

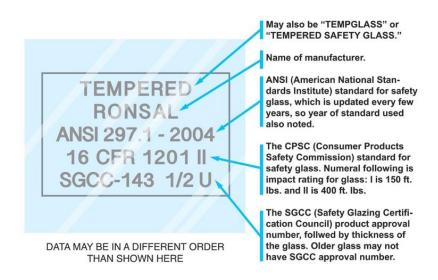
Safety Glazing

This tip sheet reflects code requirements of the 2021 International Residential Code (IRC) with Washington State Amendments.

What is Safety Glazing?

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

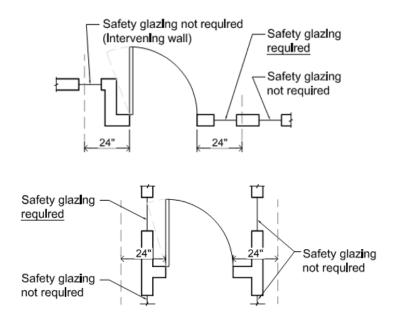
Per R308.1, where safety glazing is required, each pane must be provided with a manufacturer's label defining the type of glass and safety glazing standard to which it complies. For tempered glazing the label must be permanently etched, fired, or embossed, on the glass or be a type that once applied 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

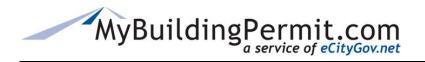
- 1. **Glazing in Doors:** Safety glazing is required in fixed and operable panels of swinging, sliding, and bifold doors. Safety glazing is not required in a door if the glazed openings do not allow the passage of a 3-inch sphere, or if the glazing in the door is decorative. (R308.4.1)
- 2. Glazing 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)



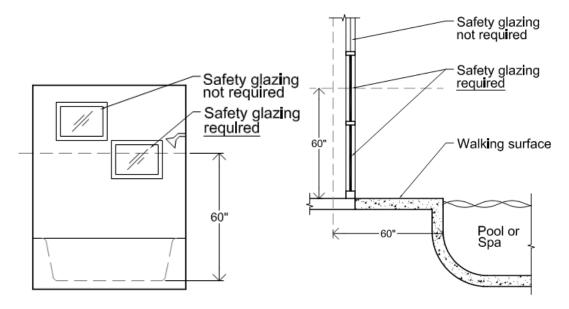


- 3. **Glazing in Windows:** Safety glazing in windows is required if the individual panel meets all of the following requirements (R308.4.3):
 - a. Exposed area of the individual panel is greater than 9 square feet.
 - b. The bottom edge of the glazing is less than 18 inches from the floor.
 - c. The 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.

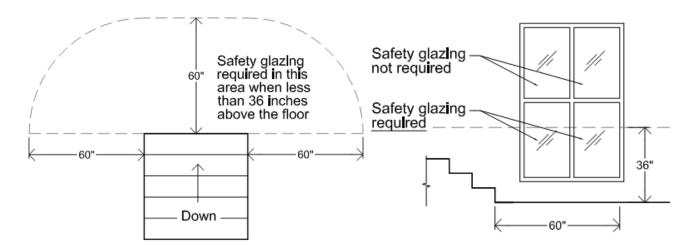
Guards with structural glass baluster panels shall be installed with an attached top rail or handrail. The top rail or handrail shall be supported by not less than three glass baluster panels, or shall be otherwise supported to remain in place should one glass baluster panel fail. Exception: An attached 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)

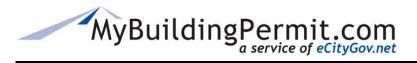


6. **Glazing Adjacent to Bottom Stair Landings:** Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within a 60-inch horizontal arc from the bottom tread must be safety glazing. (R308.4.7)



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)





Exceptions:

- 1. 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.
- 2. Glazing more than 36 inches horizontally from the walking surface is not required to be safety glazing.

