

# **ICC-ES Evaluation Report**

### ESR-5272

Reissued June 2024

This report also contains:

Revised September 2024

- CBC and CRC Supplement

Subject to renewal June 2026

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DIVISION: 07 00 00— THERMAL AND MOISTURE PROTECTION Section: 07 25 00— Water-Resistive Barriers/Weather Barriers	REPORT HOLDER: ALPHA PROTECH ENGINEERED PRODUCTS, INC.	EVALUATION SUBJECT: REX™ ROYAL HOUSE WRAP	
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## **1.0 EVALUATION SCOPE**

### 1.1 Compliance with the following codes:

- 2024, 2021, 2018, and 2015 *International Building Code*® (IBC)
- 2024, 2021, 2018, and 2015 International Residential Code® (IRC)

### Properties evaluated:

- Water resistance
- Surface-burning characteristics
- 1.2 Evaluation to the following green code(s) and/or standards:
- 2022 California Green Building Standards Code (CALGreen), Title 24, Part 11
- 2020, 2015, 2012 and 2008 ICC 700 <u>National Green Building Standard</u><sup>™</sup> (ICC 700-2020,ICC 700-2015, ICC 700-2012 and ICC 700-2008)

### Attribute verified:

■ See Section 2.0

## **2.0 USES**

REX<sup>™</sup> Royal House Wrap is used as a water-resistive barrier on the exterior side of exterior walls of buildings of any construction type under the IBC and construction permitted under the IRC. Under the IBC, the waterresistive barrier may be used on buildings of Type I, II, III and IV construction that are not greater than 40 feet (12.2 m) in height above grade in accordance with 2024 IBC Section 1402.6, 2021 and 2018 IBC Section 1402.5, or 2015 IBC Section 1403.5, except as permitted in Exceptions 1 and 2 of the 2024 IBC Section 1402.6, 2021 and 2018 IBC Section 1402.5 and 2015 IBC Section 1403.5. The water-resistive barrier is equivalent to 10-minute Grade D paper as described in 2024 and 2021 IBC Section 2510.6 and IRC R703.7.3.

The attributes of the water-resistive barriers have been verified as conforming to the requirements of (i) CALGreen Section 5.407.1 for water-resistive barriers; (ii) ICC 700-2020 Sections 602.1.8, 11.602.1.8, 1202.6 and 13.104.1.4; (iii) ICC 700-2015 Section 602.1.8, 11.602.1.8 and 12.6.602.1.8; (iv) ICC 700-2012 Section 602.1.8, 11.602.1.8 and 12.5.602.1.8; and (v) ICC 700-2008 Section 602.9 for water-resistive barriers. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.



## **3.0 DESCRIPTION**

### 3.1 General:

REX<sup>™</sup> Royal House Wrap has a flame spread index of less than 25 and a smoke-developed index of less than 450, when tested in accordance with ASTM E84.

The water-resistive barrier is manufactured with ultraviolet stabilizing additives and are supplied in rolls and sheets of varying sizes.

### 3.2 REX<sup>™</sup> Royal House Wrap:

REX<sup>™</sup> Royal House Wrap consists of a 0.74 oz./yd<sup>2</sup> (25 g/m<sup>2</sup>) polymer film laminated between two layers of 1.33 oz/yd<sup>2</sup> (45 g/m<sup>2</sup>) nonwoven spun bond polypropylene and has a total nominal weight of 3.39 oz/yd<sup>2</sup> (115 g/m<sup>2</sup>).

## **4.0 DESIGN AND INSTALLATION**

**4.1 General:** The water-resistive barrier must be installed on the exterior side of exterior walls over exterior sheathing or insulation. The printed side must be installed facing outside. The report holder's published installation instructions and this report must be strictly adhered to, and a copy of the instructions must be available at all times on the jobsite during installation. In the event of a conflict between this report and the report holder's published installation instructions, this report governs.

### 4.2 Water-resistive Barrier:

The water-resistive barrier described in this report is installed after wall framing is completed and before or after windows and doors are installed. The roll is placed approximately 1 foot (305 mm) from the starting corner and fastened to the sheathing with corrosion-resistance staples, large-headed nails, or roofing nails spaced at a maximum of 32 inches (813 mm) on center; and is then unrolled around the building and fastened, as set forth in the manufacturer's published installation instructions, at top and bottom sill plates and at framing members. A minimum of 6 inches (152 mm) of overlap is required for vertical seams and 2 inches (51 mm) for horizontal seams, except where the report holder's installation instructions specify a greater overlap dimension.

When use is over wood-based sheathing in exterior plaster applications, two layers of REX<sup>™</sup> Royal House Wrap must be applied over sheathing in accordance with 2024 and 2021 IBC Section 2510.6 or IRC Section R703.7.

When REX<sup>™</sup> Royal House Wrap are used over wood based sheathing in exterior plaster applications in accordance with 2024 and 2021 IBC Section 2510.6 and 2021 IRC Section R703.7.3 installations must be as follows:

For dry climate zones (B) in accordance with 2024 and 2021 IBC Section 2510.6.1 or 2024 and 2021 IRC Section R703.7.3.1, for the product must be applied in accordance with 2021 IBC Section 2510.6.1 Item 1 and 2024 and 2021 IRC Section R703.7.3.1 Item 1, as applicable.

For moist climate zones (A) or marine climate zones (C) in accordance with 2024 and 2021 IBC Section 2510.6.2 or 2024 and 2021 IRC Section R703.7.3.2, the product must be applied in accordance the dry climate zone (B) provisions noted above and with the additional requirements noted in 2024 and 2021 IBC Section 2510.6.2 Item 1 or 2024 and 2021 IRC Section R703.7.3.2 Item 1, as applicable.

For cementitious coatings or exterior insulation and finish systems, application is to be in accordance with the evaluation report on the exterior coating.

## **5.0 CONDITIONS OF USE:**

The REX<sup>™</sup> Royal House Wrap 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 product must be installed in accordance with the report holder's published installation instructions, the requirements of the applicable code and this report. If there is a conflict between this report and the published installation instructions, this report governs.
- **5.2** The product must be covered by an exterior wall finish complying with the requirements of the applicable code.
- **5.3** The product may be used on buildings of Type I, II, III and IV construction that are not greater than 40 feet (12.2 m) in height above grade as described in Section 2.0 of this report.
- **5.4** The product is manufactured under a quality control program with inspections by ICC-ES.

## **6.0 EVIDENCE SUBMITTED**

- **6.1** Data in accordance with the ICC-ES Acceptance Criteria for Water-resistive Barriers (AC38), dated August 2016 (editorially revised June 2024).
- 6.2 Report of flame spread characteristics testing in accordance with ASTM E84.

## 7.0 IDENTIFICATION

- **7.1** The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-5272) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- **7.2** In addition, the REX<sup>™</sup> Royal House Wrap is identified by a roll label that consists of the report holder's name (Alpha ProTech Engineered Products, Inc.), the product name, date of manufacture, installation instructions, roll dimensions and the evaluation report number (ESR-5272). The product name and ESR-5272 are printed at regular intervals on the outside face of the product.
- **7.3** The report holder's contact information is the following:

ALPHA PROTECH ENGINEERED PRODUCTS, INC. 301 SOUTH BLANCHARD STREET VALDOSTA, GEORGIA 31601 (229) 242-1931 www.alphaprotech.com



## **ICC-ES Evaluation Report**

## ESR-5272 CBC and CRC Supplement

Reissued June 2024

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This report is subject to renewal June 2026.

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION Section: 07 25 00—Water-Resistive Barriers/Weather Barriers

### **REPORT HOLDER:**

ALPHA PROTECH ENGINEERED PRODUCTS, INC.

### **EVALUATION SUBJECT:**

**REX™ ROYAL HOUSE WRAP** 

### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that the REX<sup>™</sup> Royal House Wrap water-resistive barrier, describes in ICC-ES evaluation report ESR-5272, has also been evaluated for compliance with the codes noted below.

#### Applicable code editions:

### ■ 2022 California Building Code<sup>®</sup> (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

### ■ 2022 California Residential Code<sup>®</sup> (CRC)

### 2.0 CONCLUSIONS

### 2.1 CBC:

The REX<sup>™</sup> Royal House Wrap water-resistive barrier, described in Sections 2.0 through 7.0 of the evaluation report ESR-5272, complies with CBC Chapter 14, provided the design and installation are in accordance with the 2021 *International Building Code*<sup>®</sup> (IBC) provisions noted in the evaluation report and the applicable provisions of the CBC.

### 2.1.1 OSHPD:

The REX<sup>™</sup> Royal House Wrap water-resistive barrier, described in Sections 2.0 through 7.0 of the evaluation report ESR-5272, complies with CBC Chapter 14 [OSHPD 3] and CBC Chapter 14 with amendments [OSHPD 1, 1R, 2, 4 and 5].

### 2.1.2 DSA:

The REX<sup>™</sup> Royal House Wrap water-resistive barrier, described in Sections 2.0 through 7.0 of the evaluation report ESR-5272, complies with CBC Chapter 14 with amendments [DSA SS and DSA SS/CC].

### 2.2 CRC:

The REX<sup>™</sup> Royal House Wrap water-resistive barrier, described in Sections 2.0 through 7.0 of the evaluation report ESR-5272, complies with CRC Chapter 7, provided the design and installation are in accordance with the 2021 *International Residential Code*<sup>®</sup> (IRC) provisions noted in the evaluation report and the applicable provisions of the CRC.

This supplement expires concurrently with the evaluation report, reissued June 2024 and revised September 2024.

