

Sikaflex[®] MS

High performance multi-purpose modified silicone sealant

Construction

Positioning

Description

Sikaflex[®] MS is a tough, durable elastomeric joint sealant suitable for use in a wide range of external and internal building applications. It is based upon modified silicone polymer technology resulting in a unique combination of properties ideally suited to New Zealand climatic conditions. Sikaflex MS has excellent primerless adhesion to a wide range of common building substrates as indicated below and does not stain concrete, marble and other masonry surfaces.

Use

Sikaflex[®] MS has been formulated for sealing joints in and around concrete, brick, masonry, pre-cast panels, stone cladding, windows, doors and fibre cement sheeting. Sikaflex[®] MS bonds well to:

- Concrete and masonry.
- Cement plaster systems.
- Aluminium, copper, brass and zinc.
- Stainless, mild or galvanised steel.
- Glass and ceramic tiles.
- Glass reinforced plastics.
- Fibre reinforced cement sheetings.
- Timber, particleboard, hardboard and plywood. (Refer to Limitations section.)
- Butylclad rubber products - chase sealing.

Advantages

- Good primerless* adhesion to most common building materials.
- Paintable any time after curing, with water-based paints (Compatibility testing recommended prior to full application).
- Will not stain masonry, marble or other surfaces.
- Very durable - **BRANZ appraised**.
- Neutral cure.
- Highly flexible.
- Low odour.

* Refer to Priming section.

Tests Approvals / Standards

Sikaflex[®] MS has been appraised by BRANZ – Certificate No.311 (2005)

Product Data

Form:

Moisture curing MS polymer

Colour:

Grey, white, black, bronze, ivory and titania

Storage & Shelf Life:

Twelve (12) months when stored in original, unopened packaging in cool, dry conditions.

Packaging:

300 ml cartridges / 12 per carton

Technical Data

Service temperature:

Minus 30°C to 70°C

Application temperature:

5°C to 40°C

Shore 'A' Hardness:

25 - 30

Movement capacity

(expansion-contraction):

± 25 % ISO 11600

Cure rate:

6 mm in 4 days at 25°C, 65% RH

U.V. resistance:

Excellent

Paintability:

Will accept water-based paints

Chemical resistance:

Good to dilute acids and alkalis

Design Criteria

Sikaflex[®] MS may be applied to joints between 10 and 35 mm wide. To minimise 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:

- 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.



Sika[®]

Application Conditions

Surface 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.
 - Non-porous surfaces should be degreased using Sika TCN Thinner/Cleaner.
 - 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 such as Sika PEF Rod to support the sealant while also acting as a bond breaker.

Priming

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

Application

- **Cartridge:** Cut the end off threaded stub on cartridge, screw on nozzle and cut nozzle to desired bead size at a 45° angle.
- **Sachet:** Cut the wire clamped end off the sachet and fit with open end towards nozzle into a fully enclosed barrel gun.
- 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

Clean tools immediately after use with Sika TCN Thinner/ Cleaner.

Important Notes Limitations

- Sikaflex® MS 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 MS will accept waterbased 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 discolouration may occur in the long term.

Notes

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.

Health & Safety Instructions

Protective Measures

- To avoid rare allergic reactions, we recommend the use of protective gloves. Change soiled work clothes and wash hands before breaks and after finishing work.
- Local regulations as well as health and safety advice on packaging labels must be observed.
- For further information refer to the Sika Material Safety Data Sheet which is available on request.
- If in doubt always follow the directions given on the pack or label.

Important Notes

- Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.
- Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the safety data sheet.

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



The Sika logo consists of the word "Sika" in a bold, yellow, sans-serif font, with a registered trademark symbol (®) to its right, all contained within a red triangle pointing downwards.

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