



Product Evaluation

EC53 | 0116

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: EC-53

Effective Date: January 1, 2016

Re-evaluation Date: November 2019

Product Name: Single Course Panelized Western Red Cedar Shingle Siding

Manufacturer: Cedar Valley Manufacturing, Inc.
943 San Felipe Road
Hollister, California 95023
Telephone: 831-636-8110

General Description:

The shingles are vertical or mixed grain Western Red Cedar tapered shingles that are installed as horizontal course panels on exterior walls. The panels are formed from shingles that are factory secured in a horizontal straight line to a 5/16" thick exterior plywood sheathing panel that has a tapered edge along the top. A layer of coated asphalt impregnated fiberglass felt is placed between the shingles and the plywood panel. The shingles are secured to the plywood panel with exterior glue and galvanized staples.

Limitations:

Shingle Panels: The shingle panels are 96" long. This evaluation report covers single course shingle panels that consist of one row of shingles.

Exposure: This evaluation report covers shingles with a 5.3", a 7-1/8", and a 14" exposure.

Coastal Panel: Shingles with either a 5.3" or a 7-1/8" exposure that are installed directly to the substrate.

Vent Panel: Shingles with a 7-1/8" maximum exposure that have a 5/16" thick x 3/4" wide x 6-1/2" long vertical cedar strip applied to the back of the shingle panels. The cedar strips are spaced 8" on center.

Mansard and Sidewall Panel: Shingles with a 14" exposure that are installed directly to the substrate. They can be installed on exterior walls and on the lower, steep sloped, side of Mansard roofs.

Design pressure rating:

Assembly	Description	Design Pressure Rating (psf)
1	Coastal Panel; Single course; 5.3" exposure; 1/2" thick butt shingle	-82.0
2	Coastal Panel; single course; 5.3" exposure; 5/16" thick butt shingle	-82.0
3	Coastal Panel; Single course; 7-1/8" exposure; 5/16" thick butt shingle	-65.9
4	Vent Panel; Single course; 7-1/8" exposure; 5/16" thick butt shingle; 5/16" thick x 3/4" wide x 6-1/2" long cedar strips applied vertically to the back of panel 8" on center.	-83.2
5	Mansard and Sidewall Panel; Single course; 14" exposure; 3/8" thick butt shingle	-76.3

Installation Instructions:**General Installation Requirements:**

The Western Red Cedar shingle panels must be installed as specified in this evaluation report and as specified in one of the following documents:

- **7-1/8" & 5.3" exposure panels:** 1 Course Blind Nail, Hurricane Nailing Instructions for 7-1/8" and 5.3" exposure panels, by Cedar Valley Manufacturing, CVAI-203 REV 1-07, Pages 1 through 2.
- **14" exposure panels:** 1 Course 14" Exposure Panels For 16" or 24" o.c. Studs or Rafters, Hurricane Nailing Instructions, CVAI-207 Rev 1/07, by Cedar Valley Manufacturing, Pages 1 through 2.

If a conflict exists between the manufacturer's specified installation instructions and this product evaluation report, then the requirements specified in this evaluation report must govern.

Assemblies 1 through 3:

Wall Framing: The wall framing must be minimum Spruce-Pine-Fir (SPF) dimensional lumber. The wall framing must be spaced a maximum of 16" on center.

Wall Sheathing: Minimum 7/16" thick APA rated OSB sheathing must be provided as the substrate for the shingle panels. The wall sheathing must be secured to the wall framing to resist the required wind design pressures.

Shingle Panel Anchorage: The shingle panels must be secured to the wall framing using D.H. Maze Company Stormguard S-227-A ring shank nails (13 Ga., 1-3/4" long, 3/8" diameter head). The fasteners must be either hot dipped galvanized or stainless steel. The fasteners must penetrate through the shingle panel, through the OSB sheathing, and into the wall framing. One fastener is required per wall stud. The fasteners must be located 1-1/2" down from the top of the shingle panel. Fastening must begin 1/2" in from one of the panel edges. The nail head should be flush with the surface of the shingle panel. Nails must not be overdriven.

The shingle panels must span at least one wall stud spacing. Vertical edge joints of the shingle panels must be staggered and land on stud.

Assembly 4:

Wall Framing: The wall framing must be minimum Spruce-Pine-Fir (SPF) dimensional lumber. The wall framing must be spaced a maximum of 16" on center.

Wall Sheathing: Minimum 7/16" thick APA rated OSB sheathing must be provided as the substrate for the shingle panels. The wall sheathing must be secured to the wall framing to resist the required wind design pressures.

Shingle Panel Anchorage: The shingle panels must be secured to the wall framing using D.H. Maze Company Stormguard S-227-A ring shank nails (13 Ga., 2-1/2" long, 3/8" diameter head). The fasteners must be either hot dipped galvanized or stainless steel. The cedar strips on the back of the shingle panel must align with the wall studs. The fasteners must penetrate through the shingle panel, through the cedar strip attached to the back of the shingle panel, through the OSB sheathing, and into the wall framing. One fastener is required per wall stud. The fasteners must be located 1-1/2" down from the top of the shingle panel. Fastening must begin 1/2" in from one of the panel edges. The nail head should be flush with the surface of the shingle panel. Nails must not be overdriven.

The shingle panels must span at least one wall stud spacing. Vertical edge joints of the shingle panels must be staggered and land on stud.

Assembly 5:

Wall or Roof Framing: The wall or roof framing must be minimum Southern Yellow Pine dimensional lumber. The wall or roof framing must be spaced a maximum of 16" on center.

Wall or Roof Sheathing: Minimum 15/32" thick APA rated plywood sheathing must be provided as the substrate for the shingle panels. The wall or roof sheathing must be secured to the wall or roof framing to resist the required wind design pressures.

Shingle Panel Anchorage: The shingle panels must be secured to the wall or roof framing using D.H. Maze Company Stormguard S-227-A ring shank nails (13 Ga., 2-1/2" long, 3/8" diameter head). The fasteners must be either hot dipped galvanized or stainless steel. The fasteners must penetrate through the shingle panel, through the plywood sheathing, and into the wall or roof framing. Two fasteners are required per wall stud or rafter. One fastener must be located 1-1/2" down from the top of the shingle panel and one fastener must be located 2" up from the bottom. Fastening must begin 1/2" in from one of the panel edges. The nail head should be flush with the surface of the shingle panel. Nails must not be overdriven.

The shingle panels must span at least one wall stud or rafter spacing. Vertical edge joints of the shingle panels must be staggered and land on stud.

Note: Keep the manufacturer's installation instructions, specified in the Installation section of this evaluation report, on the job site during the installation. All fasteners must be corrosion resistant as specified in this evaluation report and as specified in the IRC, the IBC, and the Texas Revisions.