

PRODUCT DATA SHEET

Sikaflex[®]-730 SMP

Silane Modified Polymers For Durable Elastomeric Joint Sealant

DESCRIPTION

Sikaflex[®]-730 SMP is a high modulus all-purpose sealant, a tough, durable elastomeric joint sealant suitable for use in a wide range of external and internal building applications. It is based upon SMP technology resulting in a unique combination of Silicone and Polyurethane properties, ideally suited to Thailand climatic conditions and construction norm which prefers to apply cementitious skim coating over joints and paint over skim-coated joints. Sikaflex[®]-730 SMP has excellent primer-less adhesion to a wide range of common building substrates as indicated below and does not stain concrete and other masonry surfaces.

USES

Sikaflex[®]-730 SMP has been formulated for sealing joints in and around concrete, brick, masonry, pre-cast panels, stone cladding, windows, doors, and fiber cement board.

Sikaflex[®]-730 SMP bonds well to:

- Concrete and masonry
- Cement plaster systems
- Aluminum, copper, brass, and zinc
- Stainless, mild, or galvanized steel
- Glass and ceramic tiles
- Glass reinforced plastics.
- Fiber reinforced cement board
- Timber, particleboard, hardboard, and plywood (refer to Limitations section)

PRODUCT INFORMATION

Packaging	600 ml sausage unipacs 20 pcs per carton (5 nozzles provided in box)
Colour	White and Grey
Shelf life	12 months from date of manufacture if stored correctly as stated

FEATURES

- Good primer-less* adhesion to most common building materials (*Refer to Priming section)
- Paintable any time after curing, with water-based paints (compatibility testing recommended prior to full application)
- Will not stain paint, skim-coating, masonry or other surfaces
- Very durable
- Neutral cure
- Highly flexible
- Low odor
- Solvent-free and Isocyanate-free

FURTHER INFORMATION

The SMP, commonly referred to as MS or Modified Silicone within the market, represents a homogeneous product sharing fundamental characteristics, while exhibiting nuanced distinctions in sub-functionalities, properties, or applications.

CERTIFICATES AND TEST REPORTS

Complied with Joint Classification, ASTM C920, Class 25 / Type S / Grade NS

Storage conditions	Store in original, unopened packaging in cool and dry conditions. Protected from direct sunlight and at temperatures +5°C to +25°C.	
Density	~ 1.43 ± 0.02 g/m ³	(ASTM D1475)

TECHNICAL INFORMATION

Shore A hardness	~ 50 (after 7 days)	(ASTM C661 or D2240)
Tensile strength	~ 1.5 MPa	(ASTM D412)
Movement capability	> 25%	(ASTM C719 or ISO 9047)
Chemical resistance	Good to dilute acids and alkalis	
Resistance to weathering	Excellent UV resistance	
Service temperature	-40°C to +90°C	
Joint design	<p>Sikaflex®-730 SMP may be applied to joints between 10 and 35 mm wide. To minimize stresses imposed on the joint sealant, all moving joints should be designed to an optimum width to depth ratio of 2:1. This ratio is subject to these overriding minimum sealant depths:</p> <ul style="list-style-type: none"> ▪ 5 mm minimum sealant depth at any point. ▪ 5 mm minimum bonding depth against metals, glass, and other non-porous surfaces, providing that joint faces are in good condition. ▪ 8 mm minimum bonding depth against masonry or other porous surfaces, or any non-porous surfaces where joint faces are in poor condition. ▪ Shear joints shall be a minimum joint width to depth ratio of 1:2 up to a maximum of 1:1. 	
Elongation at break	~ 330% (after 7 days)	(ASTM D412)

APPLICATION INFORMATION

Curing rate	3 mm / 24 hours	(CQP-49-2)
Tack free time	~40 - 50 minutes (25 ±2°C)	(ASTM C679 or JIS K 96249)
Tooling time	~30 minutes (23 ±2°C)	(CQP-019-2)

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.

LIMITATIONS OF USE

Sikaflex®-730 SMP must not be used as follows:

- With polyethylene, polypropylene, polybutylene, polycarbonate, and bitumen.
- Where it is subjected to permanent immersion in water.
- With structural glazing or floor joints.
- With pipes or in other applications where it may be subjected to hydrostatic or pneumatic pressures (other than wind pressure).
- Where continual exposure to aggressive solvents or chemicals will occur.
- Where timber or wood-based products have been painted.

- Sikaflex®-730 SMP will accept water based and multi-component coatings. However, as with all elastomeric sealants, coatings may cause undesirable side effects. Movement accommodation ability may be reduced. Dirt pick-up and discoloration may occur in the long term.
- Sikaflex®-730 SMP is suitable for use in static joints such as window and door perimeters, as well as low-movement joints such as precast wall joints in low-rise building construction, especially due to its flexibility and strong adhesion properties. It can be skim coated and painted over without issues of oil staining. However, for high-movement joints such as precast wall joints in high-rise structural construction, it is advisable to use a polyurethane sealant product like Sikaflex® -740 Construction, which offers higher elongation and movement capability, particularly for porous surfaces.

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 Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

NOTES ON INSTALLATION

Good adhesion can be gained on concrete, timber, metals, ceramics, brick work and most coating surfaces without the use of primers. However, on some surface's adhesion may be improved using a primer - refer to Sika for advice.

SUBSTRATE PREPARATION

Joint surfaces must be clean and free from frost and surface water. Remove all dirt, laitance, loose materials, and foreign matter.

- Remove all rust, scale, and protective lacquers from metal surfaces.
- Highly porous surfaces should be cleaned and primed with Sika Primer-3N to enhance bond adhesion.
- In all joints a bond breaker must be used to prevent sealant contact with the back of the joint, and hence allow optimum performance. In shallow joints self-adhesive polyethylene tape can be used. Deep joints should incorporate a backing strip to support the sealant while also acting as a bond breaker.

APPLICATION METHOD / TOOLS

Application temperature: +5°C to +40°C.

Cartridge: Cut off the end threaded stub on cartridge, screw on nozzle and cut nozzle to desired bead size at a 45° angle.

Sausage: Fit Sikaflex®-730 SMP sausage into barrel sealant gun and using wire cutters cut the sausage below the metal crimp at one end. Place sausage nozzle over open end of gun and screw on end cap to hold in place. Extrude the sealant firmly into joint to ensure complete contact with joint faces. Smooth finish, if necessary, with a spatula wetted with a dilute detergent solution.

CLEANING OF EQUIPMENT

Clean tools immediately after use with any solvent such as Thinner.

LOCAL RESTRICTIONS

Please note that because 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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