

Emergency Escape & Rescue Windows

February 2005 (Rev. February 15, 2011)

General

Purpose

Section 1029 of the 2010 California Building Code (CBC) regulates emergency escape or rescue windows in residential buildings. Because the majority of fires occur when occupants are asleep, the likelihood that people will first try to exit from these openings is very high. Therefore, the code has established that basements in residential dwellings and all sleeping rooms below the fourth story have windows and doors that may be used for emergency escape or rescue. Extensive research done by fire department personnel has determined the minimum allowed dimensions for the emergency openings to adequately allow rescue personnel and equipment in and out access to serve both rescue and escape.

Design Provisions

Location

The emergency escape and egress openings shall be located on the exterior of the building. This is intended for fire personnel to rescue the occupants from the exterior and for occupants to exit directly out of the building without having to re-enter it.

Types/Sizes of Window Allowed

Emergency escape or rescue windows must have the following characteristics:

- Must be operable,
- Must be of a usual type such as double-hung, horizontal sliding or casement windows operated by the turn of a crank,
- Does not require special knowledge or effort to operate,
- Must have a net clear opening width of 20 inches and net clear opening height of 24 inches,

- Have a minimum net clear openable area of 5.7 sq. ft. @ upper floors and 5.0 sq. ft. @ grade floor openings.
- Have a finished sill height not more than 44 inches above the floor (on the interior side).

Window Wells

For emergency escape windows with a finished sill height below the adjacent ground elevation, these shall be provided with a *window well* with the following characteristics:

1. The clear horizontal dimension shall allow the window to be fully opened, provide a minimum accessible net clear opening of 9 sq. ft. with a 36 inch minimum dimension; and
2. For window wells with more than 44 inches of vertical depth, provide an approved permanently affixed ladder or stairs accessible with the window in the fully open position (the ladder/stairs cannot encroach into the required dimensions of the window well by more than 6 inches.

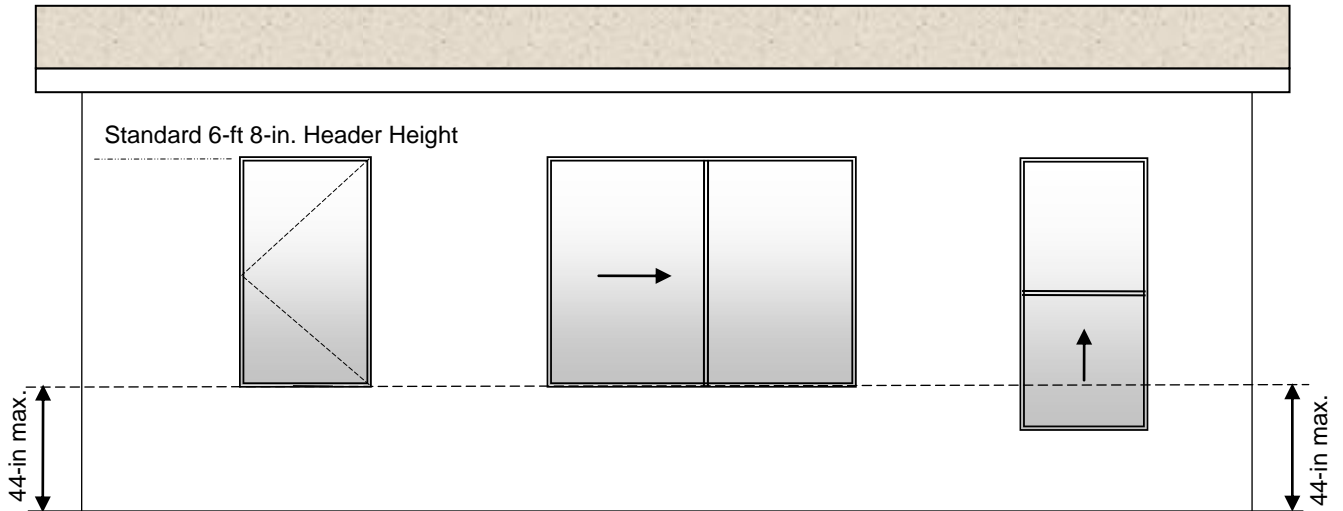
Security Devices

Emergency windows, doors or window wells may be provided with security devices such as grilles, bars and steel shutters, provided:

1. The devices are equipped with approved release mechanisms that are openable from the inside without the use of a key or special knowledge or effort; and
2. The building is equipped with smoke detectors.

Refer to the next page for typical window illustrations.

It is the owner's responsibility to verify that the actual windows installed meet the minimum egress requirements.

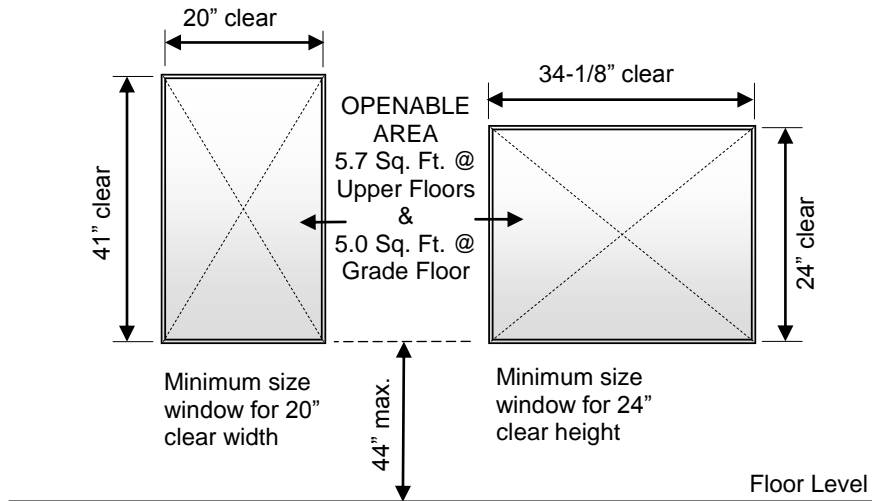


SINGLE CASEMENT:
 2-4 x 4-0
 2-6 x 3-6
DOUBLE CASEMENT:
 4-8 x 4-0
CASEMENT/FIXED COMBO:
 7-0 x 4-0

SLIDER:
 4-0 x 4-0
 5-0 x 3-6
 6-0 x 3-0
SLIDER/FIXED COMBO:
 8-0 x 4-0
 10-0 x 4-0
 12-0 x 3-0

SINGLE/DOUBLE HUNG:
 3-0 x 5-0
 3-0 x 5-6
 3-4 x 5-0
 3-8 x 5-0
 4-0 x 5-0

EMERGENCY ESCAPE/EXIT WINDOWS – ELEVATION



- 20 inches Minimum Clear Width
- 24 inches Minimum Clear Height
- 5.7 Sq. Ft. Min. Openable Area @ Upper Floors
- 5.0 Sq. Ft. Min. Openable Area @ Grade Floors