

WrapShield IT® Integrated Tape

a mechanically attached, water resistive vapor permeable air barrier membrane with integrated tape at the horizontal seams: Product No: 16109000

WrapFlashing

Product No.: 40105500 / 40108000

Product Description

WrapShield IT Integrated Tape WRB/Air Barrier membrane protects the building envelope by allowing vapor to pass through (breathable) but not air or liquid water mitigating costly moisture damage and saving energy for the life of the building.

BASIC USE

WrapShield IT Integrated Tape is installed above grade behind rain screen wall cladding assemblies.

MATERIALS

WrapShield 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

Superior building envelope protection – high drying capacity (59 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 ensures consistent properties and performance.

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

Mechanically attaches – to multiple substrates using VaproCaps™.

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.

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 build.

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

Phase construction ready, install in all temperatures sustains up to 180 days UV and climate exposure prior to cladding installation.

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

Technical Data & Environmental

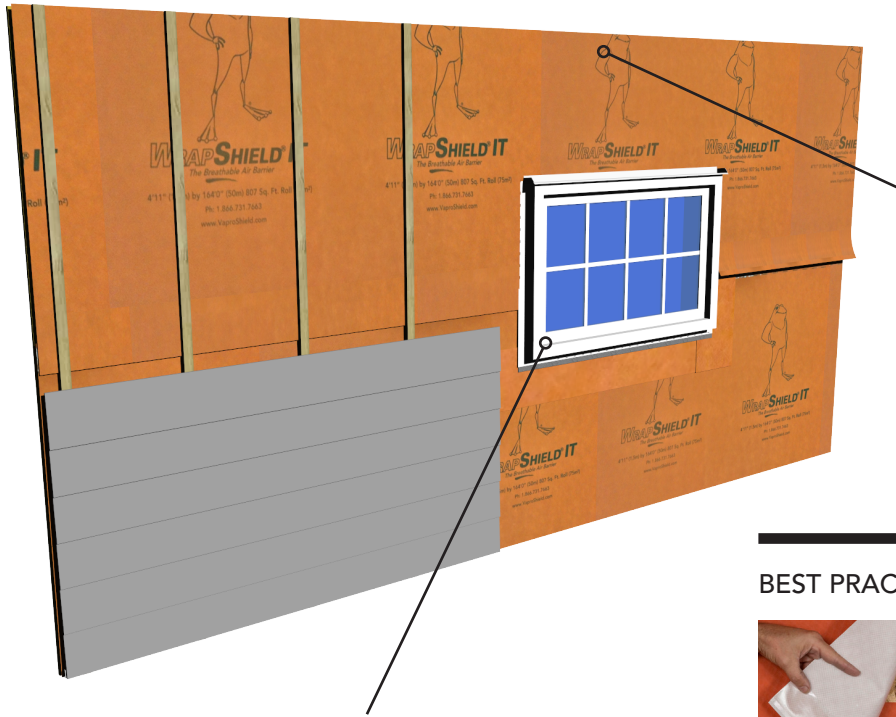
Passed and tested to industry standards for Weather Resistive Barriers.

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

PHYSICAL PROPERTIES	
PROPERTY	RESULT
Color	Orange (top), White (back)
Thickness	0.5581 mm (21.97 mil)
Membrane Weight	193.7 g/m ² (0.635 oz/ft ²)
Roll Weight	32 lbs (14 kg)
Roll Dimensions	59" x 164' (1.5m x 50m)
Roll Coverage	807 sq. ft. (75 sq. m.)
Skid	25 Rolls
VOCs	None
Ultra Violet Light Exposure	180 days maximum
Minimum Application Temperature	None
Service Temperature	minus 40°F (-40°C) - 225°F (107°C)
Warranty	20 year material warranty

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Complete Building Envelope System

WRB/AIR BARRIER
WrapShield IT Integrated Tape

ROUGH OPENING FLASHING OPTIONS

The rough opening flashing components shall be: WrapFlashing SA Self-Adhered™ or WrapFlashing™ 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.

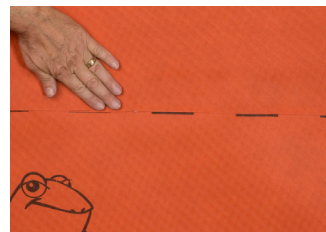
BEST PRACTICE INSTALLATION



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

Rough Opening Flashing Membranes			
Product	Part No.	Roll Sizes	
WrapFlashing SA Self-Adhered Roll	46105590	Roll Size: 11 3/4" x 164' (298mm x 50m) 161 S/F (15 S/M)	
	46108090	Roll Size: 19 2/3" x 164' (500mm x 50m) 269 S/F (25 S/M)	
WrapFlashing Roll (Mechanically Attached)	40105500	Roll Size: 11 3/4" x 164' (298mm x 50m) 161 S/F (15 S/M)	
	40108000	Roll Size: 19 2/3" x 164' (500mm x 50m) (25 S/M) Weight: 9.5lbs (4.3kg)	

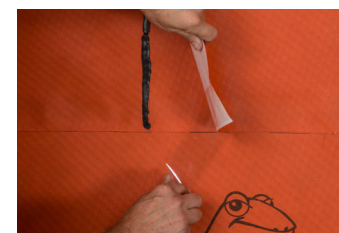
In conjunction with:

Window and Rough Openings Flashing	VaproLiqui-Flash	Vapro-SS Flashing	VaproBond
Application Temperature	35°F to 100°F (2°C to 38°C)	20°F to 170°F (-6°C to 77°C)	-50°F to 300°F (-45° to 149°C)
Drying Capacity	High	None	Low
Breathable Permeability			
Application Method	Sausage Gun / Putty Knife or Brush	Utility Knife /J-Roller	Sausage Gun / Putty Knife

BEST PRACTICE VERTICAL SEAMS



Overlap vertical seams by min. 12". Apply 1/4" (6.4 mm) bead of VaproBond adhesive sealant to ensure water and air barrier seal.

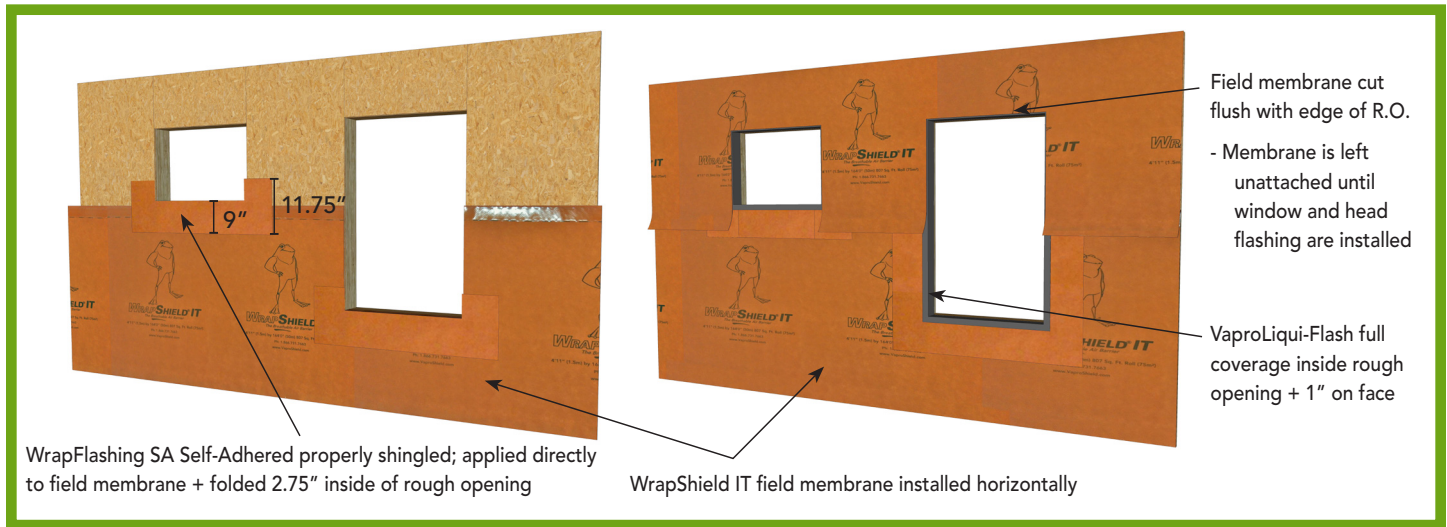


Peel back release films to finish horizontal seam. For complete installation instructions, visit VaproShield.com.

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Commercial Window Rough Opening Flashing System with WrapFlashing 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. WrapShield 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 WrapShield 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

WrapShield IT Integrated Tape should be covered within 180 days of installation.

Do not contaminate WrapShield 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.

WrapShield 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.

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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 - 171 N (38.6 lb/in) XMD - 104 N (23.3 lb/in)
Dry Tensile Strength	ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting	Control - 8.89 N/mm (50.8 lb/in) UV Exposure - 8.16 N/mm (46.6 lb/in) UV + Heat Exposure - 8.16 N/mm (46.6 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 - 445.3 N (100.1 lbf) CD - 383.0 N (86.1 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	21 Perm (grain/h•ft²•inchHg) 1201 ng/Pa•s•m²
Water Vapor Transmission Water Method 24.4°C (76.0°F) 50 %RH	ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials	66.9 Perm (grains/hr•ft²•inchHg) 3828 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	71.91 Perm (grain/h•ft²•inchHg) 4114 ng/Pa•s•m²
Air Resistance Testing		
Air Permeance	ASTM E2178 @75 Pa Standard Test Method for Air Permeance of Building Materials	0.0004 L/s•m² @ 75 Pa (0.0001 cfm/ft² @ 1.57 psf)
Air Barrier	ASTM E2357 Standard Test Method for Determining Air Leakage of Air Barrier Assemblies	<0.01 L/s•m² @ 75 Pa (<0.01 cfm/ft² @ 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•m² @ 75 Pa (<0.01 cfm/ft² @ 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
Static Water Penetration Test	ASTM E331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference"	Mockup tested at 15 psf for 15 minutes, No leaks
Fire Testing		
Flame Spread Smoke Developed	ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials	Flame Spread 0 Smoke Developed 55
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: 20 sec Flame Duration: 62 sec Ave. Effective Heat of Combustion: 11.0 MJ/kg Ave. HRR at 60 sec: 74 kW/m² Ave. HRR at 180 sec: 0 Peak HRR: 125 kW/m² Time of Peak: 26 Total HRR/A: 4.6 MJ/m²
NFPA 285 Compliant	ASTM E1354 Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter	View over 50 compliant assemblies with various manufacturers at VaproShield.com or Contact VaproShield Technical Team, 1-866-731-7663 opt. 5

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<i>TESTING DATA</i>		
PROPERTY	STANDARD	RESULT
<i>CANADIAN STANDARDS</i>		
Air Leakage Rate	CAN/CGSB 51.32	Classification A1 - PASS
Multiple	CAN/ULC-S742-11 – Sheathing Membrane, Breather Type	PASS