FOUNDATIONS:

GEOTECHNICAL INVESTIGATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH SECTIONS 1803A.3 THROUGH 1803A.8. EXCEPTIONS, 1) GEOTECHNICAL REPORTS ARE NOT REQUIRED FOR ONE-STORY, WOOD-FRAME AND LIGHT-STEEL-FRAME BUILDINGS OF TYPE II OR TYPE V CONSTRUCTION AND 4,000 SQUARE FEET OR LESS IN FLOOR AREA, NOT LOCATED WITHIN EARTHQUAKE FAULT ZONES OR SEISMIC HAZARD ZONES AS SHOWN IN THE MOST RECENTLY PUBLISHED MAPS FROM THE CALIFORNIA GEOLOGICAL SURVEY (CGS) OR IN SEISMIC HAZARD ZONES AS DEFINED IN THE SAFETY ELEMENT OF THE LOCAL GENERAL PLAN, 2) A PREVIOUS REPORT FOR A SPECIFIC SITE MAY BE RESUBMITTED, PROVIDED THAT A REEVALUATION IS MADE AND THE REPORT IS FOUND TO BE CURRENTLY APPROPRIATE. ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TABLE 1806A.2 PER CBC SECTION 1803A.2

CONCRETE

PROVIDE NECESSARY SHIMS ON FOOTINGS NOT LEVEL WITHIN THE 1/2" ALLOWABLE TOLERANCE. THE DISTRICT SHALL PROVIDE CLEAR AND UNOBSTRUCTED ACCESS TO THE SITE. THE DISTRICT IS RESPONSIBLE FOR ALL SURVEYING, STAKING THE BUILDING CORNERS, SETTING THE FINISH FLOOR ELEVATION, RIGGING. CRANING, EXCAVATION, SPOIL REMOVAL, AND BACKFILL.

THE FOUNDATION AND THE METHOD OF FASTENING THE UNITS SHALL BE AS SHOWN ON DRAWINGS WHERE APPLICABLE. HIGH STRENGTH GROUT SHALL BE EMBECO 885 NON-SHRINK, METALLIC AGGREGATE GROUT OR A DSA APPROVED EQUAL.

THE DESIGN OF CONRETE FOUNDATIONS WILL BE AS FOLLOWS:

- 1. FURNISH AND INSTALL ALL CONCRETE WORK AS SHOWN ON THE DRAWINGS AND AS SPECIFIED.
- 2. EXCEPT AS MODIFIED BY THE REQUIREMENTS SPECIFIED HEREIN AND / OR THE DETAILS ON THE DRAWINGS, ALL WORK INCLUDED IN THIS SECTION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF CODES AND STANDARDS.
- a) ALL WORK AND MATERIALS SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS,
- b) AMERICAN CONCRETE INSTITUTE (ACI): BUILDING CODE REQUIREMENTS FOR REINFORCED
- CONCRETE, ACI318-11. c) SOCIETY FOR TESTING AND MATERIALS (ASTM): THE SPECIFICATIONS AND STANDARDS HEREINAFTER REFERENCED TO SHALL BE OF THE LATEST EDITION.
- 3. CONCRETE FOUNDATION TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE ARCHITECT AND OR INSPECTOR.
- 4. DESIGN MIXES SHALL BE AS SPECIFIED IN TITLE 24. CONCRETE STRENGTH AT 28 DAYS SHALL BE AS FOLLOWS: (UNLESS REQUIRED OTHERWISE PER ACI 318-11 TABLE 4.3.1). CONCRETE COMPRESSIVE STRENGTH F'C= 3500 PSI

WATER-CEMENT RATIO SHALL NOT EXCEED 0.60 BY WEIGHT PORTLAND CEMENT TYPE I NORMAL WEIGHT

- 5. FORMS SHALL BE SUBSTANTIAL, PLUMB, LEVEL, SQUARE, TRUE TO LINE, WATER TIGHT AND ACCURATE TO THE DIMENSIONS REQUIRED.
- 6. THE ARCHITECT SHALL APPROVE LOCATION OF:
 - a) OPENINGS FOR MECHANICAL AND ELECTRICAL: PROVIDE FOR OPENINGS IN THE CONCRETE WITH THE TRADE(S) INVOLVED AND INSTALL SLEEVES AS MAY BE REQUIRED.
- b) OPENINGS FOR VENT WELLS FOR UNDER FLOOR VENTILATION: PROVIDE FOR ALL OPENINGS IN THE CONCRETE WITH THE TRADE(S) INVOLVED, INSTALL ALL SLEEVES AS MAY BE REQUIRED.
- 7. VARIANCE IN CONCRETE SLAB SURFACE SHALL BE NO MORE THAN 1/16" IN 10 FEET
- 8. ALL CEMENT SHALL BE TYPE I OR II PER ASTM C-150. (UNLESS REQUIRED OTHERWISE PER ACI 318-11 **TABLE 4.3.1)**
- 9. WATER CONTENT SHALL NOT EXCEED 7 1/4 GALLONS PER SACK OF CEMENT (UNLESS REQUIRED OTHERWISE PER ACI 318-11 TABLE 4.3.1)
- 10. AGGREGATE SHALL BE 3/4" TO 1 1/2" MAXIMUM SIZE BUT NOT MORE THAN 3/4" OF MINIMUM CLEAR BAR SPACING
- 11. ANCHOR BOLTS, DOWELS, REINFORCING STEEL, AND EMBEDDED ITEMS ARE TO BE SECURELY TIED IN PLACE BEFORE CONCRETE IS POURED "WET SETTING" IS NOT ALLOWED.
- 12. REFER TO ARCHITECTURAL, ELECTRICAL, AND MECHANICAL PLANS FOR SLEEVES, INSERTS CURBS, DEPRESSED AREAS, AND ETC.
- 13. CONCRETE MIX REQUIRED: CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN FOR FOOTINGS TO PROFESSIONAL OF RECORD FOR APPROVAL PRIOR TO POURING CONCRETE.

1705A.3.3. WAIVER OF BATCH PLAN INSPECTION.

- A. WHEN BATCH PLANT INSPECTION IS WAIVED, THE FOLLOWING REQUIREMENTS SHALL APPLY:
- QUALIFIED TECHNICIAN OF THE TESTING LABORATORY SHALL CHECK THE FIRST BATCHING AT THE
- 2. LICENSED WEIGHMASTER TO POSITIVELY IDENTIFY MATERIALS AS TO QUANTITY AND CERTIFY TO EACH LOAD BY A TICKET.
- 3. BATCH TICKETS, INCLUDING ACTUAL MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD AND SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY A TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR WILL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, IT'S LOAD. TIME OF RECEIPT AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND WILL TRANSMIT A COPY OF THE DAILY RECORD TO THE ENFORCEMENT AGENCY.

- 1 MATERIAL: ALL REINFORCING STEEL SHALL BE BILLET STEEL PER ASTM A-615 MIN. GRADE 40.
- EXCEPT #3 ANCHOR REINFORCEMENT SHALL BE GRADE 60.
- 2. SPLICES: ALL SPLICES SHALL BE LAPPED A MINIMUM 48" #5 BARS AND 30" #4 BARS UNLESS OTHERWISE DETAILED.
- 3. REINFORCING FABRICATION AND PLACEMENT: FABRICATION AND PLACING OF REINFORCING SHALL CONFORM TO THE "CODE OF STANDARD PRACTICE AND SPECIFICATIONS FOR PLACING REINFORCEMENT OF THE CONCRETE REINFORCING STEEL INSTITUTE".
- 4. MINIMUM COVERAGE: ALL REINFORCING SHALL HAVE THE FOLLOWING MINIMUM COVERAGE WITH CONCRETE:

<u>LOCATION</u> <u>All</u>	NOUN
FORMED EARTH	2"
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
WALL-EXPOSED FACE	٠,
#5 OR SMALLER	2"
#6 OR LARGER	2" ·
WALL-UNEXPOSED FACE	3/4"

TRUCTURAL STEEL

EQUAL.

- 1. ALL STRUCTURAL STEEL OTHER THAN TUBE AND PIPE COLUMNS SHALL CONFORM TO ASTM A-36.
- 2. TUBE COLUMNS SHALL CONFORM TO ASTM A500 GRADE B, OR A1085
- 3. PIPE COLUMNS SHALL CONFORM TO ASTM A501 OR ASTM A53, TYPE E OR S, GRADE B. OR A1085
- 4. TUBE STEEL USED FOR RAMPS & STAIRS SHALL CONFORM TO ASTM A513 GRADE MT1020 OR BETTER

STEEL FRAME BUILDING/STEEL FRAME CONSTRUCTION SHALL MEET THE MINIMUM DESIGN REQUIREMENTS OF STUD SPACING, ETC. PER LATEST EDITION OF 2013 CALIFORNIA BUILDING CODE. ALL WORK AND MATERIALS SHALL CONFORM TO THE "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," AMERICAN INSTITUTE OF STEEL CONSTRUCTION: TITLE 24, CCR, AND UNIFORM BUILDING CODE. STRUCTURAL STEEL SHALL BE MADE EITHER THE OPEN-HEARTH OR ELECTRIC FURNACE PROCESS ONLY AND SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL STEEL" ASTM DESIGNATION A36, CURRENT

ROOF FRAMING, FLOOR FRAMING, AND WALL FRAMING SHALL BE PER MANUFACTURER'S PC PLANS AND PER APPLICABLE CODES.

ALL STRUCTURAL MEMBERS BELOW THE SUB-FLOOR, IE, GIRDERS, JOISTS, HEADERS, BLOCKING, SHALL BE STEEL. MINIMUM JOIST SPACING SHALL BE PER PLAN.

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AISC STANDARD SPECIFICATIONS, THE APPLICABLE REGULATORY AGENCY AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OR LIGHT GAUGE STEEL STRUCTURAL MEMBERS. WELDING: SHALL COMPLY WITH THE PERTINENT PROVISIONS OF THE APPLICABLE REGULATORY AGENCY. ALL WELDING SHALL BE DONE BY OPERATORS WHO ARE QUALIFIED AS PRESCRIBED IN THE "QUALIFICATION PROCEDURE" OF THE AMERICAN WELDING SOCIETY TO PERFORM THE TYPE OF WORK REQUIRED.

STEEL SHALL BE COATED WITH ONE SHOP COAT OF MANUFACTURER'S STANDARD CHASSIS PAINT OR

BOLTS:

ALL COMMON BOLTS AND ANCHOR BOLTS SHALL CONFORM TO ASTM A-307.

STRUCTURAL WELDING: SPECIAL INSPECTOR REQUIRED

GENERAL: DURING THE WELDING OF ANY MEMBER OR CONNECTION THAT IS DESIGNED TO RESIST LOADS AND FORCES REQUIRED BY THIS CODE.

ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT/LBS AT MINUS 20 DEGREES F AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

ALL STRUCTURAL WELDING SHALL BE BY "ELECTRIC ARC PROCESS" PER AWS STANDARD CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. ALL LIGHT GAUGE STEEL (SHEET STEEL) SHALL BE WELDED PER AWS D1.3. ALL REINFORCING STEEL SHALL BE WELDED WITH LOW HYDROGEN RODS PER AWS D1.4, OR REINFORCING STEEL SHALL CONFORM TO ASTM A-706. ALL SHOP WELDED MUST BE PERFORMED BY "APPROVED" WELDERS IN A SHOP OF A LICENSED FABRICATOR. ALL FIELD WELDING SHALL BE PERFORMED BY "APPROVED" WELDERS. ELECTRODES SHALL BE E70XX FOR STRUCTURAL STEEL AND REBAR AND SHALL BE E60XX FOR LIGHT GAUGE STEEL. * (SEE OPTIONAL PROCESS)

THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF THE FOLLOWING ITEMS, PROVIDED THE MATERIALS, WELDING PROCEDURES AND QUALIFICATION OF WELDERS ARE VERIFIED PRIOR TO THE START OF WORK: PERIODIC INSPECTIONS ARE MADE OF WORK IN PROGRESS, AND A VISUAL INSPECTION OF ALL WELDS IS MADE PRIOR TO SHIPMENT OF SHOP WELDING.

- a) FLOOR AND ROOF DECK WELDING.
- b) WELDED STUDS WHEN USED FOR STRUCTURAL DIAPHRAGM OR COMPOSITE SYSTEMS.
- c) WELDED SHEET STEEL FOR COLD-FRAMED STEEL FRAMING MEMBERS SUCH AS STUDS AND JOISTS WHICH ARE NOT PART OF AN ORDINARY MOMENT FRAME.
- d) SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16".

MATERIAL SHALL BE IDENTIFIED BY MARKING OR STAMPING THE I.D. NUMBER ON STRUCTURAL STEEL COMPONENTS BY LICENSED FABRICATION SHOP.

ALL BUTT, BEVEL, GROOVE, VEE, U AND J WELDS SHALL BE PREQUALIFIED COMPLETE PENETRATION

FILLER MATERIAL FOR WELDING: SHIELDED METAL-ARC: AWS A5.1 OR 15.5 E70XX ELECTRODES. HOLES IN STRUCTURAL STEEL SHALL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.

STRUCTURAL STEEL SHALL BE THOROUGHLY CLEANED BY SCRAPING OR WIRE BRUSHING AND SHOP

ALL STEEL WORK, INCLUDING WELD AND CONNECTIONS EXCEPT WHERE ENTIRELY ENCASED IN CONCRETE SHALL BE GIVEN ONE COAT OF ACCEPTABLE METAL PROTECTION WELL WORKED INTO JOINTS AND OPEN SPACES.

* OPTIONAL USE OF: FCAW PROCESS: E71T-8 FOR STRUCTURAL/REBAR (MEETS ALL CHARPY REQUIREMENTS **E71T-11 FOR METAL DECKING**

STRUCTURAL LIGHT GAUGE STEEL FRAMING AND ACCESSORIES SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A-1011/A GRADE AS LISTED BELOW, SEE PLAN FOR MINIMUM YIELD. MATERIAL THICKNESS 0.120" OR LESS: ASTM A-1011/A GRADE 33 (UNO)

SHEET STEEL DESIGNATION THICKNESS (INCHES)	MINIMUM DELIVERED THICKNESS (INCHES)
0.018	0.017
0.030	0.029
0.036	0.034
0.048	0.046
0.060	0.057
0.075	0.071
0.105	0.100
0.120	0.114
0.135	0.128

LIGHT GAUGE STEEL STUDS AND TRACKS SHALL COMPLY WITH ASTM A-1003 STRUCTURAL GRADE 33 TYPE H

ALL WELDING SHALL BE IN CONFORMANCE WITH AWS D1.3, "STRUCTURAL WELDING CODE - SHEET STEEL". QUALIFICATION OF WELDERS SHALL BE IN ACCORDANCE WITH AWS D1.1, CHAPTER 5, PART C, "WELDER QUALIFICATIONS".

BOLTS, SCREWS, ETC. EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED

MACHINE BOLTS USED SHALL CONFORM TO SPECIFICATIONS OF ASTM STANDARD A-307

CJP GROOVE WELD NDT

ULTRASONIC TESTING SHALL BE PERFORMED ON 100 PERCENT OF CJP GROOVE WELDS IN MATERIALS 5/16 in. (8mm) THICK OR GREATER. ULTRASONIC TESTING IN MATERIALS LESS THAN 5/16 in. (8 mm) THICK IS NOT REQUIRED. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25 PERCENT OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS.

FRAMING: ALL FRAMING LUMBER SHALL BE GRADE MARKED BY AN APPROVED GRADING AGENCY AND SHALL BE OF THE FOLLOWING MINIMUM GRADES OR BETTER, PER WCLB RULES #16. PLATES AND BLOCKING - STANDARD GRADE OR BETTER

STUDS AND HEADER = DF #2 OR BETTER SHEATHING:

AMERICAN PLYWOOD ASSOCIATION PS-1-07. EACH SHEET SHALL BE GRADE MARKED BY THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL CONFORM TO THE REQUIREMENTS OF STANDARD GRADE GROUP 1 OR BETTER GRADE STAMPED AND IDENTIFIED UNDER THE PROCEDURES AND QUALIFICATIONS SET FORTH BY

- 1. PLYWOOD SUB FLOOR: 1 1/8" T&G UNBLOCKED PLYWOOD. PROVIDE SEAMLESS WOVEN POLYFLEX BOTTOM BOARD FOR MOISTURE PROTECTION
- 2. OPTIONAL PLYWOOD ROOF DECK: APA RATED 3/4" T&G OSB OR EQUIVALENT RATED SHEATHING WITH
- APPROVAL FROM DSA 3. EXTERIOR WALL SIDING:
- i. STANDARD: 5/8" DURATEMP OR 5/8" SMART PANEL ii. OPTIONAL: 5/8" MDO
- III. OPTIONAL: 1/2" OSB OR CDX PLYWOOD FOR PLASTER/STUCCO FINISH
- 4. EXTERIOR WALL SIDING ATTACHMENT: FASTENERS USED FOR THE ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE HOT-DIPPED GALVANIZED, MECHANICALLY DEPOSITED ZINC-COATED, STAINLESS STEEL, SILICON BRONZE OR COPPER PER CBC SECTION 2304.9.1.1

TREATED WOOD:

ALL WOOD INCLUDING WOOD SHEATHING IN CONTACT WITH CONCRETE OR MASONRY AND LOCATED LESS THAN 18" FROM EXPOSED EARTH SHALL BE "PRESERVATIVE TREATED" OR SHALL BE "NATURALLY DURABLE" MATERIAL PER (CBC SECTION 2304.11.2.2).

- 1. ALL ROUGH LUMBER SHALL BE DF #2 OR BETTER.
- 2. WOOD FASTENERS OTHER THAN SCREWS. ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663 OR RAMSET POWER DRIVEN FASTENERS (ICC# ESR-1799), OR SIMPSON POWER DRIVEN FASTENERS ICC #ESR-213B, OR OTHER EQUIVALENT PRODUCTS WITH ICC REPORTS AND APPROVED BY DSA.
- 3. FASTENERS, INCLUDING NUTS AND WASHERS, IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER PER CBC 2304.9.5.1

CONTINUOUS INSPECTION:

PROJECT INSPECTOR TO PROVIDE CONTINUOUS FIELD INSPECTION

IN-PLANT INSPECTOR SHALL PROVIDE CONTINUOUS INSPECTION IN-PLANT

METALS, STRUCTURAL, AND MISC. STEEL:

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND SERVICES REQUIRED FOR STRUCTURES AND MISCELLANEOUS STEEL AS SPECIFIED AND INDICATED IN THE DRAWINGS.

MATERIALS: ALL STRUCTURAL STEEL IDENTIFICATION SHALL CONFORM WITH TITLE 24, SECTION 2203A.1.

STEEL SHAPES: ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-36. OPEN HEARTH OR ELECTRIC FURNACE ONLY.

STEEL TUBES: ALL STRUCTURAL TUBES SHALL CONFORM TO REQUIREMENTS OF ASTM A-500 GRADE B (fy=46 KSI), ASTM A53 OR A1085 TYPICAL.

STEEL SHEETS: STEEL SHEETS FOR LIGHT GAUGE STEEL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-1011/A, GRADE 40 U.O.N. SHEET METAL GRAVEL STOPS AND FLASHINGS SHALL BE MINIMUM 0.030 THICKNESS AND SHALL BE GALVANIZED.

ALL STRUCTURAL STEEL SHALL BE ERECTED TRUE, STRAIGHT, PLUMB AND TO ITS DESIGNED LOCATION.

TEMPORARY BRACING OR SHORING SHALL BE INSTALLED WHEREVER NECESSARY TO TAKE CARE OF LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING ERECTION EQUIPMENT AND THE OPERATION OF SAME. CONNECTIONS SHALL BE ADEQUATE TO WITHSTAND STRESSES TO WHICH THEY ARE NORMALLY SUBJECTED, CONNECTIONS SHALL BE STEEL, EXCEPT AS OTHERWISE NOTED. FIELD CONNECTIONS SHALL BE BOLTED OR WELDED AS SHOWN ON THE DRAWINGS.

SHOP PAINT:

ERECTION:

- * EXPOSED STEEL COATED WITH ONE SHOP COAT OF PRIMER.
- * NON-EXPOSED STEEL COATED WITH ON SHOP COAT OF PRIMER * ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOP COATS.

POWER DRIVEN FASTENERS FOR SILL PLATE, WOOD NAILERS TO STEEL COLUMNS, AND SHEET METAL TO STRUCTURAL STEEL:

ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1863. OR RAMSET POWER DRIVEN FASTENERS (ICC# ESR-1799), OR SIMPSON POWER DRIVEN FASTENERS ICC #ESR-2138, OR OTHER EQUIVALENT PRODUCTS WITH ICC REPORTS AND APPROVED BY DSA.

WOOD ROUGH CARPENTRY:

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS AND STEPS NECESSARY TO PROTECT ALL COMPLETED, SEMI-COMPLETED, AND TEMPORARY WORK FROM COMMENCEMENT OF PROJECT TO COMPLETE, SEMI-COMPLETION OF SAME ANY PORTION OF THE WORK DAMAGED OR DISFIGURED SHALL BE SATISFACTORILY REPAIRED OR REPLACED AND THE WORK AS A WHOLE LEFT WITHOUT BLEMISH AT FINAL ACCEPTANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ALL NECESSARY MEASUREMENTS AT THE BUILDING, THE ACCURATE FITTING OF ALL WORK AND PROPER ACCOMMODATION OF OTHER TRADES.

THIS SECTION INCLUDES FURNISHING OF ALL LABOR. MATERIAL, TOOLS, EQUIPMENT, TRANSPORTATION, AND FACILITIES TO COMPLETE ROUGH CARPENTRY AS INDICATED IN THE DRAWINGS AND AS SPECIFIED HEREIN.

ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE BEST PRACTICE, SHALL BE ACCURATE AS TO MEASUREMENT AND SHALL BE CAREFULLY DONE. PLYWOOD SHEATHING SUBFLOOR SHALL PROVIDE A SMOOTH UNIFORM SURFACE CAPABLE PROPERLY ACCEPTING A CARPET FINISH.

ROOF DIAPHRAGM: 3/4" T&G APA RATED SHEATHING - STRUCTURE 1 EXPOSURE 1

SPAN RATING 48/24 MIN.

FASTEN TO SHEET METAL SUPPORTS W/#8 x 1 1/4" LG. SELF DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS (ICC ESR-1976) OR 0.145 PACFAST PREFERRED FASTENERS (ICC ESR-2961) AT 4" OC AT BOUNDARIES, 6" OC AT EDGES, AND 12" OC FIELD NAILS. MIN. 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2. NOTE: 0.145 PNEUMATIC FASTENERS OPTION IS NOT ALLOWED ON PARAPET APPLICATIONS (PARAPET HEIGHT) HIGHER THAN 18" OR AT STRUCTURAL STEEL. IE. TRUSSES.

FLOOR DIAPHRAGM:

1 1/8" PLYWOOD - STURD-I-FLOOR

EXTERIOR - TONGUE AND GROOVE EDGES SPAN RATING: 48" FASTEN TO SHEET METAL SUPPORTS W/ #8 - 24 x 1 3/4 LG. SELF-DRILLING, SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS (ICC ESR-1976) OR 0.145 PACFAST PREFERRED FASTENERS (ICC ESR-2961) AT 6" OC AT BOUNDARIES, AT 6" OC AT EDGES, AND 12" OC AT INTERMEDIATE SUPPORTS. MIN. 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2. 0.146 PNEUMATIC FASTENERS (PACFAST PREFERED FASTENERS) OPTION IS NOT ALLOWED APPLICATIONS AT STRUCTURAL STEEL IE FLOOR CHANNELS

CONCRETE FLOOR DATA: LIGHTWEIGHT CONCRETE FLOOR STRENGTH: 3500 PSI or 4000 PSI

TYPE: I OR II

DENSITY: 110 PCF - MAX

DIMENSION LUMBER ATTACHMENT TO STEEL FRAMING

I. ALL NAILS SHALL BE COMMON UNLESS OTHERWISE NOTED

PRODUCT WITH ICC REPORTS AND APPROVAL BY DSA.

CONNECTION AND FASTENERS:

CONNECTION OF LAG SCREWS

2 x STUDS AT CORNER STEEL COLUMNS (NAILING STUD) USE: #10 - 24 x 2 1/2" LG, SELF-DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD WITH WASHER ZINC COATED TEK SCREWS AT 24" O.C.

REFERENCE STANDARDS NOTES:

OR 150 PSF FLOOR LOAD OPTION.

INTENT OF DRAWINGS AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE STATE OF CALIFORNIA, CALIFORNIA CODE OF REGULATIONS, PART 1, 2, 3, 4, 5, 6, 9, AND 12, SUB-CHAPTER 1. CALIFORNIA BUILDING CODE, 2013 EDITION, MANUAL OF STEEL CONSTRUCTION, (AISC) 14TH EDITION, AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE, AWS D1.1, AMERICAN INSTITUTE OF TIMBER CONSTRUCTION STANDARD, (AITC) 109 ARCHITECTURAL SHEET METAL MANUAL, AIA FILE NO. 12-L (SMACNA) LATEST ADOPTED EDITION UNLESS OTHERWISE NOTED.

WORKMANSHIP AND MATERIALS SHALL BE SUCH THAT BUILDING WILL BE WEATHERTIGHT AND WATERTIGHT.

A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.

2. MACHINE APPLIED 16d FASTENERS SHALL HAVE AN EMBEDMENT OF NOT LESS THAN 1 1/2" INTO THE

ACCEPTABLE FOR HAND NAILING, PROVIDED THE REQUIRED EMBEDMENT IS MAINTAINED.

SECOND MEMBER, AND SHALL BE NOT LESS THAN 3" IN OVERALL LENGTH. THE ABOVE NAILS SHALL ALSO BE

ALL CONNECTIONS AND FASTENERS AS STATED ON THESE DRAWINGS CAN BE SUBSTITUTED BY AN EQUIVALENT

AS REQUIRED PER ANSI / AF&FA NDS-2012, LAG SCREWS MUST BE INSTALLED INTO A PRE-DRILLED PILOT HOLE

WITH A STANDARD WASHER AND TURNED WITH A WRENCH, DO NOT DRIVE IN WITH A HAMMER, OVER-TORQUING

CAN SIGNIFICANTLY REDUCE THE LATERAL RESISTANCE OF THE LAG SCREW AND SHOULD BE AVOIDED.

DOUBLE TOP PLATES	8 - 16d COMMON (3 ½"x0.162") 12 - 3"x0.131" NAILS	LAP SPLICE
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3 - 3"x0.131" NAILS	TOENAIL
12. RIM JOIST TO TOP PLATE	8d (2½"x0.131") AT 6" O.C. 3"x0.131" NAIL AT 6" O.C.	TOENAIL
13. TOP PLATES, LAPS, AND INTERSECTIONS	2 - 16d COMMON (3 ½"x0.162") 3 - 3"x0.131" NAILS	FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16d COMMON (3 ½"x0.162")	16" OC ALONG EDG
15. CEILING JOISTS TO PLATE	3 - 8d COMMON (2 ½"x0.131") 5 - 3"x0.131" NAILS	TOENAIL
16. CONTINUOUS HEADER TO STUD	4 - 8d COMMON (2 ½"x0.131")	TOENAIL
17. CEILING JOISTS, LAPS OVER PARTITIONS (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1)	3 - 16d COMMON (3 ½"x0.162") MII TABLE 2308.10.4.1 4 - 3"x0.131" NAILS	I FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1)	3 - 16d COMMON (3 ½"x0.162") MII TABLE 2308.10.4.1 4 - 3"x0.131" NAILS	FACE NAIL
19. RAFTER TO PLATE (SEE SECTION 2308.10.1, TABLE 2308.10.1	3 - 8d COMMON (2 ½"x0.131") 3 - 3"x0.131" NAILS	FACE NAIL
20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE	2 - 8d COMMON (2 ½ x0.131") 2 - 3"x0.131" NAILS	FACE NAIL
21. 1" x 8" SHEATHING TO EACH BEARING	3 - 8d COMMON (2 ½"x0.131")	FACE NAIL
22. WIDER THAN 1" x 8" SHEATHING TO EACH BEARING	3 - 8d COMMON (2 ½"x0.131")	FACE NAIL
23. BUILT-UP CORNER STUDS	16d COMMON (3 ½"x0.162") 3"x0.131" NAILS	24" O.C. 16" O.C.
24. BUILT-UP GIRDER AND BEAMS	20d COMMON (4"x0.192")32" O.C 3"x0.131" NAIL AT 24" O.C	FACE NAIL AT TOP BOTTOM STAGGER ON OPPOSITE SIDI
	2 - 20d COMMON (4" x0.192") 3 - 3"x0.131" NAILS	FACE NAIL AT END AND AT EACH SPL
25. 2" PLANKS	16d COMMON (3 ½"x0.162")	AT EACH BEARING
26. COLLAR TIE TO RAFTER	3 - 10d COMMON (3"x0.148") 4 - 3"x0.131" NAILS	FACE NAIL
27. JACK RAFTER TO HIP	3 - 10d COMMON (3"x0.148") 4 - 3"x0.131" NAILS	TOE NAIL
	2 - 16d COMMON (3 ½"x0.162") 3 - 3"x0.131" NAILS	FACE NAIL
28. ROOF RAFTERS TO 2-BY RIDGE BEAM	2 - 16d COMMON (3 ½"x0.162") 3 - 3"x0.131" NAILS	TOE NAIL
	2 - 16d COMMON (3 ½"x0.162") 3 - 3"x0.131" NAILS	FACE NAIL
29. JOIST TO BAND JOIST	3 - 16d COMMON (3 ½"x0.162") 4 - 3"x0.131" NAILS	FACE NAIL
30. LEDGER STRIP	3 - 16d COMMON (3 ½"x0.162") 4 - 3"x0.131" NAILS	FACE NAIL AT EAC JOIST
31. WOOD STRUCTURAL PANELS AND PARTICLEBOARD ^b SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING)	1/2" AND LESS 6d ^{C, l} 2 ³ / ₈ "x0.113" NAI 1 ³ / ₄ " 16d GAGE ^C 19/32" TO 3/4" 8d ^d or 6d ^e	V.
	19/32" TO 3/4" 8d ^d or 6d ^e 2 ³ / ₈ "x0.113" NAI 2" 16d GAGE ^D 7/8" TO 1" 8d ^c 1 1/8" TO 1 1/4" 10d ^d or 8d ^e	
SINGLE FLOOR (COMBINATION SUBFLOOR-UNDERLAYMENT TO FRAMING)	3/4" AND LESS 6d ^e 7/8" TO 1" 8d ^e 1 1/8" TO 1 1/4" 10d OR 8d ^e	
32. PANEL SIDING (TO FRAMING)	1/2" AND LESS 6d ^f 5/8" 8d ^f	
33. FIBERBOARD SHEATHING ⁹	1/2" NO. 11 GA ROOFING 6d COMMON NAIL (2	
	25/32" NO. 11 GA ROOFING 8d COMMON NAIL (2	
34. INTERIOR PANELING	1/4" 4d ^j 3/8" 6d ^k	
FOOTNOTES: a. COMMON OR BOX NAILS ARE PERMITTED TO BE USED EXC b. NAILS SPACED AT 6" ON CENTER AT EDGES, 12" AT INTERI SPANS ARE 48" OR MORE. FOR NAILING OF WOOD STRUC SHEAR WALLS, REFER TO SECTION 2305. NAILS FOR WALL CASING. c. COMMON OR DEFORMED SHANK (6d - 2" x 0.113"; 8d - 2 1/2" d. COMMON (6d - 2" x 0.113"; 8d - 2 1/2" x 0.131"; 10d - 3" x 0.14	DEPT WHERE OTHERWISE STATE MEDIATE SUPPORTS EXCEPT 6" A TURAL PANEL AND PARTICLEBOA L SHEATHING ARE PERMITTED TO " x 0.131" : 10d - 3" x 0.148").	T SUPPORTS WHE ARD DIAPHRAGMS A

DEFORMED SHANK (6d - 2" x 0.113"; 8d - 2 1/2" x 0.131"; 10d - 3" x 0.148").

INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS.

1 3/4" LENGTH FOR 25/32" SHEATHING.

WALLS AND DIAPHRAGMS (2305.1.2-4).

DIAPHRAGMS (2305.1.2-4).

STRUCTURAL PANELS.

SUPPORTS.

CORROSION-RESISTANT SIDING (6d - 1 7/8" x 0.106"; 8d - 2 3/8" x 0.128") OR CASING (6d - 2" x 0.099"; 8d - 2 1/2" x

USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6" ON CENTER ON THE EDGES AND 12" ON CENTER AT

CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIAMETER HEAD AND 1 1/2" LENGTH FOR 1/2" SHEATHING AND

CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16" CROWN AND 1 1/8" LENGTH FOR 1/2" SHEATHING AND 1 1/

LENGTH FOR 25/32" SHEATHING. PANEL SUPPORTS AT 16" (20" IF STRENGTH AXIS IN THE LONG DIRECTION OF

THE PANEL, UNLESS OTHERWISE MARKED). STAPLES ARE NOT PERMITTED FOR WOOD SHEAR WALLS AND

CASING (1 1/2" x 0.080") OR FINISH (1 1/2" x 0.072") NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE

PANEL SUPPORTS AT 24". CASING OR FINISH NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE

FOR ROOF SHEATHING APPLICATIONS, 8d NAILS (2 1/2" x 0.113") ARE THE MINIMUM REQUIRED FOR WOOD

. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16". STAPLES ARE NOT PERMITTED FOR WOOD SHEAR

FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4" ON CENTER AT EDGES, 8" AT INTERMEDIATE

FASTENERS SPACED 4" ON CENTER AT EDGES, 8" AT INTERMEDIATE SUPPORTS FOR SUBFLOOR AND WALL

SHEATHING AND 3" ON CENTER AT EDGES, 6" AT INTERMEDIATE SUPPORTS FOR ROOF SHEATHING.

FASTENERS SPACED 4" ON CENTER AT EDGES, 8" AT INTERMEDIATE SUPPORTS.

FASTENERS SPACED 3" ON CENTER AT EXTERIOR EDGES AND 6" ON CENTER AT INTERMEDIATE SUPPORTS, WHEN

FASTENING SCHEDULE CBC - TABLE 2304.9.1

CONNECTION

3. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST

5. 2" SUBFLOOR TO JOIST OR GIRDER

6. SOLE PLATE TO JOIST OR BLOCKING

I. WIDER THAN 1" x 6" SUBFLOOR TO EACH JOIST

SOLE PLATE TO JOIST OR BLKING AT BRACED

. JOIST TO SILL OR GIRDER

2. BRIDGING TO JOIST

WALL PANEL

9. DOUBLE STUDS

7. TOP PLATE TO STUD

8. STUD TO SOLE PLATE

10. DOUBLE TOP PLATES

FASTENING a,m

3 - 8d COMMON

3 - 3" x 0.131" NAILS

2 - 3" x 0.31" NAILS

2 - 16d COMMON

3"x0.131" NAILS AT 8" O.C.

3 - 3"x0.031" NAILS

- 3"x0.131" NAILS

3 - 3"x0.131" NAILS

THESE DRAWINGS AND ALL MATERIAL CONTAINED HEREIN ARE THE PROPERTY OF SILVERCREEK INDUSTRIES, INC (SCI Inc) AND LOCATION TOENAIL 2 - 8d COMMON (2½" x .131") **TOENAIL EACH END** FACE NAIL 2 - 8d COMMON (2 3" x .131") 3 _ 8d COMMON (2 ft x .131") BLIND AND FACE NA SILVER CREEK INDUSTRIES, INC. 16d(3 ½" x .135") AT 16" O.C. TYPICAL FACE NAIL BRACED WALL PANELS 3 - 16d(3 ½" x .135") AT 16" O.C. 4 - 3"x0.131" NAILS AT 16" O.C. ? - 16d COMMON (3 ½" x 0.162") END NAIL I - 8d COMMON (2 3"x0.131") TOENAIL - 16d COMMON (3 ½"x0.162") END NAIL FACE NAIL 16d (3]"x0.135") AT 24" O.C. 3"x0.131" NAILS AT 12" O.C. 16d (3 f x0.135") AT 16" O.C. TYPICAL FACE NAIL 3"x0.131" NAILS AT 12" O.C. PROJECT NAME: SHEET TITLE:

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24x40 STOCKPILE OFFICE BUILDING

STRUCTURAL **SPECIFICATIONS**



06/15/15



PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT ACS_FIS SS RAGE DATE MAY 18 2017

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES PC 04-114102 AUG - 4 2015

ORIGINAL PC STATE AGENCY APPROVAL

REVISIONS

SILVER CREEK INDUSTRIES 24' x 40' PC - 2:12 PITCH

PROJECT NO: DRAWN BY: SCALE: AS NOTED

01-30-15

P.C. SHEET NUMBER

DATE: