



RESIDENTIAL WINDOW REPLACEMENT

BUILDING INSPECTION REQUIREMENTS

A building permit is required for all window replacements.

The following is a listing of the general requirements for permit applications based on the 2022 California Building Code, 2022 California Residential Code, and 2022 California Energy Efficiency Standards. This page is intended to provide general information. Please contact the Building Inspection Division for any questions or additional information.

Installation Standards (CBC 104.9 and CRC R104.9)

All windows shall be installed in accordance with the manufacturer's requirements (including new flashing).

Efficiency Standards (CEES 150.2(b))

When replacing no more than 75 square feet of windows, the newly installed windows shall have a maximum U-factor of 0.40 and a maximum Solar Heat Gain Coefficient (SHGC) of 0.35. If more than 75 square feet of window area is replaced, the newly installed windows shall be a maximum U-factor of 0.30 and a maximum Solar Heat Gain Coefficient (SHGC) of 0.23.

Emergency Escape (Egress) Windows in Sleeping Rooms (CBC 1030 and CRC R310.2)

At least one window in each bedroom is required to meet the following requirements. However, if the existing rough opening is not altered or enlarged, then the replacement window need not comply.

- Minimum net 5.7 square feet of openable area, 5.0 at ground floor
- Minimum net 20" clear width when open
- Minimum net 24" clear height when open
- Maximum height of 44" from the finished floor to the bottom of the clear opening

Fall Protection (CBC 1015.1 and CRC R312.2)

A fall prevention device is required where any window opening (measured at the window sill) is located more than 72 inches above the exterior finished grade, and less than 24 inches above the finished floor.

Natural Light and Ventilation (CBC 1204.2, 1202.5.1, and CRC R303.1)

Each habitable room (excludes hallways, bathrooms, and laundry rooms) is required to have natural light (windows or skylights) sized to a minimum of 8% of the floor area of the room and ventilation (openable portion of window or skylight) sized to a minimum of 4% of the floor area. Whole house mechanical ventilation and artificial light per section R303.1 may be an alternative.

Tempered Glazing (CBC 2406 and CRC R308)

Tempered glazing shall be installed in the following locations:

- Within a 2' arc of either the edge of a door and where the bottom exposed edge of the glazing is less than 60" above the walking surface.
- Adjacent to a bottom stair landing where glazing is less than 36 inches above the landing and within 60 inches horizontally of the landing.

- Adjacent to stairs where glazing is located less than 36 inches above the plane of the adjacent walking surface.
- Within a portion of wall enclosing a tub/shower where the bottom exposed edge of the glazing is less than 60 inches above the standing surface and drain inlet.
- Within 60 inches of a tub/shower where the glazing is less than 60 inches above the walking surface.
- Any glazing meeting all the following conditions:
 - Exposed area of an individual pane greater than 9 square feet
 - Exposed bottom edge is less than 18 inches above the finished floor
 - Exposed top edge is greater than 36 inches above the finished floor
 - Where a walking surface is within 36 inches horizontally of the glazing

Where required, tempered glazing (except tempered spandrel glass) shall be permanently identified by a manufacturer marking that is permanently applied and cannot be removed without being destroyed (e.g. sand blasted, acid etched, ceramic fired, laser etched, or embossed). A label shall be permitted in lieu of the manufacturer's designation.

Smoke and Monoxide Alarms (CBC 907.2.11, CRC R314, CRC R315)

Smoke alarms shall be installed per manufacturer's installation instructions in all sleeping rooms, each area/hallway adjacent to sleeping rooms, each story of the building, and in any basement. All battery powered smoke alarms shall have a 10-year battery.

Carbon monoxide alarms shall be installed per manufacturer's installation instructions in each area/hallway adjacent to sleeping rooms, each bedroom containing (or opening to a bathroom containing) a fuel burning appliance, each story of the building, and any basement. Carbon monoxide alarms are not required if there are no fuel-burning appliances, and the garage is detached from the house.

Inspections	Building Permit Application Requirements
1. Two inspections are required: a rough frame and a final. The rough frame shall be scheduled when the new window is stalled or before the exterior covering stucco or siding) is added. The final inspection shall be scheduled when the work is complete.	<ul style="list-style-type: none"> • An approval letter from Homeowner's Association (If applicable). • Detailed floor plan including the use and size of each room and the size and location of each existing window and proposed new window. If applicable, show any pool or spa location on the site plan