Construction

Sikaflex®PRO-3

1-part high performance sealant for flooring

Product Description

Sikaflex® PRO-3 is a one part, moisture curing, elastic joint sealant with high mechanical resistance. For indoor and outdoor applications

Uses

Sikaflex® PRO-3 is a multipurpose floor joint sealant suitable for

- Movement and connection joints in floors
- Indoor and outdoor applications for pedestrian and traffic areas (e. g. parking decks, car parks)
- Sealing Garage Forecourts (Short term fluid resistance testing available)
- In warehouses and production areas
- On surfaces such as in the food industry
- In ceramic tiles such as in public buildings etc.
- Joints in waste water and sewage treatment plants
- Floor joints in tunnel construction
- Application in clean rooms

Characteristics / Advantages

- Movement capability 25%
- Bubble-free curing
- Very good application properties
- Good mechanical and chemical resistance
- Very good adhesion to most construction materials

Specific Approvals/Standards

Conforms to EN15651-4 class 25 HM for interior & exterior and cold climate areas

Conforms to ISO 11600 F 25 HM

Tested according principals of DIBT for Waste Water Exposure

EMICODE EC1 PLUS R, very low emission

ISEGA Certificate for foodstuff area usage.

Approved to BS 6290 DWI contact with potable water. Report No M 106170

CSM TVOC tested (ISO-6.8)

CSM biological resistant : very good

Resistance against Diesel and Jet Fuel according to the DIBT guidelines

Environmental Information

Specific Characteristics

- Solvent free
- Odourless
- Recyclable aluminium packaging (600 ml sausages and 300 ml cartridges)

Specific Ratings

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

Product Data

Form

Colours	White, concrete grey, mid grey, black, other colors on request	
Packaging	300 ml cartridges 600 ml sausages	

Storage

Storage Conditions / Shelf-Life	15 months from date of production if stored in undamaged original unopened containers, in dry conditions and protected from direct sunlight at temperatures between +10°C and +25°C.	

Technical Data		
Chemical Base	1-part polyurethane, moisture curing	
Density	~ 1.35 kg/l	(DIN 53 479-B)
Skinning Time	~ 60 minutes (+23°C / 50% r.h.)	
Curing Rate	~ 3.5 mm / 24h (+23°C / 50% r.h.)	
Joint Dimensions	Min. width = 10 mm / max width = 35 mm	
Sag Flow	0 mm, very good	(DIN EN ISO 7390)
Service Temperature	-40°C to +80°C	
Mechanical / Physical Properties		
Tear Strength	~ 8 N/mm^2	(DIN 53 515)
Shore A Hardness	~ 38 after 28 days (+23°C / 50% r.h.)	(DIN 53 505)
E-Modulus	~ 0.6 N/mm^2 after 28 days (+23°C / 50% r.h.)	(DIN EN ISO 8340)
Elongation at Break	> 700% after 28 days (+23°C / 50% r.h.)	(DIN 53 504)
Elastic Recovery	> 80% after 28 days (+23°C / 50% r.h.)	(DIN EN ISO 7389 B)
Resistance		
Chemical Resistance	Resistant to water, seawater, diluted alkalis, cement grout and water dispersed detergent. Diesel and Jet Fuel according to the DIBT guidelines. Short term resistance to Fuels typically used on garage forecourts; 95 Octane Petrol and Test Fuel 2 (EN 14187-6). Report Number 00002-CS&B-00349-ELa, Not resistant to alcohols, organic acids, concentrated alkalis and concentrated acids, chlorinated (hydro-carbons) fuel.	

System Information

Application Details

Consumption / Joint Design

Joints:
The joint width must be designed to suit the movement capability of the sealant. In general the joint width must be > 10 mm and < 35 mm. A width to depth ratio of ~ 1 : 0.8 must be maintained.

Joints < 10 mm are for crack control and therefore non movement joints. Relevant is the joint width at the time of application of the sealant (guide value of + 10°C).

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.

For a temperature differential of +40°C:

Joint distance	*2 m*	*4 m*	*6 m*	*8 m*	*10 m*
Min. joint width	*10 mm*	*10 mm*	*10 mm*	*15 mm*	*20 mm*
Thickness of sealant	*10 mm*	*10 mm*	*10 mm*	*12 mm*	*15 mm*

For exterior areas (max. temperature differential of +80°C):

Joint distance	*2 m*	*4 m*	*5 m*	*6 m*	*8 m*
Min. joint width	*10 mm*	*15 mm*	*18 mm*	*20 mm*	*30 mm*
Thickness of sealant	*10 mm*	*12 mm*	*15 mm*	*15 mm*	*25 mm*

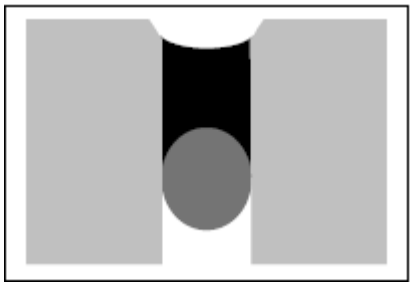
All joints must be properly designed and dimensioned by the specifier and the main contractor in accordance with the relevant standards, because changes are not usually feasible after construction. The basis for calculation of the necessary joint width is the technical values of the joint sealant and the adjacent building materials, plus the exposure of the building, its method of construction and its dimensions

Joint width	*10 mm*	*15 mm*	*20 mm*	*25 mm*	*30 mm*
Joint depth	*10 mm*	*12 - 15 mm*	*17 mm*	*20 mm*	*25 mm*
Joint length / 600 ml	*~ 6 m*	*~ 2.5 - 3.0 m*	*~ 1.8 m*	*~ 1.2 m*	*~ 0.8 m*
Joint length / 300 ml	*~ 3 m*	*~ 1.5 m*	*~ 0.9 m*	*~ 0.6 m*	*~ 0.4 m*

Backing: Use only closed cell, polyethylene foam backing rods.



The flush joint design rules out trip hazards and dirt traps.



The recessed joint design protects the sealant against mechanical loads.

Substrate Quality	Clean and dry, homogeneous, free from oils and grease, dust and loose or friable particles. Cement laitance must be removed
Substrate Preparation / Priming	Sikaflex® PRO-3 generally has strong adhesion to most clean, sound substrates. For optimum adhesion and critical, high performance applications such as multi story building work, for high stress bonding joints or in case of extreme weather exposure substrate primers and cleaners must be used. If in doubt apply product in test area first. *Non porous substrates:* Glazed tiles, powder coated metals, aluminium, anodised aluminium, stainless steel and galvanised steel have to be cleaned with a fine abrasive pad and Sika® Aktivator-205 by using a clean towel or cloth. Before sealing allow a flash off time of at least 15 min. **All other metal surfaces** not mentioned above have to be cleaned with a fine abrasive pad and Sika® Aktivator-205 by using a clean towel or cloth. After a flash off time of at least 15 minutes, apply Sika® Primer-3 N by using a brush. Before sealing allow a flash off time of at least 30 minutes (max. 8 hours). For PVC use Sika® Primer-215. Before sealing allow a flash off time of at least 30 minutes (max. 8 hours). *Porous substrates*: Concrete, aerated concrete and cementitious renders, mortars, brick, etc. have to be primed with Sika® Primer-3 N by using a brush. Before sealing allow a flash off time of at least 30 minutes (max. 8 hours). Important note: Primers are only adhesion promoters. They neither substitute for the correct cleaning of the surface nor improve their strength significantly. Primers improve long term performance of a sealed joint. For further information please refer to the Sika® Primer table.
Application Conditions / Limitations	
Substrate Temperature	+5°C min. / +40°C max.
Ambient Temperature	+5°C min. / +40°C max.
Substrate Moisture Content	Dry
Dew Point	Substrate temperature must be 3°C above dew point.
Application Instructions	
Application Method / Tools	Sikaflex® PRO-3 is supplied ready to use. After suitable joint and substrate preparation, insert Backing Rod to required depth and apply primer if necessary. Insert cartridge into sealant gun and firmly extrude Sikaflex® PRO-3 into joint making sure that it is full contact with the side of the joint. Fill the joint, avoiding air entrapment. Sikaflex® PRO-3 must be tooled firmly against joint sides to ensure good adhesion. Masking tape must be used where sharp exact joint lines or exceptionally neat lines are required. Remove the tape whilst the sealant is still soft. Sleek joint with smoothing liquid for a perfect sealant surface.
Cleaning of Tools	Clean all tools and application equipment with Sika® Remover-208 / Sika® Thinner C immediately after use. Hardened (cured) material can only be removed mechanically.

Construction

Notes on Application / Limitations

Elastic sealants may not be over painted since paints have a limited movement capability and thus will crack during joint movements.

Compatible coatings may cover the joint sides to max. 1 mm.
The compatibility must be tested according to DIN 52 452-2.

Colour deviations may occur due to exposure to chemicals, high temperatures, UV-radiation (especially with colour shade white). However a change in colour will not adversely influence the technical performance or the durability of the product.

Before using on natural stone contact our Technical Service.

Do not use Sikaflex® PRO-3 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® PRO-3 to seal swimming pools.

Do not mix with or expose uncured Sikaflex®PRO-3 to substances that may react with isocyanates, especially alcohols which are often components within e.g. thinners, solvents, cleaning agents and mould releasing compounds. Such contact could interfere or prevent the cross linking curing reaction of the material.

Value Base

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.

Local Restrictions

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet 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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