PROSOCO®

R•Guard®

AIR & WATER BARRIER

Spray Wrap Rain Screen

PROSOCO R-Guard® Spray Wrap Rain Screen is a fluid-applied air and water-resistive barrier that stops air and water leakage in cavity wall, masonry veneer construction, as well as in stucco, EIFS and most other building wall assemblies. Once on the substrate, the easily applied liquid quickly dries into a rubberized, highly durable, water-resistant, vapor-permeable membrane.

Easy-to-use Spray Wrap Rain Screen is specially formulated to meet the unique requirements of pressure-equalized rain screen construction. It provides superior protection against water intrusion, while minimizing potential for condensation within walls. Spray Wrap Rain Screen minimizes the potential for condensation and allows accumulated moisture to dry while reducing energy costs and lowering the risk of mold and mildew.

The durable membrane conforms and adheres to common building surfaces and is compatible with most paints, sealants and self-adhered waterproofing or air barrier components. Appropriate for vertical, above-grade applications to exterior gypsum, plywood and OSB sheathing; vented rain screen cladding; CMU; cast concrete and most other common building materials.

ADVANTAGES

- **ICC Evaluation Service Report No. ESR-4191.**
- **Reduces condensation and energy loss caused by air leaks through the wall assembly.**
- **Minimizes risk of water damage to sheathing and associated repair or replacement costs.**
- **Allows accumulated moisture within the wall assembly to dry. Vapor permeable with low air infiltration rate.**
- **Designed for use under typical ventilated cavity, rain screens.**
- **Fast and easy installation reduces labor costs.**
- **No air leakage or water intrusion between the sheathing and Spray Wrap Rain Screen – stable under air and wind pressure loads.**
- **Seamless – no tears, holes, or improperly lapped joints to compromise performance.**
- **Low odor and non-toxic.**
- **Gray color keeps the backup wall unseen through rain screen joints or vents.**
- **Combines the durability and flexibility of a rubberized coating with the speed and ease of a water-based, fluid-applied application.**
- **Won't tear or lose effectiveness when exposed to weather during construction.**
- **Single component. Easy to install. Long pot life. Water cleanup.**
- **Simplifies inspection, quality control.**
- **Compatible with most paints, sealants and coatings.**
- **Air Barrier Association of America (ABAA) approved product.**
- **Illustrations depicting the use of PROSOCO R-Guard® products are available at www.prosoco.com by downloading the R-Guard Installation Guidelines.**

Limitations

- Not for application at surface or air temperatures below 25°F (–3°C) or above 100°F (38°C). See Cold Weather Precautions and Hot Weather Precautions in "Surface and Air Temperatures" section.
- Not for use below-grade or in locations which are designed to be continuously immersed in water.
- Not for use as an exterior finish.

REGULATORY COMPLIANCE

VOC Compliance

R-Guard Spray Wrap Rain Screen is compliant with the US Environmental Protection Agency's AIM VOC regulations. Visit www.prosoco.com/voc-compliance to confirm compliance with individual district or state regulations.

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

TYPICAL TECHNICAL DATA

FORM	batter like, semi-gel liquid dark charcoal color
SPECIFIC GRAVITY	1.37
pH	8.5 – 9.5
WT/GAL	11.40 lbs
ACTIVE CONTENT	no data
TOTAL SOLIDS	63–68%
VOC CONTENT	<18 g/L
FREEZE POINT	32° F (0° C)
SHELF LIFE	2 years in tightly sealed, unopened container

PREPARATION

Protect people, vehicles, property, plants and all other surfaces not intended for application. To ensure best results, apply to clean surfaces free of contaminants. Chemical residues, surface oxidation, surface coatings or films may adversely affect adhesion. Pressure-treated wood or fire-retardant wood and other contaminated surfaces should be cleaned with an Isopropyl Alcohol wipe and allowed to flash-off before application of R-Guard products. Painted surfaces are not acceptable for application.

Roofing systems must be capped and sealed or top of walls protected from water intrusion both before and after air barrier system installation. Water intrusion may interfere with bonding of air barrier waterproofing materials and/or detrimentally impact the performance of such materials.

If considering use on insulated concrete forms, the preferred method for cleaning oxidation is with water and low-pressure cleaning.

Concrete Surfaces: Concrete must be in place 3–7 days and free of any curing compounds or form release agents before permeable R-Guard products are applied.

Brick/Masonry Surfaces: Mortar joints in CMU construction must have a minimum 3 day cure before being treated with R-Guard products. If joints are not struck flush, multiple coats may be required.

Sheathing: Remove and replace damaged sheathing. Surfaces to be coated must be continuous. On exterior sheathing, treat cracks with R-Guard Joint & Seam Filler and/or R-Guard FastFlash®, as needed. Sheathing gaps must be less than ¼ inch. For gaps larger than ¼ inch, apply FastFlash® with backer rod, or Joint & Seam Filler. Gap wood-based sheathing per manufacturer's recommendations, typically 1/8 inch minimum. Consult a structural engineer for all moving cracks, and repair as needed.

Fill, Bridge & Flash

1. Fill surface defects and over driven fasteners with Joint & Seam Filler and/or FastFlash®.
2. Seal cut edges of gypsum board sheathing in rough openings, and where appropriate, with fast-drying R-Guard PorousPrep. Gun and spread Joint & Seam Filler and/or FastFlash® into all inside corners, cracks, open joints and seams, as needed.
3. Seal masonry ties and properly prepare penetrations as work progresses.
4. Use FastFlash® to coat the improved rough opening and out onto the exterior wall assembly face 4–6 inches (100–152 mm), creating a continuous waterproof membrane free of voids or pinholes.
5. Let all joint and seam fillers and rough opening treatments skin over before application.

If errant nails/fasteners that do not engage with studs are removed, fill the holes with additional Joint & Seam Filler to ensure the continuity of the air and water-resistive barrier.

See individual product data sheets and R-Guard Installation Guidelines for more information.

Surface and Air Temperatures

Substrate and temperature conditions should be 25–100°F (–3°C to 38°C). Air and substrate temps must be at least 25°F (–3°C) and rising, and remain so for a minimum of 24 hours. Do not apply at temperatures below 25°F (–3°C). Wind and high temperatures will accelerate drying. As with any coating, application to substrates with high moisture content may lead to blistering of the material.

Hot Weather Conditions/Precautions: If air or surface temperatures exceed 95°F (35°C), apply to shaded surfaces and before daytime air and surface temperatures reach their peak. Hot surfaces may be cooled with a mist of fresh water. Surfaces may be damp but must be free of standing water before application. Keep containers closed and out of direct sunlight when not in use. Cover open pails with a wet towel as needed to prevent skinning.

Cold Weather Conditions/Precautions: Product may be applied to frost-free substrates at surface and air temperatures of 25°F (–3°C). Keeping material stored in a heated environment prior to use will help in these conditions.

Equipment

Mix Spray Wrap Rain Screen with a low-speed drill and clean mixing paddle. When roller applying, a maximum ¾ inch (19 mm) nap roller is recommended.

R-Guard Spray Wrap Rain Screen is compatible with GRACO and Titan airless spray equipment with the following specifications:

- Minimum 1.5–2 gallons output Immersion Feed
- *Minimum hose diameter of 3/8-inch. *NOTE*: A ¼-inch x 3-foot whip hose may be used for ergonomic purposes. Run 3/8-inch ID hose all the way to the 3-foot whip hose.
- Minimum tip size of 0.027–0.031.
- Minimum pressure requirement to spray of 2,000 psi at the gun with an airless sprayer rated no lower than 3,300 psi.
- Remove all filters in sprayer and gun before application.

*If hoses longer than 50 feet are required to a maximum hose length of 150 feet, use 75 feet of ½-inch hose and 75 feet of 3/8-inch hose with a 3 foot ¼-inch whip hose.

CAUTION needs to be taken to prevent material from skinning during application to avoid partially dried material from being sucked into the pump equipment and causing excessive tip plugging. Please contact PROSOCO with questions.

When spray applying material, back rolling is necessary to maximize coverage for a void- and pinhole-free surface.

Storage and Handling

Keep from freezing. Store in a cool dry place. Keep container tightly closed when not dispensing. Do not open container until preparation work is complete. Do not mix or alter with other chemicals. Shelf life assumes upright storage of factory sealed containers. Do not double stack pallets. Dispose of unused product and containers in accordance with local, state and federal regulations.

APPLICATION

Before use, read "Preparation" and the Safety Data Sheet. ALWAYS TEST.

Dilution & Mixing

Apply as packaged. Do not dilute or alter. Mix well before use with a low-speed drill and clean mixing paddle. Avoid mixing air into the membrane. Do not add water, over mix or add accelerators or retarders.

Typical Coverage Rates

Coverage rates will vary depending on surface porosity, moisture uptake, and other factors. Unless otherwise required by the referenced test method, test results cited on the Product Test Data were achieved when the product was applied at 10 wet mils to DensGlass® gold fiberglass mat gypsum sheathing. Some gypsum sheathing products, OSB and CMU may require additional material to achieve the desired mil thickness for a pinhole free coating. In those cases, more than two coats may be required. Actual rates must be determined through mock-up applications.

For more information regarding coverage rates as it pertains to glass-mat sheathing, please consult the AMT Laboratories Technical Bulletin available at www.prosoco.com/support/product-literature-library.

Spray Wrap Rain Screen is packaged in 5-gallon containers.

- *Exterior Gypsum Board*, OSB*, Plywood*: 50–100 sq.ft. per gallon
- *CMU*: 30–60 sq.ft. per gallon per coat (2 coat minimum required to achieve a pinhole free surface)

*Oriented Strand Board and some gypsum sheathing will require additional material due to varying substrate porosity.

Application Instructions

Exterior Sheathing

1. Apply Spray Wrap Rain Screen to Gypsum, Plywood and OSB sheathing to achieve a continuous, pinhole free coating. Some gypsum sheathing will require additional material due to varying substrate porosity.
2. When spray applying, back rolling is necessary to ensure there are no pinholes, voids or gaps in the membrane.
3. Inspect membrane before covering. Repair any deep gouges, punctures or damaged areas with FastFlash® or Joint & Seam Filler. If the surface of the primary air barrier or liquid flashing membrane is damaged during construction, remove all loose surface contaminants before selective re-coating with additional FastFlash®, Joint & Seam Filler or Spray Wrap Rain Screen. Overlap repairs, penetration treatments, transitions, SS ThruWall, rigid flashing and other air barrier components to ensure positive drainage and continuity of the air and water-resistive barrier.

CMU Wall Construction

1. Apply sufficient Spray Wrap Rain Screen to fill and cover the entire face of the exterior wall assembly. Let dry.
2. Apply a second coat. The finished application must be continuous and free of voids and pinholes. Back rolling spray-applied material is necessary to maximize coverage for a void- and pinhole-free surface. Take special care to achieve full coverage around wall ties or surface irregularities.

3. Inspect membrane before covering. Repair any deep gouges, punctures or damaged areas with FastFlash® or Joint & Seam Filler. If the surface of the primary air barrier or liquid flashing membrane is damaged during construction, remove all loose surface contaminants before selective re-coating with additional FastFlash®, Joint & Seam Filler or Spray Wrap Rain Screen. Overlap repairs, penetration treatments, transitions, SS ThruWall rigid flashing and other air barrier components to ensure positive drainage and continuity of the air and water-resistive barrier.

Curing and Drying

Curing and drying times vary with temperature, humidity and surface conditions. Protect from rain until completely cured. Surface temperatures should remain at least 25°F (–3°C) and rising after application and until curing is complete. Spray Wrap Rain Screen dries to the touch in 1 hour and can be re-coated in 2 hours. Product drying time is 12 hours at 70°F (21°C) and 50% relative humidity.

Cleanup

Clean tools and equipment with soapy water immediately after use. Mechanically remove dried material.

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. 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. Call Customer Care at 800-255-4255, or visit our website at prosoco.com, for the name of the PROSOCO representative in your area.

PRODUCT TEST RESULTS
R-Guard Spray Wrap Rain Screen

ICC-ES AC212[1]
Acceptance Criteria for Water-Resistive Coatings Used as Water-Resistive Barriers Over Exterior Sheathing

TEST	METHOD	CRITERIA	RESULTS
Tensile Bond	ASTM C 297	Minimum 15 psi (105 kPa)	Pass
Freeze-Thaw	ICC-ES AC212	No cracking, checking, crazing, erosion, delamination or other deleterious effects	Pass
Water Resistance	ASTM D 2247	No cracking, checking, crazing, erosion, delamination, or other deleterious effects	Pass
Water Vapor Transmission	ASTM E 96 Wet Cup	Measure	25 perms at 10 mils
Water Penetration	ASTM E 331	No visible water penetration at the sheathing joints as viewed from the back of the panel	Pass
Structural, Racking, Restrained Environmental Conditioning & Water Penetration	ASTM E 1233 A ASTM E 72 ICC-ES AC212 ASTM E 331	No cracking of the coating	Pass
Weathering	ICC-ES AC212 AATCC[2] 127	No cracking of the coating; no water penetration	Pass
Air Permeance	ASTM E 2178	≤ 0.02 L / s·m² at 75 Pa (≤ 0.004 cfm / ft² at 1.57 psf)	Pass: 0.0024 L / s·m² at 75 Pa (0.0005 cfm / ft² at 1.57 psf)

ABAA: Air Barrier Association of America Acceptance Criteria for Liquid Applied Membranes

TEST	METHOD	CRITERIA	RESULTS
Air Permeance	ASTM E 2178	≤ 0.02 L / s·m² at 75 Pa (≤ 0.004 cfm / ft² at 1.57 psf)	Pass: 0.0024 L / s·m² at 75 Pa (0.0005 cfm / ft² at 1.57 psf)
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: 0.0028 L / s·m² at 75 Pa (0.0005 cfm / ft² at 1.57 psf)
Water Resistance	AATCC[2] 127	No water infiltration after exposure to 55 cm head of water for 5 hours	Pass
Fastener Sealability	ASTM D 1970	No water infiltration	Pass
Pull Adhesion	ASTM D 4541	110 kPa (16 psi) or substrate failure	Pass
ICC-ES AC212	Entire Suite of Tests	Pass	Pass
Crack Bridging	ASTM C 1305	Pass	Pass
Water Vapor Transmission	ASTM E 96 Wet Cup Dry Cup	Measure	Wet Cup: 25 perms at 10 mils Dry Cup: 5 perms at 10 mils

Fire Testing

TEST	METHOD	CRITERIA	RESULTS
Surface Burning Characteristics	ASTM E 84	Criteria for ICC and NFPA Class A Building Material: Flame Spread ≤ 25 Smoke Developed ≤450	Meets Class A Building Material: Flame Spread: 5 Smoke Developed: 5
Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies	NFPA[3] 285	Must resist flame propagation and flame spread.	See Report No. 10261K from Priest & Associates Consulting, LLC

All testing conducted by independent, accredited laboratories.

NOTES:
1: International Code Council Evaluation Service Acceptance Criteria 212
2: American Association of Textile Chemists and Colorists
3: National Fire Protection Association