

## Product Evaluation

RC94 | 0220

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-94

**Effective Date:** February 1, 2020

**Re-evaluation Date:** February 2024

**Product Name:** Great American Shake Shingle, Aluminum Shingle

**Manufacturer:** Green American Home  
8510 Industry Park Drive  
Piqua, OH 45356  
(800) 543-8938

### General description:

The Great American Shake is a formed aluminum shingle to simulate the look of wood shakes. The Great American Shake shingles are constructed of 0.019" nominal thickness aluminum with each full panel measuring 24-5/8" in length and 12-13/16" in width. Along the panel's 24-5/8" long ridge side, there is a 155-degree acute upward bend return leg. Along the panel's opposite 24-5/8" long side, there is a 90-degree 1" deep downward bend. A 5/8" wide downward bend return leg fold is located along the panel's 13" wide end. Along the panel's opposite 13" wide side, there is a 5/8" wide upward bend return leg fold. The panels are secured to the roof deck using aluminum clips and fasteners.

### Limitations:

**Design Pressure:** -56 psf

**Roof Deck:** The roof deck must be solidly sheathed. The minimum required thickness of the deck must be 15/32" plywood wood structural panels.

**Roof Deck Attachment:** The roof deck must be secured to the roof framing to resist the required wind uplift design pressures.

**Installation Over an Existing Roof Covering:** Installation over an existing roof covering is limited to a maximum of one (1) existing layer of composition shingles or wood shingles or shakes. The minimum thickness of the existing roof deck must be as required for a new roof panel installation. Note: Inspection of the existing roof deck must be made before installing the roof panels. The condition of the existing roof deck must be acceptable to receive the roof panels before the roof panel installation can proceed. Note: A new underlayment installation is required when installing panels over an existing roof covering.

**Roof Slope:** The roof panels must not be installed on roofs with a roof slope less than 3:12.

### **Installation:**

#### **General Installation Requirements:**

The Great American Shake must be installed as specified in this evaluation report and as specified in the Great American Shake Installation Instructions as published by Classic Metal Roofing Systems.

**Underlayment:** A minimum of one (1) layer of No. 30 (Type II) asphalt felt must be used. The underlayment used must comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment must be installed with minimum 18" side laps and minimum 18" end laps. The underlayment must be applied with corrosion-resistant fasteners and plastic caps. One (1) row of fasteners is required in the center and one (1) row along the edges. The fasteners must be spaced a maximum of 12" on center.

**Drip edge/Starter Strip:** A drip edge/starter strip must be constructed and installed as specified in the manufacturer's installation instructions.

**Shingle Panel Anchorage:** The shingles are secured to the roof deck with aluminum clips.

The clips are a one-part assembly. The aluminum clips are 1-1/2" wide x 2-3/16" long x 0.031" in thickness. Along one end of the 1-1/2" wide side, the clip has a 1/2" long return leg. Along the opposite end, the clip has a 45-degree bend.

A total of eight (8) clips are required for each panel. Six (6) clips are required along the panel's 24-5/8" long ridge side that has the 155-degree acute upward bend return leg. The clips are evenly spaced along the side at approximately 4" on center. Along the panel's 13" wide side with the 5/8" wide upward bend return leg fold, two (2) clips are required. The clips are placed next to each other at the top end of the side.

The clips are secured to the roof deck with aluminum ring shank nails (3/16" diameter shank, 7/16" diameter head, minimum 1-3/4" in length). One nail per clip is required, through the center hole in the clip. The fasteners must be long enough to penetrate completely through the roof deck.

**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.