# PIVOT 6 XL LOUVERED PERGOLA MASTER PLAN

20 PSF

1.0 1.0

0-20 PSF

**OPEN STRUCTURE** 

0 FEET (AT GRADE)

DOES NOT GOVERN

110-160 MPH (ASD = SQRT(0.6)\*Vult)

Kd=0.85, G=0.85, Kz=0.85, Kzt=1.0 UP TO 14 FEET

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**DESIGN NOTES** 

ALLOWABLE DESIGN PRESSURES UTILIZED IN THIS DOCUMENT HAVE BEEN CALCULATED PER THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (2015 & 2018) & ASCE 7-10 / 7-16 USING ALLOWABLE STRESS DESIGN METHODOLOGY WITH THE CRITERIA AS OUTLINED HEREIN. THE CONTRACTOR SHALL CONTACT THE AUTHORITY HAVING JURISDICTION TO ENSURE APPROPRIATE CRITERIA TO BE USED BEFORE CONSTRUCTION BEGINS. THE SYSTEM HAS NOT BEEN DESIGNED TO WITHSTAND CONCENTRATED LOADS FROM

THE FLORIDA BUILDING CODE 7TH EDITION (2020). ALSO APPLICABLE FOR THE FBC 6TH EDITION (2017), IBC/IRC (2015 & 2018), AS WELL AS CURRENT VERSIONS OF THE MN, NC, NJ, NY, OH, SC, & VA BUILDING CODES ÀS APPLICABLE. CODE ENFORCED COMPLIES WITH STATE OF SEAL AND IF MULTIPLE VERSIONS ARE LISTED THEN MOST STRINGENT APPLIES. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY AND GOVERN. DESIGN SHALL UTILIZE ASD DESIGN METHOD USING ASCE 7-16 OR ASCE 7-10 CODES FOR SITE SPECIFIC APPLICATIONS AS APPLICABLE. DESIGN CRITERIA

OR SPANS BEYOND STATED HEREIN MAY REQUIRE ADDITIONAL SITE SPECIFIC SEALED ENGINEERING. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.

PRODUCT APPROVED FOR USE IN SEISMIC DESIGN CATEGORY A-B PER REQUIREMENTS OF ASCE 7 AND CALIFORNIA BUILDING CODE 2019. FOR SEISMIC DESIGN CATEGORY C-F AND ANY CONCRETE CONNECTIONS ADDITIONAL REVIEW BY THIRD-PARTY ENGINEERS IS REQUIRED FOR THE VALIDITY OF THE DESIGN.
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. THE CONTRACTOR SHALL CONSIDER POSSIBLE IMPOSING LOADS ON ROOF, INCLUDING BUT NOT LIMITED ANY SNOW, WIND, OR CONCENTRATED LOADS WHICH MAY JUSTIFY GREATER DESIGN CRITERIA. THIS ADDITIONAL ROOF LOAD CRITERIA SHALL BE PROPERLY ANALYZED BY A LICENSED ENGINEER OR REGISTERED

ARCHITECT BEFORE USE WITH THE INFORMATION HEREIN.

MATERIALS

7. ALL ALUMINUM SHALL BE 6063-T6 ALLOY AND TEMPER UNLESS NOTED OTHERWISE.

WOOD HOST STRUCTURE & ALL WOOD MEMBERS SHALL BE "#2 SOUTHERN YELLOW PINE" G=0.55 OR GREATER DENSITY WHERE APPLICABLE. CONCRETE MIXTURES SHALL BE DESIGNED TO REACH A COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS. ALL

MIXING, TRANSPORTING, PLACING, & CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318. NO ADMIXTURES ARE TO BE USED WITHOUT THE WRITTEN APPROVAL OF THE ABOVE-SIGNED ENGINEER. CONCRETE SHALL BE TYPE 1 PORTLAND CEMENT MEETING THE REQUIREMENTS OF ASTM C150, AGGREGATES TO MEET ASTM C33. POTABLE WATER SHALL BE USED.

NON-STRUCTURAL ELEMENTS:

10. THE INSTALLATION OF ANY ACCESSORIES THAT DO NOT AFFECT THE STRUCTURAL INTEGRITY OF THE STRUCTURE ARE OUTSIDE THE SCOPE OF THIS CERTIFICATION AND NOT REQUIRED TO BE CERTIFIED UNDER THIS STRUCTURAL DRAWING, THEY MAY BE INSTALLED WITHIN LIMITATIONS STATED HEREIN AND AS DESIRED PER MFR. SPECIFICATIONS. DETAILS PROVIDED HEREIN ARE FOR REFERENCE ONLY

LOUVER SYSTEM HINGES AND OPERABILITY ARE OUTSIDE THE SCOPE OF THIS CERTIFICATION

12. ALL FOOTINGS ARE TO BE INSTALLED BELOW ANY CODE REQUIRED FROST LINE. GENERAL CONTRACTOR IS RESPONSIBLE FOR ADHERENCE TO LOCAL FROST LEVEL CODE REQUIREMENTS

SURROUNDING SOIL TO BE WELL COMPACTED BY MECHANICAL MEANS TO 90% OPTIMUM DENSITY, BE FREE OF MUCK AND ORGANICS, AND ACHIEVE 2000 PSE MIN BEARING PRESSURE AND LATERAL BEARING PRESSURE MUCK AIND ORGANICS, AND ACHIEVE 2000 PS MIN BEARING PRESSURE AND LATERAL BEARING PRESSURE
BELOW NATURAL GRADE OF 150 PSF. SOIL SHALL BE CLASSIFIED OR VERIFIED BY OTHERS PRIOR TO
CONSTRUCTION AS SAND CLASS OR BETTER. SHOULD OTHER CONDITIONS OR MATERIALS BE ENCOUNTERED
THE ENGINEER OF RECORD MUST BE NOTIFIED.

4. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT
ELECTROLYSIS.

FASTENERS & ANCHORS
15. ALL FASTENERS TO BE #14 SAE GRADE 2 WITH APPROPRIATE CORROSION RESISTANT OR STAINLESS STEEL 304 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.

16. ANCHORS SHALL BE SPACED WITH 2XDIAMETER END DISTANCE AND 2.5XDIAMETER MIN. SPACING TO ADJACENT ANCHORS, UNLESS NOTED OTHERWISE.

17. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS. MINIMUM EMBEDMENT SHALL BE AS NOTED HEREIN. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM BRICK AND OTHER WALL FINISHES

18. ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY

OTHER

19. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS

20. THIS DOCUMENT SHALL NOT BE USED OR REPRODUCED WITHOUT THE ORIGINAL SIGNATURE & RAISED SEAL OF THE CERTIFYING P.E. ALTERATIONS, ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION. PHOTOCOPIES AND UNSEALED DOCUMENTS ARE NOT TO BE

21. ENGINEER SEAL AFFIXED HERETO 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, & FEDERA

CODES & FROM DEVIATIONS OF THIS PLAN.

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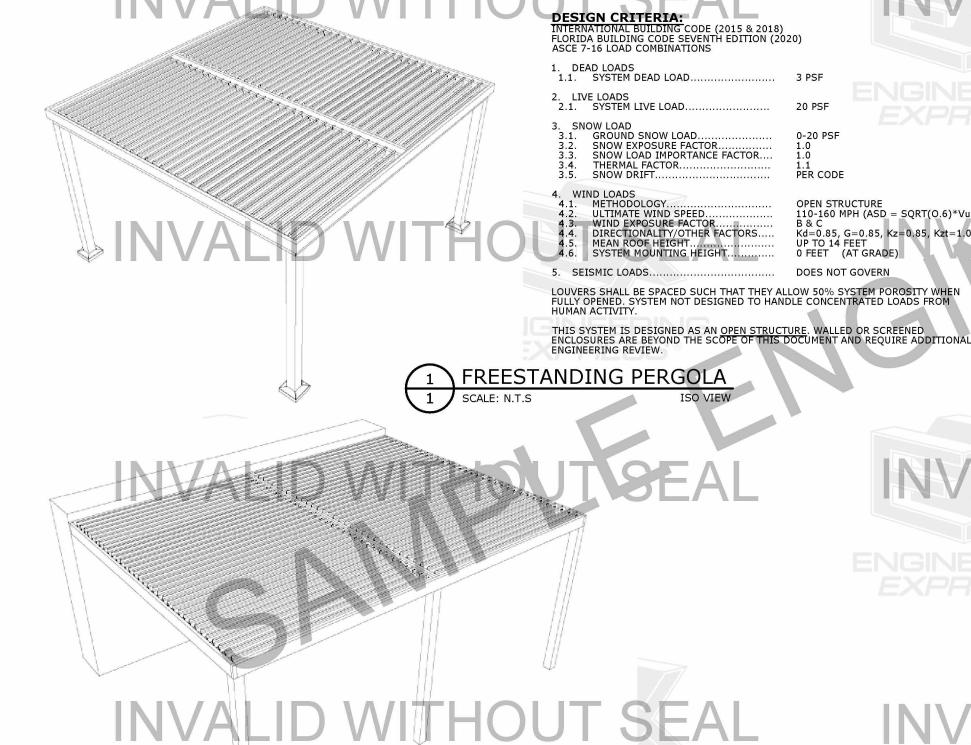
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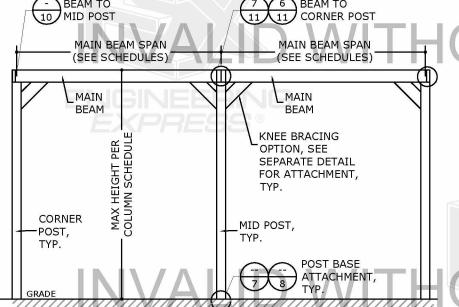




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**CORNER** 

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