

Sikaflex® 1a

One-Component, Polyurethane Sealant

Description

Sikaflex 1a is a premium-grade, high performance, moisture-cured, one-component, polyurethane-based, non-sag elastomeric sealant.

Where to use

- Designed for all types of joints with maximum depth of 13 mm and a maximum expansion of 25%.
- Excellent for small joints and fillets: windows, door frames, reglets, flashing, glazing, and many construction adhesive applications.
- Suitable for vertical and horizontal joints; readily placeable at 4°C.
- Many applications as an elastic adhesive between materials with dissimilar thermal coefficients of expansion.

Advantages

- Available in Sika's unique, low-cost, sausage packaging system.
- Eliminates time, effort, and equipment for mixing, filling cartridges and cleaning of equipment.
- High elasticity - Cures to a tough, durable, flexible consistency with exceptional cut and tear resistance.
- Excellent adhesion - Bonds to most construction materials without primer in most cases.
- Long life
- Excellent resistance to aging, weathering.
- Proven in tough climates around the world.
- Canadian Food Inspection Agency acceptance for us in establishments registered by the Food Production and Inspection Branch.

TECHNICAL DATA

Packaging	305 mL cartridge, 24/case 590 mL sausage, 20/case		
Colours	Standard: Aluminum Grey, Dark Bronze, Limestone, White, Colonial White, Capitol Tan, Black.		
Yield	Joint size	Linear meter/unit	
		Cartridge	Sausage
	6 x 6 mm	8.4	16.3
	13 x 6 mm	3.9	7.5
	19 x 13 mm	1.2	2.4
Shelf Life	15 months in original, unopened packaging. Store between 5° - 32°C. Condition product to 18° - 30°C before using.		

PROPERTIES (23°C AND 50% R.H.)

Specific Gravity	1.237			
Base	Moisture-curing polyurethane pre-polymer			
Application Temperature	4° - 38°C			
	Sealant should be installed when joint is at mid-range of its anticipated movement			
Service Range	-40° to 77°C			
Curing Rate TT-S-00230C				
Tack-free to touch	3 h			
Final cure	4-7 days			
Recovery ASTM C719	>90%			
Shore A Hardness ASTM D2240				
21 days	40 ± 5			
Tensile Properties ASTM D412				
21 days	Tensile Stress	1.37 MPa		
	Elongation at Break	500%		
	Modulus of Elasticity	25%	0.24 MPa	
		50%	0.41 MPa	
	100%	0.59 MPa		
Adhesion in Peel TT-S-00230C				
Substrate	Peel Strength	Adhesion Loss		
	N/mm	%		
Aluminum	3.4	0		
Glass	3.4	0		
Concrete	3.4	0		
Weathering Resistance	Excellent			
Ozone Resistance	Excellent			
Tear Strength	Excellent			
Chemical Resistance	Long Term	Medium Term	Short Term	
	Water	Mineral oil	Paint diluents	
	Dilute acids	Vegetable oil	Strong acids	
	Dilute alkalis	Fats	Strong alkalis	
	Sewage	Fuels		

Sikaflex® 1a

One-Component, Polyurethane Sealant

7
07920 CONTROL/EXPANSION
JOINT SEALANTS



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 Technical Data Sheet for the product concerned, copies of which will be supplied on request or can be accessed in the Internet under www.sikacanada.com.

- USDA approved. Chemically acceptable to the U. S. Department of Agriculture for use in meat and poultry processing area under federal inspection.
- NSF and EPA approved for potable water contact.
- Resists fuel, mineral oils, and dilute minerals, plant and animal fats.
- Odorless, non-staining, can be painted over with water, oil, and rubber-base paints. Since some paints dry slowly and the surface may remain slightly tacky, a preliminary test is essential.
- Meets CAN/CGSB 19.13-M87, Classification MCG-2-25-B-N.
- Meets Federal Specification TT-S-00230C, Type II, Class A.
- Meets ASTM C920 Type S, Grade NS, Class 25.
- Jet fuel resistant
- Urethane based, suggested by EPA for radon reduction.

How to use

SURFACE PREPARATION

Clean all surfaces. Joint walls must be sound, clean, dry, and free from oil and grease. Curing compound residues and any other foreign matter must be completely removed. Install bond breaker to prevent sealant from adhering to bottom of joint slot.

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 technical data sheet for additional information

APPLICATION

Recommended application temperatures between 4° - 38°C. For cold-weather application, store units at approximately 20°C remove just prior to using. Make sure joint is frost-free.

Cut plastic tip on cartridge to desired joint size. Puncture airtight seal at base of tip. Install with hand or power operated caulking gun. For best performance, Sikaflex 1a should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction.

CURING

Allow 1 week curing time at 23°C and 50% R.H. when using Sikaflex 1a in total water-immersion situations.

CLEAN UP

Uncured Sikaflex 1a may be removed from tools with Sika Equipment Cleaner and hands cleaned with Sika Hand Cleaner.

LIMITATIONS

Do not use in joints deeper than 13 mm.

Avoid exposure to high levels of chlorine.

Do not cure in the presence of curing silicone sealants.

Avoid contact with alcohol, and other solvent cleaners, during cure.

Do not apply when a moisture vapour transmission condition exists at time of application, as this can cause bubbling within the sealant.

Use opened cartridges the same day.

When applying sealant, avoid air entrapment.

Since Sikaflex 1a is a moisture curing sealant system, permit sufficient exposure to air.

Slight yellowing may occur with white sealant exposed to ultra-violet rays.

The ultimate performance of Sikaflex 1a depends on good joint design, proper application and cure. Maximum expansion and contraction should not exceed 25% of average joint width.

Caution

Avoid contact with skin. Wash hands thoroughly with warm water and soap. According to FHSLA Toxicity rating, Sikaflex 1a is a skin irritant, an eye irritant, not toxic orally, not toxic by inhalation and not toxic dermally. Consult product label for additional information.

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**

7
07920 CONTROL/EXPANSION
JOINT SEALANTS

Sikaflex® 1a

One-Component, Polyurethane Sealant



Sika Canada Inc.

601, avenue Delmar
Pointe-Claire, QC H9R 4A9
Tél.: (514) 697-2610
Fax: (514) 697-3087

Ontario

970 Verbena Road
Mississauga, ON L5T 1T6
Tel.: (905) 795-3177
Fax: (905) 795-3192

Alberta

18131-114th Avenue N.W.
Edmonton, AB T5S 1T8
Tel.: (780) 486-6111
Fax: (780) 483-1580

www.sikacanada.com

ISO 9001-94
ISO 14001-96
MONTREAL
ISO 9002-94
EDMONTON