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Code Compliance Research Report CCRR-1028

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

REPORT HOLDER:
FT Synthetics Inc.
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REPORT SUBJECT:
FT Synthetics PRO, Silver, Gold, Platinum, and Hydra Synthetic Breathable (Hydra) Roofing Underlayments

1.0 SCOPE OF EVALUATION

This Research Report addresses compliance with the following Codes:

- 2015, 2012, and 2009 *International Building Code*® (IBC)
- 2015, 2012, and 2009 *International Residential Code*® (IRC)
- 2017 *Florida Building Code* – See Section 8.1

2.0 USES

FT Synthetics PRO, Silver, Gold, Platinum, and Hydra underlayments are used in the field of the roof as an alternative to the ASTM D226, Type I and Type II, roof underlayments specified in Chapter 15 of the IBC and Chapter 9 of the IRC.

The underlayments may be used in areas of the roof required by IBC Section 1507 or IRC Section R905 to have an ice barrier roof underlayment, when installed as noted in Section 4.2.

The underlayments may be used as components of classified assemblies when installed as described in this report.

The underlayments have been evaluated for the following properties:

| PROPERTY | IBC SECTION ¹ | IRC SECTION ¹ |
|---------------------|--------------------------|--------------------------|
| Physical Properties | 104.11, 1506 and 1507 | R104.11, R904 and R905 |
| Fire Classification | 1505 | R902.1 |
| Ice Barrier | 1507 | R905 |

¹Referenced sections apply to 2015, 2012, and 2009 IBC and IRC

3.0 DESCRIPTION

FT Synthetics PRO is a mechanically attached synthetic underlayment comprised of a plain non-woven top scrim and a woven bottom scrim with a polymeric laminated facer. The underlayment has an overall weight of 2.24 pounds per 100 square feet, and it is available in rolls 42 inches wide by 286 feet long.

FT Synthetics Silver is a mechanically attached synthetic underlayment comprised of an embossed non-woven top scrim and a woven bottom scrim with a polymeric laminated facer. The underlayment has an overall weight of 2.24 pounds per 100 square feet, and it is available in rolls 48 inches wide by 250 feet long.

FT Synthetics Gold is a mechanically attached synthetic underlayment comprised of an embossed non-woven top scrim and a woven bottom scrim with a polymeric laminated facer. The underlayment has an overall weight of 3.06 pounds per 100 square feet, and it is available in rolls 48 inches wide by 250 feet long.

FT Synthetics Platinum is a mechanically attached synthetic underlayment comprised of an embossed non-woven top scrim and a woven bottom scrim with a polymeric laminated facer. The underlayment has an overall weight of 3.37 pounds per 100 square feet, and it is available in rolls 48 inches wide by 250 feet long.

FT Synthetics Hydra roofing underlayment is comprised of embossed non-woven top and bottom scrims with a laminated layer in between the scrims. The underlayment has an overall weight of 3.7 gsm and is available in blue color. Standard size roll is 48 inches wide by 250 feet long.



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4.0 INSTALLATION

4.1 General:

Installation of the underlayments must comply with the applicable Code, this report, and the report holder's published installation instructions.

The underlayments must be installed in accordance with the subsections of IBC Section 1507 and IRC Section R905 applicable to the roof covering being installed. The underlayments must be laid with the print side up, with laps as required by the applicable Code, evaluation report, or manufacturer's instructions, whichever is more restrictive.

The roof covering may be installed immediately following the underlayment application and the underlayment must be covered within the time designated in the report holder's published installation instructions.

4.2 Ice Barrier:

In areas of the roof required by IBC Section 1507 or IRC Section R905 to have an ice barrier, two layers of the underlayments, solidly cemented together with a low solvent based roofing cement complying with ASTM D4586 Type 1 (asbestos free), may be used provided the ice barrier extends up the roof a minimum distance of 24 inches inside the interior wall line of the building. The underlayment installed in the field of the roof must overlap the ice barrier.

4.3 Fire Classification:

The roof underlayments may be used as a component of a classified roof assembly when specifically recognized as such in a listing approved by the Code official. The underlayments may also be used as an alternative to the underlayments specified in the Code for roof coverings permitted under the Exceptions to IBC Section 1505.2 and IRC Section R902.1, and may be used where non-classified roofing is permitted in IBC Section 1505.5.

5.0 CONDITIONS OF USE

The underlayments described in this Research Report comply with, or are suitable alternatives to, what is specified in those Codes listed in Sections 1.0 and 2.0 of this report, subject to the following conditions:

5.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict between the manufacturer's instructions and this report, this report governs.

5.2 Installation is limited to use with approved mechanically attached roof covering systems.

5.3 Installation is limited to roof systems that do not involve hot asphalt or coal-tar pitch.

5.4 Installation is limited to roofs with a slope of 2:12 (17%) or greater.

5.5 Attic ventilation must be provided in accordance with the applicable Code since there are no requirements to evaluate vapor permeability of the underlayment.

5.6 The underlayments are manufactured under a quality control program with inspections by Intertek Testing Services NA Inc. (AA-647).

6.0 SUPPORTING EVIDENCE

6.1 Reports of tests in accordance with ASTM E108.

6.2 Data in accordance with ICC-ES Acceptance Criteria for Roof Underlayments (AC188), dated February 2012 (editorially revised December 2015).

6.3 Intertek Listing Report titled [FT Synthetics – PRO, Silver, Gold, Platinum and Hydra Roofing Underlayments](#).

7.0 IDENTIFICATION

The FT Synthetics PRO, Silver, Gold, Platinum, and Hydra underlayments are imprinted with the report holder's name, the Intertek Mark, and the Code Compliance Research Report number (CCRR-1028). Each roll of the product is also labeled with installation instructions, roll dimensions and weight.

8.0 OTHER CODES

8.1 Florida Building Code:

8.1.1 Scope of Evaluation: The FT Synthetics PRO, Silver, Gold, Platinum, and Hydra underlayments were evaluated for compliance with the 2017 *Florida Building Code – Building* and the 2017 *Florida Building Code – Residential*.

8.1.2 Conclusion: The FT Synthetics PRO, Silver, Gold, Platinum, and Hydra underlayments described in Sections 2.0 to 7.0 of this report comply with the 2017 *Florida Building Code – Building* and the 2017 *Florida Building Code – Residential* including High-velocity Hurricane Zones (HVHZ), subject to the following conditions:

- The underlayments must be installed in accordance with the provisions noted in Sections 2.0 through 7.0 of this report, Sections 1507 and 1518 of the *Florida Building Code – Building*, and Section R905 of the *Florida Building Code – Residential*.
- Intertek is recognized by the Florida Building Commission as a recognized quality assurance entity.

9.0 CODE COMPLIANCE RESEARCH REPORT USE

9.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

9.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek Testing.

9.3 Reference to the <https://bpdirectory.intertek.com> is recommended to ascertain the current version and status of this report.

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