

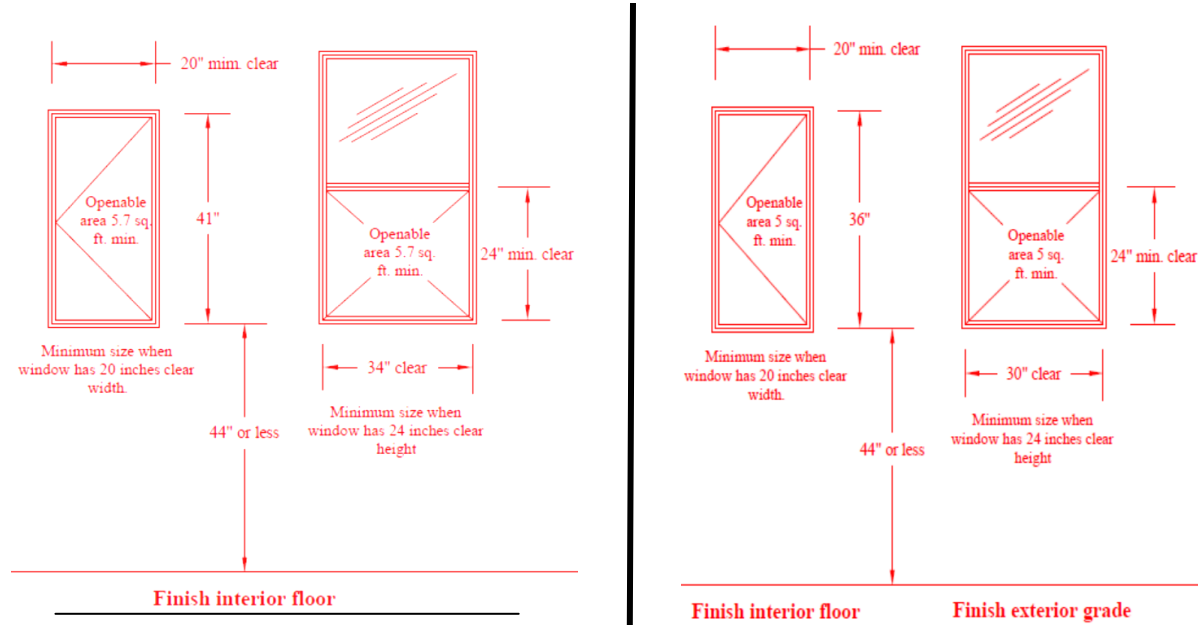
# Emergency Escape and Rescue Windows

## Oregon Residential Specialty Code Section R310.1

### Commentary

Whether your constructing a new home or remodeling an old one, changing the windows to meet current code can be confusing. The code has several requirements that must be met when installing an egress window from a sleeping room (bedroom). The first requirement found in Section R310.1 is the bottom of the opening must not be more than 44 inches from the inside floor. This measurement is to the actual *openable area* of the window, it is not measured to the framing of the opening or window framing, typically referred to as the window sill.

Egress Window Figures



The second requirement is an over-all openable area requirement. There are two over-all area numbers, they are also regulated by the 44 inches measurement, but this time it's measured on the outside of the building, and refers to the exterior grade. A *grade floor window* is defined as a window 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. A *grade floor window* must have an over all open area of 5 square feet. If the window opening is more than 44 inches above *or* below the adjacent ground level, the window must have an openable area of at least 5.7 square feet.

The third and fourth requirements relate to the minimum height and width of an egress window. These numbers are the same whether or not the window is a grade floor window. The minimum height of an egress window opening is 24 inches, and the minimum width is 20 inches.

You must meet all four of the following criteria:

1. Maximum height above finished *interior* floor..... 44 inches
2. Minimum area of window opening..... 5 *or* 5.7 sq. ft.
3. Minimum opening height ..... 24 inches
4. Minimum opening width ..... 20 inches

The Figures above show a couple examples of what the measurements would be with grade floor egress window, and a non-grade floor window. The following tables will show additional measurements for egress windows. The first table shows the minimum sizes for *grade floor windows* (5 sq. ft.). The second table depicts a *non-grade floor window* (5.7 sq. ft.) size.

**Grade Floor Window <sup>a</sup>**

(Min. over-all openable area 5 sq. ft.)

<b>If the width is-</b>	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
<b>The min. height would be-</b>	36	34	33	31½	30	29	27½	26½	25½	24¾	24	Height can not be further reduced			

a. All sizes are in inches and are approximate.

**Non-Grade Floor Window <sup>a</sup>**

(Min. over-all openable area 5.7 sq. ft.)

<b>If the width is-</b>	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34¼
<b>The min. height would be-</b>	41	39	37¼	35½	34	33	31½	30½	29¼	28¼	27½	26½	25¾	25	24

a. All sizes are in inches and are approximate.

These tables are based on over-all openable area, not actual window sizes. The numbers shown in the table are not mandatory, they're just examples. Do not use these numbers when ordering window. Most window suppliers use the outside measurement of the window, not the openable area, when they order windows from a manufacturer. Make sure you ask the supplier the exact measurements of the opening and tell them this window will be used for egress from a bedroom. Be sure to consult with your local building department for further clarification or if you have any doubt. The following formula was used for general estimates, you are encouraged to round your number up to eliminate any problems at the final inspection.

**Formula:** h'' X w'' = \_\_\_square inches ÷ 144 = \_\_\_square feet

*Non-grade floor window;*

**(Example.....** 24'' (min. h) X 34¼'' (w) = 822 sq. in. ÷ 144 = 5.7 sq. ft.

*Grade floor window;*

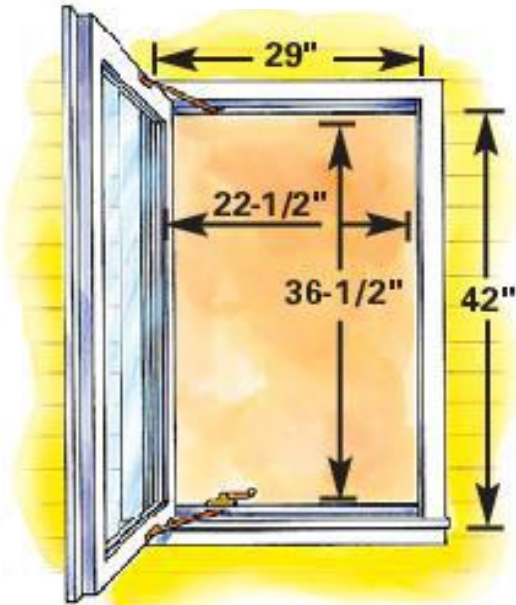
**(Example .....20'' (min. w) X 36'' (h) = 720 sq. in. ÷ 144 = 5 sq. ft.**

**Or**

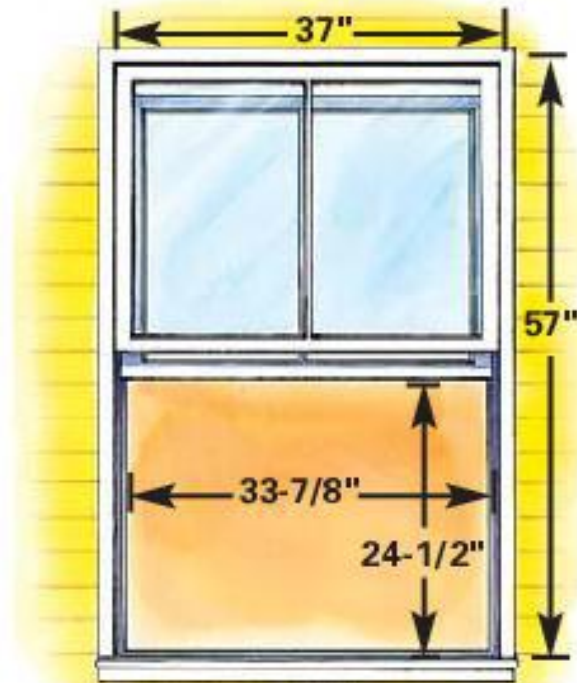
**Height x Width = Square Feet**  
144

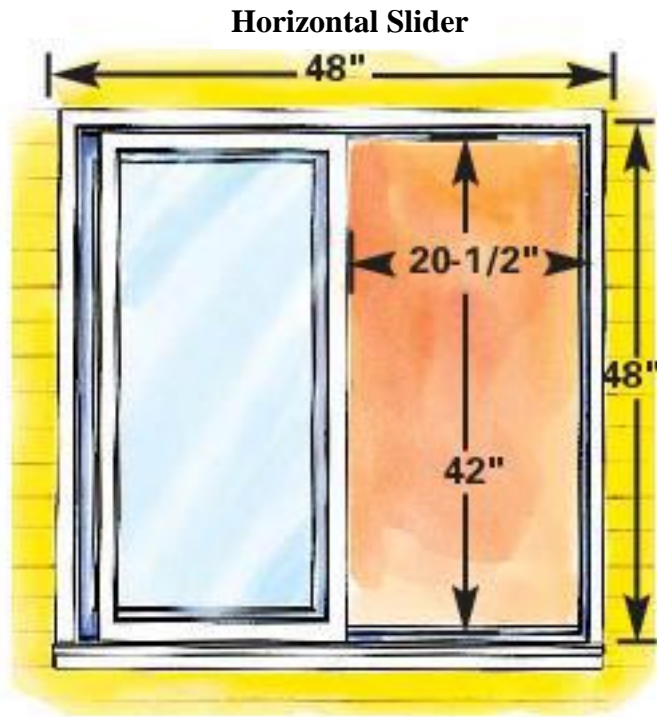
## The Following are Examples of How to Measure Windows of the Three Most Popular Styles

Casement Window



Double Hung Window





Questions?  
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