

DO KIM & ASSOCIATES, LLC
CONSULTING STRUCTURAL ENGINEERS

Florida Board of Engineers Certificate of Authorization No. 26887

Product Evaluation Report

Date: August 13, 2023

Report No.: FL# 21443-R5

Product Category: Roofing

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

Product Name: Snap-N-Lock EPS Foam Core w/ Aluminum Skin Composite Panels

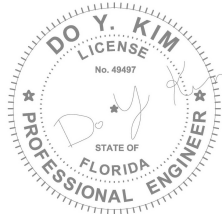
Manufacturer: Structall Building Systems, Inc.
350 Burbank Rd.
Oldsmar, FL 34677
Phone: 813-855-2627

Scope:

This product evaluation report issued by Do Kim & Associates, LLC and Do Kim, P.E. for Structall Building Systems, Inc. (Structall) is based on Florida Department of Business and Professional Regulation Rule 61G20-3, 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 & 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, 8th Edition (2023 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.



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. Code Compliance
 - a. The product assembly described herein has demonstrated compliance with the Florida Building Code 8th Edition (2023 FBC), Section 1708.2.
2. Drawings:
 - a. Drawing No. 202001 titled “3”x0.024”x1 LB EPS Foam Core Composite Aluminum Skin Panels, Florida Statewide Product Approval”, Sheets 1 & 2, prepared by Do Kim & Associates, LLC., signed and sealed by Do Kim, P.E.
 - b. Drawing No. 202003 titled “3”x0.030”x1 LB EPS Foam Core Composite Aluminum Skin Panels, Florida Statewide Product Approval”, Sheets 1 & 2, prepared by Do Kim & Associates, LLC., signed and sealed by Do Kim, P.E.
 - c. Drawing No. 202002 titled “3”x0.024”x2 LB EPS Foam Core Composite Aluminum Skin Panels, Florida Statewide Product Approval”, Sheets 1 & 2, prepared by Do Kim & Associates, LLC., signed and sealed by Do Kim, P.E.
 - d. Drawing No. 202004 titled “4”x0.024”x1 LB EPS Foam Core Composite Aluminum Skin Panels, Florida Statewide Product Approval”, Sheets 1 & 2, prepared by Do Kim & Associates, LLC., signed and sealed by Do Kim, P.E.
3. Testing
 - a. Testing per ASTM E72/ASTM E330 as performed by PRI Construction Materials Technologies LLC (PRI), and reported in test report numbers STRL-002-03-01, STRL-002-03-02, STRL-004-03-01; STRL-005-03-01, STRL-005-03-02, STRL-006-03-01; 1735T0003.01, 1735T0003.02, 1735T0003.03, and 1735T0003.04; 1735T0004.01, 1735T0004.02, 1735T0004.03, and 1735T0004.04.
 - b. Testing per ASTM E84 per test reports 15328-97939 by Omega Point Laboratories for aluminum skin composite panel with Smoke Developed Index = 170 and Flame Spread Index = 5.
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 Twining Consulting Inc. dba RADCO (FBC Organization #QUA1990).

Limitations and Condition of Use

1. Code Compliance
 - a. The product assembly described herein has demonstrated compliance with the Florida Building Code 8th Edition (FBC), Section 1708.2.
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 meeting the requirements of Section 1626.1, 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 3105-H154 aluminum facings, 1 PCF ASTM C-578 Imperial Foam & Insulation Manufacturing brand EPS adhere to aluminum facings with Morad M640 Series adhesive (by Rohm and Haas Company). Fabrication of Structall panel products shall be only in accordance with approved fabrication methods.
6. Flame spread (5) and smoke density rating (170) are in accordance to FBC Section 2603.3.
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 drawing above.
 - b. Panel spans shall not exceed those listed in the tables of Reference Drawing, unless otherwise allowed by a licensed design professional for site specific conditions.