PRODUCT DATA SHEET

SikaHyflex®-250 Facade

High-performance, professional, joint sealant for concrete, masonry and EIFS facades

PRODUCT DESCRIPTION

SikaHyflex®-250 Facade is a 1-component, moisture-curing, low-modulus elastic joint sealant.

USES

SikaHyflex®-250 Facade is designed for the elastic joint sealing and waterproofing of movement and connection joints in building envelopes. Due to its very low modulus, SikaHyflex®-250 Facade is also suitable for EIFS Facades.

CHARACTERISTICS / ADVANTAGES

- Very good weathering resistance
- Movement capability of +100 / −50% (ASTM C 719)
- Bubble-free curing
- Low stress to the substrate
- Very good extrusion and workability
- Good adhesion to many different substrates
- Solvent-free
- Very low emissions

ENVIRONMENTAL INFORMATION

- EMICODE EC1PLUS R
- LEED v4 EQc 2: Low-Emitting Materials

APPROVALS / STANDARDS

- EN 15651-1 F EXT-INT CC 25 LM
- ISO 11600 F 25 LM
- DIN 18540 F
- ASTM C 920, class 100/50

PRODUCT INFORMATION

Chemical Base	i-Cure® Technology polyurethane	
Packaging	600 ml foil pack, 20 foil packs per box	
Colour	Colour range to be defined by local sales organization.	
Shelf Life	SikaHyflex®-250 Facade has a shelf life of 15 months from the date of production, if it is stored in undamaged, original, sealed packaging, and if the storage conditions are met.	
Storage Conditions	SikaHyflex®-250 Facade shall be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5 °C and +25 °C.	
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)
Elongation at Break	~800%	(ISO 37)
Elastic Recovery	~80%	(ISO 7389)
Tear Propagation Resistance	~5.0 N/mm	(ISO 34)
Movement Capability	± 25% +100 / −50%	(ISO 9047) (ASTM C 719)
Resistance to Weathering	10	(ISO / DIS 19862)
Service Temperature	−40 °C to +70 °C	

Joint Design

The joint width must be designed to suit the joint movement required and the movement capability of the sealant. The joint width shall be ≥ 10 mm and ≤ 50 mm. A width to depth ratio of 2:1 must be maintained (for exceptions, see table below).

Standard joint widths for joints between concrete elements:

Joint distance [m]	Min. joint width [mm]	Min. joint depth [mm]
2	10	10
4	15	10
6	20	10
8	30	15
10	35	17

All joints must be correctly designed and dimensioned in accordance with the relevant standards, before their construction. The basis for calculation of the necessary joint widths are the type of structure and its dimensions, the technical values of the adjacent building materials and the joint sealing material, as well as the specific exposure of the building and the joints. For larger joints please contact Sika Technical Service.

APPLICATION INFORMATION

Consumption

Joint length [m] per 600 ml foil pack	Joint width [mm]	Joint depth [mm]
6	10	10
4	15	10
3	20	10
2	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)
Skin Time	~70 minutes (23 °C / 50% r.h.)	(CQP 019-1)
Tooling Time	~65 minutes (23 °C / 50% r.h.)	(CQP 019-2)

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be clean, dry, sound and homogeneous, free from oils, grease, dust and loose or friable particles. SikaHyflex®-250 Facade adheres without primers and/or activators.
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 pretreatment procedures 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 using Sika® Aktivator-205, wiped on with a clean towel. Before sealing, allow a flash-off time of > 15 minutes (< 6 hours).
Other metals, such as copper, brass and titanium-zinc, also have to be cleaned and pre-treated using Sika® Aktivator-205, wiped on with a clean towel. After the necessary flash-off time, use a brush to apply Sika® Primer-3 N and allow a further flash-off time of > 30 minutes (< 8 hours) before sealing the joints.
PVC has to be cleaned and pre-treated using Sika® Primer-215 applied with a brush. Before sealing, allow a flash-off time of > 30 minutes (< 8 hours).

Porous substrates
Concrete, aerated concrete and cement based renders, mortars and bricks shall be primed using Sika® Primer-3 N applied with a brush. Before sealing, allow a flash-off time of > 30 minutes (< 8 hours).

For more detailed advice and instructions please contact Sika Technical Services.

Note: Primers are adhesion promoters. They are neither a substitute for the correct cleaning of a surface, nor do they improve the strength of the surface significantly.

APPLICATION METHOD / TOOLS

SikaHyflex®-250 Facade is supplied ready to use.
After the necessary substrate preparation, insert a suitable backing rod to the required depth and apply any primer if necessary. Insert a foil pack into the sealant gun and extrude SikaHyflex®-250 Facade into the joint making sure that it comes into full contact with the sides of the joint and avoids any air entrapment. SikaHyflex®-250 Facade must be firmly tooled against the joint sides to ensure adequate adhesion.
It is recommended to use masking tape where exact joint lines or 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 tooling products containing solvents.

CLEANING OF TOOLS

Clean all tools and application equipment immediately after use with Sika® Remover-208 and/or Everbuild Wonder Wipes. Once cured, residual material can only be removed mechanically.

FURTHER DOCUMENTS

- Safety Data Sheet (SDS)
- Pre-treatment Chart Sealing & Bonding
- Method Statement Joint Sealing
- Method Statement Joint Maintenance, Cleaning and Renovation
- Technical Manual Facade Sealing

LIMITATIONS

- SikaHyflex®-250 Facade can be overpainted with most conventional facade coating paint systems. However, paints must first be tested to ensure compatibility by carrying out preliminary trials (e.g. according to ISO technical paper: Paintability and Paint Compatibility of Sealants). The best over-painting results are obtained when the sealant is allowed to fully cure first. Note: non-flexible paint systems may impair the elasticity of the sealant and lead to cracking of the paint film.
- Colour variations may occur due to exposure to chemicals, high temperatures and/or UV-radiation (especially with the colour shade white). However, a change in colour is purely of aesthetic nature and does not adversely influence the technical performance or durability of the product.
- Before using SikaHyflex®-250 Facade on natural stone, please refer to Sika Technical Service for advice.
- Do not use SikaHyflex®-250 Facade on bituminous substrates, natural rubber, EPDM rubber or on any building materials which might bleed oils, plasticizers or solvents that could attack the sealant.
- Do not use SikaHyflex®-250 Facade to seal joints in and around swimming pools.
- Do not use SikaHyflex®-250 Facade for joints under water pressure or for permanent water immersion.
- Do not expose uncured SikaHyflex®-250 Facade to alcohol containing products as this may interfere with the curing reaction.

VALUE BASE

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

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 exact product data and uses.

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.

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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