BUILDING TRUST

PRODUCT DATA SHEET

SikaHyflex®-250 Facade

High-performance, professional, elastic sealant for facades

DESCRIPTION

SikaHyflex®-250 Facade is a 1-component, moisture-curing, low-modulus elastic joint sealant.
SikaHyflex®-250 Facade is especially suitable for joint sealing according to the rules of DIN 18540 and also for connection joints.

USES

SikaHyflex®-250 Facade is designed for the elastic joint sealing and waterproofing of movement and connection joints in building envelopes. Joints in building construction, which have been designed according to the DIN 18540. Connection joints at windows and doors, concrete and plaster facades, natural stone facades, parapets and many other building components.

FEATURES

- Sealant according to DIN 18540-fb
- Very good weathering resistance
- Movement capability of 25%
- Bubble-free curing
- Low stress to the substrate
- Very good extrusion and workability
- Good adhesion to many different substrates
- Solvent-free, very low emissions

CERTIFICATES AND TEST REPORTS

- DIN 18540-fb, SKZ Würzburg
- EN 15651-1 F EXT-INT CC 25 LM, SKZ Würzburg
- ISO 11600 F 25 LM, SKZ Würzburg
- EMICODE EC1PLUS
- Migration behaviour EN 1186, EN 13130, CEN/TS 14234, ISEGA,
- EN 13501-1 Class E (Fire behaviour)

PRODUCT INFORMATION

Composition	i-Cure® Technology polyurethane	
Packaging	300 ml cartridge, 12 cartridges per box 600 ml foil pack, 20 foil packs per box	
Colour	Uni white, cream ivory, beige, buff, brown, dark brown, pebble grey, concrete light grey, concrete grey, medium grey, dark grey, basalt grey, anthracite grey, black	
Shelf life	15 months from the date of production	
Storage conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +25 °C, where it is protected from direct sunlight. Always refer to packaging.	
Density	~1.35 kg/l	(ISO 1183-1)

TECHNICAL INFORMATION

Shore A hardness	~20 (after 28 days)	(ISO 868)
Secant tensile modulus	~0.30 N/mm² at 100% elongation (23 °C) ~0.60 N/mm² at 100% elongation (−20 °C)	(ISO 8339)
Tensile strain at break	~800%	(ISO 37)
Elastic recovery	> 75%	(ISO 7389)
Tear propagation resistance	~5.0 N/mm	(ISO 34)
Movement capability	25%	
Resistance to fire	Class E	(DIN EN 13501-1)
Resistance to weathering	10	(ISO / DIS 19862)
Diffusion resistance to water vapour	μ ~ 2.500	(DIN EN 12572)
Service temperature	−40 °C to +70 °C	

Joint design

Joint layout and dimensions must be considered in the planning, because the installer usually has no possibility to change the joints. Calculation basis for the required joint width are the technical characteristics of the joint sealant and of the building materials, the stress of the building components, their construction and their size.

The joint width must be designed to suit the movement capability of the sealant. The joint width must be ≥ 10 mm and ≤ 35 mm. A width to depth ratio of 2:1 must be maintained (for exceptions, see table below).

Minimum joint width for movement joints: 10 mm

Standard joint widths for joints between concrete elements:

Joint distance [m]	Min. joint width [mm]	Min. joint depth [mm]
2	15	8
2 - 3,5	20	10
3,5 - 5	25	12
5 - 6,5	30	15
6,5 - 8	35	15

All joints must be correctly designed and dimensioned in accordance with the relevant standards,e.g DIN 18540, before their construction.
For larger joints please contact Sika Deutschland GmbH

APPLICATION INFORMATION

Consumption

Joint length [m] per 600 ml foil pack	Joint width [mm]	Joint depth [mm]
~ 7,5	10	8
~ 5,0	15	8
~ 3,0	20	10
~ 2,0	25	12
~ 1,3	30	15

Backing material	Use closed cell, polyethylene foam backing rods.	
Sag flow	0 mm (20 mm profile, 50 °C)	(ISO 7390)

Ambient air temperature	+5 °C to +40 °C	
Substrate temperature	+5 °C to +40 °C, min. 3 °C above dew point temperature	
Curing rate	~3 mm/24 hours (23 °C / 50% r.h.)	(CQP 049-2)
Skinning time	~70 minutes (23 °C / 50% r.h.)	(CQP 019-1)

BASIS OF PRODUCT DATA

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

IMPORTANT CONSIDERATIONS

- Do not use to seal joints in and around swimming pools. Natural stone of granite is to pre-treat like concrete. Other natural stones must be tested individually to check if the stone experiences plasticiser migration. Please contact Sika Deutschland GmbH.
- Do not use **SikaHyflex®-250 Facade** for joints under water pressure or for permanent water immersion.
- Do not use **SikaHyflex®-250 Facade** for floor joints and as a glazing sealant.
- Colour variations may occur due to the exposure in service to chemicals, high temperatures and/or UV-radiation (especially with white colour shade). This effect is aesthetic and does not adversely influence the technical performance or durability of the product.
- Elastic sealants should not generally be over painted. Sealant compatible coatings may cover the joint sides to max. 1 mm. Their compatibility must be tested individually according to DIN 52 452-2. Depending on type of paint used, plasticiser migration may occur causing the paint to become surface 'tacky'. Note: non-flexible paint systems may impair the elasticity of the sealant and lead to cracking of the paint coating.
- Do not use on PTFE (Teflon), Polyethylene (PE), Polypropylene (PP), Polystyrene (PS) and bituminous substrates, natural rubber, EPDM rubber or on any building materials which might leach oils, plasticisers or solvents that could degrade the sealant.
- Do not mix with or expose uncured **SikaHyflex®-250 Facade** to substances that may react with isocyanates, especially alcohols which are often components within e. g. thinners, solvents, cleaning agents and formwork releasing compounds. Such contact could interfere or prevent the cross linking curing reaction of the material.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be clean, dry, sound and free from oils, grease, dust, cement laitance, loose or friable particles, paint, hydrophobizing and antigrafitti-coating.

SikaHyflex®-250 Facade has very good adhesion properties on many clean and solid surfaces. However, for optimum adhesion and critical, high performance applications, such as on multi-story buildings, highly stressed joints, extreme weather exposure or water immersion, the following priming and/or pre-treatment procedures shall be followed:

Non-porous substrates
Anodised aluminium, stainless steel, enamel or glazed tiles has to be cleaned and pre-treated using **Sika® Aktivator-205** applied with a clean, lint-free cloth. Before sealing, allow a waiting time of > 15 minutes (< 6 hours).

2-component coatings or paints, based on EP, UP or PU, epoxy-resin mortars and coatings, GRP based on EP, UP or PU, powder coated metals, bare aluminium, and galvanised steel has to be slightly roughend with a fine abrasive pad (e.g. siavlies very fine). Clean and pre-treat using **Sika® Aktivator-205** applied with a clean, lint-free cloth. Before sealing, allow a waiting time of > 15 minutes (< 6 hours).

Other metals, such as copper, brass and titanium-zinc, clean and pre-treat using **Sika® Aktivator-205** applied with a clean, lint-free cloth. After a waiting time of > 15 minutes (< 6 hours), apply **Sika® Primer-3 N** applied by brush. Before sealing, allow a waiting time of > 30 minutes (< 8 hours)

Unplasticised PVC has to be cleaned and pre-treated using **Sika® Primer-215** applied with a brush. Before sealing, allow a waiting time of > 30 minutes (< 8 hours).

Porous substrates
Concrete, aerated concrete and cement-based renders, mortars, bricks and weathered wood surfaces must be primed using **Sika® Primer-3 N** applied by brush. Before sealing, allow a waiting time of > 30 minutes (< 8 hours).

For projects with sustainability certification (e.g. DGNB or LEED), we recommend the water-based **Sika® Primer-4 W** on porous substrates, for joints at facades and windows.

Note: Primers and activators are adhesion promoters and not an alternative to improve poor preparation / cleaning of the joint surface. Primers also improve the long-term adhesion performance of the sealed joint. Contact Sika Deutschland GmbH for additional information.

APPLICATION METHOD / TOOLS

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

Masking
It is recommended to use masking tape where neat or exact joint lines are required. Remove the tape within the skinning time after finishing.

Joint Backing
After the required substrate preparation, insert a suitable, closed cell polyethylene foam backing rod to the required depth.

Priming
If required, prime the joint surfaces as recommended in substrate preparation. Avoid excessive application of primer to avoid causing puddles at the base of the joint.

Application
SikaHyflex®-250 Facade is supplied ready to use. Prepare the end of the foil pack or cartridge, insert into the sealant gun and fit the nozzle. Extrude **SikaHyflex®-250 Facade** into the joint ensuring that it comes into full contact with the sides of the joint and avoiding any air entrapment.

Finishing
As soon as possible after application, within the skinning time, sealant must be firmly tooled against the joint sides to ensure adequate adhesion and a smooth finish.
Use a compatible tooling agent (e.g. **Sika® Tooling Agent N**) to smooth the joint surface. Water can be used. Do not use tooling products containing solvents.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with **Sika® Remover-208** or **Sika® PowerClean** cleaning wipes, immediately after use. Hardened material can only be removed mechanically.

For cleaning skin use suitable cleaning wipes, e.g. **Sika® PowerClean** cleaning wipes, or other suitable skin cleaner and water.
Dont´t use solvents at the skin!

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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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