# 

BUILDING INFOR	RMATION:	PLAN SELECTION INFORMATION:	
OCCUPANCY GROUP:	R-3	FLOOR PLAN: ROOF MATERIAL:	С
CONSTRUCTION TYPE:	V-B	1	N
STORIES:		-STANDARD -COMPOSITION SHINGLES	F
BUILDING HEIGHT:	6' MAX	I I I I I I I I I I I I I I I I I I I	E
FLOOR AREA:	599 SF	EXTERIOR WALL MATERIAL:	R
COVERED PORCH:	63 SF		F
FIRE SPRINKLERS:	SITE SPECIFIC*	$\square -\frac{1}{2}$ Columns $\square -LAP$ siding	S
W.U.I.:	Y OR N	EXTERIOR WINDOW TREATMENT: DEFERRED SUBMITTALS:	S
FLOOD ZONE:		-DECORATIVE SHUTTERS -FIRE SPRINKLERS WHEN	E
FLOOD ZONE:		-TRELLIS ABOVE WINDOWS REQUIRED	Μ
FIRM PANEL #:		-SOLAR WHEN REQ.	S
		TITLE 24 ENERGY REQUIREMENTS.	5
BUILDING SHALL COMPLY WITH CODE: CRC 2022, CEC 2022, C		I. WINDOWS: U-FACTOR= 0.3 4. WATER HEATER: HEAT PUMP	_
2022, CFC 2022, CGBC 2022, C	CEnC 2022,	SHGC=0.23 SIZE: 40 GAL 2. INSULATION: WALLS= R-2I ENERGY FACTOR: 3.1	
AND ALL STATE, FEDERAL AND ORDINANCES AS AMENDED BY		FLOOR = SLAB, RAISED 5. HERS TESTING REQUIREMENTS:	
JURISDICTION.		ATTIC = R-38 PER CALCULATIONS RAFTERS = R-19 6. AIR CONDITIONING:	
* FIRE SPRINKLERS ARE REQUIRE HOUSE THAT THIS ADU IS ACCESS		3. ROOF REQUIREMENTS: HEATING: 9.5 HSPF2 NO RADIANT BARRIER COOLING: 16 SEER2	
FIRE SPRINKLERS OR WILL REQU SPRINKLERS IF BEING NEWLY CO	IRE FIRE	VENTILATION= La SQ.FT. 12.5 EER2	
		DUCT LOCATION: NONE	

A	$\mathcal{C}$

SHEET INDEX:	PAGES:	DESIGN (	CRITERIA:	PROJECT DESCR		
OVER SHEET	CS	SEISMIC: EQUIVA				
OTE SHEETS	GNI - GN4	12.8	URE, ASCE7-16, CHP	NEW CONSTRUCTION OF A 5 DETACHED, ACCESSORY DV		
LOOR PLAN	AI, AI.I	=				
LEVATIONS	A2, A2.I	SS =	0.842			
ROOF PLAN	A3, A3.I	SI =	0.355	OWNER:		
	A4, A4.I	SMS =	I.OI			
HEAR WALL & FRAMING PLAN	A5, A5.1	SMI =	NULL			
ECTIONS	A6, A6.1	SDS =	0.673			
ELECTRICAL	A7, A7.I	SDI =	NULL	ADDRESS:		
1ECHANICAL & PLUMBING	A8, A.8.1	TL =	16	ADDRLJJ:		
STRUCTURAL NOTES	51	R0 =	1.3			
STRUCTURAL DETAILS	52 - 54	R =	6.5			
		SNOW LOAD =	O PSF			
			FORCE RESISTING			
		ASCE7-16, CHP 2		$\land \heartsuit N \vdash \pm$		
		WIND SPEED =	95 MPH			
		EXPOSURE =	C			
		ENCLOSURE =	ENCLOSED			
		SYSTEM, ALL HE ASCE7-16, CHP 2 WIND SPEED = EXPOSURE =	IGHTS METHOD, 26\$27 95 MPH C	APN #:		

	DWELLING UNIT DM, I BATH		General Notes JACKSON AND SANDS ENGINEERING HAS PROVIDED THESE PLAN SOLELY FOR THE USE WITHIN THE CITY OF ORLAND & DOES NOT GIVE PERMISSION FOR USE OUTSIDE OF THIS AREA.	
			Provid History Bright Future Chiffornut	
			JACKSON & SANDS JACKSON & SANDS 1250 EAST AVE #10 CHICO, CA 95926 (530)715-7184	
			ERING, Inc.	
			ENGR ENGR ENGR ENGR ENGR ENGR ENGR ENGR	
	YOU ASSUME ALL RESPONSIBILITY & RISK FO		No. Revision/Issue 1 1 INITIAL SUBMITTAL: 2 PCI SUBMITTAL: 8/2/	Date 23
RIPTION: 599 SQUARE FOOT, PWELLING UNIT	YOUR USE OF THESE PLANS, WHICH ARE PROVIDED "AS IS" WITHOUT REPRESENTATION OR WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIE OF TITLE, NON-INFRINGEMENT, OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITATION OF THE FOREGOING, YO AGREE THAT IT IS YOUR RESPONSIBILITY TO ENSURE, PRIOR TO USE OF ANY PLANS, THAT SUCH PLANS ARE ACCURATE, SUITABLE FOR YOUR PURPOSES & COMPLIANT WITH ALL APPLICABLE LAWS. BY USING THESE PLANS	N5 5	CIVIL PROFESS/ONA CO80657 CO80657 CO80657 CIVIL PTE OF CALIFORNIA IO/O2/2	3
	YOU AGREE TO DEFEND (WITH COUNSEL OF CITY'S CHOOSING), INDEMNIFY & HOLD CITY, EMPLOYEES, VOLUNTEERS, AGENTS, & THE DESIGN PROFESSIONAL WHO PREPARED THESE CONSTRUCTION DOCUMENTS, FREE & HARMLESS FROM ANY & ALL CLAIMS, DEMANDS, CAUSES OF ACTION, COSTS, EXPENSES, LIABILITY, LOSS, DAMAGE OR INJURY OF ANY KIND, IN LAW OR EQUITY, TO PROPERTY OR PERSONS, INCLUDING WRONGFUL DEATH, IN ANY MANNER ARISING OUT OF, PERTAINING TO, RELATED TO, OR		ORLAND ADUS WALNUT 599 SQ. FT.	,
	INCIDENT TO ACCEPTANCE OF OR USE OF TH CONSTRUCTION DOCUMENTS.		Project 23M-007 Date 10/02/23 Scale AS NOTED	

### FLOOR PLAN NOTES

- I. WHEN AUTOMATIC FIRE SPRINKLERS ARE REQUIRED THROUGHOUT THE RESIDENCE, FIRE SPRINKLERS SHALL BE DESIGNED BY A CALIFORNIA CONTRACTOR CLASSIFICATION C-16. FIRE SPRINKLER SHALL BE REQUIRED IF THE PRIMARY RESIDENCE HAS FIRE SPRINKLERS. 2. EXTERIOR WALLS TO BE 2X6 DF NO. 2 STUDS AT 16" O.C. WITH R-21 INSULATION. SIDING/SHEAR AS SHOWN ON.
- 3. INTERIOR WALLS TO BE 2X4 DF NO.2 STUDS AT 16" O.C.
- 4. TYPICAL WALL HEIGHT IS  $9'O-\frac{3}{4}"$
- 5. IF POSSIBLE, TRY TO LOCATE WATER HEATER & AIR CONDITIONER CONDENSER TOWARDS THE INSIDE OF THE PARCEL OPPOSITE OF THE STREET VIEW SIDE OF THE ADU. 6. NO OPENING SHALL BE PERMITTED IN THE EXTERIOR WALLS, INCLUDING VENTS, OF GROUP R-3 OCCUPANCIES WHERE THE EXTERIOR WALL IS CLOSER THAN 5' TO THE PROPERTY LINE
- 2022 CRC TABLE R302.I(I) & TABLE R302.I(2) 7. LISTED INSTALLATION INSTRUCTION OR MANUALS SHALL BE ON SITE & AVAILABLE FOR PLUMBING, MECHANICAL, ELECTRICAL EQUIPMENT OR OTHER INSTALLATIONS DURING FIELD INSPECTION OF SPECIFIC APPLIANCES OR FEATURES.
- 8. RODENT PROOFING & INSECT INTRUSION PROTECTION. ANNULAR SPACES AROUND PIPES, ELECTRICAL CABLE CONDUITS OR OTHER OPENINGS IN BOTTOM/SOLE PLATE AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS IN ACCORDANCE WITH THE 2022 CAL GREEN BUILDING CODE, CHAPTER 4. DIVISION 4.4 SECTION 4.406.1 CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE BY THE ENFORCING AGENCY.

### <u>GREEN BUILDING</u>

- PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF SOIL & ARE NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE, SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION, ONE OR MORE OF THE FOLLOWING MEASURES SHALL BE IMPLEMENTED TO PREVENT FLOODING OF ADJACENT
- PROPERTY, PREVENT EROSION & RETAIN SOIL RUNOFF ON SITE. 2. RETENTION BASING OF SUFFICIENT SIZE SHALL BE UTILIZED TO RETAIN STORM WATER ON
- 3. WHERE STORM WATER IS CONVEYED TO A PUBLIC DRAINAGE SYSTEM, COLLECTION POINT, GUTTER, OR SIMILAR DISPOSAL METHOD, WATER SHALL BE FILTERED BY A BARRIER SYSTEM, WATTLE, OR OTHER APPROVED METHOD.
- 4. ALL NEW RESIDENTIAL CONSTRUCTION WITH ATTACHED PRIVATE GARAGES SHALL HAVE THE FOLLOWING FOR ELECTRIC VEHICLE (EV) CHARGING STATION (CGBSC4.106.4) 4.1. INSTALL A MIN I" CONDUIT CAPABLE OF SUPPLYING A 208/240V BRANCH CIRCUIT TO A SUITABLE BOX LOCATION FOR EV CHARGING. THE OTHER END SHALL TERMINATE TO THE MAIN SERVICE # /OR SUBPANEL.
- 4.2. THE MAIN PANEL \$/OR SUBPANEL SHALL BE OF SUFFICIENT SIZE TO INSTALL A 40AMP DEDICATED BRANCH CIRCUIT. LABEL "EV CAPABLE" 5. MULTIPLE SHOWER HEADS SERVING A SINGLE SHOWER SHALL HAVE A COMBINED FLOW
- RATE OF 1.8 gpm OR THE SHOWER STALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO OPERATE AT A TIME (CGBSC4.303.1.3.2)
- 6. RESIDENTIAL PROJECTS WITH AN AGGREGATE LANDSCAPE AREA EQUAL TO OR GREATER THAN 500FT<sup>2</sup> SHALL COMPLY WITH EITHER A LOCAL WATER EFFICIENT LANDSCAPE ORDINANCE OR THE CURRENT CALIFORNIA DEPARTMENT OF WATER RESOURCES MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO), WHICHEVER IS MORE STRINGENT. AUTOMATIC IRRIGATION SYSTEM CONTROLLERS INSTALLED AT TIME OF FINAL INSPECTION SHALL HAVE WEATHER OR SOIL BASED CONTROLLERS \$ /OR WEATHER BASED CONTROLLERS WITH RAIN SENSORS. SOIL MOISTURE BASED CONTROLLERS ARE NOT
- REQUIRED TO HAVE RAIN SENSOR INPUT. (CGBSC4.304) RECYCLE #/OR REUSE A MIN OF 65% OF NON-HAZARDOUS CONSTRUCTION # DEMOLITION WASTE (CGBSC 4.408.2)
- 8. AT TIME OF FINAL INSPECTION, A BUILDING OPERATION & MAINTENANCE MANUAL, COMPACT DISC, ETC SHALL BE PROVIDED CONTAINING THE FOLLOWING: 8.1. DIRECTIONS THAT MANUAL SHALL REMAIN ONSITE FOR THE LIFE OF THE BUILDING 8.2. OPERATION & MAINTENANCE INSTRUCTIONS FOR EQUIPMENT, APPLIANCES, ROOF/YARD DRAINAGE, IRRIGATION SYSTEMS, ETC.
- 8.3. INFORMATION FROM LOCAL UTILITY, WATER & WASTE RECOVERY PROVIDERS 8.4. PUBLIC TRANSPORTATION & CARPOOL OPTIONS
- 8.5. MATERIAL REGARDING IMPORTANCE OF KEEPING HUMIDITY LEVELS BETWEEN 30-60%. 8.6. INFORMATION REGARDING ROUTINE MAINTENANCE PROCEDURES 8.7. STATE SOLAR ENERGY INCENTIVE PROGRAM INFORMATION
- 8.8. A COPY OF ANY REQUIRED SPECIAL INSPECTION VERIFICATIONS THAT WERE REQUIRED
- (IF ANY) 9. CLEARLY NOTE ON THE PLANS HOW THE PROJECT WILL MEET MIN POLLUTANT CONTROL REQUIREMENTS FOR ADHESIVES, SEALANTS, CAULKS, PAINTS, CARPET, RESILIENT FLOORING SYSTEMS, ETC (CGBSC 4.504)
- IO. DUCT OPENING RELATED TO HVAC SYSTEMS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS TO REDUCE THE AMOUNT OF WATER, DUST & DEBRIS WHICH MAY ENTER THE SYSTEM (CGBSC 4.504.1

### DECK & EXPOSED CONSTRUCTION

- I. ALL EXPOSED WOOD SHALL BE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE TREATED IN ACCORDANCE WITH AWPA UI FOR THE SPECIES, PRODUCT, PRESERVATIVE & END USE. (CRC SECTION R317.1)
- 2. POSTS/COLUMNS SHALL BE RETRAINED AT THE BOTTOM END TO PREVENT LATERAL DISPLACEMENT, CLEARLY SHOW APPROVED POST BASES, STRAPS, ETC TO ACHIEVE THIS PER CRC R407.3
- 3. ALL HARDWARE IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED OR Z-MAX COATED (G-185). ALL FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT DIP GALVANIZED (CRC R317.3) 4. PROVIDE 2X BLOCKING AT SUPPORTS
- 5. EXTERIOR STAIRS, BALCONIES, DECKS, ETC SHALL BE ATTACHED TO THE PRIMARY STRUCTURE WITH LAG SCREWS OR EQUIVALENT ATTACHMENT THAT WILL RESIST AGAINST WITHDRAWAL & VERTICAL LATERAL FORCES OR SHALL BE DESIGNED TO BE SELF-SUPPORTING (CRC R311.5)
- 6. GUARDS ARE REQUIRED IF DECK OR FLOOR IS OVER 30" ABOVE GRADE, MIN 42" HIGH, WITH OPENINGS LESS THAN 4" (CRC R312). GUARDRAILS SHALL BE DESIGNED & DETAILED FOR LATERAL FORCES ACCORDING TO CRC TABLE 301.5
- 7. PROVIDE DECK LATERAL LOAD CONNECTIONS AT EACH END OF THE DECK & AT DECK INTERSECTIONS PER CRC R507.2.4 CONNECTORS SHALL HAVE A MIN ALLOWABLE STRESS DESIGN CAPACITY OF 1,500LBS & INSTALL WITH 24" OF THE END OF THE DECK. 750LBS RATED DEVICES ARE ALLOWED (DTTIZ AS EXAMPLE) IF LOCATED EVENLY AT 4 POINTS ALONG THE DECK

### GARAGE & CARPORT

- GARAGE SHALL BE SEPARATED FROM THE DWELLING UNIT & ATTIC AREA BY  $\frac{1}{2}$ " GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGE BENEATH HABITABLE ROOMS SHALL BE SEPARATED BY NOT LESS THAN & TYPE X GYPSUM BOARD. STRUCTURE SUPPORTING FLOOR/CEILING ASSEMBLIES USED FOR REQUIRED SEPARATIONS SHALL HAVE 1 GYPSUM BOARD INSTALLED MIN. DOOR OPENINGS FROM THE GARAGE TO THE DWELLING SHALL BE SOLID WOOD/STEEL DOORS OR HONEYCOMB STEEL DOORS NOT LESS THAN IS THICK OR A 20-MINUTE RATED FIRE DOOR. DOORS SHALL BE SELF-CLOSING & SELF-LATCHING. NO OPENINGS DIRECTLY INTO A SLEEPING ROOM FROM THE GARAGE. WHEN THE DWELLING \$ GARAGE HAS FIRE SPRINKLERS INSTALLED PER R309.6 & R313, DOORS INTO THE DWELLING UNIT FROM THE GARAGE ONLY NEED TO BE SELF-CLOSING & SELF-LATCHING. (CRC R302.5.1 & T-R302.6) (CARPORTS OPEN ON TWO OR MORE SIDES & NO ENCLOSED AREAS ABOVE DO NOT REQUIRE A SEPARATION).
- 2. DUCTS PENETRATING THE GARAGE TO DWELLING SEPARATION SHALL BE A MIN OF 26 GAUGE WITH NO OPENINGS INTO THE GARAGE. (CRC R302.5.2)
- 3. PENETRATIONS THROUGH THE GARAGE TO DWELLING SEPARATION WALL (OTHER THAN DUCTS AS LISTED ABOVE) SHALL BE FIRE-BLOCKED PER CRC SECTION R302.11, ITEM #4. 4. GARAGE & CARPORT FLOOR SURFACES SHALL BE NON-COMBUSTIBLE MATERIAL & SLOPE
- TO DRAIN TOWARDS THE GARAGE DOOR OPENING. (CRC R309.1 5. APPLIANCES & RECEPTACLES INSTALLED IN GARAGE GENERATING A GLOW, SPARK OR FLAME SHALL BE LOCATED 18" ABOVE FLOOR UNLESS IT IS LISTED AS FLAMMABLE VAPOR IGNITION RESISTANT. PROVIDE PROTECTIVE POST OR OTHER IMPACT BARRIER FROM VEHICLES (CMC 308.0).

### EXTERIOR BUILDING FINISH

ATTIC GABLE & EAVES ABOVE 12' & UNDER FLOOR VENTILATION SHALL BE PROVIDED WITH FULLY COVERED METAL WIRE MESH, VENTS, OR OTHER MATERIALS THAT HAVE A MIN 占 🕯 MAX 1/2" OPENINGS, NON-COMBUSTIBLE & CORROSION RESISTANT. ALL OTHER EAVE VENTS SHALL BE LISTED/APPROVED TO RESIST THE INTRUSION OF FLAME & BURNING EMBERS. (CRC337.6.2)

- LATERAL DISPLACEMENT. (CRC R502.9 & CBC 2304.9.7)
- 2. ALL FASTENERS USED FOR ATTACHMENT OF SIDING & INTO PRESSURE TREATED LUMBER SHALL BE OF A CORROSION RESISTANT TYPE (CRC R317.3).
- 3. FIRE-BLOCK IN CONCEALED SPACES OF STUD WALLS/PARTITIONS, VERTICALLY AT CEILING/FLOOR LEVELS, & HORIZONTALLY AT IO'. INTERVALS. FIRE-BLOCK AT SOFFITS, DROP CEILINGS/SIMILAR LOCATIONS & IN CONCEALED SPACES AT THE TOP/BOTTOM OF STAIR STRINGERS. (CRC R302.11)
- 4. PROVIDE APPROVED BUILDING PAPER UNDER THE BUILDING SIDING & APPROVED FLASHING AT EXTERIOR OPENINGS (CRC R703.2). SPECIFY A MIN OF 2 LAYERS OF GRADE D PAPER UNDER STUCCO # 2 LAYERS OF 15LB FELT (OR EQUIVALENT) UNDER STONE VENEER. 5. STUCCO SHALL HAVE A MIN CLEARANCE TO EARTH OF 4" & 2" TO PAVED SURFACES WITH AN APPROVED WEEP SCREED. (CRC R703.7.2.1) MASONRY STONE VENEER SHALL BE FLASHED BENEATH THE FIRST COURSE OF MASONRY & PROVIDED WITH WEEP HOLES
- IMMEDIATELY ABOVE THE FLASHING (CRC R703.8.5 \$ R703.8.6) 6. FLOORS & WALLS ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS & IN SHOWER
- COMPARTMENTS SHALL BE FINISHED WITH A NON ABSORBENT SURFACE & SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 6' ABOVE FINISHED FLOOR (CRC R307.2)

#### STAIRWAYS & RAMPS EXTERIOR STAIR STRINGERS MUST BE NATURALLY RESISTANT TO DECAY OR PRESSURE

- TREATED. (CRC R317.1) RISE SHALL BE MAX  $7_4^3$ "; RUN SHALL BE IO" MIN; HEADROOM 6'-8" MIN; WIDTH 36" MIN,  $31_2^1$ " BETWEEN A HANDRAIL ON ONE SIDE # 27" WITH HANDRAILS ON TWO SIDES. VARIATION BETWEEN RISER HEIGHTS  $\frac{2}{3}$ " MAX. A NOSING NOT LESS THAN  $\frac{2}{3}$ " BUT NOT MORE THAN  $|\frac{1}{4}|$ " SHALL BE PROVIDED ON STAIRWAYS WITH SOLID RISERS WHERE THE TREAD DEPTH IS LESS THAN II". THE LEADING EDGE OF TREADS SHALL PROJECT NOT MORE THAN  $I_4^{T}$  BEYOND THE TREAD BELOW. OPEN RISERS ARE PERMITTED, PROVIDED THE OPENING BETWEEN THE TREADS DOES NOT PERMIT THE PASSAGE OF A 4" SPHERE. (OPENINGS ARE NOT LIMITED WHEN THE STAIR HAS A RISE OF 30" OR LESS). (CRC R311.7)
- 3. STAIRWAYS WITH 4 OR MORE RISERS SHALL HAVE A HANDRAIL ON ONE SIDE 34-38" ABOVE THE TREAD NOSING. CIRCULAR HANDRAILS SHALL HAVE AN OUTSIDE DIAMETER OF  $|\frac{1}{4}-2|$ ; IF NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF 4-6 $\frac{1}{4}$ " WITH A MAX CROSS-SECTIONAL DIMENSION OF  $2\frac{1}{4}$ ". SEE R311.7.8.3 ITEM #2 FOR TYPE 11 HANDRAILS WITH A PARAMETER OVER  $6\frac{1}{4}$ . A MIN CLEARANCE OF  $1\frac{1}{2}$ " SHALL BE MAINTAINED FROM THE WALL OR OTHER SURFACE. HANDRAILS SHALL BE RETURNED, TERMINATE IN NEWEL POSTS, OR SAFETY TERMINALS. (CRC R311.7.8.2)
- 4. GUARDS SHALL BE 42" MIN HEIGHT (UNLESS ACTING AS A HANDRAIL/GUARD FOR A STAIRWAY; THE GUARD HEIGHT MAY BE 34-38" IN HEIGHT), WITH OPENINGS LESS THAN 4" CLEAR (GUARDS ON THE OPEN SIDES OF STAIRS MAY HAVE 43" OPENINGS). (CRC R312) 5
- THE DEPTH OF THE LANDING SHALL BE 36" MIN. (SEE CRC R311.7.6 FOR EXCEPTIONS). 6. USABLE SPACES UNDERNEATH ENCLOSED/UNENCLOSED STAIRWAYS SHALL BE PROTECTED
- BY A MIN OF  $\frac{1}{2}$ " GYPSUM BOARD. (CRC R302.7) RAMPS SERVING THE EGRESS DOOR SHALL HAVE A SLOPE OF NOT MORE THAN I UNIT VERTICAL IN 12 UNITS HORIZONTAL (8.3% SLOPE). ALL OTHER RAMPS SHALL HAVE A MAX SLOPE OF I UNIT VERTICAL IN & UNITS HORIZONTAL (12.5% SLOPE). EXCEPTION: WHERE IT IS TECHNICALLY INFEASIBLE TO COMPLY BECAUSE OF SITE CONSTRAINTS, RAMPS SHALL HAVE A SLOPE OF NOT MORE THAN I UNIT VERTICAL IN & UNITS HORIZONTAL (12.5% SLOPE) (CRC R311.8.1). PROVIDE 3'X3' LANDINGS AT THE TOP & BOTTOM OF RAMPS, WHERE DOORS OPEN ONTO RAMPS, & WHERE RAMPS CHANGE DIRECTIONS. (CRC R311.8)

# PROVIDE EACH BEDROOM, BASEMENT, & HABITABLE ATTICS WITH A MIN OF ONE EXTERIOR

- WINDOW WITH A 44" MAX CLEAR OPENING HEIGHT, 5.7FT<sup>2</sup> MIN CLEAR OPENABLE AREA (MIN 5FT<sup>2</sup> AT GRADE FLOOR OPENINGS), 24" MIN CLEAR OPENABLE HEIGHT & 20" MIN CLEAR WIDTH, OR AN OPENABLE EXTERIOR EXIT DOOR. (CRC R310.2.1 & CRC R310.2.2) WINDOW WELLS, LADDERS, & STEPS SHALL COMPLY WITH CRC R310.2.3. BARS, GRILLES, COVERS, & SCREENS SHALL BE RELEASABLE OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL KNOWLEDGE, OR FORCE GREATER THAN I5LBS TO OPERATE THE EMERGENCY ESCAPE & RESCUE OPENINGS. (CRC R310.4)
- 2. EACH BATHROOM CONTAINING A BATHTUB, SHOWER OR TUB/SHOWER COMBINATION SHALL BE MECHANICALLY VENTILATED WITH ENERGY STAR APPROVED EQUIPMENT (MIN 50CFM) WITH AN INTEGRAL HUMIDISTAT INSTALLED. (CRC R303.3.1)
- 3. PROVIDE ATTIC CROSS VENTILATION: 1/150 OF ATTIC AREA OR 1/300 WITH AT LEAST 40% BUT MORE THAN 50% OF VENTS ARE 3' ABOVE EAVE & BALANCE IS AT EAVE. AS AN ALTERNATIVE IN CLIMATE ZONE 16 (TRUCKEE REGION), THE NET AREA MAY BE REDUCED TO 1/300 WHEN A CLASS I OR II VAPOR BARRIER IS INSTALLED ON THE WARM-IN-WINTER SIDE OF THE CEILING. BAFFLES ARE REQUIRED AT VENTS FOR INSULATION. PROVIDE MIN OF I" OF AIR SPACE BETWEEN INSULATION & ROOF SHEATHING. (CRC R806) 4. ENCLOSED RAFTER SPACES SHALL HAVE I" CLEAR CROSS VENTILATION. (PROPERLY SIZED
- RAFTERS FOR INSULATION) (CRC R806.3)
- WHEN A CLASS I VAPOR RETARDER IS INSTALLED ON THE GROUND SURFACE THE MIN AREA OF VENTILATION MAY BE LIMITED TO IFT<sup>2</sup> FOR EACH 1,500FT<sup>2</sup> OF UNDER-FLOOR SPACE. ONE VENTILATION OPENING SHALL BE WITHIN 3' OF EACH CORNER OF THE BUILDING (CRC R408.1). UNVENTED CRAWL SPACES SHALL COMPLY WITH CRC R408.3. 6. THE FOLLOWING AREAS SHALL HAVE SAFETY GLAZING: (CRC R308.4) • SLIDING/SWINGING
- GLASS DOORS 6.1. GLAZING IN WALLS & ENCLOSURES FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS,
- THAN 60" ABOVE THE STANDING SURFACE WITHIN THE COMPARTMENT & WITHIN 60" HORIZONTALLY OF THE WATER'S EDGE (CRC R308.4.5)
- 6.2. IN ALL FIXED & OPERABLE PANELS OF SWINGING, SLIDING & BI-FOLD DOORS 6.3. GLAZING WITHIN A 24" ARC OF A DOOR THAT IS LESS THAN 60" ABOVE THE FLOOR. GLAZING INSTALLED PERPENDICULAR TO A DOOR IN A CLOSED POSITION & WITHIN 24" OF THE DOOR ONLY REQUIRES SAFETY GLAZING IF IT IS ON THE HINGE SIDE OF AN IN-SWING DOOR. (CRC R308.4.2).
- 6.4. GLAZING WHERE THE EXPOSED AREA IS GREATER THAN 9FT<sup>2</sup>, BOTTOM IS LESS THAN 18" & AT LEAST 36" ABOVE THE FLOOR, & ADJACENT TO A WALKING SURFACE. 6.5. WITHIN 60" OF THE BOTTOM TREAD OF A STAIRWAY & LESS THAN 36" ABOVE THE LANDING.
- 6.6. GLAZING IN GUARDS & RAILINGS.

STAIRWAY. (CRC R311.3-R311.3.2)

- 6.7. GLAZING ADJACENT TO STAIRWAYS, LANDINGS, & RAMPS WITHIN 36" HORIZONTALLY OF THE WALKING SURFACE LESS THAN 36" ABOVE THE WALKING SURFACE. PROVIDE LANDINGS & A PORCH LIGHT AT ALL EXTERIOR DOORS. LANDINGS ARE TO BE MIN 3' DEEP X WIDTH OF DOOR. LANDINGS AT REQUIRED EGRESS DOORS MAY STEP DOWN A MAX OF  $7\frac{3}{2}$ " WHEN THE DOOR DOES NOT SWING OVER THE LANDING #  $1\frac{1}{2}$ " WHEN DOOR SWINGS ONTO THE LANDING. OTHER THAN REQUIRED EXTERIOR EXIT DOORS MAY HAVE A THRESHOLD OF 73" MAX; A LANDING IS NOT REQUIRED IF A STAIR WITH TWO OR FEWER
  - CLEARANCES & TREATMENT FOR WOOD FRAMING
- WEATHER EXPOSED GLULAM, BEAMS & POSTS SHALL BE PRESSURE TREATED OR SHALL BE WOOD OF NATURAL RESISTANCE TO DECAY (CRC R317.1.3 \$ 5) 2. COLUMNS EXPOSED TO THE WEATHER OR IN BASEMENTS WHEN SUPPORTED ON CONCRETE PIER OR METAL PEDESTALS SHALL BE PRESSURE TREATED OR NATURAL RESISTANCE TO DECAY UNLESS THE PIER/PEDESTALS PROJECT I" ABOVE CONCRETE OR 6" ABOVE EARTH &
- EXC.) COLUMNS IN ENCLOSED CRAWL SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING SHALL BE PRESSURE TREATED OR NATURAL RESISTANCE TO DECAY UNLESS THE COLUMN IS SUPPORTED BY A CONCRETE PIER OR METAL PEDESTAL OF A HEIGHT &" OR MORE & THE EARTH IS COVERED BY AN IMPERVIOUS MOISTURE BARRIER.
- (CRC R317.1.4 EXC. 2) 4. DECK POSTS SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING NOT LESS THAN I" ABOVE A CONCRETE FLOOR OR 6" ABOVE EXPOSED EARTH. (CRC R317.1.4 EXC. 3)

## I. UNDER FLOOR AREAS WITH STORAGE, FUEL-FIRED EQUIPMENT OR ELECTRICAL POWERED

- EQUIPMENT WITH JOISTS LESS THAN 2×10 SOLID LUMBER SHALL BE PROTECTED ON THE UNDERSIDE BY 1 SHEETROCK OR SPRINKLER SYSTEM. (R302.13)
- AREA. AT LEAST ONE VENT OPENING SHALL BE WITHIN 3' OF EACH CORNER OF THE BUILDING
- 3. BALCONIES & DECKS MUST BE DESIGNED FOR A MIN LIVE LOAD OF 60LBS/FT<sup>2</sup>. (CRC T-R301.5)

I. POSITIVE POST TO BEAM CONNECTION SHALL BE PROVIDED TO ENSURE AGAINST UPLIFT #

PROVIDE LANDINGS AT THE TOP/BOTTOM OF THE STAIRWAY THE WIDTH OF THE STAIRWAY.

5. UNDER FLOOR CROSS VENTILATION: MIN IFT<sup>2</sup> FOR EACH ISOFT<sup>2</sup> OF UNDER FLOOR AREA.

STEAM ROOMS, BATHTUBS, SHOWERS & SWIMMING POOLS WHERE THE GLAZING IS LESS

RISERS IS LOCATED ON THE EXTERIOR SIDE & THE DOOR DOES NOT SWING OVER THE

THE EARTH IS COVERED BY AN APPROVED IMPERVIOUS MOISTURE BARRIER. (CRC R317.1.4

2. UNDER FLOOR VENTILATION AREA EQUAL TO IFT<sup>2</sup> OF VENTS TO EVERY 150FT<sup>2</sup> OF FLOOR

### ENERGY STORAGE SYSTEMS 2022 CRC SEC. R328

- ENERGY STORAGE SYSTEMS (ESS) SHALL COMPLY WITH THE PROVISIONS OF THIS SECTION. 2. ENERGY STORAGE SYSTEMS SHALL BE LISTED & LABELED IN ACCORDANCE WITH UL 9540. 3. ESS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS # THEIR LISTING. INDIVIDUAL UNITS SHALL BE SEPARATED FROM EACH OTHER BY NOT LESS THAN 3'.
- 4. ESS SHALL BE INSTALLED ONLY IN THE FOLLOWING LOCATIONS:
- 4.1. DETACHED GARAGES & DETACHED ACCESSORY STRUCTURES.
- 4.2. ATTACHED GARAGES SEPARATED FROM THE DWELLING UNIT LIVING SPACE IN ACCORDANCE WITH SEC. R302.6. 4.3. OUTDOORS OR ON THE EXTERIOR SIDE OF EXTERIOR WALLS LOCATED NOT LESS THAN
- 3' FROM DOORS & WINDOWS DIRECTLY ENTERING THE DWELLING UNIT. 4.4. ENCLOSED UTILITY CLOSETS, BASEMENTS, STORAGE OR UTILITY SPACES WITHIN DWELLING UNITS THAT HAVE FINISHED OR NON-COMBUSTIBLE WALLS & CEILING. WALLS
- ¢ CEILINGS SHALL HAVE ∛" TYPE-X GYPSUM BOARD. ESS SHALL NOT BE INSTALLED IN SLEEPING ROOMS, OR CLOSETS OR SPACES OPENING DIRECTLY INTO SLEEPING ROOMS OR IN HABITABLE SPACES OF THE DWELLING.
- 5. INDIVIDUAL ESS UNITS SHALL HAVE A MAX RATING OF 20KWh. THE AGGREGATE RATING OF THE ESS SHALL NOT EXCEED: 5.1. 40KWH WITHIN UTILITY CLOSETS, BASEMENTS & STORAGE OR UTILITY SPACES. 5.2. 80KWh IN ATTACHED OR DETACHED GARAGES & DETACHED ACCESSORY STRUCTURES.
- 5.3. 80kWh ON EXTERIOR WALLS 5.4. 80KWh OUTDOORS ON THE GROUND
- 6. ESS SHALL BE INSTALLED IN ACCORDANCE WITH THE CEC. INVERTERS SHALL BE LISTED \$ LABELED IN ACCORDANCE WITH UL 1741 OR PROVIDED AS PART OF THE UL 9540 LISTING. SYSTEMS CONNECTED TO THE UTILITY GRID SHALL USE INVERTERS LISTED FOR UTILITY INTERACTION.
- ROOMS & AREAS WITHIN DWELLING UNITS, BASEMENTS & ATTACHED GARAGES IN WHICH ESS ARE INSTALLED SHALL BE PROTECTED BY SMOKE ALARMS IN ACCORDANCE WITH SEC. R314. A HEAT DETECTOR, LISTED & INTERCONNECTED TO THE SMOKE ALARMS, SHALL BE INSTALLED IN LOCATIONS WITHIN DWELLING UNITS & ATTACHED GARAGES WHERE SMOKE ALARMS CANNOT BE INSTALLED BASED ON THEIR LISTING.
- 8. ESS INSTALLED IN A LOCATION SUBJECT TO VEHICLE DAMAGE IN ACCORDANCE WITH SECTION R328.8.1 OR R328.8.2 SHALL BE PROVIDED WITH IMPACT PROTECTION IN ACCORDANCE WITH SECTION R328.8.3.
- 9. INDOOR INSTALLATIONS OF ESS THAT PRODUCE HYDROGEN OR OTHER FLAMMABLE GASES DURING CHARGING SHALL BE PROVIDED WITH MECHANICAL VENTILATION IN ACCORDANCE WITH THE CMC.
- IO. THE TEMPORARY USE OF AN OWNER OR OCCUPANT'S ELECTRIC-POWERED VEHICLE TO POWER A DWELLING UNIT WHILE PARKED IN AN ATTACHED OR DETACHED GARAGE OR OUTDOOR SHALL COMPLY WITH THE VEHICLE MANUFACTURER'S INSTRUCTIONS & THE CEC.
- II. THE FOLLOWING INFORMATION SHALL BE PROVIDED II.I. A COPY OF THE MANUFACTURER'S INSTALLATION, OPERATION, MAINTENANCE \$ DECOMMISSIONING INSTRUCTIONS SHALL BE PROVIDED TO THE OWNER OR PLACED IN
- A CONSPICUOUS LOCATION NEAR THE ESS EQUIPMENT. 1.2. A LABEL ON THE INSTALLED SYSTEM CONTAINING THE CONTACT INFORMATION FOR THE QUALIFIED MAINTENANCE & SERVICE PROVIDERS.
- 12. ESS THAT HAVE THE POTENTIAL TO RELEASE TOXIC OR HIGHLY TOXIC GAS DURING CHARGING, DISCHARGING & NORMAL USE CONDITIONS SHALL NOT INSTALLED WITHIN GROUP R-3 OR R-4 OCCUPANCIES.
- 13. ESS INSTALLED IN LOCATIONS SUBJECT TO VEHICLE DAMAGE SHALL BE PROVIDED WITH IMPACT PROTECTION (CRC R328.8)

### ELECTRICAL NOTES

- THE PANEL BOARD(S) SHALL BE PROVIDED WITH A CIRCUIT DIRECTORY OR CIRCUIT IDENTIFICATION. 2022 CEC ART. 408.3(F). EVERY CIRCUIT & CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, & SPECIFIC PURPOSE OR USE. THE IDENTIFICATION SHALL INCLUDE AN APPROVED DEGREE OF DETAIL THAT ALLOWS EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS. SPARE POSITIONS THAT CONTAIN UNUSED OVER CURRENT DEVICES OR SWITCHES SHALL BE DESCRIBED ACCORDINGLY. THE IDENTIFICATION SHALL BE INCLUDED IN A CIRCUIT DIRECTORY THAT IS LOCATED ON THE FACE OR INSIDE OF THE PANEL DOOR IN THE CASE OF A PANELBOARD & AT EACH SWITCH OR CIRCUIT BREAKER IN A SWITCHBOARD OR SWITCHGEAR. NO CIRCUIT SHALL BE DESCRIBED IN A MANNER THAT DEPENDS ON TRANSIENT CONDITIONS OF OCCUPANCY.
- 2. LISTED INSTALLATION INSTRUCTION OR MANUALS SHALL BE ON SITE & AVAILABLE FOR PLUMBING, MECHANICAL, ELECTRICAL EQUIPMENT OR OTHER INSTALLATIONS DURING FIELD INSPECTION OF SPECIFIC APPLIANCES OR FEATURES. 3. PHOTOVOLTAIC GENERATING SYSTEMS IS REQUIRED BY CEC SECTION 150.1(C)14
- INSTALLATION OF SOLAR PANELS REQUIRED PRIOR CERTIFICATE OF OCCUPANCY CAN BE ISSUED FOR THIS ADU. A SEPARATE PERMIT IS REQUIRED.
- 4. AT LEAST ONE 120-VOLT, 20-AMP BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY A BATHROOM OUTLET(S). SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS. (EXCEPTION-WHERE THE CIRCUIT SUPPLIES A SINGLE BATHROOM, OUTLETS FOR OTHER EQUIPMENT WITHIN THE SAME BATHROOM SHALL BE PERMITTED TO BE SUPPLIED.) CEC 210.11(C(1)) \$ 210.52
- 5. ALL 15-20 AMP KITCHEN RECEPTACLES THAT ARE DESIGNED TO SERVE COUNTERTOP SURFACES, DISHWASHERS, BATHROOMS, IN UNDER-FLOOR SPACES OR BELOW GRADE LEVEL, IN EXTERIOR OUTLET, WITHIN 6' OF A LAUNDRY/UTILITY/WET BAR SINKS, LAUNDRY AREAS SPECIFIED SHALL HAVE (GFCI) GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. 2022 CEC Art. 210.3(A)
- 6. RECEPTACLES SHALL NOT BE INSTALLED WITHIN OR DIRECTLY OVER A BATHTUB OR SHOWER STALL. 2022 CEC Art. 406.9(C). LIGHT PENDANTS, CEILING FANS, LIGHTING TRACKS, ETC. SHALL NOT BE LOCATED WITHIN 3' HORIZONTALLY & & VERTICALLY ABOVE
- A SHOWER \$/OR BATHTUB THRESHOLD. 2022 CEC Art. 410.10(D) 7. FIXTURES, LAMP HOLDER & RECEPTACLES OUTLETS SHALL BE SECURELY SUPPORTED. A FIXTURE THAT WEIGHTS MORE THAN 6LBS OR EXCEEDS 16" IN ANY DIMENSION SHALL NOT BE SUPPORTED BY THE SCREW SHELL OF A LAMP HOLDER. 2022 CEC Art. 410.30(a) OUTLET BOXES SHALL NOT BE USED AS THE SOLE SUPPORT FOR CEILING (PADDLE) FANS. 2022 CEC Art. 314.27(A)\$(D)
- 8. OUTLETS IN KITCHEN MUST BE INSTALLED IN EVERY COUNTER SPACE 12" OR WIDER, NOT GREATER THAN 4' O.C. WITHIN 24" OF THE END OF ANY COUNTER SPACE & NOT HIGHER THAN 20" ABOVE COUNTER (CEC 210.52(C))
- 9. TWO SMALL APPLIANCE 20-AMP BRANCH CIRCUITS ARE REQUIRED FOR THE KITCHEN \$ ARE LIMITED TO SUPPLYING WALL & COUNTER SPACE OUTLETS FOR THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, & SIMILAR AREAS. NOTE: THE CIRCUITS CANNOT SERVE OUTSIDE PLUGS, RANGE HOOD, DISPOSALS, DISHWASHER OR MICROWAVES - ONLY THE REQUIRED COUNTERTOP/WALL OUTLETS INCLUDING THE REFRIGERATOR. CEC 210.11(C(1)) \$
- 210.52(B) 10. ALL 120V SINGLE PHASE 15-20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS (I.E. RECEPTACLES, LIGHTS, SMOKE DETECTORS, ETC) INSTALLED IN DWELLING UNIT KITCHEN, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED COMBINATION-TYPE ARC-FAULT CIRCUIT INTERRUPTER, INSTALLED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH
- CIRCUIT, (CEC 210.12(A)) DEDICATED 20-AMP BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY THE LAUNDRY RECEPTACLE OUTLET(S). CEC 210.11(C)(2). (THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS, 12. GROUNDING & BONDING OF ELECTRICAL INSTALLATIONS SHALL COMPLY WITH CEC ART.
- 13. BOND ALL METAL GAS & WATER PIPES TO GROUND. ALL GROUND CLAMPS SHALL BE ACCESSIBLE & OF AN APPROVED TYPE. (CEC 250.104)
- 14. PACIFIC GAS & ELECTRIC COMPANY APPROVAL IS REQUIRED FOR ELECTRICAL METER LOCATION PRIOR TO INSTALLATION. PANEL LOCATION SUBJECT TO SITE SPECIFIC CONDITIONS & SERVING UTILITY APPROVAL WHERE THIS PLAN IS USED
- 15. AFTER BUILDING PERMIT HAS BEEN ISSUED, THE OWNER \$/OR CONTRACTOR SHALL APPLY FOR ELECTRICAL & UTILITY GAS SERVICE REQUEST TO PACIFIC GAS & ELECTRIC COMPANY
- 16. ALL NON-LOCKING TYPE 125-VOLT 15-20AMP RECEPTACLES IN THE DWELLING SHALL BE TAMPER-RESISTANT. (CED Art. 406.12)
- 17. RECEPTACLES SHALL BE INSTALLED AT 12' O.C. MAX IN WALLS STARTING AT 6' MAX FROM THE WALL END. WALLS LONGER THAN 2' SHALL HAVE A RECEPTACLE. HALLWAY WALLS LONGER AN IO' SHALL HAVE A RECEPTACLE IN HALLWAY. (CEC Art. 210.52(A) 18. ELECTRICAL RECEPTACLES OUTLETS, SWITCHES & CONTROLS FOR OCCUPANTS USE SHALL
- BE NO MORE THAN 48" & NOT LESS THAN 15" ABOVE FINISH FLOOR (R327.1.2)

- I. PROVIDE A MIN 22"x30" ACCESS OPENING TO ATTIC (CRC R807); MAY BE REQUIRED TO BE 30"X30" TO REMOVE THE LARGEST PIECE OF MECHANICAL EQUIPMENT PER THE CMC. 2. ATTIC VENTILATION TO BE INSTALLED TO PROVIDE IFT<sup>2</sup> OF VENTILATION TO EVERY 150FT<sup>2</sup> OF FLOOR AREA.
- 3. ROOF DRAINS/GUTTERS REQUIRED TO BE INSTALLED PER THE CPC CODE WITH LEAF/DEBRIS PROTECTION ALSO INSTALLED.
- 4. ALL ROOFING SHALL BE TESTED/LISTED CLASS A MIN. 5. ASPHALT SHINGLES WITH SLOPED ROOFS 2/12 TO 4/12 SHALL HAVE TWO LAYERS OF UNDERLAYMENT APPLIED PER CRC R905.2.2.

- 210.12)
- $(D), (F) \notin (G)$
- DWELLING. (CEC 210.52(E))
- ETC) EQUIPMENT. (CEC 210.64)

- THE APPLICATION. (CEC 410.10)

- ALL LIGHTING TO BE HIGH EFFICACY.
- 3|4-27(A)\$(D)

- 6. LUMINARIES RECESSED IN INSULATED CEILINGS MUST MEET 5 REQUIREMENTS (CEC CODE 150.0(K)(C):

- FIXTURES BY THE CEC.

CALGREEN, 2022 CFC

- CEILING CAVITY.

### ELECTRICAL NOTES

I. NO ELECTRICAL PANELS SHALL BE IN CLOSETS OF BATHROOMS. MAINTAIN A CLEARANCE OF 36" IN FRONT OF PANELS, 30" WIDE OR WIDTH OF EQUIPMENT & 6'-6" HIGH FOR HEADROOM (CEC 110.26)

2. A CONCRETE-ENCASED ELECTRODE (UFER) CONSISTING OF 20' OF REBAR OR #4 COPPER WIRE PLACED IN THE BOTTOM OF A FOOTING IS REQUIRED FOR ALL NEW CONSTRUCTION. (CEC 250.52(A) (3) BOND ALL METAL GAS & WATER PIPES TO GROUND. ALL GROUND CLAMPS SHALL BE ACCESSIBLE & OF AN APPROVED TYPE. (CEC 250.104) 3. ALL 15/20 AMP RECEPTACLES INSTALLED PER CEC 210.52 SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. (CEC 406.12)

4. ALL BRANCH CIRCUITS SUPPLYING 15/20 AMP OUTLETS IN FAMILY ROOMS, DINING ROOMS LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, KITCHENS, LAUNDRY ROOM OR SIMILAR ROOMS/AREAS SHALL BE PROTECTED BY A LISTED COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER. (CEC

5. PROVIDE A MIN OF ONE 20A CIRCUIT TO BE USED FOR THE LAUNDRY RECEPTACLE. (CEC 210.11(C)(2)) PROVIDE A MIN OF ONE 20A CIRCUIT FOR BATHROOM RECEPTACLE OUTLETS. (CEC 210.11(C)(3) PROVIDE A MIN OF ONE 20A CIRCUIT FOR ATTACHED & DETACHED GARAGE OUTLETS. (CEC 210.11(C)(4))

6. PROVIDE AT LEAST I OUTLET IN BASEMENTS, GARAGES, LAUNDRY ROOMS, DECKS, BALCONIES, PORCHES & WITHIN 3'OF THE OUTSIDE OF EACH BATHROOM BASIN. (CEC 210.52

7. FURNACES INSTALLED IN ATTICS & CRAWL SPACES SHALL HAVE AN ACCESS PLATFORM (CATWALK IN ATTICS), LIGHT SWITCH & RECEPTACLE IN THE SPACE. PROVIDE A SERVICE RECEPTACLE FOR THE FURNACE. (CEC 210.63) 8. ALL DWELLINGS MUST HAVE ONE EXTERIOR OUTLET AT THE FRONT & THE BACK OF THE

9. EXTERIOR OUTLETS SHALL BE GECI PROTECTED

IO. GARAGE RECEPTACLES SHALL NOT SERVE OUTLETS OUTSIDE THE GARAGE. A MIN OF I RECEPTACLE SHALL BE PROVIDED FOR EACH CAR SPACE. (210.52(G)(I), II. AT LEAST ONE WALL SWITCHED LIGHTING OUTLET OR FIXTURE SHALL BE INSTALLED IN EVERY HABITABLE ROOM, BATHROOM, HALLWAYS, STAIRWAYS, ATTACHED GARAGES & DETACHED GARAGES WITH ELECTRICAL POWER EQUIPMENT SPACED (ATTIC, BASEMENTS,

12. A 15/20-AMP RECEPTACLE SHALL BE INSTALLED WITHIN 50' OF ELECTRICAL SERVICE

13. KITCHENS, DINING ROOMS, PANTRIES, BREAKFAST NOOKS, & SIMILAR AREAS MUST HAVE A MIN OF (2) 20A CIRCUITS. KITCHEN, PANTRY, BREAKFAST NOOKS, DINING ROOMS, & SIMILAR AREAS COUNTER OUTLETS MUST BE INSTALLED IN EVERY COUNTER SPACE 12" OR WIDER, NOT GREATER THAN 4'O.C., WITHIN 24" OF THE END OF ANY COUNTER SPACE & NOT HIGHER THAN 20" ABOVE COUNTER. (CEC 210.52 (C)) ISLAND COUNTER SPACES SHALL HAVE AT LEAST I RECEPTACLE OUTLET UNLESS A RANGE TOP OR SINK IS INSTALLED THEN 2 RECEPTACLES MAY BE REQUIRED. I RECEPTACLE IS REQUIRED FOR PENINGULAR COUNTER SPACES. RECEPTACLES SHALL BE LOCATED BEHIND KITCHEN SINKS IF THE COUNTER AREA DEPTH BEHIND THE SINK IS MORE THAN 12" FOR STRAIGHT COUNTERS & 18" FOR CORNER INSTALLATIONS. (CEC FIGURE 210.52(C)(I))

14. RECEPTACLES SHALL BE INSTALLED AT 12' O.C. MAX IN WALLS STARTING AT 6' MAX FROM THE WALL END. WALLS LONGER THAN 2' SHALL HAVE A RECEPTACLE. HALLWAY WALLS LONGER THAN 10' SHALL HAVE A RECEPTACLE IN HALLWAYS. (CEC 210.52(A)) 15. RECEPTACLES SHALL NOT BE INSTALLED WITHIN OR DIRECTLY OVER A BATHTUB OR SHOWER STALL. (CEC 406.9(C) LIGHT PENDANTS, CEILING FANS, LIGHTING TRACKS, ETC SHALL NOT BE LOCATED WITHIN 3' HORIZONTALLY & & VERTICALLY ABOVE A SHOWER

\$/OR BATHTUB THRESHOLD. (CEC 410.10(D)) 16. ALL LIGHTING/FAN FIXTURES LOCATED IN WET OR DAMP LOCATIONS SHALL BE RATED FOR

17. GFCI OUTLETS ARE REQUIRED: FOR ALL KITCHEN RECEPTACLES THAT ARE DESIGNED TO SERVE COUNTERTOP SURFACES, DISHWASHERS, BATHROOMS, IN UNDER-FLOOR SPACES OR BELOW GRADE LEVEL, IN EXTERIOR OUTLETS, WITHIN 6' OF A LAUNDRY/UTILITY/WET BAR SINKS, LAUNDRY AREAS, & IN ALL GARAGE OUTLETS INCLUDING OUTLETS DEDICATED TO A SINGLE DEVICE OR GARAGE DOOR OPENER (CEC 210.8).

18. ALL 15/20 AMP RECEPTACLES IN WET LOCATIONS SHALL HAVE IN-USE (BUBBLE) COVERS INSTALLED. ALL RECEPTACLES IN WET LOCATIONS SHALL ALSO BE LISTED WEATHER-RESISTANT TYPE. (CEC 406.9(B)(I)

### ENERGY STORAGE SYSTEM (ESS) READY

AT LEAST ONE OF THE FOLLOWING SHALL BE PROVIDED ESS READY INTERCONNECTION EQUIPMENT WITH A MIN BACKED-UP CAPACITY OF 60 AMPS & A MIN OF (4) ESS-SUPPLIED BRANCH CIRCUITS, OR A DEDICATED RACEWAY FROM THE MAIN SERVICE PANEL TO A SUBPANEL THAT SUPPLIES THE FOLLOWING BRANCH CIRCUITS: REFRIGERATOR, LIGHTING CIRCUIT NEAR PRIMARY EGRESS DOOR, SLEEPING ROOM RECEPTACLE & ON ADDITIONAL.

2. THE MAIN PANELBOARD SHALL HAVE A MIN BUSBAR RATING OF 225 AMPS. SPACE SHALL BE RESERVED TO ALLOW FUTURE INSTALLATION OF A SYSTEM ISOLATION EQUIPMENT/TRANSFER SWITCH WITHIN 3' OF THE MAIN PANELBOARD. RACEWAYS SHALL BE INSTALLED BETWEEN THE PANELBOARD & THE SYSTEM ISOLATION EQUIPMENT TO ALLOW THE CONNECTION BACKUP POWER SOURCE.

3. SYSTEM USING A GAS OR PROPANE FURNACE SHALL INCLUDE A DEDICATED 240 VOLT BRANCH CIRCUIT WITHIN 3' OF THE FURNACE. THE BRANCH CIRCUIT SHALL BE RATED AT 30 AMPS MIN. THE MAIN ELECTRICAL SERVICE SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER. THE SPACE SHALL BE MARKED AS "FOR FUTURE 240V USE" (CEC 150.0(t)).

4. SYSTEM USING A GAS OR PROPANE COOKTOP SHALL INCLUDE A DEDICATED 240 VOLT BRANCH CIRCUIT WITHIN 3' OF THE COOKTOP. THE BRANCH CIRCUIT SHALL BE RATED AT 50 AMPS MIN. THE MAIN ELECTRICAL SERVICE SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER. THE SPACE SHALL BE MARKED AS "FOR FUTURE 240V USE" (CEC 150.0(U))

5. SYSTEM USING A GAS OR PROPANE DRYER SHALL INCLUDE A DEDICATED 240 VOLT BRANCH CIRCUIT WITHIN 3' OF THE CLOTHES DRYER. THE BRANCH CIRCUIT SHALL BE RATED AT 30 AMPS MIN. THE MAIN ELECTRICAL SERVICE SHALL HAVE A RESERVED SPACE TO ALLOW FOR THE INSTALLATION OF A DOUBLE POLE CIRCUIT BREAKER. THE SPACE SHALL BE MARKED AS "FOR FUTURE 240V USE" (CED 150.0(v)).

#### <u>LIGHTING NOTES</u>

2. LIGHTING IN HABITABLE SPACES, (LIVING ROOMS, DINING ROOMS, KITCHEN & BEDROOMS) SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED DIMMING CONTROLS. 3. FIXTURES, LAMP HOLDER & RECEPTACLES OUTLETS SHALL BE SECURELY SUPPORTED. A FIXTURE THAT WEIGHS MORE THAN 6LBS OR EXCEEDS 16" IN ANY DIMENSION SHALL NOT BE SUPPORTED BY THE SCREW SHELL OF A LAMP HOLDER. CEC ART. 410.30(a). OUTLET BOXES SHALL NOT BE USED AS THE SOLE SUPPORT FOR CEILING (PADDLE) FAN. 2022 CEC ART.

4. ALL LIGHTING IN BATHROOM, UTILITY ROOM, LAUNDRY ROOM, WALK IN CLOSETS # GARAGES TO BE MANUAL ON, AUTOMATIC OFF, OCCUPANT SENSOR. (VACANCY SENSOR) 5. OUTDOOR LIGHTING ATTACHED TO THE BUILDING TO BE HIGH EFFICACY, CONTROLLED BY A MANUAL ON & OFF SWITCH & ONE OF THE FOLLOWING AUTOMATIC CONTROLS 5.1. PHOTO CONTROL & MOTION SENSOR

5.2. PHOTO CONTROL & AUTOMATIC TIME SWITCH CONTROOL 5.3. ASTRONOMICAL TIME CLOCK CONTROL THAT AUTOMATICALLY TURNS THE OUTDOOR

LIGHT OFF DURING DAYLIGHT HOURS. 5.4. EMCS THAT PROVIDES THE FUNCTIONALITY OF AN ASTRONOMICAL TIME CLOCK, DOES NOT HAVE AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINARIES TO BE ALWAYS ON, & IS PROGRAMMED TO AUTOMATICALLY TURN THE OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS.

6.1. THEY MUST BE RATED FOR DIRECT INSULATION CONTACT. 6.2. THEY MUST BE CERTIFIED AS AIRTIGHT CONSTRUCTION.

6.3. THEY MUST HAVE A SEALED GASKET OR CAULKING BETWEEN THE HOUSING & CEILING TO PREVENT FLOW OF HEATED OR COOLED AIR OUT OF LIVING AREAS & INTO THE

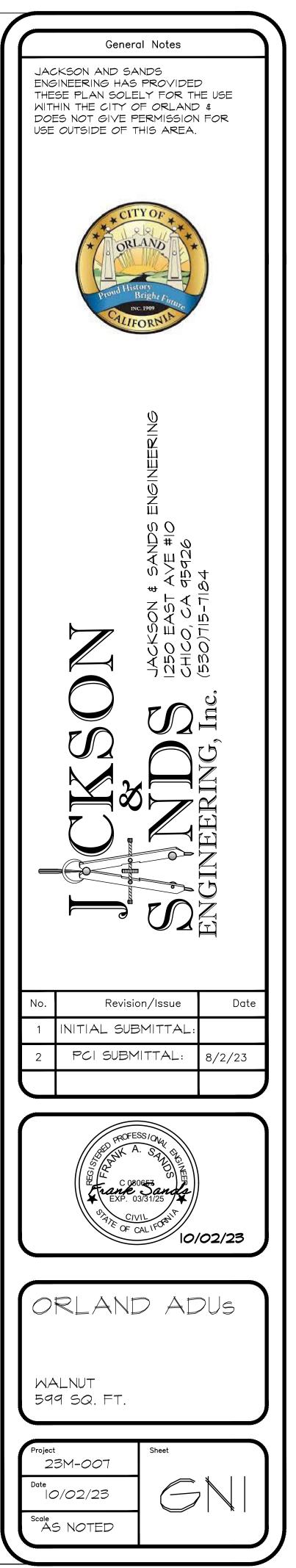
6.4. THEY MAY NOT CONTAIN A SCREW BASE SOCKETS

6.5. THEY SHALL CONTAIN A JAB COMPLIANT LIGHT SOURCE

7. OUTDOOR LIGHTING SHALL BE SUITABLE FOR WET LOCATIONS. 8. ALL HIGH EFFICACY LIGHT FIXTURES SHALL BE CERTIFIED AS "HIGH EFFICACY" LIGHT

9. CONTRACTOR SHALL PROVIDE THE HOMEOWNER WITH A LUMINAIRE SCHEDULE GIVING THE \_AMPS USED IN THE LUMINAIRES INSTALLED. (CGBSC 10-103(b)) 10. THE NUMBER OF BLANK ELECTRICAL BOXES MORE THAN 5' ABOVE FINISHED FLOOR SHALL NOT BE GREATER THAN THE NUMBER OF BEDROOMS. THESE ELECTRICAL BOXES MUST BE

SERVED BY A DIMMER, VACANCY SENSOR, OR FAN SPEED CONTROL. (CEC 150(k)1B) BUILDING SHALL COMPLY WITH THE FOLLOWING CODE: DESIGN CODES 2022 CBC, 2022 CEC, 2022 CMC, 2022 CPC, 2022 CRC, 2022 CENC, 2022



### AGING-IN-PLACE

- I. AT LEAST ONE BATHROOM ON ENTRY LEVEL SHALL BE PROVIDED WITH REINFORCEMENT FOR GRAB BARS. MIN 2x8 SOLID LUMBER. LOCATED BETWEEN 32" & 392" ABOVE FINISHED FLOOR. BOTH SIDES OF WATER CLOSET OR ONE SIDE WALL & BACK WALL. SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED. BATHTUB # COMBINATION BATHTUB/SHOWER SHALL BE CONTINUOUS ON EACH END OF THE BATHTUB \$ BACK WALL. BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR SHALL BE LOCATED NO MORE THAN 6" ABOVE BATHTUB RIM. INFORMATION FOR IDENTIFYING THE LOCATION OR REINFORCEMENT SHALL BE PLACED IN OPERATIONS & MAINTENANCE MANUAL. (R327.1.1)
- 2. ELECTRICAL RECEPTACLES OUTLETS, SWITCHES & CONTROLS SHALL BE LOCATED NO MORE THAN 48" TO THE TOP OF THE OUTLET BOX & NO LESS THAN 15" FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISHED FLOOR. (R327.1.2)
- 3. EFFECTIVE JULY 1st, 2024 AT LEAST ONE BATHROOM & ONE BEDROOM DOORWAY ON THE ENTRY LEVEL SHALL HAVE A NET CLEAR OPENING OF NO LESS THAN 32" AT A 90° ANGLE. (R327.1.3)
- 4. DOORBELL BUTTONS SHALL BE INSTALLED NO MORE THAN 48" TO THE TOP OF THE BUTTON, ABOVE THE FINISHED FLOOR. (R327.1.4)

### MECHANICAL

- WOOD BURNING APPLIANCES SHALL BE ONE OF THE FOLLOWING: I.I. A PELLET-FUELED WOOD BURNING HEATER.
- I.2. A U.S. EPA PHASE II CERTIFIED WOOD BURNING HEATER.
- 1.3. AN APPLIANCE OR FIREPLACE DETERMINED TO MEET THE U.S. EPA PARTICULATE MATTER EMISSION STANDARD OF LESS THAN 7.5 GRAMS/HOUR FOR A NON-CATALYTIC WOOD FIRED APPLIANCE OR 4.1 GRAMS/HOUR FOR A CATALYTIC WOOD FIRED
- APPLIANCE & IS APPROVED IN WRITING BY THE APCO. 2. ALL NEWLY INSTALLED GAS FIREPLACES SHALL BE DIRECT VENT & SEALED-COMBUSTION
- TYPE. (CMC 912.2) 3. ANY INSTALLED WOOD STOVE OR PELLET STOVE SHALL HAVE A PERMANENT NSPS LABEL CERTIFYING EMISSION LIMITS.
- 4. TOP CHIMNEY MUST EXTEND A MIN OF 2' ABOVE ANY PART OF THE BUILDING WITHIN 10' (CMC 802.5.4)
- 5. FIREPLACES SHALL HAVE CLOSABLE METAL OR GLASS DOORS, HAVE COMBUSTION AIR INTAKE DRAWN FROM THE OUTSIDE & HAVE A READILY ACCESSIBLE FLUE DAMPENER CONTROL. CONTINUOUS BURNING PILOT LIGHTS ARE PROHIBITED. (CEC 150.0(E))
- 6. PROVIDE COMBUSTION AIR FOR ALL GAS FIRED APPLIANCES PER CMC CHAPTER 7. 7. GAS VENTS PASSING THROUGH AN INSULATED ASSEMBLY SHALL HAVE A METAL INSULATION SHIELD A MIN 2" ABOVE INSULATION. (509.6.2.7)
- 8. GAS WATER HEATER & FURNACE ARE NOT ALLOWED IN AREAS OPENING INTO BATHROOMS, CLOSETS OR BEDROOMS UNLESS INSTALLED IN A CLOSET EQUIPPED WITH A LISTED GASKETED DOOR ASSEMBLY & A LISTED SELF-CLOSING DEVICE WITH ALL COMBUSTION AIR OBTAINED FROM THE OUTDOORS. (CPC 504)
- 9. ROOF TOP EQUIPMENT ON ROOFS WITH OVER 4/12 SLOPE SHALL HAVE A LEVEL 30"x30" WORKING PLATFORM. (CMC 304.2) IO. EXHAUST OPENINGS TERMINATING TO THE OUTDOORS SHALL BE COVERED WITH A
- CORROSION RESISTANT SCREEN  $\frac{1}{4}$ "- $\frac{1}{2}$ " IN OPENING SIZE (NOT REQUIRED FOR CLOTHES DRYERS). (CMC 502.1) II. VENT DRYER TO OUTSIDE OF BUILDING (NOT TO UNDER-FLOOR AREA). VENT LENGTH SHALL
- BE 14' MAX SHALL TERMINATE A MIN OF 3' FROM THE PROPERTY LINE & ANY OPENING INTO THE BUILDING. (CMC 504.4.2) 12. ENVIRONMENTAL AIR DUCTS SHALL NOT TERMINATE LESS THAN 3'TO A PROPERTY LINE, IO'
- TO A FORCED AIR INLET, 3' TO OPENINGS INTO THE BUILDING & SHALL NOT DISCHARGE ON TO A PUBLIC WAY. (CMC 502.2.1) 13. PROVIDE MIN 100IN<sup>2</sup> MAKE-UP AIR FOR CLOTHES DRYERS INSTALLED IN CLOSETS. (CMC
- 504.4.(()) 14. HEATING SYSTEM IS REQUIRED TO MAINTAIN 68° AT 3' ABOVE FLOOR LEVEL \$ 2' FROM
- EXTERIOR WALLS IN ALL HABITABLE ROOMS. (CRC R303.9) 15. BATHROOM FAN SHALL BE MIN VENTILATION RATE OF 50CFM FOR INTERMITTENT OR 25CFM FOR CONTINUOUS VENTILATION.
- 15.1. FAN SHALL BE 3 SONE OR LESS & INSTALLED PER MANUFACTURES SPECS. 15.2. MIN 4" DUCT SHALL VENT TO OUTSIDE & SHALL BE AIR TIGHT WITH CAULKING & GASKET 15.3. FAN IN BATHROOMS CONTAINING TUB OR SHOWER MUST BE CONTROLLED BY A
- HUMIDISTAT & BE ENERGY STAR RATED. IF FAN PROVIDES CONTINUOUS VENTILATION BY THE ENERGY CODE IS EXEMPT.
- 16. CEC STANDARDS SECTION 150(K) REQUIREMENTS FOR INDOOR AIR QUALITY VENTILATION. 16.1. BATHROOM EXHAUST FAN TO BE USED TO PROVIDE THE WHOLE BUILDING VENTILATION FAN & PROVIDE THE FOLLOWING:
  - 16.1.1. THE BATHROOM EXHAUST FAN MUST HAVE A MIN CFM RATING OF 75-CFM 16.1.2. THE BATHROOM EXHAUST FAN IS RATED AT A MAX OF 1.0 SONE.
  - 16.1.3. THE CONTROL SWITCH MUST BE LABELED AS THE WHOLE HOUSE VENTILATION \$ FAN SHOULD OPERATE WHENEVER THE HOME IS OCCUPIED.

### PLUMBING I. UNDERFLOOR CLEANOUTS SHALL NOT BE MORE THAN 5' FROM AN UNDERFLOOR ACCESS,

- ACCESS DOOR OR TRAP DOOR. (CPC 707.9) 2. EXTERIOR HOSE BIBS SHALL BE EQUIPPED WITH A NON-REMOVABLE BACK-FLOW PREVENTION. (CPC 603.5.7)
- 3. SHOWER & TUB COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC OF COMBINATION PRESSURE BALANCE THERMOSTATIC MIXING VALVE TYPE. (CPC 408.3) 4. KITCHEN SINKS REQUIRE A CLEANOUT ABOVE THE FLOOR LEVEL OF THE LOWEST FLOOR OF
- THE BUILDING. AIR GAP FITTING REQUIRED AT DISHWASHER
- 6. WATER CLOSET SHALL BE POSITIONED TO HAVE A MIN 15" FROM ITS CENTER TO THE EDGE OF THE SINK & TO THE TUB.
- ABS PIPING SHALL NOT BE EXPOSED TO DIRECT SUNLIGHT UNLESS PROTECTED BY WATER 7 BASED SYNTHETIC LATEX PAINTS. (CPC 312.13) PVC PIPING SHALL NOT BE EXPOSED TO DIRECT SUNLIGHT UNLESS PROTECTED BY WATER
- BASED SYNTHETIC LATEX PAINT, .04" THICK WRAP OR OTHERWISE PROTECTED FROM UV DEGRADATION. (CPC 312.14)
- OWET LOCATION WHEN USING THE CRC, CBC, & THE CEC. (CPC 408.5) IO. SHOWER COMPARTMENTS, REGARDLESS OF SHAPE, SHALL HAVE A MIN FINISHED INTERIOR OF 10241N2 (32"x32") & SHALL ALSO BE CAPABLE OF ENCOMPASSING A 30" CIRCLE. THE REQUIRED AREA & DIMENSIONS SHALL BE MEASURED AT A HEIGHT EQUAL TO THE TOP OF THE THRESHOLD & SHALL BE MAINTAINED TO A POINT OF NOT LESS THAN 70" ABOVE THE SHOWER DRAIN OUTLET. (CPC 408.6) PROVIDE CURTAIN ROD OR DOOR A MIN OF 22" IN WIDTH (CPC 408.5). SHOWERS & TUBS WITH SHOWERS REQUIRE A NON-ABSORBENT SURFACE UP TO 6' ABOVE THE FLOOR. (CRC R307.2)
- PROVIDE PRESSURE RELIEF VALVE WITH DRAIN TO OUTSIDE FOR WATER HEATER. (CPC 504.6) PROVIDE SEISMIC STRAPPING IN THE UPPER & LOWER THIRD OF THE WATER HEATER A MIN OF 4" ABOVE CONTROLS. (CPC 507.2) THE WATER HEATER SHALL BE OF AN INSTANTANEOUS TYPE OR THE FOLLOWING SHALL BE PROVIDED (NEW CONSTRUCTION ONLY) (CEC 150(N)):
- II.I. A 120V RECEPTACLES PROVIDED WITHIN 3' . A CATEGORY III OR IV VENT, OR A STRAIGHT (WITHOUT BENDS) TYPE B VENT
- 11.2. CONDENSATE DRAIN THAT IS NO MORE THAN 2" HIGHER THAN THE BASE OF THE WATER HEATER
- II.3. WATER HEATERS USING GAS OR PROPANE SHALL DESIGNATE A SPACE  $2\frac{1}{2}$ ' $x2\frac{1}{2}$ ' \$ 7' TALL SUITABLE FOR FUTURE INSTALLATION OF HEAT PUMP WATER HEATER
- 11.4. GAS SUPPLY LINE WITH A MIN 200,000 BTU/HR DEDICATED CAPACITY FOR THE WATER HEATER
- 11.5. DOMESTIC HOT WATER LINES SHALL BE INSULATED. INSULATION SHALL BE THE THICKNESS OF THE PIPE DIAMETER UP TO 2" IN SIZE & MIN 2" THICKNESS FOR PIPES LARGER THAN 2" IN DIAMETER. (CPC 609.11)
- 11.6. A 3" GRAVITY DRAIN SHALL BE PROVIDED AT THE LOW POINT OF UNDERFLOOR SPACES, INSTALLED SO AS TO PROVIDE  $\frac{1}{4}$ "/FOOT GRADE & TERMINATE AT AN EXTERIOR POINT OF THE BUILDING PROTECTED FROM BLOCKAGE. THE OPENING SHALL DIMENSION. LENGTHS OF THE GRAVITY DRAINS OVER IO' IN LENGTH SHALL BE FIRST APPROVED BY THE BUILDING OFFICIAL. (L-V 8.9)
- II.7. WATER HEATERS LOCATED IN ATTICS, CEILING ASSEMBLIES & RAISED FLOOR ASSEMBLIES SHALL SHOW A WATER-TIGHT CORROSION RESISTANT MIN  $I_2^{\parallel}$  DEEP PAN UNDER THE WATER HEATER WITH A MIN  $\frac{3}{4}$ " DRAIN TO THE EXTERIOR OF THE BUILDING. (CPC 507.5)
- 11.8. WATER CLOSET SHALL BE LOCATED IN A SPACE NOT LESS THAN 30" IN WIDTH (15" ON EACH SIDE) & 24" MIN CLEARANCE IN FRONT. (CPC 402.5)
- BATH-TUB FILLER SHALL NOT EXCEED 120°F. (CPC 418) II.IO. PROVIDE ANTI-SIPHON VALVES ON ALL HOSE BIBS. (CPC 603.5.7)
- II.II. FLOOR DRAINS SHALL BE PROVIDED WITH A TRAP PRIMER. (CPC 1007) II.12. MAX WATER FLOW RATES. (CGBSC 4.303.1): •WATER CLOSETS: 1.28-GPF
  - ·URINALS: .125-GPF
  - •KITCHEN FAUCETS: 1.8-GPM @ 60PSI ·LAVATORY FAUCETS: 1.2-GPM @ 60PSI •SHOWERHEADS: 1.8-GPM

### SMOKE DETECTORS & CARBON MONOXIDE DETECTORS

- 2022 CRC SEC. R314 & R315 I. CARBON-MONOXIDE ALARMS SHALL BE INSTALLED IN DWELLING UNITS WITH FUEL-BURNING
- APPLIANCES OR WITH ATTACHED GARAGES (CRC R315) 2. ALL SMOKE DETECTORS & CARBON MONOXIDE DETECTORS WITHIN THE DWELLING UNIT ARE
- TO BE INTERCONNECTED. 3. ALL DWELLING UNITS MUST HAVE SMOKE DETECTORS
- 3.1. ON THE WALL OR CEILING OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF BEDROOMS & IN EACH ROOM USED FOR SLEEPING PURPOSES
- OF ROOM OPENING TO HALLWAY SERVING BEDROOMS EXCEEDS THAT OF THE HALLWAY BY 24" OR MORE 3.3. ONE EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS.
- 4. CARBON MONOXIDE DETECTORS MAY BE COMBINATION SMOKE/CARBON MONOXIDE DETECTORS.
- 5. WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING OR SLEEPING UNIT, THE SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL
- 6. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE & SHALL BE EQUIPPED WITH A BATTERY BACKUP. SMOKE ALARMS WITH INTEGRAL STROBES THAT ARE NOT EQUIPPED WITH BATTERY BACKUP SHALL BE CONNECTED TO AN EMERGENCY ELECTRICAL SYSTEM. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT & WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION.
- 7. SMOKE ALARMS OR DETECTORS SHALL BE INSTALLED A MIN OF 20' HORIZONTAL DISTANCE FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. EXCEPTION: IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH OR PHOTOELECTRIC SMOKE ALARMS SHALL BE PERMITTED TO BE INSTALLED IO' OR GREATER FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. PHOTOELECTRIC SMOKE ALARMS SHALL BE PERMITTED TO BE INSTALLED GREATER THAN 6' FROM A PERMANENTLY INSTALLED COOKING APPLIANCE WHERE THE KITCHEN OR COOKING AREA & ADJACENT SPACES HAVE NO CLEAR INTERIOR PARTITIONS & THE IO' DISTANCES WOULD PROHIBIT THE PLACEMENT OF SMOKE ALARM OR DETECTOR REQUIRED BY OTHER SECTIONS OF THE CODE. (R314.3.3) (NFPA72 SECTION 29.8.3.4)

### FOUNDATIONS & CONCRETE SLABS

#### Concrete Strength(s): 2,500 PSI Rebar Grades: 40 KSI U.O.N.

- I. SLOPE DRAINAGE 6" WITHIN THE FIRST 10' FROM THE FOUNDATION WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT THE IO' DISTANCE, A 2-5% SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING THE WATER AWAY FROM THE FOUNDATION. IMPERVIOUS SURFACES SHALL ALSO BE SLOPED A MIN OF 2% FOR 10' AWAY FROM STRUCTURES TO AN APPROVED DRAINAGE WAY. (CRC R401.3) 2. STEPPED FOOTINGS SHALL BE USED WHEN SLOPE OF FOOTING BOTTOM IS GREATER THAN
- I:IO (∨:H). 3. CONCRETE SLABS: 3½" MIN (CRC R506.1). SLABS UNDER LIVING AREAS & GARAGES SHALL BE REINFORCED WITH WIRE 6"x6", IO GAUGE X IO GAUGE WELDED MESH OR EQUIVALENT STEEL REINFORCEMENT # 4" THICKNESS OF & MIN GRAVEL UNDER THE CONCRETE SLAB. SEPARATE FROM SOIL WITH A 10 MIL POLYETHYLENE VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6" IN LIVING AREAS. A CAPILLARY BREAK SHALL BE INSTALLED WHEN A VAPOR RETARDER IS REQUIRED.
- A PERIMETER WALL. (CRC R408.4)
- 5. MIN SILL BOLTING: 2" ANCHOR BOLTS OR APPROVED ANCHORS AT 6' O.C. MAX FOR ONE-STORY (CRC R403.1.6). USE ANCHOR BOLTS AT 4' O.C. MAX FOR THREE STORY CONSTRUCTION. EMBED BOLTS 7" MIN. THE ANCHOR BOLTS SHALL BE PLACED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. LOCATE END BOLTS NOT LESS THAN 7 BOLT DIAMETERS OR MORE THAN 12" FROM ENDS OF SILL MEMBERS. IN SDC DO & ABOVE: PROVIDE 3"X3"X0.229" PLATE WASHERS ON EACH BOLT AT BRACED OR SHEAR WALL LOCATIONS, STANDARD CUT WASHERS SHALL BE PERMITTED FOR ANCHOR BOLTS NOT LOCATED IN BRACED/SHEAR WALL LINES.

9. THE ADJACENT SPACE NEXT TO SHOWERS WITHOUT THRESHOLDS SHALL BE CONSIDERED A

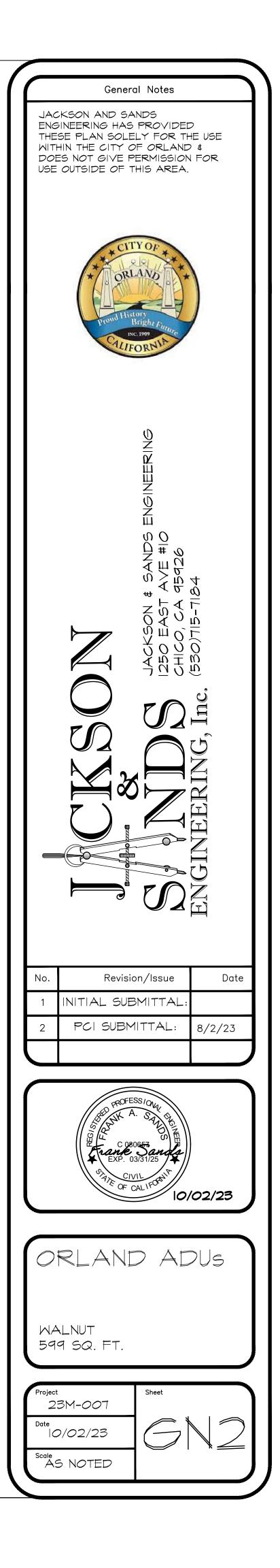
BE SCREENED WITH A CORROSION-RESISTANT WIRE MESH WITH MESH OPENINGS OF  $\frac{1}{4}$ " IN

11.9. THE MAX HOT WATER TEMPERATURE DISCHARGING FROM A BATHTUB OR WHIRLPOOL

3.2. IN THE HALLWAY & IN THE ROOM OPEN TO THE HALLWAY WHERE THE CEILING HEIGHT

BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.

4. PROVIDE 18"x24" FOUNDATION ACCESS THROUGH THE FLOOR OR 16"x24" ACCESS THROUGH



### **2022 CALIFORNIA GREEN BUILDING STANDARDS CODE RESIDENTIAL MANDATORY MEASURES, SHEET 1** (January 2023) Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is

Y N/A RESPON. PARTY	CHAPTER 3 GREEN BUILDING SECTION 301 GENERAL	Y N/A	RESPON. PARTY	<b>4.106.4.2 New multifamily dwellings, hotels and</b> When parking is provided, parking spaces for new r requirements of Sections 4.106.4.2.1 and 4.106.4.2 whole number. A parking space served by electric v
	<b>301.1 SCOPE.</b> Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.			<ul> <li>space shall count as at least one standard automob applicable minimum parking space requirements es for further details.</li> <li>4.106.4.2.1Multifamily development projects with</li> </ul>
	<b>301.1.1 Additions and alterations. [HCD]</b> The mandatory provisions of Chapter 4 shall be applied to additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned area, volume, or size. The requirements shall apply only to and/or within the specific area of the addition or alteration.			than 20 sleeping units or guest rooms. The number of dwelling units, sleeping units or gues this section.
	The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.106.4.3 for application.			1.EV Capable. Ten (10) percent of the total n of parking facilities, shall be electric vehicle c EVSE. Electrical load calculations shall demo system, including any on-site distribution tran EVs at all required EV spaces at a minimum of
	<b>Note:</b> Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing lighting fixtures are not considered alterations for the purpose of this section.			The service panel or subpanel circuit director for future EV charging purposes as "EV CAP,
	<b>Note:</b> On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and			Exceptions: 1.When EV chargers (Level 2 EVSE) are i of EV capable spaces.
	301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of			2.When EV chargers (Level 2 EVSE) are i spaces, the number of EV capable spa EV chargers installed.
	individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.			Notes: a.Construction documents are intended to future EV charging.
	SECTION 302 MIXED OCCUPANCY BUILDINGS			b.There is no requirement for EV spaces t EV chargers are installed for use.
	<b>302.1 MIXED OCCUPANCY BUILDINGS.</b> In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.			<b>2.EV Ready</b> . Twenty-five (25) percent of the Level 2 EV charging receptacles. For multifar
	<ul> <li>Exceptions:</li> <li>1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.</li> <li>2. [HCD] For purposes of <i>CAL</i>Green, live/work units, complying with Section 419 of the <i>California Building</i> code, chapter 1 and accession of the mixed occupancies. Live/Work units chall comply with</li> </ul>			dwelling unit when more than one parking sports for the served to the se
	Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.         DIVISION 4.1       PLANNING AND DESIGN			4.106.4.2.2 Multifamily development projects wit sleeping units or guest rooms. The number of dwelling units, sleeping units or gues this section.
	ABBREVIATION DEFINITIONS:         HCD       Department of Housing and Community Development         BSC       California Building Standards Commission         DSA-SS       Division of the State Architect, Structural Safety         OSHPD       Office of Statewide Health Planning and Development         LR       Low Rise			<b>1.EV Capable</b> . Ten (10) percent of the total n of parking facilities, shall be electric vehicle c EVSE. Electrical load calculations shall demo system, including any on-site distribution tran EVs at all required EV spaces at a minimum of
	HR     High Rise       AA     Additions and Alterations       N     New			The service panel or subpanel circuit director for future EV charging purposes as "EV CAPA
	CHAPTER 4 RESIDENTIAL MANDATORY MEASURES			Exception: When EV chargers (Level 2 EV parking spaces required by Section 4.106 reduced by a number equal to the number Notes:
	SECTION 4.102 DEFINITIONS 4.102.1 DEFINITIONS The following terms are defined in Chapter 2 (and are included here for reference)			a.Construction documents shall show loca
	<b>FRENCH DRAIN.</b> A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.			EV chargers are installed for use. 2.EV Ready. Twenty-five (25) percent of the
	<b>WATTLES.</b> Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also used for perimeter and inlet controls.			Level 2 EV charging receptacles. For multifar dwelling unit when more than one parking spa Exception: Areas of parking facilities serve
	<ul> <li>4.106 SITE DEVELOPMENT</li> <li>4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.</li> </ul>			<b>3.EV Chargers.</b> Five (5) percent of the total r Where common use parking is provided, at le area and shall be available for use by all resid
	<b>4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION.</b> Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.			When low power Level 2 EV charging recepta an automatic load management system (ALM capacity to each space served by the ALMS. shall have sufficient capacity to deliver at leas served by the ALMS. The branch circuit shall have a capacity of not less than 30 amperes. capacity to the required EV capable spaces.
	<ol> <li>Retention basins of sufficient size shall be utilized to retain storm water on the site.</li> <li>Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.</li> </ol>			<b>4.106.4.2.2.1 Electric vehicle charging station</b> Electric vehicle charging stations required by Se
	<ol> <li>Compliance with a lawfully enacted storm water management ordinance.</li> <li>Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or are part of a larger common plan of development which in total disturbs one acre or more of soil.</li> </ol>			Exception: Electric vehicle charging stations se shall not be required to comply with this sectior requirements.
	(Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html)			<b>4.106.4.2.2.1.1 Location.</b> EVCS shall comply with at least one of the follow
	<b>4.106.3 GRADING AND PAVING.</b> Construction plans shall indicate how the site grading or drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:			<ol> <li>The charging space shall be located adjacent the California Building Code, Chapter 11A, 2000</li> <li>The charging space shall be located on an advant space shall be located on advant space space shall be located on advant space spa</li></ol>
	<ol> <li>Swales</li> <li>Water collection and disposal systems</li> <li>French drains</li> <li>Water retention gardens</li> <li>Other retention gardens</li> </ol>			Chapter 2, to the building. Exception: Electric vehicle charging stations Building Code, Chapter 11B, are not require
	<ol> <li>Other water measures which keep surface water away from buildings and aid in groundwater recharge.</li> <li>Exception: Additions and alterations not altering the drainage path.</li> </ol>			4.106.4.2.2.1.2, Item 3. <b>4.106.4.2.2.1.2 Electric vehicle charging statio</b> The charging spaces shall be designed to com
	4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the <i>California Electrical Code</i> , Article 625.			1.The minimum length of each EV space shall b 2.The minimum width of each EV space shall b
	Exceptions: 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions: 1.1 Where there is no local utility power supply or the local utility is unable to supply adequate			3.One in every 25 charging spaces, but not les aisle. A 5-foot (1524 mm) wide minimum aisle s 12 feet (3658 mm).
	power. 1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 4.106.4, may adversely impact the construction cost of the project.			<ul> <li>a.Surface slope for this EV space and the aisle percent slope) in any direction.</li> <li>4.106.4.2.2.1.3 Accessible EV spaces.</li> </ul>
	<ol> <li>Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.</li> </ol>			In addition to the requirements in Sections 4.106 comply with the accessibility provisions for EV cf spaces and EVCS in multifamily developments s 1109A.
	<b>4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.</b> For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the			<b>4.106.4.2.3 EV space requirements.</b> 1.Single EV space required. Install a listed racew circuit. The raceway shall not be less than trade
	proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.			originate at the main service or subpanel and shi proximity to the location or the proposed location raceway termination point, receptacle or charger have a 40-ampere minimum dedicated branch ci installed, or space(s) reserved to permit installati
	Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the <i>California Electrical Code</i> .			Exception: A raceway is not required if a minim installed in close proximity to the location or the construction in accordance with the California B
	<b>4.106.4.1.1 Identification.</b> The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".			2.Multiple EV spaces required. Construction doc location of installed or future EV spaces, recepta information on amperage of installed or future re electrical load calculations. Plan design shall be raceways and related components that are planr concealed areas and spaces shall be installed at

	Y N/	A RESPON. PARTY	installed in close proximity to the location or the p construction in accordance with the California Ele	roposed location of the EV space at the time of original	Y	N/A RESPON. PARTY	_
w multifamily dwellings, hotels and motels and new residential parking facilities. g is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest			<b>4.106.4.2.4 Identification.</b> The service panel or subpanel circuit directory shall ider	ntify the overcurrent protective device space(s) reserved fo	or 🗆		4.304 OUTDOOR WA 4.304.1 OUTDOOR POTABLE a local water efficient landscap
er. A parking space served by electric vehicle supply equipment or designed as a future EV charging count as at least one standard automobile parking space only for the purpose of complying with any inimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2			future EV charging purposes as "EV CAPABLE" in acco 4.106.4.2.5 Electric Vehicle Ready Space Signage.	ordance with the California Electrical Code.			Efficient Landscape Ordinance
tails. Iultifamily development projects with less than 20 dwelling units; and hotels and motels with less			Electric vehicle ready spaces shall be identified by signa Traffic Operations Policy Directive 13-01 (Zero Emission successor(s).				1. The Model Water Effi
ping units or guest rooms. of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to		]	4.106.4.3 Electric vehicle charging for additions and alt	erations of parking facilities serving existing			Title 23, Chapter 2.7, available at: https://w
Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types			multifamily buildings. When new parking facilities are added, or electrical syst altered and the work requires a building permit, ten (10)	tems or lighting of existing parking facilities are added or percent of the total number of parking spaces added or			DIVISION 4.4 M
king facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical n, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all all required EV spaces at a minimum of 40 amperes.			altered shall be electric vehicle charging spaces (EV spaces) Notes:				4.406 ENHANCED DU 4.406.1 RODENT PROOFING
ervice panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved ure EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.			1.Construction documents are intended to demonstrate EV charging.	e the project's capability and capacity for facilitating future			sole/bottom plates at ext openings with cement m agency.
			2.There is no requirement for EV spaces to be constru DIVISION 4.2 ENERGY EFFICIE	icted or available until EV chargers are installed for use.			4.408 CONSTRUCTIO
/hen EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number EV capable spaces.			4.201 GENERAL				percent of the non-hazar 4.408.2, 4.408.3 or 4.40 management ordinance.
When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable spaces, the number of EV capable spaces required may be reduced by a number equal to the number of			<b>4.201.1 SCOPE.</b> For the purposes of mandatory energy e Commission will continue to adopt mandatory standar				Exceptions:
EV chargers installed. tes:			DIVISION 4.3 WATER EFFICIEN 4.303 INDOOR WATER USE	NCY AND CONSERVATION			<ol> <li>Excavated soil and la 2. Alternate waste redu</li> </ol>
Construction documents are intended to demonstrate the project's capability and capacity for facilitating ure EV charging.		]	4.303.1 WATER CONSERVING PLUMBING FIXTURES A urinals) and fittings (faucets and showerheads) shall	<b>ND FITTINGS.</b> Plumbing fixtures (water closets and comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3,			recycle facilities capa close to the jobsite. 3. The enforcing agenc
here is no requirement for EV spaces to be constructed or available until receptacles for EV charging or chargers are installed for use.				lential real property shall be replaced with water-conserving	g 🗆		jobsites are located 4.408.2 CONSTRUCTION WA
Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per			completion, certificate of occupancy, or final p	nt is required prior to issuance of a certificate of final ermit approval by the local building department. See Civil n of a noncompliant plumbing fixture, types of residential			in conformance with Iten necessary and shall be a
ng unit when more than one parking space is provided for use by a single dwelling unit.			buildings affected and other important enactm 4.303.1.1 Water Closets. The effective flush volum	ent dates. ne of all water closets shall not exceed 1.28 gallons per			<ol> <li>Identify the construct reuse on the project</li> <li>Specify if constructio</li> </ol>
tion: Areas of parking facilities served by parking lifts. Aultifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more			flush. Tank-type water closets shall be certified to the Specification for Tank-type Toilets.				bulk mixed (single st 3. Identify diversion fac
its or guest rooms. of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to			<b>Note</b> : The effective flush volume of dual flush of two reduced flushes and one full flush.	toilets is defined as the composite, average flush volume			4. Identify construction generated.
Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types king facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2			<b>4.303.1.2 Urinals.</b> The effective flush volume of wa The effective flush volume of all other urinals shall not	II mounted urinals shall not exceed 0.125 gallons per flush ot exceed 0.5 gallons per flush.			5. Specify that the amo by weight or volume
Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical n, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all all required EV spaces at a minimum of 40 amperes.			4.303.1.3 Showerheads.				4.408.3 WASTE MANAGEME enforcing agency, which demolition waste materia
ervice panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved				ads shall have a maximum flow rate of not more than 1.8 nall be certified to the performance criteria of the U.S. EPA			<b>Note:</b> The owner or con materials will be diverted
ure EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. ception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of				one shower. When a shower is served by more than one showerheads and/or other shower outlets controlled by			4.408.4 WASTE STREAM RE weight of construction ar
king spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be uced by a number equal to the number of EV chargers installed over the five (5) percent required.				minute at 80 psi, or the shower shall be designed to only			lbs./sq.ft. of the building Section 4.408.1
tes: Construction documents shall show locations of future EV spaces.			<b>Note</b> : A hand-held shower shall be con	isidered a showerhead.			4.408.4.1 WASTE STR weight of construction ar
here is no requirement for EV spaces to be constructed or available until receptacles for EV charging or chargers are installed for use.				The maximum flow rate of residential lavatory faucets shall	1		per square foot of the bu requirement in Section 4
Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per			not exceed 1.2 gallons per minute at 60 psi. T not be less than 0.8 gallons per minute at 20 p	The minimum flow rate of residential lavatory faucets shall osi.			4.408.5 DOCUMENTATION. [ compliance with Section
ng unit when more than one parking space is provided for use by a single dwelling unit.				and Public Use Areas. The maximum flow rate of lavatory eas (outside of dwellings or sleeping units) in residential ute at 60 psi.	'		Notes: 1. Sample forms
ception: Areas of parking facilities served by parking lifts. Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE.			5 5 1	cets when installed in residential buildings shall not deliver			(Residential)" documenting of
e common use parking is provided, at least one EV charger shall be located in the common use parking nd shall be available for use by all residents or guests.			4.303.1.4.4 Kitchen Faucets. The maximum	n flow rate of kitchen faucets shall not exceed 1.8 gallons			2. Mixed constru Department of
low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, omatic load management system (ALMS) may be used to reduce the maximum required electrical ity to each space served by the ALMS. The electrical system and any on-site distribution transformers				nporarily increase the flow above the maximum rate, but no d must default to a maximum flow rate of 1.8 gallons per			4.410 BUILDING MAIN 4.410.1 OPERATION AND MA disc, web-based reference
ave sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical			<b>Note:</b> Where complying faucets are unavailab reduction.	ole, aerators or other means may be used to achieve			following shall be placed 1. Directions to the own
ity to the required EV capable spaces.			<b>4.303.1.4.5 Pre-rinse spray valves.</b> When installed, shall meet the requirements ir	n the California Code of Regulations, Title 20 (Appliance			life cycle of the struc 2. Operation and maint a. Equipment an
<b>.2.1 Electric vehicle charging stations (EVCS).</b> ehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.			Efficiency Regulations), Sections 1605.1 (h)(4 (d)(7) and shall be equipped with an integral a	) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 utomatic shutoff.			photovoltaic s appliances an b. Roof and yard
on: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels t be required to comply with this section. See California Building Code, Chapter 11B, for applicable nents.				e and code section have been reprinted from the <i>California</i> ency Regulations),Section 1605.1 (h)(4) and Section			c. Space condition d. Landscape irri e. Water reuse s
<b>.2.1.1 Location.</b> all comply with at least one of the following options:			TABLE H-2				<ol> <li>Information from loca resource consumption</li> <li>Public transportation</li> </ol>
e charging space shall be located adjacent to an accessible parking space meeting the requirements of California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.			STANDARDS FOR COMMERCIA	AL PRE-RINSE SPRAY			<ol> <li>Educational material and what methods a</li> <li>Information about was</li> </ol>
e charging space shall be located on an accessible route, as defined in the California Building Code, oter 2, to the building.			VALUES MANUFACTURED ON				water. 7. Instructions for main feet away from the fo
ption: Electric vehicle charging stations designed and constructed in compliance with the California ling Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section			PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)			8. Information on requir painting, grading aro
6.4.2.2.1.2, Item 3. .2.1.2 Electric vehicle charging stations (EVCS) dimensions.			Product Class 1 (≤ 5.0 ozf)	1.00			<ol> <li>Information about sta 10. A copy of all special 11. Information from the</li> </ol>
rging spaces shall be designed to comply with the following: inimum length of each EV space shall be 18 feet (5486 mm).			Product Class 2 (> 5.0 ozf and $\leq$ 8.0 ozf) Product Class 3 (> 8.0 ozf)	1.20			space around reside 12. Information and/or d
inimum width of each EV space shall be 9 feet (2743 mm).				prerinse spray values manufactured on or after January not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]			4.410.2 RECYCLING BY OCC building site, provide readily ac depositing, storage and collecti
n every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is			4.303.2 Submeters for multifamily buildings and dwellin buildings.	ng units in mixed-used residential/commercial			corrugated cardboard, glass, p ordinance, if more restrictive.
3658 mm). Se slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083			Submeters shall be installed to measure water usage California Plumbing Code.	e of individual rental dwelling units in accordance with the			Exception: Rural jurisdic 42649.82 (a this section
slope) in any direction. .2.1.3 Accessible EV spaces.			<b>4.303.3 Standards for plumbing fixtures and fittings.</b> P accordance with the <i>California Plumbing Code</i> , and shall m 1701.1 of the <i>California Plumbing Code</i> .	lumbing fixtures and fittings shall be installed in neet the applicable standards referenced in Table			
n to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall ith the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready nd EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section			NOTE:				DIVISION 4.5 EN
.3 EV space requirements.			THIS TABLE COMPILES THE DATA IN SECTION 4 CONVENIENCE FOR THE USER.	·			<b>4.501.1 Scope</b> The provisions of this chapter s
V space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch e raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close			FIXTURE TYPE	FLOW RATE			irritating and/or harmful to the of SECTION 4.502 DEFI
to the location or the proposed location of the EV space. Construction documents shall identify the ermination point, receptacle or charger location, as applicable. The service panel and/ or subpanel shall -ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device			SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI			5.102.1 DEFINITIONS The following terms are defined
or space(s) reserved to permit installation of a branch circuit overcurrent protective device.			LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI			AGRIFIBER PRODUCTS. Agr cores, not including furniture, fi
on: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is I in close proximity to the location or the proposed location of the EV space, at the time of original ction in accordance with the California Electrical Code.			LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI			COMPOSITE WOOD PRODUC medium density fiberboard. "Co structural panels, structural cor
EV spaces required. Construction documents shall indicate the raceway termination point and the finite for spaces, receptacles or EV chargers. Construction documents shall also provide			KITCHEN FAUCETS METERING FAUCETS	1.8 GPM @ 60 PSI 0.2 GAL/CYCLE			wood I-joists or finger-jointed IL 93120.1.
n on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required and related components that are planned to be installed underground, enclosed, inaccessible or in				1.28 GAL/FLUSH			DIRECT-VENT APPLIANCE. A combustion from the outside at
d areas and spaces shall be installed at the time of original construction.			URINALS	0.125 GAL/FLUSH			

### N/A RESPON. PARTY

YES NOT APPLICABLE RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

### **FDOOR WATER USE**

DOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with efficient landscape ordinance or the current California Department of Water Resources' Model Water Iscape Ordinance (MWELO), whichever is more stringent.

Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, e 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are ilable at: https://www.water.ca.gov/

### ON 4.4 MATERIAL CONSERVATION AND RESOURCE ENCY

HANCED DURABILITY AND REDUCED MAINTENANCE ENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in ottom plates at exterior walls shall be protected against the passage of rodents by closing such ngs with cement mortar, concrete masonry or a similar method acceptable to the enforcing

NSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING STRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 nt of the non-hazardous construction and demolition waste in accordance with either Section , 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste

### ions:

avated soil and land-clearing debris.

rnate waste reduction methods developed by working with local agencies if diversion or ycle facilities capable of compliance with this item do not exist or are not located reasonably se to the jobsite. e enforcing agency may make exceptions to the requirements of this section when isolated bsites are located in areas beyond the haul boundaries of the diversion facility.

TRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan ormance with Items 1 through 5. The construction waste management plan shall be updated as sary and shall be available during construction for examination by the enforcing agency.

ntify the construction and demolition waste materials to be diverted from disposal by recycling, se on the project or salvage for future use or sale. ecify if construction and demolition waste materials will be sorted on-site (source separated) or

mixed (single stream) ntify diversion facilities where the construction and demolition waste material collected will be ntify construction methods employed to reduce the amount of construction and demolition waste ecify that the amount of construction and demolition waste materials diverted shall be calculated

### weight or volume, but not by both.

STE MANAGEMENT COMPANY. Utilize a waste management company, approved by the ing agency, which can provide verifiable documentation that the percentage of construction and tion waste material diverted from the landfill complies with Section 4.408.1.

The owner or contractor may make the determination if the construction and demolition waste als will be diverted by a waste management company.

STE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined of construction and demolition waste disposed of in landfills, which do not exceed 3.4 t. of the building area shall meet the minimum 65% construction waste reduction requirement in

4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined t of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds uare foot of the building area, shall meet the minimum 65% construction waste reduction ment in Section 4.408.1

**JMENTATION**. Documentation shall be provided to the enforcing agency which demonstrates ance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in

documenting compliance with this section. fixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

### LDING MAINTENANCE AND OPERATION

**RATION AND MAINTENANCE MANUAL.** At the time of final inspection, a manual, compact eb-based reference or other media acceptable to the enforcing agency which includes all of the ng shall be placed in the building:

ections to the owner or occupant that the manual shall remain with the building throughout the cycle of the structure.

eration and maintenance instructions for the following: Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major

appliances and equipment. Roof and yard drainage, including gutters and downspouts.

Space conditioning systems, including condensers and air filters. Landscape irrigation systems.

Water reuse systems.

rmation from local utility, water and waste recovery providers on methods to further reduce ource consumption, including recycle programs and locations.

blic transportation and/or carpool options available in the area. icational material on the positive impacts of an interior relative humidity between 30-60 percent

d what methods an occupant may use to maintain the relative humidity level in that range. rmation about water-conserving landscape and irrigation design and controllers which conserve

tructions for maintaining gutters and downspouts and the importance of diverting water at least 5 away from the foundation rmation on required routine maintenance measures, including, but not limited to, caulking,

nting, grading around the building, etc. prmation about state solar energy and incentive programs available.

copy of all special inspections verifications required by the enforcing agency or this code. ormation from the Department of Forestry and Fire Protection on maintenance of defensible ace around residential structures. prmation and/or drawings identifying the location of grab bar reinforcements.

YCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a provide readily accessible area(s) that serves all buildings on the site and are identified for the prage and collection of non-hazardous materials for recycling, including (at a minimum) paper, ardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling more restrictive.

tion: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.

### **DN 4.5 ENVIRONMENTAL QUALITY**

### 4.501 GENERAL

s of this chapter shall outline means of reducing the quality of air contaminants that are odorous, r harmful to the comfort and well being of a building's installers, occupants and neighbors.

#### 4.502 DEFINITIONS NUTION

terms are defined in Chapter 2 (and are included here for reference)

PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door luding furniture, fixtures and equipment (FF&E) not considered base building elements.

WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and ity fiberboard. "Composite wood products" does not include hardboard, structural plywood, els, structural composite lumber, oriented strand board, glued laminated timber, prefabricated r finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section

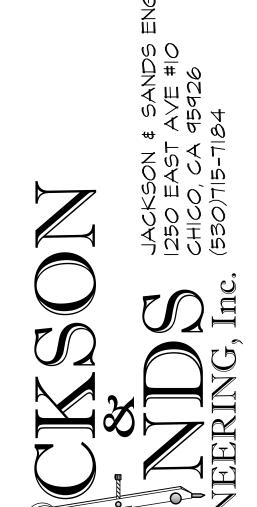
**APPLIANCE.** A fuel-burning appliance with a sealed combustion system that draws all air for rom the outside atmosphere and discharges all flue gases to the outside atmosphere.

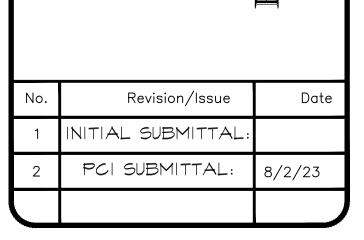
DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BUILD

### General Notes

JACKSON AND SANDS ENGINEERING HAS PROVIDED THESE PLAN SOLELY FOR THE USE WITHIN THE CITY OF ORLAND & DOES NOT GIVE PERMISSION FOR USE OUTSIDE OF THIS AREA.











WALNUT 599 SQ. FT.

23M-007 10/02/23 AS NOTED

# **2022 CALIFORNIA GREEN BUILDING STANDARDS CODE RESIDENTIAL MANDATORY MEASURES, SHEET 2** (January 2023)

	<ul> <li>MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O<sup>3</sup>/g ROC).</li> <li>Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.</li> <li>MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.</li> <li>PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).</li> <li>Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).</li> <li>REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.</li> <li>VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).</li> </ul>	TABLE 4.504.2 - SEALANT VOC LIMIT         (Less Water and Less Exempt Compounds in Grammer         SEALANTS         ARCHITECTURAL         MARINE DECK         NONMEMBRANE ROOF         ROADWAY         SINGLE-PLY ROOF MEMBRANE		TABLE 4.504.5 - FORMALDEHYDE LIMITS1         MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION         PRODUCT       CURRENT LIMIT	CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS 702 QUALIFICATIONS
	<ul> <li>compound to the "Base Reactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundredths of a gram (g O<sup>3</sup>/g ROC).</li> <li>Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.</li> <li><b>MOISTURE CONTENT.</b> The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.</li> <li><b>PRODUCT-WEIGHTED MIR (PWMIR).</b> The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).</li> <li>Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).</li> <li><b>REACTIVE ORGANIC COMPOUND (ROC).</b> Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.</li> <li><b>VOC.</b> A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain</li> </ul>	SEALANTS       ARCHITECTURAL       MARINE DECK       NONMEMBRANE ROOF       ROADWAY	<b>VOC LIMIT</b> 250		702 QUALIFICATIONS
	<ul> <li>Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.</li> <li>MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.</li> <li>PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).</li> <li>Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).</li> <li>REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.</li> <li>VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain</li> </ul>	ARCHITECTURAL MARINE DECK NONMEMBRANE ROOF ROADWAY	250	PRODUCT CURRENT LIMIT	
	<ul> <li>MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.</li> <li>PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging). Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).</li> <li>REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.</li> <li>VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain</li> </ul>	MARINE DECK NONMEMBRANE ROOF ROADWAY			
	<ul> <li>PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging). Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).</li> <li>REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.</li> <li>VOC. A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain</li> </ul>	NONMEMBRANE ROOF ROADWAY	760	HARDWOOD PLYWOOD VENEER CORE 0.05	<b>702.1 INSTALLER TRAINING.</b> HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or
	<ul> <li>article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).</li> <li>Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).</li> <li><b>REACTIVE ORGANIC COMPOUND (ROC).</b> Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.</li> <li><b>VOC.</b> A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain</li> </ul>	ROADWAY		HARDWOOD PLYWOOD COMPOSITE CORE 0.05	certification program. Uncertified persons may perform HVAC installations when under the direct supervision ar responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems.
	Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a). <b>REACTIVE ORGANIC COMPOUND (ROC).</b> Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere. <b>VOC.</b> A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain		300 250	PARTICLE BOARD 0.09	Examples of acceptable HVAC training and certification programs include but are not limited to the following:
	ozone formation in the troposphere. <b>VOC.</b> A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain	SINGLE-FET NOOT MEMBRANE	450	MEDIUM DENSITY FIBERBOARD     0.11       THIN MEDIUM DENSITY FIBERBOARD2     0.13	<ol> <li>State certified apprenticeship programs.</li> <li>Public utility training programs.</li> </ol>
	<b>VOC.</b> A volatile organic compound (VOC) broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain	OTHER	420	1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED	<ol> <li>Training programs sponsored by trade, labor or statewide energy consulting or verification organizatio</li> <li>Programs sponsored by manufacturing organizations.</li> </ol>
	with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain	SEALANT PRIMERS		BY THE CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE	5. Other programs acceptable to the enforcing agency.
	hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a).	ARCHITECTURAL		WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF.	<b>702.2 SPECIAL INSPECTION [HCD].</b> When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection
		NON-POROUS	250	CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.	other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate compete to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In additio
	<b>4.503 FIREPLACES</b> <b>4.503.1 GENERAL</b> . Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed	POROUS	775	2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).	other certifications or qualifications acceptable to the enforcing agency, the following certifications or education n considered by the enforcing agency when evaluating the qualifications of a special inspector:
	woodstove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves,	MODIFIED BITUMINOUS	500		1. Certification by a national or regional green building program or standard publisher.
	pellet stoves and fireplaces shall also comply with applicable local ordinances.		760 750	DIVISION 4.5 ENVIRONMENTAL QUALITY (continued)	<ol> <li>Certification by a statewide energy consulting or verification organization, such as HERS raters, buildir performance contractors, and home energy auditors.</li> </ol>
	4.504 POLLUTANT CONTROL 4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING	OTHER	750	4.504.3 CARPET SYSTEMS. All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions	3 Successful completion of a third party apprentice training program in the appropriate trade
	<b>CONSTRUCTION.</b> At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component			from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)	Notes:
	openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.			See California Department of Public Health's website for certification programs and testing labs.	<ol> <li>Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.</li> </ol>
	4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.			https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.	<ol> <li>HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).</li> </ol>
		TABLE 4.504.3 - VOC CONTENT LIN	MITS FOR	4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the	
	<b>4.504.2.1</b> Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality	ARCHITECTURAL COATINGS <sub>2,3</sub>		California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic	employ one or more special inspectors to provide inspection or other duties necessary to substantiate complianc
	management district rules apply:	GRAMS OF VOC PER LITER OF COATING, LES COMPOUNDS	SS WATER & LESS EXEMPT	Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specification 01350)	this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification fr
	<ol> <li>Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where</li> </ol>	COATING CATEGORY	VOC LIMIT	See California Department of Public Health's website for certification programs and testing labs.	recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.
	applicable or SCAQMD Rule 1168 VOC limits, as shown in Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic	FLAT COATINGS	50	https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.	<b>Note:</b> Special inspectors shall be independent entities with no financial interest in the materials or the
	compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and tricloroethylene), except for aerosol products, as specified in Subsection 2 below.	NON-FLAT COATINGS	100	<b>4.504.3.2 Carpet adhesive.</b> All carpet adhesive shall meet the requirements of Table 4.504.1.	project they are inspecting for compliance with this code.
	<ol> <li>Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in</li> </ol>	NONFLAT-HIGH GLOSS COATINGS	150	4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed, at least 80% of floor area receiving	
	<ol> <li>Aerosol adnesives, and smaller unit sizes of adnesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 1 pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including</li> </ol>	SPECIALTY COATINGS		resilient flooring shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,"	<b>703 VERIFICATIONS</b> <b>703.1 DOCUMENTATION.</b> Documentation used to show compliance with this code shall include but is
	than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of <i>California Code of Regulations</i> , Title 17, commencing with section 94507.	ALUMINUM ROOF COATINGS	400	Version 1.2, January 2017 (Emission testing method for California Specification 01350)	limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or oth methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific
	ů – Ever State Sta	BASEMENT SPECIALTY COATINGS	400	See California Department of Public Health's website for certification programs and testing labs.	documentation or special inspection is necessary to verify compliance, that method of compliance will be specifie the appropriate section or identified applicable checklist.
	<b>4.504.2.2 Paints and Coatings.</b> Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, unless more stringent local limits	BITUMINOUS ROOF COATINGS BITUMINOUS ROOF PRIMERS	50 350	hhtps://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.	
	apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 4.504.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss	BITOMINOUS ROOF PRIMERS BOND BREAKERS	350	4.504.5 COMPOSITE WOOD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard	
	coating, based on its gloss, as defined in subsections 4.21, 4.36, and 4.37 of the 2007 California Air Resources Board, Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in	CONCRETE CURING COMPOUNDS	350	composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.),	
	Table 4.504.3 shall apply.	CONCRETE/MASONRY SEALERS	100	by or before the dates specified in those sections, as shown in Table 4.504.5	
	<b>4.504.2.3 Aerosol Paints and Coatings.</b> Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic	DRIVEWAY SEALERS	50	<b>4.504.5.1 Documentation.</b> Verification of compliance with this section shall be provided as requested	
	compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of <i>California Code of Regulations</i> , Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air	DRY FOG COATINGS	150	by the enforcing agency. Documentation shall include at least one of the following:	
	Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8. Rule 49.	FAUX FINISHING COATINGS	350	<ol> <li>Product certifications and specifications.</li> <li>Chain of custody certifications.</li> </ol>	
	<b>4.504.2.4 Verification.</b> Verification of compliance with this section shall be provided at the request of the	FIRE RESISTIVE COATINGS	350	<ol> <li>Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).</li> </ol>	
	enforcing agency. Documentation may include, but is not limited to, the following:	FLOOR COATINGS	100	<ol> <li>Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA</li> </ol>	
	<ol> <li>Manufacturer's product specification.</li> <li>Field verification of on-site product containers.</li> </ol>	FORM-RELEASE COMPOUNDS GRAPHIC ARTS COATINGS (SIGN PAINTS)	250	0121, CSA 0151, CSA 0153 and CSA 0325 standards. 5. Other methods acceptable to the enforcing agency.	
		HIGH TEMPERATURE COATINGS	420		
		INDUSTRIAL MAINTENANCE COATINGS	250	4.505 INTERIOR MOISTURE CONTROL	
	TABLE 4.504.1 - ADHESIVE VOC LIMIT <sub>1,2</sub>	LOW SOLIDS COATINGS1	120	<b>4.505.1 General.</b> Buildings shall meet or exceed the provisions of the <i>California Building Standards Code</i> .	
	(Less Water and Less Exempt Compounds in Grams per Liter)	MAGNESITE CEMENT COATINGS	450	<ul> <li>4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by</li> <li>California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the</li> </ul>	
	ARCHITECTURAL APPLICATIONSVOC LIMITINDOOR CARPET ADHESIVES50	MASTIC TEXTURE COATINGS	100	California Residential Code, Chapter 5, shall also comply with this section.	
	CARPET PAD ADHESIVES 50	METALLIC PIGMENTED COATINGS	500	<b>4.505.2.1 Capillary break.</b> A capillary break shall be installed in compliance with at least one of the following:	
	OUTDOOR CARPET ADHESIVES 150		250	1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with	
	WOOD FLOORING ADHESIVES 100	PRETREATMENT WASH PRIMERS PRIMERS, SEALERS, & UNDERCOATERS	420	a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding, shrinkage, and curling, shall be used. For additional information, see American Concrete Institute,	
	RUBBER FLOOR ADHESIVES 60	REACTIVE PENETRATING SEALERS	100 350	ACI 302.2R-06. 2. Other equivalent methods approved by the enforcing agency.	
	SUBFLOOR ADHESIVES 50	RECYCLED COATINGS	250	<ol> <li>3. A slab design specified by a licensed design professional.</li> </ol>	
	CERAMIC TILE ADHESIVES 65	ROOF COATINGS	50	4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent	
	VCT & ASPHALT TILE ADHESIVES     50       DRYWALL & PANEL ADHESIVES     50	RUST PREVENTATIVE COATINGS	250	moisture content. Moisture content shall be verified in compliance with the following:	
	DRYWALL & PANEL ADHESIVES50COVE BASE ADHESIVES50	SHELLACS		<ol> <li>Moisture content shall be determined with either a probe-type or contact-type moisture meter.Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements</li> </ol>	
	MULTIPURPOSE CONSTRUCTION ADHESIVE 70	CLEAR	730	found in Section 101.8 of this code. 2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end	
	STRUCTURAL GLAZING ADHESIVES 100		550	of each piece verified.	
	SINGLE-PLY ROOF MEMBRANE ADHESIVES 250	SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100	<ol> <li>At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.</li> </ol>	
	OTHER ADHESIVES NOT LISTED 50	STAINS	250	Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to	
	SPECIALTY APPLICATIONS	STONE CONSOLIDANTS	450	enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying recommendations prior to enclosure.	
	PVC WELDING 510	SWIMMING POOL COATINGS	340	4.506 INDOOR AIR QUALITY AND EXHAUST	
	CPVC WELDING 490		100	<ul> <li>4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:</li> </ul>	
	ABS WELDING 325	TUB & TILE REFINISH COATINGS	420	<ol> <li>Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.</li> </ol>	
	PLASTIC CEMENT WELDING     250       ADHESIVE PRIMER FOR PLASTIC     550	WATERPROOFING MEMBRANES WOOD COATINGS	250 275	<ol> <li>Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidity control.</li> </ol>	
	ADHESIVE PRIMER FOR PLASTIC 550 CONTACT ADHESIVE 80	WOOD COATINGS	350	a. Humidity controls shall be capable of adjustment between a relative humidity range less than or	
	SPECIAL PURPOSE CONTACT ADHESIVE 250	ZINC-RICH PRIMERS	340	equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of adjustment	
	STRUCTURAL WOOD MEMBER ADHESIVE 140	1. GRAMS OF VOC PER LITER OF COATING, I	NCLUDING WATER &	<ul> <li>b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)</li> </ul>	
	TOP & TRIM ADHESIVE 250	EXEMPT COMPOUNDS 2. THE SPECIFIED LIMITS REMAIN IN EFFECT			
	SUBSTRATE SPECIFIC APPLICATIONS	ARE LISTED IN SUBSEQUENT COLUMNS IN TH	HE TABLE.	Notes:	
	METAL TO METAL 30	3. VALUES IN THIS TABLE ARE DERIVED FRO THE CALIFORNIA AIR RESOURCES BOARD, A		1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.	
	PLASTIC FOAMS 50	SUGGESTED CONTROL MEASURE, FEB. 1, 20	08. MORE INFORMATION IS	2. Lighting integral to bathroom exhaust fans shall comply with the <i>California Energy Code</i> .	
	POROUS MATERIAL (EXCEPT WOOD) 50	AVAILABLE FROM THE AIR RESOURCES BOAI		4.507 ENVIRONMENTAL COMFORT         4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be	
	WOOD   30     FIBERGLASS   80			sized, designed and have their equipment selected using the following methods:	
	FIBERGLASS 80			<ol> <li>The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J - 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.</li> </ol>	
				<ol> <li>Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.</li> </ol>	
	1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.			<ol> <li>Select heating and cooling equipment according to ANSI/ACCA 3 Manual S - 2014 (Residential Equipment Selection), or other equivalent design software or methods.</li> </ol>	
	2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE			Exception: Use of alternate design temperatures necessary to ensure the system functions are	
	THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.			acceptable.	
DISCLAIMER:T	HIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORM		UILDING DEPARTMENT JURISDICTIONS, TH	S CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER TO MEET THOSE INDIVIDUAL NEEDS.	ISER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.

### NOT APPLICABLE RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

### **CHAPTER 7 INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS 702 QUALIFICATIONS**

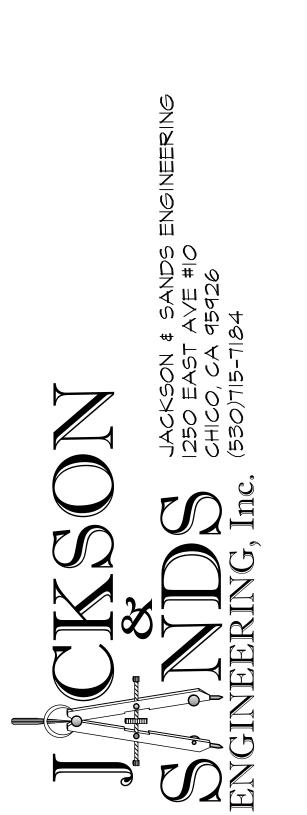
#### 1. State certified apprenticeship programs. Public utility training programs.

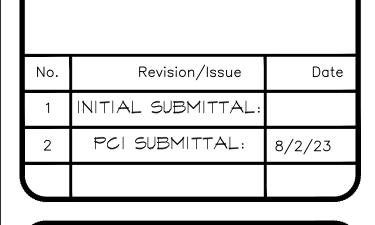
### 702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the

### **703 VERIFICATIONS**

### General Notes JACKSON AND SANDS ENGINEERING HAS PROVIDED THESE PLAN SOLELY FOR THE USE WITHIN THE CITY OF ORLAND \$ DOES NOT GIVE PERMISSION FOR USE OUTSIDE OF THIS AREA.



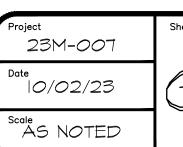


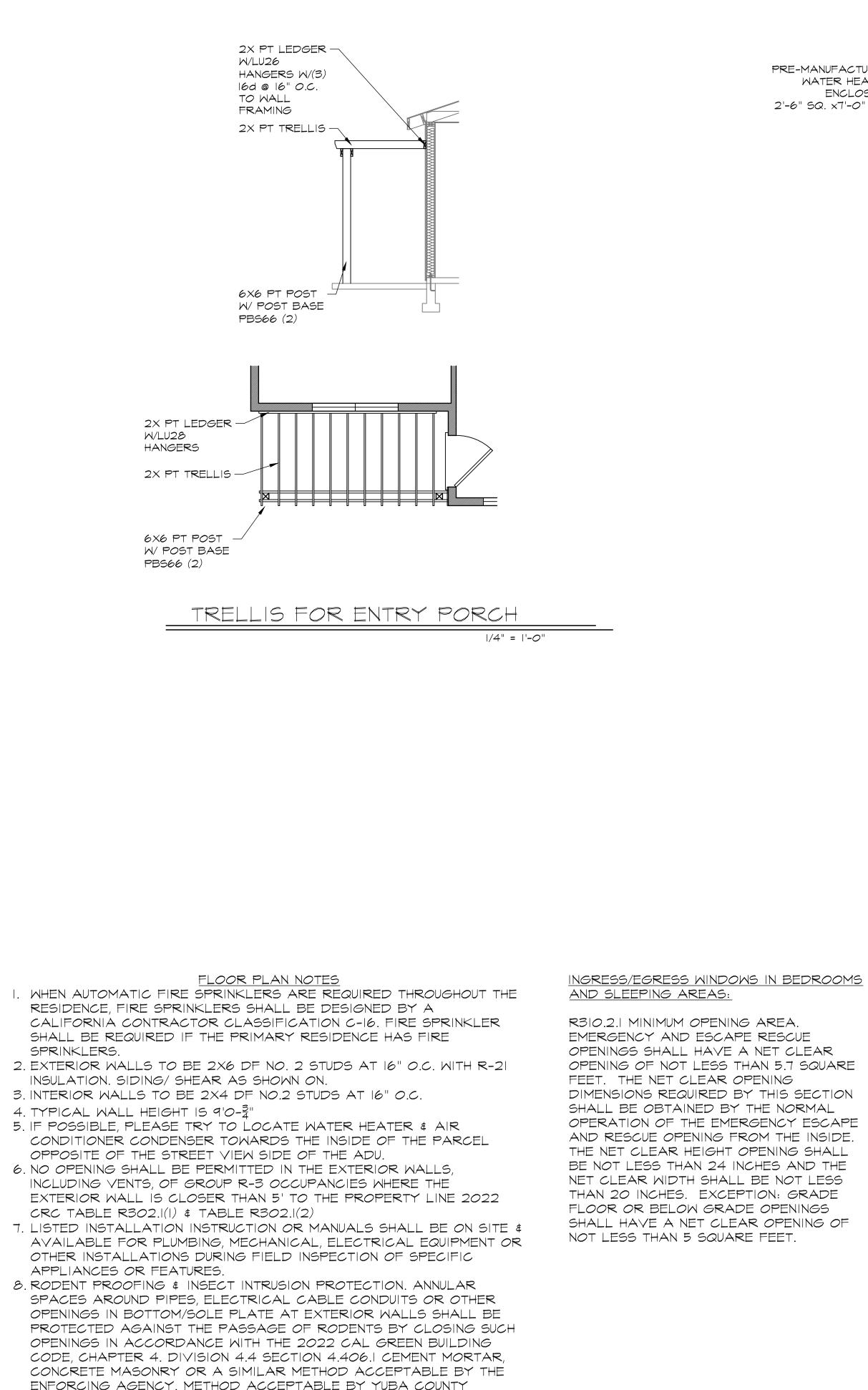






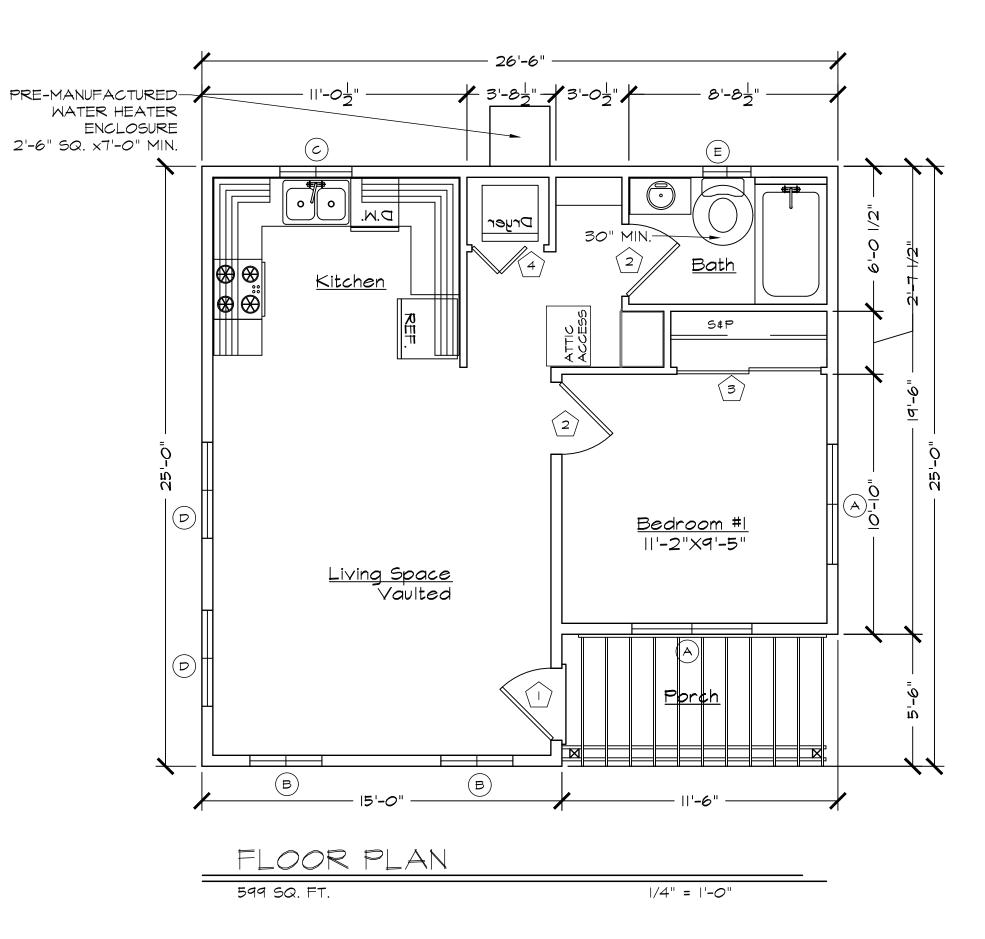
WALNUT 599 SQ. FT





BUILDING DIVISION WOULD BE LOW VOC CAULKING WITH

NON-COMBUSTIBLE FILLING MATERIAL.



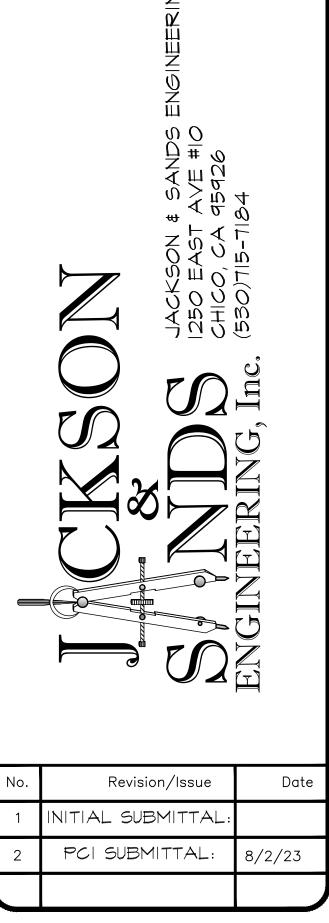
DOC	OR SCHE	EDULE						
DOOR		DOOR SIZE		DOOR	6 0 D F			
SYMBOL	WIDTH	HEIGHT	THICK	TYPE	CORE	MATERIAL	FRAME	NOTES:
(1)	3'-0"	6'-8"	1-3/4"	SINGLE DOOR	SOLID	VNL/GLASS	WOOD	MIN. 32" FRONT ENTRY DO TEMPERED GLAZING W/ CC THRESHOLD
2	3'-0"	6'-8"	1-3/4"	SINGLE DOOR	HOLLOW	WOOD	WOOD	MIN 32" INTERIOR DOG
3	6'-0"	6'-8"	1-3/4"	BI-PASS	HOLLOW	WOOD	WOOD	BI PASS CLOSET DOC
4	3'-0"	6'-8"	-3/4"	BI-FOLD	HOLLOW	WOOD	WOOD	BI FOLD CLOSET DOC
,					•	•		

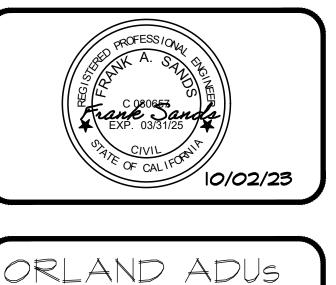
### WINDOW SCHEDULE

WINDOW	WINDOW SIZE		OPER.	QNTY.	FRAME	HEAD	U-FACTOR	SHGC	
SYMBOL	WIDTH	HEIGHT	OPER.	QNTT.		HEIGHT		JHCC	
A	5'-0"	4'-0"	SLIDER	2	VINYL	6'-8"	0.3	0.23	EGRESS
В	3'-0"	4'-0"	SLIDER	I	VINYL	6'-8"	0.3	0.23	TEMPERE
٢	3'-0"	3'-0"	SLIDER	I	VINYL	6'-8"	0.3	0.23	
	4'-0"	4'-0"	SLIDER	I	VINYL	6'-8"	0.3	0.23	
E	2'-0"	3'-0"	SLIDER	I	VINYL	6'-8"	0.3	0.23	T C

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23M-007 10/02/23 AS NOTED

DOOR W/ COMPLIANT DOORS \_\_\_\_\_ OORS

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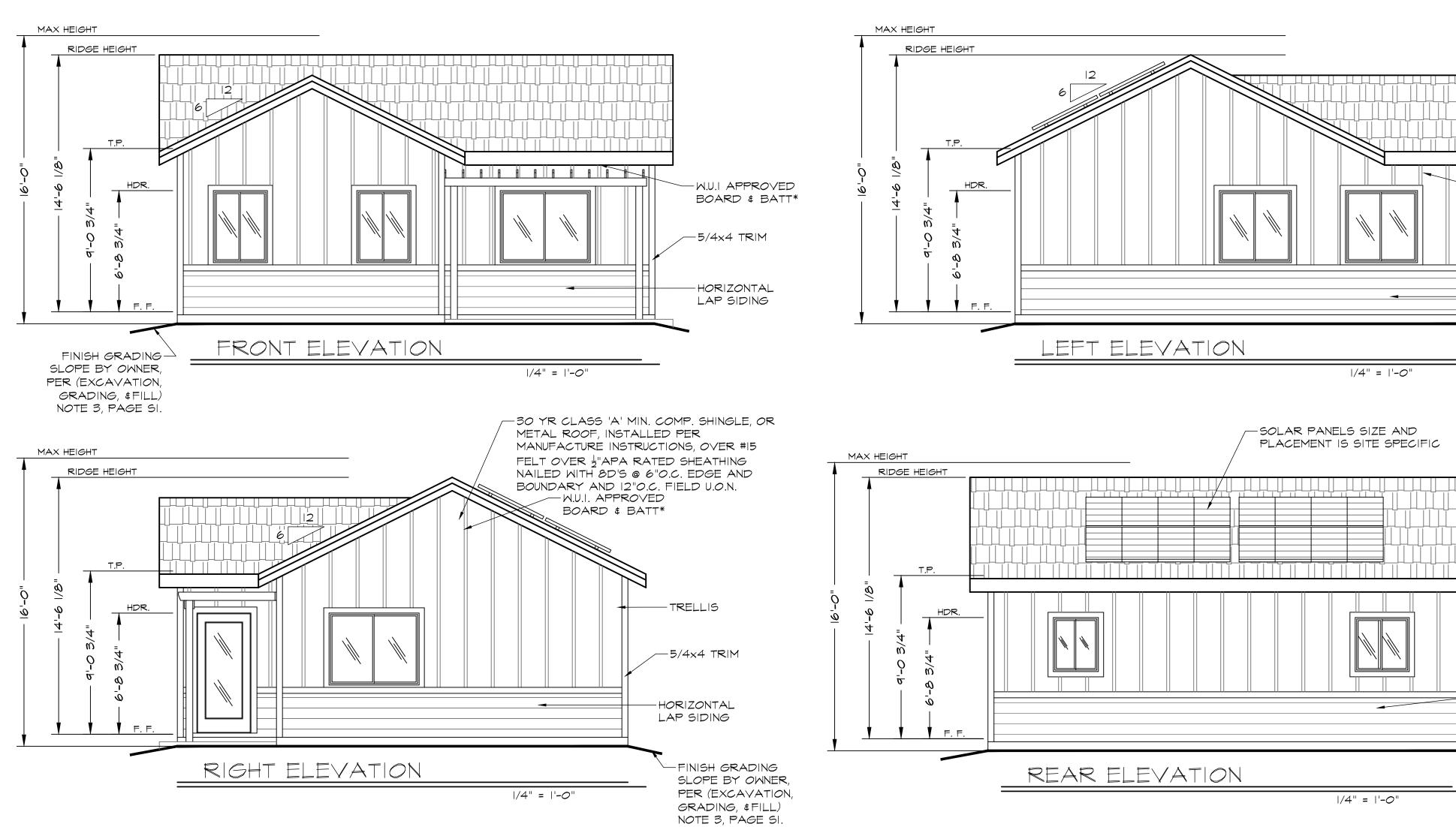
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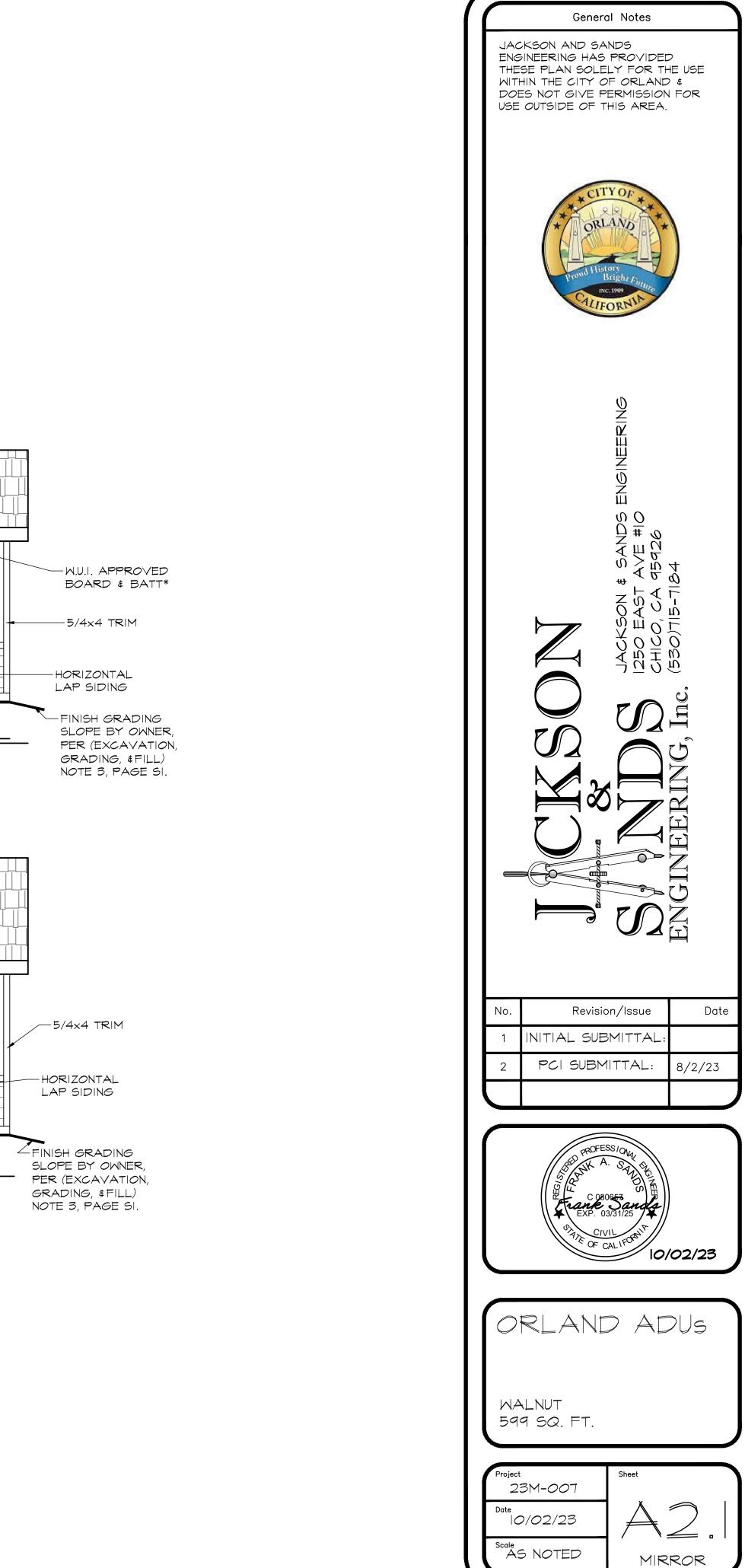
REQ. IN BEDROOM #|

RED @ FRONT DOOR

TEMPERED, OBSCURED

R319.1 ADDRESS IDENTIFICATION. BUILDINGS SHALL BE PROVIDED WITH APPROVED ADDRESS IDENTIFICATION. THE ADDRESS IDENTIFICATION SHALL BE LEGIBLE AND PLACED IN A POSITION THAT IS VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. ADDRESS IDENTIFICATION CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND. ADDRESS NUMBERS SHALL BE ARABIC NUMBERS OR ALPHABETICAL LETTERS. NUMBERS SHALL NOT BE SPELLED OUT. EACH CHARACTER SHALL BE NOT LESS THAN 4 INCHES (102 MM) IN HEIGHT WITH A STROKE WIDTH OF NOT LESS THAN 0.5 INCH (12.7 MM). WHERE REQUIRED BY THE FIRE CODE OFFICIAL, ADDRESS IDENTIFICATION SHALL BE PROVIDED IN ADDITIONAL APPROVED LOCATIONS TO FACILITATE EMERGENCY RESPONSE. WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING ADDRESS CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL , BE USED TO IDENTIFY THE STRUCTURE. ADDRESS IDENTIFICATION SHALL BE MAINTAINED. 



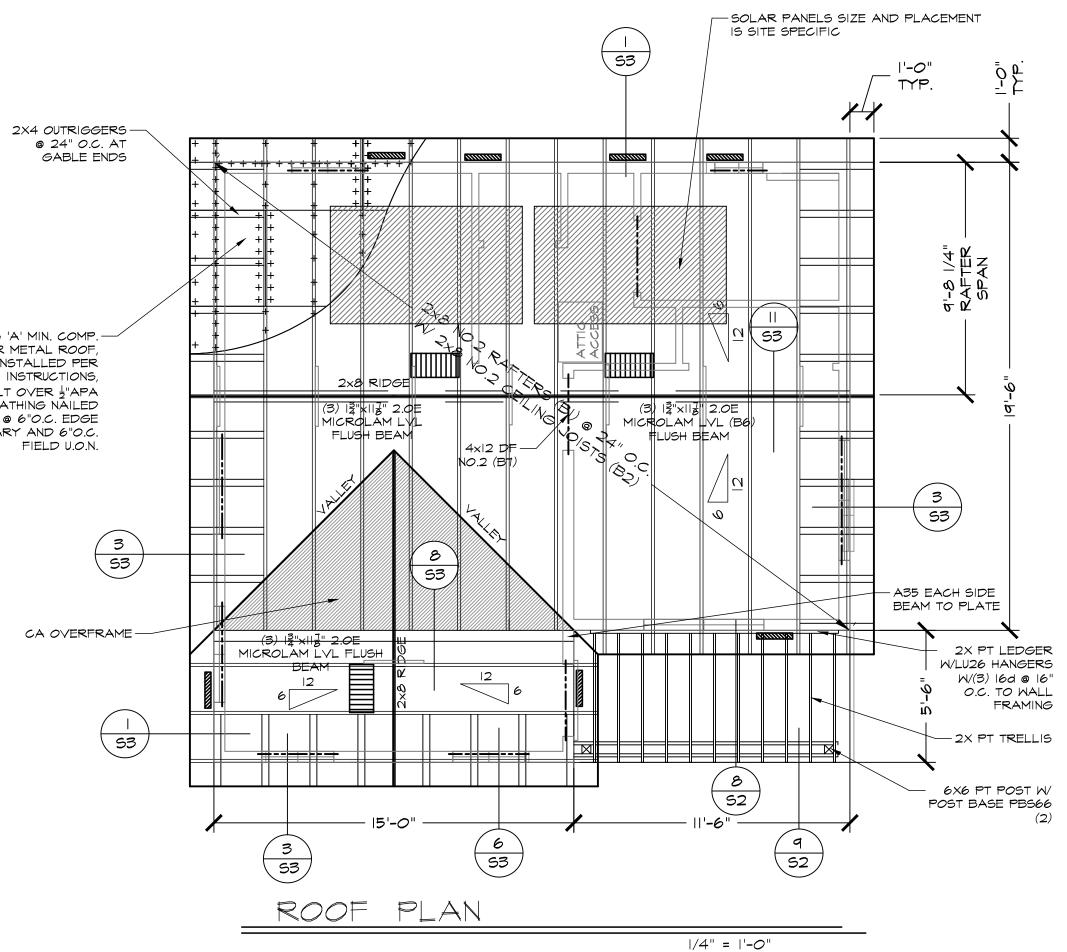


30 YR CLASS 'A' MIN. COMP.-SHINGLE, OR METAL ROOF, INSTALLED PER MANUFACTURE INSTRUCTIONS, OVER #15 FELT OVER 2"APA RATED SHEATHING NAILED WITH 8D'S @ 6"O.C. EDGE AND BOUNDARY AND 6"O.C. FIELD U.O.N.

ATTIC VEN \* EQUIVAL

ATTIC SPACE

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Notes: I. ALL EXTERIOR HEADER TO BE 6x8 DF NO.2 U.N.O. 2. ALL INTERIOR HEADER TO BE 4×6 DF NO.2 U.N.O.

ATTIC VENTILATION * EQUIVALENT MEANS			ARE ACCEF	YABLE.				
DESCRIPTION	SQUARE FOOTAGE	REQUIREMENT	VALUE	PROPOSED VENT	SYMBOL	NET VENT AREA/ VENT	# VENTS	IN <sup>2</sup> PROVIDED
ATTIC SPACE TOTAL	599	1/150	4.71 FT <sup>2</sup> 679 IN <sup>2</sup>					
LOWER VENT		1/300	2.36 FT <sup>2</sup> 340 IN <sup>2</sup>	EV223-I/8		39 IN <sup>2</sup> /LF	٩	312 IN <sup>2</sup>
UPPER VENTS		1/300	2.36 FT <sup>2</sup> 340 IN <sup>2</sup>	HALF ROUND DORMER BH24-1/8		100 IN2	4	300 IN <sup>2</sup>
				TRIANGULAR 8:12 GABLE END VENT		35 IN <sup>2</sup>	2	70 IN <sup>2</sup>
							TOTAL=	682 IN <sup>2</sup>

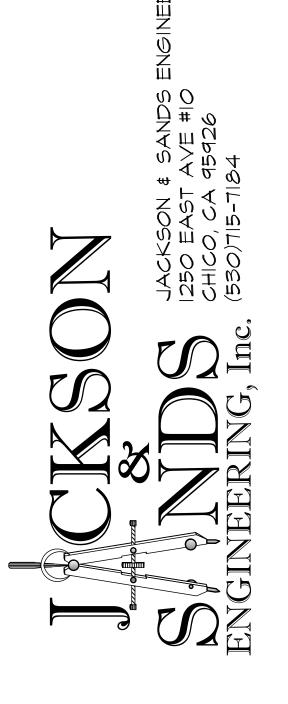
General Notes

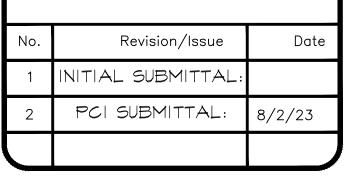
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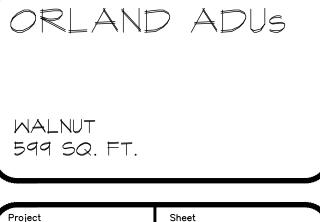
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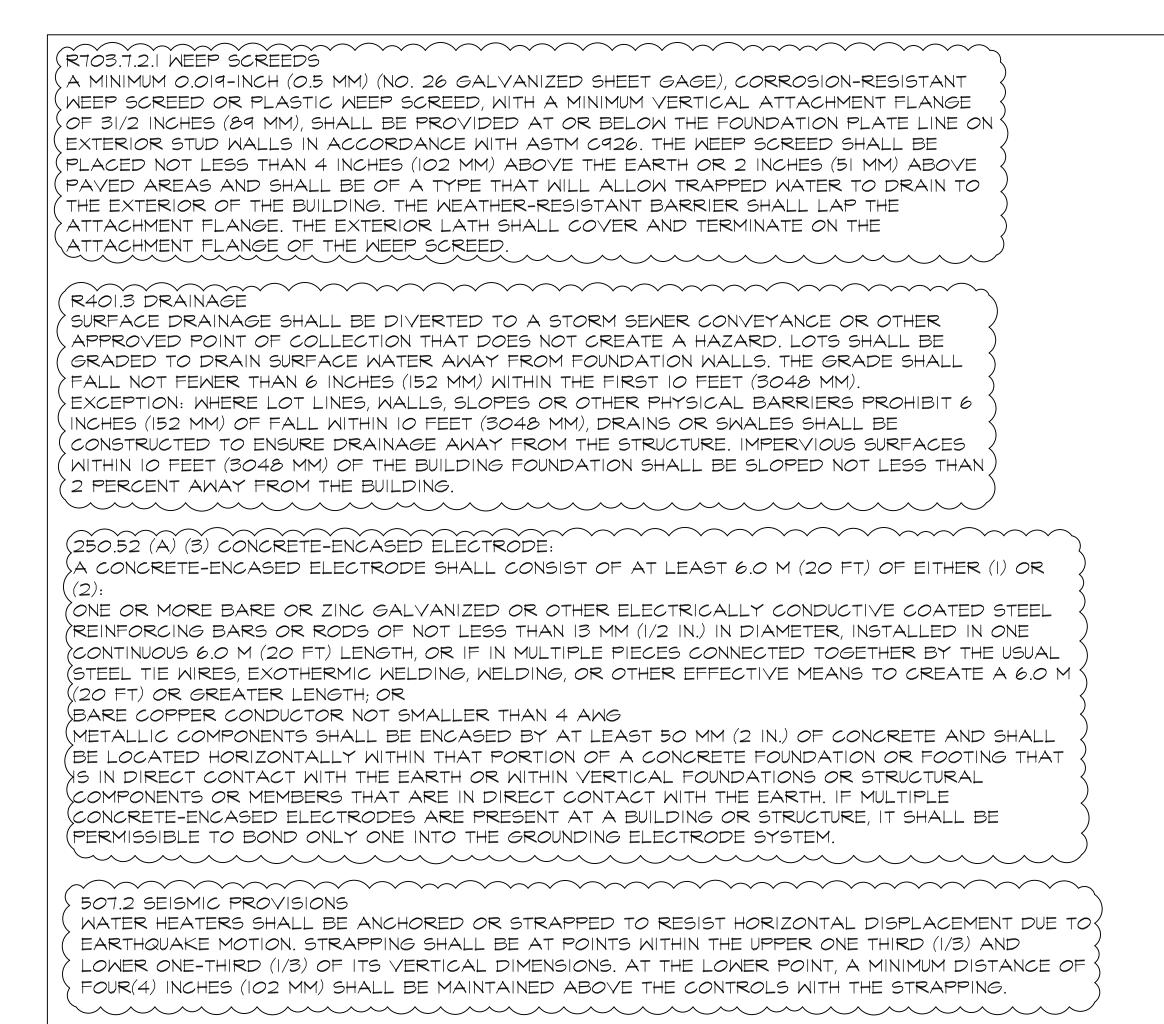
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Project 23M-007

Date 10/02/23 AS NOTED

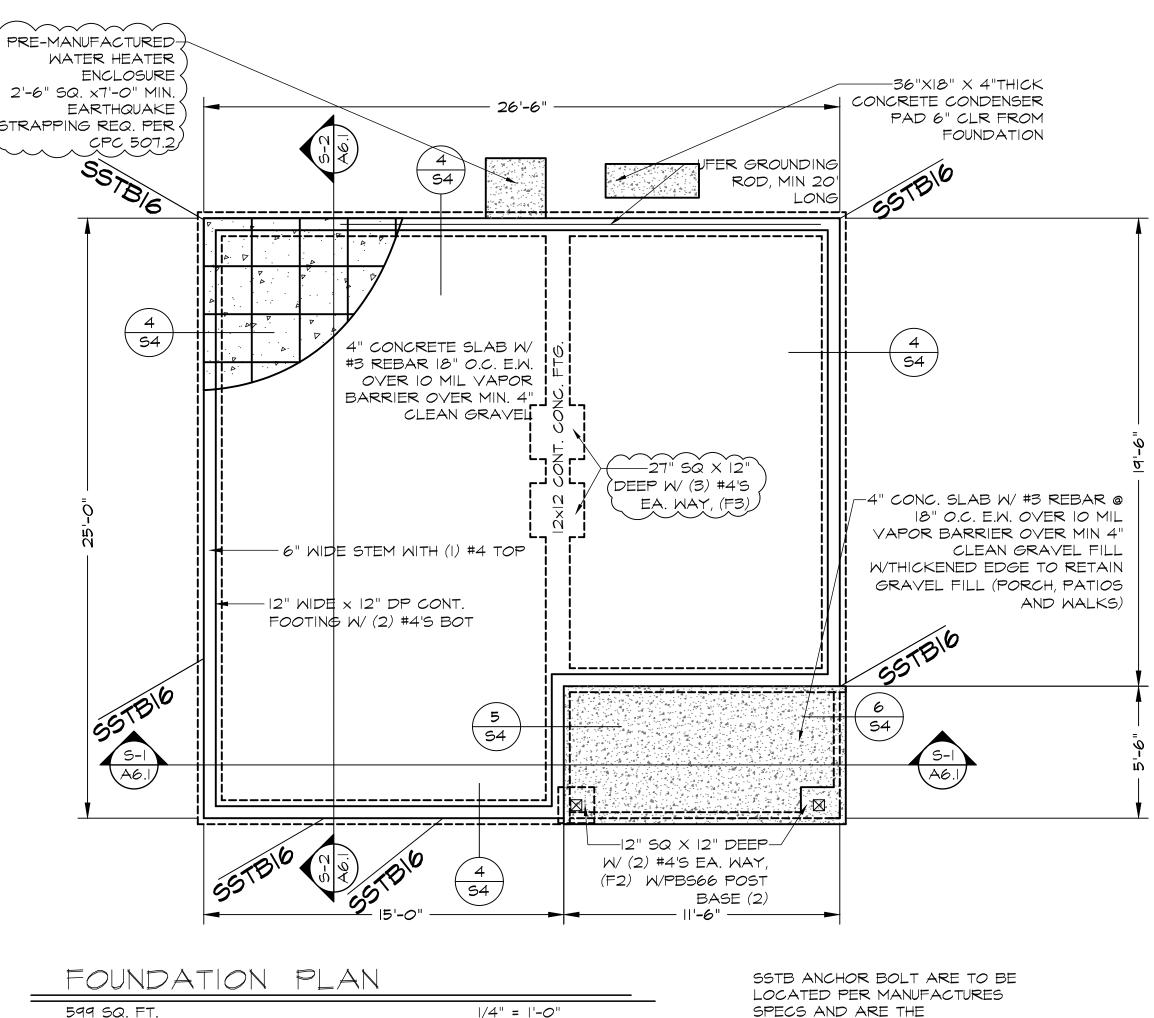
NOTES:

- I. ALL HEADERS TO BE 6X8 DF NO.I U.N.O 2. TWO LAYERS OF ASPHALT SHINGLES WITH SLOPE ROOFS 2/12 TO 4/12 PER CRC R905.2 3. ROOF TERMINATION EACH VENT PIPE OR STACK SHALL EXTEND THROUGH ITS FLASHING AND SHALL TERMINATE VERTICALLY NOT LESS THAN 6" INCHES ABOVE THE ROOF NO LESS THAN I' FOOT A VERTICAL SURFACE.
- 4. EACH VENT SHALL TERMINATE NOT LESS THAN IO' FEET FROM, OR NOT LESS THAN 3' FEET ABOVE, AN OPENABLE WINDOW, DOOR, OPENING, AIR INTAKE OR VENT SHAFT, OR LESS THAN 3' FEET FOF A LOT LINE, ALLEY AND STREET EXCEPTED.
- 5. ABS AND PVC PIPING EXPOSED TO SUNLIGHT SHALL BE PROTECTED BY WATER BASED SYNTHETIC LATEX PAINT.



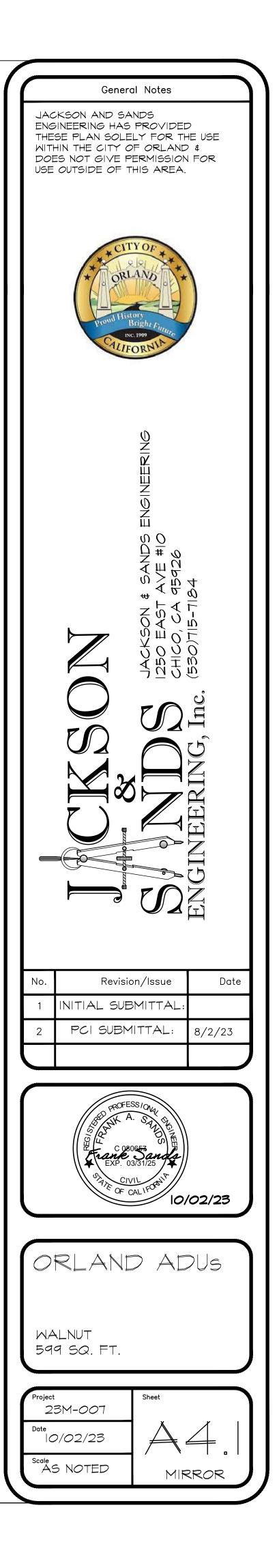
### NOTES:

- I. IF PARCEL WHERE THIS ADU IS TO BE CONSTRUCTED IN AN AREA KNOWN TO HAVE EXPANSIVE SOIL OR UPON DISCOVERY AT FOUNDATION EXCAVATION EXPANSIVE SOIL IS FOUND, THE ADDITIONAL DESIGN BY A CALIFORNIA REGISTERED DESIGN PROFESSIONAL SHALL BE REQUIRED, SUBMITTED TO THE CITY OF ORLAND AND APPROVED PRIOR TO FOUNDATION INSPECTION FOR THIS BUILDING.
- 2. THIS ADU DESIGN IS FOR A TYPICAL CITY OF ORLAND FLAT PARCEL NOT EXCEEDING A SLOPE OF 2%. IF SITE CONDITIONS EXCEED THIS SLOPE, THEN ADDITIONAL FOUNDATION DESIGN WILL BE REQUIRED BY A CALIFORNIA REGISTERED DESIGN PROFESSIONAL.
- 3. PRIOR TO ANY EXCAVATION FOR THIS PROJECT. THE OWNER AND OR CONTRACTOR SHALL REVIEW COMPLETE THE REQUREMENTS ON THE USA NORTH WEBSITE. WWW.Usanorth.org THE OWNER AND OR CONTRACTOR HAVE A LEGAL OBLIGATION TO CONTACT, TWO WORKING DAYS, BEFORE COMMENCING DIGGING. USA NORTH BY TELEPHONE. THIS CONTACT TELEPHONE NUMBER IS 811 OR 1-800-227-2600. (CALIFORNIA GOVERNMENT CODE SEC. 4216)
- 4. THESE PLANS ARE DEIGNED FOR NATIVE SOIL AND UNDISTURBED SOIL CONDITIONS. IF PARCEL HAS IMPORTED UNCONSOLIDATED SOIL, UNCONSOLIDATED ROCK FRAGMENTS OR DISTURBED SOIL, THEN A SOIL COMPACTION REPORT SHALL BE REQUIRED AT TIME OF PERMIT APPLICATION. IF IMPORTED FILL OR DISTURBED SOIL CONDITIONS ARE FOUND AT THE TIME OF FOUNDATION EXCAVATION, A SOILS COMPACTION REPORT SHALL BE REQUIRED TO BE SUBMITTED AND APPROVED BY THE CITY OF ORLAND BUILDING DIVISION, PRIOR TO FOUNDATION INSPECTION. IF FOUNDATION DESIGN CHANGES ARE REQUIRED, THEN DESIGN AND DRAWINGS SHALL BE SUBMITTED WITH WET STAMPS AND SIGNATURES FROM A CALIFORNIA REGISTERED DESIGN PROFESSIONAL TO ACCOMMODATE UNUSUAL SOIL OR GEOLOGIC CONDITIONS SHALL BE SUBMITTED TO THE CITY OF ORLAND BUILDING DIVISION FOR REVIEW AND APPROVAL
- 5. PORTIONS OF THE ADU CLOSER TO THE PROPERTY LINE THAN THE DISTANCES SPECIFIED IN CRC TABLE 302.I(I) OR IF APPLICABLE, 2022 CRC TABLE 302.I(2), SHALL REQUIRE A CONSTRUCTION OF A LISTED I-HOUR FIREWALL ASSEMBLY SEPARATION OR OTHER APPROVED METHOD SPECIFIED IN THIS CODE. THE COMPLIANCE MEANS SHALL BE PROVIDED WITH THE SITE PLAN AT TIME OF APPLICATION. THIS MAY REQUIRE ADDITIONAL PLAN DESIGN BY A CALIFORNIA REGISTERED DESIGN PROFESSIONAL FOR EMERGENCY EGRESS, AND, LIGHT AND VENTILATION.

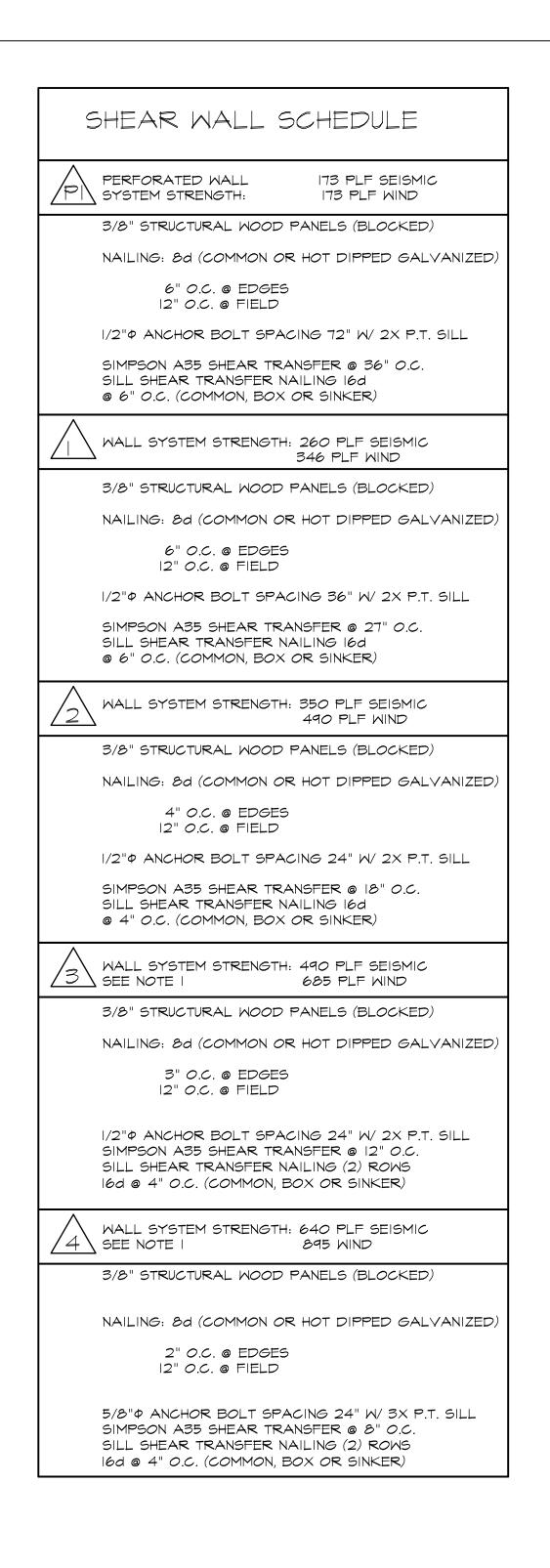


|/4" = |'-0"

SPECS AND ARE THE RESPONSIBILITY OF THE FRAMING CONTRACTOR TO LOCATE, BASED ON TYPICAL FRAMING METHODS.



NOTE: FOR 2 POUR CONDITION, SSTBIG'S SHOULD BE INCREASED BY ONE SIZE TO SSTB20'S





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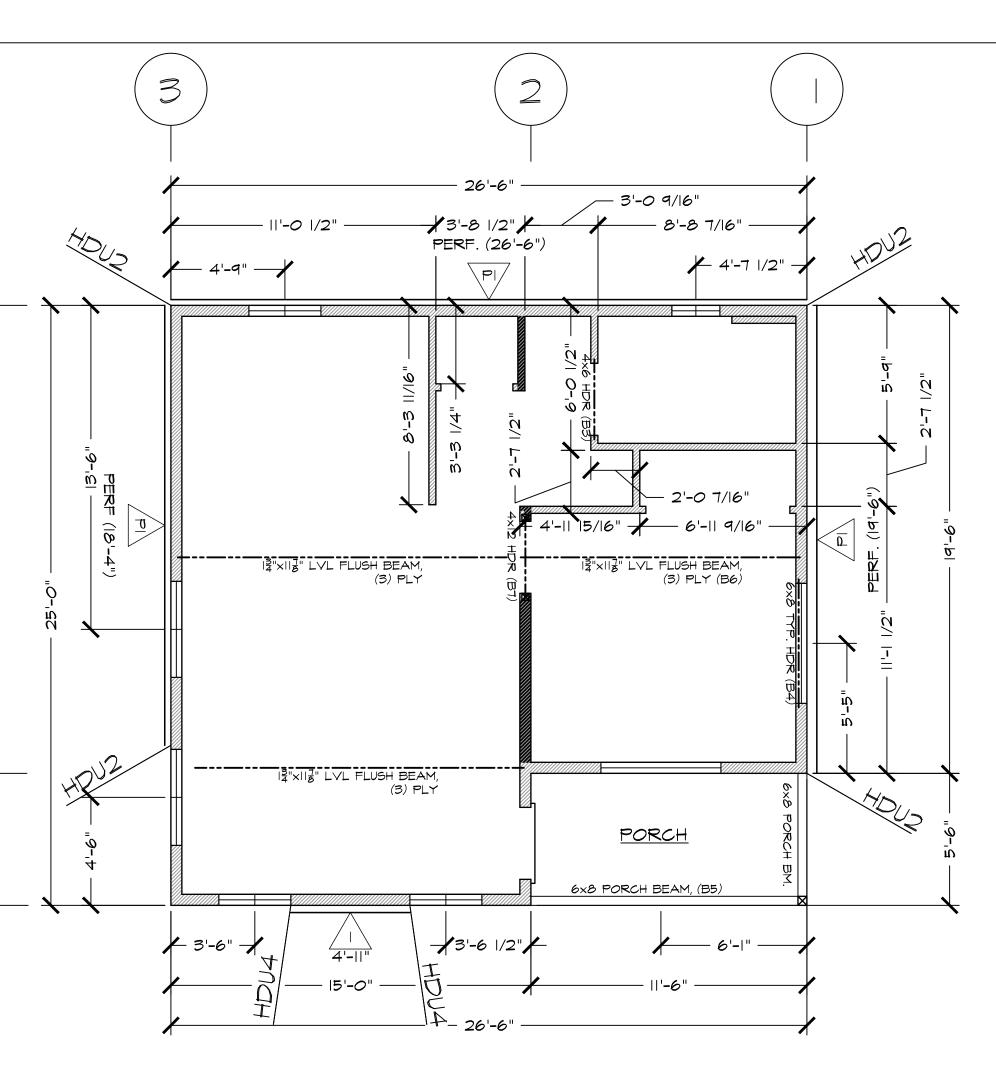
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### DOOR SCHEDULE

DOOR		DOOR SIZE		DOOR CORE MA		MATERIAL	FRAME	NOTES:
SYMBOL	WIDTH	HEIGHT	THICK	TYPE	CORE		FRAME	NOTES:
$\frown$	3'-0"	6'-8"	-3/4"	SINGLE DOOR	SOLID	VNL/GLASS	WOOD	MIN. 32" FRONT ENTRY DOOR W/ TEMPERED GLAZING W/ COMPLIANT THRESHOLD
2	3'-0"	6'-8"	-3/4"	SINGLE Door	HOLLOW	WOOD	WOOD	MIN 32" INTERIOR DOORS
3	6'-0"	6'-8"	-3/4"	BI-PASS	HOLLOW	WOOD	WOOD	BI PASS CLOSET DOORS
4	3'-0"	6'-8"	-3/4"	BI-FOLD	HOLLOW	WOOD	WOOD	BI FOLD CLOSET DOORS

	DOW SC	HEDULE							
WINDOW	WINDOW SIZE		OPER.	QNTY.	FRAME	HEAD	U-FACTOR	SHGC	NOTES:
SYMBOL	WIDTH	HEIGHT	OF LIK.	QINTT.		HEIGHT		JHOC	
A	5'-0"	4'-0"	SLIDER	2	VINYL	6'-8"	.30	.23	EGRESS REQ. IN BEDROOM #1
В	3'-0"	4'-0"	SLIDER		VINYL	6'-8"	.30	.23	TEMPERED @ FRONT DOOR
$\odot$	3'-0"	3'-0"	SLIDER		VINYL	6'-8"	.30	.23	
D	4'-0"	4'-0"	SLIDER		VINYL	6'-8"	.30	.23	
E	2'-0"	3'-0"	SLIDER		VINYL	6'-8"	.30	.23	TEMPERED, OBSCURED



### NOTES:

- I. ALL HEADERS TO BE 6X8 DF NO.I U.N.O.

- CONSTRUCTION NOTES.

### SHEAR WALL & FRAMING PLAN 599 SQ. FT. |/4" = |'-*O*"

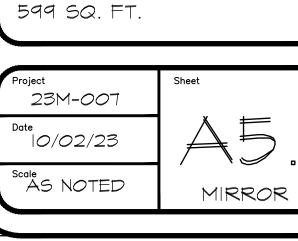
SSTB ANCHOR BOLT ARE TO BE LOCATED PER MANUFACTURES SPECS AND ARE THE RESPONSIBILITY OF THE FRAMING CONTRACTOR TO LOCATE, BASED ON TYPICAL FRAMING METHODS.

General Notes

JACKSON AND SANDS ENGINEERING HAS PROVIDED THESE PLAN SOLELY FOR THE USE WITHIN THE CITY OF ORLAND & DOES NOT GIVE PERMISSION FOR USE OUTSIDE OF THIS AREA.



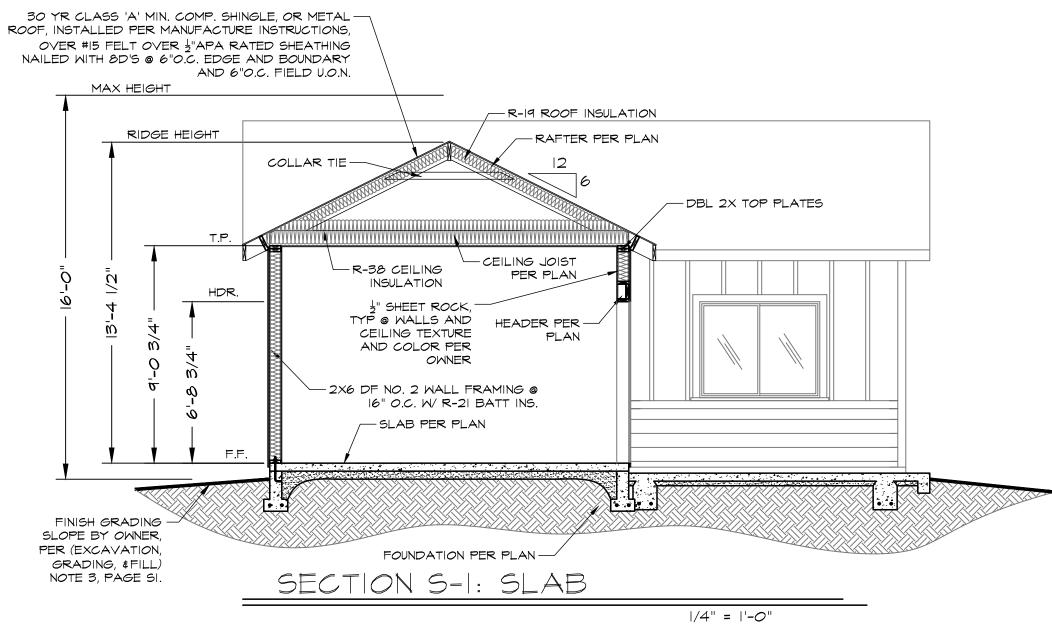
0 Q  $\overrightarrow{D} \pm \mathscr{O}$ り田UL  $\dot{0} \underline{0} \dot{0} \dot{0}$  $m \pm m$ i n n m Revision/Issue Date INITIAL SUBMITTAL PCI SUBMITTAL: 8/2/23 BOFESS 10/02/23 ORLAND ADUS WALNUT

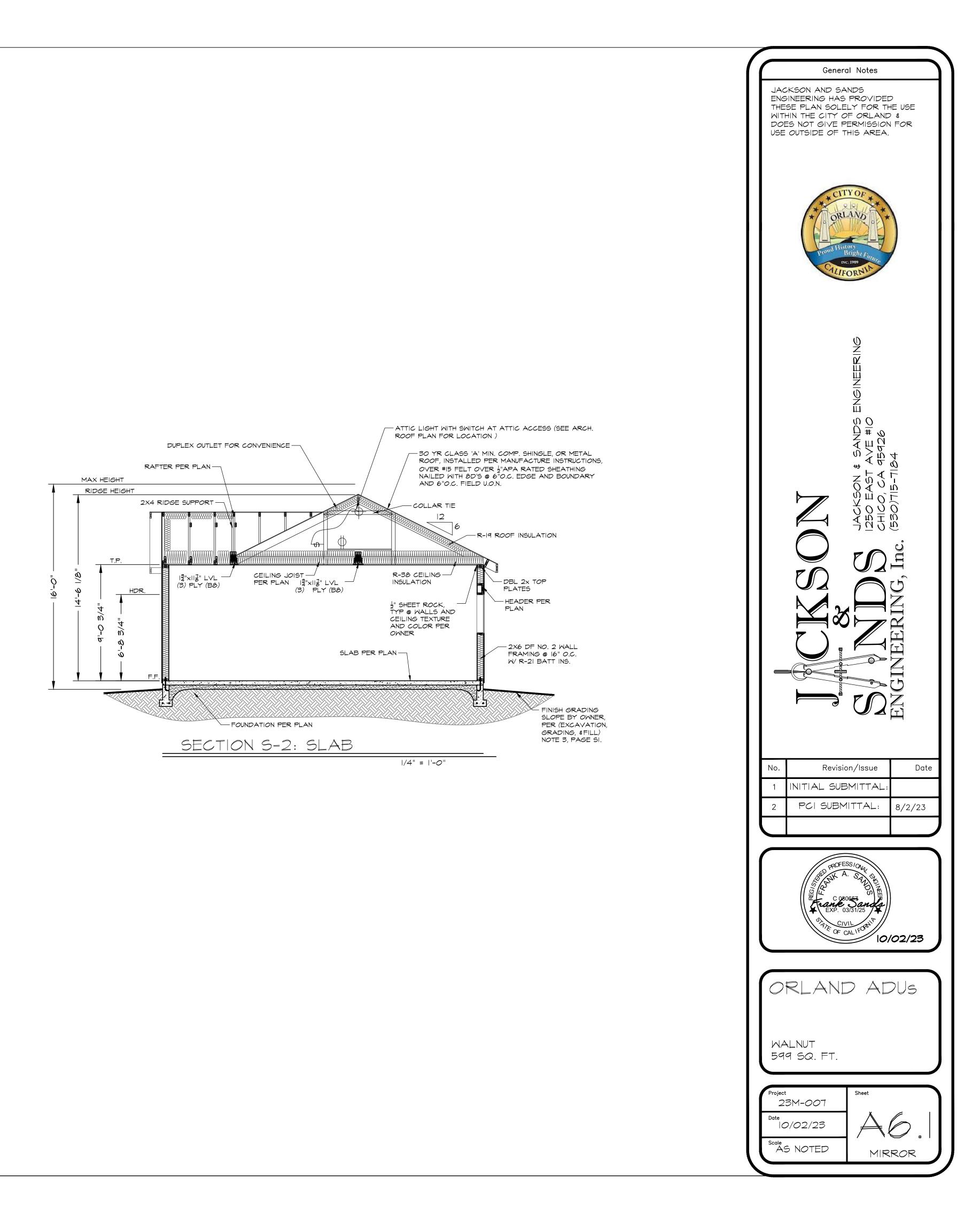


2. INTERIOR HEADERS TO BE 4X12 DF NO.2 U.N.O. 3. PERFORATED SHEAR WALL (PERF) ARE DESIGNED PER 2021 SDPWS 4.3.3.3 STRAPS TO TRANSFER FORCES AROUND OPENINGS ARE NOT REQUIRED. 4. FULLY SHEATH EXTERIOR WALLS WITH MIN 3/8" OSB, NAILED PER SHEAR WALL SCHEDULE.

5. SEE SHEET SI FOR ADDITIONAL SHEAR WALL AND

6. EXTERIOR WALLS TO BE 2X6 DF NO.2 @ 16" O.C. 7. FIRE STOPPING AND DRFT STOPPING SHALL COMPLY WITH THE REQUIREMENTS. 2022 CRC R302.11 AND R302.1(1)





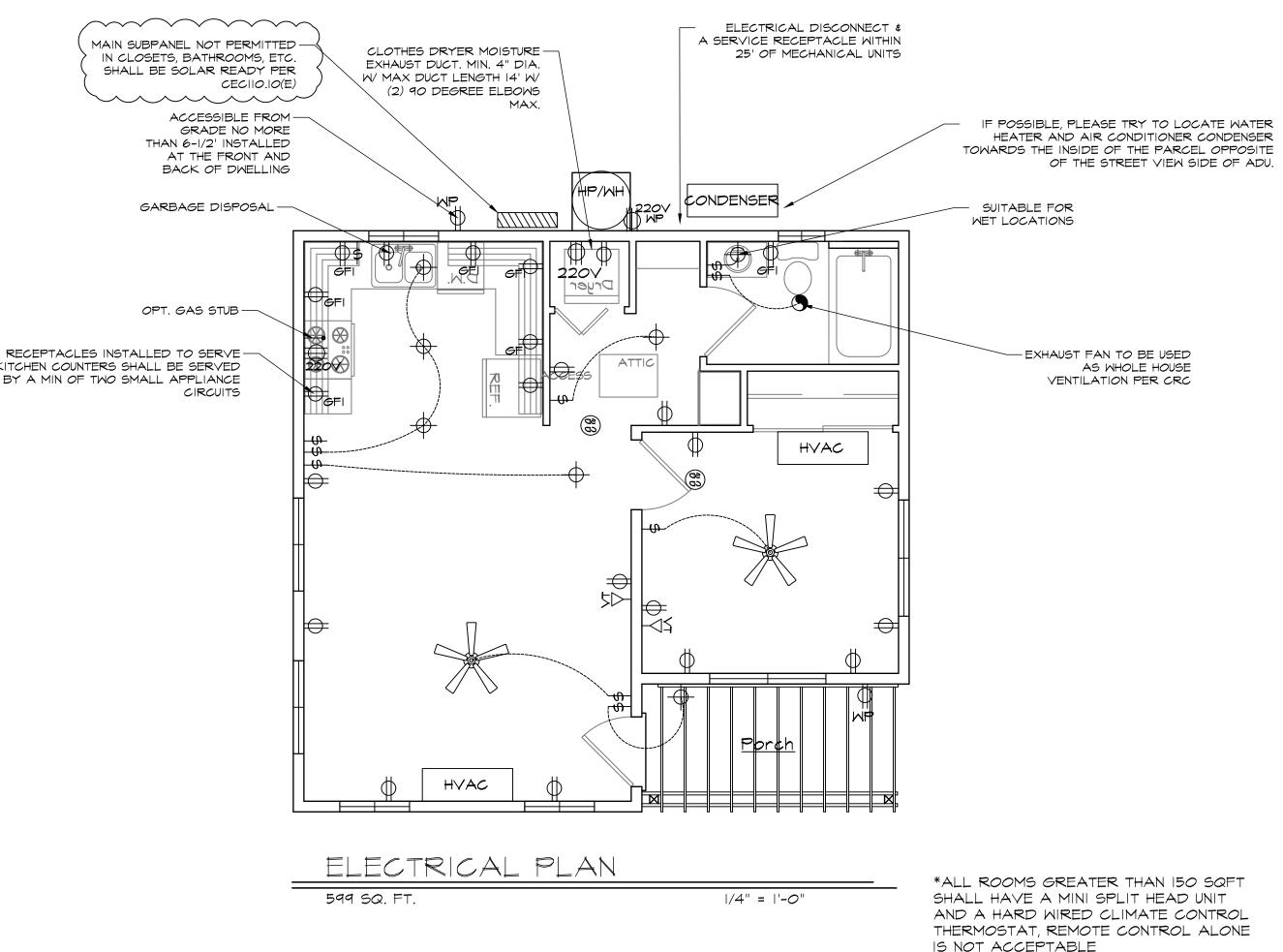
### ELECTRICAL SYMBOLS

DUPLEX RECEPTACLE	ф
DUPLEX RECEPTACLE 72" A.F.F.	<b>(</b> )+72
GROUND FAULT CIRCUIT, AS REQUIRED	∯ 6FI
DUPLEX RECEPTACLE 220 VOLT	() 220∨
DUPLEX RECEPTACLE, WATER-PROOF	¢ wp
CABLE TV	Ţ
HOSE BIB	₩
SWITCH @ +42"	<del>4</del>
SWITCH 3-WAY	<del>۳</del> <del>(۱)</del>
CEILING LIGHT FIXTURES	$\oplus$
SUBPANEL MIN. 225 AMP	(7777777)
EXHAUST FAN	Ð
SMOKE DETECTOR	90
COMBINATION SMOKE & CARBON MONOXIDE DETECTOR	(B)
CEILING FAN	
HVAC CONDENSER	CONDENSER
HVAC HEAD UNIT	HVAC
GAS METER	
GAS OUTLET	Ť
HEAT PUMP WATER HEATER	

KITCHEN COUNTERS SHALL BE SERVED BY A MIN OF TWO SMALL APPLIANCE

### ELECTRICAL NOTES

- THE PANEL BOARD(S) SHALL BE PROVIDED WITH A CIRCUIT DIRECTORY OR CIRCUIT IDENTIFICATION. 2022 CEC ART. 408.3(F). EVERY CIRCUIT & CIRCUIT MODIFICATION SHALL BE LEGIBLY IDENTIFIED AS TO ITS CLEAR, EVIDENT, & SPECIFIC PURPOSE OR USE. THE IDENTIFICATION SHALL INCLUDE AN APPROVED DEGREE OF DETAIL THAT ALLOWS EACH CIRCUIT TO BE DISTINGUISHED FROM ALL OTHERS. SPARE POSITIONS THAT CONTAIN UNUSED OVER CURRENT DEVICES OR SWITCHES SHALL BE DESCRIBED ACCORDINGLY. THE IDENTIFICATION SHALL BE INCLUDED IN A CIRCUIT DIRECTORY THAT IS LOCATED ON THE FACE OR INSIDE OF THE PANEL DOOR IN THE CASE OF A PANELBOARD & AT EACH SWITCH OR CIRCUIT BREAKER IN A SWITCHBOARD OR SWITCHGEAR. NO CIRCUIT SHALL BE DESCRIBED IN A MANNER THAT DEPENDS ON TRANSIENT CONDITIONS OF OCCUPANCY.
- 2. LISTED INSTALLATION INSTRUCTION OR MANUALS SHALL BE ON SITE & AVAILABLE FOR PLUMBING, MECHANICAL, ELECTRICAL EQUIPMENT OR OTHER INSTALLATIONS DURING FIELD INSPECTION OF SPECIFIC APPLIANCES OR FEATURES.
- 3. PHOTOVOLTAIC GENERATING SYSTEMS IS REQUIRED BY CALIFORNIA ENERGY CODE SECTION 150.1(C)14. INSTALLATION OF SOLAR PANELS REQUIRED PRIOR CERTIFICATE OF OCCUPANCY CAN BE ISSUED FOR THIS ADU. A SEPARATE PERMIT IS REQUIRED. 4. AT LEAST ONE 120-VOLT, 20-AMP BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY A BATHROOM OUTLET(S). SUCH CIRCUIT SHALL
- HAVE NO OTHER OUTLETS. (EXCEPTION-WHERE THE CIRCUIT SUPPLIES A SINGLE BATHROOM, OUTLETS FOR OTHER EQUIPMENT WITHIN THE SAME BATHROOM SHALL BE PERMITTED TO BE SUPPLIED.) CEC 210.11(C(1)) & 210.52 5. ALL 15-20 AMP KITCHEN RECEPTACLES THAT ARE DESIGNED TO SERVE COUNTERTOP SURFACES, DISHWASHERS, BATHROOMS, IN
- UNDER-FLOOR SPACES OR BELOW GRADE LEVEL, IN EXTERIOR OUTLET, WITHIN 6' OF A LAUNDRY/UTILITY/WET BAR SINKS, LAUNDRY AREAS SPECIFIED SHALL HAVE (GFCI) GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. 2022 CEC Art. 210.3(A) 6. RECEPTACLES SHALL NOT BE INSTALLED WITHIN OR DIRECTLY OVER A BATHTUB OR SHOWER STALL. 2022 CEC Art. 406.9(C). LIGHT
- PENDANTS, CEILING FANS, LIGHTING TRACKS, ETC. SHALL NOT BE LOCATED WITHIN 3' HORIZONTALLY & 8' VERTICALLY ABOVE A SHOWER \$/OR BATHTUB THRESHOLD. 2022 CEC Art. 410.10(D) 7. FIXTURES, LAMP HOLDER & RECEPTACLES OUTLETS SHALL BE SECURELY SUPPORTED. A FIXTURE THAT WEIGHTS MORE THAN 6LBS OR EXCEEDS 16" IN ANY DIMENSION SHALL NOT BE SUPPORTED BY THE SCREW SHELL OF A LAMP HOLDER. 2022 CEC Art.
- 410.30(a) OUTLET BOXES SHALL NOT BE USED AS THE SOLE SUPPORT FOR CEILING (PADDLE) FANS. 2022 CEC Art. 314.27(A) # (D) 8. OUTLETS IN KITCHEN MUST BE INSTALLED IN EVERY COUNTER SPACE 12" OR WIDER, NOT GREATER THAN 4' O.C. WITHIN 24" OF THE END OF ANY COUNTER SPACE # NOT HIGHER THAN 20" ABOVE COUNTER (CEC 210.52(C))
- 9. TWO SMALL APPLIANCE 20-AMP BRANCH CIRCUITS ARE REQUIRED FOR THE KITCHEN & ARE LIMITED TO SUPPLYING WALL & COUNTER SPACE OUTLETS FOR THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, & SIMILAR AREAS. NOTE: THE CIRCUITS CANNOT SERVE OUTSIDE PLUGS, RANGE HOOD, DISPOSALS, DISHWASHER OR MICROWAVES - ONLY THE REQUIRED COUNTERTOP/WALL OUTLETS INCLUDING THE REFRIGERATOR. CEC 210.11(C(1)) \$ 210.52(B)
- IO. ALL 120V SINGLE PHASE 15-20 AMP BRANCH CIRCUITS SUPPLYING OUTLETS (I.E. RECEPTACLES, LIGHTS, SMOKE DETECTORS, ETC) INSTALLED IN DWELLING UNIT KITCHEN, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED COMBINATION-TYPE ARC-FAULT CIRCUIT INTERRUPTER, INSTALLED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT, (CEC 210.12(A))
- II. DEDICATED 20-AMP BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY THE LAUNDRY RECEPTACLE OUTLET(S). CEC 210.11(C)(2). (THIS CIRCUIT SHALL HAVE NO OTHER OUTLETS) 12. GROUNDING & BONDING OF ELECTRICAL INSTALLATIONS SHALL COMPLY WITH CEC ART. 250
- 13. BOND ALL METAL GAS & WATER PIPES TO GROUND. ALL GROUND CLAMPS SHALL BE ACCESSIBLE & OF AN APPROVED TYPE. (CEC 250.104)
- 14. PACIFIC GAS & ELECTRIC (PG&E) COMPANY APPROVAL IS REQUIRED FOR ELECTRICAL METER LOCATION PRIOR TO INSTALLATION. PANEL LOCATION SUBJECT TO SITE SPECIFIC CONDITIONS & SERVING UTILITY APPROVAL WHERE THIS PLAN IS USED 15. AFTER BUILDING PERMIT HAS BEEN ISSUED THE OWNER \$/OR CONTRACTOR SHALL APPLY FOR ELECTRICAL \$ UTILITY GAS SERVICE REQUEST TO PACIFIC GAS & ELECTRIC COMPANY.
- 16. ALL NON-LOCKING TYPE 125-VOLT 15-20AMP RECEPTACLES IN THE DWELLING SHALL BE TAMPER-RESISTANT. (CED Art. 406.12) 17. RECEPTACLES SHALL BE INSTALLED AT 12' O.C. MAX IN WALLS STARTING AT 6' MAX FROM THE WALL END. WALLS LONGER THAN 2' SHALL HAVE A RECEPTACLE. HALLWAY WALLS LONGER AN 10' SHALL HAVE A RECEPTACLE IN HALLWAY. (CEC Art. 210.52(A) 18. ELECTRICAL RECEPTACLES OUTLETS, SWITCHES & CONTROLS FOR OCCUPANTS USE SHALL BE NO MORE THAN 48" & NOT LESS THAN
- 15" ABOVE FINISH FLOOR (R327.1.2)



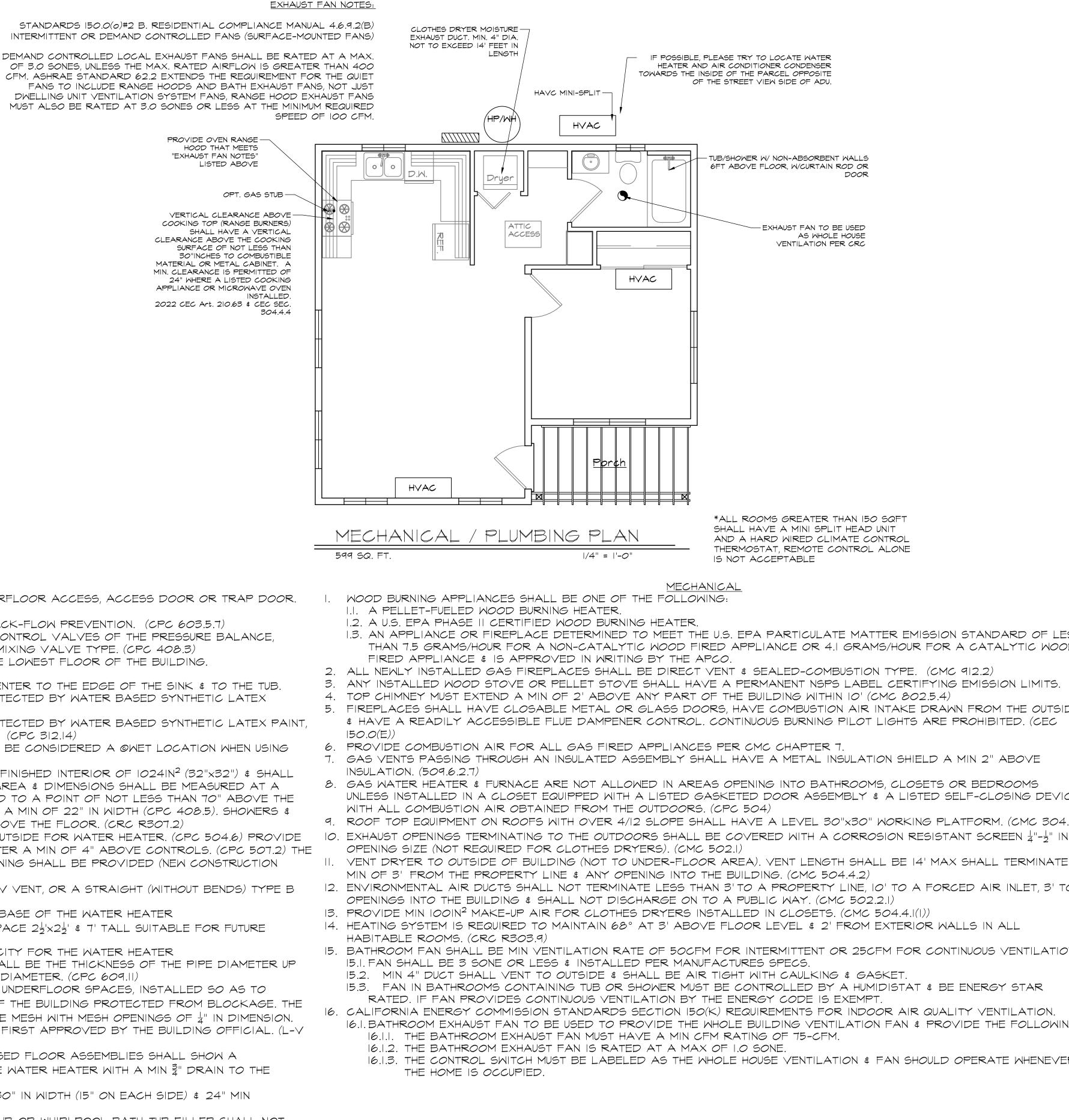
### SMOKE DETECTORS & CARBON MONOXIDE DETECTORS

- 2022 CRC SEC. R314 & R315 CARBON-MONOXIDE ALARMS SHALL BE INSTALLED IN DWELLING UNITS WITH FUEL-BURNING APPLIANCES OR WITH ATTACHED GARAGES (CRC R315)
- 2. ALL SMOKE DETECTORS & CARBON MONOXIDE DETECTORS WITHIN THE DWELLING UNIT ARE TO BE INTERCONNECTED.
- ALL DWELLING UNITS MUST HAVE SMOKE DETECTORS ON THE WALL OR CEILING 3 OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF
- BEDROOMS & IN EACH ROOM USED FOR SLEEPING PURPOSES.
- 4. IN THE HALLWAY & IN THE ROOM OPEN TO THE HALLWAY WHERE THE CEILING HEIGHT OF ROOM OPENING TO HALLWAY SERVING BEDROOMS EXCEEDS THAT OF THE HALLWAY BY 24" OR MORE
- ONE EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS. CARBON MONOXIDE DETECTORS MAY BE COMBINATION SMOKE/CARBON MONOXIDE
- DETECTORS. 7. INTERCONNECTION. WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING OR SLEEPING UNIT, THE SMOKE ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
- 8. POWER SOURCE. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING PROVIDED THAT SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE & SHALL BE EQUIPPED WITH A BATTERY BACKUP. SMOKE ALARMS WITH INTEGRAL STROBES THAT ARE NOT EQUIPPED WITH BATTERY BACKUP SHALL BE CONNECTED TO AN EMERGENCY ELECTRICAL SYSTEM. SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. WIRING SHALL BE PERMANENT & WITHOUT A DISCONNECTING SWITCH OTHER THAN AS REQUIRED FOR OVERCURRENT PROTECTION. 9. SMOKE ALARMS OR SMOKE DETECTORS SHALL BE INSTALLED A MIN OF 20' HORIZONTAL DISTANCE FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. EXCEPTION: IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH OR PHOTOELECTRIC SMOKE ALARMS SHALL BE PERMITTED TO BE INSTALLED 10' OR GREATER FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. PHOTOELECTRIC SMOKE ALARMS SHALL BE PERMITTED TO BE INSTALLED GREATER THAN 6' FROM A PERMANENTLY INSTALLED COOKING APPLIANCE WHERE THE KITCHEN OR COOKING AREA & ADJACENT SPACES HAVE NO CLEAR INTERIOR PARTITIONS & THE IO' DISTANCES WOULD PROHIBIT THE PLACEMENT OF SMOKE ALARM OR SMOKE DETECTOR REQUIRED BY OTHER SECTIONS OF THE CODE. SMOKE ALARMS LISTED FOR USE IN CLOSE PROXIMITY TO A PERMANENTLY INSTALLED COOKING APPLIANCE. [R314.3.3] [NFPA72 SECTION 29.8.3.4]

### LIGHTING NOTES

- . ALL LIGHTING TO BE HIGH EFFICACY. 2. LIGHTING IN HABITABLE SPACES, (LIVING ROOMS, DINING ROOMS, KITCHEN & BEDROOMS) SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED DIMMING CONTROLS.
- 3. FIXTURES, LAMP HOLDER & RECEPTACLES OUTLETS SHALL BE SECURELY SUPPORTED. A FIXTURE THAT WEIGHS MORE THAN 6LBS OR EXCEEDS 16" IN ANY DIMENSION SHALL NOT BE SUPPORTED BY THE SCREW SHELL OF A LAMP HOLDER CEC ART. 410.30(a). OUTLET BOXES SHALL NOT BE USED AS THE SOLE SUPPORT
- FOR CEILING (PADDLE) FAN. 2022 CEC ART. 314-27(A) \$(D) 4. ALL LIGHTING IN (BATHROOM, UTILITY ROOM, LAUNDRY ROOM, WALK IN CLOSETS \$ GARAGES) TO BE MANUAL ON, AUTOMATIC OFF, OCCUPANT SENSOR. (VACANCY SENSOR
- 5. OUTDOOR LIGHTING ATTACHED TO THE BUILDING TO BE HIGH EFFICACY, CONTROLLED BY A MANUAL ON & OFF SWITCH & ONE OF THE FOLLOWING AUTOMATIC CONTROLS
- 5.1. PHOTO CONTROL & MOTION SENSOR. 5.2. PHOTO CONTROL & AUTOMATIC TIME SWITCH CONTROOL
- 5.3. ASTRONOMICAL TIME CLOCK CONTROL THAT AUTOMATICALLY TURNS THE OUTDOOR LIGHT OFF DURING DAYLIGHT HOURS.
- 5.4. EMCS THAT PROVIDES THE FUNCTIONALITY OF AN ASTRONOMICAL TIME CLOCK, DOES NOT HAVE AN OVERRIDE OR BYPASS SWITCH THAT ALLOWS THE LUMINARIES TO BE ALWAYS ON, & IS PROGRAMMED TO AUTOMATICALLY TURN THE OUTDOOR LIGHTING OFF DURING DAYLIGHT HOURS.
- 6. LUMINARIES RECESSED IN INSULATED CEILINGS MUST MEET FIVE REQUIREMENTS (CALIFORNIA ENERGY CODE 150.0(K)IC):
- 6.1. THEY MUST BE RATED FOR DIRECT INSULATION CONTACT (IC). 6.2. THEY MUST BE CERTIFIED AS AIRTIGHT (AT) CONSTRUCTION.
- 6.3. THEY MUST HAVE A SEALED GASKET OR CAULKING BETWEEN THE HOUSING \$ CEILING TO PREVENT FLOW OF HEATED OR COOLED AIR OUT OF LIVING AREAS & INTO THE CEILING CAVITY.
- 6.4. THEY MAY NOT CONTAIN A SCREW BASE SOCKETS 6.5. THEY SHALL CONTAIN A JA8 COMPLIANT LIGHT SOURCE
- 7. OUTDOOR LIGHTING SHALL BE SUITABLE FOR WET LOCATIONS. 8. ALL HIGH EFFICACY LIGHT FIXTURES SHALL BE CERTIFIED AS "HIGH EFFICACY" LIGHT FIXTURES BY THE CALIFORNIA ENERGY COMMISSION.
- 9. CONTRACTOR SHALL PROVIDE THE HOMEOWNER WITH A LUMINAIRE SCHEDULE GIVING THE LAMPS USED IN THE LUMINAIRES INSTALLED. (CGBSC 10-103(b)).
- IO. THE NUMBER OF BLANK ELECTRICAL BOXES MORE THAN 5' ABOVE FINISHED FLOOR SHALL NOT BE GREATER THAN THE NUMBER OF BEDROOMS. THESE ELECTRICAL BOXES MUST BE SERVED BY A DIMMER, VACANCY SENSOR, OR FAN SPEED CONTROL. (CEC 150(K)IB)

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General Notes JACKSON AND SANDS ENGINEERING HAS PROVIDED THESE PLAN SOLELY FOR THE USE WITHIN THE CITY OF ORLAND \$	
DOES NOT GIVE PERMISSION FOR USE OUTSIDE OF THIS AREA.	
Provid History Bright Future CHLIFORNIA	
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JACKSON & SANDS ENGINEE JACKSON & SANDS ENGINEE 1250 EAST AVE #10 CHICO, CA 95926 (530)715-7184	
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ORLAND ADUS	
WALNUT 599 SQ. FT.	
Project Sheet	
Date 10/02/23	
ÀS NOTED MIRROR	



FIXTURE WATER FLOW RATE:

FIXTURE	G.P.F.
WATER CLOSET	1.28 GPF
KITCHEN FAUCET	I.8 GPF
LAVATORY FAUCET	I.2 GPF
SHOWERHEADS	2.0 GPF

### TRENCH DEPTH:

TYPE	DEPTH
WATER	2"
SEWER	12"-27"
GAS	12"-18"
ELEC.	6"-18"

<u>PLUMBING</u>

- UNDERFLOOR CLEANOUTS SHALL NOT BE MORE THAN 5' FROM AN UNDERFLOOR ACCESS, ACCESS DOOR OR TRAP DOOR (CPC 707.9)
- 2. EXTERIOR HOSE BIBS SHALL BE EQUIPPED WITH A NON-REMOVABLE BACK-FLOW PREVENTION. (CPC 603.5.7) 3. SHOWER & TUB COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE THERMOSTATIC OF COMBINATION PRESSURE BALANCE THERMOSTATIC MIXING VALVE TYPE. (CPC 408.3)
- 4. KITCHEN SINKS REQUIRE A CLEANOUT ABOVE THE FLOOR LEVEL OF THE LOWEST FLOOR OF THE BUILDING.
- 5. AIR GAP FITTING REQUIRED AT DISHWASHER
- 6. WATER CLOSET SHALL BE POSITIONED TO HAVE A MIN 15" FROM ITS CENTER TO THE EDGE OF THE SINK & TO THE TUB. 7. ABS PIPING SHALL NOT BE EXPOSED TO DIRECT SUNLIGHT UNLESS PROTECTED BY WATER BASED SYNTHETIC LATEX PAINTS. (CPC 312.13)
- 8. PVC PIPING SHALL NOT BE EXPOSED TO DIRECT SUNLIGHT UNLESS PROTECTED BY WATER BASED SYNTHETIC LATEX PAINT. .04" THICK WRAP OR OTHERWISE PROTECTED FROM UV DEGRADATION. (CPC 312.14)
- 9. THE ADJACENT SPACE NEXT TO SHOWERS WITHOUT THRESHOLDS SHALL BE CONSIDERED A OWET LOCATION WHEN USING THE CRC, CBC, & THE CEC. (CPC 408.5)
- IO. SHOWER COMPARTMENTS, REGARDLESS OF SHAPE, SHALL HAVE A MIN FINISHED INTERIOR OF 10241N2 (32"x32") & SHALL ALSO BE CAPABLE OF ENCOMPASSING A 30" CIRCLE. THE REQUIRED AREA & DIMENSIONS SHALL BE MEASURED AT A HEIGHT EQUAL TO THE TOP OF THE THRESHOLD & SHALL BE MAINTAINED TO A POINT OF NOT LESS THAN 70" ABOVE THE SHOWER DRAIN OUTLET. (CPC 408.6) PROVIDE CURTAIN ROD OR DOOR A MIN OF 22" IN WIDTH (CPC 408.5). SHOWERS \$ TUBS WITH SHOWERS REQUIRE A NON-ABSORBENT SURFACE UP TO 6' ABOVE THE FLOOR. (CRC R307.2)
- II. WATER HEATERS: PROVIDE PRESSURE RELIEF VALVE WITH DRAIN TO OUTSIDE FOR WATER HEATER. (CPC 504.6) PROVIDE SEISMIC STRAPPING IN THE UPPER & LOWER THIRD OF THE WATER HEATER A MIN OF 4" ABOVE CONTROLS. (CPC 507.2) THE WATER HEATER SHALL BE OF AN INSTANTANEOUS TYPE OR THE FOLLOWING SHALL BE PROVIDED (NEW CONSTRUCTION ONLY) (CEC 150(N)):
  - II.I. A 120V RECEPTACLES PROVIDED WITHIN 3' A CATEGORY III OR IV VENT, OR A STRAIGHT (WITHOUT BENDS) TYPE B VENT
  - 11.2. CONDENSATE DRAIN THAT IS NO MORE THAN 2" HIGHER THAN THE BASE OF THE WATER HEATER II.3. WATER HEATERS USING GAS OR PROPANE SHALL DESIGNATE A SPACE  $2\frac{1}{2}\times2\frac{1}{2}$  & 7' TALL SUITABLE FOR FUTURE
  - INSTALLATION OF HEAT PUMP WATER HEATER
  - 11.4. GAS SUPPLY LINE WITH A MIN 200,000 BTU/HR DEDICATED CAPACITY FOR THE WATER HEATER 11.5. DOMESTIC HOT WATER LINES SHALL BE INSULATED. INSULATION SHALL BE THE THICKNESS OF THE PIPE DIAMETER UP
  - TO 2" IN SIZE & MIN 2" THICKNESS FOR PIPES LARGER THAN 2" IN DIAMETER. (CPC 609.11)
  - 11.6. A 3" GRAVITY DRAIN SHALL BE PROVIDED AT THE LOW POINT OF UNDERFLOOR SPACES, INSTALLED SO AS TO PROVIDE 1/FOOT GRADE & TERMINATE AT AN EXTERIOR POINT OF THE BUILDING PROTECTED FROM BLOCKAGE. THE OPENING SHALL BE SCREENED WITH A CORROSION-RESISTANT WIRE MESH WITH MESH OPENINGS OF  $\frac{1}{4}$ " IN DIMENSION. LENGTHS OF THE GRAVITY DRAINS OVER 10' IN LENGTH SHALL BE FIRST APPROVED BY THE BUILDING OFFICIAL. (L-V 89)
  - 11.7. WATER HEATERS LOCATED IN ATTICS, CEILING ASSEMBLIES & RAISED FLOOR ASSEMBLIES SHALL SHOW A WATER-TIGHT CORROSION RESISTANT MIN  $\frac{1}{2}$ " DEEP PAN UNDER THE WATER HEATER WITH A MIN  $\frac{3}{4}$ " DRAIN TO THE EXTERIOR OF THE BUILDING. (CPC 507.5)
  - II.8. WATER CLOSET SHALL BE LOCATED IN A SPACE NOT LESS THAN 30" IN WIDTH (15" ON EACH SIDE) \$ 24" MIN CLEARANCE IN FRONT. (CPC 402.5)
  - II.9. THE MAX HOT WATER TEMPERATURE DISCHARGING FROM A BATHTUB OR WHIRLPOOL BATH-TUB FILLER SHALL NOT EXCEED 120°F. (CPC 418)
  - ILIO. PROVIDE ANTI-SIPHON VALVES ON ALL HOSE BIBS. (CPC 603.5.7)
  - II.II. FLOOR DRAINS SHALL BE PROVIDED WITH A TRAP PRIMER. (CPC 1007)
  - II.12. MAX WATER FLOW RATES. (CGBSC 4.303.1):
    - •WATER CLOSETS: 1.28-GPF
    - •URINALS: .125-GPF
    - •KITCHEN FAUCETS: 1.8-GPM @ 60PSI
    - ·LAVATORY FAUCETS: 1.2-GPM @ 60PSI
    - •SHOWERHEADS: 1.8-GPM

SS DD	JACKSON & SADS ENGINEERING SOUNDERING, Inc. (330)15-7184
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General Notes

THESE PLAN SOLELY FOR THE USE

DOES NOT GIVE PERMISSION FOR

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USE OUTSIDE OF THIS AREA.

WITHIN THE CITY OF ORLAND &

JACKSON AND SANDS

- I. EXCAVATION NEAR FOUNDATION FOR ANY PURPOSE SHALL NOT REDUCE LATERAL SUPPORT FROM ANY FOUNDATION OR ADJACENT FOUNDATION WITHOUT FIRST UNDERPINNING OR PROTECTING THE FOUNDATION AGAINST DETRIMENTAL LATERAL OR VERTICAL MOVEMENT OR BOTH.
- I.I. WHERE UNDERPINNING IS CHOSEN TO PROVIDE THE PROTECTION OR SUPPORT OF ADJACENT STRUCTURES, THE UNDERPINNING STEM WALL SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH PROVISIONS OF CURRENT CALIFORNIA BUILDING CODE.
- UNDERPINNING SHALL BE INSTALLED IN A SEQUENTIAL MANNER THAT PROTECTS THE 1.2. NEIGHBORING STRUCTURE AND THE WORKING CONSTRUCTION SITE. THE ENGINEER OF RECORD SHALL BE NOTIFIED IF THIS CONDITION EXISTS TO ALLOW FOR PREPARATION OF CONSTRUCTION DOCUMENTS.
- 2. PLACEMENT OF BACKFILL: THE EXCAVATION OUTSIDE THE FOUNDATION SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ORGANIC MATERIAL, CONSTRUCTION DEBRIS, ARE SPACED LESS THAN 4" ON CENTER, THEY SHALL BE STAGGERED COBBLES AND BOULDERS OR WITH CONTROLLED LOW-STRENGTH MATERIAL (CLSM). THE TENSION AND COMPRESSION CHORDS SHALL BE INSTALLED AT EACH END OF SHEAR BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED IN A MANNER THAT DOES NOT WALL DAMAGE THE FOUNDATION OR THE WATERPROOFING OR DAMPPROOFING MATERIAL. 4. FASTENERS: SHEATHING SHALL BE ATTACHED TO FRAMING MEMBERS USING NAILS OR 3. SITE GRADING: THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE OTHER APPROVED FASTENERS. NAILS SHALL BE DRIVEN WITH THE HEAD OF THE NAIL SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN 5% FOR A MINIMUM
- FLUSH WITH THE SURFACE OF THE SHEATHING. OTHER APPROVED FASTENERS SHALL BE DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE WALL. IF PHYSICAL DRIVEN AS REQUIRED FOR PROPER INSTALLATION OF THAT FASTENER. SEE TABLE FOR OBSTRUCTIONS OR LOT LINES PROHIBIT IO FEET AN APPROVED METHOD OF DRAINAGE NAIL DIMENSIONS. AWAY FROM STRUCTURE SHALL BE USED. SWALES USED FOR THIS PURPOSE SHALL BE 5. ANCHOR BOLTS: FOUNDATION ANCHOR BOLTS SHALL HAVE A STEEL PLATE WASHER SLOPED A MINIMUM OF 2% WHERE LOCATED WITHIN 10 FEET OF BUILDING FOUNDATION. UNDER EACH NUT NOT LESS THAT 0.229"X3"X3" IN SIZE. THE HOLE IN THE PLATE WASHER IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED SHALL BE PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO BE LARGER A MIN. OF 2% AWAY FROM THE BUILDING. 2% SLOPES MAY BE USED WHEN APPROVED THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1-3/4", PROVIDED A BY THE ENGINEER OF RECORD. STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. THE
- 4. WHERE SHALLOW FOUNDATIONS WILL BEAR ON COMPACTED FILL MATERIAL, THE COMPACTED FILL SHALL COMPLY WITH THE APPROVED GEOTECHNICAL REPORT. 4.1. WHERE COMPACTED FILL MATERIAL 12 INCHES IN DEPTH OR LESS NEED NOT COMPLY WITH AN APPROVED REPORT, PROVIDED THE IN-PLACE DRY DENSITY IS NOT LESS THAN 90% OF THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED IN ACCORDANCE WITH ASTM DI557. THE COMPACTION SHALL
- BE VERIFIED BY SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1705.6 DAMPPROOFING AND WATERPROOFING:
- AND FLOORS BELOW GRADE SHALL BE WATERPROOFED AND DAMPPROOFED IN 63 ACCORDANCE WITH THIS SECTION. VENTILATION FOR CRAWL SPACES SHALL COMPLY WITH CBC SECTION 1203.4 2. STORY ABOVE GRADE PLANE: WHERE A BASEMENT IS CONSIDERED A STORY ABOVE GRADE PLANE AND THE FINISHED GROUND LEVEL ADJACENT TO THE BASEMENT WALL IS NAIL SPACING SHALL BE 12" ON CENTER. BELOW THE BASEMENT FLOOR ELEVATION FOR 25% OR MORE OF THE PERIMETER, THE THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS AND BLOCKING SHALL BE 2" FLOOR AND WALLS SHALL BE DAMPPROOFED IN ACCORDANCE WITH THIS SECTION AND 6.4. NOMINAL OR GREATER. A FOUNDATION DRAIN SHALL BE INSTALLED.
- THE FINISHED GROUND LEVEL OF AN UNDER-FLOOR SPACE SUCH AS A CRAWL SPACE SHALL NOT BE LOCATED BELOW THE BOTTOM OF THE FOOTINGS. WHERE THERE IS EVIDENCE THAT THE GROUND WATER TABLE RISES TO WITHIN 6 INCHES OF THE GROUND LEVEL AT THE OUTSIDE BUILDING PERIMETER, OR THAT THE SURFACE WATER DOES NOT READILY DRAIN FROM THE BUILDING SITE, THE GROUND LEVEL OF THE UNDER-FLOOR SPACE SHALL BE AS HIGH AS THE OUTSIDE FINISHED GROUND LEVEL, UNLESS AN APPROVED DRAINAGE SYSTEM IS PROVIDED.
- 3.1. DAMPPROOFING MATERIALS FOR WALLS SHALL BE INSTALLED ON THE EXTERIOR SURFACE OF THE WALL, AND SHALL EXTEND FROM THE TOP OF THE FOOTING TO
- ABOVE GROUND LEVEL 3.2. DAMPPROOFING SHALL CONSIST OF A BITUMINOUS MATERIAL, 3 POUNDS PER SQUARE YARD OF ACRYLIC MODIFIED CEMENT,  $\frac{1}{2}$ " COAT OF SURFACE BONDING MORTAR COMPLYING WITH ASTM C887, ANY OF THE MATERIALS PERMITTED FOR WATERPROOFING BY SECTION 1805.3.2 OR OTHER APPROVED METHODS OR MATERIALS
- 4. WHERE GROUND WATER IS UNCOVERED BY INVESTIGATION OR EXCAVATIONS THE ENGINEER OF RECORD SHALL BE NOTIFIED IMMEDIATELY FOR WATERPROOFING SOLUTIONS
- 5. A DRAIN SHALL BE PLACED AROUND THE PERIMETER OF A FOUNDATION THAT CONSIST WALL BOUNDARIES, PANEL EDGES, AND INTERMEDIATE SUPPORTS SHALL BE PER OF GRAVEL OR CRUSHED STONE CONTAINING NOT MORE THAN 10% MATERIAL THAT SHEAR WALL SCHEDULE. NAILS SHALL BE LOCATED AT LEAST & FROM THE EDGES PASSES THROUGH A NO. 4 SIEVE. THE DRAIN SHALL EXTEND A MINIMUM OF 12" BEYOND AND ENDS OF PANELS. THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS AND THE OUTSIDE EDGE OF THE FOOTING. THE THICKNESS SHALL BE SUCH THAT THE BOTTOM BLOCKING SHALL BE 2" NOMINAL OR GREATER. OF THE DRAIN IS NOT HIGHER THAN THE BOTTOM OF THE BASE UNDER THE FLOOR, AND 7.2. GYPSUM WALLBOARD SHALL BE APPLIED PARALLEL OR PERPENDICULAR TO STUDS. THE TOP OF THE DRAIN IS NOT LESS THAN 6" ABOVE THE TOP OF THE FOOTING. THE GYPSUM WALLBOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN TOP OF THE DRAIN SHALL BE COVERED WITH AN APPROVED FILTER MEMBRANE ACCORDANCE WITH ASTM C 840. MATERIAL, WHERE A DRAIN TILE OR PERFORATED PIPE IS USED, THE INVERT OF THE 7.3. GYPSUM SHEATHING BOARD: 4' WIDE PIECES OF GYPSUM SHEATHING BOARD SHALL PIPE OR TILE SHALL NOT BE HIGHER THAN THE FLOOR ELEVATION. THE TOP OF JOINTS BE APPLIED PARALLEL OR PERPENDICULAR TO STUDS. 2' WIDE PIECES OF GYPSUM SHEATHING BOARD SHALL BE APPLIED PERPENDICULAR TO THE STUDS. GYPSUM OR THE TOP OF PERFORATIONS SHALL BE PROTECTED WITH AN APPROVED FILTER MEMBRANE MATERIAL SHEATHING BOARD SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C 1280.
- 6. THE FLOOR BASE AND FOUNDATION PERIMETER DRAIN SHALL DISCHARGE BY GRAVITY OR MECHANICAL MEANS INTO AN APPROVED DRAINAGE SYSTEM THAT COMPLIES WITH THE CPC. WHEN A SITE IS LOCATED IN A WELL-DRAINED GRAVEL OR SAND/ GRAVEL MIXTURE SOILS, A DEDICATED DRAINAGE SYSTEM IS NOT REQUIRED.
- RESIDENTIAL BUILDING CODE CRC. I. NO FILL OR OTHER SURCHARGE LOADS SHALL BE PLACED ADJACENT TO ANY BUILDING 2. IF CONDITIONS ARISE OUTSIDE THE SCOPE OF THESE PLANS, THE ENGINEER OF RECORD OR STRUCTURE UNLESS SUCH STRUCTURE IS CAPABLE OF WITHSTANDING THE SHALL BE NOTIFIED. ADDITIONAL LOADS CAUSED BY THE FILL OR SURCHARGE.
- 2. IF VIBRATORY LOADS ARE TO BE PRESENT DURING THE USE OF THE STRUCTURE, THE ENGINEER OF RECORD SHALL BE NOTIFIED TO DETERMINE IF ADDITIONAL CONSIDERATION IS REQUIRED TO PREVENT DETRIMENTAL DISTURBANCES OF THE SOIL.
- 3. IF EXPANSIVE SOILS ARE DISCOVERED THE ENGINEER OF RECORD SHALL BE NOTIFIED TO PROVIDE ADDITIONAL FOUNDATION DESIGN AND CONSTRUCTION REQUIREMENTS. 4. BUILDING CLEARANCE FROM ASCENDING SLOPES SHALL IN GENERAL BE SET A SUFFICIENT DISTANCE FROM THE SLOPE TO PROVIDE PROTECTION FROM SLOPE
- DRAINAGE, EROSION AND SHALLOW FAILURES. 5. FOUNDATION SETBACK FROM DESCENDING SLOPE SURFACE SHALL BE FOUNDED IN FIRM MATERIAL WITH AN EMBEDMENT AND SET BACK FROM THE SLOPE SURFACE SUFFICIENT TO PROVIDE VERTICAL AND LATERAL SUPPORT FOR THE FOUNDATION WITHOUT
- DETRIMENTAL SETTLEMENT. 6. FOR FOUNDATIONS SUPPORTING GROUP R OR U OCCUPANCIES OF LIGHT-FRAME CONSTRUCTION, TWO STORIES OR LESS IN HEIGHT, ASSIGNED TO SEISMIC DESIGN
- CATEGORY D, E OR F SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 psi 7. CONCRETE FOUNDATIONS ARE PERMITTED TO BE CAST AGAINST THE EARTH WHERE SOIL CONDITIONS DO NOT REQUIRE FORMWORK 8. SHALLOW FOUNDATIONS SHALL BE BUILT ON UNDISTURBED SOIL, COMPACTED FILL
- WITH CBC SECTION 1804.5
- 9. THE TOP SURFACE OF FOOTINGS SHALL BE LEVEL. THE BOTTOM SURFACE OF FOOTINGS SHALL BE PERMITTED TO HAVE A SLOPE NOT EXCEEDING 10%. FOOTINGS SHALL BE STEPPED WHERE IT IS NECESSARY TO CHANGE THE ELEVATION OF THE TOP SURFACE OF THE FOOTING OR WHERE THE SURFACE OF THE GROUND SLOPES MORE THAN 10%. IO. FOR SINGLE STORIES, THE MIN. DEPTH OF FOOTINGS SHALL BE 12" BELOW UNDISTURBED GROUND SURFACE. THE MIN. WIDTH OF FOOTING SHALL BE 12". FOR TWO STORIES, THE MIN DEPTH OF FOOTINGS SHALL BE 18" BELOW UNDISTURBED GROUND SURFACE AND THE MIN. WIDTH OF THE FOOTING SHALL BE 15".
- BONDED INTEGRALLY WITH THE EXTERIOR WALL FOOTINGS. 12. MIN. SLAB THICKNESS SHALL BE 4". A 10-MIL POLYETHYLENE VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6" SHALL BE PLACED BETWEEN THE BASE COURSE AND THE CONCRETE FLOOR SLAB. A VAPOR RETARDER IS NOT REQUIRED FOR DETACHED STRUCTURES ACCESSORY TO OCCUPANCIES IN GROUP R-3, SUCH AS GARAGES, UTILITY BUILDINGS OR OTHER UNHEATED FACILITIES.

### EXCAVATION, GRADING AND FILL:

I. WALLS OR PORTIONS THEREOF THAT RETAIN EARTH AND ENCLOSE INTERIOR SPACES

FOUNDATIONS:

- MATERIAL OR CLSM. COMPACTED FILL MATERIAL SHALL BE PLACED IN ACCORDANCE
- II. ALL LOAD BEARING WALLS SHALL BE PLACED ON CONTINUOUS CONCRETE FOOTINGS

- SHEAR WALL NOTES: (PER SDPWS-2021) FRAMING REQUIREMENTS: ALL FRAMING MEMBERS AND BLOCKING USED FOR SHEAR
- WALL CONSTRUCTION SHALL BE 2" NOMINAL OR GREATER. WHERE SHEAR WALLS ARE DESIGNED AS BLOCKED, ALL JOINTS IN SHEATHING SHALL OCCUR OVER AND BE FASTENED TO COMMON FRAMING MEMBERS OR COMMON BLOCKING. SHEAR WALL BOUNDARY ELEMENTS, SUCH AS END POSTS, SHALL BE PROVIDED TO TRANSMIT THE DESIGN TENSION AND COMPRESSION FORCES. SHEAR WALL SHEATHING SHALL NOT BE USED TO SPLICE BOUNDARY ELEMENTS. END POSTS (STUDS OR COLUMNS) SHALL BE FRAMED TO PROVIDE FULL END BEARING.
- COMMON FRAMING MEMBER: WHERE A COMMON FRAMING MEMBER IS REQUIRED AT ADJOINING PANEL EDGES, TWO FRAMING MEMBERS THAT ARE AT LEAST 2" NOMINAL THICKNESS SHALL BE PERMITTED PROVIDED THEY ARE FASTENED TOGETHER WITH FASTENERS DESIGNED IN ACCORDANCE WITH THE NDS TO TRANSFER THE INDUCED SHEAR BETWEEN MEMBERS. WHEN FASTENERS CONNECTING THE TWO FRAMING MEMBERS
- PLATE WASHER SHALL EXTEND TO WITHIN \$" OF THE BOTTOM PLATE ON THE SIDE(S) WITH SHEATHING OR OTHER MATERIAL WITH NOMINAL UNIT SHEAR CAPACITY GREATER THAN 400 PLF FOR WIND OR SEISMIC (TYPE D AND E SHEAR WALLS) EXCEPTIONS MAY APPLY PER SECTION 4.3.6.4.3.
- WOOD STRUCTURAL PANEL SHEAR WALL CONSTRUCTION: PANELS SHALL NOT BE LESS THAN 4'X8', EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING. 6.1. ALL EDGES OF PANELS SHALL BE SUPPORTED BY AND FASTENED TO FRAMING
- MEMBERS OR BLOCKING. 6.2. NAILS SHALL BE LOCATED AT LEAST 🐉 FROM THE PANEL EDGES. MAXIMUM NAIL
- SPACING AT PANEL EDGES SHALL BE 6" ON CENTER. NAILS ALONG INTERMEDIATE FRAMING MEMBERS SHALL BE THE SAME SIZE AS NAILS SPECIFIED FOR PANEL EDGE NAILING. AT INTERMEDIATE FRAMING MEMBERS, THE MAXIMUM NAILING SPACING SHALL BE 6" ON CENTER. WHERE PANELS ARE THICKER THAN 2" NOMINAL OR STUDS ARE SPACED LESS THAN 24" ON CENTER, THE MAXIMUM
- WHERE ANY OF THE FOLLOWING CONDITIONS OCCUR, THE WIDTH OF THE NAILED FACE 6.5. OF A COMMON FRAMING MEMBER OR BLOCKING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL OR GREATER AND NAILING SHALL BE STAGGERED AT ALL PANEL EDGES (IN LIEU OF A SINGLE COMMON FRAMING MEMBER, TWO FRAMING MEMBERS THAT ARE AT LEAST 2" IN NOMINAL THICKNESS SHALL BE PERMITTED)
- 6.5.1. NAIL SPACING OF 2" ON CENTER AT ADJOINING PANEL EDGES IS SPECIFIED (TYPE E SHEAR WALL), OR
- 6.5.2. IOD COMMON NAILS HAVING PENETRATION INTO FRAMING MEMBERS AND BLOCKING OF MORE THAN 1-1/2" ARE SPECIFIED AT 3" ON CENTER, OR LESS AT ADJOINING PANEL EDGES, OR
- THE NOMINAL UNIT SHEAR CAPACITY ON EITHER SIDE OF THE SHEAR WALL, TYPE 6.5.3. E, EXCEEDS 700 PLF IN SEISMIC DESIGN CATEGORY D, E, OR F. 6.6. MAXIMUM STUD SPACING SHALL BE 24" ON CENTER
- WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS FOR ITS TYPE 6.7. 7. SHEAR WALL CONSTRUCTION WITH GYPSUM WALLBOARD OR GYPSUM SHEATHING BOARD SHALL MEET THE FOLLOWING REQUIREMENTS:
- 7.1. END JOINTS OF ADJACENT COURSES OF GYPSUM WALLBOARD OR SHEATHING SHALL NOT OCCUR OVER THE SAME STUD. THE SIZE AND SPACING OF FASTENERS AT SHEAR

### GENERAL NOTES:

- ALL CONSTRUCTION SHALL COMPLY WITH THE CURRENTLY ACCEPTED EDITION OF THE CALIFORNIA BUILDING CODE (CBC) AND CBC STANDARDS, AND CALIFORNIA
- ALL CONCRETE SHALL HAVE A MIN. STRENGTH OF 2,500 PSI (28 DAY) 4. REINFORCEMENT BAR SHALL BE GRADE 40 FOR BARS #4 AND SMALLER AND GRADE 60 FOR BARS #5 AND LARGER
- BOTTOM HORIZONTAL REINFORCING BAR PLACED IN THE FOOTING SHALL BE 3" CLEAR OF BOTTOM OF FOOTING. TOP HORIZONTAL REINFORCING BAR PLACED IN THE FOOTING SHALL BE 2" CLEAR OF THE TOP OF THE FOOTING
- 6. FOR FASTENING SCHEDULE, REFER TO TABLE 2304.10.2.

