

ANSI A117.1 2003.

Water Closets and Toilet Compartments.
Section 604.

Wheelchair Accessible Compartments.

604 Water Closets and Toilet Compartments

604.1 General. Accessible water closets and toilet compartments shall comply with Section 604. Compartments containing more than one plumbing fixture shall comply with Section 603. Wheelchair accessible compartments shall comply with Section 604.8. Ambulatory accessible compartments shall comply with Section 604.9.

EXCEPTION: Water closets and toilet compartments primarily for children's use shall be permitted to comply with Section 604.10 as applicable.

603 Toilet and Bathing Rooms

603.1 General. Accessible toilet and bathing rooms shall comply with Section 603.

603.2 Clearances.

603.2.1 Turning Space. A turning space complying with Section 304 shall be provided within the room.

603.2.2 Overlap. Clear floor spaces, clearances at fixtures, and turning spaces shall be permitted to overlap.

603.2.3 Door Swing. Doors shall not swing into the clear floor space or clearance for any fixture.

EXCEPTIONS:

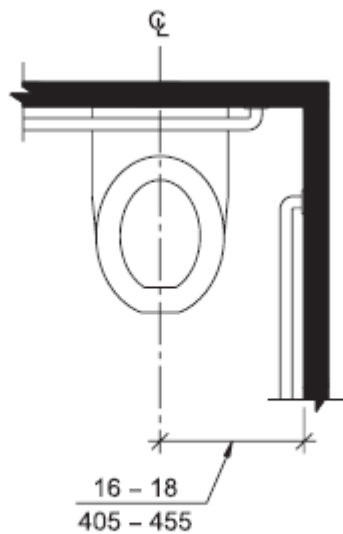
1. Doors to a toilet and bathing room for a single occupant, accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space, provided the swing of the door can be reversed to meet Section 603.2.3.
2. Where the room is for individual use and a clear floor space complying with Section 305.3 is provided within the room beyond the arc of the door swing.

603.3 Mirrors. Mirrors located above lavatories, sinks or counters shall be mounted with the bottom edge of the reflecting surface 40 inches (1015 mm)

maximum above the floor. Mirrors not located above lavatories, sinks or counters shall be mounted with the bottom edge of the reflecting surface 35 inches (890 mm) maximum above the floor.

603.4 Coat Hooks and Shelves. Coat hooks shall be located within one of the reach ranges specified in Section 308. Shelves shall be 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the floor.

604.2 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition. Water closets located in ambulatory accessible compartments specified in Section 604.9 shall have the centerline of the water closet 17 inches (430 mm) minimum to 19 inches (485 mm) maximum from the side wall or partition.



(a) Accessible Water Closets

604.3 Clearance.

604.3.1 Size. A clearance around a water closet 60 inches (1525 mm) minimum, measured perpendicular from the sidewall, and 56 inches (1420 mm) minimum, measured perpendicular from the rear wall, shall be provided.

604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, paper dispensers, sanitary napkin receptacles, coat hooks, shelves, accessible routes, clear floor space at other fixtures and the turning space. No other fixtures or obstructions shall be within the required water closet clearance.

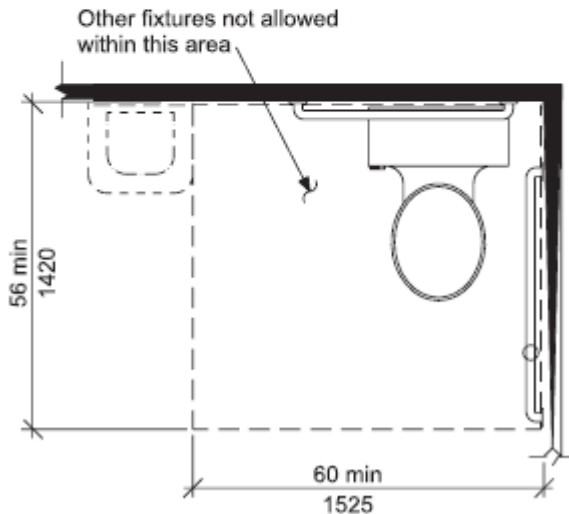


Fig. 604.3
Size of Clearance for Water Closet

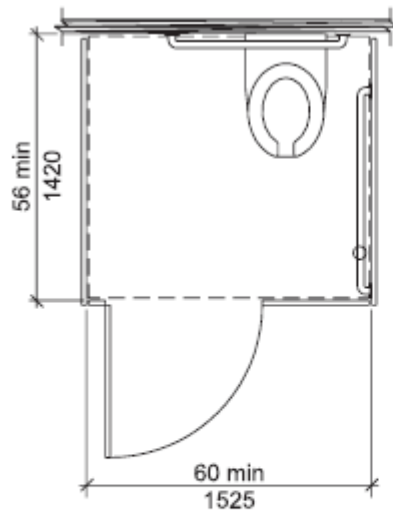
604.4 Height. The height of water closet seats shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

EXCEPTION: A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with Section 604.4.

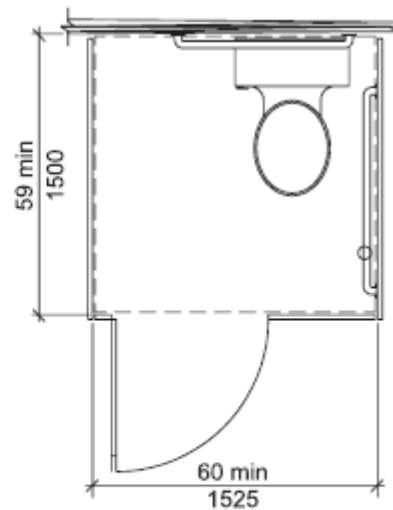
604.8 Wheelchair Accessible Compartments.

604.8.1 General. Wheelchair accessible compartments shall comply with Section 604.8.

604.8.2 Size. The minimum area of a wheelchair accessible compartment shall be 60 inches (1525 mm) minimum in width measured perpendicular to the side wall, and 56 inches (1420 mm) minimum in depth for wall hung water closets, and 59 inches (1500 mm) minimum in depth for floor mounted water closets measured perpendicular to the rear wall. The minimum area of a wheelchair accessible compartment for primarily children's use shall be 60 inches (1525 mm) minimum in width measured perpendicular to the side wall, and 59 inches (1500 mm) minimum in depth for wall hung and floor mounted water closets measured perpendicular to the rear wall.



(a) Wall-Hung Water Closet – Adult



(b) Floor-Mounted Water Closet – Adult
Wall-Hung and
Floor-Mounted Water Closet – Children

Fig. 604.8.2
Wheelchair Accessible Toilet Compartments

604.8.3 Doors. Toilet compartment doors, including door hardware, shall comply with Section 404.1, except if the approach is to the latch side of the compartment door clearance between the door side of the stall and any obstruction shall be 42 inches (1065 mm) minimum. Doors shall be located in the front partition or in the side wall or partition farthest from the water closet. Where located in the front partition, the door opening shall be 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. Where located in the side wall or partition, the door opening shall be 4 inches (100 mm) maximum from the front partition. The door shall be self-closing. A door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch. Toilet compartment doors shall not swing into the required minimum area of the compartment.

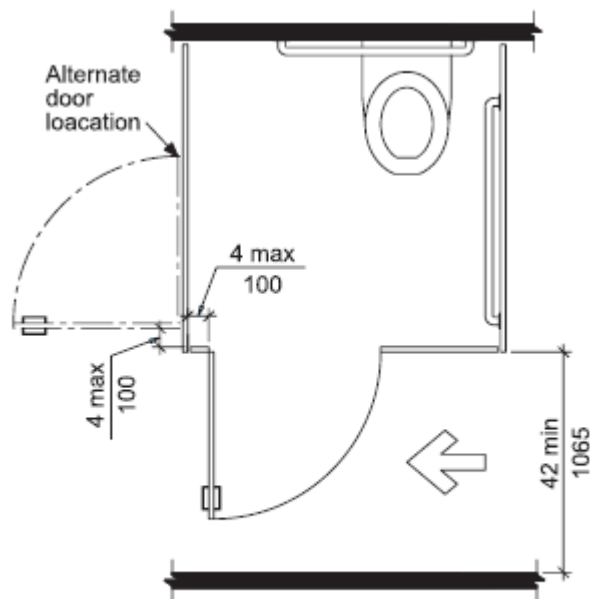


Fig. 604.8.3
Wheelchair Accessible Compartment Doors

404.2.6 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. Operable parts of such hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the floor. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

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(Amd) **1109.2.2.1 Pull handle.** Where accessible water closet compartments or single occupancy toilet rooms are provided, the compartment or room doors shall have a pull handle mounted 6 inches from the hinge side on the compartment or room side of the door. This handle shall be between 26 inches and 36 inches from the floor and shall meet the requirements of Section 404.2.6 of ICC/ANSI A117.1-2003.

Exception: Compartments or rooms with self-closing, self-latching doors.
(2009 Amd.)

604.8.4 Approach. Wheelchair accessible compartments shall be arranged for left-hand or right-hand approach to the water closet.

604.8.5 Toe Clearance. The front partition and at least one side partition shall provide a toe clearance of 9 inches (230 mm) minimum above the floor and extending 6 inches (150 mm) beyond the compartment side face of the partition, exclusive of partition support members. Compartments primarily for children's use shall provide a toe clearance of 12 inches (305 mm) minimum above the floor and extending 6 inches (150 mm) beyond the compartment side face of the partition, exclusive of partition support members.

EXCEPTIONS:

1. Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575 mm) in depth with a wall-hung water closet, or greater than 65 inches (1650 mm) in depth with a floor-mounted water closet. In a compartment primarily for children's use, greater than 65 inches (1650 mm) in depth, toe clearance at the front partition is not required.
2. Toe clearance at the side partition is not required in a compartment greater than 66 inches (1675 mm) in width.

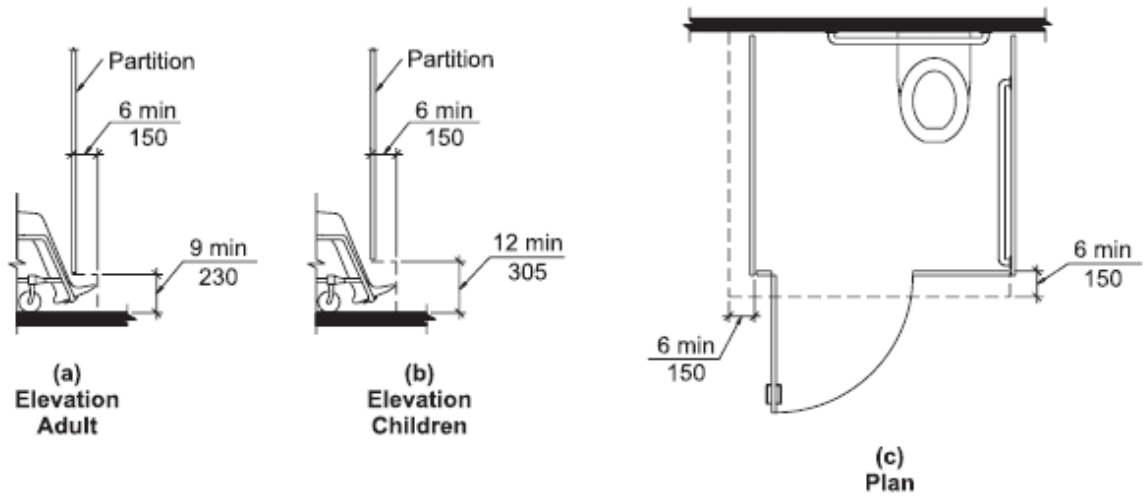


Fig. 604.8.5
Wheelchair Accessible Compartment Toe Clearance

604.8.6 Grab Bars. Grab bars shall comply with Section 609. Side wall grab bars complying with Section 604.5.1 located on the wall closest to the water closet, and a rear wall grab bar complying with Section 604.5.2, shall be provided.

609 Grab Bars

609.1 General. Grab bars in accessible toilet or bathing facilities shall comply with Section 609.

609.2 Cross Section. Grab bars shall have a cross section complying with Section 609.2.1 or 609.2.2.

609.2.1 Circular Cross Section. Grab bars with a circular cross section shall have an outside diameter of $1\frac{1}{4}$ inch (32 mm) minimum and 2 inches (51 mm) maximum.

609.2.2 Noncircular Cross Section. Grab bars with a noncircular cross section shall have a cross section dimension of 2 inches (51 mm) maximum, and a perimeter dimension of 4 inches (102 mm) minimum and 4.8 inches (122 mm) maximum.

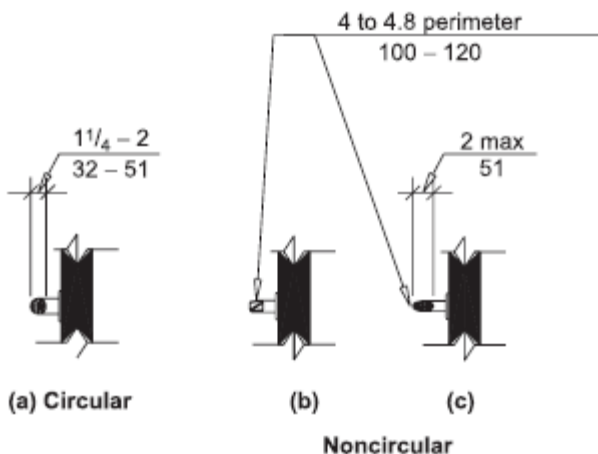


Fig. 609.2
Size of Grab Bars

609.3 Spacing. The space between the wall and the grab bar shall be $1\frac{1}{2}$ inches (38 mm). The space between the grab bar and projecting objects below and at the ends of the grab bar shall be $1\frac{1}{2}$ inches (38 mm) minimum. The space between the grab bar and projecting objects above the grab bar shall be 12 inches (305 mm) minimum.

EXCEPTIONS:

1. The space between the grab bars and shower controls, shower fittings, and other grab bars above the grab bar shall be permitted to be $1\frac{1}{2}$ inches (38 mm) minimum.
2. Swing-up grab bars shall not be required to comply with Section 609.3.

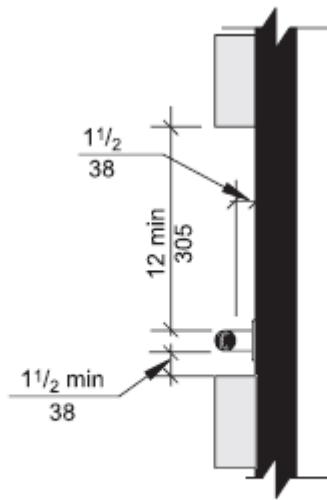


Fig. 609.3
Spacing of Grab Bars

609.4 Position of Grab Bars. Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum and 36 inches (915 mm) maximum above the floor measured to the top of the gripping surface. At water closets primarily for children's use complying with Section 604.10, grab bars shall be installed in a horizontal position 18 inches (455 mm) minimum to 27 inches (685 mm) maximum above the floor measured to the top of the gripping surface.

EXCEPTIONS:

1. The lower grab bar on the back wall of a bathtub required by Section 607.4.1.1 or 607.4.2.1.
2. Vertical grab bars required by Sections 604.5.1, 607.4.1.2.2, 607.4.2.2.2, and 608.3.1.2.

609.5 Surface Hazards. Grab bars, and any wall or other surfaces adjacent to grab bars, shall be free of sharp or abrasive elements. Edges shall be rounded.

609.6 Fittings. Grab bars shall not rotate within their fittings.

609.7 Installation. Grab bars shall be installed in any manner that provides a gripping surface at the locations specified in this standard and does not obstruct the clear floor space.

609.8 Structural Strength. Allowable stresses shall not be exceeded for materials used where a vertical or horizontal force of 250 pounds (1112 N) is applied at any point on the grab bar, fastener mounting device, or supporting structure.

604.5.1 Fixed Side Wall Grab Bars. Fixed side-wall grab bars shall be 42 inches (1065 mm) minimum in length, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) from the rear wall. In addition, a vertical grab bar 18 inches (455 mm) minimum in length shall be mounted with the bottom of the bar located between 39 inches (990 mm) and 41 inches (1040 mm) above the floor, and with the center line of the bar located between 39 inches (990 mm) and 41 inches (1040 mm) from the rear wall.

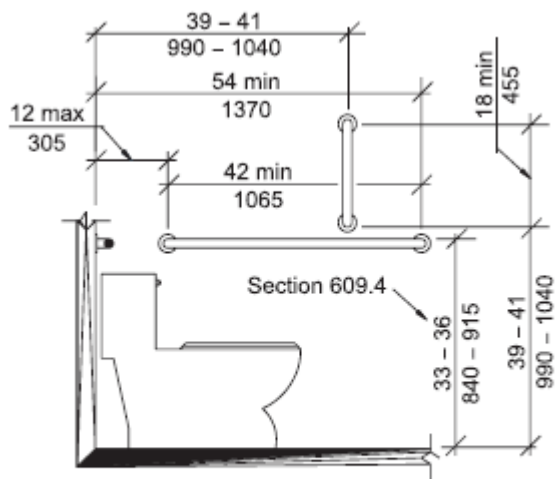


Fig. 604.5.1
Side Wall Grab Bar for Water Closet

604.5.2 Rear Wall Grab Bars. The rear wall grab bar shall be 36 inches (915 mm) minimum in length, and extend from the centerline of the water closet 12 inches (305 mm) minimum on the side closest to the wall, and 24 inches (610 mm) minimum on the transfer side.

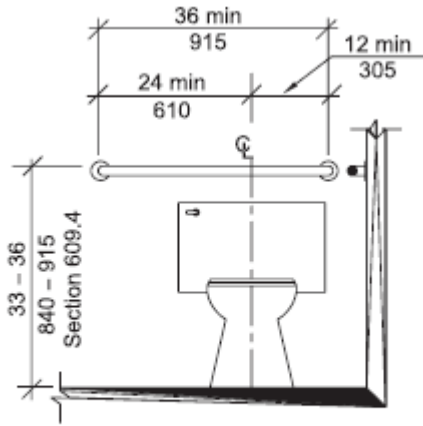


Fig. 604.5.2
Rear Wall Grab Bar for Water Closet

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(Add) **1109.2.4 Additional grab bar.** In addition to grab bars required by ICC/ANSI A117.1-2003, a separate, additional swing grab bar shall be provided at a minimum of one accessible toilet location for each gender per floor within any non-exempt building. Such additional grab bar shall be located the same distance from the water closet centerline to the side grab bar, parallel to, opposite from, and at the same height as the side grab bar. The additional grab bar shall be floor mounted or wall mounted, and shall fix or latch firmly in place when in use. The mounting height of the required rear bar may be varied to coordinate with the swing grab bar. The swing grab bar shall be not less than 24 inches nor more than 36 inches in length, and shall be capable of swinging and storing against a wall or partition when not required.

Exception: Areas in Groups E, R-1, R-2, R-3 and I-3 not serving public and administrative functions.

604.6 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 309. Flush controls shall be located on the open side of the water closet.

EXCEPTION: In ambulatory accessible compartments complying with Section 604.9, flush controls shall be permitted to be located on either side of the water closet.

604.7 Dispensers. Toilet paper dispensers shall comply with Section 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 15 inches (380 mm) minimum and 48 inches (1220 mm) maximum above the floor, and shall not be located behind the grab bars. Dispensers shall not be of a type that control delivery, or do not allow continuous paper flow.