CITY OF RICHLAND
DEVELOPMENT SERVICES DEPARTMENT
625 Swift Boulevard, MS-35
Richland, WA 99352
Telephone 509- 942-7794
Fax 509- 942-7764
CI.RICHLAND.WA.US · 509-942-7390

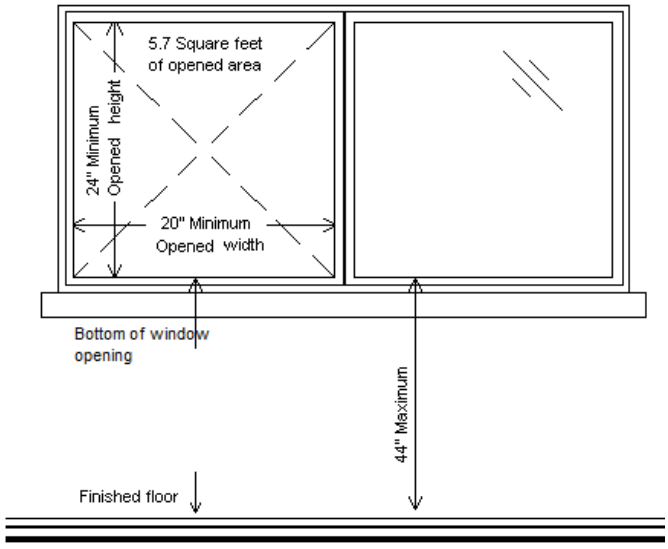
#8 – Emergency Escape and Rescue Openings

Windows in existing bedrooms may be replaced with new windows ONLY if the replacement window is the same size and type as the existing window so as to not reduce whatever emergency egress opportunity currently exists. For example, if a bedroom has an existing wood-framed, single-hung window, the replacement window must be the same size and single-hung. Most replacement window projects are done to improve energy efficiency (see Energy Code requirements below) so that the frame of the replacement window is vinyl or aluminum thermal break, etc., but the type (i.e. ½-sliding, awning, single-hung, casement) must stay the same as the existing window in order to meet the intent of the code. This directive complies with intent of R102.7.1 of the 2021 IRC in that "additions, alterations or repairs (replacing the windows) shall not cause an existing structure to become unsafe or adversely affect the performance of the building."

It should be noted that many of the problems with replacing windows occur in basement windows. The older Richland homes had very small in-swinging awning windows in the basements. Later, many people framed in a bedroom in the basement with these windows as the only type in the room. Replacing these types of windows is difficult because very few companies make an in-swinging awning window small enough to fit the existing opening. Problems have also occurred remodeling basements of newer homes when a bedroom is being added and existing window openings do not meet the egress requirements. In both these basement projects, the IRC Sec. 102.7.1 is to be met "additions or alterations to any building or structure shall conform with the requirements of the code for new construction," therefore **THE WINDOW (S) MUST BE BROUGHT UP TO THE CODE REQUIREMENTS**.

Additionally, the Washington State Energy Code requires ALL replacement windows to have a U-value of .30 (maximum).

EMERGENCY EGRESS WINDOWS: INTERIOR VIEW ONE FOR EACH BEDROOM, AT LEAST ONE TO SERVE THE BASEMENT AND ONE IN EACH BASEMENT BEDROOM



EMERGENCY EGRESS WINDOW REQUIREMENTS

1. 20" Min. width (when open)
2. 24" Min. height (when open)
3. 5.7 Sq. ft. net clear opening minimum (see exception below)
4. 44" Max vertical height to bottom of window opening.

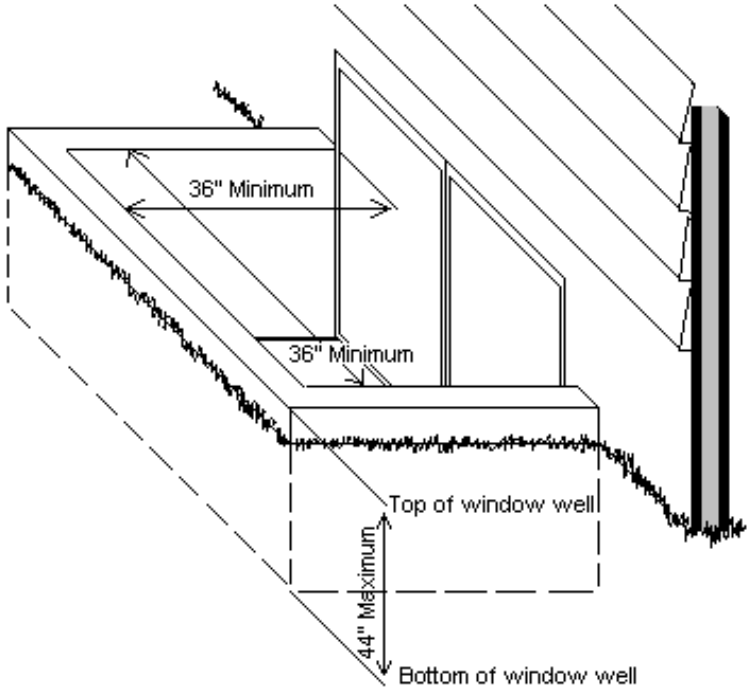
COMMON WINDOWS USED FOR EGRESS

Sliding:
5'-0" wide x 3'-0" high
4"-0" wide x 4'-0" high
Single hung:
3'-0" wide x 5'-0" high

Casement, awning, and other types of windows may be used as long as the requirements noted above can be met.

Exception: R310.2.1 Grade floor openings or below-grade openings shall have a net clear opening area of not less than 5 square feet (0.465m^2)

EMERGENCY EGRESS WINDOWS: EXTERIOR VIEW ONE FOR EACH BEDROOM, AT LEAST ONE TO SERVE THE BASEMENT AND ONE IN EACH BASEMENT BEDROOM



BASEMENT WINDOW WELL REQUIREMENTS

Window itself must meet all 4 requirements listed on the front of this sheet. The minimum horizontal area of the window well shall be 9 square feet with a minimum horizontal projection and width of 36 inches.

Window wells with a vertical depth **greater than 44 inches** 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 and not more than 6 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well.

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

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

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

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

Bars, Grills, Covers and Screens

Bars, grills, covers, screens or similar devises are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided the minimum net clear opening size of 5.7 square foot is achieved, minimum opening width of 20 inches, and shall be releasable or removable from the inside with the use of a key, tool, special knowledge, or force greater than that required for normal operation of the escape and rescue opening.

Emergency Escape and Rescue Openings Exceptions (R310.1):

Where the dwelling unit or townhouse unit is equipped with an automatic sprinkler system installed in accordance with Section P2904, sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following:

2.1. One means of egress complying with Section R311 and one emergency escape and rescue opening.

2.2. Two means of egress complying with Section R311.