

## Product Evaluation

EC117 | 0321

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-117

**Effective Date:** March 1, 2021

**Re-evaluation Date:** March 2025

**Product Name:** Fusion "Drillfree" Architectural Wall Panel System

**Manufacturer:** Carter Architectural Panels, Inc.  
221 E. Willis Road Bldg A  
Unit #18  
Chandler, AZ 85286  
(480) 828-9648

**General Description:**

The Fusion "Drillfree" Architectural Panel System is a rain screen wall cladding system. The panels are 4mm Etalbond FR ACM with and aluminum extrusion around the perimeter and intermediate stiffeners attached to the interior ACM skin.

**Maximum Panel Size:** 56.75" x 115"

**Panel Reveal:** 0.563"

**Total Height:** 2"

**ACM:** Etalbond FR ACM 4mm total thickness

**Extrusions:** 6061-T6 aluminum, continuous around the perimeter of the panel

**Extrusion Clips:** 6061-T6 aluminum; 3" long at 16" on center

**Stiffeners:** 6061-T6 aluminum fusion integrated stiffener at 18" on center attached to the interior sheet with 3M VHB structural tape

**Rivets:** 4.8mm diameter Fusion Drillfree rivets at 16" on center attaching the ACM return leg to the perimeter extrusions.

**Screws:** EVO Torxalig self-drilling screws attaching the extrusion clip to minimum 18-gauge steel sub girts at 16" on center in the horizontal and vertical reveals

**Reveal Filler Strip:** 2" wide ACM strip installed in horizontal and vertical reveals.

**Limitations:**

**Wall Framing:** The wall panels are installed over minimum 18-gauge steel framing spaced a maximum of 16" on center.

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

**Lateral Bracing:** The Fusion "Drillfree" Architectural Panel System must not be used to resist lateral loads.

**Design Pressure:** The design pressure load resistance is +75 / -75 psf. The design pressures meet a panel deflection equal to L/60.

**Installation:**

**General:** The Fusion "Drillfree" Architectural Panel System must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

**Wall Framing:** Minimum 18-gauge steel framing. The steel framing is spaced a maximum of 16" on center.

**Wall Sheathing:** Structural or no-structural wall sheathing may be applied to the wall framing before the application of the panel system. In either case, the panel system is not to be secured to the wall sheathing. Fasteners used to secure the panel system to the wall framing must be long enough to penetrate through the wall; sheathing and into the wall framing.

**Anchorage of Panel System to Wall framing:** Secure the panel system to the minimum 18-gauge steel sub girts at 16" on center with extrusion clips in the horizontal and vertical panel reveals. The horizontal steel sub girts must meet or exceed the requirements of the IRC and the IBC and must be installed as required to resist wind load.

**Water/Vapor Barrier:** The wall panel system must be installed over a water/vapor barrier.

**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.