



955-SL™

SELF-LEVELING POLYURETHANE SEALANT

KEY FEATURES

- Self leveling formulation
- CARB, OTC, SCAQMD, compliant
- Asphalt Compatible

DESCRIPTION

Bostik 955-SL™ sealant is a one-component, traffic grade polyurethane, self leveling sealant capable of dynamic joint movement totaling 70% of original joint geometry ($\pm 35\%$). The sealant cures to a tough, flexible rubber when exposed to moisture present in the atmosphere. Bostik 955-SL™ polyurethane has a pourable consistency. Its physical properties will remain relatively stable over time and in varying weather conditions. Its physical and mechanical properties remain consistent across a broad temperature range, from -40°F to 150°F (-40°C to 66°C).

APPLICABLE STANDARDS

- ASTM C920, Type S, Grade P, Class 35, Use T, M, A, O
- Canadian Specification CAN/CGSB 19.13-M87
- VOC Compliant: CARB, OTC and SCAQMD Compliant

BASIC USES

- Self-leveling, polyurethane sealant designed for sealing expansion joints, control and perimeter joints in parking decks, pavements, asphalt, plazas, malls, patios, driveways, factory and institutional floors, roofing pitch pans, and interior sealing of rain gutter joints.
- Cures to form a durable, flexible, watertight bond with most building materials in any combination including: stone, masonry, concrete, blacktop, ceramic, wood, steel, and aluminum.

APPLICATION LIMITATIONS

- Construction substrates have become complex and diverse by nature and origin. Substrate chemistries and structures can interfere with adhesive performances of the sealant. Adhesion to Substrate Pretest (ASP) is therefore MANDATORY to assess any adhesion and sealing characteristics—see Adhesion to Substrates Pretest section and see Installation Protocol section. This must be done pre-installation to avoid potential failures. Call Technical Service for more information about surface preparation and possible priming. Do not apply over damp, contaminated, loose surfaces (See Installation



Protocol and Surface Preparation), old sealants or other foreign substances that may impair the adhesion bond. Avoid air entrapment.

- Dampness and substrates with high moisture content will trigger extensive curing of the sealant within a very short period of time. This may cause an excess of bubbling and foaming within the sealant and at the bottom of the bead. High temperature/humidity can cause the sealant to develop bubbles during the curing process. Sealant installation is not recommended when the dew point of the substrate is close to ambient temperature or a moisture-vapor transmission condition is present increasing the potential for bubbling to form during cure. Porous substrates such as, but not limited to, marble, limestone and granite might absorb components of the Bostik 955-SL™ leading to staining of the substrate. ASP with sufficient aging is mandatory to assess this potential issue. The ultimate performance of Bostik 955-SL™ depends on proper joint design and proper application with joint surfaces

properly prepared (See Installation Protocol). Bostik 955-SL™ is not recommended for joints with dimensions less than or greater than what is recommended below. (See Installation Protocol – Joint Design section.)

- Bostik 955-SL™ must NOT be used to seal narrow joints or fillet joints.
- Smearing and feathering Bostik 955-SL™ over joints is not recommended.
- Bostik 955-SL™ is not recommended for continuous immersion in water or any other fluid. When fully cured, avoid exposure, even incidental, to fuels, chlorinated, acid and alkaline solutions. Bostik 955-SL™ is not recommended for exterior or interior sealing below the waterline; please refer to Bostik 940™ Fast Set for marine applications.
- Bostik 955-SL™ contains a unique formulation that allows it to be compatible with, and demonstrative optimal adhesion to, asphalt pavement/blacktop substrates. The use of Bostik 955-SL™ is recommended for use in asphalt pavement/blacktop applications.
- During the curing of Bostik 955-SL™, do not expose to curing silicone sealants, curing Bostik 2000™, Bostik 2020™, Bostik PRO-MS 50™, alcohol, acids or solvent-based materials.
- Lower relative humidity and temperature will significantly extend the curing time. Confined areas, deep joints and moisture barrier substrates may also affect the full cure time and extend it by many days. Apply sealant in ambient air temperature of 40° F. and rising.
- Until the sealant is fully cured, do not expose the sealant to any mechanical stress. Uncured sealant will not respond properly to cyclic expansion and contraction of the joint specified for the cured sealant only.
- The surface of a Bostik 955-SL™ seal when exposed to UV rays and sunlight will NOT retain its gloss. This phenomenon can occur within a few weeks after exposure. The change is limited to the surface layer of the seal and should not compromise the sealing properties of the Bostik 955-SL™ if the dimensions of the joint are proper and the sealant is otherwise properly applied. Bostik 955-SL™ may remain tacky for a few hours and attract dust and dirt from the jobsite which may affect the appearance of the sealant. Check tack-free time to prevent dirt pickup.
- Bostik 955-SL™ is not RTV silicone and therefore is suitable for painting with latex based paints. Paint chemistries and flexibility characteristics of the paint films over the sealant may affect wetting, adhesion and integrity of the paint layer; and it is therefore mandatory to pretest the paint or other coating over the Bostik 955-SL™ to ensure the successful compatibility between the sealant and the paint/coating after a sufficient amount of time. See your paint manufacturer for specifications and limitations and call our Technical Service for more information. In general, oil-based paints are not recommended because of their poor elastic properties and because of their potential interaction with the sealant chemistry, which may create non-curing conditions for the sealant. Do not paint over the polyurethane sealant until it has fully cured.

INSTALLATION PROTOCOL

Joint Design: In general, more joint movement can be accommodated in a thin bead of sealant than a thick bead. Bostik 955-SL™ should be no thicker than 1/2" (12.7mm) and no thinner

than 1/4" (6.4mm). In joints between 1/2" and 1", the ratio of sealant width to depth should be approximately 2:1. Sealant depth in joints between 1/4" and 1/2" should be 1/4" deep. Joints with dynamic movement should not be designed in widths less than 1/4". The self-leveling sealant should not be used in joints with more than a two degree slope. Joints formed with Bostik 955-SL™ can be expected to extend and compress a total of 50% of the installation width with no more than 25% movement in a single direction without affecting the seal or adhesive bond.

Surface Preparation: See limitations about surface preparation. Surfaces must be structurally clean, dry (no frost) and structurally sound, free of contaminants, including, but not limited to, dust, dirt, loose particles, tar, asphalt, rust, mill oil, etc. If substrate is painted or coated, scrape away all loose and weakly bonded paint or coating. Any paint or coating that cannot be removed must be tested to verify adhesion of the sealant or to determine the appropriate surface preparation if needed. (See ASP section on next page for details.)

To remove laitance and any other loose material, clean concrete, stone or other masonry materials with non-alcoholic based solvent by washing, grinding, sandblasting or wire brushing as necessary. Do not use water to clean substrates. Dust must be thoroughly removed after cleaning.

Alcohol is **NOT** compatible with polyurethanes and its use can cause irreparable damage to the sealant. If alcohol is used as a cleaning solvent, all traces of alcohol must thoroughly be removed prior to the installation of the polyurethane sealant. Lastly, alcohol is not recommended as a tooling medium.

Backer Rods and Bond Breaker Tapes: Bond breakers including, but not limited to, closed-cell polyethylene backer rods are used to control depth of the sealant bead, provide a firm tooling surface and avoid three-sided adhesion. Where the depth of joint prevents use of backer rods, a polyethylene strip or tape must be used as a bond breaker to prevent 3-sided adhesion. Do not prime or damage the surface of the bond breaker. Refer to instructions given by rod and tape manufacturers for the correct backer rod and tape size related to joint size.

Priming: Priming might be required for any on or below grade application or where standing water is expected to accumulate. Priming is required on all ferrous-based metals and in all applications exposed to intermittent or continuous water immersion. If sealant is to be applied to a material with specially treated surfaces, consult Bostik Technical Service for primer recommendations. Prior to any use, however, it is always recommended that the sealant be applied on the surface to test adhesion. See Adhesion to Substrate Pretest (ASP) Program.

It is the user's responsibility to check adhesion of the cured sealant on typical test joints at the project site before and also during application as weather conditions may affect the adhesion results (See ASP section on next page.). Refer to Bostik Primer product data sheet or call Technical Service for proper selection and application of Bostik Primers.

Tooling: Bostik 955-SL™ comes ready-to-use. Cut spout or tip to desired bead size. Apply moderate pressure to break seal inside the nozzle. Apply by using a professional caulking gun. Use opened cartridges and sausages the same day they are opened. Apply Bostik 955-SL™ polyurethane sealant in a continuous operation using positive pressure to the bottom of the joint to properly fill and seal the joint. When applying, avoid air entrapment and overlapping. Tool the sealant before the skin forms with adequate pressure to spread the sealant against the

backup material at the bottom and sides of the joint. A dry tool with a concave profile is recommended for that operation. Do not use water or soapy water for this operation. Avoid smearing and feathering of the sealant to allow full performance of the cured seam. Excess sealant should be dry-wiped or joints should be properly taped. Tooling of the uncured sealant will aid the wetting of the sealant to the substrate.

Also, check one-half hour or so after the sealant has been applied to be sure that no runout has taken place through voids in the bottom of the joint. Such an occurrence is easily repaired at this time by topping with new material.

Cleaning: After dry-wiping uncured sealant from substrates and tools, remaining uncured sealant can be removed by using Xylene, Toluene or similar aromatic solvents. Please refer to the MSDS provided for these solvents before use. Bostik Hand Towel and Specialty Sealant Remover™ can also remove uncured sealant. Cured sealant is usually very difficult to remove without altering or damaging the surface to which the sealant has been misapplied. Cured sealant can be removed by abrasion or other mechanical means (scrapers, putty knives).

Curing Time: Bostik 955-SL™ is a moisture cure, polyurethane sealant. On wood, with ambient air at 50% relative humidity and at 73°F (22.8°C), polyurethane sealants will generally skin within twenty-four hours and cure 1/16 of an inch per day. Lower temperature and lower relative humidity will significantly increase the skin time and cure time of a polyurethane sealant.

Painting and Coating: Bostik 955-SL™ is not RTV silicone and therefore is suitable for painting with latex-based paints. Paint chemistries and flexibility characteristics of the paint films over the sealant may affect wetting, adhesion and integrity of the paint layer, and it is therefore mandatory to pretest the paint or other coating over the Bostik 955-SL™ to ensure the successful compatibility between the sealant and the paint/coating after a sufficient amount of time. See your paint manufacturer for specifications and limitations and call our Technical Service for more information. In general, oil-based paints are not recommended because of their poor elastic properties and because of their potential interaction with the sealant chemistry, which may create non-curing conditions for the sealant. Do not paint over the polyurethane sealant until it has fully cured.

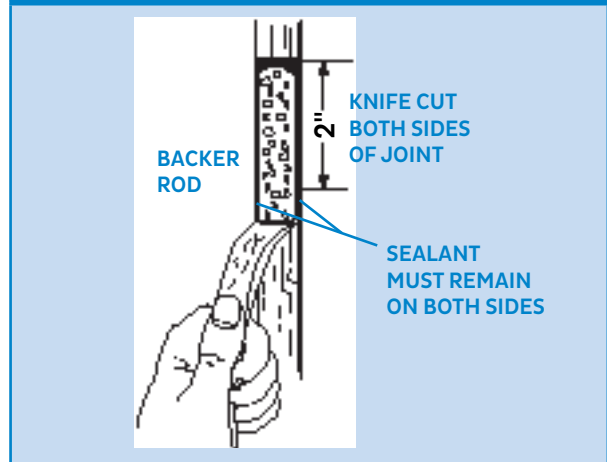
Maintenance: If the sealant becomes damaged, replace the damaged portion by removing the old sealant completely, cleaning the surfaces and reapplying a fresh and appropriate amount of new sealant in accordance with the directions and information contained in this data sheet.

MANDATORY ADHESION TO SUBSTRATES PRETEST— (ASP)

A hand pull test must be run before the job starts and at regular intervals during the job. It must be run on the job site after the sealant is fully cured, usually within 7 to 21 days. (Adhesion may develop fully after at least 14 days.) The hand pull test procedure is as follows:

1. Make a knife cut horizontally from one side of the joint to the other.
2. Make two cuts approximately two inches long, at the sides of the joint, meeting the horizontal cut at the top of the two-inch cuts.
3. Grasp the two-inch piece of sealant firmly between the fingers and pull down at a 90° angle or more, and try to pull the uncut sealant out of the joint.

MANDATORY ADHESION TO SUBSTRATE (ASP) FIELD TEST



4. If adhesion is sufficient, the sealant should tear cohesively in itself.
5. Sealant may be replaced by applying more sealant in the same manner as it was originally applied. Care should be taken to ensure that the new sealant is in contact with the original, and that the original sealant surfaces are clean, so that a proper bond between the new and old sealant will be obtained.

PACKAGING

28 fl.oz. Cartridges, 12 Cartridges/Case
5 gallon Pails

STORAGE & SHELF LIFE

Shelf life of Bostik 955-SL™ must be checked prior to using the product; do not use past its shelf life. Caulk past its shelf life may not perform or adhere as described by this data sheet. High temperature and high relative humidity may reduce significantly the shelf life of polyurethane sealants. If you are unsure of the expiration date of your Bostik product, please call customer service at 1-800-7/BOSTIK (1-800-726-7845) to check if the product is still within its shelf life.

COLORS

Limestone, Black.

AVAILABILITY

Available from authorized Bostik distributors. Go to www.bostik-us.com and check on our distributor locator for the closest distributor in your location or call customer service at 1-800-7/BOSTIK (1-800-726-7845).

HEALTH AND SAFETY

Please refer to the MSDS for First Aid Information. Most current MSDS's can be found on Bostik's website at www.bostik-us.com or call customer service at 1-800-7/BOSTIK (1-800-726-7845).

TECHNICAL SERVICE

TECHSERVICE phone number: 1-800-7/BOSTIK (1-800-726-7845). Field visits by Bostik personnel, Bostik manufacturer representatives or Bostik authorized distributor personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

COVERAGE FOR 28 FL. OZ. (828 ML) CARTRIDGE

		width						
depth	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
1/8"	288	145	95	71	58	48	40	36
1/4"		71	58	36	29	23	20	17
3/8"			32	23	17	16	13	11
1/2"				17	14	11	10	8

Linear Feet Per 28 FL. OZ. Cartridge

COVERAGE FOR 5 GALLON (18.9 L) PAIL

		width						
depth	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
1/8"	6150	3100	2050	1540	1230	1025	870	770
1/4"		1540	1240	770	615	510	440	370
3/8"			680	510	410	310	290	245
1/2"				370	305	245	220	185

Linear Feet Per 5 Gallon Pail

CAUTION

COMBUSTIBLE. HARMFUL IF SWALLOWED OR INHALED. CONTAINS POTENTIAL SENSITIZER. MAY CAUSE ALLERGIC SKIN OR LUNG REACTION. MAY IRRITATE EYES, SKIN AND RESPIRATORY TRACT. Methanol may form during curing. Do not breathe fumes. Do not get in eyes, on skin or on clothing. Do not swallow. Use only in a well-ventilated area or wear mask. Keep away from flames or sparks. Wash thoroughly after handling. Store container in a cool (60–80F / 15–30C), dry area with lid tightly sealed. Do not reuse container.

KEEP OUT OF THE REACH OF CHILDREN.

FIRST AID TREATMENT

Contains Petroleum Resins, Diisodecyl Phthalate (DIDP), Methylene Diphenyl Isocyanate (MDI), Quartz Silica. Methanol may form during curing. If in eyes or on skin, rinse with water for at least 15 minutes. If on clothes, remove clothes. If breathed in, move person to fresh air. If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

SEE MATERIAL SAFETY DATA SHEET.

FIRE

Use dry chemical, carbon dioxide, or foam. Water spray (fog).

LIMITED WARRANTY

Limited Warranty found at www.bostik-us.com or call 800.726.7845. TO THE MAXIMUM EXTENT ALLOWED BY LAW, BOSTIK DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UNLESS OTHERWISE STATED IN THE LIMITED WARRANTY, THE SOLE REMEDY FOR BREACH OF WARRANTY IS REPLACEMENT OF THE PRODUCT OR REFUND OF THE BUYER'S PURCHASE PRICE. BOSTIK DISCLAIMS ANY LIABILITY FOR DIRECT, INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES TO THE MAXIMUM EXTENT ALLOWED BY LAW. DISCLAIMERS OF IMPLIED WARRANTIES MAY NOT BE APPLICABLE TO CERTAIN CLASSES OF BUYERS AND SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. The Limited Warranty extends only to the original purchaser and is not transferable or assignable. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

PRIMER COVERAGE RECOMMENDATIONS

For one quart of primer, coverage is as follows

1 unit	5 gallon pail
5 units	1.5 gallon unit
7 gallons	1 gallon unit

*All values are approximations and can vary due to joint dimension variations, porosity, and texture of substrates. Yield per cartridge is approximate due to variables beyond Bostik's control, such as irregular joint configuration and installation technique.

TABLE 1 : TYPICAL UNCURED PROPERTIES*

Property	Value	Test Method/Note
Tool/Work Time	1.5 Hours	Bostik Test Method
Skin Time	2 Hours	Bostik Test Method
Consistency	Self Leveling	ASTM C-639
Curing Time @77°F (25°C)	2-3 days	Varies w/relative humidity
Flow, Sag or Slump	Self Leveling	ASTM C-639
Staining & Color Change	None	ASTM C-510

*Values given above are not intended to be used in specification preparation purposes.

TABLE 2 : TYPICAL CURED PROPERTIES* (AFTER 14 DAYS CURE AT 77°F AND 50% RH)

Property	Value	Test Method/Note
Hardness (Shore A)	35	ASTM C-661
Modulus @ 100% Elongation	80 psi	ASTM D 412
Tensile Strength @ Break	171 psi	ASTM D 412
Elongation @ Break	500%	ASTM D 412
Adhesion Peel	>30 piw	ASTM C 794
Ozone Resistance	Excellent	ASTM C 719
Joint Movement Capability	35%	ASTM C 719
UV Resistance	Pass	ASTM C 793

*Values given above are not intended to be used in specification preparation purposes.

WARNING

This product contains a chemical(s) known to the State of California to cause cancer and/or birth defects or other reproductive harm.



BOSTIK HOTLINE

Smart help
1-800-726-7845

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A company of TOTAL

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This document supersedes all previously published literature.