

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION RC-290

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.

Barnmaster® Metal Panels (26 gauge) manufactured by:

Wheeling Corrugating Company
1134 Market Street
Wheeling, West Virginia 26003-2971
(304) 234-2619

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

Barnmaster® metal panels are manufactured from 26 gauge, Grade 80 coated steel conforming to ASTM A653 with a minimum yield strength of 80,000 psi. The steel roofing panels have a 2.66 inch pitch by ½ inch deep corrugated profile. The panels have a 21.34 inch net cover width.

LIMITATIONS

Design Wind Pressures: For installations to 15/32" thick plywood roof decks, design wind pressure limitations are specified in Table 1.

Roof Slope: The Barnmaster® panels shall not be installed on roofs with a roof slope less than 3:12.

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)

Attachment of Barnmaster® Panel to $\frac{15}{32}$ inch plywood structural panel roof decking:

Wind Pressure (psf)	Fastener Type	Up Slope Fastener Spacing
-63.5	No. 9-15 x $1\frac{1}{2}$ " long sharp point HWH woodgrip screws with $\frac{1}{2}$ " diameter galvanized seal washer	24" 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 4 inch side laps and 4 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.

Anchorage:

To Roof Decking: The panels shall be fastened in accordance with Table 1. All fasteners shall be located at the crest of the ribs. Each panel shall have a fastener located at each panel side overlap and a fastener located at every fourth rib (center rib) except at eaves, rake edges, ridges and panel overlap where fasteners are located at the panel sidelap and every other rib. The fasteners shall be long enough to penetrate completely through the wood structural panels with a minimum exposure of $\frac{3}{16}$ inch below the underside of the wood structural panels.

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.