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Revision Date: 10-28-2024  
Renewal Date: 01-31-2025

**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](http://www.veerplastics.com)

**REPORT SUBJECT:**

A4, B4, C4, D4, Ultra, and VBreathe Vapor Permeable Synthetic Roofing Underlayments

**ADDITIONAL LISTEE:**

Veer Corporations Inc.  
25298 FM 2978 Road, Unit A  
Tomball, TX 77357  
(262) 443-3663  
[www.veerplastics.com](http://www.veerplastics.com)

**ADDITIONAL LISTEE SUBJECT:**

GatorZBack Synthetic Roofing Underlayment (B4 Underlayment)

**ADDITIONAL LISTEE:**

Mid-State Asphalt  
1637 – 51st Avenue  
Tuscaloosa, AL 35401  
(800) 489-2391  
[www.msarroof.com](http://www.msarroof.com)

**ADDITIONAL LISTEE SUBJECT:**

Quik-Felt and Deck Guard Synthetic Roofing Underlayments (C4 and D4 Underlayments)

**ADDITIONAL LISTEE:**

G.A.P. Roofing Inc.  
4444 Hunt Street  
Pryor, OK 74361  
(800) 880-9808  
[www.gaproofing.us](http://www.gaproofing.us)

**ADDITIONAL LISTEE SUBJECT:** WaterGuard AMT, WaterGuard All Purpose, and GuardShield Synthetic Roofing Underlayments (A4 and C4 Underlayments respectively)

**ADDITIONAL LISTEE:**

CertainTeed LLC  
20 Moores Road  
Malvern, PA 19355  
(610) 893-6000  
[www.certainteed.com](http://www.certainteed.com)

**ADDITIONAL LISTEE SUBJECT:** CertainTeed Diamond Deck and RoofRunner™ Synthetic Roofing Underlayments (A4 and C4 Underlayments respectively)

**ADDITIONAL LISTEE:**

SRS Distribution Inc.  
5900 S. Lake Forest Drive, Suite 400  
McKinney, TX 75070-2196  
(469) 421-0616  
[www.srsdistribution.com](http://www.srsdistribution.com)

**ADDITIONAL LISTEE SUBJECT:** CraftGrade W20 Synthetic Roof Underlayment (D4 Underlayment)

**ADDITIONAL LISTEE:**

Franklin Southern Manufacturing LLC  
Suite 105, 4815 Executive Park Court  
Jacksonville, Florida 32216  
(904) 551-7150  
[www.franklinsouthern.com](http://www.franklinsouthern.com)

**ADDITIONAL LISTEE SUBJECT:** Techador Max, Techador Pro, Techador Plus, and Techador Synthetic Roofing Underlayments (A4, B4, C4, and D4 Underlayments respectively)

**ADDITIONAL LISTEE:**

Van Boxel Surplus LLC  
13770 Gar Hwy,  
Chardon, OH 44024  
(440) 721-1504  
[www.vanboxelsurplus.com](http://www.vanboxelsurplus.com)



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[intertek.com/building](http://intertek.com/building)





**ADDITIONAL LISTEE SUBJECT: Van Boxel Building Supply Underlayment (C4 Underlayment)**

**ADDITIONAL LISTEE:**  
Warrior Roofing Manufacturing  
3050 Warrior Road,  
Tuscaloosa, AL 35404  
[www.warriorroofing.com](http://www.warriorroofing.com)

**ADDITIONAL LISTEE SUBJECT: Elephant Skin Underlayment (C4 Underlayment)**

**ADDITIONAL LISTEE:**  
Cameron Ashley Building Products  
979 Batesville Road, Suite A  
Greer, SC 29651  
[www.cameronashleybp.com](http://www.cameronashleybp.com)

**ADDITIONAL LISTEE SUBJECT: Canopy Supreme, Canopy Plus, and Canopy SafeDeck Synthetic Roofing Underlayments (A4, C4, and D4 Underlayments respectively)**

**ADDITIONAL LISTEE:**  
BEM Direct Supply LLC  
7600 Boone Ave N. Ste 65  
Brooklyn Park, MN 55428  
(646) 905-0024  
[www.bemdirect.com](http://www.bemdirect.com)

**ADDITIONAL LISTEE SUBJECT:**  
SYNSTEP PRO720, SYNSTEP B500, SYNSTEP 100, SYNSTEP L340, SYNSTEP Ultra1160, and SYNSTEP Breathe740 Synthetic Roofing Underlayments (A4, B4, C4, D4, Ultra, and VBreathe Vapor Permeable Underlayments respectively)

**ADDITIONAL LISTEE:**  
Atlantic Squared Supply LLC  
155 Professional Park Drive  
Cumming, GA 30040  
(832) 860-4330  
[www.atlanticsquared.com](http://www.atlanticsquared.com)

**ADDITIONAL LISTEE SUBJECT:**  
Aspire Plus, Aspire Protect, and Aspire Premium Synthetic Roofing Underlayments (A4, B4, and C4 Underlayments respectively)

**ADDITIONAL LISTEE:**  
Perma-Tech Roofing  
6351 S. Tucson Blvd.  
Tucson, AZ 85706  
[www.permatechroofing.com](http://www.permatechroofing.com)

**ADDITIONAL LISTEE SUBJECT: Perma-Tech S50 and Perma-Tech S30 Underlayments (B4 and C4 Underlayments respectively)**

## 1.0 SCOPE OF EVALUATION

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 *Florida Building Code* (FBC) (See Section 8.1)
- 2022 *California Building Code* (CBC) and 2022 *California Residential Code* (CRC) (See Section 8.2)

## 2.0 USES

A4, B4, C4, D4, Ultra, and VBreathe Vapor Permeable roofing underlayments are used in the field of the roof as an alternative to the ASTM D226, Type I and 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 (see Table 1):

- Physical properties
- Fire classification
- Ice barrier

## 3.0 DESCRIPTION

**A4** is a mechanically attached synthetic underlayment comprised of a polypropylene woven scrim coated on both sides with a polypropylene non-woven scrim on the exposed side.





The underlayment is grey on the exposed side and black on the sheathing side and has an overall weight of 3.69 pounds per 100 square feet. The underlayment is available in rolls of 48 inches wide by 250 feet long. A4 is also labeled as VShield Supreme.

**B4** is a mechanically attached synthetic underlayment comprised of a polypropylene woven scrim coated on both sides with a polypropylene non-woven scrim on the exposed side. The underlayment is green on the exposed side and black on the sheathing side and has an overall weight of 2.56 pounds per 100 square feet. The underlayment is available in rolls of 48 inches wide by 250 feet long. B4 is also labeled as VShield Gold.

**C4** is a mechanically attached synthetic underlayment comprised of a polypropylene woven scrim coated on both sides with a polypropylene non-woven scrim on the exposed side. The underlayment is black in color and has an overall weight of 2.05 pounds per 100 square feet. The underlayment is available in rolls of 48 inches wide by 250 feet long. C4 is also labeled as VShield Plus.

**D4** is a mechanically attached synthetic underlayment comprised of a polypropylene woven scrim coated on both sides with a polypropylene non-woven scrim on the exposed side. The underlayment is black in color and has an overall weight of 1.74 pounds per 100 square feet. The underlayment is available in rolls of 48 inches wide by 250 feet long. D4 is also labeled as VShield SafeDeck.

**Ultra** is a 4-layered mechanically attached synthetic roofing underlayment comprising of non-woven scrim on the exposed side, a polyolefin layer, another non-woven scrim, and a coating layer on the sheathing side. The exposed layer is light grey and sheathing layer is black in color with an overall weight of 5.73 pounds per 100 square feet. The underlayment is available in rolls of 48 inches wide by 142 feet long. Ultra is also labeled as VShield Ultra.

**VBreathe Vapor Permeable** is a 3-layer mechanically attached synthetic underlayment comprised of a nonwoven polymeric fabric on the exposed side, extruded polymeric sheet, and nonwoven polymeric fabric on the sheathing side. The underlayment is grey in color and has an overall weight of 3.79 pounds per 100 square feet. The underlayment is available in rolls of 48 inches wide by 250 feet long.

## 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 underlayments 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, 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 underlayments installed in the field of the roof must overlap the ice barrier.

**4.3 Fire Classification:** A4, B4, C4, D4, and Ultra 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 Section 1.0 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 underlayments.

**5.6** VBreathe Vapor Permeable synthetic roofing underlayment 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.

**5.7** The 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 D8257 and 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 "[Veer Plastics - Synthetic Roofing Underlayments](#)".

**6.4** Intertek Listing Report "[CertainTeed RoofRunner™ & DiamondDeck Synthetic Roofing Underlayments](#)".

**6.5** Intertek Listing Report "[Franklin Southern Manufacturing - Synthetic Roofing Underlayments](#)".

**6.6** Intertek Listing Report "[G.A.P – GuardShield and WaterGuard Synthetic Roofing Underlayments](#)".

**6.7** Intertek Listing Report "[MSA - Quik-Felt and Deck Guard Synthetic Roofing Underlayment](#)".

**6.8** Intertek Listing Report "[SRS Distribution – CraftGrade W20 Roofing Underlayment](#)".

**6.9** Intertek Listing Report "[Van Boxel Building Supply Underlayment](#)".

**6.10** Intertek Listing Report "[Warrior Roofing - Elephant Skin Synthetic Roofing Underlayment](#)".

**6.11** Intertek Listing Report "[Cameron Ashley Building Products – Synthetic Roofing Underlayments](#)".

**6.12** Intertek Listing Report "[BEM Direct Supply LLC – SYNSTEP PRO720, SYNSTEP B500, SYNSTEP 100, SYNSTEP L340, SYNSTEP Ultra1160, and SYNSTEP Breathe740 Synthetic Roofing Underlayments](#)".

**6.13** Intertek Listing Report "[Atlantic Squared Supply LLC – Aspire Plus, Aspire Protect, Aspire Premium Synthetic Roofing Underlayments](#)".

**6.14** Intertek Listing Report "[Veer Corporations – GatorZBack Synthetic Roofing Underlayment](#)".

**6.15** Intertek Listing Report "[Perma-Tech – Perma-Tech S50 and Perma-Tech S30 Synthetic Roofing Underlayments](#)".

## 7.0 IDENTIFICATION

The underlayments are imprinted with the product name, the company name, the Intertek Mark, and the Code Compliance Research Report number (CCRR-1048). Each roll of the product is also labeled with product name, company name, and installation instructions.

## 8.0 OTHER CODES

### 8.1 Florida Building Code:

**8.1.1 Scope of the Evaluation:** A4, B4, C4, D4, Ultra, VBreathe underlayments were evaluated for compliance with the 2023 *Florida Building Code – Building* and the 2023 *Florida Building Code – Residential*.





8.1.2 Conclusion: The A4, B4, C4, D4, Ultra and VBreathe underlayments described in Section 2.0 to 7.0 of this report comply with the 2023 Florida Building Code – Building and the 2023 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, and Sections 1507 and 1518 of the Florida Building Code – Building, and Section R905 of the Florida Building Code – Residential
- Evaluation for use with discontinuous roof tile systems is outside the scope of this report
- 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 A4, B4, C4, D4, and Ultra roofing underlayments were evaluated for compliance with the 2022 California Building Code and 2022 California Residential Code.

8.2.2 Conclusion: The A4, B4, C4, D4, and Ultra 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	104.11, 1507, and 1518.2	R904 and R905	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.

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