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-285  Effective Date: April 1, 2015
Re-evaluation Date: April 2019

Product Name: EPS Foam Core Roof Panels

Manufacturer: Elite Aluminum Corporation
4650 Lyons Technology Parkway
Coconut Creek, FL 33073
(954) 949-3200

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/m3) nominal density, Type I, expanded polystyrene foam plastic board.
  - The panel facing material on both sides of the panel is 3105-H124 aluminum with a base metal thickness of 0.024” or 0.032” depending on engineering requirements.
  - The adhesive utilized to bond the facings to the core is ISOGRIP SP 2020, adhesive manufactured by Ashland Specialty.

- **Product Identification:** Each EPS Foam Core Roof Panels are identified by a label bearing the company name (Elite Aluminum Corporation) and address, the product name, the panel dimensions, the name of the inspection agency and a statement indicating “For Patio Use Only.”

Limitations:
**General Requirements:** This report is for the panels themselves, evaluate the structural adequacy of the supporting structure(s) separately.
**Roof Slope:** Install the roof panels such that they have a minimum roof slope of 1/4" per foot.

**Construction:** The panels are valid for use in outdoor patio construction only.

**Approved Drawings:** Install the EPS Foam Core roof panels in accordance with EPS Foam Core Composite Roof Panel drawing, Drawing No. 11-EAC-0001, sheet 1 of 1, dated January 25, 2011, signed and sealed by Frank L. Bennardo, P.E. on February 4, 2011. This report refers to the stated drawings as the approved drawings. You must keep the approved drawings at the job site.

**Design and Installation Requirements:** Fabricate, identify, and erect the Elite EPS Foam Core Roof Panels in accordance with this report, the approved construction documents, and the applicable building codes. In the event of a conflict between manufacturer’s published installation instructions and this report, this report should govern. You must keep the approved construction documents at the jobsite during installation.

A Texas licensed professional engineer appointed as a qualified windstorm engineer must design and inspect structures built using the Elite EPS Foam Core Roof Panels. The approved drawings provide allowable roof spans and specifications on minimum connection requirements. Base the requirements for the design of the Elite EPS Foam Core Roof Panels on the tables and details specified on the approved drawings. A Texas licensed engineer must seal and date the design drawings. The design drawings should reference 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. An engineer must carefully evaluate the existing site conditions and design any deviations from the approved drawings. The engineer must consider additional loading requirements on the roof and host structure.

**Panel Span:** The allowable panel spans are noted on the approved drawings.

**Panel Connection:** An infinite number of panels may be interlocked.

**Panel Support:** Connect the panels to the existing structure in accordance with Detail 1 of the approved drawings and support on a structural beam in accordance with Detail 2.

**Wall Construction:** Mount the EPS Foam Core Roof Panels to the following types of wall framing:
- Pre cast concrete, cast in place concrete (minimum 3000 psi),
- Grout filled concrete masonry units (CMU) (minimum 1,500PSI),
- Aluminum, minimum 1/8" thick 6063-T6,
- Wood, minimum Southern Yellow Pine dimensional lumber.

**Allowable Design Pressure:** The allowable design pressure is a function of the loading condition, the deflection limit and the construction and thickness of the panels. Refer to the approved drawings for the allowable design pressure. The maximum allowable design pressure is ±60 psf (live load or uplift loading).

**Anchorage:** Anchor the panels to the host structure and beam in accordance with the approved drawings. When anchoring the panels, follow the mounting details on the drawings and the fasteners specified in the minimum anchor schedule.

**Note:** Keep the manufacturer’s installation instructions at the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.