

Product Data Sheet

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Sikaflex Construction Sealant

Sikaflex® Construction Sealant

One-component, all purpose, polyurethane sealant

Description Sikaflex Construction Sealant is a premium grade, moisture-cured, 1-component, polyurethane-based, non-sag elastomeric sealant. Meets Federal specification TT-S-00230C, Type II, Class A. Meets ASTM C-920, Type S, Grade NS, Class 35, use T, NT, O, M, G, I; Canadian standard CAN/CGSB 19.13-M87.

Where to Use

- Designed for all types of joints where maximum depth of sealant will not exceed 1/2 in.
- Suitable for vertical or horizontal joints; readily placeable at 40°F (4°C).
- Has many applications as an elastic sealant between materials with dissimilar coefficients of expansion.
- Ideal for:
 - ◆ Weatherproofing of joints between brickwork, blockwork, masonry, wood and concrete or metal frames
 - ◆ Joints in walls, floors, balconies, around window or door frames
 - ◆ Expansion joints
 - ◆ Roofing

Advantages

- High elasticity – cures to a tough, durable, flexible consistency with exceptional cut and tear-resistance.
- Stress relaxation.
- Excellent adhesion – bonds to most construction materials without a primer.
- Excellent resistance to aging, weathering.
- Non-staining.
- Urethane-based; suggested by EPA for radon reduction.
- Paintable with water-, oil- and rubber-based paints.
- Capable of ±35% joint movement.

Coverage 10.1 fl. oz. cartridge seals 12.2 lineal ft. of 1/2 x 1/4 in. joint.

Packaging Disposable 10.1 fl. oz., moisture-proof composite cartridges, 12/case.

How to Use**Typical Data** (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Shelf Life	12 months	
Storage Conditions	Store at 40°-95°F (4°-35°C). Condition material to 65°-75°F (18°-24°C) before using.	
Colors	White, Limestone, Capitol Tan, Dark Bronze, and Medium Bronze	
VOC	40 g/l	
Application Temperature	40° to 100°F (4°-38°C) . Sealant should be installed when joint is at midrange of its anticipated movement.	
Service Range	-40° to 170°F (-40°-77°C)	
Curing Rate	Tack-free time: 3-6 hrs; To touch: 3 hrs; Final cure: 4-7 days	
Tear Strength (ASTM D-624)	55 lb./in.	
Shore A Hardness (ASTM C-661)	21 day	40±5
Movement Capability (ASTM C-719)	+/- 35%	
Tensile Properties (ASTM D-412)	21 day	
	Tensile Stress	175 psi (1.21 MPa)
	Elongation at Break	550%
	Modulus of Elasticity	25% 35 psi (0.24 MPa)
		50% 60 psi (0.41 MPa)
		100% 85 psi (0.59 MPa)

Adhesion in Peel (TT-S-00230C, ASTM C-794)

Substrate	Peel Strength	Adhesion Loss
Concrete	20 lb.	0%
Aluminum	20 lb.	0%
Glass	20 lb.	0%

Weathering Resistance Excellent

Chemical Resistance Good resistance to water, diluted acids, and diluted alkalines. Consult Technical Service for specific data.



Residential

Surface Preparation	Clean all surfaces. Joint walls must be sound, clean, dry, frost-free, and free of oil and grease and any other contaminants. Install bond breaker tape or backer rod to prevent bond at base of joint.
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 Primer Product Data Sheet or Technical Service for additional information on priming.
Application	<p>Recommended application temperatures: 40°-100°F (4°-38°C). For cold weather application, condition units at approximately 70°F (21°C); remove prior to using.</p> <p>For best performance, Sikaflex Construction Sealant should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction.</p> <p>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.</p> <p>Avoid overlapping of sealant to eliminate entrapment of air. Tool as required. Joint dimension should allow for 1/4 inch minimum and 1/2 inch maximum thickness for sealant. Proper design is 2:1 width to depth ratio. For use in horizontal joints in traffic areas, the absolute minimum depth of the sealant is 1/2 in. and closed cell backer rod is recommended. Tool sealant to ensure full contact with joint walls and remove air entrapment. Tool as necessary, dry or with clean water.</p>
Limitations	<ul style="list-style-type: none">■ Allow 1 week minimum cure at standard conditions when using Sikaflex Construction Sealant in total water immersion situations and prior to painting.■ When over-coating with water, oil and rubber based paints, compatibility and adhesion testing is essential.■ Avoid exposure to high levels of chlorine. (Maximum continuous level is 5 ppm of chlorine.)■ Maximum depth of sealant must not exceed 1/2 in.; minimum depth is 1/4 in.■ Maximum expansion and contraction should not exceed 25% of average joint width.■ Do not cure in the presence of curing silicone sealants.■ Avoid contact with alcohol and other solvent cleaners during cure.■ Do not apply when moisture-vapor-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 color tends to yellow slightly when exposed to ultraviolet rays.■ Light colors can yellow if exposed to direct gas fired heating elements.■ The ultimate performance of Sikaflex Construction Sealant depends on good joint design and proper application with joint surfaces properly prepared.■ The depth of sealant in horizontal joints subject to traffic is 1/2 in.■ Do not tool with detergent or soap solutions.



Residential

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Caution

Contains: titanium dioxide (CAS: 13463-67-7), xylene (CAS: 1330-20-7), Quartz (SiO₂) (CAS: 14808-60-7), ethylbenzene (CAS: 100-41-4), aromatic polyisocyanate (CAS: 53317-61-6), Carbon black (CAS: 1333-86-4). Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

WARNING: This product contains a chemical known in the State of California to cause cancer.

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

HMIS: *3, 0, 0, X.

VOC: 40 g/l.

KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION

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