BUILDING TRUST

PRODUCT DATA SHEET

# SikaHyflex®-250 Facade

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

## DESCRIPTION

SikaHyflex®-250 Facade is a 1-part polyurethane joint sealant. It is used for durably sealing movement and connection joints in concrete, masonry and EIFS facades.

## USES

The Product is used for sealing and weatherproofing joints in the building envelope where reliability and durability is required.
The Product is used for the following application areas:

- Interior or exterior joint sealing
- Around window and door frames
- Around facade elements
- Around precast elements
- EIFS facades

## FEATURES

- Easy to extrude and tool
- Very high movement capability of +100 % / -50 % (ASTM C 719)
- Monomeric diisocyanate content <0.1 %: no user safety training needed (REACH restriction 2023, Annex XVII entry 74)
- Odourless
- Very low emissions
- Good adhesion to many construction materials
- Good resistance to weathering

## SUSTAINABILITY

- EMICODE EC1PLUS R
- LEED v4 EQc 2: Low-Emitting Materials
- EPD
- Conform with DGNB 2020 qualitystep 4 (indicator 11 and 13)

## CERTIFICATES AND TEST REPORTS

- 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

| | | |
|---|---|---|
| **Product declaration** | EN 15651-1:2012<br>ISO 11600:2002<br>ASTM C 920-18 | F EXT-INT CC 25 LM<br>Class F 25 LM<br>Type S, Grade NS, Movement Class 100/50, Use NT, Use M |

| | |
|---|---|
| **Composition** | Sika i-Cure® polyurethane |
| **Packaging** | 300 ml cartridge, 12 cartridges per box<br>600 ml foil pack, 20 foil packs per box |
| **Shelf life** | 15 months from the date of production. |
| **Storage conditions** | SikaHyflex®-250 Facade must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging. |
| **Colour** | Please contact our customer service, for information of which colors are sold in Denmark. |
| **Density** | ~1.35 kg/l (ISO 1183-1) |

## TECHNICAL INFORMATION

| | | | |
|---|---|---|---|
| **Shore A hardness** | Cured 28 days at +23 °C and 50 % R.H. | 20 | (EN ISO 868) |
| **Secant tensile modulus** | Cured 28 days at +23 °C and 50% R.H. Measured at 100% elongation at +23 °C | 0.30 N/mm² | (ISO 8339) |
| | Cured 28 days at +23 °C and 50% R.H. Measured at 100% elongation at -20 °C | 0.60 N/mm² | |
| **Elongation at break** | Cured 7 days at +23 °C and 50 % R.H. Measured at 100 % elongation at -20 °C | 800 % | (ISO 37) |
| **Movement capability** | ± 25%<br>+100 / −50% | | (ISO 9047)<br>(ASTM C 719) |
| **Elastic recovery** | Cured 28 days at +23 °C and 50 % R.H. Measured at 100 % elongation for 24 hours | 80 % | (EN ISO 7389) |
| **Tear propagation resistance** | ~5.0 N/mm | | (ISO 34) |
| **Service temperature** | −40 °C to +70 °C | | |
| **Resistance to weathering** | 10 | | (ISO / DIS 19862) |
| **Joint design** | For movement joints, the width must be at least 8 mm and should not exceed 40 mm. For non-movement joints such as connection joints in interior areas, the joint width can be less than 8 mm.<br>The joint dimensions must be designed to suit the movement capability of the sealant. In all cases joints must be at least 8 mm deep or a have a width to depth ratio of 2 : 1 whichever is greater.<br>For more information about joint design and calculations refer to the Sika document Design guideline: Dimensioning of construction joints or contact Sika Technical Services. | | |

## APPLICATION INFORMATION

| | | |
|---|---|---|
| **Sag flow** | 0 mm (20 mm profile, 50 °C) | (ISO 7390) |
| **Material temperature** | | |
| **Ambient air temperature** | +5 °C to +40 °C | |
| **Substrate temperature** | Maximum | +40 °C |
| | Minimum | +5 °C |
| | Beware of condensation. Substrate temperature during application must | |

| | | | |
|---|---|---|---|
| | be at least +3 °C above dew point. | | |
| **Backing material** | Use closed cell, polyethylene foam backing rods. | | |
| **Curing rate** | At +23 °C and 50 % R.H. | 3 mm / 24 h | (CQP049-2) |
| **Skinning time** | At +23 °C and 50 % R.H. | 70 minutes | (CQP019-1) |
| **Tooling time** | At +23 °C and 50 % R.H. | 65 minutes | (CQP019-2) |

## BASIS OF PRODUCT DATA

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.

## FURTHER INFORMATION

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

## IMPORTANT CONSIDERATIONS

- Tests must be performed on the actual surfaces and under current conditions to ensure adhesion and material compatibility.
- 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.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY

IMPORTANT
**Poor adhesion due to inadequate surface preparation**
Primers are adhesion promoters.
1. Do not use primers for improving poorly prepared or poorly cleaned joint surfaces.

IMPORTANT
**Poor adhesion due to incorrect priming procedure**
Incorrectly defined or uncontrolled priming procedures may lead to a variation in Product performance.
1. Test adhesion on project-specific substrates and agree on procedures with all parties before full project application. For more information contact Sika Technical Services.

### SUBSTRATE PREPARATION

he substrate must be sound, clean, dry and free of contaminants such as dirt, oil, grease, cement laitance, sealant residues and poorly bonded coatings which could affect adhesion of the primer and sealant.
The substrate must be of sufficient strength to cope with the stresses induced by the sealant during movement.
1. Use techniques such as wire brushing, grinding, grit blasting or other suitable mechanical methods to remove all weak substrate material.
2. Repair all damaged joint edges with suitable Sika repair products.
3. Remove dust, loose and friable material from all surfaces before applying the sealant.

If tested or supported by experience, the Product can be used without primers or activators on many substrates.
Use the following priming or pre-treatment procedures to ensure optimum adhesion and joint durability, or if the Product is used for high-performance applications such as joints on multi-storey buildings, highly stressed joints, or joints exposed to extreme weather.

### NON-POROUS SUBSTRATES

Aluminium, anodised aluminium, stainless steel, gal-

vanised steel or glazed tiles
1. Lightly roughen the surface with a fine abrasive pad.
2. Clean the surface.
3. Pretreat the surface with Sika® Aktivator-205 applied with a clean cloth.

Other metals, such as copper, brass and titanium-zinc
1. Lightly roughen the surface with a fine abrasive pad.
2. Clean the surface.
3. Pretreat the surface with Sika® Aktivator-205 applied with a clean cloth.
4. Wait until the flash-off time is over.
5. Prime the surface with Sika® Primer-3 N applied with a brush.

Powder-coated metals
1. Carry out preliminary trials to verify adhesion. For more information contact Sika Technical Services.

PVC substrates
1. Prime the surface with Sika® Primer-215 applied with a brush.

### POROUS SUBSTRATES

Concrete, aerated concrete and cement based renders, mortars and bricks
1. Prime the surface with Sika® Primer-3 N or Sika® Primer-115 applied with a brush.

Concrete that is 2 to 3 days old, or matt wet (surface dry)
1. Prime the surface with Sika® Primer-115 applied with a brush.

### 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 or cartridge 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 EQUIPMENT

Clean all tools and application equipment immediately after use with Sika® Remover-208 and/or Sika® Cleaning Wipes-100. Once cured, residual material can only be removed mechanically.

## LOCAL RESTRICTIONS

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

## LEGAL NOTES

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

**Sika Danmark A/S**
Hirsemarken 5
3520 Farum
Tlf. +45 48 18 85 85
www.sika.dk