STRUCTURAL SPECIFICATIONS

FOUNDATIONS:

GEOTECHNICAL INVESTIGATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH SECTIONS 1803A.3 THROUGH 1803A.6. EXCEPTION: 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 SHÓWN IN THE MOST RECENTLY PUBLISHED MAPS FROM THE CALFORNIA GEOLOGICAL SURVEY (CGS), ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TABLE 1808A.2 PER CBC SECTION 1803A.2

CONCRETE

PROVIDE NECESSARY SHIMS ON FOOTINGS <u>NOT LEVEL</u> 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:

- 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, AND CHAPTER 19.
- b) AMERICAN CONCRETE INSTITUTE (ACI): BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ACISTROS
- c) SOCIETY FOR TESTING AND MATERIALS (ASTM): THE SPECIFICATIONS AND STANDARDS EREINAFTER REFERENCED TO SHALL BE OF THE LATEST EDITION.
- 3. CONCRETE FOUNDATION TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE
- DESIGN MIXES SHALL BE AS SPECIFIED IN TITLE 24. CONCRETE STRENGTH AT 28 DAYS SHALL BE AS (UNLESS REQUIRED OTHERWISE PER ACI 318-08 TABLE 4.3.1). CONCRETE COMPRESSIVE STRENGTH FC= 3500 PSI NATER-CEMENT RATIO SHALL NOT EXCEED 0.60 BY WEIGHT
- PORTLAND CEMENT TYPE!

 NOTIMAL WISICHT

 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:

ARCHITECT AND OR INSPECTOR.

- 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(8) 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 1 OR 11 PER ASTM C-150. (UNLESS REQUIRED OTHERWISE PER CBC 1802A.2.3
- 9. WATER CONTENT SHALL NOT EXCEED 7 1/4 GALLONS PER SACK OF CEMENT (UNLESS REQUIRED OTHERWISE PER ACI 318-08 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
- 11. ANCHOR BOLTS, DOWELS, REINFORCING STEEL, AND EMBEDDED ITEMS ARE TO BE SECURELY TIED IN PLACE BEFORE CONCRETE IS POURED.
- 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.

1704A.4.3. WAIVER OF BATCH PLAN INSPECTION.

- A. WHEN BATCH PLANT INSPECTION IS WAIVED, THE FOLLOWING REQUIREMENTS SHALL APPLY:
- 1. QUALIFIED TECHNICIAN OF THE TESTING LABORATORY SHALL CHECK THE FIRST BATCHING AT THE
- 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.
- A AT THE FND OF THE PROJECT, THE WEIGHMASTER SHALL FURNISH AN AFFIDAVIT TO THE ENFORCEMENT AGENCY CERTIFYING THAT ALL CONCRETE FURNISHED CONFORMS IN EVERY PARTICULAR TO PROPORTIONS ESTABLISH BY MIX DESIGNS.

- 1. MATERIAL: ALL REINFORCING STEEL SHALL BE BILLET STEEL PER ASTM A-815 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".
- MINIMUM COVERAGE: ALL REINFORCING SHALL HAVE THE FOLLOWING MINIMUM COVERAGE WITH

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

STRUCTURAL STEEL:

- 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
- 3. PIPE COLUMNS SHALL CONFORM TO ASTM A501 OR ASTM A53, TYPE E OR S. GRADE B.

STEEL FRAME BUILDING/STEEL FRAME CONSTRUCTION SHALL MEET THE MINIMUM DESIGN REQUIREMENTS OF STUD SPACING, ETC. PER LATEST EDITION OF 2010 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

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-708. 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 ETOXX FOR STRUCTURAL STEEL AND REBAR AND SHALL BE EBOXX FOR LIGHT GAUGE STEEL.

THE SPECIAL INSPECTOR NEED NOT BE CONTINUOSLY 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 LD. 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 ON COAT OF ACCEPTABLE METAL PROTECTION WELL WORKED INTO

COLD-FORMED STEEL FRAMING:

JOINTS AND OPEN SPACES.

STRUCTURAL LIGHT GALIGE 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)

•	DESIGNATION THICKNESS (INCHES)	Minimum Delivered Thickness (Inches)
	0.018	0.017
	0.030	0.029
	0.036	0.034
	0.048	0.046
	0.080	0.057
	0.075	0.071
	0.105	0.100
	0.120	0.114
	0.135	0.128

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

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

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

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

AMERICAN PLYWOOD ASSOCIATION PS 1-85. 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" TAG UNBLOCKED PLYWOOD. PROVIDE SEAMLESS WOVEN POLYFLEX BOTTOM BOARD FOR MOISTURE PROTECTION
- 2. OPTIONAL PLYWOOD ROOF DECK: APA PATED 3/4" TAG OSB OR EQUIVALENT RATED SHEATHING WITH
- VPPROVAL FROM DSA 3. EXTERIOR WALL SIDING:
- STANDARD: 6/8" DURATEMP OR 5/5" SMART PANEL
- . OPTIONAL: 5/8" MDO III. OPTIONAL: 1/2" OSB OR CDX PLYWOOD FOR PLASTER/STUCCO FINISH
- A EXTERIOR WALL SIDING ATTACHMENT:
- FASTEMERS 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 2804.9.1.1

TREATED WOOD:

- ALL WOOD INCLUDING WOOD SHEATHING IN CONTACT WITH CONCRETE OR MASONRY AND LOCATED WITHIN 8" OF GROUND LEVEL SHALL BE "PRESSURE TREATED" BY AND "APPROVED PROCESS" OR SHALL BE
- "FOUNDATION GRADE" MATERIAL (CBC SECTION 2304.11.2.2). 1. ALL ROUGH LUMBER SHALL BE DF #2 OR SETTER.
- 2. FASTEN WOOD BEBIDES USING SCREWS. ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663, AND 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.

CONTINUOUS INSPECTION:

INSPECTOR TO PROVIDE CONTINUOUS FIELD INSPECTION.

INFLANT 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 TESTING SHALL COMPLY WITH TITLE 24, SECTION 2212A.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 (N=46KSI) OR ASTM A53, TYPICAL.

STEEL SHEETS: STEEL SHEETS FOR LIGHT GAUGE STEEL SECTIONS SHALL CONFORM TO THE REQUIREMENTS

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

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

BOLTED OR WELDED AS SHOWN ON THE DRAWINGS

- PEXPOSED 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.

R DRIVEN FASTENERS FOR SILL PLATE, WOOD NAILERS TO STEEL COLUMNS, AND SHEET METAL TO

ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# EBR-1663, 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.

<u>DESCRIPTION OF WORK:</u> 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. ROOF FRAMING: PLYWOOD SHEATHING APA, PSI-95 RATED SHEATHING, CD EXPOSURE 1 P.I.I. = 48/24 (5 PLY) T&G EDGES

WORKMANSHIP:
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

ROOF DIAPHRAGM: 3/4" TAG OSB OR APA RATED SHEATHING - STRUCTURE 1 EXPOSURE 1

SPAN RATING 48/24 MIN. FASTEN TO SHEET METAL SUPPORTS W/ #10 x 1 1/4" LG. SELF DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS OR 0.145 PACFAST PREFERRED FASTENERS (ICC ESR-2981) ISSUED SEPTEMBER 2010 AT 4" OC AT BOUNDARIES, 6" OC AT EDGES, AND 12" OC FIELD NAILS. MIN. 3/8" EDGE DISTANCE FOR STEEL APPLICATIONS(IE): TRUSSES. FLOOR DIAPHRAGM: 1 1/8" PLYWOOD - STURD + FLOOR

EXTERIOR - TONGUE AND GROOVE EDGES SPAN RATING: 48° FASTEN TO SHEET METAL SUPPORTS W/#10 - 24 x 1 3/4 LG. SELF-DRILLING, SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS OR 0.145 PACFAST PREFERRED FASTENERS (ICC ESR-2901) ISSUED SEPTEMBER 1 2010 AT 5" 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 NOTE-0. 145 PHNELIMATIC FASTENER OFTON (BACKAST FREFERRE) FASTNES)
15 NOT ALLOWED FOR APPLICATIONS AT STELLCTURAL STEEL IE. FLOOR CHANNELS
CONCRETE FLOOR DATA: LIGHTWEIGHT CONCRETE FLOOR STRENGTH: 3500 PSi or 4000 PSi

DENSITY: 110 PCF - MAX DIMENSION LUMBER ATTACHMENT TO STEEL FRAMING 2x STUDS AT CORNER STEEL COLUMNS (NAILING STUD

TYPE: | OR |

USE: #10 - 24 x 2 1/2" LG. SELF-DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD WITH WASHER ZINC COATED TEK

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, 2010 EDITION, MANUAL OF STEEL CONSTRUCTION, (AISC) 18TH 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 EDITION UNLESS OTHERWISE NOTED.

WORKMANSHIP:

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

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CHANGE ORDER APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338,

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

PART 1, TITLE 24, CCR. <u>NAILING NOTES:</u>

. ALL NAILS SHALL BE COMMON UNLESS OTHERWISE NOTED 2: MACHINE APPLIED 164 FASTENERS SHALL HAVE AN EMBEDMENT OF NOT LESS THAN 1 1/2" INTO THE SECOND MEMBER, AND SHALL BE NOT LESS THAN 3" IN OVERALL LENGTH. THE ABOVE NAILS SHALL ALSO BE ACCEPTABLE FOR HAND NAILING, PROVIDED THE REQUIRED EMBEDMENT IS MAINTAINED.

CONNECTION AND FASTENERS AS STATED ON THESE DRAWINGS CAN BE SUBSTITUTED BY AN EQUIVALENT PRODUCT WITH ICC REPORTS AND APPROVAL BY DSA.

ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

CONNECTION OF LAG SCREWS:
AS REQUIRED PER ANSI / AFSFA NDS-2005, 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.

THESE DRAWINGS AND ALL MATERIAL CONTAINED HEREIN ARE FASTENING SCHEDULE CBC-TABLE 2304.9.1 THE PROPERTY OF SILVERCREEK INDUSTRIES, INC (SCI Inc) AND SHALL NOT BE REPRODUCED, COPIED OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY AND SHALL NOT BE FASTENING 8,M LOCATION CONNECTION ED IN WHOLE OR IN PART TO ASSIST IN THE MAKING OF OR FOR THE PURPOSE OF FURNISHING ANY INFORMATION FOR THE S. RI COMMON JOIST TO SILL OR GIRDER KING OF DRAWINGS, FRINTS, AFPARATUS OR PARTS 3-3" x 0.131" NAILS THEREOF WITHOUT THE FULL KNOWLEDGE AND WRITTEN -8d COMMON (2 * x .131") TOENAIL EACH END **BRIDGING TO JOIST** 2-3" x 0.31" NAILS ALL PATENTABLE MATERIAL CONTAINED HEREIN AND FACE NAIL 2 - 8d COMMON (2 1 x .131") RIGINATING WITH SCI Inc SHALL BE THE PROPERTY OF SCI Inc 3. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST FACE NAIL 2_8d COMMON (2 \subset x .131") . WIDER THAN 1" x 6" SUBFLOOR TO EACH JOIST SILVER CREEK INDUSTRIES, INC. BLIND AND FACE NAI 2 - 18d COMMON 5. 2" SUBFLOOR TO JOIST OR GIRDER TYPICAL FACE NAIL 16d(3 & x .135") AT 16" O.C. B. SOLE PLATE TO JOIST OR BLOCKING 3'x0.131" NAILS AT 8" O.C. BRACED WALL PANEL SOLE PLATE TO JOIST OR BLKING AT BRACED 4 - 3"x0.131" NAILS AT 16" O.C. WALL PANEL 2-16d COMMON (3 2 x 0.162") END NAIL 7. TOP PLATE TO STUD 3-370.031" NAILS 4 - 8d COMMON (2 = x0.131") a. STUD TO SOLE PLATE 4-3"x0.131" NAILS 2 - 16d COMMON (3 ½'x0.162") 3-3"x0.131" NAILS ld (3 / x0.135") AT 24". O.C. 9. DOUBLE STUDS 195 EAST MORGAN PERRIS. CALIFORNIA 92571 3%0.131" NAILS AT 12" O.C. PHONE: 951-943-5393 FAX: 951-943-2211 16d (3 3 x0.135") AT 24" O.C. PICAL FACE NAIL 10. DOUBLE TOP PLATES PROJECT NAME 37x0.131" NAILS AT 12" O.C. - 16d COMMON (3 ['x0.162") 12 - 3"x0.131" NAILS **CLASS LEASING** DOUBLE TOP PLATES 11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE 3 - 8d COMMON (2 1/x0.131") **CLASSROOM BLDG'S** - 37x0.131" NAILS d (2 150.131") AT 6" O.C. TOENAIL 12. RIM JOIST TO TOP PLATE 350.131" NAIL AT 6" O.C. 2 - 18d COMMON (8 2"x0.162") FACE NAIL 13. TOP PLATES, LAPS, AND INTERSECTIONS 3 - 3"x0.131" NAILS SHEET TITLE: 8d COMMON (3 Fx0.162") 18" OC ALONG EDGE 14. CONTINUOUS HEADER, TWO PIECES 3 - 8d COMMON (2 \$7x0.131") 15. CEILING JOISTS TO PLATE 5 - 3"x0.131" NAILS STRUCTURAL 4 - 8d COMMON (2 \(\frac{1}{2} \) x0.131") 18. CONTINUOUS HEADER TO STUD 3 - 18d COMMON (3 1x0.162") MI 17. CEILING JOISTS, LAPS OVER PARTITIONS TABLE 2308.10.4.1 (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1) 4 - 3"x0.131" NAILS 18. CEILING JOISTS TO PARALLEL RAFTERS - 16d COMMON (3 ½"x0.162") MI TABLE 2308.10.4.1 (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1) 4 - 9"x0.131" NAILS 3 - 8d COMMON (2 ½"x0.131") 19. RAFTER TO PLATE - 3"x0.131" NAILS (SEE SECTION 2308.10.1, TABLE 2308.10.1 - Bd COMMON (2 3"x0.131") 20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE FACE NAIL -3"x0.131" NAILS" FACE NAIL - 8d COMMON (2 \$'x0.131") 21. 1" x 8" SHEATHING TO EACH BEARING FACE NAIL -8d COMMON (2 {7x0.131") 22. WIDER THAN 1"x 8" SHEATHING TO EACH BEARING 16d COMMON (3 \$'x0.162") 23. BUILT-UP CORNER STUDS 16" O.C. 330.131" NAH.S 20d COMMON (4'x0.192'32" O.C. FACE NAIL AT FOR AN APIN TO ST 24. BUILT-UP GIRDER AND BEAMS 37x0.131" NAIL AT 24" O.C BOTTOM STAGE 2-20d COMMON (4" x0.192") FACE NAIL AT ENDS 3-3"x0.131" NAILS AND AT EACH SPLICE AT EACH BEARING 16d COMMON (3 \(\) \(\) \(\) \(\) (3 (\) \(\) \(\) (162") 25. 2" PLANKS - 104 COMMON (350.148°) 26. COLLAR TIE TO RAFTER -3"x0.131" NAILS - 10d COMMON (3"x0.148") 27. JACK RAFTER TO HIP 4 - 3"x0.131" NAILS 2 - 16d COMMON (3 ½"x0.162") FACE NAIL

PROJECT SPECIFIC STATE AGENCY APPROVAL. - 16d COMMON (3 \$'x0.162") | FACE NAIL AT EACH ORIGINAL PC STATE AGENCY APPROVAL

RDN: 10-31-2013

"BUILDING FOR THE

Bd COMMON NAIL (2 1/x 0.131")

- 16d COMMON (3 1 x0.162") TOE NAIL

1 18d GAGE

2 Fx0.113" N

2" 18d GAGE

NO. 11 GA ROOFING NAIL!

NO. 11 GA ROOFING NAIL!

6d COMMON NAIL (23:0.113")

FACE NAIL

-3"x0.131" NAILS

-3"x0.131" NAILS

1 - 3"x0.131" NAILS

4 - 3"x0.131" NAILS

1 1/8" TO 1 1/4"

3/4" AND LESS

1/2" AND LESS

7/8" TO 1"

1/2" AND LESS 6d C.I

- 16d COMMON (3 ½7x0.1627)

- 16d COMMON (3 1"x0.162")

1 1/8" TO 1 1/4" 100 OR 50

OTNOTES: COMMON OR BOX NAILS ARE PERMITTED TO BE USED EXCEPT WHERE OTHERWISE STATED. NAILS SPACED AT 6" ON CENTER AT EDGES, 12" AT INTERMEDIATE SUPPORTS EXCEPT 6" AT SUPPORTS WHERE SPANS ARE 48" OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2306. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX,

CR CASING.
COMMON OR DEPORMED SHANK (6d.-2"x 0.113"; 8d - 2 1/2"x 0.131"; 10d - 3"x 0.148").
COMMON (6d - 2"x 0.113"; 8d - 2 1/2"x 0.131"; 10d - 3"x 0.148"). DEFORMED SHANK (8d - 2" x 0.113"; 8d - 2 1/2" x 0.131"; 10d - 3" x 0.148"). CORROSION-RESISTANT SIDING (8d - 1 7/8" x 0.106"; 8d - 2 3/6" x 0.128") OR CASING (6d - 2" x 0.099"; 8d - 2 1/2" x 0.113") NAIL. FABTENERS SPACED 3" ON CENTER AT EXTERIOR EDGES AND 6" ON CENTER AT INTERMEDIATE SUPPORTS,

28. ROOF RAFTERS TO 2-BY RIDGE BEAM

1. WOOD STRUCTURAL PANELS AND PARTICLEBOARD D

SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING)

SINGLE FLOOR (COMBINATION SUBFLOOR-UNDERLAYMENT

29. JOIST TO BAND JOIST

2. PANEL SIDING (TO FRAMING

33. FIBERBOARD SHEATHING

34. INTERIOR PANELING

30. LEDGER STRIP

WHEN USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6" ON CENTER ON THE EDGES AND 12" ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS. CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIAMETER HEAD AND 1 1/2" LENGTH FOR 1/2" SHEATHING AND 1 3/4" LENGTH FOR 25/32" SHEATHING. CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16" CROWN AND 1 1/6" LENGTH FOR 1/2" SHEATHING

AND 1 1/2" LENGTH FOR 25/32" SHEATHING. PANEL SUPPORTS AT 16" (20" IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).

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 8" ON PANEL EDGES, 12" AT INTERMEDIATE FOR ROOF SHEATHING APPLICATIONS, 8d NAILS (2 1/2" x 0.113") ARE THE MINIMUM REQUIRED FOR WOOD

STRUCTURAL PANELS. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16". FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4" ON CENTER AT EDGES, 8" AT INTERMEDIATE

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

PROJECT NO:

DRAWN BY:

· SCALE:

STKP 126

SILVER CREEK INDUSTRIES

24' x 40' PC

AS NOTED

12-23-11

P.C. SHEET NUMBER

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC?