

Sikaflex®-852 FR**Flame-retardant adhesive and sealant**

Technical Product Data

Chemical base	1-C polyurethane	
Colour (CQP ¹ 001-1)	Black, mahogany	
Cure mechanism	Moisture-curing	
Density (uncured) (CQP 006-4)	1.5 kg/l approx.	
Non-sag properties	Good	
Application temperature	5 - 35°C (40 - 95°F)	
Tack-free time ² (CQP 019-1)	75 min approx.	
Curing speed (CQP 049-1)	(see diagram)	
Shore A hardness (CQP 023-1 / ISO 868)	50 approx.	
Tensile strength (CQP 036-1 / ISO 37)	2.5 N/mm ² approx.	
Elongation at break (CQP 036-1 / ISO 37)	300% approx.	
Tensile-shear strength (CQP 046-1 / ISO 4587)	1.5 N/mm ² approx.	
Thermal resistance (CQP 513-1)	8 hours	120°C (250°F)
Service temperature	-40 - 90°C (-40 - 195°F)	
Shelf life (storage below 25°C) (CQP 016-1)	9 months	

¹⁾ CQP = Corporate Sika Quality Procedures²⁾ 23°C/ 50% r.h.**Description**

Sikaflex®-852 FR is a multi-purpose non-sag 1-C polyurethane adhesive and sealant with good fire-retardant properties, which cures on exposure to atmospheric moisture to form a durable elastomer.

Sikaflex®-852 FR is manufactured in accordance with ISO 9001 / 14001 quality assurance system and the responsible care program.

Product Benefits

- 1-C polyurethane
- Fire retardant
- Elastic
- Low odour
- Non-corrosive
- Can be over painted
- Can be sanded
- Bonds well to a wide variety of substrates
- Meets
DIN 5510: S 4, SR 2 and ST 2;
NF F 16-101: M2 F2 and
DIN 4102: B-1

Areas of Application

Sikaflex®-852 FR bonds well to a wide variety of substrates and is suitable as and elastic sealant and adhesive.

Suitable substrate materials include timber, metals, metal primers and paint coatings (2-part systems), ceramic materials, glass and plastics.

Seek manufacturer's advice before using on transparent materials that are prone to stress cracking.

This product is suitable for experienced professional users only. Tests with actual substrates and conditions have to be performed to ensure adhesion and material compatibility.



Cure Mechanism

Sikaflex®-852 FR cures by reaction with atmospheric moisture. At low temperatures the water content of the air is lower and the curing reaction proceeds at a slower rate (see diagram).

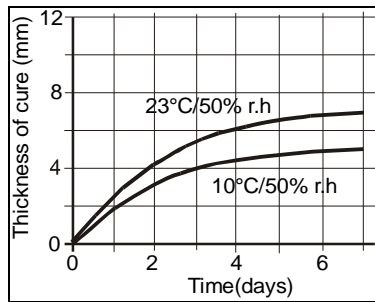


Diagram 1: Curing speed for Sikaflex®-852FR

Chemical Resistance

Sikaflex®-852 FR is resistant to fresh water, seawater, sewage effluent, dilute acids and caustic solutions; temporarily resistant to fuels, mineral oils, vegetable and animal fats and oils; not resistant to organic acids, alcohol, concentrated mineral acids and caustic solutions or solvents.

The above information is offered for general guidance only. Advice on specific applications will be given on request.

Method of Application

Surface preparation

Surfaces must be clean, dry and free from all traces of grease, oil and dust. Where appropriate, the adhesion of the sealant can be improved by treating the substrate with Sika® adhesion promoters (please refer to the current Sika® Primer Chart).

Advice on specific applications is available from the Technical Service Department of Sika Industry.

Application

Cartridge: Pierce nozzle opening of the cartridge.

Unipack: Place in the application gun and remove the closure tip.

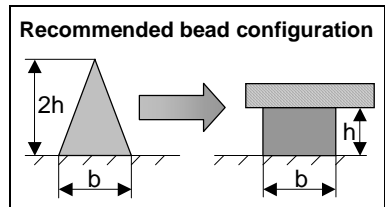
Cut off the tip of the nozzle to suit joint width and gun Sikaflex®-852 FR into the joint with a suitable hand-operated or compressed-air

gun, taking care to avoid air entrapment.

Once opened, packs should be used up within a relatively short space of time.

The optimum temperature for substrate and sealants is between 15°C and 25°C.

For advice on selecting and setting up a suitable pump system, as well as on the techniques of pump operated application, please contact the System Engineering Department of Sika Industry.



Tooling and finishing

Tooling and finishing must be carried out within the tack-free time of the sealant. We recommend the use of Sika® Tooling Agent N. Other finishing agents or lubricants must be tested for suitability /compatibility.

Removal

Uncured Sikaflex®-852 FR may be removed from tools and equipment with Sika® Remover-208 or another suitable solvent. Once cured, the material can only be removed mechanically.

Hands and exposed skin should be washed immediately using Sika® Handclean Towels or a suitable industrial hand cleanser and water. Do not use solvents!

Overpainting

Sikaflex®-852 FR can be overpainted when tack-free.

The paint must be tested for compatibility by carrying out preliminary trials. Sikaflex®-852 FR should not be exposed to baking temperatures until the adhesive has not attained full cure. It should be understood that the hardness and film thickness of the paint may impair the elasticity of the adhesive and lead to cracking of the paint film.

Further Information

Copies of the following publications are available on request:

- Material Safety Data Sheets
- Sika Pre-Treatment Chart
- General Guidelines Bonding and Sealing with Sikaflex®

Packaging Information

Cartridge	300 ml
Unipack	600 ml
Pail	23 l

Value Bases

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Health and Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Material Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

Legal Notes

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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