



# Spray Wrap

*fluid-applied air & water-resistive barrier*

R-GUARD Spray Wrap is part of the family of PROSOCO R-GUARD® products developed to prevent the unwanted movement of water and air through building envelopes. Utilize Spray Wrap as the primary air barrier over above grade structural surfaces prepared with R-GUARD Joint & Seam Filler and FastFlash®.

## OVERVIEW

PROSOCO R-GUARD® Spray Wrap 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.

Compared to self-adhered or mechanically-fastened sheet wraps, easy-to-use R-GUARD Spray Wrap provides superior protection against water intrusion, while minimizing potential for condensation within walls. R-GUARD Spray Wrap minimizes the potential for condensation and allows accumulated moisture to dry while reducing energy costs and lowering the risk of mold and mildew.

Use Spray Wrap as a high-performing water-resistive barrier or as part of a continuous, building-wide air barrier system. 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 structural sheathing, CMU, cast concrete and most

other common building materials.

## SPECIFICATIONS

For all PROSOCO product specifications visit [www.prosoco.com](http://www.prosoco.com) and click on "SpecBuilder" or "Solution Finder."

## ADVANTAGES

- **Air Barrier:** reduces condensation and energy loss caused by air leaks through the wall assembly.
- **Water-Resistive Barrier:** minimizes risk of water damage to sheathing and associated repair or replacement costs.
- **Vapor Permeable:** allows moisture which accumulates within the wall assembly to dry.
- **Cost Effective:** fast and easy installation reduces labor costs.
- **Structural:** no air leakage or water intrusion between the sheathing and R-GUARD Spray Wrap — stable under air and wind pressure loads.
- **Seamless:** no tears, holes, or improperly lapped joints to compromise performance.
- **Practical & Durable:** 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. May be exposed to weather for up to 6 months without compromising performance.
- **Saves time:** One component is easy to install

with conventional spray equipment. Long pot life. Water cleanup.

- **Color Coded:** simplifies inspection and quality control.
- **Safe:** low odor, non-toxic. Complies with all VOC regulations.
- **Versatile:** compatible with most paints, sealants and coatings.

## Limitations

- Not for use at surface or air temperatures below 40°F (4°C) or above 110°F (43°C) unless Hot Weather Precautions are followed. See "Surface and Air Temperatures."
- Not for use below-grade or in locations which are designed to be continuously immersed in water.

## REGULATORY COMPLIANCE

### VOC Compliance

PROSOCO R-GUARD® Spray Wrap 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

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## TYPICAL TECHNICAL DATA

R-GUARD SPRAY WRAP	
FORM	Light red viscous liquid, mild odor
SPECIFIC GRAVITY	>1.0
pH	7.5 – 10.0
WT/GAL	12.7 lbs
ACTIVE CONTENT	No Data
TOTAL SOLIDS	62% by volume ASTM D 2369
VOC CONTENT	< 100 g/L
FLASH POINT	>200°F (>93°C)
FREEZE POINT	32°F (0°C)
SHELF LIFE	1 year in tightly sealed, unopened container

PROSOCO R-GUARD® Joint & Seam Filler, FastFlash® and AirDam® are recommended for improved performance of all R-GUARD air- and water-resistive barrier coatings.

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.**

## PREPARATION

To ensure best results, apply to clean surfaces free of contaminants. Chemical residues, surface coatings or films may adversely affect adhesion.

Protect people, vehicles, property, plants and all other surfaces not intended to receive Spray Wrap.

Remove and replace damaged sheathing. Surfaces to be coated must be continuous.

On structural sheathing, repair cracks larger than ½ inch. On CMU or concrete, fill cracks larger than ½ inch with mortar. Consult a structural engineer for all moving cracks, and repair as needed.

## Fill, Bridge & Flash

**Uses: R-GUARD GypPrime + R-GUARD Joint & Seam Filler + R-GUARD FastFlash®**

1. Fill surface defects and over driven fasteners with R-GUARD Joint & Seam Filler. Fill open joints, seams and cracks measuring up to ½ inch (13 mm) with R-GUARD Joint & Seam Filler.
2. Consolidate and seal cut edges of gypsum board sheathing in rough openings with fast-drying R-GUARD GypPrime. Gun and spread R-GUARD Joint & Seam Filler into all inside corners, cracks, open joints and seams in rough openings. Allow Joint & Seam Filler to skin over.
3. Gun and spread R-GUARD FastFlash® to create an opaque, monolithic flashing membrane over the inside of all rough openings and extending 4–6 inches (100–152 mm) over the face of the structural wall. Allow FastFlash® to skin over. Use FastFlash® to create a continuous waterproof membrane which is free of voids or pinholes.

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

Let all joint and seam fillers and rough opening treatments skin over before applying R-GUARD Spray Wrap.

## Surface and Air Temperatures

Surface and ambient temperatures should be 40°F (4°C) and rising and below 110°F (43°C) during application and drying. Wind and high temperatures will accelerate drying.

## 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.

**Hot Weather 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.

## Equipment

Mix R-GUARD Spray Wrap with a low-speed drill and clean mixing paddle. When roller applying, use a ¾ inch (19 mm) nap roller.

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

- Minimum 1 gallon per minute output.
- Minimum hose width of 3/8 inch.  
*NOTE: A ¼ x 3' whip hose may be used for ergonomic purposes. Run 3/8" ID hose all the way to the 3' 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.

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## Storage and Handling

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. When stored at or below 80°F (27°C) R-GUARD Spray Wrap 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. Dispose of unused product and containers in accordance with local, state and federal regulations.

## APPLICATION

Before use, read "Preparation" and "Safety Information."

## Dilution & Mixing

Do not dilute or alter, except for use in sprayers. The product may need thinning with up to 5 percent fresh water, based on surface, drying conditions and equipment.

Mix well before use with a low-speed drill and clean mixing paddle. Avoid mixing air into the membrane.

## Coverage Rates

Theoretical coverage rates are calculated. Practical coverage rates are based on field experience, applied to irregular surfaces with varying surface textures.

PROSO CO R-GUARD® Spray Wrap is packaged in 5-gallon containers.

Air & Water-Resistive Barrier Membrane Calculator		
R-GUARD Spray Wrap	Theoretical Coverage	Practical Coverage
Gypsum, Plywood and OSB @ 10 wet mils x 1 coat	160 sq.ft. per gallon (1 coat)	80-120 sq.ft. per gallon (1 coat)
CMU @ 10 wet mils x 2 coats	80 sq.ft. per gallon (2 coats)	30-60 sq.ft. per gallon (2 coats)

Prepare all joints, seams, cracks, fastener penetrations and rough openings prior to application of the primary air barrier. See appropriate product data sheets and R-GUARD Installation Guidelines for more information.

## Application: Structural Sheathing

1. Apply sufficient Spray Wrap to cover and hide the entire face of the structural wall. Apply to uniform thickness of 10 wet mils per coat.
2. Apply one coat to prepared Gypsum, Plywood and OSB sheathing. Coating may be slightly translucent after drying. OSB sheathing may require touch-up with a second coat of Spray Wrap where wood strands are raised from the surface. Inspect surface after initial application and touch-up as needed. Coating must be opaque after drying.
3. Back roll as necessary to ensure there are no pinholes, voids or gaps in the membrane.
4. Inspect membrane before covering. Repair any punctures or damaged areas by applying additional Spray Wrap. Overlap repairs, penetration treatments, transitions, rigid flashing and other air barrier components to ensure positive drainage and continuity of the air and water-resistive barrier.

## Application: CMU Wall Construction

1. Apply sufficient Spray Wrap to fill and cover the entire face of the structural wall. Let dry.
2. Apply a second coat of Spray Wrap to achieve hide. The finished application must be continuous and free of voids and pinholes. If necessary, back roll spray to achieve 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 punctures or damaged areas by applying additional Spray Wrap. Overlap repairs, penetration treatments, transitions, rigid flashing and other air barrier components to ensure positive drainage and continuity of the air and water-resistive barrier.

## Curing and Drying

Complete drying times vary with temperature, humidity and surface conditions. Protect from rain or freezing until completely dry. At 70°F (21°C) and 50% relative humidity, R-GUARD Spray Wrap dries to touch and can be over coated in 2-4 hours.

## Cleanup

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

## BEST PRACTICES

Always clean new masonry exteriors with the appropriate, tested PROSO CO post construction cleaner for concrete, clay or stone masonry. NEVER USE MURIATIC OR OTHER RAW ACIDS.

PROSO CO R-GUARD® Joint & Seam Filler, FastFlash® and AirDam® are recommended for improved performance of all R-GUARD air- and water-resistive barrier coatings.

Though R-GUARD Spray Wrap can be located anywhere in the wall assembly, the ideal location is on the cavity-facing side of the structural sheathing or CMU backup. This positions the air barrier to accommodate transitions with other building components. It also lets the air barrier perform as a water-resistive barrier.

It is not necessary to apply R-GUARD Spray Wrap to the inside of rough openings prepared with FastFlash®.

Always use two coats of R-GUARD Spray Wrap on CMU structural walls.

**Hot Weather 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.

Protect cleaned masonry with the appropriate PROSO CO penetrating, breathable water-repellent for concrete, clay or stone. Applied to the masonry veneer, penetrating breathable water-repellents work with the water-resistive capabilities of R-GUARD Spray Wrap to provide total protection for buildings against moisture penetration and damage.

Common installation guidelines depicting use of PROSO CO R-GUARD® products are available at [www.prosoco.com](http://www.prosoco.com).

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



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## **SAFETY INFORMATION**

PROSOCO R-GUARD® Spray Wrap contains silicon dioxide, titanium dioxide, calcium carbonate. May cause skin irritation with prolonged contact. 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. If vomiting occurs, keep victim's head lower than waist to prevent aspiration. Seek medical attention.

**Eye Contact:** Rinse thoroughly for 15 minutes. Get medical assistance if irritation persists.

**Skin Contact:** Remove contaminated clothing and rinse thoroughly. Get medical attention if irritation persists. Launder contaminated clothing before reuse.

**Inhalation:** Remove to fresh air. Get medical attention as necessary.

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

## **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 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.** 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](http://www.prosoco.com), for the name of the PROSOCO R-GUARD® representative in your area.

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Test	Method	Criteria	Results
Air Leakage of Air Barrier Assemblies	ASTM E-2357	$\leq 0.2 \text{ L / s}\cdot\text{m}^2$ at 75 Pa ( $\leq 0.04 \text{ cfm / ft}^2$ at 1.57 psf)	0.016 L / s·m <sup>2</sup> at 75 Pa (0.003 cfm / ft <sup>2</sup> at 1.57 psf)
Water Penetration Resistance after UV Exposure & Heat Aging	AC 212, Section 4.8 and AATCC 127 (Water Column Method)	210 hours UV exposure, then 25 cycles drying at 120°F (49°C) and soaking, then 21.6 in (55 cm) hydrostatic head for 5 hours without cracking, bond failure or water penetration	No cracking, no bond failure, no water penetration after UV exposure and heat aging.
Structural Loading Water Penetration Testing	ASTM E-1233 ASTM E-331	No water at exterior plane of sheathing (exterior gypsum, Dens-Glass Gold, plywood, OSB) after 10 cycles at 80% design load and 75 minutes water spray at 6.24 psf (299 Pa) pressure differential with water spray rate of 5 gal/ft <sup>2</sup> -hr (3.4 L/m <sup>2</sup> -min).	No water penetration.
Cyclic Pressure Water Penetration Testing	ASTM E-283 ASTM E-331	No water penetration or evidence of elevated moisture levels in plywood sheathing after 10 cycles of conditioning at 299 Pa (6.24 psf) positive and negative pressure followed by 75 minutes water spray at 6.24 psf (299 Pa) pressure differential with water spray rate of 5 gal/ft <sup>2</sup> -hr (3.4 L/m <sup>2</sup> -min).	No water penetration. No elevated moisture levels.
Water Penetration R-GUARD Spray Wrap (8-in medium wt CMU w/2 coats)	ASTM E-331	No leakage at 137 Pa (2.86 psf) for 15 minutes	No leakage at 137 Pa (2.86 psf) for 15 minutes. No leakage at 300 Pa (6.24 psf) for 120 minutes.
Water Resistance Testing	ASTM D-2247	Absence of deleterious effects after 14-day exposure.	No deleterious effects after 14-day exposure.
Resistance to Mold Growth	ASTM D-3273	No mold growth after 28 days.	No mold growth after 28-day exposure.
Freeze/Thaw Resistance	ICBO Method (AC 24)	No visible effects (cracking, checking, delamination, erosion) when viewed at 5x.	No deleterious effects when viewed at 5x magnification.
Water Vapor Transmission (WMT)	ASTM E-96 Method B (Water Method)	Measure.	5.7 perms at 5-7 DFT [327 ng/(Pa·s·m <sup>2</sup> )]
Water Vapor Penetration (WMP)	ASTM E-96 Method B	Measure.	10.5 perms
Air Leakage: Wall Assembly with R-GUARD Fill and R-GUARD Spray Wrap	ASTM E-283 (SBCCI PST & ESI Method)	<0.06 cfm/ft <sup>2</sup> at 1.57 psf (0.00030 m <sup>3</sup> /s m <sup>2</sup> at 75 Pa)	0.0044 cfm/ft <sup>2</sup> (0.000022 m <sup>3</sup> /s m <sup>2</sup> )
Air Leakage: R-GUARD Spray Wrap (8-in medium wt CMU w/2 coats)	ASTM E-2178	<0.02 L/s m <sup>2</sup> at 75 Pa (<0.004 cfm/ft <sup>2</sup> at 1.57 psf)	0.001 L/s·m <sup>2</sup> (0.0002 cfm/ft <sup>2</sup> )
Structural Integrity	ASTM E-330	2-in (51mm) water pressure (positive and negative) for one hour.	No loss of structural integrity.
Flexibility	ASTM D-522	No cracking or delamination using 1/8-in (3mm) mandrel at 14°F (-10°C) before and after aging.	No cracking or delamination before and after aging.
Tensile Adhesion	ASTM C-297	>15 psi (103 kPa)	Gypsum (ASTM C 79): >30 psi (206 kPa) Gypsum (ASTM C 1177): >30 psi (206 kPa) Exposure OSB: >50 psi (344 kPa) Exterior Plywood: >90 psi (620 kPa)
Nail Sealability R-GUARD Spray Wrap	ASTM D-1970	No water found on nail shanks, on underside of sheathing and/or between sheathing and product coating.	Dens-Glass®: Pass Plywood: Pass Applied in single 10 mil wet film and allowed to dry 14-days under laboratory conditions.
Tensile Bond	ASTM D-4541	Dow 790 to R-GUARD Spray Wrap Dow 795 to R-GUARD Spray Wrap	55 psi 89 psi
Surface Burning	ASTM E-84	Flame Spread $\leq 25$ Smoke developed: $\leq 450$	Flame Spread: 15 Smoke Developed: 40 ICC and NFPA Class A Building Material
Fire Testing	NFPA 285 (formerly UBC 26-9)	No increase in fire hazard.	Pass.

**NOTES:**

1. NFPA: National Fire Protection Association
2. PROSOCO R-GUARD® Spray Wrap complies with ICC-ES AC 212, acceptance criteria for water-resistive coatings used as water-resistive barriers over exterior sheathing.