

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION RC-337

Effective Date: July 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 **December 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.

UltraLok Metal Roofing Panels Installed Over Steel Purlins, manufactured by

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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

This evaluation report is for UltraLok metal roofing panels installed over steel purlins. The metal roofing panels are 24 gauge Galvalume coated steel. The metal roofing panels have 16 inches (max) of coverage. The metal roofing panels have a 2" rib height. The metal roofing panels conform to ASTM A792, SS Grade 50 Class 1, with a minimum yield strength of 50 ksi. The metal roofing panels can be furnished painted over an AZ 50 hot-dipped aluminum zinc alloy coating or an acrylic-coated Galvalume steel with an AZ 55 hot-dipped aluminum zinc alloy coating. The metal roofing panels can be painted with silicone polyester products or with Kynar paint systems.

LIMITATIONS

Roof Framing: The metal roofing panels shall be installed over open steel purlins using clips secured to the purlins with fasteners.

New Roof Framing Attachment: The roof framing shall meet or exceed the wind pressure 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 pressure negative wind load resistance shall be as specified in Table 1 and Table 2.

Installation Over an Existing Roof Covering: Not permitted.

Table 1
UltraLok TripleLok Seam (16 ga. minimum purlins)

Span of 24 Ga. UltraLok panels to purlins	Design Load (psf)
2'-0" o.c.	-136.4
2'-6" o.c.	-123.1
3'-0" o.c.	-109.8
3'-6" o.c.	-96.50
4'-0" o.c.	-83.20
4'-6" o.c.	-69.90
5'-0" o.c.	-56.60

Table 2
UltraLok QuadLok Seam (16 ga. minimum purlins)

Span of 24 Ga. UltraLok panels to purlins	Design Load (psf)
2'-0" o.c.	-191.2
2'-6" o.c.	-172.5
3'-0" o.c.	-153.7
3'-6" o.c.	-135.0
4'-0" o.c.	-116.3
4'-6" o.c.	-97.50
5'-0" o.c.	-78.80

INSTALLATION INSTRUCTIONS

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

Steel Purlins: The minimum thickness of steel and the maximum spacing of the purlins shall be as specified in Tables 1-2.

Underlayment: N/A

Attachment of Metal Panels to the Steel Purlins: The metal roofing panels shall be secured to the steel purlins using fixed or floating clips and 1/4-14 x 1" long Type AB point, self-drilling, self-tapping hex-washer-head plated or stainless steel screws. A line of clips shall be located along each steel purlin. The spacing of the clips shall be as specified in Tables 1-2. Two fasteners are required per clip. The fasteners shall be long enough to ensure a minimum penetration of 3 pitches of thread below the steel purlin. Refer to Figure 1 in this evaluation report.

Panel Side Laps: Ribs to be seamed with an electric or hand seaming tool to form a flange with a tight hem. The seaming process should include the upper portion of the Panel Clips.

Panel Ends and End Lap: Fasteners used at end lap to be one of the following: 1/4-14 x 1" long Type AB point, self-drilling, self-tapping hex-washer-head plated or stainless steel screws or No. 12-14 x 1-1/4" long self-drilling self-tapping hex-washer-head plated steel screws. Spacing shall be a 1, 3, 4, 4, 3 inch pattern.

Panel Edges to the Steel Purlins: Panel clip-to-purlin attachment to be No. 1/4-14 x 1" long self drilling, self-tapping hex-washer-head plated steel screws. Two fasteners used per clip.

Trims, Closures, and Accessories: Components, such as the end dams, termination zees, eave trim, rake trim, ridge trim, hip trim, and valley trim shall be installed 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.

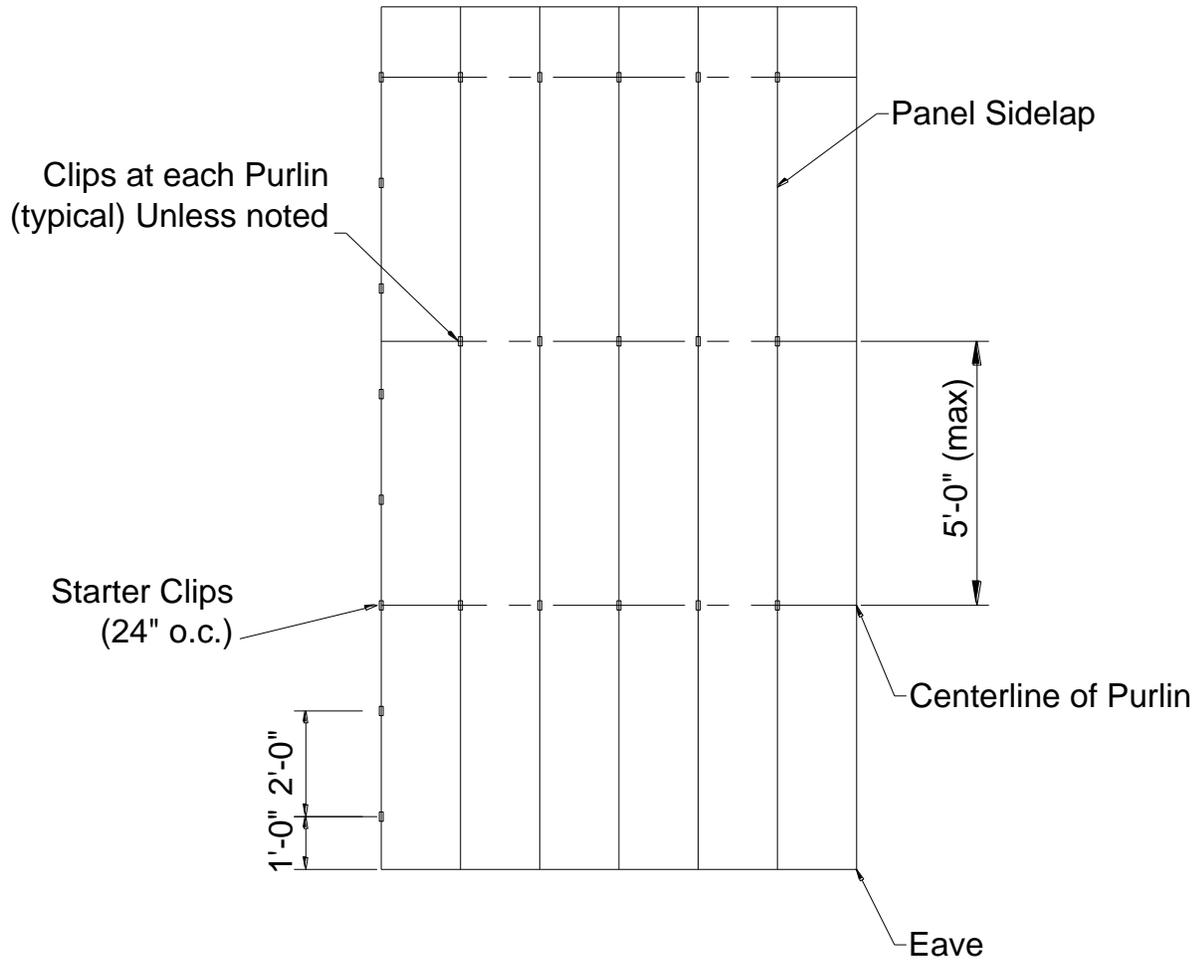


Figure 1. Clip Spacing for UltraLok Roof Panel

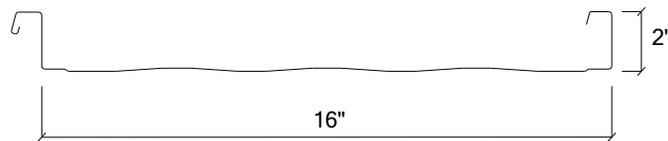


Figure 2. UltraLok Roof Panel Profile