

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"

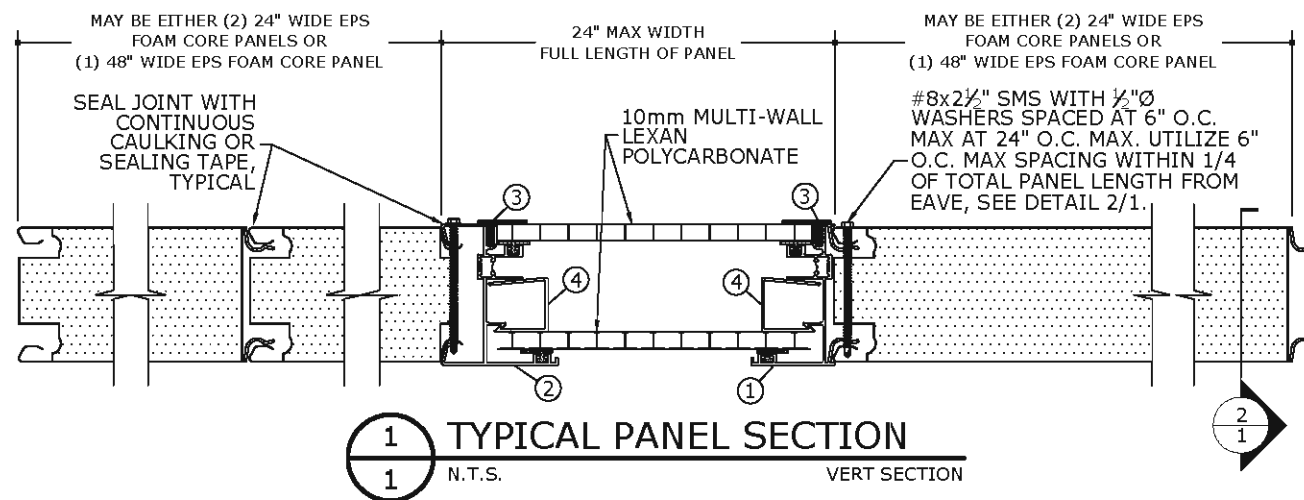
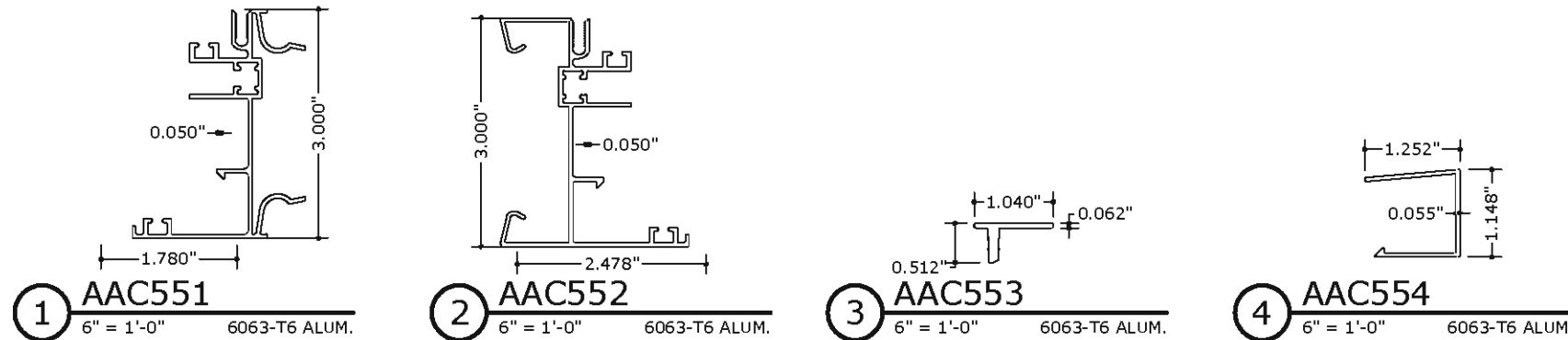
TABLE NOTES:

- DEFLECTION LIMIT AS NOTED IN CLEAR SPAN TABLES, MAXIMUM ALLOWABLE ROOF SLOPE SHALL BE 3" MAX PER FOOT (3:12).
- PANEL DEAD LOADS HAVE BEEN FACTORED INTO CALCULATIONS FOR GRAVITY LOADS AS WELL AS CALCULATIONS FOR PANEL PROPERTIES.
- 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).
- (†) INDICATES ROWS FOR USE WITHIN THE HVHZ ONLY. DEFLECTION LIMITS CONSIDERED FOR USE IN THE HVHZ ARE:
 - L/80 FOR SPANS ≤ 12'-0"
 - L/180 FOR SPANS > 12'-0"

CLEAR SPAN TABLES DIRECTIVE:

- CHOOSE TYPE OF ENCLOSURE TO BE COVERED (SCREENED WALLS, OR FULLY ENCLOSED).
- VERIFY APPROPRIATE ALLOWABLE LIVE LOAD WITH GOVERNING MUNICIPALITY AND BUILDING CODES IN EFFECT FOR THE PROJECT LOCATION USING FLORIDA BUILDING CODE.
- FIND ALLOWABLE COMPOSITE PANEL CLEAR SPAN IN TABLES.
- ANCHOR COMPOSITE PANELS TO EXISTING HOST STRUCTURE AND EXISTING SUPPORTING MEMBERS AS ILLUSTRATED HEREIN.

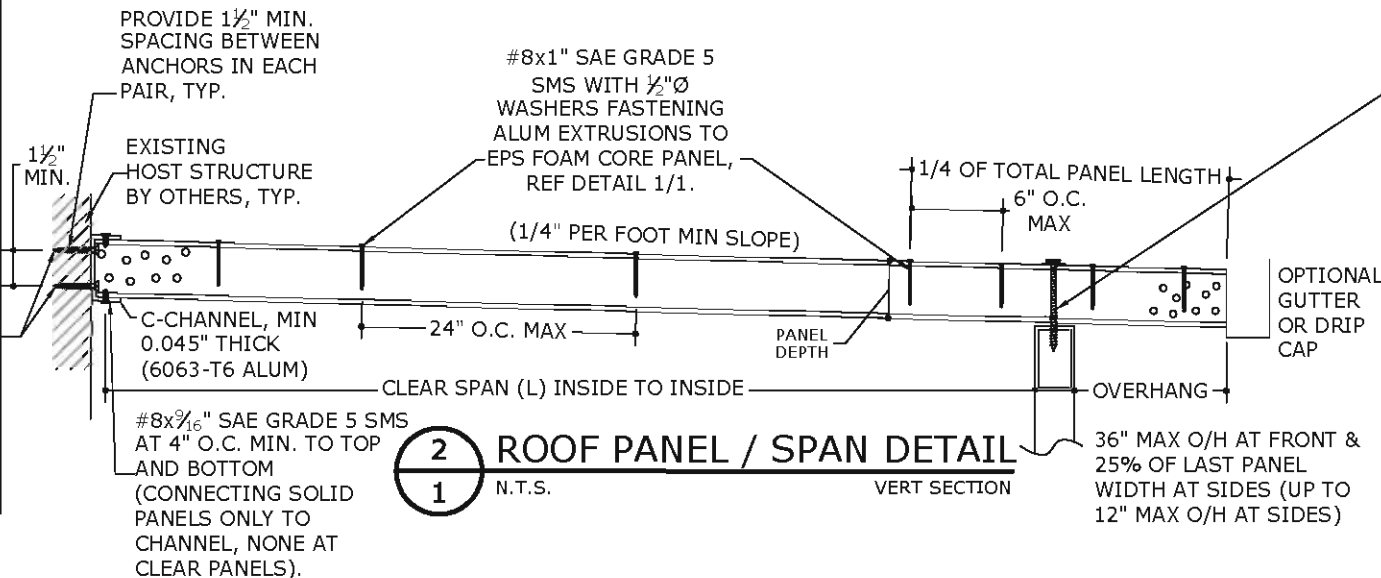
**ILLUMA-VIEW ROOF PANELS
COMPOSITE POLYCARBONATE ROOF PANEL**



TO WOOD: (2) 1/4" Ø LAG SCREWS WITH 1 1/2" MIN. THREAD PENETRATION TO EXISTING WOOD HOST (G=0.55 OR BETTER), 3/4" MIN. EDGE DISTANCE, SPACED AT 9" O.C. MAX.

TO CONCRETE: (2) 1/4" Ø ITW STAINLESS STEEL TAPCONS WITH 1 1/4" MIN. EMBED TO EXISTING 3192KSI NON-CRACKED CONCRETE HOST, 2 1/2" MIN. EDGE DISTANCE, SPACED AT 12" O.C. MAX.

TO HOLLOW BLOCK: (2) 1/4" Ø ITW STAINLESS STEEL TAPCONS WITH 1 1/4" MIN. EMBED TO EXISTING HOLLOW BLOCK, 2 1/2" MIN. EDGE DISTANCE, SPACED AT 10" O.C. MAX.



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

TO WOOD (G=0.55 OR BETTER): 1/4" Ø LAG SCREWS WITH 1 1/2" Ø MIN. WASHERS, 1 1/2" MIN. THREAD PENETRATION TO EXISTING WOOD MEMBER, 3/4" MIN. EDGE DISTANCE. PROVIDE (3) LAG SCREWS PER 24" WIDE FOAM CORE PANEL, OR (6) PER 48" WIDE FOAM CORE PANEL, 2" FROM EACH END, WITH BALANCE EQUALLY SPACED.

TO ALUMINUM (MIN 6063-T6 ALLOY, 0.125" MIN THICKNESS): 1/4" Ø SAE GRADE 5 SMS WITH 1 1/2" Ø MIN. WASHERS, SCREWS SHALL BE 1" LONGER THAN PANEL THICKNESS WITH 1/2" MIN. EDGE DISTANCE. PROVIDE (5) SMS PER 24" WIDE FOAM CORE PANEL, OR (10) PER 48" WIDE FOAM CORE PANEL, 2" FROM EACH END, WITH BALANCE EQUALLY SPACED.

DESIGN NOTES

ALLOWABLE DESIGN PRESSURES UTILIZED IN THIS DOCUMENT HAVE BEEN CALCULATED PER THE REQUIREMENTS OF THE FLORIDA BUILDING CODE SEVENTH EDITION (2020) & 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. CONTRACTOR 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.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
- THE ARCHITECT/ENGINEER OF RECORD 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 NOT BE PERMITTED. CONTACT THIS ENGINEER FOR ALTERNATE SPAN CALCULATIONS AS MAY BE REQUIRED.
- 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.
- 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 ISOCRIP 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.
- CONCRETE ANCHORS NOTED HEREIN SHALL BE EMBEDDED TO NON-CRACKED CONCRETE ONLY. INSTALL ALL CONCRETE ANCHORS PER MANUFACTURE'S RECOMMENDATIONS.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE OR PROTECT ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- 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.
- PANEL STRUCTURAL PROPERTIES DERIVED FROM CERTIFIED TEST REPORTS (REPORT NOS. 50332-A, 50410-A, 50410-B, 50410-C, 50410-D, 50410-E, 50410-F, 50410-G, 50410-H, 50410-I, BY TERRAPIN TESTING, INC. AND 14530-12330, 16289-107799 BY INTERTEK EVALUATION SERVICES).

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ILLUMA-VIEW COMPOSITE POLYCARBONATE ROOF PANEL

REMARKS	CHKD	DATE
REV FOR (2014)	CSL	04/16/15
REV FOR (2017)	JAC	08/29/17
2020 FBC	CCB	9/28/20

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SCALE:
DESCRIPTION: