Code Compliance Research Report
CCRR-0332

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

REPORT HOLDER:
Veer Plastics Private Limited
104 Sardar Patel Colony, Stadium Road
Navjivan, Ahmedabad 380014
India
91-79-27681159
www.veerplastics.com

REPORT SUBJECT:
PSU, PSU 2.0, and PSU Plus Self-Adhered Roofing Underlayments

ADDITIONAL LISTEE:
SRS Distribution Inc.
5900 S. Lake Forest Drive, Suite 400
McKinney, TX 75070-2196
469-421-0616
www.srsdistribution.com

ADDITIONAL LISTEE SUBJECT:
TopShield SG PS/Max HT Self-Adhered Roofing Underlayment

ADDITIONAL LISTEE:
Gulf Coast Supply & Manufacturing
14429 SW 2nd PL Suite G30
Newberry, FL 32669
352-498-0778
www.gulfcoastsupply.com

ADDITIONAL LISTEE SUBJECT:
GulfCoast HT PSU Self-Adhered Roofing Underlayment

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2021, 2018, and 2015 *International Building Code®* (IBC)
- 2021, 2018, and 2015 *International Residential Code®* (IRC)
- 2023 and 2020 *Florida Building Code* (FBC) (See Section 8.1)
- 2022 *California Building Code* (CBC) and 2022 *California Residential Code* (CRC) (See Section 8.2)

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

- Physical Properties
- Fire Classification
- Ice Barrier

1.3 The underlayments have been evaluated for the following uses (see Table 1):

- Use in the field of the roof as an alternative to 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 4.2
- PSU 2.0 and PSU may be used as components of classified assemblies when installed as described in this report

2.0 STATEMENT OF COMPLIANCE

PSU, PSU 2.0, and PSU Plus Self-adhered 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, when installed as described in this report, including the Conditions of Use stated in Section 5.0.

3.0 DESCRIPTION

PSU underlayment is a self-adhered synthetic underlayment comprised of a synthetic facer (non-woven scrim laminated onto a woven scrim), modified bitumen as the adhesive material, and a release liner. The underlayment is grey in color on the exposed side. The underlayment has a 3-inch edge lap where adhesive is applied to the non-woven fabric to allow for a secure overlap area. The adhesive is protected with a polymeric remover film. The nominal weight of the underlayment is 15.4 pounds per 100 square feet. The underlayment is available in rolls of 36 inches wide by 72 feet long. PSU is also labeled as VShield SuperTack and TopShield SG PS/Max HT Self-adhered Roofing Underlayments.

PSU 2.0 underlayment is a self-adhered synthetic underlayment comprised of a synthetic facer (non-woven scrim laminated onto a woven scrim), modified bitumen as the adhesive material, and a release liner. The underlayment is grey in color on the exposed side. The underlayment has a 3-inch edge lap of exposed woven scrim. The adhesive from one roll is adhered to the exposed woven layer of the next roll. The nominal weight of the underlayment is 15.4 pounds per 100 square feet. The underlayment is available in rolls of 36 inches wide by 72 feet long. PSU 2.0 is also labeled as VShield SuperTack 2.0 and GulfCoast HT PSU Self-adhered Roofing Underlayment.

PSU Plus underlayment is a self-adhered synthetic underlayment comprised of a synthetic facer (non-woven scrim laminated onto a woven scrim), modified bitumen as the adhesive material, and a release liner. The underlayment is grey in color on the exposed side. The nominal weight of the underlayment is 25.5 pounds per 100 square feet. The underlayment is available in rolls of 36 inches wide by 72 feet long. PSU Plus is also labeled as VShield MagnaTack.

4.0 INSTALLATION

4.1 General: PSU, PSU 2.0, and PSU Plus 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.

4.2 Fire Classification: PSU and PSU 2.0 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.

4.3 Application: 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.

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 of PSU Plus Underlayment is limited to structures where non-classified roof coverings are permitted or as a component of a classified roofing assembly when specifically recognized as such in a listing approved by the Code Official.

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

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

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

5.7 PSU, PSU 2.0, and PSU Plus underlayments are 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 (applies to PSU, PSU 2.0, and PSU Plus) and ASTM E108 (applies to PSU and PSU 2.0 only).

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

6.3 Reports of tests in accordance with TAS 103-20 (applies to PSU Plus only).

6.4 Reports of tests in accordance with FRSA/TRI Florida High Wind Concrete and Clay Tile Installation Manual (7th Edition) for PSU and PSU Plus.

6.5 Intertek Listing Report "PSU, PSU 2.0, and PSU Plus Self-adhered Roofing Underlayment".

6.6 Intertek Listing Report "TopShield SG PS/Max HT Self-adhered Roofing Underlayment".

6.7 Intertek Listing Report "GulfCoast HT PSU Self-adhered Roofing Underlayment".

7.0 IDENTIFICATION

The Self-Adhered Roofing 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-0332).

8.0 OTHER CODES

8.1 Florida Building Code:

8.1.1 Scope of Evaluation: The PSU, PSU 2.0, and PSU Plus underlayments were evaluated for compliance with the 2023 and 2020 *Florida Building Code – Building* and the 2023 and 2020 *Florida Building Code – Residential.*

8.1.2 Conclusion: The PSU, PSU 2.0, and PSU Plus underlayments described in Sections 2.0 to 7.0 of this report comply with the 2023 and 2020 *Florida Building Code – Building* and the 2023 and 2020 *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 Section 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*
- PSU, PSU 2.0, and PSU Plus may be used where underlayments complying with ASTM D1970 are permitted in TAS 110, and PSU Plus may be used where underlayments complying with TAS 103 are permitted in TAS 110, as referenced in *Florida Building Code – Building*, Section 1515.1.4. PSU Plus has an allowable design pressure of -127.5 psf when adhered directly to 19/32 in. thick plywood sheathing.
- PSU, PSU 2.0, and PSU Plus underlayments 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.
- Intertek is an approved evaluation entity and quality assurance entity pursuant to Florida Statute 553.842 – *Product Evaluation and Approval*

8.2 California Building Code and California Residential Code:

8.2.1 Scope of the Evaluation: The PSU and PSU 2.0 roofing underlayments were evaluated for compliance with the 2022 *California Building Code* and 2022 *California Residential Code*.

8.2.2 Conclusion: The PSU and PSU 2.0 roofing underlayments described in Section 2.0 through 7.0 of this report comply with the 2022 *California Building Code* and 2022 *California Residential Code*, including use in the exterior design and construction of buildings located within the Wildland-Urban Interface Fire Area outlined under *California Building Code* Section 705A and *California Residential Code* Section R337.

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	2021 IBC SECTION	2021 IRC SECTION	2023 FBC (BUILDING)	2023 FBC (RESIDENTIAL)	2022 CALIFORNIA BUILDING CODE SECTION	2022 CALIFORNIA RESIDENTIAL CODE SECTION
Physical Properties	104.11, 1506, and 1507	R104.11, R904, and R905	1506, 1507.1.1, and 1515.1.4	R904, R905.1.1	104.11, 1506, and 1507	R104.11, R904, and R905
Fire Classification	1505	R902.1	1505	R902	1505 705A	R902.1 R337.5
Ice Barrier	1507	R905	N/A	N/A	1507	R905

NOTE: Section numbers may be different for earlier versions of the Codes.