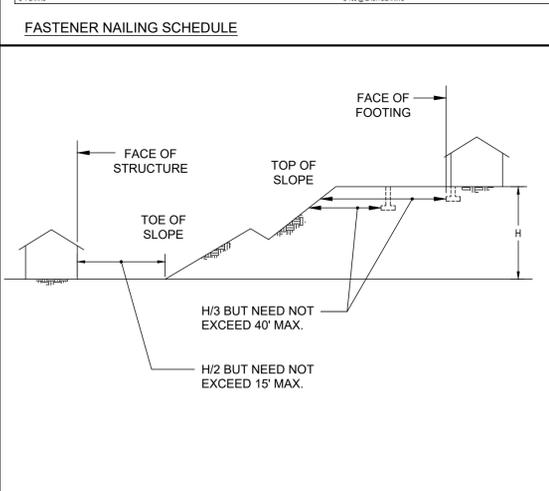
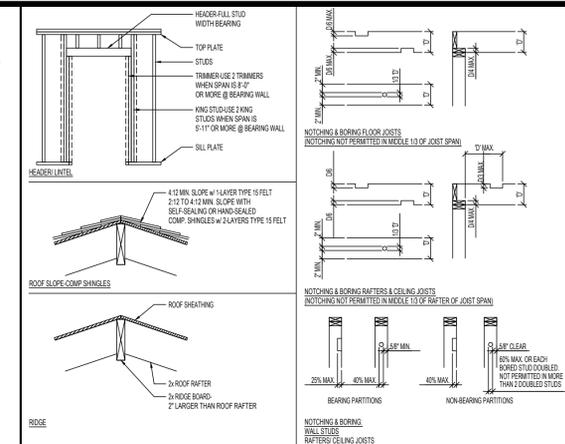


**FASTENER NAILING SCHEDULE**

ITEM	DESCRIPTION	TYPE	SIZE
1	JOIST TO SLAB ON GRADE, TOP NAIL	16D	3/4"
2	BRACING TO JOIST, TOP NAIL EACH END	16D	3/4"
3	SOLE PLATE TO JOIST OR BLOORING, TYPICAL FACE NAIL	16D @ 12" o.c.	3/4"
4	SOLE PLATE TO JOIST OR BLOORING, BRACED WALL PANELS	16D @ 12" o.c.	3/4"
5	TOP PLATE TO STUD END NAIL	16D	3/4"
6	STUD TO SOLE PLATE	16D	3/4"
7	DOUBLE STUDS FACE NAIL	16D @ 12" o.c.	3/4"
8	DOUBLE STUDS LAP SPACE	16D @ 12" o.c.	3/4"
9	BLOORING BETWEEN JOISTS OF RAFTERS TO TOP PLATE, TOP NAIL	16D @ 12" o.c.	3/4"
10	RAV JOIST TO TOP PLATE, TOP NAIL	16D @ 12" o.c.	3/4"
11	TOP PLATES LAP AND INTERSECTIONS, FACE NAIL	16D @ 12" o.c.	3/4"
12	CEILING JOIST TO TOP PLATE, TOP NAIL	16D	3/4"
13	CONTINUOUS HEADERS TO STUD, TOP NAIL	16D	3/4"
14	CEILING JOIST LAP OVER PARTITIONS, FACE NAIL	16D	3/4"
15	CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	16D	3/4"
16	CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	16D	3/4"
17	BUILT UP CORNER STUDS	16D @ 12" o.c.	3/4"
18	TOP PLATES	16D @ 12" o.c.	3/4"
19	FRAMERS	16D @ 12" o.c.	3/4"



- SITE PLAN:**
- ADDRESS SHALL BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE DWELLING.
  - LANDING AT EXTERIOR DOORS PROVIDING A LANDING EQUAL TO THE WIDTH OF THE DOOR OR STAIR AND A LENGTH IN THE DIRECTION OF TRAVEL EQUAL TO 36".
  - GRADE SHALL SLOPE AWAY FROM FOUNDATION AT THE FIRST 10' OR 2% WITH SWALE WHEN WITHIN 10' OF PROPERTY LINE. [§R401.3 LACRC]
- FOUNDATIONS:**
- USE FOUNDATION GRADE PRESSURE-TREATED FOUNDATION PLATES AND SILLS.
  - ALL STRUCTURAL WOOD MATERIAL EXPOSED TO WEATHER TO BE PRESSURE-TREATED. THIS INCLUDES ALL VERTICAL AND HORIZONTAL MEMBERS OF DECK CONSTRUCTION UNLESS A ROOF SYSTEM IS USED.
  - BOLT FOUNDATION PLATES AND SILLS TO THE FOUNDATION WITH 6" BOLTS SPACED NOT MORE THAN 6" APART. PROVIDE MIN. 2 BOLTS PER PIECE AND WITHIN 12" OF ENDS. EMBED BOLTS AT LEAST 7" IN CONCRETE OR MASONRY. USE 3" SQUARE x 0.229" THICK MINIMUM PLATE WASHERS ON EACH ANCHOR BOLT.
  - PROVIDE UNDER-FLOOR VENTILATION EQUAL TO 1 sq. ft. FOR EACH 150 sq. ft. OF UNDER-FLOOR AREA. VENTILATION OPENINGS SHALL BE APPROXIMATELY EQUALLY AND WITHIN 3 FEET OF EACH CORNER.
  - PROVIDE 18" x 24" UNDER-FLOOR ACCESS OPENING.
  - DAMPPOOF FOUNDATION WALLS ENCLACING A BASEMENT BELOW FINISHED GRADE BY AN APPROVED METHOD.
  - THE MINIMUM THICKNESS FOR CONCRETE FLOOR SLABS SUPPORTED DIRECTLY ON THE GROUND SHALL BE NOT LESS THAN 3 1/2". [§R506.1 LACRC]



**FRAMING DETAILS**

SEISMIC STRIPS: TWO MIN. 5/8" DIA. APPROVED SEISMIC STRIPS APPLIED PER MAN. SPEC.

TOP VALVE PIPED TO EXTERIOR 3/4" NIP PIPE, NO THREADS ALLOWED IN BOTTOM OF PIPING

ROOF SLOPE COMB SHINGLES

ROOF RAFTER

ROOF BOARD

NON-BEARING PARTITIONS

BEARING PARTITIONS

FLOOR JOIST

WATER HEADERS

OPENABLE AREA

VENT

MIN. SIZE WINDOW

MIN. SIZE WINDOW FOR 20' CLEAR HEIGHT

EMERGENCY ESCAPE EXIT WINDOW R310

EMERGENCY ESCAPE EXIT WINDOW

TRENCHES AT FOOTINGS

ISLAND VENT

DISHWASHER

APPROVED DISHWASHER AIR/GAP FITTING

DRAINBOARD

VENT THROUGH ROOF OR CONNECT TO OTHER VENTS

NEAREST PARTITION

VERTICAL FIXTURE VENT

14" PER FOOT GRADE

1 1/2" x 38 mm 5/8" x 2" x 38 mm

1 1/2" x 38 mm 5/8" x 2" x 38 mm

CONCRETE FOUNDATION WALL

FLOOR GIRDER

P.T. SILL

3" MIN. BEARING

SUB-FLOOR GIRDER

**FASTENER NAILING SCHEDULE**

ITEM	DESCRIPTION	TYPE	SIZE
1	JOIST TO SLAB ON GRADE, TOP NAIL	16D	3/4"
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18	TOP PLATES	16D @ 12" o.c.	3/4"
19	FRAMERS	16D @ 12" o.c.	3/4"

- WEATHER PROTECTION:**
- ALL WEATHER EXPOSED SURFACES SHALL HAVE AN APPROVED WEATHER-RESISTIVE BARRIER UNDER THE SIDING, OR BE OF APPROVED WEATHER PROOF PANELS. TWO LAYERS OF 15# FELT OVER PLYWOOD PANELS. [§R302.2 LACRC]
  - BALCONIES, LANDINGS, EXTERIOR STAIRWAYS, AND SIMILAR SURFACES EXPOSED TO THE WEATHER AND SEALED UNDERNEATH SHALL BE WATERPROOFED WITH APPROVED MATERIALS AND SLOPED A MINIMUM OF 1/4" PER FOOT FOR DRAINAGE.
  - PROVIDE MINIMUM NO. 26 GALVANIZED SHEET GAUGE CORROSION-RESISTANT METAL ON ROOF VALLEY FLASHING, WHICH SHALL ALSO EXTEND AT LEAST 12" FROM THE CENTERLINE EACH WAY. SECTIONS OF FLASHING SHALL HAVE AN END LAP OF NOT LESS THAN 4". [§R903 LACRC]

**INSTRUCTIONS FOR USING THIS SHEET**

TYPE V CONSTRUCTION GENERAL NOTES AND DETAILS FOR RESIDENTIAL CONSTRUCTION PROJECTS BASED ON THE 2023 LA COUNTY RESIDENTIAL CODE.

TYPE V CONSTRUCTION IS A CLASSIFICATION OF BUILDINGS BASED ON CONSTRUCTION MATERIALS AND METHODS. IT IS THE LEAST RESTRICTIVE CONSTRUCTION TYPE PERMITTED BY THE LA COUNTY BUILDING CODES AND INCLUDES LIGHT, WOOD-FRAMED CONSTRUCTION. THIS SHEET IS FOR INFORMATION AND REFERENCE PURPOSE ONLY, AND IS NOT A SUBSTITUTE FOR COMPLETE, ACCURATE DRAWINGS PREPARED SPECIFICALLY FOR EACH PROPOSED CONSTRUCTION PROJECT.

THIS SHEET MAY BE USED IN CONJUNCTION WITH PROJECTS DESIGNED AND REVIEWED UNDER THE 2023 LA COUNTY BUILDING CODE. THIS SHEET IS INTENDED TO EXPEDITE PLAN REVIEW WHILE AT THE SAME TIME PROMOTING SAFE, HEALTHY, CODE COMPLIANT CONSTRUCTION. BY PROVIDING STANDARD NOTES AND DETAILS ASSOCIATED WITH MOST LA COUNTY RESIDENTIAL CODE PROJECTS.

IT IS UNDERSTOOD THAT ALL OF THE NOTES AND DETAILS CONTAINED ON THIS TYPE V SHEET DO NOT APPLY TO ALL RESIDENTIAL PROJECTS. BY SIGNING AND ATTACHING THIS SHEET TO PREPARED PLANS, THE APPLICANT ACKNOWLEDGES THAT HE/ SHE HAS REVIEWED THE NOTES AND DETAILS CONTAINED ON THIS SHEET, AND UNDERSTANDS AND AGREES THAT ALL NOTES AND DETAILS ARE A PART OF THE APPROVED PLANS AND REQUIRED FOR THE PROJECT AS APPLICABLE. THE APPLICANT ALSO ACKNOWLEDGES THAT AN OMISSION OF A NOTE OR DETAIL ON THIS SHEET DOES NOT ALLOW FOR A NONCOMPLIANT FIELD CONDITION.

**INSTRUCTIONS:**

- REVIEW SUBMITTAL REQUIREMENTS BASED ON THE TYPE OF PROJECT YOU ARE DESIGNING, SUCH AS SINGLE-FAMILY RESIDENCE, RESIDENTIAL ADDITION, DETACHED ACCESSORY STRUCTURE, ETC. SUBMITTAL CHECKLISTS MAY BE DOWNLOADED ONLINE.
- PREPARE ALL NECESSARY PLAN SHEETS AND DOCUMENTS FOR YOUR PROJECT AS LISTED ON THE SUBMITTAL CHECKLIST, INCLUDING SITE PLAN, FOUNDATION PLAN, FLOOR PLAN, ROOF PLAN, ELEVATIONS, FRAMING DETAILS, SOILS REPORT, T-24 ENERGY REPORT, ETC. COMPLETE THE DESCRIPTION OF SCOPE OF WORK, AND LIST ALL PREPARED SHEETS BELOW.
- FILL IN THE BUILDING DATA AND STRUCTURAL DATA ON THE TYPE V SHEET. COMPLETE THE PLAN SHEET TABLE OF CONTENTS, SIGN THE APPLICANT SIGNATURE LINE, AND ATTACH YOUR PREPARED SHEETS TO THE TYPE V COVER SHEET. EACH SHEET MUST BE SIGNED BY THE PREPARER.

THIS TYPE V SHEET IS TO MAKE QUICK PROCESSING OF YOUR APPLICATION, USEFUL IN AVOIDING CODE COMPLIANCE PROBLEMS DURING CONSTRUCTION, AND EFFICIENT IN KEEPING YOU, YOUR FAMILY AND/OR CLIENT SAFE AND HEALTHY DURING OCCUPANCY.

**PLAN SHEET TABLE OF CONTENTS:**

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

**APPLICANT SIGNATURE:**

BY SIGNING THIS SHEET THE APPLICANT ACKNOWLEDGES THAT HE/ SHE HAS READ AND UNDERSTANDS ALL DETAILS AND NOTES HEREIN, AND AGREES THAT ALL NOTES AND DETAILS ARE PART OF THE APPROVED PLANS.

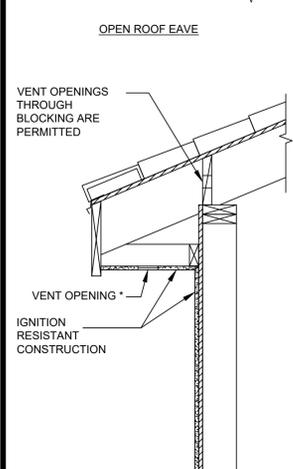
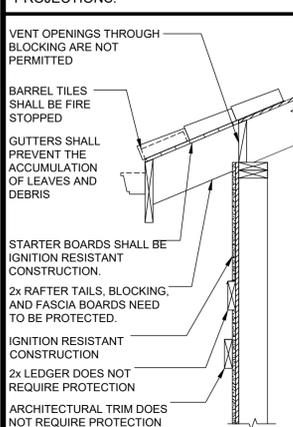
- ENERGY:**
- ALL INSTALLED LUMINAIRES SHALL BE HIGH-EFFICACY PER CEC, Sec. 150.0 (k) 1 & T-150.0-A.
  - LUMINAIRES TO BE CONTROLLED BY DIMMERS OR VACANCY SENSORS. CEC, Sec. 150.0(k)2.
  - ALL OUTDOOR LIGHTING TO BE HIGH EFFICACY PER CEC, Sec. 150(k)3 AND T-150.0-A.
  - ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A MANUAL ON/OFF SWITCH AND BY A MOTION SENSOR OR ASTRONOMICAL TIME CLOCK OR ENERGY MANAGEMENT SYSTEM PER CEC, Sec. 150.0(k)3.
  - RECESSED LIGHTING IN INSULATED CEILING SHALL BE APPROVED FOR ZERO CLEARANCE INSULATION COVER (IC TYPE) BY UL PER CEC, CEC 150.0(k)(1)(C).
  - AIR DISTRIBUTION DUCTS SHALL BE INSULATED TO A MINIMUM OF R-6 (OR R-4.2 WHEN ENTIRELY IN CONDITIONED SPACE AS CONFIRMED THROUGH FIELD VERIFICATION). CEC, Sec. 150.0(n)1.
  - EACH BATHROOM THAT CONTAINS A BATHTUB, SHOWER, OR SIMILAR SOURCE OF MOISTURE SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 50 CFM. [§150.0(O) CEC]
  - EACH KITCHEN SHALL HAVE AN EXHAUST FAN DUCTED TO THE OUTSIDE WITH A MINIMUM VENTILATION RATE OF 100 CFM. [§150.0(O) CEC]

**FLOOR PLANS & GENERAL REQUIREMENTS:**

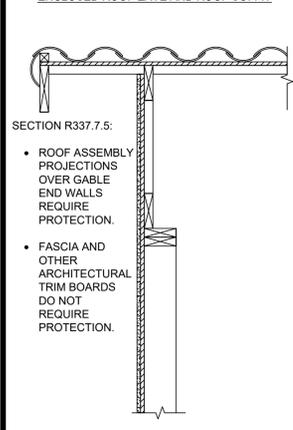
This project shall comply with Title 24 and 2023 LA County Residential Code (LACRC), LA County Mechanical Code (LACMC), LA County Plumbing Code (LACPC), LA County Electrical Code (LAECC), and California Energy Code (CEC).

- FLOOR PLAN SHOWING USE OR OCCUPANCY OF ALL PARTS OF THE ADDITION, PLACEMENT OF ELECTRICAL, MECHANICAL, AND HEATING OUTLETS AND FIXTURES, DOOR WITH DIRECTION FOR SWING, AND LOCATIONS AND SIZE OF WINDOWS AND HEADERS. INCLUDE IMMEDIATELY ADJOINING ROOMS TO THE ADDITION, THE USE, EXISTING WINDOW SIZES AND ANY WINDOWS REMOVED, SHOW EXISTING, DEMO, AND NEW WALL LOCATIONS, FLOORING AND HEATING OUTLETS AND FIXTURES, DOOR WITH DIRECTION FOR SWING, AND LOCATIONS AND SIZE OF WINDOWS AND HEADERS. INCLUDE IMMEDIATELY ADJOINING ROOMS TO THE ADDITION, THE USE, EXISTING WINDOW SIZES AND ANY WINDOWS REMOVED, SHOW EXISTING, DEMO, AND NEW WALL LOCATIONS, FLOORING AND HEATING OUTLETS AND FIXTURES, DOOR WITH DIRECTION FOR SWING, AND LOCATIONS AND SIZE OF WINDOWS AND HEADERS. 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**PROTECTION OF ROOF EAVES AND PROJECTIONS:**



**ENCLOSED ROOF EAVE AND ROOF SOFFIT**



- VENTILATION OPENINGS SHALL BE FULLY COVERED WITH WILDFIRE FLAME AND EMBER RESISTANT VENTS APPROVED AND LISTED BY THE CALIFORNIA STATE FIRE MARSHAL, OR WUI VENTS TESTED TO ASTM E2886 AND LISTED, SECTION R337.6.2, LACRC.
- SECTION R337.6.2.1, LACRC, OFF RIDGE AND RIDGE VENTS: VENTS THAT ARE INSTALLED ON A SLOPED ROOF, SUCH AS DORMER VENTS, SHALL COMPLY WITH THE FOLLOWING:
  - VENTS SHALL BE COVERED WITH A MESH WHERE THE DIMENSIONS OF THE MESH THEREIN SHALL BE A MINIMUM OF 1/16" AND SHALL NOT EXCEED 1/8" IN DIAMETER.
  - THE MESH MATERIAL SHALL BE NONCOMBUSTIBLE.
  - THE MESH MATERIAL SHALL BE CORROSION RESISTANT.

**2022 Single-Family Residential Mandatory Requirements Summary**

*NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information. (04/2022)*

**Building Envelope:**

§ 110.6(a)1: **Air Leakage.** Manufactured fenestration, exterior doors, and exterior door ports must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E283, or AIAA/WDMA/CA 1011 S.2/A40-2011. \*

§ 110.6(a)5: **Labeling.** Fenestration products and exterior doors must have a label meeting the requirements of § 110.11(a).

§ 110.6(b): **Field fabricated exterior doors and fenestration products** must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped. \*

§ 110.7: **Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped. \*

§ 110.8(a): **Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).

§ 110.8(g): **Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).

§ 110.8(i): **Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per § 10-113 when the installation of a cool roof is specified on the CFR.

§ 110.8(j): **Radiant Barrier.** When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.

§ 150.0(a): **Roof Deck, Ceiling and Rafter Roof Insulation.** Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling, or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling. \*

§ 150.0(b): **Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value. \*

§ 150.0(c): **Wall Insulation.** Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. \*

§ 150.0(d): **Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. \*

§ 150.0(f): **Slab Edge Insulation.** Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).

§ 150.0(g)1: **Vapor Retarder.** In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).

§ 150.0(g)2: **Vapor Retarder.** In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.

§ 150.0(q): **Fenestration Products.** Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45, or area-weighted average U-factor of all fenestration must not exceed 0.45. \*

**Fireplaces, Decorative Gas Appliances, and Gas Log:**

§ 110.5(e) **Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.

§ 150.0(e)1: **Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.

§ 150.0(e)2: **Combustion Intake.** Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and light-fitting damper or combustion-air control device. \*

§ 150.0(e)3: **Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. \*

**Space Conditioning, Water Heating, and Plumbing System:**

§ 110.0-§ 110.3: **Certification.** Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission. \*

§ 110.2(a): **HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. \*

§ 110.2(b): **Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating. \*

§ 110.2(c): **Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. \*

§ 110.3(c)3: **Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.

§ 110.3(c)6: **Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.

**2022 Single-Family Residential Mandatory Requirements Summary**

**Space Conditioning System Airflow Rate and Fan Efficiency.** Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficiency ≤ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficiency ≤ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. \*

**Ventilation and Indoor Air Quality:**

§ 150.0(a)1: **Requirements for Ventilation and Indoor Air Quality.** All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(a)1. \*

§ 150.0(a)1B: **Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per § 150.0(a)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and controlled per § 150.0(a)1Biiiv. CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with § 150.0(a)1C.

§ 150.0(a)1C: **Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses.** Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(a)1Ciii.

§ 150.0(a)1G: **Local Mechanical Exhaust.** Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of § 150.0(a)1Gii enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting § 150.0(a)1Giii. Airflow must be installed per the installer per § 150.0(a)1Gv, and rated for sound per § 150.0(a)1Gvi. \*

§ 150.0(a)1H8: **Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.** The airflow required per § 150.0(a)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles per Reference Residential Appendix RA3.7. Whole-dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 § 7.2 at no less than the minimum airflow rate required by § 150.0(a)1C.

§ 150.0(a)2: **Field Verification and Diagnostic Testing.** Whole-dwelling unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficiency must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per § 140.8.0(a)1G.

**Pool and Spa Systems and Equipment:**

§ 110.4(a): **Certification by Manufacturers.** Any pool or spa heating system or equipment must be certified to have all of the following: compliance with the Appliance Efficiency Regulations and listing in MAEDS, an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting; a permanent waterproof plate or card with operating instructions; and must not use electric resistance heating. \*

§ 110.4(b)1: **Piping.** Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.

§ 110.4(b)2: **Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.

§ 110.4(b)3: **Directional Inlets and Time Switches for Pools.** Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.

§ 110.5: **Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.

§ 150.0(p): **Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves. \*

**Lighting:**

§ 110.9: **Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. \*

§ 150.0(k)1A: **Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting integral to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt.

§ 150.0(k)1B: **Recycled Downlight Luminaires.** Recycled downlight luminaires must contain lamps that comply with Reference Joint Appendix JA8. \*

§ 150.0(k)1C: **Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must not contain screw based luminaires, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.

§ 150.0(k)1D: **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, must not be installed in enclosed or recessed luminaires.

§ 150.0(k)1E: **Blank Electrical Boxes.** The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.

§ 150.0(k)1F: **Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k).

**2022 Single-Family Residential Mandatory Requirements Summary**

§ 110.5: **Pilot Lights.** Continuously burning pilot lights are prohibited for natural gas, fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.

§ 150.0(h)1: **Building Cooling and Heating Loads.** Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume; the SMACNA Residential Comfort System Installation Standards Manual; or the ACCA Manual J using design conditions specified in § 150.0(h)2.

§ 150.0(h)3A: **Clearances.** Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.

§ 150.0(h)3B: **Liquid Line Drier.** Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.

§ 150.0(i)1: **Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. \*

§ 150.0(i)2: **Insulation Protection.** Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by § 120.3(i). Insulation exposed to weather must be water resistant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space, must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve.

§ 150.0(n)1: **Gas or Propane Water Heating Systems.** Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5 x 2.5 x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location; and a condensate drain no more than 2" higher than the base of the water heater.

§ 150.0(n)3: **Solar Water-heating Systems.** Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.

**Ducts and Fans:**

§ 110.8(d)3: **Ducts.** Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.

§ 150.0(m)1: **CMC Compliance.** All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and either mesh or tape must be used to seal openings greater than 1/4", if mastic or tape is used. Building ductwork, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. \*

§ 150.0(m)2: **Factory-Fabricated Duct Systems.** Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.

§ 150.0(m)3: **Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.

§ 150.0(m)7: **Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.

§ 150.0(m)8: **Gravily Ventilation Dampers.** Gravily ventilating systems serving conditioned space must have either automatic or remotely controlled, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.

§ 150.0(m)9: **Protection of Insulation.** Insulation must be protected from damage due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water retardant and solar radiation-resistant coating.

§ 150.0(m)10: **Porous Inner Core Flex Duct.** Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.

§ 150.0(m)11: **Duct System Sealing and Leakage Test.** When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.

§ 150.0(m)12: **Air Filtration.** Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean-filter pressure drop and labeling must meet the requirements in § 150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. \*

**Solar Readiness:**

§ 110.10(a)1: **Single-Family Residences.** Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which does not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).

§ 110.10(b)1A: **Minimum Solar Zone Area.** The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke venting, and spacing requirements specified in Title 24, Part 5 or other parts of Title 24 or in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. \*

§ 110.10(b)2: **Azimuth.** All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.

§ 110.10(b)3A: **Shading.** The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment. \*

§ 110.10(b)3B: **Shading.** Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.

§ 110.10(b)4: **Structural Design Loads on Construction Documents.** For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.

§ 110.10(c): **Interconnection Pathways.** The construction documents must indicate a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water-heating systems, a pathway reserved for routing plumbing from the solar zone to the water-heating system.

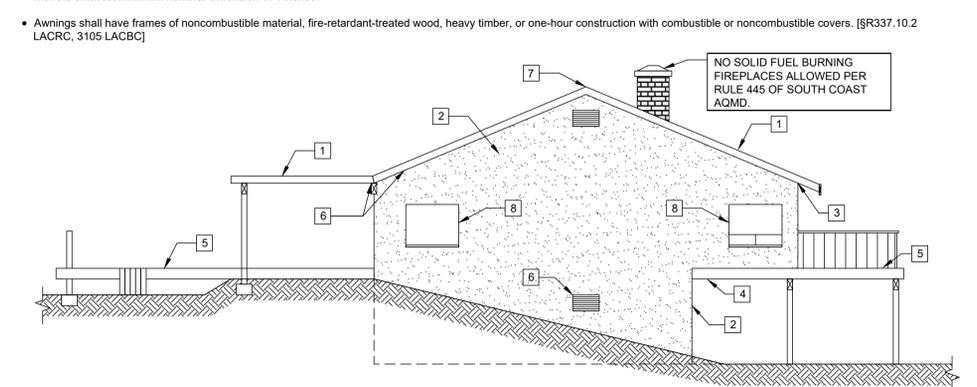
§ 110.10(d): **Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.

§ 110.10(e)1: **Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.

§ 110.10(e)2: **Main Electrical Service Panel.** The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."

**MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE:**

- New buildings, and any additions, alterations, or repairs made to existing buildings located in or moved within any Fire Hazard Severity Zone or any Wildland-Urban Interface (WUI) Fire Area designated by the Los Angeles County Fire Department constructed after the application date shall comply with the provisions of Section R337. [§R337.1.3, LACRC]
- Group U occupancy accessory buildings of any size located at least 50 feet from an applicable building on the same lot are exempt from Section R337. Accessory buildings and miscellaneous structures, including additions, alterations, or repairs, as specified in Section R337.10 shall comply only with the requirements of that Section. [§R337.1.3, LACRC]
- Where valley flashing is installed, the flashing shall be not less than 0.019-inch No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72-pound mineral-surfaced nonperforated cap sheet complying with ASTM D3909, at least 36-inch-wide running the full length of the valley. [§R337.5.3 LACRC]
- Roof gutters shall be provided with the means to prevent the accumulation of leaves and debris in the gutter. [§R337.5.4 LACRC]
- Open Roof Eaves: The exposed roof deck on the underside of unenclosed roof eaves shall consist of one or more of the following: noncombustible material, ignition resistant material, fire-retardant-treated wood, one layer of 5/8" Type X gypsum sheathing applied behind an exterior covering on the underside of the roof deck, or provide the exterior portion of a 1-hour fire-resistance-rated exterior assembly, as tested in accordance with ASTM E119 or UL 263. [§R337.7.5 LACRC]
- Enclosed Roof Eaves and Roof Eave Soffits: The exposed underside of enclosed roof eaves having either a boxed-in roof eave soffit with a horizontal underside, or sloping rafter tails with an exterior covering applied to the underside of the rafter tails, shall be protected by one or more of the following: noncombustible material, ignition-resistant material, fire-retardant-treated wood, materials approved for not less than 1-hour fire-resistance-rated construction on the exterior side tested in accordance with ASTM E119 or UL 263, one layer of 5/8" Type X gypsum sheathing applied behind the exterior covering or cladding on the underside of the rafter tails or soffit, boxed-in roof eave soffit assemblies with horizontal underside meeting Section R337.7.11 and meeting procedures set forth in ASTM E2957 or SFM standard 12-7A-3. [§R337.7.6 LACRC]
- Exterior Porch Ceilings: The exposed underside of exterior porch ceilings shall be protected by one or more of the following: noncombustible material, ignition-resistant material, fire-retardant-treated wood, materials approved for not less than 1-hour fire-resistance-rated construction on the exterior side tested in accordance with ASTM E119 or UL 263, one layer of 5/8" Type X gypsum sheathing applied behind the exterior covering or cladding on the underside of the ceiling, porch ceiling assemblies with horizontal underside meeting Section R337.7.11 and meeting procedures set forth in ASTM E2957 or SFM standard 12-7A-3. [§R337.7.7 LACRC]
- Floor Projections or Underfloor Protection: The exposed underside of a cantilevered floor projection where a floor assembly extends over an exterior wall or the underfloor area of elevated or overhanging buildings shall be protected by one or more of the following: noncombustible material, ignition-resistant material, fire-retardant-treated wood, materials approved for not less than 1-hour fire-resistance-rated construction on the exterior side tested in accordance with ASTM E119 or UL 263, one layer of 5/8" Type X gypsum sheathing applied behind an exterior covering on the underside of the floor projection, the exterior portion of an approved one-hour wall assembly or have the horizontal underside meet the performance criteria of SFM 12-7A-3 or ASTM E2957. [§R337.7.8, R337.7.9 LACRC] Exception: Structural columns and beams do not require protection when they are constructed with sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches.
- Awnings shall have frames of noncombustible material, fire-retardant-treated wood, heavy timber, or one-hour construction with combustible or noncombustible covers. [§R337.10.2 LACRC, 3105 LACBC]



- Roof coverings shall be Class A as specified in Section R902.1. Where the roofing profile has an airspace under the roof covering, installed over a combustible deck, a 72 lb. (32.7 kg) cap sheet complying with ASTM D3909 Standard Specification for "Asphalt Rolled Surfaces with Mineral Granules," shall be installed over the roof deck. Bird stops shall be used at the eaves when the profile fits, to prevent debris at the eave. Hip and ridge caps shall be installed to prevent intrusion of fire or embers. Exception: Cap sheet is not required when no less than 1 inch of mineral wool board or other noncombustible material is located between the roofing material and wood framing or deck. Alternately, a Class A fire rated roof underlayment, tested in accordance with ASTM E108, shall be permitted to be used. If the sheathing consists of exterior fire-retardant-treated wood, the underlayment shall not be required to comply with a Class A classification. Wood shingles and wood shakes are prohibited in any Fire Hazard Severity Zone regardless of classification. [§R337.5.2 LACRC]
- Exterior wall coverings shall be approved noncombustible material, ignition-resistant material, or fire-retardant-treated wood. Exterior wall coverings shall extend from the top of the foundation to the roof, and terminate at 2 inch nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure. [§R337.7.3 LACRC]
- Exterior wall assemblies of buildings or structures shall be constructed using one or more of the following methods, unless they are covered by an exterior wall covering complying with Section R337.7.3: Assembly of sawn lumber or glue-laminated wood with least dimension of 4 inches, log wall construction, assembly suitable for exterior fire exposure containing one layer of 5/8" Type X gypsum sheathing applied behind the exterior wall covering on the exterior side of the framing, or any of the following assemblies tested in accordance with: ASTM E2707, SFM Standard 12-7A-1, ASTM E119, UL 263. [§R337.7.4 LACRC]
- See "Open Roof Eaves" or "Enclosed Roof Eaves and Roof Eave Soffits" above.
- See "Floor Projections or Underfloor Protection" above.
- Walking surface material of decks, porches, balconies and stairs located within 10 feet of the building shall be constructed with one of the following materials: ignition-resistant material complying with Section R337.9.4, materials that comply with both SFM Standard 12-7A-4 and Section R337.4.3, material that complies with R337.9.4 when tested in accordance with both ASTM E2632 and ASTM E2726, exterior fire-retardant-treated wood, noncombustible material, any material complying with SFM Standard 12-7A-4 when exterior wall covering is also composed of noncombustible or ignition-resistant material, or any material complying with Section R337.9.5 when tested in accordance with ASTM E2632 and when exterior wall covering is also composed of noncombustible or ignition-resistant materials. [§R337.9.2, R337.9.3 LACRC]
- [§R337.6.2 LACRC] Ventilation openings shall be fully covered with Wildfire Flame and Ember Resistant vents approved and listed by the California State Fire Marshal, or WUI vents tested to ASTM E2886 and listed, by complying with all of the following requirements:
  - There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
  - There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
  - The maximum temperature of the unexposed side of the vent shall not exceed 662 degrees Fahrenheit. Roof and underfloor vents shall be protected by corrosion-resistant, noncombustible wire mesh with openings a minimum of 1/16-inch and shall not exceed 1/8-inch.
- [§R337.6.2.1 LACRC] Vents that are installed on a sloped roof, such as dormer vents, shall comply with all the following:
  - Vents shall be covered with a mesh where the dimensions of the mesh therein shall be a minimum of 1/16" and shall not exceed 1/8" diameter.
  - The mesh material shall be noncombustible.
  - The mesh material shall be corrosion resistant.
- Exterior windows and exterior glazed doors shall be multipane glazing with a minimum of one tempered pane, glass block units, have a fire resistance rating of not less than 20 minutes when tested in accordance with NFPA 257, or meet the requirements of SFM 12-7A-2. [§R337.8.2.1 LACRC]
- Exterior doors shall comply with one of the following: Exterior surface or cladding shall be of approved noncombustible construction or ignition-resistant material, solid core wood having stiles and rails not less than 1-3/8 inches thick with interior field panel thickness no less than 1-1/4 inches thick, shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252, meet requirements of R337.7.3.1 when tested in accordance with ASTM E2707, or meet the requirements of SFM Standard 12-7A-1. [§R337.8.3 LACRC]

**2022 Single-Family Residential Mandatory Requirements Summary**

**Electric and Energy Storage Ready:**

§ 150.0 (s) **Energy Storage System (ESS) Ready.** All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up capacity of 60 amps or more and four or more ESS supplied branch circuits, or a dedicated receiver from the main service to a subpanel that supplies the branch circuits in § 150.0(s); at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source.

§ 150.0 (t) **Heat Pump Space Heater Ready.** Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready"; and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

§ 150.0 (u) **Electric Cooktop Ready.** Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready"; and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

§ 150.0 (v) **Electric Clothes Dryer Ready.** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready"; and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."

\*Exceptions may apply.

**PLAN CHECK # :**

**PERMIT # :**

**ADDRESS:**

**CITY OF MALIBU AB-1332**

**ACCESSORY DWELLING UNIT GUIDELINES**

**"THESE CODE REQUIREMENTS GOVERN ANY ERRORS SHOWN ON OTHER PLANS."**

**SHEET 2 OF 3**

**WORK DESCRIPTION:**

**CITY OF MALIBU**

**23825 STUART RANCH ROAD**

**MALIBU, CA 90265**

**310-456-3356**

**CITY OF MALIBU INCORPORATED MARCH 1987**

**CONVERSION OF AN EXISTING CONDITONED SPACE OR AN EXISTING GARAGE TO AN ADU**

- All existing exterior walls, openings, and projections (eaves, decks, etc.) at the area of the conversion shall be modified as required for new construction in accordance with Tables R302.1(1) or R302.1(2) LACRC.
- For existing garage conversions to ADU, a continuous footing in accordance with R403.1 LACRC shall be provided at the existing garage door even if the wall infill is nonbearing. The new footing shall comply with the current requirement in RCM 401.4 for expansive soil (24" deep for exterior footings and 18" deep for interior footings). The expansive soil requirements may be waived if the existing footing and slab show no sign of damage or cracks.
- For existing garage to ADU conversion, the concrete floor shall be provided with a vapor retarder as required in Section R506.2.3 LACRC. The following are acceptable methods to comply with this code section:
  - Replace the slab and install a minimum 10-mil (0.010 inch) vapor retarder conforming to ASTM E1745 Class A requirements with joints lapped not less than 6 inches shall be placed between the concrete floor slab and the base course or the prepared subgrade where a base course does not exist.
  - Apply the vapor retarder on top of the existing slab and float a leveling slab on top.
  - Apply an approved waterproofing and crack prevention membrane over the existing slab.
- Existing gravity members including framing, footings, and slab shall be replaced or rehabilitated per Section 405.2 of the Los Angeles County Existing Building Code. A note requiring the owner to acknowledge possible structural repairs or upgrades shall be placed on the cover sheet of the plans.
- All additions, alterations, or repairs are subject to wildfire urban interface requirements of Section R337 LACRC.

**NEW ATTACHED OR DETACHED ACCESSORY DWELLING UNITS**

- Please contact the Fire Department for determination of required fire sprinkler system prior to submitting plans to Building and Safety. The cover sheet of the plans shall clearly specify if the ADU will be sprinklered or not.
- A fire separation wall and/or floor assembly is required between the main residence and the attached ADU in accordance with Section R302.3 LACRC. In addition to the required fire rating, the common wall assemblies shall have a minimum sound insulation classification of STC 50, and the common floor assemblies shall have a minimum impact insulation classification of IIC 50. All proposed assemblies shall have a listing number to verify that they have been tested for the specified use. Listed wall/floor assembly details are required to be replicated on the plans. Penetrations into the common assemblies shall be detailed on plans in accordance with Section R302.4 LACRC.
- Provide a site plan showing the fire separation distances from the ADU to the closest interior lot line, to the center of a street, an alley or public way, and to an imaginary line between the ADU and adjacent buildings (typically the main residence). The exterior walls, openings, and projections of the detached or attached ADU shall comply with Table R302.1(1) or R302.1(2) LACRC based on the fire separation distances shown on the site plan.
- Newly constructed dwelling units including ADUs shall comply with the Aging-In-Place requirements of Section R327 LACRC. Show the following notes/details on plans:
  - At least one bathroom on the entry level shall be provided with reinforcement installed in accordance with Section R327.1.1. 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.
  - 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. Please indicate on the plans.
  - 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 or controls, when installed, shall not exceed 48 inches 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.

**ADU ELECTRICAL REQUIREMENTS**

- Attached or detached ADUs may have a separate electrical main panel, or a subpanel serviced from the main residence electrical panel. A new address shall be obtained from the City of Malibu Planning Department for the ADU if a separate electrical main panel is proposed. Southern California Edison (SCE) approval is also required for separate meters. The amperage rating of all panels shall be specified on plans. A main panel upgrade or residential load calculations may be required if a subpanel is proposed for the ADU.
- Provide an electrical disconnect located in a readily accessible outdoor location. The disconnect shall be labeled so it is clear to emergency responders that this will cut off the power to the building. (230.85 LACEC)
- The electrical service panels for new ADUs shall be equipped with a surge-protective device that will cut off the power if there is a power surge in the power line. (230.67 LACEC)

**ADU PLUMBING REQUIREMENTS**

- The location of the septic tank shall be shown on the site plan.
- Show the size of the water main (in inches) adequate to support the new ADU plumbing fixtures and existing main house plumbing fixtures. A water meter upgrade may be required per LA County Waterworks District 29.

**ADU MECHANICAL REQUIREMENTS**

- The ADU shall have a separate heating unit and a separate thermostatic control located within the ADU. The main residence and the ADU are not allowed to share heating and/or cooling facilities. (R303.10 LACRC and Section 6.1 ASHRAE 62.2)

**ADU ENERGY AND GREEN BUILDING REQUIREMENTS**

- All ADUs shall comply with the current California Energy Code and LA County Green Building Standards Code as required.
- Solar panels, where required or proposed, shall be submitted as a separate permit from the main ADU permit.

**PLAN SUBMITTAL REQUIREMENTS**

- A complete set of plans prepared by a designer or a licensed architect or engineer shall be submitted to the Building Safety Department for review. The information on this sheet shall be used as minimum guidelines for the design of the ADU. Additional information may be requested by the plan reviewer during the plan review process.

**PLAN CHECK # :** \_\_\_\_\_  
**PERMIT # :** \_\_\_\_\_  
**ADDRESS:** \_\_\_\_\_

**CITY OF MALIBU AB-1332  
 ACCESSORY DWELLING UNIT  
 GUIDELINES**

**"THESE CODE REQUIREMENTS GOVERN ANY  
 ERRORS SHOWN ON OTHER PLANS."  
 SHEET 3 OF 3**

**WORK DESCRIPTION:**

**CITY OF:  
 MALIBU  
 23825 STUART RANCH ROAD  
 MALIBU, CA 90265  
 310-456-3356**

