



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 structural surfaces prepared with R-GUARD Joint & Seam Filler and 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 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 Barrier:** prevents passage of liquid water and water vapor.
- **Cost Effective:** fast and easy installation reduces labor costs.
- **Structural:** 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.
- **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 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

VB (VAPOR BARRIER)

TYPICAL TECHNICAL DATA

PROSOCO R-GUARD® VB (VAPOR BARRIER)	
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	< 100 g/L
FLASH POINT	Not Applicable
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 R-GUARD VB.

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 indicated.

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.
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, 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 VB.

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

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.

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 ¾ 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' 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

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® VB is packaged in 5-gallon containers.

Air & Water-Resistive Barrier Membrane Calculator		
R-GUARD VB	THEORETICAL COVERAGE	PRACTICAL COVERAGE
GYPSUM @ 15 WET MILS x 2 COATS	53 SQ.FT. PER GALLON (2 COATS)	40-50 SQ.FT. PER GALLON (2 COATS)
PLYWOOD @ 15 WET MILS x 2 COATS	53 SQ.FT. PER GALLON (2 COATS)	40-50 SQ.FT. PER GALLON (2 COATS)
OSB @ 15 WET MILS x 2 COATS	53 SQ.FT. PER GALLON (2 COATS)	30-45 SQ.FT. PER GALLON (2 COATS)
CMU @ 15 WET MILS x 2 COATS	53 SQ.FT. PER GALLON (2 COATS)	30-45 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 R-GUARD VB to cover and hide the entire face of the structural wall. Apply to uniform thickness of 15 wet mils per coat.
2. Apply second coat to uniform thickness of 15 wet mils. 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 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.

Application: CMU Wall Construction

1. Apply sufficient R-GUARD VB to fill and cover the entire face of the structural wall. Let dry.
2. Apply a second coat 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 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

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 VB 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 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 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 VB 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.

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
Air Leakage of Air Barrier Assemblies	ASTM E 2357	Less than 0.04 cfm/ft ² @ 1.57 psf	Pass
Aging/Water Penetration Resistance	ICC-ES AC 212 AATCC 127 (Water Column)	Resist 21.6 in (55 cm) water for 5 hours before and after aging.	Pass
Water Vapor Transmission	ASTM E 96 (Dry Cup)	<0.1 perms	R-GUARD VB: 0.063 perms
Air Barrier: PROSOCO R-GUARD® VB	ASTM E 2178	<0.004 cfm/ft ² air leakage at 1.57 psf <0.02 L/s m ² air leakage at 75 Pa	Pass
Nail Sealability PROSOCO R-GUARD® VB	ATM D 1970	No water found on nail shanks, on underside of sheathing and/or between sheathing and product coating.	Pass
Surface Burning	ASTM E 84	Flame Spread <25 Smoke Developed: <450	Pass
Adhesion to Substrates ¹	ASTM D 4541 (ASTM C-297 modified)	>15 psi	Exterior Gypsum: >15 psi Dens-Glass Gold: >15 psi OSB: >50 psi Plywood: >50 psi CMU: 393 psi
Elongation	ASTM D 412		140% at 7 days

NOTES:

1. Adhesion testing performed after 7-day coating cure. All breaks were cohesive within the substrate.