EPS FOAM CORE PANELS

0.032" ALUMINUM / 0.032" ALUMINUM SKIN CLEAR SPAN TABLE

TABLE 1: MAX ALLOWABLE CLEAR SPAN FOR EPS PANELS

	ALUM SKIN THICKENESS (EACH FACE)	EPS FOAM DENSITY	ALLOWABLE POSITIVE PRESSURE (ASD)	EQUIVALENT POSITIVE PRESSURE (ULT)	ALLOWABLE NEGATIVE PRESSURE (ASD)	EQUIVALENT NEGATIVE 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"

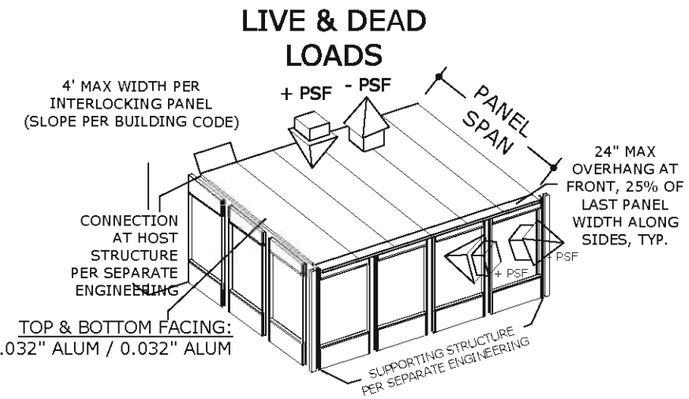
SPAN TABLE NOTES:

1. 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 NOTE 8.
2. ROOF PANEL ALLOWABLE PRESSURES CONSIDER +/- 2LB OF APPLIED DEAD LOAD DUE TO WEIGHT OF PANEL
3. ULTIMATE PRESSURES CALCULATED SUCH THAT P(ULT) = P(ASD)*0.6, AND INCLUDES SAFETY FACTOR OF 2

TABLE USE INSTRUCTIONS:

1. DETERMINE TYPE OF ENCLOSURE TO BE COVERED (OPEN, SCREENED WALLS, OR FULLY ENCLOSED) AND CORRESPONDING DEFLECTION LIMIT. USE REFERENCE BELOW FOR HELP.
2. DETERMINE THE SITE SPECIFIC REQUIRED DESIGN LOAD PROVIDED BY SEPARATE ENGINEERING, BY A LICENSED ENGINEER OR REGISTERED ARCHITECT, IN ACCORDANCE WITH THE GOVERNING CODE.
3. FIND ALLOWABLE COMPOSITE PANEL CLEAR SPAN IN TABLES FOR APPROPRIATE PANEL DEPTH, FACING THICKNESS, AND EPS CORE DENSITY SELECTED.

PANEL SPAN DEFINITION DIAGRAMS



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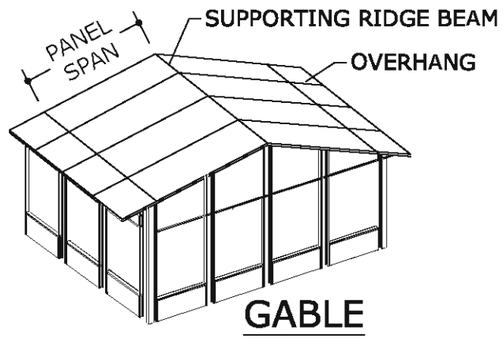

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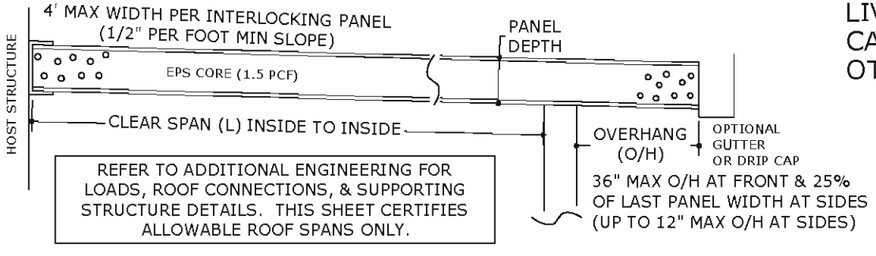
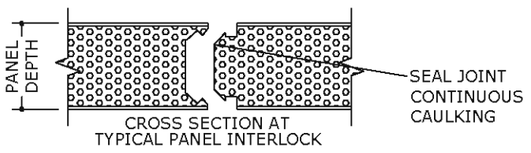
EPS ROOF PANEL SPAN DETAIL:



REFER TO ADDITIONAL ENGINEERING FOR LOADS, ROOF CONNECTIONS, & SUPPORTING STRUCTURE DETAILS. THIS SHEET CERTIFIES ALLOWABLE ROOF SPANS ONLY.

*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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DESIGN NOTES:

1. 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 SEVENTH EDITION (2020), 2012/2015/2018 INTERNATIONAL BUILDING CODES, AS WELL AS CURRENT VERSIONS OF THE MN, NC, NJ, NY, OH, SC, & VA BUILDING CODES & 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.
2. 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, MANUACTURED 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.
3. PANEL DEAD LOADS HAVE BEEN FACTORED INTO CALCULATIONS FOR GRAVITY LOADS AS WELL AS CALCULATIONS FOR PANEL PROPERTIES. FOR UPLIFT CALCULATIONS, USE ONLINE TOOL FOUND BY SCANNING THE QR CODE BELOW OR BY VISITING THE URL.
4. DEFLECTION SHALL BE CONSIDERED AS TO ALWAYS PROVIDE POSITIVE SLOPE AT THE WORST DESIGN CONDITION.
5. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
6. 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
7. FOUR SEASONS BUILDING PRODUCTS ROOF PANELS MAINTAIN A UL 1715 ROOF FIRE TEST WITHOUT SHEET ROCK AND IS ASSIGNED FILE #R14029.
8. DESIGN PRESSURES AS NOTED HEREIN ARE BASED ON A MAXIMUM TESTED PRESSURE DIVIDED BY A 2.0 FACTOR OF SAFETY. FOR ALTERNATE SAFETY FACTORS, SPANS SHALL BE ADJUSTED ACCORDINGLY.

GENERAL NOTES:

1. THE CONTRACTOR 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.
2. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
3. 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.
4. 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.
5. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
6. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

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FOR SITE SPECIFIC DEVIATIONS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE

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3IN & 4IN x 0.032 x 1.5 LB EPS ALUM WALL & ROOF PANELS
FBC SEVENTH EDITION (2020)
FL# 15085.1 & FL# 10778.1&.2

REMARKS	DRWN	CHKD	DATE
2020 FBC	CCB	RWN	9/30/20

20-32227

SCALE: NTS UNLESS NOTED

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