

Joint and Seam Filler

Air & Water Barrier

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, 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 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.

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.
- Fills open joints and seams up to 1 inch in width.
- 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 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.
- Service temperatures from -75°F to 300°F (-59°C to 149°C).
- Passes ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials.

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 which are continuously immersed in water.

REGULATORY COMPLIANCE

VOC Compliance

R-Guard® Joint & Seam Filler is compliant with the following national, state and district 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 paste, mild odor, pale red color
SPECIFIC GRAVITY	1.40 – 1.50
pH	not applicable
WT/GAL	11.8 lbs
TOTAL SOLIDS	99%
VOC CONTENT	30 g/L maximum
FLASH POINT	no data
FREEZE POINT	no data
SHELF LIFE	1 year in tightly sealed, unopened container

Cured Properties	
Hardness, Shore A	40–50
Tensile Strength	70 psi
Water Vapor Transmission	19 perms @ 20 mils
Peel Strength	>25 pli
Accelerated Weathering	Pass
Shrinkage	None
Corrosive Properties	Non-corrosive

Uncured Properties	
Cure Rate	1/8 inch thickness/24 hours
Tack-Free Time	20–40 minutes

PREPARATION

To ensure best results, 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.

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

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 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.

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.

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 lineal feet per 29-oz tube
- 38.5–60.5 lineal feet per 20-oz sausage

Application Instructions

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

1. Apply a thick bead of Joint & Seam Filler to all sheathing joints, seams and cracks. Joints up to ½ inch in width can be treated without backer rod. Treat joints ranging from ½ to 1 inch with backer rod before applying Joint & Seam Filler. Joints larger than 1 inch must be structurally improved or addressed with an appropriate transition membrane. On plywood, spot wood knots, deep cracks or surface irregularities.

2. Use a DRY joint knife, trowel or spatula to tool and spread the product. Spread 1 inch beyond seam at each side to a thickness of 20–30 mils.

3. Allow to skin before installing other air barrier components.

Fastener Penetrations

1. Spot fastener penetrations with Joint & Seam Filler, as necessary. On plywood, spot wood knots, deep cracks or surface irregularities.

2. Allow to skin before installing other air barrier components.

Detailing Rough Openings

1. Prime all raw gypsum board edges with R-Guard PorousPrep.

2. Apply a thick bead of Joint & Seam Filler to all inside corners, cracks, joints and seams within the rough opening.

3. Use a DRY joint knife, trowel or spatula to tool and spread the product. Spread 1 inch beyond seam on each side to a thickness of 20–30 mils.

4. Allow to skin before installing R-Guard® FastFlash®.

PROTECT

Apply R-Guard® Cat 5® pursuant to manufacturer instructions.

TRANSITION

Flashing Transitions

1. Fasten 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 the 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 Cat 5[®] Joint & Seam Filler may be used to fill any cracks or voids to achieve a seamless, pinhole and void free coating.

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.

Curing and Drying

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

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

Surfaces should be clean, free of standing water and in good repair before application.

In rough openings, prime raw gypsum board edges with R-Guard PorousPrep.

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

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.

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 mist treated surfaces with fresh water to accelerate cure. Uncured material may delay construction.

Use Joint & Seam Filler to adhere and gasket mechanically fastened building components. Use FastFlash[®] to counter flash.

Use Joint & Seam Filler after the primary R-Guard[®] Cat 5[®] has been applied to repair cracks or fill voids.

PROSOCO R-Guard[®] Joint & Seam Filler, FastFlash[®] and AirDam[®] are recommended for improved performance of R-Guard Cat 5[®].

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® Joint & Seam Filler Product Test Results

ICC-ES AC212¹ Acceptance Criteria For Water-Resistive Coatings Used As Water-Resistive Barriers Over Exterior Sheathing (*Joint & Seam Filler Tested As Part Of An Assembly)

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 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 1233A ASTM E 72 ICC-ES AC212 ASTM E 331	No cracking of the coating	Pass
*Weathering	ICC-ES AC212 AATCC2 127	No cracking of the coating; no water penetration	Pass

Abaa: Air Barrier Association Of America Acceptance Criteria For Liquid Applied Membranes (*Joint & Seam Filler Tested As Part Of An Assembly)

TEST	METHOD	CRITERIA	RESULTS
*Air Leakage of Air Barrier Assemblies	ASTM E 2347	$\leq 0.02 \text{ L} / \text{s} \cdot \text{m}^2$ at 75 Pa ($\leq 0.04 \text{ cfm} / \text{ft}^2$ at 1.57 psf)	Pass 0.0105 / $\text{s} \cdot \text{m}^2$ at 75 Pa (0.00021 cfm / ft^2 at 1.57 psf)

Fire Testing (*Joint & Seam Filler Tested As Part Of An Assembly)

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
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 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