

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION RC-197

Effective August 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 **August 2018**.*

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.

Magna-Loc Metal Roof Panel manufactured by

Metal Sales Manufacturing Corporation
7800 State Road 60
Sellersburg, IN 47172
(812) 246-1866

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

Magna-Loc roof panels are minimum 24 gauge (0.024" thick) aluminum-zinc alloy-coated steel with a Galvalume or painted finish. The panel width is 16" and covers 16". Panel side lap ribs are 2" high.

LIMITATIONS

Design Wind Pressures: For installation to nominal $\frac{5}{8}$ " plywood roof decks. Design wind pressure limitations are specified in Table 1.

Roof Slope: Magna-Loc roof panels shall not be installed on roofs with a roof slope greater than $\frac{1}{2}$:12, unless minimum No. 30 (Type II) asphalt felt underlayment is installed under the panels. Magna-Loc roof panels shall not be installed on roofs with a roof slope less than $\frac{1}{2}$:12 and greater than or equal to $\frac{1}{4}$:12, unless Metal Sales Hi-Temp (MS-HT) underlayment is installed underneath the panels. Magna-Loc roof panels shall not be installed on roofs with a roof slope less than $\frac{1}{4}$:12. Magna-Loc roof panels must be installed in accordance with the Magna-Loc Metal Roof Panel Details and the IRC, Section R905.10.2, or the IBC, Section 1507.4.2.

INSTALLATION INSTRUCTIONS

General Installation Requirements:

The installation of the panels shall be limited to extending one to two inches beyond the plane of the fascia board.

All IRC and IBC requirements must be satisfied and the Magna-Loc Metal Roof Panel Details followed, unless otherwise specified by this product evaluation.

PANEL INSTALLATION REQUIREMENTS

Panels: Panels shall be attached and secured to the roof deck in accordance with Table 1. Refer to the Magna-Loc Metal Roof Panel Details for an illustration of the fastening pattern.

TABLE 1

Attachment of 24 gauge, 16" Magna-Loc roof panels to plywood roof decking:

Wind Pressure (psf)	Attachment of Roof Panel to $\frac{5}{8}$ " thick plywood deck
-99	Clips spaced 2'-6" o.c.
-104	Clips spaced 1'-3" o.c.
-114	Clips spaced 1'-0" o.c.
-127	Clips spaced 0'-8" o.c.

Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt underlayment shall be used. The underlayment shall comply with one or more of the following: ASTM D 226 or ASTM D 4869 if used over the field or perimeter of the roof, or ASTM D 1970 if Metal Sales Hi-Temp (MS-HT) is used. The felt shall be installed with 6 inch side laps and 3 inch end laps. The nailable 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: The panels shall be fastened with clips and two #12-11 x 1 $\frac{1}{2}$ " square drive, low profile, wood screws spaced in accordance with Table 1 to nominal (minimum) $\frac{5}{8}$ " plywood roof decking. The panels shall be fastened along the rake at 6" o.c. with the #9-15 x 1 $\frac{1}{2}$ " woodscrews screws. The panel side overlaps shall be mechanically seamed to 90 degrees. Panel woodscrews and clip wood screws shall be corrosion resistant, with a painted or plated finish, and shall be properly driven, so that the sealing material is slightly visible at the edge of the washer.

Ridge Cap and Rake Trim: The ridge cap and the rake trim shall be attached to the panels with the $\frac{1}{4}$ "-14 x $\frac{7}{8}$ " stitch screws at 12" o.c. as indicated in the Magna-Loc Metal Roof Panel Details. Elastic butyl tape sealant is required at the panel end laps and trim.

Note: The Magna-Loc Metal Roof Panel Details 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.