

# ICC-ES Evaluation Report

**ESR-3085**

Reissued August 2019

This report is subject to renewal August 2021.

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

**Section: 07 46 33—Plastic Siding**

**REPORT HOLDER:**

**CERTAINTEED CORPORATION**

**EVALUATION SUBJECT:**

**CERTAINTEED CEDAR IMPRESSIONS® POLYMER SHAKE AND SHINGLE SIDING**

## 1.0 EVALUATION SCOPE

### 1.1 Compliance with the following codes:

- 2018, 2015 and 2012 *International Building Code*® (IBC)
- 2018, 2015 and 2012 *International Residential Code*® (IRC)

### Properties evaluated:

- Exterior veneer
- Wind load resistance—transverse
- Ignition resistance (2018 IBC only)

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

- 2016 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

CertainTeed Cedar Impressions® Polymer Shake and Shingle Sidings are used as exterior wall coverings over approved sheathing or substrate capable of supporting the imposed loads on buildings of all types of construction under the 2018 IBC and on structures constructed in accordance with the IRC. Under the 2015 and 2012 IBC, the CertainTeed Cedar Impressions® Polymer Shake and Shingle Sidings products are limited to Type VB construction (IBC), and on structures constructed in accordance with the IRC, over approved sheathings capable of supporting the imposed loads, including but not limited to positive and negative transverse wind loads.

## 3.0 DESCRIPTION

### 3.1 Siding:

The Cedar Impressions® Polymer Shake and Shingle sidings are molded into siding panels or individual shingles from polypropylene (PP) resins. The siding panels and individual shingles conform to, and are certified and labeled in accordance with, ASTM D7254. The accessory items, used to detail the application of the product as an exterior wall covering, are of the same material except for the starter strips, which are steel and aluminum.

All siding panels and individual shingles have an upper nailing flange with 1-inch-by-<sup>3</sup>/<sub>16</sub>-inch (25.4 mm by 4.8 mm) elongated nail slots spaced 1<sup>1</sup>/<sub>2</sub> inches (38.1 mm) on center and a lower locking leg that hooks into the upper edge of the lower course. The nailing flange has a <sup>1</sup>/<sub>8</sub>-inch (3.2 mm) nail hole at the center of the panel. All panels also have side lock tabs.

The siding panels and individual shingles are available in different colors with varying shingle shapes and wood-grain textures. Siding panels and individual shingles range in nominal nail flange thickness from 0.090 inch to 0.125 inch (2.3 mm to 3.2 mm). The siding panels have lengths of 32 inches to 73<sup>1</sup>/<sub>2</sub> inches (813 mm to 1867 mm). The individual shingles have lengths of 4 inches to 8 inches (102 mm to 203 mm). The accessory shapes include inside/outside corners, cornice moldings, receivers and starter strips. Refer to Table 1 and Figure 1 for panel thicknesses, lengths and profiles within the scope of this report.

The attributes of the siding panels have been verified as conforming to the provisions of (i) CALGreen Sections A4.405.1.3 (prefinished materials) and A5.406.1.2 (reduced maintenance); (ii) ICC 700-2015 and ICC 700-2012 Sections 601.7, 11.601.7, and 12.1(A).601.7 (site-applied finishing materials); and (iii) ICC 700-2008 Section 601.7 (site-applied finishing materials). 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. The code may provide supplemental information as guidance.

### 3.2 Sheathing Substrate:

- Solid plywood structural sheathing complying with DOC PS-1.
- <sup>7</sup>/<sub>16</sub>-inch or <sup>1</sup>/<sub>2</sub>-inch (11.1 mm or 12.7 mm) Exposure 1 oriented strand board (OSB) sheathing complying with DOC PS-2.

### 3.3 Fasteners:

Siding panels and individual shingles must be attached to sheathing with galvanized, or aluminum roofing nails with lengths of 1½ inches or 1⅝ inches (38 mm or 41 mm), a steel shank diameter of ⅛ inch (3.18 mm), and a ⅜-inch- or 7/16-inch-diameter (9.5 mm or 11.1 mm) head.

## 4.0 INSTALLATION

### 4.1 General:

Cedar Impressions® Polymer Shake and Shingle siding must be installed in accordance with the manufacturer's published installation instructions, the applicable code and this report. The manufacturer's published installation instructions and this report must be strictly adhered to, and a copy of the instructions must be available on the jobsite at all times during installation.

The siding panel must be installed over the sheathing substrate in accordance with the applicable code. The siding panel and accessories must be fastened to framing having a minimum specific gravity of 0.42, or structural sheathing, with roofing nails with a minimum embedment into framing of ¾ inch (19.1 mm). When fastening to structural sheathing, nail penetration must be at least ¾ inch (19.1 mm) beyond the backside of the sheathing. Accessory materials such as corners, starter strips and trim must be fastened in accordance with the manufacturer's instructions, with the starter strip fastened similar to the siding panel.

### 4.2 Wind Resistance:

The allowable negative wind pressures for the products shown in Table 1 must exceed the design negative wind pressures determined in accordance with Chapter 16 of the IBC or Section R301.2.1 of the IRC.

The siding panel must be installed only on exterior walls covered by a solid sheathing capable of supporting the imposed loads, including but not limited to positive and negative transverse wind loads.

### 4.3 Use on Exterior Walls in Types I, II, III and IV Construction in accordance with 2018 IBC Section 1405.1 (Ignition Resistance):

When the exterior wall is sheathed with fire retardant treated wood sheathing, CertainTeed Cedar Impressions® Polymer Shake and Shingle Siding can be used on the exterior side of exterior walls on buildings of Types I, II, III or IV construction. The siding shows no sustained flaming at a maximum tolerable level of incident radiant heat flux of 12.5 kW/m², when tested in accordance with NFPA 268. The minimum fire separation distance required shall be determined from 2018 IBC Table 1405.1.1.1.2. The installation of the siding must comply with the applicable requirements in 2018 IBC Section 1405.1.

## 5.0 CONDITIONS OF USE

The CertainTeed Cedar Impressions® Polymer Shake & Shingle Siding 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 The siding is limited to the design pressures shown in Table 1. In jurisdictions adopting the IRC, the siding

must be installed in accordance with 2018 and 2015 IRC Table R703.3(1) [2012 IRC Table R703.4] and limited to areas where the design wind pressure does not exceed the design values shown in Table 1.

- 5.3 The siding can be used on all types of construction under the 2018 IBC, and to structures constructed in accordance with the IRC. For Types I, II, III and IV construction, installation must comply with Section 4.3 of this report.
- 5.4 The siding is limited to use on construction Type VB under the 2015 and 2012 IBC and to structures constructed in accordance with the IRC.
- 5.5 Under Section 1403.12.2 of the 2018 IBC, the fire separation distance between the building with the siding and adjacent buildings must be no less than 10 feet (3048 mm). For Types I, II, III and IV construction, the fire separation distance must comply with 2018 IBC Section 1403.12.2 and Section 4.3 of this report.
- 5.6 Under Section 1404.12.2 of the 2015 and 2012 IBC, the fire separation distance between the building with the siding and adjacent buildings must be no less than 10 feet (3048 mm).
- 5.7 Under Section R703.14.2 of the 2018 and 2015 IRC, the siding must not be installed on walls with a fire separation distance of less than 5 feet (1524) and walls closer than 10 feet (3048 mm) to a building on another lot unless the walls are perpendicular to the line used to determine the fire separation distance.
- 5.8 The exterior walls must be braced or sheathed to resist racking loads with approved materials in accordance with the requirements of the applicable building code.
- 5.9 The sheathing must be covered with a water-resistive barrier, as required by the applicable code prior to installing the siding, and must comply with IBC Section 1403.2.
- 5.10 The CertainTeed Cedar Impressions® Polymer Shake and Shingle Siding is manufactured in McPherson, Kansas, 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 Polypropylene Siding (AC366), dated October 2018.
- 6.2 Data in accordance with NFPA 268.
- 6.3 Data in accordance with ASTM E84.

## 7.0 IDENTIFICATION

- 7.1 The siding panels and shingles described in this report are identified by a stamp bearing the manufacturer's name (CertainTeed Corporation), the product name and code, the statement "Conforms to ASTM Specification D7254," and the evaluation report number (ESR-3085).
- 7.2 The report holder's contact information is the following:

**CERTAINTEED CORPORATION**  
**20 MOORES ROAD**  
**MALVERN, PENNSYLVANIA 19355**  
**(800) 233-8990**  
[www.certainteed.com](http://www.certainteed.com)

TABLE 1—CEDAR IMPRESSIONS POLYMER SHAKE AND SHINGLE SIDING

PRODUCT NAME	PRODUCT CODE	STYLE	NAILING FLANGE THICKNESS (inch)	LENGTH (inches)	FASTENER SPACING (inches)	ALLOWABLE NEGATIVE WIND LOAD <sup>1</sup> (psf)
Individual 5-inch Sawmill Shingles	30105	Individual 5-inch Shingles	0.090	Varies <sup>2</sup>	Staples <sup>3</sup>	231
Triple 5-inch Straight Edge Sawmill Shingles	30106	Triple 5-inch Shingles	0.100	60	10	43
Triple 5-inch Straight Edge Perfection Shingles	30130	Triple 5-inch Shingle	0.100	60	8	71
Single 7-inch Perfection Shingles	30137	Single 7-inch Shingles	0.090	73.5	10	105
Double 7-inch Straight Edge Perfection Shingles	30138	Double 7-inch Shingle	0.100	48	8	83
Double 7-inch Staggered Perfection Shingles	30143	Double 7-inch Shingle	0.100	48	8	89
Double 7-inch Straight Edge Rough-Split Shakes	30141	Double 7-inch Shingle	0.125	57	10	59
Double 9-inch Staggered Edge Rough-Split Shakes	30136	Double 9-inch Shake	0.125	57	10	37
Double 6 <sup>1</sup> / <sub>4</sub> -inch Half-Round Shingles	30128	Double 6 <sup>1</sup> / <sub>4</sub> -inch Shingle	0.100	32	8	40

For SI: 1 inch = 25.4 mm

**NOTES:**

<sup>1</sup>Allowable loads as determined per A1.2.1 of ASTM D7254.

<sup>2</sup>Individual 5-inch Sawmill Shingles are available in 4-inch, 4<sup>1</sup>/<sub>4</sub>-inch, 5-inch, 5<sup>3</sup>/<sub>4</sub>-inch, 6<sup>3</sup>/<sub>4</sub>-inch and 8-inch lengths.

<sup>3</sup>Individual 5-inch Sawmill Shingles fasteners are no. 16 gage staples with a minimum length of 1<sup>1</sup>/<sub>2</sub> inch (38 mm) and a crown width of 7<sup>7</sup>/<sub>16</sub> inch (11.1 mm), spaced 3<sup>3</sup>/<sub>4</sub> inch from each shingle edge into the sheathing.

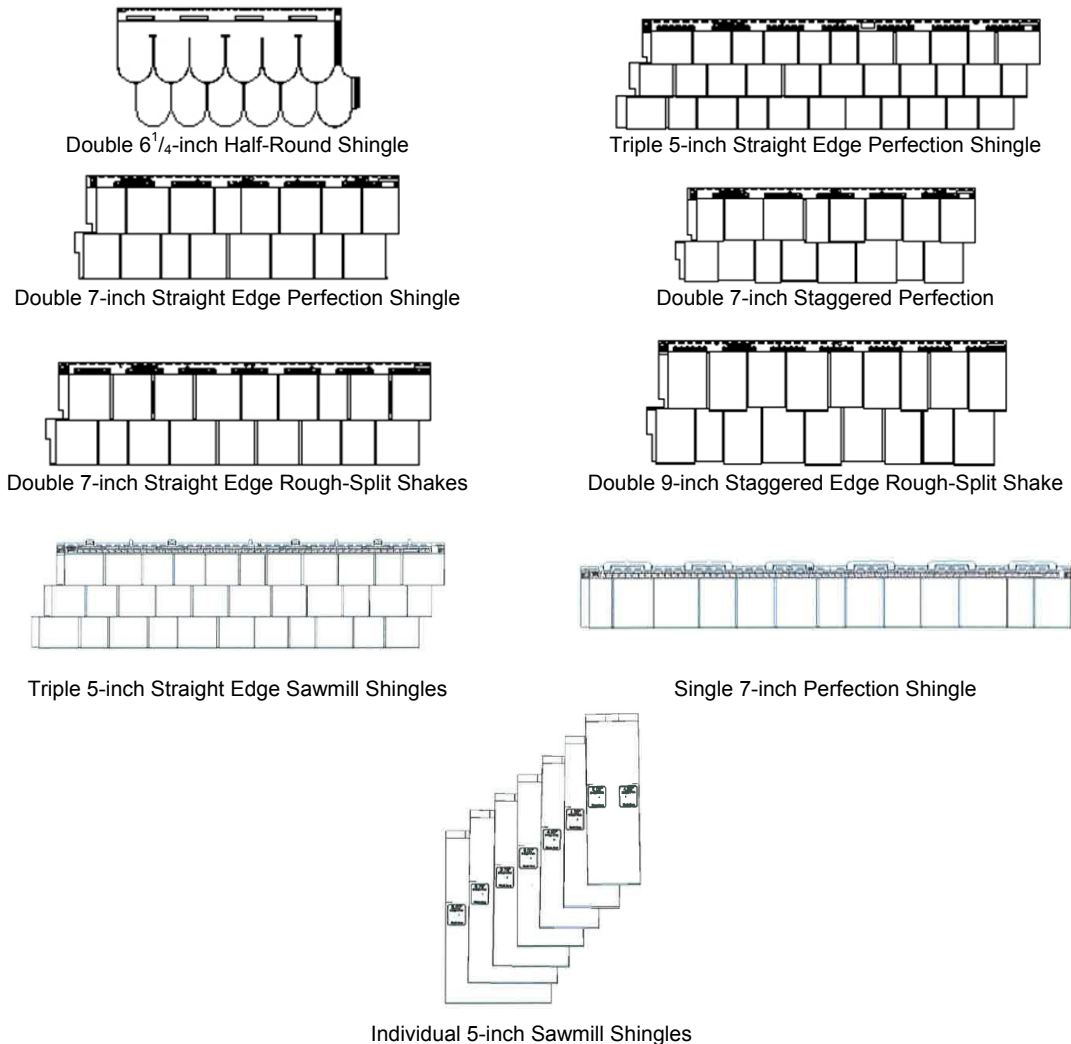


FIGURE 1—PRODUCT PROFILES

## ICC-ES Evaluation Report

## ESR-3085 CBC and CRC Supplement

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**Section: 07 46 33—Plastic Siding**

### REPORT HOLDER:

**CERTAINTEED CORPORATION**

### EVALUATION SUBJECT:

**CERTAINTEED CEDAR IMPRESSIONS® POLYMER SHAKE AND SHINGLE SIDING**

### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that CertainTeed Cedar Impressions® Polymer Shake and Shingle Sidings, recognized in ICC-ES master evaluation report ESR-3085, have also been evaluated for compliance with the codes noted below.

#### Applicable code editions:

- 2016 *California Building Code*® (CBC)
- 2016 *California Residential Code*® (CRC)

### 2.0 CONCLUSIONS

#### 2.1 CBC:

The CertainTeed Cedar Impressions® Polymer Shake and Shingle Sidings, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3085, comply with CBC Chapter 14, provided the design and installation are in accordance with the 2015 *International Building Code*® (IBC) provisions noted in the master report and the applicable provisions of the CBC.

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

#### 2.2 CRC:

The CertainTeed Cedar Impressions® Polymer Shake and Shingle Sidings, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3085, comply with CRC Chapter 7, provided the design and installation are in accordance with the 2015 *International Residential Code*® (IRC) provisions noted in the master report and the additional requirements of the CRC.

The products recognized in this supplement have not been evaluated under CRC Section R327 for use in the exterior design and construction of new buildings located in any 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 master report, reissued August 2019.

## ICC-ES Evaluation Report

## ESR-3085 FBC Supplement

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#### Applicable code editions:

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

### 2.0 CONCLUSIONS

The CertainTeed Cedar Impressions® Polymer Shake and Shingle Sidings, described in Sections 2.0 through 7.0 of the master evaluation report ESR-3085, comply with the *Florida Building Code—Building* and *Florida Building Code—Residential*, provided the design and installation are in accordance with the *International Building Code*® (IBC) provisions noted in the master report.

Use of the CertainTeed Cedar Impressions® Polymer Shake and Shingle Sidings 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 9N-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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