

DO KIM & ASSOCIATES, LLC
CONSULTING STRUCTURAL ENGINEERS

Florida Board of Engineers Certificate of Authorization No. 26887

Product Evaluation Report

Date: August 10, 2017

Report No.: FL# 7561-R4

Product Category: Roofing

Product sub-category: Products Introduced as a Result of New Technology

Product Name: EPS Foam Core w/ Aluminum Skin Composite Panels

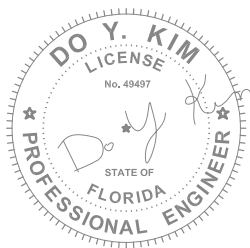
Manufacturer: Elite Aluminum Corporation
4650 Lyons Technology Parkway
Coconut Creek, FL 33073
Phone: 800-421-0682

Scope:

This product evaluation report issued by Do Kim and Associates, LLC and Do Kim, P.E. for Elite Aluminum Corporation is based on Florida Department of Business and Professional Regulation Rule 61G20-3.005 (2) Method 2 (b) of the State of Florida Product Approval. Re-evaluation of this product shall be required following pertinent Florida Building Code modifications or updates.

Do Kim and Associates, LLC and Do Kim, P.E. do not have nor will acquire financial interest in the company manufacturing or distributing the product or in any other entity involved in the approval process of the product named herein.

This product has been evaluated for use in locations adhering to the Florida Building Code, 6th Edition (FBC) and where pressure and deflection requirements, as determined by Chapter 16 of the Florida Building Code, do not exceed the design pressures as shown on the approval.



Do Kim, P.E.
FL #49497

Supporting Documents

1. Code Compliance
 - a. The product assembly described herein has demonstrated compliance with the Florida Building Code 6th Edition (FBC), Section 1709.2.
2. Drawings:
 - a. Drawing No. FL-1001 titled “EPS Foam Core Composite Panels”, Sheets 1 and 2 prepared by Do Kim and Associates, LLC., signed and sealed by Do Kim, P.E.
3. Testing
 - a. Testing per ASTM E72-05 as performed by Hurricane Engineering & Testing, Inc. (HETI), and reported in test report numbers HETI-05-1988, HETI-06-2104, HETI-06-2066, HETI-06-2105, HETI-06-2067, HETI-05-1002, HETI-06-2107, HETI-05-1987, HETI-06-2069, HETI-06-2070, HETI-06-2071, HETI-05-1994, HETI-05-1991, HETI-06-2072, HETI-06-2073, HETI-06-2074, HETI-05-1996, HETI-05-1989, HETI-05-1993, HETI-05-1985, HETI-05-1995, HETI-05-1990, HETI-05-1997, HETI-05-2037, HETI-05-2029, HETI-05-2039, HETI-05-2030, HETI-05-2041, HETI-05-2048, HETI-05-2036, HETI-05-2031, HETI-05-2038, HETI-05-2065, HETI-05-2040, HETI-05-2042.
4. Calculations
 - a. Panel performance engineering analysis for tested loading conditions have been prepared based on comparative and/or rational analysis, prepared, and submitted by Do Kim, P.E.
5. Other
 - a. Quality Assurance Agreement verified with Quality Auditing-Institute, LTD. (QAI Laboratories, LTD.) (FBC Organization #QUA7628).

Limitations and Condition of Use

1. Code Compliance
 - a. The product assembly described herein has demonstrated compliance with the Florida Building Code 6th Edition (FBC), Section 1709.2.
2. Large and small missile impact resistance has NOT been tested to or evaluated for in this approval. In HVHZ, this product shall be used in structures “not to be considered living areas” per Section 1616 unless impact resistance in accordance to the HVHZ requirements are met.
3. Each product listed above shall be installed in strict compliance with its respective Product Evaluation Document and site-specific engineering along with all components noted herein.
4. Use of each product shall be in strict accordance with its Product Approval Evaluation and Limitations of Use.
5. Composite panels shall be constructed using type 3003-H154 aluminum facings, 1 or 2 PCF ASTM C-578 Dyplast Products LLC brand EPS foam insulation (NOA No. 16-1129.05) adhere to aluminum facings with Ashland Chemical 2020D ISO grip. Fabrication to be by Elite panel products only in accordance with approved fabrication methods.
6. Elite roof panels maintain a UL 1715 (int) class ‘B’ (ext) rating and are NER-501 approved.
7. This specification has been designed and shall be fabricated in accordance with the requirements of the FBC, composite panels comply with Chapter 7 Section 720, Chapter 8 Section 803, Class A interior finish, and Chapter 26 Section 2603. All local building code amendments shall be adhered to as required.
8. The designer shall determine by accepted engineering practice the allowable loads for site specific load conditions (including load combinations) using the data from the allowable loads tables and spans in this approval.
9. Deflection limits and allowable spans have been listed to meet FBC including the HVHZ (L/80 for spans $\leq 12'-0''$ and L/180 for spans $> 12'-0''$).
10. All supporting host structures shall be designed to resist all superimposed loads.
11. All components which are permanently installed shall be protected against corrosion, contamination, and other such damage.
12. Size and Span Limitations:
 - a. Composite panels shall be limited to those specific panels listed in the DWG. FL-1001.
 - b. Panel spans shall not exceed those listed in the tables of DWG. FL-1001.