GENERAL STRUCTURAL NOTES

CODE AND DESIGN LOADS

1. ALL CONSTRUCTION SHALL CONFORM TO THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE.
2. GRAVITY:
   - ROOF LIVE LOAD - 20 PSF (REDUCIBLE)
   - ROOF SHOW LOAD - 30 PSF (50 PSF GROUND)
   - ROOF DEAD LOAD (SOLAR MODULES) - 3 PSF
3. WIND:
   - BASIC WIND SPEED - 115 MPH (3 SEC. WIND EXPOSURE 'C')
   - DESIGN WIND PRESSURES PRESERVED PER ABC (MINORS) SECTION 37.4 (OPEN BUILDING WITH MONOSLOPES, PICKETS, OR TROUGHED ROOFING), (C&D) SECTION 37.1 (OPEN BUILDING WITH MONOSLOPE FREE ROOFS)
   - SSIC: SEISMIC TL IS NOT CONSIDERED PER IBC SECTION 1913.1.

GENERAL

1. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE BEAM SIZES, METHOD OR SEQUENCE OF CONSTRUCTION.

COLD FORMED STEEL FRAMING

1. ALL COLD-FORMED STEEL FRAMING SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF COLD-FORMED STEEL STRUCTURAL MEMBERS" BY THE AMERICAN IRON AND STEEL INSTITUTE.

COLD FORMED STEEL FRAMING - MATERIAL SPECIFICATIONS

1. DESIGNATION SS GRADE 50 CLASS 16M (50/50) ±4.0" WITHIN ARRAY
2. THICKNESS .125" IN
3. COATING DESIGNATION: POWDER COATING THICK 73-TGR105 (MATERIAL SPECIFICATION REQUIRED)
4. PURLIN PLATE MATERIAL SPECIFICATIONS:
   - DESIGNATION SS GRADE 50 CLASS 16M (50/50) ±4.0" WITHIN ARRAY
   - THICKNESS .125" IN
   - COATING DESIGNATION: POWDER COATING THICK 73-TGR105 (MATERIAL SPECIFICATION REQUIRED)
5. TBX Screw-Clamp Material Specifications:
   - DESIGNATION SS GRADE 50 CLASS 16M (50/50) ±4.0" WITHIN ARRAY
   - THICKNESS .125" IN
   - COATING DESIGNATION: G90 GALVANIZATION (ASTM A653) (MATERIAL SPECIFICATION REQUIRED)

STRUCTURAL STEEL

1. STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO THE LATEST AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
2. ALL CONSTRUCTION SHALL BE SHOWN AS SHOP WELDS AND SHALL BE SHOWN ON SHOP DRAWINGS. FULL WELDING DETAILS SHALL BE SHOWN ON CONSTRUCTION DRAWINGS.
3. ANCHOR BOLTS INSTALLED IN CONCRETE: INSPECT TIED IN PLACE PRIOR TO CONCRETE USE
4. WELDING SHALL BE DONE BY WELDERS HOLDING VALID CERTIFICATES ISSUED BY AN ACCEPTED TESTING AGENCY AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELDS SHOWN ON FABRICATION DRAWINGS. ALL WELDING PER AIME WELDING SOCIETY STANDARDS. ALL WELDS ON FABRICATION DRAWINGS ARE SHOWN AS WELDS AND SHALL BE SHOWN ON SHOP DRAWINGS. FULL PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.
5. DRILLING AND WELDING BASE PLATES AND BEARING PLATES SHALL BE FIVE STAR GROUT OR AN EQUAL NONMETALLIC SHRINKAGE-RESISTANT GROUT WITH A MAX DAY COMPRESSIVE STRENGTH OF 3000 PSI.
6. ALL HOT ROLLED STRUCTURAL STEEL TO BE HOT GALVANIZED PER ASTM A36.

CAST-IN-PLACE CONCRETE

1. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ABC 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ABC 316, "BUILDING CODE PROVISIONS FOR REINFORCED CONCRETE"
2. ADDITION OF WATER TO THE BATCH WITH MATERIAL OF INSUFFICIENT SLUMP WILL NOT BE PERMITTED. ONLY WATER ADDITIONS SHALL BE MADE IN AN AMOUNT EQUAL TO THE MAXIMUM AMOUNT OF WATER THAT CAN BE ADDED TO THE BATCH ON SITE. IN NO CASE SHALL THE DESIGN WATER TO CEMENTITIOUS MATERIAL RATIO BE EXCEEDED.
3. CONCRETE SHALL BE READY MIXED CONCRETE IN ACCORDANCE WITH ASTM C144. CONCRETE SHALL NOT BE CUT AT ALL SPECIFIC LOCATIONS, BUT SHALL APPLY UNLESS NOTED OTHERWISE.
4. ALL CONCRETE MATERIALS PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BE THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHICH THE PROJECT IS LOCATED.

CONCRETE FOOTINGS:

1. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI.
2. CONCRETE SHALL BE FREE OF CHLORIDE. WHEN USED, FLY ASH SHALL NOT REPLACE MORE THAN 15% OF THE PORTION OF THE CEMENT TO BE USED IN THE MIX.
3. THE GEOTECHNICAL REPORT SHALL PROVIDE THESE INSPECTIONS.
4. ENGINEERED FILL.
5. NOTE: THE GEOTECHNICAL ENGINEER WHO PERFORMED THE SITE ENGINEERING AND SOIL TESTING MUST CONDUCT ALL SPECIAL INSPECTIONS.
6. ALL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF ACI 305; CYLINDER AT 7 DAYS AND TWO AT 28 DAYS. TESTING SHALL BE DONE BY A QUALIFIED TESTING LABORATORY.
7. ALL HOT WEATHER CONCRETING SHALL MEET THE REQUIREMENTS OF ABC 305, AND ABC 306 FOR COLD WEATHER CONCRETING.

STRUCTURAL STEEL:

1. STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO THE LATEST AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
2. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN IRON AND STEEL INSTITUTE.- DEFLECTION AS RECOMMENDED BY THE AISC. THE DESIGN SHALL CONFORM TO THE DESIGN STANDARDS OF THE AISC.
3. ALL CONSTRUCTION SHALL COMPLY WITH THE MINIMUM ABC REQUIREMENTS.
4. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR ANY TECHNICAL ASPECTS OF THE PROJECT AND THE CONTRACTOR SHALL HAVE A TECHNICAL ENGINEER IF ASKED.
5. ALL CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN IRON AND STEEL INSTITUTE.

CIVIL DESIGN

1. THE ENGINEER OF RECORD FOR THE STRUCTURE SHOWN ON THESE DRAWINGS IS NOT THE CIVIL ENGINEER OF RECORD AND ASSUMES NO RESPONSIBILITY FOR ANY ASPECT OF THE SOLAR DESIGN.

ELECTRICAL DESIGN

1. THE ENGINEER OF RECORD FOR THE STRUCTURE SHOWN ON THESE DRAWINGS IS NOT THE ELECTRICAL ENGINEER OF RECORD AND ASSUMES NO RESPONSIBILITY FOR ANY ASPECT OF THE ELECTRICAL DESIGN.

SOLAR DESIGN

1. THE ENGINEER OF RECORD FOR THE STRUCTURE SHOWN ON THESE DRAWINGS IS NOT THE SOLAR ENGINEER OF RECORD AND ASSUMES NO RESPONSIBILITY FOR ANY ASPECT OF THE SOLAR DESIGN.
CARPORT SECTION VIEW

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* SHORTER W16X40 FOR 60 CELL (WELDMENT) ALSO AVAILABLE