

PREMIUM POLYURETHANE SEALANT

WaterBlock®

**PREMIUM
POLYURETHANE
SEALANT**

**ASTM C-920
Type S Grade NS
Class 25
Use NT VOC
CARB, OTC and
SCAQMD
Compliant**

**Permanently Flexible
Quick Paint-Over Time
AAMA Compliant
NO Water Washout**



Manufacturer

International Building Components, Inc.
21428 Woods Creek Road
Monroe, WA, 98272 USA
Telephone - (360)794.2151
Fax - (360)863.8434
Toll Free - 1.888.610.2151
Web - www.waterblocksystems.com



Product Description

WaterBlock® Premium Polyurethane Sealant is a one-component, moisture cure polyurethane that is specifically engineered to be used with the WaterBlock® family of products for sealing framework of windows and doors, as well as expansion and control joints. WaterBlock® Premium Polyurethane Sealant is suitable for most building materials including masonry, concrete, wood, steel, aluminum, vinyl, and most plastic.

Sizes

WaterBlock® Premium Polyurethane Sealant is available in two convenient sizes:

- 10.1oz cartridges / 30 per case
- 20oz sausage packs / 20 per case

Compatibility

Compatible with WaterBlock® Waterproof Flashing Membranes 25 and 40mil, Corner Guards, Nail on Flashing, Sill Guards.

Features & Benefits

Features

- Low odor
- Low solvent formula
- Moisture reactive

Benefits

- Installer friendly
- Minimal shrinkage
- Multi-environmental climate use

Basic Uses

- Bedding window & door flanges
- Expansion and control joints
- Paintable
- Lath paper patching
- General wood-to-wood sealing

TYPICAL PROPERTIES

Property	Value	Test Method
Tack-Free Time	3 hours.	ASTM C-679
Extrusion Rate	65ml / min.	ASTM C1183
Flash Point	180°F (62°C)	ASTM D382
Hardness, Shore A	46	ASTM D2240
Tensile Strength	200 psi	ASTM D412
Elongation	800%	ASTM D412
Heat Aging	0.54% weight loss	ASTM C1246
Accelerated Weathering	Cracking / Chalking:None	ASTM C793
	UV Exposure: No Cracking	
	Cold Temp: No Cracking	
VOC Content	35 g/l less water and exempt solvents (meets VOC requirements in all 50 states)	

¹ After 14 day cure at 77°F and 50% relative humidity

Shelf life

WaterBlock® Premium Polyurethane Sealant will exhibit a twelve (12) month shelf life from date of manufacture when stored properly. Store in original, unopened containers away from heat and direct sunlight. Storing at elevated temperatures will reduce shelf life.

Warranty (10 year Limited)

Please refer to the warranty on our website at www.waterblocksystems.com for more detailed information on our 10 year limited warranty.

Tooling

WaterBlock® Premium Polyurethane Sealant comes ready-to-use. Cut spout or tip to desired bead size. Puncture seal inside the nozzle. Apply by using a professional caulking gun. Use opened cartridges and sausages the same day they are opened. Apply WaterBlock® Premium 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, soapy water or solvents 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.

MANDATORY ADHESION TO SUBSTRATES PRETEST

Construction substrates have become complex and diverse by nature and origin. Substrate chemistries and structures can interfere with sealant performance. Therefore, an Adhesion to Substrate Pretest is mandatory to assess adhesion and sealing characteristics. This must be performed prior to installation to avoid potential failures and warranty issues.

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.)

***Sealant Compatibility testing is not required on WaterBlock® flashing products.**

Priming

In general, application of WaterBlock® Premium Polyurethane Sealant does not require priming the substrates. However, some substrates may require a primer. 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.

Joint Design

In general, more joint movement can be accommodated in a thin bead of sealant than a thick bead. WaterBlock® Premium Polyurethane Sealant 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". Beads for bedding or lap joints should be a minimum of 3/8" diameter.

Installation

Surfaces must be clean, dry and free of all contaminants such as but not limited to construction dirt, oils, etc. Cut the nozzle to the desired size and puncture seal. Apply sealant so that the uncured sealant gains full contact with the surfaces to be sealed; ensure that the joints are filled and properly tooled. (Dry tooling is recommended.) Proper tooling promotes good adhesion and improves the aesthetics of the installed sealant. Sealant should be protected from damage during its curing process. Apply the sealant in temperatures of 40°F. and rising for optimal properties.

Painting and Coating

WaterBlock® Premium Polyurethane Sealant 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 WaterBlock® Premium Polyurethane Sealant 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 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.

Limitations

- Do not apply to overly damp, frost bearing, contaminated, or loose surfaces
- Not recommended for traffic joints
- Not recommended for immersion in water or other liquids
- Not recommended for glazing applications
- Not recommended for sealing narrow joints less than 1/4"

Cleanup

Remove uncured material immediately. Material is difficult to remove once it has cured. Use acceptable waterless hand cleaners to aid in the removal of uncured materials. For tool cleanup, use a solvent.

NOTE: The use of solvents may be hazardous to your health. Use only in well ventilated areas. **KEEP AWAY FROM OPEN FLAME.** Read all labeling before use. Follow solvent manufacturer's recommendations and instructions for safe handling.

First Aid

Combustible. Contains calcium carbonates, toluene, mineral spirits and polyurethane resins. Uncured sealant vapors may cause respiratory tract irritation. Uncured sealant may cause eye, skin, nose, and throat irritation. Keep away from heat, sparks and flame. Avoid contact with skin and eyes. Use adequate ventilation and avoid prolonged breathing of vapors. When applying, use ordinary sanitary measures.

Precautions

IF THIS PRODUCT IS USED IN DIRECT CONTACT WITH ANY OTHER SEALANT OR ELASTOMER, A COMPATIBILITY TEST MUST BE CONDUCTED BY PURCHASER OR USER, PRIOR TO ACCEPTANCE. WATERBLOCK® PREMIUM POLYURETHANE SEALANT IS NOT COMPATIBLE WITH OXIME CONTAINING SILICONE SEALANTS. The suitability of this product, for each intended use, must be determined by the purchaser prior to acceptance. Avoid skin contact. On contact, uncured sealant could cause irritation to the skin and eyes. In the case of eye contact, flush immediately with warm water for at least 15 minutes and call a physician. For skin contact, remove with a paper towel. If swallowed, do not induce vomiting; call a physician. This product is manufactured for industrial use only. Refer to Material Safety Data Sheet (MSDS) on the company's Web site at www.waterblocksystems.com for further information. For medical emergency immediately see a physician.



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