

## Product Evaluation

EC45 | 0819

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-45

**Effective Date:** August 1, 2019

**Re-evaluation Date:** August 2023

**Product Name:** SH-401 Rustic Shake Aluminum Shingles Installed over Plywood Sheathing

**Manufacturer:** Classic Metal Roofing Systems  
8510 Industry Park Drive  
Piqua, OH 45356  
(800) 543-8938

### General Description:

The Rustic Shingle (SH-401) is a formed aluminum shingle to simulate the look of wood shakes. The Rustic Shingles are constructed of 0.019" nominal thickness aluminum with each full shingle measuring 24-15/16" in length and 12-13/16" in width. The shingles have an exposure of 24" x 12". The shingle is limited to exterior wall coverings only. The Rustic Shake Shingle does not provide lateral load resistance.

### Limitations:

**Wall Framing:** The wall studs must be spaced a maximum of 24" on center. The wall framing must be minimum SPF dimension lumber.

**Wall Sheathing:** The exterior walls must be solidly sheathed with plywood panels. The minimum required thickness of the plywood panels is 15/32".

**New Wall Framing Attachment:** The wall framing must meet or exceed the wind pressure requirements of the IRC or IBC and must be installed as required for resistance to wind loads.

**Design Wind Pressure:** -55 psf

**Installation Over an Existing Wall Covering:** Not permitted.

**Installation:**

**General:** The shingles must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

**Vapor Barrier:** A vapor barrier shall be provided.

**Starter Strip:** A 2" wide aluminum starter strip (part No. SH-412) must be installed at the base of the wall. The starter strip must be secured to the wall sheathing with aluminum ring shank nails (0.145" diameter shank, 7/16" diameter head, minimum 2" in length) spaced approximately 12" on center.

**J-Channel:** Aluminum J-Channel (part No. SH-404) that is 0.75" deep by 1.75" wide by 1.25" high, with an integral water dam and return flange, must be installed around windows, doors, and along the tops of walls. The J-Channel must be secured to the wall sheathing with aluminum ring shank nails (0.145" diameter shank, 7/16" diameter head, minimum 2" in length). The ends of the panels are inserted into J-Channel.

**Inside Corners:** Install a 1.25" by 1.25" wood block strip in the inside corner. Butt the J-Channel (SH-404) against the wood blocking strip and fasten to the wall sheathing with aluminum ring shank nails (0.145" diameter shank, 7/16" diameter head, minimum 2" in length) spaced 12" on center. The J-Channel may be installed on both sides of the wood blocking strip if needed. The base of the J-Channels should rest against the sidewall. Install the ends of the panels inside the J-Channel.

**Shingle Anchorage to Wall Framing:** The shingles are secured to the wall framing with aluminum clips (part No. C-209) and with the integrated nailing tab on the shingle.

The aluminum clips are a one-part assembly. The aluminum clips are 1-1/2" wide x 1-1/2" long x 24-gauge thickness.

A total of three (3) aluminum clips are required for each shingle. The three (3) aluminum clips are installed along the shingle's 24-15/16" length, evenly spaced (approximately 6" on center).

The aluminum clips and the integrated nailing tab on the shingle are secured to the wall framing with aluminum ring shank nails (0.145" diameter shank, 7/16" diameter head, minimum 1-3/4" in length). The fasteners must be long enough to penetrate into and through the wall framing. One aluminum nail per aluminum clip is required, placed through the center hole in the aluminum clip. One aluminum nail is required for the integrated nailing tab.

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