time	Approx. 70 minutes (at 23°C; 50% R.H.)
Curing rate	Approx. 2-3 mm/24 hr.
Resistance to flow (ISO 7390)	0 mm (at 5°C and 50°C)
Elastic recovery (ISO 7389)	> 80% (at 100% elongation)
Movement capability (ISO 11600)	± 25%
Loss of volume (ISO 10563)	< 5%
Shore a hardness (ISO 868)	30
Total VOC content	Approx. 25 g/l
Application temperature	Between +5°C to +40°C
Service temperature	-40°C to +90°C

Tensile Properties

ISO 37 (2mm thickness, S2 dumbbells, 7 days 23°C;50% R.H.)

E-Modulus 100%	0.50 MPA
Tensile Strength	1.50 MPA
Elongation At Break	> 550 %

These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. The time until complete curing may be extended at lower temperature, lower humidity or increasing film thickness.

Fire Rating

Fire resistance according to AS 1530.4-2014. All tests conducted in a 150mm thick concrete separating element.

Orientation	Width (mm)	Depth (mm)	Application	FRL	Test Report
Vertical	20	15	Symmetrical – both faces	-/240/240	PF24139
Vertical	50	25	Symmetrical – both faces	-/240/240	PF24139
Vertical	30	15	Asymmetrical – single layer, unexposed face	-/240/120	PF26001
Vertical	40	20	Asymmetrical – single layer, unexposed face	-/240/120	PF26001
Vertical	25	13	Asymmetrical – double layer, exposed face (30mm gap between layers)	-/240/120	PF26001
Vertical	35	18	Asymmetrical – double layer, exposed face (30mm gap between layers)	-/240/120	PF26001

NF – No Failure. FRL expressed as Structural Adequacy / Integrity / Insulation, rounded down to the nearest standard fire-resistance increment per AS 1530.4-2014.

Symmetrical specimens (both faces) sealed flush with the face of the concrete on each side. Asymmetrical specimens sealed on the nominated face only. Double-layer specimens applied with two sealant layers separated by a 30mm gap, with the outer layer finished flush with the exposed face.

Test reports: PF24139 (FTSL, 04/04/2025) and PF26001 (FTSL, 27/03/2026). Full reports available on request.

Product Certifications

SabreSeal FRM meets the following specifications:

- FIRE RESISTANCE classification: 4 hours according to AS1530.4

SabreSeal_FRM_TDS_2605

Storage & Shelf Life

The shelf life is 12 months in its unopened original packaging, in dry conditions and protected from direct sunlight at temperatures between +5°C and +25°C.

Packaging & Colour

Available colours: Grey

Packaging Size: 600ml foil pack

IMPORTANT NOTICE

Sabre Adhesives Limited makes no warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether the product is fit for a particular purpose and suitable for user's method of application. Due to the fact that specific substrates, such as: plastics, polycarbonates, etc, may differ from manufacturer to manufacturer we recommend preliminary compatibility tests. Please remember that many factors can affect the use and performance in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a product. Given the variety of factors that can affect the use of our products some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

LIMITATION OF REMEDIES AND LIABILITY

If the product is proved to be defective, the sole remedy shall be to refund the purchase price or to repair or replace the defective product. Sabre shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty, or strict liability.

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