

TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION
RC-321

Effective Date: February 1, 2012
Revised March 1, 2012

*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 in **February 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.

.040" Snap-Clad Aluminum Standing Seam Metal Roof Panels Installed Over Plywood Deck,
manufactured by

Petersen Aluminum Corporation
1005 Tonne Road
Elk Grove Village, IL 60007
(800) 441-8661

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

PRODUCT DESCRIPTION

The Snap-Clad roof panel is a 0.040" thick aluminum panel that has a snap together seam. The panel has an effective width of 16". The alloy used is 3003-H14.

LIMITATIONS

Roof Decking: The metal roof panels shall be installed over a minimum of $\frac{19}{32}$ " thick plywood decking.

New Roof Deck Attachment: The roof decking shall meet or exceed the uplift requirements of the International Residential Code and International Building Code, and the decking shall be installed in a manner to resist lateral loads.

Design Wind Pressures: For installations to minimum $\frac{19}{32}$ " thick 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 permitted.

Roof Slope: The panels shall not be installed on roofs with a roof slope less than 2:12 or on roof slopes greater than 8:12.

Table 1
Attachment of 16" wide 0.040" Aluminum Roof Panel
to minimum 1⁹/₃₂" Plywood Deck

System	Design Pressure (psf)	Panel Seam	Panel Clip	Clip Spacing	Clip Fastener
1	-94.9	Snap-Clad	18 gauge, 3 1/2" wide Snap Clad Stainless Steel Clip	6"	(2) #10-12 x 1" A-point stainless steel screws
2	-87.1	Snap-Clad	18 gauge, 3 1/2" wide Snap Clad Stainless Steel Clip	12"	(2) #10-12 x 1" A-point stainless steel screws
3	-83.0	Snap-Clad	18 gauge, 3 1/2" wide Snap Clad Stainless Steel Clip	18"	(2) #10-12 x 1" A-point stainless steel screws

INSTALLATION INSTRUCTIONS

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

Deck: The roof deck shall be solidly sheathed with minimum 1⁹/₃₂" plywood.

Underlayment (Systems 1-2): 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 4 inch side laps and 6 inch end laps. The underlayment shall be applied with corrosion resistant tin caps and minimum 12 gauge 1 1/4" annular ring shank nails. The fasteners shall be spaced 6 inches on center at all end laps and two staggered rows 12 inches on center in the field.

Alternative Underlayment (System 3): A minimum of one layer of 40 mil W.R. Grace Ice and Water Shield self-adhered underlayment or other equivalent self adhering underlayment complying with ASTM D 1970 applied over the plywood deck.

Anchorage to Roof Decking: The metal roof panels shall be fastened in accordance with Table 1. The metal roofing panels shall be secured to the roof deck with an 18 gauge formed stainless steel clip, measuring 3 1/2" wide by 1 7/8" high. The clips are located at panel ends and are spaced either 12 or 18 inches on center in accordance with Table 1. The clips are secured with two (2) #10-12 x 1" A-point stainless steel screws. The screws must penetrate the sheathing a minimum of 3/16". The female rib of the panel is snapped over the male rib.

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 available 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.