

FOAM CORE ROOF PANEL PANEL SPAN PERFORMANCE EVALUATION PREPARED FOR AV COMPOSITES FSA - FL#41965.1

DESIGN NOTES

THIS IS A NON-SITE SPECIFIC PERFORMANCE EVALUATION PROFESSIONAL'S SITE SPECIFIC EVALUATION & CERTIFICATION USE WITHOUT A SITE SPECIFIC PLAN UNDER SEPARATE CERTIF

POSITIVE AND NEGATIVE ASD DESIGN LOAD COMBINATION PR SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS REOUIREMENTS OF THE 2018 IBC/IRC GOVERNING BUILDING C CODE ENFORCED COMPLIES WITH STATE OF SEAL AND IF MULT APPLIES. DESIGN SHALL UTILIZE ASD DESIGN METHOD USING

*THIS DOCUMENT DOES NOT CERTIFY PRODUCT FOR USE AS A AAMA 2100 SUNROOM CLASSIFICATION II, III, OR IV ONLY.

THIS SUBMITTAL IS FOR STRUCTURAL PURPOSES ONLY. MANUFACTURED BY "AV COMPOSITES". ALL NON-STRUCTURA COMPONENTS SHALL BE INSTALLED AS PER THE MANUFACTURE REFERENCED HEREIN SHALL FOLLOW MANUFACTURER'S SPECIF

GENERAL NOTES

- STRUCTURE SHALL BE FABRICATED IN ACCORDANCE WI INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING C
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEE 2.
- THE ARCHITECT/ENGINEER OF RECORD OR PERMITTING 3 RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING
- THE HOST STRUCTURE SHALL NOT BE MODIFIED WITH T WALLS SHALL REMAIN IN PLACE. WHERE IMPACT PROTE HOST STRUCTURE, NOT ON THE SUNROOM.

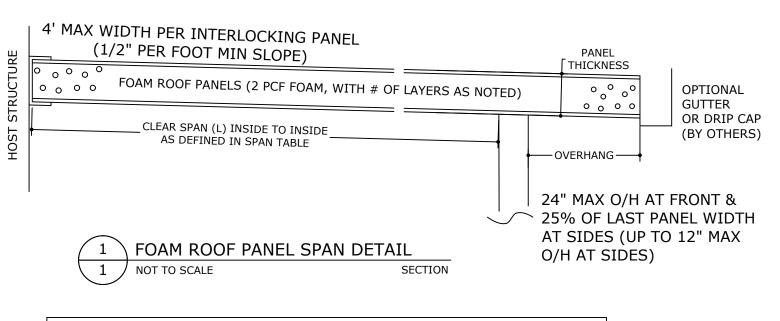
ANCHORAGE

- ALL FASTENERS TO BE #12 OR GREATER SAE GRADE 5 CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTA "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTIO APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH 6. EMBEDMENT SHALL BE AS NOTED HEREIN. MINIMUM EM FOAM, BRICK, AND OTHER WALL FINISHES.
- ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON MATERIALS
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL M 8 ELECTROLYSIS.
- ALL ALUMINUM SHALL BE 6063-T6 ALLOY AND TEMPER U 9
- 10. ALL CONCRETE TO REACH A MINIMUM COMPRESSIVE ST 11. ANY WOOD USED IN A PRIMARY CONNECTION SHALL BE
- OTHER
- 12. ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTUR SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RE ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT CODES & FROM DEVIATIONS OF THIS PLAN.
- 13. THIS ENGINEER HAS NOT VISITED THIS JOBSITE. INFOR CONTRACTOR SUPPLIED DATA AND MEASUREMENTS. TH LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE D VERIFIED PRIOR TO CONSTRUCTION. THIS ENGINEER S REEVALUATE OUR WORK UPON DISCOVERY OF ANY INAC EXISTING FIELD CONDITIONS AND FABRICATION AND IM
- 14. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITION INTENDED.
- 15. ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO TH THIS CERTIFICATION.

SPAN TABLE VALUE DEFINITIONS:

PANEL PROPERTIES & CALCULATION:

- 1. PANEL STRUCTURAL PROPERTIES AND ALLOWABLE SPANS HEREIN HAVE BEEN DERIVED FROM CERTIFIED TEST REPORTS (REPORT #1024.01-22 BY AMERICAN TEST LAB OF SOUTH FLORIDA).
- 2. PANEL DEAD LOADS HAVE BEEN FACTORED INTO CALCULATIONS FOR GRAVITY LOADS AS WELL AS CALCULATIONS FOR PANEL PROPERTIES
- 3. SITE SPECIFIC DESIGN PRESSURE SHALL BE CALCULATED AND CERTIFIED SEPARATELY BY A DESIGN PROFESSIONAL PER ASD LOAD COMBINATIONS DETAILED IN ASCE 7



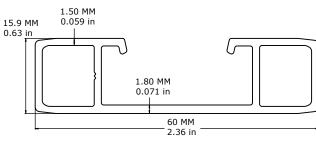
THIS DOCUMENT'S CERTIFICATION IS APPLICABLE FOR ROOF PANEL SPANS ONLY. REFER TO SEPARATE SITE-SPECIFIC ENGINEERING FOR CERTIFICATION AND DETERMINATION OF DESIGN LOADS, ROOF CONNECTIONS, & SUPPORTING STRUCTURE DETAILS (BY OTHERS).

RICHARD NEET PE# 86488 CA # 9885

ION. IT IS TO BE USED ALONG WITH A DESIGN	FL 41965.1			
ON FOR PERMIT. NO CERTIFICATION IS OFFERED FOR	Q		(219	Σ
PRESSURES CALCULATED FOR USE WITH THIS SYSTEM IS IN ACCORDANCE WITH THE STRUCTURAL & CODES, FLORIDA BUILDING CODE 7th EDITION (2020). JLTIPLE VERSIONS LISTED THEN MOST STRINGENT IG ASCE 7-16 BASED.		POSTAL ADDRESS:	W. ATLANTIC AVE R10 BOX	EXPRESS.CON
S A HABITABLE STRUCTURE.		AL AI	NTIC AVI RFACH	INGE
THIS PRODUCT SHALL BE CONSTRUCTED USING PARTS RAL ELECTRICAL / MECHANICAL UNITS AND JRER'S RECOMMENDATIONS. ANY INFORMATION NOT CIFICATIONS FOR THIS PRODUCT.		POST	401 W. ATLAN	ENGINEERIN
WITH ALL GOVERNING CODES. CONTRACTOR SHALL G CODE AMENDMENTS WHICH MAY APPLY. BEEN USED IN THE DESIGN OF THIS SYSTEM. NG CONTRACTOR FOR THE PROJECT SHALL BE IG SURFACES. H THIS DESIGN - ALL EXISTING WINDOWS, DOORS, AND TECTION IS REQUIRED, IT SHALL BE PLACED AT THE	ITES	0	PANEL SPANS	, E2322-03 M-16 (2022)
5 UNLESS NOTED OTHERWISE. FASTENERS SHALL BE STANT MATERIAL AND SHALL COMPLY WITH TION J.3.1 BY THE ALUMINUM ASSOCIATION, INC., & ANY H MANUFACTURERS' RECOMMENDATIONS. MINIMUM	COMPOSI 2950 NE 118TH ST	MIAMI, FL 33180 (305) 834 - 9416	AM CORE ROOF &FLOOR PANEL SPA TESTS PER ASTM E72-05, E2322-03	ASTM E72-05, E2322-03 D C271/C271M-16 (2022)
EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO,	595 C	Ш (30	RE RO	PER AS 3, AND
DN-CRACKED CONCRETE ONLY.	A		ΜCO	TESTS P E661-03,
. MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT R UNLESS NOTED OTHERWISE. STRENGTH OF 3000 PSI IN 7 DAYS. BE SYP#2 OR BETTER.			FOAM	E6 T
URAL DESIGN AS SHOWN ONLY. USE OF THIS	DATE 4/14/23			
5 & SAVES HARMLESS THIS ENGINEER FOR ALL COST & RESULTING FROM MATERIAL FABRICATION, SYSTEM AT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERA	CHKD -			
ORMATION CONTAINED HEREIN IS BASED ON THIS ENGINEER SHALL NOT BE HELD RESPONSIBLE OR E DATA OR MEASUREMENTS. WORK SHALL BE FIELD & SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO	DRWN CCB			
ACCURATE INFORMATION PRIOR TO MODIFICATION OF INSTALLATION OF MATERIALS. IONAL CERTIFICATIONS OR AFFIRMATIONS ARE	REMARKS NIT ISSUE FL#41965.1			
THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE				
VISIT ECALC.IO/51747	22-51747 SCALE: NTS UNLESS NOTED			
FOR SITE-SPECIFIC DEVIATIONS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE VISIT ENGINEERINGEXPRESS.COM/STORE		引		of 2
FOR ADDITIONAL PLANS, REPORTS & RESOURCES				

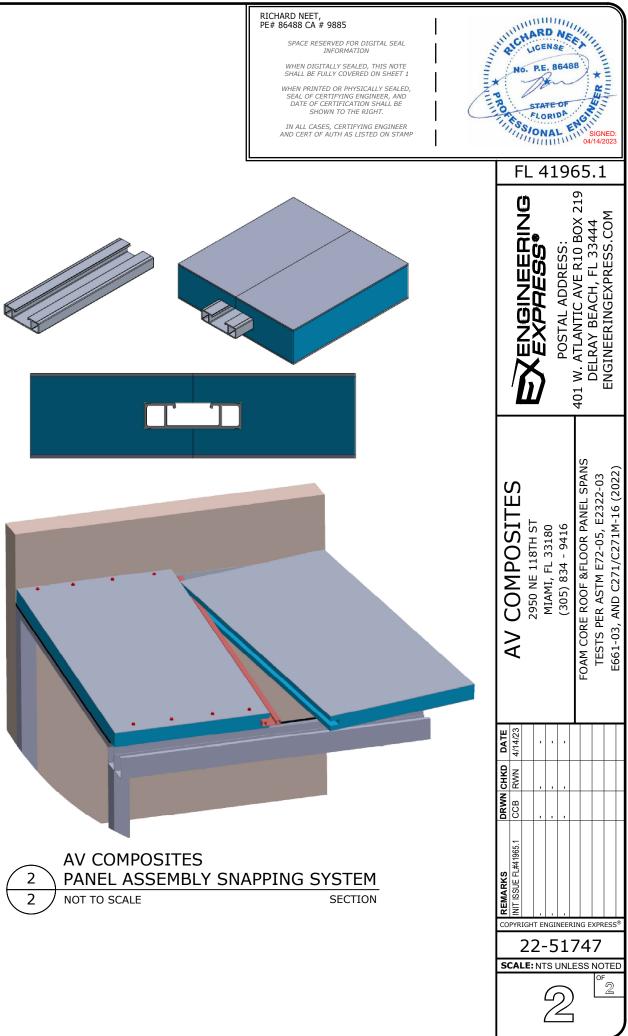
ALLOWABLE FOAM PANEL SPANS

	PANEL SIZE:	47 IN WIDTH,	47 IN WIDTH,	47 IN WIDTH,
		3 IN THICKNESS PANEL	4 IN THICKNESS PANEL	6 IN THICKNESS PANEL
AV COMPOSITES	TOP LAYER:	0.030" 3005 H46 ALUM	0.030" 3005 H46 ALUM	0.030" 3005 H46 ALUN
FOAM CORE	FOAM TYPE &	3" THICK, 1 LAYER,	4" THICK, 1 LAYER,	6" THICK, 1 LAYER,
ROOF PANELS	PROPERTIES	2 PCF DENSITY FOAM	OR 2" THICK, 2 LAYERS	
			2 PCF DENSITY FOAM	2 PCF DENSITY FOAM
	BOTTOM LAYER:	0.030" 3005 H46 Alum	0.030" 3005 H46 Alum	0.030" 3005 H46 Alum
DEFLECTION	TOTAL ASD	ALLOWABLE	ALLOWABLE	ALLOWABLE
LIMIT:	GRAVITY LOADING	PANEL SPAN	PANEL SPAN	PANEL SPAN
Δ = L/80	10 PSF	19.50	24.68	24.68
	15 PSF	18.68	23.02	24.68
	20 PSF	16.98	20.92	24.68
	25 PSF	15.76	19.42	24.29
	30 PSF	14.83	18.27	22.66
	35 PSF	14.09	16.97	20.97
	40 PSF	13.47	15.87	19.62
	45 PSF	12.83	14.96	18.50
	50 PSF	12.17	14.20	17.55
	55 PSF	11.60	13.54	16.73
	60 PSF	11.11	12.96	16.02
	65 PSF	10.67	12.45	15.39
	70 PSF	10.29	12.00	14.83
	75 PSF	9.94	11.59	14.33
	80 PSF	9.62	11.22	13.87
	10 PSF	18.68	23.02	24.68
	15 PSF	16.32	20.11	24.68
	20 PSF	14.83	18.27	22.86
	25 PSF	13.77	16.96	21.22
	30 PSF	12.95	15.96	19.97
	35 PSF	12.31	15.16	18.97
	40 PSF	11.77	14.50	18.14
Δ = L/120	45 PSF	11.32	13.94	17.44
	50 PSF	10.93	13.46	16.84
	55 PSF	10.58	13.04	16.32
	60 PSF	10.28	12.67	15.85
	65 PSF	10.01	12.34	15.39
	70 PSF	9.77	12.00	14.83
	75 PSF	9.55	11.59	14.33
	80 PSF	9.34	11.22	13.87
Δ = L/180	10 PSF	16.32	20.11	24.68
	15 PSF	14.26	17.57	21.98
	20 PSF	12.95	15.96	19.97
	25 PSF	12.03	14.82	18.54
	30 PSF	11.32	13.94	17.44
	35 PSF	10.75	13.25	16.57
	40 PSF	10.28	12.67	15.85
	45 PSF	9.89	12.18	15.24
	50 PSF	9.55	11.76	14.71
	55 PSF	9.25	11.39	14.25
	60 PSF	8.98	11.07	13.85
	65 PSF	8.75	10.78	13.48
	70 PSF	8.53	10.51	13.15
	75 PSF	8.34	10.27	12.85
	80 PSF	8.16	10.06	12.58

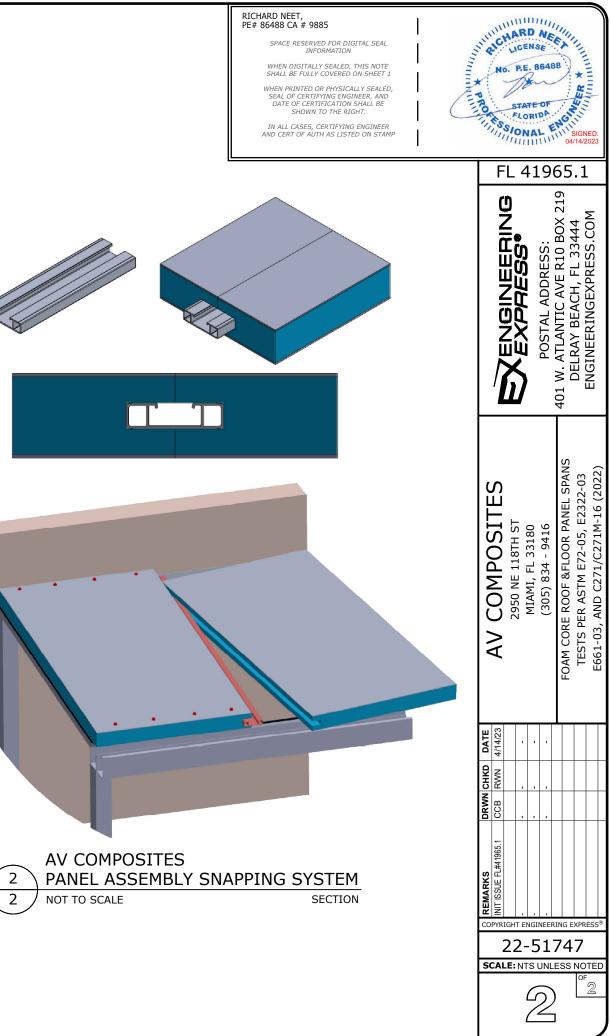


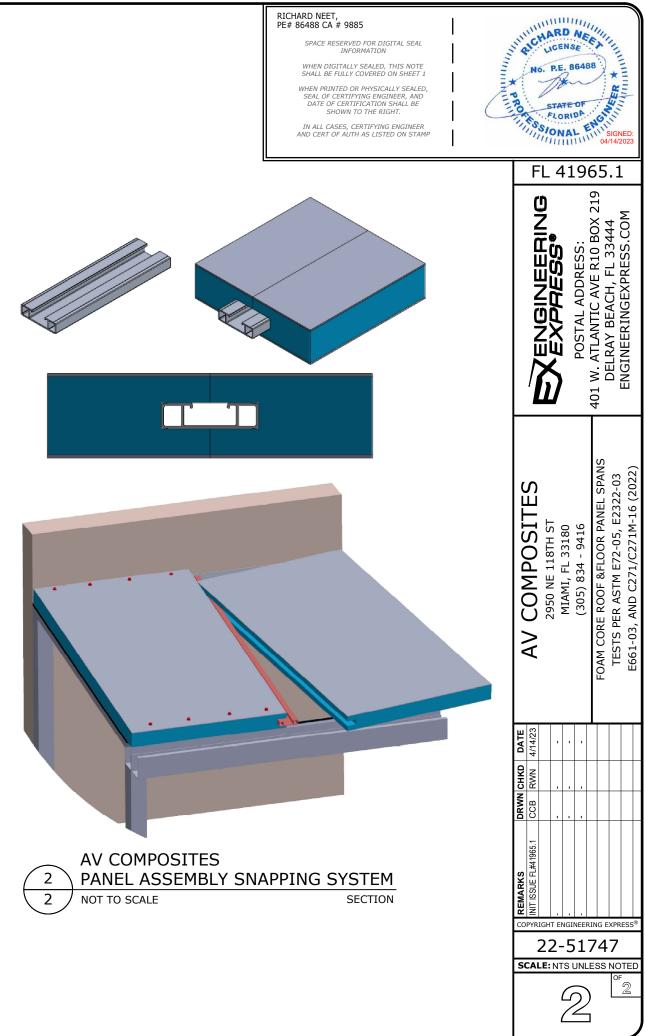






INSERT CONTINUOUS CONNECTION CHANNEL **BETWEEN FOAM PANELS** AND USE PRE-FORMED GROOVE TO SNAP PANELS TOGETHER





HOW TO USE PANEL SPAN DESIGN TABLE:

- 1. DETERMINE SITE-SPECIFIC, ASD, GRAVITY DESIGN PRESSURES VIA SEPARATE, CERTIFIED CALCULATIONS BY A DESIGN PROFESSIONAL
- 2. DETERMINE ALLOWABLE DEFLECTION LIMITS AS REQUIRED BY LOCAL CODES & STANDARDS GOVERNING THE STRUCTURE BEING INSTALLED
- 2.1. FOR DEFLECTION LIMITS BETWEEN OPTIONS LISTED, USE ALLOWABLE SPANS FOR MORE STRINGENT DEFLECTION LIMIT.
- 3. DETERMINE REQUIRED PANEL SPAN BASED ON STRUCTURE DIMENSIONS. REFER DETAIL (1/1) FOR DEFINITION OF PANEL SPAN
- 4. USE THE TABLE TO SELECT A PANEL THAT LISTS A SPAN VALUE EQUAL OR GREATER THAN THE DESIGN CONDITIONS.