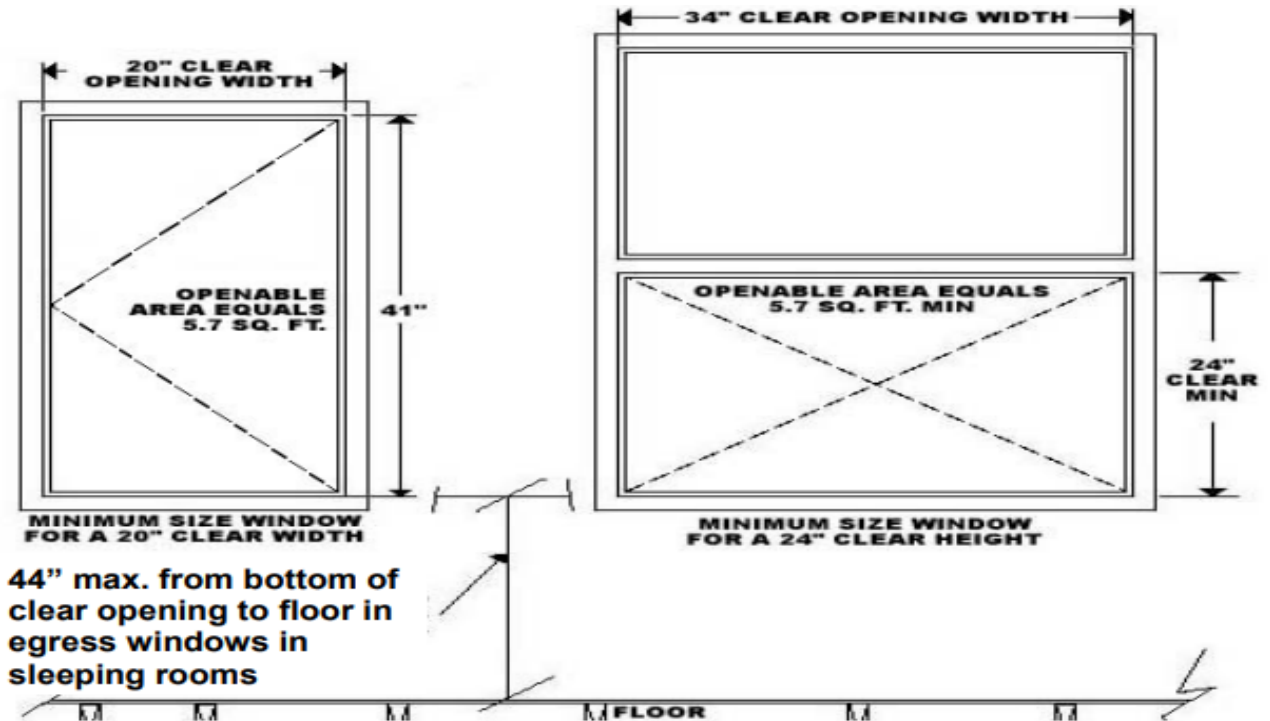




2019 CALIFORNIA RESIDENTIAL CODE - RESIDENTIAL EGRESS WINDOWS EMERGENCY ESCAPE AND RESCUE OPENINGS



Because so many fire deaths occur when occupants of residential buildings are asleep at the time of a fire, the 2019 California Residential Code (CRC), Section R310.1 requires that:

- Habitable Attics
- Basements contain one or more sleeping rooms 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 (egress windows/doors). Such openings shall open directly into a public way or to a yard or court that opens to a public way.

- The net clear openable area shall be no less than 5.7 square feet (5 square feet for grade floor openings from exterior grade and basement window wells).
- In addition to the above requirement, the net clear openable height dimension shall be a minimum of 24 inches. The net clear openable width dimension shall be a minimum of 20 inches (Note: using both minimum figures will not obtain the required 5.7 square feet.)

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

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

Exception: Where residential dwelling/townhouse is equipped with automatic fire sprinkler system, sleeping rooms in basement are not required to have egress openings provided that the basement has one of the following:

- One means of egress per CRC R311 and one emergency escape and rescue opening (does not have to be in the bedroom), or
- Two means of egress per CRC R311.

❖ **Window Replacement – CRC R310.2.5**

- When an emergency escape and rescue window is replaced within an existing frame or existing rough opening, and the replacement window is of the same operating style as the existing window or a style that provides for an **equal or greater** clear opening area, the replacement window is exempt from the maximum sill height requirements of CRC R310.2.2 and the requirements of CRC R310.2.1 for opening area and clear opening width/height (given that there is no change in occupancy of the space).
- Replacement windows must provide or maintain the 8% natural light and 4% natural ventilation of the room’s floor area.
- New glazing in existing openings must be safety glass if the opening is in a hazardous location as defined in current standards for new construction.

Replacement and retrofit windows shall have a maximum U-factor of 0.30 and solar heat gain coefficient (SHGC) of 0.23.