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DIVISION: 07—THERMAL AND MOISTURE PROTECTION
Section: 07280—Water-resistive Barriers

REPORT HOLDER:

RAVEN INDUSTRIES
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EVALUATION SUBJECT:

FORTRESS PRO “WEATHER PROTECTIVE BARRIER”

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)
- Other Codes (see Section 8.0)

Properties evaluated:

- Water resistance
- Surface-burning characteristics

2.0 USES

Raven Industries' Fortress Pro “Weather Protective Barrier” is used as water-resistive membrane on the exterior side of exterior walls of buildings of all construction types under the IBC and the IRC. Fortress Pro barrier is an alternative to water-resistive barriers required in IBC Section 1404.2 and IRC Section R703.2. The product is also considered equivalent to a Grade D paper in accordance with IBC Section 2510.6 and IRC Section R703.6.3.

3.0 DESCRIPTION

Fortress Pro membranes are made of polyester fiber-reinforced polypropylene fabric which is coated with a white, breathable polymer coating. The membrane has a nominal thickness of 0.015 inch (0.38 mm) and a basis weight of 3.15 oz/yd² (106.5 g/m²). The membrane is available in rolls of varying sizes. The Fortress Pro has a flame-spread index of 25 or less and a maximum smoke-developed index not exceeding 450, when tested in accordance with ASTM E 84.

4.0 INSTALLATION

The rolls must be placed from left to right with the printed side to the outside and with at least 6 to 12 inches (152 to 305 mm) of the membrane around building corners. The Fortress Pro membrane is fastened to framing with 1-inch-long (25.4 mm), corrosion-resistant plastic cap nails. The membrane is unrolled around the building and fastened with nails spaced

between 12 and 18 inches (305 to 457 mm) at each vertical stud line. A minimum overlap of 6 inches (152 mm) must be provided for both vertical and horizontal seams. When use is over wood-based sheathing in exterior plaster applications, two layers of the product must be applied over sheathing in accordance with Section 2510.6 of the IBC or Section R703.6.3 of the IRC, as applicable. If the product is installed with an intervening drainage space, installation may be in accordance with the exception to IBC Section 2510.6 or IRC Section R703.6.3. For installation with exterior wall coverings of cementitious coatings or exterior insulation and finish systems, application must be in accordance with the ICC-ES evaluation report on the exterior wall covering.

5.0 CONDITIONS OF USE

The Fortress Pro “Weather Protective Barrier” described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** The manufacturer's published installation instructions and this report must be strictly adhered to. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.
- 5.2** The membrane must be covered in accordance with the manufacturer's installation instructions with an approved exterior wall covering complying with the applicable code.

6.0 EVIDENCE SUBMITTED

- 6.1** Data in accordance with the ICC-ES Acceptance Criteria for Water-resistive Barriers (AC38), dated June 2004.
- 6.2** Reports of tests in accordance with ASTM E 84.

7.0 IDENTIFICATION

The Fortress Pro “Weather Protective Barrier” is identified by a label or stamp, at regular intervals, bearing the manufacturer's name (Raven Industries), the product name, the manufacturing location and the evaluation report number (ESR-2476).

8.0 OTHER CODES

8.1 Evaluation Scope:

The Fortress Pro “Weather Protective Barrier” was also evaluated for compliance with the requirements of the 1997 *Uniform Building Code*™ (UBC).

8.2 Uses:

See Section 2.0, except the product has been evaluated for Type V-N construction (UBC). The Fortress Pro “Weather Protective Barrier” is equivalent to Grade D building paper as described in UBC Standard 14-1.

8.3 Description:

See Section 3.0.

8.4 Installation:

See Section 4.0. When use is over wood-based sheathing in exterior plaster applications, two layers of Fortress Pro "Weather Protective Barrier" membranes must be applied over the sheathing, in accordance with Section 2506.4 of the UBC.

8.5 Conditions of Use:

The Fortress Pro "Weather Protective Barrier" described in this report complies with, or is a suitable alternative to what is

specified in, the UBC, subject to the conditions noted in Section 5.0 of this report.

8.6 Evidence Submitted:

See Section 6.0.

8.7 Identification:

See Section 7.0.