

FOUR SEASONS BUILDING PRODUCTS
ILLUMA-VIEW ROOF PANELS
COMPOSITE POLYCARBONATE ROOF PANEL
NON-IMPACT - HVHZ / NON-HVHZ

MAXIMUM ALLOWABLE
CLEAR SPAN TABLES

Live Load &/or Uplift	Deflection Limit (L/...)	Allowable Span
13 PSF	120	15'-0"
13 PSF	180	13'-1"
13 PSF	240	11'-11"
16 PSF	120	14'-1"
16 PSF	180	12'-4"
16 PSF	240	11'-2"
19 PSF	120	13'-3"
19 PSF	180	11'-7"
19 PSF	240	10'-6"
23 PSF	120	12'-5"
23 PSF	180	10'-10"
23 PSF	240	9'-10"
27 PSF	120	11'-8"
27 PSF	180	10'-3"
27 PSF	240	9'-3"
32 PSF	120	11'-1"
32 PSF	180	9'-8"
32 PSF	240	8'-10"
37 PSF	120	10'-6"
37 PSF	180	9'-3"
37 PSF	240	8'-5"
42 PSF	120	9'-10"
42 PSF	180	8'-10"
42 PSF	240	8'-0"
46 PSF	120	9'-5"
46 PSF	180	8'-7"
46 PSF	240	7'-9"
48 PSF	120	9'-3"
48 PSF	180	8'-5"
48 PSF	240	7'-8"
51 PSF	120	8'-11"
51 PSF	180	8'-3"
51 PSF	240	7'-6"
54 PSF	80	8'-8"
54 PSF	120	8'-8"
54 PSF	180	8'-1"
54 PSF	240	7'-4"
57 PSF	80	8'-5"
57 PSF	120	8'-5"
57 PSF	180	7'-11"
57 PSF	240	7'-3"

SPAN TABLE NOTES:

- SPANS SHOWN BASED ON PRODUCT TESTING LISTED IN GENERAL NOTES.
- PANEL DEAD LOADS HAVE BEEN FACTORED INTO CALCULATIONS FOR GRAVITY LOADS AS WELL AS CALCULATIONS FOR PANEL PROPERTIES.
- POSITIVE AND NEGATIVE DESIGN PRESSURE SHALL BE DETERMINED SEPARATELY PER ASCE 7 BASED ON SITE SPECIFIC APPLICATION AND COMPARED TO THE APPLICABLE TABLE HEREIN. THE LIMITING POSITIVE OR NEGATIVE PRESSURE SPAN VALUE SHALL BE USED FOR INSTALLATION.
- CALCULATED PRESSURES SHALL CONSIDER THE CONTROLLING LOAD COMBINATION, USING ALL APPLICABLE ASCE 7 LOADS INCLUDING DEAD, LIVE, SNOW, WIND, AND ANY OTHER LOADING APPLICABLE TO THE INSTALLATION, DETERMINED PER SEPARATE CERTIFICATION.
- TABLE CONSIDERS ASD DESIGN PRESSURES. TO CONVERT SEPARATELY CALCULATED ULTIMATE PRESSURES TO DESIGN PRESSURES, $P(ULT)*0.6 = P(ASD)$.
- DEFLECTION LIMIT AS NOTED IN CLEAR SPAN TABLES, MAXIMUM ALLOWABLE ROOF SLOPE SHALL BE 3" MAX PER FOOT (3:12).
- MAXIMUM ALLOWABLE ROOF OVERHANGS FOR THE VALUES LISTED ABOVE SHALL NOT EXCEED 3'-0". MAXIMUM ALLOWABLE SIDE OVERHANG IS 25% OF LAST PANEL WIDTH. (i.e. 12" MAX FOR 48" PANEL WIDTH).
- DEFLECTION LIMITS CONSIDERED FOR USE IN THE HVHZ ARE:
 - L/80 FOR SPANS $\leq 12'-0"$
 - L/180 FOR SPANS $> 12'-0"$

TABLE USE INSTRUCTIONS:

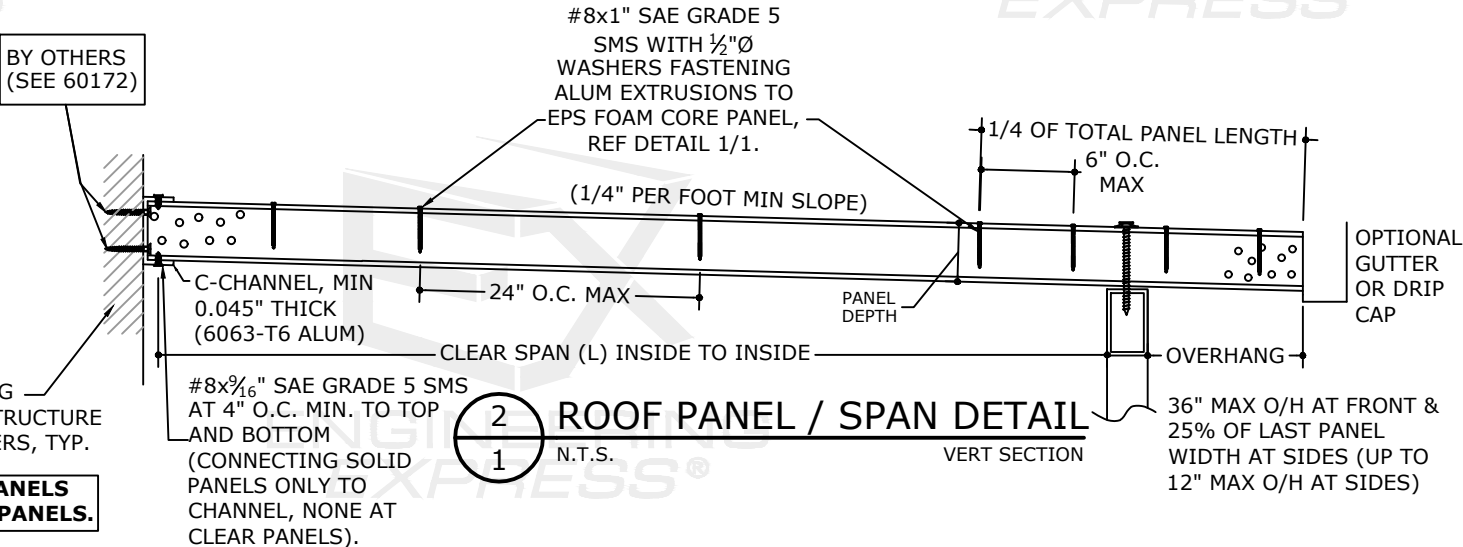
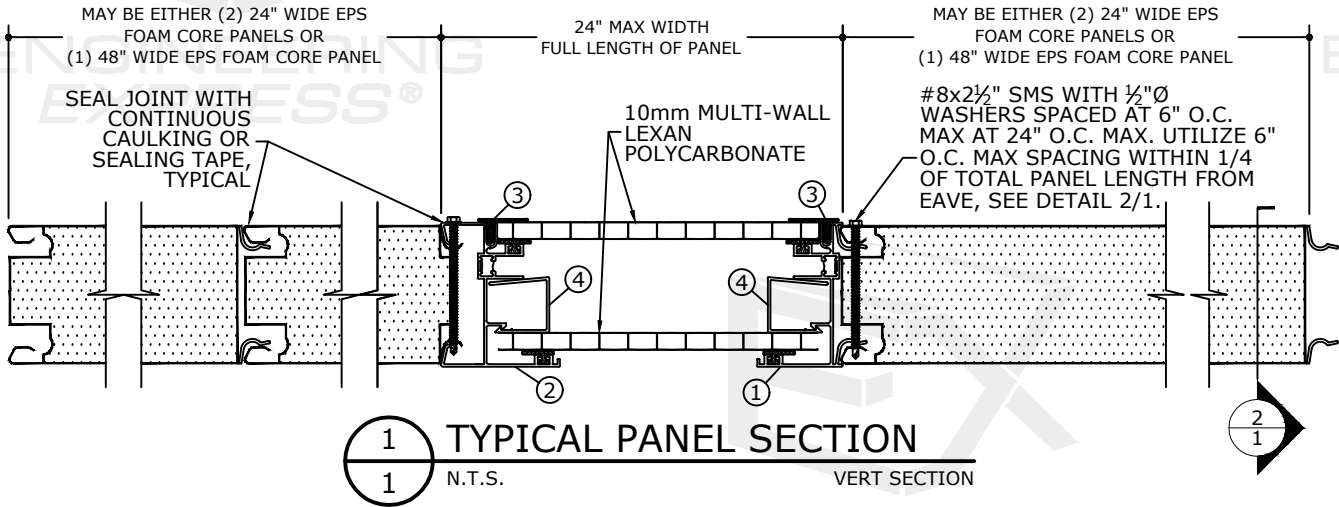
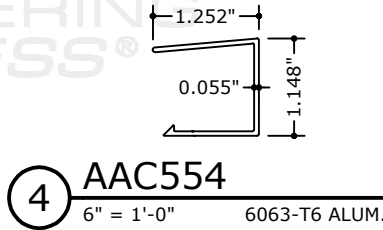
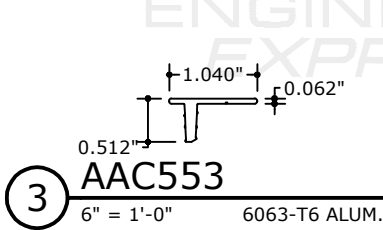
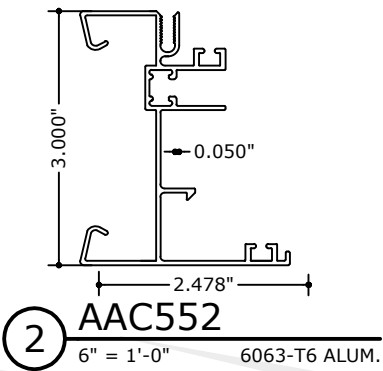
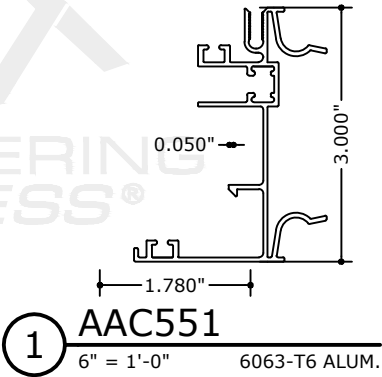
- DETERMINE TYPE OF ENCLOSURE TO BE COVERED (OPEN, SCREENED WALLS, OR FULLY ENCLOSED) AND CORRESPONDING DEFLECTION LIMIT.
- THE SPANS LISTED HEREIN ARE APPLICABLE FOR NON-HABITABLE STRUCTURES ONLY.
- DETERMINE THE SITE SPECIFIC REQUIRED DESIGN LOAD PER BY SEPARATE ENGINEERING, CERTIFIED BY A DESIGN PROFESSIONAL IN ACCORDANCE WITH THE FLORIDA BUILDING CODE AND ANY GOVERNING CODE, MUNICIPALITY, AND BUILDING CODES IN EFFECT FOR THE PROJECT LOCATION.
- BASED ON THE PROJECT DESIGN CONDITIONS DETERMINED, SELECT A SUITABLE ROOFING PANEL WITH AN ALLOWABLE SPAN GREATER THAN OR EQUAL TO THE PROJECT REQUIREMENTS.
- COMPONENT FRONT CONNECTION TO SUPPORTING BEAM AND BACK CONNECTION TO HOST STRUCTURE TO BE DETERMINED SEPARATELY ON A SITE SPECIFIC BASIS BY A DESIGN PROFESSIONAL.

EXISTING
HOST STRUCTURE
BY OTHERS, TYP.

BY OTHERS
(SEE 60172)

NOTE: ANCHORS AT SOLID PANELS
ONLY, NO ANCHORS AT CLEAR PANELS.

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

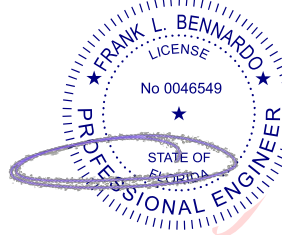


NOTE REGARDING USE OF THIS
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FRANK BENNARDO, PE
PE# 0046549 CA# 9885

AUGUST 3, 2023



Digitally signed by
Frank Bennardo
Date: 2023.08.03
11:12:56 -04'00'

DESIGN NOTES

ALLOWABLE DESIGN PRESSURES UTILIZED IN THIS DOCUMENT HAVE BEEN CALCULATED PER THE REQUIREMENTS OF THE FLORIDA BUILDING CODE EIGHTH EDITION (2023) & ASCE 7 USING ALLOWABLE STRESS DESIGN METHODOLOGY WITH THE CRITERIA AS OUTLINED HEREIN. REQUIRED DESIGN PRESSURES SHALL BE CALCULATED ON A SITE-SPECIFIC BASIS AND USED WITH THE DESIGN SCHEDULES HEREIN

GENERAL NOTES

- THIS SPECIFICATION HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FOR USE WITHIN & OUTSIDE OF THE HVHZ.
- COMPOSITE ROOF PANELS SHALL COMPLY WITH CHAPTER 7 SECTION 720, CHAPTER 8 SECTION 803, CLASS A INTERIOR FINISH, AND CHAPTER 26 SECTION 2603 OF THE FBC.
- DESIGN PROFESSIONAL SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY. DESIGN CRITERIA BEYOND AS STATED HEREIN MAY REQUIRE ADDITIONAL SITE-SPECIFIC SEALED ENGINEERING.
- THIS SYSTEM IS NOT APPROVED FOR LARGE OR SMALL IMPACT RESISTANCE. WHEN USED WITHIN THE HVHZ, THIS SYSTEM SHALL BE LIMITED TO NON-HABITABLE LIVING AREAS.
- THE DESIGN PROFESSIONAL FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR.
- 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 TABLES LISTED HEREIN SHALL DETERMINE VALUES. CONTACT THIS ENGINEER FOR ALTERNATE SPAN CALCULATIONS AS NECESSARY.
- 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 DESIGN PROFESSIONAL.
- EPS CORE COMPOSITE PANELS SHALL BE CONSTRUCTED USING TYPE 3105-H254 INTERIOR AND EXTERIOR ALUMINUM FACINGS, 1.0 PCF EPS. THE EPS FOAM SHALL BE ADHERED TO THE ALUMINUM FACINGS WITH ISOGRIP SP5040D MOISTURE CURE URETHANE ADHESIVE (BY ASHLAND SPECIALTY CHEMICAL COMPANY). FABRICATION SHALL BE IN ACCORDANCE WITH APPROVED FABRICATION METHODS BY METALS BUILDING PRODUCTS AT THEIR GROVELAND FACILITY.
- POLYCARBONATE PANELS SHALL BE SABIC LEXAN (FORMERLY G.E. LEXAN) THERMOCLEAR MULTI-WALLED POLYCARBONATE SHEETS PER MIAMI-DADE NOA#15-0915.08. EPS PANEL PERFORMANCE CHARACTERISTICS FOR SELF IGNITION, FLAME SPREAD AND SMOKE DENSITY HAVE BEEN QUALIFIED THROUGH APPLICABLE ASTM TEST STANDARDS. SEE EVALUATION REPORT FOR MORE INFORMATION.
- ALL FASTENERS TO BE #8 OR GREATER SAE GRADE 5 UNLESS NOTED OTHERWISE. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
- REFER TO FASTENER MANUFACTURER'S PUBLISHED DATA SHEETS AND RECOMMENDATIONS FOR FASTENER INSTALLATION INSTRUCTIONS.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE OR PROTECT ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- PRODUCTS SHALL BE LABELED IN ACCORDANCE WITH THE FLORIDA BUILDING COMMISSION AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATION.
- 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.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

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ILLUMA-VIEW COMPOSITE

POLYCARBONATE ROOF PANEL - FBC 2023

FLORIDA STATEWIDE APPROVAL (FSA FL#10013.1)

REMARKS	DATE	DRWN	CHKD
2020 FBC (20-30693)	9/28/20	CCB	RWN
2023 FBC	08/03/23	MLD	CCB

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SCALE: NTS UNLESS NOTED

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