

Thresholds at doorways. Thresholds at doorways shall not exceed three-fourths inch (19 mm) in height for exterior sliding doors or one-half inch (13 mm) for other types of doors. Raised thresholds and floor level changes at accessible doorways shall be beveled with a slope no greater than 1:2. See part 1341.0426, subpart 2.

1341.0442, Subpart 9. ADAAG 4.13.9: Door hardware. Handles, pulls, latches, locks, and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. When sliding doors are fully open, operating hardware shall be exposed and usable from both sides. Hardware required for accessible door passage shall be mounted no higher than 48 inches (1,220 mm) above the finished floor.

EXCEPTION: Locking mechanisms not intended for use by the general public.

1341.0442, Subpart 10. ADAAG 4.13.10: Door closers. If a door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70 degrees, the door will take at least three seconds to move to a point three inches (75 mm) from the latch, measured to the leading edge of the door.

1341.0442, Subpart 11. ADAAG 4.13.11: Door opening force. The maximum force for pushing or pulling open a door shall be as described in items A and B.

1341.0442, Subpart 11, Item A. ADAAG 4.13.11(1): Fire doors shall have the minimum opening force allowable by the exiting requirements of chapter 10 of the UBC.

1341.0442, Subpart 11, Item B. ADAAG 4.13.11(2): Other doors include:

1341.0442, Subpart 11, Item B, Subitem (1) ADAAG 4.13.11(2)(b): interior hinged doors, five pound-force (22.2 Newton); and

1341.0442, Subpart 11, Item B, Subitem (2) ADAAG 4.13.11(2)(c): sliding or folding doors, five pound-force (22.2 Newton).

The forces in subitems (1) and (2) do not apply to the force required to retract latch bolts or disengage other devices that may hold the door in a closed position.

1341.0442, Subpart 12. ADAAG 4.13.12: Automatic doors and power-assisted doors. An automatic door shall comply with ANSI/BHMA

A156.10. Slow opening, low-powered, automatic doors shall comply with ANSI A156.19. The doors shall not open to back check faster than three seconds and shall require no more than 15 pound-force (66.6 Newton) to stop door movement. If a power-assisted door is used, its door-opening force shall comply with subpart 11 and its closing shall conform to the requirements in ANSI A156.19.

Push-button control switches shall have a three-inch (75-mm) minimum dimension measured at at least one point, such as diagonal, diameter, or one side. Control buttons shall be mounted between 30 inches (760 mm) and 36 inches (915 mm) above the finished floor. Control buttons shall be located at least 30 inches (760 mm) from the pull side arc of the swinging door.

1341.0442, Subpart 13. Door surface. The bottom ten inches (250 mm) on the push side of doors shall be a smooth uninterrupted surface.

EXCEPTION: Doors with automatic openers.

1341.0444 ADAAG 4.14: ENTRANCES.

1341.0444, Subpart 1. ADAAG 4.14.1:

Minimum number. Entrances required to be accessible by part 1341.0401 shall be part of an accessible route complying with part 1341.0422. The entrances shall be connected by an accessible route to public transportation stops, to accessible parking and passenger loading zones, and to public streets or sidewalks if available. See part 1341.0422, subpart 2, item A. They shall also be connected by an accessible route to all nonexempt spaces or elements within the building or facility.

1341.0444, Subpart 2. ADAAG 4.14.2: Service entrances. A service entrance shall not be the sole accessible entrance unless it is the only entrance to a building or facility, for example, in a factory or garage.

1341.0446 ADAAG 4.15: DRINKING FOUNTAINS AND WATER COOLERS.

1341.0446, Subpart 1. ADAAG 4.15.1:

Minimum number. Drinking fountains or water coolers required to be accessible by part 1341.0401 shall comply with this part.

1341.0446, Subpart 2. ADAAG 4.15.2: Spout height. Spouts shall be no higher than 36 inches (915 mm), measured from the floor or ground surface to the spout outlet. See Figure 27(a).





Technical drawing of the M1000 chair showing dimensions and a person sitting in it. The drawing includes the following dimensions and labels:

- Overall width: 48 min, 1220
- Seat width: 17-19, 430-485
- Seat height: 30 min, 760
- Backrest height: 24 max, 610

Technical drawing of a rectangular object. The overall dimensions are 48 min (height) and 760 (width). A detail view of a small rectangular feature on the right side is shown, with a dimension of 30 min (width). The drawing includes a dashed line indicating a hidden edge or feature.

Technical drawing of a fountain basin. The drawing shows a rectangular basin with a central vertical channel. Dimensions are indicated: 30 min (minimum) for the width of the central channel, 760 for the total width, and 48 min (minimum) for the depth, with a total depth of 1220. A note with an arrow pointing to the basin area states: "not to exceed fountain depth".

1341-45

1341.0446, Subpart 5. ADAAG 4.15.5: Clearances.

1341.0446, Subpart 5, Item A. ADAAG 4.15.5(1): Wall-mounted and post-mounted cantilevered units shall have a clear knee space between the bottom of the apron and the floor or ground at least 27 inches (685 mm) high, 30 inches (760 mm) wide, and 17 inches (430 mm) to 19 inches (485 mm) deep. See Figures 27(a) and (b) in subpart 2. The units shall also have a minimum clear floor space 30 inches (760 mm) by 48 inches (1,220 mm) centered on the unit to allow a person in a wheelchair to approach the unit facing forward.

EXCEPTION: The clearances in this item shall not be required at units used primarily by children ages 12 and younger where clear floor space for a parallel approach complying with part 1341.0420, subpart 4, is provided and where the spout is no higher than 30 inches (760 mm), measured from the floor or ground surface to the spout outlet.

1341.0446, Subpart 5, Item B. ADAAG 4.15.5(2): Free-standing or built-in units not having a clear space under them shall have a clear floor space at least 30 inches (760 mm) by 48 inches (1,220 mm) that allows a person in a wheelchair to make a parallel approach to the unit. See Figures 27(c) and (d) in subpart 2. This clear floor space shall comply with part 1341.0420, subpart 4, and be centered on the unit.

1341.0448 ADAAG 4.16: WATER CLOSETS.
Subpart 1. ADAAG 4.16.1: General. Accessible water closets shall comply with part 1341.0448, subparts 2 to 6.

EXCEPTION: Water closets used primarily by children ages 12 and younger are permitted to comply with part 1341.0448, subpart 7.

1341.0448, Subpart 2. ADAAG 4.16.2: Clear

floor space. Clear floor space for water closets not in stalls shall comply with Figure 28. Clear floor space may be arranged to allow either a left-handed or right-handed approach.

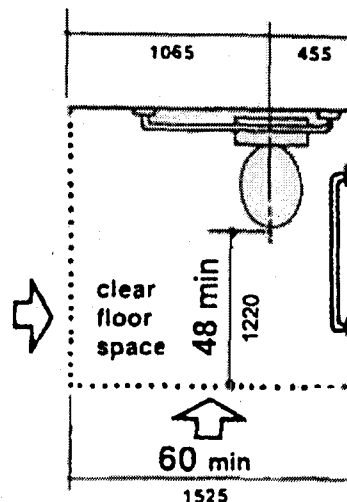


Fig. 28
Clear Floor Space at Water Closets

1341.0448, Subpart 3. ADAAG 4.16.3: Height. The height of water closets shall be 17 inches (430 mm) to 19 inches (485 mm), measured to the top of the toilet seat. See Figure 29(b). Seats shall not be sprung to return to a lifted position.

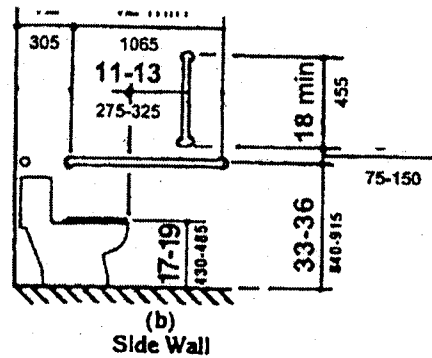
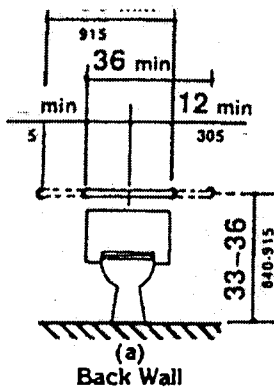
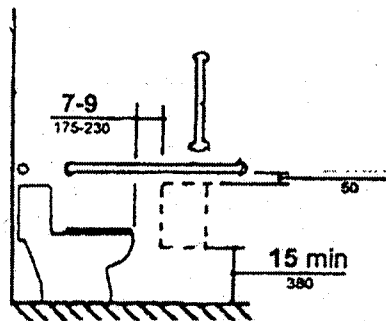


Fig. 29
Grab Bars at Water Closets



Surface mounted dispenser

Fig. 29(c)
Toilet Paper Dispenser

1341.0448, Subpart 4. ADAAG 4.16.4: Grab bars. Grab bars for water closets not located in stalls shall comply with Figure 29 in subpart 3 and part 1341.0468. The grab bar behind the water closet shall be a minimum of 36 inches (915 mm).

EXCEPTION: In nursing home and boarding care resident rooms required to be accessible, an L-shaped grab bar with each leg at least 18 inches (455 mm) in length shall be provided on the side wall. The vertical portion of the grab bar must be mounted 12 inches (305 mm) past the front edge of the water closet with the horizontal portion extending toward the rear wall at a height of ten inches (252 mm) above the toilet seat.

1341.0448, Subpart 5. ADAAG 4.16.5: Flush controls. Flush controls shall be hand-operated or

automatic and shall comply with part 1341.0470, subpart 4. Hand-operated flush controls shall be mounted on the wide side of toilet areas no more than 44 inches (1,120 mm) above the floor.

1341.0448, Subpart 6. ADAAG 4.16.6: Dispensers. Toilet paper dispensers shall be installed within reach, as shown in Figure 29(c) in subpart 3, below the horizontal grab bar with the leading edge of the dispenser seven inches (180 mm) to nine inches (230 mm) in front of the water closet. The outlet of the dispenser shall be located a minimum of 15 inches (380 mm) above the floor with at least two inches (50 mm) of clearance between the top of the dispenser and the horizontal grab bar.

EXCEPTION: In nursing home and boarding care resident rooms required to be accessible, the toilet paper dispensers must be centered

between 19 inches (485 mm) to 25 inches (635 mm) above the floor, and six inches (150 mm) to 12 inches (305 mm) in front of the seat.

Dispensers that control delivery, or that do not permit continuous paper flow, shall not be used.

1341.0448, Subpart 7. Water closets for children. Water closets used primarily by children ages 12 and younger shall comply with part 1341.0448, subpart 7, as permitted by part 1341.0448, subpart 1.

1341.0448, Subpart 7, Item A. Clear floor space for water closets not in stalls shall comply with Figure 28 in subpart 2 except that the centerline of water closets shall be a minimum of 12 inches (305 mm) to a maximum of 18 inches (455 mm) from the side wall or partition. Clear floor space may be arranged to allow either a left-hand or right-hand approach.

1341.0448, Subpart 7, Item B. The height of water closets shall be a minimum of 11 inches (280 mm) to a maximum of 17 inches (430 mm), measured to the top of the toilet seat. Seats shall not be sprung to return to a lifted position.

1341.0448, Subpart 7, Item C. Grab bars for water closets shall comply with Figure 29 in subpart 3 and part 1341.0468, except that grab bars shall be mounted a minimum of 18 inches (455 mm) to a maximum of 27 inches (685 mm) above the finished floor, measured to the grab bar centerline. The grab bar behind the water closet shall be a minimum of 36 inches (915 mm).

EXCEPTION: If flush controls for flush valves are located in a position that conflicts with the location of the rear grab bar, then that grab bar may be split or, at water closets with a centerline placement below 15 inches (380 mm), a rear grab bar a minimum of 24 inches (610 mm) on the open side of the toilet area shall be permitted.

1341.0448, Subpart 7, Item D. Flush controls shall be hand-operated or automatic and shall comply with part 1341.0470, subpart 4. Hand-operated flush controls shall be mounted on the wide side of the toilet

area no more than 36 inches (915 mm) above the floor.

1341.0448, Subpart 7, Item E. Toilet paper dispensers shall be installed a minimum of 14 inches (355 mm) to a maximum of 19 inches (485 mm) above the finished floor, measured to the dispenser centerline. The outlet of the dispenser shall be located below the horizontal grab bar with at least two inches (50 mm) of clearance between the top of the dispenser and the horizontal grab bar. Dispensers that control delivery, or that do not permit continuous paper flow, shall not be used.

1341.0450 ADAAG 4.17: TOILET STALLS.

1341.0450, Subpart 1. ADAAG 4.17.1:

Location. Accessible toilet stalls shall be on an accessible route and shall meet the requirements of part 1341.0450, subparts 2 to 6.

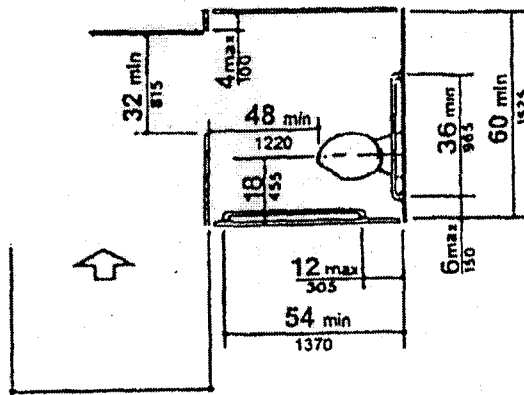
EXCEPTION: Toilet stalls used primarily by children ages 12 and younger shall be permitted to comply with subpart 7.

1341.0450, Subpart 2. ADAAG 4.17.2: Water closets. Water closets in accessible stalls shall comply with part 1341.0448.

1341.0450, Subpart 3. ADAAG 4.17.3: Size and arrangement. The size and arrangement of the side transfer toilet stall shall comply with Figure 30(a). Arrangements shown for side transfer toilet stalls may be reversed to allow either a left-hand or right-hand approach. Additional stalls shall be provided in conformance with part 1341.0460, subpart 4.

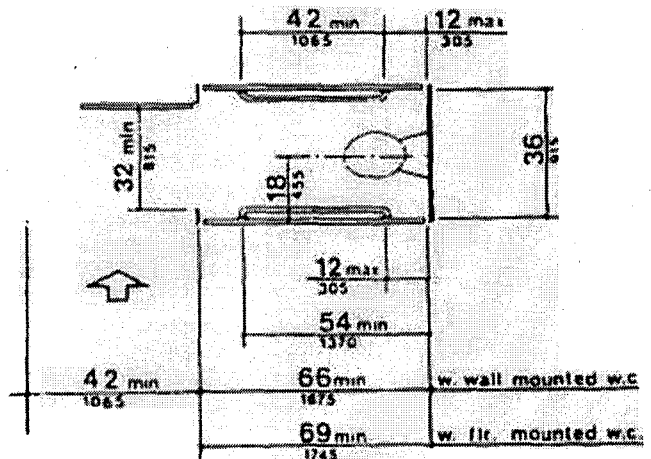
EXCEPTION: In instances of alteration work where provision of a side transfer stall as shown in Figure 30(a) is technically infeasible or where plumbing code requirements prevent combining existing stalls to provide space, the requirements of part 1341.0411, subpart 3, item E, shall be followed.





42 min latch
approach only,
other approaches
48 min

(a)
Side Transfer Stall



(b)
Ambulatory Stall

Fig. 30
Toilet Stalls

1341.0450, Subpart 4. ADAAG 4.17.4: Toe clearances. In side transfer stalls, the front partition and at least one side partition shall provide a toe clearance of at least nine inches (230 mm) above the floor. If the depth of the stall is greater than 60 inches (1,525 mm), then the toe clearance is not required.

1341.0450, Subpart 5. ADAAG 4.17.5: Doors. Toilet stall doors, including door hardware, shall comply with part 1341.0442. If the toilet stall approach is from the latch side of the stall door, clearance between the door side of the stall and any obstruction may be reduced to a minimum of 42 inches (1,065 mm) as shown in Figures 30(a) and (b) in subpart 3. If the door opens into the stall, a clear floor space complying with part 1341.0420, subpart 4, item A, which is clear of the swing of the door must be provided within the stall.

1341.0450, Subpart 6. ADAAG 4.17.6: Grab bars. Grab bars complying with the length and positioning shown in Figure 29 in part 1341.0448, subpart 3, and Figures 30(a) and (b) in subpart 3 shall be provided. Grab bars may be mounted with any desired method as long as they have a gripping surface at the locations shown and do not obstruct the required clear floor area. Grab bars shall comply with part 1341.0468.

1341.0450, Subpart 7. Toilet stalls for children. Toilet stalls used primarily by children ages 12 and younger shall comply with this subpart as permitted by subpart 1.

1341.0450, Subpart 7, Item A. Water closets in

accessible stalls shall comply with part 1341.0448, subpart 7.

1341.0450, Subpart 7, Item B. The size and arrangement of the side transfer toilet stall shall comply with subpart 3, except that the centerline of water closets shall be a minimum of 12 inches (305 mm) to a maximum of 18 inches (455 mm) from the side wall or partition. Ambulatory stalls complying with Figure 30(b) in subpart 3 may be provided where permitted by subpart 3.

1341.0450, Subpart 7, Item C. In side transfer stalls, the front partition and at least one side partition shall provide a toe clearance of at least 12 inches (305 mm) above the finished floor.

1341.0450, Subpart 7, Item D. Toilet stall doors shall comply with subpart 5.

1341.0450, Subpart 7, Item E. Grab bars shall comply with subpart 6 and the length and positioning shown in Figures 30(a) and (b) subpart 3, except that grab bars shall be mounted a minimum of 18 inches (455 mm) to a maximum of 27 inches (685 mm) above the finished floor, measured to the grab bar centerline.

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, at water closets with a centerline placement below 15 inches (380 mm), a rear grab bar a minimum of 24 inches (610 mm) on the open side of the toilet area shall be permitted.

1341.0452 ADAAG 4.18: URINALS.

1341.0452, Subpart 1. ADAAG 4.18.1:

General. Accessible urinals shall comply with this part.

1341.0452, Subpart 2. ADAAG 4.18.2: Height.

Urinals shall be stall-type or wall-hung with an elongated rim at a maximum of 17 inches (430 mm) above the finished floor.

1341.0452, Subpart 3. ADAAG 4.18.3: Clear floor space. A clear floor space 30 inches (760 mm) by 48 inches (1,220 mm) shall be provided in front of urinals to allow forward approach. The clear space shall be centered on the urinal, shall adjoin or overlap an accessible route, and shall comply with part 1341.0420, subpart 4. Urinal shields that do not extend beyond the front edge of the urinal rim may be provided with 29 inches (735 mm) of clearance between them.

1341.0452, Subpart 4. ADAAG 4.18.4: Flush controls. Flush controls shall be hand-operated or automatic, shall comply with part 1341.0470, subpart 4, and shall be mounted no more than 44 inches (1,120 mm) above the finished floor.

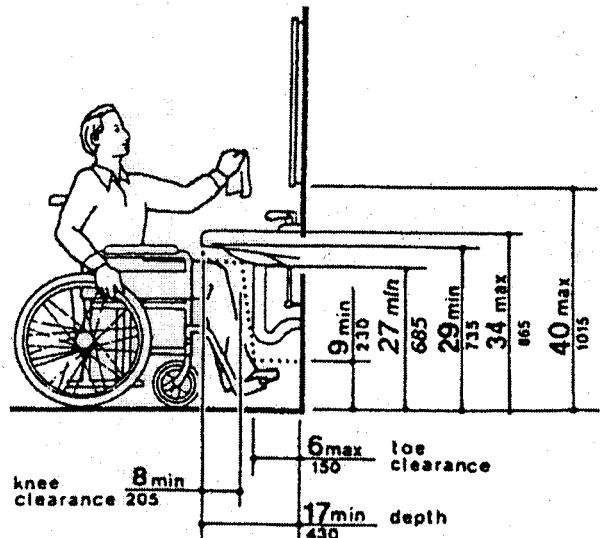


Fig. 31
Lavatory Clearances

1341.0454 ADAAG 4.19: LAVATORIES AND MIRRORS.

1341.0454, Subpart 1. ADAAG 4.19.1:

General. The requirements of this part apply to lavatory fixtures, vanities, and built-in lavatories.

1341.0454, Subpart 2. ADAAG 4.19.2: Height and clearances. Lavatories shall be mounted with the rim or counter surface no higher than 34 inches (865 mm) above the finished floor. A clearance of at least 29 inches (735 mm) shall be provided above the finished floor to the bottom of the apron. Knee and toe clearance shall comply with Figure 31.

EXCEPTION 1: Lavatories used primarily by children ages six through 12 are permitted to have an apron clearance and a knee clearance a minimum of 24 inches (610 mm) high, provided that the rim or counter surface is no higher than 31 inches (760 mm).

EXCEPTION 2: Lavatories used primarily by children ages five and younger are not required to meet the clearances in this subpart if clear floor space for a parallel approach complying with part 1341.0420, subpart 4, is provided that is centered on the lavatory.

1341.0454, Subpart 3. ADAAG 4.19.3: Clear floor space. A clear floor space 30 inches (760 mm) by 48 inches (1,220 mm) complying with part 1341.0420, subpart 4, shall be provided in front of a lavatory to allow forward approach. The clear floor space shall be centered on the lavatory, shall adjoin or overlap an accessible route, and shall extend a maximum of 19 inches (485 mm) underneath the lavatory. See Figure 32.

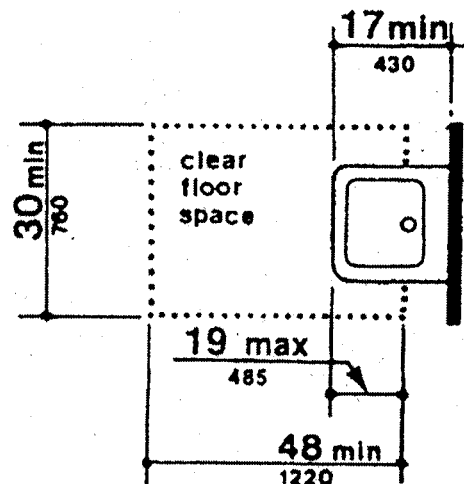


Fig. 32
Clear Floor Space at Lavatories

1341.0454, Subpart 4. ADAAG 4.19.4:
Exposed pipes and surfaces. Hot water and drain pipes under lavatories shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories.

1341.0454, Subpart 5. ADAAG 4.19.5:
Faucets. Faucets shall comply with part 1341.0470, subpart 4, and shall have their operating mechanisms no more than 20 inches (510 mm) from the front edge of the lavatory or counter. Lever-operated, push-type, and electronically-controlled mechanisms are examples of acceptable designs. If self-closing valves are used, the faucet shall remain open for at least ten seconds. Self-closing valves shall not be the type that require an individual to reach forward and push down to activate the mechanism.

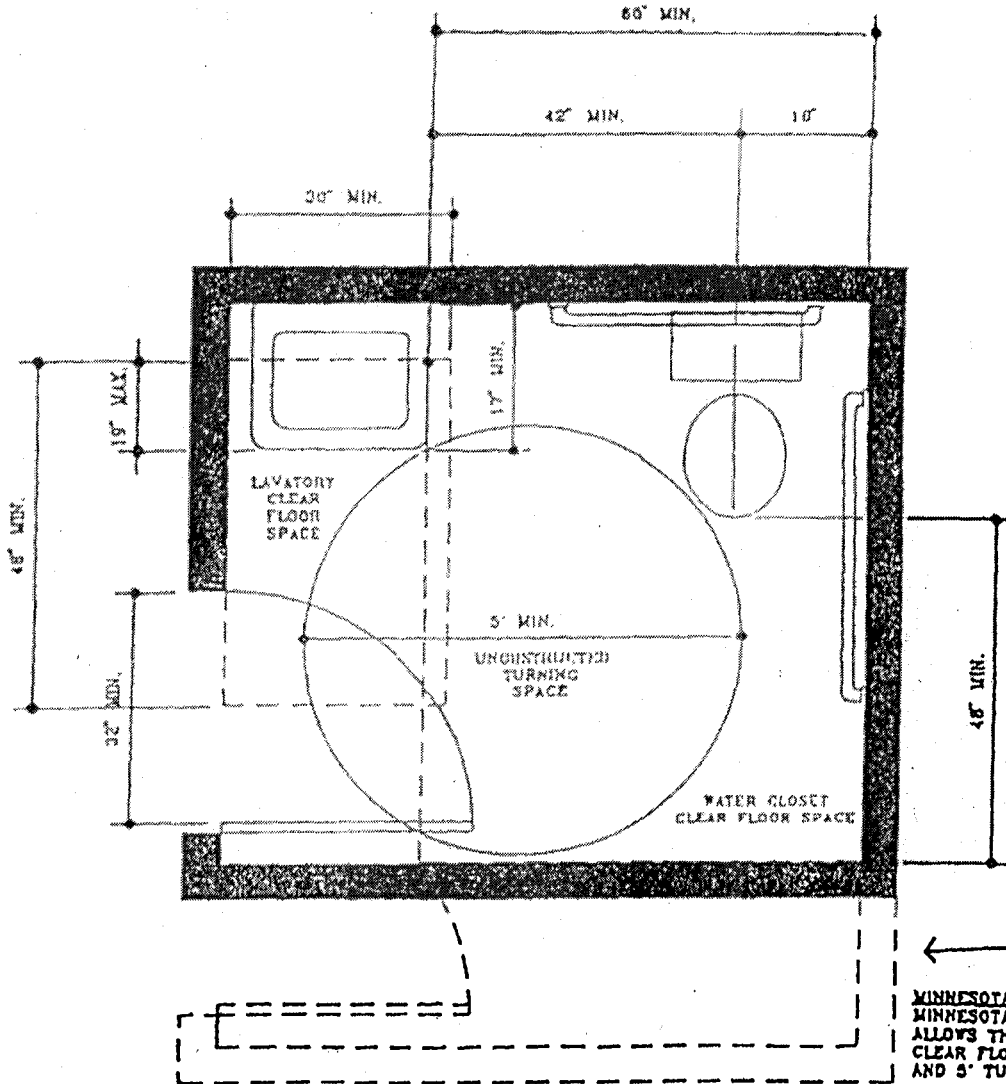
1341.0454, Subpart 6. ADAAG 4.19.6: Mirrors. Mirrors shall be mounted with the bottom edge of the reflecting surface no higher than 40 inches (1,015 mm) above the finished floor. See Figure 31 in subpart 2.

EXCEPTION: In nursing home and boarding

care resident rooms required to be accessible, the bottom of the mirror shall be mounted no more than 36 inches (915 mm) above the floor with the top of the mirror at least 66 inches (1,675 mm) above the floor, or an angled mirror shall be provided that achieves the same result.

MINIMUM CLEAR FLOOR SPACE AT ACCESSIBLE TOILET ROOMS

MINNESOTA STATE BUILDING CODE - MINNESOTA RULES CHAPTER 1340
AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES



MINNESOTA STATE BUILDING CODE
MINNESOTA RULES CHAPTER 1340
ALLOWS THE DOOR SWING TO OVERLAP
CLEAR FLOOR SPACE AT FIXTURES
AND 5' TURNING RADIUS.

THE AMERICANS WITH DISABILITIES ACT
ACCESSIBILITY GUIDELINES ALLOWS
THE DOOR SWING TO OVERLAP THE 5' TURN
RADIUS, BUT DOES NOT ALLOW THE DO
SWING TO OVERLAP THE CLEAR FLOOR
SPACE AT FIXTURES

NOTES:

AN UNOBSTRUCTED TURNING SPACE SHALL BE PROVIDED WITHIN THE ACCESSIBLE TOILET ROOM. AN UNOBSTRUCTED TURNING SPACE FOR A WHEELCHAIR TO MAKE A 180-DEGREE TURN IS A CLEAR SPACE OF 60" IN DIAMETER OR A T-SHAPED SPACE (REFER TO ADAAG FIG. 3(b))

A CLEAR FLOOR SPACE OF 30" X 48" SHALL BE PROVIDED IN FRONT OF THE LAVATORY TO ALLOW FOR A FORWARD APPROACH. SUCH CLEAR FLOOR SPACE SHALL EXTEND A MAXIMUM OF 19" UNDERNEATH THE LAVATORY.

CLEAR FLOOR SPACE FOR WATER CLOSETS SHALL BE 48" IN FRONT OF THE WATER CLOSET AND 42" FROM THE CENTER LINE OF THE WATER CLOSET ON THE SIDE NOT ADJACENT TO THE WALL.

THE CLEAR FLOOR SPACE AT FIXTURES AND CONTROLS, THE ACCESSIBLE ROUTE, AND THE UNOBSTRUCTED TURNING SPACE MAY OVERLAP.