

Product Data Sheet

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Sikaflex-2c SL

Sikaflex®-2c SL**Two-component, self-leveling, polyurethane elastomeric sealant**

Description	Sikaflex-2c SL is a 2-component, premium-grade, polyurethane-based, elastomeric sealant. It is principally a chemical cure in a <u>self-leveling</u> consistency. Meets ASTM C-920, Type M, Grade P, Class 25, use T, NT, M, G, A, O, I and Federal Specification TT-S-00227E, Type 1, Class A.
Where to use	<ul style="list-style-type: none"> ■ Intended for use in all properly designed working joints with a minimum depth of 1/4 inch. ■ Ideal for horizontal applications. ■ Placeable at temperatures as low as 40°F. ■ Adheres to most substrates commonly found in construction. ■ Submerged conditions, such as canal and reservoir joints.
Advantages	<ul style="list-style-type: none"> ■ True self-leveling properties. ■ Capable of ±50% joint movement. ■ Chemical cure allows the sealant to be placed in non-moving joints exceeding 1/2 in. in depth. ■ High elasticity with a tough, durable, flexible consistency. ■ Exceptional cut and tear resistance. ■ Exceptional adhesion to most substrates without priming. ■ Available in 35 architectural colors. ■ Color uniformity assured via Color-pak system. ■ Available in pre-pigmented Limestone Gray (no Color-pak needed). ■ Self-leveling consistency, easy to apply in horizontal joints. ■ Easy to mix. ■ Paintable with water-, oil-, and rubber-base paints. ■ Jet fuel resistant. ■ No color-pak needed in pre-pigmented Limestone.
Coverage	1 gal. yields 231 cu. in. or 154 lin. ft. of a 1/2 in. X 1/4 in. joint.
Packaging	1.5 gal. unit. 3 gal. units. Color-pak is purchased separately. Limestone Gray color available pre-pigmented.

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	One year in original, unopened containers.	
Storage Conditions	Store dry at 40°-95°F (4°-35°C). Condition material to 65°-75°F before using.	
Colors	A wide range of architectural colors are available. Special colors available on request.	
Application Temperature	40° to 100°F, ambient and substrate temperatures. Sealant should be installed when joint is at mid-range of its anticipated movement.	
Service Range	-40° to 170°F (-40°-75°C).	
Curing Rate (ASTM C-679)		
	Tack-free Time	6-8 hrs.
	Final Cure	3 days
Application Life	TT-S-00227E	4 hrs.
Tear Strength	ASTM D-624	100 lb./in.
Shore A Hardness	ASTM D-2240	40 ± 5
Tensile Properties (ASTM D412)		
	Tensile Strength at Break	175 psi
	Tensile Elongation	650%
	100% Modulus	100 psi
Adhesion in Peel (Fed Spec. TT-S-00227E)		
	Substrate	Peel Strength % Adhesion Loss
	Concrete	30 lb. Zero
Weathering Resistance	Excellent	
Chemical Resistance	Good resistance to water, diluted acids, diluted alkalines, and residential sewage. Consult Technical Service for specific data.	

How to Use

Surface Preparation All joint-wall surfaces must be clean, sound, and frost-free. Joint walls must be free of oils, grease, curing compound residues, and any other foreign matter that might prevent bond. Ideally this should be accomplished by mechanical means. A roughened surface will also enhance bond. Bond breaker tape or backer rod must be used in bottom of joint to prevent bond.

Construction



Priming Priming is typically not necessary. Most substrates only require priming if sealant will be subjected to water immersion after cure. Testing should be done, however, on questionable substrates, to determine if priming is needed.

Consult Technical Service or Sikaflex Primer Technical Data Sheet for additional information on priming.

Mixing Pour entire contents of Component 'B' into pail of Component 'A'. Add entire contents of Color-pak into pail and mix with a low-speed drill (400-600 rpm) and Sikaflex paddle. * Mix for 3-5 minutes to achieve a uniform color and consistency. Scrape down sides of pail periodically. Avoid entrapment of air during mixing.

Color-pak must be used with tint base. **Note:** When mixing 3 gal. unit, two containers of Component B and two color-paks must be used.

*For pre-pigmented Limestone base, just mix with low speed drill and Sikaflex paddle (no Color-pak needed).

Application Recommended application temperatures 40°-100°F. Pre-conditioning units to approximately 70°F is necessary when working at extremes. Move pre-conditioned units to work areas just prior to application.

Apply sealant only to clean, sound, dry, and frost-free substrates. Sikaflex-2c should be applied into joints when joint slot is at mid-point of its designed expansion and contraction.

To place, pour or extrude the SL grade in one direction and allow it to flow and level as necessary. If extruding, load mixed sealant directly into bulk gun or use follower plate loading system. 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 as necessary. 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.

Limitations

- The ultimate performance of Sikaflex-2c, depends on good joint design and proper application.
- Minimum depth in working joint is 1/4 in.
- Maximum expansion and contraction should not exceed 50% of average joint width.
- Do not cure in the presence of curing silicones.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Allow 3 day cure before subjecting sealant to total water immersion.
- Avoid exposure to high levels of chlorine. (Maximum level is 5 ppm).
- Do not apply when moisture vapor transmission exists since this can cause bubbling within the sealant.
- Avoid over-mixing sealant.
- White color tends to yellow slightly when exposed to ultraviolet rays.
- Light colors can yellow if exposed to direct gas fired heating elements.
- When overcoating: an on-site test is recommended to determine actual compatibility.
- The minimum depth of sealant in horizontal joints subject to traffic is 1/2 inch.
- Do not tool with detergent or soap solution.

Caution **Component 'A'; Irritant** - Avoid contact. Product is a skin, respiratory and eye irritant. Use of safety goggles and chemical resistant gloves recommended. Use of a NIOSH approved respirator required if PELs are exceeded. Use with adequate ventilation.

Component 'B'; Combustible; Sensitizer; Irritant - Contains Xylene. Keep away from heat, sparks and open flame. Use with adequate ventilation. Product is a respiratory and skin sensitizer. Avoid contact. Product is an eye, skin, and respiratory irritant. Use of safety goggles and chemical resistant gloves recommended. Use of a NIOSH approved respirator required if PELs are exceeded.

First Aid In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes; contact physician. For respiratory problems, remove to fresh air. Wash clothing before re-use. Discard contaminated shoes.

Clean Up Uncured material can be removed with approved solvent. Cured material can only be removed mechanically. For spillage, collect, absorb, and dispose of in accordance with current, applicable local, state, and federal regulations.

Linear Feet of Sealant per Gallon

Width	Depth	
	Inches	
1/4	308.0	
1/2	154.0	77.0
3/4	102.7	51.3
1	77.0	38.5
1 1/2	61.6	30.8
1 3/4	51.3	25.7

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