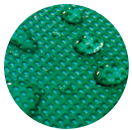




Hill 7 Project, Downtown Seattle, WA



WALLSHIELD®



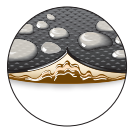
WRAPSHIELD®



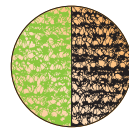
WRAPSHIELD SA®
SELF-ADHERED



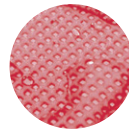
REVEALSHIELD®



REVEALSHIELD SA®
SELF-ADHERED



WRAPSHIELD RS®
RAIN SCREEN



SLOPESHIELD®



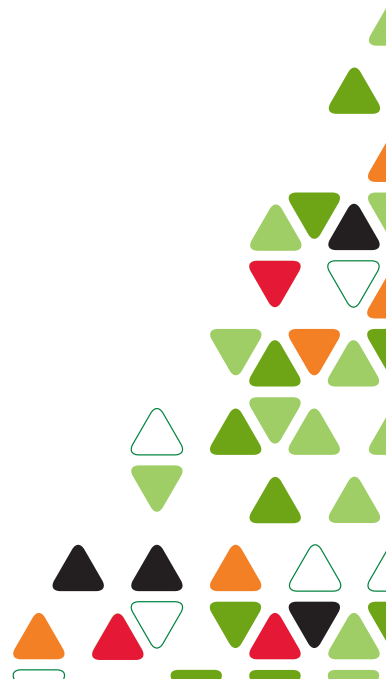
SLOPESHIELD SA®
SELF-ADHERED

PRODUCT OFFERING



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915 26th Ave. N.W. Suite C5
Gig Harbor, WA 98335
Toll Free: 866.731.7663
VaproShield.com

VaproShield Canada
101-1001 West Broadway Suite 545
Vancouver, B.C. V6H 4E4, Canada
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VaproShield.ca



Who is VaproShield?

For over a decade VaproShield has designed and manufactured high performance vapor permeable water resistive barriers (WRB) and air barrier (AB) membranes and accessories, creating a total solution-based approach to protecting the building envelope.

Our **innovative** features such as integrated tape on our membranes, permeable hybrid fluid-applied flashing for rough openings, and WRB sealant have been rigorously tested together to **maximize life-long building envelope performance and minimize building failure rates.**

VaproShield Representation and Technical Experts

VaproShield proudly works with local representatives alongside our VaproShield technical experts offering you knowledge and expertise in areas such as: local building codes, membrane testing, details, specific application testing and mock-ups. To contact a local representative visit vaproshield.com or call our Tech Team at 866-731-7663, email: technical@vaproshield.com.

VaproShield.com Comprehensive Website Offers:

- Product Information
- Product Data Sheets
- Installation Videos
- Installation Instructions
- Application Details
- Product Specifications
- Project Profiles
- Technical Articles
- MSDS Information

Accessories

VaproShield accessories can reduce rough opening flashing installation time by at least 30 percent, plus they have been rigorously tested together to maximize lifelong building envelope performance.

- VaproLiqui-Flash – vapor permeable, hybrid, fluid-applied flashing for rough openings
- VaproFlashing (Self-Adhered and Mechanically attached) – pre-cut flashing rolls
- VaproBattens, VaproShims and VaproMat – create rain screen cavity
- VaproCaps – preformed head caps seal mechanically attached membranes at fastener penetrations
- Water resistive barrier compatible sealant

Binder Contents

The VaproShield binder is intended to give you an overview of our vapor permeable water resistive barrier and air barrier membranes. In consideration of the environment, additional information is available upon request. Or, visit our website www.VaproShield.com.

Wall Membranes



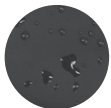
WRAPSHIELD® WITH INTEGRATED TAPE
Mechanically attached, water resistive vapor permeable air barrier membrane with integrated tape at the horizontal seams



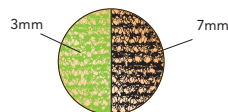
WALLSHIELD®
Mechanically attached, water resistive vapor permeable membrane



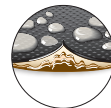
WRAPSHIELD SA® SELF-ADHERED
Self-adhered, water resistive vapor permeable air barrier sheet membrane



REVEALSHIELD™
Black UV stable, mechanically attached water resistive vapor permeable air barrier membrane with integrated tape at the horizontal seams for use with open joint rain screen systems



WRAPSHIELD RS™ RAIN SCREEN
A mechanically attached, water resistive (WRB) vapor permeable air barrier (AB) membrane with built-in rain screen drainage matrix and integrated tape at the horizontal seam



REVEALSHIELD SA® SELF-ADHERED
Self-adhered, black, UV stable water resistive vapor permeable air barrier membrane for use with open joint rain screen systems

Roof Membranes



SLOPESHIELD® WITH INTEGRATED TAPE
Mechanically attached, water resistive vapor permeable roof underlayment with integrated tape at the vertical seams



SLOPESHIELD SA® SELF-ADHERED
Self-adhered, water resistive vapor permeable roof underlayment

WrapShield SA Self-Adhered is a water resistive highly vapor permeable **Water Resistive Barrier (WRB) and Air Barrier (AB)** sheet membrane.

- No Primers Required
- Advanced Technology Adhesive
- Zero VOC's
- Low Temperature Application

Superior Building Envelope Protection

- Resists bulk water infiltration
- Allows building materials to dry out
- High drying capacity (permeability) reduces risk of damage from moisture infiltration, mold, mildew and rot

Cost Advantage

- No primer required, avoids costly delays due to primer application restrictions
- Apply to a clean and dry to the touch substrate, no additional substrate preparation is required
- Reduces contractor liability by using fully tested VaproShield system: single source membranes, flashings and sealants
- VaproShield flashing accessories eliminate the need for untested, third-party components
- Long-term durability with standard 20 year material warranty
- Manufactured rolled goods ensure consistent properties and performance
- Optimal substrate coverage using 95% net of sheet good

Phase Construction Friendly

- Applicable for all climates and weather conditions
- Installs in temperatures as low as 20°F (-6° C)
- Non-directional horizontal or vertical application
- No special installation equipment required
- Sustains six (6) months, 180 days UV and climate exposure prior to cladding installation

Energy Efficiency

- Easily create a continuous air barrier system and transitions when used with VaproShield accessories
- Reduces energy consumption for the life of the building when used with VaproShield Air Barrier Systems approach

Environmental Sustainability

- Emits zero VOC's, no exposure to harmful chemicals during installation
- Contributes to LEED points
- Helps to maintain a healthy building and supports energy efficiency



WrapShield SA Self-Adhered innovative adhesive bonds directly to virtually all substrates by simply pulling off the clear release paper and smoothing with a roller, eliminating the need for substrate/joint/corner preparation.

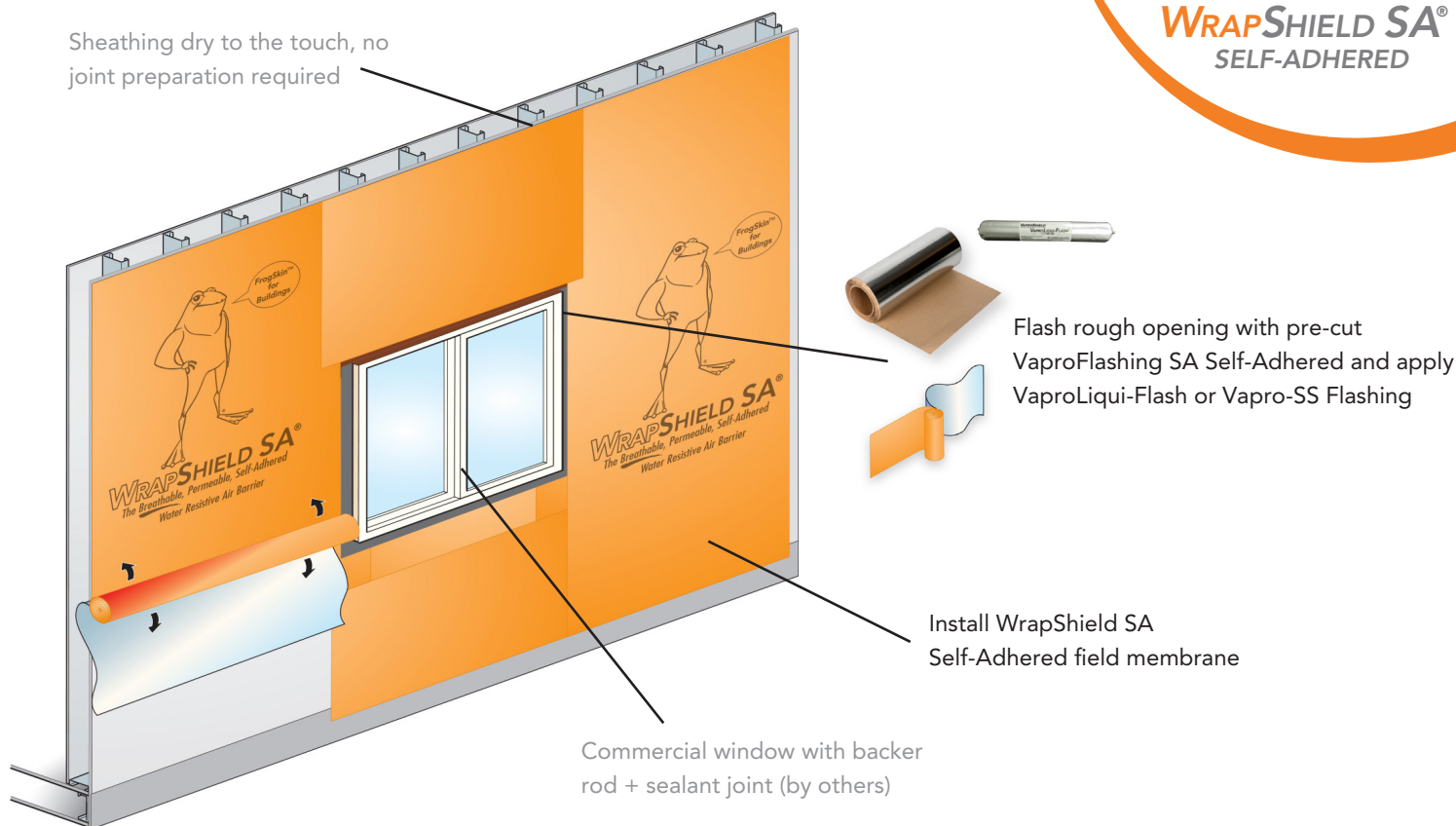


Radisson BLU Minneapolis, MN

WrapShield SA Self-Adhered was successfully installed without any construction delays during the harsh Minnesota winter. The average temperature was between 10–30°F (-12– -1°C) with frequent high winds.



First water resistive barrier/air barrier sheet good membrane to earn Declare label, placing the system at the forefront of the transparency movement.



Two Component WRB/Air Barrier System: Fast, Simple Efficient

- Installed costs average 30-50% LESS than competitors by eliminating joint, corner and substrate treatments, tapes, adhesives and spray equipment
- Follow the construction schedule, not Mother Nature, apply membranes in virtually any weather; below freezing, before/after rain events
- Achieve complete air barrier continuity by managing only TWO components in the field, drastically reducing training and installation time

PROPERTY	STANDARD TEST	RESULT
Water Vapor Transmission (WVT)	ASTM E398	52.57 U.S. Perms 364.88 g/m ² 24h WVT
Water Resistance	AATCC – 127	PASS (22in. head of water – 5 hrs)
Peel Adhesion	ASTM D3330	Meets requirement (data varies by substrate)
Application Temperature		Air & Surface minimum + 20°F (-6.67°C) and rising

PROPERTY	STANDARD TEST	RESULT
AIR BARRIER TESTING		
Air Permeance	ASTM E2178	PASS <0.00002 cfm/ft ² @ 1.57 psf (0.0001 L/s m ² @ 75 PA)
Air Barrier Assembly	ASTM E2357	PASS
FIRE TESTING		
Flame Spread	ASTM E84	5 – Class A
Smoke Developed Index	ASTM E84	15 – Class A
Assembly Fire Test	NFPA 285	Contact VaproShield Technical Team 1-866-731-7663 opt. 5

Visit VaproShield.com for:



Comprehensive Testing Data



Installation Instructions



Details

RevealShield SA Self-Adhered is a black UV stable, highly vapor permeable **Water Resistive Barrier (WRB) Air Barrier (AB)** sheet membrane for **open joint rain screen cladding systems**.

- Zero VOC's
- No Primers Required
- Exceptional UV Stability
- Highly Vapor Permeable

Open Joint Application

- Installs as a single layer WRB / AB black membrane system
- Use with up to 2" wide open joint rain screen cladding
- Extremely UV stable membrane with 20 year warranty
- Uniquely suited for open joint cladding requiring advanced UV protection such as; perforated panels, reclaimed wood and special facades.

Building Envelope Protection

- Resists bulk water infiltration
- Allows building materials to dry out
- High drying capacity reduces the risk of damage from moisture infiltration, mold, mildew and rot

Cost Advantage

- Reduces contractor liability by using fully tested VaproShield system: single source membranes, flashings and sealants
- Installs in temperatures as low as 20°F (-6°C)
- No costly delays due to primers

Phase Construction Friendly

- Applicable for all climates
- Non-directional horizontal or vertical installation
- No specialized installation equipment required
- Sustains 12 months UV and climate exposure prior to cladding installation.

Energy Efficiency

- Easily creates a continuous air barrier system and transitions when used with VaproShield accessories
- Reduces energy consumption when used with VaproShield's Air Barrier Systems approach

Environmental Sustainability

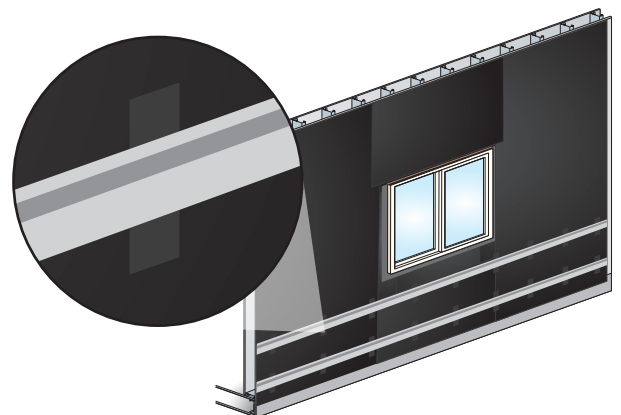
- Emits Zero VOC's; eliminates exposure to harmful and volatile chemicals
- Contributes to LEED points in Indoor Environmental Quality and Energy & Atmosphere



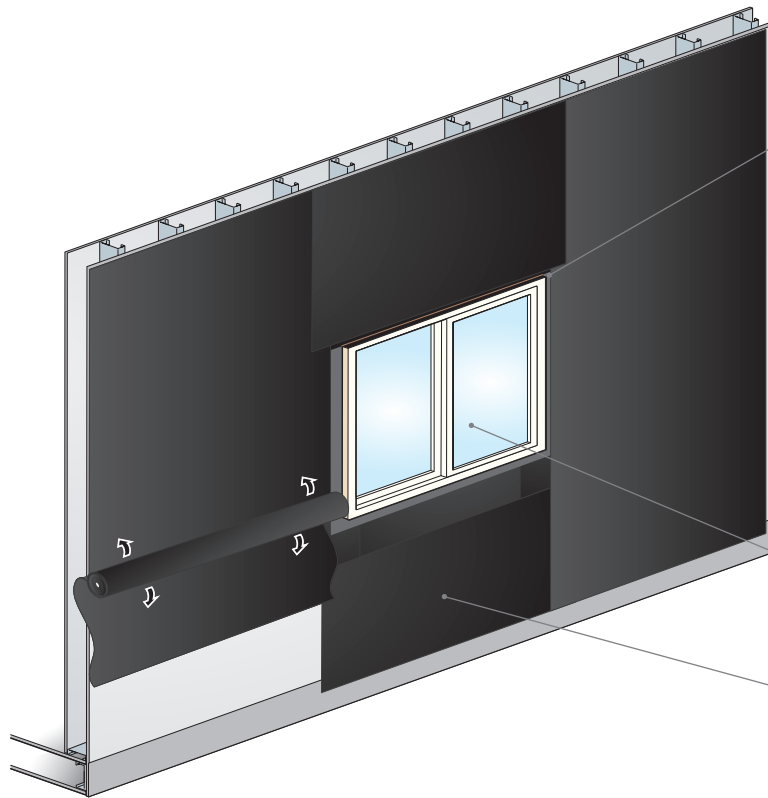
RevealShield SA Self-Adhered advanced technology adhesive requires no primers and will adhere to virtually all substrates.



RevealShield SA Self-Adhered creates the desired black reveal and UV stability behind the open joint cladding.



Create a rain screen design, ensuring maximum drying capacity using VaproShim SA Self-Adhered neoprene/EPDM accessory.



Step 1

Flash rough opening with pre-cut RevealFlashing SA Self-Adhered and apply:

VaproLiqui-Flash

or

Vapro-SS Flashing

or

VaproBond

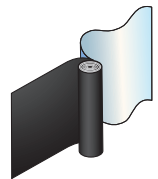


Step 2

Install window (by others)

Step 3

Install RevealShield SA Self-Adhered field membrane



Push Your Building Envelope to Perform

Promote lifelong building health with VaproShield's fully tested building envelope solutions. Our system of breathable, water resistive membranes, flashings and sealants reduce contractor liability and excessive energy consumption. Don't compromise on the most vulnerable part of your building, contact VaproShield or visit VaproShield.com to learn more about protecting your building envelope.

PROPERTY	STANDARD TEST	RESULT
Water Vapor Transmission	ASTM E96 ¹ (Method B)	15.1 g/hr•m ² (63.48 Perm) 362 g/ 24 hr•m ²
Elongation / Strength	ASTM D 5034	MD – 529 N (119 lbf) XMD – 427 N (96 lbf)

PROPERTY	STANDARD TEST	RESULT
AIR BARRIER TESTING		
Air Permeance of Building Materials	ASTM E2178	PASS <0.0000 cfm/ft ² @ 1.57 psf <0.0001 L/s•m ² @ 75Pa
Air Barrier Assembly	ASTM E2357	PASS <0.002 cfm/ft ² @ 1.57 psf <0.01 L/s•m ² @ 75 Pa
UV Stability	AC 38 Section 4.1.2	PASS , UV Stable
FIRE TESTING		
Flamespread Index	ASTM E84	0 – Class A PASS
Smoke Developed	ASTM E84	75 – Class A PASS
Assembly Fire Test	NFPA 285	Contact VaproShield Technical Team 1-866-731-7663 opt. 5

Visit VaproShield.com for:



Comprehensive Testing Data



Installation Instructions



Details

1. ASTM E 96 - Method B (wet cup method) typically gives a more realistic result for permeance for highly permeable products than does the Method A (dry cup/desiccant method).

WrapShield IT Integrated Tape is a water resistive highly vapor permeable **Water Resistive Barrier (WRB)** and **Air Barrier (AB)** membrane.

- No Primers Required
- All Weather Installation
- Zero VOC's
- High Drying Capacity

Superior Building Envelope Protection

- Resists bulk water infiltration.
- Allows building materials to dry out
- High drying capacity (permeability) reduces risk of damage from moisture infiltration, mold, mildew and rot

Cost Advantage and Labor Savings

- No primer required, avoids costly delays due to primer application restrictions
- Innovative integrated tape and horizontal lap guides ensure proper shingle installation
- Apply to a clean and dry to the touch substrate, no additional substrate preparation is required
- Compatible with multiple substrates including OSB
- Reduces contractor liability by using fully tested VaproShield system: single source membranes, flashings and sealants
- Long-term durability with standard 20 year material warranty

Phase Construction Friendly

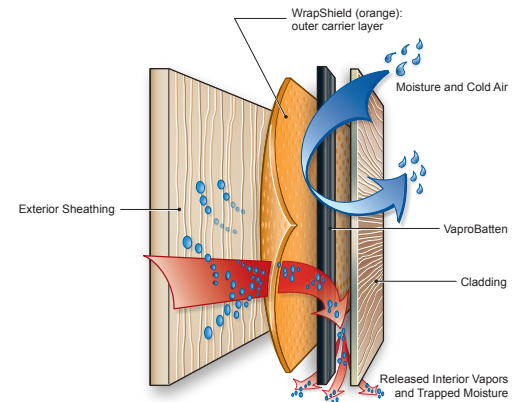
- Install year round in all climates, no construction setbacks
- No special mobilizations required
- Sustains up to 180 days of exposure before cladding installation

Energy Efficiency

- Easily create a continuous air barrier system and transitions when used with VaproShield accessories
- Reduces energy consumption for the life of the building when used with VaproShield Air Barrier Systems approach

Environmental Sustainability

- Emits zero VOC's, no exposure to harmful chemicals during installation
- Contributes to LEED points
- 100% recyclable



WrapShield IT WRB/Air Barrier is vapor open, allowing trapped moisture to escape and air tight preventing costly air migration.

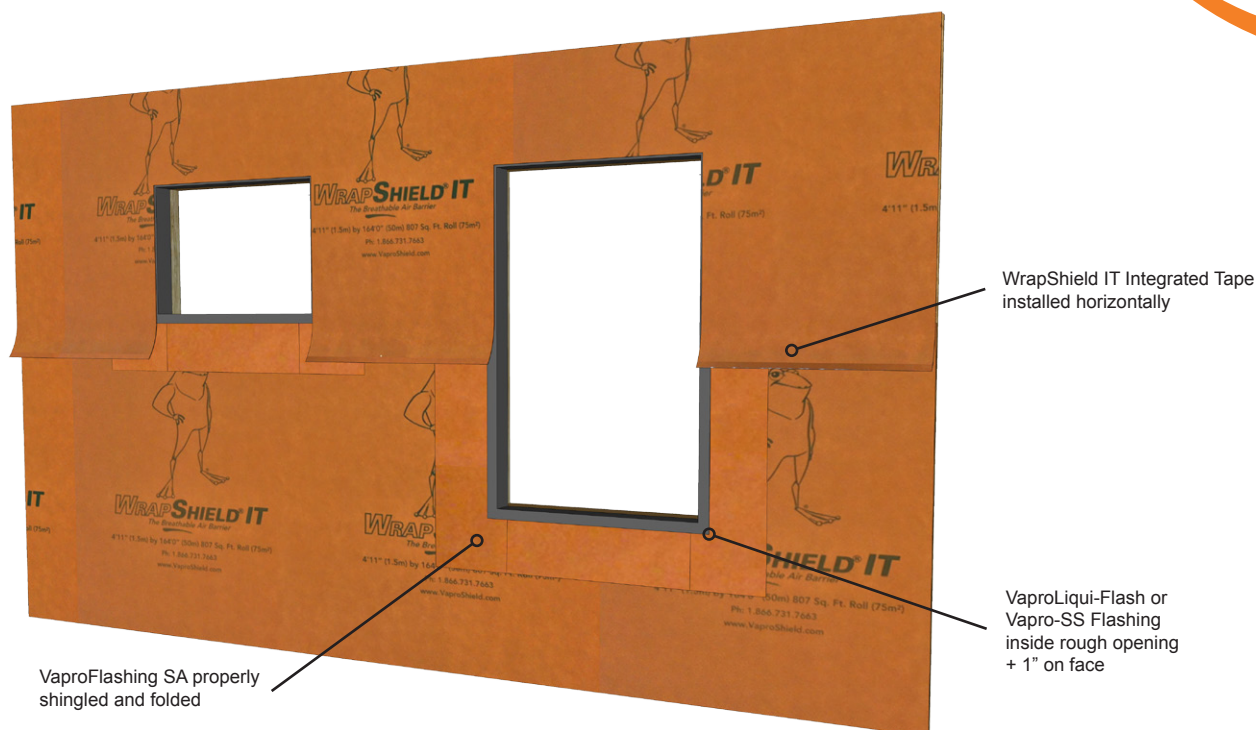
Clear integrated adhesive tape on both the upper and lower courses

Clear integrated adhesive tape

Clear integrated horizontal tape and pre-marked lap template increase installation accuracy and ensure shingled overlap.



WrapShield IT Integrated Tape was the reliable choice in the demanding urban construction site that included very tight working conditions, wind, rain and dust.



Air Barriers Simplified

By using fully tested VaproShield system: field membrane, flashings and sealants you eliminate the need for untested third-party components. Membranes, flashing and sealants have zero VOC's, can be installed in all weather conditions and require common tools for installation saving valuable field labor hours. Field training is simplified by using only a few SKU's and scrap is reduced with pre-cut flashing rolls.

PROPERTY	STANDARD TEST	RESULT
Water Vapor Transmission	ASTM E96 B (73° F 22.8 °C) 50% RH	26.15 grains/hr•ft ² (59.32 Perms) 18.24 g/hr•m ² (0.0122 g/hr•m ² •Pa)
Water Resistance	AATCC – 127	PASS (22in. head of water – 5 hrs)
Application Temperature		No restrictions

PROPERTY	STANDARD TEST	RESULT
AIR BARRIER TESTING		
Air Permeance	ASTM E2178	PASS 0.0001 cfm/ft ² @ 1.57 psf (0.0004 L/s m ² @ 75 PA)
Air Barrier Assembly	ASTM E2357	PASS
FIRE TESTING		
Flame Spread	ASTM E84	0 – Class A
Smoke Developed Index	ASTM E84	55 – Class A
Assembly Fire Test	NFPA 285	Contact VaproShield Technical Team 1-866-731-7663 opt. 5

Visit VaproShield.com for:



Comprehensive Testing Data



Installation Instructions



Details

RevealShield IT Integrated Tape combines the best properties of a water resistive highly vapor permeable air barrier and black UV stable sheet membrane into one affordable product for open joint cladding systems. With a rating of 41 perms, single layer installation and a 20 year warranty, RevealShield IT Integrated Tape saves labor, time and reduces material expense.

Open Joint Applications

- Install a single layer of RevealShield IT Integrated Tape Water Resistive Vapor Permeable Air Barrier Membrane to create the desired black open joint.
- Enhanced design opportunities with open joints up to 2" wide with a maximum of 40% total open wall area.

Cost Effectiveness

- Single layer material application and integrated tape at horizontal seams reduces installation time and material expense.
- Tear, rip and puncture resistant during and after construction, reducing the need for repairs and additional labor costs.

Air Barrier System

- Meets all relevant international and local code requirements pertaining to Air Barrier Membranes.
- Creating an air barrier behind open joint cladding is greatly simplified with the Integrated Tape at horizontal seams.

Drying Capacity

- Allows building materials to dry out while keeping bulk water from infiltrating the building envelope.
- Helps to maintain conditions to counteract mold and mildew growth, promoting healthy buildings and clean indoor air quality.

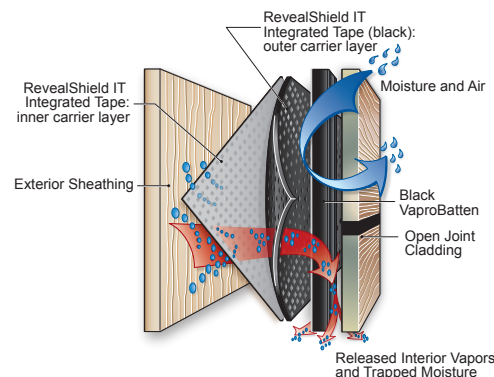
Durability and Performance

- Withstands extreme weather conditions. The Integrated Tape allows installation in a wide range of weather conditions from below freezing to extremely hot temperatures.
- Sustains 180 days UV and climate exposure, prior to cladding installation.

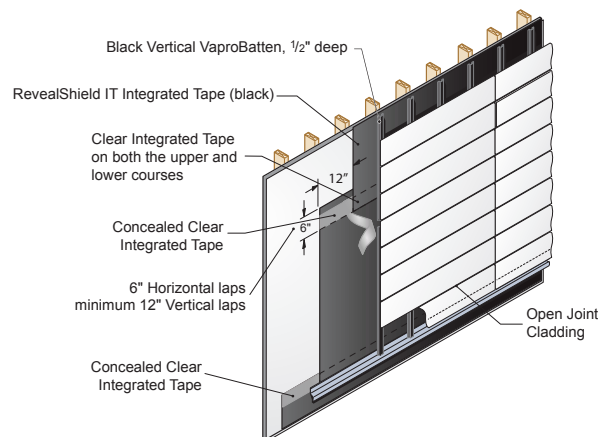
Environmental Sustainability and Energy Efficiency

- Contributes to LEED points in Indoor Environmental Quality and Energy & Atmosphere.
- Combined with an overall energy efficiency strategy, VaproShield's Air Barrier Systems can help to reduce energy consumption.

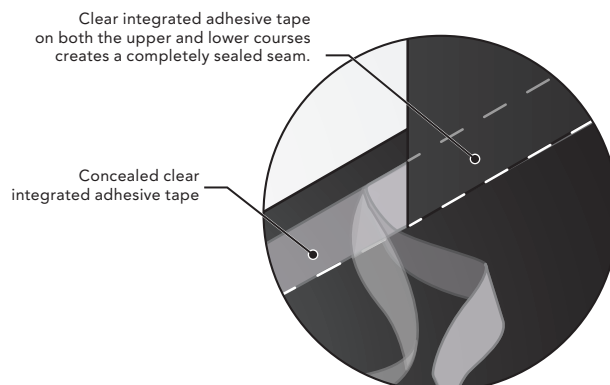
RevealShield IT Integrated Tape UNSURPASSED IN PERFORMANCE



RevealShield IT Integrated Tape, UV stable membrane for open joint cladding, membrane construction.



Apply a single layer of RevealShield IT Integrated Tape Water Resistive Vapor Permeable Air Barrier Membrane to create the desired black open joint.



Clear Integrated Tape protected by the 6" horizontal lap allows easy installation in all weather conditions.

REVEALSHIELD™ IT INTEGRATED TAPE TESTING

Acceptance Criteria for Weather Resistive Barriers ICC-ES AC 38

PROPERTY	STANDARD/TEST	RESULT
PRODUCT TESTING		
Air Permeance of Building Materials	ASTM 2178 (required for Air Barrier Association of America criteria)	0.0002 L/s/m² PASS
Air Leakage through Wall Systems	ASTM E-283	0.00017 L/s/m² 0.000034 cfm/ft² PASS
Air Retarder Materials & Systems	ASTM E-1677	Type 1 Air Barrier PASS
Tensile Strength	ASTM D828	MD - 39 lbf/inch XMD - 21.3 lbf/inch PASS
Water Resistance (control and weathered specimens)	AATCC 127 (55cm hydrostatic head of water for 5 hrs)	No leakage noted on control or weathered samples PASS
Water Vapor Transmission	ASTM E96* (Method B)	262.6 g/m² 24hrs 41.4 Perms PASS
Wall Assembly Fire Test	NFPA 285	PASS with diverse assemblies**
Flamespread Index	ASTM E-84	10 – Class A PASS
Smoke Development Index	ASTM E-84	135 – Class A PASS
UV Stability	AC 38 Section 4.1.2	PASS

Tested in accordance with ICC-ES AC 38 criteria to meet IBC and IRC requirements for Weather Resistive Barriers.

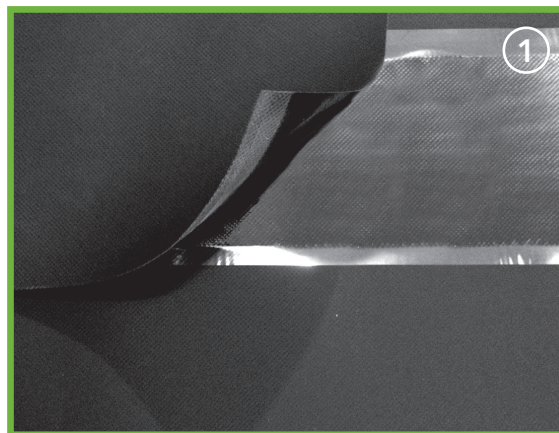
*ASTM E 96 - Method B (wet cup method) typically gives a more realistic result for permeance for highly permeable products than does the Method A (dry cup/desiccant method).

**Contact the VaproShield Technical Team to learn more about NFPA compliance and testing.

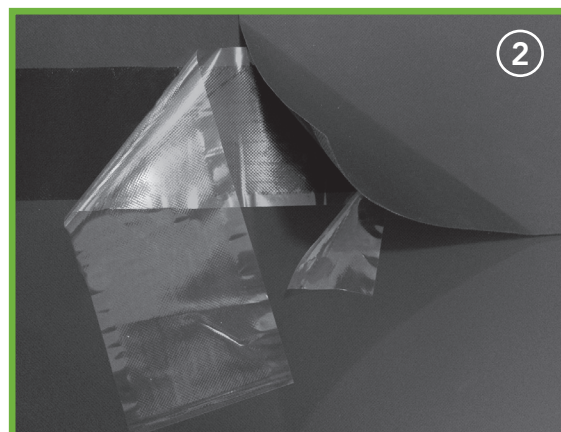


For a complete set of installation instructions and details visit www.VaproShield.com

RevealShield IT Integrated Tape Water Resistive Vapor Permeable Air Barrier Membrane features Integrated Tape and 6" Horizontal Overlap



Easily create the necessary shingled effect.



Tape seals horizontal seams in all weather conditions.



Eliminates water concerns at horizontal joints.

SlopeShield SA Self-Adhered combines the best properties of a water resistant, vapor permeable membrane and a fully self-adhered roofing underlayment in one innovative, affordable product. Suitable for all construction types: commercial, institutional, medical and multi-family residential.

SlopeShield SA Self-Adhered is Unsurpassed in Performance

- Zero VOC's
- 51.74 U.S. Perms
- No Primer

With a vapor permeance rating of 50 perms, **SlopeShield SA Self-Adhered** provides the highest breathability in a commercial quality, self-adhering roofing underlayment membrane.

SlopeShield SA Self-Adhered fully bonds to most common roofing substrates providing a water shedding, easy to install, permeable roof underlayment without the use of a primer.

SlopeShield SA Self-Adhered fully bonded membrane system provides a continuous air barrier, enhancing thermal performance by controlling air leakage through seams, joints and roof system penetrations.

Drying Capacity

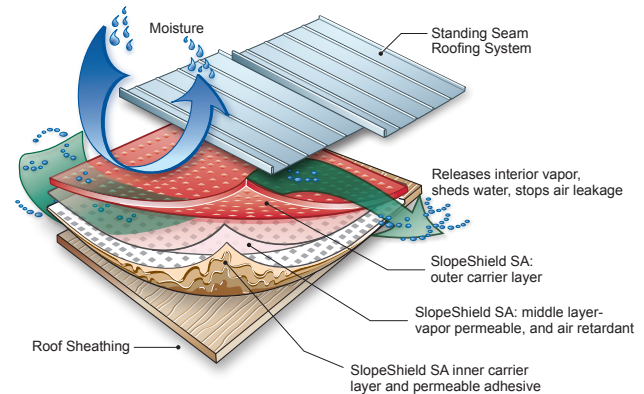
- High vapor permeability and exceptional liquid water holdout capacity helps prevent damage from moisture.
- Moisture vapor is allowed to escape ensuring good indoor air quality, reducing incidence of condensation, mold, mildew, wood rot, lumber distortion and metal corrosion.

Construction and Installation

- No Primer Required.
- Application over 20 °F (-6 °C) degrees and rising ensures a wide service temperature range, easily installed in all climates.
- Tough facer laminate resists punctures and tears.
- Textured surface helps reduce slip risks.
- Lightweight rolls install quickly and easily.
- Self-adhering membrane application reduces time and labor.

Durability and Cost Effectiveness

- High tear, rip and puncture resistance during and after construction reducing repairs and labor costs.
- UV stable for up to four months of exposure.
- Installs easily and quickly, self-adhering directly to plywood and various roofing substrates decreasing installation time.



Over 4,600 sq. ft. of SlopeShield SA Self-Adhered Water Resistive Roof Underlayment Sheet (red) was installed on the Alice Ferguson Foundation's Potomac Watershed Study Center. The Potomac Watershed Study Center marks one of several VaproShield projects seeking Living Building Challenge certification. All photos courtesy of TrueLook Webcams.

Environmental Sustainability

- Contributes to LEED points in Indoor Environmental Quality and Energy & Atmosphere.
- Void of all Living Building Challenge Red List chemicals.

Compatibility

- Compatible with metal roofing, copper, zinc, clay tile, slate, wood shakes and wood shingles.
- Compatible with typical roofing substrates: DensGlass®, plywood, OSB, rigid insulation and concrete.

Warranty

- Standard 20 year material warranty

SLOPESHIELD SA Self-Adhered Testing Data

PROPERTY	STANDARD/TEST	RESULTS
Breaking Strength/ Elongation	ASTM D5034 AC48, Section 4.1	MD – 88 lbf (391 N) CD – 83 lbf (369 N) PASS
Water Vapor Transmission (WVT) and Permeance	ASTM E398-13	51.74 Perms 359.50 g/m ² •24hrs (WVT)
Air Permeance	ASTM E2178	0.00002 cfm/ft ² 0.0001 L/s•m ² PASS
Water Ponding	AC48, 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 , AC207, Section 4.2	PASS

Independent Testing

PROPERTY	STANDARD/TEST	RESULTS
Nominal Thickness	Calibrated Micrometer	0.022 inch (0.56 mm)
Basis Weight	Electronic Weight Scale	7.37 oz/yd ² (0.819 oz/ft ²) 250 g/m ²

Application

ROOF SLOPE	APPLICATION
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

BEST PRACTICE

- See SlopeShield SA Self-Adhered Technical Data Sheets for acceptable substrates and surface conditions for placement of roof underlayment membranes.
- Substrate must be clean and dry before installing SlopeShield SA Self-Adhered.
- Install SlopeShield SA Self-Adhered in overlapping shingle format.
- All precautions should be taken to keep structure dry from the elements during construction. VaproShield will not be responsible for consequential damages if SlopeShield SA Self-Adhered is used as a temporary roof covering. Install finished roofing materials as soon as practical.

THE VAPROSHIELD SYSTEMS APPROACH

VaproShield promotes a systems approach to building envelope design, incorporating Breathable Membranes for roofs and walls resulting in High Performance Building Envelope Systems.

Complete System of Breathable Membranes + Rain Screen Design Components + 3D Window Flashing Elements = High Performance Building Envelope Solutions

SlopeShield with Integrated Tape is a mechanically attached **vapor permeable, weather resistive, roofing underlayment** with continuous **Integrated Tape**, designed as a secondary back-up under metal roofing material.

With a rating of **59 perms**, **SlopeShield** provides the **highest vapor permeability** in a commercial quality, breathable roofing underlayment.

Drying Capacity

- High permeability and exceptional water holdout capacity helps to prevent liquid water intrusion, reducing the incidence of mold, mildew, wood rot, lumber distortion and metal corrosion.
- The continuous Integrated Taped vertical seams reduce the potential of water intrusion through open laps or surface exposed tapes on roof slopes of 3 and 12 and rising.

Construction and Installation

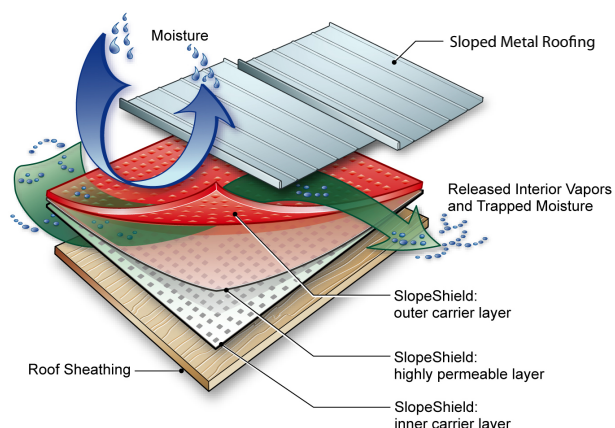
- High permeability rating (59 perms) allows wet sheathings to dry quickly, allowing installation during inclement weather
- Textured surface helps reduce slip risks
- Lightweight, wide 59" (1.5 meters) rolls install quickly and easily down the slope of the roof

Durability and Cost Effectiveness

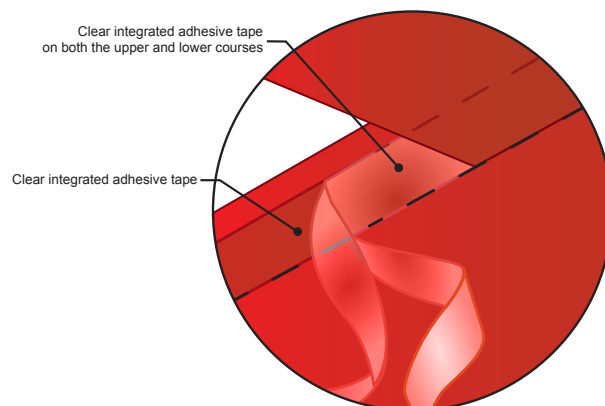
- High tear, rip and puncture resistant during and after construction reducing repairs and labor costs
- Installs easily and quickly, mechanically attaching directly to plywood, OSB and other substrates decreasing installation time
- SlopeShield can be installed over wet substrates

Environmental Sustainability

- Contributes to LEED points in Indoor Environmental Quality and Energy & Atmosphere
- Is 100% recyclable



SlopeShield membrane construction illustrating the release of interior vapors and moisture



Integrated Tape can be sealed in all weather conditions, creating a permanent seal at lap conditions.

Labor Saving Vertical Installation



SlopeShield's unique Integrated Tape joints offer significant labor savings, allowing vertical installation concurrent with the metal roofing.

SLOPESHIELD® TESTING

Tested in accordance with ICC-ES AC 48 (Acceptance Criteria for Roof Underlayments for use in severe climate areas), and AC 207 (Acceptance Criteria for Polypropylene Roof Underlayments), to meet UBC, IBC and IRC requirements for Roofing Underlayments.

PROPERTY	STANDARD/TEST	RESULTS		
Tensile Strength	ASTM D1682 AC 48, Section 4.1	Control MD – 106.7 lbf/inch (18.7 N/mm) XMD – 83.8 lbf/inch PASS	Accelerated Aged MD – 107.0 lbf/inch (18.7 N/mm) XMD – 81.4 lbf/inch PASS	UV Exposed MD – 97.3 lbf/inch (17.0 N/mm) XMD – 76.7 lbf/inch PASS
Water Vapor Transmission and Permeance	ASTM E96* (Water Method) AC 207, Section 4.1	406.3 g/m ² 24hrs 3374.8 ng/Pa/s/m ² 59 Perms 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		

*ASTM E 96 - Method B (wet cup method) typically gives a more realistic result for permeance than does the Method A (dry cut/desiccant) method.

ROOF SLOPE	SLOPESHIELD WITH INTEGRATED TAPE	SLOPESHIELD SA SELF-ADHERED
1:12 to 2:12	For slip sheet applications only. (No water hold out)	For slip sheet applications only. (No water hold out)
2:12 to 3:12	For slip sheet applications only. (No water hold out)	<ul style="list-style-type: none"> • Apply as Underlayment • 12" Horizontal/Vertical Lap Seams • VaproLiqui-Flash required under metal clips and similar penetrations
3:12 to 4:12	<ul style="list-style-type: none"> • Apply as Underlayment • Vertical Installation Only (Metal Roofing) • VaproLiqui-Flash required under metal clips and similar penetrations 	<ul style="list-style-type: none"> • Apply as Underlayment • 12" Horizontal/Vertical Lap Seams • VaproLiqui-Flash required under metal clips and similar penetrations
4:12 and greater	<ul style="list-style-type: none"> • Apply as Underlayment • 6" Vertical Lap as per the Integrated Tape • VaproLiqui-Flash required under metal clips and similar penetrations 	<ul style="list-style-type: none"> • Apply as Underlayment • 6" Horizontal/Vertical Lap Seams • VaproLiqui-Flash NOT required for clips

For slate tile or other roofing applications call VaproShield 1-866.731.7663 for review and approval.

INDUSTRY BEST PRACTICE

SlopeShield is **not to be used as a temporary roof covering** during the construction period. SlopeShield can sustain long term UV exposure but is not intended to be the primary liquid water hold out barrier. Temporary protection measures such as tarps must be used when rain, snow/ice or storms exist or are anticipated.

WallShield IT Integrated Tape is a primary, water resistive, vapor permeable, air permeable, mechanically attached sheet membrane for rain screen building enclosures.

- No Primers Required
- All Weather Installation
- Zero VOC's
- Exceptionally High Drying Capacity

Superior Building Envelope Protection

- Cutting-edge drying capacity (permeability, 142 perms) reduces risk of long-term damage from moisture infiltration, mold, mildew and rot
- Install on wet sheathings allowing saturated substrates to dry-out
- Resists bulk water infiltration

Horizontal Integrated Tape and Cost Effectiveness

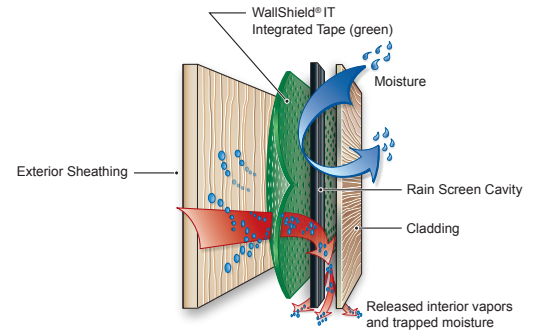
- Reduce installation time, lower material expenses and limit tape failures with integrated tape at the horizontal seams
- Increase accuracy of required 6" shingled overlap, ensuring water tight joinery, by lining upper membrane to lower membrane with pre-marked lap template
- Installs quickly and easily, mechanically attaching with VaproCaps to plywood, OSB and gypsum sheathing, rigid insulation, concrete block and pour-in-place concrete
- Reduces contractor liability by using fully tested VaproShield system: single source membranes, flashings and sealants
- Long-term durability with standard 20 year material warranty

Phase Construction Friendly

- Install in all climates and weather conditions
- No special installation equipment required, use common hand tools
- Tear, rip and puncture resistant during and after construction reducing repairs
- Sustains six (6) months of UV and climate exposure

Environmental Sustainability

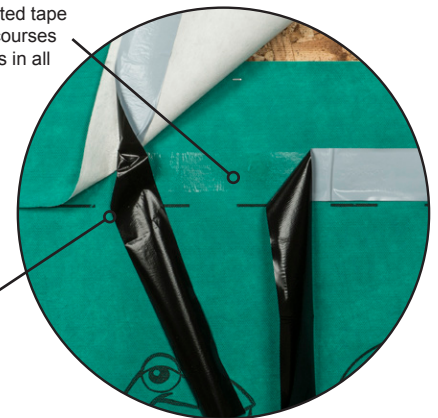
- Contributes to LEED points in Indoor Environmental Quality and Energy & Atmosphere
- Is 100% recyclable



WallShield IT Integrated Tape Water Resistive Vapor Permeable Membrane construction

Non-exposed integrated tape on upper and lower courses seal horizontal seams in all weather conditions

Integrated tape release papers



Clear Integrated Tape ensures 6" horizontal laps and can be sealed in all weather conditions.

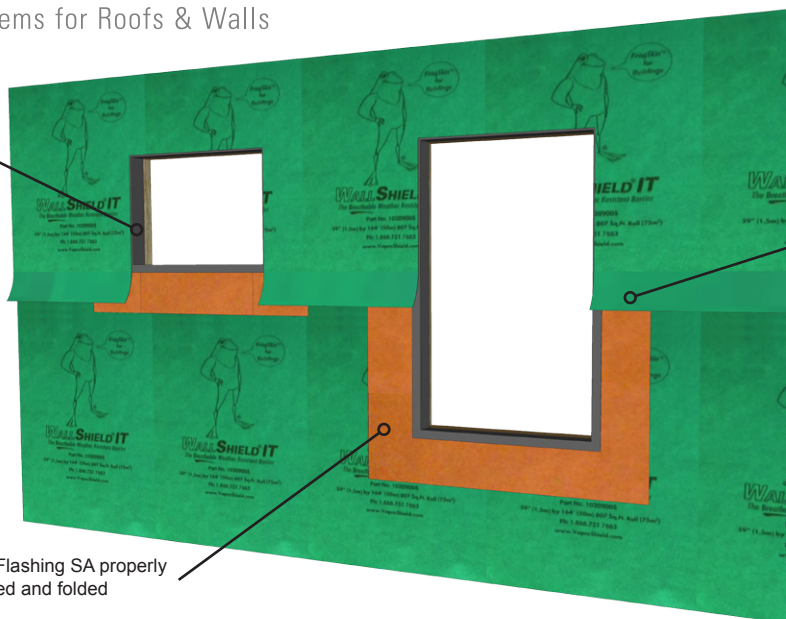


ANTHC Patient Housing in Anchorage Alaska installed WallShield IT (green) as the primary WRB to help dry in the building and defend against moisture intrusion. VaproFlashing (orange) was used around the window rough openings, allowing glazing to be installed before the siding, keeping trades on schedule.

VaproLiqui-Flash or
Vapro-SS Flashing
inside rough opening
+ 1" on face

VaproFlashing SA properly
shingled and folded

WallShield IT Integrated Tape
installed horizontally



Rough Opening Flashing

Fast and efficient rough opening flashing uses VaproShield accessories specifically designed and tested to work together, making field training and installation easy.

PROPERTY	STANDARD/TEST	RESULT
Tensile Strength	ASTM D882	MD 31.1 lbf/in (5.44 N/mm) CD 29.8 lbf/in (5.22 N/mm)
Water Resistance	AATC - 127	PASS (22 inch head of water – 5 hours)
Water Vapor Transmission	ASTM E398 as per ASTM E96* (Water Method)	142.46 Perms 986.62 g/m²•24 hrs
Breaking Force	ASTM D5034	MD 103 lbf (458 N) CD 108 lbf (480 N)
Low Temp Flexibility	AC38, Section 3.3.4	PASS
Weathering	AC38, Section 4.1	PASS
PROPERTY	STANDARD/TEST	RESULT
FIRE TESTING		
Flamespread Index	ASTM E84	0 - Class A
Smoke Developed Index	ASTM E84	65 – Class A
Assembly Fire Test	NFPA 285	Contact VaproShield Technical Team 1-866-731-7663 opt.5

WallShield IT Integrated Tape



- Easily create the necessary shingle effect
- Integrated tape seals horizontal seams in all weather conditions
- Ensure firm adhesion with weighted J-roller

Visit VaproShield.com for:



Comprehensive Testing Data



Installation Instructions



Details

*ASTM E96 - Method B (wet cup method) typically gives a more realistic result for permeance than does the Method A (dry cut/desiccant) method.

WrapShield RS Rain Screen is a highly vapor permeable Water Resistive Barrier (WRB) and Air Barrier (AB) membrane with a built-in rain screen drainage matrix and integrated tape at the horizontal seams.

- Create rain screen cavity with one step installation
- Easily maintain vertical drainage plane
- Replaces furring strips and battens
- Works with all types of cladding and stucco systems

Built-in Rain Screen Drainage Matrix

- High performance matrix maintains unimpeded vertical drainage plane
- Rain screen cavity increases drying capacity of building envelope
- Multiple depth drainage matrix options: 3mm or 7mm
- 3mm matrix creates minimal rain screen cavity, facilitating conventional installation of siding, trim, and windows
- 7mm matrix offers enhanced drainage performance for code and/or more demanding applications

Cost and Labor Savings

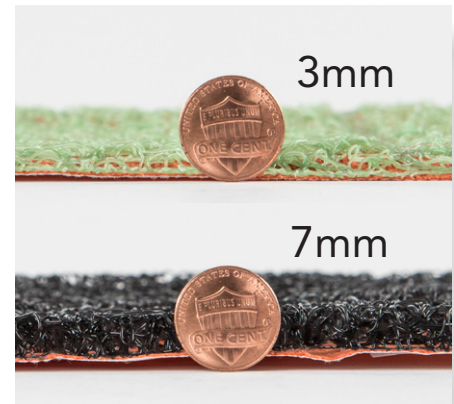
- One step installation of WRB and rain screen cavity reduces installation time
- Innovative integrated tape and horizontal lap guides ensures proper shingle installation
- Factory installed integrated tape and fully-tested accessories reduce contractor liability and take the guesswork out of product selection
- Single source savings eliminates purchase of additional tapes or rain screen components
- Can be used as part of an air barrier system reducing energy use for the life of the building

Phase Construction Friendly

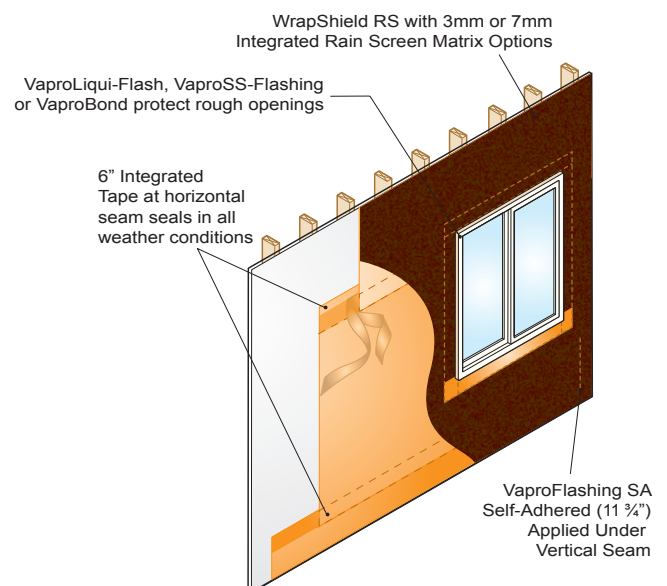
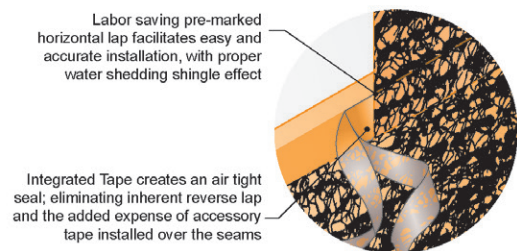
- Install year round in all climates, no construction setbacks
- No special equipment required
- Sustains up to 180 days of exposure before cladding installation

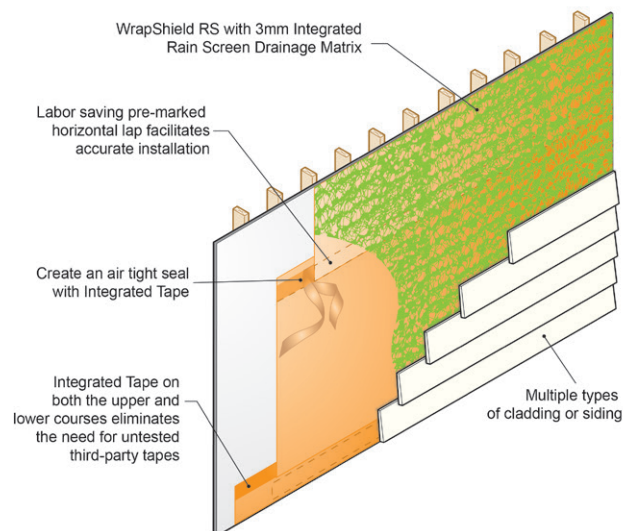
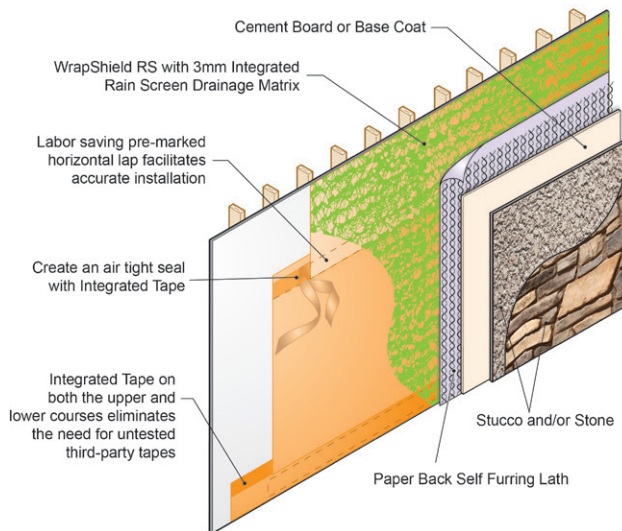
Environmental Sustainability and Durability

- Emits Zero VOC's, no exposure to harmful chemicals
- Contributes to LEED points
- Contributes to the lifelong health and energy efficiency of the building
- Guaranteed long-term durability with standard 20 year material warranty



Two rain screen drainage matrix choices offer cost saving options



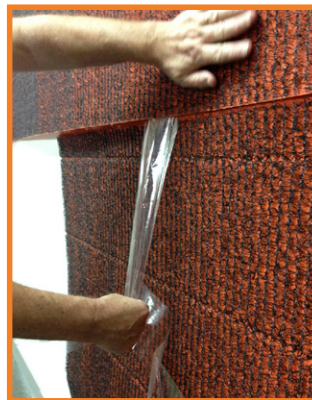


WrapShield RS with 3mm Rain Screen Matrix

Tested in accordance with ICC-ES AC 308 criteria to meet IBC and IRC requirements for Water Resistant Barriers.

PROPERTY	STANDARD/TEST	RESULT
AIR BARRIER TESTING		
Air Permeance of Building Materials	ASTM 2178 (required for Massachusetts Energy Code and Air Barrier Association of America criteria)	0.0095 L/s/m ² 0.0019 cfm/ft ² PASS
Air Leakage through Wall Systems	ASTM E-283	0.00017 L/s/m ² 0.000034 cfm/ft ² PASS
Air Retarder Materials & Systems	ASTM E-1677	Type 1 Air Barrier PASS
Dry Breaking Force	ASTM D5034	MD - 44.8 lbf/inch (7.8 N/mm) CD - 25.1 lbf/inch PASS
Water Resistance (control and weathered specimens)	AATCC 127 (55cm hydrostatic head of water for 5 hrs)	No leakage noted on underside of control or weathered samples. PASS
Water Vapor Transmission	ASTM E96* (Method B)	308.9 g/m ² 24hrs 2860 ng/Pa/s/m ² 50 Perms PASS
Flamespread Index	ASTM E-84	Class A PASS
Smoke Development Index	ASTM E-84	Class A PASS

*ASTM E 96 - Method B (wet cup method) typically gives a more realistic result for permeance for highly permeable products than does the Method A (dry cup/desiccant method).



Factory installed integrated tape seals in all weather conditions and eliminates water concerns at horizontal joints.

Visit VaproShield.com for:



Comprehensive Testing Data



Installation Instructions



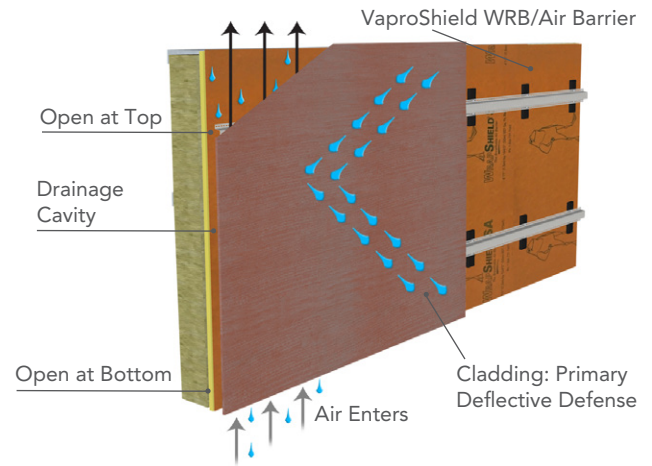
Details

VaproShield Rain Screen Design Components offer multiple methods to achieve rain screen design.

- Creates drainage cavity
- Increases drying capacity
- Adapts to multiple cladding types
- Simple and cost effective

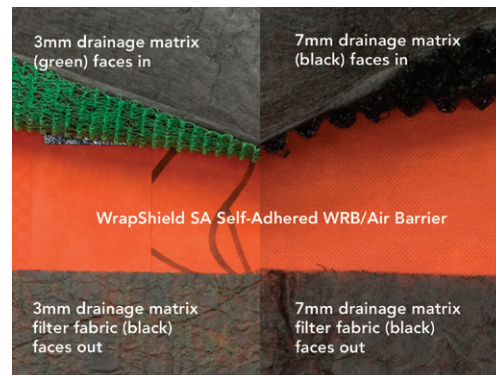
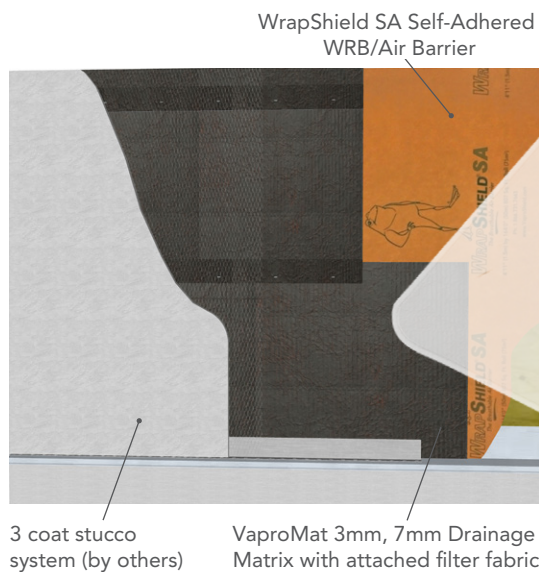
Benefits of Rain Screen Design

- **DEFLECTION** – of bulk water
- **DRAINAGE** – ventilated cavity allows moisture to drain away from the structure
- **DRYING** – permeable membrane enables building envelope to dry out
- **DURABILITY** – quality materials create a robust building envelope



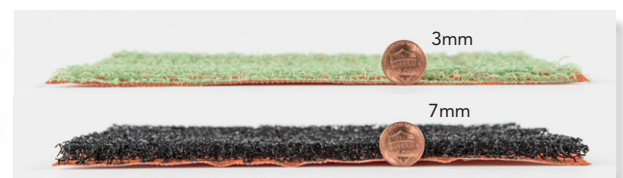
Deflection + Drainage + Drying = Durable Building Envelope

VAPROMAT™



VaproMat, installed over VaproShield membranes, creates a positive drainage cavity. Ideal for use behind stucco, stone, and traditional cladding systems. The filter backing keeps the drainage cavity clean during lath and plaster.

WRAPSHIELD RS™ RAIN SCREEN



WrapShield RS Rain Screen offers two drainage matrix options.

WrapShield RS Rain Screen is a WRB/Air Barrier with a built-in rain screen drainage matrix and integrated tape at the horizontal seams. Ideal for use with conventional siding systems and cementitious cladding materials.

VAPROSHIM SA™ SELF-ADHERED



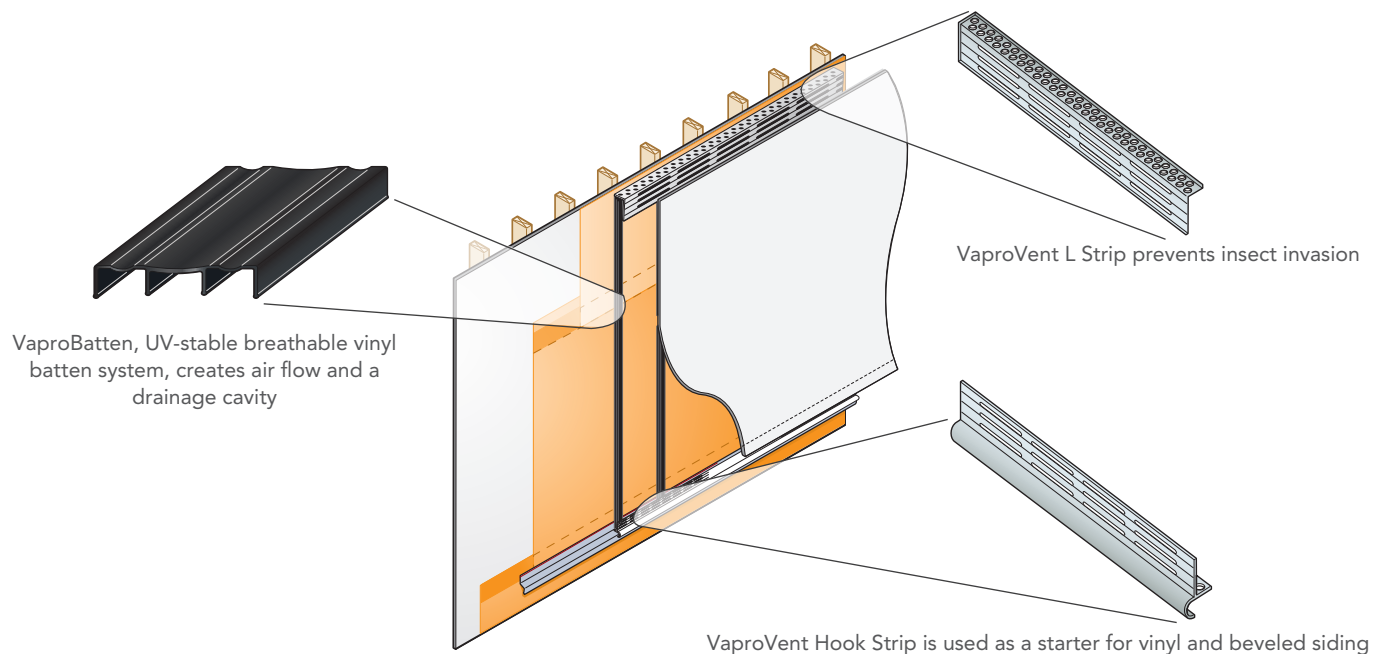
- Hat Channel (by others)
- VaproShim SA seals fastener penetrations
- VaproShield WRB/Air Barrier
- VaproShim SA creates a drainage cavity between the membrane and hat channel



Available in 2 depths: 1/8" (left), 1/4" (right)

VaproShim SA Self-Adhered is used under horizontal cladding attachment components, creating a rain screen cavity and sealing fastener penetrations—*Simple and cost effective.*

VAPROBATTEN™



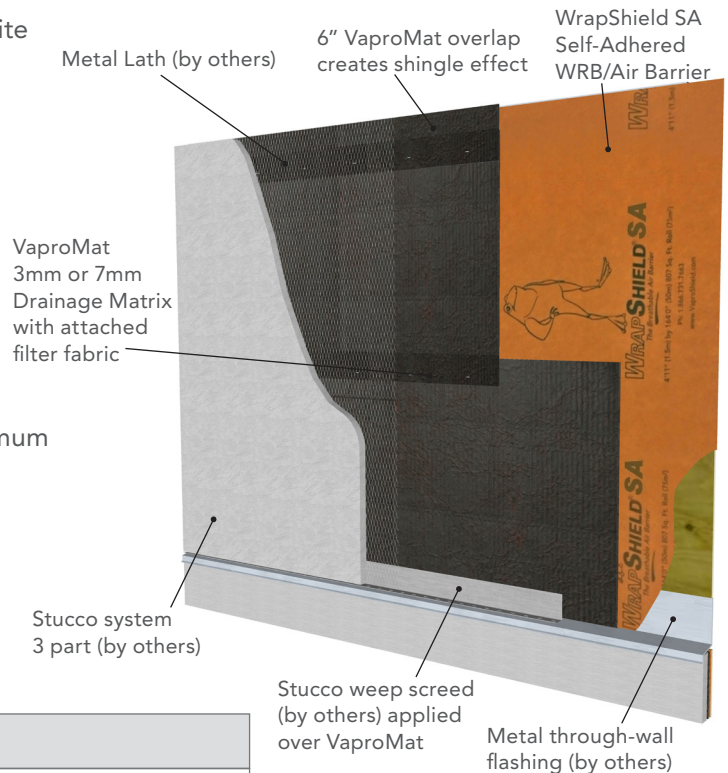
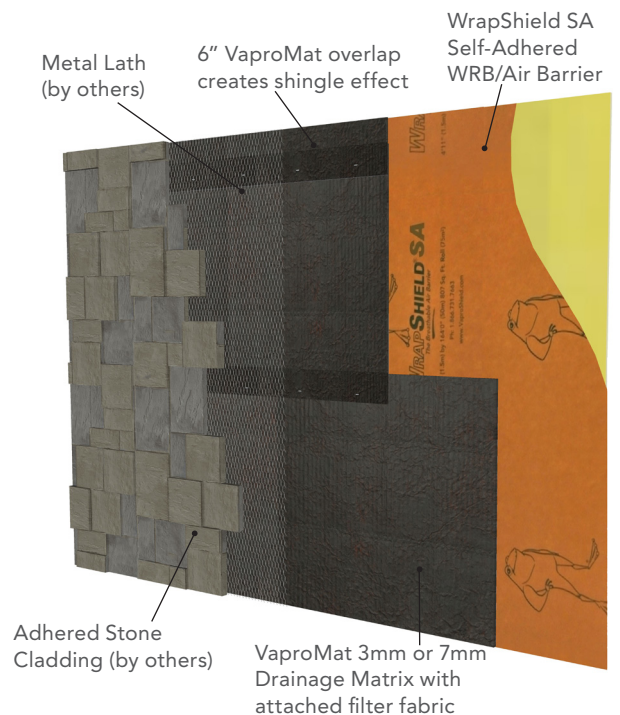
VaproBatten components are ideal for conventional construction. Fasteners can be directly installed through battens into the structural elements. Ships in 5' lengths for easy ground shipping and installation handling.

VaproMat is a lightweight, hydrophobic filter fabric with a polypropylene drainage matrix attached. Install VaproMat over VaproShield's self-adhered Weather Resistive Barriers (WRB)/Air Barrier membranes to create a cost effective, positive drainage cavity behind cementitious claddings that traditionally have not incorporated a rain screen cavity.

- Creates positive drainage cavity behind cladding
- Ideal for use with stucco or cultured stone
- Filter backing keeps drainage cavity clean during lath and plaster
- Easily works with traditional cladding systems
- Two depths: 3mm or 7mm
- Increases building envelope drying capacity

VAPROMAT ADVANTAGES

- Easily integrate a cost effective rain screen cavity with traditional cladding choices such as: metal panels, composite panels, wood siding, stucco, stone
- Constructed with a hydrophobic filter fabric back and polypropylene drainage matrix
- Lightweight filter fabric is designed to keep the drainage cavity clean and unobstructed during the lath and plaster or adhesive mortar installation
- Promotes rapid drying of the building envelope and cementitious materials
- 3mm recommended for use in arid climates requiring minimum drainage and where cavity depth is restricted due to design constraints
- 7mm recommended for mixed climates and high humidity to maximize drainage and drying from liquid water and reverse vapor drive



TECHNICAL DATA		
PROPERTY	STANDARD/TEST	RESULT
FLAMESPREAD INDEX	ASTM E-84	0 - CLASS A PASS
SMOKE DEVELOPED INDEX	ASTM E-84	100 - CLASS A PASS

VaproShim SA™ Self-Adhered Neoprene/EPDM accessory is used under horizontal cladding attachment components to create the desired vertical **rain screen drainage** plane for cladding, while sealing fastener penetrations. This simple design adds minimal cost while adding tremendous drying capacity to the building envelope.

- Creates drainage plane
- Seals fastener penetrations
- Increases drying capacity
- Universally compatible

Benefits

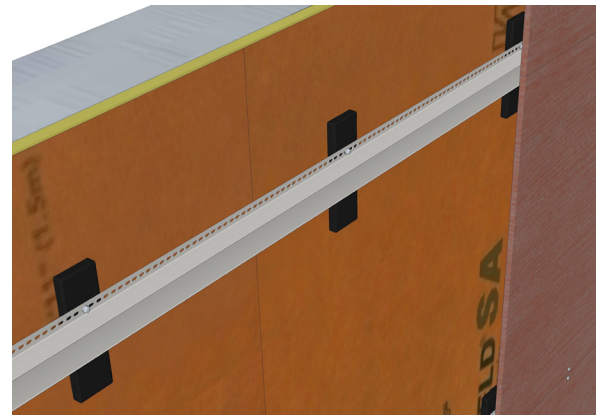
- Easily creates 1/8" or 1/4", cost effective rain screen cavity for increased drying capacity with traditional cladding choices such as metal panels, composite panels, and wood siding
- Can be used in both vertical and horizontal applications, for maximum ease of installation
- Neoprene/EPDM composition seals fastener penetrations, and is tested to ASTM E331 standard against air and water penetration
- Can be installed alongside VaproShield membranes in all weather conditions
- Adds minimal thickness the wall assembly without disruption to building plan
- Universal application, zero compatibility restrictions
- UV resistance, compatible with open joint cladding options

Technical

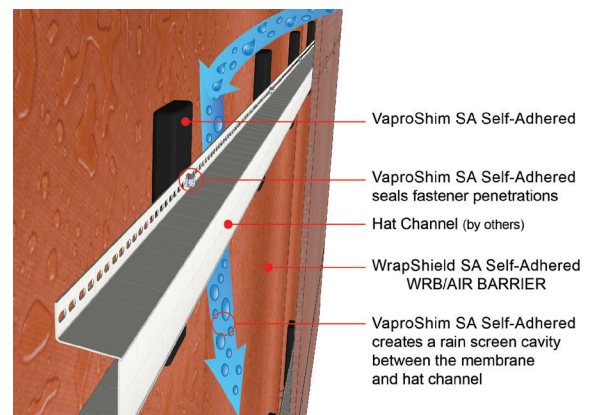
PROPERTY	VALUE
Material	Neoprene / EPDM
Temperature Range	-20° to 200° F (-29° to 93° C)
Durometer Hardness	80±5
Tensile Strength	1000 PSI
Elongation	100%
Color	Black
Size	1" width x 4" length x 1/8" thick 1" width x 4" length x 1/4" thick



Available in 2 sizes; VaproShim SA Self-Adhered 1/8"(left), 1/4"(right)



VaproShim SA Self-Adhered adhered to hat channel, when installed VaproShim SA will seal fastener penetrations and create a vertical rain screen drainage plane, adding significant drying capacity to the building envelope.



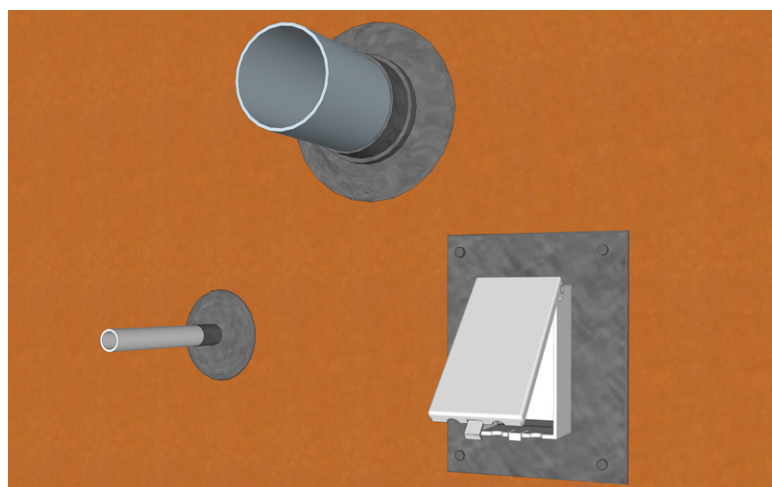
Universally compatible, simple design, VaproShim SA Self-Adhered, creates a vertical rain screen drainage plane increasing the building envelope drying capacity.

VaproLiqui-Flash is a liquid applied breathable waterproof flashing material for rough opening interfaces.

- Waterproof and permeable
- Bonds without primers
- Single component formulation
- Skins-over in 30 min.

Benefits

- Creates monolithic, waterproof surface, yet remains permeable, allowing damp surfaces to dry and reducing incidence of mold and decay
- Bonds without primers to VaproShield membranes and most common wall substrates
- Allows same day installation of windows and doors
- Bonds directly to damp or dry surfaces and cures under a variety of weather conditions
- Skins-over in 30 minutes and dries in 4 hours at 70°F (21°C) and 50% relative humidity
- Produces an opaque membrane, when installed at the recommended 12-15 wet mils (0.30 - 038 mm), simplifying inspection and quality control
- May be exposed to weather for up to 6 months without compromising performance
- Single component formulation
- Does not shrink, stain or yellow



VaproLiqui-Flash is used to seal typical building penetrations. Tool at least 2" onto face and 1" along all sides of the penetration.

Typical Uses



Quick and easy to apply around rough openings, **VaproLiqui-Flash** bonds without primers, is waterproof and breathable. Tapes, frequent cutting and precise corner installation have been eliminated saving valuable field labor time.



VaproLiqui-Flash is applied inside the rough opening and 1" on the face. The completed rough opening is now ready for window installation.

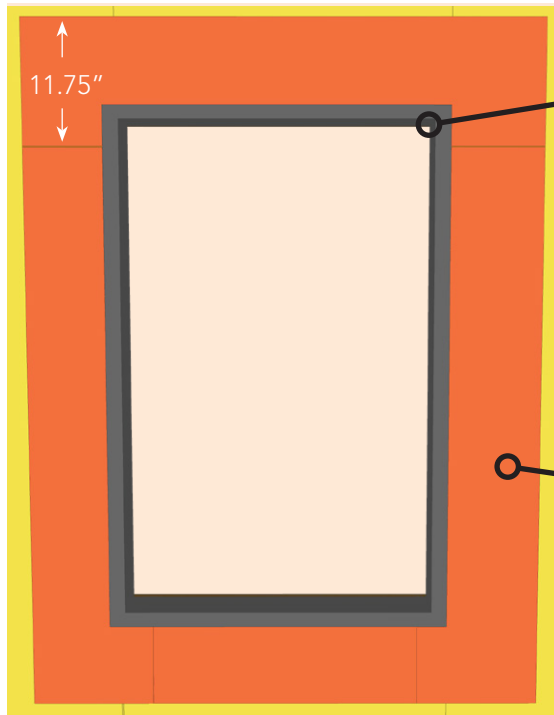
Installation

- Surface and ambient temperatures must be above 35° and below 100°F (2° to 38°C) for application
- Gun-able 20 oz. (567 g) sausages
- Spread with trowel into place



Visit VaproShield.com
for additional details and uses

Completed Rough Opening Using Two Components



VaproLiqui-Flash applied inside of rough opening and 1" on face, creates breathable waterproof interface.



VaproFlashing SA Self-Adhered W: 6 1/2", 11 3/4", 19 2/3" is a pre-cut field membrane. Simply cut **VaproFlashing SA** into appropriate lengths and apply to face and inside of rough opening. **Labor saving, time saving, convenient.**

VAPROLIQUI-FLASH™ TESTING

VAPROLIQUI-FLASH	
FORM	black, gun-grade sealant
SPECIFIC GRAVITY	1.45 - 1.60
pH	Not Applicable
DENSITY	12.5 lbs/gal (1247 g/liter)
ACTIVE CONTENT	99%
TOTAL SOLIDS	99%
VOC CONTENT	30 g/L maximum
FLASH POINT	No data
FREEZE POINT	No data
SHELF LIFE	1 year in unopened, factory-sealed container
COVERAGE	Visit VaproShield.com for comprehensive coverage data

CURED PROPERTIES	
Hardness, Shore A	40-45
Tensile Strength	180 psi (1241 MPa)
Elongation at Break	400%
Water Vapor Transmission	14 perms (165 g/m ² 24h WVT) @ 12 mil (0.3 mm)
Peel Strength	12 pli
Accelerated Weathering	Passes
Surface Burning ASTM E 84	Flame Spread: 0 Smoke Developed: 15 NFPA and ICC Class A Building Material
Staining	Passes
Corrosive Properties	Non-corrosive
UNCURED PROPERTIES	
Cure Rate	3/16 inch thickness/24 hours

Vapro-SS Flashing is a multi-purpose self-adhered flashing for use as a transition or rough opening flashing.

- Thru-wall Flashing
- Watertight Bond
- Rough Opening Flashing
- Low Temperature Application

Exceptional Durability and Performance

- Flexible 2 mil (0.05 mm) sheet of type 304 stainless steel
- 8 mils (0.2 mm) of butyl adhesive with a siliconized release liner
- Best in class puncture and tear resistance
- Install in temperatures ranging from 20 °F - 170 °F (-7 °C - 77 °C)
- Stable and air tight from -70 °F to 200 °F (21 °C - 93 °C)
- Class A, ASTM E84 fire rated
- Resistant to mold, mildew and rot

Uses

- Thru-wall flashing for masonry and stone structural components
- Rough opening flashing
- Transition membrane (air barriers, WRB, roofing membranes, plaza and below grade waterproofing)
- Curtain wall perimeter flashing
- Window and door pan fabrication
- Jamb closure flashing
- Roof to parapet flashing

Compatibility

- Use with all VaproShield materials
- Compatible with: spray polyurethane foam, exterior rigid insulation, exterior gypsum, plywood, concrete, metals
- Available in widths: 4", 6", 12", 18" x 50 ft. (15, 30 or 45 cm x 15.24 m)

Sustainable Design Benefits

- Manufactured from 60% recycled stainless steel, designed to last for the life of the building
- Contributes to LEED points by satisfying EA Credit 1 (optimize energy performance) and EQ Credit 4.1 (low emitting materials)

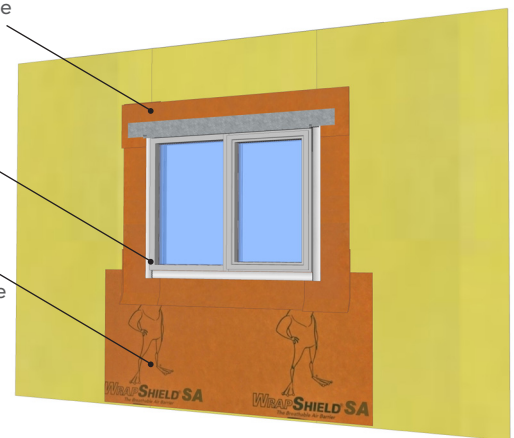


Vapro-SS Flashing, Available in widths:
4", 6", 12", 18" x 50 ft. (15, 30 or 45 cm x 15.24 m)

Pre-cut field membrane flashing around rough opening

Vapro-SS Flashing adhered directly to rough opening.

WrapShield SA Self-Adhered WRB/Air Barrier field membrane

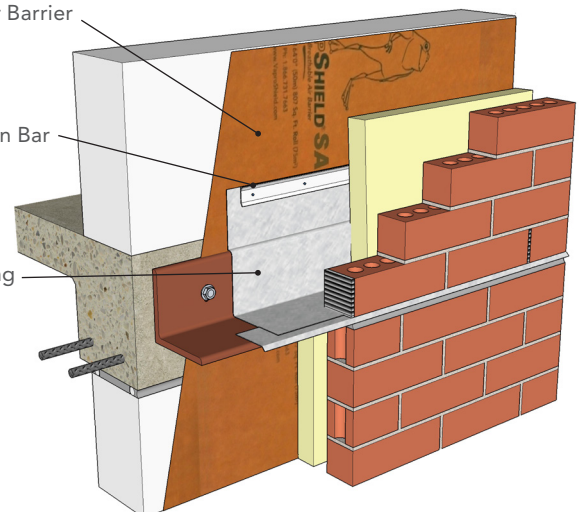


Vapro-SS Flashing applied directly to rough opening after VaproFlashing has been applied, ideal for use in all weather conditions.

WrapShield SA Self-Adhered WRB/Air Barrier

VaproTermination Bar

Vapro-SS Flashing



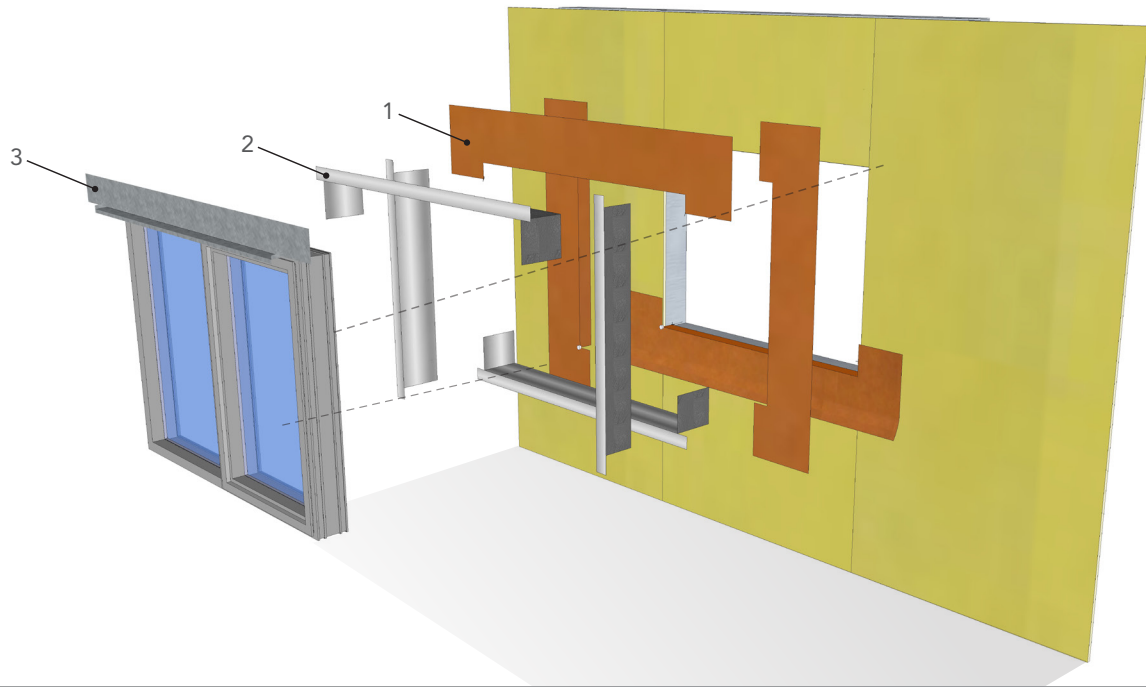
Vapro-SS Flashing installed in a thru-wall application with integrated WrapShield SA Self-Adhered WRB/Air Barrier field membrane.

Fast, Simple Two Component Rough Opening Flashing

VAPRO-SS FLASHING™

Manage only two components in the field, use common hand tools, minimal training, contractor friendly system.

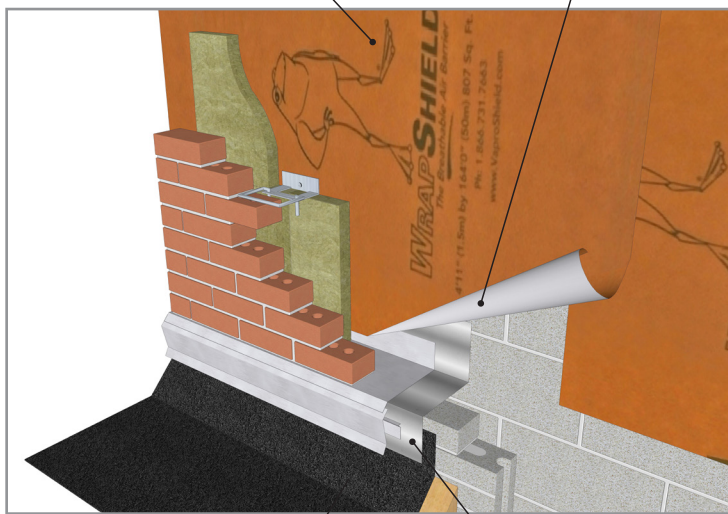
1. Apply VaproFlashing SA Self-Adhered directly to sheathing
2. Fold Vapro-SS Flashing into sill, head and jambs over flashing
3. Install window, sealant joints, backer rod and head flashing (by others)



Thru-wall Flashing Application

WrapShield SA Self-Adhered WRB/Air Barrier

WrapShield SA Self-Adhered laps over flashing materials



Roofing membrane (by others)

Vapro-SS Flashing shingled under flashing over roofing membrane

Product Testing

PROPERTY	TEST METHOD	TYPICAL VALUE
Tensile Strength	ASTM D882	100,000 psi (6,895,000 kpa)
Puncture	ASTM E154	2,500 psi (17,000 kpa)
Adhesion	PSTC-1	20 psi (138 kpa)
Application Temperature		20° F to 170° F (-6° C - 77° C)
Fire Resistance	ASTM E84	PASS , Class A
Mold Resistance	ASTM D3273	PASS

Visit VaproShield.com for:



Installation Instructions



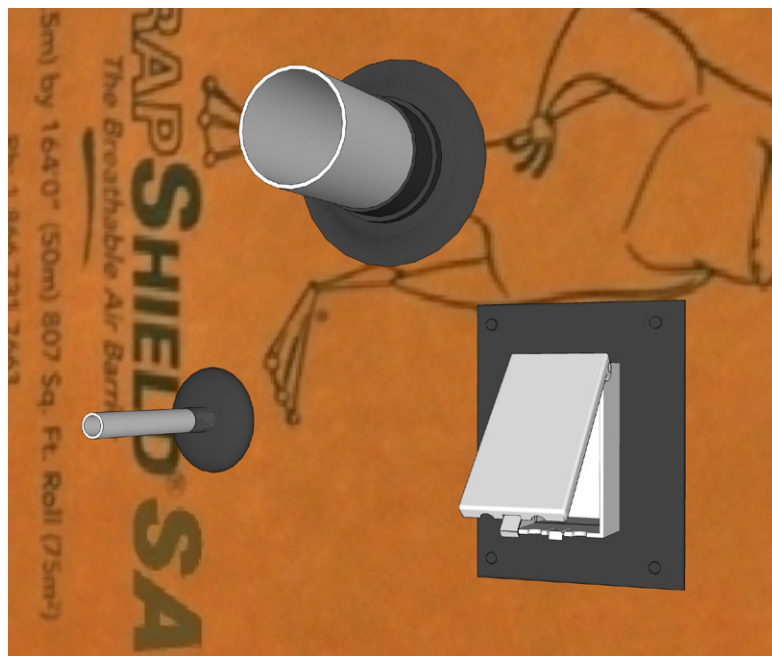
Details

VaproBond™ is a single component 100% silicone sealant used to bind layers of VaproShield membranes to each other or typical construction material surfaces. It can also be used as a liquid-applied flashing component with metal framing systems.

- Sealant and all-weather flashing material
- No primers
- Applies in -20°F and above
- Creates air and watertight seal

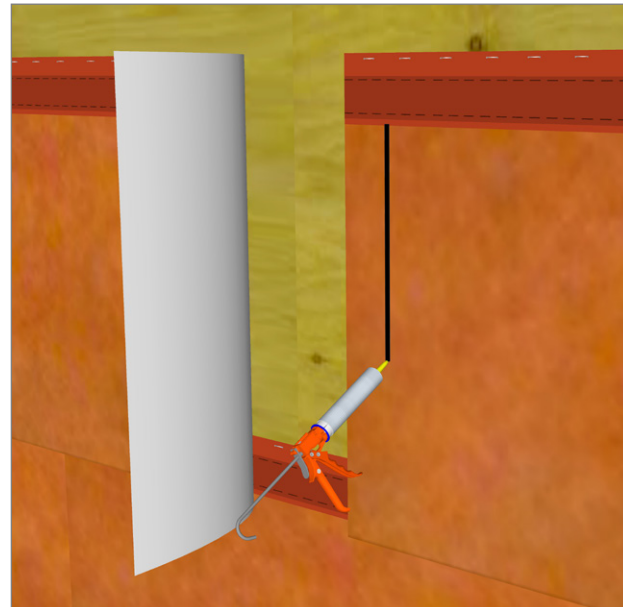
Benefits

- No primer, easy to gun and apply, offers excellent weatherability
- Allows for liquid flashing in below freezing temperatures
- Binds layers of VaproShield membranes to each other and other building materials, creates a watertight, airtight seal
- Simplifies process of producing watertight, airtight details
- Remains flexible and pliable in extreme temperatures
- UV stable, black silicone-based adhesive sealant
- Meets or exceeds ASTM-C- 920 type S, Grade NS, Class 25

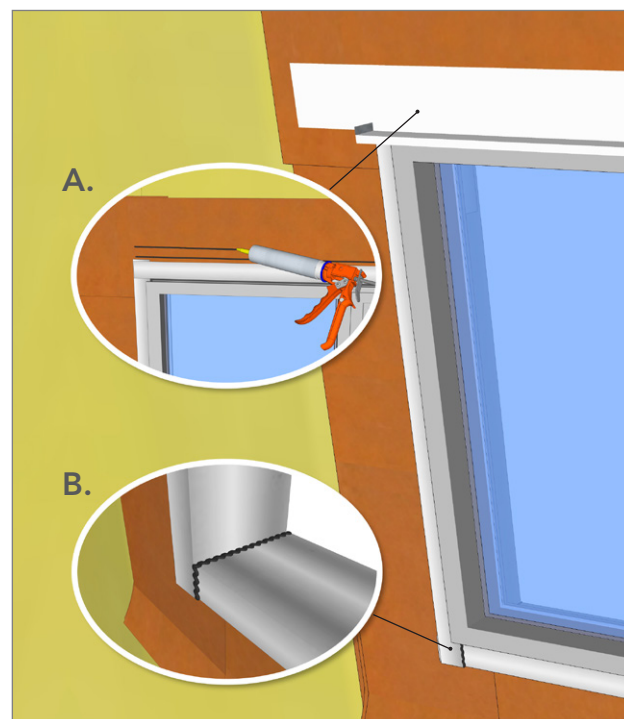


VaproBond is used to seal typical building penetrations. Tool at least 2" onto face and 1" along all sides of the penetration.

Typical Uses



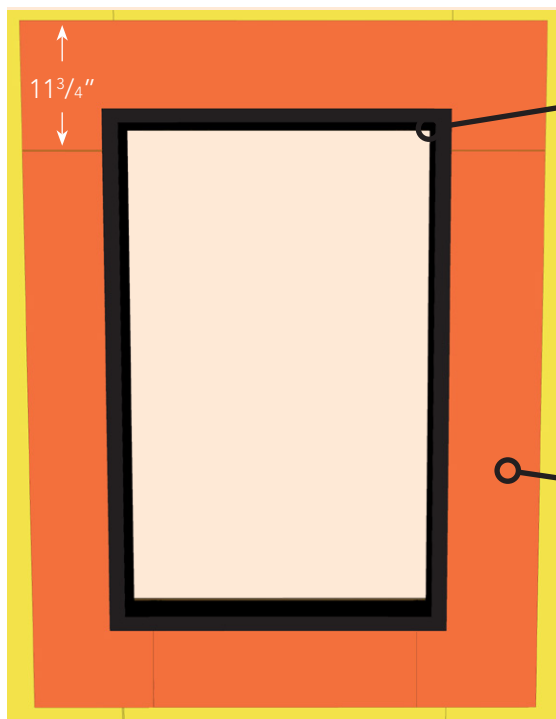
Use **VaproBond** adhesive sealant to create a watertight, airtight seal at the vertical seams when installing VaproShield mechanically-attached WRB/Air Barriers.



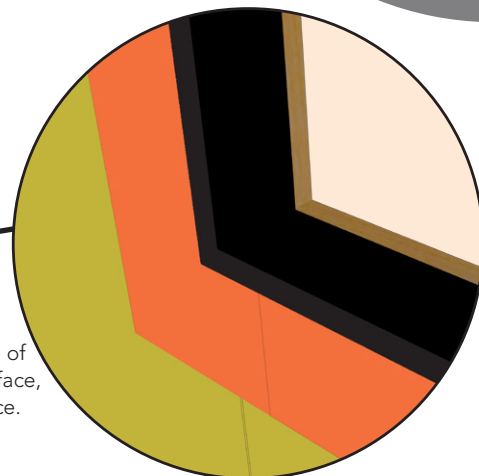
A. Fully embed head flashing (by others) in VaproBond over Vapro-SS Flashing™.

B. Seal rough opening corners with a bead of VaproBond.

Completed Rough Opening Using Two Components



VaproBond applied inside of rough opening and 1" on face, creates waterproof interface.

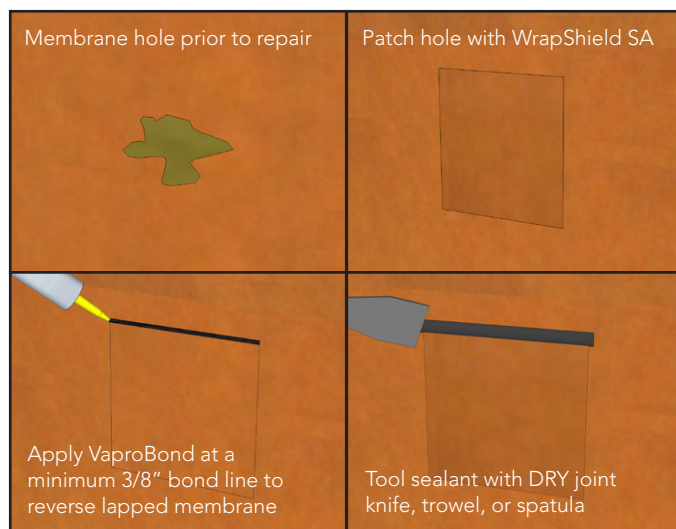


VaproFlashing SA Self-Adhered W: 6 1/2", 11 3/4", 19 2/3" is a pre-cut field membrane. Simply cut **VaproFlashing SA** into appropriate lengths and apply to face and inside of rough opening. **Labor saving, time saving, convenient.**

Technical Data

Shelf Life	12 months stored in unopened sausages at temperatures lower than 80 °F (27 °C)
Water Vapor Transmission ASTM E96	6.5 perms @ 14 mil (0.36 mm)
Dynamic Joint Movement ASTM C719	±25 %
Elongation ASTM D412	1500 %
Tensile Strength ASTM D412	165 psi
Modulus, 100 % Elongation ASTM D412	33 psi
Elongation at Break	400%
Peel Strength	12 pli
Tack-Free Time ASTM C679	50 minutes
Adhesion ASTM C794 - 15a	Pass
VOC Content ASTM D3960	80 g/L

Repairs



Visit VaproShield.com for additional details and uses

VaproSilicone Transition Materials (sheet and corners) are 100% silicone specifically designed to provide a water and air tight transition of WRB/Air Barrier membranes for areas requiring high movement capabilities.

- 100% translucent silicone elastomer sheet
- High movement capacity
- Extremely durable and tear resistant
- Provides air and water tight seal

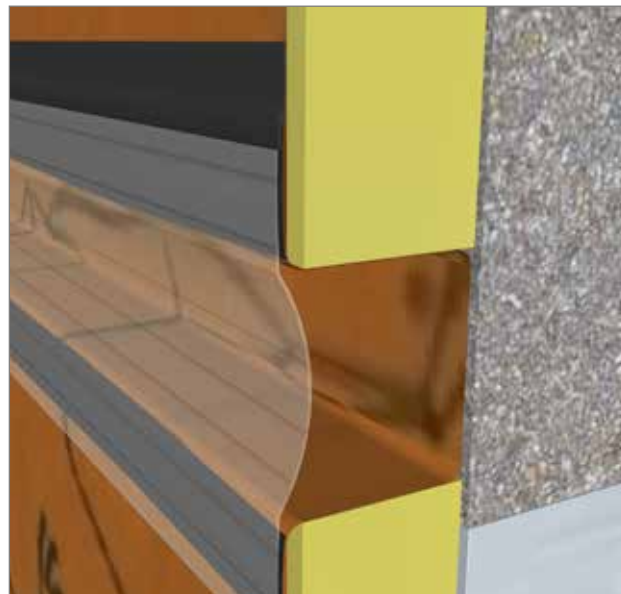
Benefits

- Provides an air and water tight seal where sealants and backer rods are not feasible
- High movement capability of +200/-50 percent
- Remains flexible under extreme temperatures
- Highly tear resistance
- Excellent weatherability; UV stable
- Usable over a wide temperature range: -50 ° to 300 °F (-45° to 149 °C)
- Translucent material clearly shows the complete bonding of **VaproBond** sealant to the substrate, eliminating the need for mechanical fastening

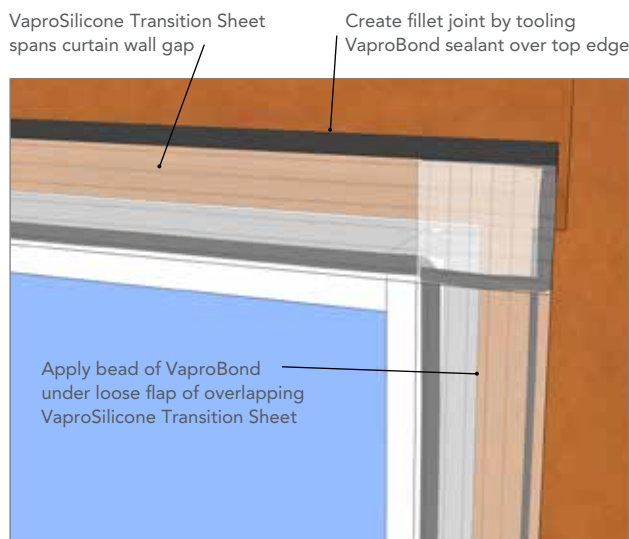
Technical Data

VAPROSILICONE TRANSITION MATERIALS	
Shelf Life of VaproBond adhesive sealant	12 months stored in unopened sausages at temperatures lower than 80 °F (27 °C)
Service Temperature	-60 ° to 300 °F (-51° to 149 °C)
Dynamic Joint Movement ASTM C719	+200 / -50 %
Elongation ASTM D412	400 %
Tensile Strength ASTM D412	295 psi (2.03 MPa)
Hardness (Shore A) ASTM C661	25
Tear Strength ASTM D624	20 ppi (3.5 N/mm)
Recovery ASTM D736	100%

Typical Uses



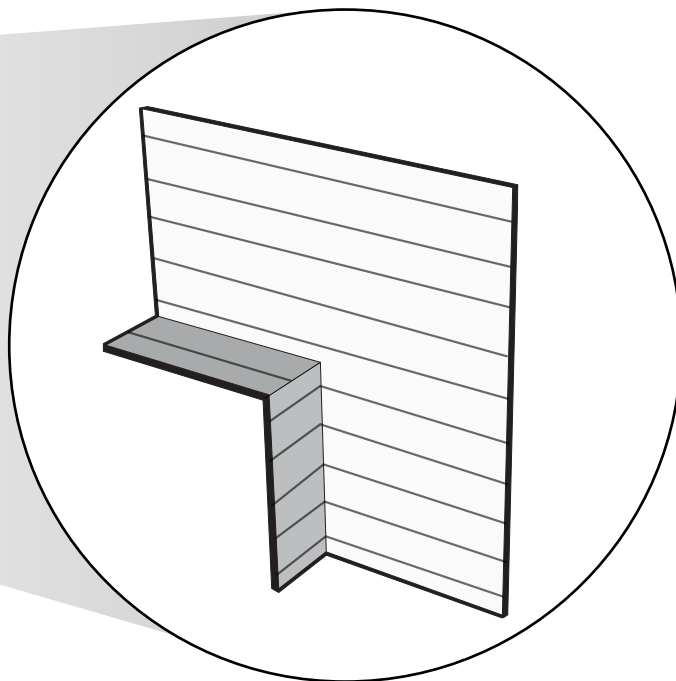
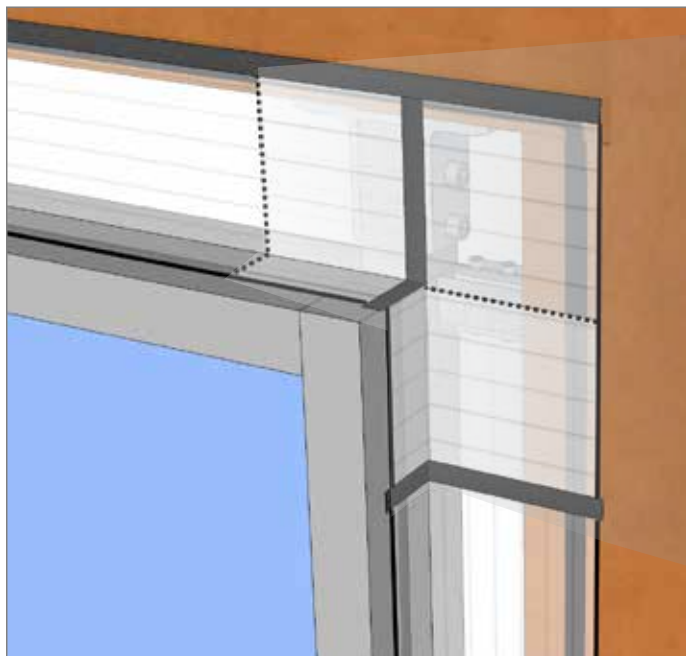
*Floor Line Movement Joint—use a combination of **VaproBond** sealant and **VaproSilicone Transition Sheet** between floors to accommodate floor line movement joints.*



*Curtain Wall Movement Joint —**VaproSilicone Transition Materials** create a continuous seal, without reverse laps, to accommodate natural building movement.*



Visit VaproShield.com for additional details and uses



VaproSilicone Transition Sheet and VaproSilicone Transition Corners create a continuous seal for curtain wall applications that are installed either proud or recessed of the WRB plane.



*The curtain wall is now fully detailed, with no reverse laps, around corners, sills and jambs using both **VaproSilicone Transition Materials** and **VaproBond** sealant. Visit VaproShield.com to review the full detail sequence.*

THE VAPROSHIELD SYSTEMS APPROACH

VaproShield promotes a systems approach to building envelope design, incorporating Breathable Membranes for roofs and walls, Rain Screen Design Components and 3D Window Flashing Elements resulting in High Performance Building Envelope Systems.

Complete System of Breathable Membranes + Rain Screen Design Components + 3D Window Flashing Elements = High Performance Building Envelope Systems

VaproCaps

VaproCaps are 1¾ inch diameter preformed head caps with a center throat hole, sealing the membrane at fastener penetration. They are designed and tested to withstand wind loads and protect against water intrusion at screw penetrations. VaproCaps are made of 100% virgin polypropylene with a carbon black UV inhibitor.

VaproCap Features:

- Low profile design
- High density, impact resistant, plastic plates will not rust, are thermal resistant and tough.
- Center-crossed choke hole creates tolerance fit when pre-assembled with properly sized bugle head screws (#6, #7, or #8).
- Unique, round shape design with the outside circumference tapered flat, evenly distributes bearing load without any sharp edges or corners.
- VaproCaps have a low profile design and when installed correctly with screws driven straight and to the proper depth, will firmly seat and seal around the fastener penetration.
- VaproCaps are required on all mechanically attached VaproShield Air Barrier systems.

Testing

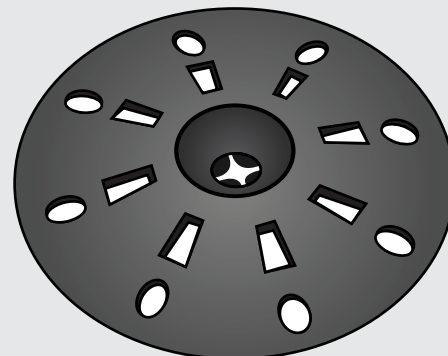
VaproCaps have been tested to ASTM E331 on various substrates, with simulated wind driven rain loads of approximately 60 mph for a period of two hours with no leakage.

Specifications

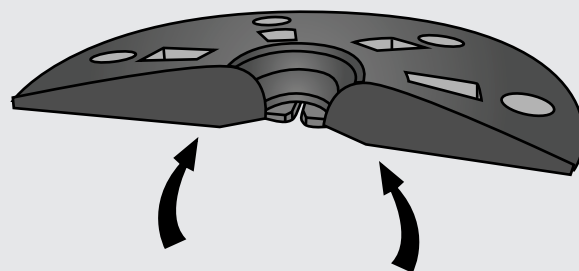
Round 1¾" diameter plastic plate, .050" to .060" gauge thick - tapered

Designed to work with corrosion resistant bugle head screws (#6, #7, or #8)

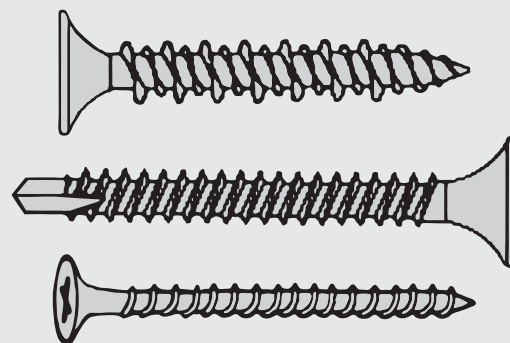
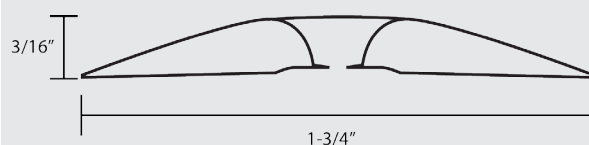
Washer fasteners/screws must be driven straight and not over or under driven



VaproCaps are intended only for installation of mechanically attached VaproShield membranes.



Center cup pressure designed to seal around screw penetration.



Use only corrosion resistant bugle head screws (#6, #7, or #8).

Contact **VaproShield** for fastener spacing recommendations.



Mural Apartments, Oakland, CA

VaproShield High Performance Building Envelope Systems work in all climates, year round and for all types of buildings and construction. We have installed millions of square feet in commercial, institutional, medical, municipal and hospitality projects. **Visit VaproShield.com to view our extensive list of project profiles.**



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