PROSOCO®

R•Guard®

AIR & WATER BARRIER

Joint & Seam Filler

INDOOR ADVANTAGE GOLD
BUILDING MATERIALS

PROSOCO R-Guard® Joint & Seam Filler is a gun-grade, crack and joint filler, adhesive and detailing compound that combines the best of silicone and polyurethane properties. This single-component, fiber-reinforced, Silyl-Terminated-Polymer (STP) is easy to gun, spread and tool.

Use Joint & Seam Filler to fill openings and create transitions where flexible reinforcement is required to bridge larger gaps and provide continuous support of fluid-applied flashing membranes, waterproofing or air barrier components.

Suitable for all climates, Joint & Seam Filler bonds directly to damp or dry surfaces and cures under a variety of weather conditions. It dramatically reduces surface preparation time by eliminating the need for reinforcing tapes at sheathing joints, inside and outside corners.

Use Joint & Seam Filler as part of a continuous, building-wide air barrier system, or to prepare surfaces for conventional waterproofing or air barrier components. Joint & Seam Filler may also be used to repair cracks or fill voids after the primary R-Guard air barrier has been applied.

REGULATORY COMPLIANCE

VOC Compliance

R-Guard Joint & Seam Filler is compliant with the US Environmental Protection Agency's AIM VOC regulations. Visit www.prosoco.com/voccompliance 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

ADVANTAGES

- **Streamlines preparation by eliminating the need for joint reinforcing tapes**
- **Silane functional polymer provides superior long term adhesion, crack filling and weathering characteristics**
- **Bonds to most common building materials without priming**
- **Single component saves time – no mixing**
- **Bonds and cures in wet weather and on damp substrates. Tolerates rain immediately after application**
- **May be fully exposed to UV and weather for up to 12 months. If longer, contact for inspection**
- **Compatible with most sealants and waterproofing or air barrier components**
- **Solvent free. Isocyanate free. Phthalate free**
- **No shrinkage. No staining. No yellowing**
- **Breathable – allows damp surfaces to dry**
- **Will not support mold growth**
- **Passes ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials**
- **Illustration depicting the use of PROSOCO R-Guard® products are available at 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 installing R-Guard SureSpan EX. See SureSpan EX literature
- Not for use below grade or in locations which are continuously immersed in water
- May have slight incompatibility with some asphaltic materials or butyl adhesives. Always test first

TYPICAL TECHNICAL DATA

FORM	viscous paste, mild odor pale red color
SPECIFIC GRAVITY	1.42 – 1.52
WT/GAL	12.3 lbs
TOTAL SOLIDS	99%
VOC CONTENT	30 g/L maximum
SHELF LIFE	1 year in tightly sealed, unopened container

Cured Properties

Hardness, Shore A	40–50
Tensile Strength	180 psi
Elongation at Break	>300% (ASTM D 412)
Water Vapor Transmission	19 perms @ 20 mils ASTM E96
Corrosive Properties	Non-corrosive

PREPARATION

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 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.

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 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.

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.

Protect people, vehicles, property, plants and all other surfaces not intended to receive Joint & Seam Filler.

Remove and replace damaged sheathing.

Any gaps or joints greater than 1 inch should be structurally repaired or readied for an appropriate transition membrane.

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 Joint & Seam Filler or other 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.

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: 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 Joint & Seam Filler 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 a professional caulking gun. Use a DRY joint knife, trowel or spatula to tool and spread the product. Do not use soapy water when tooling or spreading.

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) R-Guard Joint & Seam Filler 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. No mixing required.

Typical Coverage Rates

Coverage varies based on surface texture and irregularities. R-Guard Joint & Seam Filler is sold in 29-oz tubes and 20-oz sausages.

Estimated coverage includes overlapping 1-inch on each side of the sheathing joint. Joint width varies from 0 to 0.25 inches.

- 60.5–93.5 linear feet per 29-oz tube
- 38.5–60.5 linear feet per 20-oz sausage

Application Instructions

For best results, spread and tool Joint & Seam Filler while still wet, within 2–3 minutes of gun application.

PREPARE

Prepare all surfaces as described above under "Preparation." Once preparation is complete, cut open tip of threaded fitting, install nozzle and cut nozzle to desired opening.

Filling Joints, Seams and Cracks, Detailing Fastener Heads and Around Penetrations

1. Apply a bead of Joint & Seam Filler to all sheathing joints, seams and cracks, then strike smooth with a DRY tool. Joint widths up to 3/8 inch may be treated without backer rod. Treat joints ranging from 3/8 inch to 1 inch with backer rod before applying Joint & Seam Filler. Joints larger than 1 inch must be structurally improved or addressed with R-Guard SureSpan EX transition extrusion. Detail over wood knots, deep cracks or surface irregularities to complete the surface preparation.
2. Use a DRY joint knife, trowel or spatula to spread the product 1 inch beyond the sheathing seams on each side to a thickness of 20–30 mils.
3. Spot fastener heads and strike with a DRY tool.
4. Allow to skin before installing other waterproofing or air barrier components.

Detailing & Waterproofing Fastener Penetrations (Window & Door Penetrations)

1. Apply a bead of Joint & Seam Filler in each corner of the rough opening and at the sheathing to stud transition, then strike smooth with a DRY tool. Joint widths up to 3/8 inch may be treated without backer rod. Treat joints ranging from 3/8 inch to 1 inch with backer rod before applying Joint & Seam Filler. Joints larger than 1 inch must be structurally improved or addressed with R-Guard SureSpan EX transition extrusion.
2. Use a DRY joint knife, trowel or spatula to tool and spread product 1 inch beyond the seam on each side to a thickness of 20–30 mils.
3. Allow treated surfaces to skin over before installing R-Guard FastFlash®.

PROTECT

Apply R-Guard Spray Wrap MVP, Spray Wrap Rain Screen, Cat 5, Cat 5 Rain Screen, VB or other waterproofing or air barrier component pursuant to manufacturer instructions.

TRANSITION

Flashing Transitions

1. Fasten R-Guard SS ThruWall or other flashing leg to the vertical wall surface using a bead of Joint & Seam Filler or conventional methods. Fill any voids between the flashing leg and the vertical wall with Joint & Seam Filler.
2. Apply and tool Joint & Seam Filler as needed to direct water from the vertical wall to the face of SS ThruWall or other flashing.
3. Apply and tool Joint & Seam Filler at inside corners to ensure positive drainage.
4. Allow treated surfaces to skin before installing R-Guard FastFlash®.
5. Use Joint & Seam Filler to fill any remaining surface imperfections to provide positive drainage and continuous support of fluid-applied flashing membranes.

REPAIR

After applying R-Guard Spray Wrap MVP, Spray Wrap Rain Screen, Cat 5, Cat 5 Rain Screen, VB or other waterproofing or air barrier component, Joint & Seam Filler may be used to fill any cracks or voids to achieve a seamless, pinhole and void free coating.

Curing and Drying

At 70°F (21°C) and 50% relative humidity, product skins within 30 minutes and dries in 4 hours. Paintable with most paints after 2 hours.

Joint & Seam Filler is moisture curing. Low temperatures and low relative humidity slow dry time. High temperatures and high relative humidity accelerate dry time.

Cleanup

Clean tools and equipment with mineral spirits or similar solvent immediately after use. Follow all safety precautions. Remove cured Joint & Seam Filler mechanically using a sharp-edged tool.

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. 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. Call Customer Care at 800-255-4255, or visit our website at prosoco.com, for the name of the PROSOCO representative in your area.

PRODUCT TEST RESULTS
R-Guard Joint & Seam Filler

TEST	METHOD	CRITERIA	RESULTS
ICC-ES AC212[1]: Acceptance Criteria for Water-Resistive Coatings Used as Water-Resistive Barriers Over Exterior Sheathing (*Joint & Seam Filler Tested as Part of an Assembly)			
***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 Penetration**	ASTM E 331	No visible water penetration at sheathing joints as viewed from back of the panel	Pass
***Structural, Racking, Restrained Environmental Conditioning & Water Penetration**	ASTM E 1233A 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
ABAA: Air Barrier Association of American Acceptance Criteria for Liquid Applied Membranes (*Joint & Seam Filler Tested as Part of an Assembly)			
***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 / s·m² at 75 Pa (0.0021 cfm / ft² at 1.57 psf)
Fire Testing (*Joint & Seam Filler Tested as Part of an Assembly)			
***Fire Propagation Characteristics of Exterior Non-load-bearing Wall Assemblies**	NFPA[3] 285	Must resist flame propagation and flame spread	Pass[4]
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: 15 Smoke Developed: 5

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. Southwest Research Institute Report No. 01.17421.01.001