VAPROSHIELD®
Breathable Membrane Systems for Roofs & Walls

RevealShield IT™ Integrated Tape

a black mechanically attached, UV stable, water resistive vapor permeable air barrier membrane with integrated tape at the horizontal seams: Product No: 12309000

RevealFlashing Product No.: 47305000, 47305500

Product No.: 40105500 / 40108000

Product Description

RevealShield IT Integrated Tape 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 IT Integrated Tape is installed above grade behind open joint rain screen 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 IT Integrated Tape consists of multiple layers of spun-bonded polypropylene fabric with clear integrated horizontal tape and a pre-marked lap template to ensure accurate horizontal seam installation.

BENEFITS

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

Superior building envelope protection – high drying capacity (98 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 clear integrated tape – seals horizontal seams ensuring the upper layer shingles over the lower layer creating the 6" shingled effect.

Pre-marked shingle template – increases installation accuracy.

Air tight barrier – stops air infiltration as per the ASTM 2357 Air Barrier assembly test.

Consistent millage thickness – factory made rolled good

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

Mechanically attaches – to multiple substrates using VaproCaps™.

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

Install on dry and/or saturated substrates – eliminates additional water accumulation by locking out liquid water allowing vapor diffusive drying and helping to "dry-in" the building.

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

Phase construction ready, installs in **all temperatures** sustains up to 12 months UV and climate exposure prior to cladding installation.

Emits zero VOCs, no primer required, ensuring crew safety and a healthy building.

Technical Data & Environmental

Passed and tested to industry standards for Weather Resistive Barriers.

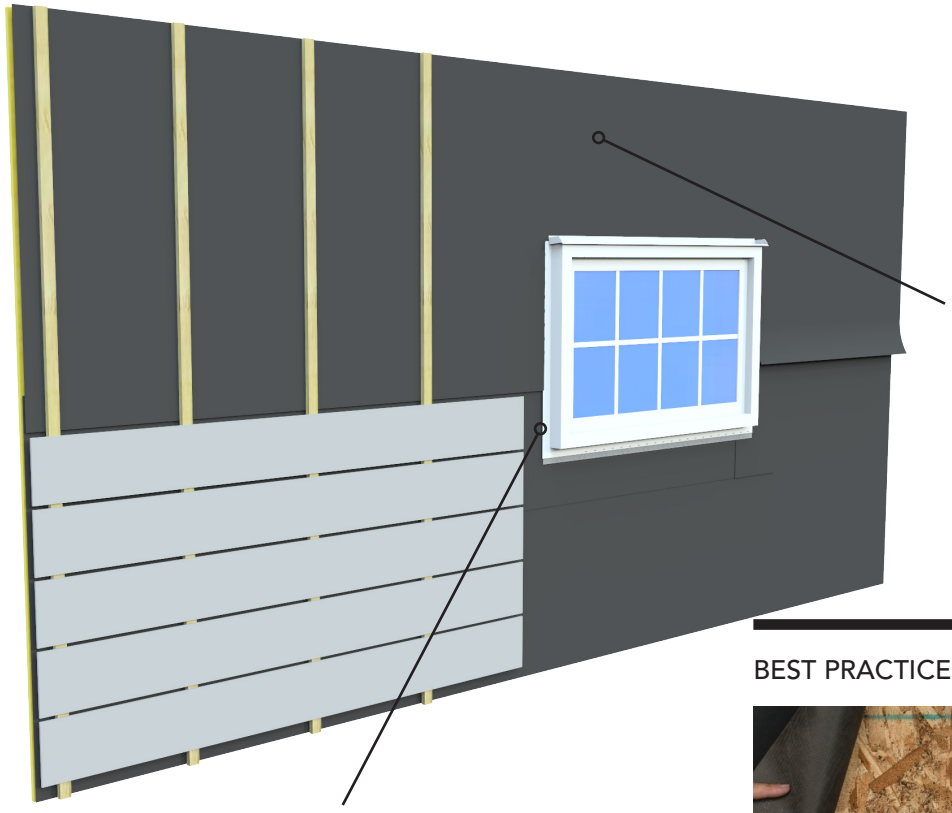
RevealShield IT Integrated tape emits zero VOCs, making the membrane safe for work crews and occupants for the life of the building.

Compatible Substrates

- OSB
- 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

Contact VaproShield Technical – if you have additional substrate questions.

PHYSICAL PROPERTIES	
PROPERTY	RESULT
Color	Black (top), Black (back)
Thickness	0.45 mm (18 mil)
Membrane Weight	309.7 g/m² (1.15 oz/ft²)
Roll Weight	54 lbs (24.5 kg)
Roll Dimensions	59" x 164' (1.5m x 50m)
Roll Coverage	807 sq. ft. (75 sq. m.)
Skid	25 Rolls
VOCs	None
Exposure Before Permeant Cladding	12 months
Minimum Application Temperature	None
Service Temperature	minus 40°F (-40°C) - 225°F (107°C)
Warranty	20 year material warranty



Complete Building Envelope System

ROUGH OPENING FLASHING OPTIONS

The rough opening flashing components shall be: RevealFlashing SA Self-Adhered™ or RevealFlashing™ in conjunction with one or more of the following depending on detail requirements:

- VaproLiqui-Flash™
- Vapro-SS Flashing™ (w/VaproBond at the seams)
- VaproBond™

Reference individual data sheets for comprehensive information.

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)
RevealFlashing Roll	47305000 47305500	6 1/2" x 164' (165mm x 50m) 88 S/F (8.2 S/M) 11 3/4" x 164' (298mm x 50m) 161 S/F (15 S/M)

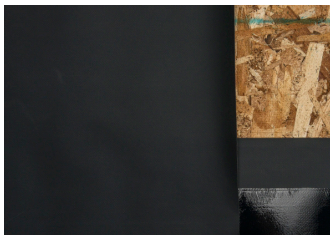
In conjunction with:

Window and Rough Openings Flashing	VaproLiqui-Flash	Vapro-SS Flashing	VaproBond
Application Temperature	35°F to100°F (2°C to 38°C)	20°F to 170°F (-6°C to 77°C)	-20°F to 120°F (-6° 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

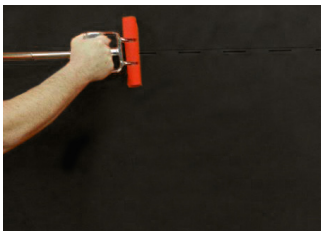
BEST PRACTICE INSTALLATION

Secure membrane with stainless steel staples **above** integrated tape. Align the bottom of the upper course with the dotted line for proper 6" (15 cm) overlap.

Join horizontal seams by peeling back both release films. Tape seals horizontal seams.



Upper course is now properly shingled over the lower course, eliminating water concerns at the horizontal joints.



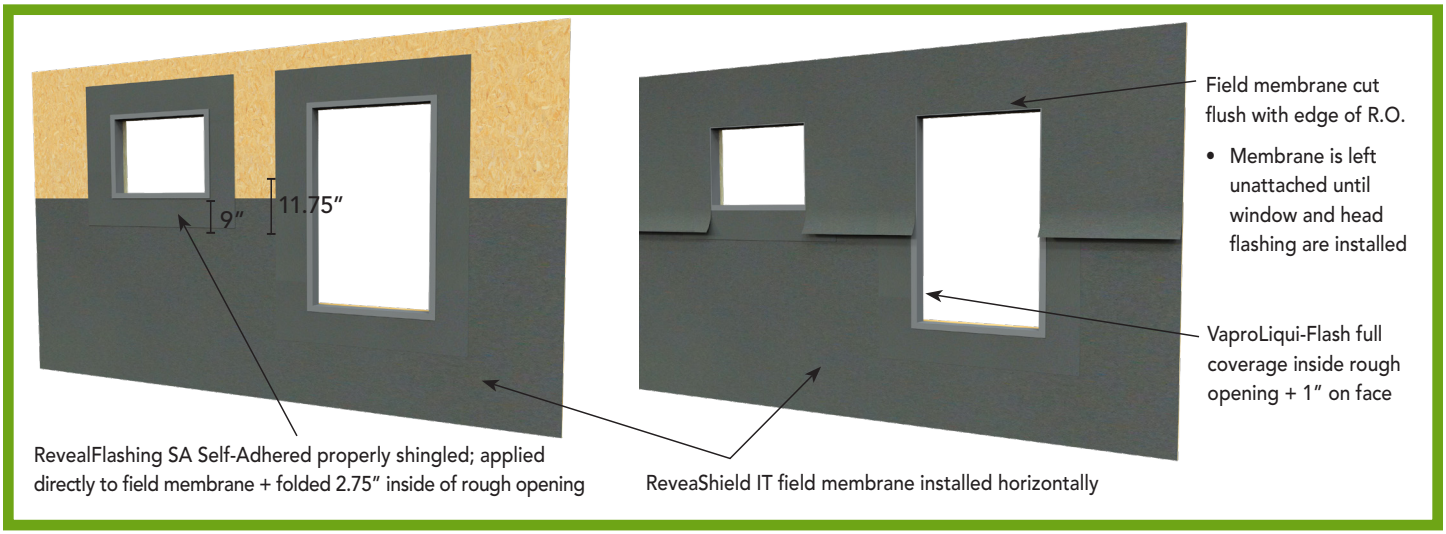
Roll the integrated tape seam with floor roller to ensure full contact

BEST PRACTICE VERTICAL SEAMS

Overlap vertical seams by min. 12". Apply ¼" (6.4 mm) bead of VaproBond adhesive sealant to ensure water and

Peel back release films to finish horizontal seam. For complete installation instructions, visit VaproShield.com.

Commercial Window Rough Opening Flashing System with VaproFlashing SA



Visit VaproShield.com to view full installation sequence

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. RevealShield IT Integrated Tape 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

Install **RevealShield IT** with approved fasteners in a horizontal, shingle fashion.

Horizontal overlaps must be 6" (15 cm) to properly seal the integrated tape joint.

Vertical overlaps must be minimum 12" (30 cm) and require VaproBond adhesive sealant, to provide an air barrier seal.

Vertical overlaps are to be staggered a minimum of 24" (61 cm) and should not occur directly above or below windows or doors.

Inside and outside corners can be continuous, or if a vertical joint occurs within 24" horizontally, an overlap of 12" minimum in both directions is required, providing a double layer at the corner."

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

LIMITATIONS

RevealShield IT Integrated Tape should be covered within 12 months of installation.

Do not contaminate RevealShield IT Integrated Tape WRB/ Air Barrier 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.

RevealShield IT Integrated Tape WRB/Air Barrier should not be subjected to asphaltic materials, chemicals, surfactants, or cleaning compounds that could affect the water resistance of the membrane surface; if exposed, replace effected membrane.

Availability

VaproShield products are available throughout North America, Central and South America, and New Zealand.

Warranty

A 20-year material warranty is available.

VAPROSHIELD®
Breathable Membrane Systems for Roofs & Walls

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	MD - 6.83 N/mm (39.0 lb/in) XMD - 3.73 N/mm (21.3 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 – 560 N (126.0 lbf) CD – 390 N (87.7 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 24.4°C (76.0°F) 50 %RH	ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials	59.7 Perm (grain/h•ft^2•inchHg) 3416 ng/Pa•s•m^2
Water Vapor Transmission Water Method 24.4°C (76.0°F) 50 %RH	ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials	97.6 Perm (grains/hr•ft^2•inchHg) 5584 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	73.97 Perm (grain/h•ft^2•inchHg) 4232 ng/Pa•s•m^2
Air Resistance Testing		
Air Permeance	ASTM E2178 @75 Pa Standard Test Method for Air Permeance of Building Materials	0.017 L/s•m^2 @ 75 Pa (0.0033 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 10 Smoke Developed 135
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: 5 sec Flame Duration: 6 sec Ave. Effective Heat of Combustion: 5.1 MJ/kg Ave. HRR at 60 sec: 40 kW/m^2 Ave. HRR at 180 sec: 0 Peak HRR: 50 kW/m^2 Time of Peak: 2 Total HRR/A: 40.4 MJ/m^2
NFPA 285 Compliant		View over 50 compliant assemblies with various manufacturers at VaproShield.com or Contact VaproShield Technical Team, 1-866-731-7663 opt. 5