# Product Evaluation



*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-29

**Effective Date:** February 1, 2016
**Re-evaluation Date:** December 2019

**Product Name:** Metal Roofing Tile, Shake, Canyon Shake, Barrel Vault and NB Tile

**Manufacturer:** Gerard Roofing Technologies
955 Columbia Street
Brea, CA 92821
Telephone: (714) 529-0407

**Product Description:**
The stone coated formed metal panels are fabricated from 26 gauge (0.0195" thick) coated steel. The metal roof panels measure as follows:

| Product | Panel Length (Inches) | Panel Width (Inches) |
|---|---|---|
| Tile | 45-3/4 | 15-1/2 |
| Shake | 44-3/4 | 15-1/2 |
| Canyon Shake | 45 | 16-1/2 |
| Barrel Vault | 45-1/8 | 15-1/2 |
| NB Tile | 46 | 16 |

**Limitations:**

- **Design Wind Pressure:** The design pressure is specified in each assembly installation.
- **Roof Slope:** Gerard steel roofing panels and shakes can be installed on roofs with slopes ranging from 3:12 to vertical.

**Installation Instructions:**
**General Installation Requirements:** All IRC and IBC requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

**Installation:**
**Roof deck:** Minimum 15/32" thick plywood sheathing.

**Underlayment:** A minimum of one layer of No. 30 underlayment (ASTM D226, Type II) or two layers of No.15 underlayment (ASTM D226, Type 1) with 6" laps must be nailed to the roof deck in accordance with the IRC and the IBC.

**Panels:** The metal panels are installed on nominal 2 x 2" wood battens ripped from Southern Yellow Pine lumber. The battens must be placed over the underlayment and spaced as follows:

| Product | Batten Spacing (Inches) |
|---|---|
| Tile | 14-3/8 |
| Shake | 14-9/16 |
| Canyon Shake | 13-7/8 |
| Barrel Vault | 13-1/2 |
| NB Tile | 14-1/4 |

The battens are attached to each rafter as noted in the assemblies outlined below. The fasteners are installed horizontally, through the nose of the steel panels, into the side of the battens. The panels have a 1" overlap along the tile end and a 2" overlap at the tile side to allow the tiles to interlock with the adjacent tiles.

**Assembly No. 1:**
**Design Wind Pressure:** -45 psf
The battens must be installed over the underlayment and spaced as noted above. The battens are fastened to each rafter with one 0.131" smooth shank diameter x 3-1/2" long nail. Each metal panel is fastened to the 2x2 wood batten with either four 8d x 2-3/8" long corrosion resistant ring shank nails or four #10 x 2" long corrosion resistant screws.

**Assembly No. 2:**
**Design Wind Pressure:** -75 psf
The battens must be installed over the underlayment and spaced as noted above. The battens are fastened to each rafter with one #8 x 3" long screws. Each metal panel is fastened to the 2x2 wood batten with either four 8d x 2-3/8" long ring shank nails or four #10 x 2" long screws.

**Assembly No. 3:**
**Design Wind Pressure:** -150 psf
The battens must be installed over the underlayment and spaced as noted above. The battens are fastened to each rafter with two #8 x 3" long screws. Each metal panel is fastened to the 2x2 wood batten with either seven 8d x 2-3/8" long corrosion resistant ring shank nails or seven #10 x 2" long corrosion resistant screws.

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