

RevealShield SA[®] Self-Adhered

Patent-pending, highly vapor permeable Water Resistive Barrier (WRB) and Air Barrier (AB) sheet membrane. Product No.: 13309090

RevealFlashing SA[™] Self-Adhered

Product No.: 44305500

Product Description

The **patent-pending** RevealShield SA Self-Adhered WRB/Air Barrier membrane 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.

BASIC USE

RevealShield SA Self-Adhered is installed above grade behind **open joint** rainscreen wall cladding assemblies where permanent UV exposure is inherent.

CLADDING OPEN JOINTS

Cladding open joints can be up to 2" (5.1 cm) or up to 40% of the total elevation area.

MATERIALS

RevealShield SA Self-Adhered consists of multiple layers of spun-bond polyester fabric with a proprietary coating and a fully self-adhered pressure sensitive adhesive that allows for initial re-positioning prior to rolling.

BENEFITS

Uniquely suited for open joint cladding requiring advanced UV protection such as perforated panels, reclaimed wood and special facades.

Superior building envelope protection – high drying capacity (63 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.

Airtight barrier – stops air infiltration as per the ASTM 2357 Air Barrier assembly test, ABAA approved.

Consistent millage thickness – a factory-made rolled good ensures consistent properties and performance.

Fully tested building envelope system – rough opening flashing accessories eliminate the need for untested outside components.

Fully bonds without primer to most substrates.

No primers are used or required for product installation.

For OSB and other substrates contact VaproShield Technical.

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

RevealShield SA, when used as a WRB/AB, meets the exemption for low combustibility provided it is the only combustible component in the wall assembly, as referenced in the current International Building Code (IBC) Chapter 14.

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

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

Phase construction ready, installs in below-freezing temperatures, non-directional installation, sustains up to 12 months UV and climate exposure prior to open joint cladding installation.

Emits zero VOCs ensuring crew safety and a healthy building.

Compatible Substrates

- Exterior Gypsum Sheathing
- Rigid Insulation
- Precast Concrete
- Concrete Block
- Cast-in-place Concrete
- Plywood
- Pre-painted Steel
- Galvanized Metal
- Aluminum (Painted/Mill Finish)
- Anodized Aluminum
- Vinyl Window and Door Frames
- Fiberglass Window and Door Frames

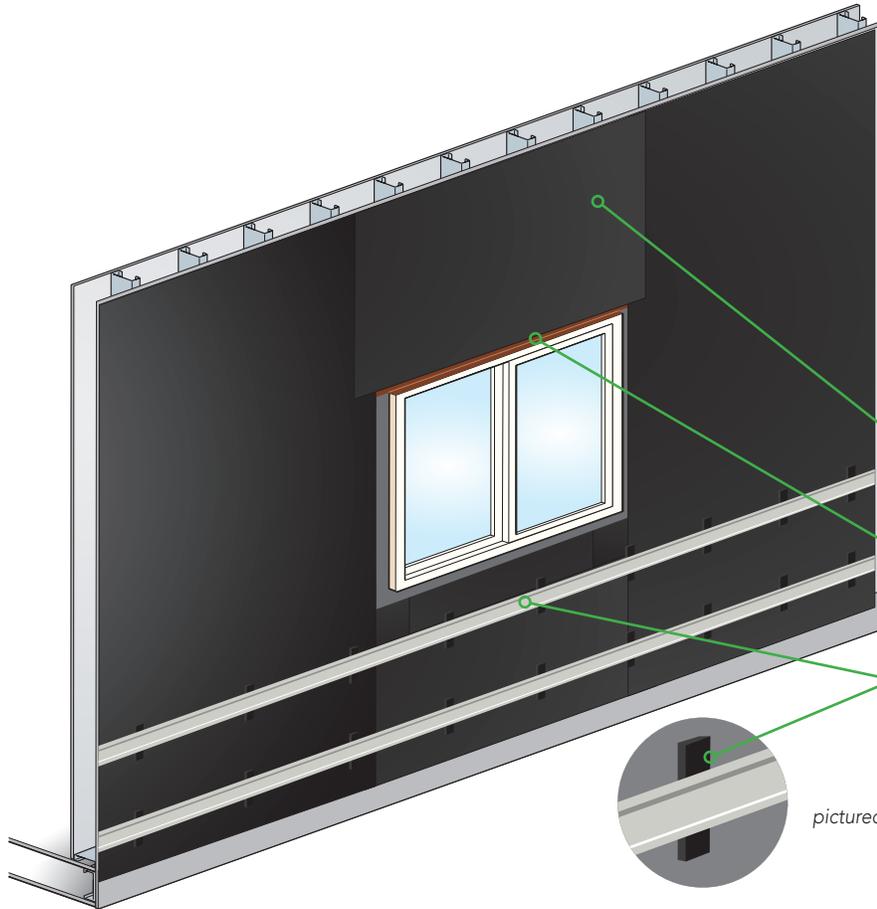
For OSB and other substrates contact VaproShield Technical.

Technical Data & Environmental

Environmental Product Declaration (EPD) third-party verified. ISO 21930 and ISO 14025 North American compliant

Tested to industry standards for Weather Resistive Barriers and approved by ABAA to meet requirements for Air Barriers.

| PHYSICAL PROPERTIES | |
|------------------------------------|--|
| PROPERTY | RESULT |
| Color | Black (top), Black (back) |
| Thickness | 0.4798 mm (18.889 mil) |
| Membrane Weight | 364.66 g/m ² (1.20 oz/ft ²) |
| Roll Weight | 55 lbs (25 kg) |
| Roll Dimensions | 59" x 102' (1.5m x 31.1 m) |
| Roll Coverage | 500 sq. ft. (46.6 sq. m.) gross |
| Skid | 25 Rolls |
| Primer | No Primer Required |
| VOCs | None |
| Exposure Before Permanent Cladding | 12 months |
| Minimum Application Temp | 20°F (-6.6°C) |
| Service Temperature | minus 40°F (-40°C) - 225°F (107°C) |
| Warranty | 20 year material warranty |

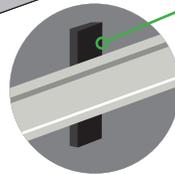


Complete Building Envelope System

WRB/AIR BARRIER
RevealShield SA Self-Adhered

A ROUGH OPENING FLASHING OPTIONS

B RAINSCREEN COMPONENTS



pictured: VaproShims SA Self-Adhered

A ROUGH OPENING FLASHING OPTIONS

The following rough opening flashing can be used:

- VaproLiqui-Flash™
- BlockFlashing™ or RevealFlashing SA™
- VaproBond™

Reference individual data sheets for comprehensive information.

B RAINSCREEN COMPONENTS

RevealShield SA Self-Adhered membrane requires a ventilated and unimpeded vertical drainage cavity or rainscreen system to be incorporated into all WRB/AB installations. VaproShim SA Self-Adhered accomplishes this, and are available as a corresponding accessory. View corresponding Product Data Sheet for in-depth information.



VaproShim SA™ Self-Adhered

Simple, cost effective neoprene accessory, creates a rain screen drainage plane and air/water tight seal for fastener penetrations, available in two thicknesses: 1/8" (3mm), 1/4" (6mm).

Rough Opening Flashing Membranes

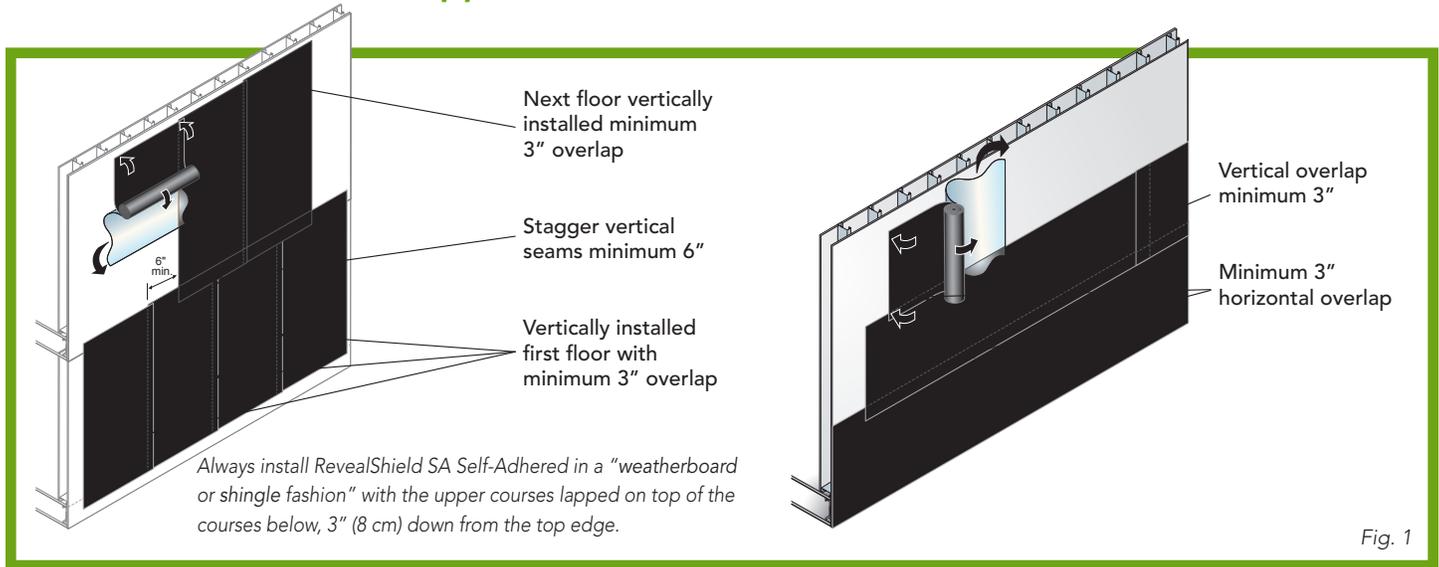
| Product | Part No. | Roll Sizes |
|-------------------------------------|----------|---|
| RevealFlashing SA Self-Adhered Roll | 44305500 | Roll Size: 11 3/4" x 102' (298mm x 31.1m) 100 S/F (9.3 S/M) |

In conjunction with:

| Window and Rough Openings Flashing | VaproLiqui-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 | High | None | Low |
| Breathable Permeability | | | |
| Application Method | Sausage Gun / Putty Knife or Brush | Utility Knife / J-Roller | Sausage Gun / Putty Knife |

Visit VaproShield.com to review additional flashing options.

Vertical and Horizontal Application



RELATED LEED CREDITS

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

Installation

STORAGE AND HANDLING

Store materials on end in original packaging at temperatures between 40°F and 120°F (4.4°C and 48.9°C). Protect materials from direct sunlight and inclement weather until ready for use.

SAFETY

Work crews are safe around VaproShield membranes. RevealShield SA Self-Adhered 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

All overlaps must be a minimum of 3" (8 cm) on vertical and horizontal seams. Inside and outside vertical corner overlaps should be a minimum 6" (15 cm) in both directions, staggered a minimum of 24" (61 cm), and should not occur directly above or below windows or doors. See Fig. 1.

Visit www.VaproShield.com for complete installation instructions and instructional videos.

LIMITATIONS

RevealShield SA Self-Adhered should be covered within 12 months of installation with permanent cladding material.

Open joint spacing should not exceed 2" (5.1 cm) with maximum open area not to exceed 40% of total elevation area of open joint cladding.

Minimum recommended application temperature of 20°F (- 6°C) and rising.

Do not contaminate RevealShield SA Self-Adhered 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.

Warranty

A 20-year material warranty is available.

PRODUCT DATA SHEET

RevealShield SA® Self-Adhered Product No.: 13309090 / RevealFlashing SA Product No.: 44305500

| TESTING DATA | | |
|--|--|---|
| PROPERTY | STANDARD | RESULT |
| Strength | | |
| Dry Tensile Strength ≥ 20 lbf/in | ASTM D828 Standard Test Method for Tensile Properties of Paper and Paperboard Using Constant-Rate-of-Elongation Apparatus | 6.6 N/mm (37.3 lb/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 – 529 N (119 lb/in) XMD – 427 N (96 lb/in) |
| 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 | 28.058 Perm (grain/h•ft ² •inchHg) 1605 ng/Pa•s•m ² |
| 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 | 63.481 Perm (grain/h•ft ² •inchHg) 3632 ng/Pa•s•m ² |
| 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 | 65.52 Perm (grain/h•ft ² •inchHg) 3748 ng/Pa•s•m ² |
| Adhesion Testing | | |
| Adhesion to backing | ASTM D3330 method B | PASS |
| Peel Adhesion 90° Peel Adhesion, 24 hours | AAMA 711 Section 5.3 | PASS |
| Accelerated Aging and UV Exposure 90° Peel Adhesion, 24 hours | AAMA 711 Section 5.4 | PASS |
| Elevated Temperature 122° F (50 °C) for 7 days) 90° Peel Adhesion, 24 hours | AAMA 711 Section 5.5 | PASS |
| Thermal Cycling 90° Peel Adhesion, 24 hours | AAMA 711 Section 5.6 | PASS |
| Resistance to Peeling from Itself 90° Peel Adhesion 24 hours | AAMA 711 Section 5.9 & Annex 2 | DensGlas Gold: No peeling, buckling or ripping Plywood: No peeling, buckling or ripping Concrete: No peeling, buckling or ripping CMU: No peeling, buckling or ripping |
| Air Resistance Testing | | |
| Air Permeance | ASTM E2178 @75 Pa Standard Test Method for Air Permeance of Building Materials | 0.0001 L/s•m ² @ 75 Pa (0.0000 cfm/ft ² @ 1.57 psf) |
| Air Barrier | ASTM E2357 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies | <0.01 L/s•m ² @ 75 Pa (<0.002 cfm/ft ² @ 1.57 psf) |
| Air Barrier | ASTM E283 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen | <0.01 L/s•m ² @ 75 Pa (<0.01 cfm/ft ² @ 1.57 psf) |
| 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 |
| Fire Testing | | |
| Flame Spread Smoke Developed | ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials | Flame Spread 0 Smoke Developed 75 |
| NFPA 285 Compliant | Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components | View over 50 compliant assemblies with various manufacturers at VaproShield.com or Contact VaproShield Technical Team, 1-866-731-7663 opt. 5 |

PRODUCT DATA SHEET

RevealShield SA® Self-Adhered Product No.: 13309090 / RevealFlashing SA Product No.: 44305500

| TESTING DATA | | |
|---------------------------------|---|---|
| PROPERTY | STANDARD | RESULT |
| Fire Testing (continued) | | |
| Cone Calorimeter Testing Data | ASTM E1354 Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter | Time to ignition: 6 sec Flame Duration: 64 sec Ave. Effective Heat of Combustion: 5.1 MJ/kg Ave. HRR at 60 sec: 62 kW/m ² Ave. HRR at 180 sec: 0 Peak HRR: 98 kW/m ² Time of Peak: 36 Total HRR/A: 4.0 MJ/m ² |
| Canadian Standards | | |
| Multiple | CAN/CGSB 51.32 – Sheathing Membrane, Breather Type | PASS |