Code Compliance Research Report
CCRR-1048

Issue Date: 10-28-2015
Revision Date: 10-09-2026
Renewal Date: 01-31-2027

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, E4, 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.msaroof.com

ADDITIONAL LISTEE SUBJECT:
Quik-Felt and Deck Guard Synthetic Roofing Underlayments (C4 and D4 Underlayments, respectively)

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:
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:
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:
Gulf Coast Supply
14429 SW 2nd PI, SUITE G30
Newberry, FL 32669
(352) 498-0778-0565
www.gulfcoastsupply.com

ADDITIONAL LISTEE SUBJECT:
Nail N' Seal Synthetic Roofing Underlayment (Ultra Underlayment)

ADDITIONAL LISTEE:
Beacon Sales Acquisition, Inc. d/b/a QXO
505 Huntmar Park Drive, Suite 300
Herndon, VA 20170
+1 512 202 5041
www.qxo.com

ADDITIONAL LISTEE SUBJECT: TRI-BUILT and TRI-BUILT Eco Synthetic Roofing Underlayments (C4 and D4 Underlayments, respectively)

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)
- 2024 *International Wildland-Urban Interface Code* (IWUIC)
- 2025 *California Wildland-Urban Interface Code* (CWUIC)
- 2026, 2023 *Florida Building Code*, including High-Velocity-Hurricane Zones (HVHZ) (See Section 9.1)
- 2025, 2022 *California Building Code* (See Section 9.2)
- 2023 *City of Los Angeles Building Code* (See Section 9.3)

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

1.2 A4, B4, C4, D4, E4, Ultra, and Vbreathe Vapor Permeable roofing underlayments have been evaluated for the following properties (see Table 1):

- Physical Properties
- Fire Classification
- Ice Barrier

1.3 A4, B4, C4, D4, E4, 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.
- Under the 2024 IWUIC, Section 504.2, the A4, B4, C4, D4, E4, Ultra, and Vbreathe Vapor Permeable 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 3 of this report.

2.0 STATEMENT OF COMPLIANCE

A4, B4, C4, D4, E4 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 an 11-mil thick mechanically attached synthetic underlayment composed of a polypropylene woven scrim laminated with a polypropylene non-woven layer on the exposed side and a polyolefin coating layer on the sheathing side. The underlayment is available in custom colours and supplied in rolls measuring 48 inches wide by 125 feet long, 48 inches wide by 250 feet long, 60 inches wide by 100 feet long and 60 inches wide by 200 feet long. A4 is also labelled as VShield Supreme.

B4 is a 9-mil thick mechanically attached synthetic underlayment composed of a polypropylene woven scrim laminated with a polypropylene non-woven layer on the exposed side and a polyolefin coating layer on the sheathing side. The underlayment is available in custom colours and supplied in rolls measuring 48 inches wide by 125 feet long, 48 inches wide by 250 feet long, 60 inches wide by 100 feet long and 60 inches wide by 200 feet long. B4 is also labelled as VShield Gold.

C4 is a 7-mil thick mechanically attached synthetic underlayment composed of a polypropylene woven scrim laminated with a polypropylene non-woven layer on the exposed side and a polyolefin coating layer on the sheathing side. The underlayment is available in custom colours and supplied in rolls measuring 48 inches wide by 125 feet long, 48 inches wide by 250 feet long, 60 inches wide by 100 feet long and 60 inches wide by 200 feet. long. C4 is also labelled as VShield Plus and VShield 30..

D4 is a 6-mil thick mechanically attached synthetic underlayment composed of a polypropylene woven scrim laminated with a polypropylene non-woven layer on the exposed side and a polyolefin coating layer on the sheathing side. The underlayment is available in custom colours and supplied in rolls measuring 48 inches wide by 125 feet long, 48 inches wide by 250 feet long, 60 inches wide by 100 feet long and 60 inches wide by 200 feet long. D4 is also labelled as VShield SafeDeck and VShield Pro.

E4 is a 5-mil thick mechanically attached synthetic underlayment composed of a polypropylene woven scrim laminated with a polypropylene non-woven layer on the exposed side and a polyolefin coating layer on the sheathing side. The underlayment is available in custom colors and supplied in rolls measuring 48 inches wide by 125 feet long, 48 inches wide by 250 feet long, 60 inches wide by 100 feet long and 60 inches wide by 200 feet long. E4 is also labelled as VShield ProX.

Ultra is a 30-mil thick 4-layered mechanically attached synthetic roofing underlayment comprising of polypropylene non-woven scrim on the exposed side, a polyolefin laminate, another polypropylene non-woven scrim, and a polyolefin coating layer on the sheathing side. The underlayment is available in custom colours and supplied in rolls measuring 48 inches wide by 125 feet long. Ultra is also labelled as VShield Ultra and N4.

VBreathe Vapor Permeable is a 26-mil thick 3-layered mechanically attached synthetic roofing underlayment composed of a polypropylene non-woven on the exposed side, an extruded polymeric sheet in between and a polypropylene non-woven layer on the sheathing side. The underlayment is available in custom colours and supplied in rolls measuring 48 inches wide by 125 feet long, 48 inches wide by 250 feet long, 60 inches wide by 100 feet long and 60 inches wide by 200 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 3 of this report, the A4, B4, C4, D4, E4, Ultra, and VBreathe Vapor Permeable roofing underlayments meet Class A fire classification per ASTM E108 and UL 790. 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 permeance of 0.07 perms, based on testing in accordance with ASTM E96. E4 roofing underlayment has a permeance of 0.00 perms, based on testing in accordance with ASTM E96. Ultra roofing underlayment has a permeance of 0.12 perms, based on testing in accordance with ASTM E96. VBreathe Vapor Permeable roofing underlayment has a permeance of 13.4 perms, based on testing in accordance with ASTM E96.

5.0 INSTALLATION

5.1 General: A4, B4, C4, D4, E4, 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 3 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 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, ASTM E108, and UL 790.

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 "Cameron Ashley Building Products – Synthetic Roofing Underlayments".

7.8 Intertek Listing Report "Atlantic Squared Supply LLC – Aspire Premium Plus, Aspire Premier, and Aspire Premium Synthetic Roofing Underlayments".

7.9 Intertek Listing Report "Veer Corporations – GatorZBack Synthetic Roofing Underlayment".

7.10 Intertek Listing Report "Perma-Tech – Perma-Tech S50 and Perma-Tech S30 Synthetic Roofing Underlayments".

7.11 Intertek Listing Report "Gulfeagle Supply – Synthetic Roofing Underlayments".

7.12 Intertek Listing Report "Precision Converters – Ready Roofing Synthetic Roofing Underlayments".

7.13 Intertek Listing Report "Gulf Coast Supply – Nail N' Seal Synthetic Roofing Underlayments".

7.14 Intertek Listing Report "Beacon Sales Acquisition, Inc – TRI-BUILT 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, E4, 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 3 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 3 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.

9.1.3 Fasteners in Saltwater Environments (2026 FBC): Use of the roofing underlayments within 3000 feet of a

saltwater coastline requires use of galvanized or stainless steel fasteners in accordance with Section 1711 of the 2026 FBC-Building and Section R332 of the 2026 FBC-Residential, as applicable.

Use of the roofing underlayments within 300 feet of a saltwater coastline requires use of stainless steel fasteners in accordance with Section 1711 of the 2026 FBC-Building and Section R332 of the 2026 FBC-Residential, as applicable.

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:

The A4, B4, C4, D4, E4, Ultra, and Vbreathe Vapor Permeable roofing underlayments described in Section 2.0 through 7.0 of this report comply with the requirements of the 2025 and 2022 *California Building Code* and *California Residential Code*, including wildland-urban interface areas regulated under the 2025 *California Wildland-Urban Interface Code*, 2022 CBC Chapter 7A, and 2022 CRC Section R337 for use in the exterior design and construction of buildings located within the Wildland-Urban Interface Fire Area.

9.3 City of Los Angeles Building Code and City of Los Angeles Residential Code:

The A4, B4, C4, D4, E4, Ultra, and Vbreathe Vapor Permeable roofing underlayments described in Section 2.0 through 7.0 of this report comply with the 2023 *City of Los Angeles Building Code* and the 2023 *City of Los Angeles Residential Code* and may be installed with the roof coverings specified in LABC Section 1507 and LARC Section R905.1.1, as an alternative to ASTM D226 compliant underlayments.
The underlayments may therefore be used in the exterior design and construction of buildings located within the Wildland-Urban Interface Fire Area outlined under LABC Section 705A.

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 (INTERNATIONAL CODES)

PROPERTY	2024 IBC SECTION	2024 IRC SECTION	2024 IWUIC SECTION
Physical Properties	1506 1507	R904 R905	-
Fire Classification	1505	R902.1	504.2
Ice Barrier	1507.1.2	R905.1.2	-

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

TABLE 2 – PROPERTIES EVALUATED (OTHER CODES)

PROPERTY	2026 FBC (BUILDING)	2026 FBC (RESIDENTIAL)	2025 CALIFORNIA BUILDING CODE SECTION	2025 CALIFORNIA RESIDENTIAL CODE SECTION	2025 CALIFORNIA WILDLAND-URBAN INTERFACE SECTION	2023 LABC SECTION	2023 LARC SECTION
Physical Properties	1507 1518.2	R904 R905	1506 1507	R904 R905	-	1507	R904 R905
Fire Classification	1505 1516.2	R902	1505	R902.1	504.2	1505 705A	R902.1 R337.5
Ice Barrier	N/A	N/A	1507	R905	-	1507	R905

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

TABLE 3 – 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, D4, E4 or Vbreathe Vapor Permeable roofing underlayment mechanically fastened to the plywood sheathing every 12 in. 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
Class A 2:12 or greater	A single layer of ½ in. DensDeck sheathing mechanically fastened to Minimum nominal 15/32 in. thick AC Grade Fir Plywood spaced 12 in. oc.	A single layer of Ultra roofing underlayment mechanically fastened to the plywood every 12 in. oc in the field and on the perimeter using 1 in. plastic cap nails.	Minimum 20 gauge aluminum roof panels Listed per ASTM E108 Class A Spread of Flame installed in accordance with the roof panel manufacturer's installation instructions.
Class A 2:12 or greater	A single layer of ½ in. DensDeck sheathing mechanically fastened to Minimum nominal 15/32 in. thick AC Grade Fir Plywood	A single layer of Ultra roofing underlayment mechanically fastened to the plywood every 12 in. oc in the field and on the perimeter using 1 in. plastic cap nails.	Minimum 29 gauge steel roof panels Listed per ASTM E108 Class A Spread of Flame installed in accordance with the roof panel manufacturer's installation instructions.