

SikaBond® Construction Adhesive

All-In-One Advanced Polyurethane, Elastomeric Adhesive/Sealant/Filler

Description SikaBond® Construction Adhesive is a one-component, gun-grade bonding, sealing and filling compound of permanent elasticity. This multi-purpose material is based on a special moisture-cured polyurethane with an accelerated curing time, allowing it to be used in many applications and for fast turnaround works. SikaBond® Construction Adhesive is used by general builders, roofing, landscaping and property maintenance contractors, electricians and shopfitters, in addition to many other trades and homeowners.

Where to Use

As an elastic adhesive for:

- Paver caps, masonry veneer, faux stone and landscaping blocks.
- Cover plates, gaskets and coverings.
- Ceiling and crown moldings and acoustic tiles.
- Floor moldings and base boards.
- Light weight construction materials.
- Wood, metal, or plastic window and door frames.
- Roof flashings, tiles and gutters.
- Ceramic and glass tiles or blocks.

As an elastic joint sealer for:

- Air ducts and high vacuum systems.
- Containers, tanks, and silos.
- Gaskets in openings in walls or floors for ducts, piling, etc.
- Reservoirs or water retaining structures.
- Aluminum fabrication.
- Bolted lap joints.

As an elastic filler for:

- Small, dynamic cracks in or between materials
- Narrow voids and small holes that need to be filled and sealed.

Advantages

- Excellent adhesion on all cement-based materials, brick, ceramics, glass, metals, wood, epoxy, polyester, acrylic resin, and plastic (not PVC). Up to 5 x the holding power of other adhesives.
- Fast cure rate, allowing quicker completion of works.
- Good weathering and water resistance.
- Is non-corrosive so enables different metals to be joined.
- Can be painted with water, oil, and rubber-based paints. (Preliminary tests recommended).
- High durability; does not shrink, harden or crack.
- Will not stain decorative materials where other substances might.
- Movement capability $\pm 12.5\%$ supports long term adhesion.
- Permanent elasticity even at low temperatures.
- Impact/vibration resistant to withstand contact and movement.
- Freeze-thaw resistant, preventing damage to the bond despite changes in weather.
- Meets Fed Spec TT-S-00230C
- Possesses USDA (United States of America Department of Agriculture) standards for contact with food (refer to specifics).
- Possesses CFIA (Canadian Food Inspection Agency) approval for contact with food (refer to specifics).
- Approved for contact with potable water when cured (ANSI/NSF Standard 61).

Technical Data

Packaging	300 (10.1 US fl. oz), 12/case and 858 mL (29 US fl. oz), 6/case moisture-proof composite cartridges
Colour	Grey
Yield	300 mL (10.1 US fl. oz) cartridge seals 3.72 lin m (12 lin ft) of 12.7 mm (1/2 in) x 6.35 mm (1/4 in) joint. 858 mL (29 US fl. oz) cartridge seals 10.7 lin m (35 lin ft) of 12.7 mm (1/2 in) x 6.35 mm (1/4 in) joint.
Shelf Life	9 months in unopened container. Store between 4 and 35°C (40 and 95°F). Condition material between 18 and 24°C (65 and 75°F) before using.



Properties at 23°C (73°F) and 50% R.H.

Application Temperature	4 to 38°C (40 to 100°F). Sealant should be installed when joint is at midrange of its anticipated movement.	
Service Range	-40 to 77°C (-40 - 170°F)	
Curing Rate	Tack-free time (TT-S-00230C)	1 to 2 hours depending on climate
	Final cure	5 to 8 days
Recovery ASTM C719	> 90%	
Shore A Hardness ASTM D2240	40 - 45	
Tensile Properties ASTM D412		
Tensile stress	1.55 MPa (225 psi)	
Elongation at break	600 %	
Lap-Shear Strength ASTM D1002 modified, glass substrate		
23°C (73°F)/50% R.H.	1.13 MPa (165 psi)	
Weathering Resistance	Excellent	
Chemical Resistance	Good resistance to water, weak acids, weak alkalis, sewage, mineral oils, vegetable oils, fats, fuels. (Not resistant to organic solvents, paint thinner, strong acids, strong alkalis.) Consult Sika Canada's Technical Services for specific data.	

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

How to Use

Surface

Preparation

Clean all surfaces. Joint walls and all contact surfaces must be free of oils, tar, asphalt, bitumen, grease, paints, coatings, sealers, curing compound residues, and any other foreign matter that might prevent adhesion. Bond breaker tape or backer rod must be used in bottom of joint for all moving joints.

Priming

Priming is not usually necessary for anodized aluminum, steel, non-absorbent materials such as glass, ceramics, stoneware and tiles. Most substrates only require priming if testing indicates a need or where sealant will be subjected to water immersion after cure. Consult Sika Canada's Technical Service for additional information on priming.

Application

Recommended application temperatures: 4 to 38°C (40 to 100°F). For cold weather application, condition material between 18 and 24°C (65 and 75°F) before using. Cut plastic tip on cartridge to desired joint size. Puncture air tight seal at base of tip. Place nozzle of gun into bottom of the joint and fill entire joint. Keep the nozzle in the sealant; continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air. Tool as required. Joint dimension should allow for 6 mm (1/4 in) minimum and 13 mm (1/2 in) maximum thickness for sealant. Proper design is 2:1 width to depth ratio.

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

- Allow 3 day cure at standard conditions when using SikaBond® Construction Adhesive in total water immersion situations and prior to painting.
- Avoid exposure to high levels of chlorine (Maximum level is 5 ppm).
- Maximum depth of sealant must not exceed 13 mm (1/2 in); minimum depth is 6 mm (1/4 in).
- Maximum expansion and contraction should not exceed 12.5% of average joint width.
- 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.
- Do not apply when a moisture-vapour-transmission condition exists from the substrate as this can cause bubbling within the sealant.
- Use opened cartridges the same day.
- When applying sealant, avoid air-entrapment.
- Since system is moisture-cured, permit sufficient exposure to air.
- White colour tends to yellow slightly when exposed to ultraviolet rays.
- The ultimate performance of SikaBond® Construction Adhesive depends on proper application, good design and proper preparation of joints surfaces.
- Not for use in expansion joints.
- Heavier substrates may require additional support during the cure period.

Health and Safety Information

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

**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.

Sika Canada Inc.

Head Office
601 Delmar Avenue
Pointe-Claire, Quebec
H9R 4A9

Other locations
Toronto
Edmonton
Vancouver

1-800-933-SIKA
www.sika.ca

An ISO 9001 certified company
Pointe-Claire: ISO 14001 certified EMS

