Listing and Technical Evaluation Report™

A Duly Authenticated Report from an Approved Agency

Report No: 2212-05

Issue Date: March 22, 2023

Revision Date: August 4, 2026

Subject to Renewal: April 1, 2027

Barricade® Underlayments

Trade Secret Report Holder:

INDEVCO Building Products
10351 Verdon Rd
Doswell, VA 23047-1600
Phone: 804-876-9176
Website: indevconorthamerica.com

Additional Listee:
Barricade® Building Products
10351 Verdon Rd
Doswell, VA 23047-1600
Phone: 840-876-3135 and Website: barricadebp.com

CSI Designations:

DIVISION: 07 00 00 - THERMAL AND MOISTURE PROTECTION Section: 07 30 00 - Steep Slope Roofing

1 Innovative Products Evaluated[1]

1.1 Barricade UDL Standard and UDL Pro™

2 Product Description and Materials

2.1 Labels for the innovative products evaluated in this report are shown in **Figure 1**.

Figure 1. UDL Standard and UDL Pro Labels

2.2 UDL Standard and UDL Pro are made from a synthetic membrane engineered specifically for use as a roofing underlayment.

2.3 *Material Availability*

2.3.1 *Standard Width:*

2.3.1.1 48" (1,219 mm)

2.3.2 *Standard Lengths:*

2.3.2.1 125' (38.1 m)

2.3.2.2 250' (76.2 m)

2.3.3 Other custom widths and lengths can be manufactured.

2.4 As needed, review material properties for design in **Section 6** and the regulatory evaluation in **Section 8**.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

3 Definitions[2]

3.1 New Materials[3] are defined as building materials, equipment, appliances, systems, or methods of construction, not provided for by prescriptive and/or legislatively adopted regulations, known as alternative materials.[4] The design strength and permissible stresses shall be established by tests[5] and/or engineering analysis.[6]

3.2 Duly authenticated reports[7] and research reports[8] are test reports and related engineering evaluations that are written by an approved agency[9] and/or an approved source.[10]

3.2.1 This report utilizes intellectual property and/or trade secrets to create public domain material properties for commercial end-use.

3.2.1.1 This report protects confidential Intellectual Property and trade secrets under the regulation, 18.US.Code.90, also known as Defend Trade Secrets Act of 2016 (DTSA).[11]

3.3 An approved agency is *"approved"* when it is ANAB ISO/IEC 17065 accredited. DrJ Engineering, LLC (DrJ) is accredited and listed in the ANAB directory.

3.4 An approved source is *"approved"* when a professional engineer (i.e., Registered Design Professional, hereinafter RDP) is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the state legislature via its professional engineering regulations.[12]

3.5 Testing and/or inspections conducted for this duly authenticated report were performed by an ISO/IEC 17025 accredited testing laboratory, an ISO/IEC 17020 accredited inspection body, and/or a licensed RDP.

3.5.1 The Center for Building Innovation (CBI) is ANAB[13] ISO/IEC 17025 and ISO/IEC 17020 accredited.

3.6 The regulatory authority shall enforce[14] the specific provisions of each legislatively adopted regulation. If there is a non-conformance, the specific regulatory section and language of the non-conformance shall be provided in writing[15] stating the nonconformance and the path to its cure.

3.7 The regulatory authority shall accept duly authenticated reports from an approved agency and/or an approved source with respect to the quality and manner of use of new materials or assemblies as provided for in regulations regarding the use of alternative materials, designs, or methods of construction.[16]

3.8 ANAB is an International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) signatory. Therefore, recognition of certificates and validation statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA with the appropriate scope shall be approved.[17] Thus, all ANAB ISO/IEC 17065 duly authenticated reports are approval equivalent,[18] and can be used in any country that is an MLA signatory found at this link: https://iaf.nu/en/recognised-abs/

3.9 Approval equity is a fundamental commercial and legal principle.[19]

4 Applicable Local, State, and Federal Approvals; Standards; Regulations[20]

4.1 *Local, State, and Federal*

4.1.1 Approved in all local jurisdictions pursuant to ISO/IEC 17065 duly authenticated report use, which includes, but is not limited to, the following featured local jurisdictions: Austin, Baltimore, Broward County, Chicago, Clark County, Dade County, Dallas, Detroit, Denver, DuPage County, Fort Worth, Houston, Kansas City, King County, Knoxville, Las Vegas, Los Angeles City, Los Angeles County, Miami, Nashville, New York City, Omaha, Philadelphia, Phoenix, Portland, San Antonio, San Diego, San Jose, San Francisco, Seattle, Sioux Falls, South Holland, St. Louis County, Texas Department of Insurance, and Wichita.[21]

4.1.2 Approved in all state jurisdictions pursuant to ISO/IEC 17065 duly authenticated report use, which includes, but is not limited to, the following featured states: California, Florida, New Jersey, Oregon, New York, Texas, Washington, and Wisconsin.[22]

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

4.1.3 Approved by the Code of Federal Regulations Manufactured Home Construction: Pursuant to Title 24, Subtitle B, Chapter XX, Part 3282.14[23] and Part 3280[24] pursuant to the use of ISO/IEC 17065 duly authenticated reports.

4.1.4 Approved means complying with the requirements of local, state, or federal legislation.

4.2 *Regulations*

4.2.1 *IBC – 18, 21, 24: International Building Code®*

4.2.2 *IRC – 18, 21, 24: International Residential Code®*

4.2.3 *FBC-B—20, 23: Florida Building Code[25] – Building (FL16453)*

4.2.4 *FBC-R—20, 23: Florida Building Code[25] – Residential (FL16453)*

4.3 *Standards*

4.3.1 *ASTM D146: Standard Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing*

4.3.2 *ASTM D226: Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing*

4.3.3 *ASTM D828: Standard Test Method for Tensile Properties of Paper and Paperboard Using Constant-Rate-of-Elongation Apparatus*

4.3.4 *ASTM D1204: Standard Test Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature*

4.3.5 *ASTM D1922: Standard Test Method for Propagation Tear Resistance of Plastic Film and Thin Sheeting by Pendulum Method*

4.3.6 *ASTM D4533: Standard Test Method for Trapezoid Tearing Strength of Geotextiles*

4.3.7 *ASTM D4869: Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing*

4.3.8 *ASTM D5035: Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)*

4.3.9 *ASTM D8257: Standard Specification for Mechanically Attached Polymeric Roof Underlayment Used in Steep Slope Roofing*

4.3.10 *ASTM F1087: Standard Test Method for Linear Dimensional Stability of a Gasket Material to Moisture*

5 Listed[26]

5.1 Equipment, materials, products, or services included in a List published by a nationally recognized testing laboratory (e.g., CBI), an approved agency (e.g., CBI and DrJ), and/or an approved source (e.g., DrJ), or other organization(s) concerned with product evaluation (e.g., DrJ), that maintains periodic inspection (e.g., CBI) of production of listed equipment or materials, and whose listing states either that the equipment or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner.

6 Tabulated Properties Generated from Nationally Recognized Standards

6.1 *General*

6.1.1 UDL Standard and UDL Pro underlayments comply with IBC Section 1507.1.1 and IRC Section R905.1.1.

6.1.2 UDL Standard and UDL Pro underlayments are used with any roof covering in IBC Table 1507.1.1(1) and IRC Table R905.1.1(1) that allow for the use of ASTM D226, Type I or ASTM D226, Type II underlayment.

6.1.3 UDL Standard and UDL Pro may also be used with any roof covering in IBC Table 1507.1.1(1) and IRC Table R905.1.1(1) that allow for the use of ASTM D4869, Type II or ASTM D4869, Type IV underlayment.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

6.2 *Pliability*

6.2.1 UDL Standard and UDL Pro underlayments were evaluated to assess their performance with regard to pliability in accordance with ASTM D146. Results are as shown in **Table 1**.

Table 1. UDL Standard and UDL Pro Pliability Testing[1]

Product	Complete Test Assessment
UDL Standard	Pass
UDL Pro	
1. Tested in accordance with ASTM D146.	

6.3 *Average Breaking Strength*

6.3.1 UDL Standard and UDL Pro underlayments were evaluated to assess their performance with regard to average breaking strength in accordance with ASTM D828, modified by ASTM D146. The results are as shown in **Table 2**.

Table 2. Breaking Strength of UDL Standard and UDL Pro Underlayments[1]

Product	Machine Direction (lbf/in. width)	Cross-Machine Direction (lbf/in. width)
UDL Standard	73.0	71.8
UDL Pro	79.0	35.8
SI: 1-lbf/in = 0.175 kN/m 1. Tested in accordance with ASTM D828, modified by ASTM D146.		

6.4 *Loss on Heating*

6.4.1 UDL Standard and UDL Pro underlayments were evaluated to assess their performance with regard to loss on heating in accordance with ASTM D146. Results are as shown in **Table 3**.

Table 3. UDL Standard and UDL Pro Loss on Heating Test Results[1]

Product	Mass Lost to the Nearest 0.5%
UDL Standard	1.0%
UDL Pro	0.5%
1. Tested in accordance with ASTM D146.	

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

6.5 *Average Tear Strength*

6.5.1 UDL Standard and UDL Pro underlayments were evaluated to assess their performance with regard to tearing strength, with and across the machine direction, in accordance with ASTM D1922. Results are provided in **Table 4**.

Table 4. UDL Standard and UDL Pro Tearing Strength[1]

Product	Machine Direction (lbf)	Cross-Machine Direction (lbf)
UDL Standard	13	13
UDL Pro	6	10

SI: 1-lbf = 4.45 N

1. Tested in accordance with ASTM D1922.

6.6 *Liquid Water Transmission*

6.6.1 UDL Standard and UDL Pro underlayments were evaluated to assess their performance with regard to water transmission in accordance with ASTM D4869. Results are as shown in **Table 5**.

Table 5. Liquid Water Transmission Test Results[1]

Product	Assessment
UDL Standard	Pass
UDL Pro	

1. Tested in accordance with ASTM D4869.

6.7 *Dimensional Stability Against Humidity*

6.7.1 UDL Standard and UDL Pro underlayments were evaluated to assess their performance with regard to their dimensional stability against humidity changes in accordance with ASTM F1087, modified by ASTM D4869. Results are specified in **Table 6**.

Table 6. Dimensional Stability Against Humidity[1]

Product	Change of Length in Machine Direction (%)	Change of Length in Cross-Machine Direction (%)
UDL Standard	0	0
UDL Pro	0	0

1. In accordance with ASTM F1087, modified by ASTM D4869.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

6.8 *Un-Rollability*

6.8.1 UDL Standard and UDL Pro underlayments were tested at the temperatures specified in **Table 7** to evaluate unrolling performance. The assessment confirmed that UDL Standard and UDL Pro underlayments could be unrolled without cracking or sustaining damage from stickiness. Results are as shown in **Table 7**.

Table 7. Un-rollability of UDL Standard and UDL Pro[1,2]

Product	Test at ≤ 50° F	Test at ≥ 140° F
UDL Standard	Pass[1]	Not Tested
UDL Pro	Pass[1]	Pass

SI: °F= (9/5 °C) +32

1. Tested in accordance with ASTM D8257.
2. Products were conditioned to 32° F.

6.9 Alternative techniques shall be permitted in accordance with accepted engineering practice and experience. These provisions for the use of alternative materials, designs, and methods of construction are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed herein. This includes, but is not limited to, the following areas of engineering: mechanics of materials, structures, building science, and fire science.

7 Certified Performance[27]

7.1 All construction methods shall conform to accepted engineering practices to ensure durable, livable, and safe construction and shall demonstrate acceptable workmanship reflecting journeyman quality of work of the various trades.[28]

7.2 The strength and rigidity of the component parts and/or the integrated structure shall be determined by engineering analysis or by suitable load tests to simulate the actual loads and conditions of application that occur.[29]

8 Regulatory Evaluation and Accepted Engineering Practice

8.1 UDL Standard and UDL Pro underlayments comply with the following legislatively adopted regulations and/or accepted engineering practice for the following reasons:

8.1.1 UDL Standard and UDL Pro underlayments have been evaluated for performance equivalency to ASTM D226, Type I and Type II, and ASTM D4869, Type II and IV, by conducting the following:

8.1.1.1 Pliability testing performed according to ASTM D146 as specified in ASTM D226 or ASTM D4869.

8.1.1.2 Average breaking strength with and across the machine direction according to ASTM D5035 or ASTM D828, modified by ASTM D146.

8.1.1.3 Loss on heating following the procedure laid out in ASTM D146.

8.1.1.4 Average tear strength with and across the machine direction according to ASTM D1922 or ASTM D4533.

8.1.1.5 Liquid water transmission test performed according to ASTM D4869.

8.1.1.6 Dimensional stability against humidity changes in the machine direction and cross-machine direction according to ASTM F1087 modified by ASTM D4869 or according to ASTM D1204.

8.1.1.7 Un-rollability test performed according to ASTM D146, as specified in ASTM D226 or ASTM D4869.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

8.2 Any building code, regulation and/or accepted engineering evaluations (e.g., research reports, duly authenticated reports, etc.) that are conducted for this Listing were performed by DrJ, which is an ISO/IEC 17065 accredited certification body and a professional engineering company operated by RDP or approved sources. DrJ is qualified[30] to practice product and regulatory compliance services within its scope of accreditation and engineering expertise,[31] respectively.

8.3 Engineering evaluations are conducted with DrJ's ANAB accredited ICS code scope of expertise, which is also its areas of professional engineering competence.

9 Installation

9.1 Installation shall comply with the approved construction documents, the manufacturer installation instructions, this report, and the applicable building code.

9.2 In the event of a conflict between the manufacturer installation instructions and this report, contact the manufacturer for counsel on the proper installation method.

9.3 *General Installation Procedure*

9.3.1 *Preparation:*

9.3.1.1 The deck surface must be dry and free of dust, dirt, loose nails, debris, and other protrusions.

9.3.1.2 Damaged sheathing must be replaced.

9.3.1.3 Ensure that the space beneath the roof sheathing is properly ventilated in accordance with IBC Section 1202.2 before installing. Unventilated attics and enclosed rafters shall comply with IBC Section 1202.3.

9.3.2 *Installation:*

9.3.2.1 UDL Standard and UDL Pro underlayments are laid out horizontally (parallel) to the eave, with the printed side up, using 4" horizontal laps and 6" vertical laps.

9.3.2.2 Follow applicable code requirements for low-slope applications, defined as slopes from 2:12 up to 4:12, and steep-slope applications, which are defined as slopes greater than 4:12.

9.3.2.3 UDL Standard is designed to withstand 60 days of exposure prior to being covered. UDL Pro is designed to withstand 180 days of exposure prior to being covered. Barricade Building Products recommends covering UDL Standard and UDL Pro underlayments with the finish roofing material as soon as possible.

9.3.3 *Fasteners:*

9.3.3.1 Barricade Building Products recommends attaching UDL Standard and UDL Pro underlayments to structural roof deck material using plastic cap, ring shank roofing nails that have a minimum 1" diameter cap.

9.3.3.2 Fasteners to be installed at a minimum per the surface markings on the product, spaced 6" on-center in vertical and horizontal laps and 12" on-center along the center of the roll.

9.3.3.3 If the installation of UDL Standard and UDL Pro, and the roof covering occur on the same day, the option to use every other printed anchoring mark is acceptable. For same day coverage, corrosion resistant $^{3}/_{8}$" head and 1" leg roofing nails are acceptable, as well as 1" plastic cap staples.

9.3.3.4 High-slope roofs with slopes greater than 7:12 must use plastic cap nails. All fasteners must be flush, 90° to the roof deck, and tight with the underlayment surface and the structural roof deck.

9.3.4 Refer to IBC Table 1507.1.1(2) and IRC Table R905.1.1(2) for the application procedure depending on the roof covering used and the basic design wind speed.

9.3.5 Refer to IBC Table 1507.1.1(3) and IRC Table R905.1.1(3) for the required attachment procedure depending on the roof covering used and the basic wind speed.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

10 Substantiating Data

10.1 Testing has been performed under the supervision of a professional engineer and/or under the requirements of ISO/IEC 17025 as follows:

10.1.1 Pliability in accordance with ASTM D146, as specified in ASTM D226 or ASTM D4869

10.1.2 Average breaking strength with and across the machine direction in accordance with ASTM D5035 or ASTM D828, modified by ASTM D146

10.1.3 Loss on heating in accordance with ASTM D146

10.1.4 Average tear strength, with and across the machine direction, in accordance with ASTM D1922 or ASTM D4533

10.1.5 Liquid water transmission in accordance with ASTM D4869

10.1.6 Dimensional stability against humidity changes in the machine direction and cross-machine direction in accordance with ASTM D1204 or ASTM F1087, modified by ASTM D4869

10.1.7 Un-rollability test in accordance with ASTM D146, as specified in ASTM D226 or ASTM D4869

10.2 Information contained herein may include the result of testing and/or data analysis by sources that are approved agencies, approved sources, and/or an RDP. Accuracy of external test data and resulting analysis is relied upon.

10.3 Where applicable, testing and/or engineering analysis are based upon provisions that have been codified into law through state or local adoption of regulations and standards. The developers of these regulations and standards are responsible for the reliability of published content. DrJ's engineering practice may use a regulation-adopted provision as the control. A regulation-endorsed control versus a simulation of the conditions of application to occur establishes a new material as being equivalent to the regulatory provision in terms of quality, strength, effectiveness, fire resistance, durability, and safety.

10.4 The accuracy of the provisions provided herein may be reliant upon the published properties of raw materials, which are defined by the grade mark, grade stamp, mill certificate, or duly authenticated reports from approved agencies and/or approved sources provided by the supplier. These are presumed to be minimum properties and relied upon to be accurate. The reliability of DrJ's engineering practice, as contained in this duly authenticated report, may be dependent upon published design properties by others.

10.5 *Testing and Engineering Analysis*

10.5.1 The strength, rigidity, and/or general performance of component parts and/or the integrated structure are determined by suitable tests that simulate the actual conditions of application that occur and/or by accepted engineering practice and experience.[32]

10.6 Where additional condition of use and/or regulatory compliance information is required, please search for UDL Standard and UDL Pro on the DrJ Certification website.

11 Findings

11.1 As outlined in **Section 6**, UDL Standard and UDL Pro underlayments have performance characteristics that were tested and/or meet applicable regulations. In addition, they are suitable for use pursuant to its specified purpose.

11.2 When used and installed in accordance with this duly authenticated report and the manufacturer installation instructions, UDL Standard and UDL Pro underlayments shall be approved for the following applications:

11.2.1 Any applications that allow the use of ASTM D226 Type I, ASTM D226 Type II, ASTM D4869 Type II, or ASTM D4869 IV underlayments.

11.3 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from INDEVCO Building Products or Barricade Building Products.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

11.4 IBC Section 104.2.3[33] (IRC Section R104.2.2[34] and IFC Section 104.2.3[35] are similar) in pertinent part state:

> 104.2.3 Alternative Materials, Design and Methods of Construction and Equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

11.5 **Approved:**[36] Building regulations require that the building official shall accept duly authenticated reports.[37]

11.5.1 An approved agency is *"approved"* when it is ANAB ISO/IEC 17065 accredited.

11.5.2 An approved source is *"approved"* when an RDP is properly licensed to transact engineering commerce.

11.5.3 Federal law, Title 18 US Code Section 242, requires that, where the alternative product, material, service, design, assembly, and/or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. Denial without written reason deprives a protected right to free and fair competition in the marketplace.

11.6 DrJ is a licensed engineering company, employs licensed RDPs and is an ANAB Accredited Product Certification Body – Accreditation #1131.

11.7 Through the IAF Multilateral Arrangement (MLA), this duly authenticated report can be used to obtain product approval in any jurisdiction or country because all ANAB ISO/IEC 17065 duly authenticated reports are equivalent.[38]

12 Conditions of Use

12.1 As defined in **Section 6**, where material and/or engineering mechanics properties are created for load resisting design purposes, the resistance to the applied load shall not exceed the ability of the defined properties to resist those loads using the principles of accepted engineering practice.

12.2 As listed herein, UDL Standard and UDL Pro underlayments shall not be used:

12.2.1 As an ice barrier as noted in IBC Section 1507.1.2 and IRC Section R905.1.2

12.2.2 In valleys covered by asphalt shingles as noted in IBC Section 1507.2.8.2 and IRC Section R905.2.8.2

12.2.3 In only a single layer for roof slopes of four (4) units vertical by twelve (12) units horizontal, unless otherwise stated in IBC Table 1507.1.1(2) and IRC Table R905.1.1(2).

12.3 When required by adopted legislation and enforced by the building official, also known as the Authority Having Jurisdiction (AHJ) in which the project is to be constructed:

12.3.1 Any calculations incorporated into the construction documents shall conform to accepted engineering practice and, when prepared by an approved source, shall be approved when signed and sealed.

12.3.2 This report and the installation instructions shall be submitted at the time of permit application.

12.3.3 At a minimum, these innovative products shall be installed per **Section 9**.

12.3.4 The review of this report by the AHJ shall comply with IBC Section 104.2.3.2 and IBC Section 105.3.1.

12.3.5 These innovative products have an internal quality control program and a third party quality assurance program in accordance with IBC Section 104.7.2, IBC Section 110.4, IBC Section 1703, IRC Section R104.7.2, and IRC Section R109.2.

12.3.6 The application of these innovative products in the context of this report is dependent upon the accuracy of the construction documents, implementation of installation instructions, inspection as required by IBC Section 110.3, IRC Section R109.2, and any other regulatory requirements that may apply.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

12.4 The approval of this report by the AHJ shall comply with IBC Section 1707.1, where legislation states in part, *"the building official shall make, or cause to be made, the necessary tests and investigations; or the building official shall accept duly authenticated reports from approved agencies in respect to the quality and manner of use of new materials or assemblies as provided for in Section 104.2.3"*, all of IBC Section 104, and IBC Section 105.3.

12.5 Design loads shall be determined in accordance with the regulations adopted by the jurisdiction in which the project is to be constructed and/or by the building designer (i.e., owner or RDP).

12.6 The actual design, suitability, and use of this report for any particular building, is the responsibility of the owner or the authorized agent of the owner.

13 Identification

13.1 UDL Standard and UDL Pro underlayments, as listed in **Section 1.1**, are identified by a label on the board or packaging material bearing the manufacturer name, product name, this report number, and other information to confirm code compliance.

13.2 Additional technical information can be found at indevconorthamerica.com or barricadebp.com.

14 Review Schedule

14.1 This report is subject to periodic review and revision. For the latest version, visit www.drjcertification.org.

14.2 For information on the status of this report, please contact DrJ Certification.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

Issue Date: March 30, 2023
Supplement Revision Date: March 23, 2026
Subject to Renewal: April 1, 2027

FBC Supplement to Report Number 2212-05

REPORT HOLDER: INDEVCO Building Products

1 Evaluation Subject

1.1 UDL Standard and UDL Pro

2 Purpose and Scope

2.1 Purpose

2.1.1 The purpose of this Report Supplement is to show UDL Standard and UDL Pro underlayments, recognized in Report Number 2212-05, have also been evaluated for compliance with the codes listed below as adopted by the Florida Building Commission.

2.2 *Applicable Code Editions*

2.2.1 *FBC-B—20, 23: Florida Building Code – Building (FL16453)*

2.2.2 *FBC-R—20, 23: Florida Building Code – Residential (FL16453)*

3 Conclusions

3.1 UDL Standard and UDL Pro underlayments, described in Report Number 2212-05, comply with the FBC-B and FBC-R and are subject to the conditions of use described in this supplement.

3.2 Where there are variations between the IBC and IRC and the FBC-B and FBC-R applicable to this report, they are listed here:

3.2.1 FBC-B Section 104 is reserved.

3.2.2 FBC-B Section 110.4 is reserved and replaces IBC Section 110.4.

3.2.3 FBC-B Section 104.6 is reserved and replaces IBC Section 104.4.

3.2.4 FBC-B Section 104.11 replaces IBC Section 104.2.3 and Section 104.2.3.2.

3.2.5 FBC-B Section 105.3 replaces IBC Section 105.3.

3.2.6 FBC-B Section 105.3.1 replaces IBC Section 105.3.1.

3.2.7 FBC-B Section 110.3 replaces IBC Section 110.3.

3.2.8 FBC-B Section 1507.1.1 replaces IBC Section 1507.1.1.

3.2.9 FBC-B Section 1507.2.9.2 replaces IBC Section 1507.2.8.2.

3.2.10 FBC-B Section 1707.1 replaces IBC Section 1707.1.

3.2.11 FBC-B Section 2306.1 replaces IBC Section 2306.1.

3.2.12 FBC-B Section 2306.3 replaces IBC Section 2306.3.

3.2.13 FBC-R Section R104 and Section R109 are reserved.

3.2.14 FBC-R Section R905.1.1 replaces IRC Section R905.1.1.

3.2.15 FBC-R Table R905.1.1(1) is reserved and replaces IRC Table R905.1.1(1).

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

3.2.16 FBC-R Table R905.1.1(2) is reserved and replaces IRC Table R905.1.1(2).

3.2.17 FBC-R Section R905.1.2 is reserved and replaces IRC Section R905.1.2.

3.2.18 FBC-R Section R905.2.8.2 replaces IRC Section R905.2.8.2.

4 Conditions of Use

4.1 UDL Standard and UDL Pro underlayments, described in Report Number 2212-05, must comply with all of the following conditions:

4.1.1 All applicable sections in Report Number 2212-05.

4.1.2 The design, installation, and inspections are in accordance with additional requirements of FBC-B Chapter 16 and Chapter 17, as applicable.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

Notes

1 For more information, visit drjcertification.org or call us at 608-310-6748.

2 Capitalized terms and responsibilities are defined pursuant to the applicable building code, applicable reference standards, the latest edition of TPI 1, the NDS, AISI S202, US professional engineering law, Canadian building code, Canada professional engineering law, Qualtim External Appendix A: Definitions/Commentary, Qualtim External Appendix B: Project/Deliverables, Qualtim External Appendix C: Intellectual Property and Trade Secrets, definitions created within Design Drawings and/or definitions within Reference Sheets. Beyond this, terms not defined shall have ordinarily accepted meanings as the context implies. Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

3 https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1702

4 Alternative Materials, Design and Methods of Construction and Equipment: The provisions of any regulation code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by a regulation. Please review https://www.justice.gov/atr/mission and https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#104.2.3

5 https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1706.2:~:text=the%20design%20strengths%20and%20permissible%20stresses%20shall%20be%20established%20by%20tests

6 The design strengths and permissible stresses of any structural material shall conform to the specifications and methods of design of accepted engineering practice. https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1706.1:~:text=Conformance%20to%20Standards-,The%20design%20strengths%20and%20permissible%20stresses,-of%20any%20structural

7 https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1:~:text=the%20building%20official%20shall%20make%2C%20or%20cause%20to%20be%20made%2C%20the%20necessary%20tests%20and%20investigations%3B%20or%20the%20building%20official%20shall%20accept%20duly%20authenticated%20reports%20from%20approved%20agencies%20in%20respect%20to%20the%20quality%20and%20manner%20of%20use%20of%20new%20materials%20or%20assemblies%20as%20provided%20for%20in%20Section%20104.2.3.

8 https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1703.4.2

9 https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#approved_agency

10 https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#approved_source

11 https://www.law.cornell.edu/uscode/text/18/1832 (b) Any organization that commits any offense described in subsection (a) shall be fined not more than the greater of $5,000,000 or 3 times the value of the stolen trade secret to the organization, including expenses for research and design and other costs of reproducing the trade secret that the organization has thereby avoided. The federal government and each state have a public records act. To follow DTSA and comply state public records and trade secret legislation requires approval through ANAB ISO/IEC 17065 accredited certification bodies or approved sources. For more information, please review this website: Intellectual Property and Trade Secrets.

12 https://www.nspe.org/resources/issues-and-advocacy/professional-policies-and-position-statements/regulation-professional AND https://apassociation.org/list-of-engineering-boards-in-each-state-archive/

13 https://www.cbitest.com/accreditation/

14 https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#104.1:~:text=directed%20to%20enforce%20the%20provisions%20of%20this%20code

15 https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#104.2.3 AND https://up.codes/viewer/mississippi/ibc-2024/chapter/1/scope-and-administration#105.3.1

16 https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1

17 https://iaf.nu/en/about-iaf-mla/#:~:text=Once%20an%20accreditation%20body%20is%20a%20signatory%20of%20the%20IAF%20MLA%2C%20it%20is%20required%20to%20recognise%20certificates%20and%20validation%20and%20verification%20statements%20issued%20by%20conformity%20assessment%20bodies%20accredited%20by%20all%20other%20signatories%20of%20the%20IAF%20MLA%2C%20with%20the%20appropriate%20scope

18 True for all ANAB accredited product evaluation agencies and all International Trade Agreements.

19 https://www.justice.gov/crt/deprivation-rights-under-color-law AND https://www.justice.gov/atr/mission

20 Unless otherwise noted, the links referenced herein use un-amended versions of the 2024 International Code Council (ICC) 2024 International Code Council (ICC) model codes as foundation references. Mississippi versions of the IBC 2024 and the IRC 2024 are un-amended. This material, product, design, service and/or method of construction also complies with the 2000-2012 versions of the referenced codes and the standards referenced therein. As pertinent to this technical and code compliance evaluation, CBI and/or DrJ staff have reviewed any state or local regulatory amendments to assure this report is in compliance.

21 See Adoptions by Publisher for the latest adoption of a non-amended or amended model code by the local jurisdiction. https://up.codes/codes/general

22 See Adoptions by Publisher for the latest adoption of a non-amended or amended model code by state. https://up.codes/codes/general

23 https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3282/subpart-A/section-3282.14

24 https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280

25 All references to the FBC-B and FBC-R are the same as the 2024 IBC and 2024 IRC unless otherwise noted in the Florida Supplement at the end of this report.

26 https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#p-3280.2(Listed%20or%20certified); https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#listed AND https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#labeled

27 https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1703.4

28 https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#:~:text=All%20construction%20methods%20shall%20be%20in%20conformance%20with%20accepted%20engineering%20practices%20to%20insure%20durable%2C%20livable%2C%20and%20safe%20housing%20and%20shall%20demonstrate%20acceptable%20workmanship%20reflecting%20journeyman%20quality%20of%20work%20of%20the%20various%20trades

29 https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#:~:text=The%20strength%20and%20rigidity%20of%20the%20component%20parts%20and/or%20the%20integrated%20structure%20shall%20be%20determined%20by%20engineering%20analysis%20or%20by%20suitable%20load%20tests%20to%20simulate%20the%20actual%20loads%20and%20conditions%20of%20application%20that%20occur

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC

[30] Qualification is performed by a legislatively defined Accreditation Body. ANSI National Accreditation Board (ANAB) is the largest independent accreditation body in North America and provides services in more than 75 countries. DrJ is an ANAB accredited product certification body.

[31] https://anabpd.ansi.org/Accreditation/product-certification/AllDirectoryDetails?prgID=1&orgID=2125&statusID=4#:~:text=Bill%20Payment%20Date-,Accredited%20Scopes,-13%20ENVIRONMENT.%20HEALTH

[32] See Code of Federal Regulations (CFR) Title 24 Subtitle B Chapter XX Part 3280 for definition: https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280

[33] 2021 IBC Section 104.11

[34] 2021 IRC Section R104.11

[35] 2018: https://up.codes/viewer/wyoming/ifc-2018/chapter/1/scope-and-administration#104.9 AND 2021: https://up.codes/viewer/wyoming/ibc-2021/chapter/1/scope-and-administration#104.11

[36] Approved is an adjective that modifies the noun after it. For example, Approved Agency means that the Agency is accepted officially as being suitable in a particular situation. This example conforms to IBC/IRC/IFC Section 201.4 (https://up.codes/viewer/mississippi/ibc-2024/chapter/2/definitions#201.4) where the building code authorizes sentences to have an ordinarily accepted meaning such as the context implies.

[37] https://up.codes/viewer/mississippi/ibc-2024/chapter/17/special-inspections-and-tests#1707.1

[38] Multilateral approval is true for all ANAB accredited product evaluation agencies and all International Trade Agreements.

Information contained in this report was developed using report holder's confidential intellectual property (IP) and trade secrets (TS), which is protected by Defend Trade Secrets Act 2016, © DrJ Engineering, LLC