

Product Evaluation

EC131 | 0122

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-131

Effective Date: January 1, 2022

Re-evaluation Date: January 2026

Product Name: AWIP Insulated Steel Wall Panels Installed over Steel Girts

Manufacturer: All Weather Insulated Panels
929 Aldridge Road
Vacaville, CA 95688
(707) 359-2280

General Description:

The AWIP insulated steel wall panels consist of roll-formed interior and exterior profiles chemically bonded to a continuously, foamed-in-place, polyisocyanurate insulating core. The exterior profile is called the 'Facer' and the interior profile is called the 'Liner.' Both are minimum 26-gauge steel, ASTM A 792 SS GR 33 with an AZ 50 or AZ 55 aluminum zinc alloy coating or ASTM A653, SS GR 33 with a G90 coating. The insulating wall panels come in a maximum panel width of 40" and a thickness of either 2", 2.5", 3", 4", 5", or 8". Each panel features an interlocking double tongue-in-groove joint, which allows for panels to be engage side by side as well as for placement of a concealed clip and fastener. The panels are offered in six styles or types: Mesa (DM40), Flat (FL40), Straited (ST40), Micr Vee (MV40), Heavy Embossed (HE40) and AdobeTexture® (HE40A) profiles with embossed, smooth, or coated finish.

Limitations:

General: The wall framing must meet or exceed the uplift requirements of the IRC or IBC and must be installed as required for resistance to wind loads.

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

Design Pressure: The design pressure uplift load resistance must be as specified in Table 1.

Table 1

Attachment of Insulating Wall Panels to Minimum 12-gauge Steel Girst with Clips (Fastening System A)

Design Wind Pressure (psf)				12-Gauge Steel Purlins
2" Thick	2.5" Thick	3" Thick	≥ 4" Thick	
-44.0	-45.8	-47.6	-51.1	5'-0" on center
-41.5	-43.0	-44.5	-47.6	5'-6" on center
-38.0	-39.4	-40.8	-43.6	6'-0" on center
-35.1	-36.4	-37.7	-40.2	6'-6" on center
-32.6	-33.8	-35.0	-37.4	7'-0" on center
-30.4	-31.5	-32.6	-34.9	7'-6" on center
-28.5	-29.6	-30.6	-32.7	8'-0" on center
-26.8	-27.8	-28.8	-30.8	8'-6" on center
-25.3	-26.3	-27.2	-29.1	9'-0" on center
-24.0	-24.9	-25.8	-27.5	9'-6" on center
-22.8	-23.6	-24.5	-26.2	10'-0" on center
-21.7	-22.5	-23.3	-24.9	10'-6" on center
-20.7	-21.5	-22.3	-23.8	11'-0" on center
-19.8	-20.6	-21.3	-22.7	11'-6" on center
-19.0	-19.7	-20.4	-21.8	12'-0" on center

Table 2

Attachment of Insulating Wall Panels to Minimum 14-gauge Steel Girts with Clips and Fab-Loks (Fastening System B)

Design Wind Pressure (psf)		14-Gauge Steel Purlins
Inward Pressure	Outward Pressure	
+65.0	-65.0	5'-0" on center

Installation:

General Installation Requirements: The insulated wall panels must be installed in accordance with the manufacturer’s installation instructions and this product evaluation.

Steel Girts: The minimum thickness of the steel and the maximum on center spacing of the girts must be as specified in Tables 1 and 2.

Attachment of Insulated Wall Panels to Steel Wall Framing:**Fastening System A:**

Secure the wall panels to the steel girts with minimum 16-gauge galvanized steel clips (WC-01) that are 4" long and have three pre-punched holes. Secure each clip to the steel girts with three (3) 1/4"-14 self-driller screws with varying length for different panel thickness. Fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread through the girts. A clip is required at each girt location.

Fastening System B:

In addition to the panel clip fastening (Fastening System A), secure the interior skin to the steel girts with Fab-Lok® FAS/FAC 10-4, 10-8 or 10-12 expansion fasteners. Two (2) expansion fasteners spaced at a maximum of 10" o.c. from the panel sidelap.

Panel Ends: As required by the manufacturer.

Panel Edges: As required by the manufacturer.

Trims, Closures and Accessories: Components such as trims, enclosures, 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.