

PRODUCT DATA SHEET

SikaSeal®-106 Construction

HYDROFLEX CONSTRUCTION SEALANT FOR CONNECTION JOINTS

PRODUCT DESCRIPTION

SikaSeal®-106 Construction is an elastic construction sealant for connection joints based on Sika's innovative water-borne Hydroflex technology. Its good adhesion to most construction materials makes it especially suitable for a variety of interior and exterior sealing applications.

USES

Sealing joints for:

- Connection joints
- Window and door frames
- Precast concrete elements
- Applications requiring over-painting of sealant
- Interior and exterior use

CHARACTERISTICS / ADVANTAGES

- Very easy to apply, easy to clean
- Low stress on substrate
- Can be over-painted
- Phthalate free
- Water-borne
- Very low VOC emissions
- Good adhesion to porous construction materials
- Movement capability $\pm 25\%$ (ISO 9047)
- Resistant to weathering
- Elastic over a wide range of temperatures
- 1-part ready to use

PRODUCT INFORMATION

Chemical Base	Hydroflex technology	
Packaging	280 ml cartridge	12 cartridges per box
Colour	White	
Shelf Life	12 months from the date of production	

ENVIRONMENTAL INFORMATION

- VOC emission classification GEV-Emicode EC1^{PLUS}
- Conformity with LEED v4 EQc 2: Low-Emitting Materials
- VOC emission classification of building materials RTS M1

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 15651-1 - Sealants for non-structural use in joints-Facade elements - F EXT-INT CC
- Joint classification, EN ISO 11600 F 12.5 E, SikaSeal®-106 Construction, SKZ, Report No. 123505/16-IV
- Joint Classification, ASTM C920-14 Type S, Grade NS, Class 25, Uses NT and M, SikaSeal®-106 Construction, MST, Report No-1216920-SIKA

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. Always refer to packaging.	
Density	~1,50 kg/l	(ISO 1183-1)
Product Declaration	EN 15651-1: F EXT-INT CC, EN ISO 11600: F 12,5 E ASTM C920: Type S, Grade NS, Class 25, Uses NT and M	

TECHNICAL INFORMATION

Shore A Hardness	~15 (after 28 days)	(ISO 868)						
Secant Tensile Modulus	~0,10 N/mm ² at 60 % elongation (23 °C) ~0,40 N/mm ² at 60 % elongation (-20 °C)	(ISO 8339)						
Elongation at Break	~400 %	(ISO 8339)						
Tear Propagation Resistance	~2,0 N/mm	(ISO 34)						
Movement Capability	±25 % ±25 %	(ISO 9047) (ASTM C 719)						
Service Temperature	-40 °C min. / +70 °C max.							
Joint Design	<p>The joint dimensions must be designed to suit the movement capability of the sealant. The joint width must be ≥ 5 mm and ≤ 15 mm. The joint depth must be ≥ 5 mm and ≤ 10 mm. A width to depth ratio between 2:1 to 1:1 must be maintained (min / max examples, see table below).</p> <table border="1"> <thead> <tr> <th>Joint width [mm]</th> <th>Joint depth [mm]</th> </tr> </thead> <tbody> <tr> <td>min. 5</td> <td>min. 5</td> </tr> <tr> <td>max. 15</td> <td>max. 10</td> </tr> </tbody> </table> <p>All joints must be correctly designed and dimensioned in accordance with the relevant standards and codes of practice before their construction. The basis for calculation of the necessary joint widths are the type of structure, dimensions, technical values of the adjacent building materials, joint sealing material, and the specific exposure of the building and the joints. For larger joints contact Sika Technical Services for additional information.</p>		Joint width [mm]	Joint depth [mm]	min. 5	min. 5	max. 15	max. 10
Joint width [mm]	Joint depth [mm]							
min. 5	min. 5							
max. 15	max. 10							

APPLICATION INFORMATION

Backing Material	Use closed or open cell, polyethylene foam backing rod	
Sag Flow	~0 mm (20 mm profile, +50 °C)	(ISO 7390)
Ambient Air Temperature	+5 °C min./+40 °C max.	
Substrate Temperature	+5 °C min./+40 °C max. Minimum +3 °C above dew point temperature	
Curing Rate	~2 mm (+23 °C / 50 % r.h.)	Sika Corporate Quality Procedure (CQP 049-2)
Skin Time	~30 minutes (23 °C / 50 % r.h.)	(CQP 019-1)
Tooling Time	~20 minutes (23 °C / 50 % r.h.)	(CQP 019-2)

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

The substrate must be sound, clean, dry and free of all contaminants such as dirt, oil, grease, cement laitance, old sealants and poorly bonded paint coatings which could affect adhesion of the sealant. The substrate must be of sufficient strength to resist the stresses induced by the sealant during movement.

SikaSeal®-106 Construction adheres without primers and/or activators.

Concrete, aerated concrete and cement based renders, mortars and brick surfaces can be primed if required using SikaSeal®-106 Construction dissolved in water (ratio 1:1–1:5) and applied by brush.

Iron and steel

Must be protected with an anti-corrosion primer. Contact Sika Technical Services for additional information.

APPLICATION METHOD / TOOLS

Reference must be made to further documentation where applicable, such as relevant method statement, application manual and installation or working instructions.

Masking

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

Joint Backing

After the required substrate preparation, insert a suitable backing rod to the required depth.

Application

SikaSeal®-106 Construction is supplied ready to use. Prepare the end of the foil pack or cartridge, insert into the sealant gun and fit the nozzle. Extrude SikaSeal®-106 Construction 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, sealant must be firmly tooled against the joint sides to ensure adequate adhesion and a smooth finish.

Water can be used if wet tooling is required. Do not use tooling products containing solvents.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be removed mechanically. For cleaning skin, use Sika® Cleaning Wipes-100

FURTHER DOCUMENTS

- Method Statement: Joint Maintenance, Cleaning and Renovation
- Technical Manual: Facade Sealing

LIMITATIONS

- 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.
- SikaSeal®-106 Construction can be over-painted 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). Optimum 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 coating.
- Do not use SikaSeal®-106 Construction on natural stone.
- Do not use for structural glazing or as a glass sealant.
- Do not use on bituminous substrates, natural rubber or any building materials which might leach oils, plasticisers or solvents that could degrade the sealant. EPDM or other gaskets in direct contact with SikaSeal®-106 Construction have to be tested for compatibility prior to application. For specific advice contact Sika technical services.
- Do not use SikaSeal®-106 Construction to seal joints in and around swimming pools.
- Do not use SikaSeal®-106 Construction for joints under water pressure or for permanent water immersion.
- Do not use for trafficked floor joints. Contact Sika Technical Services for advice on alternative products.
- Do not use for medical or pharmaceutical applications.

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.

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.

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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Product Data Sheet

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