

KIRSCH BUILDING PRODUCTS

PRODUCT EVALUATION

SCOPE OF WORK

SHARKSKIN ROOF UNDERLAYMENTS

PRODUCT EVALUATION PER CHAPTER 61G20-3.005(2)(B) FLORIDA ADMINISTRATIVE CODE

REPORT NUMBER

I5402.01-122-34-R0

FL8097-R5

ISSUE DATE

06/20/18

PREPARED BY

ARCHITECTURAL TESTING, INC. (INTERTEK-ATI)

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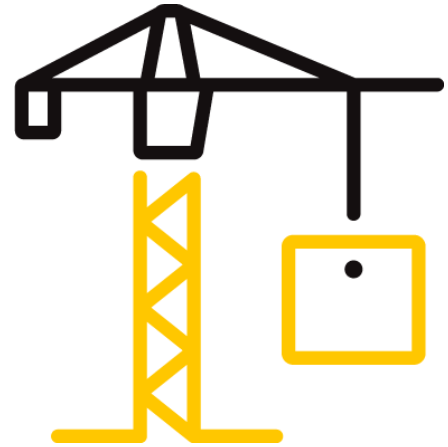
REPORT ISSUED TO

KIRSCH BUILDING PRODUCTS, LLC

1464 Madera Road

Suite N-387

Simi Valley, CA 93065



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For INTERTEK B&C:

PREPARED BY:	Daniel C. Culbert, P.E.
TITLE:	Senior Project Engineer
SIGNATURE:	
DATE:	06/20/18

PREPARED BY:	Gary Hartman, P.E.
TITLE:	Laboratory Support Engineer
SIGNATURE:	
DATE:	06/20/18

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SECTION 1

SCOPE

Product Evaluation per Chapter 61G20-3.005(2)(b) Florida Administrative Code, Evaluation report from a Florida Registered Architect or a licensed Florida Professional Engineer.

Product Category: ROOFING

Sub-Category: UNDERLAYMENT

Product: SHARKSKIN ROOF UNDERLAYMENTS

SECTION 2

BUILDING CODE COMPLIANCE

This product has demonstrated compliance with the intent of the Florida Building Code, Building, 6th Edition (2017), Section 1507.1.1, *Underlayment*.

SECTION 3

PERFORMANCE STANDARDS

STANDARD	TITLE
ASTM D226-09	Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing
ASTM D1970-15a	Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection
TAS 103-95	Test Procedure for Self-Adhered Underlayments for Use in Discontinuous Roof Systems

SECTION 4

PRODUCT DESCRIPTIONS

Mechanically Fastened Underlayments

Sharkskin Comp® is a multi-layer laminated roof underlayment comprised of a high-strength woven polypropylene scrim with a UV & antioxidant protection bond layer and a slip-resistant top layer.

Sharkskin Ultra® is a multi-layer laminated roof underlayment comprised of a high-strength woven polypropylene scrim with a UV & antioxidant protection bond layer to both sides and a slip-resistant top layer.

Sharkskin Ultra Radiant® is a multi-layer laminated roof underlayment comprised of a high-strength woven polypropylene scrim with a reflective barrier on the underside and a UV & antioxidant protection bond layer on both sides and a slip-resistant top layer.

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Self-Adhering Underlayment:

Sharkskin Ultra SA® is a multi-layer laminated roof underlayment comprised of a high-strength woven polypropylene scrim between two layers of UV & antioxidant protection bond and a self-adhering underside and a slip-resistant top layer.

SECTION 5 INSTALLATION

General

1. Installation shall be in accordance with the manufacturer's installation instructions and requirements for reinforced synthetic underlayments in §1507.1.1 for an alternative to underlayment complying with ASTM D226 Type II and §1507.3.3.
2. Sharkskin roofing underlayment is considered a vapor barrier and should generally be installed above ventilated attic spaces.
3. Damaged roof decking must be replaced. The roof deck surface must be dry and free of dust, dirt, debris, grease, solvents, loose nails, and other protrusions.
4. Metal cap nails shall be required where the ultimate design wind speed, V_{ult} , equals or exceeds 150 mph.

Sharkskin Comp®

1. For plywood or wood plank, attach to the roof deck with corrosion-resistant steel ring shank fasteners with a minimum shank diameter of 0.083 inches, having 1-inch diameter corrosion resistant metal round cap, tin tag, or plastic round top caps or plastic caps fastened with corrosion resistant staples.
2. For slopes 2.5:12 (11.8°) to 3.5:12 (16.2°): Sharkskin Comp shall be applied in a double coverage method, with 25-inch minimum horizontal laps and minimum 6-inch vertical laps offset by 6 feet. Fasten with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches and one row at the end and side laps fastened 6 inches o.c.
3. For slopes 3.5:12 (16.2°) or greater: Sharkskin Comp shall be laid horizontally, parallel to the eave with the printed side up, and have minimum 4-inch horizontal laps and minimum 6-inch vertical laps offset by 6 feet. Fasten with three staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches and one row at the end and side laps fastened 6 inches o.c.
4. See manufacturer instructions at www.sharkskin.us for additional requirements.

Sharkskin Ultra®

1. For plywood or wood plank, attach to the roof deck with corrosion-resistant steel ring shank fasteners with a minimum shank diameter of 0.083 inches, having 1-inch diameter corrosion resistant metal round cap, tin tag, or plastic round top caps or plastic caps fastened with corrosion resistant staples.
2. For steel deck, attach to the roof deck with approved corrosion resistant #10, #12 or #14 screws and metal stress plates. Screws shall engage the top flute of the steel deck.
3. For slopes 2.5:12 (11.8°) to 3.5:12 (16.2°), other than tile: Sharkskin Ultra shall be applied in a double coverage method, with 25-inch minimum horizontal laps and minimum 6-inch

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- vertical laps offset by 6 feet. Fasten with two staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches and one row at the end and side laps fastened 6 inches o.c.
4. For slopes 3.5:12 (16.2°) or greater, other than tile: Sharkskin Ultra shall be laid horizontally, parallel to the eave with the printed side up, and have minimum 4-inch horizontal laps and minimum 6-inch vertical laps offset by 6 feet. Fasten with three staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches and one row at the end and side laps fastened 6 inches o.c.
 5. See manufacturer instructions at www.sharkskin.us for additional requirements.

Sharkskin Ultra Radiant®

1. For horizontal battens, slopes 3:12 (14°) or greater:
 - a. Attach to the roof deck with corrosion-resistant steel ring shank fasteners with a minimum shank diameter of 0.083 inches, having 1-inch diameter corrosion resistant metal round cap, tin tag, or plastic round top caps or plastic caps fastened with corrosion resistant staples.
 - b. For slopes 3.5:12 (16.2°) or greater: Sharkskin Ultra Radiant shall be laid horizontally, parallel to the eave with the printed side down, and have minimum 4-inch horizontal laps and minimum 6-inch vertical laps offset by 6 feet. Fasten with three staggered rows in the field of the sheet with a maximum fastener spacing of 12 inches and one row at the end and side laps fastened 6 inches o.c.
2. For counter battens, slopes 3:12 (14°) or greater:
 - a. Attach to vertical battens with corrosion-resistant steel ring shank fasteners with a minimum shank diameter of 0.083 inches, having 1-inch diameter corrosion resistant metal round cap, tin tag, or plastic round top caps or plastic caps fastened with corrosion resistant staples.
 - b. Sharkskin Ultra Radiant shall laid horizontally, parallel to the eave with the printed-side-up across vertical wood, metal or plastic battens installed over a solid deck spaced maximum 24" o.c. with minimum 4-inch horizontal laps and minimum 6-inch vertical laps. Horizontal laps shall be sealed with Eternabond Tape, butyl-based tape or other material specifically approved by Kirsch Building Products. Vertical laps shall be minimum 6-inch wide and shall break over a vertical batten to allow water to run away from the vertical batten. Sharkskin Ultra Radiant shall be attached to the vertical battens sufficiently to hold in place until the horizontal battens are installed over-top in accordance with the tile, metal or slate manufacturer's requirements. The positioning of the fasteners holding the Sharkskin Ultra Radiant to the vertical battens prior to placement of horizontal battens shall not interfere with true, flush installation of horizontal battens.
3. See manufacturer instructions at www.sharkskin.us for additional requirements.

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Sharkskin Ultra SA®

1. Adhere directly to the plywood deck or to a mechanically attached Sharkskin Ultra anchor sheet for 2-ply system installation.
2. Position Sharkskin Ultra SA horizontally, parallel to the eave of the roof with the printed side up with minimum 2-inch horizontal laps and minimum 6-inch vertical laps.
3. Pull away the split-release liner film backing and applying the underlayment to the substrate.
4. Broom the entire surface of the underlayment, and use a heavy roller on all seams/laps to establish a secure bond.
5. For nail-on tile: install per manufacturer's recommendations and FBC §1507.3.3.
6. For foam-on tile:
 - a. Back-nail the top horizontal edge of each run prior to placement of the subsequent run. Back-nail to the roof deck with corrosion-resistant steel ring shank fasteners with a minimum shank diameter of 0.083 inches, having 1-inch diameter corrosion resistant metal round cap or approved tin tag. Back nail at 12 inches o.c. on side laps and 6 inches o.c. on end laps. No nails or tin caps shall be exposed
 - b. For 2-ply system: the maximum fastener spacing in the field of the Sharkskin Ultra sheet shall be 10 inches o.c.
7. See manufacturer instructions at www.sharkskin.us for additional requirements.

SECTION 6

LIMITATIONS OF USE

1. Fire Classification is not addressed by this Evaluation Report.
2. Use in the High Velocity Hurricane Zone is not addressed by this Evaluation Report.
3. Sharkskin Roof Underlayments shall not be exposed to sunlight for longer than:
 - a. Sharkskin Comp®: 180-days after installation.
 - b. Sharkskin Ultra®, Sharkskin Ultra Radiant® and Sharkskin Ultra SA®: 360 days after installation

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4. Sharkskin Roof Underlayments may be used with roof coverings as follows:

Product	Asphalt Shingles	Nail-on Tile	Foam-on Tile	Metal	Wood Shakes & Shingles	Slate
Comp®	Y	N	N	Y	Y	N
Ultra®	Y	Y ¹	Y ¹	Y	Y	Y
Ultra Radiant®	Y ²	N	N	Y ³	Y ³	Y ³
Ultra SA®	Y	Y	Y ⁴	Y	Y	Y

1. As the anchor sheet in a 2-ply system
2. Contact Kirsch Building Products for installation information.
3. With battens only
4. Foam-On Tile is limited to use with ICP Adhesives & Sealants, Inc. 2-Component Foam Roof Tile Adhesive AH-160 (FL6332), Dow TILE BOND™ Roof Tile Adhesive (FL717) or DAP Foam, Inc. Touch 'n Seal Stormbond Roof Tile Adhesive (FL14506). The maximum negative design pressure for such installations is -52.5 psf when adhered directly to the plywood deck, and the lesser of -52.5 psf and the allowable uplift resistance of the mechanically attached anchor sheet per §1507.3.3 for 2-ply installation. These pressures include a safety factor of 2.

SECTION 7

SUPPORTING EVIDENCE

Test Reports

G7683.01-109-18 (TAS 103-95)

Issued: 05/05/17

Architectural Testing, Inc. York, PA (TST1558)

Joseph A. Reed, PE (FL PE 58920)

JX06F8A (ASTM D1970-17a)

Issued: 06/07/2018

Momentum Technologies International (TST2508)

John Nevin, PE (FL PE 54666)

JX17A7A (TAS 103-95)

Issued: 12/28/17

Momentum Technologies International (TST2508) DBA RCMA

John Nevin, PE (FL PE 54666)

JX17A7C (ASTM D226-17)

Issued: 12/28/17

Momentum Technologies International (TST2508) DBA RCMA

John Nevin, PE (FL PE 54666)

JX17A7D (ASTM D226-09)

Issued: 05/11/17

Momentum Technologies International (TST2508) DBA RCMA

John Nevin, PE (FL PE 54666)

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SECTION 8

CERTIFICATION OF INDEPENDENCE

In accordance with Rule 61G20-3.009 Florida Administrative Code, Intertek-ATI hereby certifies the following:

- Intertek-ATI does not have, nor will it acquire, a financial interest in any company manufacturing or distributing products for which this report is being issued.
- Intertek-ATI is not owned, operated or controlled by any company manufacturing or distributing products for which this report is being issued.
- Gary Hartman, P.E. does not have nor will he acquire, a financial interest in any company manufacturing or distributing products for which evaluations are issued.
- Gary Hartman, P.E does not have, nor will he acquire, a financial interest in any other entity involved in the approval process of the product.

SECTION 9

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	06/20/18	N/A	Original Report Issue