

Sikaflex® Floor

1-part sealant for flooring

Product Description / Uses Sikaflex® Floor is a one part, moisture curing, elastic joint sealant with high mechanical resistance for the following indoor and outdoor applications:

- Connection joints in floors
- Joints for crack control in industrial floors
- Floor joints between pre-cast concrete elements (mainly indoor)

Characteristics / Advantages

- Movement capability of 12.5% (ISO 9047)
- Bubble-free curing
- Good application properties
- Very good adhesion to most construction materials
- Solvent free and odourless

Approvals / Standards Conforms to EN15651-4 PW EXT-INT CC 12.5 E
Conforms to ISO 11600 F 12.5 E

Specific Ratings	LEED® EQc 4.1	SCAQMD, Rule 1168	BAAQMD, Reg. 8, Rule 51
	passes	passes	passes

Technical Data

Colours Grey structured

Packaging 600 ml foil pack, 20 foil packs per box

Storage Conditions / Shelf-Life 12 months from date of production if stored in undamaged original sealed containers, in dry conditions and protected from direct sunlight at temperatures between +5°C and +25°C.



Technical Data

Chemical Base	i-Cure® technology polyurethane		
Density	1.65 kg/l approx.		(CQP ¹) 006-4, ISO 1183-1)
Sag Flow	< 2 mm (20 mm profile, 50°C)		(CQP 061-4, ISO 7390)
Skin Time	60 minutes approx. ²⁾		(CQP 019-1)
Tooling Time	45 minutes approx. ²⁾		(CQP 019-2)
Curing Rate	3 mm/24 h approx. ²⁾		(CQP 049-2)
Movement Capability	±12.5%		(ISO 9047)
	±25%		(ASTM C719)
Shore A Hardness	40 after 28 days approx. ²⁾		(CQP 023-1, ISO 868)
Tear propagation resistance	7 N/mm approx. ²⁾		(CQP 045-1, ISO 34)
Secant tensile modulus	0.8 N/mm ² approx. at 60% elongation ^{2), 3)}		(CQP 020-1, ISO 8339)
Elongation at Break	500% approx. ²⁾		(CQP 036-1, ISO 37)
Elastic Recovery	>85% ^{2), 3)}		(ISO 7389)
Application Temperature	+5°C to +40°C, min. 3°C above dew point temperature		
Service Temperature	-40°C to +70°C		
Resistance	Resistant to water, seawater, diluted alkalis, cement grout and water dispersed detergent. Not resistant to alcohols, organic acids, concentrated alkalis and concentrated acids, chlorinated (hydro-carbons) fuel.		

¹⁾ Sika Corporate Quality Procedure

²⁾ 23°C / 50% r.h.

³⁾ conditioning: Method B

Application Details

Joint Design/ Consumption

The joint width must be designed to suit the movement capability of the sealant. In general the joint width should be > 10 mm < 30 mm. A width to depth ratio of approx. 1:0.8 must be maintained

For concrete flooring applications where saw cuts joints are required, a minimum sealant joint width and depth of 6mm is recommended and is only applicable for non movement joints.

Standard joint widths for joints between concrete elements: with a ΔT^* of 40 °C

Joint distance [m]	2	4	6	8	
Min. joint width [mm]	10	15	20	30	
Thickness of sealant [mm]	10	12	18	25	

with a ΔT^* of 80 °C

Joint distance [m]	2	4			
Min. joint width [mm]	15	30			
Thickness of sealant [mm]	12	25			

* ΔT is considered to be the difference between the highest expected temperature in use (or lowest, check which case leads to higher Δt) and the application temperature.

All joints must be properly designed and dimensioned in accordance with the relevant standards, before construction. Basis for calculation of the necessary joint width are the technical values of the joint sealant and the adjacent building materials, as well as the exposure of the building, type of construction and its dimensions.

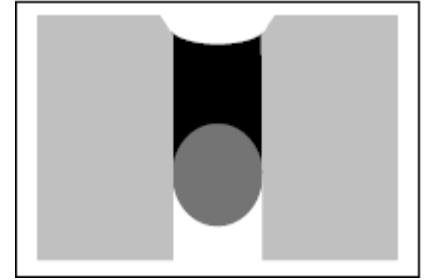
Approximate consumption

Joint width [mm]	10	15	20	25	30
Joint depth [mm]	10	12	16	20	24
Joint length / 600 ml [m]	6	3.3	1.9	1.2	0.8

Backing: Use closed cell, polyethylene foam backing rods.



Flush joint design prevents trip hazards and dirt traps



Recessed joint design protects the sealant against mechanical loads

Substrate Preparation / Priming

Sikaflex® Floor generally has strong adhesion without primers/activators to most clean, sound substrates.

For optimum adhesion and critical, high performance applications such as multi story building work, high stress bonding joints, extreme weather exposure or water immersion the following procedure shall be followed:

Non porous substrates

Aluminium, anodised aluminium, stainless steel, galvanised steel, powder coated metals or glazed tiles have to be cleaned and pre-treated with Sika® Aktivator-205 by using a clean towel. Before sealing allow a flash-off time >15 min (max.6 hours).

Metals like copper, bras, titanium-zinc etc. have to be cleaned and pre-treated with Sika® Aktivator-205 by using a clean towel. After a flash-off time >15 minutes, apply Sika® Primer-3 N by using a brush and allow a flash-off time >30 minutes (max. 8 hours) before sealing.

PVC has to be cleaned and thereafter pre-treated with Sika® Primer-215 by using a brush. Before sealing allow a flash-off time > 30 min (max.8 hours).

Porous substrates

Concrete, aerated concrete and cementitious plasters, mortars, brick, etc. have to be primed with Sika® Primer-3 N by using a brush. Before sealing allow a flash-off time >30 minutes (max. 8 hours).

For detailed instructions consult the Product Data Sheet for pre-treatments or contact our Technical Service Department.

Primers are adhesion promoters. They neither substitute for the correct cleaning of the surface nor improve their strength significantly.

Application Method / Tools

Sikaflex® Floor is supplied ready to use.

After suitable substrate preparation, insert backing rod to the required depth and apply primer if necessary. Insert foil pack into sealant gun and extrude Sikaflex® Floor into joint making sure that it is in full contact with the sides of the joint and avoid air entrapment. Sikaflex® Floor must be tooled firmly against joint sides to ensure good adhesion.

Masking tape may be used where exact joint lines or exceptionally neat lines are required. Remove the tape within the skin time. Use a compatible tooling agent (e.g. Sika® Tooling Agent N) to smooth the joint surfaces. Do not use solvent containing products!

Cleaning of Tools

Clean all tools and application equipment with Sika® Thinner C immediately after use. Once cured the material can only be removed mechanically.

Further Documents available	<ul style="list-style-type: none"> ■ Safety Data Sheet (SDS) ■ Pre-treatment Chart Sealing & Bonding ■ Method Statement Joint Sealing ■ Method Statement Joint Maintenance, Cleaning and Renovation
Notes on Application / Limitations	<p>Sikaflex[®] Floor can be over-painted with most conventional paint systems. The paint must be tested for compatibility by carrying out preliminary trials and the best results are obtained if the sealant is allowed to cure fully first. Please note that non-flexible paint systems may impair the elasticity of the sealant and lead to cracking of the paint film.</p> <p>Colour deviations may occur due to exposure to chemicals, high temperatures, UV-radiation. However a change in colour will not adversely influence the technical performance or the durability of the product.</p> <p>Do not use Sikaflex[®] Floor as a glass sealer, on bituminous substrates, natural rubber, EPDM rubber or on building materials which might bleed oils, plasticisers or solvents which could attack the sealant. Do not use Sikaflex[®] Floor to seal swimming pools. Do not expose uncured Sikaflex[®] Floor to alcohol containing products as they may interfere with the curing reaction.</p>
Value Base	<p>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.</p>
Health and Safety Information	<p>For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.</p>
Legal Notes	<p>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.</p>



SIKA LIMITED
 Head Office · Watchmead · Welwyn Garden City · Hertfordshire · AL7 1BQ · United Kingdom
 Phone: +44 1 707 394444 · Fax: +44 1 707 329129 · www.sika.co.uk