

07 00 00 Thermal & Moisture Protection

07 27 00 Air Barriers
 07 27 26 Fluid Applied Membrane Air Barriers
 07 27 29 Air Barrier Coatings
 07 25 00 Weather Barriers

PRODUCT DATA SHEET

PROSOCO
 SINCE 1939



VB

fluid-applied air & water-resistive barrier and water vapor barrier

R-Guard VB is part of the family of PROSOCO R-Guard® products developed to prevent the unwanted movement of water and air through building envelopes. Utilize R-Guard VB as the primary air barrier over above grade exterior wall assemblies prepared with R-Guard Joint & Seam Filler and/or R-Guard FastFlash®.

OVERVIEW

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.

SPECIFICATIONS

For all PROSOCO product specifications visit www.prosoco.com.

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.
- Cost Effective – 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.
- Saves Time – single component is easy to install with conventional spray equipment. Long pot life. Water cleanup.
- Simplifies inspection and quality control.
- Low odor and non-toxic. Complies with all VOC regulations.
- 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 designed to be continuously immersed in water.

REGULATORY COMPLIANCE

VOC Compliance

PROSOCO R-Guard® VB 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 VB	
FORM	Pastel green viscous liquid, mild odor
SPECIFIC GRAVITY	1.34
pH	7.5 – 10.0
WT/GAL	11.12 lbs/gal
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.
Performance When Applied at Two Coats of 15 Wet Mils Each*	
Air Infiltration	Meets air barrier performance requirements (ASTM E2178)
Air Leakage of Air Barrier Assembly	Passed (ASTM E2357)
Fastener Sealability	No water infiltration (ASTM D1970)
Surface Burning	Passed NFPA and ICC Class A Building Material

*Unless otherwise required by the referenced test method, test results cited were achieved when the product was applied at two coats of 15 wet mils to DensGlass® gold fiberglass mat gypsum sheathing.

Please obtain the PROSOCO R-Guard® VB Product Test Results sheet for a complete list of performance test results.

Illustrations depicting the use of PROSOCO R-Guard® products are available at www.prosoco.com by downloading the R-Guard Installation Guidelines.

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 R-Guard VB.

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. 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 R-Guard FastFlash®, as needed.
2. Seal cut edges of gypsum board sheathing in rough openings with fast drying R-Guard GypPrime. Gun and spread R-Guard Joint & Seam Filler and/or FastFlash® into all inside corners, cracks, open joints and seams in rough openings, as needed.
3. Use R-Guard 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.
4. 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 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

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. 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 1/4 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.

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 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.

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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

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. Many gypsum sheathing products require additional material to achieve hide and the desired mil thickness for a pinhole free coating. In some cases, 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/AirBarriers.

PROSO CO R-Guard® VB is packaged in 5-gallon containers.

R-GUARD VB	COVERAGE RATES
EXTERNAL GYPSUM BOARD PLYWOOD	40–50 SQ.FT. PER GALLON PER COAT
OSB CMU	30–50 SQ.FT. PER GALLON PER COAT

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

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 of R-Guard VB at 15 wet mils to Gypsum, Plywood and OSB sheathing. Allow to dry.
2. Apply second coat to uniform thickness of 15 wet mils. When spray applying, back roll as necessary to ensure there are no pinholes, voids or gaps in the membrane. **For CMU applications**, 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 R-Guard VB. 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 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.

BEST PRACTICES

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 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 R-Guard VB to the inside of rough openings prepared with FastFlash®. If a vapor barrier coating is required for the rough opening, R-Guard FastFlash® may be over coated with R-Guard VB.

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

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.

Coverage rates will vary depending on surface porosity, moisture uptake, and other factors. Many gypsum sheathing products require additional material to achieve hide and the desired mil thickness for a pinhole free coating. In some cases, 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/AirBarriers.**

Common installation guidelines depicting use of PROSO CO R-Guard® products are available at 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® VB contains silicone dioxide and titanium dioxide. 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 immediate 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, for the name of the PROSOCO R-Guard® representative in your area.

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Test	Method	Criteria	Results
Water Vapor Transmission	ASTM E 96 Dry Cup	Measure	0.063 perms
Water Resistance	ICC-ES AC 212 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

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_Rev 1