

TEXAS DEPARTMENT OF INSURANCE

Engineering Services / 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-289

Effective June 1, 2011

*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.

R-Panel Metal Roof Panels Installed Over Steel Purlins manufactured by:

Wheeling Corrugating Company
1134 Market Street
Wheeling, West Virginia 26003-2971
(304) 234-2345

are accepted for use 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

R-Panel is manufactured from 26 gauge, Grade 80 coated steel conforming to ASTM A653 with a minimum yield strength of 80,000 psi. Panels are available in galvanized or baked-on siliconized polyester or Kynar colors over galvanized steel. The panels are manufactured in a 36 inch net coverage width with 1-1/4 inch deep ribs at 12 inches on center.

LIMITATIONS

Roof Framing: The metal roofing panels shall be installed over minimum 16 gauge steel purlins.

New Roof Framing Attachment: The roof framing 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 wind loads.

Design Wind Pressures: The design pressures shall be as specified in Table 1.

Installation Over an Existing Roof Covering: Not permitted.

Roof Slope: The R-Panels shall not be installed on roofs with a roof slope less than 1:12.

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.

Panel Installation Requirements

Panels: Panels shall be attached in accordance with Table 1.

Table 1

26 Gauge R-Panel, 36" Wide Metal Panels Over
Minimum 16 gauge Steel Purlins

Design Pressure (psf)	Purlin Spacing (feet)	Fastener Type
-100.9	2'-6"	No. 10-16 x 1" self drilling screws with self sealing washers
-85.9	3'-0"	No. 10-16 x 1" self drilling screws with self sealing washers
-70.9	3'-6"	No. 10-16 x 1" self drilling screws with self sealing washers
-55.9	4'-0"	No. 10-16 x 1" self drilling screws with self sealing washers

Underlayment: N/A.

Anchorage:

To 16 Gauge Steel Purlins: The panels shall be fastened to each purlin in accordance with the fasteners in Table 1. Each of the fasteners is located on the bottom flat along one side of each major rib, except the panel side overlap, eaves, rake edges, ridges and panel end overlap where fasteners are located on the bottom flat adjacent to both sides of each major rib. The fasteners shall be long enough to ensure a minimum penetration of 3 threads below the steel framing.

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.