



GENERAL NOTES:

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS. THESE
- 2. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE STRUCTURE AND PERSONNEL DURING ERECTION. THIS INCLUDES THE ADDITION OF THE NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS LL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF OR OCCUPATIONAL SAFETY AND HEALTH ACT.
- IT IS THE OWNER'S SOLE RESPONSIBILITY TO EMPLOY ONE OR MORE SPECIAL INSPECTORS (IF REQUIRED) TO PROVIDE INSPECTIONS IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF IBC 2006.

FOUNDATION NOTES:

- FOUNDATION DESIGNED BASED ON AN ASSUMED MAXIMUM ALLOWABLE BEARING PRESSURE OF 2500 PSF. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY THE SOIL BEARING CAPACITY. NOTIFY THE ENGINEER AND STOP WORK IF CLAY, WET SOILS, FILL, OR OTHER DELETERIOUS MATERIALS ARE ENCOUNTERED.
- DESIGN OF EXTERIOR FOUNDATIONS IS BASED ON A FROST DEPTH OF $4^{\circ}-6^{\circ}$ BELOW FINISHED GRADE.
- NO HORIZONTAL JOINT WILL BE PERMITTED UNLESS NOTED OTHERWISE. IN THE WALLS
- PROVIDE CONTROL JOINTS IN SLABS AT 12

FT O.C. MAX.

- EXCAVATING AND BACK FILLING AT NEW FOUNDATION WALLS SHALL BE DONE SUCH THAT SYMMETRICAL LOADING SHALL BE MAINTAINED ON BOTH SIDES. WHERE DESIGN CONDITIONS REQUIRE DIFFERENT BACK FILL HEIGHTS, WALLS SHALL BE FIRMLY SHORED IN POSITION, AND SHORES SHALL REMAIN UNTIL FLOORS ARE PLACED AND PROPERLY SET, TO PROVIDE FULL SUPPORT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR AND FINAL CLEARANCE OF ANY NEEDLING, BRACING OF EXISTING STRUCTURES. DESIGN, INSTALLATION, SHORING, OR
- VAPOR BARRIER BENEATH SLAB SHALL BE 10 Mil 'OR APPROVED EQUAL.
 POLYETHYLENE <u>IS NOT</u> AN ALTERNATE PRODUCT. 10 MII "STEGO WRAP"

CONCRETE NOTES:

- ALL CONCRETE WORK SHALL CONFORM TO ACI-318.
- . ALL CONCRETE EXCEPT INTERIOR AND EXTERIOR SLABS ON GROUND SHALL BE 3000 PSI AT 28 DAYS AND A MAXIMUM SLUMP OF 4".
 ALL INTERIOR AND EXTERIOR SLABS ON GROUND SHALL BE 4000 PSI AT 28 DAYS AND A MAXIMUM SLUMP OF 4". MAXIMUM SIZE AGGREGATE SHALL BE 3/4" (WALL/FOOTINGS) AND 3/4" (SLABS ON GROUND).

2. SNOW LOAD

a. GROUND SNOW LOAD = 60 PSF
b. FLAT ROOF SNOW LOAD = 42 PSF
c. SNOW LOAD IMPORTANCE FACTOR I
d. SNOW EXPOSURE FACTOR Ce = 1.0
e. SNOW THERMAL FACTOR Ct= 1.0
f. BALANCE AND UNBALANCED SNOW LO

- = 1.0

LOADS IN ACCORDANCE

MIND

IND LOADS:

a. BASIC WIND SPEED V = 100 MPH
b. WIND LOAD IMPORTANCE FACTOR 1 = 1.0
c. WIND INTERNAL PRESSURE COEFFICIENT of the control of th

DESIGN NOTES:

THIS BUILDING IS DESIGNED TO COMPLY WITH THE 2009 EDITION OF INTERNATIONAL BUILDING CODE.

- . W CONCRETE TO REMAIN EXPOSED TO WEATHER SHALL BE AIR ENTRAINED. NO AIR ENTRAINMENT IN INTERIOR CONCRETE SLABS.
- CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.
- . U REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60. DEFORMED BARS SHALL BE DETAILED AND FABRICATED IN ACCORDANCE TO ACI-315 LATEST EDITION, AND PLACED IN ACCORDANCE WITH ACI-318.
- SPLICES OF REINFORCING BARS SHALL BE ACI-318. IN ACCORDANCE WITH

ROOF a. 1 b. E

F DEAD LOAD TOP CHORD = 10.0 PSF BOTTOM CHORD = 15.0 PSF HVAC UNIT(S) = TO BE DETERMINED

OOF LIVE LOAD a. TOP CHORD = 20.0 PSF b. BOTTOM CHORD - ATTIC LOAD Per Code.

- ANCHOR RODS SHALL CONFORM TO ASTM F1554-36.
- œ HOOKS NOT DIMENSIONED SHALL BE ACI STANDARD HOOKS
- CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS: CONCRETE CAST AGAINST EARTH
- CONCRETE EXPOSED TO EARTH OR I WEATHER H OR WEATHER
- = PROPORTION DESIGN MIXES TO PROVIDE CONCRETE FOR INTERIOR AND EXTERIOR SLABS-ON-GRADE WITH THE FOLLOWING PROPERTIES:

 a. STRENGTH; 4000psi @ 28 DAYS, 3/4" AGGREGATE

 b. W/C RATIO: 0.46

 c. ENTRAINED AIR: 6% ±1%

 d. SLUMP: 3"± 1" PROVIDE CONTROL JOINTS IN STRUCTURAL SLAB AT 12-0" ON CENTER MAX.

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6. EARTHQUAKE LOAD:
a. DESIGN OF EARTHQUAKE LOAD IN ACCORDANCE WITH ASCE 7/05
b. SEISMIC IMPORTANCE FACTOR I = 1.0
c. 0.2s MAPPED SPECTRAL RESPONSE ACCELERATION Ss = per code
d. 1.0s MAPPED SPECTRAL RESPONSE ACCELERATION SI = per code
e. SITE CLASS = CLASS D.
f. SPECTRAL RESPONSE COEFFICIENT SDS = per code
g. SPECTRAL RESPONSE COEFFICIENT SDI = per code
h. SEISMIC DESIGN CATEGORY = CATEGORY B
i. BASIC SEISMIC FORCE RESISTING SYSTEM: BEARING WALL SYSTEM =
LIGHT FRAMED WALL SYSTEMS SHEATHED WITH WOOD STRUCTURAL
PANELS RATED FOR SHEAR RESISTANCE
J. RESPONSE MODIFICATION FACTOR R = 3
k. DEFLECTION AMPLIFICATION FACTOR CD = 3
1. ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

7.

DEFLECTION CRITERIA
a. ROOF (LIVE) = L/360
b. ROOF (TOTAL) = L/240

- STRUCTURAL STEEL NOTES GENERAL:
- I. STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL" 9th EDITION.
- 3. STEEL PIPES SHALL BE A53, GRADE B
- 4. WELDING SHALL BE IN ACCORDANCE WITH AWS DI.I LATEST EDITION. ALL WELDS SHALL BE MADE WITH E70XX ELECTRODES
- 5. STEEL BEAMS AND COLUMNS SHALL BE CUT FROM FULL LENGTH STOCK. UNAUTHORIZED SPLICES WILL BE CAUSE FOR REJECTION.

- 2. ALL STEEL SHAPES AND PLATES TO BE ASTM A36 UNLESS NOTED OTHERWISE. WF BEAMS SHALL BE A992 (50KSI).
- 6. STRUCTURAL STEEL SHALL BE PAINTED WITH A SHOP APPLIED COAT OF THE FABRICATOR'S RUST INHIBITIVE PRIMER.

WOOD FRAMING NOTES:

STRUCTURAL LUMBER:

SPRUCE PINE FIR NOI/NO2 OR BETTER

Fb = 875 PSI

Fc = 1150 PSI

E = 1400000 PSI

MANUFACTURED LUMBER:
BOISE CASCADE VERSA-LAM 2.0 3100
Fb = 3100 PSI
Fc = 3000 PSI
E = 20000000 PSI

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DESIGN CODE:
IBC 2009 / NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION BY THE NATIONAL FOREST PRODUCTS ASSOCIATION. NAILING REQUIREMENTS FOR PLYWOOD SHEATHING: SEE DETAILS ON 56 FOR NAILING AND SPACING REQUIREMENTS.

.57 PROVIDE GALVANIZED METAL TIES EQUAL TO SIMPSON H2.5 HURRICANE TIES BETWEEN ROOF RAFTERS OR TRUSSES AND SUPPORTING WALL MEMBERS, UNLESS SHOWN OTHERWISE. PROVIDE GALVANIZED METAL CONNECTORS EQUAL TO SIMPSON TC26 TRUSS CONNECTOR BETWEEN ALL ROOF SCISSOR TRUSSES AND SUPPORTING WALL MEMBERS, UNLESS SHOWN OTHERWISE. SPIKE TOGETHER ALL FRAMING MEMBERS WHICH ARE BUILT-UP USING MULTIPLE 2x LUMBER.

6 PROVIDE PRESSURE TREATED LUMBER FOR ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE.

7. ROOF SHEATHING: 5/8" APA RATED SHEATHING, EXTERIOR OR STRUCTURAL I OR II RATED SHEATHING, SPAN RATING 32/16 (TRUSSES), 24/12 (JOISTS). INSTALL SHEETS WITH FACE GRAIN DIRECTION PERPENDICULAR TO SUPPORTING MEMBERS.

PROVIDE $\frac{1}{2}$ " THRU BOLTS STAGGERED @ 24" O.C. FOR ATTACHEMENT OF 2x NAILER AT TOP OR BOTTOM OF WF BEAM (COORDINATE ω / PLANS)

9. WALL CONSTRUCTION - FIRST FLOOR STUD HEIGHT UP TO 10'-6"
P.T. 2x8 SILL PLATE
(2) 2x TOP PLATES
½" CDX SHEATHING FRAMING AS SHOWN ON PLANS

CONSTRUCTION FRAMING AS SHOWN ON PLANS %" APA RATED PLYWOOD SHEATHING (REFER TO NOTE #7) PROVIDE 8d NAILS @ 12"o.c. ALONG FRAMING MEMBERS.

ALL NAILS, SPIKES, BOLTS ETC. FASTENING MEMBERS TO PRESSURE TREATED LUMBER SHALL BE EITHER STAINLESS STEEL OR HEAVY GALVANIZED.

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