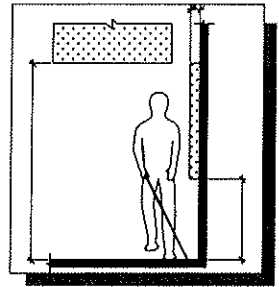
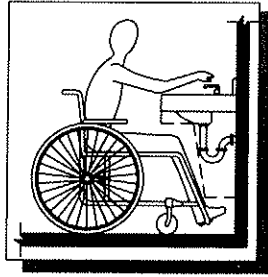


American National Standard



*Accessible and Usable
Buildings and Facilities*

Chapter 3. Building Blocks

301 General

301.1 Scope. The provisions of this chapter shall apply where required by the scoping provisions adopted by the administrative authority or by Chapters 4 through 10.

302 Floor or Ground Surfaces

302.1 General. Floor or ground surfaces shall be stable, firm, and slip resistant, and shall comply with Section 302. Changes in level in floor or ground surfaces shall comply with Section 303.

302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. Pile height shall be $\frac{1}{2}$ inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor or ground surfaces and shall have trim along the entire length of the exposed edge. Carpet edge trim shall comply with Section 303.

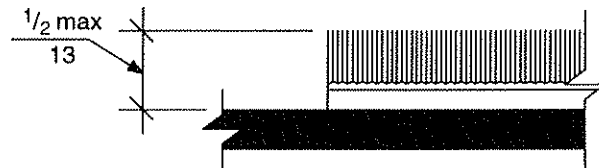


Fig. 302.2
Carpet on Floor or Ground Surfaces

302.3 Openings. Openings in floor or ground surfaces shall be of a size that does not permit the passage of a $\frac{1}{2}$ inch (13 mm) diameter sphere, except as allowed in Sections 407 and 408. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

303 Changes in Level

303.1 General. Changes in level in floor or ground surfaces shall comply with Section 303.

303.2 Vertical. Changes in level of $\frac{1}{4}$ inch (6 mm) high maximum shall be permitted to be vertical.

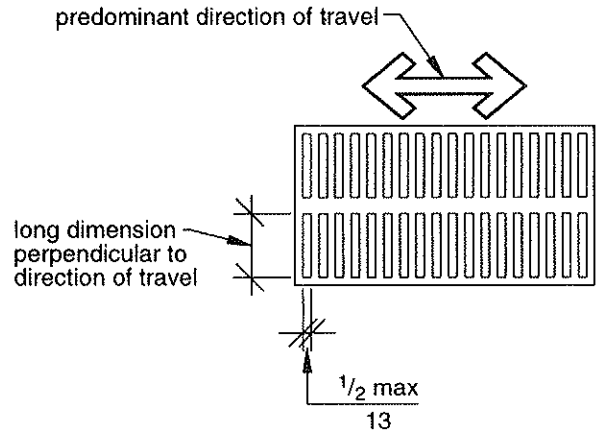


Fig. 302.3
Openings in Floor or Ground Surfaces

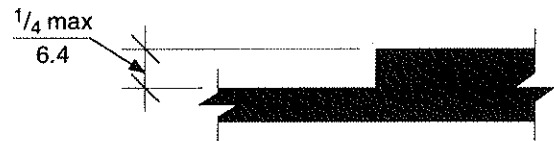


Fig. 303.2
Vertical Changes in Level

303.3 Beveled. Changes in level between $\frac{1}{4}$ inch (6 mm) high minimum and $\frac{1}{2}$ inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

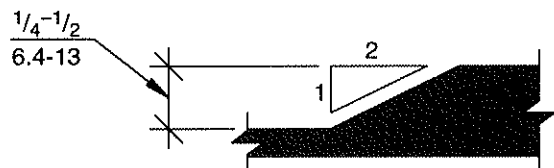


Fig. 303.3
Beveled Changes in Level

303.4 Ramped. Changes in level greater than $\frac{1}{2}$ inch (13 mm) shall be ramped and shall comply with Section 405 or 406.

404.2.7 Door Hardware. Handles, pulls, latches, locks, and other operable parts on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching, or twisting of the wrist to operate. Such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

EXCEPTION: Locks used only for security purposes and not used for normal operation are permitted in any location.

404.2.8 Closing Speed.

404.2.8.1 Door Closers. Door closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to an open position of 12 degrees shall be 5 seconds minimum.

404.2.8.2 Spring Hinges. Door spring hinges shall be adjusted so that from the open position of 70 degrees, the door shall move to the closed position in 1.5 seconds minimum, measured under ambient conditions.

404.2.9 Door-Opening Force. Fire doors shall have the minimum opening force allowable by the appropriate administrative authority. The maximum force for pushing open or pulling open doors other than fire doors shall be as follows:

1. Interior hinged door: 5.0 pounds (22.2 N)
2. Sliding or folding door: 5.0 pounds (22.2 N)

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.

404.2.10 Door Surface. Door surfaces within 10 inches (255 mm) of the floor or ground measured vertically shall be a smooth surface on the push side extending the full width of the door. Parts creating horizontal or vertical joints in such surface shall be within $\frac{1}{16}$ inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

EXCEPTIONS:

1. Sliding doors.
2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at no less than

60 degrees from the horizontal shall not be required to meet the 10 inch (255 mm) bottom rail height requirement.

3. Doors which do not extend to within 10 inches (255 mm) of the floor or ground.

404.2.11 Vision Lites. Doors and sidelites adjacent to doors containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one panel 43 inches (1090 mm) maximum above the floor or ground.

404.3 Automatic Doors. Automatic doors and automatic gates shall comply with Sections 404.3.1 through 404.3.6. Full powered automatic doors shall comply with ANSI/BHMA A156.10. Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19.

404.3.1 Clear Opening Width. Doorways shall have a clear opening of 32 inches (815 mm) in power-on and power-off mode. The minimum clear width for automatic door systems shall be based on the clear opening provided by all leaves in the open position.

404.3.2 Maneuvering Clearances. Clearances at power-assisted doors shall comply with Section 404.2.4.

404.3.3 Thresholds. Thresholds and changes in level at doorways shall comply with Section 404.2.5.

404.3.4 Two Doors in Series. Doors in series shall comply with Section 404.2.6.

404.3.5 Control Switches. Control switches shall comply with Section 309.

404.3.6 Signs. Labels and warnings for automatic doors shall comply with Section 703.4.

405 Ramps

405.1 General. Walking surfaces on accessible routes with a running slope steeper than 1:20 are ramps and shall comply with Section 405.

405.2 Slope. Ramp runs shall have a running slope not steeper than 1:12.

EXCEPTION: Ramps in or on existing buildings or facilities shall be permitted to have slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessitated by space limitations.