

#### **BUILDING TRUST**

# PRODUCT DATA SHEET

# Sikaflex®-740 Construction

# Skim coat and wall paint compatible joint sealant

#### **DESCRIPTION**

Sikaflex®-740 Construction is a 1-component, moisture-curing, elastic joint sealant, designed for movement and connection joints and optimised for non-staining skim coat and over paint ability within few days of sealant application

#### **USES**

Sealing joints for:

- Joints requiring skim coat and paint application over sealant
- Movement and connection joints
- Interior and exterior use
- Low and highrise residential properties
- Facade, pre-cast and modular building elements
- Window and door frames

# **CHARACTERISTICS / ADVANTAGES**

- Non-staining on most skim coats and paints
- Very good resistance to weathering

- Movement capability of ± 35 (ASTM C 719)
- Very good adhesion to porous substrates
- Very good adhesion to most metals
- Bubble-free curing
- Good workability
- Very low emissions

#### **SUSTAINABILITY**

- Conforms with LEED v4 EQ credit: Low-emitting materials
- VOC Test Report, SCAQMD Rule 1168, LEED v4.1, Sikaflex-740 Construction, Eurofins, Report No. 392-2021-00292706 XG EN
- VOC Emission Test CDPH, Sikaflex®-740 Construction, Eurofins, Report No.392-2021-00292703\_H\_EN

# **APPROVALS / CERTIFICATES**

 Joint Classification, ASTM C920, Class 35, Sikaflex®-740 Construction

#### PRODUCT INFORMATION

Product declaration	<ul> <li>ASTM C920 - Type S, Grade NS, Movement Class 35, Use T1, NT, M</li> <li>i-Cure® Technology polyurethane</li> </ul>		
Composition			
Packaging	300 ml cartridges	12 cartridges per box	
	600 ml cylindrical foil pack	20 foil packs per box	
	Refer to the current price list for	r available packaging variations.	
Shelf life	12 months from date of production		
Storage conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +25 °C. Always refer to packaging.		

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#### **TECHNICAL INFORMATION**

Shore A hardness	~30 (after 28 days)		(EN ISO 868)
Tensile strength	~1 MPa		(ISO 37)
Secant tensile modulus	0.6 N/mm² at 60 % elongation (23 °C) (ISO		(ISO 8339)
Elongation at break	~800 %		(ISO 37)
Movement capability	± 35 %		(ASTM C719)
Elastic recovery	~80 %		(ISO 7389)
Tear propagation resistance	~6.0 N/mm		(ISO 34-2)
Service temperature	Maximum	+70 °C	
	Minimum	-40 °C	

#### Joint design

The joint dimensions must be designed to suit the movement capability of the sealant. A width to depth ratio of 2:1 must be maintained. Joint widths less than 10 mm are generally for interior connection joints or crack control joints and therefore considered as non-movement joints.

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 adjacent building materials
- Joint sealing material
- The specific exposure of the building and the joints

CALCULATION GUIDELINE FOLLOWING ASTM C1472-10 WITH A CLASS 35 SEALANT TO ASTM C920  $\,$ 

Calculation guideline following ASTM C1472-10 with a Class 35 sealant to ASTM C920

Joint distance	Minimum joint width	Minimum joint depth	
2 m	10 mm	10 mm	
4 m	15 mm	10 mm	
6 m	15 mm	10 mm	
8 m	25 mm	12 mm	
10 m	30 mm	15 mm	
12 m	35 mm	17 mm	
14 m	40 mm	20 mm	

For joint design and calculations contact Sika Technical Services for additional information.

### **APPLICATION INFORMATION**

Consumption	Joint width	Joint depth	Joint length per 600 ml foil pack
	10 mm	10 mm	6 m
	15 mm	10 mm	4 m
	20 mm	10 mm	3 m
	25 mm	12 mm	2 m
	30 mm	15 mm	1.3 m



	wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.		
Material temperature	Maximum	+40 °C	
	Minimum	+5 °C	
Ambient air temperature	Maximum	+40 °C	
	Minimum	+5 °C	
Substrate temperature	Maximum	+40 °C	
	Minimum	+5 °C	
	Temperature must be a minimum of +3 °C above dew point temperature		
Backing material	Use closed cell, polyethylene foam backing rod or backing tape.		
Curing rate	~3 mm/24 hours (23 °C / 50 % r.h.)		

~60 minutes (23 °C / 50 % r.h.)

~30 minutes (23 °C / 50 % r.h.)

#### **BASIS OF PRODUCT DATA**

Skinning time

**Tooling time** 

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**

- Sika Pre-treatment Sealing and Bonding Chart
- Sika Method Statement: Joint Sealing
- Sika Method Statement: Joint Maintenance, Cleaning and Renovation
- Sika Technical Manual: Facade Sealing

#### IMPORTANT CONSIDERATIONS

- The Product can be over-painted with most conventional wall and facade paint coating systems. However, paints must first be tested to ensure compatibility by carrying out preliminary trials. Optimum results are obtained when the sealant is allowed to fully cure first.
- Non-flexible paint systems may impair the elasticity of the sealant and lead to cracking of the paint coating. Depending on type of paint used, plasticiser migration may occur causing the paint to become surface 'tacky'.
- Colour variations may occur due to the exposure in service to chemicals, high temperatures and / or UVradiation (especially with white colour shade). This effect is aesthetic and does not adversely influence the technical performance or durability of the product.
- Do not use on natural stone.
- Do not use on bituminous substrates, natural rubber, EPDM rubber or on any building materials which might leach oils, plasticisers or solvents that could degrade the sealant.
- Do not use to seal joints in or around swimming

- Do not use for joints under water pressure or permanent water immersion.
- Do not expose uncured Product to alcohol containing products as this may interfere with the curing reaction

#### **ECOLOGY, HEALTH AND SAFETY**

Note: Consumption data is theoretical and does not allow for any addition-

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

# **APPLICATION INSTRUCTIONS**

#### MIXING

1-part ready to use

#### **APPLICATION**

#### **IMPORTANT**

#### Strictly follow installation procedures

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

- 1. Apply masking tape where neat or exact joint lines are required. Remove the tape within the skinning time of the Product after finishing.
- 2. After the required substrate preparation, insert a backing rod to the required depth.
- 3. Prime the joint surfaces as recommended in substrate preparation. Avoid excessive application of primer to avoid causing puddles at the base of the
- 4. The Product is supplied ready to use. Prepare the end of the foil pack or cartridge, insert into the sealant gun and fit the nozzle. Extrude the Product into



- the joint ensuring that it comes into full contact with the sides of the joint and avoiding any air entrapment
- 5. IMPORTANT Do not use tooling products containing solvents. As soon as possible after application, tool the sealant firmly against the joint sides to ensure adequate adhesion and a smooth finish. Use a compatible tooling agent such as Sika® Tooling Agent N to smooth the joint surface.

#### **CLEANING OF EQUIPMENT**

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

#### 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.

#### **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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