

ICC-ES Evaluation Report

ESR-1609

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**DIVISION: 07 00 00—THERMAL AND MOISTURE
PROTECTION****Section: 07 25 00—Water-Resistive Barriers/Weather
Barriers****REPORT HOLDER:****VALERON STRENGTH FILMS, A DIVISION OF ITW, INC.**
9505 BAMBOO ROAD
HOUSTON, TEXAS 77041
(713) 462-6111
www.valeronvortec.com**EVALUATION SUBJECT:****VALERON® FILM AND VALERON® FILM WITH EVD
TECHNOLOGY****ADDITIONAL LISTEES:****BERRY PLASTICS CORPORATION, TAPES AND
COATINGS DIVISION**
25 FORGE PARKWAY
FRANKLIN, MASSACHUSETTES 02038**RAVEN INDUSTRIES**
POST OFFICE BOX 5107
SIOUX FALLS, SOUTH DAKOTA 57117**1.0 EVALUATION SCOPE****Compliance with the following codes:**

- 2009 *International Building Code*® (IBC)
- 2009 *International Residential Code*® (IRC)
- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)
- BOCA® *National Building Code*/1999 (BNBC)
- 1999 *Standard Building Code*® (SBC)
- 1997 *Uniform Building Code*™ (UBC)

Properties evaluated:

- Water resistance
- Surface-burning characteristics
- EIFS wall drainage characteristics (Valeron® Film with EVD Technology)

2.0 USES

Valeron® Film and Valeron® Film with EVD Technology are used as water-resistive barriers on the exterior side of the exterior walls of buildings of Type V-B (IBC), Type 5B

(BNBC), Type VI (SBC), or Type V-N (UBC) construction and structures constructed in accordance with the IRC. The term "water-resistive barrier" in this report includes water-resistive barriers under Sections 1402 and 1404.2 of the IBC, Section R703.2 of the IRC, and Section 1404.3 of the BNBC, and moisture protection barriers under Section 2303.3 of the SBC. The barriers may be used where Grade D building paper is required under IBC Section 2510.6 and IRC Section R703.6.3. Valeron® Film with EVD Technology may also be used in an EIFS drainage system as described in Section 4.2.

3.0 DESCRIPTION**3.1 Valeron® Film:**

Valeron® Film is a micro-perforated polyethylene material with a nominal thickness of 0.003 inch [0.076 mm (3 mils)]. The product is available in rolls 4.5 and 9 feet (1.35 or 2.70 m) wide and in various colors. Valeron® Film has a flame-spread index of 25 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E 84 (UBC 8-1). Valeron® Film is equivalent to Grade D building paper as described in UBC Standard 14-1.

3.2 Valeron® Film with EVD Technology:

Valeron® Film with EVD Technology is a micro-perforated polyethylene material with a three-dimensional surface and has a nominal thickness of 0.0032 inch [0.08 mm (3.2 mils)]. The product is available in rolls 5 feet (1.52 m) wide. Valeron® Film with EVD Technology has a flame-spread index of less than 25 and a smoke-developed index of less than 450 when tested in accordance with ASTM E 84 (UBC 8-1). Valeron® Film with EVD Technology has a 60-minute water-resistance rating when tested in accordance with ASTM D 779.

4.0 INSTALLATION**4.1 General:**

The products are installed after wall framing is completed and before windows and doors are installed. The roll is placed approximately 6 inches (152 mm) from the starting corner and fastened with cap-headed nails, 0.75-inch-wide (19.1 mm) staples or large-head nails, such as galvanized roofing nails. Fasteners are placed along the horizontal headers, sill plates and vertical studs every 16 or 24 inches (406 or 610 mm) on center. The printed side is installed facing the exterior. A minimum of 6 inches (152 mm) of overlap is provided for vertical seams and 2 inches (51 mm) for horizontal seams, except in cases where the manufacturer's published installation instructions specify a greater overlap dimension. When applied over wood-based sheathing in exterior plaster applications, two layers of

product are applied over sheathing in accordance with Section 2510.6 of the IBC, Section R703.6.3 of the IRC, or Section 2506.4 of the UBC, as applicable. Additional fasteners are used around each cut opening. When covering foam plastic insulation, fasteners must be firmly anchored into the studs or wood sheathing material. When covering or attaching to masonry, polyurethane or latex base adhesives are used.

When installing the films around rough openings, an upside-down “Y” is cut into the material. The header flap is cut to allow the window header nailing flange to slide up behind the Valeron® Film. When installing around window and door openings where no flange are used, an “X” is cut in the material from corner to corner. The flaps are pulled inside and fastened.

4.2 EIFS Wall Covering Assembly with Drainage:

The assembly described in this section complies with Section 4.10 of the ICC-ES Acceptance Criteria for EIFS Clad Drainage Wall Assemblies (AC235). This assembly is limited to the use of Valeron® Film with EVD Technology in Type V-B construction, in Group R, Division 1 and 3, Occupancies. The system consists of minimum ¹⁵/₃₂-inch-thick (11.9 mm), Exposure 1 OSB sheathing applied to wood studs spaced 16 inches (406 mm) on center and fastened in accordance with Chapter 23 of the IBC, BNBC, SBC or the UBC, or Section R604 of the IRC, and a mechanically attached drainage EIFS. Valeron® Film with EVD Technology is applied as described in Section 4.1 of this report. A minimum 1-inch-thick (25.4 mm), flat or grooved face, Type 1 expanded polystyrene (EPS), recognized in ICC-ES evaluation report [ESR-1788](#), is placed over the Valeron® Film with EVD Technology and fastened to the wood sheathing along the EPS edges. The fasteners are placed 6 inches (152 mm) from the EPS edges and 12 inches (305 mm) on center in the field of the EPS. The fasteners must be either the Wind-lock or the Wind-Devil 2 attachment system. Fasteners must be sized and spaced to meet wind resistance requirements as specified in the evaluation report, penetrating a minimum of ¹/₄ inch (6.4 mm) through sheathing. A weep screed, as set forth in Section 2512.1.2 of the IBC, Section R703.6.2.1 of the IRC, or 2506.5 of the UBC, is required. The EIFS base coat, fabric and finish coat are applied over the EPS in accordance with the applicable ICC-ES evaluation report.

5.0 CONDITIONS OF USE

The Valeron® Film and Valeron® Film with EVD Technology water-resistive barriers described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Installation must comply with this report, the manufacturer's published installation instructions and the requirements of the applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report shall govern.
- 5.2 The barriers must be covered with an exterior wall finish complying with the applicable code.
- 5.3 When Valeron® Film with EVD Technology is used in an EIFS wall covering assembly with drainage as described in Section 4.2 of this report, the assembly must be specifically recognized in the EIFS evaluation report.
- 5.4 Valeron® Film and Valeron® Film with EVD Technology are limited to use on buildings of Type V-B (IBC and UBC), Type 5B (BNBC), Type VI (SBC), or Type V-N (UBC) construction and construction permitted by the IRC.

6.0 EVIDENCE SUBMITTED

- 6.1 Data in accordance with the ICC-ES Acceptance Criteria for Water-resistive Barriers (AC38), dated February 2008.
- 6.2 Report of testing in accordance with ASTM E 84.
- 6.3 Report of testing in accordance with Section 4.10 of the ICC-ES Acceptance Criteria for EIFS Clad Drainage Wall Assemblies (AC235), dated October 2004, and ASTM E 2273.

7.0 IDENTIFICATION

The products are identified by a label noting the manufacturer's name (Valeron Strength Films, A Division of ITW, Inc.) and address, product name, the evaluation report number (ESR-1609).