



PRODUCT BULLETIN

Sto RapidGuard®

Product Number(s):

81571-740 Sto RapidGuard Cartridge

81571-741 Sto RapidGuard Sausage

PRODUCT DESCRIPTION

Sto RapidGuard is a one-component air and water-resistive barrier used as flashing at exterior wall openings, and to seal sheathing joints, seams, cracks, penetrations, and other transitions in above grade wall construction. Rapid drying time will usually allow for same day installation of other Sto air and water-resistive barrier components.

FEATURES	BENEFITS
Fast-Cure	Allows work to proceed quickly without costly delays and interruptions to work schedule
Cures in wet weather and on damp substrates	Avoids costly wet weather work shut downs or wash-offs; adheres to damp substrates without an increase in drying time.
Fluid-applied	Easily applies around complex geometries
Eliminates mesh, fabric and tapes at rough openings and sheathing joints	Simplifies and speeds application
Vapor Permeable	Minimizes risk of condensation in walls
Excellent elongation	Bridges static cracks and seams in construction without tearing or compromise in performance
Compatible with other StoGuard® Products	Reliability and peace of mind

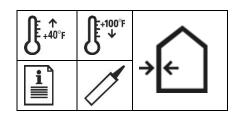
Coverage

Gypsum Sheathing Joints-applied at 20-30 WFT at 2-inch (51mm) width: 60-90 lf (18-27 m) / cartridge 40-60 lf (12-18 m) / sausage

Rough Openings-applied at 12-20 WFT

2 x 4 framing	2 x 6 Framing
30-50 lf (9.1-15m) / cartridge	22-35 lf (6.7-10.7m) / cartridge
21-34 lf (6.4-10.4m) / sausage	15-24 lf (4.6-7.3m) / sausage

Coverage may vary depending on substrate conditions, sheathing joint gap, application technique, waste factor, and final film thickness.



Packaging

29 oz. (0.86 L) cartridges	12 cartridges per case
20 oz. (0.6 L) sausages	20 sausages per case

Color: Yellow

Shelf Life: 12 months in original, unopened, properly stored container.

Storage: Store in a cool (less than 80°F [27°C]), dry area. Protect from extreme heat [90°F (32°C)], freezing and direct sunlight. Store away from sources of ignition.

SURFACE PREPARATION

Sto Proprietary Wall Systems: StoTherm® ci, StoVentec®, StoPowerwall®, StoQuik® Silver, StoPanel®, and StoLite® systems. Refer to applicable Sto Specification.

Surfaces must be fully cured, structurally sound, clean, and free of frost, damage, and all bond-inhibiting materials, including dirt, dust, efflorescence, form oil and other foreign matter. Sheathing must be Exterior Grade or Exposure 1 wood-based sheathing, ASTM C1177 compliant glass matfaced gypsum sheathing, or ASTM C1325 Type A cementbased sheathing.

Sheathing must be installed in compliance with the building code and manufacturer's recommendations. Galvanized metal surfaces should be solvent wiped with cotton cloth to remove surface contamination. May be applied to clean, dry pressure-treated and fire-retardant treated plywood. Surfaces may be damp but must not have standing water or other bond inhibiting material on them.

MIXING

Not required. Ready to use.

LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp.



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APPLICATION

Provide adequate ventilation and ensure surface and ambient temperatures are between 40°F and 100°F (4°C and 38°C) during application and drying period. Apply only to fully cured, structurally sound, clean, dry, properly prepared, frost-free surfaces. Apply over or under any of the Sto air and water-resistive barrier coatings. Apply with a caulking gun. Spread with a dry joint knife, trowel or spatula while material is still wet, usually within 2-3 minutes of gun application. Seal voids or pinholes with additional material. Do not use soapy water when spreading. IMPORTANT: topcoat with Sto air and water-resistive barrier coating when dry to touch or within 48 hours of drying for best adhesion.

Flashing and Rough Opening Protection: Apply a fillet bead of material at interior corners inside the opening to seal jamb/sill and jamb/head seams. Apply material in a zig-zag pattern along sill, jambs, and head to form a generous bead of material along the surface to be covered. Spread the material to a uniform thickness of 12-20 mils (0.3-0.5 mm) before the material skins. Treat the entire rough opening surface in this manner and overlap onto the face of the sheathing 2 inches (51 mm) minimum all the way around.

Sheathing Joints: Apply a thick bead of Sto RapidGuard with a caulking gun along sheathing joints or apply in a zig-zag pattern across and down the joints. Spread to a uniform thickness of 20-30 mils (0.5-0.8 mm) in a 2-inch (51 mm) width centered over the joints before the material skins. Follow the same procedure for inside and outside corners.

Counterflashing: Apply a thick bead of Sto RapidGuard across the flashing leg/wall surface seam or apply in a zig- zag pattern across the seam. Spread to create a seamless counterflashing that covers fastener penetrations and directs water away from the wall. Flashing may also be bedded in Sto RapidGuard and then counterflashed.

Through Wall Penetrations (e.g., pipe, electrical box, and scupper penetrations): Penetrations must be fitted snug against abutting wall surfaces. Apply a fillet bead around the penetration and spread onto both surfaces (wall surface and penetration). Create a bead profile that directs water away from the wall penetration with 1 inch (25 mm) minimum on the wall surface and ½ -1 inch (13-25mm) on the penetrating element

Fasteners and Masonry Ties: spot fasteners to seal fastener penetrations. Bed masonry ties or apply from flange of masonry tie to the wall surface around the tie.

IMPORTANT: STO RAPIDGUARD FILLS STATIC JOINTS UP TO ½ INCH (13 MM) WIDE. IF LARGER GAPS EXIST BETWEEN SHEATHING JOINTS, OR BETWEEN THE PENETRATION AND THE SHEATHING, ALTERNATIVE TRANSITION DETAILING MAY BE USED, OR OTHER STEPS MAY BE NECESSARY TO CORRECT THE DEFICIENT CONDITION. REFER TO STO DETAILS.

Drying

Product cures with moisture in the atmosphere. Full cure occurs within 24 hours and final physical characteristics at 7 days when installed at standard conditions (50% RH and 70°F [21°C]). Drying time and full cure time is slower with low temperature/low humidity and faster with high temperature/high humidity.

Clean Up

Clean tools by removing wet material with a rag before the material cures. Cured material can be removed with a citrus solvent, xylene or mineral spirits. Exercise care when handling cleansing agents and follow precautions on packaging

LIMITATIONS

- Apply only when surface and ambient temperatures are between 40 and 100°F (4 and 38°C) during application and drying period.
- Do not apply if the surface temperature is less than 5°F (2.8°C) above the ambient dew point temperature.
- Do not use on surfaces with standing water or frost.
- Do not use below grade or on surfaces subject to in-service water immersion.
- Do not use as a structural sealant, as an expansion joint sealant, or as an exposed weather seal
- Allowable in-service temperature range: -22 to 140°F (-30 to 60°C).
- Do not use to fill gaps, seams or cracks greater than ½ inch (13 mm) wide.
- Do not use in place of appropriate through wall flashing.
- Compatibility with other substrates or sealants: always verify adhesion with lab or field tests under actual conditions of use
- Fire-retardant or pressure treated plywood must be dry with surface free of salts or other chemicals migrating from within the wood. Test adhesion to be sure of desired results.
- Do not leave exposed to weather for more than 30 days. Requires permanent protection with wall cladding.
- Do not use on the outside face of the wall and do not apply Sto textured finishes or Sto finish coatings over Sto RapidGuard



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HEALTH & SAFETY

DANGER!

May damage the fertility or the unborn child.

Health Precautions

Breathing large amounts of vapor may be harmful. Can cause eye irritation. Symptoms include redness and burning of skin. Swallowing large amounts may be harmful

Safety Precautions

Use adequate ventilation. Safety goggles and protective gloves are recommended. Remove contaminated clothing immediately.

First Aid

SKIN CONTACT: Remove contaminated clothing and shoes. Use a waterless hand cleaner to remove as much material as possible. Wash with soap and water. Wash clothing and decontaminate shoes before re-use. Get medical attention if irritation develops and persists.

EYE CONTACT: Do not attempt to remove solids or gums from the eye. Immediately rinse eyes with lukewarm gently flowing water for 20 minutes, holding the eyelids open. After 5 minutes, remove contact lenses, if present and possible, and continue rinsing. Get medical attention immediately

RESPIRATORY PROBLEMS: Remove from area to fresh air. If not breathing clear airway, start mouth-to-mouth artificial respiration or use a bag mask respirator. Get immediate medical attention. If victim is having trouble breathing, transport to medical care and, if available, give supplemental oxygen.

INGESTION: DO NOT induce vomiting. DO NOT give anything by mouth to an unconscious or convulsing person. Have victim rinse out mouth and drink 8-10 oz (240-300 ml) of water to dilute the material in stomach. Get immediate medical attention.

HYGIENE: Wash hands immediately after use. Wash clothing before re-use.

Spills

Collect with suitable absorbent material such as cotton rags **Disposal**

Dispose of in accordance with local, state or federal regulations. **Warning**

KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Safety Data Sheet (SDS) for further health and safety information. Safety Data Sheet (SDS) is available at www.stocorp.com.

TECHNICAL DATA

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULT*		
Liquid Applied Flashing Membrane	AAMA 714	AAMA 714, Section 8.0	Meets acceptance criteria		
Water Column	AATCC 127 (modified)	Resist 21.6" (55 cm) water for 5 hours	No water penetration		
Elongation	ASTM D412	Measure	>350% at 30 DFT >250% at 20 DFT		
Tensile Strength	ASTM D412	Measure	200 psi (1379 kPa)		
Durometer Hardness	ASTM D2240	Shore A	31 at 28 days		
Adhesion to Substrates	ASTM D4541	>50 psi (345 kPa) or substrate failure: OSB, Plywood, Concrete, CMU, Vinyl, Galvanized Steel, and Gypsum Sheathing	> 50 psi (345 kPa)		
			> 20 psi (138 kPa) to gypsum sheathing (substrate failure)		
Water Vapor Permeance	ASTM E96 (wet cup method)	Measure	6.18 perms @ 20mils 5.37 perms @ 30 mils (353 ng/s•m²•Pa) (307 ng/s•m²•Pa)		
Air Leakage	ASTM E2178	Less than 0.02 L/s/m ²	Pass		
%Solids (by volume)	Calculation	N/A	98%		
VOC Compliance	Complies with US EPA (40 CFR 59) and South Coast AQMD (Rule 1113) VOC emission standards for Building Envelope Coating, VOC < 50 g/L				
Building Code Compliance	Complies with ICC-ES AC 212 and ASTM E2570 as joint treatment in StoGuard Air and Water-resistive Barrier system Meets requirements of 2018 IBC, IRC, and IECC as an air barrier and water-resistive barrier Meets 2018 IBC and IRC requirements as fluid applied membrane flashing for exterior wall openings				
		• Meets 2020 FBC Building and FBC Residential requirements as fluid applied membrane flashing for exterior wall o			
Results are based on lab testing under controlled conditions. Results can vary between labs or from field tests. * Based on tests performed with Sto joint treatment and no air barrier top coat					

Sto Corp.	Revision No: 009	ATTENTION
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