



**Summary of Substantive Changes
between the 2009 and 2017 editions of
ICC A117.1 “Accessible and Usable Buildings and Facilities”
Chapter 6, Plumbing Elements and Facilities**

Presented to the IAPMO Standards Review Committee on December 11, 2017

General: The changes to this standard may have an impact on currently listed products. The significant changes are:

- Added requirements for bottle fillings stations and for drinking fountains for persons who are standing (see Section 602).
- Added an exception to allow adjustable height water closets (see Section 604.4).
- Clarified the requirements for grab bars and revised the method of defining the dimensions (see Section 604.5 and Figure 604.5.2).
- Added an exception for the dispenser outlet location of a dispenser in front of a water closet (see Sections 604.7.1, 604.11.7 and Figures 604.7.1(D), 604.11.7 (B)).
- Added requirements for alternate wheelchair accessible toilet compartments, exceptions for wheelchair accessible toilet compartment doors, and changed the toe clearance dimensions for wheelchair accessible toilet compartments. (see Section 904.9 and Figures 604.9.5(A) and (B)).
- Revised the width requirement for ambulatory accessible toilet compartments to incorporate a tolerance of 2 inches and added an exception for the maneuvering clearances at the door (see Section 604.10 and Figure 604.10.1).
- Changed the clearance requirements of transfer-type shower compartments for new buildings (see Section 608.2 and Figures 608.2.1.2 (A), (B) and (C)).
- Added an exception for back wall grab bars and included new requirements for vertical grab bars (see Section 608.3 and Figures 608.3.2(A) and (B)).
- Added distance requirements for shower controls and hand showers to specify a minimum height requirement for the standard roll-in shower and a minimum distance requirement from the end wall for alternate roll-in showers (see Section 608.4 and Figures 608.4.1 and 608.4.2).
- Added a requirement for the position of a means to hold the hand show wand while in the on or off position (see Section 608.5).



Section 602, Drinking Fountains and Bottle Filling Stations: Added requirements for bottle fillings stations and for drinking fountains for persons who are standing as follows:

SECTION 602 DRINKING FOUNTAINS AND BOTTLE FILLING STATIONS

602.1 General. ~~Accessible~~ Drinking fountains for persons using wheelchairs shall comply with Sections 602.2 and 307. Drinking fountains for persons who are standing shall comply with Section 602.3 and 307.

602.2 Drinking fountains for persons using wheelchairs. Drinking fountains for persons using wheelchairs shall comply with Sections 602.2.1 through 602.2.5.

~~602.2~~ **602.2.1 Clear floor space.** A clear floor space ~~complying with Section 305~~, positioned for a forward approach to the drinking fountain shall be provided. Knee and toe space complying with Section 306 shall be provided. The clear floor space shall be centered on the drinking fountain.

Exceptions:

~~1. Drinking fountains for standing persons.~~

2. Drinking fountains primarily for children's use shall be permitted where ~~the spout outlet is 30 inches (760 mm) maximum above the floor~~, a clear floor space provides a parallel approach ~~complying with Section 305 is provided and the clear floor space~~ and is centered on the drinking fountain.

~~602.4~~ **602.2.3 Spout outlet height.** Spout outlets of ~~wheelchair accessible~~ drinking fountains shall be 36 inches (915 mm) maximum above the floor. ~~Spout outlets of drinking fountains for standing persons shall be 38 inches (965 mm) minimum and 43 inches (1090 mm) maximum above the floor.~~

Exception: At drinking fountains primarily for children's use, the spout outlet shall be 30 inches (760 mm) maximum above the floor.

~~602.5~~ **602.2.4 Spout location.** The spout shall be located 15 inches (380 mm) minimum from the vertical support and 5 inches (125 mm) maximum from the front edge of the drinking fountain, including bumpers.

Exception: ~~Where only a parallel approach is provided~~, At drinking fountains primarily for children's use, the spout shall be located 3 1/2 inches (90 mm) maximum from the front edge of the drinking fountain, including bumpers.

602.3 Drinking fountains for persons who are standing. Drinking fountains for persons who are standing shall comply with Sections 602.3.1 through 602.3.4.

602.3.1 Operable parts. Operable parts shall comply with Sections 309.3 and 309.4.

602.3.2 Spout outlet height. Spout outlets of drinking fountains shall be 38 inches (965 mm) minimum and 43 inches (1090 mm) maximum above the floor.

Exception: Drinking fountains primarily for children's use shall be permitted where the spout outlet is 30 inches (760 mm) minimum and 43 inches (1090 mm) maximum above the floor.

602.3.3 Spout location. The spout shall be located 5 inches (125 mm) maximum from the front edge of the drinking fountain, including bumpers.

602.3.4 Water flow. The spout shall provide a flow of water 4 inches (100 mm) minimum in height. The angle of the water stream from spouts within 3 inches (75 mm) of the front of the drinking fountain shall be 30 degrees maximum, and from spouts between 3 inches (75 mm) and 5 inches (125 mm) from the front of the drinking fountain shall be 15 degrees maximum, measured horizontally relative to the front face of the drinking fountain.



602.4 Bottle filling stations. Bottle filling stations shall comply with Sections 602.4.1 and 602.4.2.

Exception: Where bottle filling stations are part of the drinking fountain for persons who are standing, the bottle filling station is not required to comply with this section provided a bottle filling station is located at the drinking fountain for persons using wheelchairs.

602.4.1 Clear floor space. A clear floor space positioned for a forward or side approach shall be provided.

602.4.2 Controls. Controls for bottle filling stations shall be hand operated or automatic. Hand operated controls shall comply with Section 309.

Section 604, Water Closets and Toilet Compartments

Section 604.4, Height: Added an exception to allow adjustable height water closets as follows:

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.

Exceptions:

1. A water closet which is adjustable in height by the user is permitted provided that at least one adjustment setting provides a seat within the range specified in this section.

Section 604.5, Grab bars: Clarified the requirements for grab bars and revised the method of defining the dimensions as follows:

604.5.1 Fixed side-wall grab bars. Fixed side-wall grab bars shall ~~be~~ include a horizontal bar complying with Section 604.5.1.1 and a vertical grab bar complying with Section 604.5.1.2. The vertical grab bar at water closets primarily for children's use shall comply with Section 609.4.2.

604.5.1.1 Horizontal grab bar. A horizontal grab bar 42 inches (1065 mm) minimum in length shall be located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall.

604.5.1.2 Vertical grab bar. ~~In addition,~~ A vertical grab bar 18 inches (455 mm) minimum in length shall be mounted with the bottom of the bar located 39 inches (990 mm) minimum and 41 inches (1040 mm) maximum above the floor, and with the center line of the bar located 39 inches (990 mm) minimum and 41 inches (1040 mm) maximum from the rear wall.

~~**EXCEPTION:** The vertical grab bar at water closets primarily for children's use shall comply with Section 609.4.2.~~

604.5.2 Rear-wall grab bars. ~~The fixed 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.~~

1. Be 36 inches (915 mm) minimum in length,
2. Be located 6 inches maximum (150 mm) from the side wall, and
3. Extend 42 inches (1065 mm) minimum from the side wall.



Section 604.7, Dispensers: Added an exception for the dispenser outlet location of a dispenser in front of a water closet as follows:

604.7 Dispensers. Toilet paper dispensers shall comply with Sections 309.4 [and 609.3](#). Dispensers shall not be of a type that control delivery or do not allow continuous paper flow.

604.7.1 Location. Where the dispenser is located above the grab bar, the outlet of the dispenser shall be located within an area 24 inches (610 mm) minimum and 36 inches (915 mm) maximum from the rear wall. Where the dispenser is located below the grab bar, the outlet of the dispenser shall be located ~~within an area 24 inches (610 mm) minimum and 42 inches (1065 mm) maximum from the rear wall. The outlet of the dispenser shall be located~~ 18 inches (455 mm) minimum and 48 inches (1220 mm) maximum above the floor.

Exception: Toilet paper dispensers that accommodate a maximum of 2 toilet paper rolls of not more than 5-inch (125 mm) diameter each shall be permitted to be located 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front the 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.

Section 604.9, Wheelchair accessible toilet compartments: Added requirements for alternate wheelchair accessible toilet compartments, exceptions for wheelchair accessible toilet compartment doors, and changed the toe clearance dimensions for wheelchair accessible toilet compartments as follows:

604.9 Wheelchair accessible toilet compartments.

604.9.1 General. Wheelchair accessible [toilet](#) compartments shall comply with Section 604.9.

604.9.2 Size. [Wheelchair accessible](#) toilet compartments shall comply with Section 604.9.2.1, 604.9.2.2 or 604.9.2.3 as applicable.

604.9.2.1 Minimum area. The minimum area of a wheelchair accessible [toilet](#) 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.

604.9.2.2 Compartment for children's use. The minimum area of a wheelchair accessible [toilet](#) compartment primarily for 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.

604.9.2.3 Alternate wheelchair accessible toilet compartments. Where an alternate wheelchair accessible toilet compartment is provided, the minimum area of the compartment shall be 60 inches (1525 mm) minimum in width, measured perpendicular to the side wall, and 84 inches (2135 mm) minimum in depth, measured perpendicular to the rear wall.



604.9.3 Doors. Wheelchair accessible toilet compartment doors, including door hardware, shall comply with Section 404 ~~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.~~ 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. Wheelchair accessible toilet compartment doors shall not swing into the required minimum area of the compartment.

Exceptions:

1. Outside of the compartment, where the approach is to the latch side of the wheelchair accessible toilet compartment, door clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum.
2. Within the wheelchair accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.
3. In an alternate wheelchair accessible toilet compartment, the door shall be permitted to swing into the stall where a clear floor space complying with Section 305.3 is provided within the stall beyond the arc of the door swing.

604.9.3.1 Door opening location. The farthest edge of the wheelchair accessible toilet compartment door opening shall be located in the front wall or partition or in the side wall or partition as required by Table 604.9.3.1.

604.9.5.1 Toe clearance at wheelchair accessible toilet compartments. The front partition and at least one side partition of wheelchair accessible toilet compartments shall provide a toe clearance of 9 12 inches (~~230~~ 305 mm) minimum above the floor and extending 6 8 inches (~~150~~ 205 mm) beyond the compartment side face of the partition, exclusive of partition support members.

Exceptions:

- Toe clearance at the front partition is not required in a wheelchair accessible toilet compartment greater than 62 64 inches (~~1575~~ 1625 mm) in depth with a wall-hung water closet, or greater than 65 67 inches (1650 1700 mm) in depth with a floor-mounted water closet.
- Toe clearance at the side partition is not required in a wheelchair accessible toilet compartment greater than 66 68 inches (~~1675~~ 1725 mm) in width.

604.9.5.2 Toe clearance at wheelchair accessible toilet compartments for children's use. The front partition and at least one side partition of wheelchair accessible toilet compartments primarily for children's use shall provide a toe clearance of 12 inches (305 mm) minimum above the floor and extending 6 8 inches (~~150~~ 205 mm) beyond the wheelchair accessible toilet compartment side face of the partition, exclusive of partition support members.

Exceptions:

- Toe clearance at the front partition is not required in a wheelchair accessible toilet compartment greater than 65 67 inches (~~1650~~ 1700 mm) in depth.
- Toe clearance at the side partition is not required in a wheelchair accessible toilet compartment greater than 66 68 inches (~~1675~~ 1725 mm) in width.



Section 604.10, Ambulatory accessible toilet compartments: Revised the width requirement for ambulatory accessible toilet compartments to incorporate a tolerance of 2 inches and added an exception for the maneuvering clearances at the door as follows:

604.10.2 Size. *The minimum area of an ambulatory accessible toilet compartment shall be 60 inches (1525 mm) minimum in depth and a width of 36 35 inches (915 890 mm) in-width minimum and 37 inches (940 mm) maximum.*

604.10.3 Doors. *Ambulatory accessible toilet compartment doors, including door hardware, shall comply with Section 404. 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. Compartment doors shall not swing into the required minimum area of the compartment.*

Exceptions:

- 1. Outside of the ambulatory accessible toilet compartment, where the approach is to the latch side of the compartment door, ~~the~~ clearance between the door side of the compartment and any obstruction shall be 42 inches (1065 mm) minimum.*
- 2. Within the ambulatory accessible toilet compartment, maneuvering clearances at the door shall not be required to comply with Section 404.*

Section 604.11, Water closets and toilet compartments for children's use: Added an exception for the dispenser outlet location of a dispenser in front of a water closet as follows:

604.11.7 Dispensers. *Toilet paper dispensers ~~primarily for children's use~~ shall comply with Section 309.4. Dispensers shall not be of a type that control delivery or do not allow continuous paper flow.*

604.11.7.1 Location. *The outlet of toilet paper dispensers shall be located within an area 24 inches (610 mm) minimum and 42 inches (1065 mm) maximum from the rear wall. The outlet of the dispenser shall be 14 inches (355 mm) minimum and 19 inches (485 mm) maximum above the floor. ~~There shall be a clearance of 11 1/2 inches (38 mm) minimum below the grab bar.~~*

Exception: *Toilet paper dispensers that accommodate a maximum of 2 toilet paper rolls of not more than 5-inch diameter each shall be permitted to be located 7 inches minimum and 9 inches maximum in front of the of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 14 inches (355 mm) minimum and 19 inches (485 mm) maximum above the floor.*

Section 606, Lavatories and Sinks:

Section 606.4, Faucets: Added an exception for automatic faucets as follows:

606.4 Faucets. *Faucets shall comply with Section 309. Hand operated metering faucets shall remain open for 10 seconds minimum.*

Exception: *Automatic faucets shall not be required to comply with Section 309 provided that the reach depth to activate the faucets and the reach depth to the water flow is 11 inches (280 mm) maximum.*



Section 606.5, Lavatories with enhanced reach range: Clarified the maximum height for lavatories with enhanced reach range is 34 inches and added exceptions for enhanced reach range faucets and soap dispensers as follows:

606.5 Lavatories with enhanced reach range. *Where enhanced reach range is required at lavatories, faucets and soap dispenser controls shall have a reach depth of 11 inches (280 mm) maximum ~~or, if automatic, shall be activated within.~~ Water and soap flow outlets shall be provided with a reach depth of 11 inches (280 mm) maximum. The lavatory shall be 34 inches (865 mm) maximum above the floor, measured to the higher of the rim or counter surface.*

Exceptions:

1. Enhanced reach range faucets shall not be required on lavatories provided with automatic faucets where the reach depth to activate the faucets and the reach depth to the water outlet is 11 inches (280 mm) maximum.
2. Enhanced reach range soap dispensers shall not be required on lavatories provided with automatic dispensers where the reach depth to activate the soap dispensers and the reach depth to the soap outlet is 11 inches (280 mm) maximum.

Section 608, Shower Compartments:

Section 608.2 Size, clearance and seat: Changed the clearance requirements of transfer-type shower compartments for new buildings as follows:

608.2.1.2 Clearance.

608.2.1.2.1 New buildings and facilities. *In new buildings and facilities, a clearance of 52 inches (1320 mm) minimum in length and 36 inches (915 mm) minimum in depth shall be provided adjacent to the open face of the compartment. The length of the clear floor space shall be measured perpendicular from either the control wall or from 4 inches (100 mm) behind the control wall.*

608.2.1.2.2 Clearance **608.2.1.2.2 Existing buildings and facilities.** *In existing buildings and facilities, a clearance of 48 inches (1220 mm) minimum in length measured perpendicular from the control wall, and 36 inches (915 mm) minimum in depth shall be provided adjacent to the open face of the compartment.*



Section 608.3, Grab bars: Added an exception for back wall grab bars and included new requirements for vertical grab bars as follows:

608.3.2 Standard roll-in-type showers. Grab bars in standard roll-in showers shall comply with Sections 608.3.2.1 through 608.3.2.3.

~~608.3.2~~ **608.3.2.1 Back-wall grab bar.** In standard roll-in type showers, a grab bar shall be provided on the back wall beginning at the edge of the seat. The grab bars shall not be provided above the seat. The back-wall grab bar shall extend the length of the wall and extend within 6 inches (150 mm) maximum from the adjacent side wall opposite the seat.

Exceptions:

1. The back wall grab bar shall not be required to exceed 48 inches (1220 mm) in length.
2. The back-wall grab bar is not required to extend within 6 inches (150 mm) of the adjacent side wall opposite the seat if it would require the grab bar length to exceed 48 inches (1220 mm) in length.

~~608.3.2~~ **608.3.2.2 Side-wall grab bars.** Where a side wall is provided opposite the seat within 72 inches (1830 mm) of the seat wall, a grab bar shall be provided on the side-wall opposite the seat. ~~Grab bars shall be 6 inches (150 mm) maximum from the adjacent wall.~~ The side wall grab bar shall extend the length of the wall and extend within 6 inches (150 mm) maximum from the adjacent back wall.

Exception: The side-wall grab bar shall ~~extend the length of the wall but~~ not be required to exceed 30 inches (760 mm) in length.

608.3.2.3 Vertical grab bar. Where a side wall is provided opposite the seat within 72 inches (1830 mm) of the seat wall a vertical grab bar shall be provided. A vertical grab bar 18 inches (455 mm) minimum in length shall be provided on the end wall 3 inches (75 mm) minimum and 6 inches (150 mm) maximum above the horizontal grab bar, and 4 inches (100 mm) maximum inward from the front edge of the shower.

Section 608.4, Controls and hand showers: Added distance requirement for shower controls and hand showers to specify a minimum height requirement for the standard roll-in shower and a minimum distance requirement from the end wall for alternate roll-in showers as follows:

608.4.2 Standard roll-in showers. In standard roll-in showers, the controls and hand shower shall be located above the seat. Controls and hand showers shall be located according to the following:

1. On the back wall ~~above the grab bar,~~
2. At a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor and
3. 16 inches (405 mm) minimum and 27 inches (685mm) maximum from the ~~end~~ wall behind the seat.

608.4.3 Alternate roll-in showers. In alternate roll-in showers, the controls and hand shower shall be located

1. At a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor, and
2. ~~In alternate roll-in showers with~~ Where the controls and hand shower are located on the end wall adjacent to the seat, the controls and hand shower shall be 16 inches (405 mm) minimum and 27 inches (685 mm) maximum from the ~~seat wall behind the~~ seat wall, or
3. ~~In alternate roll-in showers with~~ Where the controls and hand shower are located on the back wall opposite the seat, the controls and hand shower shall be located within 15 inches (380 mm), ~~left or right, of~~ maximum from the centerline of the seat toward the transfer space.



Section 608.5, Hand Showers: Added a requirement for the position of a means to hold the hand show wand while in the on or off position as follows:

608.5 Hand showers. A hand shower with a hose 59 inches (1500 mm) minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided. The hand shower shall have a control with a nonpositive shutoff feature. Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars. A means to hold the hand shower wand while in the on or off position shall be located at a height of 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower finish floor.

Exception: In other than Accessible units and Type A units, a fixed shower head located 48 inches (1220 mm) maximum above the shower floor shall be permitted in lieu of a hand shower.

Section 611, Washing Machines and Clothes Dryers

Section 611.3, Operable parts: Added an exception for operable parts as follows:

611.3 Operable parts. Operable parts, including doors, lint screens, detergent and bleach compartments, shall comply with Sections 308 and 309.

Exception: The height of the obstruction in Section 308.3.2 shall be permitted to be 36 inches (915 mm) maximum above the floor.

The following figures were added to Chapter 6:

[Figure 602.2.1\(A\) Clear Floor Space at Wheelchair Drinking Fountains](#)

[Figure 602.2.1\(B\) Clear Floor Space at Wheelchair Drinking Fountains - Primarily for Children's Use](#)

[Exception](#)

[Figure 602.2.3 Wheelchair Drinking Fountain Spout Height and Location](#)

[Figure 602.3.2 Standing Use Drinking Fountain Spout Height and Location](#)

[Figure 602.3.3 Standing Use Drinking Fountain Spout Location](#)

[Figure 604.7.1\(D\) Dispenser Outlet Location Dispenser in Front of Water Closet - Exception](#)

[Figure 604.9.2.3 Wheelchair Toilet Compartments Alternate Wheelchair Toilet Compartment](#)

[Figure 604.9.3\(B\) Wheelchair Toilet Compartment Doors Exception 3 - Alternate Wheelchair Compartment](#)

[Figure 604.11.7\(B\) Children's Dispenser Outlet - Exception](#)

[Figure 608.2.1.1 Transfer-Type Shower Compartment Size](#)

[Figure 608.2.1.2\(A\) Transfer-Type Shower Compartment Clearances New Buildings - Option 1](#)

[Figure 608.2.1.2\(B\) Transfer-Type Shower Compartment Clearances New Buildings - Option 2](#)

[Figure 608.2.1.2\(C\) Transfer-Type Shower Compartment Clearances Existing Buildings](#)

[Figure 608.2.2.1 Standard Roll-In-Type Shower Compartment Size](#)

[Figure 608.3.1\(A\) Grab Bars in Transfer-Type Shower - Elevation](#)

[Figure 608.3.2\(A\) Grab Bars in Standard Roll-In-Type Shower Elevation](#)

[Figure 608.3.3\(A\) Grab Bars in Alternate Roll-In-Type Shower - Elevation](#)



The following figures were removed from Chapter 6:

~~Figure 602.2 Parallel Approach at Drinking Fountains Primarily for Children's Use (Exception 2)~~

~~Figure 602.5(b) Drinking Fountain Spout Location — Elevation~~

~~Figure 604.9.5(B) Toe Clearance — Plan~~

~~Figure 608.2.1 Transfer Type Shower Compartment Size and Clearance~~

~~Figure 608.4.3(C) Alternate Roll-In-Type Shower Control and Hand shower Location~~

The following figures were revised in Chapter 6:

Figure 604.5.2 Rear-Wall Grab Bar for Water Closet

Figure 604.9.3(A) Wheelchair Toilet Compartment Doors Door Swinging into The Wheelchair Toilet Compartment

Figure 604.9.5(A) ~~Wheelchair Accessible Compartment~~ Toe Clearance Toe Clearance - Elevation

Figure 604.9.5(CB) ~~Wheelchair Accessible Compartment~~ Toe Clearance Toe Clearance – Plan

Figure 604.10 **604.10.1** Ambulatory Compartment

Figure 605.2(A) Height and Depth of Urinal Wall Hung Type

Figure 605.2(B) Height and Depth of Urinal Stall Type

Figure 608.2.2 **608.2.2.2** Standard Roll-In-Type Shower Compartment Clearance

Figure 608.4.2 Standard Roll-In-Type Shower Controls and Hand Shower Location

Figure 609.4.2(A) Positions of Children's Grab Bars Side-Wall View

Figure 609.4.2(B) Positions of Children's Grab Bars Rear-Wall View

Figure 610.2(A) Bathtub Seats Removable In-Tub Seats