



## LP WeatherLogic™ Air and Water Barrier Louisiana-Pacific Corporation

**PR-N138**

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Products: LP WeatherLogic™ Air and Water Barrier  
LP Building Products, Louisiana-Pacific Corporation  
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1. Basis of the product report:
  - 2018 International Building Code (IBC): Sections 104.11 Alternative materials and 1403.2 Water-resistive barrier
  - 2015, 2012, and 2009 IBC: Sections 104.11 Alternative materials and 1404.2 Water-resistive barrier
  - 2018, 2015, 2012, and 2009 International Residential Code (IRC): Sections R104.11 Alternative materials and R703.2 Water-resistive barrier
  - 2018 and 2015 International Energy Conservation Code (IECC): Sections C102 Alternative materials, R102 Alternative materials, C402.5.1 Air barriers, and R402.4 Air leakage
  - 2012 and 2009 IECC: Sections C102 Alternative materials, R102 Alternative materials, C402.4.1 Air barriers, and R402.4 Air leakage
  - 2017 Oregon Residential Specialty Code
  - Performance Standard for Wood-Based Structural-Use Panels, PS 2
  - APA Panel Design Specification
  - Qualification reports and other qualification data
2. Product description:

LP WeatherLogic™ Air and Water Barrier is a system of wood structural panels and tapes used to construct exterior walls with integrated wall sheathing, water-resistive barrier, and air barrier. LP WeatherLogic Air and Water Barrier panels consist of Louisiana-Pacific 7/16 Performance Category oriented strand board (OSB) panels manufactured in accordance with the in-plant manufacturing standard approved by APA and adhered with a factory-applied proprietary overlay. The Exposure 1 OSB complies with US DOC PS 2 for wood structural panels with a span-rating of 24/16.

LP WeatherLogic seam and flashing tape is a pressure sensitive, coated polymeric film that is minimum 3-3/4 inches in width. The tape is used for sealing joints, penetrations, openings and material transitions. The tape has been tested in accordance with Method F of ASTM D3330, *Standard Test Method for Peel Adhesion of Pressure-Sensitive Tape*, and meets or exceeds the requirements specified in AAMA 711-13, *Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products*, for Type A, Class Level 3.

LP WeatherLogic Air and Water Barrier panels have been evaluated in accordance with ASTM E2357, *Standard Test Method for Determining Air Leakage of Air Barrier Assemblies*. LP WeatherLogic Air and Water Barrier panels meet the requirements specified in ICC *Evaluation Service Acceptance Criteria for Water-Resistive Membranes Factory-Bonded to Wood-Based Structural Sheathing Used as Water-Resistive Barriers*, AC310, and shall be permitted for use as a combination of wall sheathing, water-resistive barrier, and air barrier.

LP WeatherLogic Air and Water Barrier panels with LP WeatherLogic seam tapes have been evaluated in accordance with ASTM E2273, *Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies*

and exceed the 75 percent drainage efficiency requirement specified in Exception 1 to Section R703.1.1 of the Oregon Residential Specialty Code.

When installed with LP WeatherLogic seam and flash tapes described in this section in accordance with the installation requirements specified in Section 4 of this report, LP WeatherLogic Air and Water Barrier products shall be permitted for use in walls of Type V construction in the International Building Code (IBC) and one- and two-family dwellings in the International Residential Code (IRC), and as an alternative to the water-resistive barrier required in Chapters 14 of the IBC and Chapter 7 of the IRC.

The manufacturing processes and quality assurance of the LP WeatherLogic Air and Water Barrier products are documented in the in-plant manufacturing standard approved by APA.

3. Panel performance properties:

LP WeatherLogic™ Air and Water Barrier products meet the design properties specified in APA *Panel Design Specification*, Form D510 ([www.apawood.org/resource-library](http://www.apawood.org/resource-library)) for Exposure 1 panels with a span rating of 24/16.

LP WeatherLogic Air and Water Barrier products have been tested in accordance with ASTM E96, *Standard Test Methods for Water Vapor Transmission of Materials*, and have the following characteristics:

- a) Vapor permeance of 1.27 perms and equivalent Water Vapor Transmission (WVT) rate of 8.84 g/(24h-m<sup>2</sup>) when tested in accordance with ASTM E96 (desiccant method) at 73.4 ± 1°F and 50 ± 2% relative humidity.
- b) Vapor permeance of 5.35 perms and equivalent WVT rate of 36.1 g/(24h-m<sup>2</sup>) when tested in accordance with ASTM E96 (water method) at 73.4 ± 1°F and 50 ± 2% relative humidity.

When manufactured to comply as facing materials for structural insulated panels (SIPs) in accordance with Table 2 of ANSI/APA PRS 610.1 referenced in Section R610.3 of the 2018 IRC, Section R610.3.2 and Table R610.3.2 of the 2015 IRC, and Section R613.3.2 and Table R613.3.2 of the 2012 and 2009 IRC, the water-resistive barrier properties of the LP WeatherLogic Air and Water Barrier products are not affected by the manufacturing processes.

4. Product installation:

LP WeatherLogic™ Air and Water Barrier products recognized in this report shall be installed in accordance with recommendations provided by the manufacturer (<https://lpcorp.com/resources/product-literature/installation-instructions/lp-weatherlogic-installation-instructions>).

5. Fire-resistant construction:

LP WeatherLogic Air and Water Barrier products meet Class III (or C) flame spread index and smoke-developed index when tested in accordance with ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*.

6. Limitations:

- a) LP WeatherLogic Air and Water Barrier products recognized in this report shall be used in a design span not exceeding the span rating shown in the trademark.
- b) LP WeatherLogic Air and Water Barrier products are limited to dry service conditions where the average equilibrium moisture content of sawn lumber is less than 16 percent.
- c) LP WeatherLogic Air and Water Barrier products are produced by LP at the Swan Valley manufacturing facility in Minitonas, Manitoba, Canada and under a quality assurance program audited by APA.
- d) This report is subject to re-examination in one year.

7. Identification:

LP WeatherLogic Air and Water Barrier products described in this report are identified by a label or stamp bearing the manufacturer's name and/or trademark (Louisiana-Pacific Corporation), the APA assigned plant number (457 for the Swan Valley plant in Minitonas, Manitoba, Canada), the product thickness and span rating, the APA logo, the report number PR-N138, and a means of identifying the date of manufacture.



Figure 1. Typical LP WeatherLogic Air and Water Barrier Mark

APA – *The Engineered Wood Association* is an approved national standards developer accredited by American National Standards Institute (ANSI). APA publishes ANSI standards and Voluntary Product Standards for wood structural panels and engineered wood products. APA is an accredited certification body under ISO/IEC 17065 by Standards Council of Canada (SCC), an accredited inspection agency under ISO/IEC 17020 by International Code Council (ICC) International Accreditation Service (IAS), and an accredited testing organization under ISO/IEC 17025 by IAS. APA is also an approved Product Certification Agency, Testing Laboratory, Quality Assurance Entity, and Validation Entity by the State of Florida, and an approved testing laboratory by City of Los Angeles.

**APA – THE ENGINEERED WOOD ASSOCIATION  
HEADQUARTERS**

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