

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION RC-413

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 in **January 2017**.*

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.

Aluminum Canopy Roof Deck Over Steel Purlins manufactured by:

Bonnell Aluminum Products
7815 American Way
Groveland, FL 34736
Telephone: (352) 757-7766

Distributed by:

Jones Aluminum
9805 Mallut Road
Beaumont, Texas 77713
Telephone: 409-866-5585

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 roof deck is comprised of two parts: the bottom piece: WLB-576 6063-T6 Aluminum 2.675" x 6.078" x 0.078". The top piece: WLB-578 6063-T-6 aluminum, 1.830" X 6.078" X 0.078". The top piece snaps into the bottom piece.

LIMITATIONS

Roof Framing: The roof deck shall be installed over open 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. The roof deck assembly is to be installed in accordance this evaluation report and Drawing S1.1, Rev. A, which was signed and sealed, on May 20, 2014, by Mr. Terrence Wolfe, P.E., which is to be referred to in the future as the drawing.

Design Wind Pressures: The design pressure uplift shall be as specified in Table 1 of this evaluation.

Installation over an Existing Roof Covering: Not permitted.

Table 1
Attachment of Roof Deck
to Steel Purlins

Design Wind Pressure (psf)	Total Deflection (in.)	Design Notes	Purlins	Attachment of Deck to Steel Purlins
-67.55	2.95	(1)	Minimum 16 gauge; 12'-0" on center	Three fasteners at each end 1-5/16" on center
-103.95	1.29	(2)	Minimum 16 gauge; 10'-0" on center	Three fasteners at each end 1-5/16" on center
-150.75	1.38	(2) & (3)	Minimum 16 gauge; 8'-0" on center	Six fasteners at each end 7/8" on center
-100.0	1.89	(2) & (3)	Minimum 16 gauge; 10'-0" on center	Three fasteners at each end 1-5/16" on center
-57.20	2.47	(1)	Minimum 16 gauge; 12'-0" on center	Three fasteners at each end 1-5/16" on center

Notes:

1. Drain Beam Deflection was not deducted In full scale testing.
2. Roof Deck Assembly was tested over structural beam.
3. Roof deck assembly was tested as a simple span condition.

INSTALLATION INSTRUCTIONS

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

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

Underlayment: NA.

Attachment of Roof Deck to Steel Purlins: The roof deck shall be secured to the steel purlins with No. 12-24 x 1-1/2" long HWH TEK 5 with bonded washer. A line of fasteners shall be located along each purlin. The fastener pattern and the spacing of the fasteners shall be as specified in Table 1. The fasteners shall be long enough to ensure a minimum penetration of 3 pitches of thread below the steel purlin.

Eave and Rake: The eave and rake details are shown on the drawing.

Note: The manufacturer's installation instructions and the drawing 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.