

ICC-ES Evaluation Report

ESR-3172

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A Subsidiary of the International Code Council®

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:

EZWALL COATINGS, INC.

EVALUATION SUBJECT:

HYDROFACTOR WATER-RESISTIVE COATING SYSTEM

1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2015 and 2012 International Building Code (IBC)
- 2015 and 2012 International Residential Code (IRC)
- 2015 and 2012 International Energy Conservation Code® (IECC)

Properties evaluated:

- Water-resistive barrier
- Air Leakage

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

- 2019 California Green Building Standards Code (CALGreen), Title 24, Part 11
- 2015, 2012 and 2008 ICC 700 National Green Building Standard™ (ICC 700-2015, ICC 700-2012 and ICC 700-2008)

Attributes verified:

See Section 3.1

2.0 **USES**

HydroFactor Water-Resistive Barrier (HydroFactor WRB) is a water-resistive coating system used as an alternative to the water-resistive barrier specified in the IBC and IRC, when installed over wood-based structural panels and glassmat–faced gypsum sheathing in exterior walls of Type V-B construction. The system can also be used as air barrier material in accordance with IRC Section N1102.4, 2015 IECC Sections C402.5 and R402.4, and 2012 IECC Sections C402.4 and R402.4.

HydroFactor WRB may be used over sheathing where EIFS cladding is to be used.

3.0 DESCRIPTION

3.1 General:

The HydroFactor WRB system complies with ASTM E2570 and consists of a water-resistive barrier coating (HydroFactor -C) and a sheathing joint treatment. The joint treatment consists of HydroFactor-J and HydroFactor Tape.

The attributes of the HydroFactor WRB have been verified as conforming to the provisions of (i) CALGreen Section 5.407.1 and (ii) ICC 700-2015 and ICC 700-2012 Section 602.1.8, 11.602.1.8 and 12.5.602.1.8; and (iii) 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 HydroFactor-C:** HydroFactor-C is a polymer-based, noncementitious, ready-mixed coating packaged in5-gallon (19 L) pails, having a one-year shelf life when stored at temperatures between 38°F and 90°F (3.3°C and 32.2°C).
- **3.1.2 HydroFactor-J:** HydroFactor-J is a polymer-based, noncementitious, ready-mixed product packaged in 5-gallon (19 L) pails, having a one-year shelf life when stored at temperatures between 38°F and 90°F (3.3°C and 32.2°C).
- **3.1.3 HydroFactor Tape:** HydroFactor Tape is a spun-bonded, nonwoven polyester web reinforced with a 5x5 yarns-per-inch polyester mesh.
- **3.2 Air Permeance:** When installed in accordance with Section 4.1 and tested in accordance with ASTM E2178 at a thickness of 16 mils, the HydroFactor WRB system has an air leakage rate of less than 0.02 L/ (sm²) at 75 Pa [0.004 cfm/ft² at 0.3 inch w.g. (1.57 psf)].

3.3 Water Vapor Transmission:

The water vapor transmission (WVT) value for HydroFactor-C, as determined in accordance with ASTM E96 Method A (desiccant) and Method B (water), are as follows:

- HydroFactor-C: 8.36 perms, Method B (water method)
- HydroFactor-C with joint treatment: 6.56 perms, Method B (water method)



 Hydrofactor-C 17 mils thick: 3.31 perms, Method A (desiccant method)

3.4 Sheathing:

The use of HydroFactor WRB is limited to applications over the following sheathing materials:

- Glass mat-faced gypsum sheathing recognized in a current ICC-ES evaluation report as complying with ASTM C1177.
- Plywood, Exposure 1 exterior grade, complying with U.S. DOC PS-1.
- Oriented strand board (OSB), Exposure 1, complying with U.S. DOC PS-2.

4.0 INSTALLATION

4.1 General:

Installation of the HydroFactor WRB 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:

HydroFactor WRB must be installed on the exterior side of vertical exterior walls over the exterior sheathing. Surfaces must be free of all bond-inhibiting materials, including dirt, oil and other foreign matter. HydroFactor-C and HydroFactor-J must be applied only when the surface and ambient temperatures are 40°F (4°C) and rising during the application and drying period. Working time will decrease as surface and ambient temperatures increase.

HydroFactor WRB must not be installed on damp surfaces, below-grade surfaces, or surfaces subject to water immersion. Damaged sheathing must be removed and replaced. Sheathing must be installed as required by the applicable code. HydroFactor WRB must be covered with an exterior wall finish complying with the requirements of the applicable code or a current ICC-ES evaluation report. See Figures 1 through 3 for installation details.

HydroFactor-C is roller-applied over all sheathing joints, rough openings, and inside and outside building corners. HydroFactor Tape is then immediately applied over the HydroFactor-C while wet and troweled smooth. HydroFactor-J is then troweled over the HydroFactor Tape. Sheathing joints, rough openings and corners require a minimum 4-inch (101 mm) width of mesh. The system must not be applied over irregular surfaces. The application thickness of HydroFactor-J must not exceed ¹/₁₆ inch (1.6 mm).

4.3 HydroFactor-C Application:

The substrate must be prepared as described in Section 4.2. HydroFactor-C is applied in two coats to a total wet thickness of 12 mils [0.012 inch (0.30 mm)], using a ³/₄-inch (19.1 mm) nap roller. The first coat must tack-up before application of the second coat. The coating must not be applied in rainy conditions. HydroFactor-C may also be sprayer-applied, in one or two coats, to a total wet thickness of 12 mils [0.012 inch (0.30 mm)].

4.4 Curing and Drying:

The coating must be dry to the touch and may, under normal conditions, be over-coated within two to four hours after application. Drying time varies depending on temperature/humidity and surface conditions. A minimum of 24 hours is required before any adhesive attachment of exterior finish to the final HydroFactor WRB system

surface is made, if required. Surfaces must be protected from rain and freezing until completely dry.

5.0 CONDITIONS OF USE

The HydroFactor WRB 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 instructions and the applicable code. In the event of a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 5.2 For EIFS applications, special inspections are required at the jobsite in accordance with IBC Section 1705.15.1. 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 (see Figure 4) is presented to the code official at the completion of each project; otherwise, special inspections are required at the jobsite in accordance with IBC Section 1705.1.1. 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. Special inspections are not required under the IRC.
- 5.3 The HydroFactor WRB system is limited to installations on vertical walls and must not be used on parapets or on sloped or horizontal surfaces.
- 5.4 The HydroFactor WRB system must be covered with an exterior wall finish or covering complying with the applicable code or a current ICC-ES evaluation report.
- 5.5 The HydroFactor WRB system must not be used for repairing moving cracks, joints, or cracks wider than ¹/₈ inch (3.2 mm) for glass mat–faced gypsum sheathing or ¹/₂ inch (12.7 mm) for OSB or plywood sheathing.

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.

7.0 IDENTIFICATION

- 7.1 Packages of the products described in this report are identified by a label bearing the manufacturer's name (EZ Wall Coatings, Inc.) and address, product name, identification of components, lot or batch number, quantity of material in packaged mix, storage instructions and shelf life, expiration date (when applicable) and the evaluation report number (ESR-3172).
- 7.2 The report holder's contact information is the following:

EZWALL COATINGS, INC. 1001 FOREST AVENUE DALLAS, TEXAS 75215 (214) 428-1886 www.ezwallcoatings.com

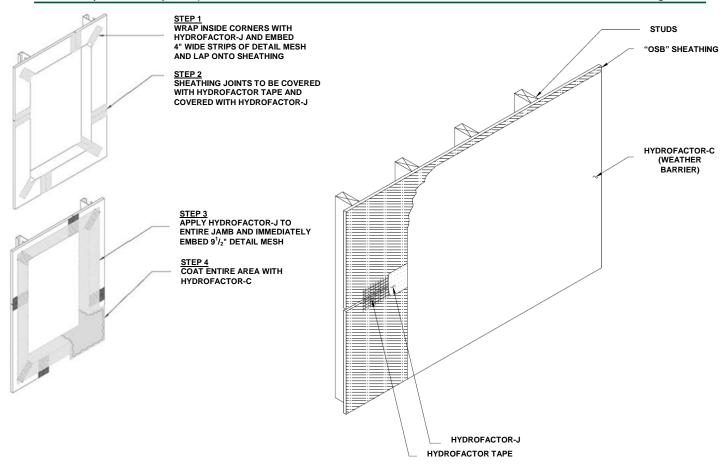
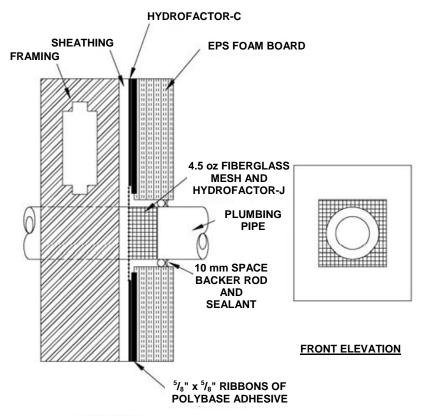


FIGURE 1—WINDOW

FIGURE 2—TYPICAL SYSTEM APPLICATION



WALL SECTION

FIGURE 3—PIPE

(Note: References to products other than HydroFactor-C, HydroFactor-J and HydroFactor Tape are outside the scope of this report.)

(WATER-RESISTIVE COATING CONTRACTOR NAME)

Con	npletion Date:		
THE	WATER-RESISTIVE COA	ATING INSTALLED ON	THE STRUCTURE LOCATED AT THE ADDRESS INDICATED BELOW
	cc	ONFORMS	
			R NAME) RECOMMENDED INSTALLATION PRACTICES AND OF EVALUATION REPORT ESR
Address of Structure:			Product Component Names:
			Reinforcing Fabric Coating
	INSTALLATION		CONFORMS
A.	Substrate Type and Tolera	ance	
В.	Water-resistive Coating		
C.	C. The information entered above is offered in testimony that the water-resistive coating application conforms with the manufacturer's installation methods and procedures, and the water-resistive coating manufacturer's evaluation report.		
app		vater-resistive coating ev	water-resistive coating installer indicating that the water-resistive coating valuation report and water-resistive coating manufacturer's installation ation.
Wat	ter-resistive Coating Contra	actor Company Name an	nd Address:
Тур	ed Name and Title of Office ephone Number: (er:	turor

FIGURE 4—CERTIFICATE OF INSTALLATION