

308.2.1 **Wired glass prohibited.** Wired glass with wire exposed on longitudinal edges shall not be used in jalousies or louvered windows.

308.3 **Human impact loads.** Individual glazed areas including glass mirrors in hazardous locations such as those indicated in Section 308.4 shall pass the test requirements of CPSC 16-CFR, Part 1201.

Exceptions:

1. Polished wire glass for use in fire doors, fire windows and view panels in 1-hour fire-resistive walls shall comply with ANSI Z97.1.
2. The unbacked specimens of plastic materials shall be exposed in Arizona and Florida to 45 degrees facing south for three years. Approved plastic materials shall be acceptable if the impact strength is not reduced by more than 25 percent during exposure when tested in accordance with Section 1201.4 (c) (2) (ii) of the CPSC standard, referenced in this section. Some discoloration is permissible, but defects other than this discoloration shall not be permissible. No bubbles or other noticeable decomposition shall be permissible in the irradiated portion.

Safety glass

308.4 **Hazardous locations.** The following shall be considered specific hazardous locations for the purposes of glazing:

1. Glazing in ingress and means of egress doors except jalousies.
2. Glazing in fixed and sliding panels of sliding (patio) door assemblies and panels in swinging doors.
3. Glazing in storm doors.
4. Glazing in all unframed swinging doors.
5. Glazing in doors and enclosures for hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers. Glazing in any part of a building wall enclosing these compartments where the bottom edge of the glazing is less than 60 inches (1524 mm) above the drain inlet.
6. Glazing, in an individual fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24-inch (610 mm) arc of the door in a closed position and whose bottom edge is less than 60 inches (1524 mm) above the floor or walking surface.
7. Glazing in an individual fixed or operable panel, other than those locations described in Items 5 and 6 above, that meets all of the following conditions:
 - 7.1 Exposed area of an individual pane greater than 9 square feet (0.836 m²).
 - 7.2 Bottom edge less than 18 inches (457 mm) above the floor.
 - 7.3 Top edge greater than 36 inches (914 mm) above the floor.
 - 7.4 One or more walking surfaces within 36 inches (914 mm) horizontally of the glazing.
8. All glazing in railings regardless of an area or height above a walking surface. Included are structural baluster panels and nonstructural in-fill panels.

9. Glazing in walls and fences enclosing indoor and outdoor swimming pools where the bottom edge of the pool side is (1) less than 60 inches (1524 mm) above a walking surface and (2) within 36 inches (914 mm) horizontally of a walking surface. This shall apply to single glazing and all panes in multiple glazing.

Exception: The following products, materials and uses are exempt from the above hazardous locations:

1. Openings in doors through which a 3-inch (76 mm) sphere is unable to pass.
2. Leaded glass panels.
3. Faceted and decorative glass.
4. Glazing in Section 308.4, Item 6, when there is an intervening wall or other permanent barrier between the door and the glazing.
5. Glazing in Section 308.4, Item 7, when a protective bar is installed on the accessible side(s) of the glazing 36 inches ± 2 inches (914 mm ± 51 mm) above the floor. The bar shall be capable of withstanding a horizontal load of 50 pounds per linear foot (74.5 kg/m) without contacting the glass and be a minimum of 1½ inches (38 mm) in height.
6. Outboard panes in insulating glass units and other multiple glazed panels in Section 308.4, Item 7, when the bottom edge of the glass is 25 feet (7620 mm) or more above grade, a roof, walking surface, or other horizontal (within 45 degrees of horizontal) surface adjacent to the glass exterior.
7. Louvered windows and jalousies complying with the requirements of Section 308.2.
8. Mirrors mounted or hung on a flush door or a panel door without a cut out for the glass.
9. Mirrors mounted or hung on a solid wall.

308.5 **Wind loads.** Safety glass or glass areas in exterior walls in screens, in partitions and in other openings subject to wind loading shall be capable of safely withstanding the wind loads shown in Section 301 acting either inward or outward. In the case of regular plate, float or sheet glass supported on four sides the design shall not be less than 2½. Adjustment factors for other types of glass are given in Table 308.5.

TABLE 308.5
RELATIVE RESISTANCE TO WIND LOAD
(Assuming equal thickness)

GLASS TYPE	APPROXIMATE RELATIONSHIP ¹
Laminated	0.6
Wired Glass	0.5
Heat-strengthened	2.0
Tempered	4.0
Sealed Insulated Glass ²	1.5
Rough-rolled Plate	1.0
Sandblasted	0.4
Regular Plate or Sheet	1.0

¹ Before using Wind Load Chart (Figure 308.5), divide the design wind load from Section 301 by the value shown for the glass type involved.

² Use thickness of the thinner of the two lights, not thickness of unit.

APPLICATION AND COMMENTARY

SECTION 306 — SANITATION

306.1 Toilet facilities. The required fixtures are the minimums needed for personal hygiene and the removal of human waste.

SECTION 307 — TOILET, BATH AND SHOWER SPACES

307.2 Space required. See Figure 307.2 of the code and commentary Sections 3206 and 3210.

SECTION 308 — GLAZING

308.3 Human impact loads. Glazed areas subject to human impact must pass the Consumer Product Safety Commission's Architectural Glazing Standard requirement listed in Part 1201 of the *Code of Federal Regulations* (16 CFR) or the glazing material must pass the requirements of a comparative test for a specific use or material given in the exceptions. This standard lists requirements for impact tests, breakage characteristics and wind-induced blowouts.

308.4 Hazardous locations. See Figures 308.4a, 308.4b, 308.4c, 308.4d and 308.4e for typical hazardous locations that require safety in glazing one- and two-family dwellings (and townhouses).

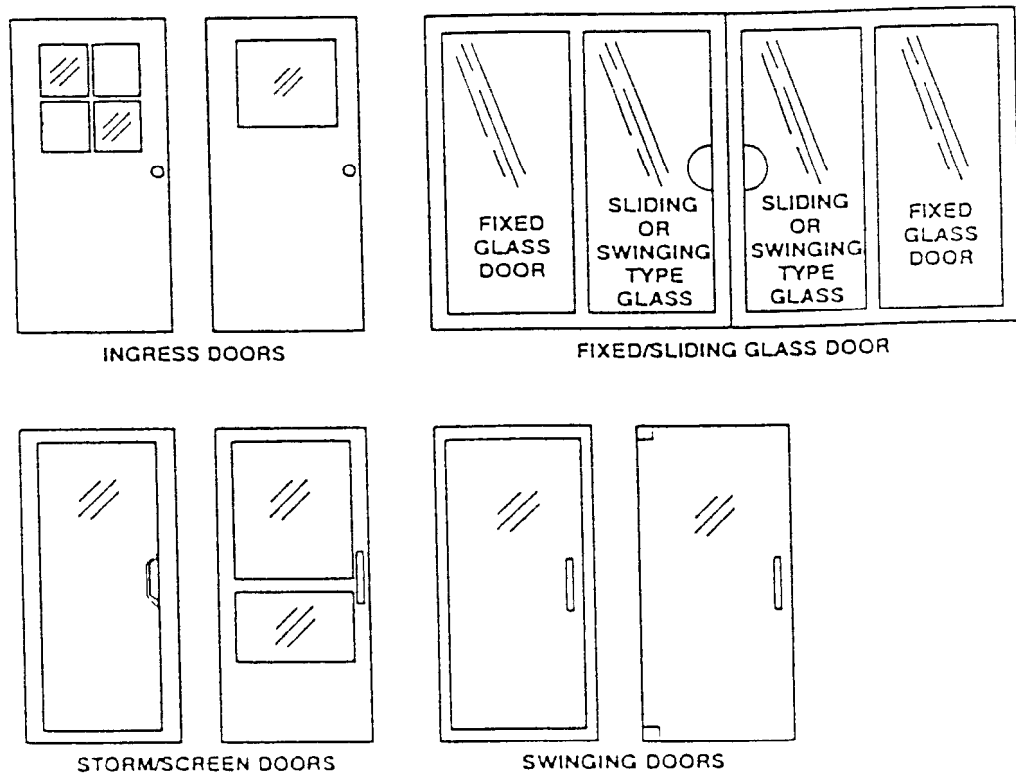
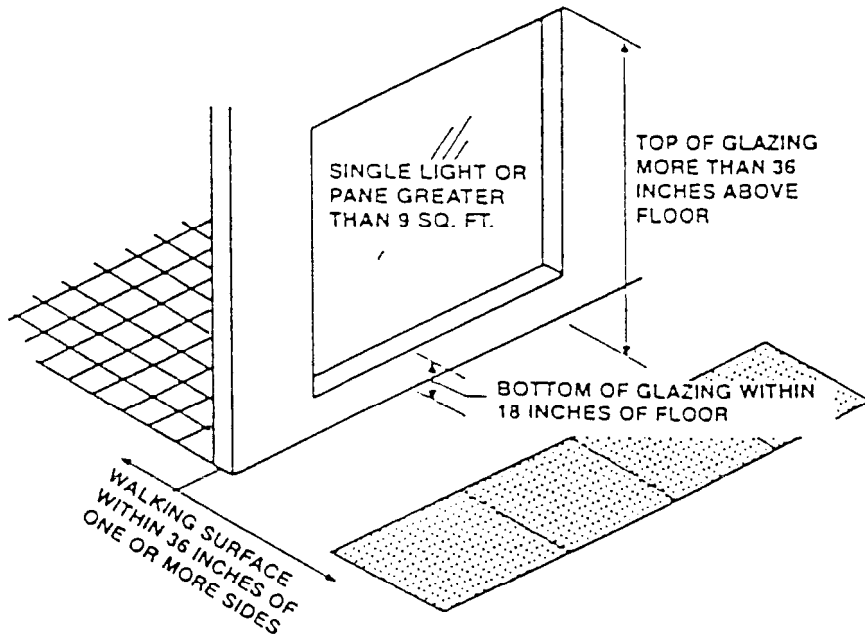
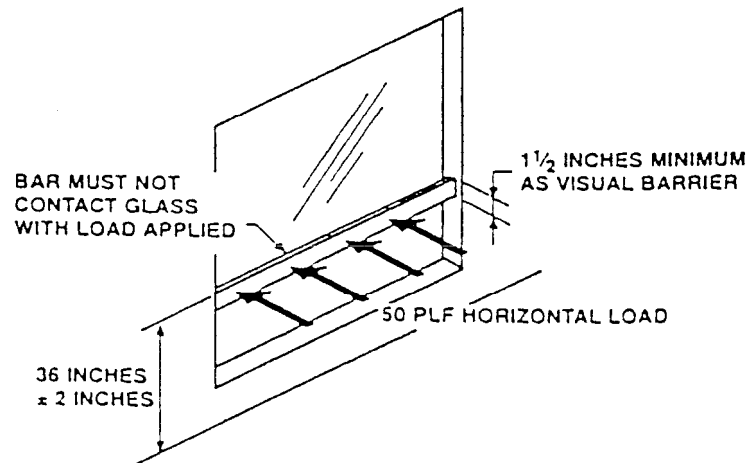


FIGURE 308.4a
SAFETY GLAZING IN DOORS

APPLICATION AND COMMENTARY



GLAZING WHICH MEETS ALL FOUR OF THE CRITERIA IS CONSIDERED TO BE A HAZARDOUS LOCATION AND THEREFORE MUST BE SAFETY GLAZED. IF THE PANEL (PANE OR LIGHT) DOES NOT MEET ANY OF THE FOUR CRITERIA, THAT PANEL IS NOT CONSIDERED A HAZARDOUS LOCATION AND THEREFORE IS NOT REQUIRED TO BE SAFETY GLAZED.



A PANEL OF GLASS WHICH IS CONSIDERED TO BE A HAZARDOUS LOCATION BY SECTION 308.4, ITEM 7, MUST BE SAFETY GLAZED. IN LIEU OF SAFETY GLAZING, A HORIZONTAL PROTECTIVE BAR AS ILLUSTRATED MAY BE INSTALLED.

FIGURE 308.4d
SAFETY GLAZING FOR FIXED PANELS

For SI: 1 inch = 25.4 mm, 1 sq. ft. = 0.929 m², 1 plf = 1.5 kgs/m.

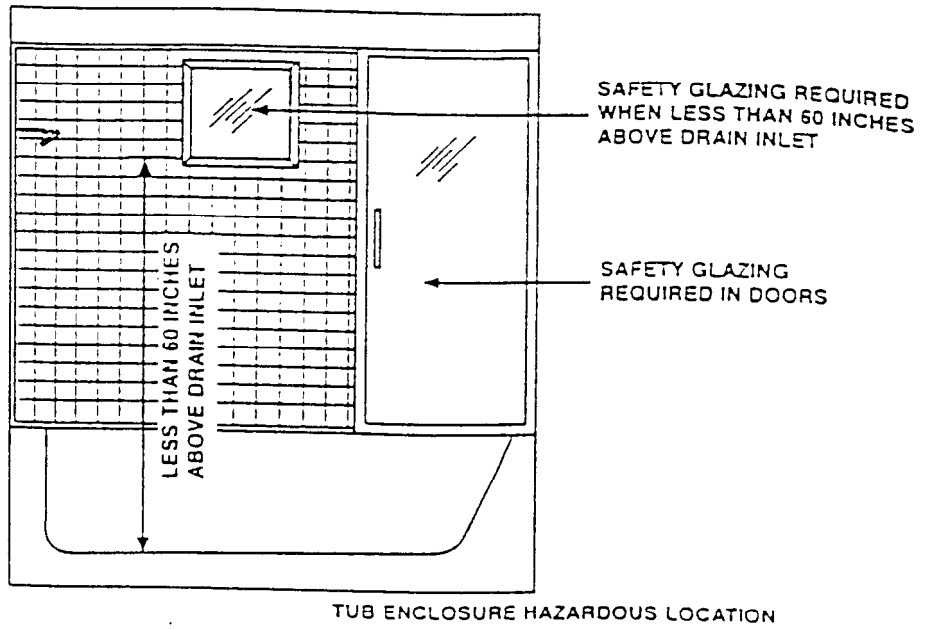


FIGURE 308.4b
SAFETY GLAZING IN TUB AND SHOWER ENCLOSURES

For SI: 1 inch = 25.4 mm.

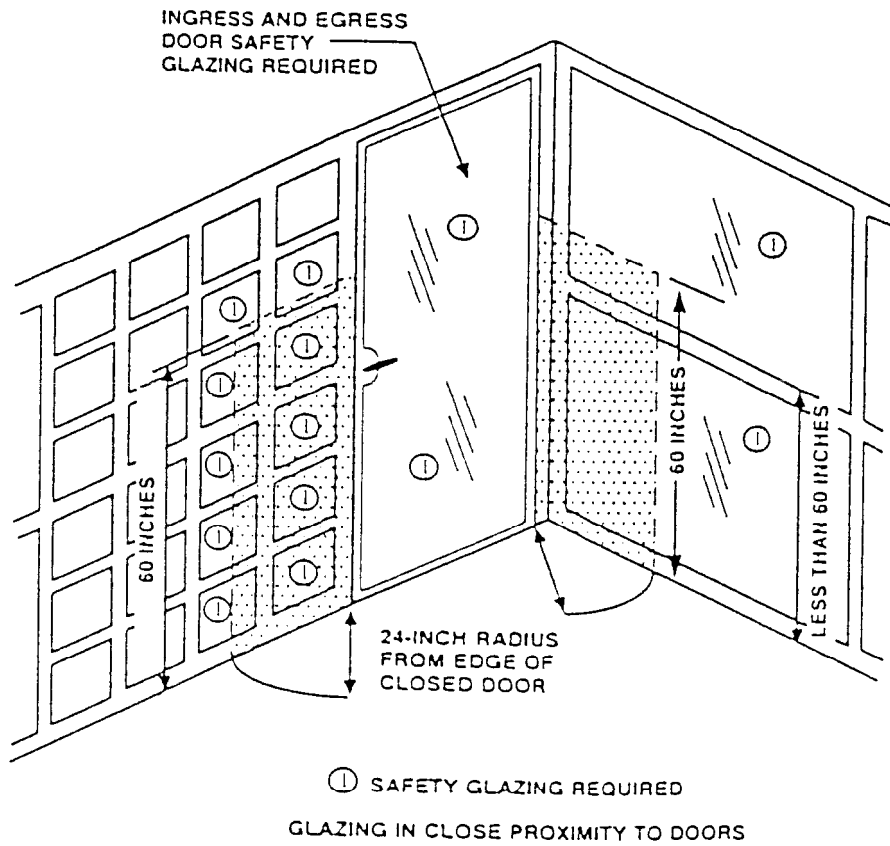


FIGURE 308.4c
SAFETY GLAZING IN CLOSE PROXIMITY TO DOORS

For SI: 1 inch = 25.4 mm.

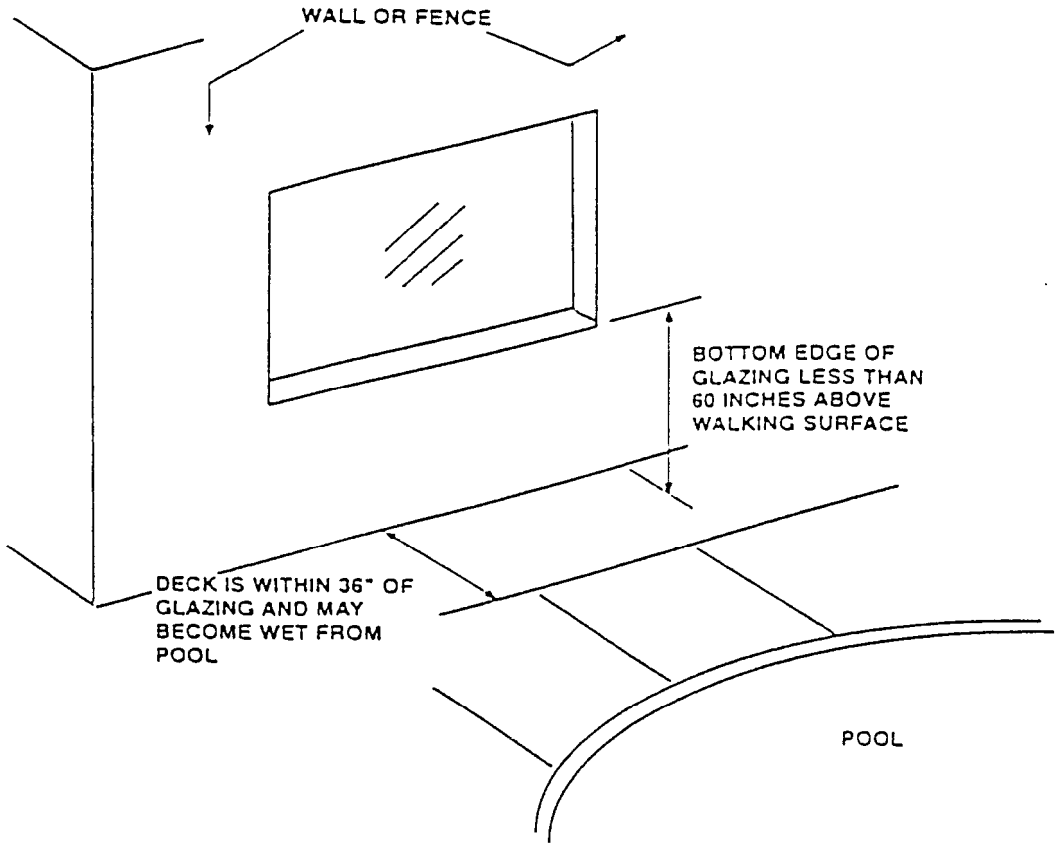


FIGURE 308.4e
SAFETY GLAZING ADJACENT TO POOL

For SI: 1 inch = 25.4 mm