

# **ICC-ES Evaluation Report**

### **ESR-4886**

Reissued August 2024

This report also contains: - CA Supplement

Revised October 2024

Subject to renewal August 2026

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	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: HENRY A CARLISLE COMPANY	EVALUATION SUBJECT: HENRY BLUESKIN <sup>®</sup> VP160 SELF-ADHERED MEMBRANE	
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## **1.0 EVALUATION SCOPE**

### 1.1 Compliance with the following codes:

- 2021, 2018, 2015, 2012, 2009 and 2006 International Building Code® (IBC)
- 2021, 2018, 2015, 2012, 2009 and 2006 International Residential Code® (IRC)
- 2021, 2018, 2015, 2012, 2009 and 2006 International Energy Conservation Code® (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)<sup>†</sup>

<sup>†</sup>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
- Air barrier material
- Air barrier assembly
- Surface-burning characteristics and heat of combustion characteristics
- 1.2 Evaluation to the following green code(s) and/or standards:
- 2022 California Green Building Standards Code (CALGreen), Title 24, Part 11
- 2021, 2018, 2015 and 2012 International Green Construction Code® (IgCC)
- 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<sup>™</sup> (ICC 700-2020, ICC 700-2012, and ICC 700-2008)

### **Attributes Verified:**

See Section 2.0



## **2.0 USES**

The Henry BLUESKIN<sup>®</sup> VP160 self-adhered membrane is used as a water-resistive barrier on the exterior side of exterior walls of buildings of any construction type under the IBC and construction permitted under the IRC. Under the 2021, 2018, 2015 and 2012 IBC, BLUESKIN<sup>®</sup> VP160 may be used on buildings of Type I, II, III and IV construction that are not greater than 40 feet (12.2 m) in height above grade in accordance with 2021 and 2018 IBC Section 1402.5 (2015 and 2012 IBC Section 1403.5), except as permitted in Exceptions 1 and 2 of Section 1402.5 of the 2021 and 2018 IBC (Section 1403.5 of the 2015 IBC).

The membrane has a water resistance greater than that of a 60-minute Grade D paper, which is permitted in Section 2510.6 of the 2021 IBC (the exception to Section 2510.6 of the 2012, 2009 and 2006 IBC) and Section R703.7.3 of the 2021, 2018 and 2015 IRC (2012, 2009 and 2006 Section R703.6.3 of the IRC). The membrane may be used as an air barrier material under IRC Section N1102.4.1 and 2021, 2018 and 2015 IECC Sections C402.5 and R402.4 [2012 IECC Sections C402.4 and R402.4 (2009 and 2006 IECC Sections 402.4 and 502.4)]. The membrane may be used as a component of an air barrier assembly in accordance with 2021 IECC Section C402.5.1.4 [2018 and 2015 IECC Section C402.5.1.2.2 (2012 IECC Section C402.4.1.2.2)] when installed in accordance with Section 4.3 of this report. The attributes of the selfadhered membrane have been verified as conforming to the provisions of (i) CALGreen Section 5.407.1 for water-resistive barriers; (ii) 2021 IgCC Section 701.3.1.2 for air barriers (2018 IgCC Section 701.3.1.1; 2015 and 2012 IgCC Section 605.1.2.1); (iii) 2020 ASHRAE 189.1 Section 7.3.1.2 for air barriers (2017 and 2014 ASHRAE 189.1 Section 7.3.1.1; 2011 ASHRAE 189.1 Section 7.4.2.9); (iv) ICC 700-2020 Sections 602.1.8, 11.602.1.8, 1202.6 and 13.104.1.4 for water-resistive barriers (ICC 700-15 Sections 602.1.8, 11.602.1.8 and 12.6.602.1.8; ICC 700-12 Sections 602.1.8, 11.602.1.8 and 12.5.602.1.8; ICC 700-08 Section 602.9). Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the projectspecific provisions that may be contingent upon meeting specific condition, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.

## **3.0 DESCRIPTION**

**3.1 General:** Henry BLUESKIN<sup>®</sup> VP160 membrane is comprised of an engineered polymeric-based sheet, bonded with a permeable adhesive layer, and a split-back poly-release film on the adhesive side.

### 3.2 Henry BLUESKIN<sup>®</sup> VP160 Self-adhered Membrane:

The Henry BLUESKIN<sup>®</sup> VP160 membrane has a flame-spread index of 25 or less and a smoke-developed index of 450 or less, when tested in accordance with ASTM E84.

The Henry BLUESKIN<sup>®</sup> VP160 membrane has a peak heat release of less than 150kW/m<sup>2</sup>, a total heat release of less than 20 MJ/m<sup>2</sup> and an effective heat of combustion of less than 18 MJ/kg, when tested in accordance with ASTM E1354.

The Henry BLUESKIN<sup>®</sup> VP160 membrane has a nominal thickness of 0.023 inch (0.584 mm). The membrane is produced in rolls of varying lengths and widths.

The Henry BLUESKIN<sup>®</sup> VP160 membrane has an air permeance not exceeding 0.02 L/s-m<sup>2</sup> at 75 Pa [0.004 cfm/ft<sup>2</sup> at 0.3 w.g. (1.57 psf)] when tested in accordance with ASTM E2178.

When installed in accordance with Section 4.3, the Henry BLUESKIN<sup>®</sup> VP160 membrane assembly has an air leakage rate not exceeding 0.2 L/s-m<sup>2</sup> at 75 Pa [0.04 cfm/ft<sup>2</sup> at 0.3 w.g. (1.57 psf)] when tested in accordance with ASTM E2357.

## 4.0 INSTALLATION

### 4.1 General:

Installation of the Henry BLUESKIN<sup>®</sup> VP160 membrane must comply with this report and the report holder's published installation instructions. The report holder's published installation instructions must be available at the jobsite at all times during the installation.

Prior to installation of the membrane, the substrate surface must be sound, dry, clean, and free of oil, grease, dirt, excess mortar, loose nails, and other protrusions, and other contaminates that would be detrimental to adhesion of the membranes. Installation of the BLUESKIN<sup>®</sup> VP160 membrane is limited to plywood, OSB, aluminum, steel, concrete and Georgia Pacific DensGlass sheathing substrates. The Henry BLUESKIN<sup>®</sup> VP160 membrane must be installed only when the ambient air and substrate temperature is at least 20°F (-7°C). When the ambient air or substrate temperature is below 40°F (5°C), the substrate must be prepared according to the report holder's published installation instructions.

### 4.2 Water-Resistive Barrier:

When installed as a water-resistive barrier, the membrane must be installed over the exterior face of the exterior wall sheathings that are attached to wall framing and must be installed in a consecutive weather board manner. The membrane roll must be placed at the starting wall corner and is then unrolled around the building. A minimum of 3 inches (76 mm) of overlap is provided for vertical seams and a minimum of 2 inches (51 mm) for horizontal seams, except where the report holder's installation instructions specify a greater overlapping dimension. When use is over wood-based sheathing in exterior plaster applications, the installation must be in accordance with 2012, 2009 and 2006 IBC Section 2510.6 or 2018 and 2015 IRC Section R703.7.3 [2012, 2009 and 2006 IRC Section R703.6.3].

When used over wood based sheathing in exterior plaster applications in accordance with 2021 IBC Section 2510.6 and 2021 IRC Section R703.7.3, installations must be as follows:

For dry climate zones (B) in accordance with 2021 IBC Section 2510.6.1 or 2021 IRC Section R703.7.3.1, the product must be applied in accordance with 2021 IBC Section 2510.6.1 Item 1 or 2 and 2021 IRC Section R703.7.3.1 Item 1 or 2, as applicable.

For moist climate zones (A) or marine climate zones (C) in accordance with 2021 IBC Section 2510.6.2 or 2021 IRC Section R703.7.3.2, the product must be applied in accordance the dry climate zone (B) provisions noted above and with the additional requirements noted in 2021 IBC Section 2510.6.2 Item 1 or 2021 IRC Section R703.7.3.2 Item 1, as applicable.

For cementitious coatings or exterior insulation and finish systems, installation of the membrane must be in accordance with a current ICC-ES evaluation report on the exterior coating.

### 4.3 Air Barrier Assembly:

When the Henry BLUESKIN® VP160 is used as a component of an air barrier assembly, the membrane must be installed on the exterior face of wall sheathing in accordance with the manufacturer's published installation instructions. Prior to application of the BLUESKIN® VP160 membrane, the exterior face of the sheathing must be primed with Henry BLUESKIN Adhesive in accordance with the manufacturer's installation instructions. Penetrations in the air barrier assembly must be sealed in accordance with 2021, 2018 and 2015 IECC Section C402.5.1(3) (2012 IECC Section C402.4.2).

## **5.0 CONDITIONS OF USE:**

The Henry BLUESKIN<sup>®</sup> VP160 self-adhered membrane 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** The membrane 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 report holder's published installation instructions, this report governs.
- **5.2** The membrane must be covered by an exterior wall covering complying with the requirements of the applicable code.
- **5.3** The product must not be installed where ASTM E2556 Type I or II building paper is required.
- 5.4 Use of the Henry Blueskin Adhesive in Types I-IV construction has not been evaluated.
- 5.5 The product is manufactured under a quality control program with inspections by ICC-ES.

## 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 July 2021).
- 6.2 Reports of tests for surface burning characteristics in accordance with ASTM E84.
- **6.3** Reports of air permeance tests in accordance with ASTM E2178.
- 6.4 Reports of air leakage rate of air barrier assembly tests in accordance with ASTM E2357.
- 6.5 Reports of tests in accordance with ASTM E1354.

## 7.0 IDENTIFICATION

- **7.1** The Henry BLUESKIN<sup>®</sup> VP160 membrane described in this evaluation report must be identified by a label on the container of each roll of the membrane, and by printing at regular intervals on the membrane, that includes the name, address, and telephone number of the manufacturer (Henry a Carlisle Company), and the evaluation report number (ESR-4886).
- **7.2** The report holder's contact information is the following:

HENRY A CARLISLE COMPANY 336 COLD STREAM ROAD KIMBERTON, PENNSYLVANIA 19442 (310) 955-9200 www.henry.com cshenry@henry.com



## **ICC-ES Evaluation Report**

## **ESR-4886 CA Supplement**

Reissued August 2024 Revised October 2024 This report is subject to renewal August 2026.

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

### **REPORT HOLDER:**

HENRY A CARLISLE COMPANY

### **EVALUATION SUBJECT:**

### HENRY BLUESKIN® VP160 SELF-ADHERED MEMBRANES

### 1.0 REPORT PURPOSE AND SCOPE

### Purpose:

The purpose of this evaluation report supplement is to indicate that Henry BLUESKIN<sup>®</sup> VP160 self-adhered membranes, described in ICC-ES evaluation report ESR-4886, have also been evaluated for compliance with the code(s) 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)
- 2022 California Energy Code (CEC)

### 2.0 CONCLUSIONS

### 2.1 CBC:

The Henry BLUESKIN<sup>®</sup> VP160 self-adhered membranes, described in Sections 2.0 through 7.0 of the evaluation report ESR-4886, comply with CBC Chapters 14, provided the design and installation are in accordance with the 2021 *International Building Code*<sup>®</sup> (IBC) provisions noted in the evaluation report ESR-4886. Use as an air barrier must be in accordance with the CEC.

The products have not been evaluated under Chapter 7A for use in the exterior design and construction of new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area.

### 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 Henry BLUESKIN<sup>®</sup> VP160 self-adhered membranes, described in Sections 2.0 through 7.0 of the evaluation report ESR-4886, comply with CRC Chapter 7, provided the design and installation are in accordance with the 2021 *International Residential Code*<sup>®</sup> (IRC) provisions noted in the evaluation report.

The products have not been evaluated under CRC Section R337 for use in the exterior design and construction of new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area.

The products recognized in this supplement have not been evaluated for compliance with the International Wildland–Urban Interface Code®.

This supplement expires concurrently with the evaluation report, reissued August 2024 and revised October 2024.

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