# Code Compliance Research Report
# CCRR-1105

**Issue Date: 01-26-2018**
**Revision Date: 03-03-2025**
**Renewal Date: 01-31-2026**

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

**REPORT HOLDER:**
**Intertape Polymer Inc.**
**50 Abbey Avenue**
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**Canada**
**1-800-565-2000**
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**REPORT SUBJECT:**
**NovaSeal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, Palisade, and Palisade SA-HT Synthetic Roofing Underlayments**

**ADDITIONAL LISTEE:**
**Kratos Building Products**
**12901 Nicholson Road, Suite 330**
**Farmers Branch, TX 75234**
**www.kratosbp.com**

**ADDITIONAL LISTEE SUBJECT:**
**Kratos Synthetic Roofing Underlayment**

**ADDITIONAL LISTEE:**
**Klaus Roofing Systems**
**29 Northridge Drive**
**Windham, CT 06256**
**www.klausroofingsystems.com**

**ADDITIONAL LISTEE SUBJECT:**
**Velora One Roof Underlayment**

**ADDITIONAL LISTEE:**
**Taylor Metal Products**
**4566 Ridge Drive NE,**
**Salem, OR 97301**
**www.taylormetal.com**

**ADDITIONAL LISTEE SUBJECT:**
**TMP SAM-HT Underlayment**

## 1.0 SCOPE OF EVALUATION

**1.1** This Research Report addresses compliance with the following Codes:

- 2024, 2021, 2018 *International Building Code®* (IBC)
- 2024, 2021, 2018 *International Residential Code®* (IRC)
- 2023 *Florida Building Code* (FBC)

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

**1.2** The underlayments have been evaluated for the following properties (see Table 1):

- Physical properties
- Ice barrier
- Fire classification

**1.3** The NovaSeal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, and Palisade underlayments have been evaluated for the following uses (see Table 1):

- Use 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
- 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 5.2
- NovaSeal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, and Palisade underlayments may be used as a component of classified assemblies when installed as noted in Section 4.1

**1.4** Palisade SA-HT 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

NovaSeal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, Palisade, and Palisade SA-HT Synthetic Roofing Underlayments comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2, and uses stated in Section 1.3 and 1.4, when installed as described in this report, including the Conditions of Use stated in Section 6.0.

## 3.0 DESCRIPTION

**3.1 NovaSeal Pro Synthetic Roofing Underlayment:** NovaSeal Pro is a mechanically attached, synthetic roofing underlayment consisting of a non-woven polypropylene top scrim laminated to a central woven polypropylene scrim with polymeric coating on the sheathing side. The underlayment has a nominal weight of 1.76 pounds per 100 square feet. The underlayment roll size varies.

**3.2 NovaSeal Prime Synthetic Roofing Underlayment:** NovaSeal Prime is a mechanically attached, synthetic roofing underlayment consisting of a non-woven polypropylene top scrim laminated to a central woven polypropylene scrim with polymeric coating on the sheathing side. The underlayment has a nominal weight of 2.1 pounds per 100 square feet. The underlayment roll size varies.

NovaSeal Prime is also labeled as Kratos Synthetic Roofing Underlayment.

**3.3 NovaSeal Elite Synthetic Roofing Underlayment:** NovaSeal Elite is a mechanically attached, synthetic roofing underlayment consisting of a non-woven polypropylene top scrim laminated to a central woven polypropylene scrim with a polymeric coating on the sheathing side. The underlayment has a nominal weight of 2.8 pounds per 100 square feet. The underlayment roll size varies.

**3.4 NovaSeal Ultra Synthetic Roofing Underlayment:** NovaSeal Ultra is a mechanically attached, synthetic roofing underlayment consisting of a non-woven polypropylene top scrim laminated to a central woven polypropylene scrim with a polymeric coating on the sheathing side. The underlayment has a nominal weight of 3.4 pounds per 100 square feet. The underlayment roll size varies.

NovaSeal Ultra is also labeled as Velora One Roof Underlayment.

**3.5 Palisade Synthetic Roofing Underlayment:** Palisade is a four-layered mechanically attached, synthetic roofing underlayment consisting of a coating layer on the sheathing side, polypropylene woven fabric, LDPE lamination layer, and a PEV dotted non-woven fabric on the exposed side. The underlayment has a nominal weight of 3.2 pounds per 100 square feet.

**3.6 Palisade SA-HT Synthetic Roofing Underlayment:** Palisade SA-HT is a self-adhered underlayment consisting of a woven facer, adhesive compound, and a release liner. It is available in 36 in. width by 66.7 length with a nominal weight of 18 lbs per 100 sq.ft. The exposed face is blue in color.

Palisade SA-HT is also labeled as TMP SAM-HT Underlayment.

## 4.0 PERFORMANCE CHARACTERISTICS

**4.1 Fire Classification:** When installed in accordance with the assembly described in Table 2 of this report, the Novaseal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, Palisade, and Palisade SA-HT roofing underlayments meet Class A fire classification per ASTM E108. Additionally, the underlayment may be used as follows:

- As a component of a classified roof assembly when specifically recognized as such in a Listing Report approved by the Code official
- As an alternative to the underlayment specified in the Code for roof coverings permitted under Exceptions 1 - 4 to IBC Section 1505.2 and Exceptions 1 - 4 to IRC Section R902.1
- Where non-classified roofing is permitted in IBC Section 1505.5

**4.2 Ice Barrier:**

**Mechanically Attached Roofing Underlayments:** In areas of the roof required by IBC Section 1507.1.2 or IRC Section R905.1.2 to have an ice barrier, two layers of the roofing underlayment solidly cemented together may be used provided the ice barrier extends up the roof a minimum distance of 24 inches inside the exterior wall line of the building.

**Self-Adhered Roofing Underlayment:** The roof deck must be in proper condition to ensure adhesion. Installation is limited to solid-sheathed decks of 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.

## 5.0 INSTALLATION

**5.1 General:** NovaSeal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, Palisade, and Palisade SA-HT Synthetic Roofing Underlayments 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.

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 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 underlayment must be laid with the print side up, with laps as required by the applicable Code, evaluation report, or manufacturer's instructions,

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.

## 6.0 CONDITIONS OF USE

**6.1** 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.

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

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

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

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

**6.6** The underlayments are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

## 7.0 SUPPORTING EVIDENCE

**7.1** Reports of tests in accordance with ASTM D8257 and ASTM E108 for NovaSeal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, and Palisade underlayments.

**7.2** Reports of tests in accordance with ASTM D1970 and ASTM E108 for Palisade SA-HT underlayment.

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

**7.4** Intertek Listing Report "Intertape – NovaSeal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, Palisade, and Palisade SA-HT Roofing Underlayments", on the Intertek Directory of Building Products.

**7.5** Intertek Listing Report "Kratos Synthetic Roofing Underlayment" on the Intertek Directory of Building Products.

**7.6** Intertek Listing Report "Velora One Roof Underlayment" on the Intertek Directory of Building Products.

**7.7** Intertek Listing Report "Taylor Metal Products - TMP SAM-HT Self-Adhered Underlayment" on the Intertek Directory of Building Products.

## 8.0 IDENTIFICATION

The underlayments are 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-1105).

## 9.0 OTHER CODES

**9.1 Florida Building Code:** The NovaSeal Pro, NovaSeal Prime, NovaSeal Elite, NovaSeal Ultra, Palisade, and Palisade SA-HT underlayments, described in Sections 2.0 through 7.0 of this Research Report, comply[ies] with the *Florida Building Code – Building* and *Florida Building Code – Residential*, for the editions indicated in Section 1.1 of this report, subject to the following conditions:

**9.1.1 For Use Outside HVHZ:** The underlayment may be installed with the roof coverings specified in FBC (Building) Table 1507.1.1.1 and FBC (Residential) Table R905.1.1.1, where ASTM D8257-compliant underlayments are permitted. The underlayment must be installed in accordance with the provisions of FBC (Building) Section 1507 and FBC (Residential) R905.

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

- As a component of a classified roof assembly when specifically recognized as such in a Listing Report approved by the Code official.
- 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.
- Where non-classified roofing is permitted in FBC (Building) Section 1505.5.

**9.1.2 For Use Inside HVHZ:** The underlayment may be installed with the roof coverings specified in FBC (Building) Table 1518.2.1, where ASTM D8257-compliant underlayments are permitted. The underlayment must be installed in accordance with the provisions of FBC (Building) Section 1518. Evaluation for use with discontinuous roof tile systems in HVHZ is outside the scope of this report.

When installed as described in Table 2 of this report, the roofing 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.

## 10.0 CODE COMPLIANCE RESEARCH REPORT USE

**10.1** 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.

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

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

**TABLE 1 – PROPERTIES EVALUATED**

| PROPERTY | APPLICABLE CODE SECTIONS[1] | | | |
|---|---|---|---|---|
| | 2024 IBC | 2024 IRC | 2023 FLORIDA BUILDING CODE – BUILDING | 2023 FLORIDA BUILDING CODE – RESIDENTIAL |
| Physical Properties | 104.11, 1506, and 1507 | R104.11, R904, and R905 | 104.11, 1507, and 1518.2 | R904 and R905 |
| Ice Barrier | 1507 | R905 | N/A | N/A |
| Fire Classification | 1505 | R902.1 | 1505 | R902 |

[1] NOTE: Section numbers may be different for earlier versions of the Codes