ICC-ES Evaluation Report

ESR-2045

Reissued March 1, 2009

This report is subject to re-examination in two years.

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

REPORT HOLDER:

PAREXLAHABRA
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EVALUATION SUBJECT:

PAREX 495 KEYGUARD, TEIFSWEATHERSEAL ROLL-ON, EL REY ROLL-ON WEATHER BARRIER, TEIFSWEATHERSEAL AND PAREXWEATHERSEAL WATER-RESISTIVE BARRIERS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)

Properties evaluated:

- Surface-burning characteristics
- Physical properties

2.0 USES

Parex 495 KeyGuard, TeifsWeatherseal Roll-on, El Rey Roll-On Weather Barrier, TeifsWEATHERSEAL and ParexWeatherseal are used as an alternative to the water-resistive barrier specified in the IBC and IRC when installed over wood or gypsum-based sheathing on exterior walls of any construction type.

3.0 DESCRIPTION

3.1 General:

Parex 495 KeyGuard, TeifsWeatherseal Roll-on, El Rey Roll-On Weather Barrier, TeifsWEATHERSEAL and ParexWeatherseal are 100-percent-acrylic water-resistive coatings that are packaged in 5-gallon (18.9 L) pails. The products have a shelf life of two years when stored unopened in a cool, dry location. The barriers have 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. The water-resistive barrier coatings require a slip sheet when used behind portland cement plaster or mortar setting beds.

3.2 Water Vapor Transmission (WVT):

The WVT value of the barriers [in compliance with the ICC-ES Acceptance Criteria for Water-resistive Barriers (AC38)] is at least 35.7 grams/m^2 per 24 hours, making them equivalent to Grade D Kraft waterproof building paper.

3.3 Exterior Sheathing or Substrate:

The use of the barriers is limited to the following:

- Exterior grade gypsum sheathing complying with ASTM C 79 or ASTM C1396.
- Glass mat gypsum substrate complying with ASTM C 1177.
- Cement board complying with ASTM C1325 and having a minimum $^1/_2$-inch (12.7 mm) thickness (see NER-259).
- Plywood, Exposure 1, 4-ply, minimum Grade C-D, complying with U.S. DOC PS-1 and having a minimum nominal $^1/_2$-inch (12.7 mm) thickness.
- Oriented strand board (OSB), Exposure 1, complying with U.S. DOC PS-2.

3.4 Flashing:

Flashing material evaluated for use with the barriers consist of No. 26 gage uncoated, galvanized, steel sheet metal; uncoated aluminum; PVC; polyester-faced peel-and-stick; stainless steel; color-coated aluminum; galvanized metal and copper.

3.5 Reinforcing Fabric:

3.5.1 ParexWeatherseal and TeifsWEATHERSEAL: The reinforcing fabric (see ESR-1935) consists of glass-fiber mesh that has been treated for alkali resistance that complies with ASTM D 4029. The minimum 4.5-ounce fabric is a balanced, open-weave, glass-fiber fabric.

3.5.2 Parex 495 KeyGuard, TeifsWeatherseal Roll-on, El Rey Roll-On: The reinforcing fabric is nonwoven 396 Sheathing Joint Tape.

4.0 INSTALLATION

4.1 General:

Installation of the barriers must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

4.2 Exterior Sheathing or Substrate Preparation:

The barriers are installed on the exterior side of vertical exterior walls over exterior sheathing or substrates in indicated in Section 3.3. Surfaces must be free of all bond-

inhibiting materials, including dirt, oil and other foreign matter. The barriers may be applied only when the surface and ambient temperatures are 40°F (4°C) and rising during the application and drying period. Working time will decrease as surface and ambient temperatures increase. The substrate to be coated must be continuous. Sheathing must be without surface defects within the field of the board exceeding what is allowed by the sheathing manufacturer.

The barriers must not be installed on damp surfaces, below-grade surfaces, or on surfaces subject to water immersion. Damaged sheathing or other material must be removed and replaced. Sheathing must be installed as required by the applicable code and be flat within $^1/_4$ inch (6.4 mm). The water-resistive barrier coatings must be covered with an exterior wall covering complying with the requirements of the applicable code or a current evaluation report. Windows, doors, and penetrations must be flashed with materials as described in Section 3.4 in accordance with the applicable code.

4.3 Coating Application:

4.3.1 ParexWeatherseal and TeifsWEATHERSEAL: Minimum 4-inch-wide (102 mm) strips of reinforcing fabric are applied to all sheathing joints, inside and outside corners, open holes up to 1 inch (25.4 mm) across, back flanges of flashing and track and all exposed edges at termination. A minimum 4-inch (102 mm) width of the coating is applied to the joint, and the reinforcing fabric is embedded so that the color of the mesh is not visible. The coating is applied by trowel, roller or sprayer to the entire surface of the substrate and flashing, as applicable, to a minimum wet thickness of $^1/_{16}$ inch (1.6 mm), resulting in a dry thickness of $^1/_{24}$ inch (1.1 mm).

4.3.2 Parex 495 KeyGuard TeifsWeatherseal Roll-on, El Rey Roll-On: The coating is applied over gaps in sheathing up to $^1/_4$ in. (6 mm) wide; open holes up to 1 inch (25 mm) in diameter; back flanges of flashings and track and centered over sheathing joints, at a 6-inch (150 mm), width with a roller, brush or spray equipment. Sprayed applications require back-rolling. Use a $1^1/_4$-inch (32 mm) or $1^3/_8$-inch (35 mm) nap roller, designed for applying latex paint.

Center the 396 Sheathing Joint Tape over the gaps, holes, sheathing joints and flashing flanges in the wet base layer of coating. Run a trowel or taping knife over the tape to fully embed it into the base layer and force the wet coating up into the tape. Do not let the coating skin over before installing the tape. If the coating does skin over before embedding the tape, scrape off the coating and start over or let it fully dry and re-apply. A top layer of the coating must be applied over the entire outer sheathing surface, at a rate of not more than 100 sq. ft. per gal. (2.4 sq. m. per L), after the tape is properly embedded into the base layer of the coating.

4.4 Curing and Drying:

The barriers must be allowed to cure for a minimum of 12 hours before application of wall covering. Curing time varies depending on temperature/humidity and surface conditions. Surfaces must be protected from rain and freezing until completely dry.

5.0 CONDITIONS OF USE

The Parex 495 KeyGuard, TeifsWeatherseal Roll-on, El Rey Roll-On Weather Barrier, TeifsWEATHERSEAL and ParexWeatherseal water-resistive coating 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 applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report governs.

5.2 Installation must be by applicators qualified by the manufacturer. For recognition under the UBC, an installation card having the format shown in Figure 1 must be completed by the applicator and must be presented to the code official at the completion of each project.

5.3 For recognition under the IBC and IRC, special inspection is required at the jobsite in accordance with IBC Sections 1704.1 and 1704.14. Duties of the inspector include verifying field preparation of materials, expiration dates, installation of components, curing of components, applied wet-film and dry-film thicknesses and interface of coating material with flashing.

5.4 Use is limited to use on vertical walls and must not be used on parapets or on sloped or horizontal surfaces. Wrapping into sill openings is permitted as required.

5.5 The barriers must be covered with an exterior wall covering complying with the applicable code or a current evaluation report.

5.6 The barriers must not be used for repairing cracks subject to movement, joints or cracks wider than $^1/_8$ inch (3.2 mm).

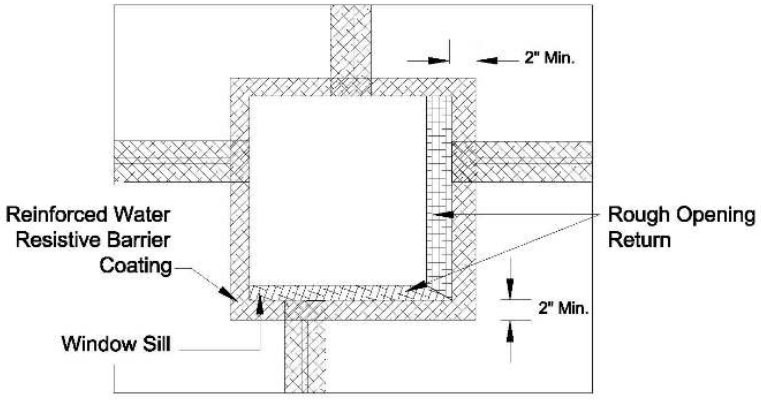
6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Water-resistive Coatings Used as Water-resistive Barriers over Exterior Sheathing (AC212), dated February 2005 (editorially revised October 2008).

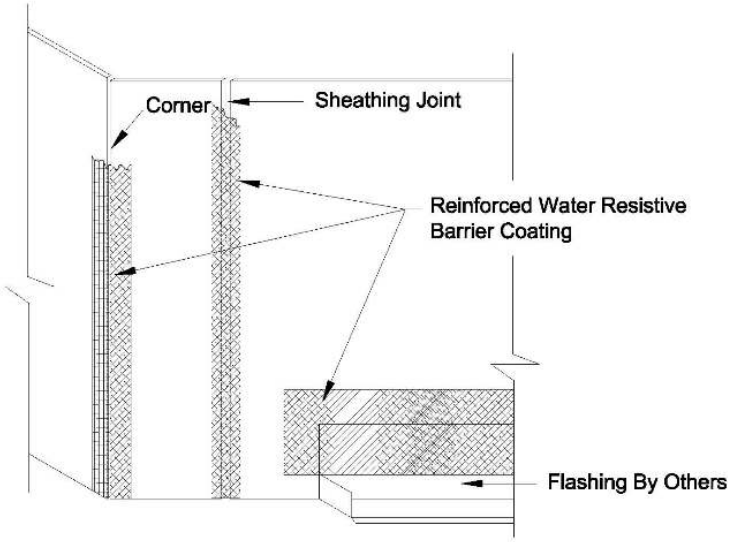
6.2 Report containing results of testing in accordance with ASTM E 84.

7.0 IDENTIFICATION

Containers of the Parex 495 KeyGuard, TeifsWeatherseal Roll-on, El Rey Roll-On Weather Barrier, TeifsWEATHERSEAL and ParexWeatherseal are identified by a label bearing the manufacturer's name (ParexLahabra) and address; the product name; identification of components; the batch number; quantity of material in packaged mix; storage instructions and shelf life; the expiration date; and the evaluation report number (ESR-2045).



Typical Rough Opening



Typical Corner, Sheathing Joint, Termination at Flashing

FIGURE 1