

# 915FS<sup>™</sup> FAST SETTING POLYURETHANE SEALANT & ADHESIVE

## **KEY FEATURES**

- Accelerated skin time
- Tenacious bond to difficult substrates
- Permanently flexible

## DESCRIPTION

915FS<sup>™</sup> is a one-component, fast setting polyurethane sealant/ 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.

915FS<sup>™</sup> has physical properties that will remain relatively stable over time and in varying weather conditions. Its physical properties are relatively unchanged over a wide temperature range, -40°F to 150°F (-40°C to 66°C). 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 onecomponent sealants as Class A, non-sag.
- CARB, SCAQMD, and OTC compliant.
- Canadian Specification CAN/CGSB 19.13-M87.

## **BASIC USES**

915FS<sup>™</sup> is designed for sealing expansion and control joints, for use under deck coatings, for sealing various roofing and siding applications, such as metal roofs, gutters, roof tile applications, and for sealing perimeters of doors, windows, and other wall penetrations.

915FS<sup>™</sup> cures to form a durable, flexible bond with most building materials in any combination including stone, masonry, ceramic, wood, steel, aluminum, copper, bondarized and Kynar<sup>®</sup> coated metals, and many other synthetic materials.

## **INSTALLATION PROTOCOL**

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

**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:** 915FS<sup>™</sup> 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 915FS<sup>™</sup> in a continuous operation using positive pressure to the bottom of the joint to properly fill and seal the joint. When applying, avoid

This supersedes and replaces in its entirety all previously published versions of this document. T1197 (Last revised on 03.27.19) 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.

**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:** 915FS<sup>™</sup> is a moisture cure, polyurethane sealant. On wood, with ambient air at 50% relative humidity and at 73°F, 915FS<sup>™</sup> will generally skin within one and a half hours. Lower temperature and lower relative humidity will significantly increase the skin time and cure time of a polyurethane sealant.

Painting and Coating: Bostik 915F5<sup>™</sup> is not an 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 915FS<sup>™</sup> to ensure the successful compatibility between the sealant and the paint/coating after a sufficient amount of time. See your paint manufacturer for specifications or limitations and call our Technical Service (1-800-726-7845) 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 painted sealant.

**Painting and coating:** Do not paint over the polyurethane sealant until it has fully cured.

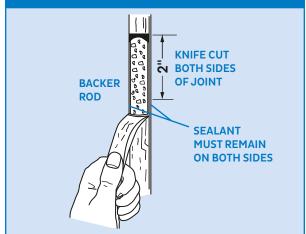
**Maintenance:** If the sealant becomes damaged, replace the damaged portion by removing the old sealant completely, cleaning the surfaces and reapplying a fresh and appropriate amount of new sealant in accordance with the directions and information contained in this data sheet.

#### 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.
- 2. 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.

#### MANDATORY ADHESION TO SUBSTRATE (ASP) FIELD TEST



#### PACKAGING

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

#### **STORAGE, PACKAGING & SHELF LIFE**

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

## COLORS

White	Stone	Bronze	Limestone
Black	Md. Bronze	Capitol Tan	Light Gray
Terra Cotta	Antique Whi	ite	Aluminum Gray

## **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).

#### **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 (ASP)section and see Installation Protocol section. This must be done pre-installation to avoid potential failures. Call Technical Service (1-800-726-7845) 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 Bostik 915FS<sup>™</sup> leading to staining of the substrate. ASP with sufficient aging is mandatory to assess this potential issue.
- The ultimate performance of Bostik 915FS<sup>™</sup> depends on proper joint design and proper application with joint surfaces properly prepared (See Installation Protocol). Bostik 915FS<sup>™</sup> is not recommended for joints with dimensions less than or greater than what is recommended below. (See Installation Protocol – Joint Design section.)
- 915FS™ must not be used to seal narrow joints, fillet joints and face nail holes.
- Smearing and feathering 915FS™ over joints is not recommended.
- 915FS<sup>™</sup> is not recommended for horizontal joints or traffic-bearing joints where abrasion resistance is required (walkways, driveways, runways, etc.). Please refer to Bostik 955-SL<sup>™</sup> for this application.
- 915FS™ is not recommended for continuous immersion in water or any other fluid. When fully cured, avoid exposure, even incidental, to fuels, chlorinated solvents, acid and alkaline solutions. 915FS™ is not recommended for exterior or interior sealing below the waterline; please refer to Bostik 940 Fast Set for marine applications.
- Contact of 915FS<sup>™</sup> with asphalts (i.e., 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 Bostik PRO-MS 50<sup>™</sup> for this application.
- 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.
- 915FS<sup>™</sup> 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.
- 915FS<sup>™</sup> 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 915FS<sup>™</sup> 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 915FS<sup>™</sup> 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>™</sup>.

#### WARNING

IRRITANT. MAY CAUSE ALLERGIC SKIN OR LUNG REACTION. MAY IRRITATE EYES, SKIN AND LUNGS. Contains a potential skin and lung sensitizer. May cause allergic respiratory tract or skin reaction, including dermatitis. Avoid breathing mists or vapors. Avoid contact with skin and eyes. Use in a well-ventilated area or wear a mask. Store in a cool 60° - 80°F (15° - 30°C), dry, well-ventilated area away from heat, ignition sources and dierct sunlight.

## KEEP OUT OF REACH OF CHILDREN

#### **FIRST AID TREATMENT**

Contains Phthalates, Methylene Diphenyl Isocyanate (MDI), Carbon Black or Titanium Dioxide inextricably bound in a polymer matrix. 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.

#### SEE SAFETY DATA SHEET

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

MEDICAL EMERGENCY: 866-767-5089

#### LIMITED WARRANTY

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. Limited Warranty found at www.bostik.com/us 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 CREDIT 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.

COVE	RAGE	FOR	10.1 F	L. OZ.	(300	ML) CA	ARTRI	DGE
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

Linear Feet Per 10.1 fl. oz. Cartridge

COVE	RAGE	FOR	20 FI	oz.	(600	ML) S	SAUS/	AGE
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 20 fl. oz. Sausage

TABLE 1: TYPICAL UNCURED PROPERTIES*						
Property	Value	Test Method/Note				
Tool/Work Time	70 min.	Bostik Test Method				
Skin Time	90 min.	Bostik Test Method				
Curing Time @77°F (25°C)	1.5-3 days	Varies w/relative humidity				
Flow, Sag or Slump	0.3 inch	Bostik Test Method				
Staining	None	ASTM C510				

\* 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)	40-45	ASTM D2240				
Tensile Strength @ Break	240 psi	ASTM D412				
Adhesion Peel	>25 piw	TT-S-00230C / ASTM C 794				
Ozone Resistance	Excellent	Bostik Method				
UV Resistance	Good	Bostik Method				
Temperature Resistance	-40° to 180°F	Bostik Method				
Modulus @ 100% Elongation	65 psi	ASTM D 412				
Elongation @ Break	850%	ASTM D 412				
Stain and Color Change	None	ASTM C510				
Joint Movement Capability	±35%	TT-S-00230C/ASTMC719				
Heat and Aging	Good	ASTM C1246				
UV Resistance	Pass	ASTM C 793				
* Values given above are not intended to be used in specification preparation purposes.						



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