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

REPORT HOLDER:
Alpha Protech Engineered Products, Inc.
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USA
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REPORT SUBJECT:
Rex HI-TEMP Self-Adhered 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) (see Section 8.1)

1.2 The underlayment has been evaluated for the following properties (see Table 1):

- Physical Properties
- Fire Classification
- Ice Barrier

1.3 The 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 D1970 are required as specified in Chapter 15 of the IBC, and Chapter 9 of the IRC.
- Use 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 4.3.
- Use as a component of classified assemblies when installed as described Section 4.2.

2.0 STATEMENT OF COMPLIANCE

Rex HI-TEMP Self-Adhered Roofing 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.

3.0 DESCRIPTION

Rex HI-TEMP underlayment is a 3-layered self-adhered underlayment comprised of a non-woven polypropylene fabric, modified bitumen as the adhesive layer, and a silicone release film. It is available in four different thicknesses of 40 mils, 45 mils, 48 mils, and 60 mils having nominal weights of 21.71, 22.43, 22.73, and 24.58 pounds per 100 square feet, respectively. The underlayment is available in rolls of 3 ft. wide by 67 ft. long and in grey and white colors.

4.0 INSTALLATION

4.1 General: Rex HI-TEMP Self-Adhered Roofing 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 Fire Classification: When installed in accordance with the assembly described in Table 2 of this report, the roofing underlayment meets Class A fire classification per ASTM E108. Additionally, the underlayment 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 underlayment 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.

4.3 Application: The roof deck must be in proper condition to ensure adhesion. Installation is limited to



solid-sheathed decks to plywood substrates. The membrane is self-adhered to the substrate after the release liner is removed.

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.

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 underlayment 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 underlayment must be installed in accordance with 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 roofs with 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 underlayments.

5.6 Rex HI-TEMP Self-Adhered Roofing 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 and ASTM E108.

6.2 Intertek Listing Report "Rex HI-TEMP Self-Adhered Roofing Underlayment", on the [Intertek Directory of Building Products](#).

7.0 IDENTIFICATION

The Rex HI-TEMP Self-Adhered Roofing Underlayment is identified with the manufacturer's name, address, the product name, the Intertek Mark as shown below, the Intertek Control Number and the Code Compliance Research Report number (CCRR-0533).



8.0 OTHER CODES

8.1 Florida Building Code: The Rex HI-TEMP Self-Adhered Roofing Underlayment described in Sections 2.0 to 7.0 of this report complies 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 underlayment 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.

- When installed as described in Table 2 of this report, the roof assembly meets Class A fire classification per ASTM E108. Additionally, the underlayment may be used as follows:





- i. As a component of a classified roof assembly when specifically recognized as such in a Listing Report approved by the Code official.
 - ii. As an alternative to the underlayment specified in the Code for roof coverings permitted under Exceptions 1 - 4 to FBC (Building) Section 1505.2 and Exceptions 1 - 4 to FBC (Residential) Section R902.1.
 - iii. Where non-classified roofing is permitted in FBC (Building) Section 1505.5.
- The underlayment may be installed with clay and concrete tiles outside of the HVHZ when installed in accordance with *Florida Building Code – Building*, Section 1507.3.3 and *Florida Building Code – Residential*, Section R905.3.3.

8.1.2 For Use Inside HVHZ: The underlayment 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 additionally be used where underlayments complying with TAS 103 are permitted in TAS 110, as referenced in *Florida Building Code – Building*, Section 1515.1.4.
- When installed as described in Table 2 of this report, the roof assembly may be used where Class A fire classification is required in FBC (Building) Section

1516.2.1. Additionally, 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.

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TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2024 IBC SECTION ¹	2024 IRC SECTION ¹	2023 FBC SECTION (BUILDING)	2023 FBC SECTION (RESIDENTIAL)
Physical Properties	1506 and 1507	R904 and R905	1506 1507.1.1 1515.1.4 1518	R904 R905.1.1
Ice Barrier	1507	R905	N/A	N/A
Fire Classification	1505	R902.1	1505	R902

¹Section numbers may be different for earlier versions of the International Codes

TABLE 2 – FIRE CLASSIFICATION

CLASSIFICATION AND SLOPE	DECK	UNDERLAYMENT	ROOF COVERING
Class A 2:12 or greater	Minimum nominal 15/32 in. thick Code compliant exterior grade plywood	A single layer of Rex HI-TEMP Self-Adhered Roofing Underlayment installed using the products' peel and stick backing.	Three-tab asphalt shingles Listed per ASTM D3462 with a minimum weight of 190 pounds per 100 square feet installed per manufacturer's installation instructions

