

Product Evaluation

RC487 | 0820

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: RC-487

Effective Date: August 1, 2020

Re-evaluation Date: August 2024

Product Name: CertainTeed LLC Matterhorn/Presidio Slate, Shake, and Tile Steel Roofing Panels Installed Over a Plywood Deck

Manufacturer: Quality Edge Inc.
2712 Walkent Drive
Walker, MI 49544
(888) 784-0878

General Description:

This evaluation report is for the CertainTeed LLC Matterhorn/Presidio Slate, Shake, and Tile metal roofing panels installed over a plywood deck. The Slate and Shake profiles simulate slate roof tiles and wooden shakes. The Tile profiles simulate barrel tiles. Refer to Figures 1 and 2 for product profiles. The metal roofing panels are pressure-formed from DDS sheet steel that conforms to ASTM A 653 with a G90 galvanized coating. The products have the following dimensions:

Table 1. CertainTeed LLC Matterhorn/Presidio Slate, Shake, and Tile Steel Roofing Panels

Product	Dimensions
Slate	Nominal thickness: 0.019"; 48" wide x 22" High; Nominal 7" exposure
Shake	Nominal thickness: 0.020"; 48" wide x 22" High; Nominal 7" exposure
Tile	Nominal thickness: 0.020"; 20.89" wide x 49.12" High; Single course tile heights of 11.81"

Limitations:

Roof Framing: Install the metal roofing panels over a solidly sheathed minimum 15/32" thick plywood roof deck.

New Roof Framing Attachment: The roof framing must meet or exceed the uplift requirements of the IRC or IBC. Install the roof framing in a manner to resist wind loads as required.

Design Wind Pressures: Table 2 specifies the design pressure uplift load resistance.

Roof Slope: Install the metal roofing panels on roofs with a roof slope as low as 3:12.

Installation Over an Existing Roof Covering: Installation over an existing roof covering is not permitted. The existing roof covering must be removed. The existing roof deck must be solidly sheathed with minimum 15/32" plywood. Note: Inspection of the existing roof deck must be made prior to the installation of the roof panels. The condition of the existing roof deck must be acceptable to receive the metal roofing panels before the metal roofing panel installation proceeds. NOTE: Underlayment is required to be installed.

Table 2. CertainTeed LLC Matterhorn/Presidio Slate, Shake, and Tile Steel Roofing Panels Installed Over a Minimum 15/32" Plywood Deck

Product	Design Wind Pressure	Attachment of Roof Panel to Deck
Slate and Shake	-42.1 psf	Minimum No. 10 x 1-1/4" pan head self-drilling screws; Locate approximately 7" on center along the top fastening edge. The panels are also secured at the vertical joints using one 1-1/4" stainless steel retention clip (0.025" thickness).
Tile	-87.5 psf	Minimum No. 10 x 1-1/4" pan head self-drilling screws; Locate the fasteners in each of the 5 holes along the fastening edge of the panels.

Installation:

General: Install the metal roofing panels in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Deck: Solidly sheath the roof deck with minimum 15/32" plywood.

Underlayment: The underlayment used must comply with ASTM D 226 Type I or ASTM D 4869. Install the underlayment as required by the metal roof panel manufacturer, the IRC, and the IBC. If proprietary underlayment is used, install as required by the underlayment manufacturer.

Attachment of Metal Roof Panels to the Roof Deck: Secure the panels to the roof deck with the fastener type and spacing specified in Table 2. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck.

Panel Ends and End Laps: As required by the manufacturer.

Panel Edges: As required by the manufacturer.

Trims, Closures, and Accessories: Install components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim as required by the manufacturer.

Note: Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.

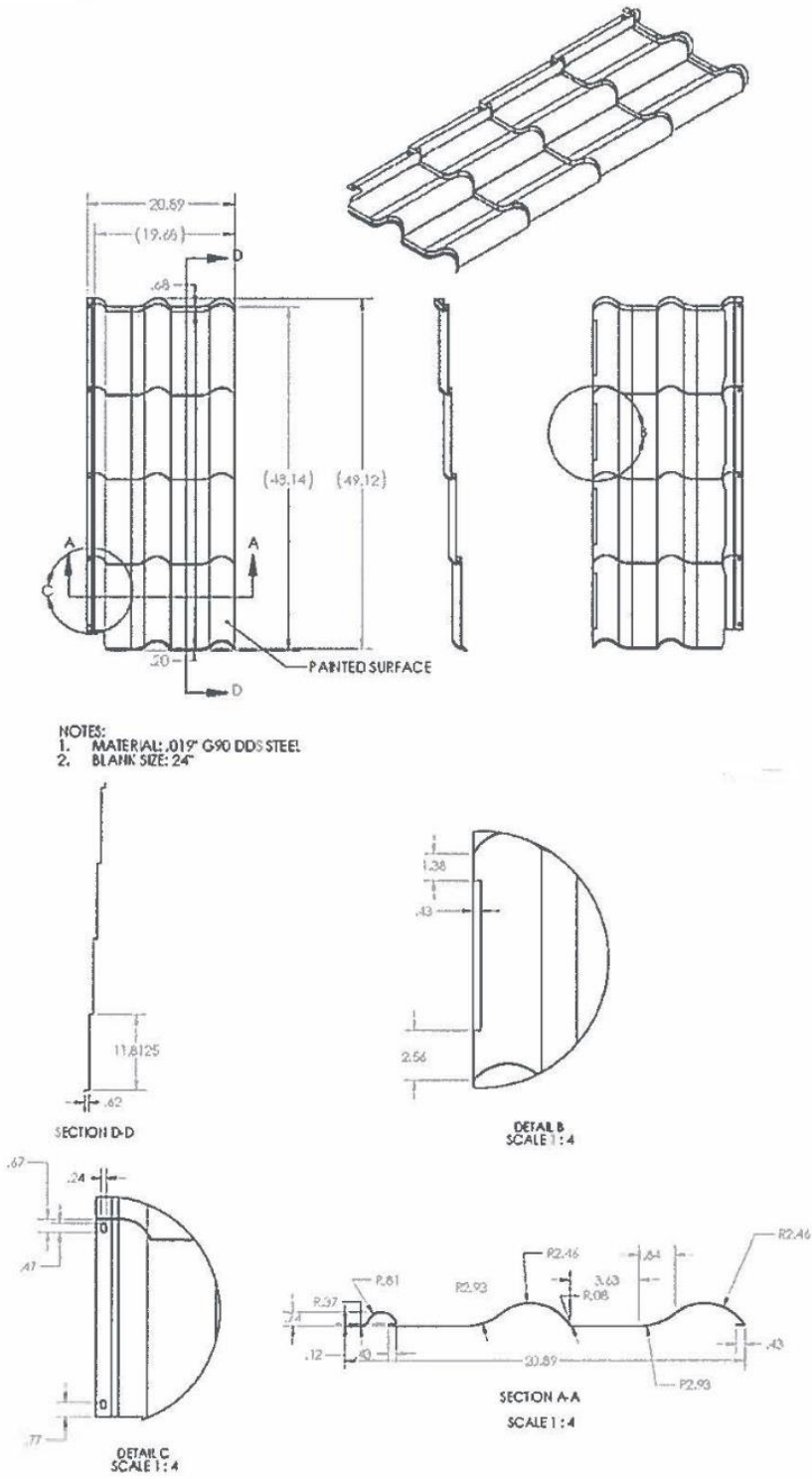


Figure 1. Tile Profile

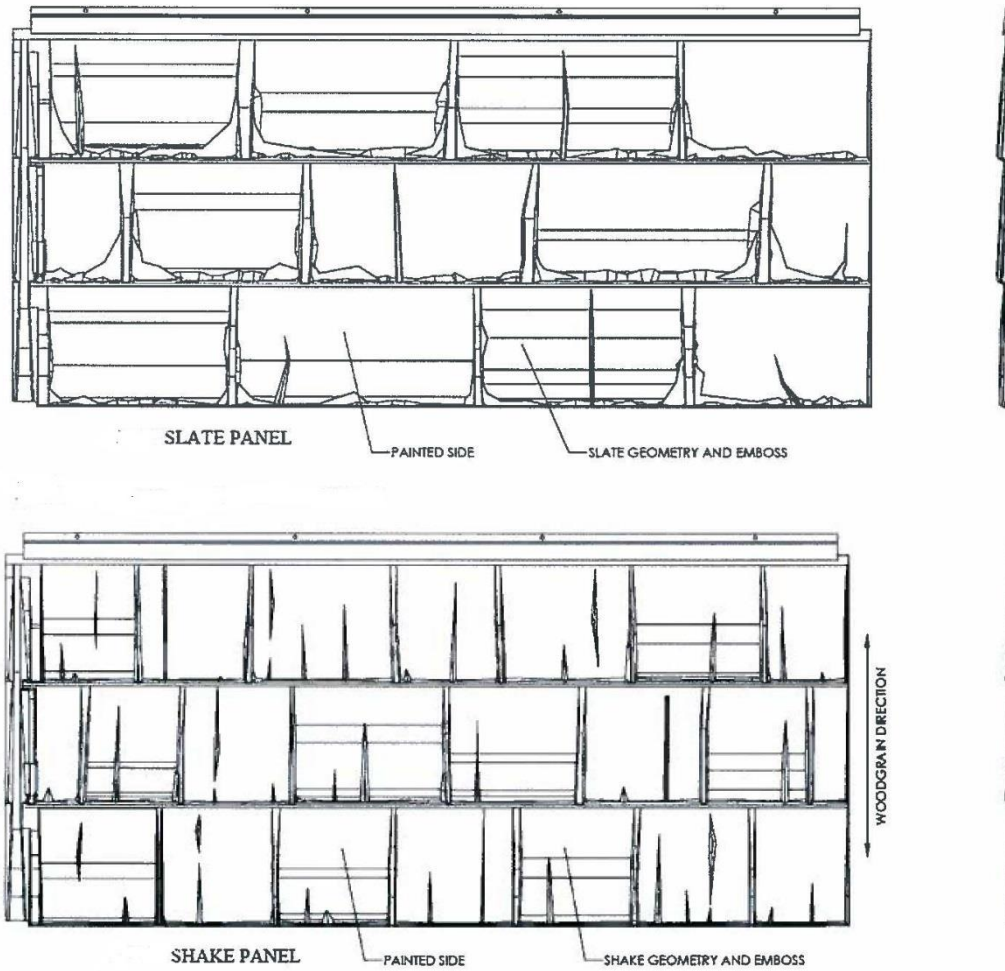


Figure 2. Slate and Shake Profile