ICC-ES Evaluation Report

ESR-2843

Reissued July 2024

This report also contains:

- CBC Supplement

Subject to renewal July 2025.

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION Section: 07 25 00—Water-Resistive Barriers/Weather Barriers	REPORT HOLDER: TREMCO CPG, INC.	EVALUATION SUBJECT: ENVIRO-DRI® WEATHER-RESISTANT BARRIER (WRB) SYSTEM	

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2021, 2018, 2015, 2012 and 2009 *International Building Code®* (IBC)
- 2021, 2018, 2015, 2012 and 2009 *International Residential Code®* (IRC)
- 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.

Property evaluated:

- Water-resistive barrier

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

- 2022 *California Green Building Standards Code (CALGreen)*, Title 24, Part 11
- 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 Enviro-Dri Weather-Resistant Barrier System is used as an alternative to the water-resistive barrier specified in 2021 and 2018 IBC Section 1403.2 (2015, 2012 and 2009 IBC Section 1404.2) and IRC Section R703.2. The system complies with ASTM E2570 as indicated in 2021 and 2018 IBC Section 1407.4.1.1 (2015, 2012 and 2009 IBC Section 1408.4.1.1) and 2021, 2018 and 2015 IRC Section 703.9.2 (2012 and 2009 IRC Section R703.9.2.1). The system may be installed over glass-mat faced gypsum, plywood, oriented strand board (OSB) and $^1/_2$-inch-thick (12.7 mm) structural fiberboard wall sheathing on exterior walls of Type V-B (IBC) construction or structures constructed in accordance with the IRC.

3.0 DESCRIPTION

3.1 General:

The Enviro-Dri Weather-Resistant Barrier System consists of Enviro-Dri Field Membrane, Enviro-Dri Joint Sealant and Enviro-Dri Joint Fabric.

The attributes of the Enviro-Dri Weather-Resistant Barrier System have been verified as conforming to the provisions of (i) CALGreen Section 5.407.1 and (ii) ICC 700-2020 Sections 602.1.8, 11.602.1.8, 12.5.602.1.8 and 13.104.1.4; (iii) ICC 700-2015 Section 602.1.8, 11.602.1.8 and 12.6.602.1.8; (iv) ICC 700-2012 Section 602.1.8, 11.602.1.8 and 12.5.602.1.8; and (v) 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.

3.1.1 Enviro-Dri Field Membrane: Enviro-Dri Field Membrane is a single-component, flexible, polymer-modified asphalt emulsion coating material. Enviro-Dri Field Membrane is packaged in 52-gallon (197 L) and 330-gallon (1249 L) drums. It has one-year shelf life when stored at temperatures between 40°F and 100°F (4°C and 38°C) and out of direct sunlight.

3.1.2 Enviro-Dri Joint Sealant: Enviro-Dri Joint Sealant is a single-component, flexible, polymer-modified asphalt emulsion joint sealant material. Enviro-Dri Joint Sealant is packaged in 52-gallon (197 L) drums. Enviro-Dri Joint Sealant has one-year shelf life when stored at temperatures between 40°F and 100°F (4°C and 38°C) and out of direct sunlight.

3.1.3 Enviro-Dri Joint Fabric: Enviro-Dri Joint Fabric is a spun polyester fabric with a minimum weight of 1.4 oz/yd^2.

3.2 Water Vapor Transmission:

The water vapor transmission value of Enviro-Dri (Tremco CPG, Inc. product numbers TBS730, TBS731, and TBS732), tested at an average thickness of 30 miles [0.030 inch (0.76 mm) in accordance with ASTM E96 (Procedure B, Water Method), is less than 35 g/m^2 per 24 hours but greater than 6 g/m^2 per 24 hours.

The water vapor transmission value of Enviro-Dri (Tremco CPG, Inc. product numbers TBS730A, TBS731A, and TBS732A), tested at an average of 12 miles [0.012 inch (0.31 mm)] in accordance with ASTM E96 (Procedure B, Water Method), is greater than 35 g/m^2 per 24 hours.

3.3 Sheathing:

The use of the Enviro-Dri Weather-Resistant Barrier System is limited to applications over the following sheathing materials:

- Plywood, Exposure 1, complying with U.S. DOC PS-1
- Oriented strand board, Exposure 1, complying with U.S. DOC PS-2
- $^1/_2$-inch, Type IV, Grade 2 Structural Fiberboard complying with ASTM C208
- Glass-mat faced gypsum recognized in a current evaluation report as complying with ASTM C1177.

4.0 INSTALLATION

4.1 General:

The installation of the Enviro-Dri Weather-Resistant Barrier System must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

4.2 Substrate Preparation:

The Enviro-Dri Weather-Resistant Barrier System must be installed on the exterior side of vertical exterior walls over the exterior sheathing. The sheathing type must be one of those listed in Section 3.3 of this report. Sheathing must be installed as required by the applicable code. The sheathing surfaces must be free of all bond-inhibiting materials, including dirt, oil, and other foreign matter. The Enviro-Dri Weather-Resistant Barrier System must not be installed on wet surfaces, below-grade surfaces, or on surfaces subject to water immersion. The substrate must be sufficiently dry to ensure bonding (adhesion) of the membrane and joint sealant. Damaged sheathing must be removed and replaced.

4.3 Enviro-Dri Weather-Resistant Barrier System Application:

Enviro-Dri Field Membrane and Joint Sealant can be applied using a brush, trowel, manual roller, power roller or spray equipment. Both Enviro-Dri Field Membrane and Joint Sealant are ready for application as supplied. The substrate must be prepared as described in Section 4.2 of this report.

4.3.1 Weather: The air and surface temperatures at the time of application are permitted to be between 0°F (-17°C) and 130°F (54°C). Temperature during the application must not exceed 130°F (54°C). The Enviro-Dri System must not be installed during rain or impending rain or mist, or on wet surfaces that might damage the system before it can sufficiently dry and cure.

4.3.2 Enviro-Dri Joint Sealant Application: Joints between sheathing panels or between sheathing panels and framing must be sealed either using Enviro-Dri Joint Sealant or Enviro-Dri Joint Fabric and coating, per

section 4.3.4. When using Enviro-Dri Joint Sealant, the joints must not exceed 1/8 inch (3.2 mm) in thickness. The full depth of the joint must be filled with the Enviro-Dri Joint Sealant material. For joints between tightly butted sheathing panels, the joint must be sealed by application of a continuous layer of Enviro-Dri Joint Sealant to the exterior surface of the adjoining sheathing and across the joint. The Enviro-Dri Joint Sealant must extend a minimum of 1/2 inch (12.7 mm) onto each adjoining sheathing panel and have a minimum wet thickness of 12 mils [0.012 inch (0.3 mm)]. For joints wider than 1/8 inch (3.2 mm) that are backed with framing, the joint between the interior edge of the sheathing panel and the framing must be sealed with Enviro-Dri Joint Sealant at a minimum of 1/4 inch (6.4 mm) wet thickness, measured as a radius from the joint.

4.3.3 Enviro-Dri Field Membrane Application: The sheathing area must be fully and evenly coated with Enviro-Dri Field Membrane applied at a minimum wet thickness of 12 mils [0.012 inch (0.3 mm)].

4.3.4 Enviro-Dri Fabric Application: Enviro-Dri Joint Fabric must be fully coated and adhered to the exterior surface of the sheathing on both sides of joints and gaps with either Enviro-Dri Field Membrane or Enviro-Dri Joint Sealant.

4.3.5 Cure Time: At 70°F (21°C) and 50 percent relative humidity, both Enviro-Dri Field Membrane and Enviro-Dri Joint Sealant are dry to the touch within two to four hours. Drying time varies depending on temperature/humidity and surface conditions; cool or damp conditions may slow drying, while hot or dry conditions ma y accelerate drying. Enviro-Dri Joint Sealant normally takes longer to dry than Enviro-Dri Field Membrane, because it is applied in a thicker application. Drying time may vary with substrate and individual job conditions. Surfaces must be protected from rain until completely dry.

5.0 CONDITIONS OF USE:

The Enviro-Dri Weather-Resistant Barrier System described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 Installation must comply with this report, the manufacturer's published installation instructions, and the applicable code. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.

5.2 For water-resistive coatings used in EIFS applications, special inspections are required at the jobsite in accordance with 2021 IBC Section 1705.17.1 {2018 and 2015 IBC Section 1705.16.1 [2012 IBC Section 1705.15.1(2009 IBC Section 1704.14.1)]}. For other applications, special inspections are not required at the jobsite if installation is done by an installer or contractor trained by the manufacturer, and a certificate of installation is presented to the code official at the completion of each project; otherwise, special inspections are required at the jobsite in accordance with 2021 IBC Section 1705.17.1 {2018 and 2015 IBC Section 1705.16.1 [2012 IBC Section 1705.15.1] (2009 IBC Section 1704.15.1)]} Duties of the inspector include verifying field preparation of materials, expiration dates, installation of components, curing of components, installation of joints and sealants, applied dry-film thickness and interface of coating material with flashings.

5.3 The Enviro-Dri Weather-Resistant Barrier System is limited to installations on vertical walls and must not be used on parapets or on sloped or horizontal surfaces.

5.4 The Enviro-Dri Weather-Resistant Barrier System must be covered with an exterior wall covering complying with the applicable code or a current ICC-ES evaluation report.

5.5 The Enviro-Dri Weather-Resistant Barrier System must not be used for repairing moving cracks or joints.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Water-resistive Coatings Used as Weather-resistive Barriers over Exterior Sheathing (AC212), dated February 2015 (revised July 2020).

7.0 IDENTIFICATION

7.1 Packages of the Enviro-Dri Weather-Resistant Barrier System products described in this report must be identified by a label bearing the manufacturer's name (Tremco CPG, Inc.) and address, product name and product number, identification of components, lot or batch number, quantity of material in packaged mix, storage instructions and shelf life, and the ICC-ES evaluation report number (ESR-2843).

7.2 The report holder's contact information is the following:

TREMCO CPG, INC.
3735 GREEN ROAD
BEACHWOOD, OHIO 44122
(800) 321-7906
www.tremcosealants.com/

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

REPORT HOLDER:

TREMCO CPG, INC

EVALUATION SUBJECT:

ENVIRO-DRI® WEATHER-RESISTANT BARRIER (WRB) SYSTEM

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Enviro-Dri® Weather-Resistant Barrier (WRB) System, described in ICC-ES evaluation report ESR-2843, has also been evaluated for compliance with the codes noted below.

Applicable code edition*(s)*:

- *2022 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.

- *2022 California Residential Code* (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Enviro-Dri® Weather-Resistant Barrier (WRB) System, described in Sections 2.0 through 7.0 of the evaluation report ESR-2843, complies with CBC Chapter 14, provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapter 14, as applicable.

2.1.1 OSHPD:

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

2.1.2 DSA:

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

2.2 CRC:

The Enviro-Dri® Weather-Resistant Barrier (WRB) System, described in Sections 2.0 through 7.0 of the evaluation report ESR-2843, complies with CRC Chapter 7, provided the design and installation are in accordance with the 2021 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of CRC Chapter 7, as applicable.

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