

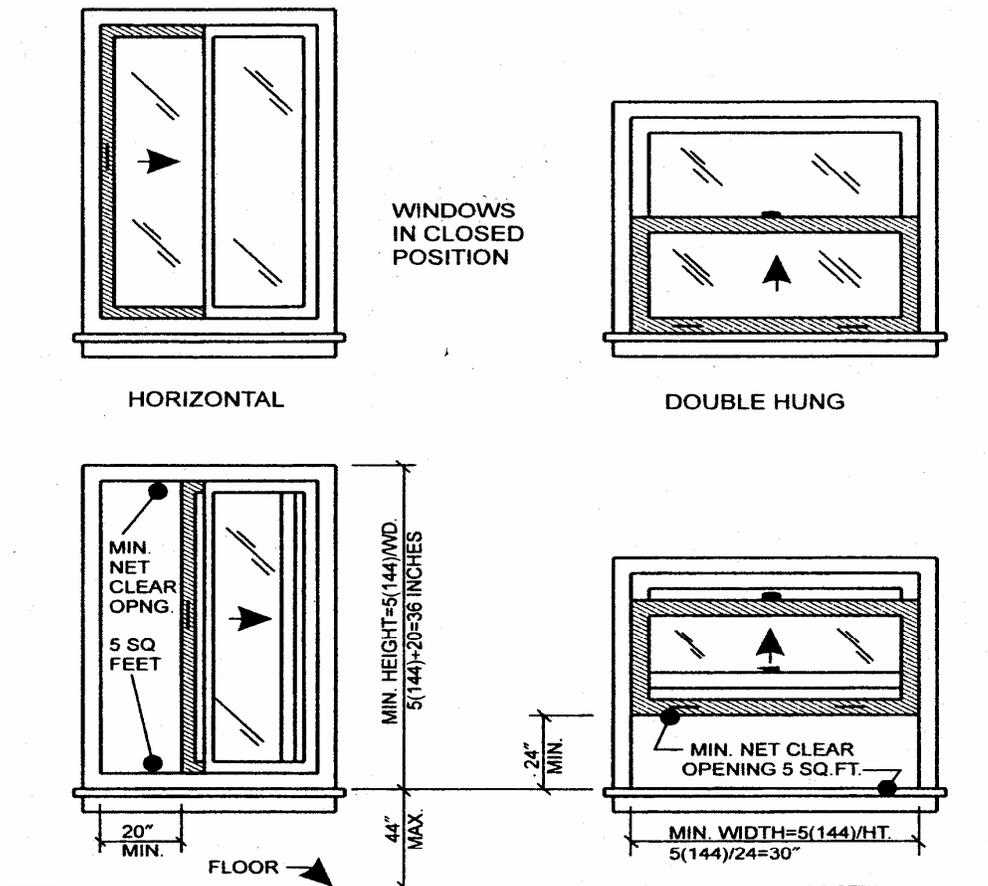
Please note: If you have any questions regarding this information, please contact the Department of Building Safety prior to purchasing windows. (989) 779-5302

Emergency Escape & Rescue Openings

Openings that can serve for emergency escape and rescue in the event of a fire are required in all sleeping rooms and habitable basements of a dwelling. Note that habitable basements are required to be provided with such an opening even if there are no sleeping rooms located in the basement. Section R310.2 (see below) contains the required dimensions for the window well and requirements for the ladder/stair equipment necessary for emergency escape openings that are below grade.

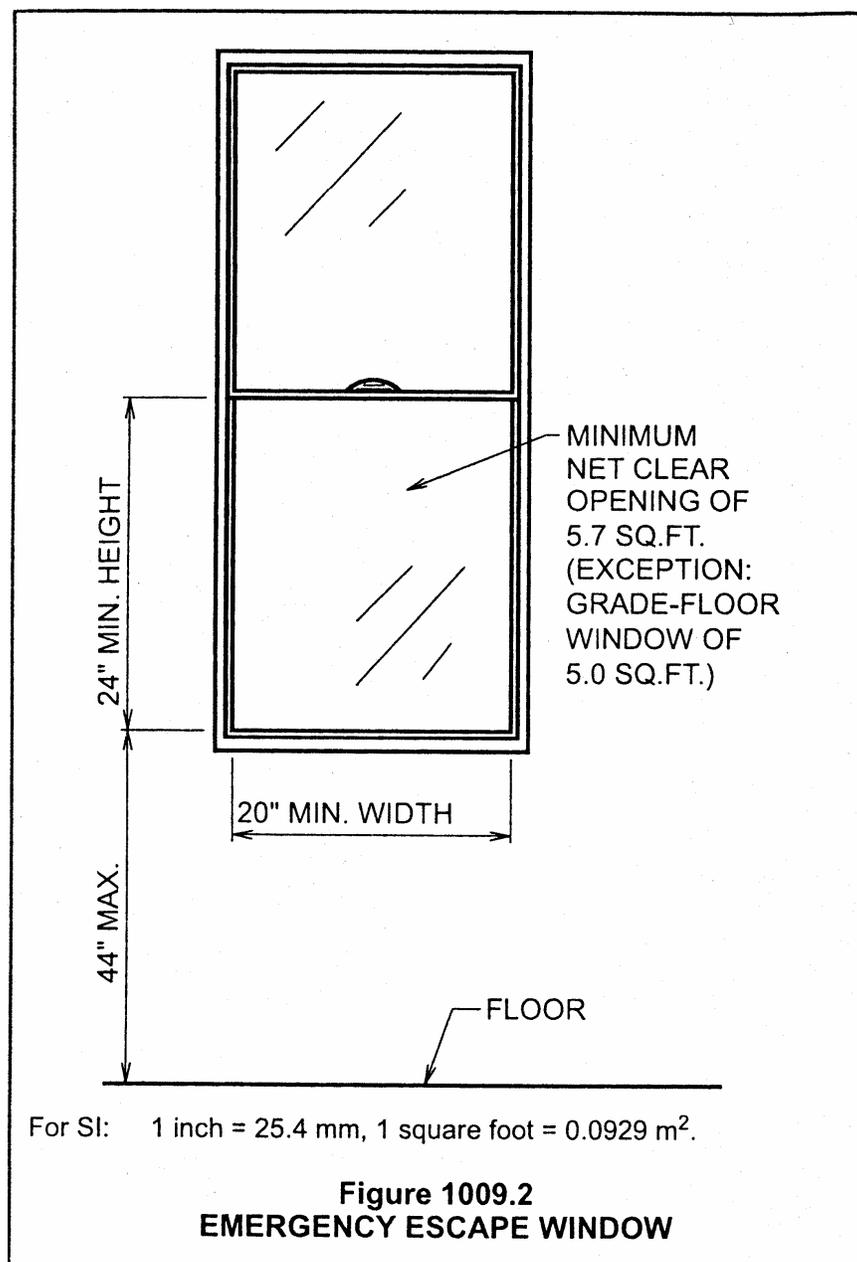
It should be noted that minimum required width and minimum required height of the openings are such that the design of a single window could not have both minimums and still have the required opening area (an opening 20 by 24 inches does not provide the required opening area of 5.7 square feet). The minimum required net clear opening must be accomplished by the normal operation of the window (See Section R310.1 below) **This means that emergency escape and rescue openings removable-sash windows are not permitted to serve as the required emergency escape opening unless the minimum opening can be achieved through the normal operation of the window (without removing the sash).**

ESCAPE WINDOWS AT GRADE: 5.0 square foot net clear opening



GRADE FLOOR EMERGENCY ESCAPE WINDOW (Section R310.1.1)

EMERGENCY ESCAPE WINDOWS BELOW GRADE OR ON SECOND FLOOR: 5.7 square foot net clear opening



R310.1 Emergency escape and rescue required. Basements with habitable space and every sleeping room shall have at least one operable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Where openings are provided as a means of escape and rescue they shall have a sill height of not more than 44 inches above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section 310.3. Escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2.

R310.1.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet.

R310.1.2 Minimum opening height. The minimum net clear opening height shall be 24 inches.

R310.1.3 Minimum opening width. The minimum net clear opening width shall be 20 inches.

R310.1.4 Operational constraints. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

R310.2 Window wells. Window wells required for emergency escape and rescue shall have horizontal dimensions that allow the door or window of the emergency escape and rescue openings to be fully opened. The horizontal dimensions of the window well shall provide a minimum net clear area of 9 square feet with a minimum horizontal projection and width of 36 inches.

Exception: The ladder or steps required by Section R310.2.1 shall be permitted to encroach a maximum of 6 inches (152mm) into the required dimensions of the window well.

R310.2.1 Ladder and steps. Window wells with a vertical depth greater than 44 inches below the adjacent ground level shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. . . Ladders or rungs shall have an inside width of at least 12 inches, shall project at least 3 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well.