TMVP

Thick mil, vapor permeable fluid-applied air & water-resistive air barrier

R-GUARD TMVP is part of the family of PROSOCO R-GUARD® products developed to maximize wall R-values by preventing the unwanted movement of water and air through building envelopes. Utilize R-GUARD TMVP as the primary air barrier/water-resistive barrier over above-grade structural wall surfaces prepared with R-GUARD joint and seam treatments and liquid flashing membranes.

Overview

PROSOCO R-GUARD® TMVP 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 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 TMVP provides superior protection against water intrusion, while minimizing potential for condensation within walls. Use R-GUARD TMVP 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 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: minimizes risk of condensation and allows moisture which accumulates within the wall assembly to dry.
• Structural: no air leakage or water intrusion between the sheathing and R-GUARD TMVP – 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 UV for up to 6 months without compromising performance.
• Cost Effective: easy, fast installation — does not require specialized spray equipment or back rolling.
• Saves Time: one component is easy to install with conventional spray equipment. Long pot life. Water clean up.
• Color Coded: simplifies inspection and quality control.
• Safe: low odor, non-toxic. Complies with all VOC regulations.

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 designed to be continuously immersed in water.
• Not intended for application with brush or roller.
• Not recommended for use beneath EIFS.

Regulatory Compliance

VOC Compliance

PROSOCO R-GUARD® TMVP complies with all known national, state and district AIM VOC regulations, including, but not limited to:

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
**TMVP** (Thick Mil Vapor Permeable)

### TYPICAL TECHNICAL DATA

<table>
<thead>
<tr>
<th>PROSOCO R-GUARD® TMVP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FORM</strong></td>
<td>Blue-grey liquid, slight ammonia odor</td>
</tr>
<tr>
<td><strong>SPECIFIC GRAVITY</strong></td>
<td>1.1 – 1.2</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not established</td>
</tr>
<tr>
<td><strong>WT/GAL</strong></td>
<td>9.85</td>
</tr>
<tr>
<td><strong>ACTIVE CONTENT</strong></td>
<td>No data</td>
</tr>
<tr>
<td><strong>TOTAL SOLIDS</strong></td>
<td>50% by volume</td>
</tr>
<tr>
<td><strong>ELONGATION</strong></td>
<td>&gt;750% ASTM D 412</td>
</tr>
<tr>
<td><strong>VOC CONTENT</strong></td>
<td>&lt; 20 g/L</td>
</tr>
<tr>
<td><strong>FLASH POINT</strong></td>
<td>Not Flammable</td>
</tr>
<tr>
<td><strong>FREEZE POINT</strong></td>
<td>32°F (0°C)</td>
</tr>
<tr>
<td><strong>SHELF LIFE</strong></td>
<td>1 year in tightly sealed, unopened container</td>
</tr>
</tbody>
</table>

The PROSOCO R-GUARD® product line includes several options for preparing structural walls to receive the primary air and water-resistive barrier. See appropriate product data sheets and R-GUARD Installation Guidelines for additional information.

PROSOCO R-GUARD® Joint & Seam Filler, FastFlash® and AirDam® are recommended for improved performance of all R-GUARD Spray 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 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

Protect people, vehicles, property, plants and all other surfaces not intended to receive R-GUARD TMVP.

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 indicated.

1. **Fill, Bridge and 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. R-GUARD Joint & Seam Filler fills and bridges joints and seams measuring up to ½ inch without the need for reinforcing tape.


   3. Gun and spread R-GUARD FastFlash® to create an opaque, monolithic flashing membrane over the inside of all rough openings, 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 TMVP.

### 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.

**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.

### STORAGE AND HANDLING

Store in a cool dry place. Protect from extreme heat, freezing and direct sunlight. 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 TMVP has a shelf life of 12 months after the date of manufacture. This shelf life assumes upright storage in accordance with local, state and federal regulations.

### 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.
**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.

Generally, no mixing is required. Prolonged storage may cause slight settling. If settling occurs, mix to a uniform consistency with an electric drill mixer.

**Coverage Rates**

Theoretical coverage rates are calculated. R-GUARD TMVP is packaged in 5-gallon containers.

- 100 sq.ft. per pail (20 sq.ft. per gallon) when applied at 80 wet mils.
- 9.29 sq.m. per pail (1.86 sq.m. per gallon) when applied at 80 wet mils.

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 Instructions**

1. Apply R-GUARD TMVP using an airless sprayer. Do not roll or back roll. Apply sufficient material to cover and hide the entire face of the structural wall. Apply to uniform thickness of 80 wet mils.
2. Use horizontal then overlapping vertical sweeping motions for continuous coverage to achieve a void and pinhole free surface. Avoid excess build-up of wet material to prevent sag, especially on non-porous surfaces and during cold or damp weather.
3. Inspect membrane before covering. Repair any punctures or damaged areas by applying additional R-GUARD TMVP. Overlap repairs, penetration treatments, transitions, rigid flashing and other air barrier components to ensure positive drainage and continuity of the air and water-resistant 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 TMVP dries within 4-6 hours and cures within 24 hours. Cold weather or damp conditions will prolong the drying period. The product has a slight tack when dry.

**Cleanup**

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

**SAFETY INFORMATION**

**PROSOCO R-GUARD** TMVP is a high solids, water-carried polymer based coating. 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:** May cause gastric disturbance. Do not induce vomiting. If vomiting occurs, keep victim’s head lower than waist to prevent aspiration. Seek immediate medical attention.

**Eye Contact:** May cause irritation of the eyes. Rinse thoroughly for 15 minutes. Get medical assistance if irritation persists.

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

**Inhalation:** May cause irritation of the respiratory tract. Remove to fresh air. Flood work area with fresh air. Seek medical attention if irritation continues.

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

**BEST PRACTICES**

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

Surfaces should be clean, dry, and in good repair before application. Most sheathing and concrete masonry can be cleaned with Enviro Klean® 2010 All Surface Cleaner. Information on construction cleaners is available at www.prosoco.com, or by calling Technical Customer Care toll-free at 800-255-4255.

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

Though R-GUARD TMVP 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-resistant barrier.

**Hot Weather Precautions:** If air or surface temperatures exceed 95° (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 PROSOCO penetrating, breathable water-repellent for concrete, clay or stone. Applied to the masonry veneer, penetrating breathable water-repellents work with the water-resistant capabilities of R-GUARD TMVP to provide total protection for buildings against moisture penetration and damage.


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 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, for the name of the PROSOCO R-GUARD® representative in your area.
<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
<th>Criteria</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Leakage of Air Barrier Assembly</td>
<td>ASTM E 2357</td>
<td>Less than 0.2 L/s·m² at 75 Pa (&lt;0.04 cfm/ft² at 1.57 psf)</td>
<td>0.016 L/s·m² at 75 Pa (0.003 cfm/ft² at 1.57 psf)</td>
</tr>
<tr>
<td>Water Vapor Permeance</td>
<td>ASTM E 96</td>
<td>Measure</td>
<td>14 perms</td>
</tr>
<tr>
<td>Air Leakage</td>
<td>ASTM E 2178</td>
<td>≤0.02 L/m·s at 75 Pa (≤0.004 cfm/ft² at 1.57 psf)</td>
<td>&lt;0.0002 L/m·s at 75 Pa (&lt;0.0014 cfm/ft² at 1.57 psf)</td>
</tr>
<tr>
<td>Low Temperature Crack Bridging</td>
<td>ASTM C 1305</td>
<td>No cracking</td>
<td>Specimens pass 10 cycles of extension and compression at –15°F (~–26°C)</td>
</tr>
<tr>
<td>Water Column</td>
<td>AATCC 127</td>
<td>No leakage for 5 hours minimum</td>
<td>Passed - both product and product with joint treatment</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D 412</td>
<td>Measure</td>
<td>&gt;750%</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D 412</td>
<td>Measure</td>
<td>&gt;75 psi</td>
</tr>
</tbody>
</table>