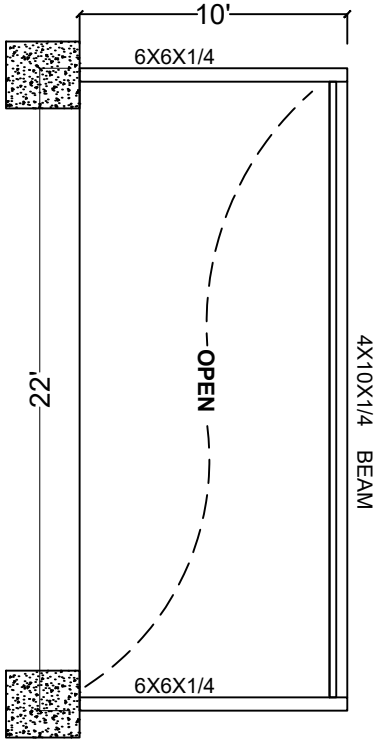


3" x 0.030 x 2 - LB EPS PANELS
(ALLOWABLE CLEAR SPAN CHARTS)

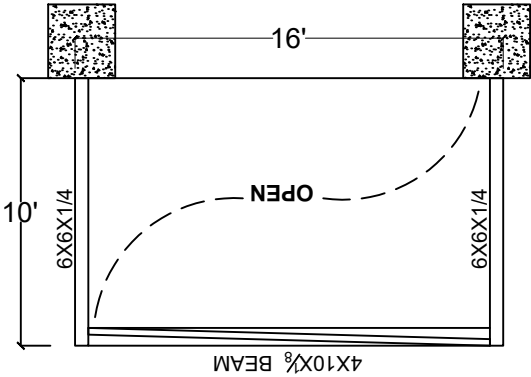
NET ALLOWABLE LOAD (PSF) ¹	MAX. ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	20.11	20.03	19.42	18.81
20	19.02	18.81	17.58	16.35
30	17.93	17.58	15.73	13.89
40	16.83	16.35	13.89	11.43
50	15.74	15.12	12.05	8.97
60	14.64	13.89	10.21	6.52
70	13.55	12.66	8.36	4.06
80	12.46	11.43	6.52	1.60

- GENERAL NOTES:**
- WIND PRESSURES HAVE BEEN DETERMINED BASED ON ASCE 7-22 WIND SPEED OF 175 MPH, EXPOSURE C.
 - THIS STRUCTURE HAS BEEN DESIGNED AND MUST BE FABRICATED IN ACCORDANCE WITH THE STRUCTURAL PROVISIONS OF FBC 2023. DESIGN CRITERIA OR SPANS BIGGER THAN STATED IN THE PLANS MAY REQUIRE ADDITIONAL CALCULATION AND CHANGE IN THE PLAN.
 - CALC ENGINEERING SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO REEVALUATE THE WORK AND DESIGN UPON DISCOVERY OF ANY INACCURATE INFO PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS.
 - NO EXTRA LOAD IS PERMITTED TO APPLY ON THE STRUCTURE AT THE TIME OF INSTALLATION.
 - CONTRACTOR SHALL CAREFULLY CONSIDER POSSIBLE IMPOSING LOADS ON ROOF INCLUDING BUT NOT LIMITED TO ANY CONCENTRATED LOADS WHICH MAY JUSTIFY GREATER DESIGN CRITERIA.
 - ALL FASTENERS TO BE #10 OR GREATER ASTM F593 COLD WORKED 304 STAINLESS STEEL UNLESS NOTED OTHERWISE.
 - ALL ANCHORS FOR ALUMINUM SHALL BE SPACED WITHIN 2 TIMES DIAMETER END DISTANCE AND 2 TIMES DIAMETER MIN SPACING TO ADJUST ANCHORS.
 - CONTRACTOR OR OWNER MUST VERIFY SIZE OF EXISTING CONCRETE SLAB,
 - ANY EXISTING SIZE OF SLAB OR FOOTER HAS TO BE CONFIRMED BY CONTRACTOR OR OWNER

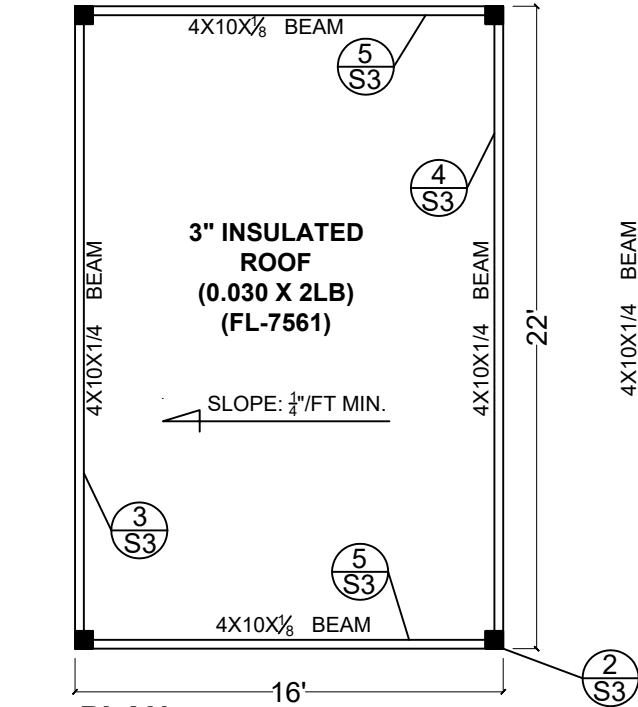
LEFT ELEVATION



REAR ELEVATION



PLAN



FRONT ELEVATION

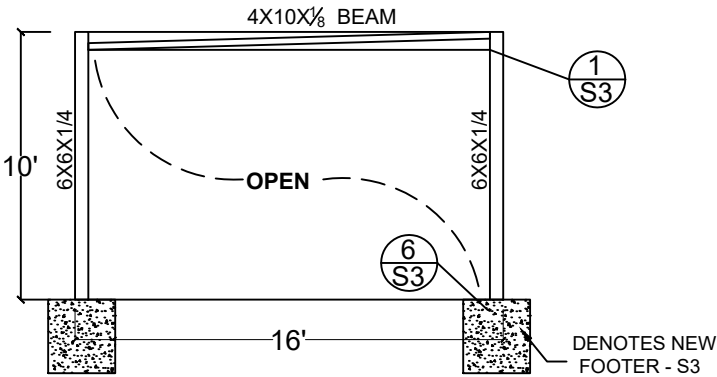


Exhibit B - Proposed Pergola Structure

DESIGN CALCULATION:

BASIC WIND SPEED (RISK CATEGORY II) 175 MPH
DESIGN BASED ON CATEGORY II
EXPOSURE CATEGORY: C
3-SEC PEAK GUST IN MPH
DESIGNED BASED ON 6061-T6 ALUMINUM
ROOF PRESSURE (SOLID) : 30.0 PSF
DEAD LOAD: 5 PSF
LIVE LOAD: 20 PSF

NOTE:

ANY ISSUES REGARDING LEAKS, SEALANT
OR DRAINAGE BY THE CONTRACTOR.

NOTE:

CONTRACTOR CAN USE BIGGER SECTIONS
FOR BEAMS AND COLUMNS

FOUNDATION NOTES:

NEW ISOLATED FOOTER
3.0'X3.0'X3.0 FOR EACH COLUMN
SEE S-3 FOR MORE DETAILS

UPLIFT CALCULATION :

TRIBUTARY COLUMN AREA = 96 SQ FEET
WIND UPLIFT FORCE = 2400 LB
WEIGHT OF FOOTING = 150X3.0X3.0X3.0 = 4050 LB
TOTAL WEIGHT = 4050 LB > 1.67X2400 = 4008 LB; OK

GENERAL NOTES:

- ALUMINUM SHALL BE 6061-T6 ALLOY ASTM A653 WITH MIN YIELD STRENGTH OF 45 KSI.
- ALL EXISTING SLABS AND FOOTING CONCRETE MUST BE WITHOUT ANY CRACK OTHERWISE NEED TO BE INSPECTED BY CALC ENGINEERING.
- ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED AND INTACT CONCRETE SURFACE.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.

FOUNDATION NOTES:

- 1) ALL REINFORCING STEEL TO BE GRADE 60 WITH YIELD STRENGTH 40 KSI
- 2) THE EXISTING SOIL MEETS OR EXCEEDS THE MINIMUM REQUIRED LOAD BEARING CAPACITY OF 2000 PSF.
- 3) SOIL IS MAIN COMPOSITION IS SANDY AND LIMEROCK
- 4) CONCRETE FOR FOOTING TO BE 3000 PSI MINIMUM.
- 5) FILL PLACED WITHIN 5'-0" OF THE STRUCTURE PERIMETER CONSIST OF CLEAN GRADED SAND IN MAX 12".
- 6) SPLICES SHALL BE 40 BAR DIAMETERS ALL AROUND THE CORNERS AND CHANGES IN DIRECTION.
- 7) CORNER BARS SHALL BE 40 BAR DIAMETERS IN EACH WAY.
- 8) MAXIMUM WATER-CEMENT RATIO BY WEIGHT TO BE 0.4.

DESIGN IS BASED ON FBC 2023, 8TH EDITION

CALC ENGINEERING

2000 NW 89 PL UNIT 102

DORAL FL 33172

Phone: (305) 898-9995

ENGINEERING BUSINESS

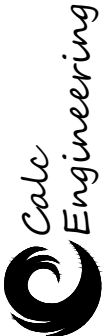
CA CERTIFICATION: 32566

NEW ALUMINUM ROOF FOR:

BABSSI MOHAMED F

4210 SIENA CIR

WELLINGTON FL 33414



DATE: 01/21/2025

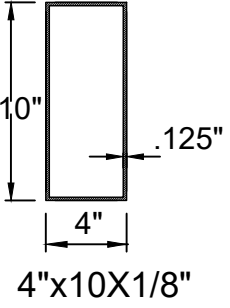
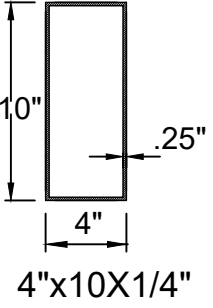
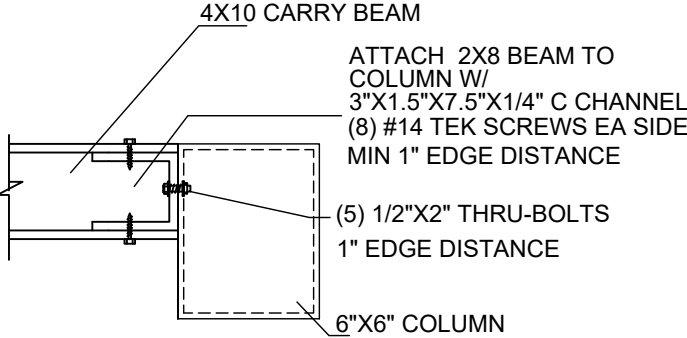
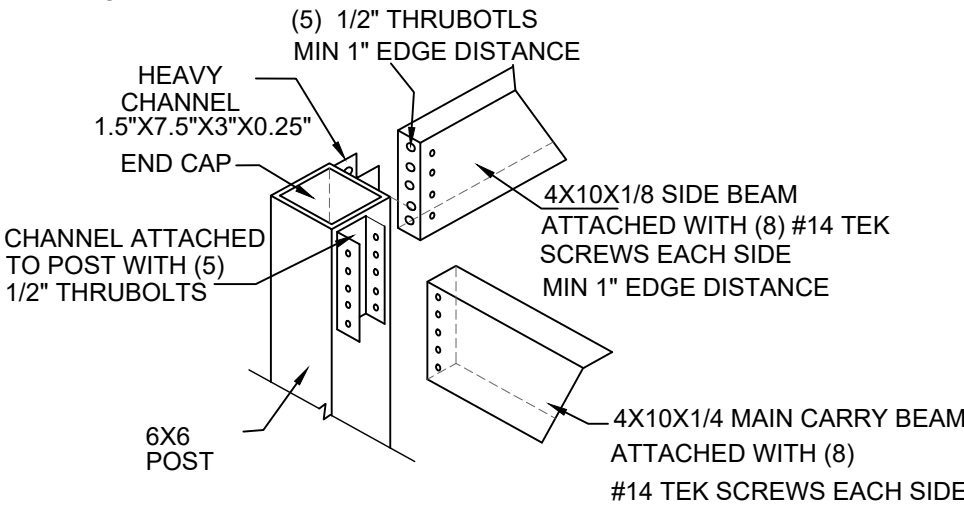
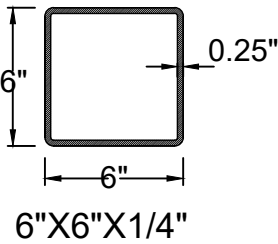
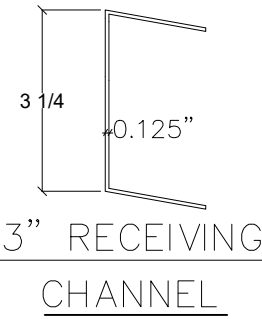
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PROYECT : E-202513

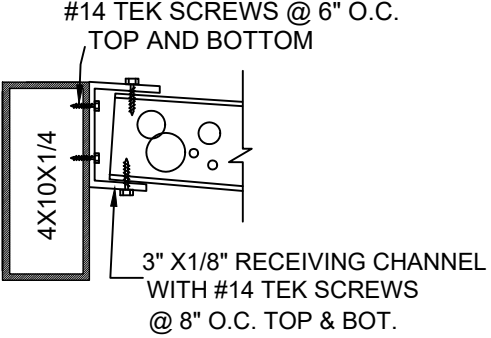
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DRG: EV

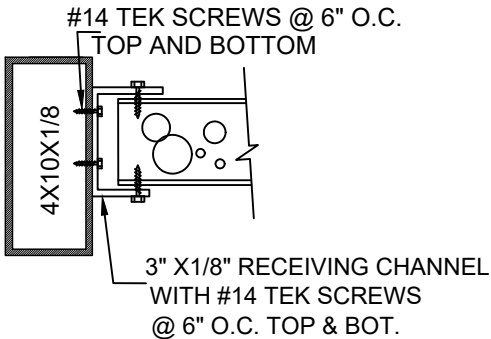
NOTE: PROVIDE MIN 1" EDGE DISTANCE AND SPACING FOR ALL SCREWS ATTACHMENT



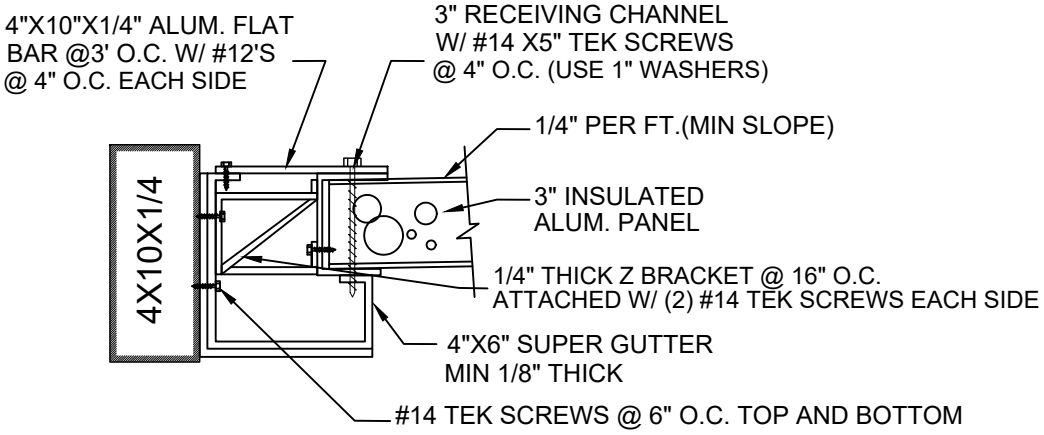
1 S3 BEAMS TO COLUMN



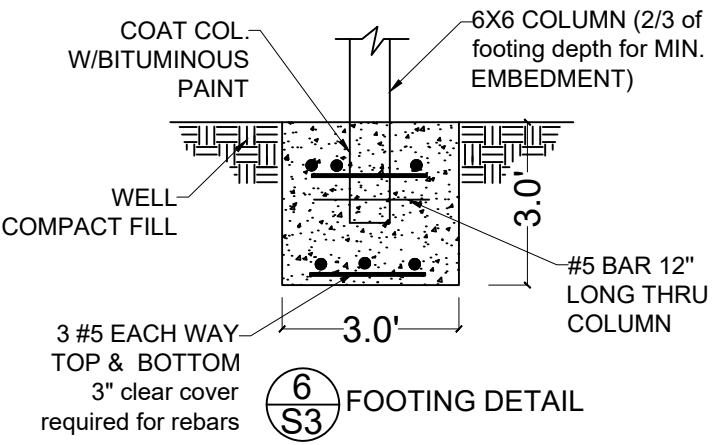
4 S3 INSULATED PANEL TO BEAM (REAR AND SIDES)



5 S3 INSULATED PANEL TO BEAM (SIDES)



3 S3 BEAM TO INSULATED ROOF



6 S3 FOOTING DETAIL

- Roof is designed for 30 psf wind load L/180 , and 5 psf dead load, live load 20 psf
- All concrete (existing & new) shall have a min. compressive strength of 3,000 psi
- All concrete anchors supporting columns shall be installed at least 3" from the edge of concrete and have min. 3 1/2" embedment w/ min ultimate ten. strength of 60ksi
- Contractor must insulate aluminum members from dissimilar metals to prevent elecrolysis
- All aluminum structural component shall be of 6061-T6 alloy and be certified to comply with all applicable specification
- Fasenter must have min 1/2" head or be provided with 1/2" dia. washers min
- Bolts and all other fasteners shall be aluminum, non-magnetic stainless, & hot-dip/electro-galvanized steel/ double cadmium plated steel with coating for corrosion resistance

SOIL STATEMENT:
THE SOIL STATEMENT AT THIS SITE HAS BEEN OBSERVED BY THE ENGINEER AND CAN BE CONSIDERED TO HAVE ALLOWABLE MAXIMUM DESIGN BEARING CAPACITY OF 2000 PSF, SOIL TYPE IS SAND AND ROCKS, SHOULD ANY OTHER CONDITION OR MATERIALS BE ENCOUNTERED IN THE PROCESS OF CONSTRUCTION BY CONTRACTOR, THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH THE WORK

DESIGN IS BASED ON FBC 2023, 8TH EDITION

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DORAL FL 33172
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NEW ALUMINUM ROOF FOR:
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