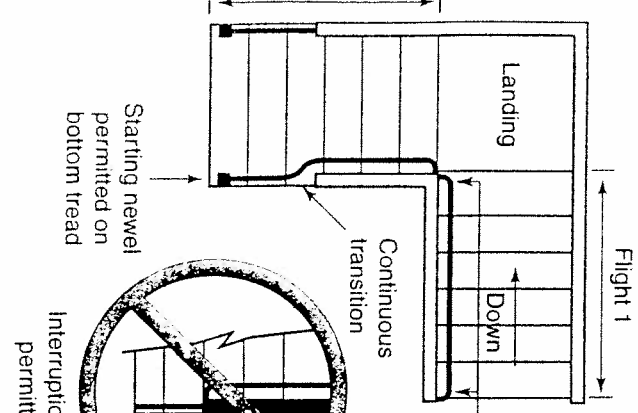
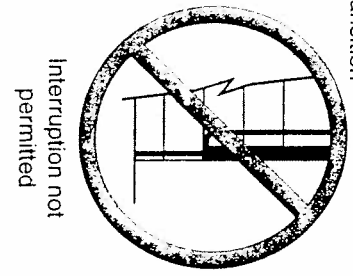


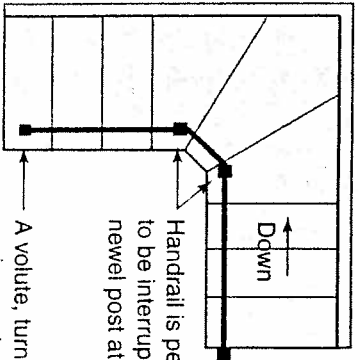
Example 7-15: This illustration details the three variations of opening restriction for guards as dependent on their location.



Handrails must be continuous from top riser to bottom riser of each flight
Ends returned to wall

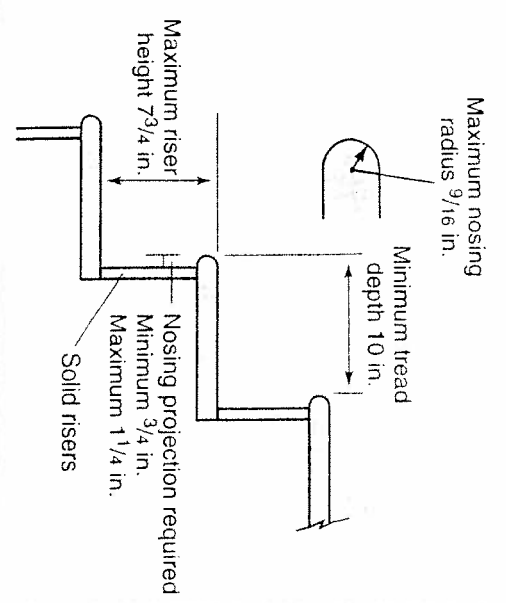


Starting newel permitted on bottom tread
Interruption not permitted

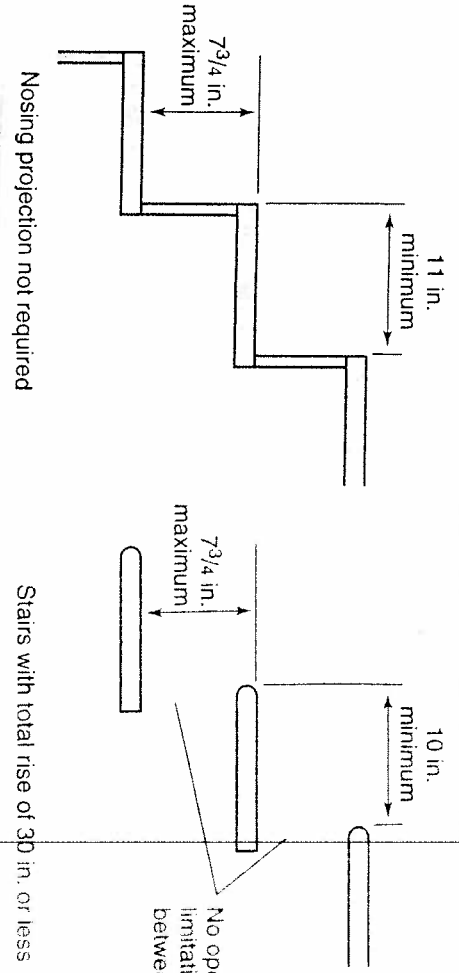


Handrail is permitted to be interrupted by newel post at a turn

A volute, turnout, starting easing or starting newel is permitted on the lowest tread



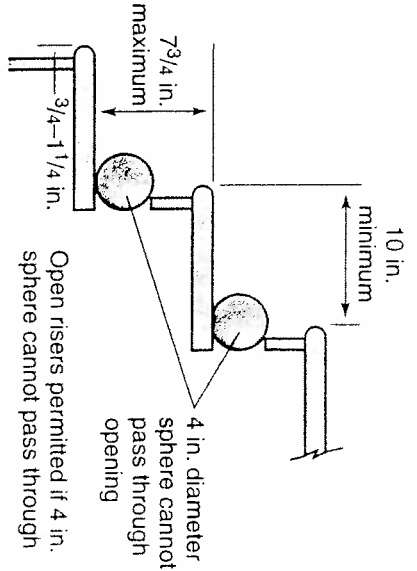
Maximum nosing radius 9/16 in.
Minimum tread depth 10 in.
Nosing projection required
Maximum riser height 7 3/4 in.
Nosing projection Minimum 3/4 in. Maximum 1 1/4 in.
Solid risers



Nosing projection not required

No opening limitations between treads

Stairs with total rise of 30 in. or less



Open risers permitted if 4 in. sphere cannot pass through opening

R312.4 Exterior woodplastic composite guards. Woodplastic composite *guards* shall comply with the provisions of Section R317.4.

- ❖ Guards made of wood/plastic composite materials must meet the requirements for installation, labeling and compliance with ASTM D 7032 stated in Section R317.4, in addition to the general requirements for guards in this section.

SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in *townhouses*.

Exception: An automatic residential fire sprinkler system shall not be required when *additions* or *alterations* are made to existing *townhouses* that do not have an automatic residential fire sprinkler system installed.

- ❖ Residential occupancies are the number one group of occupancies that suffer loss of life during fire events. A published study by the National Institute of Standards and Technology (NIST) entitled Benefit-cost Analysis of Residential Fire Sprinkler Systems, reports that, out of almost 2,000 fire incidents in homes equipped with fire sprinklers during the 4-year period 2002 to 2005, there were no fire-related fatalities. This statistic demonstrates the potential for sprinklers to save lives that would otherwise be lost in residential fires.

Since installation of a sprinkler system could be extensive in an existing townhouse, sprinkler systems are not required when an existing townhouse is being altered or has an addition added. If the townhouse already has a sprinkler system, that system must be altered or added to as appropriate.

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for *townhouses* shall be designed and installed in accordance with Section P2904.

- ❖ While not stated in this section, Section P2904.1 allows for a designer to use either Section P2904 or NFPA13D requirements for the design of a sprinkler system in a townhouse. Section P2904 includes requirements considered to provide an equivalent level of protection as an NFPA13D sprinkler system. Section P2904 provides criteria for sprinklers, sprinkler piping, water supply, pipe sizing, instructions and inspection.

R313.2 One- and two-family dwellings automatic fire systems. Effective January 1, 2011, an automatic residential fire sprinkler system shall be installed in one- and two-family *dwellings*.

Exception: An automatic residential fire sprinkler system shall not be required for *additions* or *alterations* to existing buildings that are not already provided with an automatic residential sprinkler system.

- ❖ While this section indicates an effective date of January 1, 2011 for sprinkler systems to be required in sin-

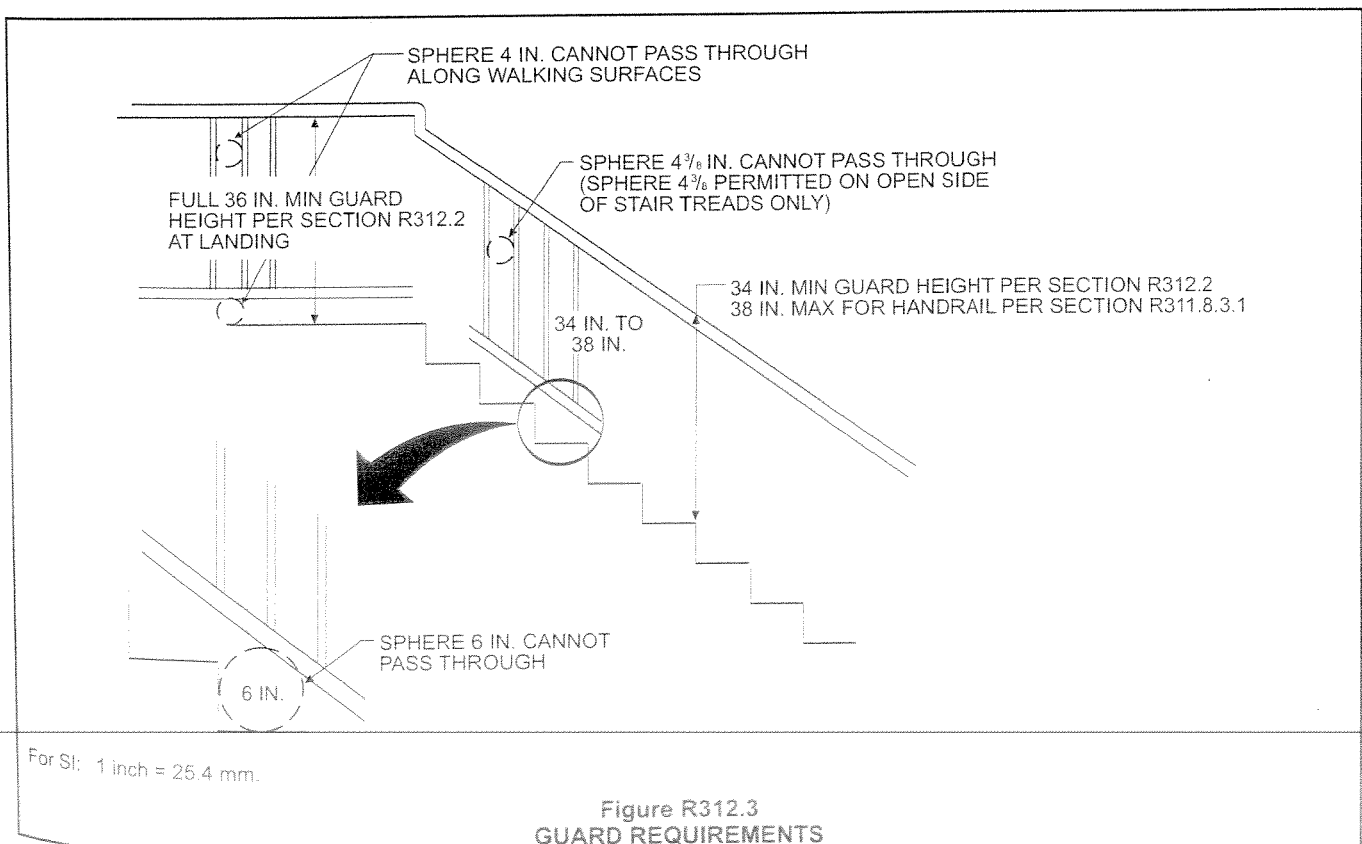


TABLE 8-1 Emergency escape and rescue openings*

		Inches					
Width		20	20.5	21	21.5	22	22.5
Height		41	40	39.1	38.2	37.3	36.5
Width		23	23.5	24	24.5	25	25.5
Height		35.7	34.9	34.2	33.5	32.8	32.2
Width		26	26.5	27	27.5	28	28.5
Height		31.6	31	30.4	29.8	29.3	28.8
Width		29	29.5	30	30.5	31	31.5
Height		28.3	27.8	27.4	26.9	26.5	26.1
Width		32	32.5	33	33.5	34	34.2
Height		25.7	25.3	24.9	24.5	24.1	24

*Minimum net clear width/height combinations to obtain a net opening of 5.7 square feet.

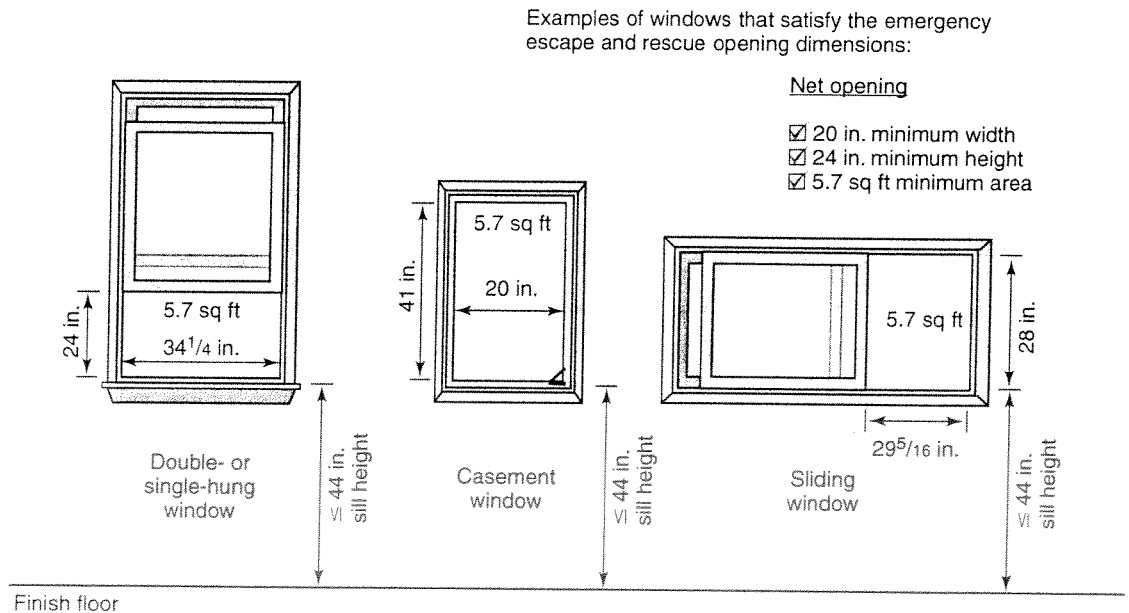


FIGURE 8-19 Emergency escape and rescue windows

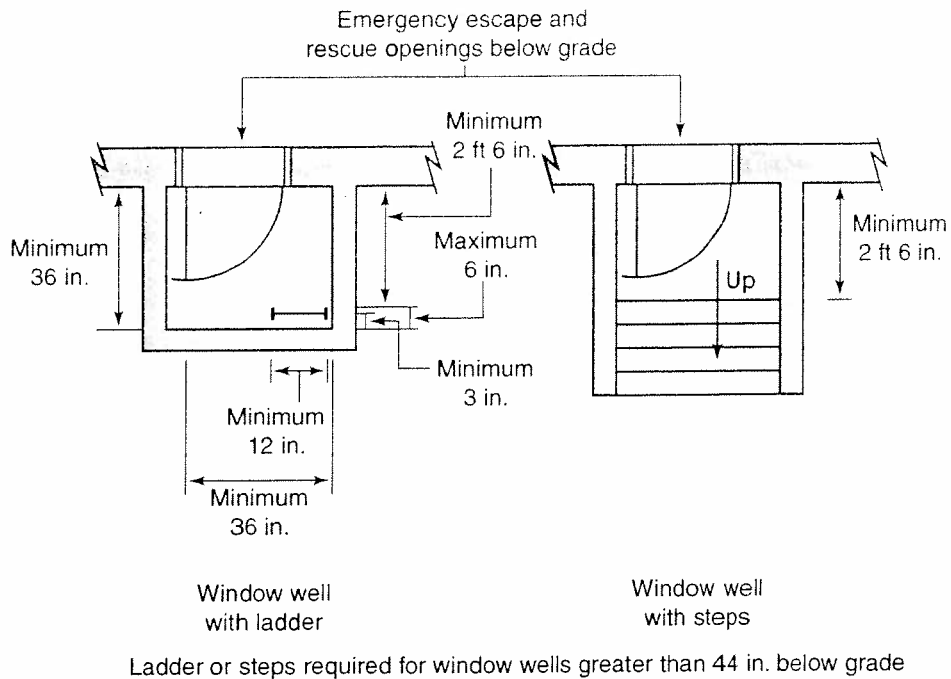


FIGURE 8-21 Window wells for emergency escape and rescue windows

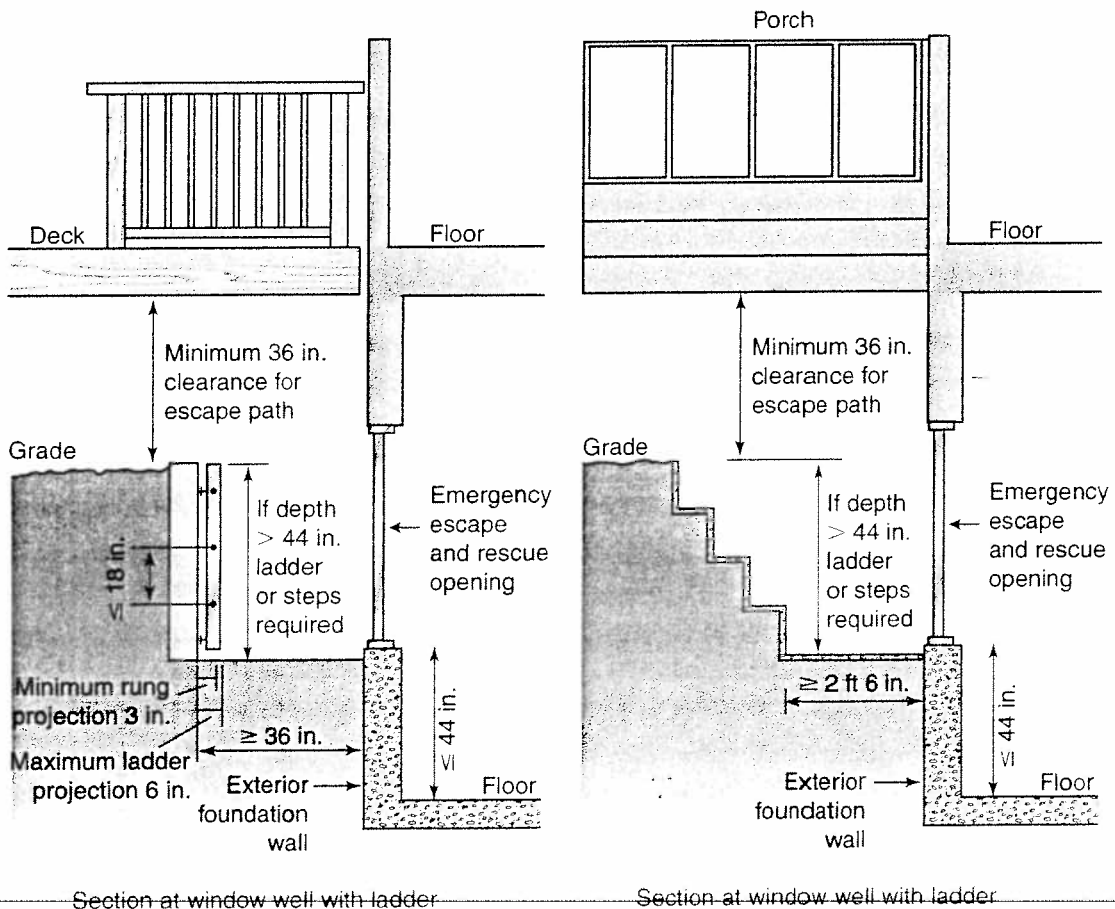


FIGURE 8-22 Window well section views

Window opening limiting devices and fall prevention devices must be approved for emergency escape and rescue provisions

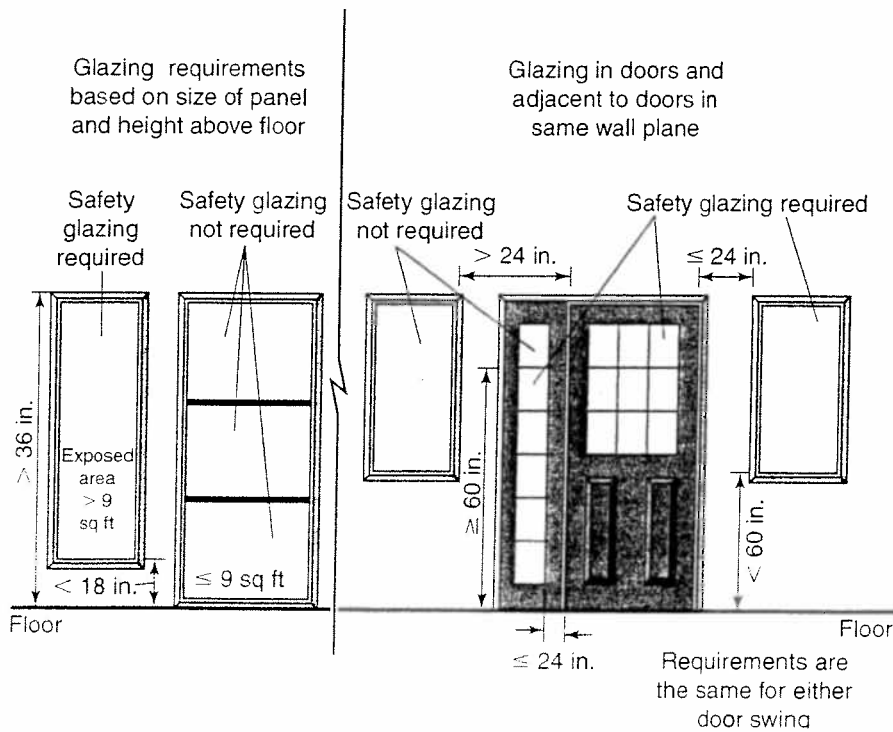
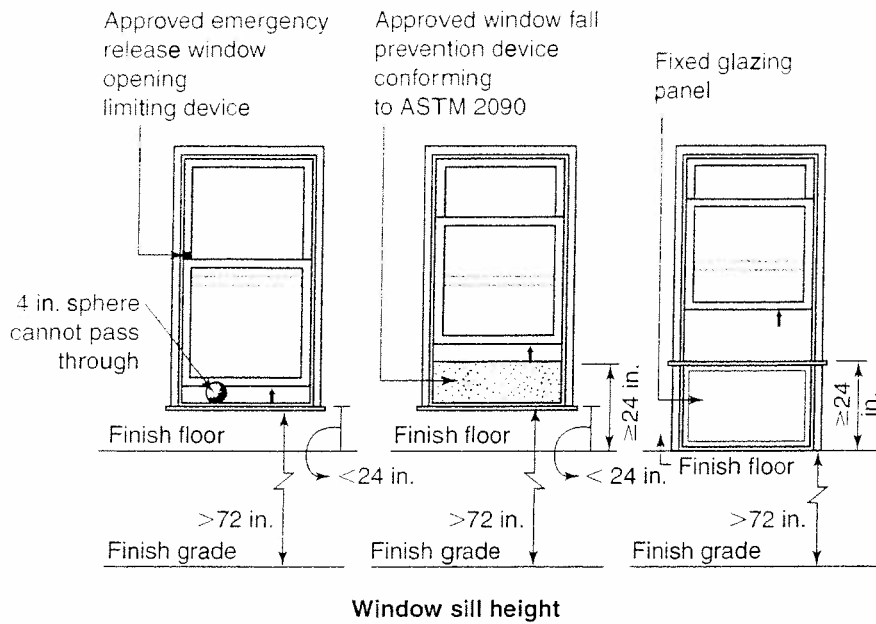
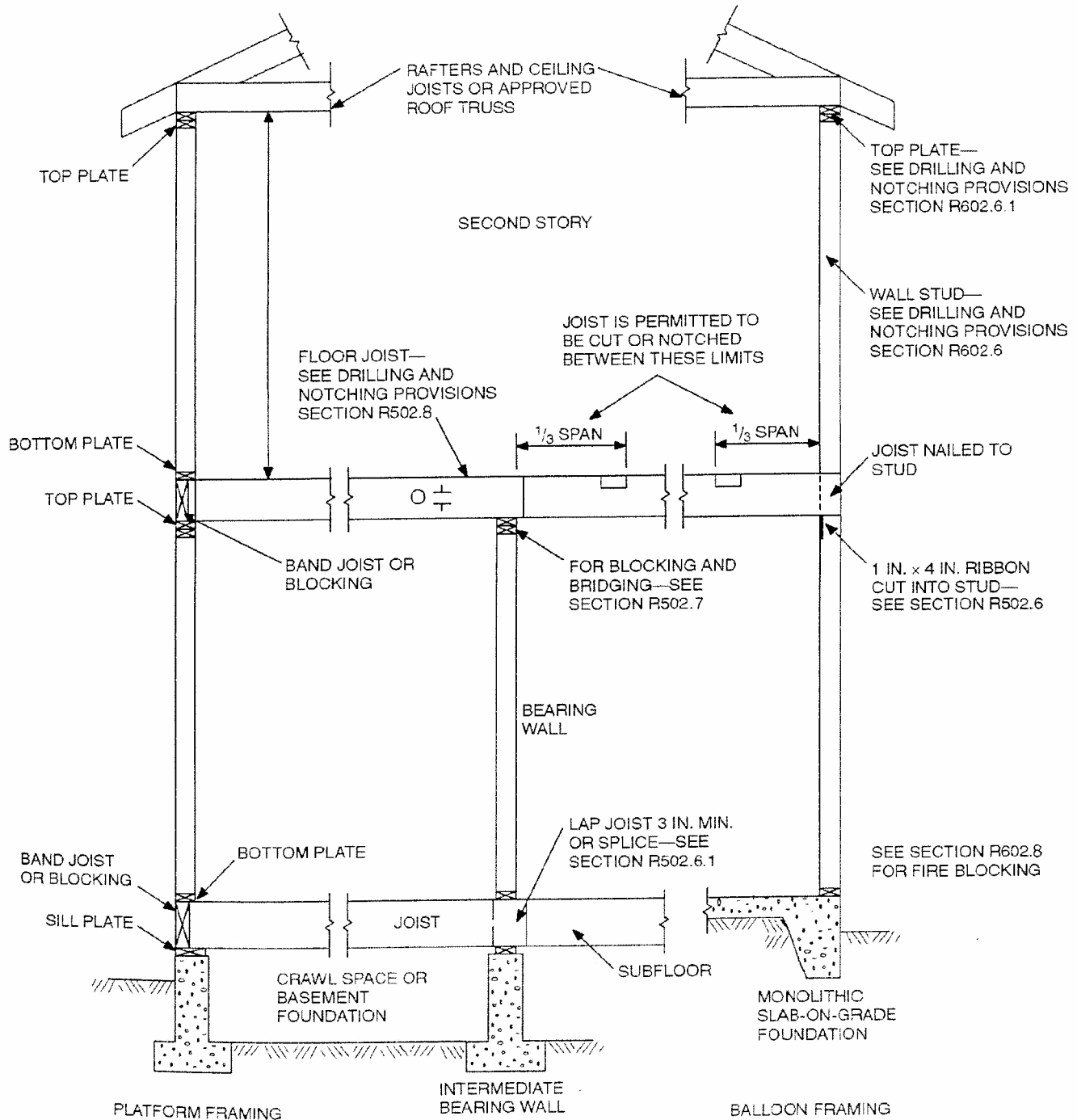


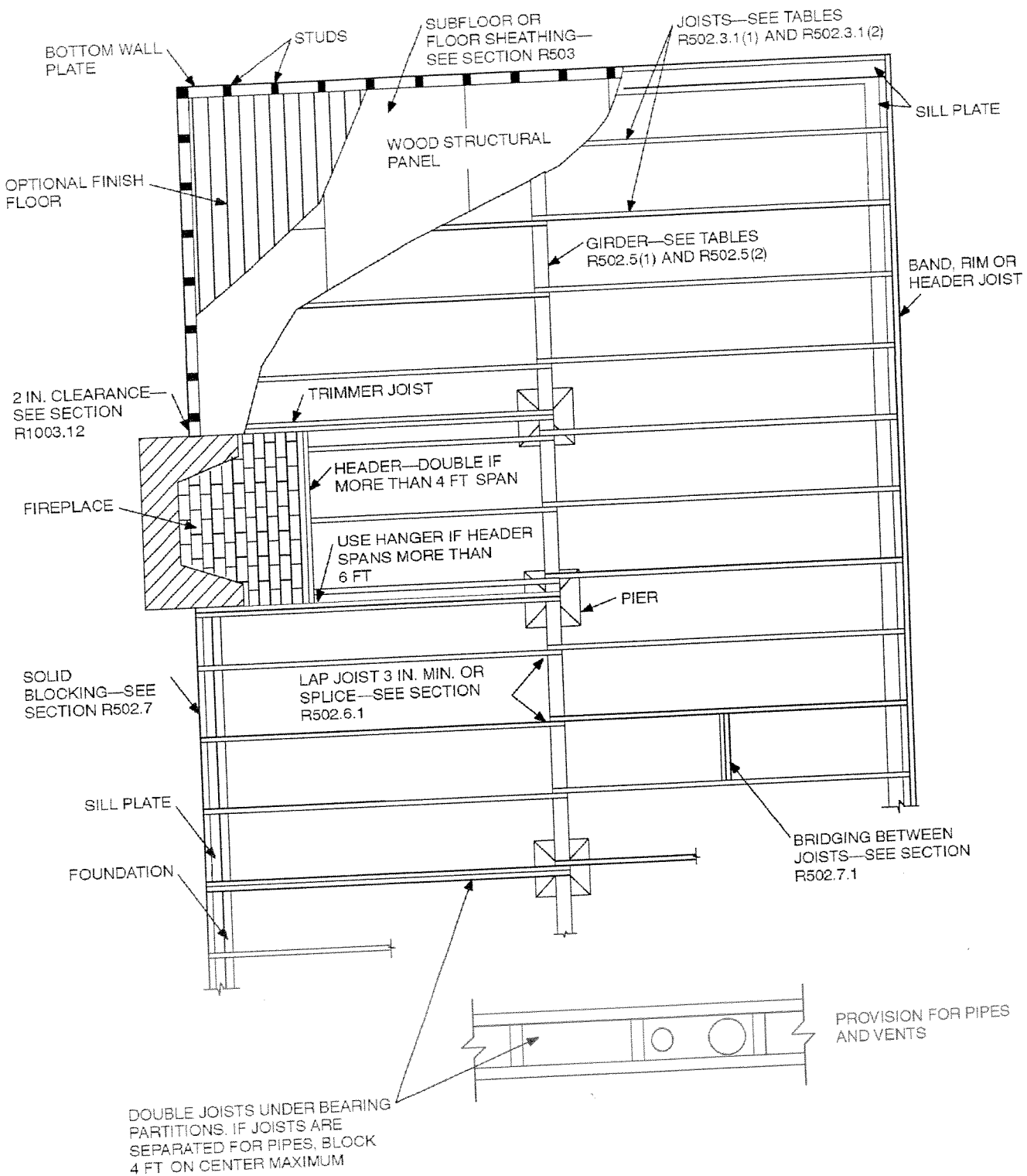
FIGURE 8-23 Safety glazing locations



For SI: 1 inch = 25.4 mm.

FIGURE R602.3(1)
TYPICAL WALL, FLOOR AND ROOF FRAMING

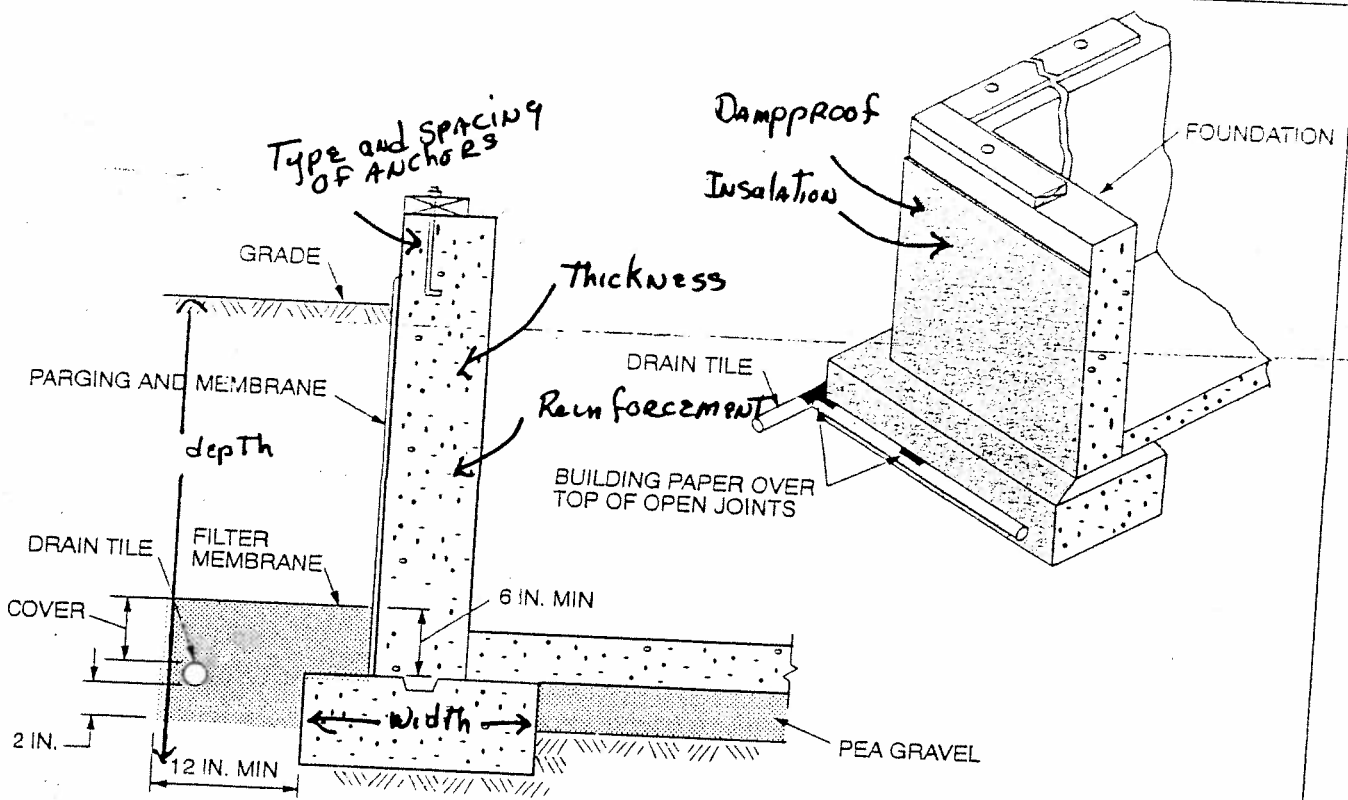
❖ This is a schematic wood-framed building section that shows code provisions for wood floor systems as well as wall construction.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R502.2
FLOOR CONSTRUCTION


❖ This figure is a schematic plan of typical wood floor framing. It serves as a key, providing references to the applicable provisions of the code.

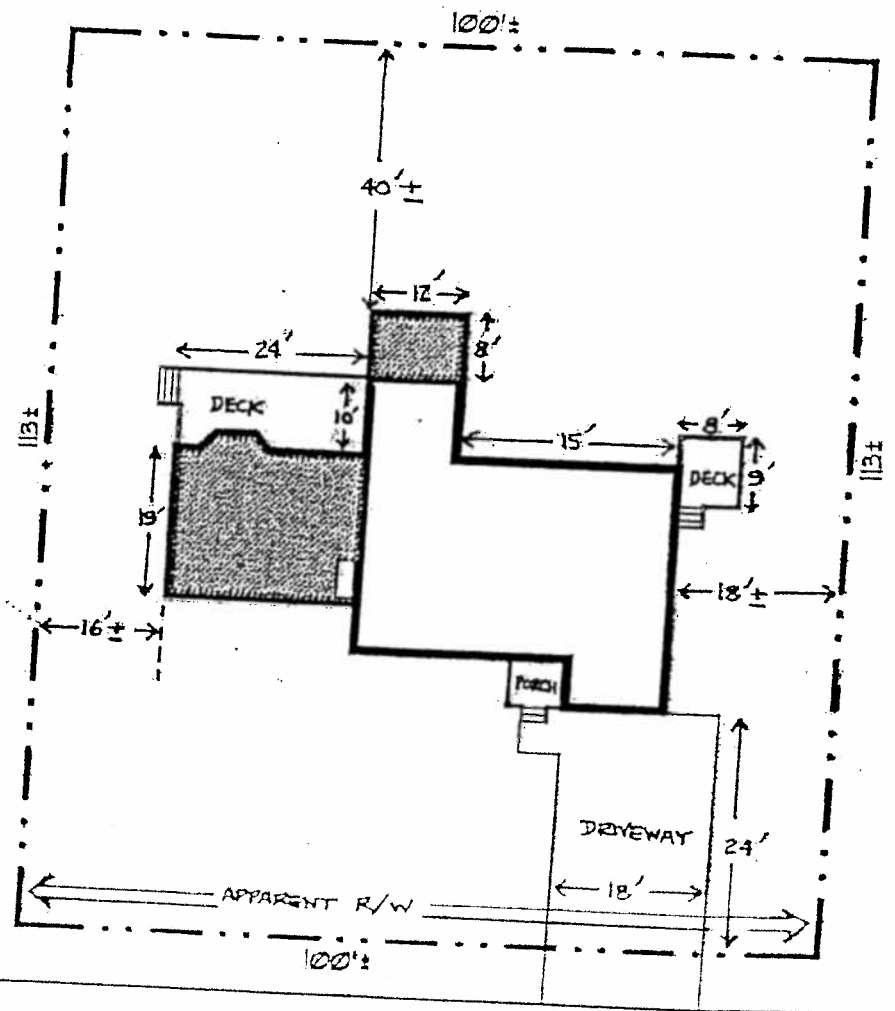


1 inch = 25.4 mm.

Figure R405.1(1)
FOUNDATION DRAINAGE FOR HABITABLE SPACE BELOW GRADE

PLOT PLAN (EXAMPLE)

LEGEND & NOTES	
	PROPERTY LINE
NOTE: SITE INFORMATION TAKEN FROM PLAN DONE BY:	



SAINTS PLACE

Elevations

(Example)



(front)

