

2010 ADA Standards for Accessible Design for Public Accommodations and Commercial Facilities: Title III

CHAPTER 3: BUILDING BLOCKS

301 General

301.1 Scope. The provisions of Chapter 3 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

302 Floor or Ground Surfaces

302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 302. EXCEPTIONS:

1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant.

2. Areas of sport activity shall not be required to comply with 302.

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. The height shall be 1/2 inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.

302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2 inch (13 mm) diameter except as allowed in 407.4.3, 408.4.2, 410.4, 410.3.3 and 410.10.1. Draped openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

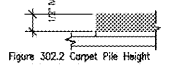


Figure 302.2 Carpet Pile Height

303 Changes in Level

303.1 General. Where changes in level are permitted on floor or ground surfaces, they shall comply with 303. EXCEPTIONS:

1. Animal containment areas shall not be required to comply with 303.

2. Areas of sport activity shall not be required to comply with 303.

303.2 Vertical Changes in Level of 1/4 Inch (6.4 mm) High. Maximum shall be permitted to be vertical.

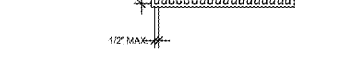


Figure 303.2 Vertical Change in Level

303.3 Beveled Changes in Level

303.3.1 General. Changes in level between 1/4 inch (6.4 mm) high minimum and 1/2 inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

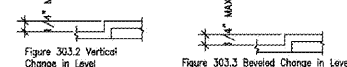


Figure 303.3 Beveled Change in Level

303.4 Ramps

303.4.1 General. Changes in level greater than 1/2 inch (13 mm) high shall be ramped, and shall comply with 405 or 406.

304 Turning Space

304.1 General. Turning space shall comply with 304.

304.2 Floor or Ground Surfaces. Floor or ground surfaces of a turning space shall comply with 302. Changes in level are not permitted. EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

304.3 Size. Turning space shall comply with 304.3.1 or 304.3.2.

304.3.1 Circular Space. The turning space shall be a space of 60 inches (1525 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with 306.

304.3.2 T-Shaped Space. The turning space shall be a T-shaped space within a 60 inch (1525 mm) square minimum with arms not base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.

304.4 Door Swing. Doors shall be permitted to swing into turning spaces.

305 Clear Floor or Ground Space

305.1 General. Clear floor or ground space shall comply with 305.

305.2 Floor or Ground Surfaces. Floor or ground surfaces of a clear floor or ground space shall comply with 302. Changes in level are not permitted. EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

305.3 Size. The clear floor or ground space shall be 30 inches (762 mm) minimum by 48 inches (1220 mm) minimum.

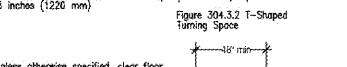


Figure 305.3 T-Shaped Turning Space

305.4 Knee and Toe Clearance. Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with 306.

305.5 Position. Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an element.

305.6 Approach. One full unobstructed side of the clear floor or ground space shall occur on accessible route or adjoin another clear floor or ground space.



Figure 305.5 Position of Clear Floor or Ground Space

305.7 Maneuvering Clearance. Where a clear floor or ground space is located in an alcove or obstructed approach on all or part of three sides, additional maneuvering clearance shall be provided in accordance with 305.7.1 and 305.7.2.

305.7.1 Forward Approach. Alcoves shall be 36 inches (915 mm) wide minimum where the depth exceeds 24 inches (610 mm).

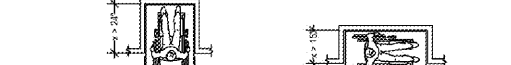


Figure 305.7.1 Forward Approach

305.7.2 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

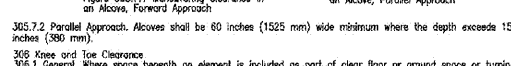


Figure 305.7.2 Parallel Approach

306 Knee and Toe Clearance

306.1 General. Where space beneath an element is included as part of clear floor or ground space or turning space, the space shall comply with 306. Additional space shall not be prohibited beneath an element but shall be considered as part of the clear floor or ground space or turning space.

306.2 Toe Clearance

306.2.1 General. Space under an element between the finish floor or ground and 8 inches (203 mm) above the finish floor or ground shall be considered toe clearance and shall comply with 306.2.

306.2.2 Maximum Depth. Toe clearance shall extend 25 inches (635 mm) under an element.

306.2.3 Minimum Required Depth. Where toe clearance is required at an element as part of a clear floor or ground space, the toe clearance shall extend 17 inches (430 mm) minimum under the element.

306.2.4 Additional Clearance. Space extending greater than 6 inches (150 mm) beyond the available toe clearance of 9 inches (230 mm) above the finish floor or ground shall not be considered toe clearance.

306.2.5 Width. Toe clearance shall be 30 inches (762 mm) wide minimum.

306.3 Knee Clearance

306.3.1 General. Space under an element between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground shall be considered knee clearance and shall comply with 306.3.

306.3.2 Maximum Depth. Knee clearance shall extend 25 inches (635 mm) maximum under an element at 9 inches (230 mm) above the finish floor or ground.

306.3.3 Minimum Required Depth. Where knee clearance is required under an element as part of a clear floor or ground space, the knee clearance shall be 11 inches (280 mm) deep minimum at 9 inches (230 mm) above the finish floor or ground, and 8 inches (203 mm) deep minimum at 27 inches (685 mm) above the finish floor or ground.

306.3.4 Clearance Reduction. Between 5 inches (127 mm) and 27 inches (685 mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch (25 mm) in depth for each 6 inches (150 mm) in height.

306.3.5 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.



Figure 306.2 Knee Clearance

307 Protruding Objects

307.1 General. Protruding objects shall comply with 307.

307.2 Protrusion Limits. Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finish floor or ground shall protrude 4 inches (103 mm) maximum horizontally into the circulation path. EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.

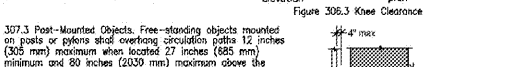


Figure 307.2 Limits of Protruding Objects

307.3 Post-Mounted Objects. Free-standing objects mounted on posts or pylons that overtop circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground, where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground. EXCEPTION: The sloping portions of handrails serving stairs and ramps shall not be required to comply with 307.3.

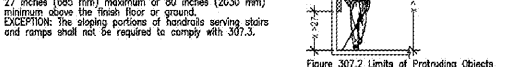


Figure 307.3 Post-Mounted Protruding Objects

307.4 Vertical Clearance. Vertical clearance shall be 80 inches (2030 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of each guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground. EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) maximum above the finish floor or ground.

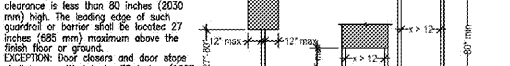


Figure 307.4 Vertical Clearance

307.5 Required Clear Width. Protruding objects shall not reduce the clear width required for accessible routes.

308 Reach Ranges

308.1 General. Reach ranges shall comply with 308.

308.2 Forward Reach. Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1220 mm) maximum and the low forward reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

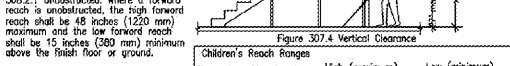


Figure 308.2 Forward Reach

308.2.1 Unobstructed Forward Reach

308.2.2 Obstructed High Forward Reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum where the reach depth is 20 inches (510 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.



Figure 308.2.2 Obstructed High Forward Reach

308.3 Side Reach. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1220 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground. EXCEPTIONS:

1. An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches (255 mm) maximum.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

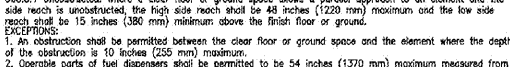


Figure 308.3 Side Reach

308.3.1 Unobstructed Side Reach

308.3.2 Obstructed High Side Reach. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

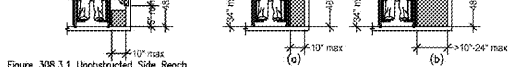


Figure 308.3.2 Obstructed High Side Reach

308.3.3 EXCEPTIONS:

1. The top of vending machines and clothes dryers shall be permitted to be 36 inches (915 mm) maximum above the finish floor.

2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum above the surface of the vehicular way where fuel dispensers are installed on existing curbs.

309 Operable Parts

309.1 General. Operable parts shall comply with 309.

309.2 Clear Floor Space. A clear floor or ground space complying with 305 shall be provided.

309.3 Height. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4 Operation. Operable parts shall comply with 309.4.1 and 309.4.2. EXCEPTION: Gas pump nozzles shall not be required to project beyond the face of the pump nozzle.

309.4.1 General. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.2 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

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309.4.7 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.8 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.9 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.10 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.11 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.12 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.13 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.14 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.15 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.16 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.17 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

309.4.18 Operation. Operable parts shall be placed within 48 inches (1220 mm) of the ramped surface in 308.

403.5.3 Passing Spaces

403.5.3.1 General. Passing spaces shall comply with 403.5.3.1. EXCEPTION: Passing spaces shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) long minimum and 36 inches (915 mm) wide minimum.



Figure 403.5.3.1 Clear Width of an Accessible Route

403.5.3.2 Clear Width at Turn. Where the accessible route makes a 180 degree turn around an element, the clear width shall be 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn. EXCEPTION: Where the clear width at the turn is 80 inches (2030 mm) minimum, the clear width at the turn shall be 48 inches (1220 mm) minimum.

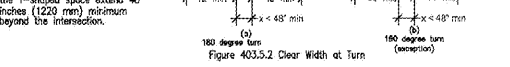


Figure 403.5.3.2 Clear Width at Turn

403.5.3.3 Handrails. Where handrails are provided along walking surfaces with running slopes not steeper than 1:20 they shall comply with 505.

404 Doors, Doorways, and Gates

404.1 General. Doors, doorways, and gates that are part of an accessible route shall comply with 404. EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.1, 404.2.2, 404.2.3, 404.2.4, 404.2.5, 404.2.6, 404.2.7, 404.2.8, 404.2.9, 404.2.10, 404.2.11, 404.2.12, 404.2.13, 404.2.14, 404.2.15, 404.2.16, 404.2.17, 404.2.18, 404.2.19, 404.2.20, 404.2.21, 404.2.22, 404.2.23, 404.2.24, 404.2.25, 404.2.26, 404.2.27, 404.2.28, 404.2.29, 404.2.30, 404.2.31, 404.2.32, 404.2.33, 404.2.34, 404.2.35, 404.2.36, 404.2.37, 404.2.38, 404.2.39, 404.2.40, 404.2.41, 404.2.42, 404.2.43, 404.2.44, 404.2.45, 404.2.46, 404.2.47, 404.2.48, 404.2.49, 404.2.50, 404.2.51, 404.2.52, 404.2.53, 404.2.54, 404.2.55, 404.2.56, 404.2.57, 404.2.58, 404.2.59, 404.2.60, 404.2.61, 404.2.62, 404.2.63, 404.2.64, 404.2.65, 404.2.66, 404.2.67, 404.2.68, 404.2.69, 404.2.70, 404.2.71, 404.2.72, 404.2.73, 404.2.74, 404.2.75, 404.2.76, 404.2.77, 404.2.78, 404.2.79, 404.2.80, 404.2.81, 404.2.82, 404.2.83, 404.2.84, 404.2.85, 404.2.86, 404.2.87, 404.2.88, 404.2.89, 404.2.90, 404.2.91, 404.2.92, 404.2.93, 404.2.94, 404.2.95, 404.2.96, 404.2.97, 404.2.98, 404.2.99, 404.2.100.

404.1.1 General. Doors, doorways, and gates that are part of an accessible route shall comply with 404. EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.1, 404.2.2, 404.2.3, 404.2.4, 404.2.5, 404.2.6, 404.2.7, 404.2.8, 404.2.9, 404.2.10, 404.2.11, 404.2.12, 404.2.13, 404.2.14, 404.2.15, 404.2.16, 404.2.17, 404.2.18, 404.2.19, 404.2.20, 404.2.21, 404.2.22, 404.2.23, 404.2.24, 404.2.25, 404.2.26, 404.2.27, 404.2.28, 404.2.29, 404.2.30, 404.2.31, 404.2.32, 404.2.33, 404.2.34, 404.2.35, 404.2.36, 404.2.37, 404.2.38, 404.2.39, 404.2.40, 404.2.41, 404.2.42, 404.2.43, 404.2.44, 404.2.45, 404.2.46, 404.2.47, 404.2.48, 404.2.49, 404.2.50, 404.2.51, 404.2.52, 404.2.53, 404.2.54, 404.2.55, 404.2.56, 404.2.57, 404.2.58, 404.2.59, 404.2.60, 404.2.61, 404.2.62, 404.2.63, 404.2.64, 404.2.65, 404.2.66, 404.2.67, 404.2.68, 404.2.69, 404.2.70, 404.2.71, 404.2.72, 404.2.73, 404.2.74, 404.2.75, 404.2.76, 404.2.77, 404.2.78, 404.2.79, 404.2.80, 404.2.81, 404.2.82, 404.2.83, 404.2.84, 404.2.85, 404.2.86, 404.2.87, 404.2.88, 404.2.89, 404.2.90, 404.2.91, 404.2.92, 404.2.93, 404.2.94, 404.2.95, 404.2.96, 404.2.97, 404.2.98, 404.2.99, 404.2.100.

404.1.2 General. Doors, doorways, and gates that are part of an accessible route shall comply with 404. EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with 404.2.1, 404.2.2, 404.2.3, 404.2.4, 404.2.5, 404.2.6, 404.2.7, 404.2.8, 404.2.9, 404.2.10, 404.2.11, 404.2.12, 404.2.13, 404.2.14, 404.2.15, 404.2.16, 404.2.17, 404.2.18, 404.2.19, 404.2.20, 404.2.21, 404.2.22, 404.2.23, 404.2.24, 404.2.25, 404.2.26, 404.2.27, 404.2.28, 404.2.29, 404.2.30, 404.2.31, 404.2.32, 404.2.33, 404.2.34, 404.2.35, 404.2.36, 404.2.37, 404.2.38, 404.2.39, 404.2.40, 404.2.41, 404.2.42, 404.2.43, 404.2.44, 404.2.45, 404.2.46, 404.2.47, 404.2.48, 404.2.49, 404.2.50, 404.2.51, 404.2.52, 404.2.53, 404.2.54, 404.2.55, 404.2.56, 404.2.57, 404.2.58, 404.2.59, 404.2.60, 404.2.61, 404.2.62, 404.2.63, 404.2.64, 404.2.65, 404.2.66, 404.2.67, 404.2.68, 404.2.69, 4