
CHAPTER 6: PLUMBING ELEMENTS AND FACILITIES

601 General

601.1 Scope. Plumbing *elements* and *facilities* required to be *accessible* by Chapter 2 shall comply with the applicable provisions of this chapter.

602 Drinking Fountains and Water Coolers

602.1 General. Drinking fountains and water coolers required to be *accessible* shall comply with 307 and 602.

602.2 Clear Floor Space. Units shall have a clear floor or ground *space* complying with 305. A forward approach complying with 602.2.1 shall be provided at wall and post-mounted cantilevered units.

Advisory 602.2
A drinking fountain that provides a parallel approach, although considered <i>accessible</i> , requires a person to twist in the <i>wheelchair</i> to use the fountain. A drinking fountain that has knee clearance for a forward approach provides greater accessibility.

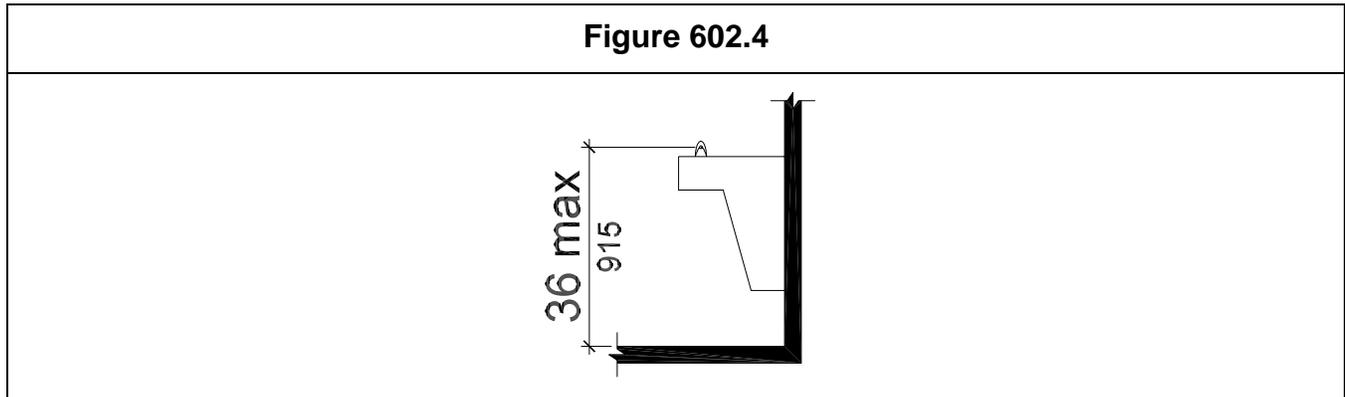
EXCEPTION: A parallel approach complying with 602.2.2 shall be permitted at wall and post-mounted cantilevered units for *children's use* where the spout is 30 inches (760 mm) maximum above the floor or ground.

602.2.1 Forward Approach. Where a forward approach is provided, the clear floor *space* shall be centered on the unit and shall include knee and toe clearance complying with 306.

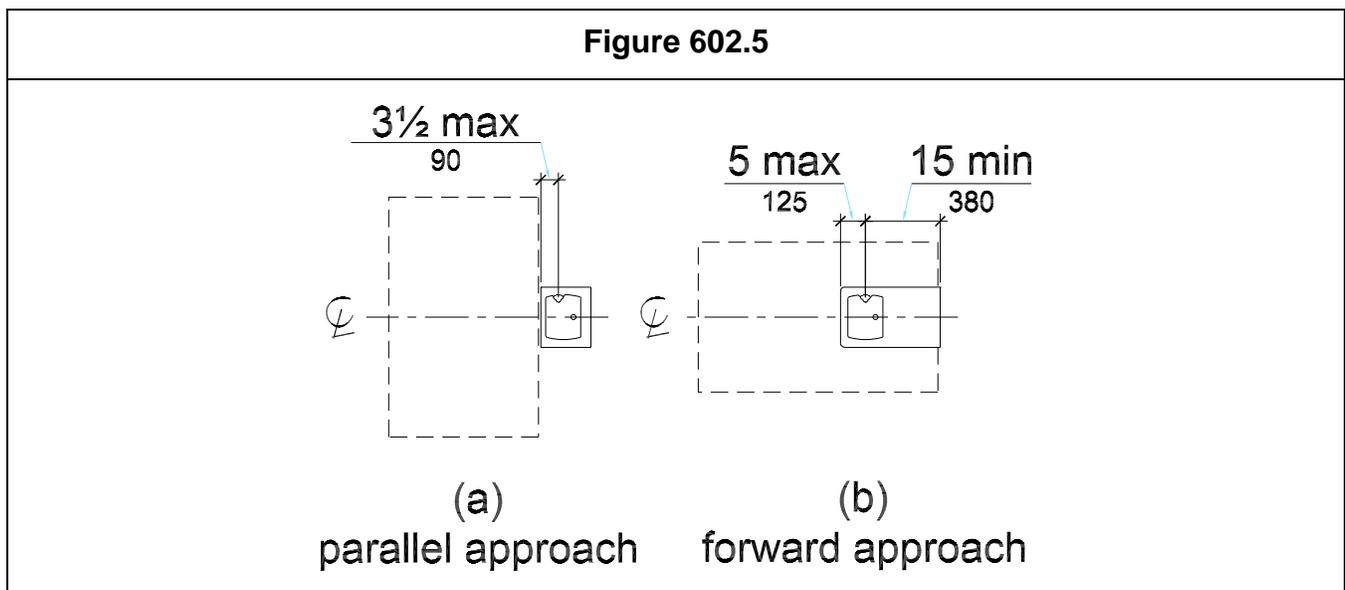
602.2.2 Parallel Approach. Where a parallel approach is provided, the clear floor *space* shall be centered on the unit.

602.3 Operable Parts. *Operable parts* shall comply with 309.

602.4 Spout Height. Spout outlets shall be 36 inches (915 mm) maximum above the floor or ground.



602.5 Spout Location. Units with a parallel approach shall have the spout located 3-1/2 inches (90 mm) maximum from the front edge of the unit, including bumpers. Units with a forward approach shall have the spout located 15 inches (380 mm) minimum from the vertical support and 5 inches (125 mm) maximum from the front edge of the unit, including bumpers.



602.6 Water Flow. The spout shall provide a flow of water 4 inches (100 mm) high minimum so as to allow the insertion of a cup or glass under the flow of water. Measured horizontally relative to the front face of the unit, the angle of the water stream from spouts located within 3 inches (75 mm) of the front of the unit shall be 30 degrees maximum and from spouts located between 3 inches (75 mm) and 5 inches (125 mm) from the front shall be 15 degrees maximum.

602.7 Drinking Fountains for Standing Persons. Spout outlets shall be 39 inches (990 mm) minimum and 43 inches (1090 mm) maximum above the floor or ground.

603 Toilet and Bathing Rooms

603.1 General. Toilet and bathing rooms required to be *accessible* shall comply with 603.

603.2 Clear Floor Space.

603.2.1 Wheelchair Turning Space. *Wheelchair* turning space complying with 304 shall be provided within the room.

Advisory 603.2.1

<p><i>Wheelchair</i> turning space should be in a location that provides the greatest access. A room should be designed so as to minimize the amount of backing up a person with a disability must do when <i>accessible elements</i>, such as toilet stalls, are located along narrow corridors.</p>

603.2.2 Overlap. Required clear floor spaces, clearance around water closets, and *wheelchair* turning space shall be permitted to overlap.

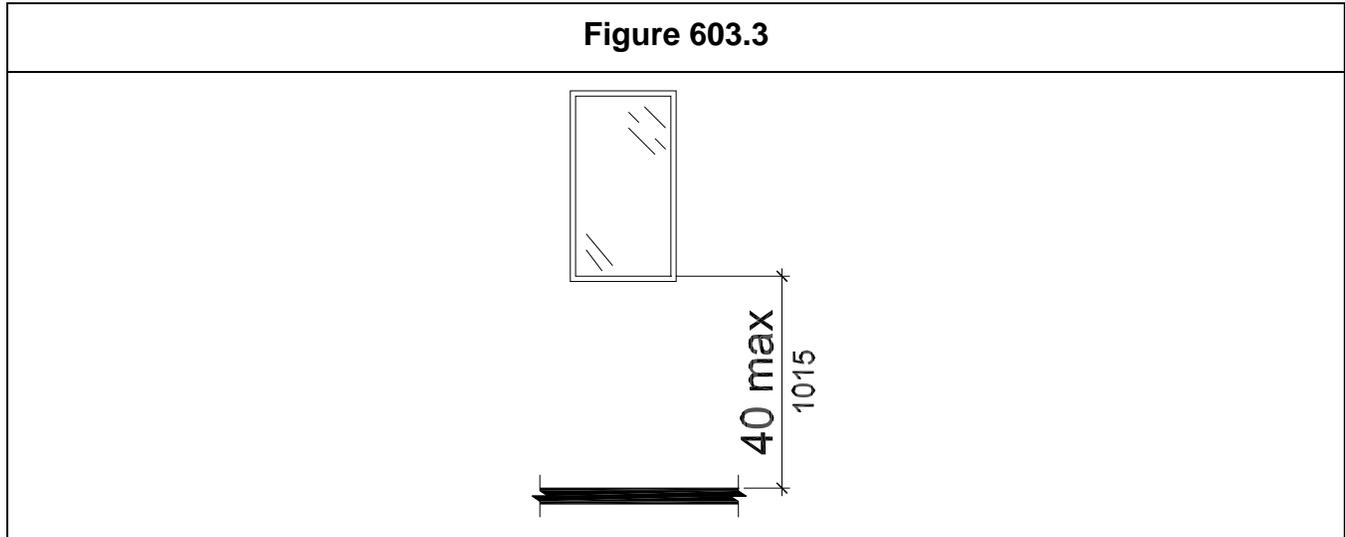
603.2.3 Doors. Doors shall not swing into the clear floor space or clearance required for any fixture.

Advisory 603.2.3

<p>While toilet and bathing room doors cannot swing into clearances for fixtures, they may swing into the <i>wheelchair</i> turning space as permitted by 304.4.</p>
--

- 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 603.2.3.
 2. This requirement shall not apply where the toilet and bathing room is for individual use and a clear floor space complying with 305.3 is provided within the room, beyond the arc of the door swing.

603.3 Mirrors. Mirrors shall be installed with the bottom edge of the reflecting surface 40 inches (1015 mm) maximum above the finish floor.



Advisory 603.3

In order for mirrors to be usable by both ambulatory people and people who use *wheelchairs*, the top edge of mirrors should be 74 inches (1880 mm) minimum from the floor or ground. A single, full-length mirror can accommodate a greater number of people including children.

603.4 Coat Hooks and Shelves. *Accessible* coat hooks provided within toilet rooms shall be located within one of the reach ranges specified in 308. Where provided, a fold-down shelf shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the floor.

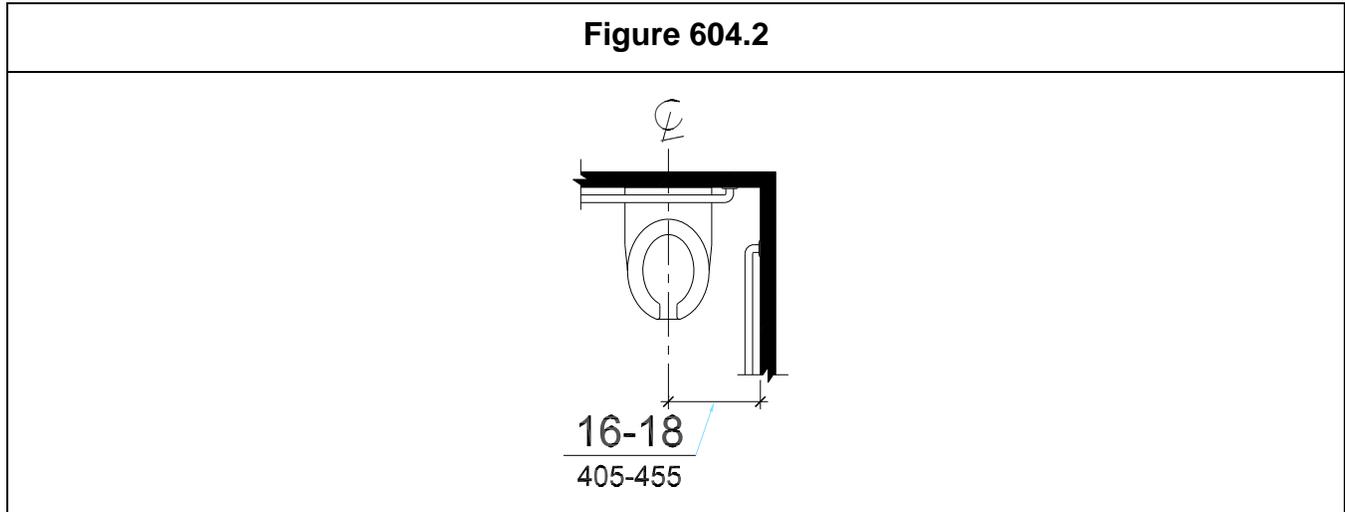
604 Water Closets and Toilet Compartments

604.1 General. Water closets and toilet compartments required to be *accessible* shall comply with 604.2 through 604.8.

EXCEPTION: Water closets and toilet compartments for *children's use* shall be permitted to comply with 604.9.

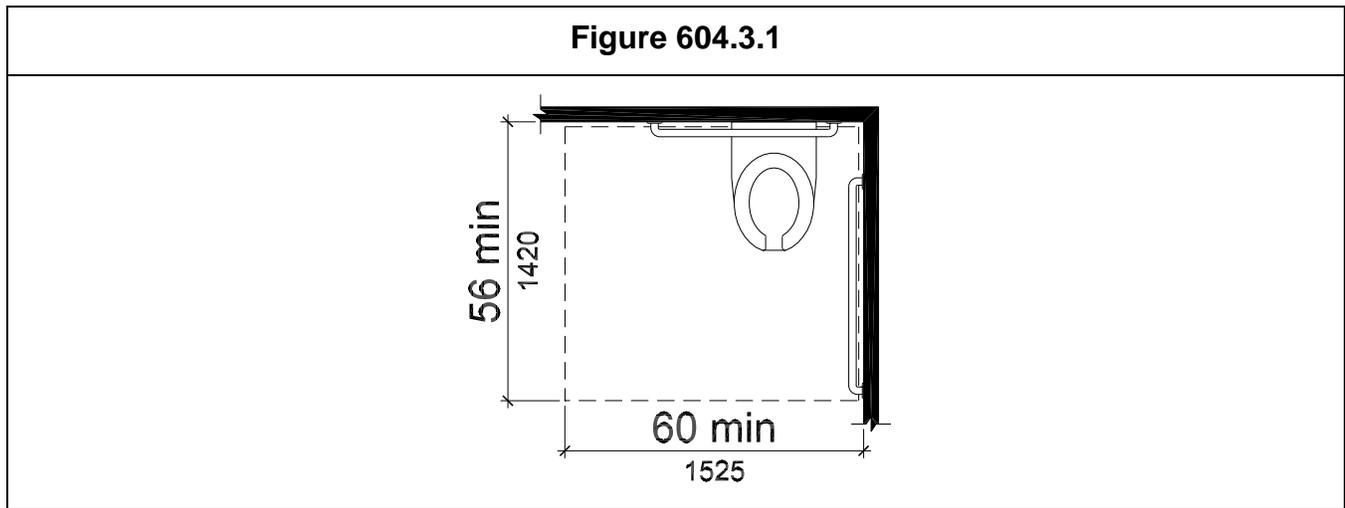
604.2 Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm)

maximum from the side wall or partition, except that the water closet shall be centered in the non-*wheelchair accessible* toilet compartment specified in 604.8.2.



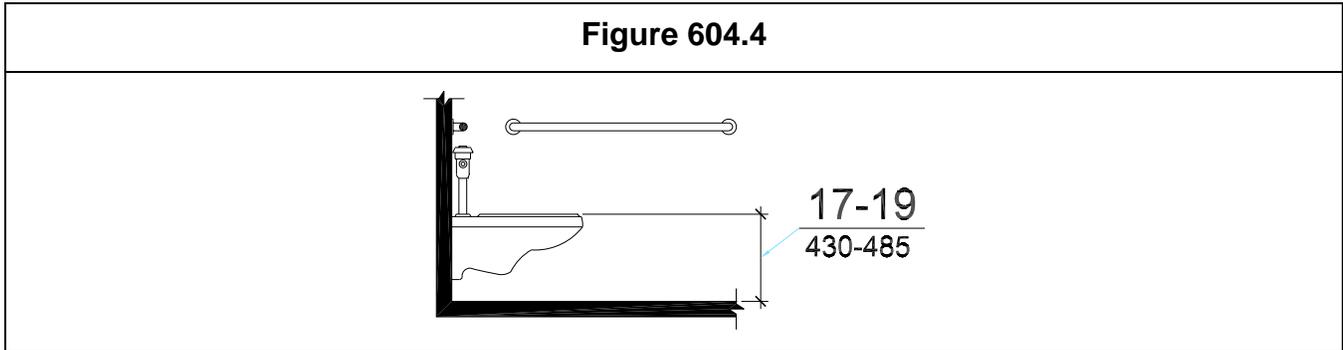
604.3 Clear Floor Space.

604.3.1 Clearance. Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall. No other fixtures or obstructions shall be located within the required water closet clearance.



604.3.2 Overlap. The required clearance around the water closet shall be permitted to overlap the fixture, associated grab bars, tissue dispensers, *accessible routes*, clear floor *space* required at other fixtures and the *wheelchair* turning *space*.

604.4 Height. The height of water closets shall be 17 inches (430 mm) minimum to 19 inches (485 mm) maximum measured to the top of the toilet seat. Seats shall not be sprung to return to a lifted position.

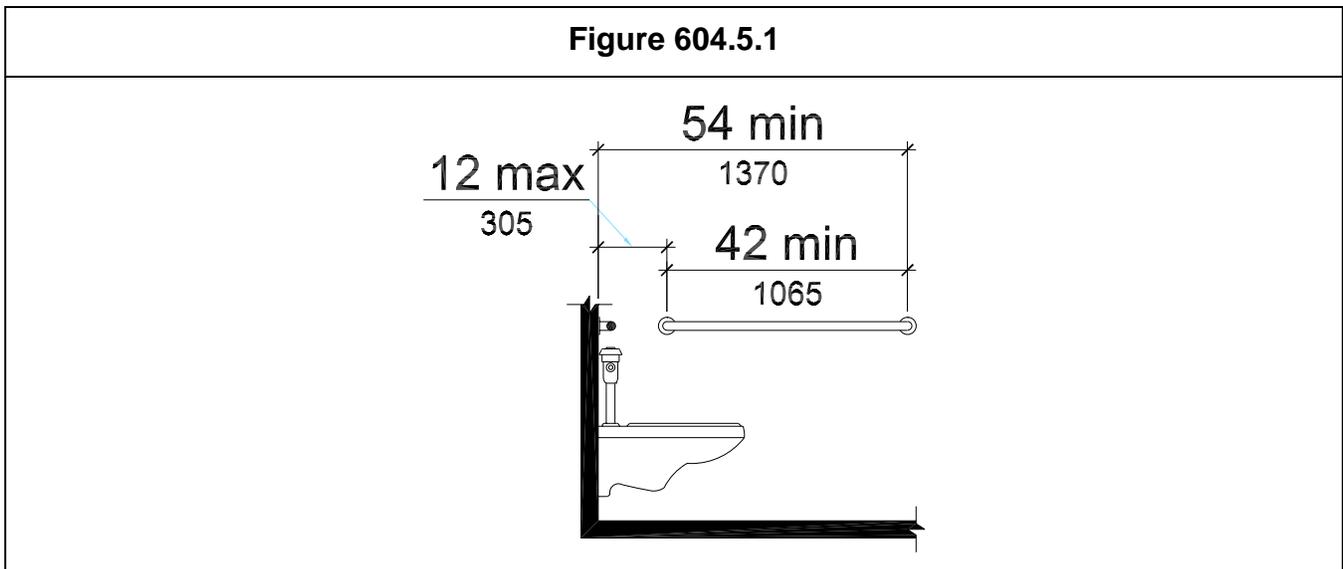


EXCEPTION: This requirement shall not apply to a water closet in a toilet room for a single occupant, accessed only through a private office and not for *common use* or *public use*.

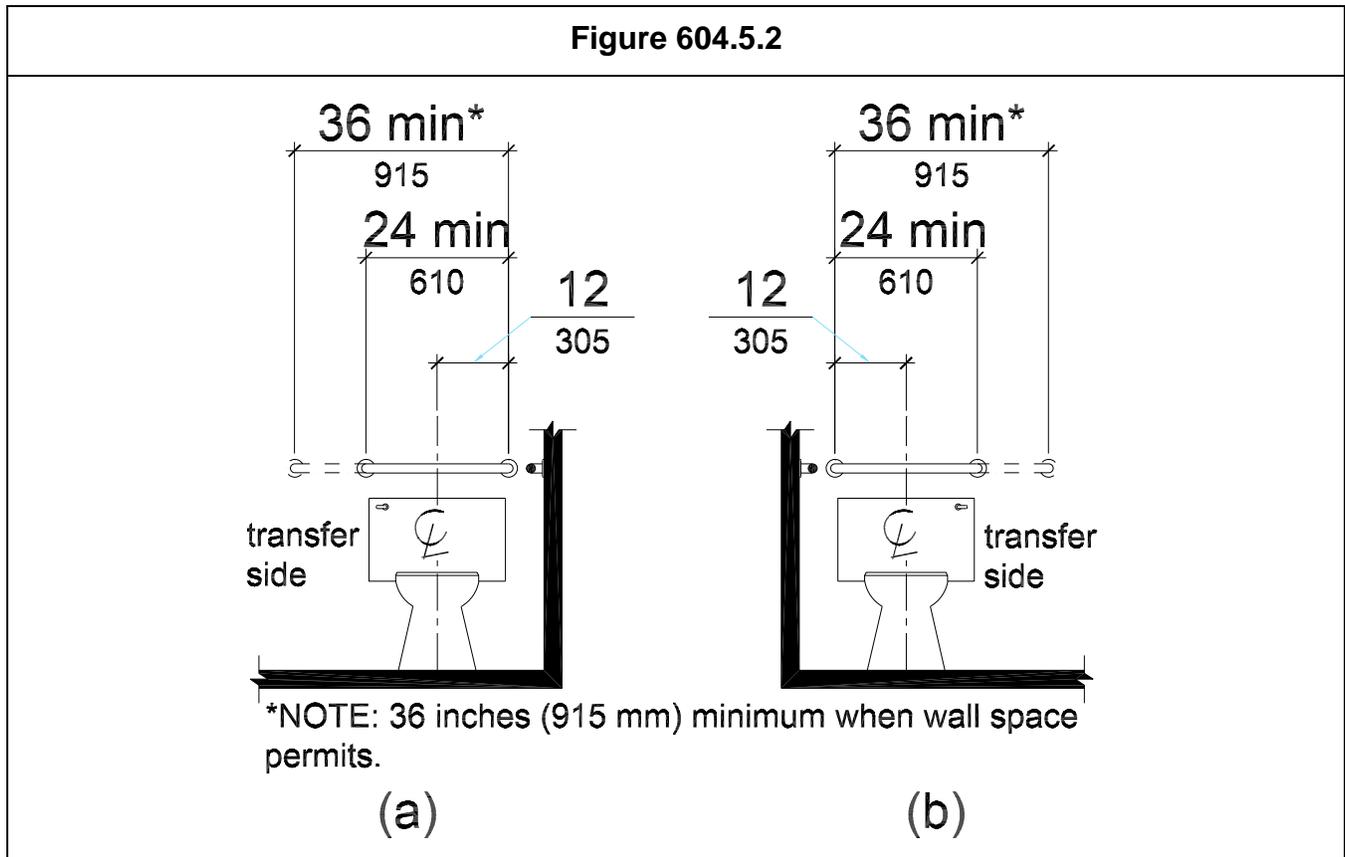
604.5 Grab Bars. Grab bars for water closets shall comply with 609. Grab bars shall be provided on the rear wall and on the side wall closest to the water closet.

EXCEPTION: Grab bars are not required to be installed in a toilet room for a single occupant, accessed only through a private office and not for *common use* or *public use* provided that reinforcement has been installed in walls and located so as to permit the installation of such grab bars.

604.5.1 Side Wall. Side wall grab bar shall be 42 inches (1065 mm) long minimum, located 12 inches (305 mm) maximum from the rear wall and extending 54 inches (1370 mm) minimum from the rear wall.



604.5.2 Rear Wall. The rear wall grab bar shall be 24 inches (610 mm) long minimum, centered on the water closet. Where wall space permits, the bar shall be 36 inches (915 mm) long minimum with the additional length provided on the transfer side of the water closet.



EXCEPTION: If administrative authorities require flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, then that grab bar may be split or shifted to the open side of the toilet area.

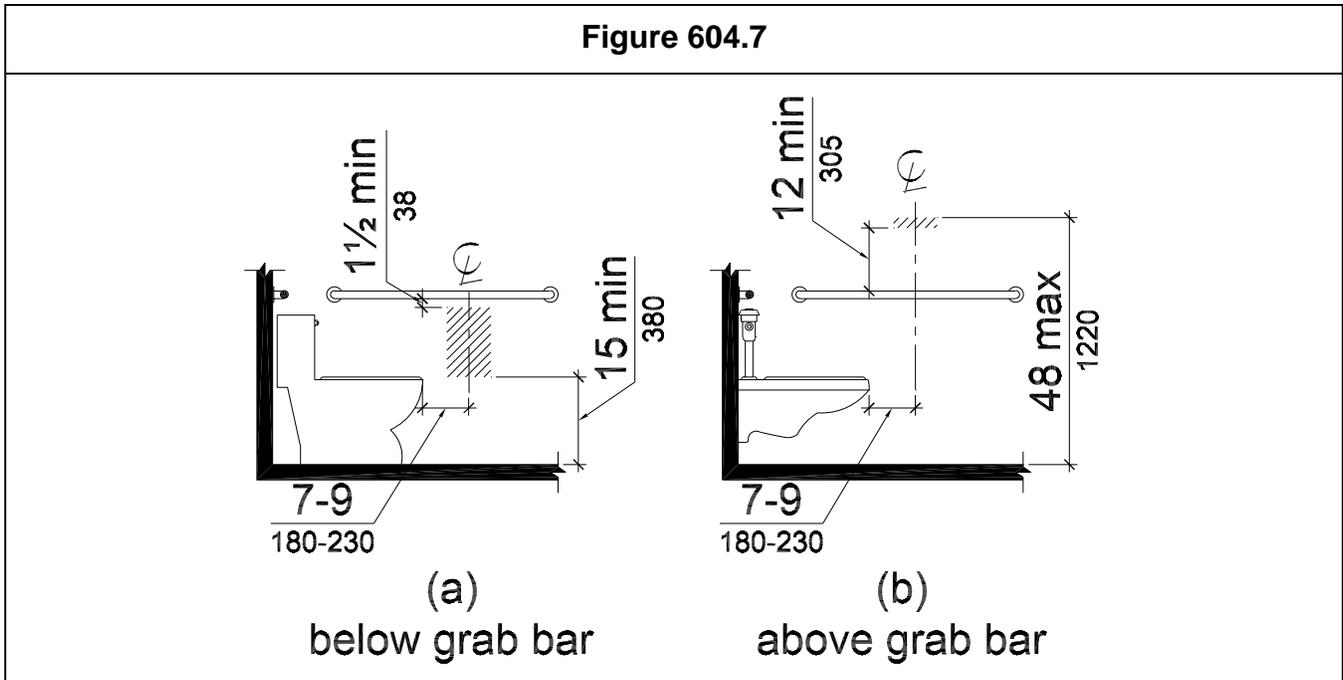
604.6 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.

Advisory 604.6

Flush valves and related plumbing can cause injury or imbalance when a person leans back against them. To prevent this, the plumbing can be located behind walls or to the side of the toilet, or a toilet seat lid can be provided if plumbing valves are directly behind the toilet seat.

604.7 Dispensers. Toilet paper dispensers shall comply with 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. There shall be a clearance of 1 1/2 inches (38 mm) minimum below and 12 inches (305 mm) minimum above the grab bar. Dispensers shall not be of a type that control delivery or that do not allow continuous paper flow.

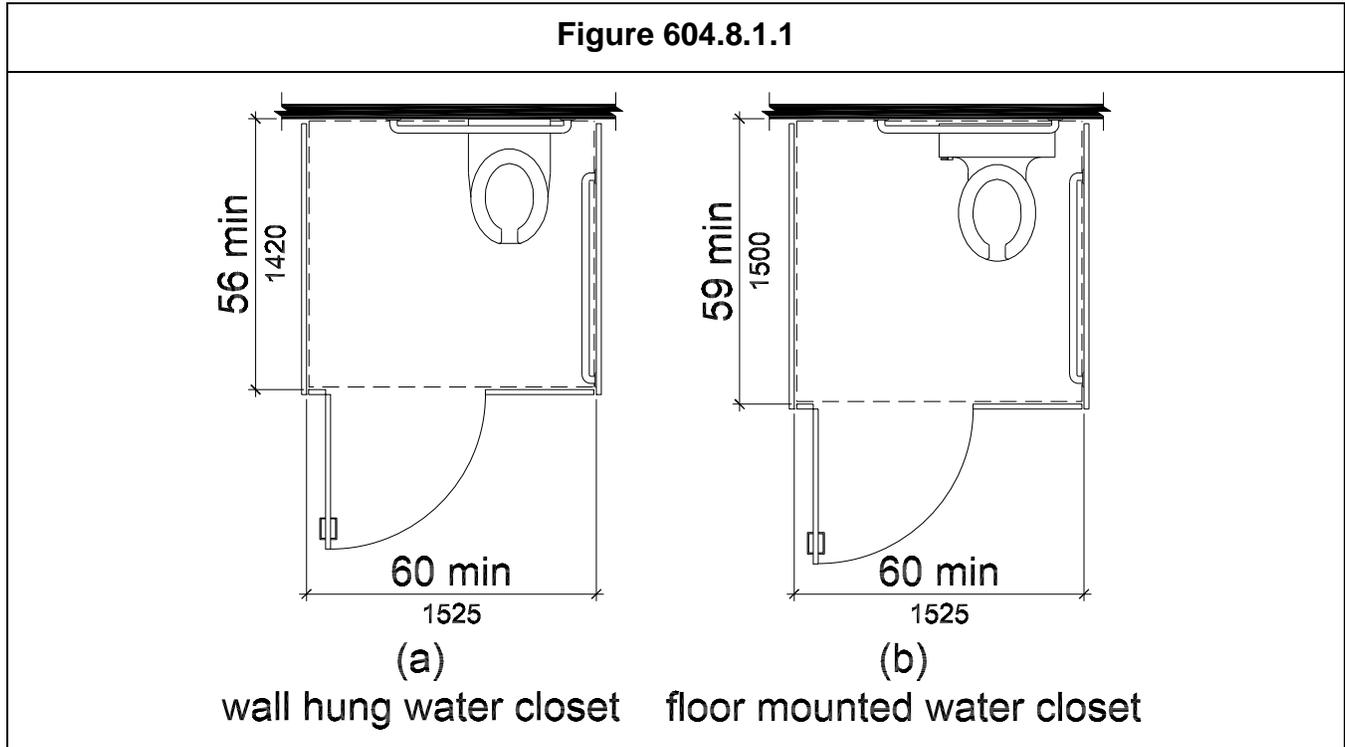


604.8 Toilet Compartments. *Wheelchair accessible* toilet compartments shall meet the requirements of 604.8.1 and 604.8.3. Compartments containing more than one plumbing fixture shall comply with 603. *Non-wheelchair accessible* compartments shall comply with 604.8.2 and 604.8.3.

604.8.1 Wheelchair Accessible Compartments.

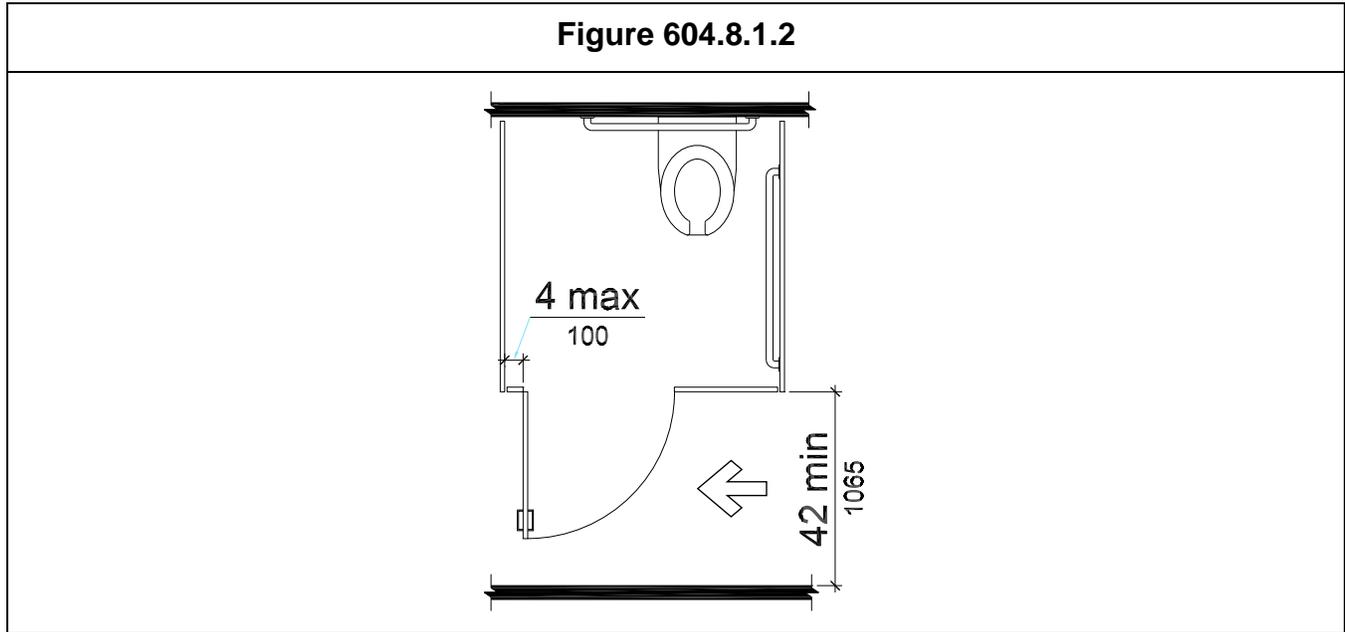
604.8.1.1 Size. *Wheelchair accessible* compartments shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 56 inches (1420 mm) deep minimum for

wall hung water closets and 59 inches (1500 mm) deep minimum for floor mounted water closets measured perpendicular to the rear wall.



604.8.1.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404 except that 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 a minimum of 42 inches (1065 mm). The door shall be hinged 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed

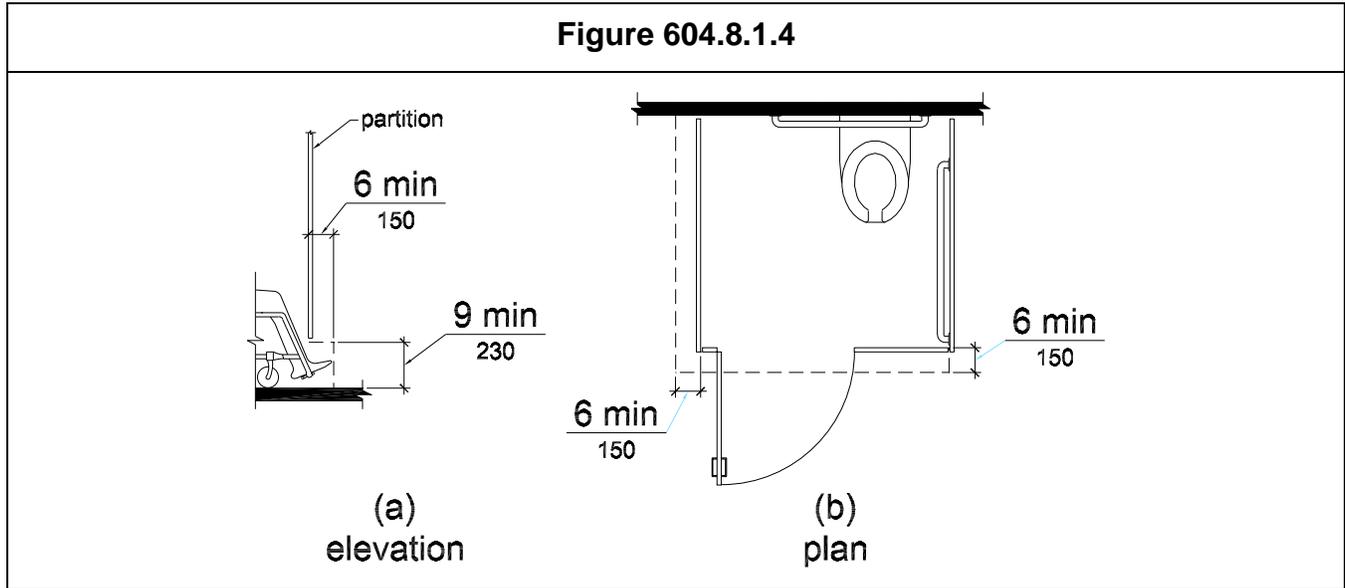
on both sides of the door near the latch. Compartment doors shall not swing into the minimum required compartment area.



604.8.1.3 Approach. Compartments shall be arranged for left-hand or right-hand approach.

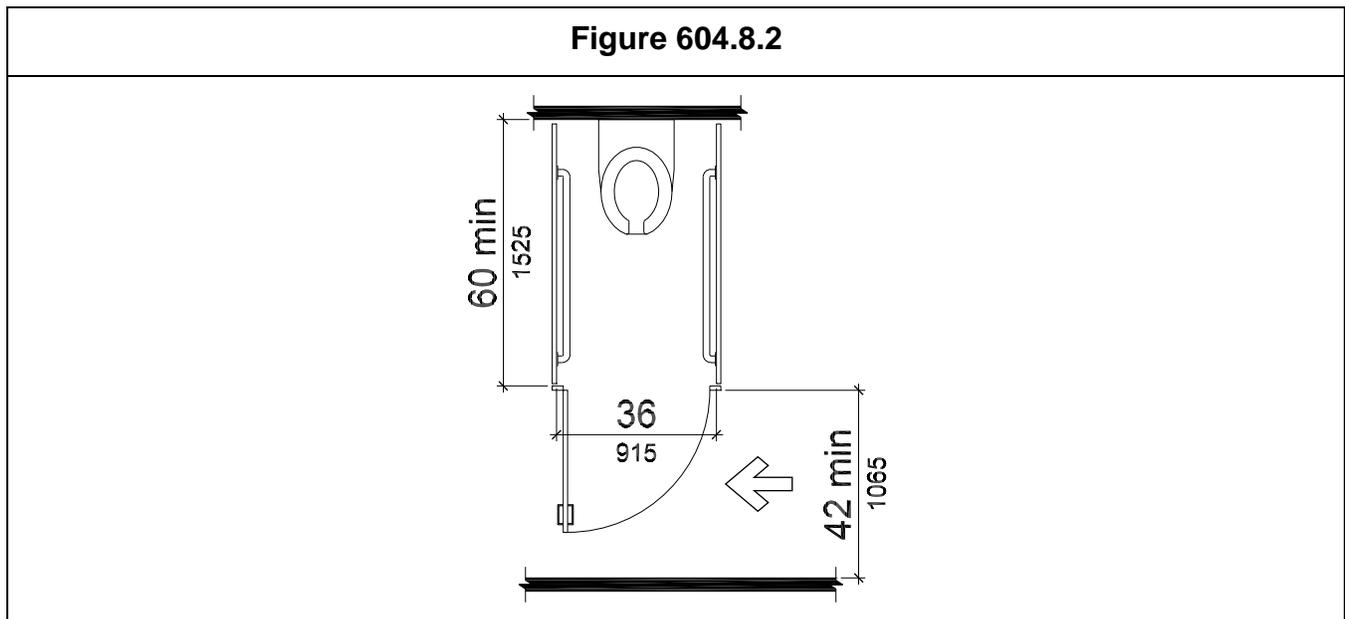
604.8.1.4 Toe Clearance. In *wheelchair accessible* compartments, the front partition and at least one side partition shall provide a toe clearance of 9 inches (230 mm) minimum above the floor and 6 inches (150 mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members. Toe clearance at the front partition is not required in a compartment greater than 62 inches (1575 mm) deep with a wall-hung water closet or 65 inches

(1650 mm) deep with a floor-mounted water closet. Toe clearance at the side partition is not required in a compartment greater than 66 inches (1675 mm) wide.



604.8.1.5 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 located on the wall closest to the water closet and a rear-wall grab bar complying with 604.5.2 shall be provided.

604.8.2 Non-Wheelchair Accessible Compartments.



604.8.2.1 Size. *Non-wheelchair accessible* compartments shall be 60 inches (1525 mm) deep minimum and 36 inches (915 mm) wide.

604.8.2.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404 except that 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 a minimum of 42 inches (1065 mm). The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the minimum required compartment area.

604.8.2.3 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 shall be provided on both sides of the compartment.

604.8.3 Coat Hooks and Shelves. *Accessible* coat hooks provided within toilet compartments shall be located within one of the reach ranges specified in 308. When provided, a fold-down shelf shall be located 40 inches (1015 mm) minimum and 48 inches (1220 mm) maximum above the floor.

604.9 Water Closets and Toilet Compartments for Children's Use. *Accessible* water closets and toilet compartments for *children's use* shall comply with 604.9.

Advisory 604.9

The requirements in 604.9 are to be followed where the exception for children's water closets in 604.1 is used. The following table provides additional guidance in applying the specifications for water closets for children according to the age group served and reflects the differences in the size, stature, and reach ranges of children ages 3 through 12. The specifications chosen should correspond to the age of the primary user group. The specifications of one age group should be applied consistently in the installation of a water closet and related *elements*.

Specifications for Water Closets Serving Children Ages 3 through 12

	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
Water Closet Centerline	12 inches (305 mm)	12 to 15 inches (305 to 380 mm)	15 to 18 inches (380 to 455 mm)
Toilet Seat Height	11 to 12 inches (280 to 305 mm)	12 to 15 inches (305 to 380 mm)	15 to 17 inches (380 to 430 mm)
Grab Bar Height	18 to 20 inches (455 to 510 mm)	20 to 25 inches (510 to 635 mm)	25 to 27 inches (635 to 685 mm)
Dispenser Height	14 inches (355 mm)	14 to 17 inches (355 to 430 mm)	17 to 19 inches (430 to 485 mm)

604.9.1 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 12 inches (305 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition, except that the water closet shall be centered in the non-wheelchair *accessible* toilet compartment specified in 604.8.2.

604.9.2 Clear Floor Space. Clearance around a water closet shall comply with 604.3.

604.9.3 Height. The height of water closets shall be 11 inches (280 mm) minimum to 17 inches (430 mm) maximum measured to the top of the toilet seat. Seats shall not be sprung to return to a lifted position.

604.9.4 Grab Bars. Grab bars for water closets shall comply with 604.5.

EXCEPTION: If *administrative authorities* require flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, then that grab bar may be split or shifted to the open side of the toilet area.

604.9.5 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.2 and 309.4 and shall be installed 36 inches (915 mm) maximum above the floor.

604.9.6 Dispensers. Toilet paper dispensers shall comply with 309.4 and shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet. 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 1 1/2 inches (38 mm) minimum below the grab bar. Dispensers shall not be of a type that control delivery or that do not allow continuous paper flow.

604.9.7 Toilet Compartments. *Accessible* toilet compartments shall meet the requirements of 604.9.7. Compartments containing more than one plumbing fixture shall comply with 603.

604.9.7.1 Wheelchair Accessible Compartments.

604.9.7.1.1 Size. *Wheelchair accessible* compartments shall be 60 inches (1525 mm) wide minimum measured perpendicular to the side wall, and 59 inches (1500 mm) deep minimum measured perpendicular to the rear wall.

604.9.7.1.2 Doors. Toilet compartment doors, including door hardware, shall comply with 404 except that 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 a minimum of 42 inches (1065 mm). The door shall be hinged 4 inches (100 mm) maximum from the side wall or partition farthest from the water closet. The door shall be self-closing. A door pull complying with 404.2.7 shall be placed on both sides of the door near the latch. Compartment doors shall not swing into the minimum required compartment area.

604.9.7.1.3 Approach. Compartments shall be arranged for left-hand, or for right-hand approach.

604.9.7.1.4 Toe Clearance. In *wheelchair accessible* compartments, the front partition and at least one side partition shall provide a toe clearance of 12 inches (305 mm) minimum above the floor and 6 inches (150 mm) deep minimum beyond the compartment-side face of the partition, exclusive of partition support members.

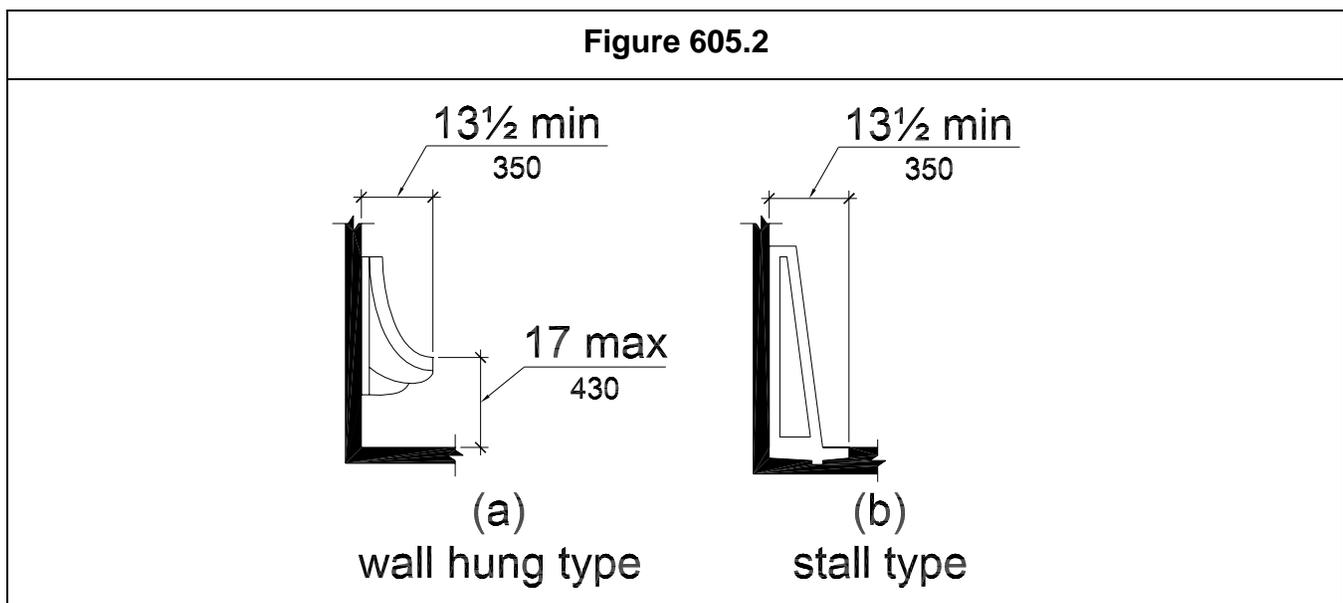
604.9.7.1.5 Grab Bars. Grab bars shall comply with 609. A side-wall grab bar complying with 604.5.1 located on the wall closest to the water closet and a rear-wall grab bar complying with 604.5.2 shall be provided.

604.9.7.2 Non-Wheelchair Accessible Compartments. Non-wheelchair *accessible* compartments shall comply with 604.8.2.

605 Urinals

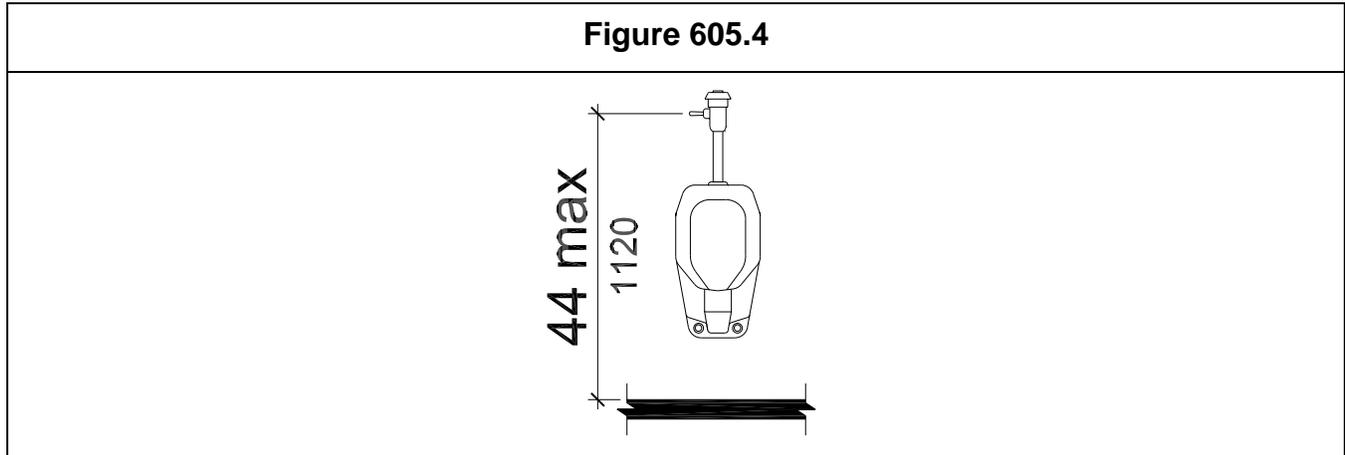
605.1 General. Urinals required to be *accessible* shall comply with 605.

605.2 Height and Depth. Urinals shall be the wall-hung type with the rim 17 inches (430 mm) maximum above the floor or ground or the stall-type. Urinals shall provide a minimum depth of 13 1/2 inches (345 mm) measured from the outer face of the urinal rim to the back of the fixture.



605.3 Clear Floor Space. A clear floor or ground *space* complying with 305 positioned for forward approach shall be provided. This clear *space* shall adjoin or overlap an *accessible route*.

605.4 Flush Controls. Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with 309.4 and shall be 44 inches (1120 mm) maximum above the floor or ground.



606 Lavatories and Sinks

606.1 General. Sinks, lavatory fixtures, vanities and lavatories required to be *accessible* shall comply with 606.

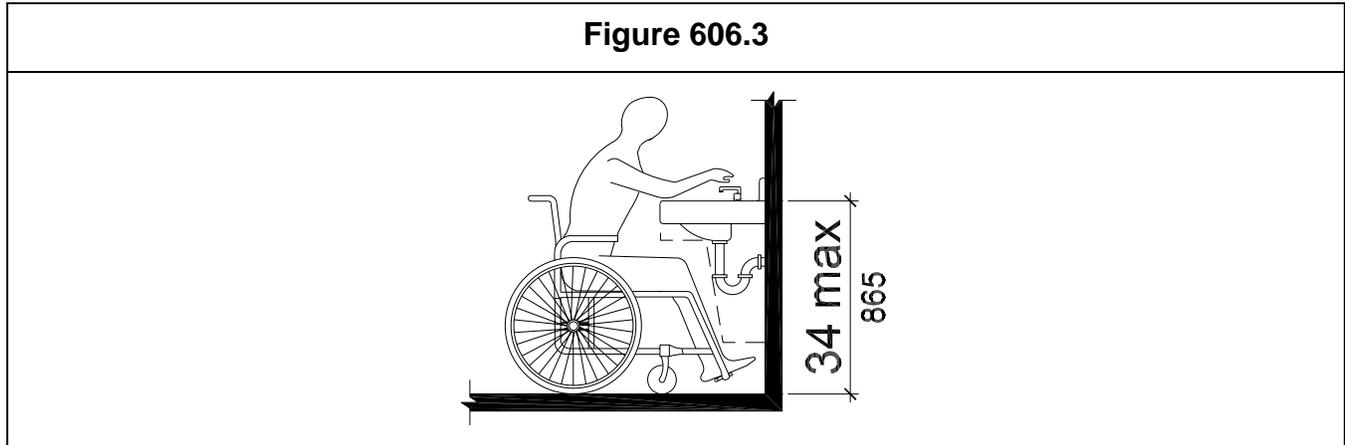
Advisory 606.1

If soap and towel dispensers are provided, they must be located within the reach ranges specified in 308 and should be usable by a person at the *accessible* lavatory.

606.2 Clear Floor Space. A clear floor *space* complying with 305, positioned for forward approach, and knee and toe clearance complying with 306 shall be provided.

- EXCEPTIONS:**
1. The dip of the overflow shall not be considered in determining knee and toe clearances.
 2. The requirement for knee and toe clearance shall not apply to a lavatory in a toilet and bathing facility for a single occupant, accessed only through a private office and not for *common use* or *public use*.
 3. The requirement for knee and toe clearance shall not apply to more than one bowl of a multi-bowl sink.
 4. A knee clearance of 24 inches (610 mm) minimum above the floor or ground shall be permitted at lavatories and sinks used primarily by children ages 6 through 12 where the rim or counter surface is 31 inches (760 mm) maximum above the floor or ground.
 5. A parallel approach shall be permitted in lieu of a forward approach to lavatories and sinks used primarily by children ages 5 and younger.

606.3 Height. Lavatories and sinks shall be installed with the front of the higher of the rim or counter surface 34 inches (865 mm) maximum above the finish floor.



EXCEPTION: This requirement shall not apply to a lavatory in a toilet and bathing *facility* for a single occupant, accessed only through a private office and not for *common use* or *public use*.

606.4 Faucets. Faucets shall comply with 309. Hand-operated, self-closing faucets shall remain open for 10 seconds minimum.

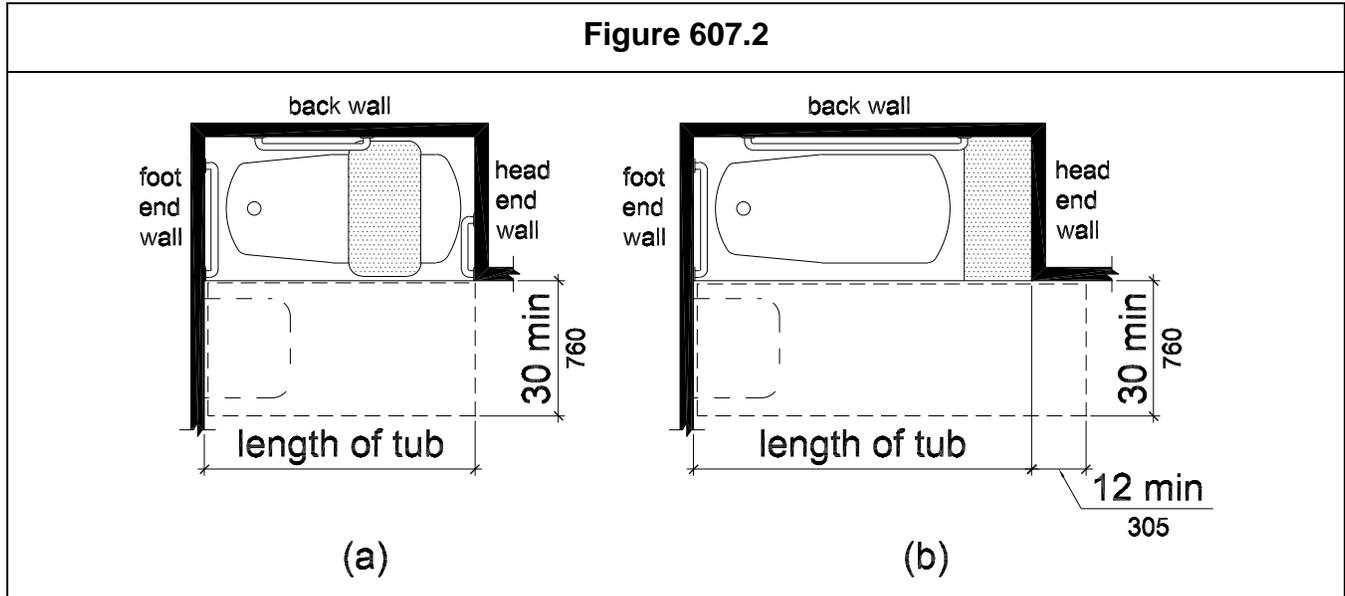
606.5 Exposed Pipes and Surfaces. Water supply and drain pipes under lavatories and sinks shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories and sinks.

607 Bathtubs

607.1 General. Bathtubs required to be *accessible* shall comply with 607.

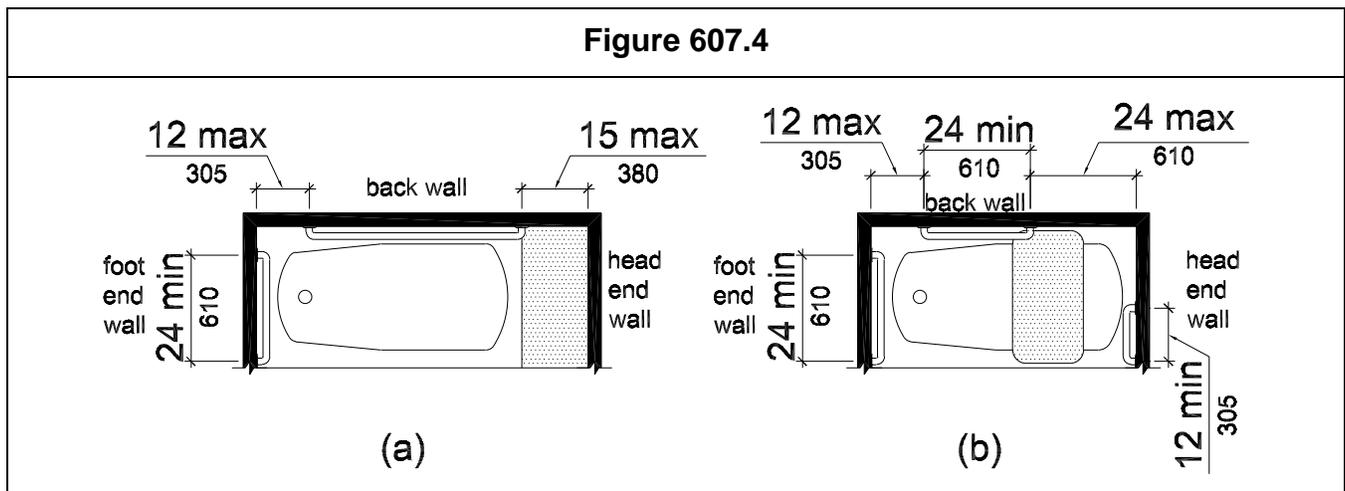
607.2 Clear Floor Space. Clearance in front of bathtubs shall extend the length of the tub and shall be 30 inches (760 mm) wide minimum. A lavatory complying with 606 shall be permitted at the foot end of

the clear floor *space*. Where a permanent seat is provided at the head end of the tub, the clear floor *space* shall extend a minimum of 12 inches (305 mm) beyond the seat.



607.3 Seat. A permanent seat at the head end of the tub or a removable in-tub seat shall be provided. Seats shall comply with 610.

607.4 Grab Bars. Grab bars for bathtubs shall comply with 609 and shall be provided in accordance with 607.4.1 and 607.4.2.

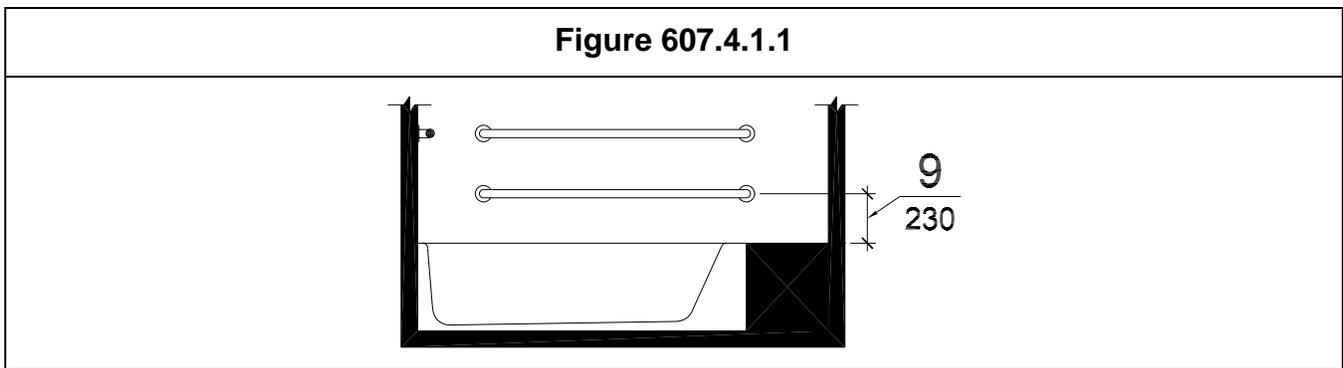


EXCEPTION: Grab bars are not required to be installed in a bathing *facility* for a single occupant accessed only through a private office and not for *common use* or *public use*, provided that

reinforcement has been installed in walls and located so as to permit the installation of such grab bars.

607.4.1 Bathtubs With Permanent Seats. For bathtubs with permanent seats, grab bars shall be provided in accordance with 607.4.1.

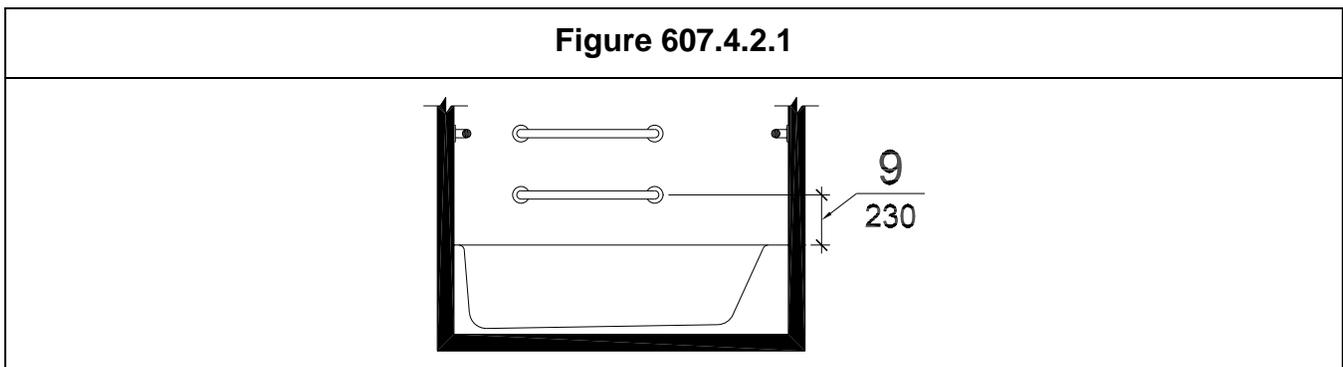
607.4.1.1 Back Wall. Two grab bars shall be installed on the back wall, one located in accordance with 609.3 and the other located 9 inches (230 mm) above the rim of the tub. Each grab bar shall be installed 15 inches (380 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the foot end wall.



607.4.1.2 Foot End Wall. A grab bar 24 inches (610 mm) long minimum shall be installed on the foot end wall at the front edge of the tub.

607.4.2 Bathtubs Without Permanent Seats. For bathtubs without permanent seats, grab bars shall comply with 607.4.

607.4.2.1 Back Wall. Two grab bars shall be installed on the back wall, one located in accordance with 609.3 and other located 9 inches (230 mm) above the rim of the tub. Each grab bar shall be 24 inches (610 mm) long minimum and shall be installed 24 inches (610 mm) maximum from the head end wall and 12 inches (305 mm) maximum from the foot end wall.

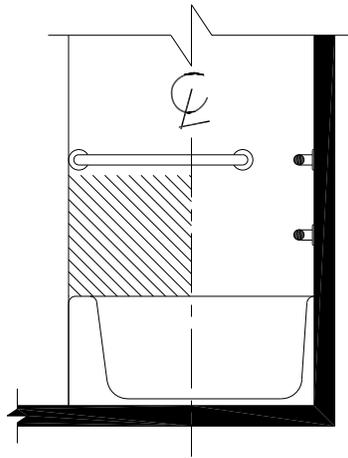


607.4.2.2 Foot End Wall. A grab bar 24 inches (610 mm) long minimum shall be installed on the foot end wall at the front edge of the tub.

607.4.2.3 Head End Wall. A grab bar 12 inches (305 mm) long minimum shall be installed on the head end wall at the front edge of the tub.

607.5 Operable Parts. *Operable parts*, other than drain stoppers, shall be located on an end wall above the tub rim and below the grab bars, and between the front edge of the tub and the mid-point of the width of the tub. *Operable parts* shall comply with 309.4.

Figure 607.5



607.6 Shower Spray Unit and Water. A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed shower head and as a hand-held shower shall be provided. The shower spray unit shall have a water-on and water-off control. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Bathtub/shower spray units shall deliver water that is thermal shock protected to 120°F maximum.

607.7 Bathtub Enclosures. Enclosures for bathtubs shall not obstruct *operable parts* or transfer from *wheelchairs* onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks installed on the rim of the open face of the tub.

608 Shower Compartments

608.1 General. Shower compartments required to be *accessible* shall comply with 608.

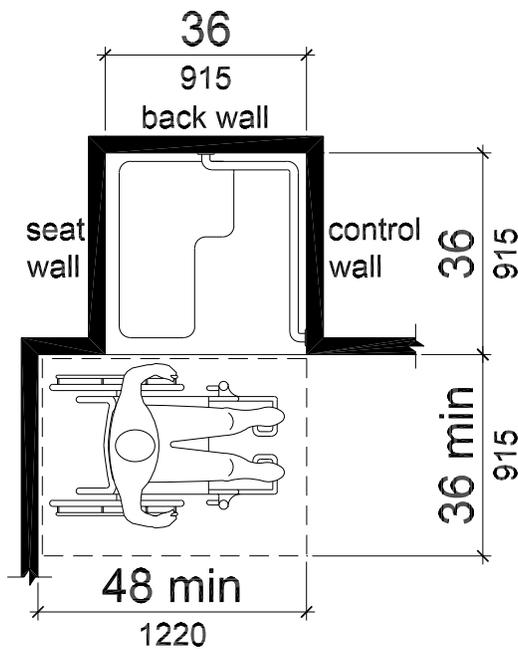
Advisory 608.1

Shower stalls that are 60 inches (1525 mm) wide and have no curb may increase the usability of a bathroom because the shower area provides additional maneuvering *space*.

608.2 Size and Clearances for Shower Compartments.

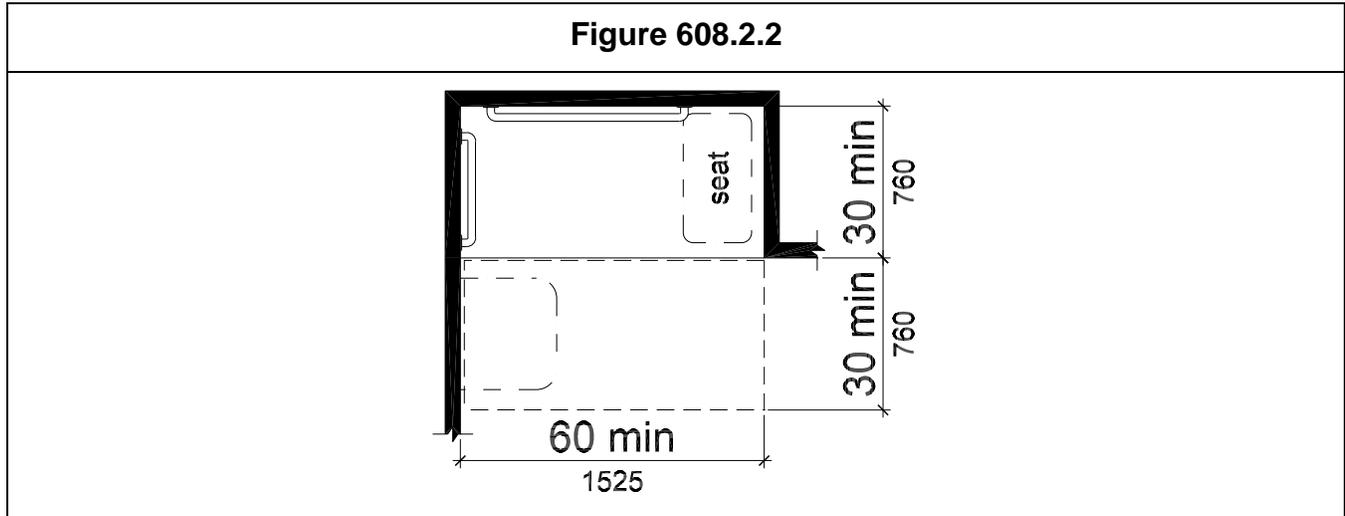
608.2.1 Transfer Type Shower Compartments. Transfer-type shower compartments shall be 36 inches (915 mm) by 36 inches (915 mm) inside finished dimension measured at the centerpoint of opposing sides and shall have a minimum 36 inch (915 mm) wide entry on the face of the shower compartment. Clear floor *space* of 36 inches (915 mm) wide minimum by 48 inches (1220 mm) long minimum measured from the control wall shall be provided.

Figure 608.2.1

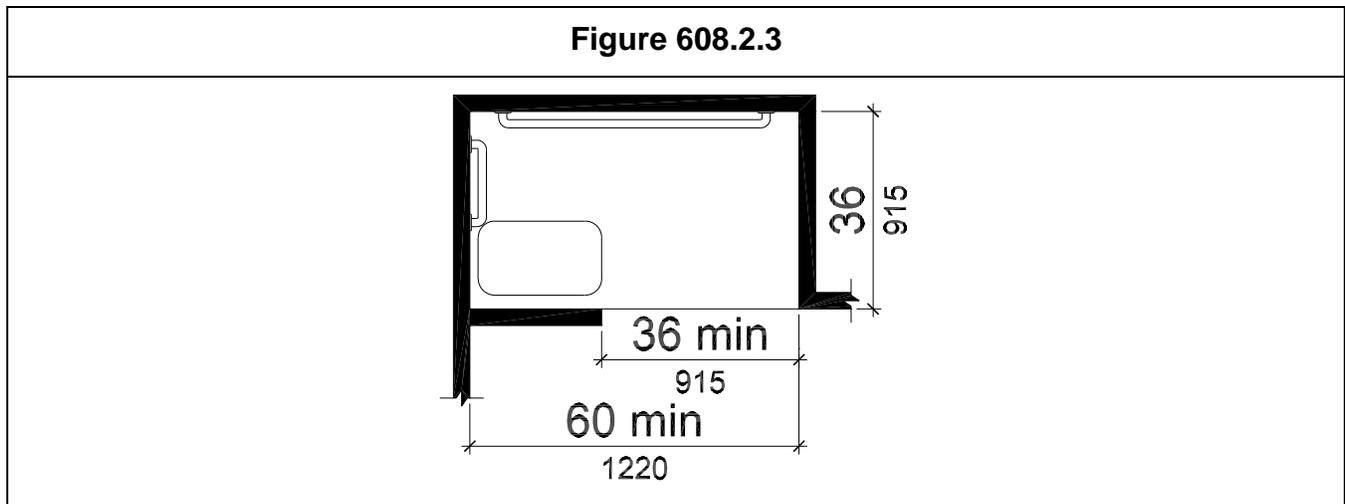


608.2.2 Standard Roll-In Type Shower Compartment. Standard roll-in type shower compartments shall be 30 inches (760 mm) minimum by 60 inches (1525 mm) minimum clear inside dimension measured at the centerpoint of opposing sides and shall have a minimum 60 inches (1525 mm) wide entry on the face of the shower compartment. A 30 inch (760 mm) wide minimum by 60 inch (1525 mm) long minimum clear floor *space* shall be provided adjacent to the open face of the shower compartment. A lavatory complying with 606 shall be permitted at the end of the clear *space*,

opposite the shower compartment end where the seat is installed and opposite the shower compartment side where shower controls are located.



608.2.3 Alternate Roll-In Type Shower Compartment. Alternate roll-in shower compartments shall be 36 inches (915 mm) in width and 60 inches (1220 mm) minimum in depth. A 36 inch (915 mm) wide minimum entry shall be provided on one side of the stall.

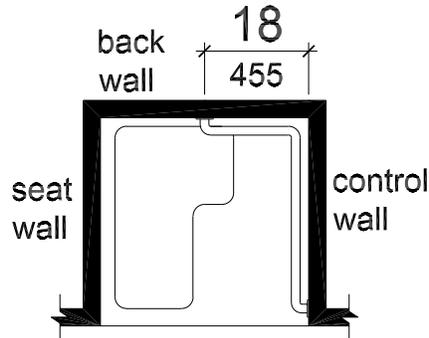


608.3 Grab Bars. Grab bars shall comply with 609 and shall be provided in accordance with 608.3. Where multiple grab bars are used, they shall be installed at the same height.

EXCEPTION: Grab bars are not required to be installed in a shower *facility* for a single occupant, accessed only through a private office and not for *common use* or *public use* provided that reinforcement has been installed in walls and located so as to permit the installation of such grab bars.

608.3.1 Transfer Type Showers. Grab bars shall be extended across the control wall and back wall to a point 18 inches (455 mm) from the control wall.

Figure 608.3.1

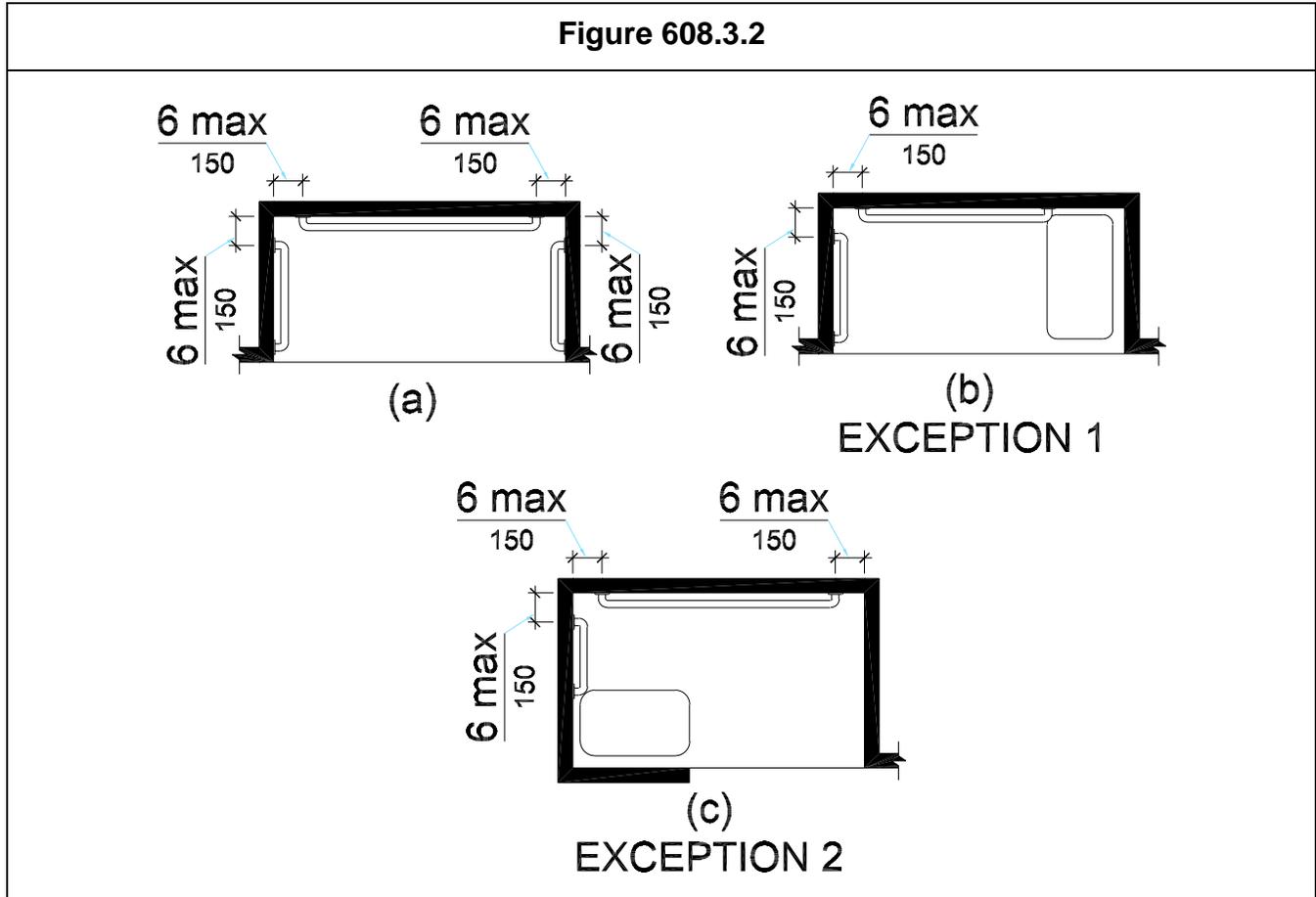


608.3.2 Roll-In Type Showers. Grab bars shall be provided on the three walls of the shower. Grab bars shall be installed 6 inches (150 mm) maximum from the adjacent wall.

EXCEPTIONS: 1. Where a seat is provided in a roll-in type shower, grab bars shall not extend over the seat at the control wall and shall not be located behind the seat.

2. In alternate roll-in type showers, grab bars shall not be required on the side wall opposite the control wall and shall not be located behind the seat.

Figure 608.3.2



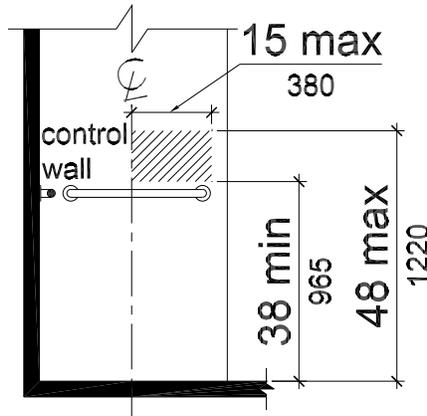
608.4 Seats. An attachable or integral seat shall be provided in transfer-type shower compartments. A folding seat shall be provided in roll-in showers used in *accessible transient lodging* guest rooms. Seats shall comply with 610.

608.5 Operable Parts. Controls and faucets shall comply with 309.4.

608.5.1 Transfer Type Showers. In transfer-type shower compartments controls, faucets, and the shower spray unit shall be installed on the side wall opposite the seat 38 inches (965 mm) minimum

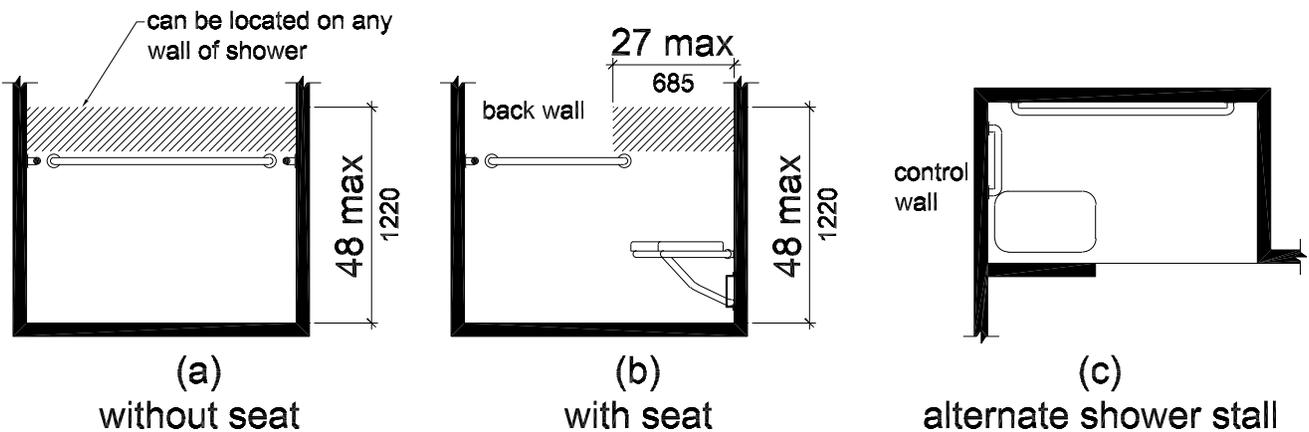
to 48 inches (1220 mm) maximum above the shower floor and shall be located on the control wall 15 inches (380 mm) maximum left or right of the centerline of the seat.

Figure 608.5.1



608.5.2 Roll-in Type Shower. Controls in roll-in type shower compartments shall be located above the grab bar but no higher than 48 inches (1220 mm) above the shower floor. In roll-in type shower compartments with seats, the controls, faucets, and the shower spray unit shall be installed on the wall adjacent to the seat wall and shall be located 27 inches (685 mm) maximum from the seat wall. In alternate roll-in type shower compartments, the shower unit and controls shall be installed on the end wall furthest from the compartment entry.

Figure 608.5.2



Advisory 608.5.2

In roll-in showers without seats, the shower head and *operable parts* can be located on any of the three walls of the shower without adversely affecting accessibility.

608.6 Shower Spray Unit and Water. A shower spray unit with a hose 59 inches (1500 mm) long minimum that can be used both as a fixed shower head and as a hand-held shower shall be provided. The shower spray unit shall have a water-on and water-off control. If an adjustable-height shower head on a vertical bar is used, the bar shall be installed so as not to obstruct the use of grab bars. Shower spray units shall deliver water that is thermal shock protected to 120°F maximum.

608.7 Curbs. Thresholds in shower compartments shall be 1/2 inch (13 mm) high maximum in accordance with 303.

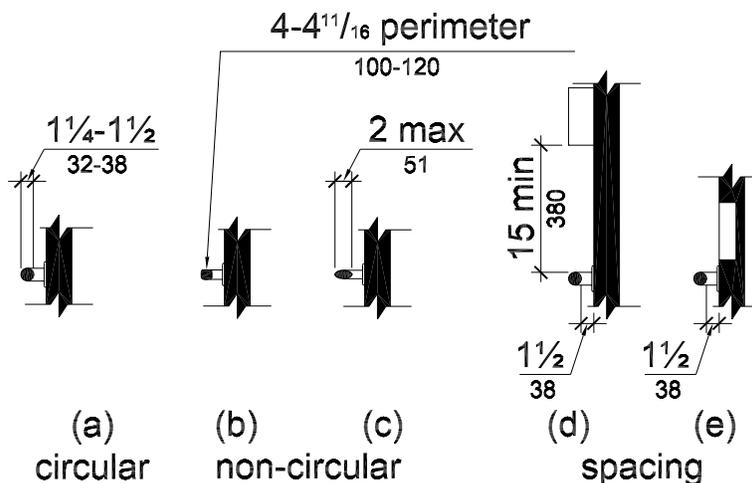
608.8 Shower Enclosures. Enclosures for shower compartments shall not obstruct *operable parts* or obstruct transfer from *wheelchairs* onto shower seats.

609 Grab Bars

609.1 General. Grab bars in *accessible toilet facilities* and bathing *facilities* shall comply with 609.

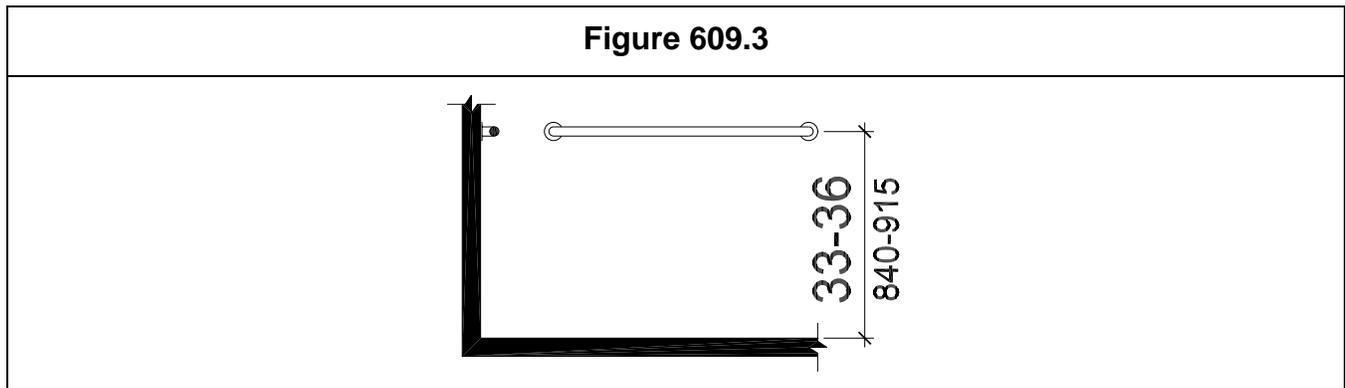
609.2 Size and Spacing of Grab Bars. The diameter of grab bars shall be 1-1/4 inches (32 mm) minimum to 1-1/2 inches (38 mm) maximum. If not round, the shape shall provide equivalent graspability with a maximum cross-section dimension of 2 inches (51 mm) and perimeter dimension of 4 inches (100 mm) minimum and 4-11/16 inches (120 mm) maximum and with edges having a 1/8-inch (3.2 mm) minimum radius. The *space* between the wall and the grab bar shall be 1-1/2 inches (38 mm). The *space* between the grab bar and projecting objects above shall be 15 inches (380 mm) minimum.

Figure 609.2



EXCEPTION: The *space* between the grab bars and shower controls, shower fittings, and other grab bars above shall be 1-1/2 inches (38 mm) minimum.

609.3 Position of Grab Bars. Grab bars shall be installed in a horizontal position, 33 inches (840 mm) minimum to 36 inches (915 mm) maximum above the floor, except that at water closets for *children's use* complying with 604.9, grab bars shall be installed in a horizontal position 18 inches (455 mm) minimum to 27 inches (685 mm) maximum above the floor.



609.4 Surface Hazards. Grab bars and any wall or other surfaces adjacent to grab bars shall be free of sharp or abrasive *elements*. Edges shall have a radius of 1/8 inch (3.2 mm) minimum.

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

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

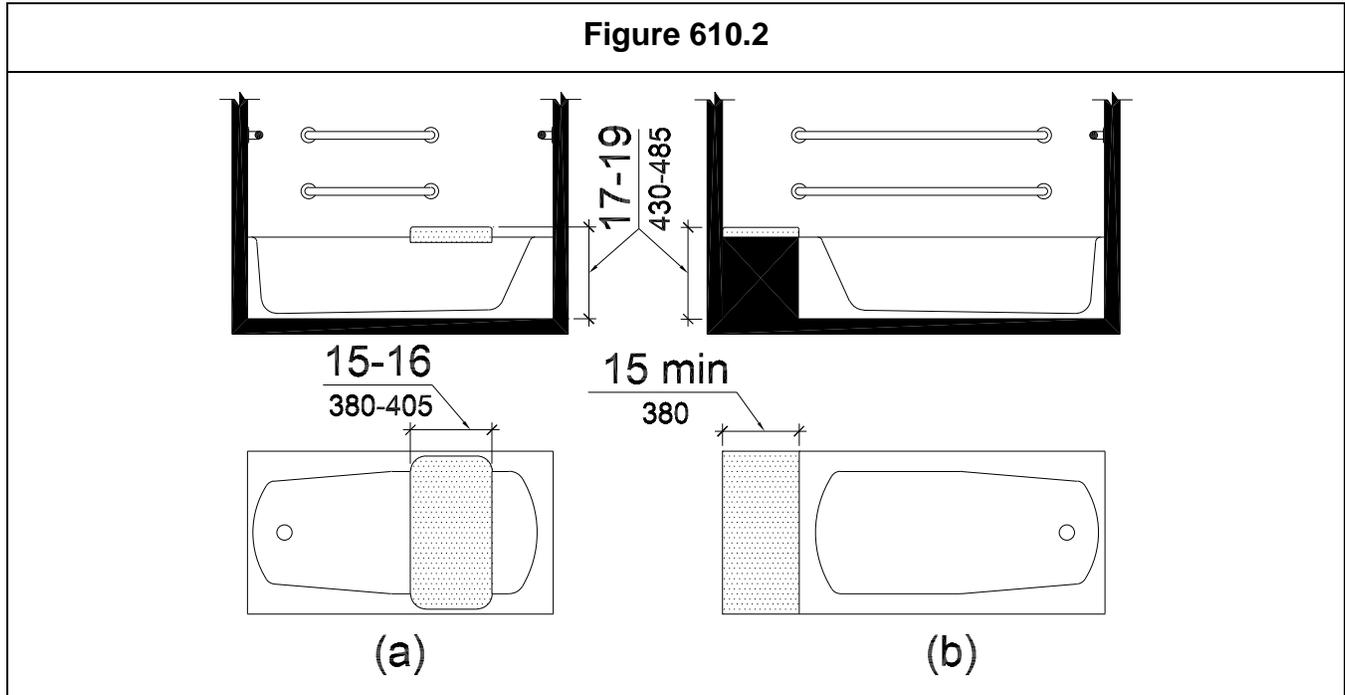
609.7 Structural Strength. Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of 250 lb (1112 N) is applied at any point on the grab bar, fastener, mounting device, or supporting structure.

610 Seats

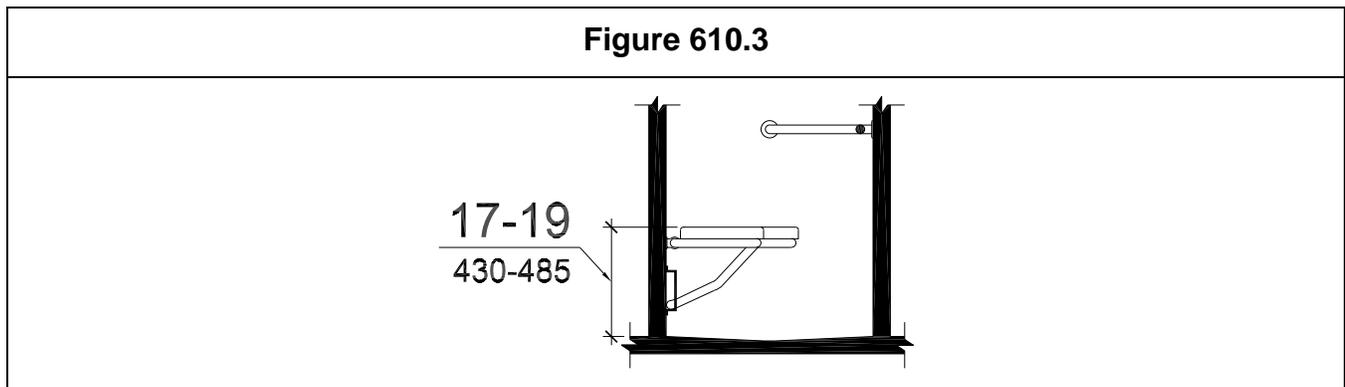
610.1 General. Seats in *accessible* bathtubs and shower compartments shall comply with 610.

610.2 Bathtub Seats. The depth of a removable in-tub seat shall be 15 inches (380 mm) minimum to 16 inches (405 mm) maximum. The seat shall be capable of secure placement. The depth of a permanent

seat at the head end of the bathtub shall be 15 inches (380 mm) minimum. The top of bathtub seats shall be 17 inches (430 mm) minimum to 19 inches (485 mm) maximum above the bathroom floor.

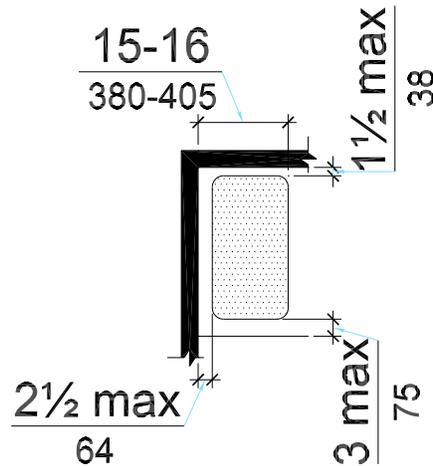


610.3 Shower Compartment Seats. Where a seat is provided in a roll-in shower compartment, it shall be a folding type and shall be installed on the wall adjacent to the controls. Seats shall be L-shaped or rectangular. The top of the seat shall be 17 inches (430 mm) minimum to 19 inches (485 mm) maximum above the bathroom floor. In transfer-type showers, the seat shall extend from the back wall to a point within 3 inches (75 mm) of the compartment entry. In roll-in-type showers, the seat shall be located adjacent to the compartment entry and shall extend from the control wall to a point within 3 inches (75 mm) of the compartment entry.



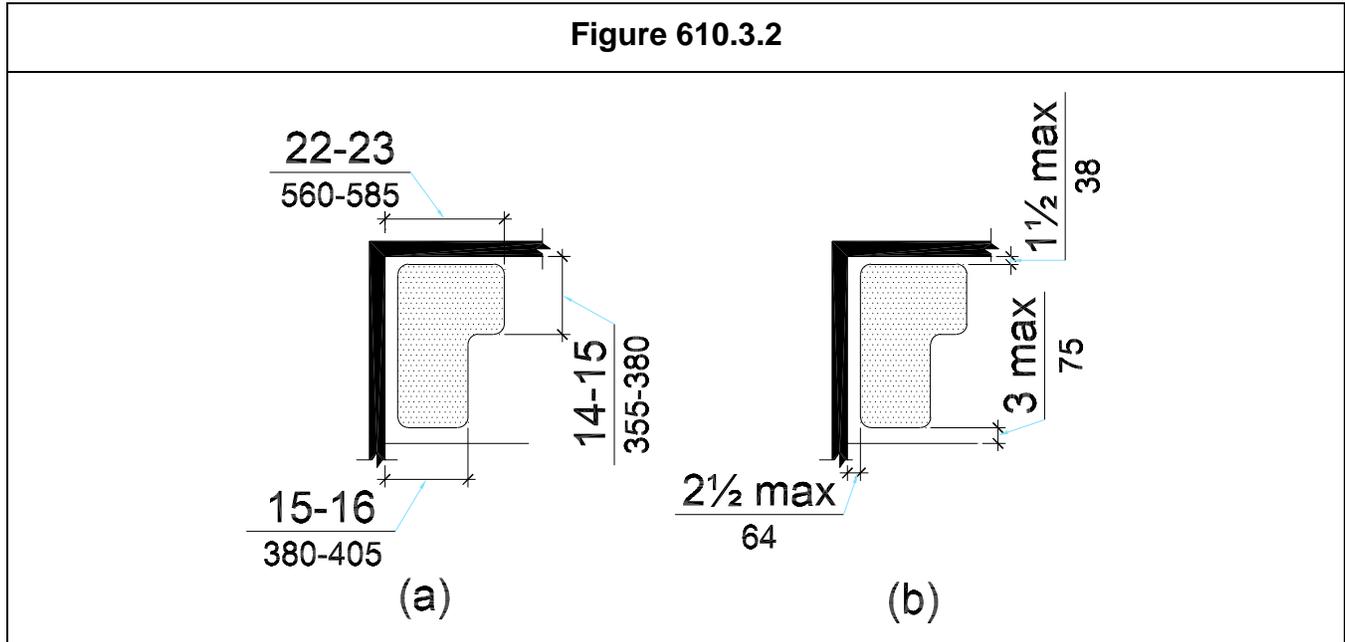
610.3.1 Rectangular Seats. The rear edge of a rectangular seat shall be 2 1/2 inches (64 mm) maximum and the front edge 15 inches (380 mm) minimum to 16 inches (405 mm) maximum from the seat wall. The side edge of the seat shall be 1-1/2 inches (38 mm) maximum from the back wall of a transfer-type shower and 1-1/2 inches (38 mm) maximum from the control wall of a roll-in-type shower.

Figure 610.3.1



610.3.2 L-shaped Seats. The rear edge of an L-shaped seat shall be 2 1/2 inches (64 mm) maximum and the front edge 15 inches (380 mm) minimum to 16 inches (405 mm) maximum from the seat wall. The rear edge of the “L” portion of the seat shall be 1 1/2 inches (38 mm) maximum from the wall and the front edge shall be 14 inches (355 mm) minimum to 15 inches (380 mm)

maximum from the wall. The end of the “L” shall be 22 inches (560 mm) minimum to 23 inches maximum (585 mm) from the main seat wall.



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

611 Laundry Equipment

611.1 General. Washing machines and clothes dryers required to be *accessible* shall comply with 611.

611.2 Clear Floor Space. A clear floor or ground *space* complying with 305 positioned for parallel approach shall be provided. The clear floor or ground *space* shall be centered on the appliance.

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

611.4 Height. Top loading machines shall have the door to the laundry compartment located 34 inches (865 mm) maximum above the floor. Front loading machines shall have the bottom of the opening to the

laundry compartment located 15 inches (380 mm) minimum and 34 inches (865 mm) maximum above the floor.

