

EPS FOAM CORE PANELS

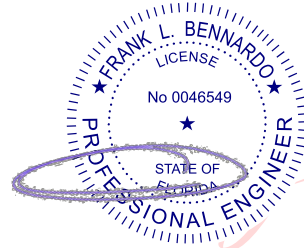
0.032" ALUMINUM / 0.032" ALUMINUM SKIN CLEAR SPAN TABLE HVHZ / NON-HVHZ

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.

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Digitally signed by
Frank Bennardo
Date: 2026.08.19
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TABLE 1: MAX ALLOWABLE CLEAR SPAN FOR EPS PANELS

	ALUM SKIN THICKENESS (EACH FACE)	EPS FOAM DENSITY	POSITIVE DESIGN PRESSURE (ASD)	POSITIVE ULTIMATE PRESSURE (ULT)	NEGATIVE DESIGN PRESSURE (ASD)	NEGATIVE ULTIMATE PRESSURE (ULT)	ALLOWABLE DEFLECTION LIMITS	MAX ALLOWABLE SPAN
3" WALL PANEL	0.032 IN	1.5 PCF	+ 29 PSF	+ 48 PSF	- 29 PSF	- 48 PSF	L/80	10' - 0"
4" WALL PANEL	0.032 IN	1.5 PCF	+ 29 PSF	+ 48 PSF	- 29 PSF	- 48 PSF	L/80	11' - 0"
4" ROOF PANEL	0.032 IN	1.5 PCF	+ 28 PSF	+ 47 PSF	- 30 PSF	- 50 PSF	L/80	12' - 0"

TABLE USE INSTRUCTIONS:

- OBTAIN SITE-SPECIFIC GRAVITY (DOWNWARD), AND UPLIFT (UPWARD), OR LATERAL (WALL) DESIGN PRESSURES, PREPARED BY A DESIGN PROFESSIONAL PER THE GOVERNING CODE FOR THE PROJECT LOCATION. THE LARGER OF THE GRAVITY OR UPLIFT LOAD SHALL BE YOUR CONTROLLING DESIGN VALUE.
- FOR THE SELECTED PANEL AND OVERHANG CONDITION, READ THE ALLOWABLE SPAN FROM THE TABLE.
- WHERE A PRESSURE FALLS BETWEEN ROWS, USE THE NEXT HIGHER ROW OR INTERPOLATE LINEARLY.
- THE SMALLEST OF THE ALLOWABLE DESIGN SPANS GOVERNS THE MAXIMUM ALLOWABLE PANEL SPAN.
- VERIFY THE PROJECT SPAN DOES NOT EXCEED THE GOVERNING

TABLE VALUE.

- FRONT (BEAM) AND BACK (HOST) CONNECTIONS ARE BY SEPARATE SITE-SPECIFIC DESIGN.
- FOR PRESSURES AND SPANS BEYOND THE VALUES STATED HEREIN, CONTACT THIS OFFICE FOR SITE-SPECIFIC CONSULTATION.
- FOR SITE-SPECIFIC ASD DESIGN PRESSURES, VISIT **ENGINEERINGEXPRESS.COM/WIND**.

TABLE NOTES:

- SPANS ARE BASED ON THE PRODUCT TESTING AND EVALUATION REPORT PER THE GENERAL NOTES.
- THE SPANS LISTED HEREIN ARE APPLICABLE FOR NON-HABITABLE

STRUCTURES ONLY.

- PRESSURES SHALL REFLECT THE CONTROLLING ASCE 7 LOAD COMBINATION (DEAD, LIVE, SNOW, WIND, ETC.), DETERMINED SEPARATELY.
- TABLES CONSIDER ASD PRESSURES. FOR ULTIMATE PRESSURES, $P(ULT) = P(ASD)*5/3$.
- SPANS SHOWN BASED ON PRODUCT TESTING LISTED IN GENERAL NOTES. TESTS PERFORMED TO A MAXIMUM OF 58 PSF AND DEFLECTION LIMITS SHOWN. SAFETY FACTOR OF 2 APPLIED IN TABLE ABOVE PER DESIGN NOTES.
- A 0.7x REDUCTION (PER FBC TABLE 1604.3 FOOTNOTE f) APPLIES TO DEFLECTION ONLY, UNLESS NOTED.

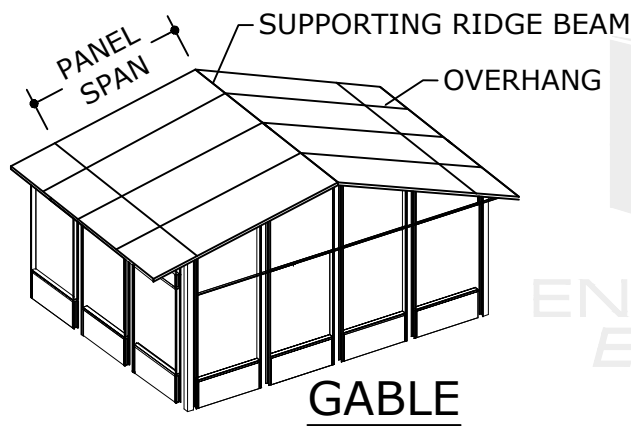
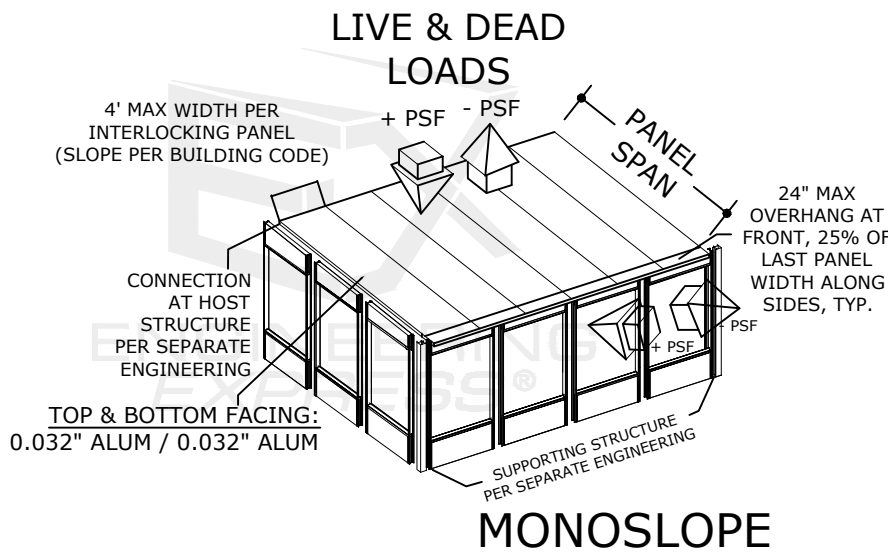
DESIGN NOTES:

- POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE FLORIDA BUILDING CODE NINTH EDITION (2026), AND ALL LOCAL CODES & AMENDMENTS THAT MAY APPLY. CODE ENFORCED COMPLIES WITH STATE OF SEAL.
- SITE-SPECIFIC PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH THE GOVERNING CODE SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN, WHICH HAVE BEEN CALCULATED PER ALLOWABLE STRESS DESIGN METHODOLOGY.
- EPS CORE COMPOSITE PANELS SHALL BE CONSTRUCTED USING TYPE 3105-H254 ALUMINUM FACINGS. FOAM CORE SHALL HAVE TYPICAL DENSITY OF 1.5 PCF WITH ASTM C-578 EXPANDED POLYSTYRENE, MANUFACTURED BY FOURSEASONS BUILDING PRODUCTS. THE EPS FOAM SHALL BE ADHERED TO THE ALUMINUM FACING WITH 5040/5050 ISOGRIP SP 202 ADHESIVE (BY ASHLAND SPECIALTY). FABRICATION SHALL BE IN ACCORDANCE WITH APPROVED FABRICATION METHODS BY MANUFACTURER FOR ALL PANELS.
- PANEL DEAD LOADS HAVE BEEN FACTORED INTO CALCULATIONS FOR GRAVITY LOADS AS WELL AS CALCULATIONS FOR PANEL PROPERTIES.
- SEPARATE SITE SPECIFIC SEALED ENGINEERING SHALL BE REQUIRED IN ORDER TO DEViate FROM LOADS, DEFLECTIONS, OR SPANS CONTAINED HEREIN. LINEAR INTERPOLATION OF THE ALLOWABLE SPAN TABLE LISTED HEREIN SHALL DETERMINE VALUES. CONTACT THIS ENGINEER FOR ALTERNATE SPAN CALCULATIONS AS NECESSARY.
- DEFLECTION SHALL BE CONSIDERED AS TO ALWAYS PROVIDE POSITIVE SLOPE AT THE WORST DESIGN CONDITION.
- DEFLECTION LIMITS AND ALLOWABLE SPANS HAVE BEEN LISTED TO MEET FBC INCLUDING THE HVHZ (L/80 FOR SPANS < 12'-0" IN HVHZ PER CHAPTER 16 TABLE 1604.3 DEFLECTION LIMITS). IN HVHZ REGIONS, THE L/80 DEFLECTION LIMIT IS FOR USE IN GROUP R3 OCCUPANCIES WITH ROOF PROJECTION NOT EXCEEDING 12 FEET AND WHERE THE STRUCTURES ARE NOT TO BE CONSIDERED LIVING AREAS PER FBC SECTION 1616.3.1. VERIFY USE CASE FOR NON-HVHZ APPLICATIONS.
- FOUR SEASONS BUILDING PRODUCTS ROOF PANELS MAINTAIN A UL 1715 ROOF FIRE TEST WITHOUT SHEET ROCK AND IS ASSIGNED FILE #R14029.

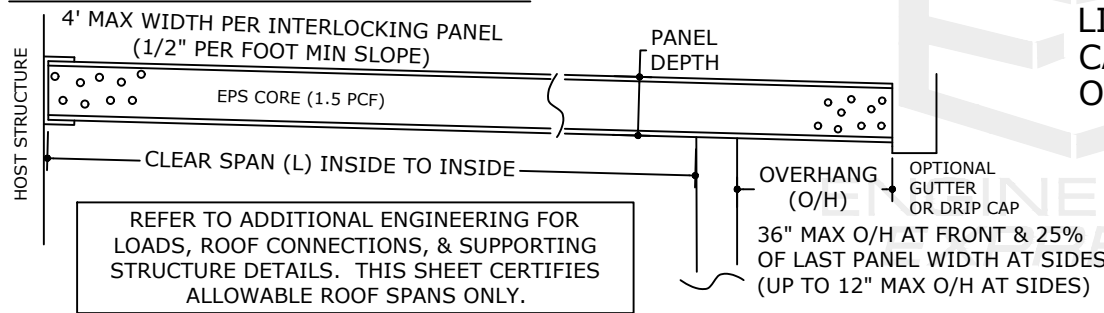
GENERAL NOTES:

- THE DESIGN PROFESSIONAL SHALL CAREFULLY CONSIDER POSSIBLE IMPOSING LOADS ON ROOF, INCLUDING BUT NOT LIMITED TO ANY CONCENTRATED LOADS WHICH MAY JUSTIFY GREATER DESIGN CRITERIA. THIS ADDITIONAL ROOF LOAD CRITERIA SHALL BE PROPERLY ANALYZED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT.
- ALL PANEL ATTACHMENTS SHALL BE CERTIFIED PER SEPARATE ENGINEERING ON A SITE SPECIFIC BASIS. REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.
- FOR PERMANENT OUTDOOR INSTALLATIONS, ALL EXPOSED ANCHORS, FASTENERS, CONNECTORS, AND METAL PLATES SHALL BE CORROSION RESISTANT. CORROSION RESISTANCE MAY BE PROVIDED BY INHERENT MATERIAL COMPOSITION OR, WHERE PERMITTED BY CODE, BY AN APPROVED PROTECTIVE COATING OR GALVANIZATION. WHERE APPLICABLE NEAR A SALTWATER COASTLINE, SUCH COMPONENTS SHALL COMPLY WITH FBC SECTION 1711, INCLUDING APPLICABLE REQUIREMENTS FOR EXPOSED, PROTECTED, OR ENCLOSED CONDITIONS. MATERIALS, COATINGS, AND FINISHES SHALL BE COMPATIBLE WITH CONNECTED MATERIALS, AND PROTECTIVE COATINGS SHALL BE CONTINUOUS OVER EXPOSED SURFACES. FASTENERS USED WITH ALUMINUM MEMBERS SHALL ALSO COMPLY WITH SECTION J.3.7.2 OF THE ALUMINUM DESIGN MANUAL, "SPECIFICATION FOR ALUMINUM STRUCTURES." SUBSTITUTION OF COMPONENTS FROM ALTERNATE MANUFACTURERS, OR WITH DIFFERENT MATERIALS, COATINGS, OR FINISHES, SHALL NOT BE ASSUMED EQUIVALENT AND MAY REQUIRE ADDITIONAL ENGINEERING REVIEW OR SITE-SPECIFIC ANALYSIS.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- THE PLAN DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED PROFESSIONAL SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- ENGINEER SEAL AFFIXED HERE TO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

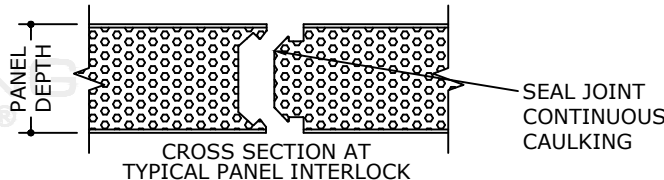
PANEL SPAN DEFINITION DIAGRAMS



EPS ROOF PANEL SPAN DETAIL:



*TOTAL LOAD = SUM OF ALL LOADS (WIND, LIVE, DEAD, ETC.) ACTING IN THE WORST CASE LOAD COMBINATION AS DETERMINED BY OTHERS



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3IN & 4IN x 0.032 x 1.5 LB EPS ALUM WALL & ROOF PANELS
FLORIDA BUILDING CODE NINTH EDITION (2026)
FLORIDA STATEWIDE APPROVAL (FSA FL# 15085.1 & FL# 10778.1&.2)

REMARKS	DATE	DRWN	CHKD
2020 FBC (20-32227)	9/30/20	CCB	RWN
2023 FBC (23-60200)	8/07/23	MLD	CCB
2026 FBC UPDATE	08/11/26	NRD	RMS

26-100268

SCALE: NTS UNLESS NOTED

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