

ICC-ES Evaluation Report

ESR-1708

Reissued September 2019

This report is subject to renewal September 2020.

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 30 05—Roofing Felt and Underlayment

REPORT HOLDER:

KIRSCH BUILDING PRODUCTS, LLC

EVALUATION SUBJECT:

SHARKSKIN COMP®, SHARKSKIN ULTRA®, SHARKSKIN ULTRA SA® AND SHARKSKIN ULTRA RADIANT® ROOFING UNDERLAYMENTS

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2018, 2015, 2012, 2009 and 2006 *International Building Code®* (IBC)
- 2018, 2015, 2012, 2009 and 2006 *International Residential Code®* (IRC)

Properties evaluated:

- Physical properties
- Ice barrier
- ~~Severe climate underlayment~~

1.2 Evaluation to the following green code(s) and/or standards:

- 2016 California Green Building Standards Code (CALGreen), Title 24, Part 11
- 2015, 2012 and 2008 ICC 700 *National Green Building Standard™* (ICC 700-2015, ICC 700-2012 and ICC 700-2008)

Attributes verified:

- See Section 3.1

2.0 USES

Sharkskin Comp®, Sharkskin Ultra®, Sharkskin Ultra SA® and Sharkskin Ultra Radiant® roofing underlayments are used as alternatives to the ASTM D 226 Type I and Type II underlayments specified in Chapter 15 of the IBC and Chapter 9 of the IRC. Sharkskin Ultra® and Sharkskin Ultra SA® may be used as an underlayment in severe climate areas as specified in Chapter 15 of the IBC and Chapter 9 of the IRC.

3.0 DESCRIPTION

3.1 General:

Sharkskin® roofing underlayment products consist of a

woven core coated with a polyolefin, a nonwoven polyolefin, slip-resistant top surface layer. The roofing underlayments are available in rolls of varying size.

The attributes of the Sharkskin Ultra® and Sharkskin Ultra SA® underlayments have been verified as conforming to the provisions of (i) CALGreen Section A4.407.5; (ii) ICC 700-2015 and ICC 700-2012 Sections 602.1.13, 11.602.1.13 and 12.5.602.1.14; and (iii) ICC 700-2008 Section 602.10 for ice 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 Sharkskin Comp®:

Sharkskin Comp® underlayment consists of a woven base layer of polypropylene scrim, a top polyolefin coating layer and a nonwoven polyolefin, slip-resistant top surface layer embedded into the coating layer. Sharkskin Comp® is gray in color with red printing. The underlayment has a nominal weight of 3.8 pounds per 100 square feet (0.186 kg/m²).

3.3 Sharkskin Ultra®:

Sharkskin Ultra® underlayment consists of a core layer of woven polypropylene scrim; a top polyolefin coating layer, a nonwoven polyolefin, slip-resistant top surface layer embedded into the coating layer and a bottom polyolefin coating layer. Sharkskin Ultra® is gray in color with blue printing. The underlayment has a nominal weight of 4.8 pounds per 100 square feet (0.234 kg/m²).

3.4 Sharkskin Ultra SA®:

Sharkskin Ultra SA® underlayment consists of a core layer of woven polypropylene scrim, a top polyolefin coating layer, a nonwoven polyolefin, slip-resistant top surface layer embedded into the coating layer, a bottom polyolefin coating layer and a layer of proprietary synthetic butyl blend adhesive backed by a polyolefin split release liner that is removed prior to installation of the Sharkskin Ultra SA® to the roof deck or substrate. Sharkskin Ultra SA® is gray in color with green printing. The underlayment has a nominal weight of 6.5 pounds per 100 square feet (0.317 kg/m²).

3.5 Sharkskin Ultra Radiant®:

Sharkskin Ultra Radiant® underlayment consists of a core layer of woven polypropylene scrim, a top polyolefin coating layer, a nonwoven polyolefin, slip-resistant top surface layer embedded into the coating layer and a bottom polyolefin coating layer with an attached reflective layer. Sharkskin Ultra Radiant® is gray in color with yellow/gold printing. The

underlayment has a nominal weight of 5.5 pounds per 100 square feet (0.269 kg/m²).

4.0 INSTALLATION

4.1 General:

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

Prior to application of the underlayment, the deck surface must be dry, free of dust, dirt, debris, loose nails and other protrusions. Damaged sheathing must be replaced and wood knots repaired.

Installation of the roof covering may proceed immediately following application of the underlayment or within the time period set forth in the manufacturer's published installation instructions. The underlayment must be covered by the roof covering as soon as possible.

4.2 Attachment of Sharkskin Comp®, Sharkskin Ultra®, Sharkskin Ultra SA® and Sharkskin Ultra Radiant®:

4.2.1 General: The underlayments must be laid horizontally (parallel to the eaves) starting at the lowest eave point with the printed side up where overlaps run with the flow of water in a shingling manner except when the self-adhered Sharkskin Ultra SA® underlayment is installed as valley lining.

4.2.2 Sharkskin Comp®: Sharkskin Comp® must be installed with minimum 3-inch (76 mm) horizontal (head) laps and minimum 6-inch (152 mm) vertical (end) laps. The Sharkskin Comp®, underlayment is mechanically attached with corrosion-resistant fasteners, such as hammer-tacker staples, No. 12 gauge nails or staples with 1-inch (25 mm) diameter metal or plastic round caps, tin tags with corrosion-resistant nails or staples, or roofing nails with 3/8-inch (10 mm) diameter heads, as set forth in the manufacturer's published installation instructions.

4.2.3 Sharkskin Ultra® and Sharkskin Ultra Radiant®: Sharkskin Ultra® must be installed with minimum 2-inch (51 mm) horizontal (head) laps and minimum 6-inch (152 mm) vertical (end) laps. Sharkskin Ultra Radiant® must be installed with minimum 4-inch (102 mm) horizontal (head) laps and minimum 6-inch (152 mm) vertical (end) laps. The Sharkskin Ultra® and Sharkskin Ultra Radiant®, underlayments are mechanically attached with corrosion-resistant fasteners, such as hammer-tacker staples, No. 12 gauge nails or staples with 1-inch (25 mm) diameter metal or plastic round caps, tin tags with corrosion-resistant nails or staples, or roofing nails with 3/8-inch (10 mm) diameter heads, as set forth in the manufacturer's published installation instructions. When battens are installed over Sharkskin Ultra® and Sharkskin Ultra Radiant®, the underlayment need only be preliminarily attached pending attachment of battens or counterbattens.

4.2.4 Sharkskin Ultra SA®: Sharkskin Ultra SA® must be installed with minimum 2-inch (51 mm) horizontal (head) laps and minimum 6-inch (152 mm) vertical (end) laps. The self-adhered Sharkskin Ultra SA® underlayment is installed by positioning the underlayment and removing the split-release liner film backing and applying directly to the roof deck as set forth in the manufacturer's published installation instructions.

4.2.5 High Wind Areas: The mechanically attached underlayments are installed to the roof deck as described in the manufacturer's published installation instructions, except in areas subject to basic (3-second gust) wind speeds in excess of 110 miles per hour (49 m/s), where the underlayments must be attached in accordance with IBC

Section 1507.2.8.1 or IRC Section R905.2.7.2 for asphalt shingles roof coverings or IRC Section R905.3.3.3 for concrete and clay tile roof coverings, as applicable.

4.3 Ice Barrier:

The Sharkskin Ultra® and Sharkskin Ultra SA® underlayment can be used as an ice barrier under the IBC and IRC. Two layers of the Sharkskin Ultra® must be applied over the solid substrate in accordance with the applicable code and fastened with mechanical fasteners so that the underlayments extend up the roof a distance equal to the distance inside the exterior wall line of the building that is specified in the appropriate section of the applicable code.

4.4 Reroofing:

For reroofing applications, the same procedures apply as for new construction, after removal of the old roof covering and roofing felts to expose the roof deck.

5.0 CONDITIONS OF USE

The Sharkskin Comp®, Sharkskin Ultra®, Sharkskin Ultra Radiant® and Sharkskin Ultra SA® roofing underlayments 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 underlayment must be installed in accordance with this report, the applicable code and the manufacturer's published installation instructions. In the event of conflict between the manufacturer's instructions and this report, this report governs.
- 5.2** Installation of Sharkskin Ultra SA® is limited to use on plywood substrates.
- 5.3** Installation is limited to roofs having a slope of 2:12 (17%) or greater.
- 5.4** Installation is limited to use with roof coverings that do not involve hot asphalt or coal-tar pitch.
- 5.5** Installation is limited to use with roof coverings that are mechanically fastened through the underlayment to the sheathing or rafters, or to battens or counterbattens that are mechanically fastened through the underlayment to the sheathing or rafters.
- 5.6** Installation is limited to roofs with ventilated attic spaces in accordance with the requirements of the applicable code.
- 5.7** Installation is limited to structures located in areas where nonclassified or nonrated roof coverings are permitted or as a component of a classified roofing assembly when specifically recognized as such in a listing approved by the code official.
- 5.8** The Sharkskin Comp®, Sharkskin Ultra®, Sharkskin Ultra Radiant® and Sharkskin Ultra SA® underlayments are manufactured for Kirsch Building Products, LLC, under a quality control program with inspections provided by ICC-ES.

6.0 EVIDENCE SUBMITTED

6.1 Data in accordance with the ICC-ES Acceptance Criteria for Roof Underlayments (AC188), dated February 2012 ([editorially revised May 2018](#)), and the

6.1.2 ICC-ES Acceptance Criteria for Roof Underlayment for [Self-Adhered Roof Underlayments for Use as Ice Barriers](#) Use in Severe Climate Areas (AC48), dated November 2005 ([corrected July 2009](#)) February 2012 ([editorially revised May 2018](#)). Specifically, data in accordance with Section 3.1.2.

7.0 IDENTIFICATION

- 7.1 Each roll of the roofing underlayment products described in this report must be identified with a stamp bearing the report holder's name (Kirsch Building Products), the product name, the manufacturing date code, and the evaluation report number (ESR-1708).
- 7.2 The report holder's contact information is the following:

KIRSCH BUILDING PRODUCTS, LLC
1464 MADERA ROAD, SUITE N-387
SIMI VALLEY, CALIFORNIA 93065
(805) 750-0084
www.sharkskin.us