



PROSOCO®

R-Guard®

AIR & WATER BARRIER

VB (Vapor Barrier)

PROSOCO R-Guard® VB 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 membrane.

R-Guard VB performs the function of both a vapor barrier and an air/water resistive barrier. Spray-grade R-Guard VB is ideal for special construct types that require protection from the passage of air, liquid water and water vapor. R-Guard VB reduces heating and cooling costs and lowers the risk of mold and mildew.

Compared to self-adhered or mechanically fastened sheet wraps, easy-to-use R-Guard VB provides superior protection against penetration of liquid water and water vapor. Use R-Guard VB as a high-performing water resistive barrier, vapor 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 exterior sheathing, CMU, cast concrete and most other common building materials.

ADVANTAGES

- 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.
- Prevents passage of liquid water and water vapor.
- Fast and easy installation reduces labor costs.
- No air leakage or water intrusion between the sheathing and R-Guard VB – stable under air and wind pressure loads.
- Seamless – no tears, holes, or improperly lapped joints to compromise performance.

- 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.
- Single component. Easy installation. Long pot life. Water cleanup. Low odor. Non toxic.
- Simplifies inspection and quality control.
- Compatible with most paints, sealants and coatings.
- 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 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 for use as an exterior finish.

REGULATORY COMPLIANCE

VOC Compliance

R-Guard VB 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

Product Data Sheet

R-Guard VB

TYPICAL TECHNICAL DATA

| | |
|-------------------------|---|
| FORM | viscous liquid, mild odor light green color |
| SPECIFIC GRAVITY | 1.34 |
| pH | 7.5–10.0 |
| WT/GAL | 11.12 lbs |
| ACTIVE CONTENT | no data |
| TOTAL SOLIDS | 62.5% ASTM D 2369 |
| VOC CONTENT | 45 g/L |
| FLASH POINT | not applicable |
| FREEZE POINT | 32° F (0° C) |
| SHELF LIFE | 1 year in tightly sealed, unopened container |

PREPARATION

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.

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.

Concrete must be in place 28 days and free of any curing compounds or form release agents before R-Guard VB may be applied. Mortar joints in CMU construction must have a minimum 3 day cure before being treated with R-Guard products.

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

Protect people, vehicles, property, plants and all other surfaces not intended for application. Remove and replace damaged sheathing. Surfaces to be coated must be continuous.

On exterior sheathing, treat cracks with Joint & Seam Filler and/or R-Guard FastFlash®, as needed. Consult a structural engineer for all moving cracks, and repair as indicated.

Fill, Bridge and Flash

1. Fill surface defects and over driven fasteners with R-Guard Joint & Seam Filler and/or FastFlash®, as needed.
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 applying R-Guard VB.

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

Surface & Air Temperatures

Substrate and temperature conditions 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. As with any coating, application to substrates with high moisture content may lead to blistering of the material.

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 VB with a low-speed drill and clean mixing paddle. When roller applying, use a 3/4 inch (19 mm) nap roller.

R-Guard VB 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-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.

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- 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.

Storage & 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. When stored at or below 80°F (27°C), R-Guard VB has a shelf life of 12 months after the date of manufacturer. This shelf life assumes upright storage of factory-sealed containers. Do not double stack pallets. Dispose of unused products and containers in accordance with local, state and federal regulations.

APPLICATION

Read “Preparation” and the Safety Data Sheet before use. **ALWAYS TEST.**

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. Always test.

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

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 two coats of 15 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.

R-Guard VB is packaged in 5-gallon containers.

- *External Gypsum Board and Plywood:*
40–50 sq.ft. per gallon per coat
- *OSB and CMU:* 30–50 sq.ft. per gallon per coat
(2-coat minimum required to achieve a pinhole-free surface.)

BEST PRACTICES

Though R-Guard VB can be located anywhere in the wall assembly, the ideal location is on the cavity-facing side of the exterior 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 VB to the inside of rough openings prepared with FastFlash®. If a vapor barrier coating is required for the rough opening, FastFlash® may be over coated with VB.

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

Always use a minimum of two coats of R-Guard VB on OSB and CMU.

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.

For Cast-in-Place Concrete Applications, the concrete designated for application must be clean, smooth and free of curing compounds and form release agents. Repair bug holes, honey combing and other imperfections using a suitable cementitious mortar. Remove concrete splashes, over pours, grout or slurry rundown using appropriate mechanical means. Fill and prepare minor imperfections in the concrete surface with R-Guard Joint & Seam Filler. After product application, inspect the surface to ensure the coating is applied at the appropriate wet mil thickness, achieving a continuous film and free of pinholes. Treat visible pinholes or breaks in the film with additional primary air and water barrier coating or R-Guard FastFlash®.

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.

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.

Common installation guidelines depicting 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 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.

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Application Instructions

Typical application requires two coats at 15 wet mils each. Some sheathing may require additional material to achieve a continuous coating.

1. Apply one coat at 15 wet mils. Allow to dry.
2. Apply second coat to uniform thickness of 15 wet mils. When spray applying, back rolling is necessary to maximize coverage for a void- and pinhole-free surface.
For CMU applications, 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 VB. 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

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 VB dries to touch and can be over coated in 2–4 hours.

Cleanup

Clean tools and equipment with water immediately after use. Remove dried material mechanically.

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 website at www.prosoco.com, for the name of the PROSOCO representative in your area.

PRODUCT TEST RESULTS

R-Guard VB



| TEST | METHOD | CRITERIA | RESULTS |
|---|---|--|---|
| Water Vapor Transmission | ASTM E 96 Dry Cup | Measure | 0.063 perms |
| Water Resistance | ICC-ES AC212 ¹ AATCC ² 127 | No water infiltration after exposure to 55 cm head of water for 5 hours | Pass |
| Air Permeance | ASTM E 2178 | ≤ 0.02 L / s·m ² at 75 Pa (≤ 0.004 cfm / ft ² at 1.57 psf) | Pass |
| Air Leakage of Air Barrier Assemblies | ASTM E 2357 | ≤ 0.2 L / s·m ² at 75 Pa (≤ 0.04 cfm / ft ² at 1.57 psf) | Pass |
| Fastener Sealability | ASTM D 1970 | No water infiltration | Pass |
| Pull Adhesion | ASTM D 4541 | 110 kPa (16 psi) or substrate failure | Pass |
| 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 Pass |
| Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies | NFPA ³ 285 | Must resist flame propagation and flame spread. | Pass ⁴ |

All testing was completed 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
- 4: Intertek Testing Services NA, Inc. Final Report Number G100445307SAT-001_Rev1

