

MECHANICALLY OPENING PERGOLA

ARCADIA SLIDE HD EXPO

FLORIDA - TYPICAL MASTER PLAN SHEET

STRUCTURAL ALUMINUM NOTES:

- ALL STRUCTURAL ALUMINUM COMPONENTS SHALL BE FABRICATED AND ERECTED ACCORDING TO THE GOVERNING BUILDING CODE AND MATERIAL STANDARDS REFERENCED ON THIS SHEET.
- ALL STRUCTURAL ALUMINUM SHALL BE THE FOLLOWING ALLOY AND TEMPER:
 - BEAMS, PURLINS, COLUMNS 6063-T6 (UNLESS NOTED OTHERWISE)
 - ALL OTHER EXTRUSIONS 6063-T6 (UNLESS NOTED OTHERWISE)
 - FASTENERS SS 316
- STRUCTURAL ALUMINUM SHALL BE FRAMED PLUMB AND TRUE AND ADEQUATELY BRACED DURING CONSTRUCTION.
- WHERE ALUMINUM IS IN CONTACT WITH OTHER METALS EXCEPT 300 SERIES STAINLESS STEEL, ZINC OR CADMIUM AND THE FAYING SURFACES ARE EXPOSED TO MOISTURE, THE OTHER METALS SHALL BE PAINTED OR COATED WITH ZINC, CADMIUM, OR ALUMINUM.
- UNCOATED ALUMINUM SHALL NOT BE EXPOSED TO MOISTURE OR RUNOFF THAT HAS COME IN CONTACT WITH OTHER UNCOATED METALS EXCEPT 300 SERIES STAINLESS STEEL, ZINC, OR CADMIUM. ALUMINUM SURFACES TO BE PLACED IN CONTACT WITH MASONRY, CONCRETE, WOOD, FIBERBOARD, OR OTHER POROUS MATERIAL THAT ABSORBS WATER SHALL BE PAINTED.
- FOR ALUMINUM IN CONTACT WITH CONCRETE: ACCEPTABLE PAINTS: PRIMING PAINT (ONE COAT), SUCH AS ZINC MOLYBDATE PRIMER IN ACCORDANCE WITH FEDERAL SPECIFICATION TT-P-645B ("GOOD QUALITY", NO LEAD CONTENT). ALT: HEAVY COATING OF ALKALI RESISTANT BITUMINOUS PAINT. ALT: WRAP ALUMINUM WITH A SUITABLE PLASTIC TAPE APPLIED IN SUCH A MANNER AS TO PROVIDE ADEQUATE PROTECTION AT THE OVERLAPS. NOTE: ALUMINUM SHALL NOT BE EMBEDDED IN CONCRETE TO WHICH CORROSIVE COMPONENTS SUCH AS CHLORIDES HAVE BEEN ADDED IF THE ALUMINUM WILL BE ELECTRICALLY CONNECTED TO STEEL.
- BOLT HOLES SHALL BE DRILLED THE SAME NOMINAL DIAMETER AS THE BOLT + 1/16"
- STAINLESS STEEL FASTENERS SHALL BE ASTM F593 316 SS COLD WORKED CONDITION. PROVIDE (5) PITCHES MINIMUM PAST THE THREAD PLANE FOR ALL SCREW CONNECTIONS. ALL FASTENER CONNECTIONS TO METAL SHALL PROVIDE 2xDIAMETER EDGE DISTANCE AND 3xDIAMETER SPACING.
- SELF-DRILLING SCREWS SHALL BE TEK BRAND / ALL POINTS FASTENERS OF SIZE #14, STAINLESS STEEL 300 SERIES, WITH MINIMUM 1/2" THREAD ENGAGEMENT BEYOND THE CONNECTED PART, UNLESS OTHERWISE NOTED.

STRUCTURAL WOOD NOTES (AS APPLICABLE):

- ALL DIMENSION LUMBER SHALL BE STRUCTURAL GRADE #2 SOUTHERN YELLOW PINE OR BETTER MEETING APPLICABLE REQUIREMENTS OF THE SOUTHERN PINE INSPECTION BUREAU (SPIB) AND PRESSURE-IMPREGNATED (PT) BY AN APPROVED PROCESS (ACQ 0.4 PRESSURE TREATED) PRESERVATIVE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE BUILDING CODE AND AMERICAN WOOD PRESERVERS ASSN (AWPA) "BOOK OF STANDARDS" OR 0.55 SPECIFIC GRAVITY MIN.
- WOOD IN CONTACT WITH ALL METAL CONNECTORS USED IN LOCATIONS EXPOSED TO WEATHER SHALL BE GALVANIZED.
- NAILS SHALL PENETRATE THE SECOND MEMBER A DISTANCE EQUAL TO THE THICKNESS OF THE MEMBER BEING NAILED THERETO. THERE SHALL BE NOT LESS THAN 2 NAILS IN ANY CONNECTION.
- MEMBERS SHALL BE FREE OF CRACKS AND KNOTS. MOISTURE CONTENT SHALL BE 19% OR LESS.
- WOOD THAT IS IN CONTACT WITH CONCRETE OR MASONRY, AND AT OTHER LOCATIONS AS SHOWN ON STRUCTURAL DRAWINGS, SHALL BE PROTECTED WITH 30 # FELT (UNLESS NOTED OTHERWISE) OR PRESSURE TREATED IN ACCORDANCE WITH AITC-109. MEMBER SIZE SHOWN ARE NOMINAL UNLESS NOTED OTHERWISE.

STORM WARNING REQUIREMENT:
 LOUVERS SHALL BE ROTATED TO A 90° POSITION DURING ANY NAMED STORM TO PREVENT EXCESSIVE UPLIFT FORCE ON THE ROOF SYSTEM

EXCLUSIONS

HOST STRUCTURE, MECHANICAL, EGRESS, ELECTRICAL, WIRING, FAN BEAMS, FANS, OR ANY ACCESSORY ATTACHMENTS

SPECIAL DESIGN NOTES:

CONTRACTOR SHALL POST WITH A LEGIBLE AND READILY VISIBLE DECAL OR PRINTED INSTRUCTIONS TO THE OWNER OR TENANT TO REMOVE OR REPOSITION THE STRUCTURE OR PART THEREOF DURING SUCH PERIODS OF TIME AS DESIGNATED BY THE US WEATHER BUREAU AS BEING A HIGH WIND OR SNOW ADVISORY, OR A TROPICAL STORM/HURRICANE WARNING OR ALERT. THIS SYSTEM MUST BE LOCKED IN THE OPEN POSITION, WITH BLADES VERTICAL, AND ANY FANS OR ACCESSORY COMPONENTS SHALL BE REMOVED. THE STRUCTURE SHALL ALSO NOT BE WALKED UPON AND IS NOT DESIGNED FOR HUMAN ACTIVITY OR STORAGE. THE WARNING LABEL SHALL READ AS FOLLOWS: THIS SYSTEM MUST HAVE LOUVER BLADES REPOSITIONED TO THE OPEN POSITION DURING A HIGH WIND, SNOW, OR TROPICAL STORM/HURRICANE WARNING OR ALERT AS DESIGNATED BY THE U.S. WEATHER BUREAU.

DESIGN NOTES:

- FLORIDA BUILDING CODE SIXTH EDITION (2017)
- WIND PRESSURES HAVE BEEN DETERMINED BASED ON ASCE 7-10, ROOF OVER OPEN STRUCTURE, OBSTRUCTED WIND FLOW, DESIGN PRESSURES CONSIDER WIND LOAD FROM Vult=156 MPH 3-SECOND GUST (*Vasd EQUIVALENT = 121MPH*), IN EXPOSURE 'b' ACTING SIMULTANEOUSLY WITH 5 PSF ROOF LIVE LOAD, DIRECTIONALITY FACTOR Kd=0.85, G=0.85, Kz=0.85, Kzt=1.0, 10' MRH. LOUVERS SHALL BE SPACED SUCH THAT THEY ALLOW 50% SYSTEM POROSITY WHEN FULLY OPENED.
 - DEFLECTION CRITERIA L/80
 - SYSTEM NOT DESIGNED TO HANDLE CONCENTRATED LOADS FROM HUMAN ACTIVITY.

USER SHALL CONFIRM WITH AUTHORITY HAVING JURISDICTION TO ENSURE THE GENERAL DESIGN LOADS ARE ALLOWABLE

SLIDING ROOF PANELS SHALL BE IN OPEN POSITION DURING A HIGH WIND, SNOW, OR TROPICAL STORM/HURRICANE WARNING OR ALERT AS DESIGNATED BY THE U.S. WEATHER BUREAU

GENERAL NOTES:

- THIS STRUCTURE HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE STRUCTURAL PROVISIONS OF THE ABOVE REFERENCED BUILDING CODE. STRUCTURE SHALL BE FABRICATED IN ACCORDANCE WITH ALL GOVERNING CODES. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY AND GOVERN. DESIGN CRITERIA OR SPANS BEYOND STATED HEREIN MAY REQUIRE ADDITIONAL SITE SPECIFIC SEALED ENGINEERING.
- THIS ENGINEER HAS NOT VISITED THIS JOBSITE. INFORMATION CONTAINED HEREIN IS BASED ON CONTRACTOR SUPPLIED DATA AND MEASUREMENTS. ENGINEERING EXPRESS SHALL NOT BE HELD RESPONSIBLE OR LIABLE IN ANY WAY FOR ERRONEOUS OR INACCURATE DATA OR MEASUREMENTS. WORK SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. THIS ENGINEERING SHALL BE NOTIFIED AND GIVEN AN OPPORTUNITY TO REEVALUATE OUR WORK UPON DISCOVERY OF ANY INACCURATE INFORMATION PRIOR TO MODIFICATION OF EXISTING FIELD CONDITIONS AND FABRICATION AND INSTALLATION OF MATERIALS.
- THE EXISTING HOST STRUCTURE MUST BE CAPABLE OF SUPPORTING THE LOADED SYSTEM AS VERIFIED BY THE ENGINEER & OR ARCHITECT OF RECORD, et.al. THE HOST STRUCTURE WHICH IS DESIGNED, CERTIFIED, AND INSPECTED BY OTHERS MUST PROVIDE SUFFICIENT, CAPACITY FOR THIS SPECIFIED DECK SYSTEM. NO WARRANTY OR GUARANTEE TO THESE CONDITIONS, EITHER EXPRESSED OR IMPLIED, IS OFFERED WITH THIS CERTIFICATION.
- THE CONTRACTOR SHALL CAREFULLY CONSIDER POSSIBLE IMPOSING LOADS ON ROOF, INCLUDING BUT NOT LIMITED TO ANY CONCENTRATED LOADS WHICH MAY JUSTIFY GREATER DESIGN CRITERIA.
- LOUVERED ROOF SYSTEM SHALL BE PER MANUFACTURER MAXIMUM SPANS OR BY OTHERS.
- 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 AS DESIRED PER MFR. SPECIFICATIONS.
- ALL FASTENERS TO BE #14 OR GREATER ASTM F593 COLD WORKED 304 STAINLESS STEEL, UNLESS NOTED OTHERWISE. FASTENERS SHALL BE CADMIUM-PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION 1.3.7.2 BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES. Fy= 65 KSI MIN.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS. EMBEDMENT SHALL BE AS NOTED HEREIN. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- ALL CONCRETE ANCHORS SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY.
- THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- ANY SPECIFIED LIGHT GAUGE STEEL MEMBERS SHALL CONFORM TO ASTM A36 AND CURRENT EDITION OF AISC WITH MINIMUM Fy = 55KSI.
- ANY SPECIFIED CONCRETE AND EPOXY TO REACH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI IN 7 DAYS.
- SURROUNDING SOIL TO BE COMPACTED TO 98% OPTIMUM DENSITY, 2000 PSF MIN AND SHALL BE CLASSIFIED OR VERIFIED BY OTHERS PRIOR TO CONSTRUCTION AS SANDY GRAVEL CLASS OR BETTER.
- DIMENSIONS ARE SHOWN TO ILLUSTRATE DESIGN FORCES AND OTHER DESIGN CRITERIA. THEY MAY VARY SLIGHTLY, BUT SHALL REMAIN IN CONFORMANCE WITH THE LIMITATIONS OF THIS PLAN. THE CONTRACTOR IS TO VERIFY ALL FIELD DIMENSIONS PRIOR TO INSTALLATION, AND VERIFY THAT PROPOSED DIMENSIONS AND FIELD CONDITIONS AGREE WITH THIS PROPOSED PLAN. USE OF THIS DOCUMENT CONSTITUTES ACCEPTANCE OF THE PROPOSED SYSTEM LAYOUT, COMPONENTS SELECTED, AND INSTALLATION. THESE DRAWINGS ARE NOT INTENDED TO BE USED AS FABRICATION OR SHOP DRAWINGS.
- 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, & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

PE SEAL REQUIRED 2/20/2019

CERTIFYING ENGINEER AND CERT OF AUTHORITY AS LISTED ON STAMP

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