

GENERAL STRUCTURAL NOTES

FLORIDA BUILDING CODE 2007 w/LATEST SUPPLEMENTS 2009

DESIGN CRITERIA:

LOADS:

DESIGN LOADS:  
ROOF LIVE LOADS:  
20 PSF TYP. U.O.N.

DEAD LOADS:  
COLLATERAL 7 PSF  
WIND LOADS PER ASCE 7-05  
120 MPH WIND SPEED, EXPOSURE CATEGORY C  
BUILDING IMPORTANCE FACTOR I=1.0

CONCRETE:  
ALL CONCRETE NOT OTHERWISE DESIGNATED SHALL BE 3000 PSI AT END OF 28 DAYS AS DETERMINED BY USE OF ASTM C31 AND C39. CODES GOVERNING WORK ARE AS FOLLOWS:  
ACI-318 BULDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, LATEST EDITION.  
ACI-347 RECOMMENDED PRACTICE FOR CONCRETE FORMWORK, LATEST EDITION.  
ACI-301 SPECIFICATIONS FOR STRUCTUAL CONCRETE FOR BUILDINGS, LATEST EDITION.

ALL REINFORCING SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES IN CONFORMANCE WITH CRSI MANUAL OF STANDARD PRACTICE AND ACI 315 DURING PLACEMENT OF THE CONCRETE.

UNLESS OTHERWISE NOTED, SPLICES IN REINFORCING, WHERE PERMITTED, SHALL BE AS FOLLOWS:  
WELEDED WIRE FABRIC WIRE SPACING PLUS 6"  
REINFORCING BARS 40 BAR DIAMETERS

ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. LAPS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318 OR AS INDICATED ON THE DRAWINGS. USE CLASS B SPLICES UNLESS OTHERWISE NOTED. MIMUM COVER SHALL BE AS FOLLOWS:  
FOOTINGS: 3"  
COLUMNS AND PEDESTALS: 2"  
SLABS AND WALLS (EXPOSED TO EARTH, LIQUID OR WEATHER): 2"  
SLABS AND WALLS (NOT EXPOSED TO EARTH, LIQUID OR WEATHER): 3/4"  
SLABS ON GRADE: 2" FROM TOP

ALL HOOKS IN REINFORCING BARS SHALL BE AN ACI STANDARD HOOK, U.O.N.

DOWELS FROM FOUNDATIONS OR SLABS TO WALLS SHALL MATCH WALL REINFORCING, U.O.N. DOWELS SHALL BE PLACED BEFORE CONCRETE IS PLACED. THEY SHALL NOT BE PUSHED INTO CONCRETE.

PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS OR BEAMS, WALL, ETC.

AT CHANGE IN DIRECTION OF CONCRETE WALLS, BEAMS AND STRIP FOOTINGS PROVIDE CORNER BARS OF SAME SIZE AND SPACING AS HORIZONTAL STEEL.

STRUCTURAL STEEL: (PER CURRENT EDITION AISC)  
ALL WELDED WIRE FABRIC ASTM A185  
WIDE FLANGE: ASTM A572 GRADE 50  
STEEL PIPE ASTN A53, GRADE B, OR ASTM A501  
STEEL TUBE ASTM A500, GRADE B.  
CHANNELS, ANGLES, PLATES AND OTHER MIS. STEEL ASTM A36.  
ALL BOLTS SHALL BE 3/4" DIAMETER (A325N) U.O.N.  
ANCHOR BOLTS SHALL BE ASTM A307  
WELDED STUDS ASTM A108  
DEFORMED BAR ANCHORS ASTM, A706

STRUCTURAL STEEL GROUT: FOR STEEL COLUMNS SHALL BE A NON-SHRINKAGE, NON-EXPANSIVE, NON-METALLIC, GROUT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI WHEN TESTED IN ACCORDANCE WITH ASTM C109. FORMS SHALL BE PLACED AROUND BASE PLATE AND THE STRUCTURAL GROUT SHALL BE POURED. NO DRY/DAMP PACKING.

MINIMUM SIZE OF FILLET WELDS SHALL CONFORM TO AISC SPECIFICATIONS EVEN THOUGH SHOWN OTHERWISE ON ARCHITECTURAL, MECHANICAL OR STRUCTURAL DRAWINGS. ALL WELDS ALONG THE LENGTH OF MEMBERS INDICATED ON ARCHITECUTRAL OR STRUCTURAL DRAWINGS, BUT NOT SIZED, SHALL BE A MINIMUM 3/16" ALTERNATING 2-12

ALL WELDS SHALL BE MADE WITH E70XX ELECTRODES. ALL WELDING IS TO BE DONE BY WELDERS HOLDING CURRENT CERTIFICATES FROM A RECOGNIZED TESTING LAB. ALL WELDS ARE TO BE PER A.W.S. D1.1 CODE

PRIME ALL STEEL SURFACES BOTH EXPOSED AND CONCEALED, ARE TO RECEIVE ONE SHOP COAT AND FIELD SPOT PRIME (WELDS, SCARS, CONN. ETC.)

ALL ANGLES, BARS, ANCHORS, ANCHOR BOLTS, ETC. EMBEDDED IN CONCRETE SHALL BE HOT DIPPED GALV. AFTER FABRICATION.

ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALV. AFTER FABRICATION.

SHOP DRAWINGS:  
ALL FABRICATED ITEMS ARE TO HAVE APPROVED SHOP DRAWINGS BEFORE FABRICATION. CONTRACTOR SHALL CAREFULLY CHECK AND STAMP "APPROVED" BEFORE SUBMITTAL TO THE ENGINEER. NO SPLICES OR OTHER DETAILS ARE TO BE ADDED WITHOUT SUBMITTAL.

EXPANSION ANCHORS: U.O.N. INSTALL ANCHORS PER MANUF. WRITTEN INSTRUCTIONS, INCLUDING MANUF. MINIMUM EMBEDMENTS AND EDGE DISTANCE. ALL ANCHORS WITH EXTERIOR EXPOSURE SHALL BE HOT DIPPED GALV.

CONTRACTOR SHALL VERIFY ALL STRUCTURAL OPENINGS AFFECTED BY MECH. EQUIPMENT PURCHASED BEFORE PROCEEDING WITH STRUCTURAL WORK.

NO STRUCTURAL MEMEBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH.

MASONRY:  
CONCRETE MASONRY UNITS SHALL BE HOLLOW UNIT MASONRY IN ACCORDANCE WITH ASTM C90 AND SHALL HAVE A MIMUM NET AREA COMPRESSIVE STRENTH OF 1900 PSI WHEN USING TYPE M OR S MORTAR (ASTM C270). IN ACCORDANCE WITH ACI 530, THE 1900 PSI BLOCK IN COMBINATION WITH TYPE M OR S MORTAR PROVIDES A DESIGN COMPRESSIVE STRENGTH (f'm) OF 1500 PSI.  
GROUT:  
THE GROUT SHALL BE IN ACCORDANCE WIT ASTM C476 AND SHALL HAVE A MAXIMUM COURSE AGGREGRATE OF 3/8" PLACED AT AN 8" TO 11" SLUMP AND HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C1019.

GROUT POUR HEIGHTS-THE TOTAL HEIGHT OF MASONRY TO BE GROUTED PRIOR TO ERECTION OF ADDITIONAL MASONRY.  
GROUT POUR-CONSISTS OF ONE OR MORE GROUT LIFTS.  
GROUT LIFT-THE LAYER OF GROUT PLACED IN A SINGLE CONTINUOUS OPERATION AND IS LIMITED TO 5 FEET.

THE CONTRACTOR SHALL DESIGN, ENGINEER AND ERECT ALL TEMPORARY BRACING INCLUDDING MEASURES NECESSARY TO PROTECT THE STRUCTURE AND ANY PERSONNEL DURING CONSTRUCITON.

VERIFY ALL DIMENSIONS WITH ARCHITECUTRAL DRAWINGS.

CHARLES R.  
WALKER, AIA

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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME, OR UNDER MY DIRECT SUPERVISION UNDER THE LAWS OF THE STATE OF FLORIDA.

CHARLES R. WALKER AR0006658

NEW METAL BUILDING STRUCTURE FOR  
RINGPOWER CORPORATION  
CANNON CREEK - I-75 AND CR 47  
COLUMBIA COUNTY, FLORIDA

Contract Stage:  
CONSTRUCTION DRAWINGS

Revisions:	

Drawn By:  
Checked By:

Sheet Title:  
DESIGN CRITERIA  
AND  
GENERAL NOTES

Sheet No:

S1.1

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