

## StoPanel® AWRB

Product Number: 81835

### PRODUCT DESCRIPTION

StoPanel AWRB is a vapor permeable fluid-applied air barrier and water-resistive barrier (AWRB) for use over glass mat gypsum sheathing in StoPanel Systems.

FEATURES	BENEFITS
Fast drying	Improves prefabricated panel throughput
Tack-free when dry	Does not pull or tear from panel surface
Opaque at minimum specified thickness	Hides sheathing logos and other markings for improved quality control
Vapor Permeable	Minimizes risk of condensation in walls
Fully bonded and durable	Stable under air pressure loads; does not tear or blow off the wall in windy exposures
Spray applied with airless spray equipment	Easy, fast installation; does not require specialized spray equipment
Water-based and low VOC	Safe, VOC compliant, easy clean- up, improved IAQ
Compatible with other Sto products	Facilitates installation detailing

### Coverage (per pail)

10-12 mils WFT: 425-525 ft² (39-49m²) 20-24 mils WFT: 210-260 ft² (19.5-24.2m²) 40-44 mils WFT: 100-130 ft² (9.2-12.1m²)

Coverage may vary depending on substrate, application technique, waste factor, and other variables that may exist. Construct a mock-up under actual conditions of use to verify coverage and for approval by the appropriate authority.

#### **Packaging**

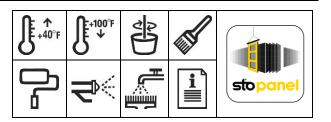
5 gallon (19L) pail

## Shelf Life

12 months in original, unopened, properly stored container.

## Storage

Store in tightly sealed container. Protect from extreme heat [90°F (32°C)], freezing and direct sunlight.



#### SURFACE PREPARATION

Sheathing must be glass mat gypsum sheathing in compliance with ASTM C1177. Sheathing must be installed in compliance with the building code and manufacturer's recommendations. Sheathing surfaces must be structurally sound, clean, dry, and free of all bond-inhibiting materials, including dirt, dust, frost, and other foreign matter. Treat sheathing joints, inside and outside corners, rough openings, and transition details with appropriate StoGuard® Detail Components. Refer to Sto Details. Pre-treat vacant fastener holes and over-driven fasteners with Sto RapidGuard®.

#### **MIXING**

Mix to a uniform consistency with an electric drill and clean, rust-free paddle. Do not thin or dilute with water.

## **APPLICATION**

Provide adequate ventilation and ensure surface and ambient temperatures are between 40 and 100°F (4 and 38°C) during application and curing period. Apply only to structurally sound, clean, dry, properly prepared frost-free surfaces.

Apply StoPanel AWRB to the prepared substrate using a ½ or ¾ inch (13 or 19mm) nap roller or airless spray equipment. Suggested tip size is .031. Pressure and tip size may vary depending on equipment used. Apply uniformly in one coat at 10-12 mils WFT to achieve a VOID and PINHOLE free surface. If thicker sections are required by project specifications apply in multiple coats.

# Cure Time of StoPanel Components at Standard Conditions (70°F & 50% RH)

StoPanel Component	Fan Assist (if necessary) <sup>1</sup>	Time <sup>2</sup> (Hours)
StoPanel AWRB in one coat (w StoGuard Fabric at Joints)	Immediately after application	3.5-5
Sto EPS Insulation installed w Sto TurboStick Adhesive	N/A	1
StoPanel Base Coat w Sto Mesh embedded	After 2 hours of unaided curing	3-4
StoPrime Hot (apply between 3 and 4 hours after the application of base coat)	For up to 1 hour	0.5-1
TOTAL		8-11

Fan assist may not be necessary with higher temperature and/or lower RH. Do NOT use fan assist within the first 2-hours of StoPanel Base Coat Cure.

2. Results may vary with individual fabrication conditions/techniques



## StoPanel® AWRB

Product Number: 81835

### Curing

The product cures within 5-1/2 hours at minimum temperature of 60°F (15.5°C) and 40-60% RH. Cool and/or high humidity conditions extend cure time, hot and/or low humidity conditions accelerate cure time. The use of low-speed (2.5 mph) fans immediately after application, evenly placed at a distance around the surface, will accelerate curing. Final cure time varies depending on temperature/humidity, thickness of application, and surface conditions. Protect from rain, high humidity, and temperatures less than 40°F (4°C) until completely dry. IMPORTANT: IF TEMPORARY HEATERS ARE USED, VENTILATE TO THE EXTERIOR TO PREVENT WATER VAPOR FROM CONDENSING ON OR WITHIN THE PANEL COMPONENTS.

**Clean Up:** clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

#### **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 panels that will be below grade or subject to inservice water immersion.
- Allowable weather exposure: 90 days. If used in conjunction with adhesively attached StoTherm ci Systems ensure the surface is clean, dry, and free of surface contamination before adhesive attachment.
- Exercise care when mechanically attaching wall assembly components through StoPanel AWRB so that fasteners go into (not between) framing supports. Do not use powder actuated or other fastening devices that can damage the substrate. Seal all penetrations through the wall to make them watertight. Test assemblies when necessary to verify watertightness.
- Allowable in-service temperature range: -40° to 180°F (-40° to 82°C)

#### LIMITED WARRANTY

This product is subject to a written limited warranty which is extended exclusively through StoPanel Technology Affiliates.

#### **HEALTH & SAFETY**

**Health Precautions:** Product is water-based. As with any chemical construction product, exercise care when handling.

**WARNING:** Causes eye and skin irritation.

**Precautionary Statement:** Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

**FIRST AID MEASURES**: Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

**Skin Contact:** Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

**Ingestion:** If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Store locked up.

**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.



## **PRODUCT BULLETIN**

## StoPanel® AWRB

Product Number: 81835

## **TECHNICAL DATA**

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULT
%Solids (by volume)	Calculation	N/A	64%
Color	N/A	N/A	Grey
Air Leakage Resistance	ASTM E2178	< 0.02 L/m <sup>2</sup> ·s @ 75 Pa (<0.004 cfm/ft <sup>2</sup> @ 1.57 psf)	Pass
Water Vapor Permeability	ASTM E96 Method B	Measured average	> 10 perms (572 ng /Pa·s·m2)
Surface Burning	ASTM E84	Flame Spread: ≤ 25 Smoke Developed: ≤ 450	Flame Spread: 15 Smoke Developed: 15
Adhesion to Substrates	ASTM D4541	> 15 psi (103 kPa)	> 15 psi (103 kPa) over glass mat gypsum sheathing
Nail Sealability	ASTM D1970	No water penetration after 72 hours at 40°F (4°C)	Pass
Resistance to Mold	ASTM E96 (modified)	Examine plywood and OSB test specimens protected by AWRB for degradation and mold	No degradation or mold growth on plywood or OSB after 82 days
Accelerated Weathering/ Hydrostatic Pressure	ASTM E2570/ AATCC 127 (modified)	No cracking of the coating or bond failure, no water penetration after cyclic weathering & 5-hour water column (21.5 in [55 cm])	Pass
Structural, Racking, Restrained Environmental Conditioning, and Resistance to Water Penetration	ASTM E2570/ E1233/ E72/E331 (par 6.6.3)	No cracking in the field of the panel, at substrate joints, and at the interface with flashing, no water penetration after exposure	Pass
Air Leakage of Air Barrier Assembly*	ASTM E2357	< 0.2 L/s●m2 @ 75 Pa (< 0.04 cfm/ft2 @ 1.57 psf)	Pass
Fire Performance of Assembly	NFPA 285	Comply with acceptance criteria	Complies (see below)
Building Code Compliance	requirements of  Class A Building	S ci • StoPanel 3DP pact ci • StoPanel Dri-Design assic ci • StoPanel Brick ci	·
VOC Compliance	This product complies with US EPA (40 CFR 59) and South Coast AQMD (Rule 1113) VOC emission standards for Building Envelope Coating. VOC less than 50 g/L.		

<sup>1.</sup> Other StoPanel assemblies may also comply based on engineering judgements on file at Sto Corp. or by way of modeling or rational analysis of the particular assembly in question.

Sto Corp.	Revision No: 000	ATTENTION
3800 Camp Creek Parkway Building 1400, Suite 120 Atlanta, GA 30331 Tel: 404-346-3666 Toll Free: 1-800-221-2397 Fax: 404 346-3119	Date: 06/2023	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
www.stocorp.com		application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, <a href="https://www.stocorp.com">www.stocorp.com</a>

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

\*Results based on use of Sto detail and transition components at joints and seams only (fluid-applied AWRB not applied to test panel)



# StoGuard® Fabric StoGuard® RediCorner®

Product Number(s):

80207 StoGuard Fabric 6-in 81361 StoGuard Fabric 9-in 80208 StoGuard Fabric 4-in 80209 StoGuard RediCorner

## PRODUCT DESCRIPTION

StoGuard Fabric is a non-woven cloth reinforcement for use with StoGuard coatings as part of a complete StoGuard Air and Water-resistive Barrier System. It is used to seal sheathing joints and seams, to protect rough openings, and to detail other transitions in vertical above grade wall construction.

StoGuard RediCorner is a preformed fabric piece used in the corners of rough openings for quick and easy installation.

FEATURES	BENEFITS
Easy to cut and handle	No special skills needed for
	installation
Flexible	Folds easily around corners
Installs with brush or roller	Does not require highly
	skilled labor
Preformed RediCorners	Installs fast and helps to
	ensure protection at corners
	of openings

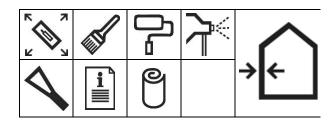
## Packaging:

StoGuard Fabric 4-in x 180 ft (102mm x 50m):18 rolls per box StoGuard Fabric 6-in x 180 ft (152mm x 50m):12 rolls per box StoGuard Fabric 9-in x 180 ft (229mm x 50m):12 rolls per box StoGuard RediCorner: 60 pieces per box

Color: Gray

**Shelf Life:** 18 months when properly stored in original unopened packaging.

**Storage:** Store off the ground in a dry area. Protect from direct sunlight.



## **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, dry, 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 mat gypsum sheathing, or ASTM C1325 Type A cementitious sheathing. Sheathing must be installed in compliance with the building code and manufacturer's recommendations. Treat sheathing joints, inside and outside corners, and transition details with StoGuard Fabric embedded in StoGuard coating. Use StoGuard RediCorners at corners of rough openings. Refer to Sto Details. Pre-treat defects such as knots in wood-based sheathing, vacant fastener holes, and minor static cracks (up to 1/16 inch [1.6 mm] wide) in concrete and CMU with Sto Gold Fill® or Sto RapidGuard®. If cracks are structural consult an engineer.

#### APPLICATION

Refer to StoGuard Air and Water-resistive Barrier Detail Booklets at www.stocorp.com for illustrations of installation.

Product	Use or Application
4-in StoGuard Fabric	sheathing joints and seams
6-in StoGuard Fabric	2x4 rough opening protection
	Inside and outside corners
9-in StoGuard Fabric	2x6 rough opening protection
StoGuard Redicorner	corners of rough openings

Apply between 40° and 100°F (4° and 38°C) during application and drying period. Apply only to fully cured, structurally sound, clean, dry, properly prepared, frost-free surfaces.



# StoGuard® Fabric StoGuard® RediCorner®

Product Number(s):

80207 StoGuard Fabric 6-in 81361 StoGuard Fabric 9-in 80208 StoGuard Fabric 4-in 80209 StoGuard RediCorner

## **APPLICATION (CONTINUED)**

StoGuard Fabric for Joints and Seams: apply the StoGuard coating liberally (minimum 15 wet mils) by airless spray or with a ¾-in (19mm) nap roller at the sheathing joint. Immediately place the fabric in the wet StoGuard coating, and embed and smooth the fabric with a roller so no wrinkles exist. Apply an additional coat of the StoGuard coating to completely embed and seal the fabric.

Should gaps exceed 1/8 inch (3 mm), up to 1/4 inch (6 mm) wide at the sheathing joint, apply low expanding urethane foam into joints and rasp or shave flush with the sheathing surface before installing the joint treatment.

StoGuard RediCorner and StoGuard Fabric for Rough **Opening Protection:** apply the StoGuard coating liberally (15 wet mils) at the rough opening corner. Immediately place StoGuard RediCorner in the wet coating on the inside of the rough opening with the tabs oriented so they are on the face of the sheathing. Embed StoGuard RediCorner in the coating by brushing or rolling. Apply additional coating to completely embed and seal the fabric. Repeat until all corners have been treated. After all corners have been installed, apply a liberal coat of the StoGuard coating to the sill of the rough opening. Immediately embed StoGuard Fabric into the coating by placing it in the wet coating and embedding and smoothing the fabric with a roller so no wrinkles exist. Overlap StoGuard RediCorner by at least 2-in (51mm) with StoGuard Fabric. Repeat at jambs and head. Once the entire rough opening has been treated, inspect for voids and pinholes. If found, apply more coating until the voids/pinholes have been filled to achieve a VOID and PINHOLE FREE surface.

#### LIMITATIONS

- Use in conjunction with the StoGuard Air and Waterresistive barrier coatings.
- Protect from rain and freezing until COMPLETELY dry.
- Apply only when the surface and ambient temperatures are above 40°F (4°C) and below 100F (38°C) during application and drying period.
- Not recommended for use when cool, damp conditions exist for prolonged periods. Cool, damp conditions retard drying and may require extended periods of protection.
- Do not use below grade or on surfaces subject to in-service water immersion.
- Fire-retardant treated or pressure treated plywood substrates must be dry and free of all bond-inhibiting materials.
- Not recommended for spanning sheathing joints or holes in excess of 1/8" (3 mm) wide.
- Ventilate temporary heaters to the exterior to prevent water vapor from accumulating on or within the wall assembly materials.
- When StoGuard Air and Water-resistive Barrier coatings are used in conjunction with StoTherm ci Systems, ensure the surface is clean, dry, and free of surface contamination. Do not expose the coating to weather for more than the allowable period printed under LIMITATIONS in the applicable Product Bulletin.

#### LIMITED WARRANTY

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

#### **HEALTH AND SAFETY**

**Warning:** KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY

**Disposal:** dispose in accordance with local, state, or federal regulations

Consult the Safety Data Sheet (SDS) for further health and safety information, available at www.stocorp.com

## **PRODUCT BULLETIN**

# StoGuard® Fabric StoGuard® RediCorner®

Product Number(s):

80207 StoGuard Fabric 6-in 81361 StoGuard Fabric 9-in 80208 StoGuard Fabric 4-in 80209 StoGuard RediCorner

## **TECHNICAL DATA**

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULT*
Accelerated Weathering/ Hydrostatic Pressure <sup>1</sup>	ASTM E2570/ AATCC 127 (modified)	No cracking of the coating or bond failure, no water penetration after cyclic weathering & 5 hour water column (21.5 in [55 cm])	Pass
Structural, Racking, Restrained Environmental Conditioning, and Resistance to Water Penetration <sup>1</sup>	ASTM E2570/ E1233/ E72/E331 (par 6.6.3)	No cracking in the field of the panel, at substrate joints, and at the interface with flashing, no water penetration	Pass, no water penetration after sequence of 15 minute water sprays at 2.86, 6.24, 12.0, and 15.0 psf (137, 299, 574, and 718 Pa)
Fire Performance of Assembly <sup>1</sup>	NFPA 285	Comply with acceptance criteria	Complies (see below)
Building Code Compliance	<ul> <li>Meets requirements for use on noncombustible construction as a component of:         <ul> <li>StoTherm® ci, StoPowerwall ci®, StoQuik® Silver, StoPanel®, and StoLite®. Refer to ICC-ESRs 1748, 4500, and 1233</li> <li>StoVentec® Ventilated Rainscreen wall systems. Refer to Intertek Design Listings Sto/CWP 30-01, Sto/CWP 30-02, and Intertek CCRR-0454</li> <li>Code compliant concrete, concrete masonry, portland cement stucco and other wall assemblies. Refer to ICC-ESR 1233</li> </ul> </li> </ul>		
*Results are based on lab testing under controlled conditions. Results can vary between labs or from field tests.			
1. Test specimens made with StoGuard I	Fabric embedded in StoGuard air and wate	r-resistive barrier coating at sheathing joints a	nd seams

Sto Corp.	Revision Number: 009	ATTENTION
3800 Camp Creek Parkway Building 1400, Suite 120 Atlanta, GA 30331 Tel: 404-346-3666 Toll Free: 1-800-221- 2397 Fax: 404 346-3119 www.stocorp.com	Date: 8/2023	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 Corp. website, <a href="https://www.stocorp.com">www.stocorp.com</a>