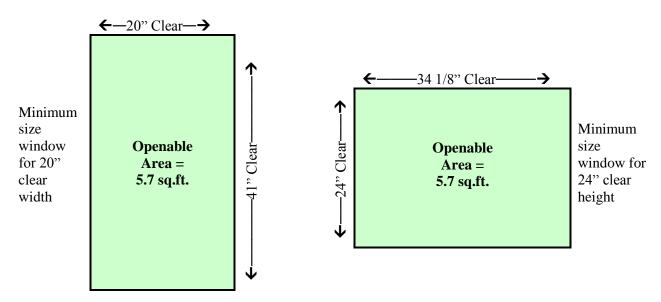


Emergency Egress WindowsResidential Construction



Because so many fire deaths occur when occupants of residential buildings are asleep at the time of a fire, the California Building Code® (CBC) requires that:

- basements with habitable space; and
- every sleeping room below the fourth story

shall have at least one operable window or exterior door opening approved for emergency escape and rescue. CBC Section 1026.4 requires rescue openings to be operational from the inside of the room without the use of keys, tools, special knowledge or effort and requires that they open directly onto a street or public alley, or a yard or court located on the same lot as the building.

- The net clear openable area (not "call out" size) shall be no less than 5.7 square feet, with exceptions for below grade window openings and window wells. The net clear openable area may be reduced to 5 SF IF the windowsill is within 44" of grade.
- In addition to the above requirement, the <u>net clear openable</u> height dimension shall be a minimum of 24 inches. The <u>net clear openable</u> width dimension shall be a minimum of 20 inches. (Note: using both minimum figures will not obtain the required 5.7 square feet.)
- The finished sill height shall not be more than 44 inches above the floor.

Bars, grilles, grates or similar devices may be installed on emergency escape or rescue windows, doors or window wells, provided:

- 1. The devices are equipped with approved release mechanisms that are openable from the inside without the use of a key or special knowledge or effort; **and**
- 2. The building is equipped with smoke alarms installed in accordance with Section 907.2.10.1.

Note: if windowsill is more than 72" above grade **and** 24" or less above the floor, a guardrail may be required. CBC 1015.8. See back side of this form for more detail.

The chart below summarizes the minimum window opening dimensions that will achieve a 5.7 square-foot opening.

Examples of Minimum Width/Height Requirements for Emergency Escape and Rescue Windows (inches)

Width	20	20.5	21	21.5	22	22.5	23	23.5	24	24.5	25	25.5	26	26.5	27
Height	41	40	39.1	38.2	37.3	36.5	35.7	34.9	34.2	33.5	32.8	32.2	31.6	31	30.4

Width	27.5	28	28.5	29	29.5	30	30.5	31	31.5	32	32.5	33	33.5	34	34.2
Height	29.8	29.3	28.8	28.3	27.8	27.4	26.9	26.5	26.1	25.7	25.3	24.9	24.5	24.1	24



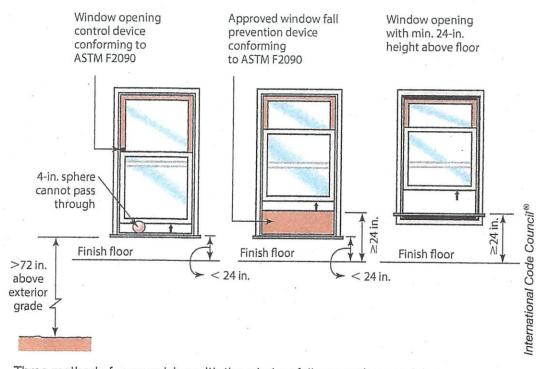
Window Fall Protection

Residential Construction

2019 CODE: Window Sills (R312.2.1)

In dwelling units, where the top of the sill of an operable window opening is located less than 24 inches (610 mm) above the finished floor and greater than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, the operable window shall comply with *one* of the following:

- 1. Operable windows with openings that will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening where the opening is in its largest open position.
- 2. Operable windows that are provided with window fall prevention devices that comply with ASTM F2090.
- 3. Operable windows that are provided with window opening control devices that comply with Section R312.2.2.



Three methods for complying with the window fall prevention provisions

IMPORTANT! PLEASE NOTE!

The information contained in this handout covers only general 2016 California Residential Code requirements that pertain to emergency egress windows; there may be other code sections that apply to your particular installation. For complete information, please refer to:

The 2019 California Residential Code Section R311-312 (all)