

Construction codes questions and answers

Questions regarding uses of safety glazing (safety glass)

Code requirement: As stated in the 2000 *International Residential Code*, section R308.4, "safety glazing (such as tempered glass) is required in an individual fixed or operable panel ... that has an exposed area of an individual pane greater than nine square feet, has a bottom edge that is less than 18 inches above the floor, has a top edge greater than 36 inches above the floor and has a walking surface within 36 inches horizontally of the glazing."



Question: If a window is installed in a bay above a bench seat, is the 18 inches (referenced in the code) measured from the actual floor levels, or is it measured from the top of the bench seat?

Answer: It is measured from the actual finished floor level. The bench seat has no affect on this code requirement related to safety glazing.

Question: Is there any requirement for a guard (guardrail) for the openable window above the bench seat?

Answer: Not in the 2000 *International Residential Code*. However, please read the response to the next question regarding a coming change to the 2006 *International Residential Code* regarding safety glazing.

Question: If a guard was installed in front of a window in a bay above a bench seat, are there any particular code requirements related to openings or structural capacity of this guard?

Answer: No. Although it would be recommended to design it with a live load capacity of 50 psf on the guardrail in-fill components and no openings that would allow a 4-inch-diameter sphere to pass through.

In 2007, the 2006 edition of the *International Residential Code* will be adopted by the State of Minnesota. There is a significant change related to safety glazing in section R613.2, "Window sills. In dwelling units, where the opening of an operable window is located more than 72 inches above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches shall be fixed or have openings through which a 4-inch-diameter sphere cannot pass.

Exceptions:

1. Windows whose openings will not allow a 4-inch-diameter 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."

