DESCRIPTION

SikaHyflex®-305 EU is a 1-component, moisture curing, low-modulus elastic weather sealant. Suitable for use in hot and tropical climatic conditions.

USES

SikaHyflex®-305 EU is designed for weather proofing and sealing applications where durability under severe conditions is required. SikaHyflex®-305 EU is particularly suited for use as a weather sealant for curtain wall and metal cladding facades.

CHARACTERISTICS / ADVANTAGES

- Very good weathering resistance
- Movement capability of ± 50 % (ASTM C 719)
- Very good workability
- Good adhesion to a wide range of substrates
- Solvent-free
- Neutral cure

ENVIRONMENTAL INFORMATION

SikaHyflex®-305 EU conforms to LEED® EQc 4.1
- VOC content < 50 g/l (US EPA Method 24)
- SCAQMD, Rule 1168
- BAAQMD, Reg. 8, Rule 51

APPROVALS / STANDARDS

- ASTM C 920, class 50
- EN 15651-1 F EXT-INT CC 25 LM
- EN 15651-2 G CC 25 LM
- ISO 11600 F 25 LM & G 25 LM
- DIN 18540 F

PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Chemical Base</th>
<th>Neutral cure silicone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>300 mL cartridge, 25 cartridges per box 600 mL foil pack, 20 foil packs per box</td>
</tr>
<tr>
<td>Colour</td>
<td>Black, white, grey S1, grey S3, grey S4, grey S6, ivory, beige and bronze</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>SikaHyflex®-305 EU has a shelf life of 12 months for cartridges and 15 months for foil packs from the date of production, if it is stored in undamaged, original, sealed packaging, and if the storage conditions are met.</td>
</tr>
<tr>
<td>Storage Conditions</td>
<td>SikaHyflex®-305 EU shall be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5 °C and +25 °C.</td>
</tr>
<tr>
<td>Density</td>
<td>~1.50 kg/l (ISO 1183-1)</td>
</tr>
</tbody>
</table>
**TECHNICAL INFORMATION**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shore A Hardness</td>
<td>~25 (after 28 d)</td>
</tr>
<tr>
<td>Secant Tensile Modulus</td>
<td>~0.35 N/mm² at 100% elongation (23 °C)</td>
</tr>
<tr>
<td></td>
<td>~0.45 N/mm² at 100% elongation (-20 °C)</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>~900 %</td>
</tr>
<tr>
<td>Elastic Recovery</td>
<td>~80 %</td>
</tr>
<tr>
<td>Tear Propagation Resistance</td>
<td>~4.0 N/mm</td>
</tr>
<tr>
<td>Movement Capability</td>
<td>± 50 %</td>
</tr>
<tr>
<td>Resistance to Weathering</td>
<td>10</td>
</tr>
<tr>
<td>Service Temperature</td>
<td>-40 °C / +150 °C</td>
</tr>
</tbody>
</table>

**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 ≥ 6 mm and ≤ 45 mm. The joint depth shall be ≥ 6 mm and ≤ 15 mm. A width to depth ratio of 2 : 1 must be maintained (for exceptions, see table below).

**Typical joint dimensions**

<table>
<thead>
<tr>
<th>Joint Width [mm]</th>
<th>Joint Depth [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>45</td>
<td>15</td>
</tr>
</tbody>
</table>

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 our Technical Departement.

**Compatibility**

SikaHyflex®-305 EU is compatible with most SikaHyflex® and Sikasil® silicone weather sealants, Sikasil® SG adhesives and Sikasil® IG sealants. All other sealants and adhesives have to be approved by Sika before using them in direct contact with SikaHyflex®-305 EU.

Where two or more different reactive sealants and/or adhesives are used, allow the first one to cure completely before applying the next one. For specific information regarding compatibility contact our Technical Departement.
APPLICATION INFORMATION

<table>
<thead>
<tr>
<th>Consumption</th>
<th>Joint length [m] per 600 mL foil pack</th>
<th>Joint width [mm]</th>
<th>Joint depth [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>15</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>30</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Backings Material
Use closed cell, polyethylene foam backing rods.

Sag Flow
~0 mm (20 mm profile at 50 °C) (ISO 7390)

Ambient Air Temperature
+5 °C / +40 °C (min. 3 °C above dew point temperature)

Substrate Temperature
+5 °C / +40 °C

Curing Rate
~2 mm/24 h (23 °C / 50 % r.h.) (CQP 049-2)

Skin Time
~25 min. (23 °C / 50 % r.h.) (CQP 019-1)

Tack Free Time
~180 min. (23 °C / 50 % r.h.) (CQP 019-1)

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be clean, dry, sound and homogeneous, free from oils, grease, dust and loose or friable particles. The following priming and/or pre-treatment procedures shall be followed:

Non-porous substrates
Float glass, coated glass, anodised aluminium and stainless steel have to be pre-treated using Sika® Aktivator-205, Sika® Aktivator-100 or Sika® Cleaner P. Powder coated and PVDF coated metals have to be pre-treated using Sika® Aktivator-205. For details like application and flash-off times refer to the most recent Product Data Sheet of the respective pre-treatment product.

Porous substrates
Concrete, aerated concrete and cement based renders, mortars and bricks shall be primed using Sika® Primer-3 N or Sika® Primer-210. For details like application and flash-off times refer to the most recent Product Data Sheet of the respective pre-treatment product.

Adhesion tests on project specific substrates must be performed prior to application. For more detailed advice and instructions please contact our Technical Department.

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®-305 EU is supplied ready to use. After the necessary substrate preparation, insert a suitable backing rod to the required depth and apply pre-treatment if necessary. Insert a foil pack or cartridge into the sealant gun and extrude SikaHyflex®-305 EU into the joint making sure that it comes into full contact with the sides of the joint and avoids any air entrapment. SikaHyflex®-305 EU sealant 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.

CLEANING OF TOOLS

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

- Safety Data Sheet (SDS)
- Pre-treatment Chart Sealing & Bonding
- General Guidelines SikaHyflex and Sikasil Weather Sealants

LIMITATIONS

- SikaHyflex®-305 EU cannot be overpainted.
- Colour variations may occur due to exposure to chemicals, high temperatures and/or UV-radiation (especially with the colour white). However, a change in colour is purely of aesthetic nature and does not adversely influence the technical performance or durability of the product.
- Do not use SikaHyflex®-305 EU on natural stone.
- Do not use SikaHyflex®-305 EU 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®-305 EU on pre-stressed polycarbonate as it may cause environmental stress cracking (crazing).
- Do not use SikaHyflex®-305 EU to seal joints in and around swimming pools.
- Do not use SikaHyflex®-305 EU for joints under water pressure or for permanent water immersion.
- Do not expose uncured SikaHyflex®-305 EU to alcohol containing products as this may interfere with the curing reaction.

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.

LOCAL RESTRICTIONS

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