

## Product Evaluation

RC377 | 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:** RC-377

**Effective Date:** March 1, 2021

**Re-evaluation Date:** March 2025

**Product Name:** EPS Foam Core Roof Panels

**Manufacturer:** Four Seasons Building Products  
7815 American Way  
Groveland, FL 34736  
(352) 787-7766

### General Description:

The EPS Foam Core Composite Roof Panels are laminated sandwich panels consisting of aluminum facings adhered to both faces of an expanded polystyrene (EPS) foam plastic core. The panels are available in a nominal thickness of 3", 4", and 6" with a weight of 0.90, 0.97 and 1.11 psf respectively. The panels are 48" wide and come in different lengths up to 40' (shipping lengths). The longitudinal edges of the panels are designed such that each panel interlocks with the adjacent panel or with a flashing/termination extrusion.

**Material:** The panel core material is 1.0 pcf (16.0 kg/m<sup>3</sup>) nominal density, Type I, or 1.5 pcf Type II nominal expanded polystyrene foam plastic board.

The panel facing material on both sides of the panel is 3105-H254 aluminum with a base metal thickness of 0.024" or 0.032".

The adhesive utilized to bond the facings to the core is MOR AD652, Rohm & Haas, 5040d/5050d-Ashland adhesive manufactured by Ashland.

**Product Identification:** Each EPS Foam Core Roof Panel is identified by a label bearing the company name (Four Seasons Building Products); the company address; the product name; the panel dimensions; the name of the inspection agency; and a statement indicating "For Outdoor Patio Use Only."

**Limitations:**

**General Requirements:** This evaluation report is for the roof panels only. The structural adequacy of the supporting structure and the connection of the panels to the supporting structure must be evaluated separately.

**Roof Slope:** Install the roof panels with a minimum roof slope of 1/4" per foot.

**Limitation of Use:** The panels are valid for use in outdoor patio construction only.

**Installation:**

**Drawings:** Install the EPS Foam Core roof panels in accordance with the following drawing:

Four Seasons Building Products "EPS Foam Core Roof Panel," Drawing No. 20-27026, sheet 1 of 1, dated July 18, 2014; Revised July 28, 2020; signed and sealed by Frank L. Bennardo, P.E. on September 1, 2020.

This evaluation report refers to the stated drawings as approved drawings.

**Panel Span:** The approved drawings note the allowable panel spans.

**Panel Overhang:** The allowable panel overhang is specified on the approved drawing.

**Panel Connection:** The panels interlock. They are not required to be fastened together.

**Allowable Design Pressure:** The allowable design pressure is a function of the panel construction, the panel span, and the deflection limit. Refer to the table in the approved drawings for the allowable design pressures.

**Design and Installation Requirements:** Four Seasons Building Products EPS Foam Core Roof Panels must be fabricated, identified, and erected in accordance with this evaluation report, the approved drawings, and the applicable building codes. In the event of a conflict between the manufacturer's published installation instructions and this evaluation report, this evaluation report will govern. The jobsite must maintain a copy of the approved construction documents during installation.

This evaluation report covers only the panels and the maximum allowable spans for the panels. It does not cover the design of the supports of the host structure and the attachment of the panels

to the supports of the host structure. A Texas licensed professional engineer must design and inspect the attachment of the roof panels to a supporting structure for the specific installation location. The design must include the appropriate edition of the wind load standard (ASCE 7) used based on the current building specifications adopted by TDI. Reference the basic wind speed and the exposure category used for the design. The required design pressures must be included with the design. The design must include the panel used based on the approved drawing. The design must include the requirements for the host structure and the method of attachment of the panels to the host structure. This includes the type of fasteners required, the location and spacing of the fasteners, and the minimum required penetration of the fasteners into the host structure.

**Note:** Keep the manufacturer's installation instructions, the approved drawing, and the design for the job specific installation, available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.