TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

Effective September 1, 2012

RC-94

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 shall be subject to reevaluation August 2016.

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.

Great American Shake Shingle, Aluminum Shingle as manufactured by

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will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT 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-inch nominal thickness aluminum with each full panel measuring $24\frac{5}{8}$ inches in length and $12\frac{13}{16}$ inches in width. Along the panel's $24\frac{5}{8}$ inch long ridge side, there is a 155 degree acute upward bend return leg. Along the panel's opposite $24\frac{5}{8}$ inch long side, there is a 90 degree 1 inch deep downward bend. A $\frac{5}{8}$ inch wide downward bend return leg fold is located along the panel's 13 inch wide end. Along the panel's opposite 13 inch wide side, there is a $\frac{5}{8}$ inch 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 shall be solidly sheathed. The minimum required thickness of the deck shall be $\frac{15}{32}$ " plywood panels.

Roof Deck Attachment: The roof deck shall 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 existing layer of composition shingles or wood shingles or shakes. The minimum thickness of the existing roof deck shall 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.

LIMITATIONS (Continued)

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

INSTALLATION INSTRUCTIONS

General Installation Requirements:

The Great American Shake shall 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 layer of No. 30 (Type II) asphalt felt shall be used. The underlayment used shall comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment shall be installed with minimum 18 inch side laps and minimum 18 inch end laps. The underlayment shall be applied with corrosion-resistant fasteners and plastic caps. One row of fasteners is required in the center and one row along the edges. The fasteners shall be spaced not farther apart than 12 inches on center.

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

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

The clips are a one part assembly. The clips are $1\frac{1}{2}$ " wide x $2\frac{3}{16}$ " long x 0.031" in thickness. Along one end of the $1\frac{1}{2}$ " wide side, the clip has a $\frac{1}{2}$ " 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 clips along the panel's 24 $\frac{5}{8}$ inch long ridge side that has the 155 degree acute upward bend return leg. The clips are evenly spaced along the side at approximately 4 inches on center. Along the panel's 13 inch wide side with the $\frac{5}{8}$ inch wide upward bend return leg fold, two (2) clips are required. The clips are placed next to each other at top end of the side.

The clips are secured to the roof deck with aluminum ring shank nails ($\frac{3}{16}$ " diameter shank, $\frac{7}{16}$ " diameter head, minimum 1 $\frac{3}{4}$ " in length). One nail per clip is required, through the center hole in the clip.

Note: The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.