

AirDam[®]

Air & Water Barrier

PROSOCO R-Guard[®] AirDam[®] is a gun-grade sealant combining the best of silicone and polyurethane properties. Installed as the interior air sealant, AirDam[®] creates a long lasting, weather-tight seal that prevents moist outside air from entering, and conditioned indoor air from escaping around window and door assemblies. This ensures wind driven rain and condensed water are diverted to the flashing membrane and water resistive barrier before it can enter the living space.

This single component, Silyl-Terminated-Polymer (STP) is easy to gun and tool in all weather conditions. AirDam[®] is immediately waterproof and can be applied in unfavorable weather conditions to dry or damp substrates, eliminating many weather-related construction delays and accelerating the “drying in” of new buildings.

AirDam[®] cures quickly to produce a durable, high performance, high movement elastomeric sealant. Appropriate for exterior or interior use, AirDam[®] is easily applied with standard caulking tools. AirDam[®] bonds tenaciously and can be used with all types of window and door frame material – vinyl, wood or metal, including painted metal. As a properly applied interior window sealant, AirDam[®] can substantially reduce a building's heating and cooling costs.

Advantages

- Solvent free. Isocyanate free. Complies with all AIM VOC regulations.
- Silane functional polymer provides superior long term adhesion, crack bridging and weathering characteristics.
- Bonds to most common building materials without priming.
- Produces a durable, weather-tight seal.
- Suitable for exterior or interior use.
- Stops penetration of air and water under normal and extreme weather conditions.
- Single component formulation saves time and requires no mixing.
- Easy to gun and tool in all climates.
- Bonds and cures in wet weather and on damp substrates.
- Compatible with most sealants and waterproofing or air barrier components.
- No shrinkage. No staining. Non-yellowing.
- Breathable – allows damp surfaces to dry.
- Will not support mold growth.
- Cured service temperatures: -75°F to 300°F. (-59°C to 149°C).

Limitations

- Not for use bridging gaps more than 2 inches wide.
- Not for underwater applications.
- Not for applications in direct contact with strong acids or solvents.

REGULATORY COMPLIANCE

VOC Compliance

R-Guard[®] AirDam[®] is compliant with the following national, state and district AIM VOC regulations:

- US Environmental Protection Agency California
- Air Resources Board SCM Districts South Coast
- Air Quality Management District
- Maricopa County, AZ
- Northeast Ozone Transport Commission



**SEALANT • WATERPROOFING
& RESTORATION INSTITUTE**

Issued to: PROSOCO, Inc.
Product: PROSOCO R-GUARD[®] AirDam[®]

C719: Pass Ext:+25% Comp:-25%

Substrate: Vinyl, Anodized Aluminum, Wood
[all substrates were unprimed]

Validation Date: 9/11/13 – 9/10/18

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SEALANT VALIDATION
www.swrionline.org

Typical Technical Data

FORM	viscous white paste, mild odor
SPECIFIC GRAVITY	1.3–1.4
pH	not applicable
WT/GAL	11.24 lbs
TOTAL SOLIDS	98%
VOC CONTENT	30 g/L maximum
FLASH POINT	>200 ° F (>93° C)
FREEZE POINT	not applicable
SHELF LIFE	1 year in tightly sealed, unopened container

Cured Properties

Hardness, Shore A	15–25
Tensile Strength	85 psi
Peel Strength	25 pli

SAFETY INFORMATION

Always read full label and SDS for precautionary instructions before use. Use appropriate safety equipment and job site controls during application and handling.

24-Hour Emergency Information: INFOTRAC at 800-535-5053

PREPARATION

Protect people, vehicles, property, plants, and all other surfaces not intended to receive AirDam®. Surfaces must be structurally sound and free of any surface contaminants, chemical residues, surface coatings or films that may adversely affect adhesion. Pressure-treated wood and other contaminated surfaces should be cleaned with a solvent wipe before application.

Joint Preparation

For joints less than one-half (½) inch wide, sealant depth should be equal to the width of the joint.

For joints ranging from one-half (½) to one (1) inch wide, sealant depth should be approximately one-half (½) the joint width.

In deep joints, control sealant depth by installing closed cell backer rod. The diameter of soft backer rod should be 25% greater than the joint width. Do not puncture backer rod.

Where joint depth does not permit use of a backer rod, install bond breaker tape to prevent three point bonding.

Surface & Air Temperatures

Surface and ambient temperatures should be 35°F (2°C) and rising and below 110°F (43°C) during application and drying. If air or surface temperatures exceed 95°F (35°C), apply to shaded surfaces and before daytime air and surface temperatures reach their peak. See Best Practices for hot weather installation instructions.

Though AirDam® may be applied to damp surfaces and tolerates rain immediately after application, do not apply to surfaces with standing water or frost. Contact PROSOCO if conditions are questionable.

Equipment

Apply using standard caulking tools.

To tool the product, use a DRY joint knife slightly wider than the gap or joint opening. Do not use soapy water when tooling or spreading.

Storage & Handling

Store in a cool, dry place. Keep container tightly closed when not in use. Do not open cartridges or sausages until preparation work has been completed. Do not alter or mix with other chemicals. When stored at or below 80°F (27°C), AirDam® has a shelf life of 12 months after the date of manufacture. This shelf life assumes upright storage of factory-sealed containers. Do not double- stack pallets. Keep out of the reach of children. Dispose of in accordance with local, state and national regulations.

APPLICATION

Before use, read “Preparation” and the Safety Data Sheet. ALWAYS TEST each surface for suitability and desired results before overall application.

Use the following application instructions. Let the surface dry thoroughly before inspection and approval.

Dilution & Mixing

Apply as packaged. Do not dilute or alter, or use for applications other than specified. AirDam® is ready to use. No mixing is required.

Coverage Rates

Coverage varies depending on the width and depth of joints. When overlapping onto adjacent surfaces, rough surface irregularities will reduce coverage. Use the table below as a guideline when estimating sealant requirements.

JOINT SIZE (D x W)	Linear Feet Sealed	
	20-oz Sausage	10.3-oz Cartridge
3/16 x ¼ inches	64	33
3/16 x ½ inches	32	16
¼ x ¼ inches	48	25
¼ x ½ inches	24	12
3/8 x 3/8 inches	21	11
3/8 x 5/8 inches	13	6.6
½ x ½ inches	12	6.2
½ x ¾ inches	8	4.1

Application Instructions

1. Using a professional grade caulking gun, install sealant in a continuous bead without gaps or air pockets.
2. Tool sealant immediately to ensure complete wetting of joint bond surface and to produce a smooth, concave joint profile flush with the edges of adjacent surfaces. DO NOT use water, soapy water or solvent to tool. Avoid over tooling. Where horizontal and vertical surfaces meet, tool sealant to create a slight cove which will not trap moisture or debris.

Cleanup

Clean tools and equipment immediately with mineral spirits or similar solvent.

Curing and Drying

AirDam[®] cures at the rate of 1/8 inch of depth per day. High humidity accelerates curing and drying time.

WARRANTY

The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of our products, nor anticipate every variation encountered in masonry surfaces, job conditions and methods used. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose.

PROSOCO, Inc. warrants this product to be free from defects. **Where permitted by law, PROSOCO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose.** The purchaser shall be responsible to make his own tests to determine the suitability of this product for his particular purpose. PROSOCO's liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which defective product has been applied. Acceptance and use of this product absolves PROSOCO from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of PROSOCO, its distributors or dealers.

CUSTOMER CARE

Factory personnel are available for product, environment and job-safety assistance with no obligation. Call 800-255-4255 and ask for Customer Care – technical support.

Factory-trained representatives are established in principal cities throughout the continental United States. Call Customer Care at 800-255-4255, or visit our web site at www.prosoco.com, for the name of the PROSOCO representative in your area.

BEST PRACTICES

AirDam[®] bonds tenaciously. Carefully protect all nearby surfaces not intended to be treated. Immediately clean up incidental contact using mineral spirits or similar solvent.

Use as is. Do not thin or alter in any way.

Apply using a professional caulking gun. To tool the product, use a DRY joint knife slightly wider than the gap or joint opening. Do not use water, soapy water or solvent when tooling or spreading. Avoid over tooling.

Allow for drying time based on temperature and humidity. AirDam[®] cures at the rate of 1/8 inch of depth per day. High humidity decreases dry-time. Low temperatures and low relative humidity will extend cure time.

Hot Weather Installations: when practical install AirDam[®] to shaded surfaces. When conditions are hot and dry, cool and dampen the surface with a fresh water mist. Allow standing water to dry before installation.

PROSOCO R-Guard[®] Joint & Seam Filler, FastFlash[®] and AirDam[®] are recommended for improved performance of R-Guard Cat 5[®].

To schedule field technical support, contact your PROSOCO Technical Customer Care toll-free at 800-255-4255. Field visits by PROSOCO personnel are for the purpose of making technical recommendations only. PROSOCO is not responsible for providing job site supervision or quality control. Proper application is the responsibility of the applicator.

R-Guard® AirDam® Product Test Results

ASTM C 920: Standard Specification For Elastomeric Joint Sealants

TEST	METHOD	CRITERIA	RESULTS
Rheological Properties	ASTM C 639	Vertical Slump at 40± 3.6° F must be ≤ 3/16" Vertical Slump at 122± 3.6° F must be ≤ 3/16" Horizontal Slump at 40± 3.6° F, no deformation Horizontal Slump at 122± 3.6° F, no deformation	Pass: 0 Pass: 0 Pass: no deformation Pass: no deformation
Extrusion Rate	ASTM C 1183 Procedure A	Report Specific Gravity Extrusion Rate ≥ 10.0 mL/min	1.4 96.9 mL/min
Application Life: Type M, Grade P Only	ASTM C 1183 Procedure A	Not applicable for Type S, Grade NS	Not applicable
Hardness	ASTM C 661	Indentation Hardness <60	Pass: 18
Effects of Heat Aging	ASTM C 1246	Percent Weight Loss ≤7% Visual Examination for presence of cracks or chalking	Pass: 0.98% Pass: no cracking or chalking
Tack-Free Time	ASTM C 679	< 72 hours	Pass: 1.7 hours
Stain and Color Change	ASTM C 510	No visible stain or color change	Pass
Adhesion and Cohesion Under Cyclic Movement	ASTM C 719	Aggregate loss in bond and cohesion ≤1½ in²	Pass 0 on vinyl 0 on aluminum 0 on wood
Adhesion-in-Peel	ASTM C 794	Aggregate loss in bond and cohesion ≥5 lbf	Pass 10.4 lbf on vinyl 13.7 on aluminum 10.5 on wood
Adhesion-in-Peel exposed to UV through glass	ASTM C 794 ASTM C 1442	Aggregate loss in bond and cohesion ≥5 lbf	≥5 lbf
Effects of Accelerated Weathering	ASTM C 793 ASTM C 1442	Visual inspection for cracking after accelerated weathering and after cold exposure and low temperature bend ≤ Example #2 in ASTM C 793	Pass: no cracking

Adhesion and Cohesion Under Cyclic Movement

TEST	METHOD	CRITERIA	RESULTS
Adhesion and Cohesion Under Cyclic Movement (±25%)	ASTM C 719	Aggregate loss in bond and cohesion ≤1½ in²	Pass 0 on vinyl 0 on aluminum 0 on wood

Adhesion-in-Peel exposed to UV through glass

TEST	METHOD	CRITERIA	RESULTS
Air Leakage of Air Barrier Assemblies	ASTM E 2357	≤ 0.2 L / s•m² at 75 Pa (≤ 0.04 cfm / ft² at 1.57 psf)	Pass: <0.001 L / s•m² at 75 Pa (0.0002 cfm / ft² at 1.57)

All testing conducted by independent, accredited laboratories.