

# Safety Glazing Requirements

February 2005(Rev. March 24, 2008)

## General

### Purpose

The 2007 California Building Code (CBC) regulates interior and exterior glass and glazing subject to human impact. This handout is intended to clarify the locations where safety glazing is required in order to protect against accidental impact by individuals adjacent to the glazing.

## Design Provisions

### Identification

Permanent labels and identification marks for glazing installed in hazardous locations is always required. Each unit of tempered glass shall be sandblasted, laser etched embossed or of a type that once applied cannot be removed without being destroyed and be visible when the unit is glazed.

### Hazardous Locations

The following are specific hazardous locations where safety glazing is required:

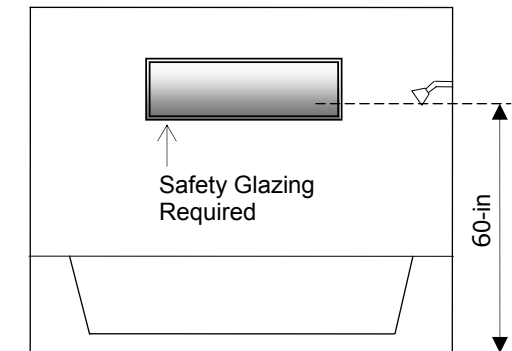
#### A. Glass Panels Adjacent to Doors

Glazing in fixed or operable panels adjacent to a door where the nearest exposed edge of the

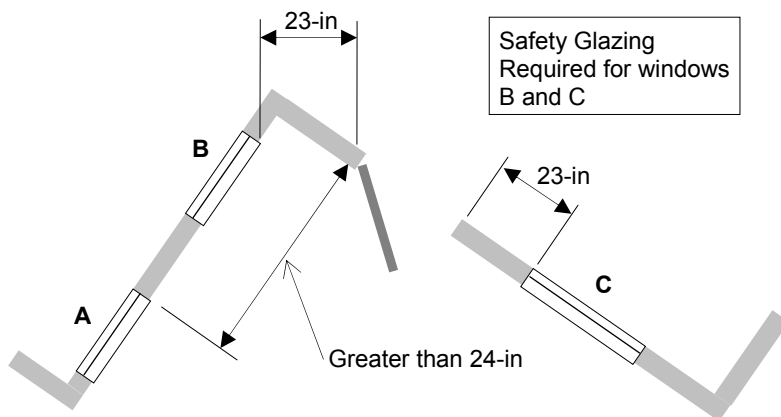
glazing is within a 24-in arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60-in above the walking surface.

#### B. Glass Panels in Walls within Tubs

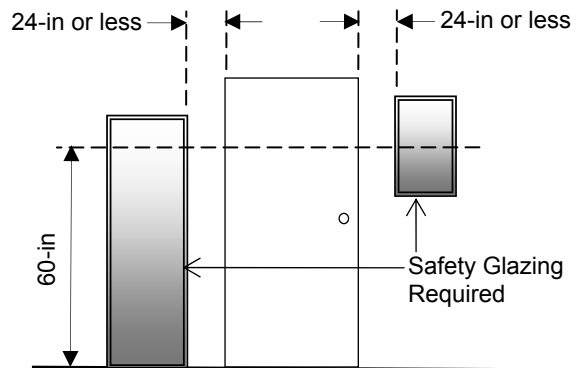
Doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers. Glazing in walls enclosing these compartments if the bottom exposed edge of the glazing is less than 60-in above a standing surface and drain inlet.



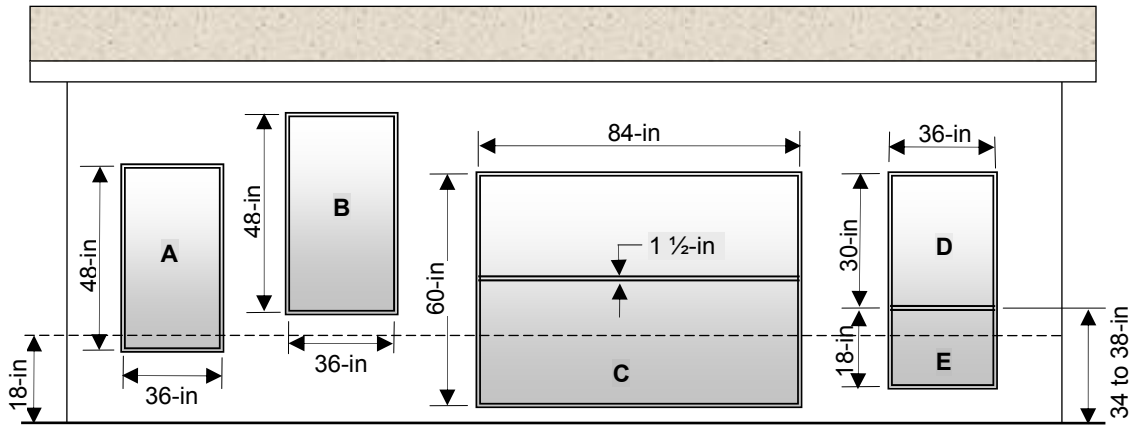
**GLASS WITHIN SHOWER WALLS**



**PLAN VIEW**



**GLASS IN SIDELITES – ELEVATION**



## **GLASS PANELS ADJACENT TO A WALKING SURFACE – ELEVATION**

<b>Table 1 - Glass panels adjacent to a walking surface</b>		
<b>Glass Panel(s)</b>	<b>Safety Glazing Required?</b>	<b>Remarks</b>
A	Yes	Panel A is more than 9 sq. ft. in area and its lowest edge extends to within 18-in of the walking surface.
B & D	No	The lowest edge of the panel is more than 18-in above the walking surface.
E	No	Panel E is less than 9 sq. ft. in area.
C	See remarks	Panel C, being one piece of glass more than 9 sq. ft. in area and within 18-in of the walking surface, is required to be of safety glazing materials unless a horizontal member not less than 1 1/2-in in width is located between 34 and 38-in above the walking surface.

### **C. Glass Panels Adjacent to a Walking Surface**

Individual fixed or operable panel that meets all of the following criteria:

1. The exposed area of an individual pane is greater than 9 sq. ft.
2. The exposed bottom edge is less than 18-in above the floor.
3. The exposed top edge is greater than 36-in above the floor.
4. One or more walking surfaces is within 36-in horizontally of the plane of the glazing.

Refer to the diagram and table above for specific safety glazing locations.

### **D. Railings**

Glass in railings shall be glazed with safety glazing materials, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface.

### **E. Swimming Pool Barriers**

Glazing in walls and fences used as the barrier for indoor and outdoor swimming pools and spas, when the following conditions are present:

1. The bottom edge is less than 60-in above grade on the pool side.
2. The glazing is within 5-ft of the swimming pool or spa water's edge.

### **F. Stairs and Landings**

Glazing in walls enclosing a stairway's landings or within 5-ft of the bottom and top of stairways where the bottom edge of the glass is less than 60-in above a walking surface.

### **G. Other Locations**

1. Swinging doors except jalousies.
2. Fixed and sliding panels of sliding door assemblies and panels sliding and bi-fold assembly doors.
3. Storm doors.
4. All unframed swinging doors.

### **H. Exceptions**

- Glazing under Item A where there is an intervening wall or other permanent barrier between the door and glazing.
- Glazing under Item C when a protective bar is installed on the accessible sides of the glazing 34 to 38 inches above the floor (see window type C in the illustration above). The bar shall be capable of withstanding a horizontal load of 50 (pounds per linear foot) without contacting the glass and be a minimum of 1 1/2-inches in height.
- Outboard pane in insulating glass units and in other multiple glazed panels under Item C when the bottom exposed edge of the glass is 25-ft or more above any grade, roof, walking surfaces or other horizontal or sloped (within 45° of horizontal) surface adjacent to the glass exterior.
- Glass block panels complying with CBC Section 2110.

- Openings in doors through which a 3-inch sphere is unable to pass.
- Decorative glass in section 2406.3 item 1.6 and/or 1.7
- Commercial refrigerated cabinet glazed doors
- Louvered windows complying with the requirements of section 2403.5
- Mirrors and other glass panels mounted or hung on a surface that provides a continuous backing support

## **Information**

Specific information may be requested at the Building Safety & Inspection office located at:

*Address: 8401 Laguna Palms Way*  
*Phone: (916) 478-2235*  
*Hours: Mon through Fri, 8 am – 5 pm*