

PRODUCT DATA SHEET



1. Product Name

WrapShield RS™ Rain Screen

Water Resistive Vapor Permeable Air Barrier Sheet Membrane with Integrated Rain Screen Drainage Matrix and Integrated Tape

2. Manufacturer

VaproShield, LLC.

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3. Product Description

BASIC USE AND APPLICATIONS

WrapShield RS with an Integrated Rain Screen matrix is a mechanically attached high performance Water Resistive Barrier (WRB) and Air Barrier (AB) material with integrated tape at the horizontal joint that creates a drainage cavity for wall cladding systems such as wood siding, metal siding, masonry veneers, stucco, Mechanically Attached EIFS and veneer stone facades.

BENEFITS

WrapShield RS is a multi-functional product. The Water Resistive Vapor Permeable Air Barrier sheet membrane provides excellent liquid water holdout while preventing air leakage and allowing the wall assembly to breathe or 'dry-out' as necessary, to meet the conditions of seasonal changes for each climate zone. The integrated high performance rain screen drainage matrix maintains an unimpeded vertical drainage plane behind the cladding. The incorporation of the integrated tape at the horizontal seams increases ease of installation of a WRB / Air Barrier system, eliminating tape failure, reverse laps and additional associated costs. WrapShield RS creates the desired rain screen cavity in one installation step.

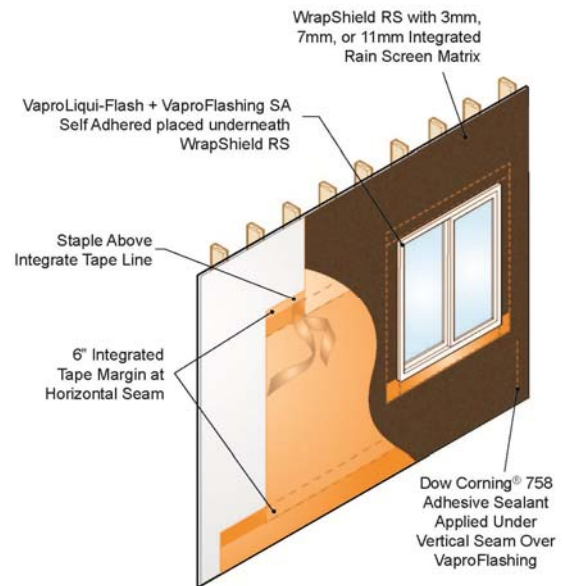
MATERIAL

WrapShield RS with an Integrated Rain Screen consists of the WrapShield Vapor Permeable Water Resistive Barrier / Air Barrier base layer material manufactured from a vapor permeable spun bonded polypropylene fabric with a six inch integrated tape margin at the horizontal joint, for a properly shingled installation. The FT Plastic Rain Screen drainage matrix is bonded to the WrapShield WRB / AB membrane.

07 27 27 Water Resistive Air Barrier Membrane

WRAPSHIELD RS™ Rain Screen

Water Resistive Vapor Permeable Air Barrier Sheet Membrane with Integrated Tape



SIZE/COLOR:

RAIN SCREEN AVAILABLE IN 3 DEPTHS (3mm, 7mm, 11mm):

Membrane Size: 59" Gross (53" Net) x 37.5' Roll (1.5M by 11.4M)
184.5 Gross SF or 165 Net SF of Rain Screen Coverage Per Roll

Membrane **Orange/Green RS** Drainage Matrix **3mm** (+/- 1mm); **1/8"**

Membrane **Orange/ Black RS** Drainage Matrix **7mm** (+/- 1mm); **1/4"**

Membrane **Orange/ Orange RS** Drainage Matrix **11mm** (+/- 1mm); **7/16"**

SUSTAINABLE DESIGN BENEFITS

WrapShield RS with Integrated Rain Screen Vapor Permeable Water Resistive Air Barrier Sheet Membrane with integrated tape can remain exposed for up to 180 DAYS prior to installation of cladding system. The rain screen cavity created by the integrated RS matrix, greatly increases the drying capacity of the building envelope. WrapShield RS protects against water intrusion and is vapor permeable, allowing the building materials that may have become wet during the construction phase to dry out, reducing the risk of wood rot, deterioration or corrosion. The air barrier function of the WrapShield RS system increases the energy efficiency of the building envelope, as well as prolonging the life of the structure by reducing air borne moisture loading.

4. Technical Data

WrapShield RS membrane is tested in accordance with ICC-ES AC 38 criteria to meet IBC and IRC requirements for Weather Resistive Barriers; and is tested in accordance with CCMC testing requirements.

RELATED LEED CREDITS

WrapShield RS membrane contributes to LEED points:

- IEQ Credit 3.1: Construction Indoor Air Quality Management Plan-During Construction
- EA Credit 1: Optimize Energy Performance

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Property	Standard/Test	Result
Air Barrier Testing		
Air Permeance Of Building Materials	ASTM 2178	0.0095 L/S/m ² 0.0019
Air Leakage Through Wall Systems	ASTM E-283	0.00017 L/S/m ² 0.000034 cfm/f ² PASS
Air Retarder Materials & Systems	ASTM E-1677	Type 1 Air Barrier PASS
Dry Breaking Force	ASTM D 5034	MD – 44.8 lbf/inch (4.94 N/mm) CD – 25.1 lbf/inch PASS
Water Resistance (control and weathered specimens)	AATCC 127 (55cm Hydrostatic Head of Water for 5 hours)	No leakage noted on underside of control or weathered Samples PASS
Water Vapor Transmission	ASTM E96	308.9 g/m ² 24 hrs 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

5. Installation

SYSTEM ACCESSORIES

- VaproLiqui-Flash™
- VaproFlashing™ and/or VaproFlashing SA™
- Dow Corning® 758 Adhesive Sealant

PREPARATION

- **WrapShield RS** with Integrated Rain Screen and integrated tape can be installed over multiple substrates including: Plywood, OSB, Framing Lumber, Gypsum Sheathing, Rigid Insulation, and Semi-Rigid Insulation (Mineral Fiber).
- WrapShield RS with Integrated Tape can be installed over damp substrates to limit further water intrusion and to allow the substrate to dry during the construction period.

FASTENING GUIDELINES

- **WrapShield RS** with Integrated Tape is mechanically fastened to the substrate. Stainless steel staples may be used just above the horizontal tape line as temporary fasteners during installation. Do not staple excessively in the field. DO NOT place staples in the Integrated Tape overlap area, prior to removal of the tape release papers and sealing of the horizontal Integrated Tape seam. Staples should be placed in the overlap area only after the Integrated Tape release papers have been removed and the joint is sealed.
- At vertical seam location, apply 11-3/4" wide VaproFlashing SA vertically and directly on the substrate at the vertical seam location.
- Apply Dow Corning 758® Adhesive Sealant to

VaproFlashing SA, directly behind WrapShield RS vertical seam.

- Apply WrapShield RS seams as a butt joint, centered over the VaproFlashing and Dow 758 Adhesive Sealant. Hand smooth seam to activate sealant.
- Join horizontal seams by pulling and removing release papers simultaneously (from the upper and lower courses of membrane). Then apply hand pressure to engage horizontal tape joint.

See complete Installation Instructions at www.vaproshield.com for additional information.

BEST PRACTICE OVERVIEW

- Horizontal overlaps must be at 6" in order to properly seal the Integrated Tape joint. Vertical overlaps are to be placed over the Dow 758 Sealant (which is applied to the vertical length of the VaproFlashing SA), to provide a continuous Air Barrier Seal. Vertical overlaps are to be staggered a minimum of 24" and should not occur directly above or below windows or doors.
- Always install WrapShield RS with Integrated Tape in a "weatherboard" or "shingle fashion" with the upper courses lapped on top of the courses below.
- For stucco applications install a layer of paperbacked lath over the WrapShield RS to prevent blockage of drainage matrix during Stucco installation.

STORAGE AND HANDLING

- Rolls should be stored on a clean, dry, level surface, either flat or upright and kept under cover.

LIMITATIONS

- Contamination of WrapShield RS membrane with building site chemicals which make it more wettable (e.g., surfactants), adversely affects its water resistance and therefore its contribution to the water resistance of the overall wall system.
- The WrapShield RS Rain Screen membrane 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 affected sections.
- The WrapShield RS Rain Screen membrane can remain exposed for up to 180 DAYS prior to installation of cladding system.

5. Availability

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

6. Warranty

- A 20 Year Product Warranty is available.