BUILDING TRUST

PRODUCT DATA SHEET

SikaHyflex®-140 Construction

1-PART FLEXIBLE SEALANT FOR PRECAST SEALING

DESCRIPTION

SikaHyflex®-140 Construction is a 1-part, moisture curing, elastic joint sealant suitable for movement and connection joints between Precast elements.

USES

SikaHyflex®-140 Construction is designed for movement and connection joints in concrete facades as well as other construction sealing applications.

CHARACTERISTICS / ADVANTAGES

- Good weathering- and ageing resistance
- Movement capability of ±25 (ASTM C719)
- Good adhesion to Precast concrete
- Suitable for use in hot and tropical climatic conditions

APPROVALS / STANDARDS

Conforms to ASTM C920 class 25

PRODUCT INFORMATION

Chemical base	Polyurethane	
Packaging	600 ml foil pack, 20 foil packs per box	
Colour	Concrete grey, white, beige	
Shelf life	12 months from date of production if stored in undamaged original sealed containers.	
Storage Conditions	Store in dry conditions and protected from direct sunlight at temperatures between +5 °C and +25 °C	
Density	~1.40 kg/L (at +23 °C/50% r.h.)	(CQP1) 006-4, ISO 1183-1)

TECHNICAL INFORMATION

Shore A Hardness	~26 (after 28 days, +23 °C/50% r.h)	
Secant Tensile Modulus	~0.55 N/mm^2 at 60% elongation	(CQP 020-1, ISO 8339)

Elongation at Break	~400 %	(CQP 036-1, ISO 37)
Elastic Recovery	~80 %	(ISO 7389)
Tear Propagation Resistance	~6.5 N/mm	(CQP 045-1, ISO 34)
Movement Capability	±25 %	(ASTM C719)
Service temperature	-40 °C to +70 °C	

Joint Design

the joint width must be designed to suit the movement capability of the sealant. In general the joint width should be > 10 mm and < 35 mm.
A width to depth ratio of approx. 2:1 must be maintained.

Standard joint widths for joints between concrete elements with ΔT* = 80 °C

Joint distance (m)	2	4	6	8
Min. Joint width (mm)	10	16	26	35
Min. Joint depth (mm)	10	10	14	18

*ΔT is considered to be the difference between the highest expected temperature in use (or lowest, check which case leads to higher ΔT) and the application temperature.

All joints must be properly designed and dimensioned in accordance with the relevant standards, before construction. Basis for calculation of the necessary joint width are the technical values of the joint sealant and the adjacent building materials, as well as the exposure of the building, type of construction and its dimensions.

APPLICATION INFORMATION

Consumption

Approximate consumption

Joint Width (mm)	10	15	20	25	30
Joint Depth (mm)	10	10	10	12	15
Joint length / 600 ml(m)	6	4	3	2	1.3

Backing: Use closed cell, polyethylene foam backing rods

Sag Flow	< 3 mm (20 mm profile, 50°C)	(CQP 061-4, ISO 7390)
Application Temperature	+5 °C to +50 °C	
Curing Rate	~2 mm/24 hours	(CQP 049-2)
Skin time	~150 minutes	(CQP 019-1)
Tooling Time	~130 minutes	(CQP 019-2)

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

SikaHyflex®-140 Construction generally has strong adhesion without primers/activators to most clean, dry and sound substrates.
For optimum adhesion and critical, high performance applications such as multi story building work, high stress bonding joints, extreme weather exposure or water immersion the following procedure shall be followed:

Porous substrates

Concrete, aerated concrete and cementitious plasters, mortars, brick, etc. have to be primed with Sika® Primer-3 N by using a brush. Before sealing allow a flash-off time >30 minutes (max. 8 hours).

For detailed instructions consult the Product Data Sheet for pre-treatments or contact our Technical Service Department.

Primers are adhesion promoters. They neither substitute for the correct cleaning of the surface nor improve their strength significantly.

APPLICATION METHOD / TOOLS

SikaHyflex®-140 Construction is supplied ready to use.

After suitable substrate preparation, insert backing rod to the required depth and apply primer if necessary. Insert foil pack into sealant gun and extrude SikaHyflex®-140 Construction into joint making sure that it is in full contact with the sides of the joint and avoid air entrapment. SikaHyflex®-140 Construction must be tooled firmly against joint sides to ensure good adhesion.

Masking tape may be used where exact joint lines or exceptionally neat lines are required. Remove the tape within the skin time.

If SikaHyflex®-140 Construction is dry-tooled it shows a slightly structured, concrete-like surface. If it is wet-tooled (by using a compatible tooling agent e.g. Sika® Tooling Agent N) it shows a smooth surface.

Do not use solvent containing products as tooling agents!

CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Remover-208 / Sika® TopClean-T immediately after use. Once cured the material can only be removed mechanically.

FURTHER DOCUMENTS

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

LIMITATIONS

SikaHyflex®-140 Construction can be over-painted with most conventional paint Limitations The paint must be tested for compatibility by carrying out preliminary trials and the best results are obtained if the sealant is allowed to cure fully first. Please note that non-flexible paint systems may impair the elasticity of the sealant and lead to cracking of the paint film.
Colour deviations may occur due to exposure to chemicals, high temperatures, UV- radiation (especially with colour shade white). However a change in colour will not adversely influence the technical performance or the durability of the product.
Before using on natural stone contact our Technical Service

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.

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.

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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