



**1. Product Name**

**SlopeShield SA® Self-Adhered Water-Resistive Vapor-Permeable Roof Underlayment Sheet Membrane**

**2. Manufacturer**

VaproShield, LLC.  
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**3. Product Description**

**BASIC USE AND APPLICATIONS**

SlopeShield SA membrane is a self-adhering water resistive vapor permeable sheet intended to be used as a roof underlayment membrane over sloped roof applications. SlopeShield SA Self-Adhered membrane is designed to be applied over most common construction substrates including plywood, gypsum, steel deck and rigid insulation. Acceptable roof cladding systems include most Metal Roofing systems, Slate, Tile and Cedar Shakes.

**BENEFITS**

SlopeShield SA Self-Adhered membrane is a no VOC, non-asphaltic fully adhered water resistant roofing underlayment with excellent liquid water holdout capabilities, a high degree of vapor permeability and is designed to bond to roofing substrates without the use of a primer or surface conditioner. SlopeShield SA Self-Adhered membrane is UV stable, tear and puncture resistant and controls air leakage when installed as a continuous membrane over the roof.

SlopeShield SA Self-Adhered membrane can be installed in temperatures as low as 20 degrees F (-6C).

The strong durable textured surface of SlopeShield SA Self-Adhered membrane aids with slip resistance, cinches around fasteners to prevent water penetration and can remain exposed for up to 4 months.

**MATERIAL**

SlopeShield SA Self-Adhered membrane is a triple layer sheet membrane consisting of a front and back carrier sheets with a middle layer of spun-bonded polypropylene fabric engineered to resist liquid water

penetration and has a micro-porous film laminate with a proprietary acrylic vapor permeable pressures sensitive adhesive fully applied to the back sheet.

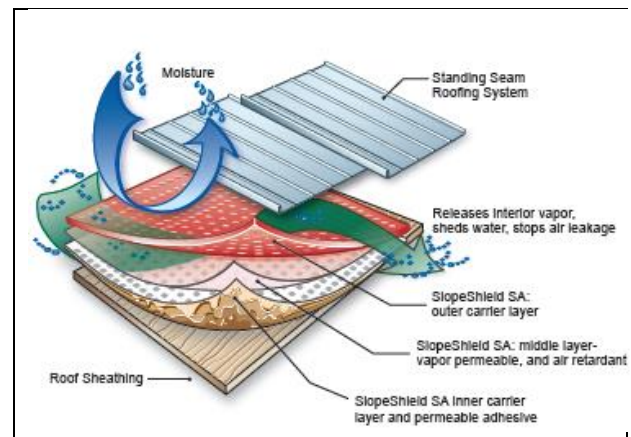
**ACCESSORIES**

Compatible accessories intended to be used in conjunction with SlopeShield SA Self-Adhered membrane include:

- VaproFlashing SA™ a zero VOC self-adhered vapor permeable water-resistive sheet membrane consisting of multiple layers of UV stabilized spun-bonded polypropylene having the following properties equal to the primary self-adhered water resistive underlayment membrane. Available in sizes 11-3/4 inches x 164 feet (298.4mm x 50m) or 19-2/3 inches x 164 feet (499.6mm x 50m).
- VaproTape™ (Single-Sided): 20 mil thick by 3 inches (76 mm) wide lap seam and edge tape
- VaproAluma™ Tape: 20 mil thick by 4.5 inches (114 mm) and 9 inches (229 mm) wide, foil faced, UV stable, moisture-resistant, self-priming flashing and membrane transition tape.

**SIZES:**

SlopeShield SA Self-Adhered Water-Resistive Vapor-Permeable Roof Underlayment Sheet Membrane is supplied in rolls measuring 59 inches by 164 feet (1500 mm by 50 m).



**SUSTAINABLE DESIGN BENEFITS**

SlopeShield SA Self-Adhered Water-Resistive Vapor-Permeable Roof Underlayment Sheet Membrane protects against water intrusion but allows building materials that may have become wet during the construction phase to dry out, reducing the risk of wood rot, deterioration or corrosion.

The strong non-woven spun-bonded polypropylene membrane cinches around screw fasteners without tearing or stretching which allows for movement of the roof fastener attachment.

**SLOPESHIELD SA® SELF-ADHERED Testing**

PROPERTY	TEST/STANDARD	RESULT
Breaking Strength/Elongation	ASTM D5034 AC 48, Section 4.1	MD – 88 lbf (391 N) CD – 83 lbf (369 N) PASS
Water Vapor Transmission and Permeance	ASTM E96* (Water Method) AC 207, Section 4.1	50 perms 271.87 g/m <sup>2</sup> 24 hrs 2861 ng/Pa/s/m <sup>2</sup> PASS
Air Permeance	ASTM E2178	0.00002 cfm/ft <sup>2</sup> 0.0001 L/s/m <sup>2</sup> PASS
Water Ponding	AC 48, Section 4.4 24" head of water for 48 hrs.	PASS
Accelerated Aging	AC48, Section 4.7 AC207, Section 4.6	PASS
UV Exposure	AC48, Section 4.8 AC207, Section 4.7	PASS
Liquid Water Transmission	ASTM D4869 AC207, Section 4.3	PASS
Rupture Resistance	ASTM D3462 AC207, Section 4.4	PASS
Pliability	ASTM E48 AC 207, Section 4.2	PASS
<b>INDEPENDENT TESTING</b>		
Nominal Thickness	Calibrated Micrometer	0.022 inch (0.56 mm)
Basis Weight	Electronic Weight Scale	7.37 oz/yd <sup>2</sup> (0.819 oz/ft <sup>2</sup> ) 250 g/m <sup>2</sup>
Acceptance Criteria for Polypropylene Roof Underlayments AC 207 & Acceptance Criteria for Roof Underlayments for use in severe climate areas AC48. Tested in accordance with ICC-ES AC48 and AC207 criteria to meet UBC, IBC and IRC requirements for Roofing Underlayment.		
*ASTM E96 - Method B (wet cup method) typically gives a more realistic result for permeance than does the Method A (dry cut/desiccant) method.		
<b>ROOF SLOPE</b>	<b>APPLICATION</b>	
1:12	For slip sheet applications only	
2:12	Minimum 12" (305 mm) Horizontal/Vertical Lap Seams VaproLiqui-Flash™ or VaproShims™ required under metal clips and similar penetrations	
3:12	Minimum 12" (305 mm) Horizontal/Vertical Lap Seams VaproLiqui-Flash™ or VaproShims™ required under metal clips and similar penetrations	
4:12 and Greater	Minimum 6" (152 mm) Horizontal/Vertical Lap Seams Neither VaproLiqui-Flash™ or VaproShims™ are required for clips	

**RELATED LEED CREDITS**

SlopeShield SA Self-Adhered membrane contributes to LEED points, is 100 percent recyclable and is free of urea-formaldehyde constituents.

- IEQ Credit 3.1: Construction Indoor Air Quality Management Plan-During Construction
- EA Credit 1: Optimize Energy Performance

**5. Installation**

**STORAGE AND HANDLING**

Store and handle products according to manufacturer's written recommendations. Store rolled materials

vertically on end in original packaging at temperatures between 40°F and 120° F. Protect materials from direct sunlight and inclement weather until ready for use.

**PREPARATION**

- Verify that all surfaces are clean and dry to the touch and in "as new condition," sound, and free of oil, grease, dirt, or other contaminants detrimental to the adhesion of the membrane.
- Ensure all preparatory work, including installation of mechanical and electrical penetrations and fixtures are complete and secured in-place prior

## PRODUCT DATA SHEET

## 07 30 05.1 Self-Adhered Roof Underlayment

to applying SlopeShield SA Self-Adhered membrane. See recommendations below.

- Mechanical fasteners used to secure sheathing boards, insulation or penetrate roof deck shall be set flush with surface and fastened into solid backing.
- Do not install SlopeShield SA Self-Adhered membrane when ambient temperatures are below 20° F.
- Prior to installation and removing release paper, unroll and allow material to adjust to the ambient temperature.
- Plan the installation and layout of SlopeShield SA Self-Adhered membrane PRIOR to application, to minimize waste.

### GENERAL

Install SlopeShield SA Self-Adhered membrane and related accessories according to manufacturer's separate written installation instructions.

### PENETRATIONS, UP-TURN FLASHINGS AND VALLEY FLASHINGS

- Install VaproFlashing SA™ Self-Adhered flashing membrane along eaves and rake, and seal roof connections, up-turn details, stack and vent pipes and other junctures or penetrations of the roof system.
- Allow flashing membrane to hang down over to lowest point of fascia to accommodate adjacent surface tie-ins and connections or as detailed.
- Wrap flashing membrane down fascia and provide fasteners at 2' o/c (on center) along underside of fascia or as detailed to secure and protect the membrane from tearing due to wind.
- Install pre-manufactured penetration sleeves around mechanical and electrical penetrations as per Mechanical / Electrical Division.
- Install double-sided VaproTape across the top and sides of pre-manufactured penetration sleeves, pre-measured and fit water-resistive vapor permeable roof underlayment membrane over and around sleeves and press into double-sided tapes against the sleeves as appropriate to form a weather tight connection.

### PRE-MANUFACTURED CURBS

- Install pre-manufactured curbs as per approved shop drawings for curb and roof system installations.
- Extend SlopeShield SA Self-Adhered membrane over curbs.
- Seal to corners with VaproTape as appropriate, forming a weather tight connection.

### VALLEY SUBSTRATES

- Prepare valley substrates
- Provide continuous uniform surface
- Install full width sheets of SlopeShield SA Self-Adhered membrane centered in valley
- Measure and pre-cut SlopeShield SA Self-Adhered membrane into manageably sized sheets to suit the application conditions
- Start at lowest point of roof
- Install SlopeShield SA Self-Adhered membrane in roof slope direction and in overlapping shingle format
- Install second-ply of water-resistive roof underlayment membrane on each side of valley
- Place membrane in the roof slope direction in overlapping shingle format
- Roll installed applications of SlopeShield SA Self-Adhered membrane, ensuring positive contact with substrate

### ROOF UNDERLAYMENT MEMBRANE

- Measure and pre-cut SlopeShield SA Self-Adhered membrane into manageable size sheets to suit application conditions.
- Begin installation of SlopeShield SA Self-Adhered membrane starting at the lowest point of roof.
- Align and position SlopeShield SA Self-Adhered membrane.
- Place sheets over roof deck substrate and provide min 3 inch lap over VaproFlashings.
- Remove release paper and press firmly into place.
- Subject to roof slope provide minimum 12 inch overlap as per the attached table.
- Apply pressure to ensure positive contact onto roof deck substrate.
- Install subsequent sheets of SlopeShield SA Self-Adhered membrane in overlapping shingle format.
- Ensure sheets lay smooth and flat to surfaces.
- Roll membrane and lap seams with roller to ensure contact and adhesion.

### PENETRATION SEALANTS

- Seal penetrations, lap seams around pipe penetrations or reverse laps with Butyl based sealants and Dow 758
- Detail penetrations prior to the installation of the field membrane
- Always ensure overlapping shingle format result

### LIMITATIONS

SlopeShield SA Self-Adhered Water-Resistive Vapor-Permeable Roof Underlayment Sheet Membrane is not intended to be a temporary roof system.

### PROTECTION DURING INSTALLATION

- Cover membrane as soon as practical.
- SlopeShield SA Self-Adhered membrane may remain exposed for up to 4 months.
- SlopeShield SA Self-Adhered membrane is not intended to be a temporary roof system.
- Protect uncompleted installations of SlopeShield SA Self-Adhered membrane from damage due to extreme weather conditions, physical abuse and other sub-trades.
- Protect exposed membrane to prevent damage from rainwater runoff draining off upper roofs to lower roofs such as overhangs, ~~≠~~ eaves, ~~≠~~ or valleys onto SlopeShield SA Self-Adhered membrane.
- Cover SlopeShield SA Self-Adhered membrane with permanent roof covering as soon as practical.

## **6. Availability**

VaproShield products are available from qualified representatives throughout North America; contact VaproShield or go to [www.vaproshield.com](http://www.vaproshield.com) for local contact information.

## **7. Warranty**

VaproShield will provide replacement of Self-Adhered Water-Resistive Vapor-Permeable Roof Underlayment materials if original material, handled and installed in accordance with manufacturer's separate written installation instructions, fails due to material defects within 20 years of date of purchase. This material warranty does not include labor for installation. Details of warranty terms and conditions are available from VaproShield.

## **8. Maintenance**

SlopeShield SA Self-Adhered membrane is concealed by the roofing product following installation and requires no maintenance. The SlopeShield SA Self-Adhered membrane should not be subjected to asphaltic materials, chemicals, surfactants, or cleaning compounds that could affect the water resistance of the fabric surface; if exposed, replace affected fabric.

## **9. Technical Services**

Detailed information including product literature, test reports, installation instructions, and information on special applications is available through VaproShield.

## **10. Available Resources**

- ICC-ES Report and related independent test reports are available from VaproShield.