



## Planning and Public Works

### Visit our office:

6000 Main St SW  
Lakewood, WA 98499

### Contact us:

(253) 512-2261

Permit Center

[permits@cityoflakewood.us](mailto:permits@cityoflakewood.us)

Rental Housing Safety  
Program

[rentals@cityoflakewood.us](mailto:rentals@cityoflakewood.us)

Business Licensing

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Engineering

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Planning

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# Window/Door Replacement

## Code References:

- International Building Code 2402.1 & 1010.1
- International Existing Building Code (IEBC) 505.
- International Residential Code (IRC) WA State Amendments section R4502.5
- Washington State Energy Code
- Washington State Administrative Code (WAC) 51-11R

## When do I need to apply for this permit?

Whether or not a building permit is required for installing or replacing a window depends on what kind of structure the windows are going into and what kind of alterations are involved.

Please review our [Do I Need a Building Permit?](#) brochure for more details.

A floor plan is not required for a window replacement permit. The applicant is required to list the following information during submittal:

- Room where the window is being replaced (bedroom, kitchen, dining room), size of the window, & U-value for the window for the window.
- Where windows are being replaced in bedrooms, the customer shall identify that it's an existing bedroom not being converted to be used as a bedroom. Rooms being converted to be used as bedroom shall have emergency escape openings per IEBC 702.5.
- Where the room is being used as bedroom & the window size does not comply with the requirements, the replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening in accordance with IEBC 702.5.

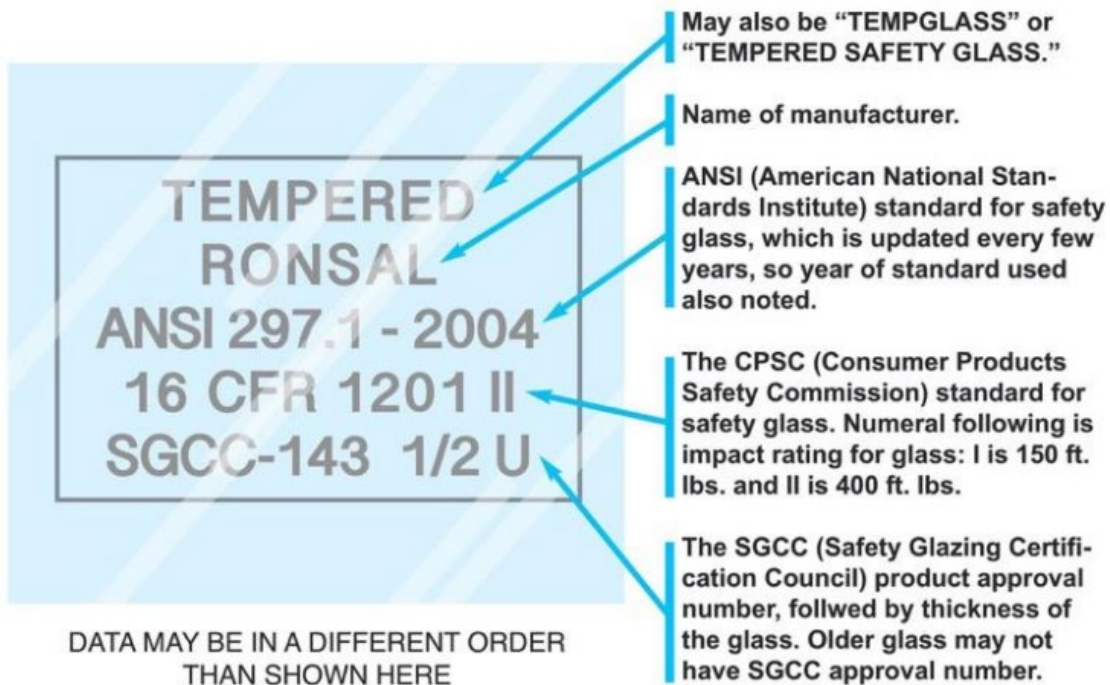
Contact the Planning and Public Works Department to discuss your proposed project scope:

- Schedule a virtual or in person appointment with our Tech of the Day [HERE](#)
- Visit us Tuesday – Thursday 9am – 12pm in the office at
- 6000 Main St SW Lakewood, WA 98499
- Call us at (253) 512-2261
- Email us at [permits@cityoflakewood.us](mailto:permits@cityoflakewood.us)
- Visit our website [HERE](#)

### Safety Glazing

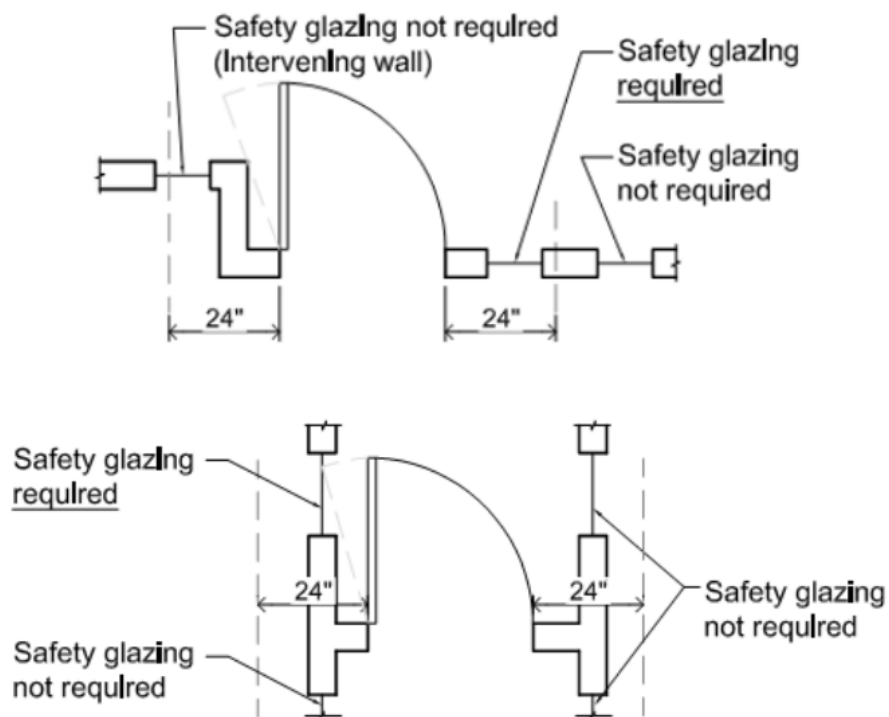
Safety glazing is glass that is less dangerous when it breaks, such as tempered or laminated glass.

Per R308.1, where safety glazing is required, each pane must be provided with a manufacturer’s label defining the type of glass and safety glazing standard to which it complies. For tempered glazing the label must be permanently etched, fired, or embossed, on the glass or be a type that once applied cannot be removed without being destroyed. For other types of safety glazing (such as laminated glass), a certificate, affidavit or other evidence confirming compliance with the code must be provided at time of inspection.



## Hazardous Locations where Safety Glazing is Required

1. Glazing in Doors: Safety glazing is required in fixed and operable panels of swinging, sliding, and bifold doors. Safety glazing is not required in a door if the glazed openings do not allow the passage of a 3-inch sphere, or if the glazing in the door is decorative. (R308.4.1)
2. Glazing Adjacent to Doors: Glazing adjacent to doors is required in the following locations if the bottom edge of the glazing is less than 60 inches above the walking surface: Within 24 inches of either side of the door in the plane of the door in a closed position, or if glazing is in a wall less than 180 degrees from the plane of the door in a closed position and within 24 inches of the hinge side of an in-swinging door. Safety glazing is not required if there is an intervening wall or permanent barrier between the door and the glazing. (R308.4.2)

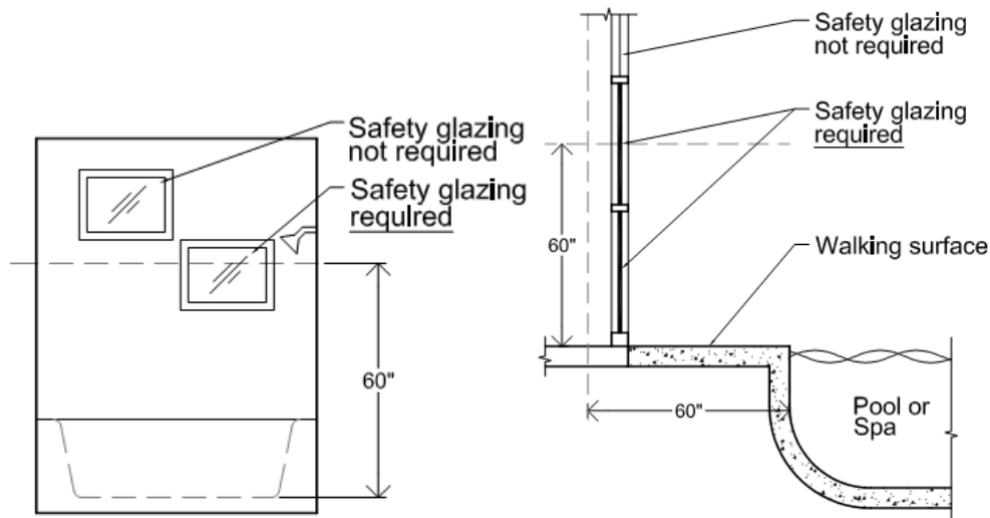


3. Glazing in Windows: Safety glazing in windows is required if the individual panel meets all of the following requirements (R308.4.3):
  - a. Exposed area of the individual panel is greater than 9 square feet.
  - b. The bottom edge of the glazing is less than 18 inches from the floor.
  - c. The top edge of the glazing is more than 36 inches above the floor.
  - d. There is a walking surface within 36 inches, measured horizontally, from the glazing. Exceptions:
    - i. Decorative glazing.

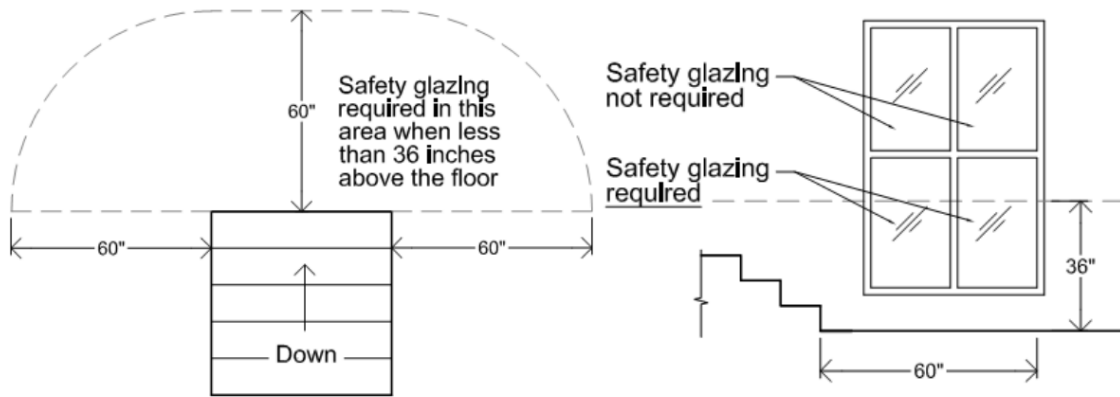
- ii. Where a horizontal rail capable of resisting 50 pounds per linear foot of force without making contact with the glass is installed on the accessible side of the glazing 34 to 38 inches above the walking surface.
- 4. Glazing in Railings and Guards: All glazing in railings and guards, including structural baluster panels and nonstructural in-fill panels, is required to be safety glazing.

Guards with structural glass baluster panels shall be installed with an attached top rail or handrail. The top rail or handrail shall be supported by not less than three glass baluster panels, or shall be otherwise supported to remain in place should one glass baluster panel fail. Exception: An attached top rail or handrail is not required where the glass baluster panels are laminated glass with two or more glass plies of equal thickness and of the same glass type. (R308.4.4)

- 5. Glazing and Wet Surfaces: Glazing in walls, enclosures, or fences adjacent to hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and indoor or outdoor swimming pools where the bottom edge of the glazing is less than 60 inches from the standing or walking surface is required to be safety glazing. Safety glazing is not required where the glazing is more than 60 inches, horizontally, from the edge of the water. (R308.4.5)



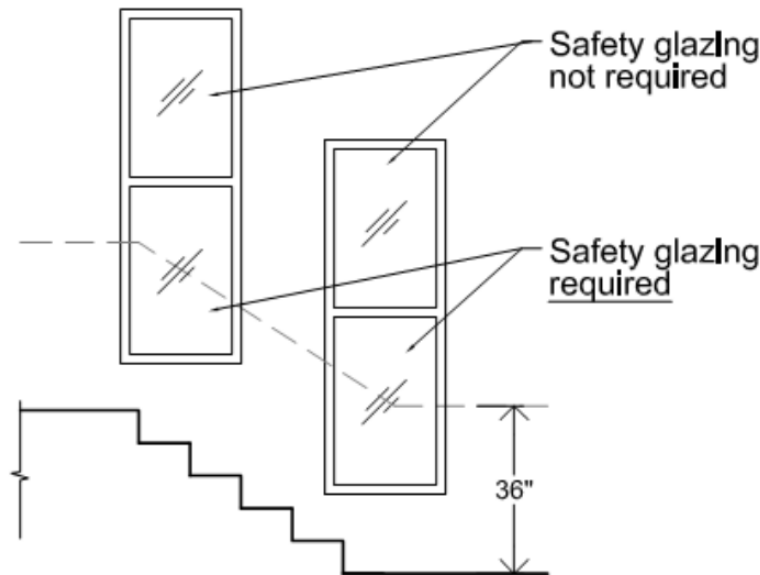
- 6. Glazing Adjacent to Bottom Stair Landings: Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within a 60-inch horizontal arc from the bottom tread must be safety glazing. (R308.4.7)



7. Glazing Adjacent to Stairs and Ramps: Glazing where the bottom edge is less than 36 inches above the plane of the adjacent walking surface of stairways, ramps, and landings between stair flights and ramp runs, must be safety glazing. (R308.4.6)

a. Exceptions:

- i. Where a horizontal rail capable of resisting 50 pounds per linear foot of force without making contact with the glass is installed on the accessible side of the glazing 34 to 38 inches above the walking surface.
- ii. Glazing more than 36 inches horizontally from the walking surface is not required to be safety glazing.



### Window Fall Protection

Where the sill height above finished grade on the exterior side of an operable window opening is greater than 72 inches, and the sill height above the finished floor on the interior side of the operable window opening is less than 24 inches (or 36 inches in

dwelling units regulated by the IBC) (see Figure 1), then window fall protection shall be provided by one of the following (R312.2.1, R312.2.2; IBC 1015.8):

1. Operable windows with openings that, when in their largest opened position, will not allow the passage of a 4-inch sphere (see Figure 2).
2. Operable windows that are provided with opening control or fall prevention devices that comply with ASTM F 2090 (see Figure 2) (IBC 1015.8.1).
3. In dwelling units regulated by the IBC where the sill height of an operable window above exterior finished grade is more than 75 feet, provide window fall prevention devices complying with ASTM F 2006 (see Figure 2).

Where operable windows serve as emergency escape and rescue openings, any window opening control or fall prevention devices, after operation to release the devices allowing the windows to fully open, shall not reduce the net clear opening area of the window units to less than the area required by R310.2.1 and R310.2.2 (R312.2.2) (IBC 1015.8.1).

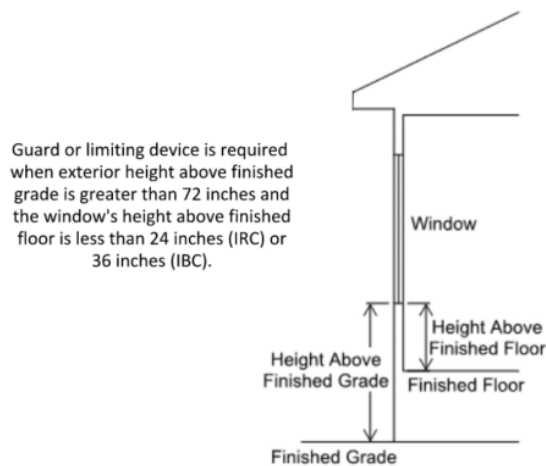


Figure 1: Sill height above finished grade on the exterior side of an operable window opening.

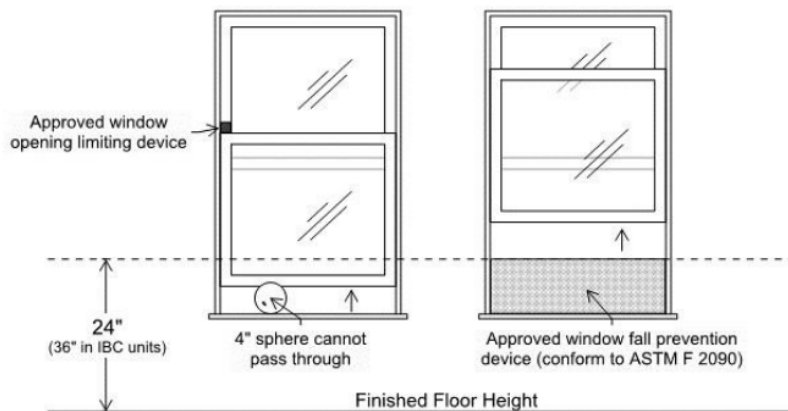
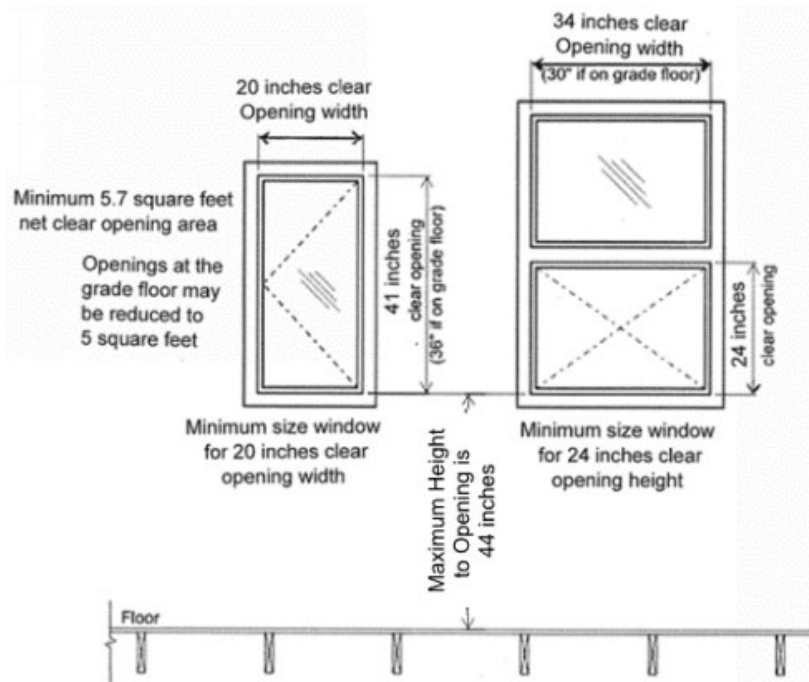


Figure 2: Window fall protection

### Residential Emergency Egress Openings

Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall be operational from the inside without the use of keys, tools, or special knowledge, and open directly into a public way, or to a yard or court providing an unobstructed path with a width of not less than 36 inches (914 mm) that opens to a public way. (R310.1)

Where bars, grilles, covers, screens, or opening control devices are placed on emergency escape and rescue openings the minimum net clear opening sizes shall comply, and such devices shall be releasable or removable from the inside without the use of key, tool, special knowledge, or force greater than that required for normal operation of the escape and rescue opening. (R310.4)



**Minimum Emergency Egress and Rescue Opening Dimensions**

### Area Wells in Conjunction with Emergency Escape and Rescue Openings

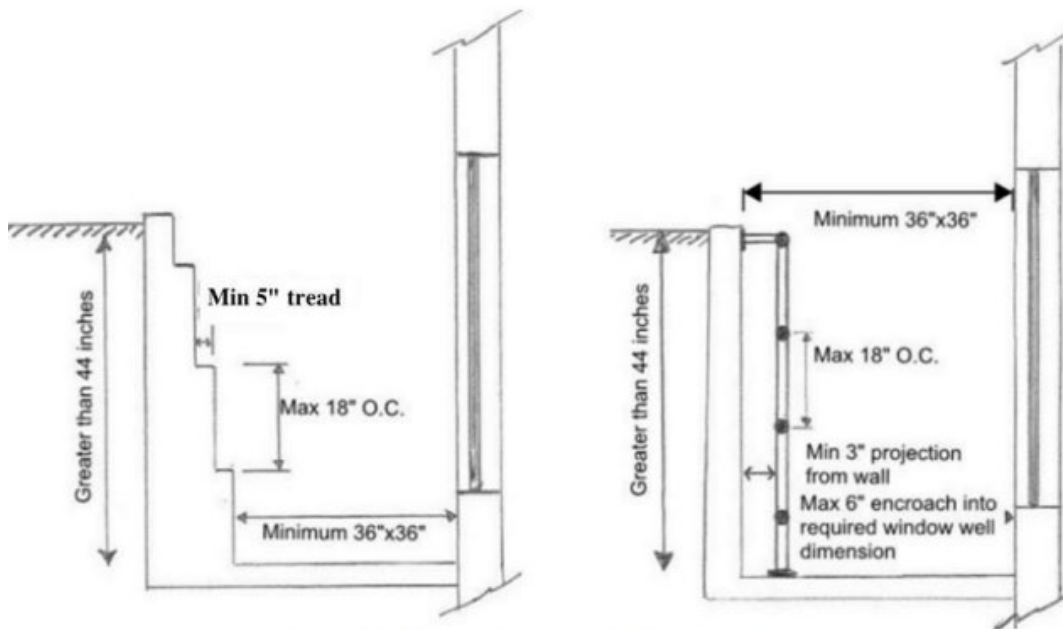
The horizontal area of the area well shall be not less than 9 square feet, with a horizontal projection and width not less than 36 inches. The size of the area well shall allow the emergency escape and rescue opening to be fully opened. (R310.4.1)

Area wells with a vertical depth greater than 44 inches shall be equipped with a permanently affixed ladder or steps useable with the emergency escape and rescue

opening in the fully opened position and shall not encroach into the required dimensions of the window well. (R310.4.2)

Ladders, rungs, and steps shall have an inside width of not less than 12 inches, shall project not less than 3 inches from the wall or have a minimum 5-inch tread depth, and be spaced not more than 18 inches on center vertically for the full height of the area well. (R310.4.2.1 / R310.4.2.2)

Where bars, grilles, covers, screens or similar devices are placed bulkhead enclosures or area wells that serve emergency escape and rescue openings, the minimum net clear opening size shall be no less than the emergency escape and rescue opening as shown in the figures above. Such devices shall be releasable or removable from the inside without the use of a key or tool or force greater than that required for the normal operation of the escape and rescue opening, and shall not obstruct access to or from the emergency escape and rescue opening. (R310.4.4)



**Area Well Dimensions and Access Features**

**Egress Door (R311.2)**

Not less than one egress door shall be provided for each dwelling unit. The egress door shall be side-hinged and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The clear height of the door opening shall be not less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the dwelling without the use of a key or special knowledge or effort.

**Floor Elevations at the Required Egress Doors (R311.3.1)**

Landings or finished floors at the required egress door shall be not more than 1½ inches (38 mm) lower than the top of the threshold. **Exception:** The landing or floor on the exterior side shall be not more than 7¾ inches (196 mm) below the top of the threshold provided that the door does not swing over the landing or floor.

Where exterior landings or floors serving the required egress door are not at *grade*, they shall be provided with access to *grade* by means of a *ramp* in accordance with Section R311.8 or a *stairway* in accordance with Section R311.7.

**Floor Elevations at Other Exterior Doors (R311.3.2)**

Doors other than the required egress door shall be provided with landings or floors not more than 7¾ inches (196 mm) below the top of the threshold. **Exception:** A top landing is not required where a *stairway* of not more than two *risers* is located on the exterior side of the door, provided that the door does not swing over the *stairway*.

**Storm and Screen Doors (R311.3.3)**

Storm and screen doors shall be permitted to swing over exterior stairs and landings.

**Landing, Deck, Balcony and Stair Construction and Attachment (R311.5)**

Exterior landings, decks, balconies, stairs and similar facilities shall be positively anchored to the primary structure to resist both vertical and lateral forces or shall be designed to be self-supporting. Attachment shall not be accomplished by use of toenails or nails subject to withdrawal.