



## **INTRODUCTION**

Kitchen additions, alterations or renovations require Building permits. The following information can be used as a guideline for the minimum requirements for a kitchen renovation project. Additions, alterations or renovations require compliance with the following:

- **2019 California Residential Code (CRC)**
- **2019 California Plumbing Code (CPC)**
- **2019 California Mechanical Code (CMC)**
- **2019 California Electrical Code (CEC)**
- **2019 California Energy Code (CEnC)**
- **2019 California Green Building Standards Code (CGBSC)**
- **City of Carpinteria Municipal Code**

A kitchen renovation includes, but is not limited to, the removal and/or relocation of base cabinets, countertops, sinks, dishwasher, garbage disposal, installed appliances, changes to the lighting, removal and replacement of any wallboard, modifications to the structural elements of the dwelling and changes to the electrical, mechanical and plumbing systems. Removal and replacement of the base cabinets and countertop will require compliance with the electrical outlet location requirements of the code.

The following details the minimum requirements for the kitchen electrical, mechanical, and plumbing systems:

## **ELECTRICAL**

- All kitchen countertop outlets shall be GFCI protected. [CEC 210.8(A)(6)]
- Receptacles shall be listed as tamper resistant.
- 12" or wider countertops require an outlet. [CEC 210.52(C)(1)]
- Outlets are required within 24" of any location along the countertop. [CEC 210.52(C)(1)]
- Kitchen outlets positioned a maximum 20" above countertop. [CEC 210.52(C)(5)]
- Appliance garage outlets are not counted as a required countertop outlet. [CEC 210.52(C)(5)]
- Appliances and sinks which break up the countertop run require each side to comply individually. [CEC 210.52 (C)]
- The electrical outlet requirements include islands, peninsulas, kitchen desktops, wet bars, and serving bars. A large window across the back of a sink or lack of a backsplash does not exempt the countertop from the outlet requirements. These outlets may be in a drop front cabinet face, under cabinet plug strip, pop up or tombstone-type receptacle. [CEC 210.52(C)(2),(3),(4)]
- Two or more small appliance branch circuits, 20 amps each, are required for kitchens. Circuits shall be balanced and have no other outlets. (CEC 210.52(B)(1),(2))
- Individual dedicated circuits are required for all major appliances. [210.11(C)(1) & 422.10(A)]
- Garbage disposal cord and plug connected 18" to 36" long. [CEC 422.16(B)(1)]
- Dishwasher cord 36" to 48" long. Romex installed with a plug is not an approved flexible cord. [CEC 422.16(B)(2)]
- Minimum 15 amp circuit for the dishwasher and a 15 amp circuit for the disposal [CEC 210.23(A)]
- If using a split outlet (two circuits on the same yoke or mounting strap) for dishwasher/disposal, provide a listed handle tie at the two circuit breakers at the panel. [CEC 210.7]
- All installed luminaires shall be high-efficacy. [CEnC 150.0(K)1.A]



- IC (direct contact) and AT (air tight) rated cans are required for recessed lighting if installed in an insulated ceiling. For occupancies with a horizontal (floor/ceiling assembly) rated separation, the recessed fixtures shall be protected to the rating of the separation (1 hour) or be listed for the required protection. This generally applies to residential condominium construction where units are above or below other units. [CEnC 150(K)1.C]

### **MECHANICAL**

- A ducted residential exhaust hood is required. A metal, smooth interior surface duct required on vent hood or down draft exhaust vent. Aluminum flex duct not approved. Provide back draft damper [CMC 504.3]
- Minimum 30" vertical clearance to combustibles from cook top surface. [CMC 921.3.1]
- Kitchen local exhaust ventilation requires a minimum rate of 100cfm meeting the requirements of ASHRAE 62.2. This includes a maximum sound rating of 3 sone @ 100cfm.

### **PLUMBING**

- A gas test is required on piping modifications (10 psi for 15 minutes). A maximum 15 psi gauge is required for the gas test. A lower gas pressure test may be performed when using a recording test gauge per Section 1214.3 of the CPC. [CPC 1213.3]
- Cover Requirements. Underground piping systems shall be installed with a cover not less than 12 inches (305 mm). Where external damage to the pipe is not likely to result, the cover shall be not less than 18 inches (457 mm). Where a cover not less than 12 inches (305 mm) cannot be provided, the pipe shall be installed in conduit or bridged (shielded). [CPC 1210.1.1]
- Gas lines that run under a slab shall run through an approved, vented, gas tight conduit. [CPC 1210.3.4]
- An accessible gas shutoff valve shall be provided upstream of each gas pressure regulator. Where two gas pressure regulators are installed in a single gas line, a manual valve shall not be required at the second regulator. [CPC 1210.11]
- Provide maximum 6-ft- long listed gas flexible connector and shut off to freestanding range. [CPC 1212.3.1]
- A listed air gap is required for the dishwasher drain. [CPC 807.3]
- The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. [CPC 402.4]



### SMOKE ALARMS & CARBON MONOXIDE ALARMS:

In single family residences and multi-family residences (townhomes, condominiums, and apartments), installation of smoke alarms and carbon monoxide alarms is required prior to the final inspection as follows:

**Smoke Alarms:** Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings. Smoke alarms shall comply with NFPA 72 and listed in accordance with UL 217. Combination smoke and carbon monoxide alarms shall be listed in accordance with UP217 and UL2034. Systems and components shall be California State Fire Marshal Listed and approved in accordance with California Code of Regulations, Title 19, Division 1 for the purpose which they are installed. Unless previously installed, smoke alarms are required in each sleeping room, outside each separate sleeping area in the immediate vicinity of the bedroom, on each additional story of the dwelling. In existing buildings, alarms may be solely battery operated where alterations or repairs do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes. Where more than one smoke alarm is required to be installed, the alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit, except where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes. The alarms shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed. Refer to CRC Section R314.

**Carbon Monoxide Alarms:** For existing buildings and new construction, carbon monoxide alarms shall be provided in dwelling units if the dwelling unit contains a fuel fired appliance or fireplace OR the dwelling unit has an attached garage. Where an addition is made to an existing dwelling or a fuel burning heater, appliance or fireplace is added to an existing dwelling, not previously required to be provided with carbon monoxide alarms, new carbon monoxide alarms shall be installed outside each separate sleeping area in the immediate vicinity of the bedrooms, on every occupiable level of a dwelling unit, including basements. Where a fuel burning appliance is located within a bedroom or its attached bedroom, a carbon monoxide alarm shall be installed within the bedroom. In existing dwelling units a carbon monoxide alarm is permitted to be solely battery operated where repairs or alterations do not result in the removal of wall and ceiling finishes or there is no access by means of attic, basement or crawl space. Where more than one carbon monoxide alarm is required to be installed, the alarms shall be interconnected in a manner that activation of one alarm shall activate all of the alarms in the individual unit, except where repairs do not result in the removal of wall and ceiling finishes, there is no access by means of attic, basement or crawl space, and no previous method for interconnection existed. See CRC Section R315 for additional information.