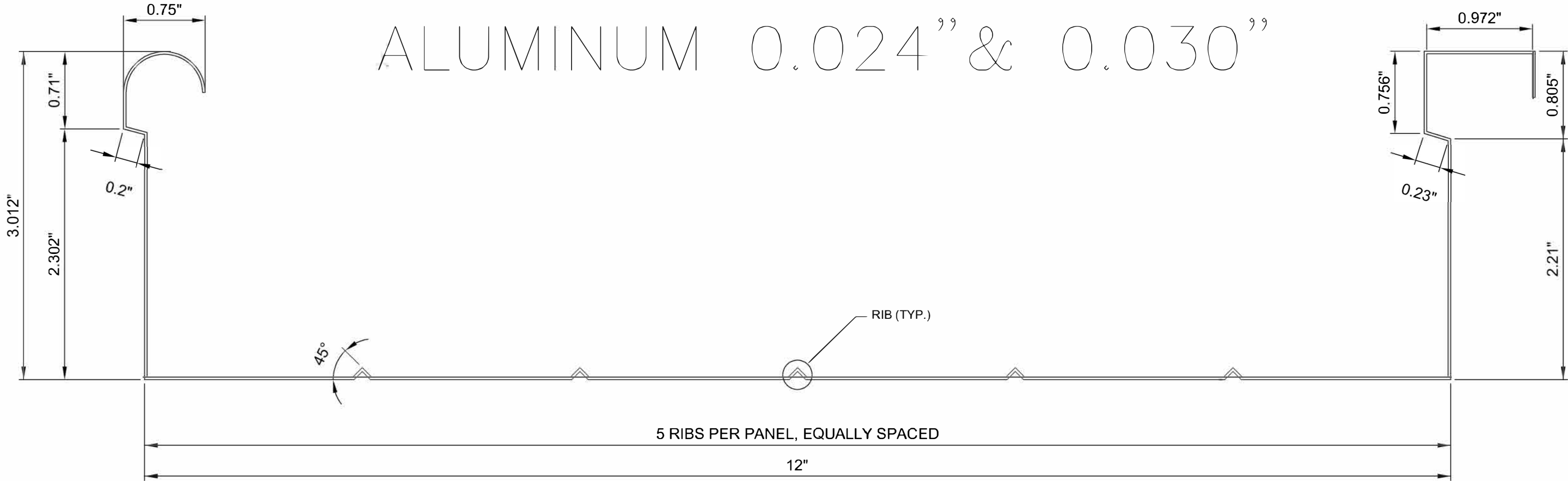


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3" RISER ROOF PANELS ALUMINUM 0.024" & 0.030"



ZONE 1				
Exposure B	ASCE 7-22 Ultimate Design Pressure Span Table			5 Degree
Open Structures (Clear Wind Flow)				
Wind Speed	Design Pressure/Suction		0.024" Span (ft).	0.030" Span (ft).
110	18.9	16.7	11.6	12.5
120	22.4	19.9	11.0	11.8
130	26.3	23.3	10.4	11.2
140	30.5	27.1	9.9	10.6
150	35.1	31.1	9.4	10.2
160	39.9	35.4	9.0	9.7

ZONE 1				
Exposure B	ASCE 7-22 Ultimate Design Pressure Span Table			5 Degree
Open Structures (Obstructed Wind Flow) & Partially Open Structure				
Wind Speed	Design Pressure/Suction		0.024" Span (ft).	0.030" Span (ft).
110	9.0	19.7	11.4	12.3
120	10.7	23.5	10.8	11.6
130	12.6	27.5	10.2	11.0
140	14.6	31.9	9.7	10.5
150	16.7	36.7	9.3	10.0
160	19.1	41.7	8.9	9.6

ZONE 1				
Exposure B	ASCE 7-22 Ultimate Design Pressure Span Table			1.2 Degree
Open Structures (Clear Wind Flow)				
Wind Speed	Design Pressure/Suction		0.024" Span (ft).	0.030" Span (ft).
110	16.3	15.4	12.2	13.1
120	19.3	18.4	11.5	12.4
130	22.7	21.6	10.9	11.7
140	26.3	25.0	10.4	11.2
150	30.2	28.7	9.9	10.7
160	34.4	32.7	9.5	10.2

ZONE 1				
Exposure B	ASCE 7-22 Ultimate Design Pressure Span Table			1.2 Degree
Open Structures (Obstructed Wind Flow) & Partially Open Structure				
Wind Speed	Design Pressure/Suction		0.024" Span (ft).	0.030" Span (ft).
110	7.0	16.5	12.1	13.1
120	8.4	19.6	11.5	12.3
130	9.8	23.0	10.9	11.7
140	11.4	26.7	10.3	11.1
150	13.1	30.6	9.9	10.6
160	14.9	34.8	9.5	10.2

ZONE 1				
Exposure C	ASCE 7-22 Ultimate Design Pressure Span Table			5 Degree
Open Structures (Clear Wind Flow)				
Wind Speed	Design Pressure/Suction		0.024" Span (ft).	0.030" Span (ft).
110	27.9	24.7	10.2	11.0
120	33.1	29.4	9.6	10.3
130	38.9	34.5	9.1	9.8
140	45.1	40.0	8.7	9.3
150	51.8	45.9	8.3	8.9
160	58.9	52.3	7.9	8.5

ZONE 1				
Exposure C	ASCE 7-22 Ultimate Design Pressure Span Table			5 Degree
Open Structures (Obstructed Wind Flow) & Partially Open Structure				
Wind Speed	Design Pressure/Suction		0.024" Span (ft).	0.030" Span (ft).
110	13.3	29.1	10.0	10.8
120	15.8	34.7	9.5	10.2
130	18.6	40.7	9.0	9.7
140	21.5	47.2	8.6	9.2
150	24.7	54.2	8.2	8.8
160	28.1	61.6	7.8	8.4

ZONE 1				
Exposure C	ASCE 7-22 Ultimate Design Pressure Span Table			1.2 Degree
Open Structures (Clear Wind Flow)				
Wind Speed	Design Pressure/Suction		0.024" Span (ft).	0.030" Span (ft).
110	24.0	22.8	10.7	11.5
120	28.6	27.1	10.1	10.9
130	33.6	31.8	9.6	10.3
140	38.9	36.9	9.1	9.8
150	44.7	42.4	8.7	9.4
160	50.8	48.2	8.3	9.0

ZONE 1				
Exposure C	ASCE 7-22 Ultimate Design Pressure Span Table			1.2 Degree
Open Structures (Obstructed Wind Flow) & Partially Open Structure				
Wind Speed	Design Pressure/Suction		0.024" Span (ft).	0.030" Span (ft).
110	10.4	24.3	10.7	11.5
120	12.4	28.9	10.1	10.8
130	14.5	34.0	9.5	10.3
140	16.9	39.4	9.1	9.8
150	19.4	45.2	8.7	9.3
160	22.0	51.5	8.3	8.9

PRODUCT APPROVAL DETAILS:

BLDG CODE: 2023 FLORIDA BUILDING CODE 8TH EDITION
HVHZ: NOT FOR USE IN HVHZ
LIMITS OF USE: FOR PATIO USE ONLY.
- CARPORTS
- PATIO COVERS
- SUNROOMS
- SCREEN ENCLOSURES
- CANOPIES
- OTHER MINOR SIMILAR STRUCTURES

NOTES:

- ALUMINUM ROOF PANELS SHALL BE OF ALUMINUM ALLOY 3105-H1 OR APPROVED EQUAL.
- ROOF PANEL METAL THICKNESS TESTED: 0.024" AND 0.030".
- PRODUCT MATERIALS CONFORM TO ASTM B209.
- ALL INSIDE BEND RADII ARE 0.047 UNLESS OTHERWISE NOTED.
- STANDARD MANUFACTURING TOLERANCES:
DIMENSION+ 1/- 0.005
RADIUS +/- .005
ANGLE +/- 1'
- PRODUCT TEST REPORT FOR 0.030" AND 0.024" THICKNESS ROLLED 3" RISER ROOF PANELS, TEST REPORT NO.: E9946.01-401-44, OCT. 2, 2015. ASTM E330/E330M-14. ARCHITECTURAL TESTING, INC. AN INTERTEK COMPANY, 2250 MASSARO BLVD., TAMPA, FL 33619.
- ALL PRODUCT PERFORMANCE SPECIFICATIONS AND CONSTRUCTION REQUIREMENTS SHALL BE ENGINEERED BY A LICENSED DESIGN PROFESSIONAL IN ACCORDANCE WITH THE ALUMINUM DESIGN MANUAL, SPECIFICATIONS & GUIDELINES FOR ALUMINUM STRUCTURES, WASHINGTON, DC, FOR WIND RESISTANCE IN CONFORMANCE TO FBC CHAPTER 16 FOR COMPONENTS AND CLADDING LOADS, ASCE/SEI 7-22 CHAPTER 30 PART 1 LOW RISE, PART 4 ROOF OVERHANGS, AND PART 5 NON BUILDING STRUCTURES FOR ROOF COMPONENTS AND CLADDING FOR ENCLOSED AND OPEN STRUCTURES. EFFECTIVE AREA FOR WIND LOAD CALCULATIONS BASED ON 36 SQ. FEET (ABSOLUTE VALUE OF CONTROLLING DESIGN PRESSURE IS SHOWN ON SPAN TABLES).
- CLEAR WIND FLOW DENOTES RELATIVELY UNOBSTRUCTED WIND FLOW BLOCKAGE LESS THAN OR EQUAL TO 50% OBSTRUCTED WIND FLOW DENOTES OBJECTS BELOW ROOF INHIBITING WIND FLOW (>50% BLOCKAGE AS DEFINED BY ASCE/SEI 7-22.
- SPAN SCHEDULE SHOW MAXIMUM ROOF PANEL SPANS BETWEEN SUPPORT. INTERPOLATION BETWEEN SPAN VALUES IN PERMITTED. MAX. SPAN DEFLECTION LIMIT L/60.
- MEAN ROOF HEIGHT OF STRUCTURE SHALL NOT EXCEED 15 FEET ABOVE GRADE. SPAN TABLES FOR OPEN STRUCTURES BASED ON 5' MAX. ROOF SLOPE. SPAN TABLES FOR ENCLOSED STRUCTURES BASED ON 27' MAX. ROOF SLOPE.
- EACH ROOF PANEL SHALL BE CONNECTED PER DESIGN PROFESSIONAL'S INSTRUCTIONS, BUT SHALL HAVE MIN. OF (3)-#10 SMS W/NEOPRENE GASKET AND WASHER AT EACH SUPPORT POINT (OR OTHER APPROVED CONNECTION BY DESIGN PROFESSIONAL) W/ MIN. 0.040" THICK, 6063-T6 ALUMINUM BASE METAL. SUPPORT BEAMS SHALL BE PROVIDED ON EDGE PANELS PARALLEL TO PANEL SPAN.
- CALCULATION WAS PERFORMED BASED ON THE DEFLECTION ONLY, NOT MOMENT OR ANY OTHER FACTORS.
- PANEL STRUCTURAL PROPERTIES DERIVED FROM AUTO-CAD MASS PROPERTIES.
- THIS SYSTEM IS NOT APPROVED FOR IMPACT RESISTANCE FROM LARGE OR SMALL DEBRIS.
- THIS SYSTEM SHALL BE CONFINED TO NON-HABITABLE LIVING AREAS.
- PRODUCT TEST REPORT FOR 26 AND 24 GAUGE ROLLED FORMED GALVALUME ROOF PANEL, TEST REPORT E9946.01-401-44, OCT 2, 2015. ASTM E330/E330/E330M-14. ARCHITECTURAL TESTING INC. AN INTERTEK COMPANY, 2250 MASSARO BLVD., TAMPA, FL 33619
- SEPARATE SITE-SPECIFIC ENGINEERING SHALL BE REQUIRED IN ORDER TO DEViate FROM LOADS, DEFLECTIONS, OR SPANS CONTAINED HEREIN. LINEAR INTERPOLATION OF THE OF THE ALLOWABLE SPAN TABLES LISTED HEREIN SHALL NOT BE ALLOWED. CONTACT THIS ENGINEER FOR ALTERNATE SPAN CALCULATIONS AS MAY BE REQUIRED.
- THE SINGLE-SPAN ANALYSIS IS PRESENTED HERE AS THIS IS THE TYPICAL CRITICAL CONDITION. MULTIPLE SPANS WITH INTERMEDIATE CARRY BEAMS CAN PRODUCE BETTER SPANS CONTACT THIS ENGINEER FOR ALTERNATE SPAN CALCULATIONS AS MAY BE REQUIRED.
- THE CONTRACTOR SHALL CAREFULLY CONSIDER POSSIBLE ADDITIONAL IMPOSED LOADS ON THE ROOF SYSTEM. IF SUCH LOADS EXIST, APPROPRIATE REDUCTIONS IN SPANS SHALL BE ANALYZED BY A LICENSED PROFESSIONAL ENGINEER.
- FABRICATION SHALL BE IN ACCORDANCE WITH APPROVED FABRICATION METHODS BY ALUMFLO, INC AT THEIR ALUMFLO,INC FACILITY. USE OF THESE SDPAN AND LOAD TABLES WITH OTHER MANUFACTURERS OF SIMILAR PRODUCTS IS SPECIFICALLY PROHIBITED.
- ALL FASTENERS TO BE #12 OR LARGER, SAE GRADE 5 OF BETTER UNLESS OTHERWISE SPECIFIED. FASTENERS SHALL BE PLATED OR COATED WITH CORROSION RESISTANT MATERIAL AND SHALL COMPLY WITH ANY APPLICABLE FEDERAL, STATE OR LOCAL CODES.
- CONCRETE ANCHORS NOTED HEREIN SHALL BE EMBEDDED INTO UNCRACKED CONCRETE SPANS INSTALL ALL CONCRETE ANCHORS PER MANUFACTURERS RECOMMENDATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR INSULATING THE MEMBERS OF THIS SYSTEM FOR DISSIMILAR METALS TO PREVENT ELECTROLYSIS.
- THE CONTRACTOR IS RESPONSIBLE FOR WEATHER PROOFING MATERIALS AND INSTALLATION SUCH AS FLASHING, CAULKING, ETC.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- ALTERATIONS ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT IS NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- THIS SYSTEM 'S VALIDATED FOR THE STRUCTURAL DESIGN AS SHOWN ONLY.
- USE OF THIS SPECIFICATION BY CONTRACTOR, et al INDEMNIFIES & AND HOLDS HARMLESS THE ENGINEER SIGNING AND SEALING THIS PLAN FOR ALL COSTS & DAMAGES INCLUDING LEGAL FEES, APPELLATE FEES, COURTS COSTS -OR OTHER COSTS RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY FEDERAL, STATE AND LOCAL CODES, AS WELL AS FROM DEVIATIONS FROM THIS SPECIFICATION.
- VERIFICATION OF THE STRUCTURAL INTEGRITY / CAPACITY OF THE SUPPORTING HOST STRUCTURE AND SUPPORT FRAMING ELEMENTS ARE THE RESPONSIBILITY OF THE SITE SPECIFIC DESIGN PROFESSIONAL.
- THESE DESIGN SPAN TABLES ARE APPLICABLE TO PATIO COVERS, SCREEN ROOMS AND CARPORTS ATTACHED (OR SUPPORTED BY FOUR WALL CONSTRUCTION) TO THE BUILDING ENVELOPE OF THE MAIN HOST STRUCTURE.
- CALCULATION WAS PERFORMED BASED ON THE DEFLECTION ONLY, NOT MOMENT OR ANY OTHER FACTORS.

REVISIONS		
No.	DATE	DESCRIPTION
A	12/21/23	PERMIT SET

3" ALUMINUM RISER ROOF PANELS

ALUMINUM PANEL DETAILS SHEET (ZONE 1)

FREDERIC P. CARRIE P.E., S.E., LEED AP BD+C
FLORIDA LICENSE #0091 FLORIDA S.E. LICENSE #1707660
DATE: 10/21/2022
DESIGNED AND DRAWN BY: FCP CONSULTANTS, INC.
CHECKED BY: FCP CONSULTANTS, INC.
DATE: 10/21/2022
DESIGNED AND DRAWN BY: FCP CONSULTANTS, INC.
CHECKED BY: FCP CONSULTANTS, INC.

FCP CONSULTANTS, LLC	
CONSULTING ENGINEERS	
12500 SW 13th Terrace Miami, FL 33186 Ph: (305) 427-3784 fcpsa@fcpsa.com	

Design By	FC
Drawn By	CR
Checked By	FC
Scale	AS NOTED
Date	12-22-2023
Solicitation No.	-

SHEET NUMBER
A-1.1

Digitally
signed by
Frederic P
Carrie
Date:
2024.01.04
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