

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION RC-235

Effective January 1, 2012  
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 **January 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.*

**DECRA Shake XD and DECRA Shingle XD** 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 Shake XD and DECRA Shingle XD are identical except for the embossed pattern and color of the exposed surface of the stone coated steel shingle. DECRA Shake XD and DECRA Shingle XD panels measure 52-1/2 inches long by 14-1/8 inches wide. 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

**For all Applications:** Do not install the product on roof slopes less 3:12.

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

**Underlayment:** One layer of ASTM Type II or D4869 Type IV roofing felt with sufficient fasteners to hold it down until the steel roofing panels can be installed.

**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.

## INSTALLATION INSTRUCTIONS

### Assembly No. 1

**Design Pressure: -78.5 psf**

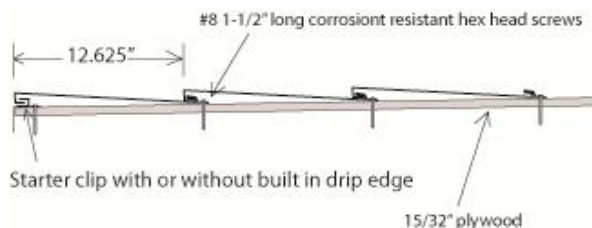
The steel panels are installed with a  $2\frac{3}{4}$  inch side lap and are interlocked in the vertical position with the course below (Figure 1). The shingles are attached to the plywood deck with No. 8 by 1-1/2" long hex head steel screws spaced 10 inches on center with one screw per shingle fastening location for a total of five fasteners per shingle length.

### Assembly No. 2

**Design Pressure: -153.5 psf**

The steel panels are installed with a  $2\frac{3}{4}$  inch side lap and are interlocked in the vertical position with the course below (Figure 1). The shingles are attached to the plywood deck with No. 8 by 1-1/2" long hex head steel screws spaced 5 inches on center with one screw per shingle fastening location for a total of ten fasteners per shingle length.

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.