# DESIGN PARAMETERS

PF	ROJECT	DESIG	N (	CRITERI	A	
	BUILDING	G CODE:	20	012 INTERN	ATIONAL B CODE	UILDING
LOCATION (LATII	UDE / LONG	GITUDE):		41.3690	7°,-111.759	005°
OCCUI	PANCY CAT	EGORY:			П	
	GEOTECH	INICAL PA	RAN	METERS:		
SOILS	REPORT EN	GINEER:		IG	ES, INC.	
	REPORT N	UMBER:	R01628-008			
	REPOR	T DATE:	JULY 15, 2016			
ALLOWABLE SOIL B	EARING PRE	ESSURE:		3,	500 PSF	
ALLOWABLE P	PASSIVE PRE	ESSURE:		3	20 PCF	
TO	OTAL SETTL	EMENT:		1"	OVER 30'	
DIFFEREN	NTIAL SETTL	EMENT:		$\frac{1}{2}$ " (	OVER 30'	
	CORR	OSIVITY:				
5	SULFATE CO	ONTENT:				
	SEISMIC D	DESIGN PA	ARAI	METERS:		
SITE CLASS:					С	
SHORT PERIOD SPECTRAL			0.827g			
1s PERIOD SPECTRAL ACCELERATION, S1:		ION, 53. ION, S1:	0.275g			
SEISMIC DESIGN CATEGORY:		EGORY:			D	
SEISMIC IMPORTANCE FACTOR, Ie:		TOR, Ie:			1.0	
BUILDING RISK CATEGORY:					II	
RESPONSE MODIFICATION, R		TION, R:	6.5	(WOOD SH	IEAR WALL	S, U.N.O.)
WIND DESIGN PARAMETERS:						
DESIGN SPEED (3s GUST): 120						
EXP	EXPOSURE CATEGORY:				С	
BUILDIN	IG RISK CAT	EGORY:			П	
	SNOW D	ESIGN PAI	RAN	IETERS:		
Ι	DESIGN ELE	VATION:		8	,900 FT	
DESIGN GROUN	D SNOW LO	DAD, Pg:	280.6 PSF			
DESIC	GN SNOW D	ENSITY:				
MAXIMUM ANTICIPA	AXIMUM ANTICIPATED SNOW DEPTH:					
EXPOSURE FACTOR, Ce:				1.00		
GRAVITY DESIGN PARAMETERS: (PSF, SERVICE LOADS)						
	DEAD	ROOF LI	VE	SNOW Pf or Ps	LIVE	TOTAL
ROOF:	15	20		196.4	-	211.4
FLOOR:	15	-		-	40	55
EXTERIOR DECK:	15	-		196.4	60	211.4
EXTERIOR WALL:	15	-		-	-	15
INTERIOR WALL:	10	-		-	_	10



$\mathbf{S}_{s} =$	0.827 g	<b>S</b> <sub>мs</sub> =	0.967 g	S <sub>DS</sub> =	0.645 g
<b>S</b> <sub>1</sub> =	0.275 g	<b>S</b> <sub>M1</sub> =	0.509 g	<b>S</b> <sub>D1</sub> =	0.339 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



For PGA<sub>M</sub>,  $T_L$ ,  $C_{RS}$ , and  $C_{R1}$  values, please view the detailed report.

Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

# SHEET INDEX

## GENERAL NOTES

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### PLANS

S1	<b>ΕΟΙΙΝΟΔΤΙΟΝ ΡΙ ΔΝ</b>
51	FOUNDATION FLAN

- S2 LEVEL 1 MODULE - FLOOR FRAMING PLAN
- **S**3 LEVEL 1 MODULE- ROOF FRAMING PLAN

## STRUCTURAL DETAILS

SD1	FOUNDATION DETAILS	

- SD2 GENERAL FRAMING DETAILS
- ROOF FRAMING DETAILS SD3



Product Number HOLDOWNS	Capacity (Lbs.)						1
HOLDOWNS		Product Number	r Capacity	Fastener Schedule			
HOLDOWNS			(Lbs.)				l
STHD14	3,850	Not Available	N/A	(24) 16d Sinkers	Holdown	3-1/4" x .148"	
HTT5	4,670	Not Available	N/A	(26) 10d Sinkers	Holdown	3" x .148"	í
HDQ8	9,230	Not Available	N/A	(20) 1/4" dia. x 3" Long SDS Screws	Holdown	N/A	í
HDU11	11,175	Not Available	N/A	(30) 1/4" dia. x 2-1/2" Long SDS Screws	Holdown	N/A	
HDU14	14,375	Not Available	N/A	(36) 1/4" dia. x 2-1/2" Long SDS Screws	Holdown	N/A	
	1						
ANCHOR BOLTS							
SSTB24	5,175	STB24	5,175		Holdown Anchor	N/A	
SSTB34	10,100	STB34	10,100		Holdown Anchor	N/A	
HARDWARE							
 H1	485	RT15	500	(4) 8d Nails	At Rafters/Trusses	1-1/2" x .131"	
LS50	450	MP5	455	(8) 10d Nails	At Blocking or Rim	1-1/2" x .148"	
A35	450	MPA1	570	(12) 8d Nails	At Blocking or Rim	1-1/2" x .131"	
LTP4	515	MP4F	565	(12) 8d Nails	At Blocking or Rim	1-1/2" x .131"	[
LS50	450	MP5	455	(8) 10d Nails	Thru Plywood	2-1/2" x .148"	
A35	450	MPA1	570	(12) 8d Nails	Thru Plywood	2-1/2" x .131"	
LTP4	515	MP4F	565	(12) 8d Nails	Thru Plywood	2-1/2" x .131"	
STRAPS							[
 CS16	1705	RS150	1700	(26) 8d Nails	Directly to Timber	1-1/2" x .131"	[
CS16	1705	RS150	1700	(26) 8d Nails	Thru Plywood	2-1/2" x .131"	[
CMST14	6490	CMST14	6490	(76) 10d Nails	Thru Plywood	1-1/2" x .148"	í
CMST14	6490	CMST14	6490	(76) 10d Nails	Directly to Timber	2-1/2" x .148"	
CMST12	9235	CMST12	9320	(100) 10d Nails	Thru Plywood	1-1/2" x .148"	
CMST12	9235	CMST12	9320	(100) 10d Nails	Directly to Timber	2-1/2" x .148"	
Shear Walls:							[
8d Common					S.W.'S 2,3,4, & 6	2-1/2" x .131"	
10d Common	1				S.W. 2B	2-1/4" x .148"	
	1						

### CONVENTIONAL WOOD FRAMING REQUIREMENTS - CBC A TABLE 2304.10.1

CONNECTION	NAILING
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATES, TOENAIL	(3) 8d COMMON , (3) 3" x 0.131" NAILS, OR (3) 3" 14 GAGE STAPLES
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT WALL TOP PLATES, TOENAIL, EACH END	(2) 8d COMMON , (2) 3" x 0.131" NAILS, (2) 3" 14 GAGE STAPLES
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT WALL TOP PLATES, END NAIL	(2) 16d COMMON , (3) 3" x 0.131" NAILS, (3) 3" 14 GAGE STAPLES
FLAT BLOCKING TO TRUSS/WEB FILLER, FACE NAIL	16d COMMON, 3" x 0.131" NAILS, 3" 14 GAGE STAPLES @ 6" O.C.
CEILING JOIST TO TOP PLATE, EACH JOIST, TOENAIL	(3) 8d COMMON , (3) 3" x 0.131" NAILS, (3) 3" 14 GAGE STAPLES, $\frac{7}{16}$ " CROWN
CEILING JOIST, LAPS PARTITION, FACE NAIL - TABLE 2308.7.3.1	(3) 16d COMMON , (4) 3" x 0.131" NAILS, (4) 3" 14 GAGE STAPLES, $\frac{7}{16}$ " CROWN
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL - TABLE 2308.7.3.1	PER TABLE 2308.7.3.1
COLLAR TIE TO RAFTER, FACE NAIL	(3) 10d COMMON, (4) 3" x 0.131" NAILS, OR (4) 3" 14 GAGE STAPLES
RAFTER OR ROOF TRUSS TO PLATE, TOENAIL - TABLE 2308.7.5	(3) 10d COMMON, (4) 3" x 0.131" NAILS, OR (4) 3" 14 GAGE STAPLES
ROOF RAFTER TO 2x RIDGE BEAM, END NAIL	(2) 16d COMMON, (3) 3" x 0.131" NAILS, OR (3) 3" 14 GAGE STAPLES
ROOF RAFTER TO 2x RIDGE BEAM, TOE NAIL	(3) 10d COMMON, (4) 3" x 0.131" NAILS, OR (4) 3" 14 GAGE STAPLES
STUD TO STUD (NON-BRACED WALL PANELS), 24" O.C. FACE NAIL	16d COMMON (3 ½"x 0.162")
STUD TO STUD (NON-BRACED WALL PANELS), 16" O.C. FACE NAIL	3" x 0.131" NAILS, (3) 3" 14 GAGE STAPLES
STUD TO STUD AT INTERSECTING CORNER (BRACED), 16" O.C. FACE NAIL	16d COMMON (3 ½"x 0.162")
STUD TO STUD AT INTERSECTING CORNER (BRACED), 12" O.C. FACE NAIL	3" x 0.131" NAILS, (3) 3" 14 GAGE STAPLES
BUILT-UP HEADER (2" TO 2"), 16" O.C. EACH EDGE, FACE NAIL	16d COMMON (3 ½"x 0.162")
CONTINUOUS HEADER TO STUD, TOENAIL.	(4) 8d COMMON
TOP PLATE TO TOP PLATE, 16" O.C. FACE NAIL	16d COMMON
TOP PLATE TO TOP PLATE, 12" O.C. FACE NAIL	3" x 0.131" NAILS, 3" 14 GAGE STAPLES
TOP PLATE TO TOP PLATE, AT END JOINTS, EACH SIDE OF END JOINT, FACE NAIL (MIN. 24" LAP SPLICE LENGTH EACH SIDE END JOINT)	(8) 16d COMMON, (12) 3" x 0.131" NAILS, (12) 3" 14 GAGE STAPLES
BOTTOM PLATE TO JOIST, RIM JOIST, OR BLOCKING AT NON-BRACED PANEL, 16" O.C. FACE NAIL	16d COMMON
BOTTOM PLATE TO JOIST, RIM JOIST, OR BLOCKING AT NON-BRACED PANEL, 12" O.C. FACE NAIL	3" x 0.131" NAILS, 3" 14 GAGE STAPLES
BOTTOM PLATE TO JOIST, RIM JOIST, OR BLOCKING AT BRACED PANEL, 16" O.C. FACE NAIL	(2) 16d COMMON, (4) 3" x 0.131" NAILS, (4) 3" 14 GAGE STAPLES
STUD TO TOP OR BOTTOM PLATE, TOENAIL	(4) 8d COMMON, (4) 3"x 0.131" NAILS, (4) 3" 14 GAGE STAPLES
STUD TO TOP OR BOTTOM PLATE, END NAIL	(2) 16d COMMON, (3) 3"x 0.131" NAILS, (3) 3" 14 GAGE STAPLES
TOP OR BOTTOM PLATE TO STUD, END NAIL	(2) 16d COMMON, (3) 3"x 0.131" NAILS, (3) 3" 14 GAGE STAPLES
TOP PLATES, LAP AND INTERSECTIONS, FACE NAIL.	(2) 16d COMMON , (3) 3" x 0.131" NAILS, OR (3) 3" 14 GAGE STAPLES
1" BRACE TO EACH STUD AND PLATE, FACE NAIL.	(2) 8d COMMON, (2) 3" x 0.131" NAILS, OR (2) 3" 14 GAGE STAPLES
1" x 6" SHEATING TO EACH BEARING, FACE NAIL.	(2) 8d COMMON, (2) 3" x 0.128" NAILS
1" x 8" AND WIDER SHEATING TO EACH BEARING, FACE NAIL.	(3) 8d COMMON, (3) 3" x 0.128" NAILS
JOIST TO SILL OR GIRDER, TOENAIL	(3) 8d COMMON , (3) 3" x 0.131" NAILS, OR (3) 3" 14 GAGE STAPLES
RIM JOIST, BLOCKING TO TOP PLATE, TOENAIL.	8d (2 1/2" x 0.131") AT 6" o/c, 3" x 0.131" NAILS AT 6" o/c, OR 3" 14 GAGE STAPLES AT 6" o/c
1" x 6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	(2) 8d COMMON
2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	(2) 16d COMMON
2" PLANKS.	(2) 16d COMMON AT EACH BEARING
BUILT-UP GIRDER AND BEAMS	20d COMMON AT 32" o/c, 3" x 0.131" NAILS AT 24" o/c, OR 3" 14 GAGE STAPLES AT 24" o/c AT, AT TOP AND BOTTOM, STAGGERED (2) 20d COMMON, (3) 3" x 0.131" NAILS, OR (3) 3" 14 GAGE STAPLES AT ENDS AND AT EACH SPLICE
LEDGER STRIP, EACH JOIST OR RAFTER, FACE NAIL	(3) 16d COMMON, (4) 3" x 0.131" NAILS, OR (4) 3" 14 GAGE STAPLES
JOIST TO BAND JOIST, FACE NAIL	(3) 16d COMMON, (4) 3" x 0.131" NAILS, OR (4) 3" 14 GAGE STAPLES
BRIDGING TO JOIST, TOENAIL EACH END	(2) 8d COMMON, (2) 3" x 0.131" NAILS, OR (2) 3" 14 GAGE STAPLES
BRIDGING TO JOIST, TOENAIL EACH END	(2) 8d COMMON, (2) 3" x 0.131" NAILS, OR (2) 3" 14 GAGE STAPLES

### STRUCTURAL STEEL NOTES

- . FABRICATION & ERECTION: ALL FABRICATION & ERECTION SHALL CONFORM TO THE LATEST STANDARDS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS.
- 2. ASTM SPECIFICATIONS: STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS:

TABLE 1 - STEEL MATERIAL SPECIFICATIONS			
STEEL SHAPE	ASTM SPECIFICATION		
W	A992 OR A572 GRADE 50		
M, S, HP	A36 OR A572 GRADE 50		
C - CHANNEL	A572 GRADE 50		
L - ANGLE	A36		
PLATES & BAR	A36		
STEEL PIPE	A53 GRADE B		
ROUND HSS	A500 GRADE B OR C		
SQ. & RECT. HSS	A500 GRADE B OR C		
MACHINE BOLTS	A325, A490, F1852, F2280		
NUTS	A563, A194		
WASHERS	F436		
ANCHOR RODS	F1554-A36		
SHEAR STUDS	A108		

- 3. STEEL EXPOSED TO WEATHER OR CORROSIVE ENVIRONMENT: ALL STEEL EXPOSED TO WEATHER OR CORROSIVE ENVIRONMENT SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN COMPLIANCE WITH ASTM A123. ALL FIELD WELDS ON GALVANIZED STEEL SHALL BE TREATED WITH ZINC-RICH PAINT IN COMPLIANCE WITH ASTM A780.
- 4. STEEL FABRICATION: ALL STEEL FABRICATION SHALL BE PERFORMED IN A SHOP APPROVED BY THE GOVERNING JURISDICTION DEPARTMENT OF BUILDING & SAFETY.
- 5. STEEL FABRICATOR: THE STRUCTURAL STEEL FABRICATOR SHALL PROVIDE A SET OF SHOP FABRICATION DRAWINGS FOR APPROVAL TO THE ENGINEER OF RECORD. THE FABRICATOR SHALL NOT FABRICATE THE STEEL UNTIL THE ENGINEER OF RECORD HAS APPROVED THE SHOP DRAWINGS.
- 6. WELDING: ALL WELDING SHALL BE IN CONFORMANCE WITH THE LATEST AISC & AMERICAN WELDING SOCIETY (AWS) STANDARDS. ALL WELDING SHALL BE PERFORMED USING A SHIELDED ARC PROCESS USING APPROVED ELECTRODES CONFORMING TO AWS SPECIFICATION E70XX (LOW HYDROGEN). WELD MATERIAL SHALL COMPLY WITH AWS CERTIFICATION AND POSSESS A CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT -20 DEGREES F. WELDING SHALL BE PERFORMED BY ONLY AWS CERTIFIED WELDERS.
- WELDING PROCEDURES: A WRITTEN WELDING PROCEDURE SPECIFICATIONS (WPS) PER AWS D1.1 SHALL BE DEVELOPED BY THE FABRICATOR/ERECTOR AND REVIEWED BY THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT.
- 8. ERECTION AIDS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDS AND JOINT PREPARATIONS THAT INCLUDE, BUT ARE NOT LIMITED TO, ERECTION ANGLES, LIFT HOLES AND OTHER AIDS, WELDING PROCEDURES, REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, COPES, SURFACE ROUGHNESS AND UNEQUAL PARTS.
- 9. <u>FIELD WELDING:</u> FIELD WELDING SHALL BE PERFORMED BY A BUILDING DEPARTMENT CERTIFIED WELDERS. FIELD WELDING REQUIRES CONTINUOUS SPECIAL INSPECTION. PERIODIC FIELD SPECIAL INSPECTION IS ACCEPTABLE FOR FLOOR AND ROOF DECK WELDING, STUD WELDING & WELDING OF STAIR/HANDRAIL SYSTEMS.
- 10. BOLTING: BOLTING OF STRUCTURAL STEEL SHALL MEET THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) 2000 EDITION SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 & A490 BOLTS FOR TYPES X, N & SC.
- 11. CAMBER: ALL STEEL BEAMS SHALL HAVE STANDARD MILL CAMBER UNLESS NOTED OTHERWISE ON THE STRUCTURAL PLANS.

#### NAILS

- . <u>DIAPHRAGM NAILING:</u> ALL FLOOR SHEATHING, ROOF SHEATHING AND SHEAR PANELS CONSTRUCTED USING WOOD-BASED STRUCTURAL-USE PANELS SHALL BE FASTENED WITH COMMON NAILS HARDWARE SHALL BE NAILED PER MANUFACTURER'S REQUIREMENTS, OTHERWISE SHORT NAILS MAY BE USED. NAILING SHALL BE PER THE BUILDING CODE UNLESS NOTED OTHERWISE ON THE PLANS OR DETAILS.
- 2. NAIL GUNS: MUST BE EQUIPPED WITH A FLUSH NAILER ATTACHMENT FOR NAILING OF PLYWOOD SHEAR WALLS, FLOOR SHEATHING AND ROOF SHEATHING.
- 3. NAIL MANUFACTURING: ALL NAILS MUST BE DOMESTICALLY MANUFACTURED & MEET THE REQUIREMENTS OF THE CURRENT BUILDING CODE.
- 4. GALVANIZED NAILS: ALL NAILS INTO PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED OR OTHER APPROVED COATING TO RESIST CORROSION UNLESS PRESSURE TREATED PLATE IS TREATED WITH BORATE.

#### MANUFACTURED LUMBER PRODUCTS

- 1. <u>MANUFACTURED LUMBER:</u> ALL MANUFACTURED SHALL HAVE ICC APPROVAL FOR THE LATEST BUILDING CODE.
- 2. <u>SIZES & STRENGTH</u>: THE FOLLOWING MINIMUM DESIGN VALUES MUST BE ACHIEVED FOR EACH TYPE OF MANUFACTURED LUMBER SPECIFIED ON THE STRUCTURAL PLANS.

STRUCTURAL COMPOSITE LUMBER				
	MINIMUM DESIGN VALUES			
DEAW TIPE	Fb (PSI)	Fv (PSI)	E (PSI x 10^ 6)	
PSL - PARALLAM	2,900	290	2.2	
LVL - MICROLAM	2,600	285	1.9	
LSL - TIMBERSTRAND	2,325	310	1.55	
RIM - TIMBERSTRAND	1,700	400	1.3	

3. <u>I-JOISTS</u>: PROVIDE FLOOR I-JOISTS AS MANUFACTURED BY I-LEVEL OR APPROVED EQUAL. THE FLOOR I-JOIST SIZES NOTED ON PLAN REFERENCE I-LEVEL PRODUCT.

### EARTHWORK AND FOUNDATIONS

- . GEOTECHNICAL REPORT: PERFORM SOILS WORK COMPLYING WITH FOUNDATION DESIC BASED ON RECOMMENDATIONS IN SOILS REPORT. SEE STRUCTURAL COVER SHEET (SC FOR SOILS REPORT NUMBER AND DATE.
- ALLOWABLE FOUNDATION DESIGN VALUES PER GEOTECHINCAL REPORT: VALUES BELC MAY BE INCREASED 33 PERCENT FOR TRANSIENT LOADING. A. BEARING CAPACITY: SEE PROJECT DESIGN CRITERIA PASSIVE LATERAL BEARING PRESSURE: SEE PROJECT DESIGN CRITERIA
- COEFFICIENT OF FRICTION: SEE PROJECT DESIGN CRITERIA С.
- B. <u>GRADING, EXCAVATIONS, BACKFILL AND COMPACTION OF BACKFILL:</u> COMPLY WITH GEOTECHNICAL REPORT AND REQUIREMENTS OF GOVERNING CODE AUTHORITY AND PERFORMED ONLY UNDER CONTINUOUS SPECIAL INSPECTION OF GEOTECHNICAL ENGINEER.
- PREPARATION OF SOIL UNDER BUILDING PAD: SEE GEOTECHNICAL REPORT FOR OVER-EXCAVATION OF EXISTING SOIL AND INSTALLATION OF PROPERLY COMPACTED BACKFILL
- FOUNDATION EXCAVATIONS: FOUNDATIONS ARE TO BEAR ON FIRM EXISTING SOIL OR APPROVED COMPACTED FILL AS INDICATED IN GEOTECHNICAL REPORT. EXCAVATIONS ARE TO BE INSPECTED BY GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL AND FORMWORK. ENSURE EXCAVATIONS ARE CLEANS, DRY AND FREE OF DEBRIS OR LOOSE SOIL. SLOPE SIDES OF EXCAVATION NOT LESS THAN MINIMU SLOPE INDICATED IN GEOTECHNICAL REPORT. CAST CONCRETE DIRECTLY AGAINST EXCAVATED SURFACES.
- 6. <u>BACKFILLING OF RETAINING WALLS:</u> PLACE AFTER COMPLETION AND INSPECTION OF WATERPROOFING. ADEQUATELY SHORE RETAINING WALLS DURING BACKFILL OPERATIC UNLESS ADEQUATELY SHORED, DO NOT PLACE BACKFILL BEHIND BUILDING STRUCTUR RETAINING WALLS (EXCLUDING SITE RETAINING WALLS) UNTIL CONCRETE AT ELEVATED FLOOR LEVELS ADJACENT TO WALLS ARE COMPLETELY POURED (IN AREA) AND HAVE CURED FOR AT LEAST 7 DAYS.
- WATER EXPOSURE AT BUILDING PERIMETER FOOTINGS: AT AREAS WHERE SIDEWALKS PAVING DO NOT IMMEDIATELY ADJOIN STRUCTURE, PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURE AT BUILDING PERIMETER. LANDSCAPE IRRIGATION IS NOT PERMITTEI WITHIN FIVE FEET OF BUILDING PERIMETER FOOTINGS EXCEPT WHEN ENCLOSED IN PROTECTED PLANTERS WITH DIRECT DRAINAGE AWAY FROM STRUCTURE OR WHICH COMPLIES WITH APPLICABLE CODE. DISCHARGE FROM DOWN SPOUTS, ROOF DRAINS A SCUPPERS IS NOT PERMITTED ONTO UNPROTECTED SOILS WITHIN FIVE FEET OF BUILDIN PERIMETER. REFER TO GEOTECHNICAL REPORT FOR COMPLETE REQUIREMENTS.

#### WOOD FRAMING

SAWN LUMBER: ALL STRUCTURAL SAWN LUMBER SHALL BE DOUGLAS FIR LARCH WITH 19% AXIMUM MOISTURE CONTENT OF THE FOLLOWING GRADES, CONFORMING TO STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17, UNLESS NOTED OTHERWISE. THE LUMBER GRADES AS SPECIFIED BELOW MEET MINIMUM REQUIREMENTS:

LUMBER GRADES			
CONDITION	GRADE		
PLATES & BLOCKING	STUD OR BETTER		
STUDS TO 10'-0" IN HEIGHT	STUD OR BETTER		
STUDS OVER 10'-0" IN HEIGHT	#2		
2x RAFTER JOISTS	#2		
4x6 THROUGH 4x12 BEAMS, HEADER & POSTS	#2		
4x14 BEAMS, HEADERS & POSTS	#1		
4x4 POSTS, HEADERS	#2		
6x AND LARGER POSTS, BEAMS, STRINGERS	#1		

- 2. GRADE STAMPS: WHERE POSSIBLE ALL LUMBER GRADE STAMPS SHALL REMAIN ON JMBER AFTER INSTALLATION. CONVENTIONAL LUMBER SHALL MEET DOC PS 20 REQ.
- PRESSURE TREATED LUMBER: ALL WOOD BEARING ON CONCRETE OR MASONRY SHALL BE PRESSURE TREATED FIR. ALL NAILS TO PLATES TREATED W/ BORATE MAY BE STANDARD NAILS, FOR ALL OTHER PRESSURE TREATED PLATES, USE HOT DIP GALVANIZED NAILS.
- PLYWOOD/OSB: EACH WOOD-BASED STRUCTURAL-USE PANEL USED FOR DIAPHRAGM CONSTRUCTION SHALL BE IDENTIFIED BY A REGISTERED STAMP OR BRAND OF AN ICC-APPROVED COMPLIANCE ASSURANCE AGENCY.WOOD-BASED STRUCTURAL-USE PANELS SHALL MEET THE REQUIREMENTS OF DOC PS 1 OR PS 2. ALL PANELS SHALL BE GLUED WITH EXTERIOR TYPE GLUE MEETING APA SPECIFICATIONS. PANELS PERMANENTLY EXPOSED TO THE OUTDOORS SHALL BE EXTERIOR TYPE.
- METAL CONNECTORS: ALL METAL CONNECTORS SHALL BE THOSE MANUFACTURED BY SIMPSON STRONG TIE OR USP LUMBER CONNECTORS. THE NAILS FOR THESE CONNECTORS SHALL BE AS SPECIFIED BY THE MANUFACTURERS FOR CAPACITY OF TH HARDWARE. ALL CALLOUTS REFER TO SIMPSON PRODUCT CODES AND NAMES. REFER TO CROSS REFERENCE TABLES PROVIDED BY USP IN THEIR PRODUCT CATALOGS.
- FIRE STOPS: PROVIDE FIRE STOPS AT ALL INTERSECTIONS OF STUD WALLS AT FLOOR, CEILING AND ROOF. FIRE STOPS SHALL BE 2x NOMINAL THICKNESS OF WOOD AND SHAL BE THE FULL WIDTH OF THE ENCLOSED SPACE. PLACE FIRESTOPS AT A MAXIMUM SPACING OF 10'-0" IN THE VERTICAL DIRECTION. PROVIDE 2x FIRE STOPS IN ALL FURRED SPACES. VERTICAL AND HORIZONTAL. AND AT A MAXIMUM SPACING OF 10'-0" IN EACH DIRECTION AND AT THE SAME LINES AS FIRE STOPS IN ADJACENT STUD WALLS.
- BOLT HOLES: IN WOOD SHALL BE 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER . ALL BOLTS SHALL HAVE A STANDARD CUT WASHER UNDER HEAD AND NUT UNLESS NOTED OTHERWISE.
- 8. BOLTS: ALL BOLTS USED FOR WOOD CONNECTIONS SHALL BE ASTM A307, U.N.O. ALL NUTS AND BOLTS SHALL BE RE-TIGHTENED PRIOR TO THE APPLICATION OF SHEATHING, PLASTER. ETC.
- 9. <u>NOTCHING & CUTTING:</u> STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, ETC. UNLESS SPECIFICALLY DETAILED. NOTCHING OF HORIZONTAL STRUCTURAL MEMBERS SHALL CONFORM TO THE BUILDING CODE. NOTCHING AND BORING OF STUDS AND TOP PLATES SHALL CONFORM TO THE BUILDING CODE.
- 10. JOIST BLOCKING: PROVIDE 2x BLOCKING BETWEEN CONVENTIONAL JOISTS AND RAFTER AT ALL BEARING SUPPORTS. PROVIDE SOLID BLOCKING AT I-JOIST SHEAR WALLS. PROVIDE BLOCKING WHEN I-JOISTS ARE NON-CONTINUOUS OVER BEARING SUPPORT. FOR CONTINUOUS I-JOIST, PROVIDE (1) 16d PER JOIST TO TOP PLATE, AND OMIT BLOCKING AT BEARING SUPPORTS.CROSS BRIDGING OR SOLID BLOCKING SHALL BE PROVIDED AT 8'-0" O/C MAXIMUM FOR ALL CONVENTIONAL JOISTS MORE THAN 12" DEEP UNLESS BOTH EDGES ARE HELD IN LINE FOR THEIR ENTIRE LENGTH.
- 11. JOIST HANGERS: FOR I-JOISTS, PROVIDE SIMPSON "IUS" HANGER. FOR CONVENTIONAL JOIST, USE SIMPSON "LUS" HANGER, OR EQUIVALENT.
- 12. <u>BEAM BEARING:</u> ALL BEAMS TO BE SUPPORTED WITH FULL BEARING UNLESS NOTED OTHERWISE.
- 13. <u>CONVENTIONAL FRAMING:</u> ALL CONVENTIONAL FRAMED PORTIONS OF THE STRUCTURE ARE TO BE CONSTRUCTED PER SECTION 2308 OF THE CBC.
- 14. WALLS ON WOOD FLOOR: PROVIDE SINGLE FLOOR JOIST BELOW NON-BEARING, PARALLEL WALLS 10'-0" OR LONGER.
- 15. FINGER JOINTED STUDS: IT IS STRUCTURALLY ACCEPTABLE TO USE STRUCTURAL GLUED (FINGER-JOINTED) LUMBER. ALL FINGER-JOINTED LUMBER MUST BE "CER EXT JNTS" AND CONFORM WITH THE WWPA'S GLUED PRODUCTS PROCEDURES AND QUALITY CONTROL. FINGER-JOINTED LUMBER IS TO BE STAMPED WITH "CER EXT JNTS" AND MAY BE USED INTERCHANGEABLE WITH ANY SOLID-SAWN LUMBER PRODUCT OF THE SAME SPECIES AND GRADES. PLEASE REFER TO LUMBER SPECIFICATION IN THE STRUCTURAL GENERAL NOTES AND CALCULATIONS.
- 16. <u>PLATE WASHERS AT NON-SILL PLATE APPLICATION:</u> MINIMUM SIZE FOR SQUARE PLATE WASHERS: (REFER TO PLANS FOR SILL PLATE WASHER REQUIREMENTS.)

PI NON SIL	PLATE WASHERS NON SILL PLATE APPLICATION		
BOLT SIZE	PLATE WASHER SIZE		
$\frac{1}{2}$ "	$\frac{3}{16}$ " x 2" x 2"		
<u>5</u> " 8	$\frac{1}{4}$ " x 2 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ "		
$\frac{3}{4}$	$\frac{5}{16}$ " x 2 $\frac{3}{4}$ " x 2 $\frac{3}{4}$ "		
$\frac{7}{8}$ "	<sup>5</sup> / <sub>16</sub> " x 3" x 3"		
1"	$\frac{3}{8}$ " x 3 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ "		

FIELD VERIFICATION: FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO. CONSTRUCTION	
PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) IN CASE OF DISCREPANCIES. DESIGN INTENT: CONTRACT DOCUMENTS INDICATE DESIGN INTENT FORE STRUCTURE IN ITS COMPLETED STATE. THEY DO NOT INDICATE METHOD OF CONSTRUCTION. PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENCINEER), DRIOR TO PROCEEDING. WITH WORK IE DESIGN INTENT, REQUIRES	
ARCHITECT (STRUCTURAL ENGINEER), PRIOR TO PROCEEDING WITH WORR, IF DESIGN INTENT REQURES FURTHER CLARIFICATION. <u>DEVIATIONS, MODIFICATIONS AND SUBSTITUTIONS TO APPROVED STRUCTURAL DRAWINGS</u> : MUST BE ACCEPTED IN WRITING BY ARCHITECT (STRUCTURAL ENGINEER) AND APPROVED BY GOVERNING CODE AUTHORITY. NO DEVIATION, MODIFICATION OR SUBSTITUTION WILL BE ACCEPTED VIA SHOP DRAWING	
REVIEW. <u>PROCEDURES OF CONSTRUCTION</u> : CONTRACTOR IS RESPONSIBLE FOR PROCEDURES OF CONSTRUCTION COMPLYING WITH NATIONAL, STATE AND LOCAL SAFETY ORDINANCES. SITE VISITS (INCLUDING STRUCTURAL OBSERVATION) BY ARCHITECT. (STRUCTURAL ENGINEER) DO NOT CONSTITUTE	STRUCTURAL ENGINEERIN 40810 COUNTY CENTER DR. #11 TEMECULA, CA 92591
<ul> <li>SUPERVISIONS OF METHODS OF CONSTRUCTION.</li> <li>A. <u>PROTECTION OF UTILITIES</u>: LOCATE EXISTING UTILITIES, INCLUDING THOSE NOT SHOWN ON CONTRACT DOCUMENTS, AND PROTECT THEM FROM DAMAGE. CONTRACTOR BEARS EXPENSE OF</li> </ul>	TEL: 951.600.0032 WWW.ISEENGINEERS.CO TEAM CONTACT INFORMATION
<ul> <li>REPAIR OR REPLACEMENT OF UTILITIES IN CONJUNCTION WITH EXECUTION OF WORK.</li> <li>EXCAVATIONS: PROTECT STRUCTURE, ADJACENT STRUCTURES, ADJACENT PROPERTIES, STREETS, AND UTILITIES DURING EXCAVATION UTILIZING LAGGING, SHORING, UNDERPINNING AT SIDES AND RELATED PROCEDURES AS MAY BE REQUIRED. PROVIDE NECESSARY SUPPORTS FOR SOIL EXCAVATIONS. CONTRACTOR AND AFFECTED TRADES SHALL REFER TO GEOTECHNICAL REPORT FOR</li> </ul>	ISE PROJECT NO.: 17-4815 PROJECT MANAGER:
MORE INFORMATION. C. <u>PROTECTION OF STRUCTURE</u> : PROVIDE NECESSARY MEASURES TO PROTECT STRUCTURE DURING EXECUTION OF WORK	SHANE@ISEENGINEERS.COM
D. <u>CONTRACTOR PROPOSED REVISIONS:</u> WHERE A REVISION OF STRUCTURAL DESIGN OR CONNECTION IS PROPOSED BY CONTRACTOR TO ACCOMMODATE CONSTRUCTION TOLERANCES, CONSTRUCTION SEQUENCE AND/OR DIMENSION MODIFICATIONS, CONTRACTOR SHALL RETAIN A STRUCTURAL ENGINEER LICENSED IN STATE OF CALIFORNIA TO PERFORM DESIGN. SUBMIT STAMPED AND SIGNED DESIGN DRAWINGS AND CALCULATIONS TO THE ARCHITECT (STRUCTURAL	PROJECT DESIGN ENGINEER: MATTHEW ESPINOZA EXT. 209 MATTHEW@ISEENGINEERS.COM
<ul> <li>ENGINEER) FOR REVIEW AND THE GOVERNING CODE AUTHORITY FOR APPROVAL.</li> <li>E. <u>ERECTION PLANS:</u> DETERMINE PHASES OF WORK REQUIRING ERECTION PLANS ACCORDING TO APPLICABLE SAFETY REGULATIONS. MAINTAIN CERTIFIED COPIES OF ERECTION PLANS AT SITE</li> </ul>	RIDGE NEST
<ul> <li>DURING CONSTRUCTION.</li> <li>F. <u>SHORING, BRACING, AND OTHER TEMPORARY SUPPORTS</u>: DESIGN AND ERECT SHORING, BRACING, AND OTHER TEMPORARY SUPPORTS WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH AND AS REQUIRED FOR SAFE ERECTION. ENSURE FLOOR, ROOF, AND WALL MEMBERS ARE SECURELY SHORED AND REACED DURING CONSTRUCTION. DROVIDE SHORING AT ELEVATED REAMS AND</li> </ul>	7914 E. HEARTWOOD DRIVE EDEN, UTAH 84310
SLABS SUPPORTING CONCRETE OR MASONRY WALLS DURING AND AFTER WALL POUR UNTIL WALL ATTAINS DESIGN STRENGTH.	CONTACT INFORMATION:
<ul> <li>G. <u>TEMPORARY LOADING:</u> ENSURE CONSTRUCTION LOADS DO NOT EXCEED INDICATED DESIGN LIVE LOAD VALUES. NOTIFY AFFECTED SUB-CONTRATOR TRADES OF THESE DESIGN LOAD LIMITS.</li> <li>H. FABRICATION, SHIPMENT, AND ERECTION OF STRUCTURAL STEEL: ENSURE STRESSES OCCURRING</li> </ul>	LIVING HOMES 2910 LINCOLN BLVD.
DURING FABRICATION, SHIPMENT, AND ERECTION OF STRUCTURAL STEEL ARE TEMPORARY AND ARE LESS THAN DESIGN AND ALLOWABLE STRESS CAPACITIES OF INDIVIDUAL MEMBERS. DO NOT IMPAIR FULL DESIGN AND LOAD CARRYING CAPACITY OF MEMBERS DUE TO FABRICATION, SHIPMENT, OR EDECTION. CONTRACTOR IS DESPONSIBLE FOR CONTROL INC. EDECTION SEQUENCE, EDECTION	SANTA MONICA, CA 90405 310.581.8500
PROCEDURE, TEMPERATURE DIFFERENTIALS AND WELD SHRINKAGE TO MINIMIZE RESIDUE STRESSES. PROVIDE ADDITIONAL MATERIALS FOR THE ERECTION OF STRUCTURAL STEEL SUCH AS TEMPORARY BRACING AND GUY CABLES AS MAY BE NECESSARY AT NO ADDITIONAL COST. REMOVE THESE MATERIALS UNLESS APPROVED IN WRITING BY OWNER. DO NOT TIGHTEN BOLTS IN TYPICAL BEAM TO COLUMN CONNECTIONS FOR ERECTION PURPOSES.	livinghomes
I. <u>SECURING REINFORCING STEEL, DOWELS, ANCHOR BOLTS AND EMBEDS</u> : FIRMLY SUPPORT AND ACCURATELY PLACE COMPLYING WITH ACI STANDARDS PRIOR TO CASTING CONCRETE OR GROUT IN MASONRY WALLS. USE TIES AND SUPPORT BARS IN ADDITION TO REINFORCING STEEL SHOWN WHERE NECESSARY. NO WELDING OR REINFORCING STEEL, INCLUDING TACK WELDING, IS PERMITTED UNLESS OTHERWISE ACCEPTED IN WRITING BY ARCHITECT (STRUCTURAL ENGINEER). PROVIDE PLASTIC OR PLASTIC COATED CHAIRS AND SPACERS WHEN RESTING ON EXPOSED SURFACES.	GOVERNING JURISDICTION(S) WEBER COUNTY, UTAH BUILDING DIVISION 2380 WASHINGTON BLVD, #240 OGDEN, UT 84401
COORDINATION RESPONSIBILITY: CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WORK INCLUDING THAT OF SUB-CONTRACTOR TRADES.	
SUBMITTALS: SUBMIT TO ARCHITECT (STRUCTURAL ENGINEER) AS INDICATED ON STRUCTURAL DRAWINGS AND SPECIFICATIONS. GENERAL CONTRACTOR SHALL REVIEW SUBMITTAL FOR COMPLETENESS AND COMPLIANCE WITH CONTRACT DOCUMENTS PRIOR TO SUBMISSION.	3.135 -127
A. <u>REQUEST FOR INFORMATION (RFI) SUBMITTALS:</u> ACCOMPANY RFIS WITH PARTIAL STRUCTURAL FOUNDATION OR FRAMING PLANS SHOWING LOCATION IN QUESTION AND AFFECTED STRUCTURAL MEMBERS. COPY PARTIAL PLAN FROM STRUCTURAL DRAWINGS AND INDICATE GRID LINE LOCATIONS AND FLOOR LEVEL. ALSO PROVIDE PROPERLY DRAWN ENGINEERING SKETCHES ILLUSTRATING ISSUES AND CONTRACTOR'S PROPOSED SOLUTIONS. PHOTOGRAPHS ARE NOT ACCEPTABLE SUBSTITUTES TO ENGINEERING SKETCHES.	WEBER COUNTY
<u>CONTRACT DOCUMENTS USE:</u> REVIEW CONTRACT DOCUMENTS IN THEIR ENTIRETY BEFORE PERFORMING STRUCTURAL RELATED WORK AND BEFORE DEVELOPING SHOP DRAWINGS. BRING DISCREPANCIES TO THE IMMEDIATE ATTENTION OF ARCHITECT (STRUCTURAL ENGINEER) BEFORE STARTING WORK.	APPROVAL STAMP
<ul><li>A. SCALING OF DRAWINGS: NOT PERMITTED.</li><li>B. ADDITIONAL STRUCTURAL REQUIREMENTS: SEE SPECIFICATIONS.</li></ul>	
C. BUILDING GEOMETRY: SEE ARCHITECTURAL DRAWINGS FOR BUILDING GEOMETRY INCLUDING, BUT NOT LIMITED TO, TOP OF FLOOR AND ROOF ELEVATIONS; DEPRESSIONS; SLOPES; CURBS; DRAINS; TRENCHES; SLAB AND DECK EDGE LOCATIONS; WALL OVERALL DIMENSIONS; AND SIZE AND LOCATIONS OF OPENINGS IN FLOORS, ROOF AND WALLS.	PLAN REVIEW ACCEPTANCE FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.
D. NON-STRUCTURAL ITEMS REQUIRING SPECIAL PROVISIONS: SEE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR NON-STRUCTURAL ITEMS REQUIRING SPECIAL PROVISIONS DURING CONSTRUCTION. THEY INCLUDE, BUT ARE NOT LIMITED TO, NON-STRUCTURAL WALLS; SIZE AND LOCATIONS OF OPENINGS AND SLEEVES PENETRATING STRUCTURE; SIZE AND LOCATION OF CONCRETE CURBS AND PADS; AND SIZE AND LOCATION OF PIPING, DUCTWORK, AND ELEVENT AND CONSTRUCT CORES MOLIFIED OF DESIGNED EPON STRUCTURE; SIZE AND DESIGN AND STRUCT URE AND PADS; AND SIZE AND STRUCT URE STATES AND PADS; AND SIZE AND LOCATION OF STRUCT URE STATES AND PADS; AND SIZE AND LOCATION OF STRUCT URE STATES AND PADS; AND SIZE AND LOCATION OF STRUCT URE STATES AND PADS; AND AND PADS; AND PADS; AND PADS; AND STRUCT URE STATES AND PADS; AND PAD	BuildingStructuralMechanicalPlumbingElectricalEnergyAccessibilityFire
AND PRODUCTION OF EQUIPMENT WITH EQUIPMENT MANUFACTURER.         MATERIALS:         FURNISH AND INSTALL IN COMPLIANCE WITH LEGALLY CONSTITUTED PUBLIC AUTHORITIES	PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.
HAVING JURISDICTION INCLUDING COUNTY AND LOCAL ORDINANCES AND SAFETY ORDERS OF STATE INDUSTRIAL ACCIDENT COMMISSION, OSHA. PENETRATIONS, EMBEDMENTS, AND OPENINGS IN STRUCTURAL MEMBERS: NO PENETRATION,	BY: DATE: 10/16/17 WEST COAST CODE CONSULTANTS, INC.
EMBEDMENT, OPENING, SLEEVE, PIPE, OR CONDUIT SHALL OCCUR IN STRUCTURAL MEMBERS INCLUDING FOOTINGS, SLABS, WALLS, COLUMNS, AND BEAMS UNLESS SPECIFICALLY SHOWN OR INDICATED ON STRUCTURAL DRAWINGS.	
2. <u>TYPICAL DETAILS</u> : DETAILS ON SD SERIES SHEETS ARE APPLICABLE THROUGHOUT PROJECT WHEREVER THE DESCRIBED CONDITION OCCURS AND MAY OR MAY NOT BE SPECIFICALLY REFERENCED ON STRUCTURAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THESE DETAILS AND UNDERSTANDING EXTENT OF THEIR APPLICATION PRIOR TO PERFORMING WORK.	CO. PC & LH REV'S 10/03/17
APPDEVIATIONS	
$AB = ANCHOR BOLT \qquad GT = GIRDER TRUSS$ $ABV = ABOVE \qquad HDD = HEADED$	ENGINEER STAMP & SIGNATUR
ABV-ABOVEHDK=HEADEHADD'L=ADDITIONALHGR=HANGERALT=ALTERNATEIBC=INTERNATIONAL BUILDING CODEAWA=ALIGN WITH ABOVEIN=INCHBEW=BOTTOM EACH WAYINFO=INFORMATIONBLK=BLOCKINT=INTERIOR	ENGINEER SAUL
BLKG     = BLOCKING       BLW     = BLOCKING       JST     = JOIST       LSL     = LAMINATED STRAND LUMBER       BM     = BEAM       EN     = MAXIMUM	CON LOTHROP 8 TH 0087000375-22028 ⊂ 1087000375-22028 ⊂ 1087000375-22028 ⊂ 1087000375-22028 ⊂

STATE, OR LOCAL REGULATIONS MEM DATE: 10/16/1 EST COAST CODE CONSULTANTS, IN PLAN REVISIONS DESCRIPTION | DATE CO. PC & LH REV'S 10/03/17 EER STAMP & SIGNATUR DATE: 10/13/17 SHEET TITLE: GENERAL NOTES SHEET REV: SHEET NUMBER

WWM = WELDED WIRE MESH W/ = WITHW/O = WITHOUT

MFR = MANUFACTURER

N/P = NOT PROVIDED

PI = PLASTICITY INDEX

PT = POST TENSION

RR = ROOF RAFTER

SPN = SOLE PLATE NAILING

TSL = TRIANGULAR STRAND LUMBER

UBC = UNIFORM BUILDING CODE

UNO = UNLESS NOTED OTHERWISE

SHTG = SHEATHING

SIM = SIMILAR

SQ = SQUARE SQSH = SQUASH

STD = STANDARD

SW = SHEAR WALL

TP = TOP PLATE

TYP = TYPICAL

PSL = PARALLEL STRAND LUMBER

O/C = ON CENTER

PLT = PLATE

PNL = PANEL

REV = REVISION

RF = ROOF

PLYWD= PLYWOOD

MIN = MINIMUM

MULT = MULTIPLEN/A = NOT APPLICABLE

GA = GAGE GLB = GLU-LAM

BRG = BEARING

BTM = BOTTOM

BTR = BETTER

CLG = CEILING

DBL = DOUBLE

DP = DEEP

DR = DROP

EA = EACH

CONC = CONCRETE

DF = DOUGLAS FIR

EMBED = EMBEDMENT

EN = EDGE NAILING

EW = EACH WAY

EXT = EXTERIOR

FA = FROM ABOVE

FDN = FOUNDATION

FH = FULL HEIGHT

FJ = FLOOR JOIST FL = FLUSH

FLR = FLOOR FNGR = FINGER

FT = FEET

FRMG = FRAMING

= DECK JOIST

= EXPANSION INDEX

EWB = ENGINEERED WOOD BEAM

DIA = DIAMETER

BTWN = BETWEEN

CBC = CALIFORNIA BUILDING CODE



#### **REINFORCING STEEL**

- REINFORCING STEI A. <u>ALL BARS, U.N.O.</u>: ASTM A615, GRADE 60
- B. BARS TO BE WELDED: ASTM A706, GRADE 60
- C. ADDITIONAL REQUIREMENTS FOR BARS, EXCLUDING TIES, IN DUCTILE MOMENT RESISTING FRAMES AND BOUNDARY ELEMENTS IN SHEAR WALLS: NO ADDITIONAL REQUIREMENTS IF ASTM A706, GRADE 60 BARS USED. ASTM615, GRADE 60 BARS ARE PERMITTED PROVIDED ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI (RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3,000 PSI) AND RATIO OF ACTUAL ULTIMATE TENSILE STRESS TO ACTUAL TENSILE YIELD STRENGTH IS NOT LESS THAN
- WIRE AND SPIRAL REINFORCING
- A. SMOOTH WELDED WIRE FABRIC (W.W.F.): ASTM A185, FY=65 KSI, FLAT SHEETS ONLY. DO NOT USE ROLLED MESH. LAP SPACES (1 FOOT MINIMUM). OFFSET LAPS IN ADJACENT SHEETS TO AVOID CONTINUOUS LAPS. B. DEFORMED WIRE STIRRUPS (D4 AND LARGER ONLY): ASTM A497, FY=65 KSI. C. SPIRAL REINFORCING: ASTM A82, GRADE 60
- SHOP DRAWINGS: ACI 315, PART B. SHOW REINFORCING STEEL PLACEMENT INCLUDING SIZES, QUANTITIES, SPACING, CLEARANCES, SPLICE LOCATIONS, LAP LENGTHS, AND CONCRETE COVERAGES AND SUBMIT TO ARCHITECT (STRUCTURAL ENGINEER). PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) PRIOR TO DEVELOPING SHOP DRAWINGS IF INSUFFICIENT CLEAR DISTANCES BETWEEN REINFORCING STEEL AND OTHER CONGESTION IS ENCOUNTERED. NOTIFY SPECIAL INSPECTOR OF ADJUSTMENTS MADE FORM APPROVED CONTRACT DOCUMENTS WHICH ARE INDICATED ON ACCEPTED SHOP DRAWINGS THAT FACILITATE FIELD PLACEMENT OF REINFORCING STEEL AND CONCRETE.
- SPLICE LOCATIONS: SPLICE #5 BARS AND LARGER ONLY AT LOCATIONS INDICATED. IF ADDITIONAL SPLICE LOCATIONS ARE PROPOSED, PROMPTLY NOTIFY ARCHITECT (STRUCTURAL ENGINEER) PRIOR TO DEVELOPING SHOP DRAWINGS. A. SPLICES IN WALLS: LOCATE SPLICES IN HORIZONTAL BARS AT WELL-STAGGERED LOCATIONS. DO NOT SPLICE VERTICAL BARS EXCEPT AT HORIZONTAL SUPPORTS SUCH AS FLOOR AND ROOF DIAPHRAGMS.
- MINIMUM CLEARANCES BETWEEN PARALLEL REINFORCING STEEL INCLUDING DISTANCE <u>BETWEEN SETS OF SPLICED BARS:</u> 1" OR 1 db, WHICHEVER IS GREATER. 1  $\frac{1}{2}$ " OR 1 $\frac{1}{2}$  db WHICHEVER IS GREATER, AT COLUMNS, PIERS, AND PILASTERS ONLY. FOR BUNDLED BARS, MINIMUM CLEAR DISTANCES BETWEEN UNITS OF BUNDLED BARS SHALL BE SAME AS SINGLE BARS EXCEPT BAR DIAMETER IS DERIVED FROM EQUIVALENT TOTAL AREA OF BUNDLE.
- DOWELS AT CONSTRUCTION JOINTS: PROVIDE DOWELS MATCHING SIZE AND QUANTITY OF REINFORCING STEEL INTERRUPTED AT CONSTRUCTION JOINTS, UNLESS DETAILED OTHERWISE.
- 8. <u>PLACEMENT OF BARS IN WALLS:</u> PLACE VERTICAL BARS CLOSEST TO WALL SURFACES AT CURTAINS CONTAINING VERTICAL AND HORIZONTAL BARS OF THE SAME SIZE. IN CURTAINS WHICH VERTICAL AND HORIZONTAL BARS ARE OF DIFFERENT SIZES OR SPACING, PLACE LAYER WITH MOST STEEL AREA CLOSEST TO NEAR WALL SURFACE.
- 9. BARS TERMINATING AT WALLS, COLUMNS, BEAMS, AND FOUNDATIONS: EXTEND BARS TO WITHIN 2" (3" AT CONCRETE POURED AGAINST EARTH) OF FAR FACE OF WALL, COLUMN, BEAM OR FOUNDATION AND PROVIDE STANDARD ACI 90-DEGREE HOOK UNLESS DETAILED OTHERWISE
- 10. BARS INTERRUPTED BY STRUCTURAL STEEL: EXTEND BARS TO WITHIN 2" OF STEEL FACE AND PROVIDE STANDARD ACI 90-DEGREE HOOK UNLESS DETAILED OTHERWISE.
- 11. WELDING: AWS D1.4, EXCEPT AS MODIFIED BY APPLICABLE CODE STANDARD 19-1. SEE RGA #3-77 OF CITY OF LOS ANGELES "R" BOOK FOR ADDITIONAL REQUIREMENTS IF GOVERNING CODE AUTHORITY IS CITY OF LOS ANGELES DEPARTMENT OF BUILDING AND SAFETY. A. ACCEPTABLE REINFORCING STEEL FOR WELDING ASTM A706: IF WELDING OF REINFORCING STEEL OTHER THAN A706 IS DESIRED. SUBMIT PROPOSED PROCEDURE.
- INDICATING CONFORMANCE TO APPLICABLE CODE AND REQUIREMENTS OF GOVERNING CODE AUTHORITY, TO ARCHITECT (STRUCTURAL ENGINEER) FOR ACCEPTANCE AND TO GOVERNING CODE AUTHORITY FOR APPROVAL PRIOR TO EXECUTION. B. WELDER CERTIFICATION: GOVERNING CODE AUTHORITY.
- 12. BENDING: BEND COLD UNLESS OTHERWISE ACCEPTED BY ARCHITECT (STRUCTURAL ENGINEER), DO NOT FIELD-BEND REINFORCING STEEL BARS EMBEDDED IN CONCRETE UNLESS OTHERWISE ACCEPTED IN WRITING BY ARCHITECT (STRUCTURAL ENGINEER).
- 13. LAP SPLICES: PROVIDE CLASS B SPLICES UNLESS INDICATED OTHERWISE.

### MASONRY

- SPECIFIED COMPRESSIVE STRENGTH OF MASONRY (fm): 1,500 PSI TYPICAL UNLESS NOTED OTHERWISE
- VERIFYING SPECIFIED COMPRESSIVE STRENGTH OF MASONRY (fm): USE MASONRY PRISM TESTING METHODS UNLESS OTHERWISE ACCEPTABLE TO ARCHITECT (STRUCTURAL ENGINEER). FULL ALLOWABLE STRESSES ARE USED IN DESIGN. SUBMIT MASONRY PRISM DATA FOR EACH TYPE AND COMPRESSIVE STRENGTH OF MASONRY REQUIRED, WITH A PROFESSIONAL ENGINEER'S SIGNATURE AND STATE OF CALIFORNIA SEAL, TO ARCHITECT (STRUCTURAL ENGINEER). COMPLIANCE WITH MINIMUM REQUIRED COMPRESSIVE STRENGTH SHALL BE BASED ON APPLICABLE CODE SECTION 2105.3.
- CONCRETE BLOCK: ASTM C90, NORMAL WEIGHT, GRADE N-I AND APPLICABLE CODE STANDARD 21-4 ATTAINING A MINIMUM COMPRESSIVE STRENGTH AS REQUIRED TO MEET SPECIFIED COMPRESSIVE STRENGTH OF MASONRY (fm).
- 4. FACE BRICK: ASTM C216 AND APPLICABLE CODE STANDARD 21-1.
- 5. <u>PORTLAND CEMENT FOR MORTAR AND GROUT:</u> ASTM C150, TYPE I OR II. USE OF MASONRY CEMENT OR PLASTIC CEMENT IS NOT PERMITTED.
- 6. <u>AGGREGATES FOR MORTAR AND GROUT:</u> A. AGGREGATES FOR MORTAR: ASTM C144. B. AGGREGATES FOR GROUT: C404, COARSE TYPE.
- 7. MORTAR: ASTM C270, TYPE S. MIX IN PROPORTIONS ACCORDING TO APPLICABLE CODE TABLE 21-A TYPE S. (2,000 PSI MINIMUM).
- 8. <u>GROUT:</u> ASTM C476, COARSE TYPE, ATTAINING A MINIMUM COMPRESSIVE STRENGTH AS REQUIRED TO MEET SPECIFIED COMPRESSIVE STRENGTH OF MASONRY (fm). HOWEVER, IN NO CASE SHALL GROUT COMPRESSIVE STRENGTH BE LESS THAN 2,000 PSI AT 28 DAYS.
- 9. <u>REINFORCING STEEL:</u> REINFORCING STEEL SECTION OF GENERAL NOTES UNLESS INDICATED OTHERWISE.
- 10. COMPOSITE MASONRY WALL PENETRATION SUBMITTAL: SUBMIT FOR EACH WALL INDICATING SIZE AND LOCATION OF EACH WALL PENETRATION AND OPENING AS NECESSARY BY AFFECTED TRADES. SUBMIT TOGETHER WITH APPROPRIATE REINFORCING STEEL SHOP DRAWINGS. SUBMIT WRITTEN STATEMENT FROM SPECIAL INSPECTOR THAT NO ADDITIONAL PENETRATIONS OR OPENINGS WERE ADDED TO THOSE SHOWN IN PENETRATION SUBMITTAL.
- 11. <u>REINFORCING STEEL SPLICES:</u> LAP REINFORCING STEEL AS NOTED ON PLANS & PER THE CURRENT ACI 318 CODE.
- 12. DOWELS FOR WALLS, COLUMNS, PILASTERS, AND PIERS: MATCH SIZE AND SPACING OF VERTICAL REINFORCING STEEL, UNLESS NOTED OTHERWISE. SET DOWELS TO ALIGN WITH CELLS CONTAINING REINFORCING STEEL.
- 13. MINIMUM REINFORCING STEEL CLEARANCES: A. MINIMUM CLEARANCES BETWEEN REINFORCING AND OUTSIDE FACE OF MASONRY: 2" EXCEPT IN NO CASE SHALL CLEARANCE BE LESS THAN  $1\frac{1}{2}$  db.
- B. MINIMUM CLEARANCE BETWEEN REINFORCING AND INSIDE FACE OF GROUT CELL:  $\frac{1}{2}$ " C. <u>MINIMUM CLEARANCE DISTANCE BETWEEN PARALLEL REINFORCING</u>: 1" OR db, WHICHEVER IS LESS. INCREASE TO  $1\frac{1}{2}$  OR  $1\frac{1}{2}$  db, WHICHEVER IS LESS, AT COLUMNS, PILASTERS, AND PIERS ONLY.
- 14. <u>PLACEMENT:</u> SET COURSES IN RUNNING BOND PATTERN UNLESS INDICATE OTHERWISE. SET CELLS IN VERTICAL ALIGNMENT. PROVIDE FLUSH MORTAR JOINTS AT SURFACES TO RECEIVE WATERPROOFING OR DAMP-PROOFING.
- 15. <u>GROUTING:</u> GROUT SOLID ALL CELLS. MECHANICALLY VIBRATE GROUT IN CELLS. A. GROUT HEIGHT LIMITS: APPLICABLE CODE TABLE 21-C
- B. HORIZONTAL CONSTRUCTION JOINTS: HOLD GROUT 1 1/2 INCHES BELOW TOP OF MASONRY UNIT IF WORK IS STOPPED ONE HOUR OR LONGER. C. GROUT COVER AROUND REINFORCING STEEL, ANCHOR BOLTS AND INSERTS PENETRATING MASONRY SHELL: 1" MINIMUM.
- 16. HORIZONTAL BAR TERMINATING AT WALL ENDS AND OPENING JAMBS: EXTEND BARS TO WITHIN 2 INCHES OF END OF WALL AND PROVIDE STANDARD AI 90-DEGREE HOOK UNLESS DETAILED OTHERWISE.

#### CONCRETE EXPOSURE REQUIREMENTS

ACI	318 TABLE 4.2.1 - E	EXPOSURE	E CATEGORIES AND C	LASSES					
CATEGORY	SEVERITY	CLASS	S CONDITION						
	NOT APPLICABLE	FO	CONCRETE NOT EXE AND THAWING CYC	POSED TO FREEZING LES					
F	MODERATE	F1	CONCRETE EXPOSED TO FREEZING AND THAWING CYCLES AND OCCASIONAL EXPOSURE TO MOISTURE						
FREEZING AND THAWING	SEVERE	F2	CONCRETE EXPOSED TO FREEZING A THAWING CYCLES AND IN CONTINUC CONTACT W/ MOISTURE						
	VERY SEVERE	F3	CONCRETE EXPOSE THAWING AND IN CO W/ MOISTURE AND I CHEMICALS	D TO FREEZING AND ONTINUOUS CONTACT EXPOSED TO DEICING					
			WATER SOLUBLE SULFATE (SO4) IN SOIL, PERCENT BY WEIGHT	DISSOLVED SULFATE (SO4) IN WATER, PPM					
S	NOT APPLICABLE	S0	SO <sub>4</sub> < 0.10	SO <sub>4</sub> < 150					
SULFATE	MODERATE	S1	$0.10 \le SO_4 < 0.20$	$\frac{150 \le SO_4 < 1500}{SEAWATER}$					
	SEVERE	S2	$0.20 \leq SO_4 \leq 2.0$	$1500 \leq SO_4 \leq 10,000$					
	VERY SEVERE	S3	SO <sub>4</sub> > 2.00	SO <sub>4</sub> > 10,000					
P	NOT APPLICABLE	PO	IN CONTACT W/ WA' PERMEABILITY IS NO	TER WHERE LOW DT REQUIRED					
PERMEABILITY	REQUIRED	P1	IN CONTACT W/ WATER WHERE LOW PERMEABILITY IS REQUIRED						
	NOT APPLICABLE	C0	CONCRETE DRY OR PROTECTED FROM MOISTURE						
C	MODERATE	C1	CONCRETE EXPOSED TO MOISTURE BUT NOT TO EXTERNAL SOURCES OF CHLORIDE						
PROTECTION OF REINFORCEMENT	SEVERE	C2	CONCRETE EXPOSED TO MOISTURE A AN EXTERNAL SOURCE OF CHLORIDE FROM DEICING CHEMICALS, SALT, BRACKISH WATER, SEAWATER, OR SP FROM THESE SOURCES						

#### ACI 318 TABLE 4.3.1 - REQUIREMENTS FOR CONCRETE BY EXPOSURE CLASS

EXPOSURE CLASS	MAX W/C	MIN fc	ADDITIONAL MINIMUM REQUIREMENTS									
				AIR CONTENT								
FO	N/A	2500		N/A								
F1	0.45	4500	PER T	N/A								
F2	0.45	4500	PER TA	PER TABLE 4.4.1 - ACI 318-08								
F3	0.45	4500	PER T	PER TABLE 4.4.1 - ACI 318-08								
			CEMENTI	CALCIUM CHLORIDE								
			ASTM C150	ASTM C595	ASTM C1157	ADMIXTURE						
S0	N/A	2500	NO TYPE RESTRICTION	NO TYPE RESTRICTION	NO TYPE RESTRICTION	NO RESTRICTION						
S1	0.50	4000	Ш 2,3	IP (MS) IS(< 70) (MS)	MS	NO RESTRICTION						
S2	0.45	4500	V 3	IP (HS) IS(< 70) (HS)	HS	NOT PERMITTED						
S3	0.45	4500	V PLUS POZZOLAN OR SLAG 4	IP (HS) PLUS POZZOLAN OR SLAG 4 OR IS (< 70) (HS) PLUS POZZOLAN OR SLAG 4	HS PLUS POZZOLAN OR SLAG 4	NOT PERMITTED						

PO	N/A	2500	NONE								
P1	0.50	4000	NONE								
			MAXIMUM W CHLORII CONTENT I PERCENT F CEN REINFORCED CONCRETE	ATER SOLUBLE DE ION (CL-) N CONCRETE, BY WEIGHT OF MENT 5 PRESTRESSED CONCRETE	RELATED PROVISIONS						
СО	N/A	2500	1.00	0.06	NONE						
C1	N/A	2500	0.30	NOME							
C2	0.40	5000	0.15	0.06	ACI 318, 7.7.6 & 18.16 6						

- ALTERNATIVE COMBINATIONS OF CEMENTITIOUS MATERIALS OF THOSE LISTED IN TABLE 4.3.1 SHALL BE PERMITTED WHEN TESTED FOR SULFATE RESISTANCE AND
- MEETING THE CRITERIA IN 4.5.1. FOR SEAWATER EXPOSURE, OTHER TYPES OF PORTLAND CEMENTS WITH TRICALCIUM ALUMI-NATE (C3A) CONTENTS UP TO 10 PERCENT ARE PERMITTED IS THE W/ CM DOES
- NOT EXCEED 0.40 OTHER AVAILABLE TYPES OF CEMENT SUCH AS TYPE II OR TYPE I ARE PERMITTED IN EXPOSURE CLASSES S1 OR S2 IF THE C3A CONTENTS ARE LESS THAN 8 OR 5 PERCENT,
- RESPECTIVELY. THE AMOUNT OF THE SPECIFIC SOURCE OF THE POZZOLAN OR SLAG TO BE USED SHALL NOT BE LESS THAN THE AMOUNT THAT HAS BEEN DETERMINED BY SERVICE RECORD TO IMPROVE SULFATE RESISTANCE WHEN USED IN CONCRETE CONTAINING
- TYPE V CEMENT. ALTERNATIVELY, THE AMOUNT OF THE SPECIFIC SOURCE OF THE POZZOLAN OR SLAG TO BE USED SHALL NOT BE LESS THAN THE AMOUNT TESTED IN ACCORDANCE WITH ASTM C1012 AND MEETING THE CRITERIA IN 4.5.1. WATER-SOLUBLE CHLORIDE ION CONTENT THAT IS CONTRIBUTED FROM THE
- INGREDIENTS INCLUDING WATER, AGGREGATES, CEMENTITIOUS MATERIALS, AND ADMIXTURES SHALL BE DETERMINED ON THE CONCRETE MIXTURE BY ASTM C1218 AT AGE BETWEEN 28 AND 42 DAYS. REQUIREMENTS OF 7.7.6 SHALL BE SATISFIED. SEE 18.16 FOR UNBONDED TENDONS.

- CONCRETE COMPRESSIVE STRENGTH: ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH AS SHOWN IN THE TABLE 2 BELOW AT 28 DAYS, U.N.O. ON PLANS. SEE ALSO SULFATE CONTENT NOTES.
- AGGREGATES IN CONCRETE: SHALL BE NATURAL SAND AND ROCK (150 LB/CU. FT) CONFORMING TO ASTM C33. AGGREGATE SHALL HAVE PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN 0.05% PER ASTM C-157. DO NOT CHANGE SOURCE OF AGGREGATE DURING COURSE OF WORK WITHOUT WRITTEN CONSENT OF ENGINEER.
- CEMENT: SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150. CEMENT SHALL BE TYPE II OR AS REQUIRED TO SATISFY SITE SOIL CONDITIONS. REFER TO TABLE 4 FOR CONCRETE CEMENT REQUIREMENTS ON SOIL CONTAINING SULFATE. REFER TO TABLE 2 FOR MAXIMUM WATER TO CEMENT RATIO.

CONCRETE STRENGTH										
CONDITION	STRENGTH, fc	WATER / CEMENT RATIO	MAX. SLUMP							
SLAB ON GRADE	2,500 PSI	0.65	6"							
FOOTING & GRADE BM	2,500 PSI	0.65	6"							
RETAINING WALL	2,500 PSI	0.65	6"							

REBAR CLEAR COVER IN CONCRETE: THE FOLLOWING MINIMUM CLEAR DISTANCES BETWEEN REINFORCING STEEL AND FACE OF CONCRETE SHALL BE MAINTAINED UNLESS NOTED OTHERWISE

REBAR CLEAR COVER FOR CAST	-IN-PLACE CONCRETE
CONDITION	COVER
SLAB ON GRADE	CENTER OF SLAB OR 2" MIN
CONCRETE AGAINST & PERMANENTLY EXPOSED TO EARTH:	3"
CONCRETE EXPOSED TO EARTH OR WEATHER:	
WALL PANELS, SLABS, JOINTS:	1"
OTHER MEMBERS:	1 1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER:	
SLABS, WALLS, JOINTS:	<u>3</u> " 4
BEAM, COLUMNS PRIMARY REINFORCEMENT:	1 <sup>1</sup> / <sub>2</sub> "
BEAM, COLUMNS TIES, STIRRUPS, SPIRALS	1"

- 5. <u>VIBRATION:</u> VIBRATION OF CONCRETE SHALL BE IN ACCORDANCE WITH GENERAL PROVISIONS OUTLINED IN PORTLAND CEMENT ASSOCIATION SPECIFICATION ST26.
- CURING: CONCRETE SHALL BE MAINTAINED AT IN A MOIST CONDITION FOR A MINIMUM OF FIVE DAYS AFTER ITS PLACEMENT. FOR CONCRETE OTHER THAN SLAB ON GRADE, APPROVED CURING COMPOUNDS MAY BE USED IN LIEU OF MOIST CURING. ONLY IF APPROVED BY THE ENGINEER OR ARCHITECT.
- INSPECTIONS, TESTING & QUALITY ASSURANCE: REFER TO SHEET SN1 FOR DEPUTY SPECIAL INSPECTION, TESTING & STRUCTURAL OBSERVATION REQUIREMENTS. A MINIMUM OF ONE COMPRESSION TEST AT 7 DAYS AND 2 TESTS AT 28 DAYS FOR ALL CONCRETE SAMPLES. TAKE TEST AT A FREQUENCY OF ONCE EVERY 150 CU. YDS OR 5,000 SQ. FT MINIMUM.
- 8. ANCHOR BOLTS, DOWELS, INSERTS: SHALL BE TIED IN PLACE PRIOR TO POURING CONCRETE.
- 9. <u>CONSTRUCTION AND POUR JOINTS:</u> LOCATIONS SHALL BE APPROVED BY ENGINEER PRIOR TO POURING CONCRETE.
- 10. FLY ASH: THE MAXIMUM CONTENT OF FLY ASH OR POZZOLANS CONFORMING TO ASTM C618 IN CONCRETE SHALL BE 25% AND SHALL BE GOVERNED BY ACI 318-08 TABLE 4.2.3.
- 11. FORMWORK: FORMWORK TOLERANCE SHALL IN ACCORDANCE WITH THE C.B.C. AND A.C.I. STANDARDS.
- 12. HOT AND COLD WEATHER CONCRE HOT WEATHER CONCRETING: WHEN AIR TEMPERATURE RISES ABOVE 80° F AND HUMIDITY FALLS BELOW 25, THE CONTRACTOR SHALL FOLLOW HOT WEATHER CONCRETING IN ACCORDANCE WITH ACI 305 5-77. CONTRACTOR SHALL BE PREPARED TO USE FOG SPRAY OR OTHER PRECAUTIONS ACCEPTABLE TO ARCHITECT WHEN RATE OF EVAPORATION EQUALS OR EXCEEDS 0.2 POUNDS PER SQUARE FOOT PER HOUR.
- COLD WEATHER CONCRETING: ADEQUATE EQUIPMENT SHALL BE PROVIDED FOR HEATING CONCRETE MATERIALS AND PROTECTING CONCRETE DURING FREEZING OR NEAR FEEZING WEATHER. ALL CONCRETE MATERIALS AND ALL REINFORCEMENT, FORMS FILLERS AND GROUND WITH WHICH THE CONCRETE IS TO CONTACT SHALL BE FREE FROM FROST. FROZEN MATERIAL OR MATERIALS CONTAINING ICE SHALL NOT BE USED. COLD WEATHER CONCRETING SHALL BE DONE IN ACCORDANCE WITH ACI 306 R-78. (LATEST EDITION)
- 13. PIPES IN CONCRETE: PIPES MAY PASS THROUGH STRUCTURAL CONCRETE IN SLEEVES, BUT SHALL NOT BE EMBEDDED THEREIN. PIPES OR DUCTS EXCEEDING ONE-THIRD THE SLAB OR WALL THICKNESS SHALL NOT BE PLACED IN THE STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED.
- 14. EXPOSED CORNERS: PROVIDE 3/4" CHAMFERS AT ALL EXPOSED CORNERS.
- 15. ARCHITECTURAL DETAILS: REFER TO ARCHITECTURAL DRAWINGS FOR REVEALS, AREAS OF TEXTURED CONCRETE OR SPECIAL FINISHES, ITEMS REQUIRED TO BE CAST INTO THE CONCRETE, CURBS AND SLAB DEPRESSIONS.
- 16. DRYPACK OR GROUT: SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AND BE COMPOSED OF ONE PART PORTLAND CEMENT TO NOT MORE THAN THREE PARTS SAND.

PROPRIETARY ANCHORAGES AND FASTENERS

1. ANCHORAGES

- A. DRILL AND EPOXY ANCHORS: SIMPSON SET-XP EPOXY ADHESIVE SYSTEM USING THREADED STEEL RODS CONFORMING TO ASTM-F1554, GRADE 36, OR REINFORCING STEEL CONFORMING TO ASTM A615 OR A706, GRADE 60, COMPLYING WITH ICC ES ESR 2508. INSTALLERS TO BE CERTIFIED BY MANUFACTURER.
- B. MECHANICAL ANCHORS: HILTI KWIK BOLT-III CARBON STEEL EXPANSION ANCHORS COMPLYING WITH ICC ES REPORT NO. 1385.
- C. WELDED SHEAR STUDS: NELSON 3SL FLUX FILLED, HEADED STUD ANCHORS, 60,000 PSI MINIMUM ULTIMATE TENSILE STRENGTH, AUTOMATICALLY END WELDED IN FIELD CONFIRMING TO ASTM A108 AND COMPLYING WITH ICC ES REPORT NO. 2614. D. WELDED DEFORMED ANCHORS: NELSON D2L, COLD ROLLED, DEFORMED STEEL
- REINFORCING BARS CONFORMING TO ASTM A496 AND COMPLYING WITH ICC ES REPORT NO. 5217.
- A. POWDER ACTUATED FASTENERS: HILTI XCP, COMPLYING WITH CURRENT ICC ES REPORT NO. 2379. PROVIDE APPROPRIATE WASHER BETWEEN FASTENER HEAD AND LIGHT GAUGE METAL OR WOOD SURFACE. B. <u>SELF-DRILLING METAL SCREWS (INDICATED "SCREWS" ON DRAWINGS)</u>: MINIMUM
- 0.292-INCH HEAD DIAMETER SELF-DRILLING/SELF-TAPPING STEEL SCREWS COMPLYING WITH ICC ES REPORT. MINIMUM YIELD STRESS, FY=33 KSI.
- 3. <u>INSTALLATION:</u> SEE MANUFACTURER'S WRITTEN INSTRUCTIONS AND REFERENCED ICC ES A. MATERIALS NOT TO BE PENETRATED BY FASTENERS OR ANCHORAGES POST-TENSIONED CONCRETE AND PRECAST, PRESTRESSED CONCRETE UNLESS SPECIFICALLY DETAILED HEREIN OR AS ACCEPTED IN WRITING BY ARCHITECT (STRUCTURAL ENGINEER). WHEN INSTALLATION IS PERMITTED, LOCATE PRESTRESSING
- AND POST-TENSIONED TENDONS ACCURATELY PRIOR TO INSTALLATION. B. DRILLING HOLES IN EXISTING CONCRETE OR MASONRY FOR ANCHORAGES: USE NON-PNEUMATIC, RATARY HAMMER TOOLS WITH ANSI COMPLIANT NON-REBAR CUTTING DRILL BITS TO DRILL HOLES OF PROPER TOLERANCES. LOCATE EXISTING REBAR INCLUDING PRESTRESSING AND POST-TENSIONING TENDONS USING NON-HAZARDOUS, NONDESTRUCTIVE 1 METHODS WITH ACCURATE LOCATION TOLERANCES (PLUS OR MINUS INCH PRIOR TO DRILLING 4 HOLES TO AVOID CUTTING OR DAMAGING. HOLES SHALL BE THOROUGHLY CLEANED PER MANUFACTURERS WRITTEN RECOMMENDATIONS PRIOR TO INSTALLATION OF ANCHORAGES. C. <u>DELETERIOUS MATERIALS:</u> KEEP ANCHORAGES, INCLUDING HOLES FOR DRILL AND EPOXY ANCHORS AND MECHANICAL ANCHORS, FREE OF DUST, GREASE, AND OTHER
- MATERIALS THAT IMPAIR BOND. 4. TESTING FOR DRILL AND EPOXY ANCHORS:
- A. SPECIAL INSPECTION: SPECIAL INSPECTOR WILL PERFORM CONTINUOUS SPECIAL INSPECTION DURING INSTALLATION.

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	BUILDING DIVISION 2380 WASHINGTON BLVD, #240
	000LIN, 01 04401
	WEBER COUNTY
	APPROVAL STAMP
	APPROVAL STAMP  PLAN REVIEW ACCEPTANCE FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.  BUILDING BUILDING STRUCTURAL DESTRUCTURAL DESTRUCTURAL DESTRUCTURAL
	APPROVAL STAMP         PLAN REVIEW ACCEPTANCE         FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         BUILDING       STRUCTURAL         MECHANICAL       PLUMBING         ELECTRICAL       PLUMBING         ACCESSIBILITY       FIRE
	APPROVAL STAMP         PLAN REVIEW ACCEPTANCE         FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         BUILDING       STRUCTURAL         MECHANICAL       PLUMBING         ELECTRICAL       PLUMBING         ACCESSIBILITY       FIRE         PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.
	<b>PLAN REVIEW ACCEPTANCE</b> FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         BUILDING       STRUCTURAL         BUILDING       STRUCTURAL         BUILDING       STRUCTURAL         MECHANICAL       PLUMBING         ELECTRICAL       PLUMBING         ACCESSIBILITY       FIRE         PLAN REVIEW ACCEPTANCE OF DOCUMENTS       DOES NOT AUTHORIZE CONSTRUCTION TO         DES NOT AUTHORIZE CONSTRUCTIONS OF ANY FEDERAL,       STATE, OR LOCAL REGULATIONS.         MEM       DATE: 10/16/17.         WEST COAST CODE CONSULTANTS, INC.
	APPROVAL STAMP     PLAN REVIEW ACCEPTANCE   FOR COMPLIANCE WITH THE APPLICABLE   CONSTRUCTION CODES IDENTIFIED BELOW.   BUILDING   BUILDING   BUILDING   BUILDING   BULCERICAL   BULCERSIBILITY   FIRE   PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS. MEM MEM MENT DATE: 10/16/17 VEST COAST CODE CONSULTANTS, INC.
DE	APPROVAL STAMP         PLAN REVIEW ACCEPTANCE         FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         MEDILDING       STRUCTURAL         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       ENERGY         ACCESSIBILITY       FIRE         PLAN REVIEW ACCEPTANCE OF DOCUMENTS         DES NOT AUTHORIZE CONSTRUCTION TO         PROCEED IN VIOLATION OF ANY FEDERAL,         STATE, OR LOCAL REGULATIONS.         MEM         DATE:         10/16/17         WEST COAST CODE CONSULTANTS, INC.
	APPROVAL STAMP  PLAN REVIEW ACCEPTANCE  FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.  BUILDING STRUCTURAL BUILDING STRUCTURAL MECHANICAL PLUMBING ELECTRICAL PLUMBING ELECTRICAL ENERGY ACCESSIBILITY FRE  PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOS NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.  MEM PT DATE: 10/16/17 WEST COAST CODE CONSULTANTS, INC.  PLAN REVISIONS  TABLE  CO. PC & LH REV'S 10/03/17
	APPROVAL STAMP
	APPROVAL STAMP  PLAN REVIEW ACCEPTANCE  FOR COMPLIANCE WITH THE APPLICABLE CONSTRUCTION CODES IDENTIFIED BELOW.  BUILDING STRUCTURAL BUILDING STRUCTURAL MECHANICAL PLUMBING ELECTRICAL PLUMBING ELECTRICAL ENERGY ACCESSIBILITY FIRE  PLAN REVIEW ACCEPTANCE OF DOCUMENTS DOES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.  MEM MEM DATE: 10/16/17  CO. PC & LH REV'S 10/03/17  GUINEER STAMP & SIGNATURE
	APPROVAL STAMP         PLAN REVIEW ACCEPTANCE         FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         MECHANICAL       STRUCTURAL         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       MENERGY         ACCESSIBILITY       FIRE         NAN REVIEW ACCEPTANCE OF DOCUMENTS DES NOT AUTHORIZE CONSTRUCTION TO PROCEED IN VIOLATION OF ANY FEDERAL, STATE, OR LOCAL REGULATIONS.         MEM       DATE: 10/16/17         VEST COAST CODE CONSULTANTS, INC.         PLAN REVISIONS         TAM       DESCRIPTION         DATE       10/03/17         MEIN       IO/03/17         MEIN       IO/03/17         MEIN       IO/03/17
	APPROVAL STAMP
	APPROVAL STAMP         PLAN REVIEW ACCEPTANCE         FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         BUILDING       STRUCTURAL         MECHANICAL       PLUMBING         MECHANICAL       MENDERAL         STATE, OR LOCAL REGULATIONS       MENDERAL         MEM       DATE:         MEM       DATE:         MEM       DATE:         MENDICEED       DATE:         MENDICED       DATE         CO. PC & LH REV'S 10/03/17         MINICIPAL       SIGNATURE         MINICIPAL       SIGNATURE         MINICIPAL       SIGNAUM         MINICIPA
	PLAN REVIEW ACCEPTANCE         FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       MENGINE         DATE:       10/16/17         DATE:       10/16/17         WEST COAST CODE CONSULTANTS, INC.         PLAN REVISIONS         ELTA       DESCRIPTION         DATE:       10/03/17         MEIN       LOTHROP & SIGNATURE         MEIN       SHAND D.         MERVISIONS       LOTHROP & SIGNATURE
	APPROVAL STAMP
	APPROVAL STAMP         PLAN REVIEW ACCEPTANCE         FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         MECHANICAL       PLUMBING         MEN       DATE: 10/16/17         MEM       DATE: 10/13/17         MEN       DATE: 10/03/17         MEN       DATE: 10/03/17         MEN       DATE: 10/03/17         MEN       DATE: 10/03/17
	PLAN REVIEW ACCEPTANCE         FOR COMPLIANCE WITH THE APPLICABLE         CONSTRUCTION CODES IDENTIFIED BELOW.         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       PLUMBING         MECHANICAL       MENERGY         ACCESSIBILITY       FIRE         PLAN REVIEW ACCEPTANCE OF DOCUMENTS         DOES NOT AUTHORIZE CONSTRUCTION TO         PREM       DATE: 10/16/17         WEST COAST CODE CONSULTANTS, INC.         PLAN REVISIONS         ELTA       DESCRIPTION         DATE       10/03/17         MEDILICION       DATE         MEDILICION       DATE
	APPROVAL STAMP

D	EPUTY SPECIAL INSPECTOR	QUALITY ASSURANCE (STRUCTURAL OBSE
1.	DEPUTY SPECIAL INSPECTIONS SHALL BE PROVIDED BY:	1. <u>STRUCTURAL OBSERVATION:</u> A. <u>COORDINATION RESPONSIBILITIES OF CONTRACTOR:</u> NOTIFY ARCHITECT (ST
	NAME: PHONE NUMBER:	<ul> <li>B. <u>PRE-CONSTRUCTION MEETING:</u> OWNER MAY COORDINATE AND CALL FOR M THAT AFFECT VERTICAL AND LATERAL LOAD RESISTING SYSTEMS OF STRUCT</li> </ul>
2.	SPECIAL INSPECTOR SHALL BE HIRED BY THE OWNER TO PROVIDE SPECIAL INSPECTIONS AS REQUIRED PER THE PLANS.	<ul> <li>CRITICAL STAGES OF CONSTRUCTION REQUIRING STRUCTURAL OBSERVATIO</li> <li>i. CASTING OF FIRST CONCRETE FOOTING.</li> <li>ii. FRAMING &amp; PRE-CONCRETE POUR REBAR OBSERVATIONS</li> <li>2. <u>MILL TEST REPORTS CERTIFYING MATERIALS</u>: CONTRACTOR TO SUBMIT MILL TEST I</li> </ul>
3.	SPECIAL INSPECTOR: A QUALIFIED PERSON, EMPLOYED BY THE OWNER, WHO HAS DEMONSTRATED COMPETENCE TO THE SATISFACTION OF THE BUILDING OFFICIAL FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. DUTIES INCLUDE VISUAL INSPECTIONS AND FIELD MEASUREMENTS OF MATERIALS, OBTAINING SPECIMENS FOR TESTS AND RELATED ACTIONS INCLUDING PREPARATION OF REPORTS.	<ul> <li>CANNOT BE MADE AVAILABLE OR IF MATERIAL CANNOT BE IDENTIFIED, TESTING REPLACING DEFICIENT MATERIALS.</li> <li>A. <u>ULTRASONIC EXAMINATION OF HEAVY ROLLED SHAPES AND THICK PLATES A</u>MILL TEST REPORTS SHALL CERTIFY THAT CHARPY V-NOTCH TESTING WAS 0</li> <li>3. <u>CERTIFICATE OF COMPLIANCE FOR OFFSITE FABRICATION</u>: SUBMIT FOR STRUCT</li> <li>4. WELD TESTING AND INSPECTION: TESTING LABORATORY WILL SUBMIT WELD TESTING</li> </ul>
4.	<u>CONTINUOUS INSPECTION:</u> ON SITE INSPECTION BY THE SPECIAL INSPECTOR ON A CONTINUOUS BASIS OBSERVING ALL WORK REQUIRING SPECIAL INSPECTION.	A. <u>STRUCTURAL STEEL WELDING:</u> APART FROM VISUAL INSPECTION AND REVIEW STEEL FABRICATION AND ERECTION AND STRUCTURAL WELDING. SHOP AND FI I. ULTRASONIC TESTING IS REQUIRED FOR ALL (100%) PARTIAL AND COMPLETE II. BASE METAL THICKER THAN 1-1/2 INCHES. SUBJECTED TO THROUGH THICKN
5.	<u>PERIODIC INSPECTION:</u> INTERMITTENT INSPECTION AS PERMITTED BY THE PLAN, SPECIFIED AT PRE-DETERMINED INTERVALS OR MORE FREQUENTLY AS WORK PROGRESSES. NO SIGNIFICANT ELEMENTS OR AREAS SHALL BE COVERED BY ADDITIONAL WORK UNTIL APPROVED BY THE BUILDING OFFICIAL AND/OR SPECIAL INSPECTOR.	<ul> <li>WELDS SHALL BE VISUALLY INSPECTED AND PERIODICALLY MEASURED (15)</li> <li>WELDS SHALL BE VISUALLY INSPECTED AND PERIODICALLY MEASURED (15)</li> <li>CHECK 10 PERCENT OF FILLET WELDS BY MAGNETIC PARTICLE (ASTM 109 M</li> <li>ULTRASONICALLY TEST COLUMN FLANGES LOCATED AT PROPOSED WELDE INCLUDE AREA 6 INCHES ABOVE AND BELOW EACH BEAM FLANGE CONNEC AFTER FABRICATION, AND AFTER FINAL WELDING OF BEAM.</li> <li>MULTACE DOLARTY AND ELECTRODE STICK OUT WILL BE VERI</li> </ul>
6.	REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL IN A TIMELY MANNER AS DETERMINED BY THE BUILDING OFFICIAL.	5. <u>CONTINUOUS SPECIAL INSPECTION:</u> UNLESS OTHERWISE INDICATED, CONTINUC (STRUCTURAL ENGINEER). SEE SPECIFICATIONS FOR ADDITIONAL SPECIAL INSPE
		REQUIRED VERIFICATIONS AND INSPECTIONS OF SEISMIC I         VERIFICATION AND INSPECTION         COLSPAN="2">COLSPAN="2"
		1. SEISMIC FORCE RESISTING SYSTEMS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, F
		2. DESIGNATED SEISMIC SYSTEMS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY D, E, F:
		A. STRUCTURAL STEEL: REQUIRED IN ACCORDANCE WITH QUALITY ASSURANCE PLAN OF AISC 341. EXCEPT AT: i.a. STEEL STRUCTURES IN CATEGORY C WITH R < 3
		EXCLUDING CANTILEVERED COLUMN SYSTEMS ii.b. ORDINARY MOMENT FRAMES, ULTRASONIC AND MAGNETIC PARTICLE TESTING OF CIP WELDS ARE ONLY
		B. STRUCTURAL WOOD:
		ii. NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS OF THE SEISMIC RESISTING SYSTEM
		INCLUDING: WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES, SHEAR PANELS AND HOLD-DOWNS. EXCEPTION: NOT REQUIRED AT SHEAR WALLS, DIAPHRAGMS
		INCLUDING NAILING, BOLTING, ANCHORING TO OTHER MEMBERS OF THE SEISMIC SYSTEM WHERE THE FASTENER SPACING OF THE SHEATHING IS MORE THAN 4" O.C.
		C. COLD-FORMED STEEL FRAMING: INSPECTION OF WELDING OF SEISMIC RESISTING SYSTEM, SCREW ATTACHMENT, BOLTING, ANCHORING, AND FASTENING OF ITEMS IN SEISMIC RESISTING SYSTEM, INCLUDING STRUTS, BRACES, AND HOLD-DOWNS.
		EXCEPT: IF SHEATHING IS GYPSUM OR FIBERBOARD. OR IF SHEATHING IS WOOD STRUCTURAL PANEL OR STEEL SHEETS ON ONE SIDE WITH FASTENERS MORE THAN 4" O.C.
		E. STORAGE RACKS AND ACCESS FLOORS: REQUIRED DURING ANCHORAGE OF ACCESS FLOORS AND STORAGE RACKS 8 FEET OR HIGHER IN SEISMIC DESIGN CATEGORY D, E, F.
		F. ARCHITECTURAL COMPONENTS: REQUIRED DURING ERECTION & FASTENING OF EXTERIOR CLADDING, INTERIOR & EXTERIOR NON-BEARING WALLS, VENEER IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY D, E, F.
		EXCEPTIONS: SPECIAL INSPECTION IS NOT REQUIRED FOR: 1. EXTERIOR CLADDING, NON-BEARING WALLS & VENEER 30FT OR LESS ABOVE GROUND 2. CLADDING & VENEER WEIGHING 5 PSF OR LESS. 3. INTERIOR NON-BEARING WALLS WEIGHING 15 PSF OR LESS.
		G. <u>ELECTRICAL AND MECHANICAL COMPONENTS:</u> i. ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY OR STANDBY POWER SYSTEMS IN STRUCTURES ASSICNED TO
		SEISMIC DESIGN CATEGORY C, D, E, F.      ii. INSTALLATION OF ANCHORAGE OF OTHER ELECTRICAL     EQUIPMENT IN STRUCTURES ASSIGNED TO SEISMIC DESIGN
		CĂTEGORY C, D, E, F. iii.INSTALLATION OF PIPING SYSTEMS INTENDED TO CARRY FLAMMABLE, COMBUSTIBLE OR HIGHLY TOXIC CONTENTS AND
		THEIR ASSOCIATED MECHANICAL UNITS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, F. iv.INSTALLATION OF HVAC DUCTWORK THAT WILL CONTAIN
		HAZARDOUS MATERIALS IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, F.         v. INSTALLATION OF VIBRATION ISOLATION SYSTEMS IN         v. INSTALLATION OF VIBRATION ISOLATION SYSTEMS IN
		STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, F WHERE THE CONSTRUCTION DOCUMENTS REQUIRE A NOMINAL CLEARANCE OF 0.25 INCHES OR LESS BETWEEN THE EQUIPMENT SUPPORT FRAME AND RESTRAINT.
		I. <u>SEISMIC ISOLATION SYSTEM: FABRICATION AND INSTALLATION</u> OF ISOLATOR UNITS AND ENERGY DISSIPATION DEVICES THAT ARE PART OF THE SEISMIC ISOLATION SYSTEM.
		REQUIRED VERIFICATIONS AND INSPECTIONS OF WIND F         VERIFICATION AND INSPECTION
		1. REQUIRED IN WIND EXPOSURE CATEGORY B, WHERE 3-SECOND GUST BASIC WIND SPEED IS 120 MPH OR GREATER.
		2. REQUIRED IN WIND EXPOSURE CATEGORY C OR D, WHERE THE 3-SECOND GUST BASIC WIND SPEED IS 110 MPH OR GREATER.
		REQUIRED: 1. ROOF CLADDING . 2. WALL CLADDING. 3. REQUIRED FOR WOOD & COLD FORM STEEL AS OUTLINED IN ST
		ENGINEER OF R
		STRUCTURAL OBSERVATIONS FOR SEISMIC RESISTANCE:
		<ol> <li>STRUCTURAL OBSERVATIONS SHALL BE PROVIDED BY THE ENGINEER O</li> <li>STRUCTURE IS CLASSIFIED AS OCCUPANCY CATEGORY III OR IV.</li> <li>THE HEIGHT OF THE STRUCTURE IS GREATER THAN 75 FT.</li> <li>THE STRUCTURE IS ASSIGNED TO SEISMIC DESIGN CATEGORY E,</li> <li>WHEN DESIGNATED BY THE ENGINEER OF RECORD.</li> <li>WHEN REQUIRED BY THE BUILDING OFFICIAJ</li> </ol>
		STRUCTURAL OBSERVATIONS FOR WIND RESISTANCE: STRUCTURAL OBSERVATIONS SHALL BE PROVIDED BY THE ENGINEER O

### ERVATION, MATERIALS TESTING, AND SPECIAL INSPECTION).

TRUCTURAL ENGINEER) 48 HOURS IN ADVANCE OF CRITICAL STAGES OF CONSTRUCTION INDICATED BELOW SO VISITS MAY BE SCHEDULED BY STRUCTURAL OBSERVATION. CONTRACTOR TO BEAR COSTS OF REMOVAL AND ROCESS OR AS REQUIRED FOR CORRECTIVE ACTION. MEETING BETWEEN ARCHITECT (STRUCTURAL ENGINEER) RESPONSIBLE FOR STRUCTURAL DESIGN, STRUCTURAL OBSERVER, CONTRACTOR, AFFECTED SUBCONTRACTOR, AFFECTED S CTURE AND TO REVIEW SCHEDULE OF STRUCTURAL OBSERVATION, MATERIALS TESTING, AND SPECIAL INSPECTION OF PROJECT. ON:

REPORTS CERTIFYING REINFORCING STEEL, STRESSING TENDONS, AND STRUCTURAL STEEL ARE OF IDENTIFIABLE TESTED STOCK TO OWNER, SPECIAL INSPECTOR, ARCHITECT (STRUCTURAL STEEL ARE OF IDENTIFICATION, IF MILL TEST REPORTS ABORATORY WILL PERFORM TESTS AS DIRECTED BY ARCHITECT (STRUCTURAL ENGINEER). CONTRACTOR SHALL PAY TESTING RELATED TO TESTS AND INSPECTIONS OF UNIDENTIFIABLE MATERIALS FURNISHED WITHOUT MILL LABORATORY FOR COSTS TEST REPORTS, MATERIALS FOUND DEFICIENT AFTER INITIAL TESTS AND INSPECTIONS, OR MATERIALS AT PROPOSED WELDED MOMENT CONNECTIONS: WHERE COMPLETE PENETRATION GROOVE WELDS OCCUR AT GROUPS 4 AND 5 STRUCTURAL STEEL SHAPES, AS DEFINED IN ASTM A6, AND PLATES EXCEEDING 2 INCHES THICK, SUBMIT MILL TEST REPORTS TO ARCHITECT (STRUCTURAL ENGINEER) AND, UPON REQUEST, TO GOVERNING CODE AUTHORITY. CONDUCTED IN COMPLIANCE WITH ASTM A6, SUPPLEMENTARY REQUIREMENT S5, INCLUDING IMPACT TEST COMPLYING WITH ASTM A673 AT FREQUENCY P WITH MINIMUM AVERAGE VALUE OF 20 FT.-LBS. ABSORBED ENERGY AT 70 DEGREES FAHRENHEIT. TURAL STEEL, GLU-LAMS, AND PLYWOOD-WEB JOISTS, PRECAST CONCRETE IN COMPLIANCE WITH APPLICABLE CODE SECTION 1701.7. SUBMIT TO OWNER, TESTING LABORATORY, ARCHITECT (STRUCTURAL ENGINEER) AND GOVERNING CODE AUTHORITY. EST RESULTS TO OWNER, CONTRACTOR, ARCHITECT (STRUCTURAL ENGINEER) AND, UPON REQUEST, TO GOVERNING CODE AUTHORITY. SEE SPECIFICATIONS FOR TESTING REQUIREMENTS NOT INDICATED ON STRUCTURAL DRAWINGS. OF FABRICATION AND ERECTION REPORTS OF FABRICATOR/ERECTOR'S OWN QUALITY CONTROL TESTING. TESTING LABORATORY WILL BE AWS Q.C.-1 CERTIFIED AND WILL PROVIDE INSPECTIONS FOR CONTINUOUS INSPECTION OF ELD TESTING OF MATERIALS AND WELDING WILL BE AS FOLLOWS: E PENETRATION WELDS. TEST GROOVE WELDING ON CONTINUITY PLATES BY ULTRASONIC TESTING AFTER BEAM FLANGE WELD CONNECTION. TESTING WILL BE PERFORMED 24 HOURS OR MORE AFTER COMPLETION OF WELDING. WELD BACKING REMOVAL AREAS AND FILLET WELDS WILL BE SUBJECTED TO MAGNETIC PARTICLE EXAMINATION. NESS WELD SHRINKAGE, WILL BE ULTRASONICALLY TESTED DIRECTLY BEHIND SUCH WELDS 48 HOURS OR MORE AFTER COMPLETION OF WELDING. PERCENT MINIMUM).

12 METHOD). CHECK 25 PERCENT OF CONTINUITY PLATE FILLET WELDS AND BEAM FILLET WELDS (100 PERCENT IN MOMENT ZONES) BY MAGNETIC PARTICLE. ED MOMENT CONNECTIONS, CONTINUITY PLATES, DOUBLER PLATES AND BASE PLATES WHERE COLUMN FLANGE OR PLATE THICKNESS EXCEEDS 1-1/2 INCHES. TEST FOR EVIDENCE OF LAMINATIONS, INCLUSIONS OR OTHER DISCONTINUITIES IN ACCORDANCE WITH ASTM A435, STRAIGHT BEAM STRUCTURAL SHAPES, AS APPLICABLE. TEST ZONE TO TION. FOR PLATES, ANY DISCONTINUITY CAUSING A TOTAL LOSS OF BACK REFLECTION NOT CONTAINED WITHIN 3-INCH DIAMETER CIRCLE, OR ONE-HALF THICKNESS OF PLATE, WHICHEVER IS GREATER, WILL BE REJECTED. FOR ROLLED SHAPES, ASTM 898, LEVEL 1 CRITERIA APPLIES. TESTING WILL BE PERFORMED ON MATERIAL PRIOR TO FABRICATION, FIED FOR COMPLIANCE WITH ELECTRODE MANUFACTURER'S RECOMMENDATIONS.

OUS SPECIAL INSPECTION WILL BE PERFORMED BY SPECIAL INSPECTOR COMPLYING WITH APPLICABLE CODE SECTION 1701 AND SPECIFICALLY APPROVED BY GOVERNING CODE AUTHORITY FOR EACH INSPECTION CATEGORY BELOW. PERIODIC INSPECTION IS NOT PERMITTED UNLESS INDICATED IN THE PROGRAM OR OTHERWISE ACCEPTED BY ARCHITECT ECTION REQUIREMENTS. REFER TO THE YES/NO BOX BELOW IN THE PROGRAM FOR APPLICABILITY OF EACH ITEM TO THIS PROJECT.

						SPE	CIAL II	ISPE	ECTIO	N PROGRAM PER SECTION 1705									
REQUIRED VERIFICATIONS AND INSPECTIONS OF <u>SEISM</u> VERIFICATION AND INSPECTION	IIC RESISTAN	<u>CE</u> - SECTIC JS PERIODI	0N 1705.3 IC Yes	11 No	REQUIRED VERIFICATION AND INSPECTION OF <u>PIER</u> VERIFICATION AND INSPECTION	FOUNDATIONS	- TABLE 17 PERIODIC	'05.8 Yes	No	MASONRY LEVEL 1 INSPECTION REQUIREMENTS (OCC. CATE INSPECTION TASK	CONTINUOUS	LDINGS) - TA PERIODIC	BLE 1 Yes	1704.5.1 No	REQUIRED VERIFICATION AND INSPECTION OF STEEL CO           VERIFICATION AND INSPECTION TASK	ONSTRUCTION CONTINUOUS	I - TABLE 17 PERIODIC	705A.2.1 Yes N	No
EISMIC FORCE RESISTING SYSTEMS IN STRUCTURES ASSIGNED O SEISMIC DESIGN CATEGORY C, D, E, F			•		1. OBSERVE DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PIER	•				1. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED		-			1. MATERIAL VERIFICATION OF HI-STRENGTH BOLTS, NUTS AND WASHERS:				
DESIGNATED SEISMIC SYSTEMS IN STRUCTURES ASSIGNED TO EISMIC DESIGN CATEGORY D, E, F:					2. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFORM PIER DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO REDPOCK (IF APPLICABLE) AND ADEQUATE					SUBMITTALS SHALL BE VERIFIED. 2. VERIFICATION OF f m AND f AAC PRIOR TO CONSTRUCTION EXCEPT WHERE SPECIFICALLY EXEMPTED BY CODE					A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.			•	
. STRUCTURAL STEEL: EQUIRED IN ACCORDANCE WITH QUALITY ASSURANCE PLAN F AISC 341.				•	END BEARING STRATA CAPACITY. 3. FOR CONCRETE PIERS. PERFORM ADDITIONAL INSPECTIONS IN					3. VERIFICATION OF SLUMP FLOW AND VSI AS DELIVERED TO THE SITE FOR SELF-CONSOLIDATING GROUT.					B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.           2. INSPECTION OF HIGH-STRENGTH BOLTING:				
XCEPT AT: a. STEEL STRUCTURES IN CATEGORY C WITH R < 3 EXCLUDING CANTILEVERED COLUMN SYSTEMS					ACCORDANCE WITH SECTION 1704.4. 4. FOR MASONRY PIERS, PERFORM ADDITIONAL INSPECTIONS IN				•	4. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE					A. SNUG-TIGHT JOINTS B. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT				
b. ORDINARY MOMENT FRAMES, ULTRASONIC AND MAGNETIC PARTICLE TESTING OF CJP WELDS ARE ONLY					ACCORDANCE WITH SECTION 1704.5. REQUIRED VERIFICATION AND INSPECTION OF PILE	FOUNDATIONS	- TABLE 17	04.8	-	A. PROPORTIONS OF SITE-PREPARED MORTAR.					WITH MATCHMARKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION				
REQUIRED AT DEMAND CRITICAL WELDS STRUCTURAL WOOD:					VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	Yes	No	B. CONSTRUCTION OF MORTAR JOINTS.         C. LOCATION OF REINFORCEMENT, CONNECTORS,					C. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITHOUT MATCHMARKING OR CALIBRATED WRENCH METHODS OF INSTALLATION	•		-	Ъ
i. GLUING OPERATIONS OF SEISMIC RESISTING SYSTEM					1. VERIFY PILE MATERIALS, SIZES AND LENGTHS COMPLY WITH THE REQUIREMENTS.					PRESTRESSING TENDONS AND ANCHORAGES. D. PRESTRESSING TECHNIQUE.					3. MATERIAL VERIFICATION OF STRUCTURAL STEEL & COLD-FORM DECK A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO				
ii. NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS OF THE SEISMIC RESISTING SYSTEM INCLUDING: WOOD SHEAR WALLS, WOOD DIAPHRAGMS,		•	-		2. DETERMINE CAPACITIES OF TEST PILES AND CONDUCT ADDITIONAL LOAD TESTS, AS REQUIRED.	•				E. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.		•		-	CONFORM TO AISC 360. B. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO				
EXCEPTION: NOT REQUIRED AT SHEAR WALLS, DIAPHRAGMS					3. OBSERVE DRIVING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PILE.					5. DURING CONSTRUCTION THE INSP. PROGRAM SHALL VERIFY:		_			ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.				
MEMBERS OF THE SEISMIC SYSTEM WHERE THE FASTENER SPACING OF THE SHEATHING IS MORE THAN 4" O.C.					4. VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM TYPE AND SIZE OF HAMMER, RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, DETERMINE REQUIRED	•			•	A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.     B. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING     OTHER DETAILS OF ANCHORAGE OF MASONRY TO				-	4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:		-		
COLD-FORMED STEEL FRAMING: INSPECTION OF WELDING OF SEISMIC RESISTING SYSTEM, SCREW ATTACHMENT, BOLTING, ANCHORING, AND FASTENING OF ITEMS IN SEISMIC					AND BUTT ELEVATIONS AND DOCUMENT ANY PILE DAMAGE.					STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION.					A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS				
RESISTING SYSTEM, INCLUDING STRUTS, BRACES, AND HOLD-DOWNS. EXCEPT: IF SHEATHING IS GYPSUM OR FIBERBOARD, OR IF					ACCORDANCE WITH SECTION 1704.3.					C. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT, ANCHOR BOLTS, PRESTRESSING TENDONS, AND ANCHORAGES.		-		-	B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.         5. INSPECTION OF WELDING:				
SHEATHING IS WOOD STRUCTURAL PANEL OR STEEL SHEETS ON ONE SIDE WITH FASTENERS MORE THAN 4" O.C.					ADDITIONAL INSPECTIONS IN ACCORDANCE WITH SECTION 1704.4.					D. WELDING OF REINFORCING BARS.					A. STRUCTURAL STEEL: (1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS				
STORAGE RACKS AND ACCESS FLOORS: REQUIRED DURING ANCHORAGE OF ACCESS FLOORS AND STORAGE RACKS 8 FEET OR HIGHER IN SEISMIC DESIGN CATEGORY D, E, F.		-		•	7. FOR SPECIALTY PILES, PERFORM ADDITIONAL INSPECTIONS AS DETERMINED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.				•	E. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMP BELOW 40°F) OR HOT WEATHER (TEMP ABOVE 90°F)		-		-	(2) MULTIPASS FILLET WELDS.				
ARCHITECTURAL COMPONENTS: REQUIRED DURING ERECTION & FASTENING OF EXTERIOR CLADDING, INTERIOR		•			8. FOR AUGERED UNCASED PILES AND CAISSON PILES, PERFORM INSPECTIONS IN ACCORDANCE WITH SECTION 1704.9.					F. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.		-		-	(3) SINGLE-PASS FILLET WELDS > 5/16" (4) PLUG AND SLOT WELDS				
& EXTERIOR NON-BEARING WALLS, VENEER IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY D, E, F.					REQUIRED VERIFICATION AND INSPECTION OF <u>CONCRE</u> VERIFICATION AND INSPECTION TASK	TE CONSTRUCT	ION - TABI	E 1705 Yes	.3 No	6. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:					$(5) SINGLE-PASS FILLET WELDS \leq 5/16"$ $(6) FLOOR AND ROOF DECK WELDS$				╧┥┝╸
EXCEPTIONS: SPECIAL INSPECTION IS NOT REQUIRED FOR:     EXTERIOR CLADDING, NON-BEARING WALLS &     VENEER 30FT OR LESS ABOVE GROUND     CLADDING, & VENUEER WEIGHING, E DES OF LESS					1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING					A. GROUT SPACE IS CLEAN					B. REINFORCING STEEL:				
<ol> <li>CLADDING &amp; VENEER WEIGHING 5 PSF OR LESS.</li> <li>INTERIOR NON-BEARING WALLS WEIGHING 15 PSF OR LESS.</li> </ol>					TENDONS, AND PLACEMENT.         2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE         WITH TABLE 1704.0. WITH 45 P					AND PRESTRESSING TENDONS AND ANCHORAGES					(1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706 (2) REINFORCING STEEL RESISTING ELEVIDAL AND AVIAL FORCES				
B. ELECTRICAL AND MECHANICAL COMPONENTS:					3. INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DUDING PLACEMENT OF CONCRETE WHERE ALLOWARDE	)				PRESTRESSING GROUT FOR BONDED TENDONS.					<ul> <li>(2) REINFORCING STEEL-RESISTING FLEADART AND FRAMES, AND</li> <li>IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND</li> <li>BOUNDARY ELEMENTS OR SPECIAL REINFORCED CONCRETE</li> <li>SHEAR WALLS AND SHEAR REINFORCEMENT.</li> </ul>	-			-
TANDBY POWER SYSTEMS IN STRUCTURES ASSIGNED TO EISMIC DESIGN CATEGORY C, D, E, F.					AND DURING FLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS WERE INCREASED OR WHERE STRENGTH DESIGN IS USED 4 INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE	).	-			7. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENT				-	(3) SHEAR REINFORCEMENT.				
NSTALLATION OF ANCHORAGE OF OTHER ELECTRICAL QUIPMENT IN STRUCTURES ASSIGNED TO SEISMIC DESIGN ATEGORY C, D, E, F.		-		-	5. VERIFYING USE OF REQUIRED DESIGN MIX.		•			PROVISIONS. A. GROUTING OF PRESTRESSING BONDED TENDONS.	-				(4) OTHER REINFORCING STEEL.     (6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH     APPROVED CONSTRUCTION DOCUMENTS:				
NSTALLATION OF PIPING SYSTEMS INTENDED TO CARRY LAMMABLE, COMBUSTIBLE OR HIGHLY TOXIC CONTENTS AND					6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE	•			•	8. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.	•			•	A. DETAILS SUCH AS BRACING AND STIFFENING				
HEIR ASSOCIATED MECHANICAL UNITS IN STRUCTURES SSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, F.		-			CONCRETE.           7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR					9. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED		•		-	B. MEMBER LOCATIONS C. APPLICATION OF JOIST DETAILS AT EACH CONNECTION				
AZARDOUS MATERIALS IN STRUCTURES ASSIGNED TO SEISMIC ESIGN CATEGORY C, D, E, F.		-		-	PROPER APPLICATION TECHNIQUES.     8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING     TEMPERATURE AND TECHNIQUES.				-	MASONRY         LEVEL 2 INSPECTION REQUIREMENTS (OCC. CAT	TEGORY IV BUILI	DINGS) - TAB	LE 17	04.5.3	STRUCTURAL STEEL INSPECTION & EXCEPTIONS: (1704.2.2 & 1704.3)           1.         SPECIAL INSPECTIONS AS NOTED IN THE TABLE ABOVE ARE NOT RETTIVE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO DESCRIPTION	QUIRED WHERE T	THE WORK IS F WORK WITHO	PERFORME UT SPECIAI	D ON
NSTALLATION OF VIBRATION ISOLATION SYSTEMS IN TRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, WHERE THE CONSTRUCTION DOCUMENTS REQUIRE A		_		_	9. INSPECTION OF PRESTRESSED CONCRETE:					VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	Yes	No	INSPECTION.     SPECIAL INSPECTION OF THE STEEL FABRICATION PROCESS SHALL N     NOT DEPENDENT ANY WEI DIVIC. THERMAL CLITTING OF HEATING OF	OT BE REQUIRED	WHERE THE	FABRICATO	R DOES
OMINAL CLEARANCE OF 0.25 INCHES OR LESS BETWEEN THE QUIPMENT SUPPORT FRAME AND RESTRAINT.		-			A. APPLICATION OF PRESTRESSING FORCES. B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE					THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.		•			FABRICATION PROCESS. IN SUCH CASES, THE FABRICATOR SHALL BI FOR MATERIAL CONTROL THAT DEMONSTRATES THE FABRICATOR' PROCEDURES SUCH THAT, AT ANY TIME DURING THE FABRICATION	ERATION OF AN E REQUIRED TO S 5 ABILITY TO MAI PROCESS, THE M	UBMIT A DETA NTAIN SUITAB	AILED PROC	EDURE DS AND
SEISMIC ISOLATION SYSTEM: FABRICATION AND INSTALLATION OF ISOLATOR UNITS AND ENERGY DISSIPATION DEVICES THAT RE PART OF THE SEISMIC ISOLATION SYSTEM.				•	SEISMIC-FORCE-RESISTING SYSTEM. 9. ERECTION OF PRECAST CONCRETE MEMBERS.				•	2. VERIFICATION OF f m AND f AAC PRIOR TO CONSTRUCTION AND FOR EVERY 5,000 SQUARE FEET DURING CONSTRUCTION.		-		-	GRADE AND MILL TEST REPORTS FOR THE MAIN STRESS-CARRYING DETERMINED.	ELEMENTS ARE (	CAPABLE OF BE	EING	
REQUIRED VERIFICATIONS AND INSPECTIONS OF WIN	ND RESISTAN	<u>CE</u> - SECTIC	ON 1705	No	10.VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POSTTENSIONED CONCRETE AND					3. VERIFICATION OF PROPORTIONS OF MATERIALS ON PREMIXED OR PREBLENDED MORTAR AND GROUT AS					3. THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT D PROVIDED THE MATERIALS, WELDING PROCEDURES, AND QUALIFIC START OF THE WORK; PERIODIC INSPECTIONS ARE MADE OF THE W OF ALL WELDS IS MADE PRIOR TO COMPLETION OR PRIOR TO SHIP	URING WELDING ATIONS OF WEL ORK IN PROGRE	OF THE FOLLC DERS ARE VER SS; AND A VISU VELDING	JWING ITEL IFIED PRIOI JAL INSPEC	AS, ≵TO ″TION
EQUIRED IN WIND EXPOSURE CATEGORY B, WHERE 3-SECOND					PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	)				4. VERIFICATION OF SLUMP FLOW AND VSI AS DELIVERED TO					$ \begin{array}{c cccc} 3.1 & \text{SINGLE PASS FILLET WELDS NOT EXCEEDING } \frac{1}{96}" \text{ IN SIZE.} \\ 3.2 & \text{FLOOR AND ROOF DECK WELDING} \\ 3.3 & \text{WELDED STUDS WHEN USED FOR STRUCTURAL DIAPHRAGN} \end{array} $	1			
UST BASIC WIND SPEED IS 120 MPH OR GREATER. EQUIRED IN WIND EXPOSURE CATEGORY C OR D, WHERE THE					11.INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		•			5. THE FOLLOWING SHALL BE VERIFIED TO ENSURE	-			-	3.4 WELDED SHEET STEEL FOR COLD-FORMED STEEL FRAMING     3.5 WELDING OF STAIRS AND RAILING SYSTEMS.	MEMBERS SUCH	AS STUDS OR .	JOISTS.	ECTION
THER OF THE CONDITIONS ARE MET ABOVE THEN SPECIAL INSP	PECTION OF TH	IE FOLLOWIN	IG ITEMS	IS	ADHESIVE TYPE CONCRETE ANCHORS.					A. PROPORTIONS OF SITE-PREPAIRED MORTAR, GROUT					OF BUILDINGS OVER 160 FEET IN HEIGHT WITH STRUCTURAL STEEL     REQUIRED VERIFICATION AND INSPECTION OF	MOMENT RESIS	TING FRAMES.		
UIRED: . ROOF CLADDING . . WALL CLADDING. . PEOLUTED FOR WOOD & COLD FORM STEEL AS OUTUNED IN		TION 1707 A	DOVE		CONCRETE INSPECTION EXCEPTIONS: (1704.4) SPECIAL INSPECTION IS NO     I. ISOLATED SPREAD FOOTINGS OF BUILDINGS THREE STORIES OR LE     SUPPORTED ON EARTH OR ROCK.     CONTINUOUS CONCRETE FOOTINGS SUPPORTING WALLS OF BUILDINGS	T REQUIRED FOR: SS ABOVE GRADE	PLANE THAT	ARE FULI	Y Radf	B. PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS.				-	VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	Yes N	10
. REQUIRED FOR WOOD & COLD FORM STEEL AS OUTLINED I		.110N 1707 A	IBUVE.		PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK WHERE: 2.1 THE FOOTINGS SUPPORT WALLS OF LIGHT FRAME CONSTR 2.2 THE FOOTINGS ARE DESIGNED IN ACCORDANCE WITH 1809	RUCTION; 9.7; OR				C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGE				•	1. INSPECTOR SHALL INSPECT WOOD HIGH LOAD DIAPHRAGMS PER TABLE 2306.3.2. CHECK PANEL GRADE, THICKNESS, MEMBERS SIZES AT ADJOINING PANEL EDGES & NAILS OR		-		-
					2.3 THE STRUCTURAL DESIGN OF THE FOOTING IS BASED ON F COMPRESSIVE STRENGTH SPECIFIED IN THE IN THE CONSTI CONSTRUCTION.	'c= 2,500 PSI OR LE RUCTION DOCUMI	SS, REGARDL ENTS OR USEI	ESS OF T IN THE	HE FOOTING	D. GROUT SPACE PRIOR TO GROUTING					STAPLES.     2. SPRAYED FIRE RESISTANT MATERIALS PER 1704.10				-
					<ol> <li>NON STRUCTORAL CONCRETE SLADS SOFTOX TED DIRECTLE ON TH GRADE, WHERE THE EFFECTIVE PRE-STRESS IS LESS THAN 150 PSI.</li> <li>CONCRETE FOUNDATION WALLS CONSTRUCTED WITH TABLE 1807</li> <li>CONCRETE PATIOS, DRIVEWAYS AND SIDEWALKS ON GRADE.</li> </ol>	7.1.6.2	DINGTRESTR	LOOLD OI	ADS ON	E. PLACEMENT OF GROUT F. PLACEMENT OF PRESTRESSING GROUT.					REQUIRED VERIFICATION AND INSPECTION OF	F <u>SOILS</u> - TABI	E 1705.6		
ENGINEER O	OF RECORD S	TRUCTURAL	L OBSER	VATION RI	EQUIREMENTS					G. SIZE AND LOCATION OF STRUCTURAL ELEMENTS					VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	Yes N	10
RUCTURAL OBSERVATIONS FOR SEISMIC RESISTANCE:	ER OF RECORD	FOR STRIICT	LIBEC IN .	SEISMIC DI	SIGN CATEGORIES D. F. F. WHEN THE FOLLOWING CONDITIONS EVICT.					OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTR.					1. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.     2. VERIEV EXCAVATIONS ARE EXTENDED TO PROPER DEPETY.		-		
STRUCTURE IS CLASSIFIED AS OCCUPANCY CATEGORY III OR THE HEIGHT OF THE STRUCTURE IS GREATER THAN 75 FT	IV.		ا ۱۱۱ ومیند ر							I. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT, ANCHOR BOLTS, PRESTRESSING TENDONS AND ANCHORAGES.					2. VERITIEACAVATIONS ARE EATENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL 3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED				
THE STRUCTURE IS ASSIGNED TO SEISMIC DESIGN CATEGOR' WHEN DESIGNATED BY THE ENGINEER OF RECORD. WHEN REQUIRED BY THE BUILDING OFFICIAL.	Y E, IS CLASSIF	IED AS OCCU	PANCY CA	ATEGORY I	OR II AND IS GREATER THAN TWO STORIES IN HEIGHT.					J. WELDING OF REINFORCING BARS.	•								
TRUCTURAL OBSERVATIONS FOR WIND RESISTANCE:										K. PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40^F) OR HOT WEATHER (TEMPERATURE ABOVE 90^F)		-			THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	•			
UCTURAL OBSERVATIONS SHALL BE PROVIDED BY THE ENGINEE STRUCTURE IS CLASSIFIED AS OCCUPANCY CATEGORY III OR T	ER OF RECORD	FOR STRUCT	URES WH	IERE THE BA	ASIC WIND SPEED EXCEEDS 110 WHERE ONE OR MORE OF THE FOLLOV	WING EXIST:				L. APPLICATION AND MEASUREMENT OF PRESTRESS FORCE.	•				5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		•		-
WHEN DESIGNATED BY THE ENGINEER OF RECORD. WHEN REQUIRED BY THE BUILDING OFFICIAL.										O. FREFARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED.					SOILS INSPECTION EXCEPTIONS: (1704.7) 1. SPECIAL INSPECTION IS NOT REQUIRED DURING PLACEMENT OF CC OR LESS.	ONTROLLED FILL F	IAVING A TOT	AL DEPTH (	)F 12"
															L				

![](_page_3_Picture_7.jpeg)

![](_page_4_Figure_0.jpeg)

# FOUNDATION NOTES

FOR GENERAL NOTES & DETAILS REFER TO THE SN & SD SHEETS.

SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR TOP OF STRUCTURAL CONCRETE SLAB ELEVATIONS, DEPRESSIONS, SLOPES, CURBS, DRAINS, PADS, DECK EDGE LOCATIONS, HOLDOWN LOCATIONS ALL OVERALL DIMENSIONS, AND LOCATIONS OF OPENINGS IN WALLS AND SLABS NOT INDICATED ON STRUCTURAL DRAWINGS.

3. CENTER CONTINUOUS FOOTINGS UNDER WALLS U.N.O. CENTER SPREAD FOOTINGS UNDER COLUMNS U.N.O. 4. CONSTRUCT CONTINUOUS FOOTINGS AT CORNERS AND INTERSECTIONS PER DETAIL 10/SD1.

DIMENSIONS TO WALLS ARE TO FACE OF CMU BLOCK OR STEEL UNLESS NOTED OTHERWISE.

IN NO CASE SHALL PIPES, CONDUITS, OR SLEEVES BE EMBEDDED IN SPREAD FOOTINGS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.

ALL HOLD-DOWNS/STRAPS AND ANCHOR BOLTS AT SHEAR WALLS SHALL BE SET IN PLACE TO TEMPLATE PRIOR TO FOUNDATION INSPECTION.

# FOUNDATION LEGEND & SYMBOLS

	<u>INDICATES:</u> CONCRETE FOOTING. FOOTING SIZE AND REINFORCING PER DETAIL SHEET SD1
	INDICATES: FOUNDATION WALL & FOOTING LOCATION PER PLAN & DETAIL SHEET SD1
	INDICATES: STUD CRIPPLE WALL & FOOTING LOCATION PER PLAN & DETAIL SHEET SD1
ANCHOR /SPACING DETAIL # SHEET #	INDENTIFIES: DETAIL CUT LOCATION. REFER TO DETAIL # AND STRUCTURAL SHEET NUMBER FOR MORE INFORMATION. TEXT ABOVE BUBBLE INDICATES REVISED HARDWARE OTHER THAN NOTED IN DETAIL
D POST W/ LDOWN E - X L = x - LENGTH C ID	INDENTIFIES WOOD SHEAR WALL LOCATION. REFER TO DETAIL 7/SD1 FOR ANCHOR BOLT SIZE & SPACING AT EACH SHEAR WALL TYPE. <u>PROVIDE 3" SQ x 0.229"</u> ANGLE SLOTTED PLATE WASHERS AT EACH ANCHOR BOLT. REDUCE BOLT SPACING BY HALF AT DOUBLE SIDED SHEAR WALLS.

![](_page_4_Figure_11.jpeg)

![](_page_4_Figure_12.jpeg)

MOD LAYOUT SCALE :  $\frac{1}{8}$ " = 1'-0", DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS. ALL CONSTRUCTION DIMENSIONS MUST BE VERIFIED WITH THE ARCH. PLANS

![](_page_4_Picture_14.jpeg)

![](_page_5_Figure_0.jpeg)

![](_page_5_Figure_3.jpeg)

![](_page_6_Figure_0.jpeg)

![](_page_6_Figure_3.jpeg)

![](_page_7_Figure_0.jpeg)

![](_page_8_Figure_0.jpeg)

D FRAMED SHEAR WALL SCHEDULE - 2016 CBC / AF&PA SDPWS-2015 - SEISMIC DESIGN CATEGORY D, E & F										
		٧G		SHEAR V	FRAMING MEMBER	ASD CAPACITY (PLF) (DOUGLAS FIR)				
				5	TO WOOD FRAMI	NG	THICKNESS AT			
IL SIZE	ON CENTER SPACING	ON CENTER SPACING	NOMINAL PLATE THICKNESS	SPACING TO CONC.	FASTENER SPAC		ADJOINING PANEL EDGES	SEISMIC	WIND	
8d	6"	12"	2x	48"	16d (3 <sup>1</sup> / <sub>4</sub> " × 0.131")	4"	2x	260	365	
8d	4"	12"	2x	32"	$\frac{1}{4}$ "Ø x $3\frac{1}{2}$ " SDS SCREW 12"		2x	350	532	
8d	3"	12"	2x	24"	$\frac{1}{4}$ "Ø x $3\frac{1}{2}$ " SDS SCREW	8"	Зx	490	685	
8d	2"	12"	2x	16"	$\frac{1}{4}$ "Ø x $3\frac{1}{2}$ " SDS SCREW	6"	Зx	640	895	
8d	2"	12"	2x	16"	$\frac{1}{4}$ "Ø x $3\frac{1}{2}$ " SDS SCREW	6"	Зx	730	1022	
10d	2"	12"	2x	12"	$\frac{1}{4}$ "Ø x $3\frac{1}{2}$ " SDS SCREW	4"	Зx	870	1217	
-	-	-	-	-	$\frac{1}{4}$ "Ø x $3\frac{1}{2}$ " SDS SCREW	8"	-			
						I	,			

![](_page_9_Figure_0.jpeg)