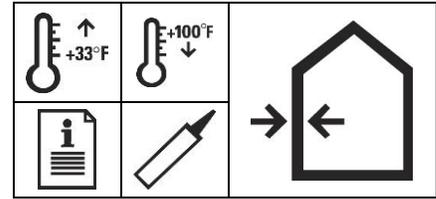


Sto RapidGuard®

81571-740 Sto RapidGuard Cartridge
81571-741 Sto RapidGuard Sausage



Technical Data

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS
Water Penetration Resistance	AATCC-127 (water column)	Resist 55 cm (21.6") water for 5 hours	No water penetration
Tensile Strength	ASTM D 412	Measure	1724 kPa (250 psi)
Elongation at Break	ASTM D 412	Measure	400%
Durometer Hardness	ASTM D 2240	Shore A	40-45 points
Adhesion (psi)	ASTM D4541	> 345 kPa (50 psi) or substrate failure: OSB, Plywood, Concrete, CMU, Vinyl, Galvanized Steel, and Gypsum Sheathing	> 345 kPa (50 psi) > 138 kPa (20 psi) to gypsum sheathing (substrate failure)
Water Vapour Permeability (@DFT)	ASTM E 96 (wet cup method)	Measure	353 ng/s•m ² •Pa (6.18 perms @ 20mils) 307 ng/s•m ² •Pa (5.37 perms @ 30 mils)
Air Leakage Resistance	ASTM E2178	Less than 0.02 L/s/m ²	Pass
% Solids by Volume	Calculation	Calculated	98%
VOC Content	Calculation	Compliant with EPA and South Coast AQMD requirements for Building Envelope Coatings	< 21 g/L
Building Code Compliance	<ul style="list-style-type: none"> Meets requirements of 2015 IBC, IRC, and IECC as an air barrier and joint treatment, ICC AC 212 and ASTM E 2570 		

Results are based on lab testing under controlled conditions. Results can vary between labs or from field tests.

Features Benefits

1 Fast Cure	Allows work to proceed quickly without costly delays and interruptions to work schedule
2 Eliminates mesh, fabric and tapes at rough openings and sheathing joints	Simplifies and speeds application
3 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.
4 Gun applied	Does not require highly skilled applicator work force; easy to install around complex geometries
5 Excellent elongation	Bridges static cracks and seams in construction without tearing or compromise in performance
6 Water vapour permeable	Resists blistering

Surface Preparation

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, or building code compliant glass mat gypsum or cement-based 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.

Sto RapidGuard is a one-component air barrier and waterproof material used to protect rough openings, 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 barrier components.

Sto RapidGuard is compatible with most common building materials, including concrete, concrete masonry, brick, galvanized steel, and gypsum, wood, and cement-based sheathing.

Approximate Coverage

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

Rough Openings-applied at 12-20 WFT
2 x 4 framing
9.1-15 m (30-50 lf) / cartridge
6.4-10.4 m (21-34 lf) / sausage
2 x 6 Framing
6.7-10.7 m (22-35 lf) / cartridge
4.6-7.3 m (15-24 lf) / sausage

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

Packaging

0.86 L (29 oz.) cartridges
12 cartridges per case

0.6 L (20 oz.) sausages
20 sausages per case

Shelf Life

12 months if properly stored and sealed.

Storage

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

Sto RapidGuard

Mixing

Not required. Ready to use.

Application

Sto RapidGuard may be applied over or under any of the Sto air and moisture barrier coatings: Sto Gold Coat, Sto Gold Coat-TA, Sto AirSeal, Sto EmeraldCoat, and Sto VaporSeal. 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:** top coat with Sto air and moisture barrier coating when dry to touch or within 48 hours of drying for best adhesion.

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 0.3-0.5 mm (1/2-20 mils) before the material skins. Treat the entire rough opening surface in this manner and overlap onto the face of the sheathing 51 mm (2 inches) 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 0.5-0.8 mm (20-30 mils) in a 51 mm (2 inch) width centered over the joints before the material skins. Follow the same procedure for inside and outside corners.

Flashing Shiplap Detailing: 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 counter-flashing that covers fastener penetrations and

directs water away from the wall. Flashing may also be bedded in Sto RapidGuard and then counter-flashed.

Through Wall Penetrations (e.g., pipe, electrical box, and scupper penetrations): penetrations must be fitted snug against abutting wall surfaces. Apply a fillet bead of Sto RapidGuard 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 25 mm (1 inch) minimum on the wall surface and 13-25 mm (1/2 - 1 inch) 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 13 mm (1/2 inch) 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.

Curing and 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 21°C [70°F]). 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.

Health And Safety

DANGER!

May damage the fertility or the unborn child.

Health Precautions

Breathing large amounts of vapour 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 240-300 ml (8-10 oz) 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.

LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp. Refer to *Sto Specifications for more complete information on proper use and handling of this product.*

Limitations

- Use only when surface and ambient temperatures are above 33°F (0.6°C) and below 100°F (37.8°C) during application and drying period.
- 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: -30°C to 60°C (-22°F to 140°F).
- Do not use to fill gaps, seams or cracks greater than 13 mm (1/2 inch) wide.
- Do not use in place of appropriate through wall flashing.
- Chemically compatible with most silicone and urethane 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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Attention

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the **Sto Canada Ltd.** website, www.stocanada.com.