



**Building and Safety
Permit Service Center**

All plans must be submitted in electronic format as an unsecured, flattened PDF with embedded fonts. Minimum 11"x17" sheet size.

This checklist is intended to provide information and improve consistency in local application and enforcement of the California Building Code requirements as they may apply to this project.

Numbers in parenthesis refer to code sections of the 2022 edition of the California Residential Code (CRC), California Electrical Code (CEC), California Mechanical Code (CMC), California Plumbing Code (CPC), California Energy Code (CEnC) and California Green Building Standards Code (CGBSC).

Building and Safety
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Code Compliance Checklist

WINDOWS AND DOORS

Project Information

Project Address:

Permit Number:

Permit Submittal Requirements

Schematic Site Plan showing building footprint with distances to property lines and indicating locations of all exterior windows and doors to be replaced/relocated/added/ altered. The site plan shall also contain project information (i.e., project address, owner's information, scope of work statement).

Schematic Floor Plan(s) showing the size and use of all rooms and areas. Identify plan location of each window/door which is to be replaced/relocated/added/altered. Note: site and floor plan information can be combined if clarity is maintained.

Window Schedule or notes on the plans indicating each window size, type (e.g. fixed, casement, sliding, single/double hung, awning, etc.), window sill height, etc.

- Specify locations of all windows requiring safety glazing as set forth in CRC R308.4. See Code Requirements below for additional guidance.
- Specify locations of all windows required to meet emergency escape and rescue requirements of CRC R310.1. See Code Requirements for additional guidance.
- Specify U-factor. See Code Requirements for additional guidance.

Exterior Elevations for all affected sides of the structure where window/door sizes are being altered or new windows/doors are being added. (This may not be necessary in individual cases)

Code Requirements

Energy Code Requirements: Specify new and replacement fenestrations (e.g. windows, skylights and exterior doors with a glazed area of more than 25% of the door area) shall have a U-factor of 0.30 or less. Specify new and replacement doors separating conditioned space from outside or adjacent unconditioned space, except fire-rate garage doors, shall have a U-factor of 0.20 or less. [CEnC 150.1(c)3A, 150.1(c)5, 150.2(b)1B, 150.2(b)1N and Table 150. 1-A]

Exceptions:

- Replacement of vertical fenestration no greater than 75 square feet with a U-factor no greater than 0.40.
- Replacement skylights, or new skylights upto 16 square feet in area, must meet a U-factor no greater than 0.55, and a Solar Heat Gain Coefficient value no greater than 0.30.

Smoke Detectors: Dwellings are to be equipped with smoke alarms installed in the following locations: [CRC 314.3]

- In each existing sleeping room.
- Outside each separate sleeping area in the immediate vicinity of the bedrooms.
- On each story including basements and habitable attics and not including crawl spaces and uninhabitable attics.
- In a hallway serving bedrooms and in a room open to the hallway, where the ceiling

height of the room open to the hallway exceeds that of the hallway by 24 inches or more.

- Installed not less than 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by [CRC R314]

Carbon Monoxide Alarms: Dwellings that have attached garages with an opening that communicates with the dwelling unit, or fuel burning appliances, or fire place are to be equipped with carbon monoxide alarms installed in the following locations: [CRC R315]

- 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 bathroom. A carbon monoxide alarm shall be installed within the bedroom.

Emergency Escape and Rescue: Basements, habitable attics and every sleeping room are required to have at least one operable emergency escape and rescue opening that meets all of the following requirements: [CRC R310.2]

- A minimum net clear openable area of not less than 5.7 square feet. (An openable area of 5.0 square feet is allowed for openings located within 44 inches of the exterior grade.)
- A minimum net clear opening height of 24 inches.
- A minimum net clear opening width of 20 inches.
- Sill height not more than 44 inches above the floor.

Note: Please account for the size of the sash members when specifying the net size of the opening. The net clear opening dimensions shall be the result of normal operation of the opening from the inside of the room.

Window Fall Protection: Where the opening of an operable window is located more than 72 inches (6 feet) above finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4 inch diameter sphere where such openings are located within 24 inches of the finished floor. [CRC R312.2.1]

Exceptions:

- Windows whose openings will not allow a four-inch-diameter sphere to pass through the opening when the opening is in its largest open position.
- Openings that are provided with fall prevention devices that comply with ASTM F 2090.
- Windows that are provided with opening control devices that comply with CRC R312.2.2.

Hazardous Locations: The following is a partial list of the most common locations requiring safety glazing per CRC R308.4:

Glazing in all fixed and operable panels of swinging, sliding and bi-fold doors [CRC R308.4.1].

Exceptions

- Glazed openings of a size through which a 3-inch diameter sphere is unable to pass.
- Decorative glazing.

Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24-inch arc of either vertical edge of the door in a closed position and whose bottom edge is less than 60 inches above the floor or walking surface [CRC R308.4.2].

Exceptions:

- Glazing in the hinge side of an in-swinging door where the wall containing the glazing is greater than 180 degrees from the plane of the door.
- Decorative glazing.
- When there is an intervening wall or other permanent barrier between the door and the glazing.
- Glazing adjacent to a door where access through the door is to a closet or storage area 3 feet or less in depth.
- Glazing that is adjacent to the fixed panel of patio doors

Glazing in an individual fixed or operable panel that meets all of the following conditions: [CRC R308.4.3]

- The exposed area of an individual pane is larger than 9 square feet; and
- The bottom edge of the glazing is less than 18 inches above the floor; and the top edge of the glazing is more than 36 inches above the floor; and

One or more walking surfaces are within 36 inches, measured horizontally and in a straight line, of the glazing.

Exceptions:

- Decorative glazing.
- When a horizontal rail is installed on the accessible side(s) of the glazing 34 to 38 inches above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot without contacting the glass and be a minimum of 1½ inches in cross sectional height.
- Outboard panes in insulating glass units and other multiple glazed panels when the bottom edge of the glass is 25 feet or more above grade, a roof, walking surfaces or other horizontal (within 45 degrees of horizontal) surface adjacent to the glass exterior.

Glazing in guards and railings, including structural baluster panels and nonstructural infill panels, regardless of area or height above a walking surface [CRC R308.4.4].

Glazing in walls or enclosures facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs and showers where the bottom exposed edge of the glazing is less than 60 inches measured vertically above any standing or walking surface [CRC R308.4.5].

Exception: Glazing that is more than 60 inches measured horizontally and in a straight line, from the water's edge of a bathtub, hot tub, spas, whirlpool or from the edge of a shower, sauna or steam room.

Glazing where the bottom exposed edge of the glazing is less than 36 inches above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps [CRC R308.4.6].

Exceptions:

- Where glazing is adjacent to a walking surface and a horizontal rail is installed 34 to 38 inches above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot without contacting the glass and be a minimum of 1½ inches in cross sectional height.
- Glazing 36 inches or more measured horizontally from the walking surface.

Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within 60 inches horizontally of the bottom tread [CRC R308.4.7].

Exception: Where the glazing is protected by a guard complying with Section R312 and the plane of the glass is more than 18 inches from the guard.

Fire Zone Requirements: The following is required for projects located in the City of Berkeley Hillside Fire Zone 2 or Fire Zone 3, per CRC R337.8.2 and R337.8:

Replacement exterior windows, skylights and exterior glazed door assemblies shall comply with one of the following requirements [CRC R337.8.2.1]:

- Be constructed of multi-pane glazing with a minimum of one tempered pane meeting the requirements of CRC R308 Safety Glazing, or
- Be constructed of glass block units, or
- Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or
- Be tested to meet the performance requirements of SFM Standard 12-7A-2.

Operable skylights shall be protected by a noncombustible mesh screen where the dimensions of the openings in the screen shall not exceed 1/8 inch. [CRC R337.8.2.2]

Replacement exterior doors shall comply with one of the following [CRC R337.8.3]:

- The exterior surface or cladding shall be of noncombustible or ignition-resistant material, or
- Shall be constructed of solid core wood that comply with the following requirements:
 1. Stiles and rails shall not be less than 1¾ inches thick.
 2. Panels shall not be less than 1¼ inches thick, except for the exterior perimeter of the raised panel that may taper to a tongue not less than 3/8 inch thick.
- Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252, or be tested to

meet the performance requirements of SFM Standard 12-7A-1.

Additional:

I certify that I have read and acknowledged all of the Code Requirements noted above. I accept full responsibility for complying with all of the above requirements, as applicable to my project. I further agree that if I fail to comply with the code requirements, due to error or omission, I will correct all deficiencies prior to final inspection.

Name

Signature

Date

Check One:

Contractor

Owner

Owner's Agent