

DO KIM & ASSOCIATES, LLC
CONSULTING STRUCTURAL ENGINEERS

Florida Board of Engineers Certificate of Authorization No. 26887

Product Evaluation Report

Date: August 8, 2020

Report No.: 090301-R5

Product Category: Structural Components (FL#12225-R5)

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

Product Name: Elite Foam Core-Aluminum Skin Composite Panels

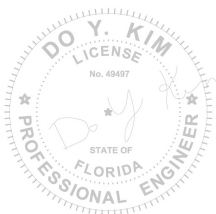
Manufacturer: Elite Aluminum Corporation
4650 Lyons Technology Parkway
Coconut Creek, FL 33073
Phone: 800-421-0682

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, Method (1) (d) 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 & 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, 7th Edition (FBC), inclusive of the HVHZ and where pressure and deflection requirements, as determined by Chapter 16 of the Florida Building Code, do not exceed the following nominal (allowable) design pressure of +43 psf, -70 psf.



This item has been digitally signed and sealed by Do Y. Kim on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Do Kim, P.E.
FL #49497

Supporting Documents

1. Drawings:
 - a. Drawing No. 090227-R5 titled “EPS Foam Core Composite Panels Aluminum/Aluminum Skin”, Sheet 1 of 1, prepared by Do Kim & Associates, LLC, signed and sealed by Do Kim, P.E.
2. Testing
 - a. Testing per TAS 201-94, TAS 202-94, and TAS 203-94 as performed by Construction Testing Corporation, located at 13873 N.W. 19th Avenue, Miami, FL 33054, (305) 685-6657. Report No 97-044 dated January 21, 1998.
 - b. Miami-Dade County Approved NOA No. 17-1207.05, February 1, 2018. Classified Foamed Plastic Surface Burning Characteristics, Dyplast Products LLC, Flame Spread and Smoke Developed Index for EPS foam is 0 and 110.
3. Calculations
 - a. Anchor calculations for tested loading conditions and fire rating analysis per Gypsum Design Manual GA File No. WP 1311-PG. 35 has been prepared based on comparative and/or rational analysis by Do Kim, P.E.
4. Other
 - a. Quality Assurance Agreement verified with Quality Auditing-Institute, LTD. (QAI Laboratories, LTD.) (FBC Organization #QUA7628).

Limitations and Condition of Use

1. Large and small missile impact resistance has been tested to and evaluated for in this approval. Approved for use in HVHZ areas.
2. 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.
3. Use of each product shall be in strict accordance with its Product Approval Evaluation Documents.
5. This specification has been designed and shall be fabricated in accordance with the requirements of the Florida Building Code 7th Edition (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.
6. The designer shall determine by accepted engineering practice the allowable loads for site specific load conditions.
7. All supporting host structures shall be designed to resist all superimposed loads.
8. Elite Aluminum Corporation Impact Doors and Impact Windows may be incorporated into system as allowed substitute panels. All limitations shall be adhered to and lowest allowed design pressure shall govern the system design.
9. Composite panels shall be constructed using type 3003-H154 or 3105-H154 aluminum facings, 2 PCF ASTM C-578 Dyplast Products LLC brand EPS foam insulation (NOA No. 17-1207.05) adhere to aluminum facings with Ashland Chemical 2020D ISO grip. Fabrication to be by Elite panel products only in accordance with approved fabrication methods.
10. Elite roof panels maintain a UL 1715 (int) class 'B' (ext) rating and are NER-501 approved.
11. Deflection limits and allowable spans have been listed to meet FBC including the HVHZ (L/80 for spans $\leq 12'-0"$ in HVHZ per Section 1616.3.1, and L/180 in non-HVHZ per Chapter 16 Table 1604.3).
12. All supporting host structures shall be designed to resist all superimposed loads.
13. All components which are permanently installed shall be protected against corrosion, contamination, and other such damage.