



**SIGNIFICANT CHANGES TO TITLE 19, THE BUILDING AND
CONSTRUCTION ORDINANCE OF
THE COUNTY OF SAN LUIS OBISPO**

1. **Appendix Q** of the California Residential Code- Tiny Houses.
2. **Updated Chapter 3** – Building Codes by restructuring Tables 903.1 and 903.2 for easier understanding and two methods of calculating fire sprinkler requirements for revisions and alterations.
 - a. Updated Chapter 7 – Plumbing Code to reflect onsite wastewater (septic) permit requirement authority.
 - b. Updated Chapter 11 – Stormwater Management to be consistent with state permit language.

**SIGNIFICANT CHANGES TO THE 2019 CALIFORNIA RESIDENTIAL
CODE (CRC)**

1. **R101.2-** Scope- Allowed to be constructed under CRC
 - a. Live/Work Units
 - b. Owner- Occupied Lodging Houses- Five or fewer guestrooms
 - c. Care Facilities 5 or fewer persons- custodial care/medical care/care- within a dwelling
 - d. Live/Work Units etc are not mixed occupancies R302.1
2. **R110.1-** Change of Occupancy- change of use permits required, i.e from a dwelling to a live/work or residential care facility
3. **R106.4.2-**10% of required residential parking spaces shall be EV capable
4. **R106.4-** ACCESSORY Dwelling Unit (ADU) without required parking are exempt from EV requirements
5. **R301.5-** Live load change from 40lbs to 60lbs for balconies and decks
6. **R302.3** Now references all fire resistance ratings permitted in CBC 703.3

7. **R302.13-** ½” Gypsum required in un-sprinklered crawl spaces with fuel burning appliances
8. **R308.4.2-** Glazing within 24” of the hinge side of a door
9. **R310.1** Emergency escape openings no longer required in bedrooms in sprinklered basements- and other conditions apply
10. **R311.7.1-** Handrail projection- changing wording to allow handrails on both sides to encroach into the minimum width
11. **R314.2.2** Smoke alarms shall be interconnected on repairs
12. **R315-** Carbon Monoxide alarms shall be interconnected
13. **R317.1-** Enclosed balconies must have natural ventilation
14. **R317.3** Staples in fire retardant and pressure treated lumber must be stainless steel: nails, bolts have other options
15. **R324.6.2.2-** Emergency egress windows require a rescue path on roof with solar installed
16. **R325.3-** Mezzanine limitations increase from 1/3 to 1/2 area of the room served, under certain conditions
17. **R408.3** Unvented crawl spaces- when dehumidification exists
18. **R806.5** Unvented Attics- new options and requirements; vapor diffusion ports.

SIGNIFICANT CHANGES TO THE 2019 CALIFORNIA BUILDING CODE (CBC)

1. **CBC 202** - Definition of sleeping unit- fire separation
2. **CBC302.1-** Classification of outdoor areas- rooftop decks
3. **CBC 303.4-** Assembly use of greenhouse classification- where public access is provided for the exhibition of plants- A occupancy
4. **CBC 309.1-** Mercantile use of greenhouse, sale of plants—M Occupancy

5. **CBC 312.1.1-** Greenhouses not classified as another occupancy shall be classified as group U
6. **CBC 310.4.2-** Owner occupied lodging houses with 5 rooms or less or 10 total occupants are now under CRC
7. **CBC 311.1.1-** Regardless of size, storage rooms are to be classified as part of the occupancy they are accessory to
8. **CBC 311.2-** Self Storage facilities shall now be classified as S-1
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17. **422.6-** Electrical backup power requirements for ambulatory care facilities are added in this code cycle
18. **424.1-** Children’s play structures 10’ high **OR** 150 SF shall comply
19. **506.2-** Allowable area for a Non-Sprinklered VB greenhouse has substantially increased; 5,500 SF to 9000 SF
20. **706.1.1-** Fire walls are no longer required for a party wall on lot lines dividing a building for building ownership purposes.

21. **708.4-** Garage door perimeter gap protection in the Wildland Urban Interface (WUI) areas
22. **903.3.1.2.1-** Sprinkler protection at exterior balconies and decks- dwelling units and sleeping units
23. **904.13-** UL 300- Fire Extinguishing Hoods in I-2.1 and R-2's
24. **905.3.1- C-Table 1004.5-** Occupant Load Factor of a B; 100 to 150
25. **1004.8** a new sub-category of concentrated occupant load factor of one per fifty sq. ft.; Building Official discretion
26. **1010.1.4.4-** Locking arrangements in E and Educational B occupancies; including remote operation
27. **1615-** Risk Category III and IV must design for Tsunami loads if applicable
28. **1704.6.3-** Structural Observation is required on all Category III & IV buildings and Seismic Design Category (SDC) E, 3 stories or greater

SIGNIFICANT CHANGES TO THE 2019 CALIFORNIA ENERGY CODE

Residential

1. The installation of solar photovoltaics will become mandatory. Square footage of the homes/units and number of bedrooms will help determine system sizing. For example, a 2,000 sq. ft. home in Los Angeles will require approximately 2.8 kW of solar PV and a 30-unit apartment building in Oakland will require approximately 30 kW. There are a few exemptions, such as buildings with minimal roof space due to a narrow envelope, zero lot area, or if there are tall buildings or other obstructions like protected trees blocking solar production.
2. New HERS (Home Energy Rating System) testing for:
 - a. Kitchen exhaust hood ventilation test, which must provide 100CFM at 3.0 Sones
 - b. Blower door test if utilizing a continuously running exhaust fan per Section 150.0(o)1EQuality insulation installation (QII) will be Prescriptively required.
 - c. HVAC systems will need to be designed closer to ACCA Manual J, D, & S which means duct sizing may increase, return air sizing may increase, and equipment sizing may decrease. There will need to be enough plenum space to ensure ducts are not smashed or pinched.

- d. Filter ratings will increase to MERV 13.
3. Domestic hot water solar preheat will become Prescriptively required:
 - a. 20% net solar fraction in Climate Zones 1-9,
 - b. 35% net solar fraction in Climate Zones 10-16.

Non-Residential (Includes new multi-family four stories or more from grade)

1. Interior windows and doors leading to unconditioned space will have minimum Prescriptive U Factors.
2. Demand Controlled Ventilation (DCV): CO2 monitors will help control outside airflow.
3. The Prescriptive requirement for domestic solar hot water is being removed. Projects that install such systems will receive a major boost to whole building performance

SIGNIFICANT CHANGES TO THE 2019 CALIFORNIA ELECTRIC CODE (CEC)

(N) Indicates a new provision to the code that did not previously exist.

1. **210.5 (C)(1)(B)** Posting of Identification means- "...The label shall be of sufficient durability to withstand the environment involved and shall not be hand-written".
2. **210.8(B)** Other than dwelling units- All single phase receptacles rated 150 volts to ground or less, 50 amps or less and all 3 phase receptacles rated 150 volts or less, 100 amps or less installed in the following locations shall have ground fault circuit interrupter protection for personnel.
 - a. Bathrooms
 - b. Kitchens
 - c. Rooftops
 - d. Outdoors
 - e. Within 6' of a sink
 - f. Indoor wet locations
 - g. Locker rooms with showers
 - h. Garage service bays
 - i. Crawl spaces
 - j. Unfinished basements

3. **(N) 210.8(E)** Crawl space outlets- (GFCI) protection shall be provided for lighting outlets not exceeding 120 volts to ground installed in crawl spaces.
4. **(N) 210.12(C)** Guest room and guest suites- All 120-volt single phase 15- & 20-amp branch circuits supplying outlets (not just receptacles) and devices installed in guest rooms and guest suites of hotels and motels shall be protected by any means in 210.12(A)(1) (AFCI)
5. **210.52(G)(1)** Dwelling unit receptacle outlets- In each attached garage or detached garage with electrical power, at least one receptacle outlet shall be installed in each vehicle bay not more than 5 ½ feet above the floor.
6. **210.64** Electrical service area-At least one 120-volt single phase 15 or 20 amp rated receptacle outlet shall be installed in an accessible location within 25 feet of the indoor electrical service equipment. The receptacle shall be installed in the same room or area as the service equipment.
7. **210.70 (C)** Lighting outlets required all occupancies-For attics and under floor spaces, utility rooms and basements at least one lighting outlet containing a switch or controlled by a wall switch shall be installed where these spaces are used for storage or contain equipment requiring servicing.
8. **(N) 210.7** Meeting rooms- Each meeting room not more than 1000 SF in other than dwelling units shall have 15 or 20 ampere receptacle outlets:
 - a. Outlets in fixed walls shall be installed in accordance with 210.52(A)
 - b. Floor receptacle outlets In meeting rooms that are at least 12 feet wide and at least 215 SF shall have at least on outlet located in the floor a minimum of 6 feet from each fixed wall for each 215 SF.
9. **225.20** Protection against physical damage- Conductors installed on building, structures or poles shall be protected against physical damage as provided in 230.50.
10. **225.27-** Raceway seal- Where a raceway enters a building or structure from outside it shall be sealed. The sealant shall be identified for use with the cable insulation.
11. **230.91** Location- Where fuses are used as the service overcurrent device, the disconnecting means shall be located ahead of the supply side of the fuses.
12. **240.24 (A)** Location in or on premises, accessibility- Switches containing fuses and circuit breakers shall be readily accessible and installed so that the center of the grip of the operation handle of the switch or circuit breaker, when in its highest position is not more than 6' 7".

13. **250.30 (A) (4)** Grounding electrode-The building or structure grounding electrode system shall be used as the grounding electrode for the separately derived system. If located outdoors, the grounding electrode shall be installed in accordance with 250.30(C).
Exception: If the separately derived system originates in equipment that is listed and identified as suitable for use as service equipment, the grounding electrode used for the service or feeder equipment shall be permitted to be used as the grounding electrode for the separately derived system.
14. **300.5(G)** Raceway seal
Conduits or raceways through which moisture may contact live parts shall be sealed or plugged at either or both ends. Spare or unused raceways shall also be sealed. Sealants shall be identified for use with the cable insulation, conductor insulation, bare conductor shield or other components.
15. **314.23(B)(1)** Structural mounting nails or screws- Mounting holes made in the field shall be approved
16. **(N) 376.20** Conductors connected in parallel- Where single conductor cables comprising each phase, neutral or grounded conductor of an alternating current system are connected in parallel as permitted by 310.10(H) the conductors shall be installed in groups consisting of not more than one conductor per phase, neutral or grounded conductor to prevent current imbalance due to inductive reactance.
17. **404.9(B)** Provisions for general use snap switches
...metal faceplates shall be grounded.
18. ***2014 NEC 406.4(D)4** Arch fault circuit interrupter
Where a receptacle outlet is located in any of the area specified in 210.12(A) or (B) a replacement shall be one of the following.
a. Listed branch circuit type AFCI receptacle
b. A receptacle protected by branch a circuit type AFCI receptacle.
c. A receptacle protected by a listed Combination AFCI circuit breaker.
19. **406.9(B)1** Wet locations- "...an outlet box hood installed for this purpose shall be identified as "extra duty".
20. **406.9(B)1** Wet locations- All 15 and 20 ampere 125 volt and 250 volt non locking type receptacles shall be listed and so identified as weather resistant.
21. **406.12** Tamper resistant receptacles- All 15 and 20 ampere 125 volt and 250 volt non locking type receptacles in areas specified in 406.12(1) through (7) shall be listed as tamper resistant.
a. Dwelling units

- b. Business offices, corridors and waiting rooms
 - c. Guest room and Guest Suites
 - d. Assembly occupancies
 - e. Transportation waiting areas
 - f. Childcare facilities
 - g. Gymnasiums
 - h. Auditoriums
 - i. Preschools and elementary school facilities
 - j. Dormitories
22. **408.4(B)** Source of supply- All switch boards, panel boards, switch gear supplied by feeders shall be permanently marked to indicate each device or equipment where power originates. The label shall be permanently affixed, of sufficient durability to withstand the environment involved and not hand-written.
23. **(N) 422.5** Appliances GFCI protection for personnel- Appliances as identified in 422.5(A)(1-5) 250 volt to ground or less and 60 ampere or less single or 3 phase shall be provided with GFCI protection for personnel.
- a. 1 Automotive vacuum machines provided for public use.
 - b. 2 drinking water coolers
 - c. 3 High pressure spray washing machines, cord and plug connected.
 - d. 4 Tire inflation machines provided for public use.
 - e. 5 Vending machines
24. **450.43(C)** Transformer vaults, doorways, locks- Doors shall be equipped with locks and doors shall be kept locked, access being allowed only to qualified persons. Personnel doors shall open in the direction of egress and be equipped with listed panic hardware.
25. **(N) 440.9** Grounding and bonding- Where equipment is installed on a roof, an equipment grounding conductor of the wire type shall be installed inside the conduit where non-threaded fittings are used.
26. **480.8** Insulation of batteries- Batteries constructed of electrically conductive container shall have insulated support if a voltage is present between the container and ground.
27. **480.9** Battery support system- For battery chemistries with corrosive electrolyte, the structure that supports the battery shall be resistant to deteriorating action by electrolyte. Metallic structures shall be provided with non-conductive support members for cells or shall be constructed with a continuous insulating material. Paint alone shall not be considered as an insulating material.
28. **(N) 680.74** Bonding hydromassage tubs- The following parts shall be bonded.
- a. 1 All metal fittings attached to the tubs and in contact with the water.
 - b. 2 Metal parts of electrical equipment associated with the tub.

- c. 3 Metal sheathed cable, raceways and pipes within 5' of the tub.
 - d. 4 All metal surface within 5' of the tub.
 - e. 5 Electrical devices and controls within 5' and not associated with the tub.
29. **705.22(5)** Disconnect devices- Where the line and load terminals are capable of being energized in the open position the disconnecting means shall be marked in accordance with the warning in 690.13(B).

SIGNIFICANT CHANGES TO THE 2019 CALIFORNIA MECHANICAL CODE (CMC)

1. **Chapter 3-** New clearance requirements for solid-fuel burning appliances, ducts serving Type I hood exhaust system, and product conveying ducts
2. **Chapter 5-** New provisions for Type I and Type II exhaust systems and product conveying ducts
3. **Chapter 6-** New sizing provisions for duct systems; duct leakage testing requirements; installations and closure requirements for flexible air ducts; and new provisions for air dispersion systems
4. **Chapter 9-** New requirements for pressure regulators and electric furnaces
5. **Chapter 11-** New refrigerant system requirements, such as A2L and B2L low flammability refrigerants; machinery room requirements such as access, openings, detectors, and ventilation systems; and new pressure limiting-device provisions for compressors
6. **Chapter 12-** new pressure testing requirements for piping and components, expansion tanks, and materials for hydronic systems
7. **Chapter 13-** New requirements for piping material, overpressure protection, and gas piping installation for fuel gas piping systems
8. **MERV Filters-** have differing mandatory minimum requirements

SIGNIFICANT CHANGES TO THE 2019 CALIFORNIA PLUMBING CODE (CPC)

1. **CPC Chapter 3-** New sound transmission provisions for plumbing piping systems
2. **CPC-Chapter 4-** New product standards for such plumbing fixtures as wall hung fixtures, waste fittings, lavatories, showers, bathtubs and whirlpool bathtubs, flushometer valves, sinks, and eyewash stations; and signage for single use toilet facilities -ASME A112.6.1
3. **CPC- 507.27 and 509.6-** New provisions for connector capacities for elbows in connectors and clearance of appliances and their connectors to combustible materials
4. **CPC 604.10.1-** Tracer wire shall be electrically continuous, corrosion resistant and blue
5. **CPC 609.4-** PEX, PP or PE-RT tubing shall be permitted to be tested with air where permitted by the manufacturer
6. **CPC- Chapter 6-** New backflow protection provisions for chemical dispensers; new material provisions for pipes, tubes, fittings and joint methods for water supply and distribution; and new pressure testing for the hot and cold-water supply system
7. **CPC 1007.2-** New provisions for trap seal primers for potable water supply ASSE 1018