

# Sikaflex® Construction Sealant

## One-Component, Multi-Purpose, Polyurethane Sealant

<b>Description</b>	Sikaflex® Construction Sealant is a one component, polyurethane-based and moisture cured, nonsag elastomeric sealant.
<b>Where to Use</b>	<ul style="list-style-type: none"> <li>■ Designed for joints where maximum depth of sealant will not exceed 13 mm (1/2 in).</li> <li>■ Suitable for vertical and horizontal joints</li> <li>■ Has many applications as an elastic sealant between materials with dissimilar coefficients of expansion.</li> <li>■ Weatherproofing of joints between brickwork, blockwork, masonry, wood and concrete or metal frames.</li> <li>■ Joints in walls, floors, balconies, around window or door frames.</li> <li>■ Expansion joints.</li> <li>■ Roofing details.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>■ High elasticity - cures to a tough, durable, flexible consistency with exceptional cut and tear resistance.</li> <li>■ Stress relaxation - prevents separation from joint walls.</li> <li>■ Excellent adhesion - bonds to most construction materials without a primer.</li> <li>■ Excellent resistance to aging, weathering.</li> <li>■ Non-staining - compatible with architectural substrates including marble and stone</li> <li>■ Urethane-based; suggested by EPA for radon reduction.</li> <li>■ Can be painted over with water, oil and rubber-based paints.</li> <li>■ Capable of ± 25% joint movement.</li> <li>■ ANSI/NSF Standard 61 potable water contact-approved formula available by special order only.</li> <li>■ Meets Federal specification TT-S-00230C, Type II.</li> <li>■ Meets ASTM C920, Type S, Grade NS.</li> <li>■ Meets CAN CGSB-19.13-M87.</li> </ul>

### Technical Data

<b>Packaging</b>	300 mL (10.1 fl. oz) cartridge (12/case) 17 L (4.5 US gal.) pail
<b>Colours</b>	White, Capitol Tan, Limestone, Aluminum Gray, Medium Bronze, Hartford Green, Redwood Tan and Cedar
<b>Yield</b>	Linear Metre of Sealant per Litre
<b>Width</b>	<b>Depth</b>
<b>mm (in)</b>	<b>6 (¼)</b> <b>13 (½)</b>
6 (¼)	24.8
13 (½)	12.4
19 (¾)	8.3
<b>Shelf Life</b>	<b>300 mL cartridge:</b> 15 months; <b>17 L pail:</b> 6 months - in original, unopened packaging. Store dry between 4 and 35°C (39 and 95°F). Condition product between 18 and 30°C (65 and 86°F) before using.
<b>Properties at 23°C (73°F) and 50% R.H.</b>	
<b>Application Temperature</b>	4 to 38°C (39 to 100°F) Sealant should be installed when joint is at midrange of its anticipated movement.
<b>Service Range</b>	-40 to 77°C (-40 to 170°F)
<b>Curing Rate ASTM C679</b>	Tack-free time Meets ASTM C920 Final cure 7 days
<b>Shore A Hardness</b>	Meets ASTM C920
<b>Adhesion in Peel ASTM C794</b>	
Concrete	Meets ASTM C920
Aluminum	Meets ASTM C920
Glass	Meets ASTM C920
<b>Weathering Resistance</b>	Excellent
<b>Chemical Resistance</b>	Good resistance to water, diluted acids, and diluted alkalis.



## How to Use

### Surface Preparation

All joint surfaces must be clean, sound, dry and frost-free. Joint walls must be free of oils, tar, asphalt, bitumen, grease, paints, coatings, sealers, curing compound residues, and any other foreign matter that might prevent adhesion. Ideally this should be accomplished by mechanical means. Bond breaker tape or backer rod must be used in bottom of joint to prevent bond.

### Priming

Priming is not usually necessary. Most substrates only require priming if testing indicates a need or where sealant will be subjected to water immersion after cure. Consult Sikaflex® Primers Product Data Sheet for additional information.

### Application

For best performance, Sikaflex® Construction Sealant should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction. Recommended application temperature is between 4 and 38°C (39 and 100°F). For cold-weather application, store sealant at approximately 21°C (70°F) and remove just prior to using. Ensure joint is clean sound, dry and frost-free before sealing. Install with hand or power operated caulking gun. Cut plastic tip on cartridge to desired joint size. Puncture airtight seal at base of tip. Place nozzle of gun into bottom of joint and fill entire joint. Keeping the nozzle deep in the sealant, continue with a steady flow of sealant preceding nozzle to avoid air entrapment. Also, avoid overlapping of sealant since this also entraps air. Tool sealant when wet to compact and ensure contact with joint walls, produce the required finish and achieve a correctly dimensioned seal. Proper sealant dimensions for moving joints is 2:1 width to depth ratio, with a recommended 6 mm (1/4 in) minimum and 13 mm (1/2 in) maximum depth of sealant. For non-moving joints, the width to depth ratio can vary.

### Clean Up

Clean all tools and equipment with Sika® Equipment Cleaner. Once hardened, product can only be removed mechanically. Wash soiled hands and skin thoroughly in hot soapy water or use Sika® Hand Cleaner towels.

### Limitations

- The ultimate performance of Sikaflex® Construction Sealant depends on good joint design, correct joint preparation and proper application
- Some substrates require priming. Please refer to the Sikaflex® Primers Product Data Sheet or consult with Sika Canada's Technical Services.
- Although applying sealants over paints, sealers or coatings is not recommended within the industry, where it cannot be avoided, it is always necessary to test for adhesion. It should also be recognized that the existing paint, sealer or coating will dictate bond values and possibly the integrity of a subsequently applied sealant and thus the performance of the joint.
- Do not apply when joint walls are wet or damp and a moisture-vapour-transmission condition exists from the substrate as this can cause bubbling within the sealant.
- Maximum depth of sealant must not exceed 13 mm (1/2 in); minimum depth is 6 mm (1/4 in).
- The depth of sealant in horizontal joints subject to traffic is 13 mm (1/2 in).
- Maximum expansion and contraction should not exceed 25% of average joint width.
- Use opened cartridges the same day.
- When applying sealant, avoid air-entrapment.
- Do not tool with detergent or soap solutions.
- Since system is moisture-cured, permit sufficient exposure to air.
- Avoid contact with materials or surfaces impregnated with, or containing, oil, asphalt, tar or bituminous substances.
- Do not apply or cure in the presence of uncured silicone sealants, alcohol and other solvent cleaners.
- Allow at least 7 days for sealant to cure under stated conditions when using Sikaflex® Construction Sealant in total water immersion situations or prior to painting.
- When over-coating with water-, oil- and rubber- based paints, compatibility and adhesion tests are essential.
- Avoid exposure to high levels of chlorine. (maximum continuous level is 5 ppm of chlorine.)
- White colour tends to yellow slightly when exposed to ultraviolet light.

### Caution

**Irritant; Sensitizer; Combustible Liquid** - Contains xylenes, ethyl benzene, isocyanate prepolymer. Can cause skin and/or respiratory sensitization after prolonged or repeated exposure. Skin, eye, respiratory irritant. Avoid skin contact. Use only with adequate ventilation. Use of safety goggles and chemical resistant gloves is recommended. In case of exceedance of TLVs, use an appropriate, properly fitted NIOSH/MSHA approved respirator. Remove contaminated clothing. Keep away from sparks, open flames and high heat.

### First Aid

In case of skin contact, wash with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes. Contact a physician. For respiratory problems, transport victim to fresh air. Remove contaminated clothing and wash before re-use.

For more information, consult Sika Material Safety Data Sheet.

**KEEP OUT OF REACH OF CHILDREN  
FOR INDUSTRIAL USE ONLY**

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, within their shelf life. 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 recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under [www.sika.ca](http://www.sika.ca).

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