

# TEXAS DEPARTMENT OF INSURANCE

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**PRODUCT EVALUATION**  
RC-362

Effective February 1, 2013

*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 **February 2017**.*

*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.*

**5V Crimp 29 gauge Metal Roof Panels** manufactured by

**Southeastern Metals Manufacturing Company (SEMCO)**  
11801 Industry Drive  
Jacksonville, Florida 32218  
(904) 757-4200

and

**Dot Metals**  
18757 Bracken Drive  
San Antonio, TX 78266  
(800) 331-9966

is acceptable in designated catastrophe zones along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

The 5V Crimp roof panel is an exposed fastened metal roof panel. The metal roof panels are manufactured from 29 MSG minimum coated steel,  $F_y = 50$  ksi, and has 24" wide coverage with  $\frac{7}{16}$ " corrugations.

## LIMITATIONS

**Design Wind Pressures:** For installations to nominal  $\frac{15}{32}$  inch plywood roof decks, design wind pressure limitations are specified in Table 1.

**Installation Over an Existing Roof Covering:** Installation over an existing roof covering is not covered in this product evaluation report.

**Roof Slope:** The 5V Crimp panels shall not be installed on roofs with a roof slope less than 3:12.

**Roof Framing Members:** The roof framing members shall be spaced a maximum of 24 inches on center.

## INSTALLATION INSTRUCTIONS

**General Installation Requirements:** All International Residential Code (IRC) and the International Building Code (IBC) requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

**Table 1**

Attachment of 29 gauge 5V Crimp Panel to minimum  $1\frac{5}{32}$  inch plywood roof decks

System	Design Wind Pressure (psf)	Attachment to Plywood
1	-71	Fasteners spaced 16" o.c.
2	-93.5	Fasteners spaced 12" o.c.

**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 felt shall be installed with 6 inch side laps and 3 inch end laps. The felt shall be fastened to the roof deck 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 Panels to Wood Deck:** 5V Crimp panels are fastened to the roof deck with No. 9-15 x  $1\frac{1}{2}$ " inch long HWH wood screws with  $\frac{1}{2}$ " diameter sealing washer. The fasteners are installed through the panel rib at the spacing specified in Table 1. Refer to Figures 1 and 2 for panel fastener pattern. Refer to Figure 3 for panel lap detail.

**Trims, Closures, and Accessories:** Components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim shall be installed as required by the manufacturer.

**Panel Ends and End Laps:** As required by the manufacturer.

**Panel Edges:** As required by the manufacturer.

**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.

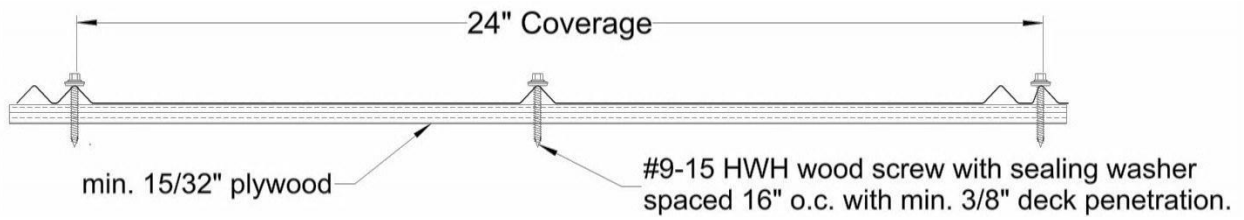


Figure 1: 5V Crimp Panel Fastener Pattern for System 1

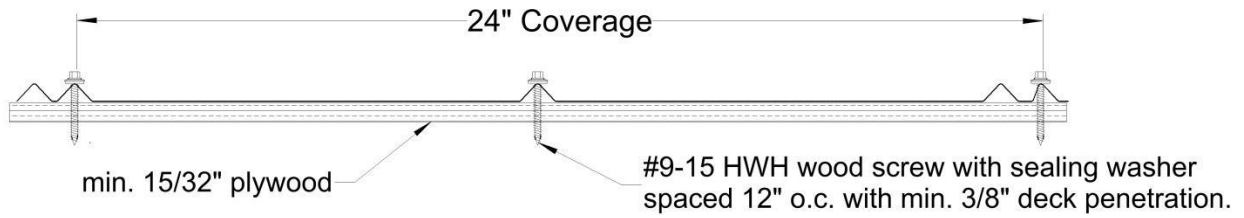


Figure 2: V Crimp Panel Fastener Pattern for System 2

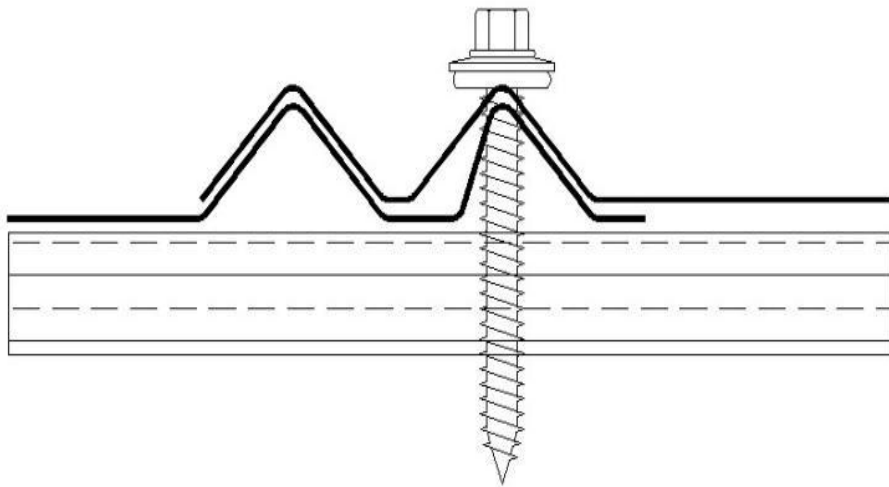


Figure 3: 5V Crimp Panel Lap Detail