

BUILDING SAFETY DIVISION



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Residential Plan Code

Items included in this checklist are more commonly missing in the field application.

The items listed do not supersede details found in the plan if those details exceed minimum code requirement.

Please Note

- 1.) The approved plans must be on the job site for both construction purposes and inspection.
- 2.) The property line(s) will be clearly marked as required by county ordinance for setback verification at the time of foundation inspection.
- 3.) Construction must meet all current codes, indicated on the approved plan, as adopted and enforced at the time of the permit application.
- 4.) All erosion controls must be in place at all times between October 15 and May 1 and permanent controls at time of final inspection.
- 5.) Driveway grade rock and sight distance must be installed for encroachment on to county maintained roads at the time of foundation inspection. All encroachment and grading requirements must be completed before the final of the permitted structure.
- 6.) The property address must be clearly posted at the driveway before the first inspection.

2007 California Building Code Excerpts

B-1. Occupancy separations shall comply with the following:

1. The private garage shall be separated from the dwelling unit and its attic area by means of a minimum 1/2" gypsum wallboard applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8" Type X gypsum board or equivalent. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than 1 3/8" thick, or doors in compliance with CBC Section 715.4.3. (20 minute fire door.) Openings from a private garage directly into a room for sleeping purposes shall not be permitted. Doors shall be self closing and self latching.
2. Ducts in a private garage and ducts penetrating the walls or ceiling separating the dwelling unit from the garage shall be constructed of a minimum 0.019" sheet steel and shall have no openings into the garage.

3. A separation is not required between a Group R-3 dwelling and Group U carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above.

CBC § 406.1.4

B-2. Smoke alarms: Single or multiple station smoke alarms shall be installed and maintained in and R-2, and R-3, residential single family units at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
2. In each room used for sleeping purposes.
3. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

CBC § 907.2.10.1.2

In new construction smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for over current protection.

CBC § 907.2.10.2 (note, when an installation is required in existing construction battery powered smoke detectors are allowed)

Where more than one smoke alarm is required to be installed, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

CBC § 907.2.10.3

For all dwelling units intended for human occupancy, upon the owner's application for a permit for alterations, repairs, or additions, exceeding \$1000 a smoke detector, approved and listed by the State Fire Marshall shall be installed, in accordance with the manufacturer's instruction and per California Health and Safety Code Section 13113.7.

CBC § 907.2.10.5.2

B-4. Emergency Egress: In dwelling units, basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exceptions:

1. The emergency escape and rescue opening is permitted to open onto a balcony within an atrium provided the balcony provides access to an exit and the dwelling unit or sleeping unit has a means of egress that is not open to the atrium.
2. Basements with a ceiling height of less than 80" shall not be required to have emergency escape and rescue windows.

3. Emergency escape and rescue openings are not required from basement or sleeping rooms that have an exit door or exit access door that opens directly into a public way or yard, court or exterior exit balcony that provides access to a public way.

4. Basements without habitable spaces and having no more than 200 square feet in floor area shall not be required to have emergency escape windows.

CBC § 1026.1

Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet except grade floor openings shall be 5 square feet.

CBC § 1026.2

The minimum net clear opening height dimension shall be 24". The minimum net clear opening width dimension shall be 20". The net clear opening dimensions shall be the result of normal operation of the opening.

CBC § 1026.2.1

Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 44" measured from the floor.

CBC § 1026.3

Emergency egress windows for basements shall open to a window well constructed in accordance with the provisions of Sections 1026.51 and 1026.52

B-6. Ventilation: Natural ventilation of an occupied space shall be through windows, doors, louvers or other openings to the outdoors. The minimum open able area to the outdoors shall be 4 percent of the floor area being ventilated.

CBC § 1203.4.1

Rooms containing bathtubs, showers, spas and similar bathing fixtures shall be mechanically ventilated in accordance with the California Mechanical Code.

CBC § 1203.4.2.1

Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings. The minimum net glazed area shall not be less than 8 percent of the floor area of the room served as per **CBC § 1205.2**

B-8. Safety Glazing: Provide safety glazing located in all specific hazardous locations.

1. Glazing in swinging doors except Jalousies.
2. Glazing in fixed and sliding panels of sliding door assemblies and panels in sliding and bifold closet door assemblies.
3. Glazing in storm doors.
4. Glazing in unframed swinging doors.
5. Glazing in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers. Glazing in any portion of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60" above a standing surface.

6. Glazing in an individual fixed or operable panel adjacent to a door where the nearest exposed edge of the glazing is within a 24" arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60" above the walking surface.

Exceptions:

1. Panels where there is an intervening wall or other permanent barrier between the door and glazing.
2. Where access through the door is to a closet or storage area 3 feet or less in depth. Glazing in this application shall comply with Section 2406.3, item 7.
3. Glazing in walls perpendicular to the plane of the door in a closed position, other than the wall towards which the door swings when opened, in one- and two-family dwellings or within dwelling units in Group R-2.
7. Glazing in an individual fixed or operable panel, other than in those locations described in preceding Items 5 and 6, which meet all of the following conditions:
 - 7.1. Exposed area of an individual pane greater than 9 square feet;
 - 7.2. Exposed bottom edge less than 18 inches above the floor;
 - 7.3. Exposed top edge greater than 36 inches above the floor; and
 - 7.4. One or more walking surface(s) within 36 inches horizontally of the plane of the glazing

Exception: Safety glazing for item 7 is not required for the following installations:

1. A protective bar 1½ inches or more in height, capable of withstanding a horizontal PLF without contacting the glass, installed on the accessible sides of the glazing 34 inches to 38 inches above the floor.
2. The outboard pane in insulating glass units or multiple glazing where the bottom exposed edge of the glass is 25 feet or more above any grade, roof, walking surface or other horizontal or sloped(within 45 degrees of horizontal) surface adjacent to the glass.
8. Glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface.
9. Glazing in walls and fences enclosing indoor and outdoor swimming pools, hot tubs and spas where all of the following conditions are present:
 - 9.1. The bottom edge of the glazing on the pool or spa side is less than 60 inches above a walking surface on the pool or spa side of the glazing; and
 - 9.2. The glazing is within 60 inches horizontally of the water's edge of the swimming pool or spa.
10. Glazing adjacent to stairways, landings and ramps within 36 inches horizontally of a walking surface; when the exposed surface of the glass is less than 60 inches above the plane of the adjacent walking surface.
11. Glazing adjacent to stairways within 60" horizontally of the bottom tread of a stairway in any direction when the exposed surface of the glass is less than 60" above the nose of the tread.

Exceptions: Safety glazing for item 10 or 11 is not required for the following installations where:

1. The side of a stairway, landing or ramp which has a guardrail or handrail, including balusters or in-fill panels, complying with the provisions of Sections 1013 and 1607.7; and
2. The plane of the glass is greater than 18 inches from the railing.

CBC § 2406.3.

B-9. An opening not less than 20 inches x 30 inches shall be provided to any attic area having a clear height of over 30 inches. A 30 inch minimum clear headroom in the attic space shall be provided at or above the access opening.

CBC § 1209.2

B-10. Stairways: Stairways serving an occupant load of less than 50 shall have a width of not less than 36 inch minimum.

CBC § 1009.1

Stairways shall have a min. headroom clearance of 80 inches. Spiral stairways complying with CBC Section 1009.8 are permitted a 78 inch headroom clearance.

CBC § 1009.2

Within dwelling units the maximum riser height shall be 7-3/4 inches; the minimum tread depth shall be 10 inches; the minimum winder tread depth at the walk line shall be 10 inches; and the minimum winder tread depth shall be 6 inches. A nosing not less than 3/4 inch but not more than 1-1/4 inches shall be provided on stairways with solid risers where the tread depth is less than 11 inches.

CBC § 1009.3

The tolerance between the largest and smallest riser height or between the largest and smallest tread depth shall not exceed 3/8 inch in any flight of stairs.

CBC § 1009.3.2

There shall be a landing at the top and bottom of each stairway. The width of landings shall not be less than the width of the stairways they serve. Every landing shall have a minimum dimension measured in the direction of travel equal to the width of the stairway. Such dimension need not exceed 48 inches where the stairway has straight run.

Exceptions:

1. Doors opening onto a landing shall not reduce the landing to less than one-half the required width. When fully open the door shall not project more than 7 inches into a landing.
2. A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs.

CBC § 1009.4

Spaces under stairways serving and contained within a single residential dwelling unit shall be permitted to be protected on the enclosed side with 1/2 inch gypsum board.

CBC § 1009.5.3

Stairways having four or more risers require at least one handrail in residential construction.

CBC § 1009.10

B-11. Handrails: Handrail height, measured above stair tread nosings, shall be uniform and not less than 34 inches and not more than 38 inches.

CBC § 1012.2

The handgrip portion of handrails shall have an outside diameter of at least 1-1/4 inches and not greater than 2 inches or shall provide equivalent graspability.

CBC § 1012.3

B-12. Guardrails: Guards shall be located along open-sided walking surfaces, stairways, ramps and landings that are located more than 30 inches above the floor or grade below.

CBC § 1013.1

Guards shall form a protective barrier not less than 42 inches high, measured vertically above the leading edge of the tread or adjacent walking surface.

Exception:

Guards whose top rail also serves as a handrail shall have a height not less than 34 inches and not more than 38 inches measured vertically from the leading edge of the stair tread nosing.

CBC § 1013.2

Open guards shall have balusters or ornamental patterns such that a 4 inch diameter sphere cannot pass through any opening.

Exceptions:

1. The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be of a minimum size such that a sphere of 6 inches” in diameter cannot pass through the opening.

2. Within individual dwelling units and sleeping units, openings for required guards on the sides of stair treads shall not allow a sphere of 4-3/8 inches” to pass through.

CBC § 1013.3

B-13. Underfloor: The space between the bottom of the floor joists and the earth under any building except spaces occupied by a basement or cellar shall be provided with ventilation openings through foundation walls or exterior walls. Such openings shall be placed so as to provide cross ventilation of the under- floor space.

CBC § 1203.3

The minimum net area of ventilation openings shall not be less than 1 square foot for each 150 square feet of crawl-space area. Ventilation openings shall be covered for their height and width with approved materials provided that the least dimension of the covering shall not exceed 1/4 inch.

CBC §1203.3.1

Crawl spaces shall be provided with a minimum of one access opening not less than 18 inches x 24 inches.

CBC §1209.1

Where wood joists or the bottom of a wood structural floor without joists are closer than 18 inches, or wood girders are closer than 12 inches to the exposed ground in crawl spaces or unexcavated areas located within the perimeter of the building foundation, the floor assembly (including posts, girders, joists and subfloor) shall be of naturally durable or preservative-treated wood.

CBC § 2304.11.2.1

B-16. Foundations & Footings: Wood framing members, including wood sheathing that rests on exterior foundation walls and are less than 8 inches from exposed earth, wood framing members and furring strips attached directly to the interior of exterior masonry or concrete walls below grade, sleepers and sills, posts or columns supporting permanent structures shall be of naturally durable or preservative-treated wood.

CBC § 2304.11.2.2 through 2304.11.2.7

Foundation plates or sills shall be bolted or anchored to the foundation with not less than 1/2 inches diameter steel bolts or approved anchors. Bolts shall be embedded at least 7 inches into concrete or masonry, and spaced not more than 6 feet apart. There shall be a minimum of two bolts or anchor straps per piece with one bolt or anchor strap located not more than 12 inches or less than 4 inches from each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate.

CBC § 2308.6

In Seismic Design Category D or E steel plate washers shall be placed between the foundation sill plate and the nut. Such washers shall be a minimum of 0.229 inches x3 inches x 3 inches in size.

CBC § 2308.12.8

Footings shall be designed and constructed in accordance with Sections 1805.4.1 through 1805.4.6.

CBC § 1805.4

The design, materials and construction of concrete footings shall comply with Sections 1805.4.2.1 through 1805.4.2.6 and the provisions of Chapter 19.

Exception:

Where a specific design is not provided, concrete footings supporting walls of light-frame construction are permitted to be in accordance with CBC Table 1805.4.2.

CBC §1805.4.2

The design, materials and construction of masonry-unit footings shall comply with Sections 1805.4.3.1 and 1805.4.3.2 and the provisions of Chapter 21.

Exception:

Where a specific design is not provided, masonry-unit footings supporting walls of light-frame construction are permitted to be designed in accordance with CBC Table 1805.4.2.

CBC §1805.4.3

Footings shall be so designed that the allowable bearing capacity of the soil is not exceeded, and that differential settlement is minimized. The minimum width of footings shall be 12 inches. Footings in areas with expansive soils shall be designed in accordance with the provisions of Section 1805.8.

CBC § 1805.4.1

Concrete and Masonry foundation walls shall be designed in accordance with Chapter 19 or 21, respectively. Foundation walls that are laterally supported at the top and bottom and within the parameters of Tables 1805.5(1) through 1805.5(5) are permitted to be designed and constructed in accordance with Sections 1805.5.1 through 1805.5.5.

CBC §1805.5

B-18. Framing: In exterior walls and bearing partitions any wood stud is permitted to be cut or notched to a depth not exceeding 25 percent of its width. Cutting or notching of studs to a depth not greater than 40 percent of the width of the stud is permitted in nonbearing partitions supporting no loads other than the weight of the partition.

CBC § 2308.9.10

A hole not greater in diameter than 40 percent of the stud width is permitted to be bored in any wood stud. Bored holes, not greater than 60 percent of the stud width, are permitted in nonbearing partitions or in any wall

where each bored stud is doubled, provided not more than two such successive doubled studs are so bored. In no case shall the edge of the bored hole be nearer than 5/8 inch to the edge of the stud. Bored holes shall not be located at the same section of stud as a cut or notch.

CBC § 2308.9.11

All bearing walls shall be supported on masonry, concrete, foundations, piles, or other approved foundation systems that will be sufficient size to support all loads.

Wood columns and posts shall be framed to provide full end bearing. Alternatively, column-and-post end connections shall be designed to resist the full compressive loads, neglecting end-bearing capacity. Column-and-post end connections shall be fastened to resist lateral and net induced uplift forces.

CBC § 2304.9.7

Girders and beams shall be closely fitted around columns and adjoining ends shall be cross tied to each other, or intertied by caps or ties, to transfer horizontal loads across joints. Wood bolsters shall not be placed on tops of columns unless the columns support roof loads only.

CBC § 2304.10.1.1

Where ceiling joists are not parallel to rafters, an equivalent rafter tie shall be installed in a manner to provide a continuous tie across the building, at a spacing of not more than 4 feet on center.

CBC § 2320.12.6.

B-23. The net free ventilating area shall not be less than 1/150 of the area of the attic space ventilated, with 50 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

Exception:

The minimum required net free ventilating area shall be 1/300 of the area of the attic space ventilated provided a vapor retarder having a transmission rate not exceeding 1 perm in accordance with ASTM E 96 is installed on the warm side of the attic insulation and provided 50 percent of the required ventilating area provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet above eave or cornice vents, with the balance of the required ventilation provided by eave or cornice vents.

CBC § 1203.2

2007 California Mechanical Code Excerpts

M-1. Domestic clothes dryer moisture exhaust ducts shall be smooth metal and shall terminate on the outside of the building and shall be equipped with a back draft damper. Sheet metal screws or other fasteners that will obstruct the flow shall not be used. Unless otherwise permitted or required by the dryer manufacturer's installation instructions and by the building official, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of 14 feet including two 90 degree elbows. Two feet shall be deducted for each 90 degree elbow in excess of two.

CMC § 504.3

M-2. When a closet is designed for the installation of a clothes dryer, a minimum opening of 100 square inches for make up air shall be provided in the door or by other approved means.

CMC § 504.3.2

M-3. Central heating furnaces and low pressure boilers may be installed in a closet located in the bedroom or bathroom, provided the closet is equipped with a listed, gasketed door assembly and a listed self closing device as per Section 904.0. Unvented room heaters shall not be installed in bathrooms or bedrooms as per Section 924.0

M-4. A gas vent shall terminate in accordance with one of the following:

1. Above the roof surface with a listed cap or roof assembly. Gas vents 12 inches in size or smaller with listed caps shall be permitted to be terminated in accordance with Figure 8-2, provided they are at least 8 feet from a vertical wall or similar obstruction. All other gas vents shall terminate not less than 2 feet above the highest point where they pass through the roof and at least 2 feet higher than any portion of a building within 10 feet.
2. Direct vent systems as provided in Section 802.2.5
3. Equipment with integral vents as provided in Section 802.2.6
4. Mechanical draft systems as provided in Section 802.3.4
5. Ventilating hoods and exhaust systems as provided in Section 802.3.5 CMC Section 802.6.2

Note: Single wall metal vent connectors shall not originate in an unoccupied attic or concealed space and shall not pass through any attic, inside wall, concealed space, or floor.

CMC § 802.7.4.2

M-5. Equipment covered by this code that is located in a garage and generates a glow, spark, or flame capable of igniting flammable vapors shall be installed with sources of ignition at least 18 inches above the floor level.
CMC § 308.

2007 California Electrical Code Excerpts

E-1. All 120-volt, single phase, 15 and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by a listed arc-fault circuit interrupter, combination type installed to provide protection of the branch circuit.

CEC Article 210.12(B)

E-2. Ground Fault: All 125-volt, single phase, 15- and 20- ampere receptacles installed in the locations specified in 1 through 7 shall have ground-fault circuit-interrupter protection for personnel.

1. Bathrooms
2. Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use.

Exceptions:

1. Receptacles that are not readily accessible.
2. A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with CEC Articles 400.7(a)(6), (a)(7), or (a)(8).

Receptacles installed under the exceptions 1 and 2 shall not be considered as meeting the requirements of **CEC Article 210.52(G)**.

3. Outdoors.

Exception:

Receptacles that are not readily accessible and are supplied by a dedicated branch circuit for electric snow-melting or deicing equipment shall be permitted to be installed in accordance with **CEC Article 426.28**.

4. Crawl spaces at or below grade level.

5. Unfinished basements. For purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.

Exceptions:

1. Receptacles that are not readily accessible.

2. A single or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with CEC Article 400.7(A)(6), (A)(7), or (A)(8).

3. A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

Receptacles installed under the exceptions 1 through 3 shall not be considered as meeting the requirements of CEC Article 210.52(G).

6. Kitchens where the receptacles are installed to serve the countertop surfaces.

7. Laundry, utility, and wet bar sinks, where the receptacles are installed within 6' of the outside edge of the sink.

CEC Article 210.8

E-3. Wet Locations: A receptacle installed outdoors in a damp location shall have an enclosure that is weatherproof.

CEC Article 406.8(A).

A receptacle installed in wet locations shall have an enclosure that is weatherproof.

CEC Article 406.8(B).

Receptacles shall not be installed within or directly over a bathtub or shower stall.

CEC Article 406.8(C).

E-4. Receptacles shall be installed so that no point measured horizontally along the floor line in any wall space is more than 6' from a receptacle outlet.

CEC Article 210.52(A)(1)

As used in this section, a wall space shall include the following:

1. Any space 2 feet or more in width (including space measured around corners) and unbroken along the floor line by doorways, fireplaces, and similar openings.

2. The space occupied by fixed panels in exterior walls, excluding sliding panels.

3. The space afforded by fixed room dividers such as free standing bar-type counters or railings.

CEC Article 210.52(A)(2)

E-5. Two or more 20-ampere small-appliance branch circuits shall be provided for all receptacle outlets specified by Article 210.52(B).

CEC Article 210.11(C)(1)

E-6. In the kitchen, pantry, breakfast room, dining room, or similar area, the two or more 20-ampere small-appliance branch circuits required by Article 210.11(C)(1) shall serve all wall and floor receptacle outlets covered by Article 210.52(A), all countertop outlets covered by Article 210.52(C), and receptacle outlets for refrigeration equipment.

Exceptions:

1. In addition to the required receptacles specified by Article 210.52, switched receptacles supplied from a general-purpose branch circuit in other than kitchens and bathrooms, one or more receptacles controlled by a wall switch shall be permitted in lieu of lighting outlets.
2. The receptacle outlet for refrigeration equipment shall be permitted to be supplied from an individual branch circuit rated 15 amperes or greater.

CEC Article 210.52(B)(1)

The two or more small-appliance branch circuits shall have no other outlets.

Exceptions:

1. A receptacle installed solely for the electrical supply to and support of an electric clock in any of the rooms specified in CEC Article 210.52(B)(1).
2. Receptacles installed to provide power for supplemental equipment and lighting on gas-fired ranges, ovens, or counter-mounted cooking units. CEC 210.52(B)(2)

E-7. In kitchen and dining rooms receptacle outlets for counter spaces shall be installed in accordance with items 1 through 5.

1. A receptacle outlet shall be installed at each wall counter space that is 12 inches or wider. Receptacle outlets shall be installed so that no point along the wall line is more than 24 inches measured horizontally from a receptacle outlet in that space.

Exception:

Receptacle outlets shall not be required on a wall directly behind a range or sink.

2. At least one receptacle shall be installed at each island counter space with a long dimension of 24 inches or greater and a short dimension of 12 inches or greater. Where a rangetop or sink is installed in an island counter and the width of the counter behind the rangetop or sink is less than 12 inches", the rangetop or sink is considered to divide the island into two separate countertop spaces as defined in item 4 below.
3. At least one receptacle outlet shall be installed at each peninsular counter space with a long dimension of 24 inches or greater and a short dimension of 12 inches or greater. A peninsular countertop is measured from the connecting edge.
4. Countertop spaces separated by rangetops, refrigerators, or sinks shall be considered as separate countertop spaces in applying the requirements of items 1, 2 and 3.
5. Receptacle outlets shall be located above, but not more than 20 inches above, the countertop. Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages,

sinks, or rangetops as covered in item 1, Exception, or appliances occupying dedicated space shall not be considered as these required outlets.

Exception:

To comply with the conditions specified in 1 or 2 below, receptacle outlets shall be permitted to be mounted not more than 12 inches below the countertop. Receptacles mounted below a countertop in accordance with this exception shall not be located where the countertop extends more than 6 inches beyond its support base.

1. Construction for the physically impaired.
2. On island and peninsular countertops where the countertop is flat across an entire surface (no backsplashes, dividers, etc.) and there are no means to mount a receptacle within 20" above the countertop, such as an overhead cabinet.

CEC Article 210.52(C)

E-8. For a dwelling that is at grade level, at least one receptacle outlet accessible at grade level and not more than 6-1/2 feet above grade shall be installed at the front and back of the dwelling.

CEC Article 210.52(E)

E-9. At least one receptacle outlet, in addition to any provided for laundry equipment, shall be installed in each basement and in each attached garage, and in each detached garage with electric power.

CEC Article 210.52(G)

E-10. Hallways of 10 feet or more in length shall have at least one receptacle outlet. The hall length shall be considered the length along the centerline of the hall without passing through a doorway.

CEC Article 210.52(H)

E-11. A 125-volt, single phase, 15 or 20-ampere-rated receptacle outlet shall be installed at an accessible location for the servicing of heating, air-conditioning, and refrigeration equipment. The receptacle shall be located on the same level and within 25 feet of the heating, air-conditioning, and refrigeration equipment. The receptacle outlet shall not be connected to the load side of the equipment disconnecting means.

Exception:

A receptacle outlet shall not be required for the service of evaporative coolers.

CEC Article 210.63

E-12. For permanently connected appliances rated over 300 volt-amperes or 1/8 hp, the branch-circuit switch or circuit breaker shall be permitted to serve as the disconnecting means where the switch or circuit breaker is within sight from the appliance or is capable of being locked in the open position. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed.

CEC Article 422.31(B).

E-13. Provide control and protection of fixed electric space-heating equipment per CEC Article 424 III. Provide control and protection of air-conditioning and refrigerating equipment.

CEC Article 440

E-14. Luminaires (fixtures) and lampholders shall be securely supported. A luminaire (fixture) that weighs more than 6 pounds or exceeds 16 inches in any dimension shall not be supported by the screw shell of a lampholder.

CEC Article 410.15(A)

E-15. Where an outlet box is used as the sole support of a ceiling-suspended (paddle) fan, the box shall be marked by their manufacturer as suitable for this purpose and for the weight of the fan to be supported.

CEC Article 314.27 (D)

E-16. Hydro massage bathtubs and their associated electrical components and all receptacles within 5 feet of them shall be protected by a ground-fault circuit interrupter(s).

CEC Article 680.71

2007 California Plumbing Code Excerpts

P-1. Provide an approved dishwasher air gap fitting.

CPC § 807.4

P-2. Potable water outlets with hose attachments, other than water heater drains, boiler drains, and clothes washer connectors, shall be protected by a non-removable hose-bib-type backflow preventer, a non-removable hose-bib-type vacuum breaker, or by an atmospheric vacuum breaker installed at least 6 inches above the highest point of usage located on the discharge side of the valve. In climates where freezing temperatures occur, a listed self-draining frost-proof hose bibb with an integral backflow preventer or vacuum breaker shall be used.

CPC § 603.4.7

P-3. Where a fixture comes in contact with the wall or floor, the joint between the fixture and the wall or floor shall be made watertight.

CPC § 407.2

P-4. Gas utilization equipment in residential garages and in adjacent spaces that open to the garage and are not part of the living space of a dwelling unit shall be installed so that all burners and burner-ignition devices are located not less than 18 inches above the floor unless listed as flammable vapor ignition resistant.

CPC § 508.14(1)

P-5. Air for combustion, ventilation, and dilution of flue gases for gas utilization equipment shall be obtained by application of one of the methods covered in Sections 507.2.1 through 507.7. Gas utilization equipment of other than natural draft and Category I vented appliances shall be provided with combustion, ventilation, and dilution air in accordance with the manufacturer's instructions. Where infiltration does not provide the necessary air, outdoor air shall be introduced in accordance with methods covered in Sections 507.4 through 507.7 and as per Section 507.0

P-6. Water heater installations in bedrooms and bathrooms shall comply with one of the following:

1. Fuel burning water heaters may be installed in a closet located in the bedroom or bathroom provided the closet is equipped with a listed, gasketed door assembly and a listed self-closing device. The self-closing door assembly shall meet the requirements of Section 505.1.1. The door assembly shall be installed with a threshold and bottom door seal and shall meet the requirements of Section 505.1.2. All combustion air for such installations shall be obtained from the outdoors in accordance with CPC Section 507.4. The closet shall be for the exclusive use of the water heater.

2. Water heaters shall be direct vent type.

CPC § 505.1

P-7. Showers and tub-shower combinations in all buildings shall be provided with individual control valves of the pressure balance, thermostatic, or combination pressure balance/ thermostatic mixing valve type that provide scald and thermal shock protection. Handle position stops shall be provided on such valves and shall be adjusted per the manufacturer's instructions to deliver maximum mixed water setting of 120°F.

CPC § 418.0.

P-8. The installing agency shall conform with the equipment manufacturer's recommendations in completing an installation of water heaters. The installing agency shall leave the manufacturer's installation, operating, and maintenance instructions in a location on the premises where they will be readily available for reference and guidance for the Authority Having Jurisdiction, service personnel, and the owner or operator.

CPC § 508.26

P-9. Relief valves located inside a building shall be provided with a drain, not smaller than the relief valve outlet, of galvanized steel, hard drawn copper piping and fittings, CPVC, or listed relief valve drain tube with fittings that will not reduce the internal bore of the pipe or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building, with the end of the pipe not more than 2 feet nor less than 6 inches above the ground or the flood level of the area receiving the discharge and pointing downward. Such drains may terminate at other approved locations. Relief valve drains shall not terminate in a building's crawl space. No part of such drain pipe shall be trapped or subject to freezing. The terminal end of the drain pipe shall not be threaded.

CPC § 608.5

P-10. Discharge from a relief valve into a water heater pan shall be prohibited.

CPC § 508.5

P-11. Water heaters shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third and lower one-third of its vertical dimensions. At the lower point, a minimum distance of 4 inches shall be maintained above the controls with the strapping.

CPC § 508.2

P-12. Connecting gas equipment (including barbeques and fireplaces) to building piping shall conform.

CPC § 1212.0

P-13. Gas utilization equipment connected to a piping system shall have an accessible, approved manual shutoff valve with a nondisplaceable valve member, or a listed gas convenience outlet installed within 6 feet of the equipment it serves. Where a connector is used, the valve shall be installed upstream of the connector. A union or flanged connection shall be provided downstream from this valve to permit removal of controls. Shutoff valves serving decorative gas appliances shall be permitted to be installed in fireplaces if listed for such use. **CPC § 1212.4**