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Revision Date: 05-28-2025
Renewal Date: 01-31-2026

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:

A4, B4, C4, D4, Ultra (N4), and VBreathe Vapor Permeable
(N3 Breathable) Synthetic Roofing Underlayments

ADDITIONAL LISTEE:

Veer Corporations Inc.
25298 FM 2978 Road, Unit A
Tomball, TX 77357
(262) 443-3663
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

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

ADDITIONAL LISTEE SUBJECT: WaterGuard AMT, WaterGuard All Purpose, and GuardShield 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

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

ADDITIONAL LISTEE:

Van Boxel Surplus LLC
13770 Gar Hwy,
Chardon, OH 44024
(440) 721-1504
www.vanboxelsupply.com

ADDITIONAL LISTEE SUBJECT: VanBoxel Elite, VanBoxel Premium, and VanBoxel Standard Roofing Underlayments (B4, C4, D4 Underlayments respectively)

ADDITIONAL LISTEE:

Cameron Ashley Building Products
979 Batesville Road, Suite A
Greer, SC 29651
www.cameronashleybp.com

ADDITIONAL LISTEE SUBJECT: Canopy Supreme C50, Canopy Plus C30, and Canopy SafeDeck C20 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



545 E. Algonquin Road • Arlington Heights • Illinois • 60005
intertek.com/building



**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

ADDITIONAL LISTEE SUBJECT:

Aspire Premium Plus, Aspire Premier, 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

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

ADDITIONAL LISTEE:

Gulfeagle Supply
2900 E. 7th Avenue Ste. 200.
Tampa FL 33605
(813) 636-9809
www.gulfeaglesupply.com

ADDITIONAL LISTEE SUBJECT: Gulfeagle Supply Synthetic Roof Underlayment (C4 Underlayment)

ADDITIONAL LISTEE:

Precision Converters
5770 N. Blackstock Rd
Spartanburg, SC 29303
(864) 574 7832
www.pciindgroup.com

ADDITIONAL LISTEE SUBJECT:

Ready Roofing Synthetic Roof Underlayment (C4 Underlayment)

ADDITIONAL LISTEE:

Turbo Synthetic
7580 Little Mountain Rd
Mentor, Ohio 44060
(440) 342 3809
acv987@gmail.com

ADDITIONAL LISTEE SUBJECT:

Turbo Synthetic Roofing Underlayment (D4 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)
- 2024 *International Wildland-Urban Interface Code* (IWUIC)
- 2023 *Florida Building Code* (FBC) - *Building and Residential*, including High-Velocity-Hurricane Zones (HVHZ) (See Section 9.1)
- 2022 *California Building Code* (CBC) and 2022 *California Residential Code* (CRC) (See Section 9.2)

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

1.2 A4, B4, C4, D4, and Ultra roofing underlayments have been evaluated for the following properties (see Table 1):

- Physical Properties
- Fire Classification
- Ice Barrier

VBreathe Vapor Permeable roofing underlayment has been evaluated for the following properties (see Table 1):

- Physical Properties
- Ice Barrier

1.3 A4, B4, C4, D4, Ultra, and VBreathe Vapor Permeable roofing underlayments have been evaluated for the following uses (see Table 1):

- Under the 2024 IBC and IRC, the underlayment may be used in the field of roofs where ASTM D8257 compliant underlayments are required as specified in IBC Chapter 15 and IRC Chapter 9.





- Under the 2021 and 2018 Codes, the underlayment may be used as an alternative to the ASTM D226, Type I and Type II, roofing underlayments specified in IBC Chapter 15 and IRC Chapter 9.
- In areas of the roof required by IBC Section 1507 or IRC Section R905 to have an ice barrier as described in Section 4.2 of this report.
- As a component of a classified assembly when installed as described in Section 4.1 of this report (excludes VBreathe Vapor Permeable roofing underlayment).
- Under the 2024 IWUIC, Section 504.2, the A4, B4, C4, D4, and Ultra underlayments may be used on buildings requiring Class 1 ignition-resistant construction in wildland-urban interface areas when installed as part of an assembly described in Table 2 of this report.

2.0 STATEMENT OF COMPLIANCE

A4, B4, C4, D4, Ultra, and VBreathe Vapor Permeable 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 6.0.

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 and VShield 30.

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 and N4.

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. VBreathe Vapor Permeable is also labeled as VShield VBreathe and N3 Breathable.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Fire Classification: When installed in accordance with the assemblies described in Table 2 of this report, the A4, B4, C4, D4, and Ultra roofing underlayments meet Class A fire classification per ASTM E108. Additionally, the underlayments 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 to 4 in IBC Section 1505.2 and Exceptions 1 to 4 in IRC Section R902.1.
- Where non-classified roofing is permitted in IBC Section 1505.5.





4.2 Ice Barrier: 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.

4.3 Vapor Permeability: A4, B4, C4, and D4 roofing underlayments have a permance of 0.07 perms, based on testing in accordance with ASTM E96. Ultra roofing underlayment has a permance of 0.12 perms, based on testing in accordance with ASTM E96. VBreathe Vapor Permeable roofing underlayment has a permance of 13.4 perms, based on testing in accordance with ASTM E96.

5.0 INSTALLATION

5.1 General: A4, B4, C4, D4, Ultra, and VBreathe Vapor Permeable 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 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 D8257-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 underlayment 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.

When installed as described in Table 2 of this report, the roof assemblies comply with IWUIC Section 504.2 and may be used on buildings requiring Class 1 ignition-resistant construction in wildland-urban interface areas.

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.

6.0 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:

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 between the manufacturer's instructions and this report, 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 underlayments.

6.6 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.

6.7 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.

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

7.3 Intertek Listing Report "[Veer Plastics - Synthetic Roofing Underlayments](#)".





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

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

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

7.7 Intertek Listing Report "[Van Boxel Building Supply Synthetic Roofing Underlayments](#)".

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

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

7.10 Intertek Listing Report "[Atlantic Squared Supply LLC – Aspire Premium Plus, Aspire Premier, and Aspire Premium Synthetic Roofing Underlayments](#)".

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

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

7.13 Intertek Listing Report "[Gulfeagle Supply – Synthetic Roofing Underlayments](#)".

7.14 Intertek Listing Report "[Precision Converters – Ready Roofing Synthetic Roofing Underlayments](#)".

7.15 Intertek Listing Report "[Turbo Synthetic – Turbo Synthetic Roofing Underlayments](#)".

8.0 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.

9.0 OTHER CODES

9.1 Florida Building Code: The A4, B4, C4, D4, Ultra, and VBreathe Vapor Permeable roofing underlayments, described in Sections 2.0 through 7.0 of this Research Report, comply 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*.

9.2 California Building Code and California Residential Code:

9.2.1 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*.

9.2.2 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.

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.

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TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2024 IBC SECTION	2024 IRC SECTION	2023 FBC (BUILDING)	2023 FBC (RESIDENTIAL)	2022 CALIFORNIA BUILDING CODE SECTION	2022 CALIFORNIA RESIDENTIAL CODE SECTION	2024 IWUIC SECTION
Physical Properties	1506 and 1507	R904 and R905	1507 and 1518.2	R904 and R905	1506 and 1507	R904 and R905	-
Fire Classification	1505	R902.1	1505, 1516.2	R902	1505 705A	R902.1 R337.5	504.2
Ice Barrier	1507.1.2	R905.1.2	N/A	N/A	1507	R905	-

NOTE: Section numbers may be different for earlier versions of the 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 A4, B4, C4, or D4 roofing underlayment mechanically fastened to the plywood sheathing every 12 inches oc in the field and on the perimeter using plastic cap nails	Asphalt shingles Listed per ASTM D3462 with a minimum weight of 190 pounds per 100 square feet, installed per manufacturer's installation instructions
Class A 2:12 or greater	Minimum nominal 3/8 in. thick AC Grade exterior grade plywood	One layer of Ultra roofing underlayment mechanically fastened to the plywood every 12 in. oc along the width and 24 in. oc along the length using 1 in. plastic cap nails, and 2 in. overlap on horizontal joints.	Asphalt shingles Listed per ASTM D3462 with a minimum weight of 190 pounds per 100 square feet, installed per manufacturer's installation instructions

