

# 915

# **POLYURETHANE SEALANT & ADHESIVE**

TECHNICAL DATA SHEET 04/19/2023

## **SMART ADVANTAGES**

- Tenacious bond to difficult substrates
- Permanently flexible
- Miami-Dade approval NOA 17-0329.18, 15-0520.01

# DESCRIPTION

915 sealant is a one-component, smooth polyurethane adhesive capable of dynamic joint movement totaling 70% of original joint geometry (±35%). The sealant cures to a tough, flexible rubber when exposed to moisture present in the atmosphere.

Bostik 915's all-season formula has physical properties that will remain stable over time. The cured performance temperature range is -40°F to 150°F. Where textured appearance is needed, please use Bostik 916.

#### **APPLICABLE STANDARDS**

- ASTM C920, TYPE S, GRADE NS, CLASS 35 USE NT, A AND M
- US Federal Specification TT-S 00230C (COMB-NBS) for one-component sealants as Class A, non-sag
- CARB, SCAQMD, and OTC compliant
- Canadian Specification CAN /CGSB 19.13-M87
- Miami-Dade County, Florida, NOA No.: 13.0423.10, 05/24/17
- Miami-Dade TAS 102- Static Uplift Resistance
- AAMA 808.3
- AAMA 100/200/300 installation requirements

#### **BASIC USES**

915 is designed for applications from foundation to finish and is ideal for sealing expansion and control joints, tilt-up joints, perimeters of doors, windows, and other wall penetrations. It has tenacious sealing and bonding performance for many roofing applications, metal roofs, gutters, roof tile installations, flashing, and sheet metal applications.

915 cures to form a durable, flexible bond with most building materials such as stone, foam, masonry, ceramic, wood, steel, Kynar® coated metals, copper, and most other metals.



# INSTALLATION PROTOCOL

**Miami-Dade County Considerations:** To maximize wetting potential of the sealant to the substrates, mate or join adjacent surfaces prior to the Bostik 915 skinning and subsequent curing. Allow full cure, typically 7 days, prior to any mechanical stress-testing procedures. It is recommended that adhesion testing be performed to capture batch control qualities of proposed substrates.

Joint Design: In general, more joint movement can be accommodated in a thin bead of sealant than a thick bead. Bostik 915 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". 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.)

This supersedes and replaces in its entirety all previously published versions of this document. B56443

# Adhesive solutions by **ARKEMA**

**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.

**Tooling:** 915 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 915 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. Before the skin forms, tool the sealant 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 this 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.

**Cleaning:** After dry-wiping uncured sealant from substrates and tools, remaining uncured sealant can be removed by using mineral spirits. 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:** 915 is a moisture cure, polyurethane sealant. On wood, with ambient air at 50% relative humidity and at 73°F (23°C), polyurethane sealants will generally skin within 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:** 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)**

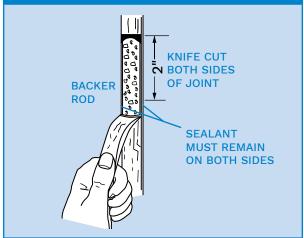
A hand pull test must be run before the job starts and at regular intervals during the job. It must be run on the job site after the sealant is fully cured, usually within 7 to 21 days. (Adhesion may develop fully after at least 14 days.) The hand pull test procedure is as follows:

- 1. Make a knife cut horizontally from one side of the joint to the other.
- Make two vertical 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.
- 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

- 10.1 fl. oz. Cartridges, 24 Cartridges/Case
- 20 fl. oz. Sausages, 12 Sausages/Case

# MANDATORY ADHESION TO SUBSTRATE PRETEST (ASP)



## COLORS

White, Black, Light Gray, Stone, Aluminum Stone, Limestone, Bronze, Medium Bronze, Terra Cotta, and Tan

#### AVAILABILITY

Available from authorized Bostik distributors. Go to www.bostik.com/us 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).

#### STORAGE/SHELF LIFE

Store in a clean, dry area not affected by freezing or hot temperatures between 50°F (10°C) and 90°F (32°C). Shelf life is one year from date of manufacturing in unopened cartridge.

#### 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.
- Do not apply over damp, contaminated, loose surfaces, 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 moisturevapor 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 915 leading to staining of the substrate. ASP with sufficient aging is mandatory to assess this potential issue.
- 915 must not be used to seal narrow joints, fillet joints, and face nail holes.

- Smearing and feathering 915 over joints is not recommended.
- 915 is not recommended for horizontal joints or traffic-bearing joints where abrasion resistance is required (walkways, driveways, runways, etc.).
- 915 is not recommended for continuous immersion in water or any other fluid. When fully cured, avoid exposure, even incidental, to fuels, and chlorinated, acidic, or alkaline solutions. Bostik 915 is not recommended for exterior or interior sealing below the waterline; please refer to Bostik 940 Fast Set for marine applications.
- Contact of 915 with asphalts (e.g., back coating of window flashing, etc.) and other filler compounds impregnated with oil, asphalt, tar, etc., may deteriorate the cohesive strength of the substrate and ultimately compromise the seal. Please refer to PRO MS 50<sup>™</sup> for asphalt applications.
- 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 (4.4°C). and rising.
- 915 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.
- 915 is not recommended for glazing applications. Bond line strength can be affected by UV rays through the clear material (glass, acrylic glass, polycarbonate, etc.).
- Do not paint over the polyurethane sealant until it has fully cured.
- The surface of a 915 seal when exposed to UV rays and sunlight will yellow and will not retain its gloss. This phenomenon can occur within a few weeks after exposure. The change of color is limited to the surface layer of the seal and should not compromise the sealing properties of the 915 if the dimensions of the joint are proper and the sealant is otherwise properly applied. In areas where color retention is critical, please refer to Bostik PRO MS 50<sup>TM</sup>.

# CAUTION

IRRITANT. MAY BE HARMFUL IF SWALLOWED OR INHALED. CONTAINS POTENTIAL SENSITIZER. MAY CAUSE ALLERGIC SKIN OR LUNG REACTION. MAY IRRITATE EYES, SKIN AND RESPIRATORY TRACT. 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. Wash thoroughly after handling. Store container in a cool, dry area with lid tightly sealed. Do not reuse container.

## KEEP OUT OF 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 SAFETY DATA SHEET

CHEMICAL EMERGENCY: 800-424-9300 (USA), 703-527-3887 (International)

MEDICAL EMERGENCY: 866-767-5089

# TABLE 1: TYPICAL UNCURED PROPERTIES\*

Property	Value	Test Method/Note			
Tool/Work Time	60 min.	Bostik Test Method			
Skin Time	4 hours	Bostik Test Method			
Curing Time @77°F (25°C)	2-7 days	Varies w/relative humidity			
Flow, Sag or Slump	0.3 inch	Bostik Test Method			
* 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)	42	ASTM D 2240
Modulus @ 100% Elongation @ 25% Elongation	65 psi 45 psi	ASTM D 412 ASTM D 412
Tensile Strength @ Break	133 psi	ASTM D 412
Elongation @ Break	685%	ASTM D 412
Adhesion Peel	>5 piw	TT-S-00230C / ASTM C 794
Joint Movement Capability	+/- 35%	TT-S-00230C / ASTM C 719
UV Resistance	Pass	ASTM C 793
Static Uplift Resistance (concrete roof tile)	49	Miami-Dade TAS 102
* Maluna 2000 alkana ang mat inter		and in an additional an

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

# COVERAGE FOR 10.1 FL. OZ. (300 ML) CARTRIDGE

Width								
Depth	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
1/8"	99	49	33	24	20	16	14	12
1/4"		24	20	12	10	8	7	6
3/8"			11	8	6	5	5	4
1/2"				6	5	4	3	3
1/2				0	5	4	3	3

Linear Feet Per 10.1 fl. oz. Cartridge

# COVERAGE FOR 20 FL. OZ. (600 ML) SAUSAGE

	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
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Linear Feet Per 20 fl. oz. Sausage

SEALANT · WATERPROOFING • RESTORATION INSTITUTE				
lssued to: Bostik, Inc. Product: Bostik 915/915 R	r			
C719: Pass _ 🖌 Ext:+35%	Comp:-35%			
Substrate: Unprimed Glass				
Validation Date: 06/06/22 - 06/05/27				
No. BOS915-915RT	Copyright © 2022			
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BOSTIK HOTLINE

Smart help 1-800-726-7845

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