

Product Evaluation

EC96 | 0422

Engineering Services Program

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 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.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: EC-96

Effective Date: April 1, 2022

Re-evaluation Date: April 2026

Product Name: Minimum 29-gauge Steel PBR Wall Panels Installed over Steel Girts

Manufacturer: Metal Building Components, Inc. (MBCI), L.P., a division of NCI, L.P.
14031 West Hardy
Houston, TX 77060
(281) 445-8555

General Description:

The PBR wall panels are minimum 29-gauge steel panels. The steel wall panels have a maximum 36" of coverage. The steel wall panels have a 1-1/4" rib height. The ribs are 12" on center. The steel wall panels are Galvalume steel with a minimum yield strength of 80,000 psi for the 29-gauge and the 26-gauge panels and a minimum yield strength of 50,000 psi for the 24-gauge and 22-gauge panels.

Limitations:

Wall Framing: The steel wall panels must be installed over open steel girts.

New Wall Framing Attachment: The wall framing must meet or exceed the wind pressure requirements of the IRC or IBC and must be installed as required for resistance to wind loads.

Design Wind Pressures: The design pressure load resistance must be as specified in Table 1.

Table 1

Attachment of Steel PBR Wall Panels to Steel Girts

System	Panel Thickness	Design Wind Pressure	Girts	Attachment of Panel to Steel Girts
1	29-gauge	-55.0 psf	Minimum 16-gauge; 4'-0" on center	Fasteners; 12"-12"-12" pattern
2	26-gauge	-80.0 psf	Minimum 16-gauge; 4'-0" on center	Fasteners; 12"-12"-12" pattern
3	24-gauge	-90.0 psf	Minimum 16-gauge; 4'-0" on center	Fasteners; 12"-12"-12" pattern
4	22-gauge	-142.5 psf	Minimum 16-gauge; 4'-0" on center	Fasteners; 12"-12"-12" pattern

Installation:

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

Steel Girts: The minimum thickness of the steel and the maximum on center spacing of the girts must be as specified in Table 1.

Attachment of Steel Wall Panels to the Steel Girts: Secure the panels to the steel girts with 1/4-14 x 1-1/4" HWH with Ultimate Long Life Head self-driller screws with EPDM washers, manufactured by Atlas Bolt & Screw, LLC. The fastener pattern is as specified in Table 1. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the girts.

Panel Ends and End Laps: Secure the panels to the steel girts with 1/4-14 x 1-1/4" HWH with Ultimate Long Life Head self-driller screws with EPDM washers, manufactured by Atlas Bolt & Screw, LLC. The fastener pattern is as specified in Table 1. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the girts.

Panel Side Laps: One (1) 1/4-14 x 7/8" HWH with Ultimate Long Life Head self-driller screws with EPDM washers, manufactured by Atlas Bolt & Screw, LLC. Fasteners spaced a maximum of 20" on center.

Trims, Closures, and Accessories: Components, such as trims, closures, and accessories must be installed as required by the manufacturer.

Note: Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.