Code Compliance Research Report
CCRR-0319

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DIVISION: 06 00 00 – WOOD, PLASTICS, AND COMPOSITES
Section: 06 16 36 – Wood Panel Product Sheathing

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 25 00 – Weather Barriers
Section: 07 27 00 – Air Barriers

REPORT HOLDER:
Louisiana-Pacific Corporation
1610 West End Avenue
Suite 200
Nashville, TN 37203
(615) 986-5600
www.lpcorp.com

REPORT SUBJECT:
LP WeatherLogic® Air & Water Barrier

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2021 and 2018 *International Building Code®* (IBC)
- 2021 and 2018 *International Residential Code®* (IRC)
- 2021 and 2018 *International Energy Conservation Code®* (IECC)
- 2021 *Oregon Residential Specialty Code (ORSC)*, Section R703.1.1 (See Section 9)
- 2023, 2020 *Florida Building Code* (excluding HVHZ) (See Section 9)

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

1.2 LP WeatherLogic® Air & Water Barrier has been evaluated for the following properties (see Table 1):

- Physical Properties
- Water Resistance
- Air Permeance
- Drainage Efficiency
- Roof Fire Classification

1.3 LP WeatherLogic® Air & Water Barrier has been evaluated for the following uses (see Table 1):

- Use as an air barrier
- Use as a water-resistive barrier
- Use as a roof underlayment
- Use in classified roof assemblies
- Use in nonclassified roof assemblies
- Use in Type V construction under the IBC and in one- and two-family dwellings under the IRC

2.0 STATEMENT OF COMPLIANCE

LP WeatherLogic® Air & Water Barrier complies 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.

3.0 DESCRIPTION

3.1 LP WeatherLogic® Panel: The LP WeatherLogic® Panel consists of a 7/16 to 5/8 Performance Category Oriented Strand Board (OSB) panel adhered with a factory-applied proprietary overlay. The Structural 1, Exposure 1 OSB complies with US DOC PS 2 for wood structural panels with a span rating of 24/16, 32/16, or 40/20.

3.2 LP WeatherLogic® Seam & Flashing Tape: The LP WeatherLogic® Seam & Flashing Tape is a pressure-sensitive, coated polymeric film that is supplied in either 3-3/4- or 6-inch widths. The tape is used for sealing panel joints and to flash penetrations, openings, and material transitions. The tape is listed in the AAMA Verified Component List as complying with AAMA 711 Type A, Level 3.

3.3 LP WeatherLogic® Seam & Flashing Sealant: The LP WeatherLogic® Seam & Flashing Sealant is a liquid-applied sealant that is supplied in tubes to seal panel joints and to flash penetrations, openings, and material transitions. The sealant shall be installed a minimum of 15 wet mils thick and sufficiently wide to extend a minimum of 1-3/4 inches on each side of seams and 1-1/4 inches beyond nail heads. The sealant is listed in the AAMA Verified Component List as complying with AAMA 714 Level 3, Category I.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Water Vapor Transmission: The water vapor transmission (WVT) rate of the proprietary overlay is 36.1 g/(24-hr-m^2) when evaluated in accordance with ASTM E96 Procedure B and 8.84 g/(24-hr-m^2) when evaluated in accordance with ASTM E96 Procedure A (desiccant method). The vapor permeance of the proprietary overlay is 5.35 perms when evaluated in accordance with ASTM E96 Procedure B and 1.27 perms when evaluated in accordance with ASTM E96 Procedure A.

4.2 Air Barrier Assembly: When used as an air barrier, the LP WeatherLogic® Air & Water Barrier system must be installed in accordance with the manufacturer's instructions and Section 5 of this report. When tested in accordance with ASTM E2357, LP WeatherLogic® Air & Water Barrier exhibits a maximum air leakage rate less than 0.04 cfm/ft^2 (0.2 L/s-m^2) at a pressure differential of 1.57 pounds per square foot (75 Pa).

4.3 Drainage Efficiency: The LP WeatherLogic® Air & Water Barrier exhibits a drainage efficiency of greater than 75% when evaluated in accordance with ASTM E2273 on assemblies containing both vertical and horizontal seams.

4.4 Surface Burning Characteristics: The LP WeatherLogic® Panel has a flame-spread index of 200 or less and a smoke-developed index of 450 or less, when tested in accordance with ASTM E84.

4.5 Wind Uplift Resistance: When used as roof sheathing, allowable wind uplift resistance values shall be determined for the LP WeatherLogic® Panel as permitted for wood structural panel sheathing in Sections 1609 and 2304.8.2 of the IBC and Section R301.2.1 of the IRC.

4.6 Fire Classification:

4.6.1 Class B: Roofing assemblies consisting of Class A asphalt shingles and minimum 7/16-inch-thick LP WeatherLogic® Air & Water Barrier have a Class B roof fire classification.

4.6.2 Class A: Roofing assemblies consisting of Class A asphalt shingles and minimum 15/32-inch-thick LP WeatherLogic® Air & Water Barrier marked with APA Mill 520 have a Class A roof fire classification.

4.6.3 Nonclassified Roofing: The LP WeatherLogic® Air & Water Barrier may be used as a component of nonclassified roof assemblies, where permitted by the code, when covered with any approved roof covering allowed by the manufacturer's installation instructions.

5.0 INSTALLATION

5.1 General: LP WeatherLogic® Air & Water Barrier 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 (LP WeatherLogic® Air & Water Barrier Installation Manual, Document LPWRB0094, revised December 2023) must be available on the jobsite during installation.

5.2 Application: The LP WeatherLogic® Panels must be attached to structural framing in accordance with the applicable code for wood structural panels, and in compliance with their span rating. The panels must be installed with the overlay facing outwards. Panels may be installed horizontally or vertically on walls. Panels must be installed perpendicular to supports and with two or more continuous spans on roofs. Roof panels must be installed at a minimum slope of 2:12. A 1/8-inch gap is required between panels. All panel joints must be sealed with either LP WeatherLogic® Seam & Flashing Tape or LP WeatherLogic® Seam & Flashing Sealant. The panel surface must be dry and free from debris or foreign substances prior to tape or sealant installation.

5.3 Flashing: All penetrations and terminations of exterior wall assemblies must be flashed in accordance with the applicable code. LP WeatherLogic® Seam & Flashing Tape or LP WeatherLogic® Seam & Flashing Sealant may be used to seal joints and overlap flashings and accessories as shown in the standard details of the LP WeatherLogic® Air & Water Barrier Installation Manual.

5.4 Use Behind Exterior Cement Plaster (Stucco): When installed behind exterior cement plaster (stucco) in accordance with IBC Section 2510.6 or IRC Section R703.7.3, the LP WeatherLogic Air & Water Barrier system serves as the first layer equivalent to 10-minute Grade D paper. In Dry (B) climate zones, the installation shall comply with Item 1 of IBC Section 2510.6.1 or IRC Section R703.7.3.1, as applicable. In Moist (A) or Marine (C) climate zones, the

installation shall comply with Item 1 of IBC Section 2510.6.2 or IRC Section R703.7.3.2, as applicable.

6.0 CONDITIONS OF USE

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, this report governs.

6.2 The LP WeatherLogic® Air & Water Barrier must be covered by a code-complying exterior wall or roof covering within the time period specified by the manufacturer.

6.3 Fire-resistance-rated construction is outside the scope of this report.

6.4 The LP WeatherLogic® Panel is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc. and APA – The Engineered Wood Association (PS-2 and Florida Product Approval).

7.0 SUPPORTING EVIDENCE

7.1 Reports of tests in accordance with ASTM E84, ASTM E96, ASTM E2273, and ASTM E2357.

7.2 Data in accordance with the ICC-ES Acceptance Criteria for Water-resistive Membranes Factory-bonded to Wood-based Structural Sheathing, Used as Water-resistive Barriers (AC310), approved May 2008, editorially revised August 2015.

7.3 Data in accordance with ICC-ES Acceptance Criteria for Wood Structural Panel Roof Sheathing Factory-Laminated with an Alternative Roof Underlayment (AC266), approved May 2008, editorially revised October 2015.

7.4 Intertek Listing Report "Louisiana-Pacific – LP WeatherLogic Air & Water Barrier", on the Intertek Directory of Building Products.

8.0 IDENTIFICATION

The LP WeatherLogic® Panel is identified on the exterior face with the manufacturer's trademark and product name (LP WeatherLogic® Air & Water Barrier), a means of identifying the date of manufacture, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0319). The interior face of the LP WeatherLogic® Panel bears the APA assigned plant number, the product thickness, and the span rating.

CODE COMPLIANCE
ETL US
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The LP WeatherLogic® Seam & Flashing Tape is identified with the manufacturer's trademark and product name (LP WeatherLogic® Air & Water Barrier), and the words "Seam & Flashing Tape".

The LP WeatherLogic® Seam & Flashing Sealant is identified with the manufacturer's trademark and product name (LP WeatherLogic® Air & Water Barrier) and the words "Seam & Flashing Sealant".

9.0 OTHER CODES

9.1 OREGON RESIDENTIAL SPECIALTY CODE

LP WeatherLogic® Air & Water Barrier, described in Sections 2.0 through 7.0 of this Research Report, complies with Section R703.1.1, Exception 1, of the 2021 *Oregon Residential Specialty Code* for use without a separate drainage space when installed in accordance with the manufacturer's instructions and this Research Report.

9.2 FLORIDA BUILDING CODE

LP WeatherLogic® Air & Water Barrier, described in Sections 2.0 through 7.0 of this Research Report, complies with the 2023 and 2020 *Florida Building Code – Building*, *Florida Building Code – Residential*, and *Florida Building Code – Energy Conservation*, subject to the following conditions:

- LP WeatherLogic® Air & Water Barrier, when installed using LP WeatherLogic® Seam & Flashing Tape in accordance with the manufacturer's instructions and this Research Report, complies with Method 2 of Section 1507.1.1.1 of the 2023 *Florida Building Code – Building* and Section R905.1.1.1 of the 2023 *Florida Building Code – Residential* for use directly under asphalt shingles, metal panels or shingles, mineral surfaced roll roofing, slate and slate-type shingles, wood shakes, and wood shingles.

- Use of LP WeatherLogic® Air & Water Barrier for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code – Building* and the *Florida Building Code – Residential* has not been evaluated and is outside the scope of this Research Report.

Intertek is an approved *evaluation entity* and *quality assurance entity* pursuant to Florida Statute 553.842 – *Product Evaluation and Approval.*

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.

TABLE 1 – PROPERTIES EVALUATED

PROPERTY	2021 IBC SECTION[1]	2021 IRC SECTION[1]	2021 IECC SECTION[1]	2021 ORSC SECTION	2023 FBC – Building	2023 FBC – Residential	2023 FBC – Energy
Physical Properties	Not Required	Not Required	Not Required	Not Evaluated	Not Required	Not Required	Not Required
Water-resistive Barrier	1403.2	R703.2	NA	Not Evaluated	1404.2	R703.2	NA
Air Barrier	1301	NA	C402.5.1	Not Evaluated	1301	NA	C402.5.1
Air Leakage	NA	NA	R402.4	Not Evaluated	NA	NA	R402.4
Drainage Efficiency	NA	NA	NA	R703.1.1 Exception 1	NA	NA	NA
Underlayment	1507.1.1	R905.1.1	NA	Not Evaluated	1507.1.1.1	R905.1.1.1	NA
Roof Fire Classification	1505	R902	NA	Not Evaluated	1505	R902	NA

[1] Section numbers may be different for earlier versions of the International codes.