Code Compliance Research Report
CCRR-0400

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

REPORT HOLDER:
Amrize Building Envelope LLC (HomeGuard by OX Engineered Products)
5430 Shawland Road
Jacksonville, FL 32254
www.oxep.com

REPORT SUBJECT:
ToughSkin HT Ice and Water Guard™ Roofing Underlayment

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021, and 2018 *International Building Code®* (IBC)
- 2024, 2021, and 2018 *International Residential Code®* (IRC)
- 2023 *Florida Building Code®* (FBC) – Building and Residential including High-Velocity-Hurricane Zones (HVHZ) (See Section 8.1)

NOTE: This report references the most recent Code editions noted. Section numbers in earlier editions may differ

1.2 ToughSkin HT Ice and Water Guard™ underlayment has been evaluated for the following properties (see Table 1):

- Physical properties
- Ice barrier

1.3 ToughSkin HT Ice and Water Guard™ underlayment has been evaluated for the following uses (see Table 1):

- Use in the field of the roof where self-adhering roof underlayments complying with ASTM D1790 are required as specified in Chapter 15 of the IBC, and Chapter 9 of the IRC.
- Use in areas of the roof required IBC Section 1507 or IRC Section R905 to have an ice barrier roof underlayment, when installed as noted in Section 4.2 of this report.

2.0 STATEMENT OF COMPLIANCE

ToughSkin HT Ice and Water Guard™ underlayment complies with the Codes listed in Section 1.1, for the properties stated in Section 1.2, and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 5.0.

2.1 2024 IBC and IRC Evaluation Reports: The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 ToughSkin HT Ice and Water Guard™ Underlayment: ToughSkin HT Ice and Water Guard™ is a self-adhered roofing underlayment comprised of a polymeric facer layer and a polymer modified bitumen, and a release liner. The product has a nominal thickness of 60 mils and is available in a standard roll size of 36 in. wide by 67 ft. long. Custom lengths and widths of the rolls are available.

4.0 INSTALLATION

4.1 General: ToughSkin HT Ice and Water Guard™ underlayment must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

4.2 Application: The roof deck must be in proper condition to ensure adhesion. Installation is limited to solid-sheathed decks of plywood and OSB substrates.

The membrane is self-adhered to the substrate after the release liner is removed.

When used as an ice barrier, the membrane is applied from the lower edge of the roof, extending up the roof a distance of 24 inches inside the exterior wall line of the building.
The membrane must be lapped a minimum of 3 inches on horizontal seams and 6 inches on vertical seams. Flashings around protrusions must be installed under the underlayment.

The underlayments may be installed with the roof coverings specified in IBC Table 1507.1.1(1) and IRC Table R905.1.1(1), where ASTM D1970-compliant underlayments are permitted. The underlayments must be installed in accordance with the IBC Table 1507.1.1(2) and IRC Table R905.1.1(2) and fastened in accordance with IBC Table 1507.1.1(3) and IRC Table R905.1.1(3).

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.

5.0 CONDITIONS OF USE

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, 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 buildings permitted to have non-classified roofing in accordance with IBC Section 1505.5, unless the underlayment is specifically recognized as a component of a classified roofing assembly in a listing approved by the Code official.

5.5 The ToughSkin HT Ice and Water Guard™ underlayment is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

6.0 SUPPORTING EVIDENCE

6.1 Reports of tests in accordance with ASTM D1970 as set forth in ICC-ES Acceptance Criteria for Self-adhered Roof Underlayments for Use as Ice Barriers (AC48), dated February 2012 (editorially revised December 2024).

6.2 Data in accordance with ICC-ES Acceptance Criteria for Roof Underlayments (AC188), dated February 2012 (editorially revised December 2020).

6.3 Intertek Listing Report "HomeGuard ToughSkin HT Ice and Water Guard™ Underlayment", on the Intertek Directory of Building Products.

7.0 IDENTIFICATION

The ToughSkin HT Ice and Water Guard™ underlayment is identified with the manufacturer's name, address and telephone number, the product name, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0400).

8.0 OTHER CODES

8.1 Florida Building Code: The ToughSkin HT Ice and Water Guard™ underlayments described in Sections 2.0 to 7.0 of this report comply with the 2023 *Florida Building Code – Building* and *Florida Building Code – Residential*, subject to the following conditions:

8.1.1 For Use Outside HVHZ: The ToughSkin HT Ice and Water Guard™ underlayments may be installed with roof coverings specified in FBC (Building) Section 1507.1.1 and FBC (Residential) Section R905.1.1, where ASTM D1970-compliant underlayments are permitted. The underlayment must be installed in accordance with FBC (Building) Section 1507 and FBC (Residential) R905.

8.1.2 For Use Inside HVHZ: The underlayments may be installed with the roof coverings specified in FBC (Building) Section 1518, where ASTM D1970-compliant underlayments are permitted. The underlayment must be installed in accordance with the provisions of FBC (Building) Section 1518.

The underlayment may be used with roof coverings permitted under the Exception to FBC (Building) Section 1516.2.1.

Intertek is an approved evaluation entity and quality assurance entity pursuant to Florida Statute 553.842 – *Product Evaluation and Approval*

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.

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

TABLE 1 - PROPERTIES EVALUATED

PROPERTY	2024 IBC SECTION[1]	2024 IRC SECTION[1]	2023 FBC - BUILDING	2023 FBC – RESIDENTIAL
Physical Properties	1506 and 1507	R904 and R905	1507.1.1 1515.1.4	R905.1.1
Ice Barrier	1507	R905	N/A	N/A

[1] Section numbers may be different for earlier versions of the International and Florida Codes

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