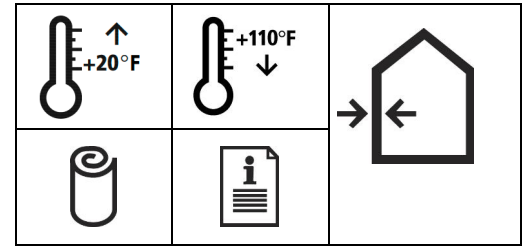


## PRODUCT BULLETIN

# StoShield™ SA VP

Product Number: 81949



## PRODUCT DESCRIPTION

StoShield SA VP is a self-adhered vapor permeable air barrier and water-resistive barrier (AWRB) for use over prepared vertical above-grade concrete, concrete masonry, wood sheathing, glass mat gypsum sheathing, and cementitious sheathing.

FEATURES	BENEFITS
Highly conformable	Folds easily around corners, edges, and transitions to facilitate installation
Versatile, aggressive adhesive system	Cold temperature application, stable under high heat conditions, primer-less adhesion to most substrates
Durable	Rigid and stable under air pressure loads; does not easily tear, puncture, or come off the wall with wind or water exposure
Compatible with other StoGuard® Products	Reliability and peace of mind

**Packaging:** 37.5-inch (0.95m) wide rolls, 75 lineal feet (22.9m) per roll, packaged in cartons

**Shelf Life:** 1 year when properly stored in original unopened packaging.

**Storage:** Store upright off the ground in a dry area between 50°F - 80°F (10°C - 27°C). Do not remove the roll from the box until ready for application. Prior to use, avoid prolonged direct sunlight on the membrane, especially in warm climates.

## SURFACE PREPARATION

All substrates must be installed in accordance with applicable code requirements and manufacturer's recommendations.

**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 clean, dry, and free of surface contamination, weather deterioration, physical damage or defects.

**Concrete:** must be fully cured, structurally sound, clean, dry, and free of frost, damage, and all bond-inhibiting materials, including dirt, dust, grease, efflorescence, form oil, curing compound, paints or coatings, salts, laitance, or other surface conditions that could interfere with adhesion. Remove form ties and repair surface defects such as spalls or honeycombs (refer to Sto Product Bulletins: Sto Wall Leveler and Patch or Sto Leveler and Skim Coat).

## SURFACE PREPARATION (continued)

**Concrete Masonry:** must be fully cured, structurally sound, clean, dry, and free of frost, damage, and all bond-inhibiting materials, including dirt, dust, grease, efflorescence, paints or coatings, salts, laitance, or other surface conditions that could interfere with adhesion. Provide masonry units with flush joints and free of surface defects. Projecting mortar must be removed so it is even with the plane of the wall.

## APPLICATION

Refer to *StoShield SA Self-Adhered Membrane Air & Water-Resistive Barriers Installation Guide* for illustrations.

### General Instructions:

1. Treat all detail and transition areas – penetrations such as pipes, scuppers and vents, rough openings, static and dynamic joints, connections at foundation and parapet – with StoGuard Conformable Membrane or other appropriate StoGuard Detail component. Refer to *StoGuard Conformable Membrane Installation Guide*.
2. Follow the basic principle of shingle lapping the membrane in courses from bottom to top of the wall. Shingle lap minimum 2-in (51mm) at horizontal membrane overlaps, minimum 3-in (76mm) at vertical membrane overlaps, and minimum 3-in (76mm) in each direction at inside and outside corners. Offset vertical seams from one membrane course to the next by a minimum of 12-in (305mm).
3. Pre-cut pieces with scissors or a scoring knife to manageable lengths and mark the position of the top edge of the membrane on the wall with a chalk line.
4. Hold the membrane in place in alignment with the chalk line and fold the top half of the membrane back on itself to expose the top half of the split release liner.
5. Remove the top half of split release liner from the back of the membrane. Pull from one end at a 45 degree angle and put the membrane in place, aligning it with the marked line.
6. Press 3-inches (76mm) of the top horizontal edge into place to adhere and hold the membrane in place. Then work from top to bottom, and center to edges, toward the lower half of the membrane, pressing the membrane into place by hand and removing all air pockets to achieve a smooth, wrinkle-free surface. Use a hard rubber roller to apply firm, uniform pressure by rolling from center to edges of the top half of the membrane, again removing all air pockets to achieve a smooth, wrinkle-free surface.

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### APPLICATION (continued)

7. Remove the remaining half of the split release liner, pulling from one end at 45-degree angle. Then press by hand into place, working from top to bottom and center to edges of the membrane. Use the roller to apply firm, uniform pressure by rolling from center to edges of the membrane to achieve a smooth, wrinkle-free surface.

**IMPORTANT:** Use StoGuard Conformable Membrane or Sto RapidGuard® gun-applied air barrier and waterproofing to seal any fish mouths, penetrations or tears caused by bracket or accessory applications, and any other voids in the membrane.

**Priming:** certain substrates may require priming to fill the texture of the substrate and enhance adhesion, depending on the condition of the surface. In such cases use compatible primer. When priming, substrate and ambient temperature must be 40°F (4°C) and rising for a minimum of 24 hours.

### LIMITATIONS

- Optimal application conditions: when surface and ambient temperatures are between 20°F to 110°F (-6.7°C to 43.3 °C). See Technical Data table for functional temperature limits.
- Do not use below grade or on surfaces subject to in-service water immersion.
- Do not use as a roofing membrane
- Not intended for prolonged (more than 6 months) UV exposure
- CMU surfaces: joints should be struck flush with the surface (smooth) to prevent water infiltration behind the membrane, as water may enter during construction due to concavity or unevenness of mortar joints.
- Use on Noncombustible Construction:
  - Not for use in StoTherm® ci Systems.
  - Not for use in StoPowerwall® ci and StoPowerwall ci (Inbound) Systems
  - StoVentec® Glass, Render, and MVF Systems: minimum 2-inch (51mm) thick, minimum 4 pcf (64 kg/m³) density continuous mineral wool insulation is required over the Sto AWRB.
  - StoQuik® Silver DrainScreen®: limited to walls that are less than or equal to 40 ft (12.2m) in height above grade plane.
  - Other Claddings: use is limited to walls that are less than or equal to 40 ft (12.2m) in height above grade plane, unless the Sto AWRB is the only combustible component in the wall assembly, and the wall covering is StoVentec Fiber Cement, brick, concrete, stone, terra cotta, stucco or steel with minimum thickness as specified in the code (refer to 2021 IBC Section 1402.5 and Table 1404.2).

### LIMITATIONS (continued)

- Use on Combustible Construction:
  - Limited to heights permitted by the applicable building code.
  - StoTherm® ci Systems require mechanical attachment. Refer to ICC ESR-1030.
  - StoPowerwall ci Systems limited to 3 inch (76mm) maximum insulation board thickness

### LIMITED WARRANTY

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

### HEALTH & SAFETY

**Health Precautions:** As with any chemical construction product, exercise care when handling.

**Precautionary Statement:** Material will be tacky/sticky. Wash hands after use.

**Personal Protection:** Eyes: safety glasses with side-shields recommended. Skin: normal lightweight work clothing will minimize skin contact. Use of lightweight cloth or leather gloves recommended. Respiratory: no adverse respiratory exposure anticipated under normal use. General Note: under normal conditions of use, this product is not expected to release hazardous chemicals or pose a physical hazard or health risk.

#### FIRST AID MEASURES:

**Eye Contact:** If wearing contact lenses, remove. Hold eyelids apart and immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. Get medical attention if irritation develops or persists.

**Inhalation:** Not applicable

**Ingestion:** Never give anything by mouth to an unconscious person. Seek medical attention if symptoms develop.

**Spills:** Not applicable

**Disposal:** As supplied, product is classified as RCRA non-hazardous. 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) on [www.stocorp.com](http://www.stocorp.com) for further health and safety information.

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## TECHNICAL DATA

TEST	METHOD	TEST CRITERIA	RESULTS*
Air Leakage Resistance (Material)	ASTM E2178	$\leq 0.004 \text{ cfm/ft}^2 (0.02 \text{ L/s/m}^2)$	Pass
Surface Burning	ASTM E84	Flame Spread less than 25 Smoke Developed less than 450	Flame Spread: 20 Smoke Developed: 5
Water Vapor Transmission	ASTM E96 Method B	Measure	$>10 \text{ perms } (5.72 \text{ ng/s}\cdot\text{m}^2\cdot\text{Pa})$
Installation Temperature Range	Lab Method	Measure	0°F to 140°F (-17.8 to 60°C)
Service Temperature Range	Lab Method	Measure	-40°F to 240°F (-40°C to 115°C)
Tensile Strength Machine Direction	AC38 / ASTM D5034	Measure	65 pli (11.4 N/mm)
Tensile Strength Cross Direction	AC38 / ASTM D5034	Measure	48 pli (8.41 N/mm)
Cold Temperature Pliability	AC 38 / ASTM D1970 / D1970M	No cracking or loss of adhesion after 2 hours at 0°F (-17.7°C)	Pass
Water Penetration Resistance after Conditioning	AC38 / AATCC 127	No water on underside: 210h UV Light Exposure, 25 cycles at 120 F for 3h followed by 3h H <sub>2</sub> O immersion at 73F, then 18h air dry, condition at 70F and 65% RH, then test 55cm hydrostatic head for 5h at 70 F	Pass
Peel Adhesion to Substrates	AAMA 711-Section 5.3 / ASTM D3330	1.5 lb/in (0.26 N/mm) minimum to Anodized Aluminum, Plywood, OSB, Rigid Vinyl, Glass Mat Gypsum, Product Facer	Pass
Peel Adhesion to substrates after Accelerated Aging	AAMA 711-Section 5.4 / ASTM G154 / D3330	Verify appearance and peel adhesion after 14 day exposure period to Anodized Aluminum	Pass
Peel Adhesion after Elevated Temperature Exposure	AAMA 711-Section 5.5 / ASTM D3330	Verify peel adhesion after 7 days at 176°F (80°C) to Aluminum	Pass, Level 3
Peel Adhesion after Thermal Cycling	AAMA 711-Section 5.6 / ASTM D3330	Verify appearance and peel adhesion after 10 freeze/thaw cycles (8h at 120°F [50°C], 16h at -40°F [-40°C]) to Aluminum	Pass
Peel Adhesion after Water Immersion	AAMA 711-Section 5.8 / ASTM D3330	Verify peel adhesion to Anodized Aluminum after 7-day immersion	Pass
Resistance to Peeling	AAMA 711-Section 5.9	Visually inspect for edge curling $> \frac{1}{2}$ -in (12.5mm) or corner curl greater than $\frac{1}{2}$ width after 176°F (80°C)	Pass, Level 3
Air Leakage Resistance (Assembly)	ASTM E2357	$\leq 0.04 \text{ cfm/ft}^2 (0.2 \text{ L/s/m}^2)$	Pass
Building Code Compliance	<ul style="list-style-type: none"> <li>Complies with IBC, IRC, and IECC requirements as an Air Barrier Material</li> <li>Complies with ICC-ES AC308 requirements as a Water-resistive Barrier (WRB)</li> <li>Class A Building Material</li> <li>Meets requirements for use on noncombustible construction as a component of: <ul style="list-style-type: none"> <li>StoPowerwall®, StoPowerwall® MVES</li> <li>StoPowerwall® DrainScreen®, StoPowerwall® DrainScreen® MVES</li> <li>StoVentec® ventilated rainscreen wall systems (with minimum 2-inch [51mm] continuous mineral wool insulation)</li> <li>Other Claddings: refer to limitations</li> </ul> </li> </ul>		

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

<b>Sto Corp.</b> 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 <b>www.stocorp.com</b>	Revision Number: 002 Date: 08/2025	<b>ATTENTION</b> <p>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. <b>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.</b> 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="http://www.stocorp.com">www.stocorp.com</a></p>
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