



**CITY OF DES MOINES
PLANNING BUILDING AND
PUBLIC WORKS DEPARTMENTS**

**ESCAPE
AND RESCUE
WINDOWS
BH-019**

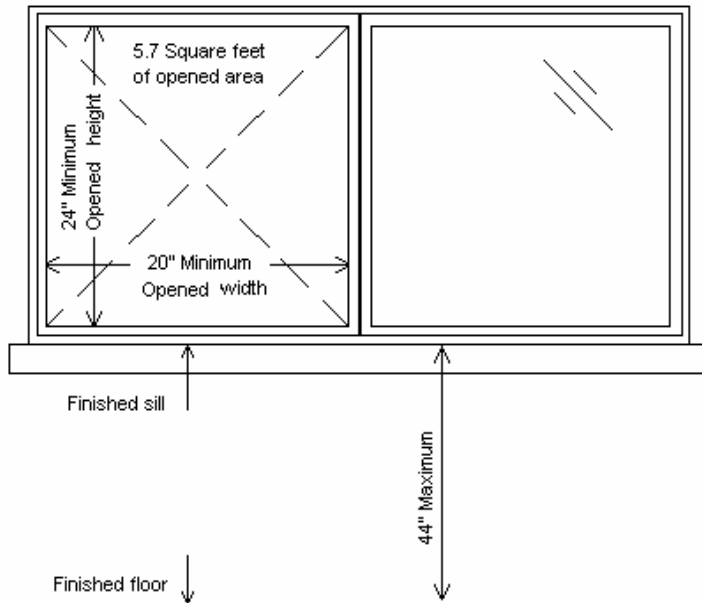
Planning, Building, and Public Works • 21630 11th Ave S, Ste D • Phone: (206) 870-7576 Fax: (206) 870-6544

ESCAPE AND RESCUE WINDOWS

Replacing windows requires a building permit. Replacement of escape and rescue windows can generate some alteration to the existing building in the case where the existing building does not meet the current code requirements. Any alteration to the escape window will cause the window opening to be brought up to the current code for escape and rescue opening size and sill height. Many people want to replace old wood-framed, double-hung windows with horizontal sliding windows, which usually requires bigger framed openings and sometimes a new header. Des Moines has some additional requirements for windows due to the Sound Control Ordinance found in DMMC 14.08.280. Additionally, the Washington State Energy Code requires ALL replacement windows to have a U-value of .40

**ESCAPE AND RESCUE WINDOWS
INTERIOR VIEW**

ONE FOR EACH BEDROOM, AT LEAST ONE TO SERVE THE BASEMENT AND ONE IN EACH BASEMENT BEDROOM. Written installation instructions shall be provided by the manufacturer for each window.



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 finished sill of window

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: Grade floor openings, defined as a window or other opening located such that the sill height of the opening is not more than 44 inches above or below the finished ground level adjacent to the opening, shall have a minimum net clear opening of 5 square feet.

FLASHING - IRC R613.1, GENERAL

Windows shall be installed and flashed in accordance with the manufacturers' written installation instructions. Written installation instructions shall be provided by the manufacturer for each window.

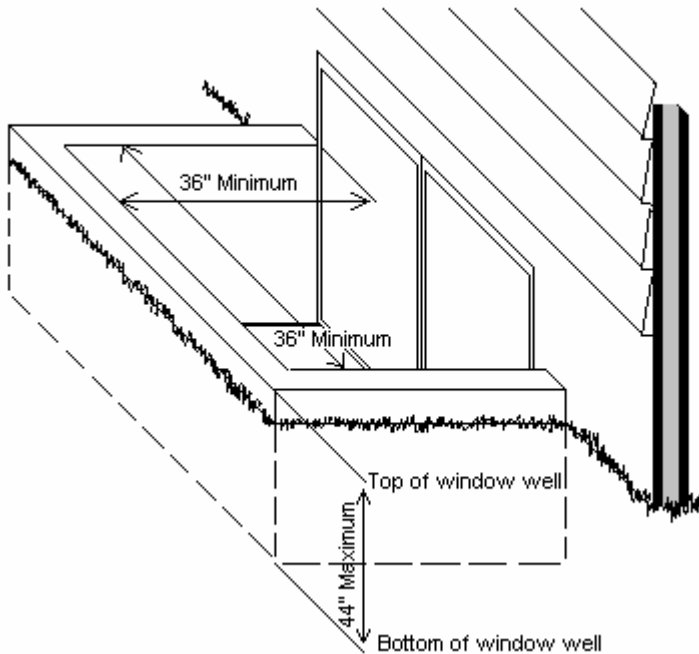
WINDOW SILLS - IRC 613.2

In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches (610 mm) shall be fixed or have openings such that a 4 inch (102 mm) diameter sphere cannot pass through. Exceptions: (1) Windows whose openings will not allow a 4 inch diameter (102mm) sphere to pass through the opening when the opening is in its largest opened position. (2) Openings that are provided with window guards that comply with ASTM F 2006 or F 2090.

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 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 devices 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 and minimum opening width of 20 inches.