PROSOCO®

R•Guard®

AIR & WATER BARRIER

Cat 5™ Rain Screen

INDOOR ADVANTAGE GOLD BUILDING MATERIALS

PROSOCO R-Guard® Cat 5™ Rain Screen is a fluid applied, waterproofing, and air and water barrier membrane that combines the best of silicone and polyurethane properties. This single component, Silyl-Terminated-Polymer (STP) is specially formulated to meet the unique requirements of pressure-equalized rain screen construction.

The roller applied air and waterproof barrier produces a highly durable, seamless, elastomeric weatherproof membrane on exterior sheathing behind open-jointed or vented rain screen cladding. Cat 5™ Rain Screen is proven to prevent water and air penetration of the building envelope in conditions ranging from everyday weather to the drenching rains and 155 mph winds of a Category 5 hurricane.

Cat 5™ Rain Screen can be applied in unfavorable weather conditions to dry or damp substrates. This feature eliminates many weather-related construction delays and accelerates the "drying in" of new buildings. The durable, elastomeric membrane adheres to most surfaces, is immediately waterproof and is compatible with most sealants and waterproofing or air barrier components.

ADVANTAGES

- **Silane functional polymer provides superior long term adhesion, crack bridging and weathering characteristics. Self seals fastener penetrations.**
- **Bonds and cures in wet weather and on damp substrates.**
- **Bonds to most common building materials without priming to produce a durable, weatherproof membrane. Easy to repair if damaged.**
- **Will not tear or lose effectiveness when exposed to weather and UV during construction for up to 12 months.**
- **Designed for use under typical ventilated cavity, rain screens.**
- **Waterproof on application and for the life of the building. Creates an unmatched drainage plane.**
- **Dark bronze color keeps the backup wall unseen through rain screen joints or vents.**
- **Single component – saves time.**
- **Easy roller application in all climates.**
- **Breathable. Allows damp surfaces to dry.**
- **Compatible with most sealants and waterproofing or air barrier components.**
- **Air Barrier Association of America (ABAA) approved product.**
- **Solvent free. Isocyanate free. Phthalate free.**
- **No shrinkage. No staining. No yellowing.**
- **Will not support mold growth.**
- **Stops penetration of air and water under normal and extreme weather conditions.**
- **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 use as a liquid flashing membrane. Use R-Guard FastFlash®.
- Not for use in place of appropriate through-wall flashing. See R-Guard SS ThruWall product literature.
- Not for use below grade or in locations designed to be continuously immersed in water.

REGULATORY COMPLIANCE

VOC Compliance

R-Guard Cat 5™ Rain Screen 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 jurisdictions.

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

TYPICAL TECHNICAL DATA

FORM	viscous liquid, mild odor dark bronze color
SPECIFIC GRAVITY	1.35–1.50
pH	not applicable
WT/GAL	11.6 lbs
TOTAL SOLIDS	99%
VOC CONTENT	<30 g/L
FLASH POINT	>200° F (>93° C)
FREEZE POINT	not applicable
SHELF LIFE	1 year in tightly sealed, unopened container

Cured Properties

Hardness, Shore A	20–25
Tensile Strength	>100 psi
Elongation at Break*	>250% (ASTM D 412)
Water Vapor Transmission	18 perms (ASTM E 96)
Transfer Free Time	2–4 hours

*Elongation per ASTM D 412 is not a requirement of the Air Barrier Association of America's (ABAA) Acceptance Criteria for Liquid Applied Membranes nor is it a requirement of the International Code Council Evaluation Service's Acceptance Criteria for Water-Resistive Coatings used as Water-Resistive Barriers over exterior Sheathing (ICC-ES AC212). Elongation is not a requirement of the AAMA 714 Specification for Liquid Applied Flashing used to Create a Water-Resistive Seal Around Exterior Wall Openings. There is no data to support that certain levels of elongation must be achieved to perform as a fluid applied WRB or as a fluid applied flashing. Specifications should be based upon performance test results like those required from the referenced organizations. Refer to the R-Guard Cat 5™ Rain Screen Product Test Results for a complete list of performance test results.

PREPARATION

Protect people, vehicles, property, plants and all other surfaces not intended for application. To ensure best results, apply to clean surfaces free of contaminants. Chemical residues, surface oxidation, surface coatings or films may adversely affect adhesion. Pressure-treated wood and other contaminated surfaces should be cleaned with an Isopropyl Alcohol wipe and allowed to flash-off before application of R-Guard products.

Concrete must be in place 3–7 days and free of any curing compounds or form release agents before permeable R-Guard products are applied. Mortar joints in CMU construction must have a minimum 3 day cure before 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.

Remove and replace damaged sheathing. On exterior sheathing, treat cracks with R-Guard Joint & Seam Filler and/or R-Guard FastFlash®, as needed.

In rough openings, and where appropriate, prepare all raw gypsum board edges with R-Guard PorousPrep. Apply to raw gypsum board edges in a thin, uniform coat according to published application instructions. Do not over apply. Allow to dry tack-free before application of R-Guard products.

Use R-Guard Joint & Seam Filler and/or R-Guard FastFlash® on joints, seams and all other interfaces, as needed. Let Joint & Seam Filler and/or FastFlash® skin over before applying Cat 5™ Rain Screen.

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.

Surface & Air Temperatures

Substrate and temperature conditions between 32°F (0°C) and 110°F (43°C) are required for proper curing and drying of material to take place.

Hot Weather Conditions/Precautions: When air or surface temperatures exceed 95°F (35°C), apply product to the shady side of structure before daytime air and surface temperatures reach their peak. Hot surfaces may be cooled with a mist of fresh water. Keep containers closed and out of direct sunlight when not in use. Do not apply when substrate temperature exceeds 110°F (43°C).

Cold Weather Conditions/Precautions: Product may be applied to frost-free substrates at temperatures below 32°F (0°C). Product will not begin to cure until temperatures reach 32°F (0°C) and remain above freezing. Keeping material stored in a heated environment prior to use and misting applied material with warm, fresh water will help in these conditions.

Low Humidity Conditions/Precautions: The process of curing may take longer when lower humidity levels occur. A light misting of fresh water over the treated surface will accelerate curing if necessary.

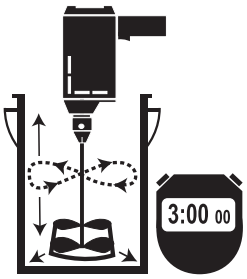
Though Cat 5™ Rain Screen may be applied to damp surfaces and tolerates rain immediately after application, do not apply to surfaces with standing water or frost. *Contact PROSOCO if conditions are questionable.* As with any coating, application to substrates with high moisture content may lead to blistering of the material.

Equipment
Apply using standard ¼ to 3/8 inch nap rollers.

Storage & Handling
Store in a cool, dry place. Keep container tightly closed when not dispensing. Do not open container until preparation work has been completed. Do not alter or mix with other chemicals. When stored at or below 80°F (27°C) Cat 5™ Rain Screen has a shelf life of 12 months after the date of manufacture. This shelf life assumes upright storage of factory-sealed containers. Do not double stack pallets. Dispose of unused product and container in accordance with local, state and federal regulations.

APPLICATION
Read "Preparation" and the Safety Data Sheet before use.

Dilution & Mixing
Apply as packaged. Do not dilute or alter, or use for applications other than specified. Using a low-speed drill and paddle, mix well from top to bottom and side-to-side for a minimum of 3 minutes before use. Avoid mixing air into the product.



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 were achieved when the product was applied at 12 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 to achieve a pinhole free coating. Actual rates must be determined through mock-up applications.

For more information regarding coverage rates as it pertains to glass-mat sheathing, please consult

BEST PRACTICES
Cat 5™ Rain Screen bonds tenaciously. Carefully protect all nearby surfaces not intended for treatment. Immediately clean up incidental contact using mineral spirits or similar solvent.

Always use Joint & Seam Filler, FastFlash® and AirDam® where required. Do not substitute.

Prepare all rough openings with Joint & Seam Filler and/or FastFlash®. Allow to skin over before installing Cat 5™ Rain Screen. Overlap Cat 5™ Rain Screen onto FastFlash® by 2 inches or more. A slightly diagonal vertical application stroke provides best coverage.

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 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.

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®.

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 an d/or detrimentally impact the performance of such materials.

Wind, high temperatures and high humidity accelerate drying. At 70°F (21°C) and 50% relative humidity, product will skin in approximately 2 hours and cure in approximately 12 hours when applied at 12 mil thickness.

Illustrations depicting the 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.

the AMT Laboratories Technical Bulletin available at www.prosoco.com/support/product-literature-library.

Cat 5™ Rain Screen is sold in 5 gallon containers.

- *Exterior Gypsum Board, OSB or Plywood*: 50–100 sq.ft. per gallon
- *CMU*: 50–80 sq.ft. per gallon

Application Instructions

1. Roller apply to exterior wall assembly using vertical strokes with a slight diagonal slant. Ensure there are no pinholes, voids or gaps in the membrane. ***NOTE***: If air or surface temperatures exceed 95°F (35°C), apply to shaded surfaces and before daytime air and surface temperatures reach their peak.
2. Seal masonry ties and properly prepared penetrations as work progresses. Some sheathing will require additional material to achieve a continuous coating. Inspect surface after initial application and touch-up as needed. CMU, OSB and exceptionally porous gypsum sheathing may require more than two coats.
3. Allow product to cure and dry. Wind, high temperatures and high humidity will accelerate drying. Low temperatures and low relative humidity will extend cure time. Lightly mist treated surfaces with fresh water to accelerate cure. For cladding gaps >1 inch, it is recommended to apply a second coat in the same manner as the first coat and allow product to cure and dry.
4. Inspect membrane before installing cladding to ensure a void- and pinhole-free surface. 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 Cat 5™ Rain Screen. 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.

Cleanup

Clean tools and equipment with mineral spirits or similar solvent immediately after use.

Curing and Drying

At 70°F (21°C) and 50% relative humidity, product skins in approximately 2 hours and cures in approximately 12 hours when applied at 12 mil thickness.

Cat 5™ Rain Screen is moisture curing. Low temperatures and low relative humidity slow cure time. Wind, high temperatures and high humidity accelerate drying.

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 Cat 5™ Rain Screen

PROSOCO

ICC-ES AC212[1]
Acceptance Criteria for Water-Resistive Coatings Used as Water-Resistive Barriers Over Exterior Sheathing

TEST	METHOD	CRITERIA	RESULTS
Tensile Bond	ASTM C 297	Minimum 15 psi (105 kPa)	Pass
Freeze-Thaw	ICC-ES AC212	No cracking, checking, crazing, erosion, delamination or other deleterious effects	Pass
Water Resistance	ASTM D 2247	No cracking, checking, crazing, erosion, delamination, or other deleterious effects	Pass
Water Vapor Transmission	ASTM E 96 Wet Cup	Measure	18 perms at 12 mils
Water Penetration	ASTM E 331	No visible water penetration at the sheathing joints as viewed from the back of the panel	Pass
Structural, Racking, Restrained Environmental Conditioning & Water Penetration	ASTM E 1233 A ASTM E 72 ICC-ES AC212 ASTM E 331	No cracking of the coating	Pass
Weathering	ICC-ES AC212 AATCC[2] 127	No cracking of the coating; no water penetration	Pass
Air Permeance	ASTM E 2178	≤ 0.02 L / s·m² at 75 Pa (≤ 0.004 cfm / ft² at 1.57 psf)	Pass: 0.0009 L / s·m² at 75 Pa (0.00018 cfm / ft² at 1.57 psf)

ABAA: Air Barrier Association of America Acceptance Criteria for Liquid Applied Membranes

TEST	METHOD	CRITERIA	RESULTS
Air Permeance	ASTM E 2178	≤ 0.02 L / s·m² at 75 Pa (≤ 0.004 cfm / ft² at 1.57 psf)	Pass: 0.0009 L / s·m² at 75 Pa (0.00018 cfm / ft² at 1.57 psf)
Air Leakage of Air Barrier Assemblies	ASTM E 2357	≤ 0.2 L / s·m² at 75 Pa (≤ 0.04 cfm / ft² at 1.57 psf)	Pass: 0.0105 L / s·m² at 75 Pa (0.0021 cfm / ft² at 1.57 psf)
Water Resistance	AATCC 127	No water infiltration after exposure to 55 cm head of water for 5 hours	Pass
Fastener Sealability	ASTM D 1970	No water infiltration	Pass
Pull Adhesion	ASTM D 4541	110 kPa (16 psi) or substrate failure	Pass
ICC-ES AC212	Entire Suite of Tests	Pass	Pass
Crack Bridging	ASTM C 1305	Pass	Pass
Water Vapor Transmission	ASTM E 96 Wet Cup Dry Dup	Measure	Wet Cup: 18 perms at 12 mils Dry Cup: 15 perms at 12 mils

Fire Testing

TEST	METHOD	CRITERIA	RESULTS
Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies	NFPA[3] 285	Must resist flame propagation and flame spread	Pass[4]
Determining Ignitability of Exterior Wall Assemblies	NFPA 268	Cannot exhibit sustained flaming when exposed to radiant heat flux of 12.5 kW/m2 ± 5% for 20 minutes	Pass[5]
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: Flame Spread: 10 Smoke Developed: 0

All testing conducted 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: Southwest Research Institute Report No. 01.17421.01.001
5. Southwest Research Institute Report No. 01.17421.01.002