STRUCTALL BUILDING SYSTEMS PANEL SPAN TABLES:

3" x 0.024 x 2 - LB EPS PANELS (OPEN STRUCTURES-EXPOSURE B)

WIND SPEED	NET ULTIMATE LOAD (PSF)[1]	MAX. ALLOWABLE SPAN (FT)			
		L/60 & L/80	L/120	L/180	L/240
110	23.03	18.88	18.11	16.63	15.13
120	27.41	17.97	17.25	15.85	14.32
130	32.16	17.13	16.46	15.13	13.58
140	37.30	16.35	15.74	14.46	12.89
150	42.82	15.62	15.06	13.84	12.26
160	48.72	14.95	14.42	13.26	11.66
180	61.66	13.71	13.26	12.19	10.57

[1] MULTIPLY ULTIMATE LOADS BY 0.6 FOR ALLOWABLE LOADS

3" x 0.024 x 2 - LB EPS PANELS (OPEN STRUCTURES-EXPOSURE C)

WIND SPEED	NET ULTIMATE LOAD (PSF)[1]	MAX. ALLOWABLE SPAN (FT)			
		L/60 & L/80	L/120	L/180	L/240
110	27.96	17.86	17.15	15.76	14.23
120	33.28	16.95	16.30	14.97	13.42
130	39.06	16.11	15.51	14.25	12.68
140	45.30	15.33	14.78	13.58	12.00
150	52.00	14.60	14.10	12.96	11.36
160	59.16	13.93	13.47	12.38	10.76
180	74.88	12.69	12.31	11.32	9.67

3" x 0.024 x 2 - LB EPS PANELS (ENCLOSED STRUCTURES-EXPOSURE B)

WIND SPEED	NET ULTIMATE LOAD (PSF)[1]	MAX. ALLOWABLE SPAN (FT)			
		L/60 & L/80	L/120	L/180	L/240
110	18.62	20.00	19.16	17.60	16.11
120	22.25	19.07	18.29	16.80	15.29
130	25.99	18.24	17.51	16.09	14.56
140	30.23	17.46	16.77	15.41	13.87
150	34.61	16.74	16.11	14.80	13.24
160	39.43	16.06	15.47	14.21	12.64
180	49.99	14.82	14.31	13.15	11.55

[1] MULTIPLY ULTIMATE LOADS BY 0.6 FOR ALLOWABLE LOADS

3" x 0.024 x 2 - LB EPS PANELS (ENCLOSED STRUCTURES-EXPOSURE C)

WIND SPEED	NET ULTIMATE LOAD (PSF)[1]	MAX. ALLOWABLE SPAN (FT)			
		L/60 & L/80	L/120	L/180	L/240
110	22.53	19.00	18.22	16.74	15.23
120	26.91	18.06	17.34	15.93	14.40
130	31.54	17.24	16.57	15.22	13.68
140	36.52	16.46	15.84	14.56	12.99
150	41.93	15.74	15.16	13.94	12.36
160	47.69	15.06	14.53	13.35	11.76
180	60.38	13.82	13.37	12.29	10.67

3" x 0.024 x 2 - LB EPS PANELS (PARTIALLY ENCLOSED STRUCTURES) (EXPOSURE B)

WIND SPEED	NET ULTIMATE LOAD (PSF)[1]	MAX. ALLOWABLE SPAN (FT)			
		L/60 & L/80	L/120	L/180	L/240
110	27.28	17.99	17.27	15.87	14.34
120	32.46	17.08	16.42	15.09	13.54
130	38.10	16.24	15.63	14.36	12.80
140	44.18	15.46	14.90	13.70	12.11
150	50.72	14.74	14.23	13.07	11.47
160	57.71	14.06	13.59	12.49	10.88
180	73.04	12.82	12.43	11.43	9.79

[1] MULTIPLY ULTIMATE LOADS BY 0.6 FOR ALLOWABLE LOADS

3" x 0.024 x 2 - LB EPS PANELS (PARTIALLY ENCLOSED STRUCTURES) (EXPOSURE C)

WIND SPEED	NET ULTIMATE LOAD (PSF)[1]	MAX. ALLOWABLE SPAN (FT)			
		L/60 & L/80	L/120	L/180	L/240
110	33.12	16.97	16.32	14.99	13.44
120	39.42	16.06	15.46	14.21	12.64
130	46.26	15.22	14.68	13.49	11.90
140	53.65	14.44	13.95	12.82	11.21
150	61.59	13.72	13.27	12.20	10.58
160	70.08	13.04	12.64	11.62	9.98
180	88.69	11.80	11.48	10.56	8.89

PRODUCT APPROVAL DETAILS:

- BLDG CODE: 6TH EDITION FLORIDA BUILDING CODE (2017 FBC)
- LIMITS OF USE: FOR PATIO USE ONLY (RISK CATEGORY I).
  - -CARPORTS
  - -PATIO COVERS
  - -SUNROOMS
  - -SCREEN ENCLOSURES
  - -CANOPIES
  - -OTHER SIMILAR MINOR STRUCTURES

Note

1. All product performance specifications and construction requirements shall be engineered by a licensed design professional in accordance with the Aluminum Design Manual, *Specifications & Guidelines for Aluminum Structures, Washington, DC*, for wind resistance in conformance to FBC Chapter 16 for Components and Cladding Loads, ASCE 7-10 Chapter 30 for Roof Components and Cladding for Enclosed and Open Structures. Effective area for wind load calculations based on 50 sq. feet (absolute value of controlling design wind pressure is shown on span tables).
2. Span schedule show maximum roof panel spans between two sided clear supports as shown.
3. Wind load design pressures in span tables are calculated in accordance to ASCE 7-10, Components & Cladding loads as required in FBC Table 2002.4. Mean roof height of structure shall not exceed 15 feet above grade. Span tables for open structures based on 7.5° max. roof slope and used the avg. of free flow and obstructed flow net pressure coefficients. Span tables for enclosed and partially enclosed structures based on 27° max. and 7° roof slope, respectively.
4. Each roof panel shall be connected per design professional's instructions, but may use min. per details shown on this dwg. at each support (or other approved connection by design professional) w/ min. 0.040" thick, 6063-T6 aluminum base metal. Edge panels shall be supported on min. three sides or per design professional's instructions. Details 1 & 2 are reflective of the boundary conditions utilized in the testing of panels as referenced in the test reports.
5. Composite panels shall be constructed using type 3105-H154 aluminum facings, 1 or 2 PCF ASTM C-578 Imperial Foam & Insulation Manufacturing brand EPS adhered to aluminum facings with Morad M640 Series adhesive (by Rohm and Haas Company). Fabrication to be by Structall panel products only in accordance with approved fabrication methods.
6. Structall 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 Florida Building Code 6th Edition (2017 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 design loads for site specific load conditions (including load combinations) using the data from the loads tables and spans in this approval.
9. Deflection limits and allowable spans have been listed to meet FBC including the HVHZ. 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.
10. Safety factor of 2.0 has been use to develop allowable loads and spans from testing in accordance to the Guidelines for Aluminum Structures Part 1 and conforms to the FBC Chapter 16 and 20.
11. Testing has been conducted in accordance to ASTM E72: Strength Test of Panels for Building Construction.
12. Linear interpolation shall be allowed for figures within the tables shown.
13. Panels with fan beams shall be considered equivalent to similar panels without fan beams. Design professionals may include the strength of the fan beam to exceed shown figures as part of site-specific engineering.
14. Reference test reports: Certified test reports 1735T0003.01, 1735T0003.02, 1735T0003.3, 1735T0003.04 by PRI-Construction Materials Technologies LLC., 6412 Badger Drive, Tampa, FL 33610, (813) 621-5777.

This item has been digitally signed and sealed by Do Y. Kim, PE on this date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
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Tampa, FL 33679
Tel: (813) 857-9955

Rev./Date		Description
1	1/10 2020	ISSUED FOR PRODUCT APPROVAL

Structall Building Systems
350 Burbank Road
Oldsmar, FL 34677

3"x0.024"x2 LB EPS FOAM CORE
COMPOSITE ALUMINUM SKIN PANELS
FLORIDA STATEWIDE PRODUCT APPROVAL

DRAWN BY:	DYK
CHECKED BY:	DYK
SCALE:	AS SHOWN
DATE:	10/19/16

DO Y. KIM LICENSE
DO YEON KIM, P.E.
FLA. REG. NUMBER 49497
DO KIM & ASSOCIATES, LLC
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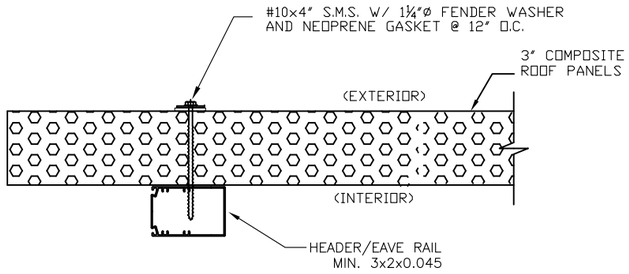
STATE OF FLORIDA PROFESSIONAL ENGINEER

Drawing No. - 161027



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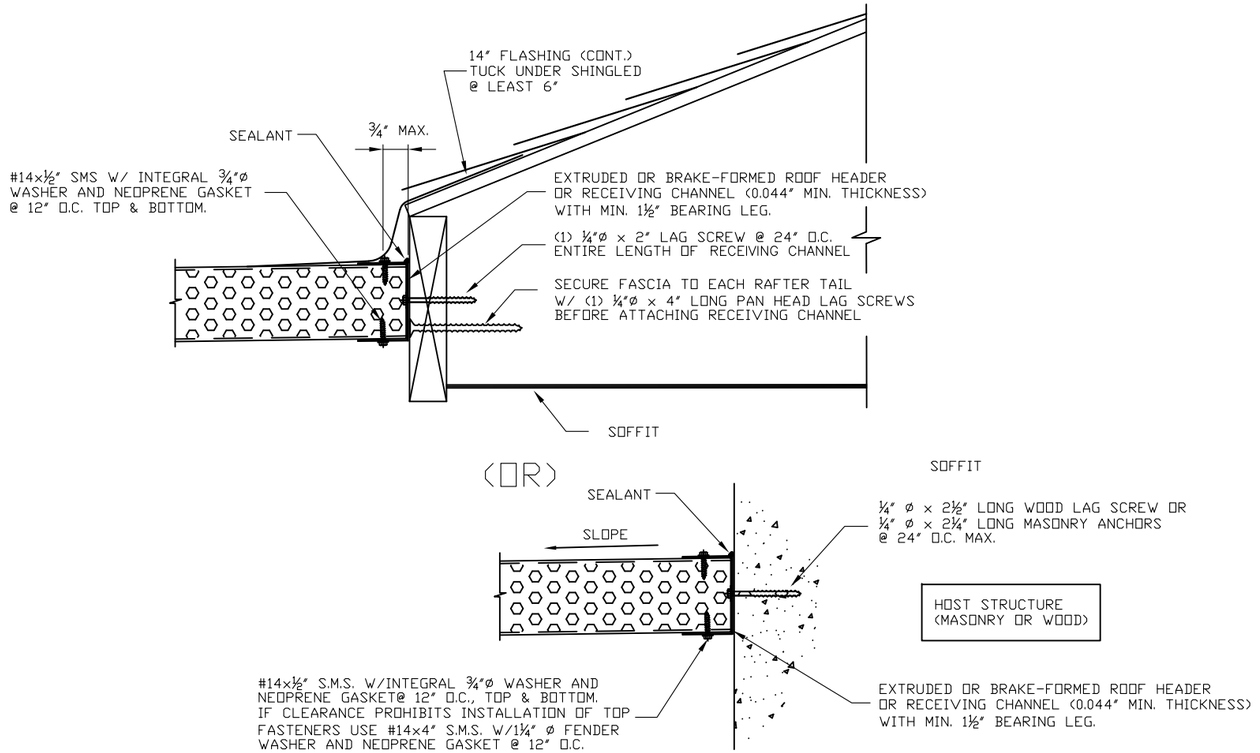
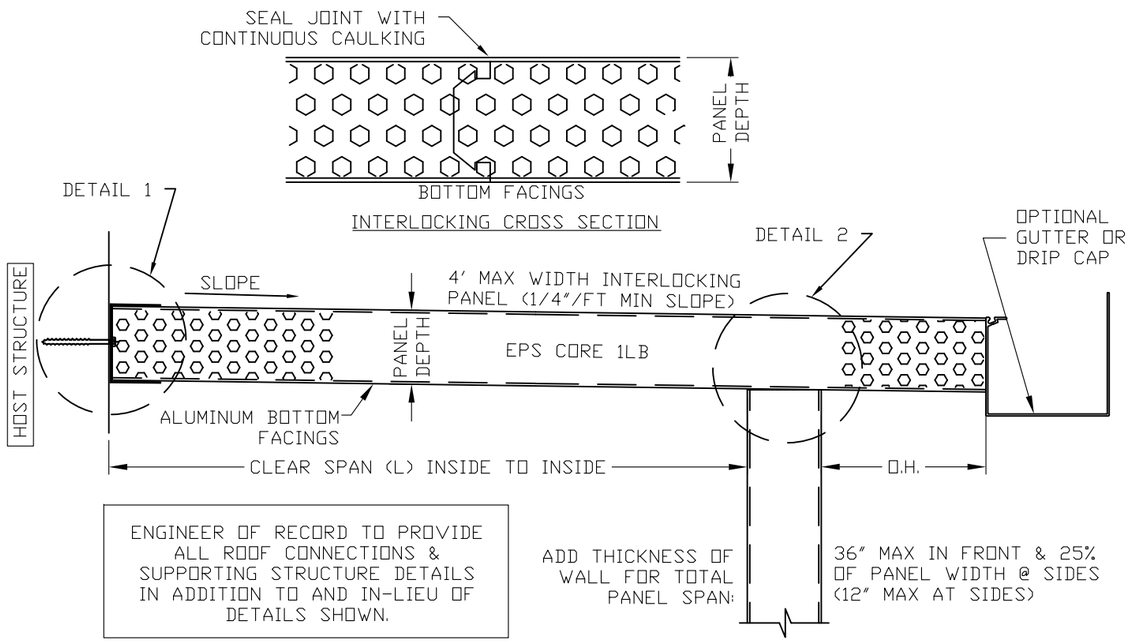


DETAIL 1



3" EPS ROOF PANEL/ SPAN DESCRIPTION

DO KIM
& ASSOCIATES, LLC

CONSULTING
STRUCTURAL
ENGINEERS

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Structall Building Systems
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3"x0.024"x2 LB EPS FOAM CORE
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