TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective May 1, 2011
RC-282 Revised February 1, 2014

*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 **June 2015**.*

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.

DECRA Villa Tile lightweight steel shingles manufactured by

DECRA Roofing Systems, Inc.
1230 Railroad Street
Corona, CA 92882
(951) 272-8180

will be acceptable 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 DECRA Villa Tile panels measure 44 $\frac{3}{4}$" inches long by 17 inches wide with installed expose of 39 $\frac{3}{8}$" inches long by 14.5". The lightweight steel roofing panels are pressure formed, 26 gauge, and 55% aluminum-zinc alloy coated steel. The steel is coated with corrosion-inhibiting acrylic primer, an acrylic resin base coat, an embedded stone granule surface, and a clear acrylic resin binder. Ridge, gable, rake, and hip trim pieces are constructed similar to the panels. Flashing pieces are made from the same material as the panels, but may or may not have the stone granule coating. The panels are installed directly to the roof deck.

LIMITATIONS

Roof Decking: A minimum of $\frac{15}{32}$ inch thick plywood sheathing.

New Roof Deck Attachment: The roof decking shall meet or exceed the uplift requirements of the International Residential Code or International Building Code and shall be installed as required for resistance to lateral wind loads.

Design Wind Pressures: The design pressure uplift load resistance shall be as specified in Table 1.

Table 1

System	Design Wind Pressure
1	-52.5 psf
2	-76.5 psf

Installation Over an Existing Roof Covering: Installation over an existing roof covering is limited to a maximum of one existing layer of composition shingles, built-up roofing, or roll roofing applied over an existing, solid roof deck. The minimum thickness of roof deck shall be as required for a new metal roof installation. 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. A layer of underlayment over the existing roof covering is not required.

For all Applications: Decra shingle panels shall not be installed on roof slopes less than 3:12.

INSTALLATION INSTRUCTIONS

General: The metal roofing panels shall be installed in accordance with the manufacturer's recommended installation instructions and this product evaluation report.

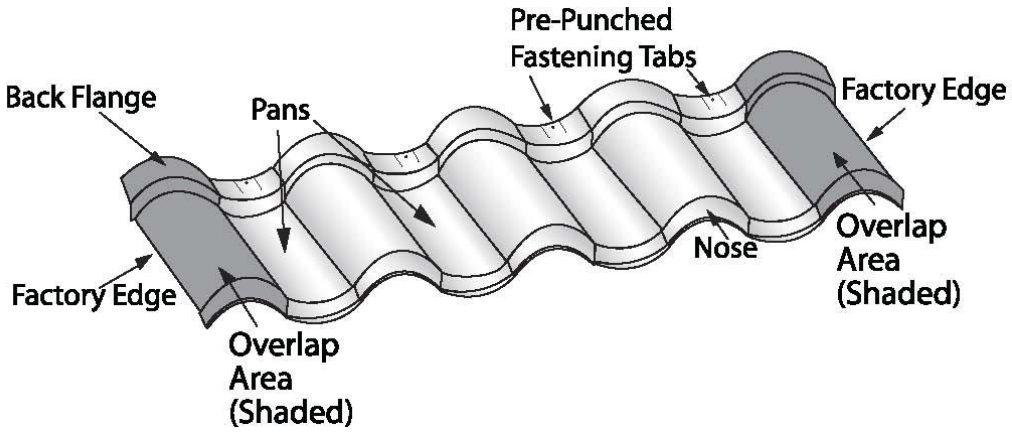
Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt shall be used. The underlayment used shall comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment shall be installed with 6-inch side laps and 3-inch end laps. The underlayment shall be applied with corrosion-resistant fasteners in accordance with the manufacturer's installation instructions. Fasteners shall be applied along the overlaps not farther apart than 36 inches on center.

Attachment of Metal Roofing Panels to Roof Deck: The metal roofing panels shall be secured to the roof deck as follows:

System 1: The steel panels are installed with a 5 3/8 inch side lap and are interlocked in the vertical position with the course below. The shingles are attached to the plywood deck with No. 8 by 1 ½" long hex head steel screws placed with one screw per fastening tab for a total of four fasteners per panel length (Figure 1).

System 2: The steel panels are installed with a 5 3/8 inch side lap and are interlocked in the vertical position with the course below. The shingles are attached to the plywood deck with No. 12 by 1 ½" long hex head steel screws placed with one screw per fastening tab for a total of four fasteners per panel length (Figure 1).

Figure 1:



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.