



Land Use Services Department Building & Safety Division

RESIDENTIAL WINDOW REPLACEMENTS

The following information is provided as a guide for residential window replacements and new installations using the 2019 California Building Code (CBC), the 2019 California Residential Code (CRC), the 2019 California Energy Code (CEgC) and the San Bernardino County Development Code (SBC Dev Code). San Bernardino County requires a building permit for all window and exterior door replacements regardless of how they are classified. This includes both “Retrofit Windows” and “New Construction Flanged Windows.”

EMERGENCY ESCAPE AND RESCUE OPENINGS

Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. The following outlines the minimum dimensions for egress compliance:

- A net **clear** opening area of not less than 5.7 square feet is provided (*see page 3 for sample openings*); **and**

Exception: *Net clear opening space of not less than 5 square feet is allowed for grade floor or below grade openings.*

- A net **clear** opening height of not less than 24 inches is provided; **and**
- A net **clear** opening width of not less than 20 inches is provided; **and**
- The bottom of the **clear** opening is not greater than 44 inches measured from the floor.
- Emergency escape and rescue openings shall be maintained free of any obstructions other than those allowed by CBC and CRC and shall be operational from the inside of the room without the use of keys, tools or special knowledge.

Exception: *Group R-1 occupancies provided with a monitored fire sprinkler system in accordance with Section 903.2.8 of CBC may have operable windows permanently restricted to a maximum 4-inch open position. (CBC 1030.4)*

FIRE SAFETY OVERLAY AREA

For properties located within the Fire Safety Overlay area, new and/or replacement windows shall be multi-pane glazing with a minimum of one tempered pane.

Exceptions:

1. Replacement windows for structures constructed prior to July 1, 2008. (CRC R337.1.3.1)
2. Additions less than 50% of the existing floor area. (SBC Dev Code 82.13.050(d))



Land Use Services Department Building & Safety Division

FIRE SAFETY OVERLAY AREA (continued)

Vinyl window frame assemblies are prohibited, except when they have all of the following characteristics:

- (I) Frame and sash are comprised of vinyl material with welded corners; and
- (II) Metal reinforcement in the interlock area; and
- (III) Glazed with insulated glass or tempered; and
- (IV) Frame and sash profiles are certified in American Architectural Manufacturing Association (AAMA) Lineal Certification Program (verified with either an AAMA product label or Certified Products Directory); and
- (V) Certified and labeled in compliance with American National Standards Institute (ANSI)/AAMA/National Wood Window and Door Association (NWWDA) structural requirements. (SBC Dev Code Section 82.13.050 (p)(2)(A))

ENERGY REQUIREMENTS

The installation for window replacements, without a Performance Energy Analysis, shall comply with the Mandatory Measures Prescriptive requirements. High Performance Windows are required, reducing the U-Factor down to 0.30 and the Solar Heat Gain Coefficient (SHGC) down to 0.23. (CEgC Section 150.1(c)3A, Table 150.1-A). Labels provided with window(s) must be present for final inspection.

GLAZING

Glazing installed in windows and doors shall meet the requirements for hazardous locations as specified in CRC R308.4. Laminated, tempered or other approved safety glazing is required in the following locations:

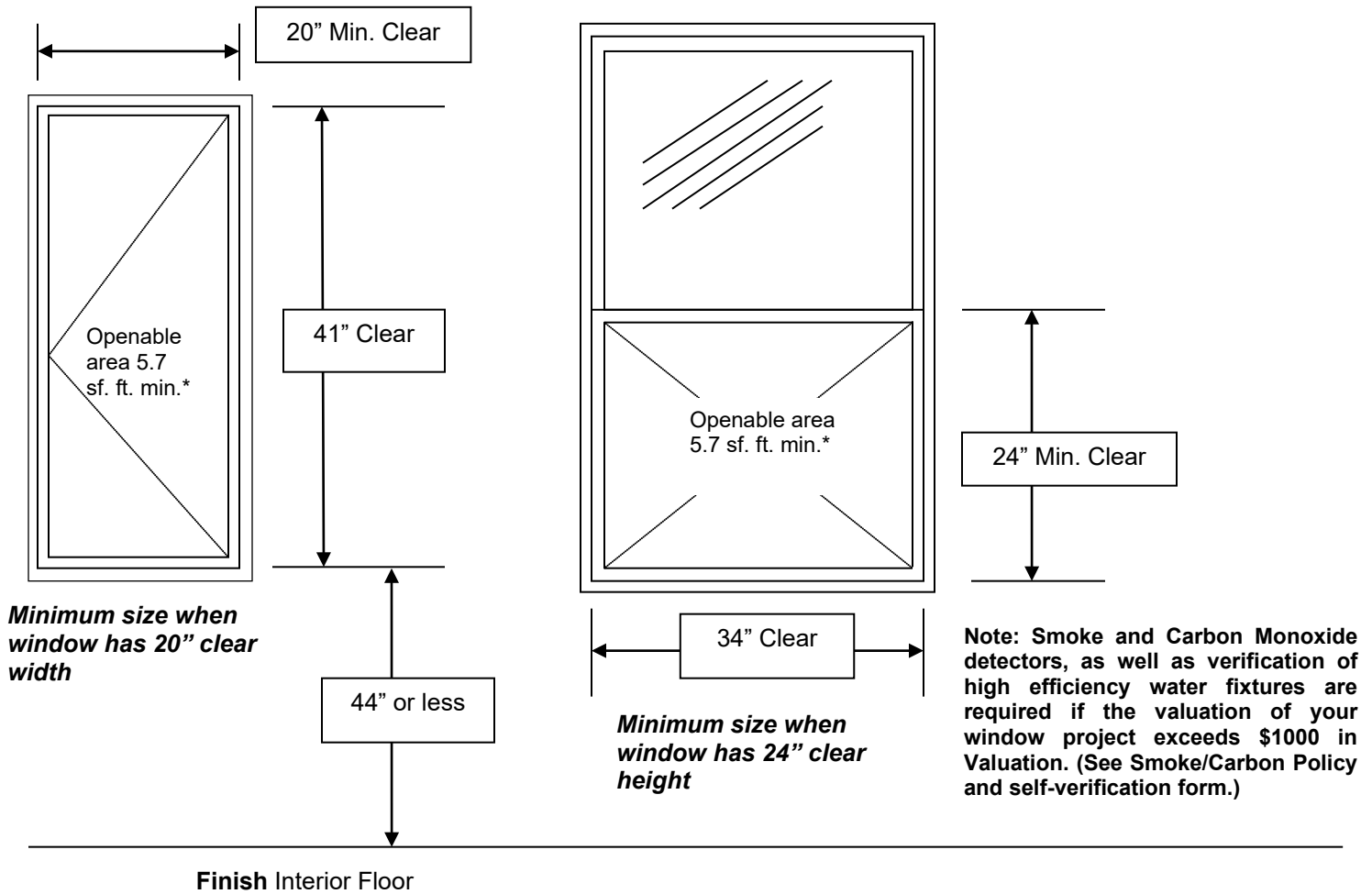
- Glazing in an individual fixed or operable panel adjacent to a door where: 1) the glazing is within 24 inches of either side of the door in the plane of the door in a closed position; or 2) the glazing is on a wall perpendicular to the plane of the door in a closed position and within 24 inches of the hinge side of an in-swinging door.
- Glazing in walls, enclosures or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and indoor/outdoor swimming pools where the bottom exposed edge of the glazing is less than 60 inches measured vertically above any standing or walking surface.

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, spa, whirlpool or swimming pool or from the edge of shower, sauna or steam room.*



Land Use Services Department
Building & Safety Division

Typical Window Opening Diagram



***Exception:** Net clear opening space of not less than 5 square feet is allowed for grade floor or below grade openings.

Example of Minimum Measurements for 5.7 sq. ft. net clear opening:

Width	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34.25
Height	41	39	37.25	35.5	34	33	31.5	30.5	29.25	29.5	28.25	27.5	26.5	25.75	24

Example of Minimum Measurements for 5.0 sq. ft. net clear opening (Grade Level Only):

Width	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Height	36	34	33	31.5	30	29	27.5	26.5	25.5	24.75	24	Height cannot be further exceeded			