

R-Guard® Cat 5®

Air & Water Barrier

PROSOCO R-Guard® Cat 5® is a fluid applied, air and water barrier membrane that combines the best of silicone and polyurethane properties. This single component, Silyl-Terminated-Polymer (STP) is roller applied to produce a highly durable, seamless, elastomeric weatherproofing membrane on exterior sheathing, CMU back-up walls, and pre-cast concrete. Cat 5® 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® 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 air barrier components.

Advantages

- Silane functional polymer provides superior long term adhesion, crack bridging and weathering characteristics. Self seals fastener penetrations.
- 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 during construction.
- Bonds and cures in wet weather and on damp substrates.
- May be fully exposed to UV and weather for up to 12 months. If longer, contact for inspection.
- Service temperature from -75°F to 300°F (-59°C to 149°C).
- Single component – saves time.
- Easy roller application in all climates.
- Breathable. Allows damp surfaces to dry.
- 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.
- Air Barrier Association of America (ABAA) approved product.

Limitations

- Not for use as a liquid flashing membrane. Use R-Guard FastFlash®.
- Not for use in place of appropriate through-wall flashing.
- Not for use below grade or in locations designed to be continuously immersed in water.

REGULATORY COMPLIANCE

VOC Compliance

R-Guard® Cat 5® 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

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, light brown 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
Water Vapor Transmission	18 perms (ASTM E 96)
Transfer Free Time	2–4 hours

PREPARATION

Protect people, vehicles, property, plants and all other surfaces not intended for application. Apply to clean surfaces free of contaminants. Chemical residues, surface coatings or films may adversely affect adhesion. Pressure-treated wood and other contaminated surfaces should be cleaned with a solvent wipe before application.

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 outside corners, prime all raw gypsum board edges with R-Guard PorousPrep. 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®.

Surface & 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. Keep containers closed and out of direct sunlight when not in use.

Cold Weather Conditions: May be applied to frost-free substrates at temperatures below 32°F (0°C). Product will not start curing and drying until temperature rises to and remains above 32°F (0°C).

Low Humidity Conditions: Curing may take longer than 12 hours. Lightly misting treated surfaces with fresh water will accelerate curing. Uncured material may delay construction.

Though Cat 5® 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.

Equipment

Apply using standard ¼ inch to ⅜ inch nap rollers.

Storage & Handling

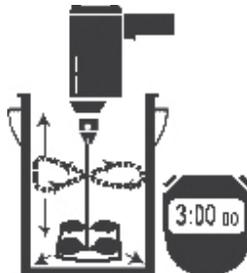
Store in a cool, dry place. Keep container tightly closed when not dispensing. Do not open container until preparation work has been completed. Do not alter or mix with other chemicals. When stored at or below 80°F (27°C) Cat 5® has a shelf life of 12 months after the date of manufacture. This shelf 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.



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. Many gypsum sheathing products require additional material to achieve hide and the desired mil thickness for a pinhole free coating. In some cases, particularly on CMU, 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 the AMT Laboratories Technical Bulletin available at www.prosoco.com/literature-library.

Cat 5® is sold in 5 gallon containers.

- Exterior Gypsum Board, OSB and 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 substrates 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 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.
4. Inspect membrane before covering 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®. 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 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® 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 web site at www.prosoco.com, for the name of the PROSOCO representative in your area.

BEST PRACTICES

Cat 5[®] 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[®]. Overlap Cat 5[®] onto FastFlash[®] by 2 inches or more. A slightly diagonal vertical application stroke provides best coverage.

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/literature-library.

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.

Low temperatures and low relative humidity will extend cure time. Mist surfaces with fresh water to accelerate cure.

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.

R-Guard® Cat 5® Product Test Results

ICC-ES AC212¹

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	AC212 ASTM E 331	No cracking of the coating; no water penetration	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: 0.0009 L / s•m ² at 75 Pa (0.00018 cfm / ft ² 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•m ² at 75 Pa (≤ 0.04 cfm / ft ² at 1.57 psf)	Pass: 0.0009 L / s•m ² at 75 Pa (0.00018 cfm / ft ² at 1.57 psf)
Air Leakage of Air Barrier Assemblies	ASTM E 2357	≤ 0.02 L / s•m ² at 75 Pa (≤ 0.04 cfm / ft ² at 1.57 psf)	Pass: 0.0105 L / s•m ² at 75 Pa (0.0021 cfm / ft ² 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 Permeance at applied thickness	ASTM E 96	Report in Ng/(Pa•s•m ²)	Wet: 1015 Ng/(Pa•s•m ²) Dry: 860 Ng/(Pa•s•m ²)

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/m ² ± 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