

# **ICC-ES Evaluation Report**

#### ESR-3431

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# **1.0 EVALUATION SCOPE**

### 1.1 Compliance with the following codes:

- 2021, 2018, 2015, 2012 and 2009 *International Building Code*® (IBC)
- 2021, 2018, 2015, 2012 and 2009 International Residential Code® (IRC)

#### **Properties evaluated:**

- Physical properties
- 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 *National Green Building Standard*<sup>™</sup> (ICC 700-2020, ICC 700-2015, ICC 700-2012 and ICC 700-2008)

#### Attributes verified:

See Section 3.1

## **2.0 USES**

KS Housewrap (UFP Housewrap or Novawrap) and KS Premiumwrap (UFP Premiumwrap or Everbilt<sup>™</sup> Housewrap) are used as alternatives to the water-resistive barriers specified in 2021 and 2018 IBC Section 1403.2 [2015, 2012 and 2009 IBC Section 1404.2] and IRC Section R703.2. KS Housewrap and KS Premiumwrap are equivalent to Grade D building paper as described in the exception to 2021, 2012 and 2009 IBC Section 2510.6 and 2021, 2018 and 2015 IRC Section R703.7.3 [2012 and 2009 IRC Section R703.6.3].

The water-resistive barriers may be used on the exterior side of exterior walls of buildings in all types of construction. Under the 2021, 2018 and 2015 IBC, the water-resistive barrier products 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 2021 and 2018 IBC Section 1402.5 and 2015 IBC Section 1403.5, except as permitted in Exception 1 of Section 1402.5 of the 2021 and 2018 IBC and Section 1403.5 of the 2015 IBC. Under the 2012 IBC the water-resistive barriers may be used on buildings of Type I, II, III or IV construction that are not greater than 40 feet (12.2 m) in height above grade in accordance with 2012 IBC Section 1403.5. The water-resistive barriers may also be used on construction permitted under the IRC.



# 3.0 DESCRIPTION

### 3.1 General:

KS Housewrap is a woven, perforated, polyolefin fabric with a polymeric coating on one side. It is produced in rolls of varying sizes and has a nominal weight of 1.92 ounces per square yard. KS Premiumwrap is a woven, perforated, polyolefin fabric with a polymeric coating on both sides. It is produced in rolls of varying sizes and has a nominal weight of 2.21 ounces per square yard.

The attributes of the water-resistive barriers have been verified as conforming to the provisions of (i) CALGreen Section 5.407.1; (ii) ICC 700-2020 Sections 602.1.8, 11.602.1.8. 1202.6 and 13.104.1.4; (iii) ICC 700-2015 and ICC 700-2012 Section 602.1.8, 11.602.1.8 and 12.5.602.1.8; and (iv) 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.

### 3.2 Surface-burning Characteristics:

KS Housewrap and KS Premiumwrap have a flame-spread index of 25 or less and a smoke-developed index of 450 or less, when tested in accordance with ASTM E84.

### **4.0 INSTALLATION**

The KS Housewrap and KS Premiumwrap water-resistive barriers must be installed on the exterior side of exterior walls over exterior sheathing or insulation. The water-resistive barriers are installed after wall framing is completed and before windows and doors are installed. The manufacturer's published installation instructions and this report must be strictly adhered to. If requested by the code official, a copy of this report is to be available at the jobsite during installation.

The roll is placed approximately 2 to 3 feet from the starting corner and is fastened to the sheathing or framing members with corrosion-resistant nails or staples with minimum 1-inch (25.4 mm) crowns; and is then unrolled around the building and fastened with nails or staples at a maximum of 18 inches (457 mm) on center along studs and a maximum of 8 inches (203 mm) on center along top and bottom sill plates. The printed sides of the barriers are installed facing the outside. The water-resistive barriers must be installed horizontally on vertical walls, with the upper layer lapped over the lower layer. A minimum of 6 inches (152 mm) of overlap must be provided for vertical seams and 6 inches (152 mm) for horizontal seams, except where the published installation instructions specify a greater overlap.

When use is over wood-based sheathing in exterior plaster applications, the product must be applied over sheathing in accordance with 2012 and 2009 IBC Section 2510.6 or 2018 and 2015 IRC Section R703.7.3 [2012 and 2009 IRC Section R703.6.3], as applicable.

When used over wood-based sheathing with exterior cement plaster application in accordance with 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 2021 IBC Section 2510.6.1 or 2021 IRC Section R703.7.3.1, the product must be applied in accordance with IBC Section 2510.6.1 Item 1 or 2 and 2021 IRC Section R703.7.3.1 Item 1 or 2, as applicable.

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

For cementitious coatings or exterior insulation and finish systems, application of the barrier must be in accordance with the evaluation report on the exterior coating. When the water-resistive barriers are installed over nonstructural sheathing products or foam insulation boards, fasteners must penetrate the framing members at least 1/2 inch (13 mm) and be spaced as noted above.

## 5.0 CONDITIONS OF USE:

The KS Housewrap and KS Premiumwrap 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** The products must be installed in accordance with the manufacturer's published instructions, the requirements of the applicable code and this report. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.

- **5.2** The products must be covered in accordance with the manufacturer's installation instructions with an approved exterior wall covering complying with the applicable code.
- 5.3 The products must not be installed where ASTM E2556 Type I or II building paper is required.
- 5.4 The products are 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 July 2021).
- 6.2 Reports of surface-burning 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-3431) 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 KS Housewrap (UFP Housewrap and NovaWrap) and KS Premiumwrap (UFP Premiumwrap and Everbilt<sup>™</sup> Housewrap) water-resistive barriers are identified by a label on each roll of membrane, and by printing on the product at regular intervals, that includes the report holder's name (OKS Poly Co., Ltd.) or additional listee's name (UFP Distribution, Intertape Polymer Group or The Home Depot Inc.) and address, the product name, and the evaluation report number (ESR-3431).
- **7.3** The report holder's contact information is the following:

OKS POLY CO., LTD. 50, SEONG SEO-RO 35 GIL, DALSEO-GU DAEGU 42719 SOUTH KOREA +82.53.582.1177 www.okspoly.com PRODUCTS:\_KS HOUSEWRAP AND KS PREMIUMWRAP WATER-RESISTIVE BARRIERS

7.4 The Additional Listees' contact information is the following:

UFP DISTRIBUTION 2701 ADA DRIVE ELKHART, INDIANA 46514 (574) 266-3603 <u>www.ufpi.com</u> PRODUCTS: UFP HOUSEWRAP AND UFP PREMIUMWRAP

INTERTAPE POLYMER GROUP 50 ABBEY AVENUE TRURO, NOVA SCOTIA B2N 6W4 CANADA www.intertapepolymer.com PRODUCT: NOVAWRAP

THE HOME DEPOT INC. ATLANTA STORE SUPPORT CENTER 2455 PACES FERRY NW ATLANTA, GA 30339 (770) 384-4646 www.homedepot.com PRODUCT:\_EVERBILT<sup>™</sup> HOUSEWRAP