



# ICC-ES Evaluation Report

## ESR-4302

Reissued June 2023

This report is subject to renewal June 2024.

**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**

**Section: 07 77 00—Wall Specialties**

**REPORT HOLDER:**

**AMICO**

**EVALUATION SUBJECT:**

**HYDRODRY® RAIN SCREEN DRAINAGE SYSTEMS**

### 1.0 EVALUATION SCOPE

**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)

**Properties evaluated:**

- Material properties
- Drainage efficiency

### 2.0 USES

HYDRODRY® Rain Screen drainage systems are used to provide a means of draining incidental water to the exterior from behind exterior wall cladding systems which include but are not limited to cement plaster (stucco), adhered masonry, cement board siding, wood, vinyl and cedar shake siding, as required by 2018 IBC Section 1402.2 (2015, 2012, 2009 and 2006 IBC Section 1403.2) and Section R703.1.1 of the IRC. These products are used in exterior wall systems in Type V-B construction (IBC) and dwellings constructed in accordance with the IRC.

### 3.0 DESCRIPTION

#### 3.1 General:

HYDRODRY® Rain Screen drainage system consists of Rain Screen, AMIFLOW Drain Screed and EZ Vent.

#### 3.2 Rain Screen:

A drainage and ventilation mat with randomly oriented, geometric patterned fibers designed to enhance water flow and evaporation. Rain Screen has a gray filter-fabric heat-bonded to the exterior side.

**3.2.1 Surface-burning Characteristics:** The Rain Screen has a flame-spread index of less than 25 and smoke-developed index of less than 450 when tested in accordance with ASTM E84 (UL 723).

#### 3.3 AMIFLOW Drain Screed:

A high-density PVC extruded drainage profile that is used at the base of a wall to provide a termination and allow incidental water to drain from behind the cladding.

AMIFLOW Drain Screed incorporates a drainage trough with drainage slots and multiple grounds to accommodate various stucco thicknesses and allow for proper application of three-coat stucco with 6 mm rainscreen. Universal connectors are used to join pieces together.

#### 3.4 EZ Vent:

A high-density PVC extruded profile for the top of wall terminations that allows the wall to vent and release residual water and vapor within the wall cavity. E-Z Vent works in conjunction with the AMIFLOW Drain Screed and the Rain Screen to create a continuous airflow within the drainage plane.

### 4.0 INSTALLATION

#### 4.1 General:

Installation of the HYDRODRY® Rain Screen drainage system must comply with this report, the applicable code and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

For installation of cement plaster (stucco) or adhered masonry over wood-based sheathing, HYDRODRY® Rain Screen drainage system is installed after wall framing is completed, over a water-resistive barrier with a water resistance equal to or greater than that of ASTM E2556 Type II as described in the exceptions to the 2018 and 2015 IBC Section 2510.6 or 60-minute Grade D paper, as described in the exceptions to 2012, 2009 and 2006 IBC Section 2510.6; and 2018 and 2015 IRC Section R703.7.3 (2012, 2009 and 2006 IRC Section R703.6.3).

For installation with exterior wall systems other than cement plaster (stucco) or adhered masonry, over sheathing complying with the code, HYDRODRY® Rain Screen drainage system is installed after wall framing is completed, over a water-resistive barrier complying with 2018 IBC Section 1403.2 (2015, 2012, 2009 and 2006 IBC Section 1404.2) or IRC Section R703.2.

#### 4.2 Rain Screen:

Rain Screen is located approximately 12 inches (305 mm) from the starting corner, with the filter fabric facing away from the structure, and is fastened to the sheathing with corrosion-resistant staples or cap-nails spaced at a maximum of 24 inches (610 mm) on center in the field and at a maximum of 16 inches (406 mm) on center along horizontal and vertical edges. Horizontal and vertical edges are butted together with no overlap. Rain Screen is 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.

After installation of the Rain Screen, expanded metal lath and other components of the cement plaster or adhered masonry veneer system must be installed in accordance with the code or the applicable 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 Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the published installation instructions and this report, this report governs.
- 5.2 Installation is limited to use in Type V-B construction (IBC) and dwellings constructed in accordance with the IRC.
- 5.3 The size and spacing of fasteners used to support the weight of exterior cement plaster or adhered masonry veneer must be designed to resist negative wind

pressure and the thickness of the moisture drainage system and is outside the scope of this evaluation report.

- 5.4 The structural performance of exterior cement plaster or adhered masonry veneer walls installed over the moisture drainage system is outside the scope of this evaluation report.
- 5.5 The HYDRODRY® Rain Screen drainage system is manufactured under a quality control program with inspections by ICC-ES.

#### 6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Moisture Drainage Systems Used with Exterior Cement Plaster or Adhered Masonry Veneer Walls (AC356), dated October 2009 (editorially revised December 2018).

#### 7.0 IDENTIFICATION

- 7.1 The products described in this report are identified by a label on each roll or pallet that includes the report holder's name (AMICO) and address, the product name, the product size, the lot number and the evaluation report number (ESR-4302).
- 7.2 The report holder's contact information is the following:

**AMICO**  
**3245 FAYETTE AVENUE**  
**BIRMINGHAM, ALABAMA 35208**  
**(205) 787-2611**  
[www.amicoglobal.com](http://www.amicoglobal.com)

**DIVISION:07 00 00—THERMAL AND MOISTURE PROTECTION**  
**Section: 07 77 00—Wall Specialties**

**REPORT HOLDER:**

AMICO

**EVALUATION SUBJECT:**

HYDRODRY® RAIN SCREEN DRAINAGE SYSTEMS

**1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that HYDRODRY® Rain Screen drainage systems, described in ICC-ES evaluation report ESR-4302, 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 HYDRODRY® Rain Screen drainage systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-4302, 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 and the additional requirements of CBC Chapters 14 and 25, 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 HYDRODRY® Rain Screen drainage systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-4302, complies 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 and the additional requirements of CRC Chapters 3 and 7.

This supplement expires concurrently with the evaluation report, reissued June 2023.

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**Applicable code editions:**

- 2017 *Florida Building Code—Building*
- 2017 *Florida Building Code—Residential*

**2.0 CONCLUSIONS**

The HYDRODRY® Rain Screen drainage systems, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-4302, comply with the *Florida Building Code—Building* and *Florida Building Code—Residential*, provided the design requirements are determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-4302 for the 2015 *International Building Code*® meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable, subject to the following conditions of use:

1. Evaluation of the complete wall covering system is outside the scope of this supplement report.
2. Installation must be in accordance with Section 1403.8 of the *Florida Building Code—Building* or Section R318.7 of the *Florida Building Code—Residential*, as applicable.
3. Flashing must be in accordance with Section 1405.4 of the *Florida Building Code—Building* or Section R703.4 of the *Florida Building Code—Residential*, as applicable.

Use of the HYDRODRY® Rain Screen drainage systems for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and *Florida Building Code—Residential* has not been evaluated; and is outside the scope of this supplemental report.

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official, when the report holder does not possess an approval by the Commission).

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