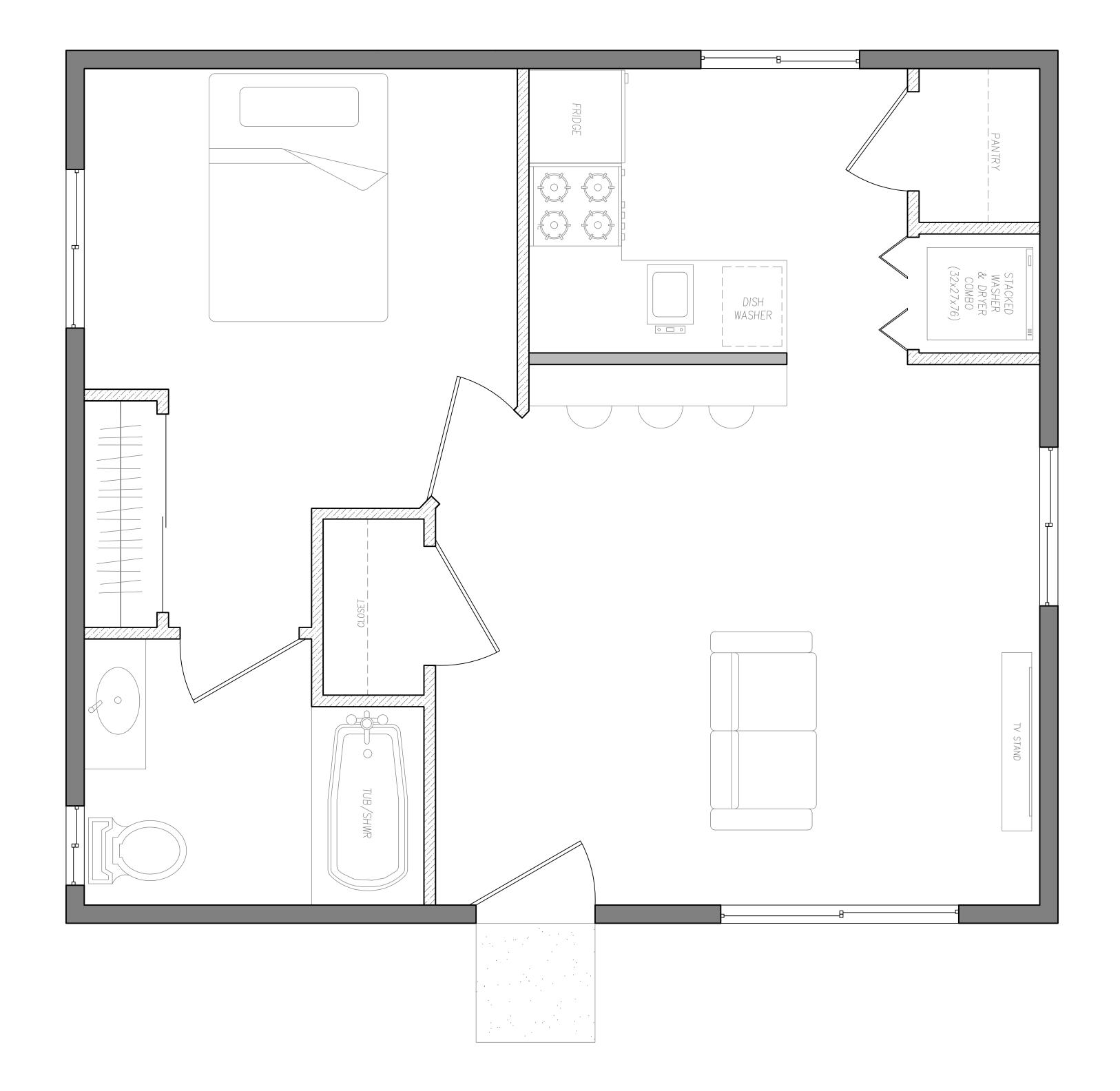
CITY OF LEMOORE PRE-REVIEWED ACCESSORY DWELLING UNIT PROGRAM





550 SQ. FT. 1 BED 1 BATH ACCESSORY DWELLING UNIT DETACHED

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APPROVED

Lemoore Building Inspection Department

All construction shall be in accordance with these plans and specifications

And shall not be changed, modified, or altered without approval of the

Building Official

The issuance of granting of plans and specifications SHALL NOT be

construed to be a permit for, or approval of, and violation, any of the provisions

of any City of Lemoore Ordinance, County Ordinance, or State

Law, nor shall it prevent the Building Official from thereafter requiring the

correction of errors in said plans or from prevention of building

operations being carried on thereunder when in violation of any ordinance of the

City of Lemoore

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ADU INFO

OCCUPANCY TYPE	R-3
CONSTRUCTION TYPE	VB
CLIMATE ZONE	13

ADDITIONAL REQUIREMENTS DUE AT TIME OF SUBMITTAL

TRUSS DRAWINGS AND ANALYSIS

FIRE SPRINKLER PLAN

SOLAR PHOTOVOLTAIC (PV) PLAN

GEOTECHNICAL SOILS AND FOUNDATION INVESTIGATION

ENERGY DOCUMENTATION (TITLE 24)(MUST BE REGISTERED)

MECHANICAL PLAN

BUILDING CODE:

2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2022 CALIFORNIA RESIDENTIAL CODE (CRC) PART 2, TITLE 24 PART 2.5 (2021
INTERNATIONAL BUILDING CODE WITH CALIFORNIA AMENDMENTS).

2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2020 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION)
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2021 UNIFORM MECHANICAL CODE AND CA AMENDMENTS)

2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2020 UNIFORM PLUMBING CODE AND AMENDMENTS)

2022 CALIFORNIA ENERGY CODE AND ENERGY COMMISSION STANDARDS (CECS), PART 6, TITLE 24 C.C.R.

2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R. (2021 INTERNATIONAL FIRE CODE)

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11 TITLE 24 C.C.R. 2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12 TITLE 24 C.C.R. 2022 TITLE 19 C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL

CONTRACTOR SHALL REFER TO THE ABOVE CITED CODES AND LOCAL REGULATIONS WHERE SPECIFIC DETAILS ARE REQUIRED BUT NOT DEPICTED IN THE APPROVED PLANS.

CALIFORNIA

REVISIONS

ADU PROGRAM

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PRE-REVIEWED ADU

T DESCRIPTION

COVER

SJV RFAP

SJV RFAP

SJV RFAP

550

DRAWING SCALE



A. GENERAL

1. NOTES AND DETAILS OR THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE NOTES. THE DETAILS ON THE DRAWINGS SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OTHERWISE. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, DETAILS OF A CHARACTER SIMILAR TO THOSE SHOWN SHALL BE USED, SUBJECT TO REVIEW.

B. ELECTRICAL, PLUMBING, AND MECHANICAL

- 1. EXTERIOR LIGHTING. ALL PROJECTS SHALL COMPLY WITH THE RESPECTIVE CITY'S MUNICIPAL CODE.
- 2. DETECTORS. ALL DETECTORS MUST BE HARD WIRED TO THE BUILDING'S ELECTRICAL SYSTEM, INSTALLED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SHALL BE INTERCONNECTED, WITH BATTERY BACKUP [CRC R314.1]
- 2.1. SMOKE DETECTORS. SMOKE DETECTORS ARE REQUIRED IN EACH EXISTING SLEEPING ROOM, OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF SLEEPING ROOMS, AND ON EACH STORY OF A DWELLING INCLUDING BASEMENTS. (CRC R314.3)
- 2.2. CARBON MONOXIDE DETECTORS. CARBON MONOXIDE DETECTORS ARE REQUIRED OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF SLEEPING ROOMS AND ON EACH STORY OF A DWELLING INCLUDING BASEMENTS. (CRC
- 3. WATER HEATER SEISMIC STRAPPING. MINIMUM TWO 3/4-INCH-BY-24-GAUGE STRAPS REQUIRED AROUND WATER HEATERS, WITH 1/4-INCH-BY-3-INCH LAG BOLTS ATTACHED DIRECTLY TO FRAMING. STRAPS SHALL BE AT POINTS WITHIN UPPER THIRD AND LOWER THIRD OF WATER HEATER VERTICAL DIMENSION. LOWER CONNECTION SHALL OCCUR MINIMUM 4 INCHES ABOVE CONTROLS. (CPC 507.2)
- 4. WATER CLOSET CLEARANCE. MINIMUM 30-INCH-WIDE BY 24-INCH-DEEP CLEARANCE REQUIRED AT FRONT OF WATER
- CLOSETS. (CPC 402.5) 5. SHOWER SIZE. SHOWER COMPARTMENTS SHALL HAVE MINIMUM AREA OF 1024 SQUARE INCHES AND BE ABLE TO ENCOMPASS A 30-INCH-DIAMETER CIRCLE. SHOWER DOORS SHALL HAVE A MINIMUM 22-INCH UNOBSTRUCTED WIDTH. (CPC 408.5 AND CPC 408.6)

C. MECHANICAL VENTILATION AND INDOOR AIR QUALITY (ASHRAE 62.2-2010)

- 1. TRANSFER AIR. VENTILATION AIR SHALL BE PROVIDED DIRECTLY FROM THE OUTDOORS AND NOT AS TRANSFER AIR FROM ADJACENT DWELLING UNITS OR OTHER SPACES, SUCH AS GARAGES, UNCONDITIONED CRAWLSPACES, OR UNCONDITIONED
- 2. INSTRUCTIONS AND LABELING. VENTILATION SYSTEM CONTROLS SHALL BE LABELED AND THE HOME OWNER SHALL BE
- PROVIDED WITH INSTRUCTIONS ON HOW TO OPERATE THE SYSTEM. (CBEES 150.0(0)) 3. COMBUSTION AND SOLID-FUEL BURNING APPLIANCES. COMBUSTION APPLIANCES SHALL BE PROPERLY VENTED AND AIR
- SYSTEMS SHALL BE DESIGNED TO PREVENT BACK DRAFTING. (CBEES 150.0(0)) 4. MINIMUM FILTRATION. MECHANICAL SYSTEMS SUPPLYING AIR TO OCCUPIABLE SPACE THROUGH DUCTWORK SHALL BE PROVIDED
- WITH A FILTER HAVING A MINIMUM EFFICIENCY OF MERV 13 OR BETTER. (CBEES 150.0(0))
- 5. AIR INLETS. AIR INLETS (NOT EXHAUST) SHALL BE LOCATED AWAY FROM KNOWN CONTAMINANTS. (CBEES 150.0(0))
- 6. AIR MOVING EQUIPMENT. AIR MOVING EQUIPMENT USED TO MEET EITHER THE WHOLE-BUILDING VENTILATION REQUIREMENT OR
- THE LOCAL VENTILATION EXHAUST REQUIREMENT SHALL BE RATED IN TERMS OF AIRFLOW AND SOUND. (CBEES 150.0(0)) 6.A. ALL CONTINUOUSLY OPERATING FANS SHALL BE RATED AT A MAXIMUM OF 1.0 SONE.
- 6.B. INTERMITTENTLY OPERATED WHOLE-BUILDING VENTILATION FANS SHALL BE RATED AT A MAXIMUM OF 1.0 SONE. 6.C. INTERMITTENTLY OPERATED LOCAL EXHAUST FANS SHALL BE RATED AT MAXIMUM OF 3.0 SONE.
- 6.D. REMOTELY LOCATED AIR-MOVING EQUIPMENT (MOUNTED OUTSIDE OF HABITABLE SPACES) NEED NOT MEET SOUND REQUIREMENTS IF AT LEAST 4 FEET OF DUCTWORK BETWEEN FAN AND INTAKE GRILL.
- 7. LOCAL EXHAUST FANS TO EXTERIOR TO PROVIDE MINIMUM 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS VENTILATION OR
- AS SPECIFIED IN ENERGY REPORT. 8. AN INTERMITTENTLY OR CONTINUOUSLY OPERATING LOCAL MECHANICAL EXHAUST VENTILATION SYSTEM SHALL BE INSTALLED IN EACH BATHROOM WITH A BATHTUB, SHOWER, OR SIMILAR MOISTURE SOURCE AND IN EACH KITCHEN IN COMPLIANCE WITH
- ASHRAE STANDARD 62.2 AS ADOPTED BY THE CALIFORNIA ENERGY COMMISSION. 8.1. BATHROOMS: INTERMITTENT LOCAL EXHAUST VENTILATION AIRFLOW RATES SHALL NOT BE LESS THAN 50 CFM. CONTINUOUS OPERATION SHALL NOT BE LESS THAN 20 CFM. (CMC 405.3.1)
- 8.2. KITCHENS: INTERMITTENT CONTROLLED OPERATIONS, THE EXHAUST RATE SHALL NOT BE LESS THAN 100 CFM FOR RANGE HOODS OR 300 CFM FOR MECHANICAL EXHAUST FANS INCLUDING DOWNDRAFT APPLIANCES. CONTINUOUS OPERATED VENTILATION, THE EXHAUST RATE SHALL NOT BE LESS THAN 5CFM OR 4% OF THE OCCUPIED FLOOR AREA. (CMC 405.4.1)

D. FOUNDATION

- 1. PROJECTS DETERMINED TO BE IN SEISMIC DESIGN CATEGORY (SDC) "D" REQUIRE A GEOTECHNICAL SOILS AND FOUNDATION INVESTIGATION [CBC 1803.2 & 1803.5.12] UNLESS WAIVED BY THE BUILDING OFFICIAL. THE SOILS ENGINEER SHALL BE RESPONSIBLE FOR REVIEWING AND COORDINATING THE SITE PLAN AND THE FOUNDATION PLAN PREPARED BY OTHERS FOR CONFORMANCE WITH THE RECOMMENDATIONS OF HIS SOILS REPORT AND SHALL SIGNIFY HIS REVIEW BY CERTIFYING THE FIRST SHEET OF SAID PLANS [CRC R301.1.3.1].
- 1.1. SAMPLE CERTIFICATION. THESE PLANS CONFORM TO THE GEOTECHNICAL REPORT #___ AS PREPARED DATED UNDER MY SUPERVISION. WE MAKE NO REPRESENTATION AS TO THE ACCURACY OF DIMENSIONS, MEASUREMENTS, CALCULATIONS OR ANY PORTION OF THE DESIGN.
- 2. FOUNDATION REINFORCEMENT. CONTINUOUS FOOTINGS AND STEM WALLS SHALL BE PROVIDED WITH A MINIMUM TWO
- LONGITUDINAL NO. 4 BARS, ONE AT THE TOP AND ONE AT THE BOTTOM OF THE FOOTING. (CRC R403.1.3.3) 3. INTERIOR BRACED WALL FOUNDATION SUPPORT. BRACED WALLS SHALL BE SUPPORTED BY CONTINUOUS FOUNDATIONS. (CRC
- 403.1.3.4) 4. HORIZONTAL REINFORCEMENT SHALL BE THE LONGEST LENGTHS PRACTICAL. WHERE SPLICES ARE NECESSARY IN REINFORCEMENT, THE LENGTH OF LAP SPLICE SHALL BE 40 BAR DIAMETERS. THE MAXIMUM GAP BETWEEN NONCONTACT PARALLEL BARS AT A LAP SPLICE SHALL NOT EXCEED THE SMALLER OF ONE-FIFTH THE REQUIRED LAP LENGTH AND 6
- INCHES [SEE FIGURER608.5.4(1)] 5. ANCHOR BOLTS AND SILLS. FOUNDATION PLATES OR SILLS SHALL BE BOLTED OR ANCHORED TO THE FOUNDATION OR
- FOUNDATION WALL PER THE FOLLOWING (CRC R403.1.6 AND CRC R602.11.1):
- 5.A. MINIMUM 1/2-INCH-DIAMETER STEEL BOLTS, ASTM F1554, GR36
- 5.B. BOLTS EMBEDDED AT LEAST 7 INCHES INTO CONCRETE OR MASONRY
- 5.C. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE.
- 5.D. BOLTS SPACED MAXIMUM 6 FEET ON CENTER
- 5.E. MINIMUM TWO BOLTS PER PLATE/SILL PIECE WITH ONE BOLT LOCATED MAXIMUM 12 INCHES AND MINIMUM 7 BOLT DIAMETERS FROM EACH END OF EACH SILL PLATE/PIECE
- 5.F. MINIMUM 3-INCH BY 3-INCH BY 0.229-INCH STEEL PLATE WASHER BETWEEN SILL AND NUT ON EACH BOLT EXCEPT WHERE APPROVED ANCHOR STRAPS ARE USED. THE HOLE IN THE PLATE WASHER IS PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 겲 INCH LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1-3/4 INCHES, PROVIDED STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT.
- HOLD-DOWNS. ALL HOLD-DOWNS MUST BE TIED IN PLACE PRIOR TO FOUNDATION INSPECTION. 7. FASTENERS FOR PRESSURE-PRESERVATIVE TREATED AND FIRE RETARDANT TREATED WOOD SHALL BE HOT-DIPPED ZINC
- COATED GALVANIZED, STAINLESS STEEL OR COPPER (CRC R317.3) 8. VAPOR RETARDER.
- 8.1. A VAPOR RETARDER INSPECTION WILL BE REQUIRED PRIOR TO PLACEMENT OF THE SAND TO CONFIRM PROPER INSTALLATION (VAPOR RETARDER IS TO BE ASTM E1745 CLASS A COMPLIANT AND MANUFACTURER'S INSTALLATION REQUIREMENTS MUST BE AVAILABLE FOR INSPECTION PURPOSES).
- 8.2. A MINIMUM 10-MIL VAPOR RETARDER CONFORMING TO ASTM E1745 CLASS A REQUIREMENTS WITH JOINTS LAPPED NOT LESS THAN 6" IS REQUIRED.
- 8.3. PROVIDE 4" NOMINAL THICK CONCRETE SLAB WITH #3 REBAR AT 24" O.C. EACH WAY, PLACED MID-HEIGHT OF SLAB OVER 2" SAND BLOTTER INSTALLED OVER 10 MIL VAPOR RETARDER CONFORMING TO ASTM E1745 OVER AN ADDITIONAL 2" SAND OVER COMPACTED FILL COMPLYING WITH SITE SOILS REPORT.

E. WOOD FRAMING

- 1. FASTENER REQUIREMENTS. THE NUMBER, SIZE, AND SPACING OF FASTENERS CONNECTING WOOD MEMBERS/ELEMENTS SHALL NOT BE LESS THAN THAT SET FORTH IN CRC TABLE R602.3(1). (CRC R602.3)
- 2. SILL PLATE. STUDS SHALL HAVE FULL BEARING ON NOMINAL 2—INCH THICK OR LARGER SILL PLATE WITH WIDTH AT LEAST EQUAL TO STUD WIDTH. (CRC R602.3.4)
- 3. BEARING STUDS. WHERE JOISTS, TRUSSES, OR RAFTERS ARE SPACED MORE THAN 16 INCHES ON CENTER AND THE BEARING STUDS BELOW ARE SPACED 24 INCHES ON CENTER, SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES OF THE STUDS BENEATH. (CRC R602.3.3) EXCETPTION: THE TOP PLATES ARE TWO 2-INCH BY 6-INCH OR TWO 3-INCH BY 4- INCH MEMBERS.

- 4. DRILLING AND NOTCHING OF STUDS. ANY STUD IN AN EXTERIOR WALL OR BEARING PARTITION MAY BE CUT OR NOTCHED TO G. GENERAL MATERIAL SPECIFICATIONS A DEPTH NOT EXCEEDING 25% OF ITS WIDTH. STUDS IN NONBEARING PARTITIONS MAY BE NOTCHED TO A DEPTH NOT TO EXCEED 40% OF A SINGLE STUD WIDTH. ANY STUD MAY BE BORED OR DRILLED, PROVIDED THE DIAMETER OF THE RESULTING HOLE IS NO MORE THAN 60% OF THE STUD WIDTH, THE EDGE OF THE HOLE IS NO MORE THAN 5/8 INCH TO THE EDGE OF THE STUD, AND THE HOLE IS NOT LOCATED IN THE SAME SECTION AS A CUT OR NOTCH. STUDS LOCATED IN EXTERIOR WALL OR BEARING PARTITIONS DRILLED OVER 40% AND UP TO 60% SHALL ALSO BE DOUBLED WITH NO MORE THAN TWO SUCCESSIVE STUDS BORED. (CRC R602.6) EXCEPTION: USE OF APPROVED STUD SHOES IS PERMITTED WHERE THEY ARE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.
- 5. TOP PLATE. WOOD STUD WALLS SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND AT INTERSECTIONS WITH OTHER PARTITIONS. END JOINTS IN DOUBLE TOP PLATES SHALL BE OFFSET AT LEAST 24 INCHES. JOINTS IN PLATES NEED NOT OCCUR OVER STUDS. PLATES SHALL BE MINIMUM NOMINAL 2 INCHES THICK AND HAVE WIDTH AT LEAST EQUAL TO WIDTH OF STUDS. (CRC R602.3.2)
- 6. TOP PLATE SPLICES. TOP PLATE LAP SPLICES SHALL BE FACE-NAILED WITH MINIMUM 8 16D NAILS ON EACH SIDE OF SPLICE. (CRC R602.10.8.1)
- DRILLING AND NOTCHING OF TOP PLATE. WHEN PIPING OR DUCTWORK IS PLACED IN OR PARTLY IN AN EXTERIOR WALL OR INTERIOR LOAD-BEARING WALL, NECESSITATING CUTTING, DRILLING, OR NOTCHING OF THE TOP PLATE BY MORE THAN 50% OF ITS WIDTH, A GALVANIZED METAL TIE NOT LESS THAN 0.054-INCH THICK AND 1-1/2-INCHES WIDE SHALL BE FASTENED ACROSS AND TO THE PLATE AT EACH SIDE OF THE OPENING WITH NOT LESS THAN 8 10D NAILS HAVING A MINIMUM LENGTH OF 1-1/2 INCHES AT EACH SIDE OR EQUIVALENT. THE METAL TIE MUST EXTEND MINIMUM 6 INCHES PAST THE OPENING. (CRC R602.6.1)
- 8. SHEAR WALL AND DIAPHRAGM NAILING. ALL SHEAR WALLS, ROOF DIAPHRAGMS, AND FLOOR DIAPHRAGMS SHALL BE NAILED TO SUPPORTING CONSTRUCTION PER CRC TABLE R602.3(1). (CRC R604.3)
- 9. SHEAR WALL JOINTS. ALL VERTICAL JOINTS IN SHEAR WALL SHEATHING SHALL OCCUR OVER, AND BE FASTENED TO, COMMON STUDS. HORIZONTAL JOINTS IN SHEAR WALLS SHALL OCCUR OVER, AND BE FASTENED TO, MINIMUM 1-1/2-INCH-THICK
- 10. FRAMING OVER OPENINGS. HEADERS, DOUBLE JOISTS, OR TRUSSES OF ADEQUATE SIZE TO TRANSFER LOADS TO VERTICAL MEMBERS SHALL BE PROVIDED OVER WINDOW AND DOOR OPENINGS IN LOAD-BEARING WALLS AND PARTITIONS. (CBC
- 11. ROOF TRUSSES TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE INDIVIDUAL TRUSS DESIGN DRAWINGS. IN THE ABSENCE OF SPECIFIC BRACING REQUIREMENTS, TRUSSES SHALL BE BRACED IN ACCORDANCE WITH ACCEPTED INDUSTRY PRACTICE SUCH AS THE SBCA BUILDING COMPONENT SAFETY INFORMATION (BCSI) GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES.
- 12. ROOF DIAPHRAGM UNDER FILL FRAMING. ROOF PLYWOOD SHALL BE CONTINUOUS UNDER CALIFORNIA FILL FRAMING. 13. ROOF DIAPHRAGM AT RIDGES. MINIMUM 2-INCH NOMINAL BLOCKING REQUIRED FOR ROOF DIAPHRAGM NAILING AT RIDGES.
- 14. BLOCKING OF ROOF TRUSSES. MINIMUM 2-INCH NOMINAL BLOCKING REQUIRED BETWEEN TRUSSES AT RIDGE LINES AND AT
- POINTS OF BEARING AT EXTERIOR WALLS. 15. TRUSS CLEARANCE. MINIMUM 1/2-INCH CLEARANCE REQUIRED BETWEEN TOP PLATES OF INTERIOR NON-BEARING PARTITIONS
- AND BOTTOM CHORDS OF TRUSSES. 16. FIREBLOCKING. FIREBLOCKING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS (CRC R302.11 AND CRC R1003.19): 16.A. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AND PARALLEL ROWS OF STUDS
- OR STAGGERED STUDS, AS FOLLOWS: 16.A.1. VERTICALLY AT THE CEILING AND FLOOR LEVELS 16.A.2. HORIZONTALLY AT INTERVALS NOT EXCEEDING 10 FEET
- 16.B. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, AND COVE CEILINGS
- 16.C.IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN 16.D. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES AND WIRES AT CEILING AND FLOOR LEVEL, WITH AN APPROVED
- MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION 16.E. AT CHIMNEYS AND FIREPLACES PER ITEM E.49
- 16.F. CORNICES OF A TWO-FAMILY DWELLING AT THE LINE OF DWELLING-UNIT SEPARATION 17. FIREBLOCKING MATERIALS. EXCEPT AS OTHERWISE SPECIFIED IN ITEMS E.48 AND E.49, FIREBLOCKING SHALL CONSIST OF THE FOLLOWING MATERIALS WITH THE INTEGRITY MAINTAINED (CRC R302.11.1):
- 17.A. TWO-INCH NOMINAL LUMBER

PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASES.

- 17.B. TWO THICKNESSES OF ONE-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS 17.C.ONE THICKNESS OF 23/32-INCH WOOD STRUCTURAL PANEL WITH JOINTS BACKED BY 23/32-INCH WOOD STRUCTURAL
- 17.D. ONE THICKNESS OF 3/4-INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH PARTICLEBOARD
- 17.E. 1/2-INCH GYPSUM BOARD
- 17.F. 1/4-INCH CEMENT-BASED MILLBOARD 17.G. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OF OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE PERMITTED FOR COMPLIANCE WITH THE 10-FOOT HORIZONTAL FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS. UNFACED FIBERGLASS BATT INSULATION USED AS FIREBLOCKING SHALL FILL THE ENTIRE CROSS-SECTION OF THE WALL CAVITY TO A MINIMUM HEIGHT OF 16 INCHES MEASURED VERTICALLY. WHEN PIPING, CONDUIT, OR SIMILAR OBSTRUCTIONS ARE ENCOUNTERED, THE INSULATION SHALL BE PACKED TIGHTLY AROUND THE OBSTRUCTION. LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN
- 18. FIREBLOCKING AT OPENINGS AROUND VENTS, PIPES, DUCTS, CABLES, AND WIRES AT CEILING AND FLOOR LEVEL. SUCH OPENINGS SHALL BE FIREBLOCKED WITH AN APPROVED MATERIAL TO RESIST THE FREE PASSAGE OF FLAME AND PRODUCTS OF COMBUSTION. (CRC R302.11)
- 19. FIREBLOCKING OF CHIMNEYS AND FIREPLACES. ALL SPACES BETWEEN CHIMNEYS AND FLOORS AND CEILINGS THROUGH WHICH CHIMNEYS PASS SHALL BE FIREBLOCKED WITH NONCOMBUSTIBLE MATERIAL SECURELY FASTENED IN PLACE. THE FIREBLOCKING OF SPACES BETWEEN CHIMNEYS AND WOOD JOISTS, BEAMS, OR HEADERS SHALL BE SELF-SUPPORTING OR BE PLACED ON STRIPS OF METAL OR METAL LATH LAID ACROSS THE SPACES BETWEEN COMBUSTIBLE MATERIAL AND THE
- CHIMNEY. (CRC R1003.19) 20. DRAFTSTOPPING. IN COMBUSTIBLE CONSTRUCTION WHERE THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS. WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING MEMBRANE BELOW, DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES (CRC R302.12):
- 20.A. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING 20.B.FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS
- 21. DRAFTSTOPPING MATERIALS. DRAFTSTOPPING SHALL NOT BE LESS THAN 1/2-INCH GYPSUM BOARD, 3/8-INCH WOOD STRUCTURAL PANELS, OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED. DRAFTSTOPPING SHALL BE INSTALLED PARALLEL TO THE FLOOR FRAMING MEMBERS UNLESS OTHERWISE APPROVED BY THE BUILDING OFFICIAL. THE INTEGRITY OF DRAFTSTOPS SHALL BE MAINTAINED. (CRC R302.12.1)
- 22. COMBUSTIBLE INSULATION CLEARANCE. COMBUSTIBLE INSULATION SHALL BE SEPARATED MINIMUM 3 INCHES FROM RECESSED LUMINAIRES, FAN MOTORS, AND OTHER HEAT-PRODUCING DEVICES. (CRC R302.14) 23. PROTECTION OF WOOD AGAINST DECAY. NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD SHALL BE PROVIDED IN THE
- FOLLOWING LOCATIONS (CRC R317.1): 23.A. ALL WOOD IN CONTACT WITH GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH GROUND, OR EMBEDDED IN
- CONCRETE EXPOSED TO WEATHER 23.B. WOOD FRAMING MEMBERS THAT REST ON CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8
- INCHES FROM EXPOSED EARTH SHALL BE OF NATURALLY DURABLE OR PRESERVATIVE—TREATED WOOD 23.C. WOOD FRAMING, SHEATHING, AND SIDING ON THE EXTERIOR OF THE BUILDING AND HAVING CLEARANCE LESS THAN 6 INCHES FROM THE EXPOSED GROUND OR LESS THAN 2 INCHES VERTICALLY FROM CONCRETE STEPS, PORCH SLABS,
- PATIO SLABS, AND SIMILAR HORIZONTAL SURFACE EXPOSED TO WEATHER 23.D.SILLS AND SLEEPERS ON CONCRETE OR MASONRY SLAB IN DIRECT CONTACT WITH GROUND UNLESS SEPARATED FROM SUCH SLAB BY IMPERVIOUS MOISTURE BARRIER

F. BASIS OF DESIGN

NOTE: WINTER DESIGN TEMP, FLOOD HAZARDS, AIR FREEZING INDEX AND MEAN ANNUAL TEMP SECTIONS ARE REQUIRED BY APPLICANT AT TIME OF SUBMITTAL.

GROUND	WIND	DESIGN	SEISMIC DESIGN	SUBJEC	CT TO DAMAGE FRO	М	Winter	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
SNOW LOAD	Speed (mph)	Topo graphic effects	CAT.	Weathering	Frost Line Depth	Termite	Design Temp				
0	110	NO	D	<5000'=NEG	<5000'=12"	YES		<5000' = NO			

- 1. LUMBER. ALL JOISTS, RAFTERS, BEAMS, AND POSTS SHALL BE NO. 2 GRADE DOUGLAS FIR-LARCH OR BETTER. STUDS NOT MORE THAN 8 FEET LONG SHALL BE STUD-GRADE DOUGLAS FIR-LARCH OR BETTER WHEN SUPPORTING NOT MORE THAN ONE FLOOR, ROOF, AND CEILING. STUDS LONGER THAN 8 FEET SHALL BE NO. 2 GRADE DOUGLAS FIR-LARCH OR
- 2. STUCTURAL PLYWOOD SHALL CONFORM TO COMMERIAL STANDARD DOC PS 1-09 AND HAVE A PANEL GRADE OF C-D. WOOD BASED STRUCTURAL -USE PANELS (I.E. ORIENTED STRAND BOARD) SHALL CONFORM TO THE APA PRP-108 PERFORMANCE STANDARD OF THE VOLUNTARY PRODUCT STANDARD DOC PS 2-10. "PERFORMANCE STANDARD FOR WOOD-BASED STRUCTURAL-USE PANELS". PUBLISHED BY THE DEPARTMENT OF COMMERCE AND THE AMERICAN PLYWOOD ASSOCIATION. ALL PLYWOOD AND STRUCTURAL-USE PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1. SHEATHING EXPOSED TO WEATHER SHALL BE GRADE C-C EXTERIOR WITH A RANGE INDEX AS TO MATCH BODY OF DIAGRAM SPECIFIED.
- 3. CONCRETE. THE QUALITY AND DESIGN OF CONCRETE SHALL BE IN ACCORDANCE WITH 2022 CALIFORNIA BUILDING CODE (CBC), EXCEPT ITEMS NOT SPECIFICALLY COVERED THERIN SHALL ALSO CONFORM TO ACI 318-14. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS (CRC R402.2)
- 4. REINFORCING STEEL. REINFORCING STEEL USED IN CONSTRUCTION OF REINFORCED CONCRETE STRUCTURES SHALL BE
- DEFORMED AND COMPLY WITH ASTM A 615., GRADE 40 (CRC R403.1.3.5.1) 5. FASTENERS FOR PRESERVATIVE—TREATED WOOD. FASTENERS FOR PRESERVATIVE—TREATED AND FIRE—RETARDANT—TREATED WOOD - INCLUDING NUTS AND WASHERS -- SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL,
 - EXCEPTION: 1/2-INCH DIAMETER OR GREATER STEEL BOLTS EXCEPTION: FASTENERS OTHER THAN NAILS AND TIMBER RIVETS MAY BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM
 - EXCEPTION: PLAIN CARBON STEEL FASTENERS ACCEPTABLE IN SBX/DOT AND ZINC BORATE PRESERVATIVE—TREATED WOOD IN AN INTERIOR, DRY ENVIRONMENT
- 6. FASTENERS FOR FIRE-RETARDANT-TREATED WOOD. FASTENERS FOR FIRE-RETARDANT-TREATED WOOD USED IN EXTERIOR APPLICATIONS OR WET OR DAMP LOCATIONS SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL,
- SILICON BRONZE, OR COPPER. (CRC R317.3.3) 7. WALL FLASHING. APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE FASHION AT THE FOLLOWING LOCATIONS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL
- FRAMING COMPONENTS (CRC R703.8): 7.A. EXTERIOR DOOR AND WINDOW OPENINGS, EXTENDING TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE
- WATER-RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE 7.B. AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH
- PROJECTING LIPS ON BOTH SIDES UNDER STUCCO COPINGS
- 7.C. UNDER AND AT THE ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS 7.D. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM
- 7.E. WHERE EXTERIOR PORCHES, DECKS, OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION
- 7.F. AT WALL AND ROOF INTERSECTIONS 7.G. AT BUILT-IN GUTTERS

LIGHTING

RESIDENTIAL LIGHTING. CA ENERGY CODE 150.0(K)

SILICON BRONZE, OR COPPER. (CRC R317.3.1)

- 1. LUMINAIRE REQUIREMENTS. 1.A. LUMINAIRE EFFICACY. ALL INSTALLED LUMINAIRES SHALL MEET THE REQUIREMENTS IN TABLE 150.0-A.
 - EXCEPTION 1 TO SECTION 150.0(K)1A: INTEGRATED DEVICE LIGHTING. LIGHTING INTEGRAL TO EXHAUST FANS, KITCHEN RANGE HOODS, BATH VANITY MIRRORS AND GARAGE DOOR OPENERS. EXCEPTION 2 TO SECTION 150.0(K)1A: NAVIGATION LIGHTING SUCH AS NIGHT LIGHTS, STEP LIGHTS, AND PATH LIGHTS
 - LESS THAN 5 WATTS. EXCEPTION 3 TO SECTION 150.0(K)1A: CABINET LIGHTING. LIGHTING INTERNAL TO DRAWERS, CABINETRY AND LINEN CLOSETS WITH AN EFFICACY OF 45 LUMENS PER WATT OR GREATER.
- 1.B. SCREW-BASED LUMINAIRES. SCREW-BASED LUMINAIRES SHALL CONTAIN LAMPS THAT COMPLY WITH REFERENCE JOINT APPENDIX JA8.
- 1.C. RECESSED DOWNLIGHT LUMINAIRES IN CEILINGS. LUMINAIRES RECESSED INTO CEILINGS SHALL MEET ALL OF THE
- FOLLOWING REQUIREMENTS: i. SHALL NOT CONTAIN SCREW BASE LAMP SOCKETS; AND
- ii. HAVE A LABEL THAT CERTIFIES THE LUMINAIRE IS AIRTIGHT WITH AIR LEAKAGE LESS THAN 2.0 CFM AT 75 PASCALS WHEN TESTED IN ACCORDANCE WITH ASTM E283. AN EXHAUST FAN HOUSING WITH INTEGRAL LIGHT SHALL NOT BE REQUIRED TO BE CERTIFIED AIRTIGHT; AND iii. BE SEALED WITH A GASKET OR CAULK BETWEEN THE LUMINAIRE HOUSING AND CEILING, AND HAVE ALL AIR LEAK
- PATHS BETWEEN CONDITIONED AND UNCONDITIONED SPACES SEALED WITH A GASKET OR CAULK, OR BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS TO MAINTAIN AIRTIGHTNESS BETWEEN THE LUMINAIRE HOUSING AND CEILING; iv. MEET THE CLEARANCE AND INSTALLATION REQUIREMENTS OF CALIFORNIA ELECTRICAL CODE SECTION 410.116 FOR
- RECESSED LUMINAIRES. EXCEPTION TO SECTIONS 150.0(K)1CII AND III: RECESSED LUMINAIRES MARKED FOR USE IN FIRE-RATED INSTALLATIONS EXTRUDED INTO CEILING SPACE AND RECESSED LUMINAIRES INSTALLED IN NONINSULATED CEILINGS.

1.A. LIGHT SOURCES IN ENCLOSED OR RECESSED LUMINAIRES. LAMPS AND OTHER SEPARABLE LIGHT SOURCES THAT ARE NOT

- COMPLIANT WITH THE JA8 ELEVATED TEMPERATURE REQUIREMENTS, INCLUDING MARKING REQUIREMENTS, SHALL NOT BE INSTALLED IN ENCLOSED OR RECESSED LUMINAIRES. 1.B. BLANK ELECTRICAL BOXES. THE NUMBER OF ELECTRICAL BOXES THAT ARE MORE THAN 5 FEET ABOVE THE FINISHED
- FLOOR AND DO NOT CONTAIN A LUMINAIRE OR OTHER DEVICE SHALL BE NO GREATER THAN THE NUMBER OF BEDROOMS. THESE ELECTRICAL BOXES MUST BE SERVED BY A DIMMER, VACANCY SENSOR CONTROL, LOW VOLTAGE WIRING OR FAN 2. INDOOR LIGHTING CONTROLS.
- 2.A. LIGHTING SHALL HAVE READILY ACCESSIBLE WALL-MOUNTED CONTROLS THAT ALLOW THE LIGHTING TO BE MANUALLY TURNED ON AND OFF.
- EXCEPTION TO SECTION 150.0(K)2A: CEILING FANS MAY PROVIDE CONTROL OF INTEGRATED LIGHTING VIA A REMOTE 2.B. NO CONTROLS SHALL BYPASS A DIMMER, OCCUPANT SENSOR OR VACANCY SENSOR FUNCTION WHERE THAT DIMMER OR SENSOR HAS BEEN INSTALLED TO COMPLY WITH SECTION 150.0(K).
- 2.C. LIGHTING CONTROLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 110.9. 2.D. AN ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) OR A MULTISCENE PROGRAMMABLE CONTROL MAY BE USED TO COMPLY WITH DIMMING, OCCUPANCY AND LIGHTING CONTROL REQUIREMENTS IN SECTION 150.0(K)2 IF IT PROVIDES THE FUNCTIONALITY OF THE SPECIFIED CONTROLS IN ACCORDANCE WITH SECTION 110.9, AND THE PHYSICAL CONTROLS
- SPECIFIED IN SECTION 150.0(K)2A. 3. RESIDENTIAL OUTDOOR LIGHTING. IN ADDITION TO MEETING THE REQUIREMENTS OF SECTION 150.0(K)1A, LUMINAIRES PROVIDING RESIDENTIAL OUTDOOR LIGHTING SHALL MEET THE FOLLOWING REQUIREMENTS, AS APPLICABLE: 3.A. FOR SINGLE-FAMILY RESIDENTIAL BUILDINGS, OUTDOOR LIGHTING PERMANENTLY MOUNTED TO A RESIDENTIAL BUILDING OR
- TO OTHER BUILDINGS ON THE SAME LOT SHALL MEET THE REQUIREMENT IN ITEM I AND THE REQUIREMENTS IN EITHER ITEM II OR ITEM III: i. CONTROLLED BY A MANUAL ON AND OFF CONTROL SWITCH THAT PERMITS THE AUTOMATIC ACTIONS OF ITEMS II OR III
- ii. CONTROLLED BY A PHOTOCELL AND EITHER A MOTION SENSOR OR AN AUTOMATIC TIME SWITCH CONTROL; OR ii. CONTROLLED BY AN ASTRONOMICAL TIME CLOCK CONTROL.
- AUTOMATIC CONTROL TO ITS NORMAL OPERATION WITHIN 6 HOURS. AN ENERGY MANAGEMENT CONTROL SYSTEM THAT PROVIDES THE SPECIFIED LIGHTING CONTROL FUNCTIONALITY AND COMPLIES WITH ALL REQUIREMENTS APPLICABLE TO THE SPECIFIED CONTROLS MAY BE USED TO MEET THESE REQUIREMENTS.

CONTROLS THAT OVERRIDE TO ON SHALL NOT BE ALLOWED UNLESS THE OVERRIDE AUTOMATICALLY RETURNS THE

ROOFING AND WEATHERPROOFING

- 1. ROOF COVERING. ALL ROOF COVERING SHALL BE INSTALLED PER APPLICABLE REQUIREMENTS OF CBC 1507. ROOF COVERINGS SHALL BE AT LEAST CLASS A RATED IN ACCORDANCE WITH ASTM E 108 OR UL 790, WHICH SHALL INCLUDE COVERINGS OF SLATE, CLAY OR CONCRETE ROOF TILE, EXPOSED CONCRETE ROOF DECK, FERROUS OR COPPER SHINGLES
- OR SHEETS. 2. ROOF FLASHING. FLASHING SHALL BE INSTALLED AT WALL AND ROOF INTERSECTIONS, AT GUTTERS, WHEREVER THERE IS A CHANGE IN ROOF SLOPE OR DIRECTION, AND AROUND ROOF OPENINGS. WHERE FLASHING IS OF METAL, THE METAL SHALL BE CORROSION-RESISTANT WITH A THICKNESS OF NOT LESS THAN 0.019 INCH (NO. 26 GALVANIZED SHEET). (CRC
- 3. CRICKETS AND SADDLES. A CRICKET OR SADDLE SHALL BE INSTALLED ON THE RIDGE SIDE OF ANY CHIMNEY OR PENETRATION MORE THAN 30 INCHES WIDE AS MEASURED PERPENDICULAR TO THE SLOPE. CRICKET OR SADDLE COVERING SHALL BE SHEET METAL OR THE SAME MATERIAL AS THE ROOF COVERING. (CRC R903.2.2).
- WATER-RESISTIVE BARRIER. A MINIMUM OF ONE LAYER OF NO. 15 ASPHALT FELT SHALL BE ATTACHED TO STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER MINIMUM 2 INCHES. WHERE JOINTS OCCUR, FELT SHALL BE LAPPED MINIMUM 6 INCHES. THE FELT SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MAINTAIN A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. (CRC R703.2)

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DRAWING SCALE

- 5. DAMPPROOFING. DAMPPROOFING MATERIALS FOR FOUNDATION WALLS ENCLOSING USABLE SPACE BELOW GRADE SHALL BE INSTALLED ON THE EXTERIOR SURFACE OF THE WALL, AND SHALL EXTEND FROM THE TOP OF THE FOOTING TO FINISHED GRADE. (CRC R406.1)
- 6. WEEP SCREED. A MINIMUM 0.019-INCH (NO. 26 GALVANIZED SHEET GAGE), CORROSION-RESISTANT WEEP SCREED OR PLASTIC WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3-1/2 INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE LINE ON EXTERIOR STUD WALLS IN ACCORDANCE WITH ASTM C 92. THE WEEP SCREED SHALL BE PLACED A MINIMUM 4 INCHES ABOVE THE EARTH OR 2 INCHES ABOVE PAVED AREAS AND SHALL BE OF A TYPE ALLOWING TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. (CRC R703.7.2.1)

J. DRAINAGE NOTES

- 1. SURFACE DRAINAGE SHALL BE DIVERTED TO A STORM SEWER CONVEYANCE OR OTHER APPROVED POINT OF COLLECTION THAT DOES NOT CREATE A HAZARD [CRC R401.3].
- 2. LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS A MINIMUM OF 6 INCHES FOR A DISTANCE OF 10 FEET. EXCEPTION: WHERE SLOPES OR OTHER PHYSICAL BARRIERS PROHIBIT 6 INCHES OF FALL FOR 10 FEET, DRAINS OR SWALES SHALL BE CONSTRUCTED TO ENSURE DRAINAGE AWAY FROM THE STRUCTURE. WHEN DRAINS OR SWALES ARE USED FOR THIS PURPOSE:
- 2.1. PROVIDE A MINIMUM 5% SLOPE FROM FOUNDATION TO DRAIN/SWALE,
- 2.2. DRAIN/SWALE SHOULD BE LOCATED AS FAR AS IS PRACTICAL FROM THE FOUNDATION TO MAXIMIZE FALL AND
- 2.3. DRAIN/SWALE IS TO SLOPE A MINIMUM OF 2%.
- 3. IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED NOT LESS THAN 2 PERCENT AWAY FROM THE BUILDING.
- 4. ON GRADED SITES, THE TOP OF ANY EXTERIOR FOUNDATION (FINISH FLOOR ELEVATION) SHALL EXTEND ABOVE THE ELEVATION OF THE STREET GUTTER AT POINT OF DISCHARGE OR THE INLET OF AN APPROVED DRAINAGE DEVICE NOT LESS THAN 12 INCHES PLUS 2 PERCENT [CRC R403.1.7.3].
- 5. ALTERNATE SETBACKS AND CLEARANCES ARE PERMITTED, SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL [CRC R403.1.7.4].

K. STREET ADDRESSING

1. SEPARATE STREET ADDRESSING IS REQUIRED FOR THE ADU. INSTALL STREET ADDRESS NUMERALS, AT LEAST FOUR INCHES HIGH WITH MINIMUM 1/2-INCH STROKE, MOUNTED ON A CONTRASTING BACKGROUND ON FRONT OF THE BUILDING [CRC R319.1].

TABLE R602.3(1)

ITEM	DESCRIPTION OF BUILDING EL	EMENTS	NUMBER AND TYPE OF	SDACIA	IG OF FASTENERS		
IIEM	DESCRIPTION OF BUILDING EL	EMENIS	FASTENER ^{a, b, c}	SPACIN	IG OF FASTENERS		
8	The second second second second	0.00	Roof	T			
1	Blocking between joists or rafters to top	plate, toe nail	$3-8d (2^{1}l_{2}'' \times 0.113'')$		_		
2	Ceiling joists to plate, toe nail		$3-8d (2^{1}/_{2}" \times 0.113")$		_		
3	Ceiling joists not attached to parallel rat tions, face nail		3-100		_		
4	Collar tie to rafter, face nail or $1^{1}/_{4}^{"} \times 2^{1}$	0 gage ridge strap	3-10d (3" × 0.128")		_		
5	Rafter or roof truss to plate, toe nail		3-16d box nails (3 ¹ / ₂ " × 0.135") or 3-10d common nails (3" × 0.148")		one side and 1 toe nail or of each rafter or truss ^j		
6	Roof rafters to ridge, valley or hip rafter	s: toe nail face nail	4-16d ($3^{1}/_{2}$ " × 0.135") 3-16d ($3^{1}/_{2}$ " × 0.135")		_		
7	Built-up studs-face nail		Wall 104 (21 × 0.129 //)	Ι	24" o.c.		
ON 11	•:1	12.13 (10d (3" × 0.128") 16d (3 ½" x 0.135")				
8	Abutting studs at intersecting wall corn	7 (20)		16" = =	12" o.c.		
9	Built-up header, two pieces with 1/2" spa	acer	$16d (3^{1}/_{2}" \times 0.135")$		along each edge		
10	Continued header, two pieces		16d (3 ¹ / ₂ " × 0.135")	16" 0.0	. along each edge		
11	Continuous header to stud, toe nail		$4-8d (2^{1}/_{2}" \times 0.113")$				
12	Double studs, face nail		10d (3" × 0.128")		24" o.c.		
13	Double top plates, face nail		10d (3" × 0.128")		24" o.c.		
14	Double top plates, minimum 24-inch of face nail in lapped area	fset of end joints,	$8-16d (3^1/_2" \times 0.135")$		-		
15	Sole plate to joist or blocking, face nail		$16d (3^1/_2" \times 0.135")$		16" o.c.		
16	Sole plate to joist or blocking at braced	$3-16d (3^{1}/_{2}" \times 0.135")$		16" o.c.			
17	Stud to sole plate, toe nail		3-8d (2 ¹ / ₂ " × 0.113") or		-		
No. discussion			$2-16d (3^{1}/_{2}" \times 0.135")$		— '		
18	Top or sole plate to stud, end nail		$2-16d (3^{1}/_{2}" \times 0.135")$		_		
19	Top plates, laps at corners and intersect	ions, face nail	2-10d (3" × 0.128")		_		
20	1" brace to each stud and plate, face nai	1	2-8d $(2^{1}/_{2}" \times 0.113")$ 2 staples $1^{3}/_{4}"$		Ξ		
21	$1" \times 6"$ sheathing to each bearing, face	nail	2-8d $(2^{1}/_{2}" \times 0.113")$ 2 staples $1^{3}/_{4}"$		_		
22	$1" \times 8"$ sheathing to each bearing, face	nail	2-8d $(2^{1}/_{2}" \times 0.113")$ 3 staples $1^{3}/_{4}"$		_		
23	Wider than $1" \times 8"$ sheathing to each be	earing, face nail	3-8d $(2^{1}/_{2}" \times 0.113")$ 4 staples $1^{3}/_{4}"$		_		
	1		Floor				
24	Joist to sill or girder, toe nail		$3-8d (2^{1}/_{2}" \times 0.113")$		_		
25	Rim joist to top plate, toe nail (roof app		8d $(2^1/_2" \times 0.113")$	6" o.c.			
26	Rim joist or blocking to sill plate, toe na	ail	8d (2½" × 0.113")		6" o.c.		
27	$1" \times 6"$ subfloor or less to each joist, fac	ce nail	2-8d $(2^{1}/_{2}^{"} \times 0.113^{"})$ 2 staples $1^{3}/_{4}^{"}$				
28	2" subfloor to joist or girder, blind and t	ace nail	$2-16d (3^1/_2" \times 0.135")$!		
29	2" planks (plank & beam - floor & roof)	1	2-16d (3 ¹ / ₂ " × 0.135")	at	each bearing		
30	Built-up girders and beams, 2-inch lumb	per layers	10d (3" × 0.128")	top and botton	r as follows: 32" o.c. at and staggered. and and at each splice.		
31	Ledger strip supporting joists or rafters		$3-16d (3^{1}/_{2}" \times 0.135")$	2000000	ch joist or rafter		
			heathing to framing and particleboar	d wall sheathing	to framing		
32	78 - 72	8d common $(2^1/_2" \times$.113") nail (subfloor, wall) ⁱ (0.131") nail (roof) ^f	6	12 ^g		
33	1777	8d common nail (21	The same state of	6	12 ^g		
34		10d common (3" × 8d (2 ¹ / ₂ " × 0.131")		6	12.		
	1/2" structural cellulosic		ofing nail, ⁷ / ₁₆ " crown or 1" crown				
35	fiberboard sheathing	staple 16 ga., 1 ¹ / ₄ " l	ong		6		
36	fiberboard sheathing	staple 16 ga., 1 ¹ / ₂ " l		3	6.		
37	7 ₂ gypsum sneauning	$1^{1}/_{2}^{"}$ long; $1^{1}/_{4}$ screv	10.70	7"	7		
38	7 ₈ gypsum sneaming	1 ⁵ / ₈ " long; 1 ⁵ / ₈ " scre		7	7		
		***************************************	mbination subfloor underlayment to	framing			
39	7 ₄ and less	6d deformed $(2'' \times 0'')$ 8d common $(2^1/2'')$	(0.131") nail	6	12		
40	18 -1	8d common $(2^1/_2" \times 8d \text{ deformed } (2^1/_2" \times 8d \text{ deformed } (2^1/_2")$	× 0.120") nail	6	12		
41		10d common (3" \times 8d deformed (2 $^{1}/_{2}$ ")		6	12		

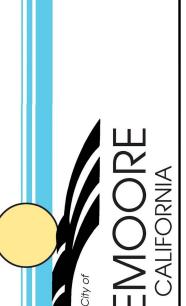
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.

a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.

8d deformed $(2^{1}/_{2}" \times 0.120")$ nail

- b. Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width.
- c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
- d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically. e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).

- f. For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 6 inches on center where the ultimate design wind speed is less than 130 mph and shall be spaced 4 inches on center where the ultimate design wind speed is 130 mph or greater but less than 140 mph.
- g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208.
- h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.
- i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.
- j. RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

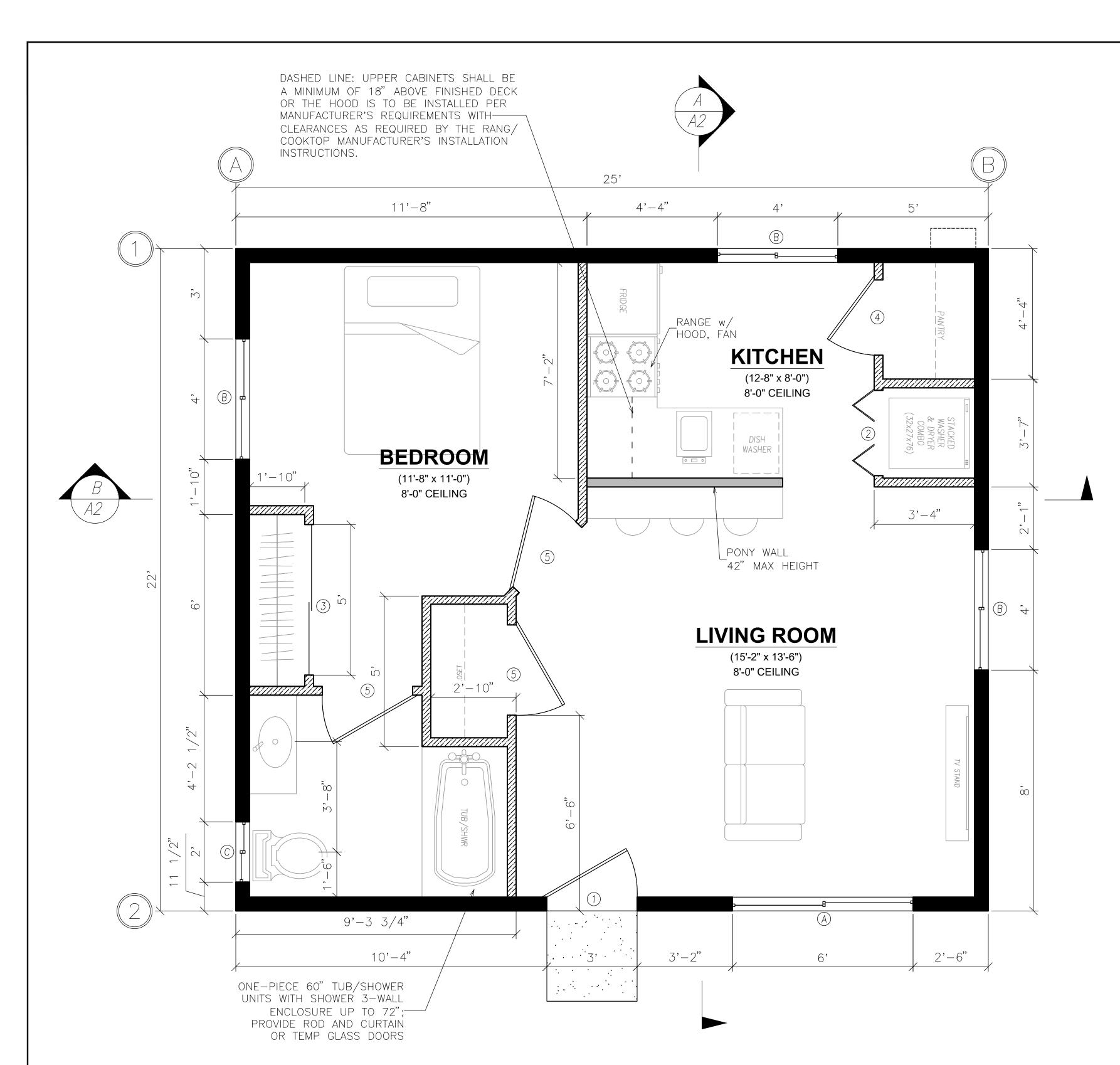


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DRAWING SCALE



D	OOR	SCHEDULE		
/	MARK	DIMENSION	TYPE	NOTES
	1)	3'-0" x 6'-8"	SWINGING	1-3/8" SOLID CORE
	2	2'-6" x 6'-8"	BI-FOLD	LAUNDRY COVERING w/VENTILATION SLATS
	3	5'-0" x 6'-8"	SLIDING	5'-6" CLOSET
	4	2'-6" x 6'-8"	SWINGING	1-3/8" HOLLOW CORE
	(5)	3'-0" x 6'-8"	SWINGING	1-3/8" HOLLOW CORE

WINDOW SCHEDULE												
MARK	DIMENSION	TYPE	TEMPERED	NOTES								
A	6'-0" x 4'-0"	SLIDING	_	_								
B	4'-0" x 4'-0"	SLIDING	_	_								
<u>(C)</u>	2'-0" x 3'-0"	SLIDING	TEMP	_								

MINIMUM LI = 0.32 SHGC = 0.28

THE BOTTOM OF THE CLEAR OPENING OF WINDOWS IN SLEEPING ROOMS SHALL NOT BE MORE THAN 44" ABOVE THE FLOOR (CRC R310.2.3)

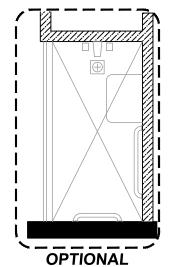
LEGEND

EXTERIOR LOAD BEARING 2 x 6 @ 16" o.c., 9 ft PL HT; REFER TO EXTERIOR ELEVATIONS FOR EXTERIOR WALL COVERINGS: 1/2" WALLBOARD INTERIOR: R-21 BATT INSULATION IN STUD CAVITY: APA CDX PLYWD OR OSB SHEATHING ON EXTERIOR FACE OF STUDS: 2 LAYERS NO. 15 BUILDING PAPER OVER PLWD R-5 RIGID INSUL ON EXTERIOR FACE OF SHEATHING.

INTERIOR NON-LOAD-BEARING WALL 2 x 4 @ 16" o.c.. 1/2" WALLBOARD INTERIOR

EXCERPT FROM R602.3.3 - BEARING STUDS

WHERE JOISTS, TRUSSES OR RAFTERS ARE SPACED MORE THAN 16 INCHES (406 MM) ON CENTER AND THE BEARING STUDS BELOW ARE SPACED 24 INCHES (610 MM) ON CENTER. SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES (127 MM) OF THE STUDS BENEATH.



ROLL-IN SHOWER

AGING-IN-PLACE

AGING-IN-PLACE DESIGN AND FALL PREVENTION. NEWLY CONSTRUCTED DWELLINGS SUBJECT TO THE REQUIREMENTS OF THIS CODE SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH SECTIONS R327.1.1 THROUGH R327.1.4.PAGE

REINFORCEMENT FOR GRAB BARS [CRC 327.1.1]

1. AT LEAST ONE BATHROOM ON THE ENTRY LEVEL SHALL BE PROVIDED WITH REINFORCEMENT INSTALLED IN ACCORDANCE WITH THIS SECTION. WHERE THERE IS NO BATHROOM ON THE ENTRY LEVEL, AT LEAST ONE BATHROOM ON THE SECOND OR THIRD FLOOR OF THE DWELLING SHALL COMPLY WITH THIS SECTION.

2. INFORMATION AND/OR DRAWINGS IDENTIFYING THE LOCATION OF GRAB BAR REINFORCEMENT SHALL BE PLACED IN THE OPERATION AND MAINTENANCE MANUAL IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE, CHAPTER 4, DIVISION 4.4.

3. REINFORCEMENT SHALL NOT BE LESS THAN 2"x8" NOMINAL LUMBER (1-1/2"x7-1/4" ACTUAL DIMENSION) OR OTHER CONSTRUCTION MATERIAL PROVIDING EQUAL HEIGHT AND LOAD CAPACITY. REINFORCEMENT SHALL BE LOCATED BETWEEN 32 INCHES AND 39-1/4 INCHES ABOVE THE FINISHED FLOOR FLUSH WITH THE WALL FRAMING.

4. WATER CLOSET REINFORCEMENT SHALL BE INSTALLED ON BOTH SIDE WALLS OF THE FIXTURE. OR ONE SIDE WALL AND THE BACK WALL

SHOWER REINFORCEMENT SHALL BE CONTINUOUS WHERE WALL FRAMING IS PROVIDED.

BATHTUB AND COMBINATION BATHTUB/SHOWER REINFORCEMENT SHALL BE CONTINUOUS ON EACH END OF THE BATHTUB AND THE BACK WALL. ADDITIONALLY, BACK WALL REINFORCEMENT FOR A LOWER GRAB BAR SHALL BE PROVIDED WITH THE BOTTOM EDGE LOCATED NO MORE THAN 6 INCHES (152.4 MM) ABOVE THE BATHTUB

INSTALLATION OF FLOOR-MOUNTED, FOLDAWAY OR SIMILAR ALTERNATE GRAB BAR REINFORCEMENTS APPROVED BY THE ENFORCING AGENCY.

6.2. REINFORCEMENT SHALL NOT BE REQUIRED IN WALL FRAMING FOR PRE-FABRICATED SHOWER ENCLOSURES AND BATHTUB WALL PANELS WITH INTEGRAL FACTORY-NSTALLED GRAB BARS OR WHEN FACTORY—INSTALLED REINFORCEMENT FOR GRAB BARS IS PROVIDED

SHOWER ENCLOSURES THAT DO NOT PERMIT INSTALLATION OF REINFORCEMENT AND/OR GRAB BARS SHALL BE PERMITTED, PROVIDED REINFORCEMENT FOR NSTALLATION OF FLOOR—MOUNTED GRAB BARS OR AN ALTERNATE METHOD IS APPROVED BY THE ENFORCING AGENCY.

- BATHTUBS WITH NO SURROUNDING WALLS, OR WHERE WALL PANELS DO NOT PERMIT THE INSTALLATION OF REINFORCEMENT SHALL BE PERMITTED, PROVIDED RFINFORCEMENT FOR INSTALLATION OF FLOOR-MOUNTED GRAB BARS ADJACENT TO THE BATHTUB OR AN ALTERNATE METHOD IS APPROVED BY THE ENFORCING
- 6.5. REINFORCEMENT OF FLOORS SHALL NOT BE REQUIRED FOR BATHTUBS AND WATER CLOSETS INSTALLED ON CONCRETE SLAB FLOORS.

ELECTRICAL RECEPTACLE OUTLET, SWITCH AND CONTROLS [CRC 327.1.2]

ELECTRICAL RECEPTACLE OUTLET, SWITCH AND CONTROL HEIGHTS. ELECTRICAL RECEPTACLE OUTLETS, SWITCHES AND CONTROLS (INCLUDING CONTROLS FOR HEATING, VENTILATION AND AIR CONDITIONING) INTENDED TO BE USED BY OCCUPANTS SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX AND NOT LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX ABOVE THE FINISH FLOOR. **EXCEPTIONS:**

- DEDICATED RECEPTACLE OUTLETS; FLOOR RECEPTACLE OUTLETS; CONTROLS MOUNTED ON CEILING FANS AND CEILING LIGHTS; AND CONTROLS LOCATED ON APPLIANCES RECEPTACLE OUTLETS REQUIRED BY THE CALIFORNIA ELECTRICAL CODE ON A WALL SPACE WHERE THE DISTANCE BETWEEN THE FINISHED FLOOR AND A BUILT-IN
- FEATURE ABOVE THE FINISH FLOOR, SUCH AS A WINDOW, IS LESS THAN 15 INCHES (381 MM).

INTERIOR DOORS [CRC R327.1.3]

EFFECTIVE JULY 1, 2024, AT LEAST ONE BATHROOM AND ONE BEDROOM ON THE ENTRY LEVEL SHALL PROVIDE A DOORWAY WITH A NET CLEAR OPENING OF NOT LESS THAN 32 INCHES, MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM THE CLOSED POSITION; OR, IN THE CASE OF A TWO- OR THREE-STORY SINGLE FAMILY DWELLING. ON THE SECOND OR THIRD FLOOR OF THE DWELLING IF A BATHROOM OR BEDROOM IS NOT LOCATED ON THE ENTRY LEVEL.

DOORBELL BUTTONS [CRC R327.1.4]

DOORBELL BUTTONS OR CONTROLS, WHEN INSTALLED, SHALL NOT EXCEED 48 INCHES (1219.2 MM) ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON ASSEMBLY. WHERE DOORBELL BUTTONS INTEGRATED WITH OTHER FEATURES ARE REQUIRED TO BE INSTALLED ABOVE 48 INCHES MEASURED FROM THE EXTERIOR FLOOR OR LANDING, A STANDARD DOORBELL BUTTON OR CONTROL SHALL ALSO BE PROVIDED AT A HEIGHT NOT EXCEEDING 48 INCHES ABOVE EXTERIOR FLOOR OR LANDING, MEASURED FROM THE TOP OF THE DOORBELL BUTTON OR CONTROL

OPTIONAL ROLL-IN SHOWER PLAN NOTES

NOTE: OPTIONAL ROLL IN SHOWERS OFFERED FOR CONVENIENCE NOT FOR COMPLIANCE WITH ACCESSIBILITY STANDARDS.

THRESHOLDS [CBC 1127A.5.3.2]

SHALL BE 1 MAX. IN HEIGHT AND SHALL BEBEVELED WITH A SLOPE NO GREATER THAN ONE UNIT VERTICAL IN TWO UNITS HORIZONTAL (50% SLOPE).

<u>FLOOR [CBC 1127A.5.3.4]</u>

SHOWER COMPARTMENT FLOOR SURFACES SHALL BE STABLE, FIRM AND SLIP RESISTANCE. THE MAXIMUM SLOPE SHALL BE $\frac{1}{4}$ " PER FOOT IN ANY DIRECTION. WHERE DRAINS ARE PROVIDED, GRATE OPENINGS SHALL BE $\frac{1}{4}$ " MAX. AND LOCATED FLUSH WITH THE FLOOR SURFACE.

CONTROLS [CBC 1127A.5.3.5]

CONTROLS. FAUCETS AND SHOWER SPRAY UNITS IN SHOWER COMPARTMENTS SHALL BE OPERABLE WITH ONE HAND. AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS (22.2 N) MAXIMUM. ALL CONTROLS AND FAUCETS SHALL BE OF A SINGLE-LEVER DESIGN.

STANDARD ROLL-IN SHOWER COMPARTMENTS: [CBC 1127A.5.3.5.1]

OPERABLE PARTS OF SHOWER CONTROLS AND FAUCETS: SHALL BE INSTALLED ON THE BACK WALL OF SHOWER COMPARTMENT ADJACENT TO THE SEAT WALL, 19 INCHES MIN. AND 27 INCHES MAX. FROM THE SEAT WALL. SHALL BE LOCATED ABOVE GRAB BAR, BUT NO HIGHER THAN 48 INCHES ABOVE SHOWER FLOOR WITH THEIR CENTERLINE AT 39 INCHES MIN. AND 41 INCHES MAX. ABOVE SHOWER FLOOR.

HAND-HELD SHOWER SPRAYER UNIT [CBC 1127A.5.3.6]

A FLEXIBLE HAND—HELD SHOWER SPRAY UNIT WITH A HOSE AT LEAST 59 INCHES LONG THAT CAN BE USED BOTH AS A FIXED SHOWER HEAD AND AS A HAND—HELD SHOWER SHALL BE PROVIDED. THE SHOWER SPRAY UNIT SHALL HAVE AN ON/OFF CONTROL WITH A NON-POSITIVE SHUT-OFF. IF AN ADJUSTABLE-HEIGHT SHOWER HEAD ON A VERTICAL BAR IS USED, THE BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS.

SHOWER COMPARTMENT SEAT

- 1. MUST BE FOLDING TYPE, INSTALLED ON THE SIDE WALL ADJACENT TO THE CONTROLS. SEAT SHALL NOT EXTEND FROM THE BACK WALLTO A POINT WITHIN 3 INCHES OF THE COMPARTMENT ENTRY. SEAT SHALL BE LOCATED WITHIN 27 INCHES OF SHOWER CONTROLS. THE TOP OF THE SEAT SHALL BE 17 INCHES MIN. AND 19 INCHES MAX. ABOVE BATHROOM FINISHED FLOOR. WHEN FOLDED THE SEAT SHALL NOT EXTEND MORE THAN 6 INCHES FROM THE MOUNTING WALL. [CBC 1127A.5.3.7]
- 2. STRUCTURAL ADEQUACY OF MOUNTING HARDWARE AND FASTENERS TO ACCOMMODATE 250 POUND POINT LOAD APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE [CBC 1127A.4.4]

SHOWER GRAB BARS

- I. GRAB BARS SHALL BE INSTALLED ON THE BACK WALL AND ON THE SIDE WALL OPPOSITE THE SEAT. SHALL BE ABOVE THE SEAT ARE NOT PERMITTED. SHALL BE INSTALLED 6 INCHES MAX. FROM ADJACENT WALLS. [CBC 1127.A.5.3.8.1]
- 2. SHALL BE INSTALLED IN A HORIZONTAL POSITION, 33 INCHES MIN. AND 36 INCHES MAX. ABOVE THE FINISH FLOOR MEASURED TO THE TOP OF THE GRIPPING SURFACE. [CBC 1127A.4.2]

3. GRAB BARS WITH CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 1-1/4" MIN. AND 2" MAX. [CBC 1127A.4.3.1]

- 4. GRAB BARS WITH NON-CIRCULAR CROSS SECTION SHALL HAVE A DIMENSION OF 2" MAX. THE PERIMETER DIMENSION OF GRAB BARS WITH NON-CIRCULAR CROSS SECTION SHALL BE 4 INCHES MIN. AND 4.8" MAX. [CBC 1127A.4.3.2]
- 5. STRUCTURAL ADEQUACY OF MOUNTING HARDWARE AND FASTENERS TO ACCOMMODATE 250 POUND POINT LOAD APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE [CBC 1127A.4.4] 6. A GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES. [CBC
- 1127A.4.5] 7. WHEN GRAB BARS MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1-1/2 INCHES. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS BELOW AND AT THE ENDS SHALL BE 1-1/2 INCHES MIN.
- **EXCEPTIONS:** 7.1. THE SPACE BETWEEN THE GRAB BARS AND SHOWER CONTROLS, SHOWER FITTINGS AND OTHER GRAB BARS ABOVE SHALL BE PERMITTED TO BE 11/2 INCHES MIN.
- 7.2. FOR L-SHAPED OR U-SHAPED GRAB BARS THE SPACE BETWEEN THE WALLS AND THE GRAB BAR SHALL BE 11/2 INCHES MIN. FOR A DISTANCE OF 6 INCHES ON EITHER SIDE OF THE INSIDE CORNER BETWEEN TWO ADJACENT WALL SURFACES. [CBC 1127A.4.6]

SOAP DISH [CBC 1127A.5.3.9]

WHEN A SOAP DISH IS PROVIDED, IT SHALL BE LOCATED ON THE CONTROL WALL AT A MAXIMUM HEIGHT OF 40 INCHES ABOVE THE SHOWER FLOOR, AND WITHIN THE



REVISIONS

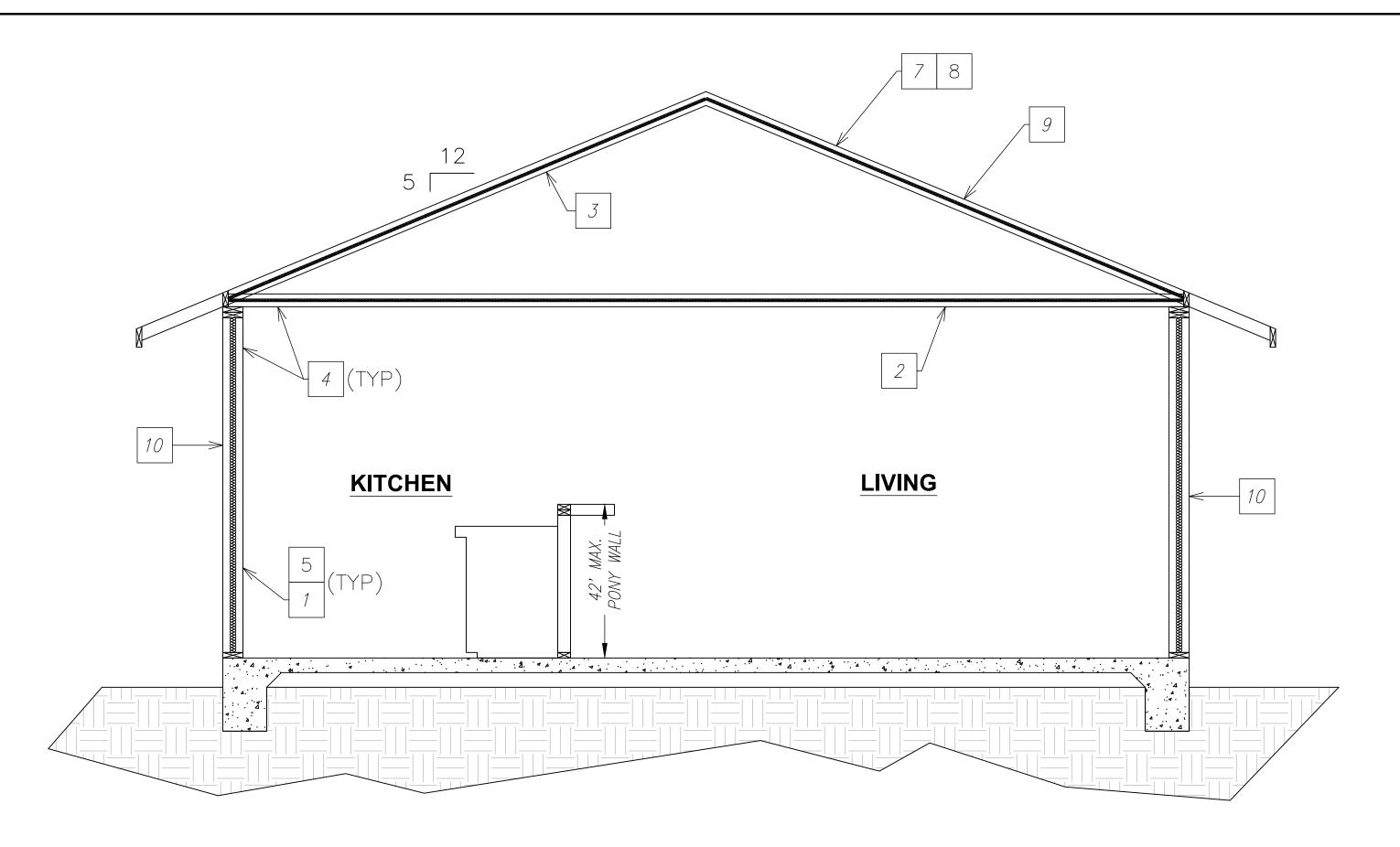
CITY OF LEMOOF -REVIEWED ADU FLOOR

ADU SQFT *550*

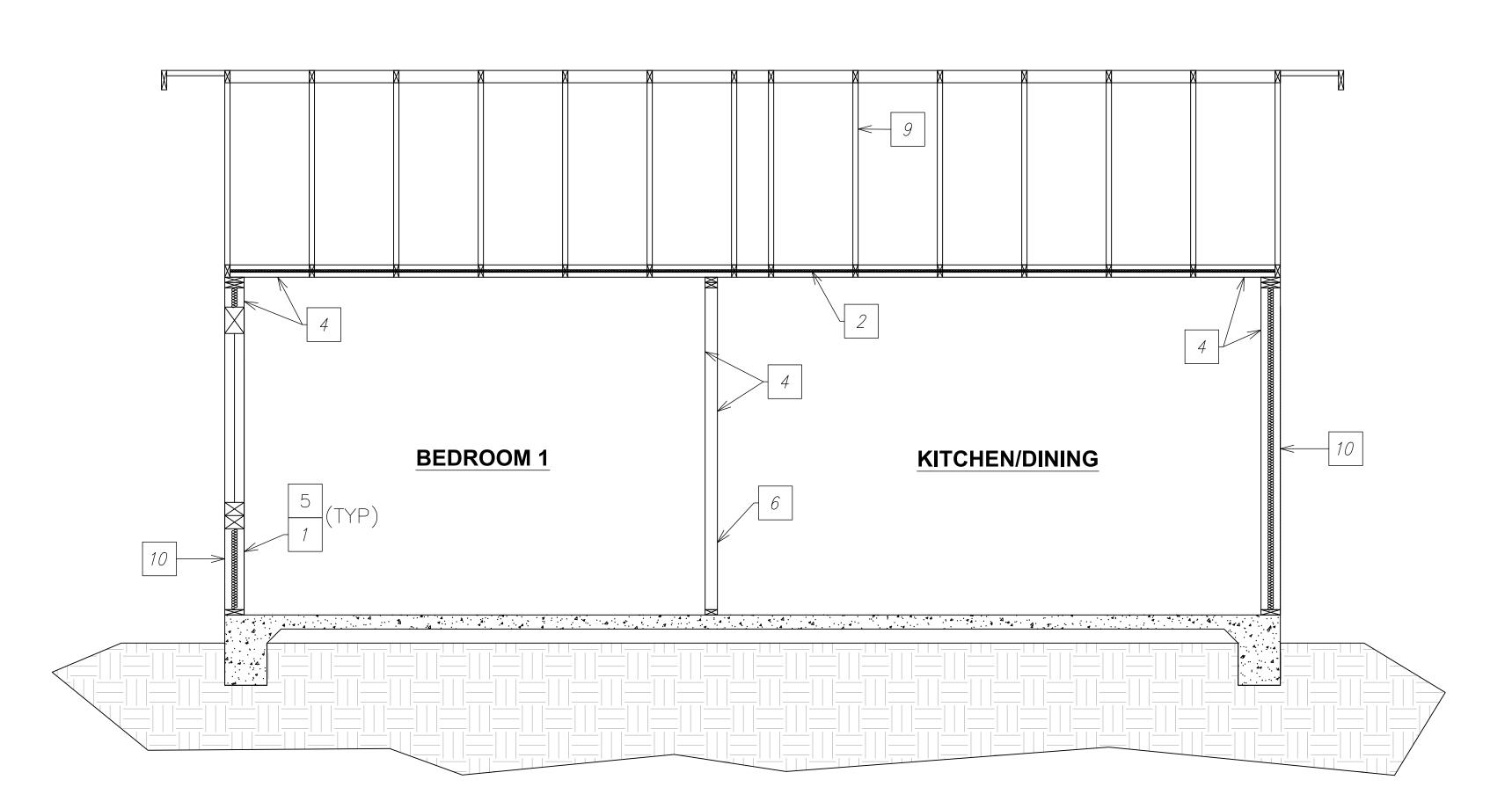
DRAWING SCALE

SHEET

REACH LIMITS FROM THE SEAT.



SECTION A - A



SECTION B - B

SECTION KEYNOTES

WALL INSULATION: R19

CEILING INSULATION: R38

ROOF INSULATION: R19

INTERIOR FINISH: $\frac{1}{2}$ GYPSUM BOARD (UNLESS WALL IS FIRE RESISTANT ASSEMBLE)

EXTERIOR WALL: 2x6 STUD WALL @ 24" O.C.

INTERIOR WALL: 2x4 STUD WALL @ 24" O.C.

RADIANT BARRIER IS REQUIRED

ROOFING: REFER TO ELEVATIONS

PRE-ENGINEERED, PRE-FABRICATED ROOF TRUSSES (REQUIRED BY APPLICANT AT TIME OF SUBMITTAL)

EXTERIOR WALL COVERING AS DENOTED AT EXTERIOR ELEVATION. ALL WALL COVERINGS SHALL BE APPLIED OVER WATER RESISTIVE BARRIER APPLIED TO WOOD SHEATHING PER (CRC 703.7.3.1)

- 1. DESIGN OF ROOF TRUSSES SHALL ACCOMMODATE PHYSICAL DIMENSIONS AND GRAVITY LOAD OF ATTIC MOUNTED AIR HANDLER, AND PV PANEL WEIGHT.

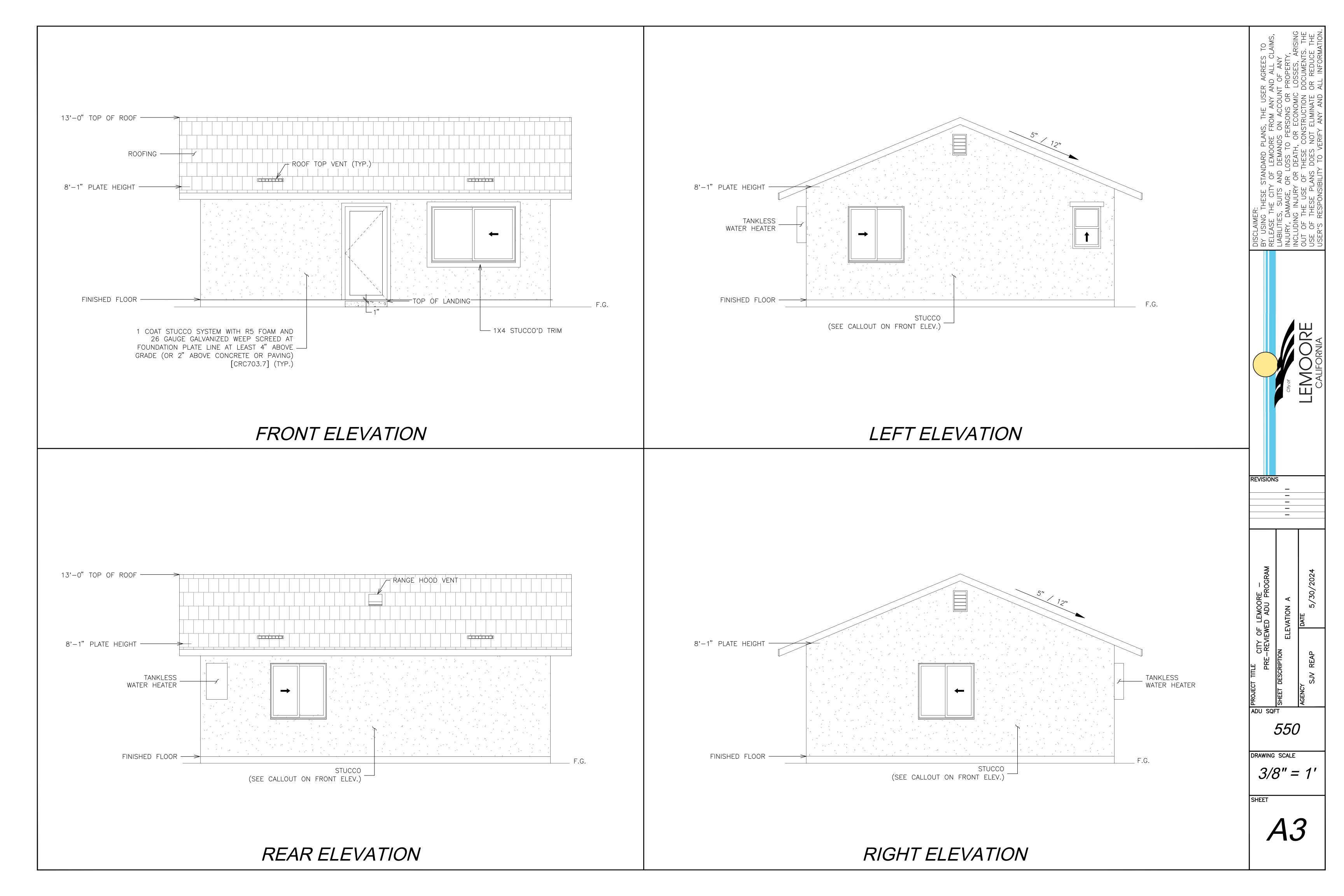
 2. VERIFY INSULATION VALUES WITH ENERGY COMPLIANCE REPORT.
- 3. FOR 1—HOUR FIRE RATED ASSEMBLY" AND "1—HOUR FIRE RATED GABLE END" DETAIL ON

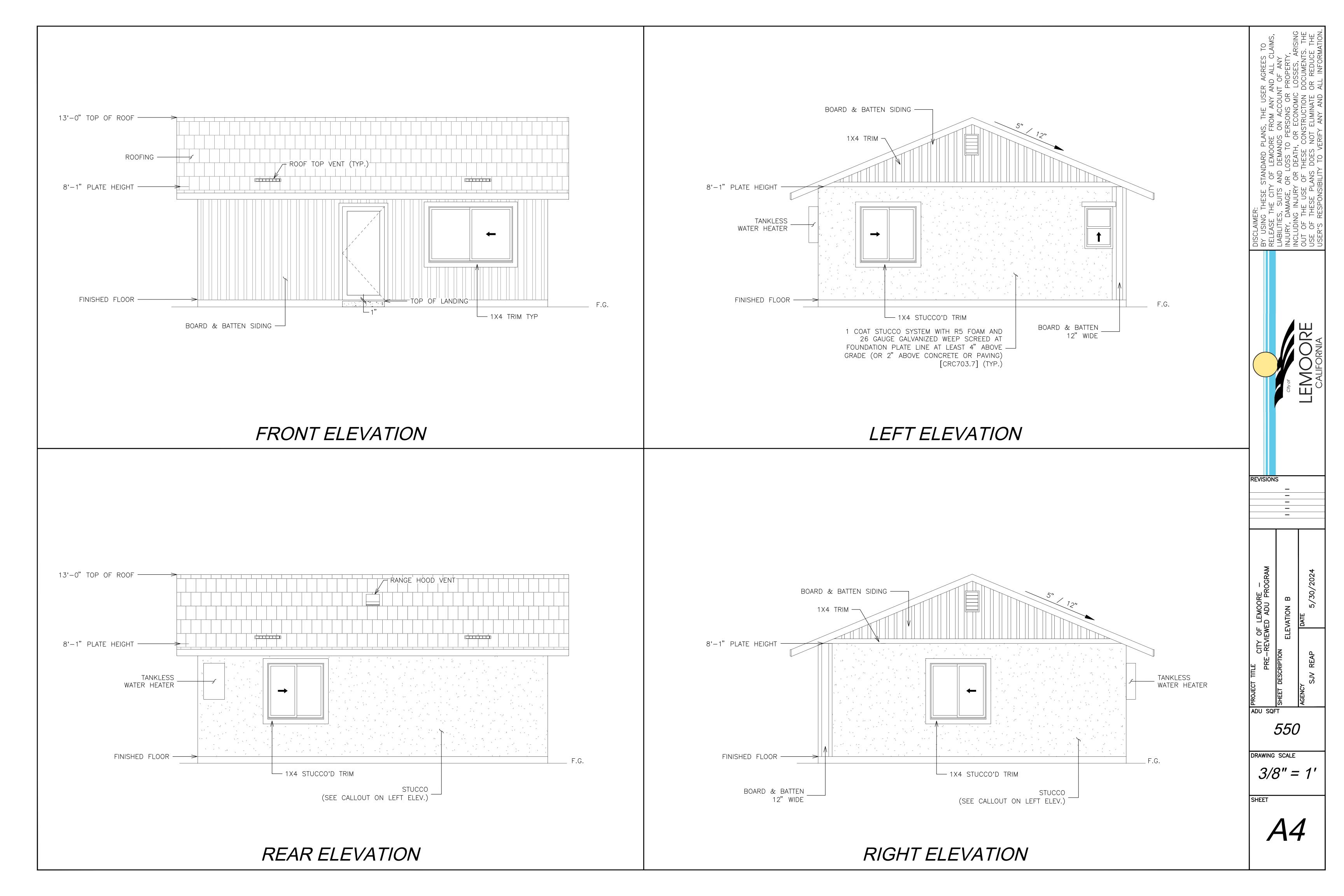
SHEETS S4 WHERE REQUIRED.

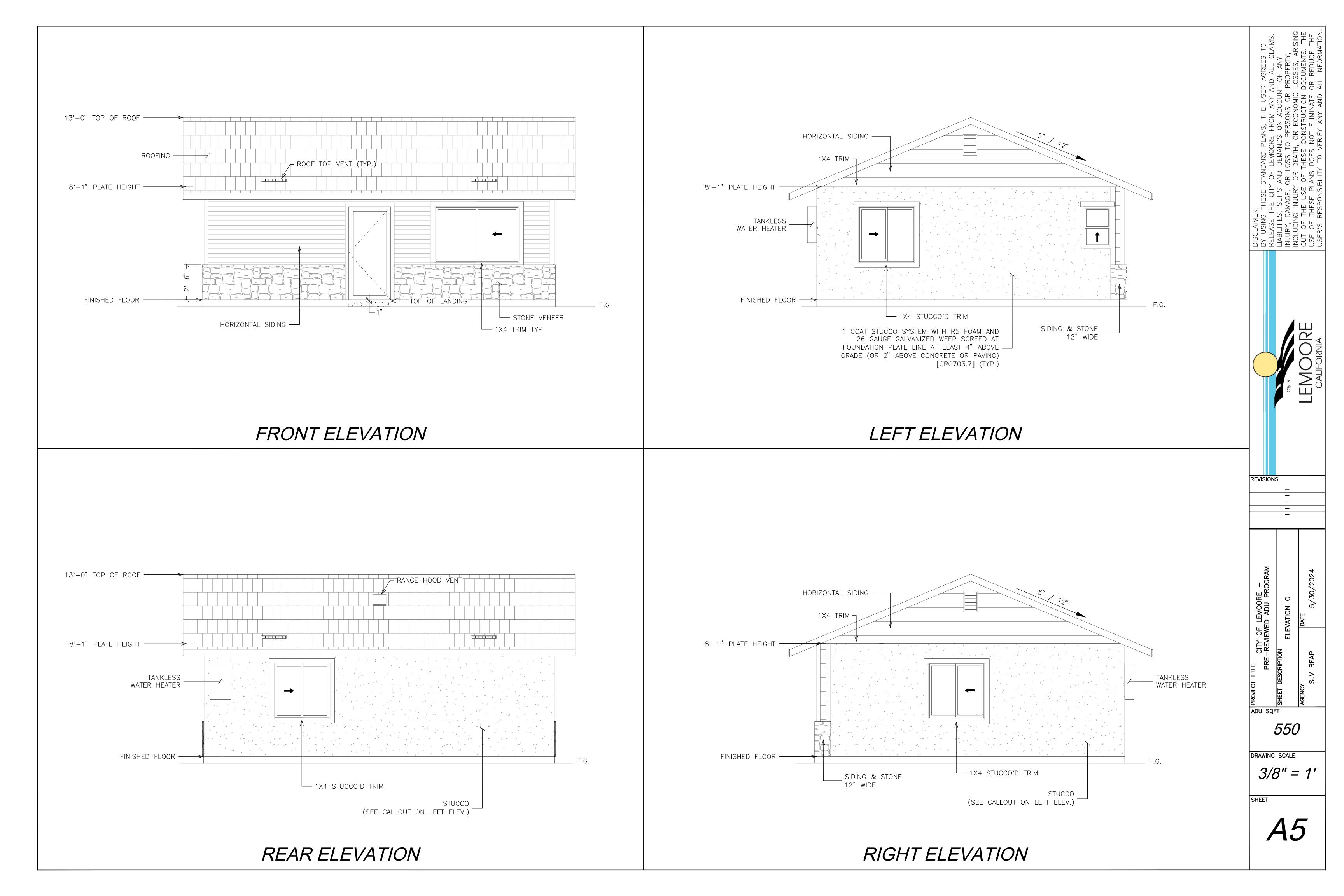
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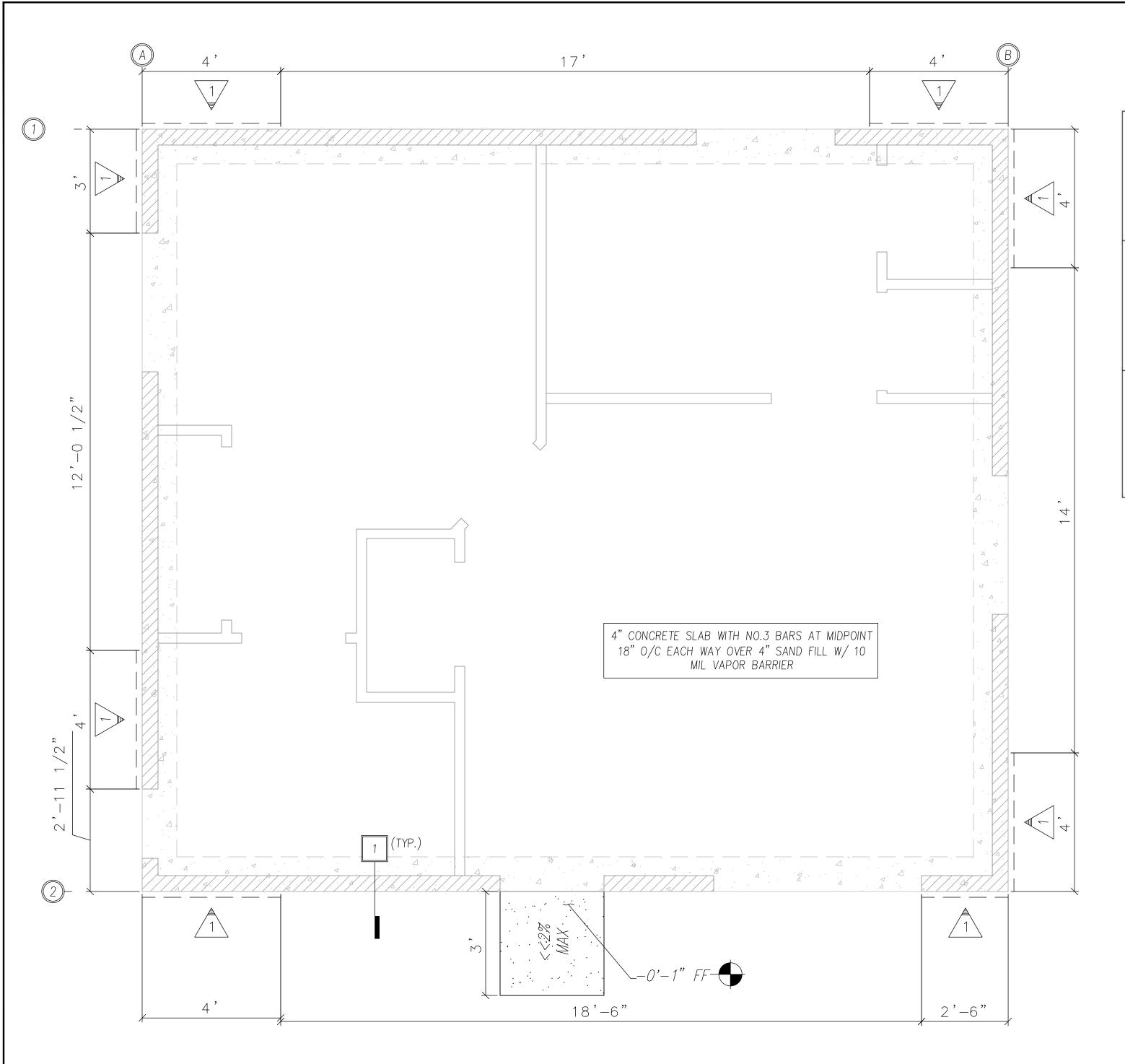
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DRAWING SCALE









KEYNOTES/LEGEND

MATERIAL

BRACED WALL LINE

FOUNDATION PLAN DETAIL FOUND ON SHEET S3

WALL BRACING SCHEDULE

3/8" PLYWD² | 6d NAILS; EDGES @ 6" O.C. , FIELD NAIL @ 12" O.C.

STRUCTURAL PANEL SHEATHING TO BE USED ON ALL EXTERIOR SURFACES

EXPANDED METAL OR WOVEN WIRE LATH STAPLED TO ALL STUDS, TOP AND BTM.

NAILING/STAPLING

INDICATES CONCRETE FOOTING AREA

INCLUDING AREAS ABOVE AND BELOW OPENINGS.

FIGURE R602.10.7 END CONDITIONS FOR BRACED WALL LINES WITH CONTINUOUS SHEATHING

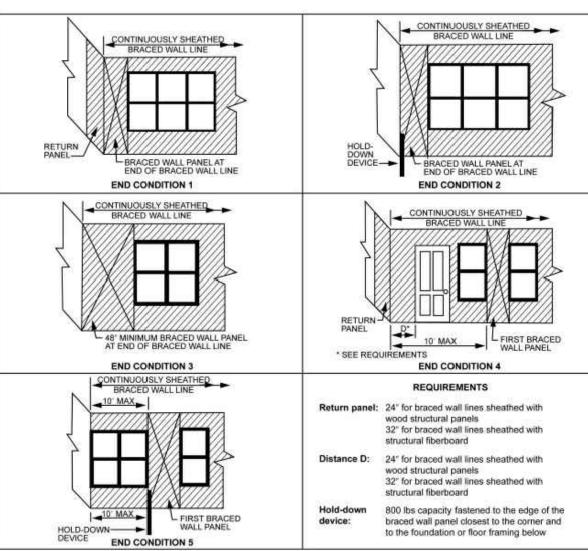


TABLE R602.3(3) REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES^{a, b, c}

MINIMUM NAIL		STRUCTURAL NOMINAL		MAXIMUM WALL STUD SPACING	PANEL NAI	PANEL NAIL SPACING		WIND SPEED V _{ult} (mph)		
Size	Penetration	PANEL SPAN RATING	THICKNESS	(inches)	Edges	Field	Wind exposure category			
Size	(inches)		(inches)		(inches o.c.)	(inches o.c.)	В	С	D	
6d Common (2.0" × 0.113")	1.5	24/0	³ / ₈	16	6	12	140	115	110	
8d Common	8d Common 1.75 24/16		7,	16	6	12	170	140	135	
$(2.5" \times 0.131")$	1./3	24/10	⁷ / ₁₆	24	6	12	140	115	110	

For SI: 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s.

- a. Panel strength axis parallel or perpendicular to supports. Three-ply plywood sheathing with studs spaced more than 16 inches on center shall be applied with panel strength axis perpendicular to supports.
- b. Table is based on wind pressures acting toward and away from building surfaces in accordance with Section R301.2. Lateral bracing requirements shall be in accordance with Section R602.10.
- c. Wood structural panels with span ratings of Wall-16 or Wall-24 shall be permitted as an alternate to panels with a 24/0 span rating. Plywood siding rated 16 o.c. or 24 o.c. shall be permitted as an alternate to panels with a 24/16 span rating. Wall-16 and Plywood siding 16 o.c. shall be used with studs spaced not more than 16 inches on center.

WALL BRACING NOTES

- 1. FOR THE PURPOSE OF DETERMINING THE AMOUNT AND LOCATION OF BRACING REQUIRED IN EACH STORY LEVEL OF A BUILDING, BRACED WALL LINES SHALL BE DESIGNATED AS STRAIGHT LINES IN THE BUILDING PLAN PLACED IN ACCORDANCE WITH THIS SECTION.(CRC602.10.1)
- 2. THE LENGTH OF A BRACED WALL LINE SHALL BE THE DISTANCE BETWEEN ITS ENDS. THE END OF A BRACED WALL LINE SHALL BE THE INTERSECTION WITH A PERPENDICULAR BRACED WALL LINE, AN ANGLED BRACED WALL LINE AS PERMITTED IN SECTION R602.10.1.4 OR AN EXTERIOR WALL AS SHOWN IN FIGURE R602.10.1.1. (CRC602.10.1.1)
- 3. EACH BRACED WALL LINE SHALL BE LOCATED SUCH THAT NO MORE THAN TWO—THIRDS OF THE REQUIRED BRACED WALL PANEL LENGTH IS LOCATED TO ONE SIDE OF THE BRACED WALL LINE. BRACED WALL PANELS SHALL BE PERMITTED TO BE OFFSET UP TO 4 FEET (1219 MM) FROM THE DESIGNATED BRACED WALL LINE. BRACED WALL PANELS PARALLEL TO A BRACED WALL LINE SHALL BE OFFSET NOT MORE THAN 4 FEET (1219 MM) FROM THE DESIGNATED BRACED WALL LINE LOCATION AS SHOWN IN FIGURE R602.10.1.1.
- EXTERIOR WALLS PARALLEL TO A BRACED WALL LINE SHALL BE OFFSET NOT MORE THAN 4 FEET (1219 MM) FROM THE DESIGNATED BRACED WALL LINE LOCATION AS SHOWN IN FIGURE R602.10.1.1.
- INTERIOR WALLS USED AS BRACING SHALL BE OFFSET NOT MORE THAN 4 FEET (1219 MM) FROM A BRACED WALL LINE THROUGH THE INTERIOR OF THE BUILDING AS SHOWN IN FIGURE R602.10.1.1. (CRC602.10.1.2)
- 4. THE SPACING BETWEEN PARALLEL BRACED WALL LINES SHALL BE IN ACCORDANCE WITH TABLE R602.10.1.3. INTERMEDIATE BRACED WALL LINES THROUGH THE INTERIOR OF THE BUILDING SHALL BE PERMITTED. (CRC602.10.1.3)

TABLE R602.10.1.3 BRACED WALL LINE SPACING

ADDITION	CONDITION	BUILDING TYPE	В	RACED WALL LINE SPACING CRITERIA				
Wind bracing Seismic bracing	CONDITION	BUILDING TYPE	Maximum Spacing	Exception to Maximum Spacing				
Wind bracing	Ultimate design wind speed 100 mph to < 140 mph	speed 100 mph betached,		None				
	SDC A – C	Detached		Use wind bracing				
	SDC A – B	Townhouse		Use wind bracing				
	SDC C	Townhouse	35 feet	Up to 50 feet when length of required bracing per Table R602.10.3(3) is adjusted in accordance with Table R602.10.3(4).				
Seismic bracing	SDC D ₀ , D ₁ , D ₂	Detached, townhouses, one- and two-story only	25 feet	Up to 35 feet to allow for a single room not to exceed 900 square feet. Spacing of all other braced wall lines shall not exceed 25 feet.				
	SDC D ₀ , D ₁ , D ₂	Detached, townhouse	25 feet	Up to 35 feet when length of required bracing per Table R602.10.3(3) is adjusted in accordance with Table R602.10.3(4).				

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m², 1 mile per hour = 0.447 m/s.

- 5. BRACED WALL LINES WITH A LENGTH OF 16 FEET (4877 MM) OR LESS SHALL HAVE NOT LESS THAN TWO BRACED WALL PANELS OF ANY LENGTH OR ONE BRACED WALL PANEL EQUAL TO 48 INCHES (1219 MM) OR MORE. BRACED WALL LINES GREATER THAN 16 FEET (4877 MM) SHALL HAVE NOT LESS THAN TWO BRACED WALL PANELS. (CRC602.10.2.3)
- 6. TABLE R602.10.3(1) AND THE APPLICABLE ADJUSTMENT FACTORS IN TABLE R602.10.2(2) (CRC602.10.3)

TABLE R602.10.3(3) BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE ^{a, 1}								
Seismic Design Category	Story Location	Braced Wall Line Length (feet) ^c	Method LIB ^d	Method GB	Methods DWB, SFB, PBS, PCP, HPS, CS- SFB ^e	Method WSP	Methods CS-WSP, CS-G, CS-P				
		10	NP	2.8	2.8	1.8	1.6				
		20	NP	5.5	5.5	3.6	3.1				
		30	NP	8.3	8.3	5.4	4.6				
		40	NP	11.0	11.0	7.2	6.1				
		50	NP	13.8	13.8	9.0					
	_	10	NP	5.3	5.3	3.8	3.2				
		20	NP	10.5	10.5	7.5	6.4				
D_0		30	NP	15.8	15.8	11.3	9.6				
		40	NP	21.0	21.0	15.0	CS-WSP, CS-G, CS-PF 1.6 3.1 4.6 6.1 7.7 3.2 6.4				
		50	NP	26.3	26.3	18.8	16.0				
	^	10	NP	7.3	7.3	5.3	4.5				
		20	NP	14.5	14.5	10.5	9.0				
		30	NP	21.8	21.8	15.8	13.4				
		40	NP	29.0	29.0	21.0	17.9				
		50	NP	36.3	36.3	26.3	22.3				

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kl

NP = Not Permitted.

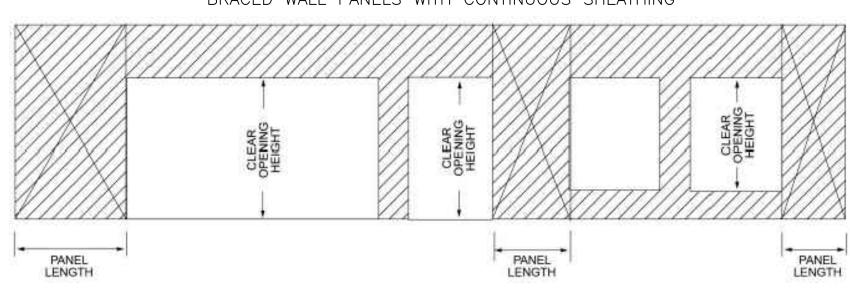
a. Linear interpolation shall be permitted.

b. Wall bracing lengths are based on a soil site class "D." Interpolation of bracing length between the S_{ds} values associated with the seismic design categories shall be permitted when a site-specific S_{ds} value is determined in accordance with Section 1613.2 of the California Building Code.

- c. Where the braced wall line length is greater than 50 feet, braced wall lines shall be permitted to be divided into shorter segments having lengths of 50 feet or less, and the amount of bracing within each segment shall be in accordance with this table.
- d. Method LIB shall have gypsum board fastened to not less than one side with nails or screws in accordance with Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches.
- e. Methods PFG and CS-SFB do not apply in Seismic Design Categories D₀, D₁ and D₂.

 f. Where more than one bracing method is used, mixing methods shall be in accordance with Section R602.
- f. Where more than one bracing method is used, mixing methods shall be in accordance with Section R602.10.4.1.

FIGURE R602.10.5 BRACED WALL PANELS WITH CONTINUOUS SHEATHING



AD PLANS, THE USER AGREES TO MOORE FROM ANY AND ALL CLAIMS EMANDS ON ACCOUNT OF ANY S TO PERSONS OR PROPERTY, ATH, OR ECONOMIC LOSSES, ARISINES CONSTRUCTION DOCUMENTS. THE SE CONSTRUCTION DOCUMENTS.

BY USING THESE STANDARD F
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LIABILITIES, SUITS AND DEMAN
INJURY, DAMAGE, OR LOSS TO
INCLUDING INJURY OR DEATH,
OUT OF THE USE OF THESE

LEMOORE CALIFORNIA

CITY OF LEMOORE —
PRE—REVIEWED ADU PROGRAM
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FOUNDATION PLAN
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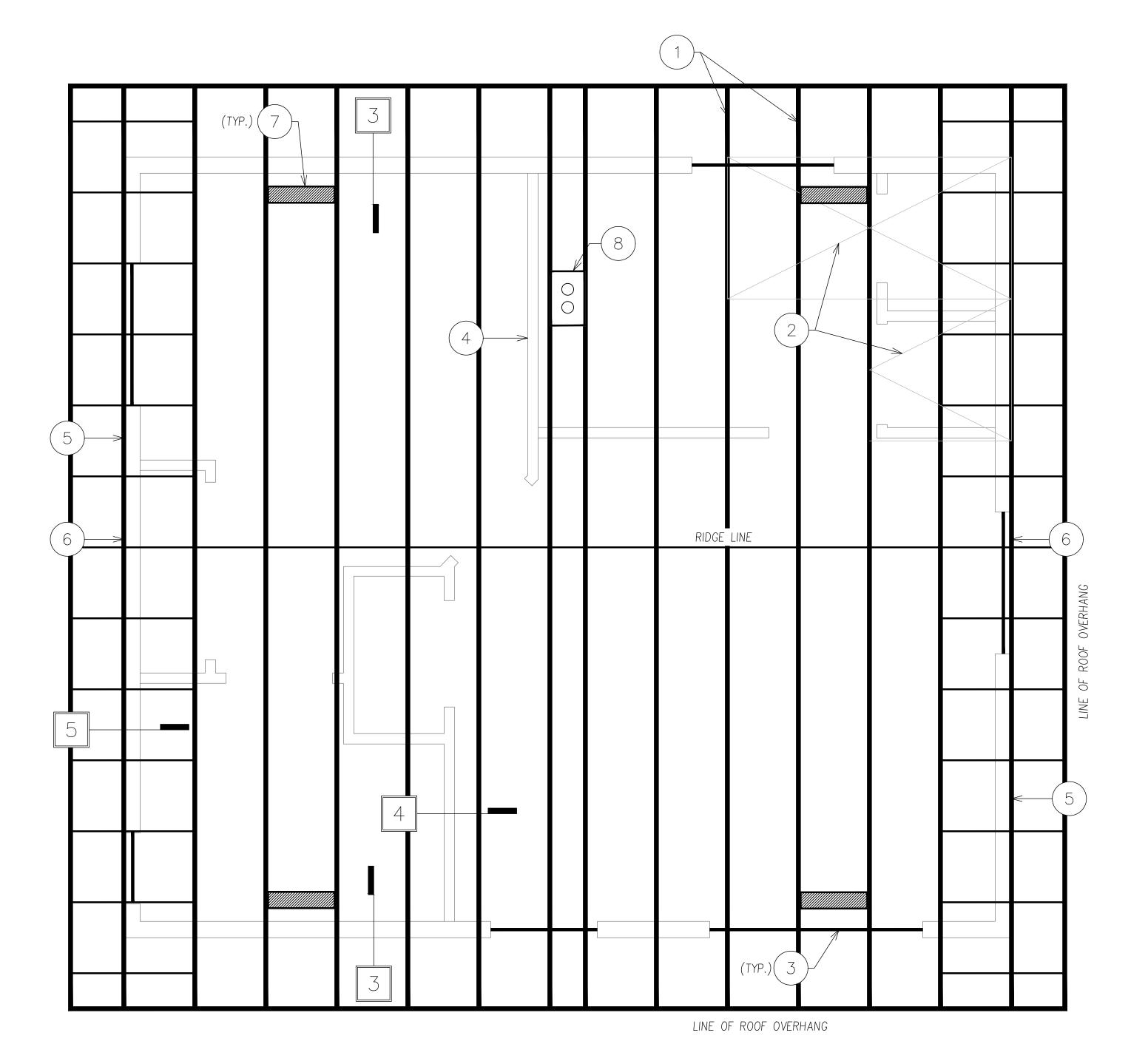
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DRAWING SCALE

1/2" = 1

SHEET

S1



KEYNOTES

- PRE-MFR. TRUSSES @ 24" O.C.
- 15/32" APA RATED PLYW'D OR OSB, P.I. 32/16, EDGE NAIL W/8D @ 6" O.C. & FIELD NAIL @ 6" O.C.
- 6X8 D.F. # 2
- TOP OF NON-BEARING, NON-BRACED WALL. SEE DETAIL 5.
- SEE DETAIL 3 FOR END WALL TRUSS SHEAR TRANSFER DESIGN REQUIREMENT
- LOCATION OF 12"x18" GABLE END VENT
- LOCATION OF 5 $\frac{1}{2}$ " x 22 $\frac{1}{2}$ " ROOF TOP VENT
- LOCATION OF RANGE HOOD VENT
- FRAMING PLAN DETAIL FOUND ON SHEET S3

NOTES

1. TRUSS CALCULATIONS (FROM THE TRUSS MANUFACTURER) SHALL BE PROVIDED TO THE BUILDING DEPARTMENT PRIOR TO A REQUEST FOR ROOF AND SHEAR INSPECTION

ATTIC VENTILATION REQUIREMENTS

 $= (528 \text{ in }^2)$

PROVIDE:

2 - 12"x18" GABLE END VENT (140 in²) $= (280 \text{ in }^2)$ 4 - 5-1/2" x 22-1/2" ROOF TOP VENT (83 in²) = (283 in²) TOTAL PROVIDED: $= (612 in^2)$

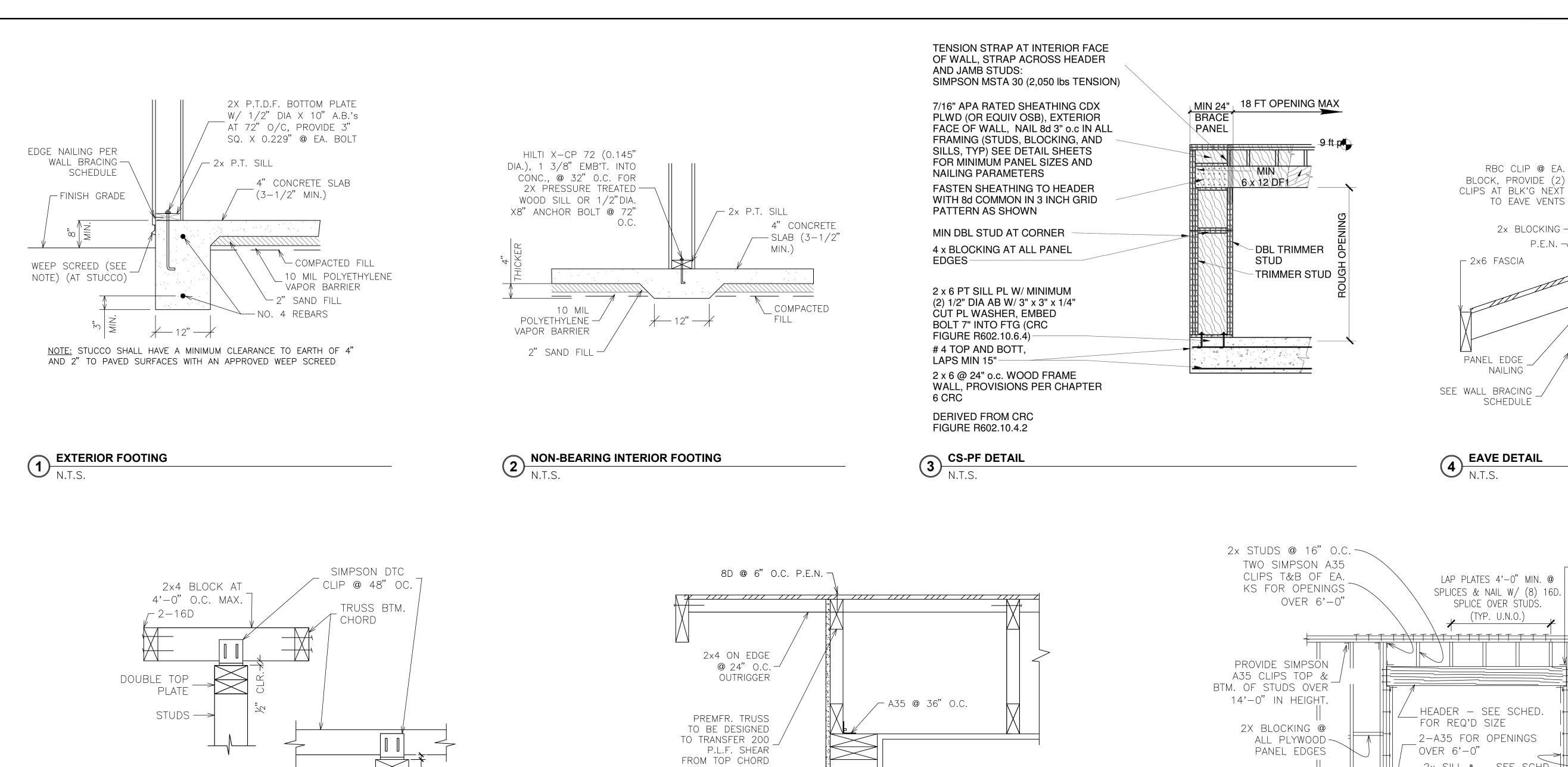


REVISIONS

CITY OF LEMOORE — -REVIEWED ADU PROGRAM FRAMING PLAN

550

DRAWING SCALE



GABLE END DETAIL

22' x 30" Minimum —

TO BTM. CHORD SEE WALL BRACING └ 2X STUDS @ 16" O.C. SCHEDULE

Furnace / Fan Coil Unit(s) installed in attic space shall be installed in accordance with manufacture's installation instructions as per 2022 California Mechanical Code Section 304.4 30" x 30" Clear Working Area in Front of Mechanical Unit platform is required in front of the service side of the appliance. Section 304.4.3 Minimum 24" wide passageway. Section 304.4.2 Mechanical Unit in Attic. See Minimum 24" x 30" Clear Fumace Installation Detail. Crawl Space to Mechanical

Where passageway is less

than 6 feet height. Section

AN APPROVED LOCATION. SIZE IN ACCORDANCE WITH CMC 310. SHEET METAL SRAP. SECURE TO BOTH FURNACE AND EQUIPMENT PLATFORM. INSULATED SUPPLY AIR SUPPLY PLENUM. ---- REFRIGERANT PIPING MIN. 36"xCOIL CONNECTION. SECURE TO COOLING COIL WITH MECHANICAL FASTENERS. SEAL AIR TIGHT. RETURN AIR DUCT SUPPLY AIR DUCT BRANCHED -WITH MANUAL VOLUME DAMPERS. INSULATED RETURN AIR PLENUM EQUIPMENT SERVICE PLATFORM BY OTHERS — SAFETY PAN UNDER COOLING COIL. MAKE WATER TIGHT. EQUIPMENT SERVICE PLATFORM TO BE PROVIDED WITH CONNECT DRAIN LINE TO SECONDARY CONDENSATE LINE. A MINIMUM 24" WIDE CONTINUOUS WALKWAY FROM 3/4" OVERFLOW LINE TO DISCHARGE TO A CONSPICUOUS ATTIC ACCESS TO SERVICE PLATFORM. LOCATION WITH 90 DEGREE ELBOW POINTED DOWN. (PREFERABLE OVER A SIDE WINDOW) REFER TO 2022 CMC, SECTION 304.4 FOR ACCESS AND SERVICE SPACE CODE REQUIREMENTS --- PVC OVERFLOW PIPING OUT OVER NEAREST WINDOW WITH 90N DEGREE ELBOW TURNED DOWN. SHEET METAL RUNNERS UNDER FURNACE

DOUBLE TOP PLATE —

5 NON-BRG., NON-BRACED WALL CONNECTION N.T.S.

STUDS —

NOTE: FURNACE/FAN COIL UNIT TO BE INSTALLED AND SECURELY FASTENED IN ACCORDANCE WITH MANUFACTURE'S INSTALLATION INSTRUCTIONS AS PER 2022 CALIFORNIA MECHANICAL CODE SECTION 303.4.

7 FAN COIL INSTALLATION IN ATTIC N.T.S.

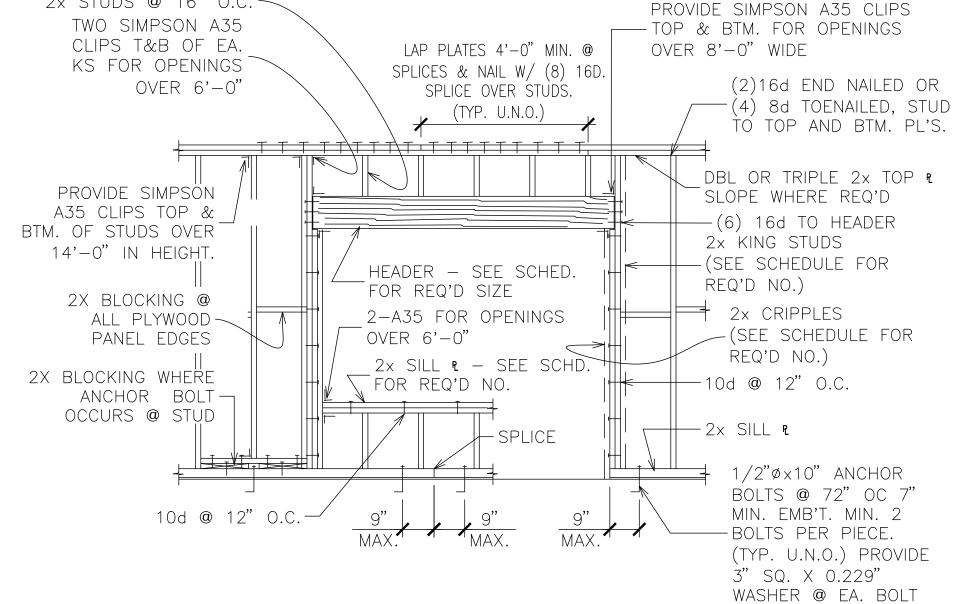
1. ATTIC ACCESS DOORS SHALL HAVE PERMANENTLY ATTACHED INSULATION USING ADHESIVE OR MECHANICAL FASTENERS. THE ATTIC ACCESS SHALL BE GASKETED TO PREVENT AIR LEAKAGE. [CA. ENERGY CODE 150.0(a)2]

Insulation Under Catwalk and

Equipment Platform.

2. FURNACE/FAN COIL UNIT(S) INSTALLED IN ATTIC SPACE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURE'S INSTALLATION INSTRUCTIONS AS PER (CMC 304.4)

ATTIC MOUNTED AIR HANDLER



TYP. WALL FRAMING AT OPENING

	HEADER SCHEDULE												
CLEAR SPAN OF		ADER IZE _{note 1}		BER OF PPLES		ER OF STUDS	NUMBER OF SILL PLATES						
OPENING	BEARING WALL	NON-BRG WALL	BRG WALL	NON-BRG WALL	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR					
UP TO 6'-0"	4 x 8	4 × 6	1	1	1	1	1	1					

NOTES:

- 1. 4x HEADER SIZE SHOWN IS FOR 2x4 STUD WALL. REVISE TO 6x FOR 2x6 STUD WALLS AND 8x FOR 2x8 STUD WALLS.
- 2. DETAILS AND MEMBER SIZES ARE TYPICAL UNLESS OTHERWISE NOTED OR DETAILED.
- 3. NOTES AND MEMBER SIZES SHOWN ON FRAMING PLANS SHALL TAKE PRECEDENCE OVER SCHEDULE.



REVISIONS CITY OF LEMOOF -REVIEWED ADU ADU SQFT *550* DRAWING SCALE SHEET

DARD PL/ LEMOORE DEMANDS OSS TO DEATH, (THESE C(

ROOF SLOPES > 4/12 REQR.

10D TOENAILED EACH

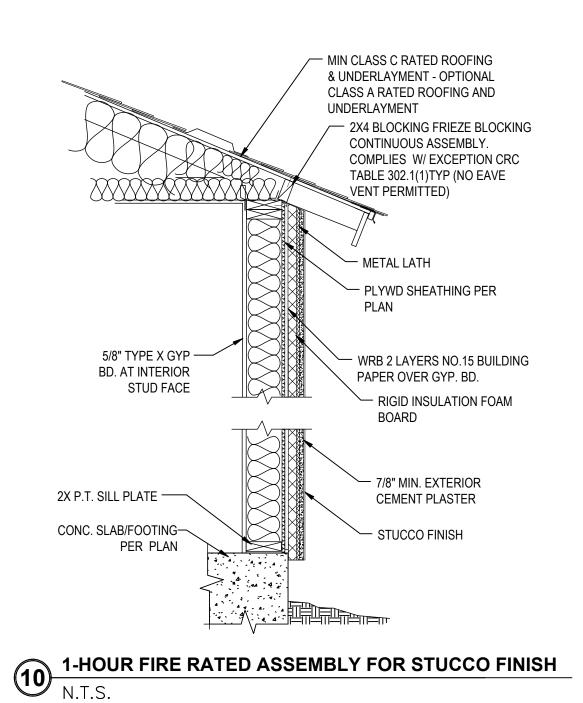
SIDE OF TRUSS

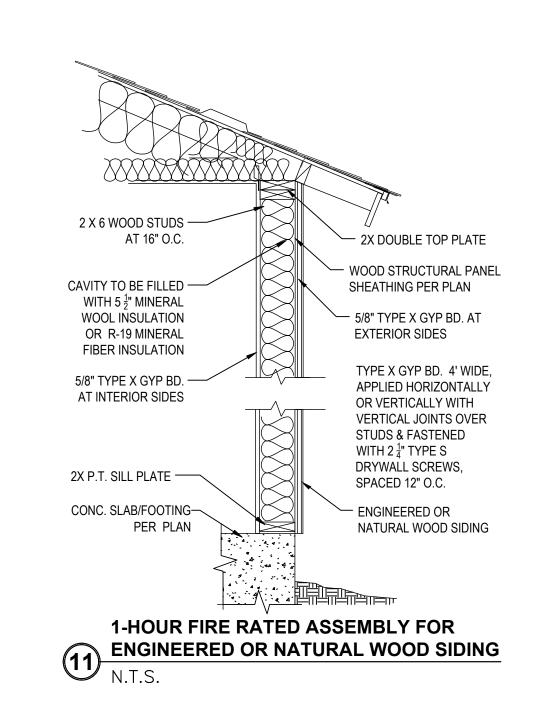
L 2x STUDS @ 16" O.C.

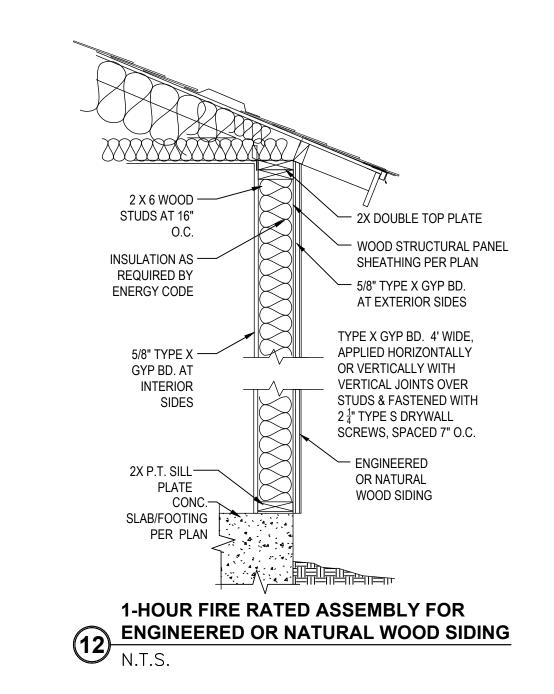
N.T.S.

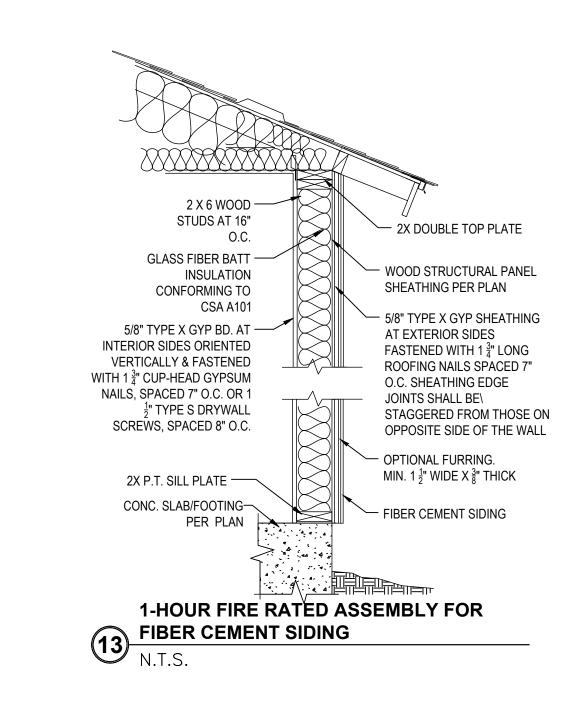
2 LAYERS OF FELT

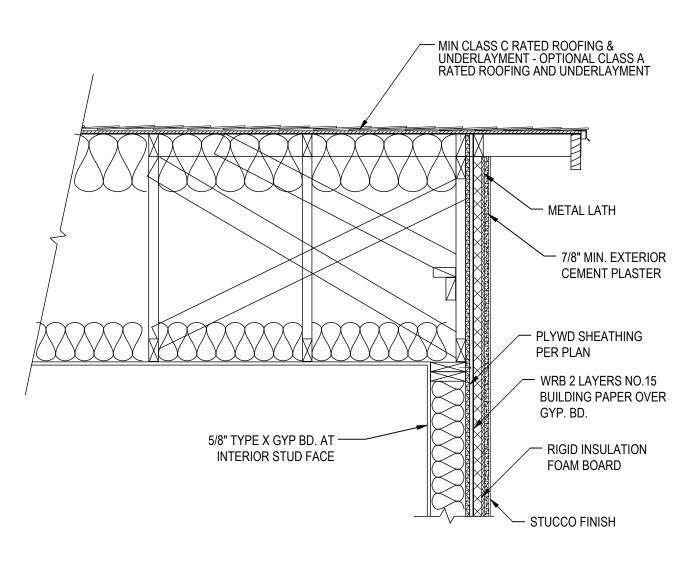
H3 CLIP EA. TRUSS



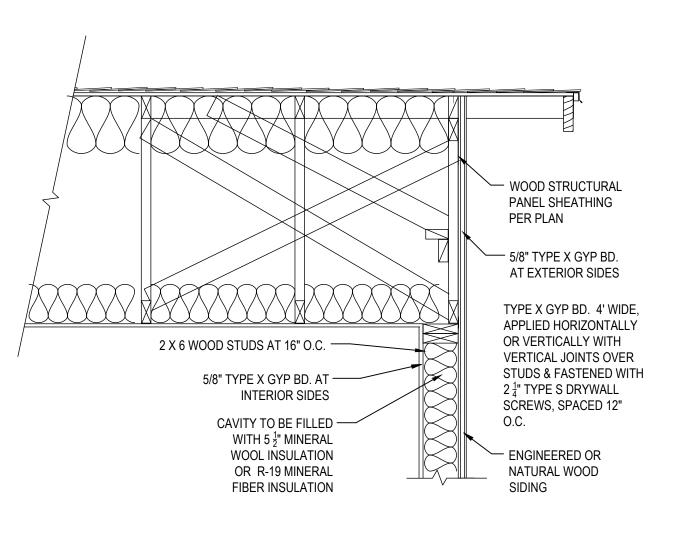






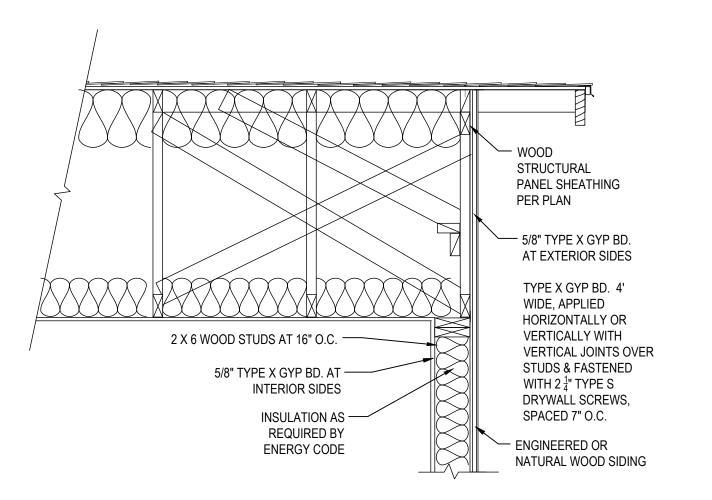






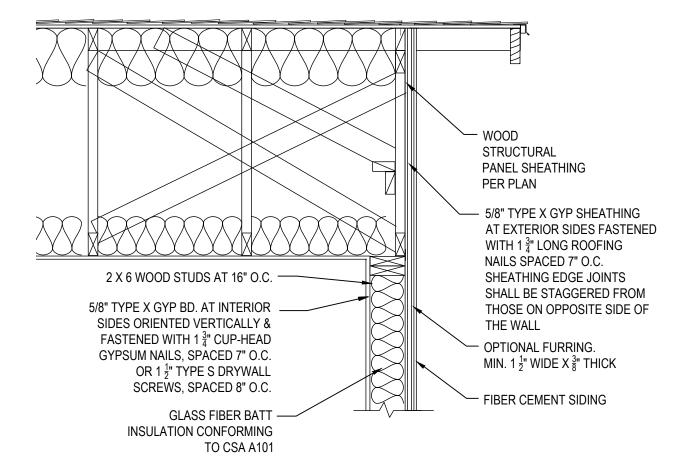
1-HOUR FIRE RATED GABLE END FOR ENGINEERED OR NATURAL WOOD SIDING

N.T.S.



1-HOUR FIRE RATED GABLE END FOR ENGINEERED OR NATURAL WOOD SIDING

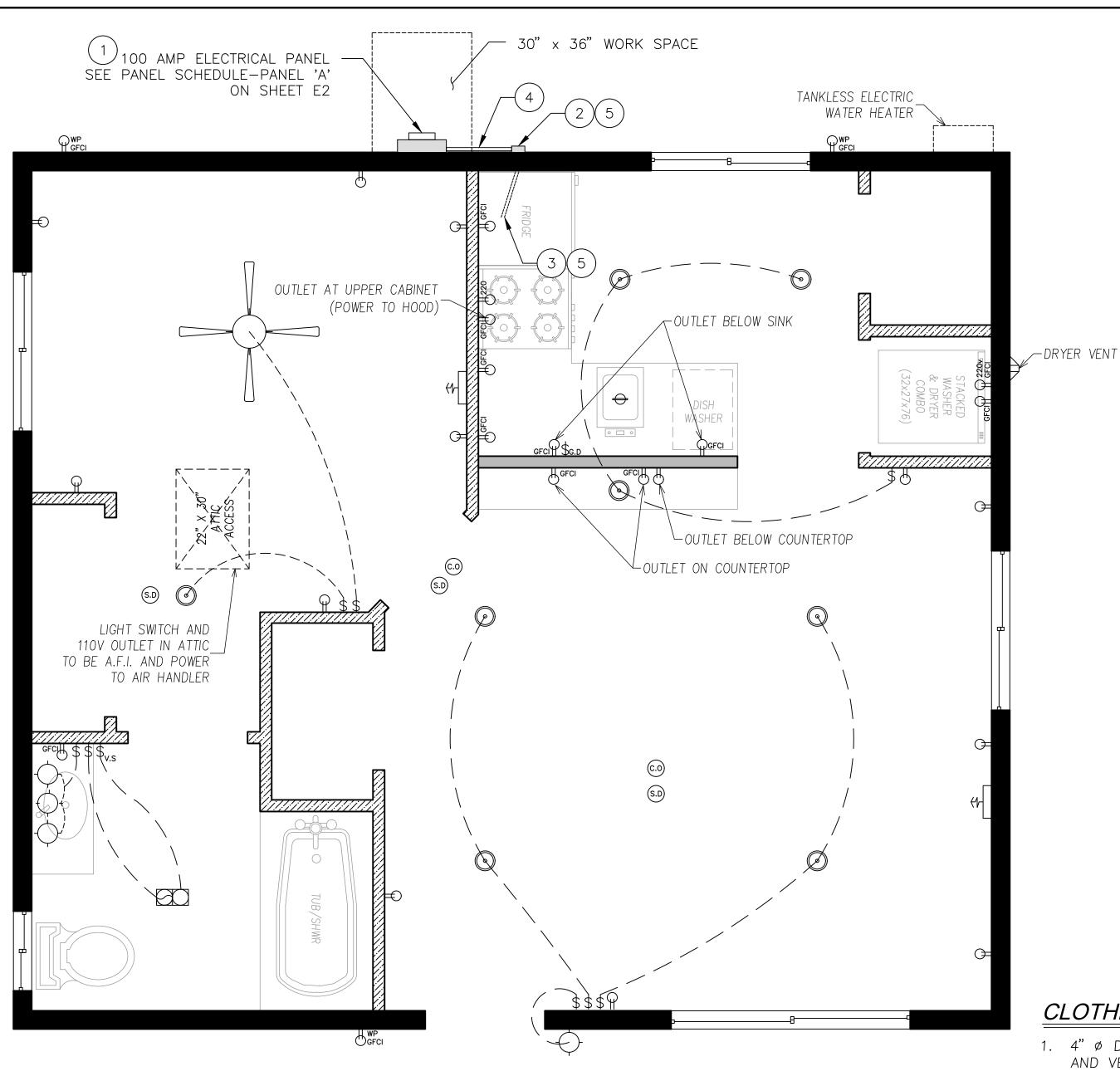
N.T.S.



1-HOUR FIRE RATED GABLE END FOR FIBER CEMENT SIDING N.T.S.

REVISIONS CITY OF LEMOOF -REVIEWED ADU ADU SQFT *550* DRAWING SCALE SHEET

S4



120/240V 1PH 3 WIRE 100 AMP

MLO

10KAIC

NEMA-1 FLUSH MOUNT 30 CK PANEL SCHEDULE -PANEL 'A'

25% LCU/IML

TOTAL LOAD

TOTAL LOAD AMPS

DESCRIPTION	СКТ	OCPD	PHASE A	PHASE B	OCPD	СКТ	DESCRIPTION
RECEPTACLES	1	20 AMP	1800	1300	15 AMP	2	LIGHTING
WASHER	3	20 AMP	1800	2700	30 AMP	4	DRYER
RANGE	5	40 AMP	3700	2700	30 AMP	6	DRYER
RANGE	7	40 AMP	3700	1350	20 AMP	8	KITCHEN APPLIANCE
KITCHEN APPLIANCE	9	20 AMP	1350	1800	20 AMP	10	DISH WASHER
RECEPTACLES	11	20 AMP	1800	1800	20 AMP	12	DISPOSAL
EF #1 AND EF #2	13	20 AMP	600	4000	50 AMP	14	COOK TOP
	15			4000	50 AMP	16	COOK TOP
WATER HEATER	17	30 AMP	2400	2400	30 AMP	18	FURNACE
WATER HEATER	19	30 AMP	2400	2400	30 AMP	20	FURNACE
SPACE	21					22	SPACE
SPACE	23					24	SPACE
SPACE	25					26	SPACE
SPACE	27					28	SPACE
SPACE	29					30	SPACE
SPACE	31					32	SPACE
SPACE	33					34	SPACE
SPACE	35					36	SPACE
SPACE	37					38	SPACE
SPACE	39					40	SPACE
SPACE	41					42	SPACE
	•	TOTAL VA LOAD	14150	11650	Commo	· · · · · · · · · · · · · · · · · · ·	

AFCI PROTECTION REQUIRED FOR KITCHENS AND LAUNDRY ROOMS IN ADDITION TO GFCI PROTECTION.

#498

CLOTHES DRYER VENT NOTES

- 1. 4" Ø DRYER VENT WITH MAXIMUM 14 FOOT COMBINED HORIZONTAL AND VERTICAL LENGTH WITH TWO 90 DEGREE ELBOWS.
- 2. SMALL APPLIANCE CIRCUIT LOAD IN EACH DWELLING UNIT, THE LOAD SHALL BE CALCULATED AT 1500 VOLT-AMPERES FOR EACH 2-WIRE SMALL APPLIANCE BRANCH CIRCUIT AS COVERED BY 2010.11(C)(1). WHERE THE LOAD IS SUBDIVIDED THROUGH TWO OR MORE FEEDERS, THE CALCULATED LOAD FOR EACH SHALL INCLUDE NOT LESS THAN 1500 VOLT-AMPERES FOR EACH 2-WIRE SMALL APPLIANCE BRANCH CIRCUIT. THESE LOADS SHALL BE PERMITTED TO BE INCLUDED WITH THE GENERAL LIGHTING LOAD AND SUBJECTED TO THE DEMAND FACTORS PROVIDED IN TABLE 220.42.
- 2.1. THE INDIVIDUAL BRANCH CIRCUIT PERMITTED BY 210.52(B)(1). EXCEPTION NO. 2, SHALL BE PERMITTED TO EB EXCLUDED FROM THE CALCULATION REQUIRED BY 220.52.
- 3. LAUNDRY CIRCUIT LOAD A LOAD OF NOT LESS THAN 1500 VOLT-AMPERES SHALL IN INCLUDED FOR EACH 2-WIRE LAUNDRY BRANCH CIRCUIT INSTALLED AS COVERED BY 210.11(C)(2). THIS LOAD SHALL BE SUBJECTED TO THE DEMAND FACTORS PROVIDED IN TABLE 220.42. [CEC 220.43(B)]
- 4. APPLIANCE LOAD-DWELLING UNITS IT SHALL BE PERMISSIBLE TO APPLY A DEMAND FACTOR OF 75 PERCENT TO THE NAMEPLATE RATING LOAD OF FOUR OR MORE APPLIANCES RATED 1/2 HP OR GREATER, OR 500 WATTS OR GREATER, THAT ARE FASTENED IN PLACE AND THAT ARE SERVED BY THE SAME FEEDER OR SERVICE INA ONE-FAMILY, TWO-FAMILY, OR MULTIFAMILY DWELLING. THIS DEMAND FACTOR SHALL NOT APPLY TO: HOUSEHOLD ELECTRIC COOKING EQUIPMENT THAT IS FASTENED IN PLACE, CLOTHES DRYERS, SPACE HEATING EQUIPMENT, ADN AIR-CONDITIONING EQUIPMENT. [CEC 220.53]
- 5. ELECTRIC CLOTHES DRYER THE LOAD FOR HOUSEHOLD ELECTRIC CLOTHES DRYERS INA DWELLING UNIT SHALL BE EITHER 5,000 WATTS OR THE NAMEPLATE RATING, WHICHEVER IS LARGER, FOR EACH DRYER SERVED. THE USE OF THE DEMAND FACTORS IN TABLE 220.54 SHALL BE PERMITTED. WHERE TWO OR MORE SINGLE-PHASE DRYERS ARE SUPPLIED BY A 3-PHASE.4-WIRE FEEDER OR SERVICE, THE TOTAL LOAD SHALL BE CALCULATED ON THE BASIS OF TWICE THE MAX. NUMBER CONNECTED BETWEEN ANY TWO PHASES. KILOVOLT-AMPERES SHALL BE CONSIDERED EQUIVALENT TO KILOWATTS FOR LOADS CALCULATED IN THIS SECTION.

OUTLET NOTES

210.52(D)]

3538

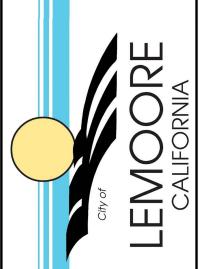
17688

2913

14563

SUPPORT BASE. [CEC 210.52(C)(3)]

- 1. RECEPTACLES SHALL BE INSTALLED SUCH THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE OF ANY WALL SPACE IS MORE THAN 6 FEET FROM A RECEPTACLE OUTLET. [CEC 210.52(A)(1)]
- 2. GFCI OUTLETS. GROUND FAULT CIRCUIT INTERRUPTER (GFCI) OUTLETS ARE REQUIRED IN BATHROOMS, AT KITCHEN COUNTERTOPS, AT LAUNDRY AND WET BAR SINKS, IN GARAGES, IN CRAWLSPACES, IN UNFINISHED BASEMENTS, AND OUTDOORS. (CEC 210.8)
- 3. AFCI OUTLETS. ELECTRICAL CIRCUITS IN BEDROOMS, LIVING ROOMS, DINING ROOMS, DENS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS MUST BE PROTECTED BY ARC FAULT CIRCUIT INTERRUPTERS (AFCI). (CEC 210.12)
- RECEPTACLE OUTLETS SHALL BE LOCATED IN ONE OR MORE OF THE FOLLOWING: 4.1. ON OR ABOVE COUNTERTOP OR WORK SURFACES: ON OR ABOVE, BUT NOT MORE THAN 20 INCHES
- ABOVE, THE COUNTERTOP OR WORK SURFACE. 4.2. IN COUNTERTOP OR WORK SURFACES: RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN COUNTERTOPS
- OR WORK SURFACES SHALL BE PERMITTED TO BE INSTALLED IN COUNTERTOPS OR WORK SURFACES. 4.3. BELOW COUNTERTOP OR WORK SURFACES: NOT MORE THAN 12 INCHES BELOW THE COUNTERTOP OR WORK SURFACE. RECEPTACLES INSTALLED BELOW A COUNTERTOP OR WORK SURFACE SHALL NOT BE LOCATED WHERE THE COUNTERTOP OR WORK SURFACE EXTENDS MORE THAN 6 INCHES BEYOND ITS
- AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS WITHIN 3FEET OF THE OUTSIDE EDGE OF EACH BASIN. THE RECEPTACLE OUTLET SHALL BE LOCATED ON A WALL OR PARTITION THAT IS ADJACENT TO THE BASIN OR BASIN COUNTERTOP, LOCATED ON THE COUNTERTOP, OR INSTALLED ON THE SIDE OR FACE OF THE BASIN CABINET. IN NO CASE SHALL THE RECEPTACLE BE LOCATED MORE THAN 12 INCHES BELOW THE TOP OF THE BASIN OR BASIN COUNTERTOP RECEPTACLE OUTLET ASSEMBLIES LISTED FOR USE IN THE COUNTERTOPS SHALL BE PERMITTED TO BE INSTALLED IN THE COUNTERTOP. [CEC
- 6. OUTDOOR OUTLETS ALL EXTERIOR RECEPTACLES SHALL BE WP/GFCI PROTECTED. FOR A ONE-FAMILY DWELLING THAT IS AT GRADE LEVEL, AT LEAST ONE RECEPTACLE OUTLET READILY ACCESSIBLE FROM GRADE AND NOT MORE THAN 6 1/2 FEET ABOVE GRADE LEVEL SHALL BE INSTALLED AT THE FRONT AND BACK OF THE DWELLING. [210.52(E)(1)]
- 7. LAUNDRY AREAS IN DWELLING UNITS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN AREAS DESIGNATED FOR THE INSTALLATION OF LAUNDRY EQUIPMENT. [210.52(F)]
- GFCI OUTLETS. GROUND FAULT CIRCUIT INTERRUPTER (GFCI) OUTLETS ARE REQUIRED IN BATHROOMS, AT KITCHEN COUNTERTOPS, AT LAUNDRY AND WET BAR SINKS, IN GARAGES, IN CRAWLSPACES, IN UNFINISHED BASEMENTS, AND OUTDOORS. (CEC 210.8)
- 9. AFCI OUTLETS. ARC FAULT CIRCUIT INTERRUPTERS (AFCI) PROTECTION IS REQUIRED THROUGHOUT ALL 15 AND 20-AMP 120V CIRCUITRY THAT IS NOT GFCI PROTÉCTED. (CEC 210.12)



CITY OF LEMOORE — -REVIEWED ADU PROGRAM

ADU SQFT 550

DRAWING SCALE 1/2'' = 1'

SHEET



HIGH EFFICACY LIGHT FIXTURE

HIGH EFFICACY RECESSED LIGHT

HVAC AIR DUCT LOCATION

→ GARBAGE DISPOSAL

NOTE: SOLAR READY NOTES SHOWN TO DEMONSTRATE PLAN IS SOLAR READY. SEPARATE PERMIT AND FEES ARE REQUIRED. IF REQUIRED, CONTACT A PV/SOLAR PROVIDER FOR PLANS AND

- THE MAIN ELECTRICAL SERVICE PANEL SHALL NOT BE OF A TYPE WITH A CENTER-FED MAIN CIRCUIT BREAKER AND SHALL INCLUDE RESERVED SPACE ALLOWING FOR INSTALLATION OF DOUBLE-POLE CIRCUIT BREAKERS FOR A FUTURE SOLAR PHOTOVOLTAIC SYSTEM. SUCH RESERVED SPACE SHALL BE POSITIONED AT THE OPPOSITE (LOAD) END FROM THE INPUT FEEDER OR MAIN CIRCUIT BREAKER LOCATION. THE RESERVED SPACE SHALL BE PERMANENTLY AND VISIBLY MARKED AS "FOR FUTURE SOLAR PHOTOVOLTAIC"
- APPROVED MINIMUM 4-INCH SQUARE ELECTRICAL JUNCTION BOX LOCATED WITHIN 72 INCHES HORIZONTALLY AND 12 INCHES VERTICAL OF MAIN ELECTRICAL SERVICE PANEL
- MINIMUM 1 INCH DIAMETER LISTED ELECTRICAL METALLIC RACEWAY ORIGINATING AT READILY ACCESSIBLE ATTIC LOCATION WITH PROXIMITY TO SOLAR ZONE AREA AND TERMINATING AT THE REQUIRED ELECTRICAL JUNCTION BOX

SUB-PANEL & SWITCH GEAR FOR FUTURE BATTERY STORAGE

PGFI GFCI OUTLET

\$ WALL SWITCH

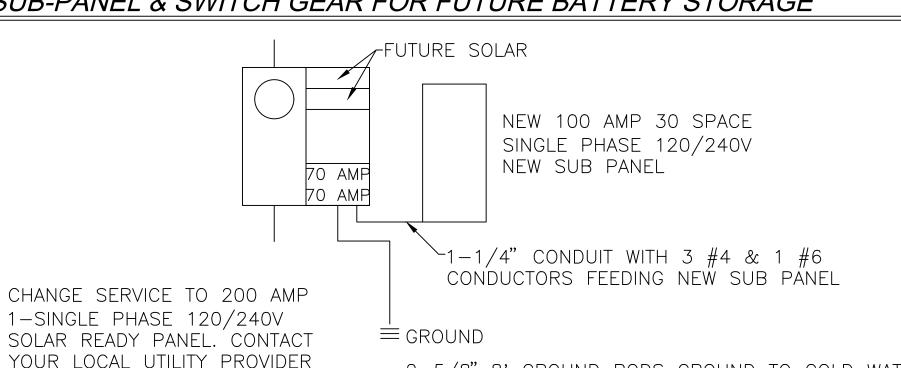
PWP WEATHERPROOF GFCI OUTLET

\$_{G.D} GARBAGE DISPOSAL SWITCH

VACANCY SENSOR

SMOKE DETECTOR

CARBON MONOXIDE ALARM



2-5/8"x8' GROUND RODS GROUND TO COLD WATER & GAS

FAN & LIGHT COMBO

- N.T.S. 4. MINIMUM 1 INCH DIAMETER LISTED ELECTRICAL METALLIC RACEWAY ORIGINATING AT THE REQUIRED ELECTRICAL JUNCTION BOX AND TERMINATING AT THE MAIN ELECTRICAL SERVICE PANEL
 - 5. ELECTRICAL JUNCTION BOX AND SEGMENT OF METALLIC RACEWAY IN THE ATTIC SHALL BE PERMANENTLY AND VISIBLY MARKED AS "FOR FUTURE SOLAR PHOTOVOLTAIC"

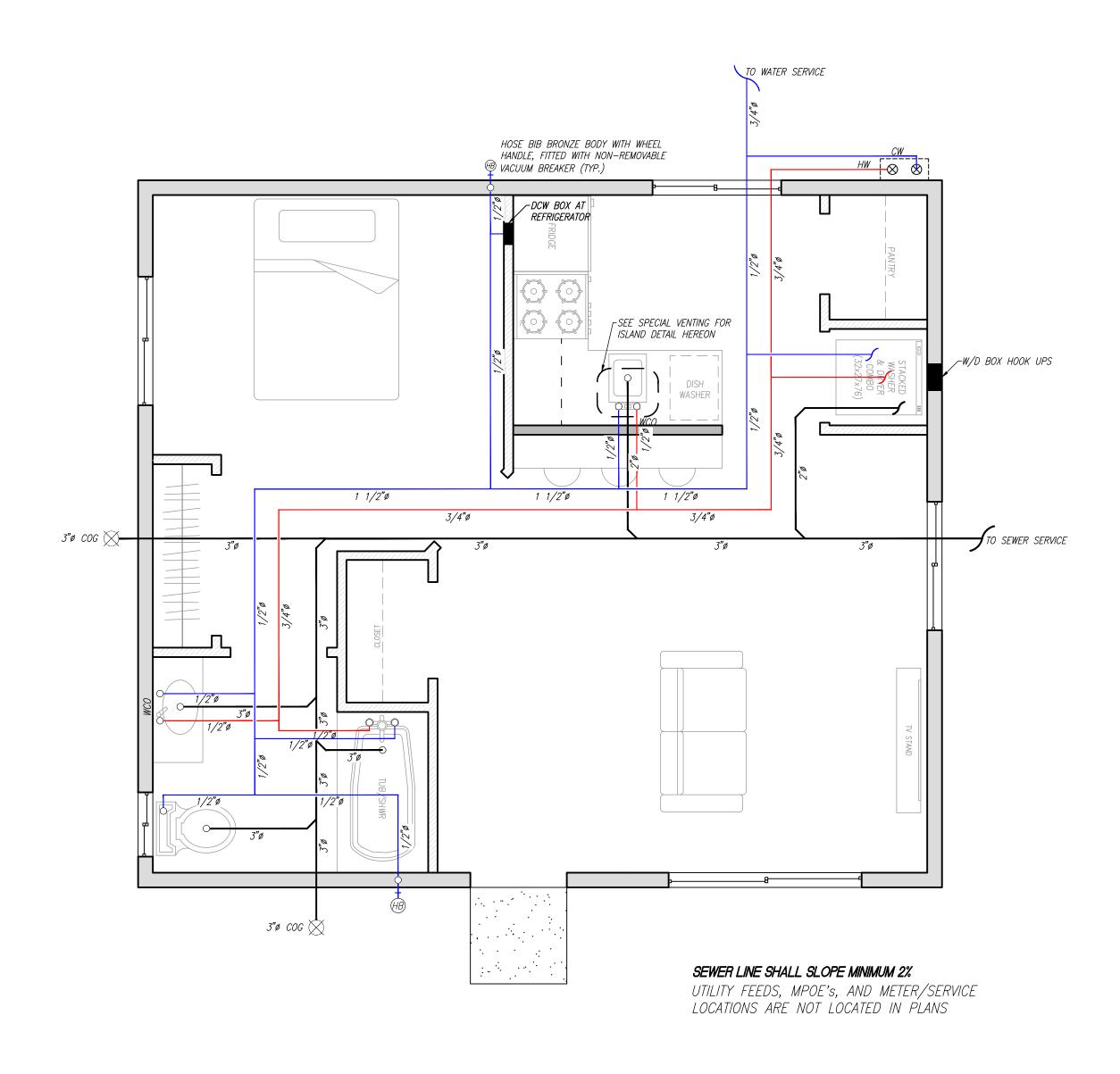


TABLE 610.4 FIXTURE UNIT TABLE FOR DETERMINING WATER PIPE AND METER SIZES

METER AND STREET	BUILDING SUPPLY AND	SUPPLY (feet)													70	
(inches)	BRANCHES (inches)	40	60	80	100	150	200	250	300	400	500	600	700	800	900	1000
		M2		No.	PRES	SURE R	ANGE —	30 to 4	5 psi ¹		W	hi:		kr		AD
3/4	1/22	6	5	4	3	2	1	1	1	0	0	0	0	0	0	0
3/4	3/4	16	16	14	12	9	6	5	5	4	4	3	2	2	2	1
3/4	1	29	25	23	21	17	15	13	12	10	8	6	6	6	6	6
1	1	36	31	27	25	20	17	15	13	12	10	8	6	6	6	6
3/4	11/4	36	33	31	28	24	23	21	19	17	16	13	12	12	11	11
1	11/4	54	47	42	38	32	28	25	23	19	17	14	12	12	11	11
11/2	11/4	78	68	57	48	38	32	28	25	21	18	15	12	12	11	11
1	11/2	85	84	79	65	56	48	43	38	32	28	26	22	21	20	20
11/2	11/2	150	124	105	91	70	57	49	45	36	31	26	23	21	20	20
2	11/2	151	129	129	110	80	64	53	46	38	32	27	23	21	20	20
1	2	85	85	85	85	85	85	82	80	66	61	57	52	49	46	43
11/2	2	220	205	190	176	155	138	127	120	104	85	70	61	57	54	51
2	2	370	327	292	265	217	185	164	147	124	96	70	61	57	54	51
2	21/2	445	418	390	370	330	300	280	265	240	220	198	175	158	143	133

For SI units: 1 inch = 25 mm, 1 foot = 304.8 mm, 1 pound-force per square inch = 6.8947 kPa

Available static pressure after head loss.

Building supply, not less than 3/4 of an inch (20 mm) nominal size.

FIXTURE UNIT TABLE

FIXTURES	QTY	COLD	COLD WATER HOT		HOT WATER (COLD WATER VALUE x0.75)	
		WSFU (EACH)	WSFU (EACH)	WSFU (EACH)	WSFU (EACH)	
ATER CLOSET	1	2.5	2.5	0	0	
AVATORY	1	1	1	0.75	0.75	
INK	1	1.5	1.5	1.5	1.5	
ATHTUB	1	4	4	3	3	
ISHWASHER	1	1.5	1.5	1.5	1.5	
LOTHES WASHER	1	4	4	3	3	
IOSE BIB	2	2.5	5			
UBTOTALS					9.75	
OTAL					29.25	

NOTES

ASSUMPTION: 3/4" MUNICIPAL WATER SERVICE

CONNECTION TO BE DETERMINED ON SITE

610.3 Quantity of Water

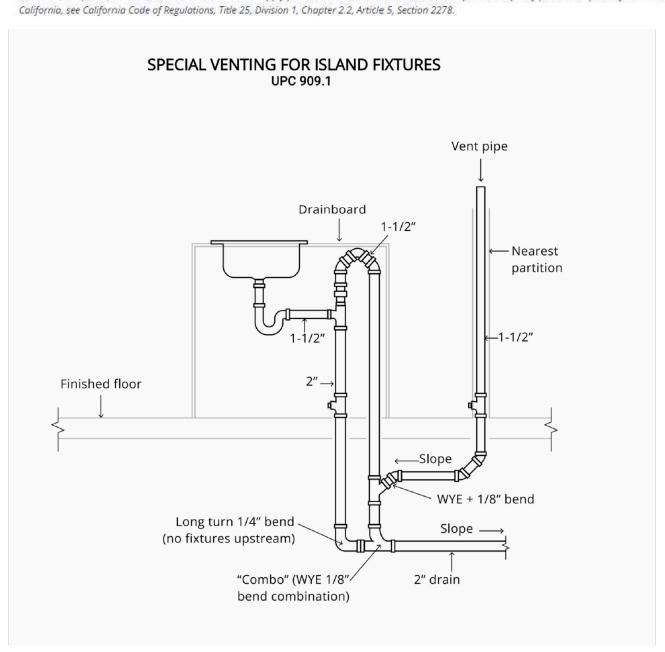
The quantity of water required to be supplied to every plumbing fixture shall be represented by fixture units, as shown in Table 610.3. Equivalent fixture values shown in Table 610.3 include both hot and cold water demand.

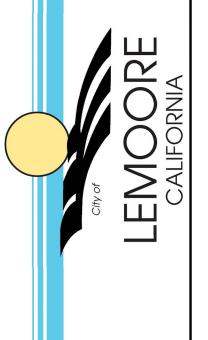
TABLE 610.3 WATER SUPPLY FIXTURE UNITS (WSFU) AND MINIMUM FIXTURE BRANCH PIPE SIZES³

APPLIANCES, APPURTENANCES OR FIXTURES ²	MINIMUM FIXTURE BRANCH PIPE SIZE ^{1,4} (Inches)	PRIVATE	PUBLIC	ASSEMBLY
Bathtub or Combination Bath/Shower (fill)	1/2	4.0	4.0	=:
³ / ₄ inch Bathtub Fill Valve	3/4	10.0	10.0	= 1
Bidet	1/2	1.0	====	
Clothes Washer	1/2	4.0	4.0	_
Dental Unit, cuspidor	1/2	- 1	1.0	=:
Dishwasher, domestic	1/2	1.5	1.5	
Drinking Fountain or Water Cooler	1/2	0.5	0.5	0.75
Hose Bibb	1/2	2.5	2,5	
Hose Bibb, each additional ⁸	1/2	1.0	1.0	==
Lavatory	1/2	1.0	1.0	1.0
Lawn Sprinkler, each head ⁵	\$ - \$	1.0	1.0	= 1,h
Mobilehome or Manufactured Home, each (minimum) ⁹	·—:	6.0	(0)	
Sinks	=		<u> ==</u> 1	-
Bar	1/2	1.0	2.0	
Clinical Faucet	1/2	=	3.0	- 2
Clinical Flushometer Valve with or without faucet	1		8.0	
Kitchen, domestic with or without dishwasher	1/2	1.5	1.5	
Laundry	1/2	1.5	1.5	===
Service or Mop Basin	1/2	1.5	3.0	
Washup, each set of faucets	1/2	- 	2.0	=
Shower, per head	1/2	2.0	2.0	-
Urinal, 1.0 GPF Flushometer Valve	3/4	See Fo	ootnote ⁷	<u> </u>
Urinal, greater than 1.0 GPF Flushometer Valve	3/4	See Footnote ⁷ -		
Urinal, flush tank	1/2	2.0	2.0	3.0
Urinal with Drain Cleansing Action	1/2	1.0	1.0	1.0
Wash Fountain, circular spray	3/4	=	4.0	==
Water Closet, 1.6 GPF Gravity Tank	1/2	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Tank	1/2	2.5	2.5	3.5
Water Closet, 1.6 GPF Flushometer Valve	1	See Footnote ⁷		=
Water Closet, greater than 1.6 GPF Gravity Tank	1/2	3.0	5.5	7.0
Water Closet, greater than 1.6 GPF Flushometer Valve	1	See Fo	ootnote ⁷	

¹ Size of the cold branch pipe, or both the hot and cold branch pipes.

- Appliances, appurtenances, or fixtures not referenced in this table shall be permitted to be sized by reference to fixtures having a similar flow rate and frequency of use.
- 3 The listed fixture unit values represent their load on the cold water building supply. The separate cold water and hot water fixture unit value for fixtures having both hot and cold water connections shall be permitted to be each taken as three-quarter of the listed total value of the fixture.
- 4 The listed minimum supply branch pipe sizes for individual fixtures are the nominal (I.D.) pipe size.
- ⁵ For fixtures or supply connections likely to impose continuous flow demands, determine the required flow in gallons per minute (gpm) (L/s), and add it separately to the demand in gpm (L/s) for the distribution system or portions thereof.
- 6 Assembly [Public Use (See Table 422.1)].
- Where sizing flushometer systems, see Section 610.10.
- 8 Reduced fixture unit loading for additional hose bibbs is to be used where sizing total building demand and for pipe sizing where more than one hose bibb is supplied by a segment of water distribution pipe. The fixture branch to each hose bibb shall be sized on the basis of 2.5 fixture units.
- 9 For water supply fixture unit values related to lots within mobilehome parks in all parts of the State of California, see California Code of Regulations, Title 25, Division 1, Chapter 2, Article 5, Section 1278. For water supply fixture unit values related to lots within special occupancy parks in all parts of the State of





REVISIONS

NG

DRAWING SCALE

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".

California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

2.Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the

location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide

information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and

electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required

raceways and related components that are planned to be installed underground, enclosed, inaccessible or in

concealed areas and spaces shall be installed at the time of original construction.

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the location or the proposed location of the EV space at the time of original CHAPTER 3 construction in accordance with the California Electrical Code. 4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities. GREEN BUILDING 4.304 OUTDOOR WATER USE When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest **SECTION 301 GENERAL** The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. Efficient Landscape Ordinance (MWELO), whichever is more stringent. space shall count as at least one standard automobile parking space only for the purpose of complying with any **301.1 SCOPE.** Buildings shall be designed to include the green building measures specified as mandatory in applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 4.106.4.2.5 Electric Vehicle Ready Space Signage. the application checklists contained in this code. Voluntary green building measures are also included in the Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans application checklists and may be included in the design and construction of structures covered by this code, Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its 1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations. but are not required unless adopted by a city, county, or city and county as specified in Section 101.7. 4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are 301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to available at: https://www.water.ca.gov/ The number 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 alterations of parking facilities serving existing 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 DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or specific area of the addition or alteration. 1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or **EFFICIENCY** of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical facilities or the addition of new parking facilities serving existing multifamily buildings. See Section 4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all 4.106.4.3 for application. 4.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in EVs at all required EV spaces at a minimum of 40 amperes. sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such 1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved lighting fixtures are not considered alterations for the purpose of this section. for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. 2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use. Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or 4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. **DIVISION 4.2 ENERGY EFFICIENCY 4.408.1 CONSTRUCTION WASTE MANAGEMENT.** Recycle and/or salvage for reuse a minimum of 65 Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate percent of the non-hazardous construction and demolition waste in accordance with either Section 1. When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and management ordinance. **4.201.1 SCOPE.** For the purposes of mandatory energy efficiency standards in this code, the California Energy other important enactment dates. Commission will continue to adopt mandatory standards. 2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable Exceptions: spaces, the number of EV capable spaces required may be reduced by a number equal to the number of 301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION Excavated soil and land-clearing debris. individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential 2. Alternate waste reduction methods developed by working with local agencies if diversion or 4.303 INDOOR WATER USE buildings, or both. Individual sections will be designated by banners to indicate where the section applies recycle facilities capable of compliance with this item do not exist or are not located reasonably 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, high-rise buildings, no banner will be used. 3. The enforcing agency may make exceptions to the requirements of this section when isolated future EV charging. jobsites are located in areas beyond the haul boundaries of the diversion facility. b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or **SECTION 302 MIXED OCCUPANCY BUILDINGS** Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving **4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN**. Submit a construction waste management plan EV chargers are installed for use. plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final in conformance with Items 1 through 5. The construction waste management plan shall be updated as **302.1 MIXED OCCUPANCY BUILDINGS.** In mixed occupancy buildings, each portion of a building completion, certificate of occupancy, or final permit approval by the local building department. See Civil necessary and shall be available during construction for examination by the enforcing agency. 2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power shall comply with the specific green building measures applicable to each specific occupancy. Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per buildings affected and other important enactment dates. 1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, dwelling unit when more than one parking space is provided for use by a single dwelling unit. 1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall reuse on the project or salvage for future use or sale. comply with Chapter 4 and Appendix A4, as applicable. **4.303.1.1 Water Closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per 2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or Exception: Areas of parking facilities served by parking lifts. 2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the California flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense bulk mixed (single stream). Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with Specification for Tank-type Toilets. 3. Identify diversion facilities where the construction and demolition waste material collected will be 4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more Chapter 4 and Appendix A4, as applicable. sleeping units or guest rooms. Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume 4. Identify construction methods employed to reduce the amount of construction and demolition waste The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to DIVISION 4.1 PLANNING AND DESIGN of two reduced flushes and one full flush. 5. Specify that the amount of construction and demolition waste materials diverted shall be calculated **4.303.1.2 Urinals.** The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. by weight or volume, but not by both. **1.EV Capable**. Ten (10) percent of the total number of parking spaces on a building site, provided for all types Department of Housing and Community Development The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush. of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 California Building Standards Commission **4.408.3 WASTE MANAGEMENT COMPANY.** Utilize a waste management company, approved by the Division of the State Architect, Structural Safety EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical enforcing agency, which can provide verifiable documentation that the percentage of construction and system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all OSHPD Office of Statewide Health Planning and Development demolition waste material diverted from the landfill complies with Section 4.408.1. EVs at all required EV spaces at a minimum of 40 amperes. **4.303.1.3.1 Single Showerhead.** Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA Note: The owner or contractor may make the determination if the construction and demolition waste The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved Additions and Alterations WaterSense Specification for Showerheads. materials will be diverted by a waste management company. for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. 4.303.1.3.2 Multiple showerheads serving one shower. When a shower is served by more than one 4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only lbs /sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in **RESIDENTIAL MANDATORY MEASURES** reduced by a number equal to the number of EV chargers installed over the five (5) percent required. allow one shower outlet to be in operation at a time. **Note**: A hand-held shower shall be considered a showerhead 4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds **SECTION 4.102 DEFINITIONS** a. Construction documents shall show locations of future EV spaces. 4.303.1.4 Faucets per square foot of the building area, shall meet the minimum 65% construction waste reduction 4.102.1 DEFINITIONS requirement in Section 4.408.1 The following terms are defined in Chapter 2 (and are included here for reference) b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or 4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall EV chargers are installed for use. not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall **4.408.5 DOCUMENTATION**. Documentation shall be provided to the enforcing agency which demonstrates FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar not be less than 0.8 gallons per minute at 20 psi. compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4... pervious material used to collect or channel drainage or runoff water. 2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per 4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials dwelling unit when more than one parking space is provided for use by a single dwelling unit. faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also buildings shall not exceed 0.5 gallons per minute at 60 psi. 1. Sample forms found in "A Guide to the California Green Building Standards Code used for perimeter and inlet controls. Exception: Areas of parking facilities served by parking lifts. (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in **4.303.1.4.3 Metering Faucets.** Metering faucets when installed in residential buildings shall not deliver documenting compliance with this section 3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. 2. Mixed construction and demolition debris (C & D) processors can be located at the California more than 0.2 gallons per cycle. 4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation Where common use parking is provided, at least one EV charger shall be located in the common use parking Department of Resources Recycling and Recovery (CalRecycle). and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, area and shall be available for use by all residents or guests. **4.303.1.4.4 Kitchen Faucets.** The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons management of storm water drainage and erosion controls shall comply with this section. per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not 4.410 BUILDING MAINTENANCE AND OPERATION When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required, to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per 4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact 4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less an automatic load management system (ALMS) may be used to reduce the maximum required electrical disc, web-based reference or other media acceptable to the enforcing agency which includes all of the than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers following shall be placed in the building: shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) or more, shall manage storm water drainage during construction. In order to manage storm water drainage **Note**: Where complying faucets are unavailable, aerators or other means may be used to achieve during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall 1. Directions to the owner or occupant that the manual shall remain with the building throughout the have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical property, prevent erosion and retain soil runoff on the site. life cycle of the structure. capacity to the required EV capable spaces. 4.303.1.4.5 Pre-rinse spray valves. 2. Operation and maintenance instructions for the following: Retention basins of sufficient size shall be utilized to retain storm water on the site. When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance a. Equipment and appliances, including water-saving devices and systems, HVAC systems, 2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar 4.106.4.2.2.1 Electric vehicle charging stations (EVCS). Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 photovoltaic systems, electric vehicle chargers, water-heating systems and other major disposal method, water shall be filtered by use of a barrier system, wattle or other method approved Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1. (d)(7) and shall be equipped with an integral automatic shutoff. b. Roof and yard drainage, including gutters and downspouts. 3. Compliance with a lawfully enacted storm water management ordinance. Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels FOR REFERENCE ONLY: The following table and code section have been reprinted from the California c. Space conditioning systems, including condensers and air filters. shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section d. Landscape irrigation systems. Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or 1605.3 (h)(4)(A). e. Water reuse systems. are part of a larger common plan of development which in total disturbs one acre or more of soil. 3. Information from local utility, water and waste recovery providers on methods to further reduce 4.106.4.2.2.1.1 Location. resource consumption, including recycle programs and locations. (Website: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html) EVCS shall comply with at least one of the following options: TABLE H-2 4. Public transportation and/or carpool options available in the area. 5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent **4.106.3 GRADING AND PAVING.** Construction plans shall indicate how the site grading or drainage system will 1.The charging space shall be located adjacent to an accessible parking space meeting the requirements of and what methods an occupant may use to maintain the relative humidity level in that range. manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space. STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY 6. Information about water-conserving landscape and irrigation design and controllers which conserve water include, but are not limited to, the following: VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019 2. The charging space shall be located on an accessible route, as defined in the California Building Code, 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 Chapter 2, to the building. feet away from the foundation. 2. Water collection and disposal systems 8. Information on required routine maintenance measures, including, but not limited to, caulking, MAXIMUM FLOW RATE (gpm) French drains Exception: Electric vehicle charging stations designed and constructed in compliance with the California [spray force in ounce force (ozf)] painting, grading around the building, etc. Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section Water retention gardens 9. Information about state solar energy and incentive programs available. 5. Other water measures which keep surface water away from buildings and aid in groundwater Product Class 1 (≤ 5.0 ozf) 10. A copy of all special inspections verifications required by the enforcing agency or this code. 11. Information from the Department of Forestry and Fire Protection on maintenance of defensible 4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions. space around residential structures **Exception**: Additions and alterations not altering the drainage path. The charging spaces shall be designed to comply with the following: Product Class 2 (> 5.0 ozf and \leq 8.0 ozf) 12. Information and/or drawings identifying the location of grab bar reinforcements. Product Class 3 (> 8.0 ozf) 1.28 4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 1. The minimum length of each EV space shall be 18 feet (5486 mm). **4.410.2 RECYCLING BY OCCUPANTS.** Where 5 or more multifamily dwelling units are constructed on a 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625. 2. The minimum width of each EV space shall be 9 feet (2743 mm). 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)] depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling 3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum 4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial ordinance, if more restrictive. 1. On a case-by-case basis, where the local enforcing agency has determined EV charging and aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is infrastructure are not feasible based upon one or more of the following conditions: Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the **Exception:** Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 1.1 Where there is no local utility power supply or the local utility is unable to supply adequate California Plumbing Code. 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 1.2 Where there is evidence suitable to the local enforcing agency substantiating that additional percent slope) in any direction. **4.303.3 Standards for plumbing fixtures and fittings.** Plumbing fixtures and fittings shall be installed in local utility infrastructure design requirements, directly related to the implementation of Section accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 4.106.4.2.2.1.3 Accessible EV spaces. 4.106.4. may adversely impact the construction cost of the project. 1701.1 of the California Plumbing Code. 2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional In addition 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 **DIVISION 4.5 ENVIRONMENTAL QUALITY** comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section **SECTION 4.501 GENERAL** THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER. 4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway 4.106.4.2.3 EV space requirements. TABLE - MAXIMUM FIXTURE WATER USE irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors. shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main 1. Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall **FLOW RATE SECTION 4.502 DEFINITIONS** proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere proximity to the location or the proposed location of the EV space. Construction documents shall identify the SHOWER HEADS (RESIDENTIAL) 1.8 GMP @ 80 PSI The following terms are defined in Chapter 2 (and are included here for reference) 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit raceway termination point, receptacle or charger location, as applicable. The service panel and/ or subpanel shall have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device **AGRIFIBER PRODUCTS.** Agrifiber products include wheatboard, strawboard, panel substrates and door MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device. LAVATORY FAUCETS (RESIDENTIAL) cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements. 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 Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and LAVATORY FAUCETS IN COMMON & PUBLIC installed in close proximity to the location or the proposed location of the EV space, at the time of original 0.5 GPM @ 60 PSI accordance with the California Electrical Code. USE AREAS medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, construction in accordance with the California Electrical Code. structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated **4.106.4.1.1 Identification.** The service panel or subpanel circuit directory shall identify the overcurrent 1.8 GPM @ 60 PSI KITCHEN FAUCETS

METERING FAUCETS

WATER CLOSET

DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.

0.2 GAL/CYCLE

1.28 GAL/FLUSH

0.125 GAL/FLUSH

7 K S S - 0

CITY OF LEMOOF -REVIEWED ADU

DRAWING SCALE

wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section

DIRECT-VENT APPLIANCE. A fuel-burning appliance with a sealed combustion system that draws all air for

combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.



California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SH 2023)

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 O3/g ROC). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood.

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).

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to

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).

4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed 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, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL
4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING

CONSTRUCTION. 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 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.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 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 management district rules apply:

1. 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 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 compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and tricloroethylene), except for aerosol products, as specified in Subsection 2 below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, 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 prohibitions on use of certain toxic compounds, of California Code of Regulations, Title 17, commencing with section 94507.

4.504.2.2 Paints and Coatings. 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 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 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

4.504.2.3 Aerosol Paints and Coatings. 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 compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) of California Code of Regulations, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation

4.504.2.4 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

 Manufacturer's product specification. Field verification of on-site product containers.

FABLE 4.504.1 - ADHESIVE VOC LIM	·
Less Water and Less Exempt Compounds in Gram	s per Liter)
ARCHITECTURAL APPLICATIONS	VOC LIMIT
NDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
/CT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVE	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT LISTED	50
PECIALTY APPLICATIONS	
VC WELDING	510
PVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
DHESIVE PRIMER FOR PLASTIC	550
ONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
OP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
VOOD	30
IBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED. 2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE

THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR

QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC L	IMIT
Less Water and Less Exempt Compounds in	Grams per Liter)
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

TABLE 4.504.3 - VOC CONTENT LIMITS FOR

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT

ARCHITECTURAL COATINGS_{2,3}

COMPOUNDS

COATING CATEGORY	VOC LIMIT		
FLAT COATINGS	50		
NON-FLAT COATINGS	100		
NONFLAT-HIGH GLOSS COATINGS	150		
SPECIALTY COATINGS			
ALUMINUM ROOF COATINGS	400		
BASEMENT SPECIALTY COATINGS	400		
BITUMINOUS ROOF COATINGS	50		
BITUMINOUS ROOF PRIMERS	350		
BOND BREAKERS	350		
CONCRETE CURING COMPOUNDS	350		
CONCRETE/MASONRY SEALERS	100		
DRIVEWAY SEALERS	50		
DRY FOG COATINGS	150		
FAUX FINISHING COATINGS	350		
FIRE RESISTIVE COATINGS	350		
FLOOR COATINGS	100		
FORM-RELEASE COMPOUNDS	250		
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500		
HIGH TEMPERATURE COATINGS	420		
INDUSTRIAL MAINTENANCE COATINGS	250		
LOW SOLIDS COATINGS1	120		
MAGNESITE CEMENT COATINGS	450		
MASTIC TEXTURE COATINGS	100		
METALLIC PIGMENTED COATINGS	500		
MULTICOLOR COATINGS	250		
PRETREATMENT WASH PRIMERS	420		
PRIMERS, SEALERS, & UNDERCOATERS	100		
REACTIVE PENETRATING SEALERS	350		
RECYCLED COATINGS	250		
ROOF COATINGS	50		
RUST PREVENTATIVE COATINGS	250		
SHELLACS			
CLEAR	730		
OPAQUE	550		
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100		
STAINS	250		
STONE CONSOLIDANTS	450		
SWIMMING POOL COATINGS	340		
TRAFFIC MARKING COATINGS	100		
TUB & TILE REFINISH COATINGS	420		
WATERPROOFING MEMBRANES	250		
WOOD COATINGS	275		
WOOD PRESERVATIVES	350		
ZINC-RICH PRIMERS	340		

EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

ΙΕΙ		• • • • • • • • • • • • • • • • • • •	T 2	2 (January
,	Y	N/A	RESPON. PARTY	
				TABLE MAXIMUM PRODUCT HARDWO HARDWO PARTICLE MEDIUM I THIN MED 1. VALUE BY THE O MEASURE WITH AST CODE OF 93120.12.
				2. THIN N THICKNE DIVISION 4.5 4.504.3 CARPET SYSTEMS Department of Public Health, from Indoor Sources Using E California Specification 01356
				See California Department of https://www.cdph.ca.gov/Programment California Department Chemical Emissions fr
				(Emission testing method See California Departronal https://www.cdph.ca.gov. 4.504.3.2 Carpet adhod 4.504.4 RESILIENT FLOOR resilient flooring shall meet the
				Testing and Evaluation of Vo Version 1.2, January 2017 (E See California Department of hhttps://www.cdph.ca.gov/Pro
	-			composite wood products use formaldehyde as specified in by or before the dates specified 4.504.5.1 Documenta by the enforcing agence
				 Product cert Chain of cus Product labe CCR, Title 1 Exterior grade Wood Assort Other method
				4.505 INTERIOR MO 4.505.1 General. Buildings s 4.505.2 CONCRETE SLAB I
				California Building Code, Cha California Residential Code, 4.505.2.1 Capillary br following:
				1. A 4-inch (10 a vapor barr shrinkage, a ACI 302.2R-2. Other equiva 3. A slab desig 4.505.3 MOISTURE CONTE shall not be installed. Wall ar
				moisture content. Moisture c

TABLE 4.504.5 - FORMALDEHYDE LIMITS			
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION			
PRODUCT	CURRENT LIMIT		
HARDWOOD PLYWOOD VENEER CORE	0.05		
HARDWOOD PLYWOOD COMPOSITE CORE	0.05		
PARTICLE BOARD	0.09		
MEDIUM DENSITY FIBERBOARD	0.11		
THIN MEDIUM DENSITY FIBERBOARD2	0.13		
THIN WEDIOW BENOTITI IBENDONNOZ	0.10		

ES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED CALIF. AIR RESOURCES BOARD, AIR TOXICS CONTROL RE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE STM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF. F REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH

MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM ESS OF 5/16" (8 MM).

ENVIRONMENTAL QUALITY (continued) 3. All carpet installed in the building interior shall meet the requirements of the California "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions Environmental Chambers," Version 1.2, January 2017 (Emission testing method for

of Public Health's website for certification programs and testing labs.

ograms/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

shion. All carpet cushion installed in the building interior shall meet the requirements of the at of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 thod for California Specification 01350)

tment of Public Health's website for certification programs and testing labs

gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

hesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

RING SYSTEMS. Where resilient flooring is installed, at least 80% of floor area receiving the requirements of the California Department of Public Health, "Standard Method for the olatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Emission testing method for California Specification 01350)

of Public Health's website for certification programs and testing labs.

rograms/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

DD PRODUCTS. Hardwood plywood, particleboard and medium density fiberboard sed on the interior or exterior of the buildings shall meet the requirements for n ARB's Air Toxics Control Measure for Composite Wood (17 CCR 93120 et seq.), ified in those sections, as shown in Table 4.504.5

ation. Verification of compliance with this section shall be provided as requested ncy. Documentation shall include at least one of the following:

- rtifications and specifications
- peled and invoiced as meeting the Composite Wood Products regulation (see
- 17, Section 93120, et seq.). de products marked as meeting the PS-1 or PS-2 standards of the Engineer ociation, the Australian AS/NZS 2269, European 636 3S standards, and Canadian CSA 0151, CSA 0153 and CSA 0325 standards.
- nods acceptable to the enforcing agency.

DISTURE CONTROL

shall meet or exceed the provisions of the California Building Standards Code. **FOUNDATIONS.** Concrete slab foundations required to have a vapor retarder by napter 19, or concrete slab-on-ground floors required to have a vapor retarder by the , Chapter 5, shall also comply with this section.

preak. A capillary break shall be installed in compliance with at least one of the

- 01.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with rrier in direct contact with concrete and a concrete mix design, which will address bleeding, and curling, shall be used. For additional information, see American Concrete Institute,
- valent methods approved by the enforcing agency. ign specified by a licensed design professional.

ENT OF BUILDING MATERIALS. Building materials with visible signs of water damage and floor framing shall not be enclosed when the framing members exceed 19 percent noisture content. Moisture content shall be verified in compliance with the following:

1. 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

2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end

of each piece verified. 3. 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.

Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying

4.506 INDOOR AIR QUALITY AND EXHAUST **4.506.1 Bathroom exhaust fans.** Each bathroom shall be mechanically ventilated and shall comply with the

- 1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. 2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a
- a. Humidity controls shall be capable of adjustment between a relative humidity range less than or equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of
- b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

- 1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or 2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.
- 4.507 ENVIRONMENTAL COMFORT

4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be sized, designed and have their equipment selected using the following methods:

- 1. 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. 2. Duct systems are sized according to ANSI/ACCA 1 Manual D - 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
- 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S 2014 (Residential Equipment Selection), or other equivalent design software or methods.

Exception: Use of alternate design temperatures necessary to ensure the system functions are acceptable.

CHAPTER 7

INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. 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 certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

- 1. State certified apprenticeship programs. Public utility training programs.
- 3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
- 4. Programs sponsored by manufacturing organizations. 5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. 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 or other duties necessary to substantiate compliance with 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 to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be

- 1. Certification by a national or regional green building program or standard publisher. 2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building
- performance contractors, and home energy auditors. 3. Successful completion of a third party apprentice training program in the appropriate trade.
- 4. Other programs acceptable to the enforcing agency.

considered by the enforcing agency when evaluating the qualifications of a special inspector:

- Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
- 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).

[BSC] 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 or other duties necessary to substantiate compliance with 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 from a 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.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

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