RESIDENTIAL **KITCHEN** ALTERATION REQUIREMENTS

(2016 Adopted Codes Effective January 2017)

The code requirements in this document are excerpts only and are not a comprehensive list of all requirements that may apply to a building project.

These sheets, when attached to a set of plans, become part of those plans and must remain attached thereto. The approval of these plans and the specifications shall not be held to permit or approve the violation of any ordinance or State or Federal law.

**Amended Construction Documents:** Work shall be installed in accordance with the approved construction documents and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

a. It shall be the duty of the building permit holder or their duly authorized agent to notify the Building Official when work is ready for inspection and to provide access and means for inspection of such work.

b. All work shall be subject to inspection by the Building Official and such work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of the code or any other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of the code or for any other ordinances of the jurisdiction shall not be valid. Neither the Building Official nor the jurisdiction shall be liable for expenses entailed in the removal or replacement of any material required to allow inspection.

MAIN DWELLING □ ACCESSORY DWELLING □ OTHER □

I have read and will comply with the items relevant to this project per the code.

Signature of: ___________________________ Date: ____________

Owner □ Authorized Agent □ Contractor □ Architect/Engineer □
The following is a listing of the general requirements for residential kitchen remodels and is based on the 2016 California Residential Code (CRC), 2016 California Electrical Code (CEC), 2016 California Plumbing Code (CPC), 2016 California Mechanical Code (CMC), 2016 California Energy Efficiency Standards (CEES), California Green Building Standards Code (CGBSC) and the California Civil Code. This is a general informational handout only and is not to be considered all inclusive. In all cases, the appropriate code(s) shall govern.

Electrical Requirements:

Countertop receptacles shall meet all of the following requirements: (CEC 210.8, 210.12(A) 210.52, 406.4(D), 406.12,)

- All receptacles shall be GFCI/AFCI protected and tamper-resistant (TR).
- Receptacles shall be provided at all countertop areas with a minimum dimension of 12 inches.
- Be located so that no point is more than 24 inches from a receptacle outlet measured horizontally along the wall.
- Receptacles shall be located no more than 20 inches above countertop.
- Islands/peninsulas shall have at least one receptacle mounted not more than 12 inches below the countertop and where the countertop does not extend more than 6 inches beyond its base.

Exhaust systems shall be provided for residential kitchens per the CMC, CGBSC and the CEES. All exhaust systems shall exhaust to the outside of the structure and be protected with a back draft device.

- Exhaust systems that are operated intermittently shall have the capacity of 100 cfm/hr.
- Exhaust systems that are operated continuously shall have the capacity of 25 cfm/hr.

Kitchen receptacles shall be supplied by circuits meeting all of the following requirements: (CEC 210.11, 210.52, 422.16)

- Countertop receptacles shall be supplied by a minimum of two 20-amp branch circuits.
- A dedicated circuit is required for cord and plug connected range exhaust hoods.
Separate circuits may be required for the garbage disposal, dishwasher and built-in microwave based on the manufacturer's requirements and the motor rating. Outlet serving the Dishwasher to be GFCI protected. (CEC210.8 (D))

Any new receptacles added in the dining area, breakfast room, pantry, or similar area shall be supplied by a 20-amp circuit, the countertop circuits may be used to supply these areas.

The existing electrical panel may need to be upgraded, or a sub-panel added, if the requirements above cannot be accommodated.
Water Efficient Plumbing Fixtures (California Civil Code 1101.4(a) and CGBSC 4.303):

The California Civil Code requires that all existing non-compliant plumbing fixtures (based on water efficiency) throughout the house be upgraded whenever a building permit is issued for remodeling improvements. Residential buildings constructed after January 1, 1994 are exempt from this requirement. The following table shows the fixtures that are compliant and what is required if fixtures need to be replaced:

- Water Closet (Toilet): 1.28 gallons/flush
- Showerhead: 2.0 gallons/minute at 80psi
- Faucet – Bathroom: 1.5 gallons/minute At 60 psi
- Faucet – Kitchen: 1.8 gallons/minute at 60 psi (average)

Plumbing Requirements:

- Dishwashing Machine drainage connection shall be through airgap connection. (CPC 414.3 §807.3)
- Island fixture venting shall meet CPC section 909 requirements for special island venting.
- New gas piping shall be sized to sufficiently supply gas appliances served. (CPC 1215)
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**Lighting Efficiency (CEES 150.0(k)5):**

A minimum of 50% of the total rated lighting wattage (based on the maximum allowed for each fixture) shall be high efficiency fixtures (e.g. fluorescent). A listing of approved high efficiency lighting fixtures is on-line at:

[http://www.appliances.energy.ca.gov/QuickSearch1024.aspx](http://www.appliances.energy.ca.gov/QuickSearch1024.aspx)

**HIGH EFFICIENCY LIGHTING REQUIREMENTS:**

The following table defines the requirements for high efficiency lighting: Lamp Power Rating Minimum Lamp Efficiency:

- 5 watts or less 30 lumens per watt
- Over 5 watts to 15 watts 45 lumens per watt over 15 watts to 40 watts 60 lumens per watt over 40 watts 90 lumens per watt

The **CF2R-LTG-01-E** form will be supplied with any scope of work containing lighting.

Luminaires installed in a ceiling penetrating into an unconditioned attic must meet these requirements:

- They must be listed for zero clearance insulation cover (IC) by UL or other testing/rating laboratories recognized by the International Code Council. This enables insulation to be packed in direct contact with the luminaires.
- The luminaires must have a label certify air tight (AT) construction. Air tight construction means that leakage through the luminaires will not exceed 2.0 cfm when exposed to a 75 Pa pressure difference, when tested in accordance with ASTM E283.
- The luminaires must be sealed with a gasket or caulk between the housing and the ceiling.

**Safety glazing** is required at hazardous locations. Each pane of glazing installed within a hazardous location shall be provided with the manufacturer's designation specifying the type of glass and the safety glazing standard with which it complies. CRC R308.1 R308.4

- Glazing in fixed or operable panels of doors.
- Glazing in a panel adjacent where the nearest edge is within a 24 inch arc of a door on the closed position.
Glazing in enclosures or walls facing a bath tub, shower, saunas and similar components where the bottom edge is within 60 inches above the walking surface.

**Smoke and Carbon Monoxide Alarms (CRC 314.3, CRC 315.1)**

- Smoke alarms shall be installed on the ceiling or wall (between 4" and 12" of the ceiling) in all sleeping rooms, each area/hallway adjacent to sleeping rooms, each story of the building, and in any basement. Smoke alarms shall be replaced 10 years after the date of manufacture listed on the alarm (if no date is listed the alarm shall be replaced). Newly installed smoke alarms shall have a 10-year battery. Always consult the manufacturer's installation instructions.

- Carbon monoxide alarms shall be installed on the ceiling or wall (above the door header) in each area/hallway adjacent to sleeping rooms, each story of the building, and any basement. Carbon monoxide alarms are not required if there is no fuel-burning appliances and where the garage is detached from the house. Always consult the manufacturer's installation instructions.

**Residential Smoke and Carbon Monoxide Detector (Typical Locations)**

![Diagram of residential smoke and carbon monoxide detector locations](image)