



# ICC-ES Evaluation Report

## ESR-3121

Reissued April 2023

Revised October 2023

This report is subject to renewal April 2024.

**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**  
**Section: 07 30 05—Roofing Felt and Underlayment**

**REPORT HOLDER:**

**CERTAINTED LLC**

**ADDITIONAL LISTEE:**

**GCP APPLIED TECHNOLOGIES, INC**

**EVALUATION SUBJECT:**

**GRACE VYCOR ICE & WATER SHIELD® HT**

### 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)

**Properties evaluated:**

- Physical properties
- Ice 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 Grace VYCOR Ice & Water Shield® HT (Grace Ice & Water Shield® HT) roofing underlayment is a self-adhering membrane that is used where an ice barrier is specified in Chapter 15 of the IBC and Chapter 9 of the IRC.

### 3.0 DESCRIPTION

Grace VYCOR Ice & Water Shield® HT (Grace Ice & Water Shield® HT) is a self-adhering membrane composed of

rubberized asphalt combined with a polymeric film on one face and a release paper on the back that is removed prior to attachment to plywood sheathing. The membrane is nominally 40 mils thick [0.040 inch (1.02 mm)] and is supplied in rolls 36 inches (914 mm) wide.

The attributes of the Grace VYCOR Ice & Water Shield® (Grace Ice & Water Shield® HT) HT roofing underlayment have been verified as conforming to the provisions of (i) 2022 and 2019 CALGreen Section A4.407.5; (ii) ICC 700-2020 Sections 602.1.13, 11.602.1.13, 11.602.1.13, 1202.9 and 13.104.1.7; (iii) ICC 700-2015 and ICC 700-2012 Sections 602.1.13, 11.602.1.13 and 12.5.602.1.14; and (iv) ICC 700-2008 Section 602.10 for ice 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.

### 4.0 INSTALLATION

The membrane must be installed in accordance with this report, the report holder's published application instruction, the approved plans (if applicable), and the applicable provisions of the code. In the case of a conflict amongst these documents, this report governs.

Prior to application of the membrane, the deck surface must be free of frost, dust, dirt, loose nails, or protrusions. Damaged sheathing must be replaced. Installation of the membrane is limited to plywood substrates complying with the requirements of the applicable code. The membrane must not be applied when the ambient air and deck temperatures are below 40°F (4.4°C).

Cut the membrane into 10- to 15-foot (3- to 5-m) lengths and re-roll loosely. Tack/secure the end of the roll with a nail. Peel back 1- to 2-feet (300- to 600-mm) of release liner, align the membrane, and continue to peel the release liner from the membrane. Press the membrane in place with heavy hand pressure. Side laps must be a minimum of 3.5 inches (90 mm) and end laps a minimum of 6 inches (150 mm). For valley and ridge application, peel the release liner, center the sheet over the valley or ridge, drape, and press it in place. Work from the center of the valley or ridge outward in each direction and start at the low point and work up the roof.

Alternatively, starting with a full roll of membrane, unroll a 3- to 6-feet (1- to 2-m) piece of membrane leaving the

release liner in place. Align the membrane and roll in the intended direction of membrane application. Carefully cut the release liner on top of the roll in the cross direction being careful not to cut the membrane. Peel back about 6 inches (150 mm) of the release liner in the opposite direction of the intended membrane application exposing the black adhesive. Hold the release liner with one hand and pull the roll along the deck with the release liner, leaving the applied membrane behind. Use the other hand to apply pressure on the top of the roll. Stop frequently to press the membrane in place with heavy hand pressure. When finished with the roll go back to the beginning, reroll and pull the remaining release paper from the material, finishing the installation.

Consistent with good roofing practice, install the membrane such that all laps shed water. Always work from the low point to the high point of the roof. Apply the membrane in valleys before the membrane is applied to the eaves. Following placement along the eaves, continue application of the membrane up the roof. The membrane may be installed either parallel or perpendicular to the roof slope.

If, during application, the membrane becomes misaligned, the roll must be cut and restarted. After application, the membrane is inspected, and any defect is repaired. "Fish mouths" must be slit, pressed flat and covered with a patch of membrane that extends beyond the damaged area 6 inches (152 mm) in all directions. Flashing around protrusions is installed over the membrane to prevent water backup. Other flashing must be installed in accordance with the applicable code.

Following the membrane application, installation of the roof covering can proceed immediately. The membrane is not intended to be left exposed and must be covered by an approved roof covering. For reroofing applications, the same procedures apply after removal of the existing roof covering to expose the plywood roof deck.

## 5.0 CONDITIONS OF USE

The Grace VYCOR Ice & Water Shield® HT (Grace Ice & Water Shield® HT) underlayment 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 and the manufacturer's published installation instructions. In the event of a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 5.2 Installation is limited to use on plywood substrates on structures located in areas where nonclassified roof coverings are permitted.
- 5.3 The self-adhesive membranes must be installed when the ambient, roof deck and membrane are at temperatures of 40°F (4.4°C) or above.
- 5.4 Installation is limited to roofs having a slope of 2:12 (16.67 percent slope) or greater.
- 5.5 Installation is limited to use with roof coverings that do not utilize hot asphalt or coal-tar pitch.
- 5.6 Installation is limited to use with roof coverings that are mechanically fastened through the underlayment to the sheathing or rafters.
- 5.7 Installation is limited to roofs having attics or rafter spaces that are ventilated, in accordance with the requirements of the applicable code.
- 5.8 The membranes are manufactured under a quality control program with inspections by ICC Evaluation Service, LLC.

## 6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Self-adhered Roof Underlayment for Use as Ice Barrier (AC48), dated February 2012 (editorially revised February 2021).

## 7.0 IDENTIFICATION

7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-3121) along with the name, registered trademark, or registered logo of the report holder (CertainTeed, LLC) or listee (GCP Applied Technologies, Inc.) must be included the product label.

7.2 In addition, the membrane described in this report is identified by a label on the packaging of each roll of membrane bearing the product name.

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

**CERTAINTeED LLC**  
**20 MOORES ROAD**  
**MALVERN, PENNSYLVANIA 19355**  
**(610) 893-5945**  
[www.CertainTeed.com](http://www.CertainTeed.com)

7.4 The Additional Listee's contact information is the following:

**GCP APPLIED TECHNOLOGIES, INC.**  
**2325 LAKEVIEW PARKWAY**  
**ALPHARETTA, GEORGIA 30009**  
**(617) 876-1400**  
[www.gcpat.com](http://www.gcpat.com)  
**PRODUCT: GRACE ICE & WATER SHIELD® HT**

**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION****Section: 07 30 05—Roofing Felt and Underlayment****REPORT HOLDER:**

CERTAINTEED LLC

**EVALUATION SUBJECT:**

GRACE VYCOR ICE &amp; WATER SHIELD® HT

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

The purpose of this evaluation report supplement is to indicate that Grace VYCOR Ice & Water Shield® HT (Grace Ice & Water Shield® HT), described in ICC-ES evaluation report ESR-3121, have also been evaluated for compliance with the codes noted below.

**Applicable code editions:**

- 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 Grace VYCOR Ice & Water Shield® HT (Grace Ice & Water Shield® HT), described in Sections 2.0 through 7.0 of the evaluation report ESR-3121, comply with CBC Chapter 15 provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions, as applicable, noted in the evaluation report and the additional requirements of CBC Chapter 15, 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 Grace Ice & Water VYCOR Shield® HT (Grace Ice & Water Shield® HT), described in Sections 2.0 through 7.0 of the evaluation report ESR-3121, comply with CRC Chapter 9, provided the design and installation are in accordance with the 2021 *International Residential Code*® (IRC) provisions, as applicable, noted in the evaluation report and the additional requirements of CRC Chapter 9, as applicable.

This supplement expires concurrently with the evaluation report, reissued April 2023 and revised October 2023.