

ICC-ES Evaluation Report

ESR-4665

Reissued November 2024


This report also contains:

- [CA Supplement](#)

Subject to renewal November 2025

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

Copyright © 2024 ICC Evaluation Service, LLC. All rights reserved.

<p>DIVISION: 07 00 00 — THERMAL AND MOISTURE PROTECTION</p> <p>Section: 07 25 00 — Water-resistive Barriers/Weather Barriers</p> <p>Section: 07 27 00 — Air Barriers</p>	<p>REPORT HOLDER: PERMA R PRODUCTS, INC.</p>	<p>EVALUATION SUBJECT: WATERSHED LP, WATERSHED HP AND WATERSHED COMMERCIAL</p>	
---	---	---	---

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2018, 2015, 2012, 2009 and 2006 [International Building Code® \(IBC\)](#)
- 2018, 2015, 2012, 2009 and 2006 [International Residential Code® \(IRC\)](#)
- 2018, 2015, 2012, 2009 and 2006 [International Energy Conservation Code® \(IECC\)](#)
- 2013 *Abu Dhabi International Building Code (ADIBC)*[†]

[†]The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Water resistance
- Surface-burning characteristics
- Air leakage
- Drainage

1.2 Evaluation to the following green code(s) and/or standards:

- 2022 [California Green Building Standards Code \(CALGreen\)](#), Title 24, Part 11
- 2024, 2021, 2018, 2015 and 2012 [International Green Construction Code® \(IgCC\)](#)
- 2023, 2020, 2017, 2014 and 2011 [ANSI/ASHRAE/USGBC/IES Standard 189.1](#)—Standard for the Design of High-Performance Green Buildings, Except Low-Rise Residential Buildings
- 2020, 2015, 2012 and 2008 [ICC 700 National Green Building Standard™](#)(ICC 700-2020, ICC 700-2015, ICC 700-2012 and ICC 700-2008)

Attributes verified:

See Section 3.1

2.0 USES

The products recognized in this report (WaterShed LP, WaterShed HP and WaterShed Commercial) are used as water-resistive barriers on the exterior side of exterior walls of buildings of any construction type under the IBC and construction permitted under the IRC. Under the 2018, 2015 and 2012 IBC, the water-resistive barriers may be used on buildings of Types I, II, III or IV construction that are not greater than 40 feet (12.2 m) in height above grade plane in accordance with 2018 IBC 1402.5 or 2015 and 2012 IBC Section 1403.5, except as permitted under Exceptions 1 and 2 of the 2018 IBC Section 1402.5 and 2015 IBC Section 1403.5. They are equivalent to Grade D paper as described in 2012, 2009 and 2006 IBC Section 2510.6 and IRC Section R703.6.3 (2018 IRC Section R703.7.3). The WaterShed HP and WaterShed Commercial comply as an ASTM E2556, Type I water-resistive barrier in accordance with 2018 and 2015 IBC Section 2510.6. The WaterShed LP complies as an ASTM E2556, Type II water-resistive barrier in accordance with 2018 and 2015 IBC Section 2510.6. The products may also be used as air barrier materials under IRC Section N1102.4.1 and 2018 and 2015 IECC Sections C402.5 and R402.4 (2012 IECC Sections C402.4 and R402.4 and 2009 and 2006 IECC Sections 402.4 and 502.4).

In addition, the products may be used as components of an EIFS drainage system as described in Section 4.4.

3.0 DESCRIPTION

3.1 General:

The products described in this report have a flame spread index of less than 25 and a smoke-developed index of less than 450, when tested in accordance with ASTM E84.

The products described in this report have a peak heat release rate of less than 150 kW/m², a total heat release rate of less than 20 MJ/m², and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354.

The products have an air leakage rate not exceeding 0.02 L/s-m² at 75 Pa [0.004 cfm/ft² at 0.3 inch w.g. (1.57 psf)] when used as an air barrier material under IRC Section N1102.4.1 and IECC Sections 402.4 or 502.4.

The products are manufactured with ultraviolet stabilizing additives and are supplied in rolls and sheets of varying sizes.

The attributes of the water-resistive barrier have been verified as conforming to the requirements of (i) CALGreen Section 5.407.1 for water-resistive barriers; (ii) 2024 and 2021 IgCC Section 701.3.1.2, 2018 IgCC Section 701.3.1.1, and 2015 and 2012 IgCC Section 605.1.2.1 for air barriers; (iii) 2023 and 2020 ASHRAE 189.1 Section 7.3.1.2, 2017 and 2014 ASHRAE 189.1 Section 7.3.1.1 and 2011 ASHRAE 189.1 Section 7.4.2.9 for air barriers; (iv) ICC 700-2020 Sections 602.1.8, 11.602.1.8, 1202.6 and 13.104.1.4 (v) ICC 700-2015 Sections 602.1.8, 11.602.1.8 and 12.6.602.1.8; (vi) ICC 700-2012 Sections 602.1.8, 11.602.1.8 and 12.5.602.1.8; and (vii) ICC 700-2008 Section 602.9 for water-resistive barriers. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.

3.2 WaterShed HP:

WaterShed HP consists of a polyethylene nonwoven fabric laminated to a polyethylene microporous film.

3.3 WaterShed Commercial:

WaterShed Commercial consists of a nonwoven fabric laminated to a polyethylene film.

3.4 WaterShed LP:

WaterShed LP consists of a polyethylene nonwoven fabric laminated to a polyethylene microporous film.

4.0 DESIGN AND INSTALLATION

4.1 General:

The report holder's published installation instructions and this report must be strictly adhered to. If requested by the code official, a copy of this report must be available at the jobsite during installation.

4.2 Water-resistive Barrier:

When installed as water-resistive barriers, the products described in this report are installed after wall framing is completed. The roll is placed approximately 2 feet (610 +mm) from the starting corner and fastened to the sheathing with corrosion-resistant staples, large-headed nails, or roofing nails spaced at a maximum of 16 inches (406 mm) on center; and is then unrolled around the building and fastened, as set forth in the report holder's published installation instructions, at top and bottom sill plates and at framing members. A minimum of 6 inches (152 mm) of overlap is required for vertical seams and 2 inches (50.8 mm) for horizontal seams, except where the report holder's installation instructions specify a greater overlap dimension. When use is over wood-based sheathing in exterior plaster applications, two layers of the barrier must be applied over sheathing in accordance with IBC Section 2510.6 or IRC Section R703.6.3 (2018 IRC Section R703.7.3, as applicable). For cementitious coatings or exterior insulation and finish systems, application of the barrier must be in accordance with the evaluation report on the exterior coating.

4.3 Air Barrier Material:

When used as an air barrier, the materials must be installed in accordance with the report holder's installation instructions and this report.

4.4 Wall Covering Assembly with Drainage: The assembly described in this section complies with Section 4.5 of the ICC-ES Acceptance Criteria for EIFS Clad Drainage Wall Assemblies (AC235). The assembly is limited to Type V construction, and may be used in Group R, Division 1 and 3, Occupancies. The system consists of minimum ⁷/₁₆-inch-thick (11.1 mm) Exterior or Exposure 1 plywood or Exposure 1 oriented strand board applied to wood studs spaced a maximum of 16 inches (406 mm) on center and fastened in accordance with the requirements of IBC Chapter 23 or IRC Chapter 6. Vertical board edges must butt over studs. The water-resistive barriers must be applied as described in Section 4.2. For EIFS, minimum 1-inch-thick (25.4 mm) flat Type I expanded polystyrene (EPS) foam plastic boards, recognized in a current ICC-ES evaluation report as complying with ASTM C578, are placed over the WaterShed LP, WaterShed HP and WaterShed Commercial, which are fastened to the sheathing. The EPS boards are fastened through the sheathing with wood screws sized to meet wind resistance requirements, with minimum 2-inch-diameter (51 mm) plates or washers and penetrating a minimum of ¼-inch through the sheathing. The fastener spacing must not exceed 12 inches (305 mm). Weep screeds, as set forth in IBC 2512.1.2 or IRC Section R703.6.2.1, must be installed. The EIFS base coat, reinforcing mesh and finish coat must be installed over the EPS in accordance with the EIFS manufacturer's ICC-ES evaluation report.

5.0 CONDITIONS OF USE:

The products described in this 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:

- 5.1 The products must be installed in accordance with the report holder's published installation instructions, the requirements of the applicable code and this report. In the event of a conflict between this report and the published installation instructions, this report governs.
- 5.2 The products must be covered by an exterior wall finish complying with the requirements of the applicable code.
- 5.3 This report is based on air leakage rates for the products as an air barrier material only. The design and evaluation of the air barrier assembly, of which the products are a component, is outside the scope of this report.

6.0 EVIDENCE SUBMITTED

- 6.1 Data in accordance with the [ICC-ES Acceptance Criteria for Water-resistive Barriers \(AC38\)](#), dated August 2016 (editorially revised June 2019).
- 6.2 Report of flame spread characteristics testing in accordance with ASTM E84.
- 6.3 Reports of air leakage testing in accordance with ASTM E2178.
- 6.4 Report of drainage testing in accordance with ASTM E2273.
- 6.5 Report of testing in accordance with ASTM E1354.

7.0 IDENTIFICATION

- 7.1 The products described in this report are identified by a label on the container of each roll of membrane, and by printing on the product that includes the report holder's name, address, and telephone number; the product name; and the evaluation report number (ESR-4665).
- 7.2 The report holder's contact information is the following:

PERMA R PRODUCTS, INC.
P.O. BOX 279
GRENADA, MISSISSIPPI 38902
(662) 226-8075
www.permarproducts.com

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 25 00—Water-resistive Barriers/Weather Barriers
Section: 07 27 00—Air Barriers

REPORT HOLDER:

PERMA R PRODUCTS, INC.

EVALUATION SUBJECT:

WATERSHED LP, WATERSHED HP AND WATERSHED COMMERCIAL

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that WaterShed LP, WaterShed HP and WaterShed Commercial, described in ICC-ES evaluation report ESR-4665, have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2019 *California Building Code*® (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2019 *California Residential Code*® (CRC)

2.0 CONCLUSIONS**2.1 CBC:**

The WaterShed LP, WaterShed HP and WaterShed Commercial, described in Sections 2.0 through 7.0 of the evaluation report ESR-4665, comply with CBC Chapter 14, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report ESR-4665 and applicable provisions in the CBC.

2.1.1 OSHPD:

The applicable OSHPD Sections of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections of the CBC are beyond the scope of this supplement.

2.2 CRC:

The WaterShed LP, WaterShed HP and WaterShed Commercial, described in Sections 2.0 through 7.0 of the evaluation report ESR-4665, comply with CRC Chapter 7, provided the design and installation are in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation report ESR-4665.

This supplement expires concurrently with the evaluation report, reissued November 2024.