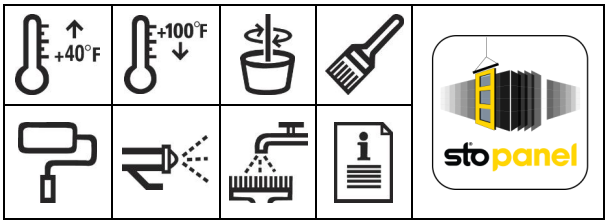
Building with conscience.

PRODUCT BULLETIN

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 and exterior grade or fire-resistance rated plywood in StoPanel Systems (see Limitations).

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 mils WFT: 450-550 ft^2 (41.8-51.1m^2)
20 mils WFT: 300-400 ft^2 (27.9-37.2m^2)
40 mils WFT: 200-300 ft^2 (18.6-27.9m^2)

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

SURFACE PREPARATION

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)[1]	Time[2] (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

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

TOTAL		8-11

1. 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

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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

- Glass mat gypsum sheathing for substrates must comply with ASTM C1177. Plywood shall be Exposure-1 exterior grade complying with U.S. DOC PS-1.
- 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 in-service water immersion.

Allowable weather exposure: 90 days when used as the AWRB component of StoPanel Classic and StoPanel Classic NExT ci. 180 days when applied in two coats and used as a component of other StoPanel Systems.

- 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.

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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/m²·s @ 75 Pa (<0.004 cfm/ft² @ 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 D3273	No mold growth after 28 days	Pass, no mold growth
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	ASTM E2570/ E1233/ E72/E331 (par	No cracking in the field of the panel, at substrate joints, and at the interface with flashing, no water penetration after exposure	Pass

to Water Penetration	6.6.3)		
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	• Meets requirements of 2018 IBC, IRC, and IECC as an air barrier and water-resistive barrier, complies with requirements of ICC AC 212 and ASTM E2570. • Class A Building Material. Meets requirements[1] for use on noncombustible construction and fire-resistance rated wall assemblies as a component of: • StoPanel Classic Next ci • StoPanel XPS ci • StoPanel Impact ci • StoPanel Classic ci • StoPanel Mineral ci • StoPanel MVES • StoPanel 3DP • StoPanel Dri-Design • StoPanel Brick ci • StoPanel Precast 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.		

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)

1. 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.

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Revision No: 002
Date: 01/2024

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 Corp. website, www.stocorp.com