



Product Evaluation

EC82| 1116

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-82

Effective Date: November 1, 2016

Re-evaluation Date: November 2020

Product Name: FW-12 Steel Wall Panels Installed over Steel Girts

Manufacturer: Berridge Manufacturing Company
6515 Fratt Road
San Antonio, TX 78218
(210) 650-3050

General Description:

The FW-12 wall panels are steel wall panels. The metal wall panels require either a seam lock feature or panel side laps to resist panel disengagement. The metal wall panels have a maximum 12" of coverage. The metal wall panels have a 1-1/2" rib height. The metal wall panels are Grade 40 with a minimum yield strength of 40,000 psi.

Limitations:

Wall Framing: The metal 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 and Table 2.

Table 1

Attachment of minimum 22-gauge steel FW-12 wall panels to steel girts

| System | Design Wind Pressure | Panel Seam Disengagement | Girts | Attachment of Panel to Steel Girts |
|--------|----------------------|--------------------------|--------------------------------------|------------------------------------|
| 1 | -70.0 psf | Panel Side Lap Fasteners | Minimum 16-gauge; 5'-0" on center | Two fasteners |
| 2 | -100.0 psf | Panel Side Lap Fasteners | Minimum 16-gauge; 2'-0" on center | Two fasteners |

Table 2

Attachment of minimum 24-gauge steel FW-12 wall panels to steel girts

| System | Design Wind Pressure | Panel Seam Disengagement | Girts | Attachment of Panel to Steel Girts |
|--------|----------------------|--------------------------|--------------------------------------|------------------------------------|
| 3 | -31.2 psf | Seam Lock Feature | Minimum 16-gauge; 5'-0" on center | Two fasteners |
| 4 | -67.6 psf | Seam Lock Feature | Minimum 16-gauge; 2'-0" on center | Two fasteners |
| 5 | -45.0 psf | Panel Side Lap Fasteners | Minimum 16-gauge; 5'-0" on center | Two fasteners |
| 6 | -65.0 psf | Panel Side Lap Fasteners | Minimum 16-gauge; 2'-0" on center | Two fasteners |

Installation:

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

Steel Girts: Berridge Manufacturing Company steel "CEE," "ZEE," or "HAT Section" girts. The minimum thickness of the steel and the maximum spacing of the girts must be as specified in Table 1 and Table 2.

Attachment of Metal Wall Panels to the Steel Girts: The metal wall panels must be secured to the steel girts as follows:

Systems 1 and 2: Two 1/4-14 x 1" DP3 screws manufactured by Triangle Fastener Corporation. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the girts. The fasteners must be located at each steel girt.

Systems 3 and 4: Two #12-14 x 1-1/4" Fenderhead DP3 screws manufactured by Triangle Fastener Corporation. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the girts. The fasteners must be located at each steel girt.

Systems 5 and 6: Two #10-16 x 1" Pancake screws manufactured by SFS. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the girts. The fasteners must be located at each steel girt.

Panel Side Laps: One 1/4-14 x 7/8" Tek at 24" 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 installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.