## 07 00 00 Thermal & Moisture Protection

07 27 00 Air Barriers

07 27 26 Fluid Applied Membrane Air Barriers

07 27 29 Air Barrier Coatings

07 25 00 Weather Barriers





# air and weather barrier sealant for windows and doors

AirDam® is part of the family of PROSOCO R-Guard® products developed to prevent the movement of water and air through building envelopes. R-Guard AirDam® completes the air barrier system by stopping the movement of moist air through cracks surrounding windows and doors. Utilize AirDam® in all rough openings prepared with R-Guard FastFlash®.

**OVERVIEW** 

PROSOCO R-Guard® AirDam® is a gun-grade waterproofing sealant that combines the best of silicone and polyurethane properties. This single component, Silyl-Terminated-Poly-Ether (STPE) is easy to gun and tool in all weather conditions. AirDam® cures quickly to produce a durable, high performance, high movement elastomeric sealant.

Installed as the interior air sealant, R-Guard 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 that wind driven rain and condensed water are diverted to the flashing membrane and the water resistive barrier before it can enter the living space.

SEALANT • WATERPROOFING & RESTORATION INSTITUTE

Product: PROSOCO R-GUARD® AirDam®

II. PRUSUCU R-GUARD® AIIDAIII®

**C719:** Pass <u>✓</u> Ext:+25% Comp:-25%

Substrate: Vinyl, Anodized Aluminum, Wood

[all substrates were unprimed]

Validation Date: 9/11/13 - 9/10/18

No. 913-PR0918

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## **SEALANT VALIDATION**

www.swrionline.org

AirDam® is immediately waterproof and can be applied in unfavorable weather conditions to dry or damp substrates. This feature eliminates many weather-related construction delays and accelerates the "drying in" of new buildings.

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.

## **SPECIFICATIONS**

For all PROSOCO product specifications visit www. prosoco.com.

## **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**

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

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







## TYPICAL TECHNICAL DATA

R-Guard AIRDAM®		
FORM	heavy white paste	
SPECIFIC GRAVITY	1.3–1.4	
рН	not applicable	
WT/GAL	11.24 pounds	
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	
Elongation at Break	1000%	
Peel Strength	25 pli	

## **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.

## **Joint Preparation**

For joints less than one-half (1/2) inch wide, sealant depth should be equal to the width of the joint.

For joints ranging from one-half (1/2) to one (1) inch wide, sealant depth should be approximately one-half (1/2) 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.

## **ALWAYS TEST**

ALWAYS TEST a small area of each surface to confirm suitability and desired results before starting overall application. Test with the same equipment, recommended surface preparation and application procedures planned for general application.

## Surface and 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.

## **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), R-Guard 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 "Safety Information."

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 1/4 inches	64	33
3/16 x 1/2 inches	32	16
1/4 x 1/4 inches	48	25
1/4 x 1/2 inches	24	12
3/8 x 3/8 inches	21	11
3/8 x 5/8 inches	13	6.6
1/2 x 1/2 inches	12	6.2
1/2 x 3/4 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.

## **Curing and Drying**

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

## Cleanup

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

## SAFETY INFORMATION

PROSOCO R-Guard® AirDam® contains calcium carbonate and may cause eye and skin irritation. Use with adequate ventilation, safety equipment and job site controls during application and handling. Read the full label and MSDS for precautionary instructions before use.

#### First Aid

**Ingestion**: DO NOT induce vomiting. DO NOT give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

**Eye Contact**: Immediately rinse eyes with water. Remove any contact lenses. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Continue flushing eyes with running water for at least 15 minutes. Get medical attention if irritation develops.

**Skin Contact**: Wash affected areas with large amounts of running water and soap for 15 minutes. Remove contaminated clothing and shoes. Wash clothing and decontaminate shoes before re-use. Get medical attention if irritation develops and persists.

**Inhalation**: Remove from area to fresh air. If not breathing, clear girway and start mouth-to-mouth artificial respiration or use a bag mask respirator. Get immediate medical attention. If victim is having trouble breathing, transport to medical care and if available, give supplemental oxygen.

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

## **BEST PRACTICES**

Surfaces should be clean, free of standing water and in good repair before application. Most building surfaces can be cleaned with Enviro Klean® 2010 All Surface Cleaner, Information is available by calling Technical Customer Care toll-free at 800-255-4255.

BEFORE installing AirDam®, prepare all rough openings with R-Guard Joint & Seam Filler and/or FastFlash®, as needed.

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 Spray Wrap, MVP, VB, Cat 5® and Cat 5® Rain Screen water-resistive barrier coatinas.

Illustrations depicting the use of PROSOCO R-Guard® products are available at www.prosoco. com by downloading the R-Guard Installation Guidelines.

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.





#### WARRANTY

Information and recommendations are based on our research and the research of others, and are believed to be accurate. No guarantee of their accuracy is made because we cannot anticipate every application or variations encountered in building 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. 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, environmental 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 R-Guard® representative in your area.