## PRODUCT DATA SHEET





### **Product Description**

RainScreen SA is a self-adhered Air Barrier and WRB membrane with built-in rainscreen drainage matrix. It protects the building envelope by allowing vapor pass through (breathable) but not air or liquid water, mitigating costly moisture damage and saving energy for the life of the building. The factory-bonded drainage matrix (3mm or 7mm) maintains an unimpeded vertical drainage plane behind the cladding.

#### **BASIC USE**

Designed for commercial and residential above grade construction applications, RainScreen SA creates a water resistive air barrier and drainage matrix when applied outside of the wall sheathing and behind the exterior wall cladding.

#### **MATERIALS**

RainScreen SA consists of multiple layers of spun-bonded polypropylene with specially formulated adhesive and a factory-bonded rainscreen matrix.

#### **BENEFITS**

**Superior building envelope protection** – high drying capacity (25 perms) allows building materials to dry out, reducing the risk of damage from moisture infiltration, mold, mildew, and rot for the life of the building.

**Factory installed drainage matrix** – bonded directly to the membrane is available in two (2) depths: 3mm or 7mm.

**Bonded drainage matrix** – creates unimpeded vertical drainage plane behind cladding

One step air barrier, WRB installation and rainscreen cavity - reduces installation time

**Aggressive adhesive** – ensures membrane adhesion on multiple substrate types including plywood, OSB, gypsum sheathing, concrete, and steel.

**Air barrier** – stops air infiltration, passes ASTM E2178 materials test and ASTM E2357 Air Barrier assembly test.

**Apply membrane** – in virtually all suitable weather conditions including below freezing 20°F (-6°C) and rising without the use of primer. (Surface must be frost free.)

**Fully bonds without primer –** no primers are used or required for product installation.

**60 day UV and weather exposure –** makes membrane ideal for phase construction.

Compatible with all VaproShield rough opening flashing accessories eliminating the need for additional system testing.

**Simple installation** – requires only basic tools, no specialized mobilizations or protection gear are required.

**Apply to clean and dry-to-the-touch** "as new" substrates, no additional preparation is required.

Spans substrate joint gaps up to 7/8" (22.2mm), eliminates need for tapes and fillers.

Emits zero VOCs, contains no Red List Chemicals, no primer required, ensuring crew safety and a healthy building.

### **Compatible Substrates**

- Exterior Gypsum Sheathing
- Rigid Insulation
- OSBConcrete

- Brick
- Plywood
- Metal (Steel, Aluminum)
- Fiberglass Window and Door Frames

**Contact VaproShield Technical** – if you have additional substrate or technical questions.

### Technical Data & Environmental

Passed and tested to industry standards for Air Barrier and Weather Resistive Barriers and ASTM E2273 Drainage Test.

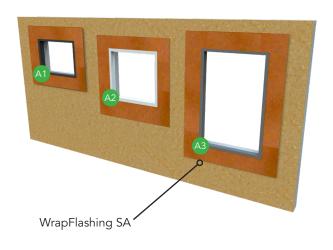
RainScreen SA emits zero VOCs, making the membrane safe for work crews and occupants for the life of the building.

PHYSICAL PROPERTIES					
PROPERTY	RainScreen SA 3mm	RainScreen SA 7mm			
Color	Color Beige Membrane/Black Matrix				
Thickness with Matrix	4.4 mm	7.2 mm			
Membrane Weight with Matrix	504.4 g/m² (1.7 oz/ft²)	580.1 g/m² (1.9oz/ft²)			
Roll Weight	27lbs (12kg)	27lbs (12kg)			
Roll Dimensions gross	29.5 x 105' (.75m x 32m), 258.1 S/F (23.9 S/M)	29.5" x 60' (.75m x 18.2m) 147.5 S/F (13.7 S/M)			
Roll Dimensions Net	26.5" x 105' (0.7m x 32m), 231.9 S/F (21.5 S/M)	26.5" x 60' (.7m x 18.2m), 132.5 S/F (12 S/M)			
Skid	15 Rolls				
Primer	No Primer Required				
VOCs	None				
Exposure Before Permanent Cladding	60 Days				
Minimum Application Temperature	20°F (-6°C)				
Service Temperature	-40°F (-40°C) - 225°F (107°C)				
Warranty	20 year material warranty				



Rainscreen SA Product No.: 3mm 75709192, 7mm : 75709194/WrapFlashing SA Product No.: 46105590 / 46108090





## A ROUGH OPENING FLASHING OPTIONS

The following rough opening flashing components can be used:

- A1 VaproLiqui-Flash™
- A2 BlockFlashing™ or WrapFlashing SA™
- A3 VaproBond™

Reference individual data sheets for comprehensive information at VaproShield.com.

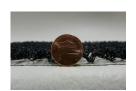
Rough Opening Flashing Membranes					
Product	Part No.	Roll Sizes			
WrapFlashing SA Self-Adhered Roll	46105590 46108090	Roll Size: 11 3/4" x 164' (298mm x 50m) 161 S/F (15 S/M) Roll Size: 19 2/3" x 164' (500mm x 50m) 269 S/F (25 S/M)			

## B DRAINAGE MATRIX OPTIONS

Two rainscreen drainage matrix options, 3mm and 7mm, offer cost saving options and work with conventional siding, stucco, stone, trim and windows.



3mm matrix creates minimal rainscreen cavity, facilitating conventional installation of siding, trim and windows



7mm matrix offers enhanced drainage performance for code and/or more demanding applications

Window and Rough Openings Flashing	Vapro- Liqui-Flash	BlockFlashing	VaproBond
Application Temperature	35°F to 110°F (1.7°C to 43°C)	0°F to 180°F (-18°C to 82°C)	20°F to 120°F (-6.7°C to 49°C)
Drying Capacity Breathable Permeability	High	None	Low
Application Method	Sausage Gun / Putty Knife or Brush	Utility Knife / J-Roller	Sausage Gun / Putty Knife

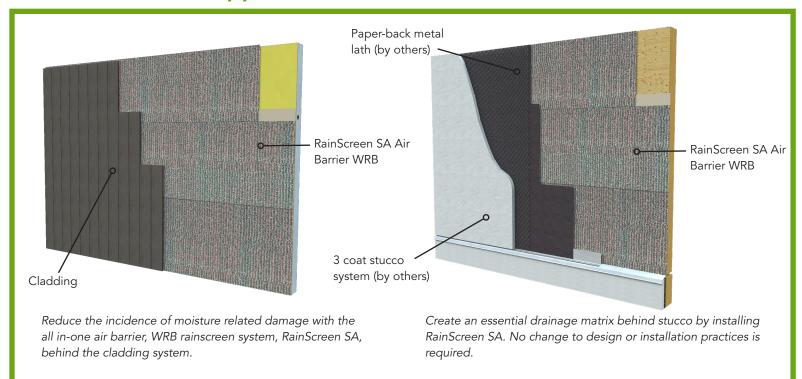
Visit VaproShield.com to review other air barrier WRB solutions that offer sustainability attributes and for use with open joint cladding.

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# RainScreen SA Applications



### **RELATED LEED CREDITS**

VaproShield membranes qualify for LEED credits. Visit VaproShield.com for the latest sustainability and LEED information.

### Installation

#### STORAGE AND HANDLING

Store material rolls on end in original packaging. Protect rolls from direct sunlight and inclement weather until ready for use.

### **SAFETY**

Work crews are safe around VaproShield membranes. RainScreen SA contains zero VOCs or toxins.

### **PREPARATION**

All surfaces must be dry, sound, clean, "as new" condition, and free of oil, grease, dirt, excess mortar or other contaminants detrimental to the adhesion of the water resistive air barrier membrane and flashings. Fill voids and gaps in substrate greater than 7/8 inch (22.2 mm) in width to provide an even surface. Strike masonry joints full-flush.

#### **BEST PRACTICE INSTALLATION**

RainScreen SA requires installation sequence modifications. Review installation instructions and details prior to beginning a project. Visit VaproShield.com for complete installation instructions and instructional videos.

#### LIMITATIONS

RainScreen SA should be covered within 180 days of installation.

Do not contaminate RainScreen SA membrane with building site chemicals which make it more wettable (e.g., surfactants). This will adversely affect its water resistance and therefore its contribution to the water resistance of the overall wall system.

Flash fenestrations per window and door manufacturers' recommendations, local building code requirements, ASTM and AAMA guidelines.

If desired adhesion is not attained between membranes due to site conditions, VaproShield recommends applying a bead of VaproBond as an additional solution to pressure rolling.

# **Availability**

VaproShield products are available throughout North America, Central and South America, and New Zealand. Visit VaproShield.com for product availability in your area.

# Warranty

A 20-year material warranty is available.



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TESTING DATA					
PROPERTY	STANDARD	RESULT			
Strength					
Dry Tensile Strength ≥ 20 lbs/in	ASTM D828 Standard Test Method for Tensile Properties of Paper and Paperboard Using Constant-Rate-of-Elongation Apparatus	MD - 6.1 N/mm (34.8 lbs/in)			
Dry Breaking Force (Grab method) MD ≥40 XMD ≥35	ASTM D5034 Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)	MD – 391 N (88 lbf) CD – 369 N (83 lbf)			
Cold Mandrel Bend Test	AC38 Section 3.3.4	Warp (Machine) Direction - No cracking Filling (Cross) Direction - No cracking			
Weathering Tests	AC38 Section 4.1.2 UV Exposure AC38 Section 4.1.3 Accelerated Aging	UV - No visual change UV & Accelerated - visibly lighter, no visible deterioration			
Water Vapor Transmittance					
Water Vapor Transmission Desiccant Method, Procedure A, 24.4°C (76.0°F) 50 %RH	ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials	14.7 Perm (grain/h•ft²•inchHg) 480 ng/Pa•s•m²			
Water Vapor Transmission Water Method, Procedure B, 24.4°C (76.0°F) 50 %RH	ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials	20.5 Perm (grains/hr•ft²•inchHg) 1171 ng/Pa•s•m²			
Water Vapor Transmission Dynamic Relative Humidity Measurement (23°C 50 %RH)	ASTM E398 Standard Test Method for Water Vapor Transmission Rate of Sheet Materials Using Dynamic Relative Humidity Measurement	21.95 Perm (grain/h•ft²•inchHg) 1255 ng/Pa•s•m²			
Air Resistance Testing					
Air Permeance	ASTM E2178 @75 Pa Standard Test Method for Air Permeance of Building Materials	0.0014 L/s m² @ 75 Pa ( 0.00276 cfm/ft² @ 1.57 psf )			
Adhesion Testing					
90° Peel Adhesion	AAMA 711	PASS			
Water Resistance Testing					
Nail Sealability	ASTM D1970/ section 7.9 Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection	Pass - Review Fastener Penetrations Technical Bulletin at VaproShield.com			
Water Resistance (Boat Test)	ASTM D779 Standard Test Method for Water Resistance of Paper, Paperboard, and Other Sheet Materials by the Dry Indicator Method (Withdrawn 2011)	Control - No leakage Weathered - No Leakage			
Water Resistance (Control after Weathering)	AATCC 127 Hydrostatic pressure test (550 mm water column for 5 hours), American Association of Textile Chemists and Colorists	Control - No leakage Weathered - No Leakage			
Drainage Test	ASTM E2273 Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies	Exceeds Required 90%			
Fire Testing					
Flame Spread Smoke Developed	ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials	Flame Spread 10 Smoke Developed 75 (Class A)			