



1. Product Name

Valéron Vortec EVD™

2. Manufacturer

Valéron Strength Films
9505 Bamboo Rd.
Houston, TX 77041
(800) 825-3766
(713) 462-6111
Fax: (713) 690-2746
E-mail: info@valeron.com
www.valeronvortec.com
www.valeron.com

3. Product Description

BASIC USE

Valéron Vortec EVD™ is a crush resistant weather resistive barrier designed to drain moisture away from the wall cavity in homes and commercial buildings. An engineered surface pattern of raised, micro-perforated dimples creates a crush resistant airspace between sheathing and cladding, allowing moisture to drain away from the wall cavity rather than pond behind the building façade.

Valéron Vortec EVD allows necessary moisture vapor migration while helping to protect against energy robbing air infiltration and the formation of mold and mildew that can lead to frame rot and poor indoor air quality. Valéron Vortec EVD is designed to drain and is intended for use behind multiple cladding systems including stucco, EIFS, siding, masonry, cementitious cladding and curtain wall façades.

COMPOSITION & MATERIALS

Valéron Vortec EVD is an engineered vertical drain sheet offering superior outdoor durability and strength. It is manufactured of 100% UV enhanced, cross-laminated high density polyethylene.

SIZES

Valéron Vortec EVD is available in standard widths of 60" (1524 mm) for 1000 ft² (93 m²) of coverage (5' x 200' (2 x 61 m) roll sizes).

COLOR

Valéron Vortec EVD is available in White.



Easy to handle 5' (1.5 m) wide rolls

BENEFITS

- For use behind masonry, siding materials, stucco, EIFS, curtain wall and cementitious cladding systems
- Provides a crush resistant airspace between sheathing and cladding
- Engineered 3-dimensional surface prevents water ponding and facilitates moisture drainage away from the wall cavity
- Multidirectional design permits vertical, horizontal and diagonal installation without altering drainage properties
- Semi-permeable to allow moisture vapor migration
- Tear, snag and puncture resistant
- Translucent material promotes ease in locating studs, edges and openings
- Lightweight rolls help to speed installation
- Contains ultraviolet light resistance up to one year
- Helps maintain the moisture level needed for better curing of stucco. Improving the curing process results in stronger stucco
- Can be used as an alternative to Grade D water vapor permeable building paper

LIMITATIONS

Valéron Vortec EVD is intended for exterior wall applications and is not for use in applications in which temperatures will exceed 200 degrees F (93 degrees C) or as an alternative to asphalt-saturated organic felt underlayment in roofing applications.

4. Technical Data

APPLICABLE STANDARDS

ASTM International

- ASTM D774 Standard Test Method for Bursting Strength of Paper
- ASTM D779 Standard Test Method for Water Resistance of Paper, Paperboard, and Other Sheet Materials by the Dry Indicator Method
- ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting
- ASTM D1929 Standard Test Method for Determining Ignition Temperature of Plastics
- ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials
- 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
- ASTM E1677 Standard Specification for an Air Retarder (AR) Material or System for Low-Rise Framed Building Walls
- ASTM E2273 Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies

Federal Test Method Standard (FTMS) - FTMS 292 Tear Strength

Technical Association of the Pulp and Paper Industry (TAPPI)

- TAPPI T41D Basis Weight
- TAPPI T433 Water Resistance of Sized Paper and Paperboard (Dry Indicator Method Acid-Soluble Iron in Paper)
- TAPPI T460 Air Resistance of Paper
- TAPPI T470 Edge Tear Resistance of Paper

APPROVALS

Valéron Vortec EVD is approved for use in the following Building Code Evaluation Reports:

- ICC ES Acceptance Criteria (AC) - ICC ESR-1609
- Uniform Building Code (UBC)
- Canadian Construction Materials Centre (CCMC) - CCMC Evaluation Report 13259-R

PHYSICAL/CHEMICAL PROPERTIES

See Table 1. Complete test data, reports and other information are available upon request.

FIRE PERFORMANCE

- Flamespread index < 25; smoke developed index < 450 (ASTM E84)

5. Installation

METHODS

To attach Valéron Vortec to wood, foam or

fiberboard sheathing, or to exterior gypsum board, use fasteners that are long enough to penetrate into the stud or nail base material.

1. Start 2' - 3' (610 - 914 mm) from a lower corner and unroll Vortec in either direction, print side out. Wrap Vortec around corner and continue nailing or stapling while moving around the structure.
2. Secure Vortec firmly in place by fastening it every 16" or 24" (406 or 610 mm) along the horizontal header, sill plate and vertical studs. Place extra fasteners around each opening to be cut. Install Vortec "shingle-lap" fashion, with the higher piece lapped over the outside of the lower piece. Seams or joints between overlapping layers should be handled according to local building codes. At roof sections, lap the multidirectional drainage barrier over the entire top of any step-flashed areas against the wall.
3. Make an inverted Y cut in the wrap at the window's rough opening. Make diagonal cuts at the top of the rough opening corners.
4. Fold the 3 flaps in through the opening, fastening them inside with staples set approximately every 6" (152 mm). Fold the top flap up and tape temporarily.
5. Install the bottom flashing over the wrap. Note - Valéron Strength Films recommends the use of flashing material. Windows must



Multidirectional drainage installs easily with less waste.

TABLE 1 PHYSICAL/CHEMICAL PROPERTIES

Thickness, in (mm)	Base film - 0.003 (0.076) Vortec EVD - 0.020 (0.51)
Basis weight, lb/Msf (in ² /lb)	4.5 (9930)
Tensile strength (ASTM D882)	27 lbs/inch MD, 24 lbs/inch CD - Exceeds standard
Tear resistance (FTMS 292, TAPPI T470), grams	2500
Air porosity (TAPPI T460)	8.1 sec/100 cc
Water vapor transmission (ASTM E96), perms (grams)	6.5 (50) - Exceeds standard
Water resistance (AC 38, ASTM D779, TAPPI T433)	88 minutes - Exceeds standard
Drainage efficiency (AC 235, ASTM E2273)	93% - Exceeds standard
Surface burning characteristics (ASTM E84)	
Flamespread	Class A
Indexed smoke developed value	Class A
Use temperature maximum, degrees F (degrees C)	200 (93)
Use temperature minimum, degrees F (degrees C)	-70 (-57)
UV exposure rating, days	365
Specific gravity	0.91 - 0.97

- be installed in accordance with manufacturer's recommended installation procedures.
6. Install window.
 7. Install the side flashing over the side window flanges.
 8. Install the head flashing over the top window flange and extend it out 3" - 4" (76 - 102 mm) over the side flashings.
 9. The bottom window flange should be over the flashing, as described in Step 5 above.
 10. Remove the temporary tape from the top drainage barrier flap and apply over the installed head flashing.

Installing Valéron Vortec EVD With Existing Windows

1. Create a top flap so that the head flashing can be installed under the drainage barrier and over the flange.
2. Extend the head flashing 3" - 4" (76 - 102 mm) to each side with the flap taped over it.
3. On the remaining 3 sides, trim the drainage barrier close to the window flange and secure it to the flange with tape or caulk in a shingled fashion for positive drainage.

PRECAUTIONS

Valéron Vortec EVD is not intended to perform the function of an exterior siding product and should be covered as soon as possible.

BUILDING CODES

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

6. Availability & Cost

AVAILABILITY

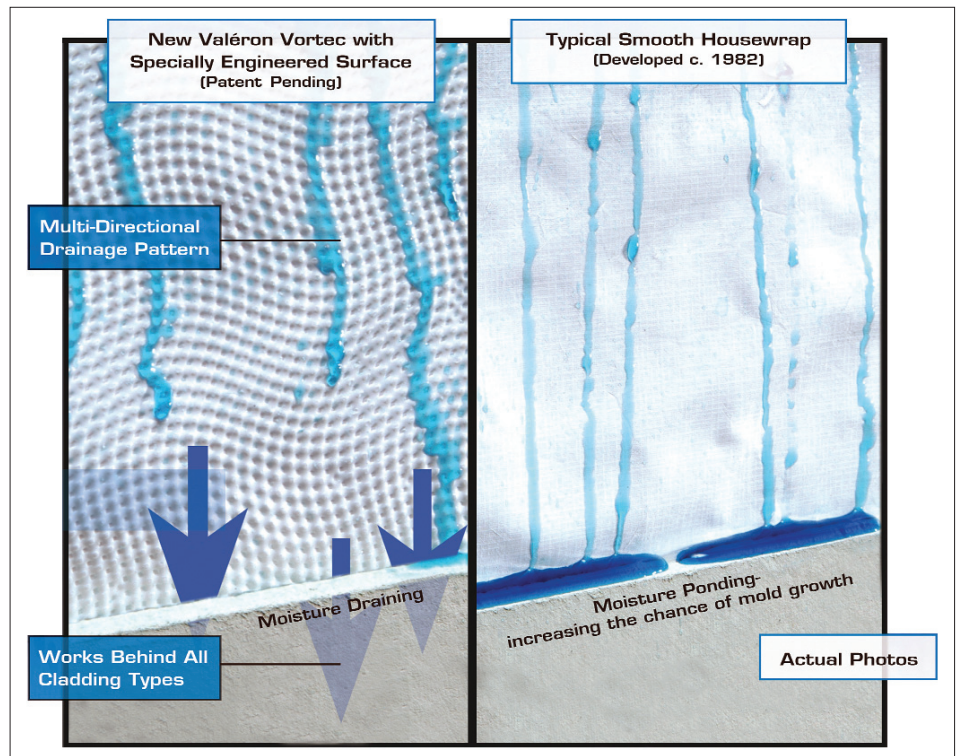
Valéron Vortec EVD is available throughout the U.S. Contact Valéron Strength Films at 1-800-VALERON (800-825-3766), (713) 462-6111, or online at www.valeronvortec.com for local distributors and delivery information.

COST

Contact Valéron Strength Films for local distributors who can provide installed cost and delivery information.

7. Warranty

Valéron Strength Films will replace any Valéron Vortec EVD material that is damaged during installation by weather or normal handling if it is installed according to the procedures published by Valéron Strength Films. Complete warranty terms and conditions are available from the manufacturer.



Engineered surface pattern facilitates moisture drainage.

8. Maintenance

None required.

9. Technical Services

Technical assistance, including more detailed information, product literature, test results, project lists, assistance in preparing project specifications and arrangements for application supervision, is available by contacting Valéron Strength Films.

10. Filing Systems

- Reed First Source
- MANU-SPEC®
- First Source CAD
- Additional product information is available from the manufacturer upon request.