

RESIDENTIAL KITCHEN REMODELS

A permit is required for kitchen remodels that include removal and replacement and/or relocation of kitchen cabinets, countertops, sink, dishwasher, new/altered island or replacement/alteration to the electrical, & exhaust hood. A permit is not required for kitchen countertop replacement or re-facing of the existing cabinets. If a permit is required it must be obtained prior to the start of the remodel.

This handout is for information and reference only, and is not a substitute for plans prepared for each project.

The following is a list of the general requirements based on the 2019 California Electrical Code (CEC), 2019 California Residential Code (CRC), 2019 California Mechanical Code (CMC), and 2019 California Plumbing Code (CPC), 2019 California Energy Code (CEnC), 2019 California Green Building Standards Code (CalGreen) and the California Civil Code. Contact the Building & Safety Division for any questions or additional information, including requirements for new/altered plumbing (water, sewer, or gas lines) or mechanical (bathroom exhaust fan).

Water Conserving Plumbing Fixtures [California Civil Code 1101.4(a)]

The California Civil Code requires that all Residential buildings constructed before January 1, 1994 with existing non-compliant plumbing fixtures (based on water efficiency) throughout the house be upgraded whenever a building permit is issued for remodeling improvements even if the fixtures are not within the scope of work. The following table shows the fixtures that are considered to be non-compliant and the type of water-conserving plumbing fixture that should be installed.

Type of Fixture	Non-Compliant Plumbing Fixture	Required Water-Conserving Plumbing Fixture (max. rate) [CalGreen 4.303]	
Water Closet (Toilet)	More than 1.6 gallons/flush	1.28 gallons/flush	
Urinal	More than 1.0 gallons/flush	0.125 gallons/flush for wall mount; 0.50 for others	
Showerhead	More than 2.5 gallons/minute	1.8 gallons/flush at 80 psi	
Faucet-Bathroom	More than 2.2 gallons/minute	1.2 gallons/minute at 60 psi	
Faucet- Kitchen	More than 2.2 gallons/minute	1.8 gallons/minute at 60 psi	

Plumbing

- The hot water valve shall be installed on the left side where two separate handles control are provided [CPC 417.5]
- Traps for Island sinks shall be roughed in above the floor and maybe vented by extending the vent as high as possible, but not less than the drain board height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. [CPC 909.1]
- Air gap required for dishwasher connected to Garbage Disposal or tailpiece of sink. [CPC 414.4, 807.3]

Kitchen Lighting Requirements

- All installed luminaire (lighting) shall be high efficacy in accordance with CEnC Table 150.0-A
- Under Cabinet lighting shall be switched separately from other lighting systems. [CEnC 150.0 (k)(2)K]
- All recessed lighting shall be "IC Rated and Airtight Certified." [CEnC 150.0 (k)(C-ii)]

• For occupancies with a (floor/ ceiling) fire-rated separation, the recessed fixtures shall be protected to the same rating of the separation or be listed for the required fire protection. This generally applies to residential condominium construction where units are above or below other units. [CBC 714.4.2]

Electrical

- Counter top receptacles shall meet all of the following requirements: [CEC 210.8, 210.52, 406.12]
 - ◆ All receptacles shall be GFCI protected and tamper-resistant (TR).
 - ◆ Wall receptacle shall be provided at all wall countertop spaces with a minimum dimension of 12" wide to be located so that no point along the wall line is more than 24" measured horizontally from the receptacle on the counter space.
 - ◆ Islands/peninsulas (min long dimension of 24" & short dimension of 12") 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 support base.
- All receptacles at the following location shall be GFCI protected and tamper-resistant (TR):
 - ◆ Within 6-ft of the outside edge of sink.
 - Kitchen islands and countertops.
- The GFCI shall be installed in a readily accessible location.
- Kitchen receptacles shall be supplied by circuits meeting all of the following requirements: CEC 210.11(c), 210.52, 422.16



Minimum of two 20-Amp small appliance branch circuits shall be provided to serve all wall & floor receptacles, and counter-top receptacles.[210.11(C)(1)]

Rangehoods may be cord and plug connected if the receptacle is accessible and on an individual circuit.[422.16(B)]

Microwaves shall be on an individual branch circuit rated at 15 amps or greater. [210.52(B)(1)]

The existing electrical panel may need to be upgraded or a sub panel added, if the requirements above cannot be accommodated.



CORNER SINKS

Kitchen Hood Ventilation

• Local exhaust system shall be installed in the kitchen and vented to the outdoors (recirculation prohibited) with a minimum exhaust rate as indicated in the table below. [CEnC 150(o), ASHRAE std. 62.2]

	INTERMITTENT		CONTINUOUS	
APPLICATION	MIN FLOW RATE	NOTES	MIN FLOW RATE	NOTES
KITCHEN	100 CFM	Vented Range hood required if exhaust fan flow is less than 100 CFM	5 Air changes per hr	Based on kitchen volume

- Ducts used for kitchen range ventilation shall be of metal and have smooth interior surface. Aluminum flex duct is prohibited. A back draft damper shall be provided. [CMC 504.3, 504.1.1]
- Upper cabinets shall be a minimum of 30" above cooking top. Cabinets and kitchen range hood shall be installed with the minimum clearances as required by the range/cooktop manufacture's installation instructions. [CMC 920.3.2]

Energy (Title-24)

- All Exterior walls exposed during construction shall be insulated with min R-13 2x4 walls, R-20 2x6 walls [CEnC 150.0 (C)(6)]
- All Roofing/Ceiling exposed during construction shall be insulated with min R-19 [CEnC 150.2(b), 150.0(a)1]
- All accessible joints, penetrations and other openings in the building envelope about the area of work shall be caulked, gasketed, weather stripped or otherwise sealed. [CEnC 110.7]

Smoke and Carbon Monoxide Alarms

• Smoke alarms shall be installed in each sleeping room, on the ceiling or wall outside each sleeping area in the immediate vicinity of the bedrooms, on each story of a multistory unit, in habitable attics, and in basements a minimum of 3 feet from any vent or end of a fan blade [CRC R314.3]

• Smoke alarms shall be listed and labeled in accordance with UL 217 and installed in accordance with the provisions of NFPA 72.

Alarms shall be tested and maintained in accordance with the manufacturer's instructions. Alarms that no longer function must be replaced.

- Carbon Monoxide alarms are not required if there is no fuel-burning appliances or fireplace in the unit and where the garage is detached from the unit. [CRC 315.2.1]
- Carbon Monoxide alarms shall be installed on the ceiling or wall (above the door header) outside each separate sleeping area in the immediate vicinity of the bedrooms, on each story of a multistory unit, in basements and bedrooms where a fuel-burning appliance is located within the bedroom or its attached bathroom. [CRC 315.3]
- Carbon monoxide alarms (including smoke and carbon monoxide combination alarms) shall be listed in accordance with UL 2034 (and UL 217 for combo alarms) and installed and maintained in accordance with NFPA 720 & manufactures instructions.
- In Multifamily buildings, all required smoke and carbon monoxide alarms shall be equipped with the capability to support visible alarm notification in accordance with NFPA 720.

Green Building Standards

Adhesives, sealants, caulks, paints & coatings shall comply with the VOC limits. [CalGreen 4.504.2.1 & 4.504.2.2]

- Aerosol paints & coatings shall meet the Product-Weighted MIR limits for ROC [CalGreen 4.504.2.3]
- Minimum 80% of the installed resilient flooring shall comply with one or more certified products per CalGreen Section 4.504.4
- Interior use of hardwood plywood particle board, and medium density fiberboard composite wood products shall comply with the formaldehyde limits per CalGreen Table 4.504.5
- New framing shall not be enclosed when the framing members have a moisture context exceeding 19% [CalGreen 4.505.3]

Permit Approval Requirements

- A completed building permit application. (Plan review may be done over the counter depending on complexity of the remodel)
- Provide the following plans for review: (total of 3 copies must be provided)
- ◆ Site Plan (not required to be to scale) to show the property lines at all sides, outline of existing structures on the lot, location of the public streets/alleys/easements and a north arrow. Approximately identify/highlight the location of the area of work on Floor Plan with dimensions about the remodeled area. Partial floor plan is allowed, but must show adjacent rooms/areas.

Show all proposed work on the plan.

- ◆ If the kitchen layout will be changed, an existing floor plan and a proposed floor plan must be provided. If walls are being demolished, an existing framing layout is required to determine if the wall is bearing or non-load bearing. Engineering may be required.
 - ◆ Permit Fees (including all MEP Fees) and administrative fees are required.

Inspections

A Minimum of two inspections are required for kitchen remodels. A rough electrical inspection should be scheduled after the electrical boxes are installed and prior to any devices being connected. Any other structural, mechanical or plumbing alterations should also be scheduled for a rough inspection. The final inspection should be scheduled once all the work has been completed.