

DESCRIPTION & USE

PROSOCO R-GUARD™ is a fluid applied air and moisture barrier that stops air and water leakage through cavity wall, masonry veneer construction. Compared to conventional sheet or liquid-applied barriers, PROSOCO R-GUARD™ provides superior protection against penetration of wind driven rain, while minimizing potential for condensation within the wall cavity. This easy-to-use, three part system stops air and water penetration through structural sheathing or CMU backup – even at vulnerable seams, cracks, fasteners, roof, window and door openings. PROSOCO R-GUARD™ maximizes the R-value of masonry veneer construction, reduces heating and cooling costs and lowers the risk of mold and mildew.

The PROSOCO R-GUARD™ System consists of:

- **PROSOCO R-GUARD™ Tape:** self-adhering, glass fiber, fabric tape for use with PROSOCO R-GUARD™ Fill to reinforce rough openings, inside and outside corners and sheathing joints.
- **PROSOCO R-GUARD™ Fill:** a ready mixed, acrylic air barrier compound for use with PROSOCO R-GUARD™ Tape over cracks, sheathing joints or rough openings through the structural wall.
- **PROSOCO R-GUARD™ Spray Wrap:** a ready- mixed, flexible, acrylic coating to be applied to structural sheathing or CMU backup to prevent penetration of liquid water.

These three PROSOCO R-GUARD™ components are compatible with most conventional sheet membranes, rigid flashing, joint sealant, foam and other transition materials to form a continuous air and moisture barrier.

Independent tests show PROSOCO R-GUARD™ is a more durable and effective air and moisture barrier than traditional building sheet wraps.

ADVANTAGES

- **Air Barrier:** reduces condensation caused by air leaks through the wall assembly.
- **Moisture Barrier:** minimizes risk of water damage to sheathing and associated repair or replacement costs.
- **Vapor Permeable:** won't trap moisture in the wall cavity.
- **Cost Effective:** reduced air leakage improves building comfort, reduces energy consumption.
- **Structural:** no air leakage or moisture intrusion between the sheathing and PROSOCO R-GUARD™ – rigid and stable under air and wind pressure loads.
- **Seamless:** no tears, holes, or improperly lapped joints to compromise performance.
- **Practical & Durable:** 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.
- **Simple:** easy to install with conventional airless spray equipment. Long pot life. Water clean up.

- **Color Coded:** simplifies inspection and quality control.
- **Safe:** low odor, non-toxic, and water based.
- **Complies with all known national, state and district AIM VOC regulations.**

Limitations

- Do not apply when surface or air temperatures are below 40°F (4°C) or above 100°F (38°C).
- Not for application below-grade or to surfaces designed to be immersed in water.
- Application to concrete block backing may require a cementitious base coat.

TYPICAL TECHNICAL DATA

PROSOCO R-GUARD™ Fill

FORM: dark red, viscous liquid, mild odor
SPECIFIC GRAVITY: >1.0
TOTAL SOLIDS: 83% ASTM 2369
pH: 7.5 – 10.0
WT./GAL: 11.9 lbs.
FLASH POINT: >200°F (>93°C)
FREEZE POINT: 32°F (0°C)

VOC Information

US EPA: maximum VOC content 600 g/L
CARB SCM Districts: maximum VOC content 100 g/L
SCAQMD: maximum VOC content 100 g/L
Maricopa County, AZ: maximum VOC content 250 g/L
NEOTC: maximum VOC content 100 g/L

PROSOCO R-GUARD™ Spray Wrap

FORM: light red, viscous liquid, mild odor
SPECIFIC GRAVITY: >1.0
TOTAL SOLIDS: 74% ASTM D 2369
pH: 7.5 – 10.0
WT./GAL: 12.7 lbs.
FLASH POINT: >200°F (>93°C)
FREEZE POINT: 32°F (0°C)

VOC Information

US EPA: maximum VOC content 600 g/L
CARB SCM Districts: maximum VOC content 250 g/L
SCAQMD: maximum VOC content 250 g/L
Maricopa County, AZ: maximum VOC content 400 g/L
NEOTC: maximum VOC content 250 g/L

PROSOCO R-GUARD™ Tape

4.25-in (11cm) and 9.5-in (24cm) wide self-adhesive, flexible, symmetrical, interlaced glass fiber fabric, with alkaline resistant coating.

SPECIFYING PROSOCO R-GUARD™

When installed as an Air and Moisture Barrier, specify PROSOCO R-GUARD™ under Division 07 – Thermal and Moisture Protection, section 07 27 26 – Fluid Applied Membrane Air Barriers.

When installed as a Moisture Barrier only, specify PROSOCO R-GUARD™ under Division 07 – Thermal and Moisture Protection, section 07 14 16 – Cold Fluid Applied Waterproofing.

PROSOCO R-GUARD™ is not a vapor barrier.

PREPARATION

Protect people, vehicles, property, plants and all surfaces not designated to receive PROSOCO R-GUARD™ from the product, splash, and wind drift. Surfaces must be clean, dry, and in good repair. Surfaces must be free of frost, damage and all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign matter. Contact PROSOCO Customer Care toll-free at 800-255-4255 for cleaning recommendations.

Sheathing

Damaged sheathing must be removed and replaced. Avoid application over irregular surfaces. Surfaces to be coated must be continuous without joints, holes, etc. exceeding 1/8 inch (3 mm) in size. Sheathing must be properly installed as required by applicable building codes or sheathing manufacturer.

Concrete Masonry Units (CMU)

Remove all loose and friable materials. Repair cracks wider than 1/8 inch (3mm) and up to 1/4 inch (6mm) with a paintable acrylic latex caulk tooled flush. Consult a structural engineer for all larger or moving cracks, and repair as indicated.

Surface and Air Temperatures

Surface and air temperatures should be above 40°F (4°C) and below 100°F (38°C) during application and drying period. Not recommended for use when cool, damp conditions exist for prolonged periods. Cool, damp conditions retard drying and may require extended periods of protection.

Equipment

Apply PROSOCO R-GUARD™ Tape over sheathing joints and using a seam roller or other blunt tool to firmly adhere mesh tape to backing. To reduce any potential for damage to the mesh tape, round sharp corners of tools used to install PROSOCO R-GUARD™ Tape.

Mix PROSOCO R-GUARD™ Fill and PROSOCO R-GUARD™ Spray Wrap to a uniform consistency with a clean, rust-free electric drill and paddle.

Apply PROSOCO R-GUARD™ Fill with a trowel or texture sprayer.*

Apply PROSOCO R-GUARD™ Spray Wrap with a roller or texture sprayer.* Use a 3/4 inch (19mm) nap roller when roller applying to GP Dens-Glass® Gold, Oriented Strand Board (OSB) or CMU backup. Use a 1/2 inch (13mm) nap roller when roller applying to plywood or exterior gypsum sheathing.

*Texture sprayers should have a max working pressure of 100-120 psi (7-8.3 bar) and a max delivery rating of 2.0-4.0 gpm (7.5-15.1 lpm).

PROSOCO R-GUARD™ Fill and PROSOCO R-GUARD™ Spray Wrap are compatible with GRACO TexSpray™ RTX 1500 and GTX 2000 equipment.

APPLICATION

Before use, read “Preparation” and “Safety Information.” 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.

Dilution

Use PROSOCO R-GUARD™ Fill and PROSOCO R-GUARD™ Spray Wrap in concentrate. Do not dilute or alter.

Mixing

Thoroughly mix PROSOCO R-GUARD™ Fill and PROSOCO R-GUARD™ Spray Wrap before applying.

Application Instructions

Structural Sheathing: *GP Dens-Glass® Gold, exterior gypsum sheathing board, exterior plywood*

1. Apply 4.25-inch PROSOCO R-GUARD™ Tape over sheathing joints and seams. Fold and apply 9.5-inch PROSOCO R-GUARD™ Tape to rough openings, inside and outside corners. Use a seam roller or other blunt tool to firmly adhere mesh tape to sheathing
2. Uniformly cover Tape and about 4 inches of sheathing on either side of the Tape with PROSOCO R-GUARD™ Fill using a trowel or texture sprayer. Trowel smooth. Spot fasteners and surface defects with PROSOCO R-GUARD™ Fill. Let dry.
3. Spray or roller apply PROSOCO R-GUARD™ Spray Wrap to the entire surface to a uniform wet mil thickness of 10 mils, including areas covered by PROSOCO R-GUARD™ Tape and PROSOCO R-GUARD™ Fill. Let dry.

Structural Sheathing: *Oriented Strand Board (OSB)*

NOTE: Two coats of PROSOCO R-GUARD™ Spray Wrap are required over OSB Sheathing.

1. Spray or roller apply PROSOCO R-GUARD™ Spray Wrap to the entire surface to a uniform wet mil thickness of 10 mils. Let dry.
2. Apply 4.25-inch PROSOCO R-GUARD™ Tape over sheathing joints and seams. Fold and apply 9.5-inch PROSOCO R-GUARD™ Tape to rough openings, inside and outside corners. Use a seam roller or other blunt tool to firmly adhere mesh tape to sheathing.
3. Uniformly cover Tape and about 4 inches of sheathing on either side of the Tape with PROSOCO R-GUARD™ Fill using a trowel or texture sprayer. Trowel smooth. Spot fasteners and surface defects with PROSOCO R-GUARD™ Fill. Let dry.

- Spray or roller apply a second coat of PROSOCO R-GUARD™ Spray Wrap to the entire surface to a uniform wet mil thickness of 10 mils, including areas covered by PROSOCO R-GUARD™ Tape and PROSOCO R-GUARD™ Fill. Let dry.

Concrete Masonry Unit (CMU) Wall Construction

For air and moisture barrier

- Uniformly spray or trowel apply a cementitious block filler in accordance with the manufacturer's suggested application procedures. Let dry.
- Seal gaps between CMU, structural concrete, window and door frames, and roofing with any high-quality rubberized asphalt or peel-and-stick membrane.
- Spray or roller apply PROSOCO R-GUARD™ Spray Wrap to the entire surface to a uniform wet mil thickness of 10 mils, including the rubberized asphalt or peel-and-stick membrane. Let dry.

For moisture barrier only

- Cover gaps between block backing, window and door frames, and roofing with any high-quality rubberized asphalt or peel-and-stick membrane.
- Spray or roller apply PROSOCO R-GUARD™ Spray Wrap to the rubberized asphalt or peel-and-stick membrane and the adjoining block surfaces to a uniform wet mil thickness of 10 mils. Let dry.
- Spray or roller apply a second coat of PROSOCO R-GUARD™ Spray Wrap to a uniform wet mil thickness of 10 mils. Let dry.

Coverage

Coverage rates may vary depending on application technique and surface conditions.

- PROSOCO R-GUARD™ Tape: 4.25in (11cm) x 150 lineal ft (46m)
- PROSOCO R-GUARD™ Tape: 9.5-in (24cm) x 150 lineal ft (46m)
- PROSOCO R-GUARD™ Fill: 175-250 linear feet (53-76m) of sheathing joints and rough openings per pail
- PROSOCO R-GUARD™ Spray Wrap

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| Dens-Glass® Gold: | 425-525 ft ² (39-49m ²) per pail |
| Exterior Gypsum: | 550-650 ft ² (51-60m ²) per pail |
| Plywood: | 550-650 ft ² (51-60m ²) per pail |
| OSB (2 coats): | 300-400 ft ² (28-37m ²) per pail |
| CMU (2 coats): | 250-400 ft ² (23-37m ²) per pail |

Curing and Drying

Complete drying times vary depending on temperature, humidity and surface conditions. Protect from rain or freezing until completely dry. Under normal conditions [70°F (21°C), 50% RH]:

- PROSOCO R-GUARD™ Fill dries to touch and can be overcoated in 4 hours.
- PROSOCO R-GUARD™ Spray Wrap dries to touch and can be overcoated in 2-4 hours.

Clean Up

Clean tools and equipment with water immediately after use. Dried material must be removed mechanically.

SAFETY INFORMATION

Caution. Causes eye irritation. Keep out of the reach of children.

Precautions

PROSOCO R-GUARD™ Spray Wrap contains silicon dioxide, titanium dioxide, calcium carbonate.

PROSOCO R-GUARD™ Fill contains mica, silicon dioxide.

Do not get in eyes. Wear safety glasses or splash goggles depending on application conditions. May cause skin irritation with prolonged contact. Wear gloves and other protective clothing as necessary. Wash thoroughly after use. Provide adequate ventilation when using in enclosed spaces. Avoid breathing mists generated during application. Wear a dust/mist respirator as necessary. Contains silica (quartz sand). May cause lung injury if ground or sanded when dry. Wear appropriate respiratory protection. Read the MSDS and product label for additional safety and application information.

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

Storage and Handling: Keep from freezing. Do not alter or use for purposes other than specified. Store in cool, dry place. Keep containers tightly closed when not dispensing to protect from skinning. If skin forms, remove skinned material from container. Remaining material is unaffected. Do not reuse container. Dispose of container and unused contents in accordance with local, state and federal regulations. **Shelf Life:** 1 year from manufacture date if properly stored and sealed.

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 R-GUARD™ representative in your area.

TEST RESULTS

| Test | Method | Criteria | Results |
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| Aging Water Penetration Resistance | AATCC127 (Water Column) | Resist 21.6 in (55 cm) water for 5 hours before and after aging. | No water penetration before and after aging. No water penetration at 332 inches (843cm) head of water before 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 ² -hr (3.4 L/m ² -min). | No water penetration before and after aging. No water penetration at 332 inches (843cm) head of water before aging. |
| 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 ² -hr (3.4 L/m ² -min). | No water penetration before and after aging. No water penetration at 332 inches (843cm) head of water before aging. |
| Water Resistance Testing | ASTM D 2247 | Absence of deleterious effects after 14-day exposure. | No visible 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 visible deleterious effects when viewed at 5x. |
| Water Vapor Transmission | ASTM E 96 Method B (Water Method) | Measure. | R-GUARD™ Fill: 17.3 perms [(994 ng/(Pa s m ²))] R-GUARD™ Spray Wrap: 5.7 perms [(327 ng/(Pa s m ²))] |
| Air Leakage: Wall Assembly with R-GUARD™ Fill and R-GUARD™ Spray Wrap | ASTM E 283 (SBCCI PST & ESI Method) | <0.06 cfm/ft ² at 1.57 psf (0.00030 m ³ /s m ² at 75 Pa) | 0.0044 cfm/ft ² (0.000022 m ³ /s m ²) |
| Air Leakage: R-GUARD™ Fill | ASTM E 283 (CCMC Technical Guide Method) | <0.003 cfm/ft ² at 1.57 psf (<0.02 L/s m ² at 75 Pa) | 0.0002 cfm/ft ² (0.0014 L/s m ²) |
| Structural Integrity | ASTM E 330 | 2-in (51mm) water pressure (positive and negative) for one hour. | No loss of structural integrity. |
| Dry Tensile Strength | ASTM D 882 | 20 lbs/in (3503 N/m) minimum before and after aging. | R-GUARD™ Fill: 159 pli (27.8 kN/m) before aging. 213 pli (37.3 kN/m) after aging. |
| 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 or 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 1 OSB: >50 psi (344 kPa) Exterior Plywood: >90 psi (620 kPa) |
| Surface Burning | ASTM E 84 | Flame Spread <25 Smoke developed: <450 | Flame Spread: 5 Smoke Developed: 10 NFPA Class A, UBC Class 1 building material |
| Fire Testing | UBC 26-9 | No increase in fire hazard. | Pass. |