California Amendments to Code Check Complete 3rd edition

Updated January 10, 2024

Code Check Complete is based on the 2021model codes that are used for the 2022 triennial California code editions. Significant changes to the model codes are noted throughout the text of the book. California amends these model codes and also provides an energy code and green building standards that are unique to this state.

The California Building, Residential, Electrical, Plumbing, and Mechanical codes include a "Matrix Adoption Table" for each chapter. These tables explain which state agency adopts or amends each section of the code; the administrative portions of each code explain who is responsible for local enforcement. In general, the codes relevant to residential construction are adopted by the Department of Housing and Community Development (HCD) and enforceable by local building departments.

The amendments shown below are for topics covered by ***Code Check Complete***, and do not include all California amendments. To view these online, go to the Building Standards Commission website and click through to the 2022 Triennial Code Editions.

Abbreviations used in this text

CCC = Code Check Complete
ESS = Energy Storage System
IBC = International Building Code
IECC = International Energy Conservation Code
IRC = International Residential Code
NEC = National Electrical Code
UMC = Uniform Mechanical Code
UPC = Uniform Plumbing Code

2022 California Residential Code Amendments

California adopts only the first 11 chapters of the IRC; these are the basis for the code references in the building section of our book.

☐ **105.2#1 Work exempt from permits:** Accessory structures provided floor area does not exceed 120 sq. ft. (model code allows 200 sq. ft.). In fire hazard severity zones or any Wildland-Urban Interface Fire Area, accessory buildings of any size require permits if closer than 3 ft. to the applicable building, and accessory buidings and decks within 50 ft. must be constructed of noncombustible or ignition-resistant materials. See California Building Code 701A.3 and 710A.3 ***(CCC p. 9)***

☐ **106.1.6 Balconies and Elevated Exterior Walking Surfaces:** Where balconies or other elevated walking surfaces are exposed to water from direct or blowing rain, snow or irrigation, and the structural framing is protected by an impervious moisture barrier, the construction documents shall include details for all elements of the impervious moisture barrier system. The construction documents shall include manufacturer's installation instructions. ***(CCC p. 9)***

☐ **109.1.5.3 Weather-exposed Balcony and Walking Surface Waterproofing:** Where balconies or other elevated walking surfaces are exposed to water from direct or blowing rain, snow or irrigation, and the structural framing is protected by an impervious moisture barrier, all elements of the impervious moisture barrier system shall not be concealed until inspected and approved, unless special inspections are provided by an approved agency. ***(CCC p. 9)***

☐ **109.1.6.2 Operation and Maintenance Manual:** A manual in acceptable media form shall be placed in the building in accordance with California Green Building Standards Code Chapter 4.

☐ **300.2 Grading and Paving:** Construction plans shall indicate how the site grading or drainage system will manage surface water flows to keep water from entering buildings in accordance with California Green Building Standards Code, Chapter 4, Division 4.1. ***(CCC p. 9)***

☐ **301.1.3.1 California licensed architect or engineer:** In accordance with Business and Professions Code sections 5537 & 6737.1, buildings with irregular or non-conventional elements must have plans stamped by a licensed architect or engineer for the irregular or non-conventional elements. The building official shall require construction documents to be signed by a licensed architect or engineer for dwellings of wood frame construction more than two stories + basement in height, and for structural elements designed of cold-formed steel, concrete, masonry, or SIPS panels. ***(CCC p. 9)***

☐ **301.5 Minimum Uniformly Distributed Live Loads:** In table 301.5, the live load for exterior balconies and for decks is 60 psf. The model code is 40 psf. The tables in section 507 (decks) for footing size, deck post height, beam spans, and joist spans are based on 40 psf if no snow load. Though there are tables for a 60 psf snow load, the duration factor would not be the same, and the 60 psf *snow* load is not a direct substitute for *live* load. If using these tables prescriptively, the appropriate tables in section 507 are those for 70 psf snow loads. ***(CCC p. 20)***

☐ **302.6 Dwelling Garage and/or Carport Fire Separation:** A separation is not required between the dwelling unit and a carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above. (The IRC definition of a carport is that it is open on two or more sides. The California difference here is to say that it must be *entirely* open, and also to require protection of its ceiling and walls if there are enclosed areas above it. ***(CCC p. 17)***

☐ **309.4 Automatic Garage Door Openers:** New or replacement garage doors require auto-reverse features and a battery backup. ***(CCC p. 22)***

2022 California Residential Code Amendments (Continued)

☐ **309.7 Extension Garage Door Springs:** New or replacement garage door extension springs require safety restraints. See California Building Code section 1211. (Note: the first printing of the CRC mistakenly refers this to CBC section 1210, not 1211). ***(CCC p. 22)***

☐ **309.8 Electric Vehicle Charging Infrastructure:** New 1- & 2-familly dwellings and townhouses require EV infrastructure per Green Building Standards Chapter 4, division 4.1. See electrical section. Essentially this requires an empty 1 in. conduit to a box in the garage and capacity within the panel to allow for a 40-amp 240-volt circuit. ***(CCC p. 318)***

☐ **311.4 Vertical Egress:** For habitable levels or basements located more than one story above or more than one story below an egress door, the maximum travel distance from any occupied point to a stairway or ramp that provides egress shall not exceed 50 ft.

☐ **312.1.2 Guard Height:** The minimum height for guards is 42 in. except for guards on the open sides of stairs ***(CCC p. 33)***

☐ **313 Automatic Sprinkler Systems:** The material that is in Chapter 29 of the IRC is moved to CRC section 313. ***(CCC p. 24–27)***

☐ **327.1 Aging-in-place Design and Fall Prevention:** Reinforcement for grab bars at showers and water closets required for entry level bathroom (or at least one on 2nd or 3rd floor if no entry level bathroom). Receptacles minimum 15 in. to bottom of box, maximum 48 in. to top of box. Minimum one bathroom and bedroom with minimum net clear door opening not less than 32 in.

☐ **328.7 Fire Detection for ESS Systems:** Rooms within dwelling units, sleeping units, basements, and attached garages with ESS require smoke alarms. If not possible due in an area that would violate the listing of the smoke alarms, heat detectors must be installed. ***(CCC p. 318)***

☐ **328.8.1 ESS in Garages:** Impact protection required for ESS in garages if in the normal path of travel (width of garage door) for a vehicle. ***(CCC p. 318)***

☐ **337 – Materials and Construction Methods for Exterior Wildfire Exposure:** See the full text of article 337 for details. Highlights include material requirements, crawlspace and attic vents designed to resist building ignition, protection of underfloor and under-ceiling projections, tempered glass, max ⅛ in. perimeter gap at garage doors, restrictions on vegetation, decks, and structures within 50 ft. of buildings on the same lot. Also see California Building Code Chapter 7A.

☐ **401.4.1 Soil Tests:** Requires local ordinance to enforce rules for preliminary soils tests for critically expansive or other problem soils (e.g., sulfate corrosion) in accordance with Health and Safety Code Sections 17953 through 17957. ***(CCC p. 36)***

☐ **408.8 Under-floor vapor retarder:** In certain climate zones a vapor retarder is required on the exposed face of air-permeable insulation in an under-floor crawlspace over dirt. The zones listed in CCC are for the IECC, and California has its own climate zone system, as shown in the comparison table 702.7(5). ***(CCC p. 50)***

☐ **507 Decks:** See note on previous page for minimum uniformly distributed live loads regarding use of the 70 psf snow load rows of the tables. ***(CCC p. 20 and 97–99)***

☐ **806.1 Attic Ventilation:** Attic vents in Wildland-Urban Interface areas to conform with 337 above. The vapor retarder associated with the allowance for reduced area of ventilation is essentially not applicable in California (see table below) ***(CCC p. 96)***

☐ **1001.3&4 Seismic Reinforcement:** Masonry or concrete chimneys in all structures in SDC C also require seismic reinforcement and anchorage at each ceiling level. Model code only applies these rules to SDC D. ***(CCC p. 115)***

☐ **1003.9.2 Spark Arrester:** All chimneys that serve appliances that burn solid fuel require a spark arrester. The model code only regulates spark arresters when they are installed, and does not have a requirement that they be installed. ***(CCC p. 117)***

☐ **R1004.1.1 Factory-built wood burning fireplaces:** Factory-built wood burning fireplaces shall be qualified at the U.S. EPA's Voluntary Fireplace Program Phase 2 emissions level and be in accordance with the California Green Building Standards Code, Chapter 4, Division 4.5. ***(CCC p. 117)***

TABLE 702.7(5) IECC AND CALIFORNIA ENERGY CODE CLIMATE ZONE COMPARISON

IECC Climate Zone[A]	California Energy Code Climate Zone	Counties Included[B]
6	16	Alpine, Mono
5	11, 12, 16	Siskiyou, Modoc, Lassen, Plumas, Sierra, Nevada
4 (marine)	1, 2, 16	Del Norte, Humboldt
4	2, 12, 13, 16	Inyo, Trinity, Lake, El Dorado, Amador, Calaveras, Tuolumne, Mariposa
3	8 — 16	Shasta, Tehama, Butte, Glenn, Colusa, Yuba, Contra Costa, Sutter, Yolo, Sacramento, Placer, San Joaquin, Solano, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, Kern, Ventura, Los Angeles, Orange, San Bernardino, Riverside
3 (marine)	1 — 6, 9, 12, 16	Mendocino, Sonoma, Marin, San Francisco, San Mateo, Alameda, Santa Cruz, Monterey, San Benito, San Luis Obispo, Santa Barbara, Ventura, San Diego
2	14, 16	Imperial

A. IECC Climate Zones 1, 7, and 8 do not occur in California, nor do any IECC moist climate zones
B. IECC boundaries are defined by county political boundary lines. California Energy Code boundaries are based on metes and bounds specifications aligned with climate-affecting features and often do not coincide with county lines.

California Plumbing Code Amendments

Code Check Complete has two columns of code references for most lines in the plumbing section. Do not use the IRC column in California; the model for California's plumbing code is the UPC.

☐ **310.11 Prohibited Practices:** Plastic piping (such as ABS) with a flame spread rating over 75 per ASTM E84-77a is not allowed to be exposed in the interior room finish of occupancies regulated by the State Fire Marshal (such as occupancies where 50 or more persons could gather. ***(CCC p. 131)***

☐ **401.3 Water-Conserving Fixtures and Fittings:** Noncompliant fixtures in any residential or commercial occupancy must be replaced with water-conserving fixtures prior to issuing final permit approval. Noncompliant fixtures are defined in Civil Code sections 1101.1 through 1101.9. Local jurisdictions typically provide certification forms with details of what constitutes a noncompliant fixture and a water-conserving fixuture. ***(CCC p. 159)*** California also makes the following modifications to table 32:

TABLE 32 — **MAX. FLOW RATES FOR PLUMBING FIXTURES UPC & CPC 407.2, 408.2, 411.2, 420.2**

Plumbing Fixture or Fixture Fitting	Model Code Max. Flow Rate	California Max. Flow Rate
Lavatory faucet	2.2 gpm at 60 psi[A]	1.2 gpm at 60 psi[A]
Shower head[B]	2.5 gpm at 80 psi	1.8 gpm at 80 psi
(Kitchen) Sink faucet	2.2 gpm at 60 psi	1.8 gpm at 60 psi[C]
Water closet	1.6 gal. per flush	1.28 gal. per flush[D]

A. Private only — maximum flow rate for a public lavatory faucet or one in a common area of a mutlifamily residential building is 0.5 gpm.
B. Handheld shower sprays are also considered shower heads.
C. Showers with more than 1 showerhead cannot have a combined flow greater than 1.8 combined, or must not allow more than one to showerhead to operate at a time.
D.California also requires compliance with the EPA Water Sense standards, which are 20% less than the federal standard of 1.6 gal. per flush. The net result is 1.28 gal. per flush.

☐ **501.2 Water Heaters:** New water heater installations must also comply with California Energy Code sections 110.3 and 150.0(n). ***(CCC p. 163)***

☐ **604.1 PEX-AL-PEX:** The use of PEX-AL-PEX is not adopted for use in potable water supply and distribution. ***(CCC p. 151 Table 23)***

☐ **604.1.1 Local Authority to Approve CPVC Pipe in Residential Buildings under Specified Conditions:** This section includes the procedures and documentation required for Certification to obtain a building permit, worker safety programs and flushing procedures for CPVC pipe. ***(CCC p. 151 Table 23)***

☐ **604.1.2 PEX:** This section includes the procedures and documentation required for flushing procedures for PEX tubing when it is the initial plumbing system of a dwelling. It does not apply to replacement supply and distribution systems. ***(CCC p. 151 Table 23)***

☐ **605.15 Dielectric Unions:** Dielectric unions shall be used at all points of connection where there is a dissimilarity of metals. ***(CCC p. 151)***

☐ **609.11 Water Hammer:** Housing & Community Development did not adopt the requirement for water hammer arresters at quick-closing valves. Some cities (San Francisco) require air chambers, and have a list of valves they consider to be quick-closing, including single-handle shower mixers. ***(CCC p. 151)***

☐ **609.12.3 Pipe Insulation:** In accordance with California Energy Code section 150.0(j)1, piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall butt securely against all framing members. Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with (QII) as specified in the Reference Residential Appendix RA3.5. Exception 4 to Section 150.0(j)1: Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation shall not be required to have pipe insulation. ***(CCC p. 151)***

☐ **701.2 Drainage Piping: "**ABS & PVC are limited to not more than 2 stories or areas of residential accomodation." This section is often misinterpreted. It does not mean that 2 stories of ABS or PVC can be used in a residential building of any number of stories. It means that **no** ABS or PVC can be used in a residential building that is more than 2 stories. It can be used in the piping under a slab in such a building. ***(CCC p. 131)***

☐ **903.1.1 Vent Piping: "**ABS & PVC are limited to not more than 2 stories or areas of residential accomodation." Like the one above, this section is often misinterpreted. It does not mean that 2 stories of ABS or PVC can be used in a residential building of any number of stories. It means **no** ABS or PVC vents in a residential building that is more than 2 stories. ***(CCC p. 131)***

☐ **1101.4 Storm Drainage:** ABS & PVC have the same restriction as for drainage and vent piping. ***(CCC p. 131)***

☐ **1501.6 Gray Water, Non-Potable Water, and Recycled Water Systems:** An operations manual shall be provided for systems required to have a permit. ***(CCC p. 150)***

☐ **1503.1.1 Gray Water Systems from Clothes Washers:** This section specifies the conditions under which a gray water system from a clothes washer does not require a building permit. ***(CCC p. 150)***

California Electrical Code Amendments

Code Check Complete has two columns of code references for the residential lines in the electrical section. Do not use the IRC column in California; the model for California's electrical code is the NEC. *Note also the minimum busbar rating of 225 amps in the Energy Code requirements on page 5.*

☐ **90.2(B) Items Not Covered:** The model code does not exclude mobile homes. HCD excludes them. The model code does not cover any floating building, including houseboats. HCD does include houseboats. ***(CCC p.232)***

☐ **210.8(F) Outdoor Outlets for Dwellings:** All outdoor outlets for dwellings (other than the exception for deicing equipment) require GFCI protection. This includes outlets for air conditioning equipment. Note that this new rule is for outlets, not necessarily receptacle outlets. In most air conditioning circuits, the local disconnecting means is the outlet. A temporary interim amendment (TIA 1589) was approved by the NFPA Standards Council. It adds a second exception for listed HVAC equipment, with the exception expiring on September 1, 2026. The state of California did not adopt this TIA. With ordinary split-system air conditioners, GFCI protection (provided by a breaker) will not be a probem. The reason for the TIA is that some types of mini-splits, with power conversion equipment, cause GFCI breakers to trip. The on-line version of the California code does not mention the TIA. The print version does specifically state that GFCI protection is required now for heat pumps with power conversion equipment. ***(CCC p.290)***

☐ **210.52(C)(2) Countertops and Work Surfaces:** The first printing of the CEC has a printing error; it left out the sentence that states that a peninsular countertop space is measured from the connected perpendicular wall. ***(CCC p.297)***

☐ **210.52(C)(3) Receptacle Outlet Location:** A major change in this code cycle allows all required kitchen counter receptacle outlets to be placed below the countertop (on the face of a cabinet) provided they are no more than 12 inches below the countertop and the overhanging counter does not extend more than 6 inches beyond its support base. In the 2023 code, which will not go into effect in California until 2026, this practice is prohibited, and no required outlets can be on the face of the cabinets below the countertop. Furthermore, the new (to this code cycle) requirements for a receptacle outlet for the first 18 sq. ft. of island or peninsula counter, and additional receptacle outlets for each additional 9 sq. ft. or fraction thereof, are repealed in the 2023 edition, and no receptacle outlets will be required. The infrastructure for them (which could be an empty conduit) will be required. ***(CCC p.296)***

☐ **394.12(5) Concealed Knob-and-Tube Wiring, Uses Not Permitted:** California adds the following exception: This article is not intended to prohibit the installation of insulation where knob-and-tube wiring is present, provided the following are complied with: ***(CCC p.288)***

1. The wiring shall be surveyed by an electrical contractor licensed by the state of California. Certification shall be provided by the electrical contractor that the existing wiring is in good condition with no evidence of deterioration or improper overcurrent protection, and no improper connections or splices. Repairs, alterations, or extensions to the electrical system will require permits and inspections by the authority having jurisdiction for the enforcement of this code.

2. The certification form shall be filed with the authority having jurisdiction for the enforcement of this code, and a copy furnished to the property owner.

3. All accessible areas in the building where insulation has been installed around knob-and-tube wiring shall be posted by the insulation contractor with a notice, clearly visible, stating that caution is required when entering those areas. The notice shall be printed in both English and Spanish.

4. The insulation shall be noncombustible.

5. The insulation shall be non-conductive.

6. The AHJ may permits and inspections for installing insulation.

☐ **408.2 Panelboards in Dwelling Units:** Panelboards serving the individual dwelling unit in single-family residential buildings that include one or two dwellings shall be provided with circuit breaker spaces for heat pump water heaters, heat pump space heaters, electric cooktops and electric clothes dryers as specified in California Energy Code section 150.0(n), (t), (u), and (v). In multifamily buildings, panelboards serving the individual dwelling unit shall be provided with circuit breaker spaces for heat pump space heaters, electric cooktops and electric clothes dryers as specified in California Energy Code section 160.9(a), (b), and (c). ***(CCC p.289***

☐ **422.3(A&B) Electric Appliance Readiness:** In single-family residential buildings that include one or two dwellings, each dwelling unit shall be provided with: (1) Designated spaces, receptacles, branch circuits and circuit identifications as specified for heat pump water heaters in Energy Code section 150.0(n), and (2) Dedicated circuits and circuit identifications as specified for electric cooktops in Energy Code section 150.0(u), and (3) Dedicated circuits and circuit identifications as specified for electric clothes dryers in Energy Code section 150.0(v) 422.3(B). In multifamily buildings, each dwelling unit shall be provided with items 2 & 3 above as specified in Energy Code sections 160.9(b&c). ***(CCC p.289)***

☐ **440.3(E & F) California Energy Code Requirements for Heat Pump Space Heaters and their Readiness:** Each dwelling unit shall be provided with designated spaces, receptacles, branch circuits and circuit identifications as specified for heat pump space heaters in California Energy Code Section 150.0(t). ***(CCC p.289***

☐ **625.1.1 Electric Vehicle Readiness:** Refers to Green Building Standards section 4.106.4.1& 2 for requirements for electric vehicle charging infrastructure. ***(CCC p.318)***

☐ **706.10 Energy Storage Systems:** In single-family residential buildings that include one or two dwellings, each dwelling unit shall be provided with dedicated raceways, designated branch circuits and isolation devices for energy storage systems as specified in California Energy Code Section 150.0(s). Additionally, the main panelboard shall be provided with the minimum busbar rating of 225 amps as specified in California Energy Code Section 150.0(s). ***(CCC p.318)***

2022 California Energy Code

The requirements listed below generally apply only to new construction. They might also apply to alterations, repairs, or additions depending on the scope of a project, whether the prescriptive or performance approach is used, the applicable climate zone, and other factors. Excellent resources and training are available from Energy Code Ace *and from* BayREN *for questions and interpretations of the* California Energy Code *and* Green Building Standards. *The energy citations on* ***p.118*** *in* Code Check Complete *are based on the IRC and do not apply in California.*

☐ **150.0(n) Water Heating System:** If a gas or propane water heater serves an individual dwelling unit, a space 2.5 ft. x 2.5 ft. x 7 ft. must be designated for a future heat pump water heater:

- Install a 3-conductor #10 copper circuit from the panel to that space.
- If the space is more than 3 ft. from the gas water heater, install a blank cover marked "240V Ready". In the panel, leave open a 2-pole space marked "For Future 240V Use".
- If the space is less than 3 ft. from the gas water heater, install a 20-amp circuit & receptacle using one of the conductors. Mark the unused conductor "spare" at both ends and maintain it in an electrically isolated condition. Leave a blank spot next to the 20-amp single-pole breaker and label it "Future 240V Use". ***(CCC p. 163)***

☐ **150.0(t) Heat pump space heater ready:** Systems using a gas or propane furnace to serve individual dwelling units shall include the following:

1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready."

2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as "For Future 240V use." ***(CCC p. 182)***

☐ **150.0(u) Electric cooktop ready:** Systems using a gas or propane cooktop to serve individual dwelling units shall include the following:

1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the cooktop and accessible to the cooktop with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready."

2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric cooktop installation. The reserved space shall be permanently marked as "For Future 240V use." ***(CCC p. 218)***

☐ **150.0(v) Electric clothes dryer ready:** Clothes dryer locations with gas or propane plumbing to serve individual dwelling units shall include the following:

1. A dedicated 240 volt branch circuit wiring shall be installed within 3 feet from the clothes dryer location and accessible to the clothes dryer location with no obstructions. The branch circuit conductors shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready."
2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric clothes dryer installation. The reserved space shall be permanently marked as "For Future 240V use." ***(CCC p. 218-9)***

☐ **150.1(c)14 Photovoltaic requirements:** All single-family residential buildings shall have a newly installed photovoltaic (PV) system or newly installed PV modules meeting the minimum qualification requirements specified in Joint Appendix JA11. The annual electrical output of the PV system shall be no less than the smaller of a PV system size determined using Equation 150.1-C, or the maximum PV system size that can be installed on the building's Solar Access Roof Area (SARA). ***(CCC p. 319-327)***

☐ **150.0(s) Energy Storage System:** All single family residences that include one or two dwelling units shall have at least one of the following: ***(CCC p. 318)***

1A. ESS ready interconnection equipment with a minimum backed up capacity of 60 amps and a minimum of four ESS supplied branch circuits, or

1B. A dedicated raceway from the main service panel to a subpanel that could supply the minimum four ESS supplied branch circuits. These circuits could originate at the service panel prior to installation of the ESS. The trade size of the raceway must be at least one inch.

2. A minimum of 4 branch circuits, one must supply a refrigerator, one must supply a sleeping room receptacle outlet.

3. The main panelboard must have a minimum busbar rating of 225 amps.

4. Sufficient space shall be reserved to install an isolation device within 3 ft. of the main panelboard.

California Mechanical Code Amendments

Code Check Complete has two columns of code references for most line in the mechanical section. Do not use the IRC column in California; the model for California's mechanical code is the UMC.

☐ **303.7 Liquified Petroleum Gas:** Liquified-petroleum gas-burning appliances shall not be installed in a pit, basement or similar location where heavier-than-air gas might collect. Appliances so fueled, shall not be installed in an above-grade, under-floor space or basement unless such location is provided with an approved means for removal of unburned gas. ***(CCC p. 175)***

☐ **402 Ventilation Air:** Ventilation air requirements of the California Energy Code supersede those found in the California Mechanical Code. ***(CCC p. 216-217)***

☐ **601.2.1 California Energy Code Residential Return Duct Sizing Requirements:** California Energy Code Tables 150.0-B and 150.0-C specify return duct sizing requirements for single return and multiple return systems, respectively, that are applicable as an alternative to confirming system airflow via field verification and diagnostic testing. See California Energy Code Section 150.0(m)13 for provisions applicable to newly constructed buildings, and section 150.2(b)(1)(F)(ii)(a) for alterations. ***(CCC p. 207)***

☐ **603.9.2.1 Duct Leakage Tests:** HCD does not adopt 603.9.2, and California Energy Code section 150.0(m) supersedes the CMC. Field verification and diagnostic testing must be in accordance with all applicable procedures specified in Energy Code Reference Residential Appendix RA3.1 For single-family dwellings and townhouses with the air-handling unit installed and the ducts connected directly to the air handler, the total leakage of the duct system shall not exceed 5 percent of the air handler airflow as determined utilizing the procedures in Reference Residential Appendix Section RA3.1.4.3.1. If the air handler has not yet been installed, the total leakage shall not exceed 4 percent. ***(CCC p. 207)***

☐ **912.2 Vented Gas Fireplaces:** Any newly installed gas fireplace must be a direct-vent sealed combustion type. ***(CCC p. 199)***

☐ **916.2 Gas Fired Room Heaters:** Unvented fuel-burning room heaters shall not be installed, used, maintained, or permitted to exist in a residential occupancy. ***(CCC p. 185)***

☐ **1211.6 PEX-AL-PEX in Hydronic Heating Systems:** PEX-AL-PEX is not allowed in *potable* water supply and distribution systems, and this chapter of the CMC has many reminders of that requirement. If a hydronic system has potential for a cross connection to potable water, PEX-AL-PEX could not be used in the system. The use of this material is one of the means of providing an oxygen barrier, which is necessary on systems embedded in concrete. A layer of ethylene vinyl alcohol on ordinary PEX is also used as an oxygen barrier. ***(CCC p. 212)***

2022 California Green Building Standards

☐ **4.106.4.1 Electric Vehicle Readiness in new 1- and 2-family dwellings and townhouses with attached private garages:** (Exceptions: Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.)

For each dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere 208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. ***(CCC p. 318)***

☐ **4.106.4.2 Electric Vehicle Readiness in new multifamily, hotels, and motels and residential parking facilities:**

These requirements vary depending on the number of units, and include EV Capable, EV Ready, and various identification requirements. CBC chapters 11A & 11B have accessibility requirements, and the Office of the State Architect provides a convenient summary of the requirements for accessible EV parking spaces. Also see table 5.106.5.3.1 for number of EV capable and number provided with EVSE. The basic power infrastructure must be capable of accommodating the required future EVSE power circuits.

Errata to the First Printing of Code Check Complete 3rd edition

Building, page 8, table 1, the correct organization for ASCE is American Society of Civil Engineers.
Building, page 52, right column, 3rd to last checkbox, typo – first word should be "joists" not "joints."
Building, page 114, left column, 2nd to last checkbox, the word "intermediate"should be ahead of the word "landings".
Plumbing, page 141, left column, 10th checkbox item says "Horizontal changes in trap arms per T7" and should instead reference T12.
Plumbing, page 154, right column, 5th checkbox, reference to P51 should be F51.
Plumbing, Page 155, Table 29, Lines 1 & 7 should each be referencing T25 not T30.
Plumbing, Page 156, 2nd checkbox, add another UPC reference to 602.4
Plumbing, page 172, table 38, line 6A reference should be to T40 not T39.
Mechanical, page 189, figure 13, the arrows on the right side each point the opposite direction of what they should be.
Mechanical, page 197, left column, 3rd checkbox from bottom, add word "vertical" in front of word "wall"
Electrical, page 247, figure 7, the reference to the conductor between building steel and the service should be T15, not T52
Electrical, page 289, Table 43, the correct max. cord & plug connected load for a 20 amp circuit is 16 amps (not 30)
Electrical, page 295, right column. 2nd checkbox, distance should be 4 inches, not 4 feet.
Electrical, page 305, left column. last checkbox, IRC reference 3901.1 is more on point than 1405.1.
Electrical, page 312, figure 87, the stop and start controls should not both be in the closed position.

(Updated January 10, 2024) — If you find any other errors, please let us know by contacting us through Codecheck.com