

Issue Date: 02-18-2022
Revision Date: 03-19-2025
Renewal Date: 03-31-2026

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 25 00 – Weather Barriers
Section: 07 27 00 – Air Barriers

REPORT HOLDER:
Henry, a Carlisle Company
336 Coldstream Rd.,
Kimberton, PA 19442
610-761-4686
www.henry.com

REPORT SUBJECT:
Weathersmart D Drainable and PlyDry Housewraps

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2021, 2018, and 2015 *International Building Code*® (IBC)
- 2021, 2018, and 2015 *International Residential Code*® (IRC)
- 2021, 2018, and 2015 *International Energy Conservation Code*® (IECC)

NOTE: This report references 2021 Code sections. Earlier version of the Codes may have different section numbers.

1.2 Weathersmart D Drainable and PlyDry Housewraps have been evaluated for the following properties (see Table 1):

- Water-resistive barrier
- Surface-burning characteristics
- Air barrier material
- Air barrier assembly
- Drainage efficiency

1.3 The Housewraps have been evaluated for the following uses (see Table 1):

- Use as an alternative to the water-resistive barriers referenced in IBC Section 1403.2 and IRC Section 703.2

- Use as a water-resistive barrier over wood-based sheathing under cement plaster (stucco) having a 60-minute water-resistive rating under IBC Section 2510.6 and IRC Section R703.7.3
- Weathersmart D Drainable housewrap has been additionally evaluated for use as an air barrier material under IRC Section N1102.4.1 and IECC Sections C402.5 and R402.4

2.0 STATEMENT OF COMPLIANCE

Weathersmart D Drainable and PlyDry housewraps comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2, and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.0.

3.0 DESCRIPTION

3.1 Weathersmart D Drainable Housewrap consists of a nonwoven polypropylene fabric laminated onto a permeable polypropylene film. Either the nonwoven fabric or the film may be used as the exposure side of the wrap. The building wrap is available in various colors and roll sizes with a nominal weight of 1.64 lbs/100 ft².

3.2 PlyDry Housewrap consists of a woven microperforated polymeric scrim with polymeric coating. The building wrap is available in various colors and sizes. The nominal weight of the building wrap is 1.33 lbs/100 ft².

4.0 PERFORMANCE CHARACTERISTICS

4.1 Surface Burning Characteristics: The housewraps have a flame-spread index of 25 or less and a smoke-developed index of 450 or less when tested in accordance with ASTM E84.

4.2 Water-resistance: The housewraps have a 60-minute water-resistance rating when tested in accordance with the applicable requirements of ICC-ES AC38.



4.3 Air Barrier Material: The Weathersmart D Drainable housewrap has an air leakage rate no greater than 0.02 L/s-m² at 75 Pa when tested in accordance with ASTM E2178.

4.4 Air Barrier Assembly: The PlyDry housewrap is recognized as a component of an air barrier assembly in accordance with IECC Section C402.5.1.4 based on testing in accordance with ASTM E2357.

4.5 Drainage Efficiency: The housewraps have drainage efficiency rating of 90% or more, when tested in accordance with ASTM E2273.

5.0 INSTALLATION

5.1 General: The housewraps must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

5.2 Water-resistive Barrier Application: When used as a water-resistive barrier, the housewraps must be installed as described in IBC Section 1403.2 and IRC Section R703.2, and in accordance with the manufacturer's published installation instructions.

When used as a water-resistive barrier in exterior stucco applications over wood-based sheathing, installation must comply with IBC Section 2510.6 or IRC Section 703.7.3.

5.3 Air Barrier Material: The Weathersmart D Drainable housewrap may be used where air barrier materials are permitted under IECC Section C402.5.1.3.

5.4 Air Barrier Assembly: When used as a component of an air barrier assembly, PlyDry is attached to sheathing with fasteners specified in the manufacturer's published installation instructions. Seams in the building wraps must be sealed with 1-7/8 in. wide Jumpstart Sheathing Tape Code (JCIST01) or equivalent pressure-sensitive tape. Minimum 1/2 in. thick gypsum wallboard on the interior side of the assembly must be attached to the wall framing. Penetrations in the air barrier assembly must be sealed in accordance with IECC Section C402.5.1.1.

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 The housewraps must be covered with an approved exterior wall covering in accordance with the applicable Code.

6.3 Installation of the housewraps on buildings of Type I, II, III, or IV construction is limited to buildings 40 feet or less in height above grade plane.

6.4 The housewraps are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1 Reports of tests in accordance with ASTM E84, ASTM E2178, ASTM E2273, ASTM E2357, and ASTM E2556.

7.2 Data in accordance with the ICC-ES Acceptance Criteria for Water-resistive Barriers (AC38), approved August 2016.

7.3 Intertek Listing Report "Henry - Weathersmart D Drainable and PlyDry Housewraps", on the [Intertek Directory of Building Products](#).

8.0 IDENTIFICATION

The housewraps are identified with the report holder's name, telephone number, the product name, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0442).



9.0 OTHER CODES

This section is not applicable.





10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the <https://bpdirectory.intertek.com> is recommended to ascertain the current version and status of this report.

TABLE 1 – PROPERTIES EVALUATED

PROPERTY	APPLICABLE CODE SECTIONS ¹		
	IBC	IRC	IECC
Water-resistive Barrier	1403.2 2510.6	R703.2 R703.7.3	NA
Air Barrier	NA	N1102.4.1	C402.5 R402.4
Exterior Walls of Types I-IV Construction	1402.5	NA	NA
Water Drainage Efficiency	NA	NA	NA

¹ Section numbers pertain to the most recent edition cited in Section 1.1 of this Report

This Code Compliance Research Report (“Report”) is for the exclusive use of Intertek’s Client and is provided pursuant to the agreement between Intertek and its Client. Intertek’s responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Report. Only the Client is authorized to permit copying or distribution of this Report and then only in its entirety, and the Client shall not use the Report in a misleading manner. Client further agrees and understands that reliance upon the Report is limited to the representations made therein. The Report is not an endorsement or recommendation for use of the subject and/or product described herein. This Report is not the Intertek Listing Report covering the subject product and utilized for Intertek Certification and this Report does not represent authorization for the use of any Intertek certification marks. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.



545 E. Algonquin Road • Arlington Heights • Illinois • 60005
intertek.com/building

