Figure 1. Minimum Clear Width for Single Wheelchair
The minimum clear passage width as pictured for a single wheelchair shall be 36
inches minimum along an accessible route but can be reduced to 32 inches minimum
at a point for a maximum depth of 24 inches such as at a doorway.
www.access-board.gov/adaag/html/figures/fig1.html

Figure 2. Minimum Clear Width for Two Wheelchairs
The minimum clear width for passage of two wheelchairs is shown to be 60 inches minimum. www.access-board.gov/adaag/html/figures/fig2.html

Figure 3. Wheelchair Turning Space illustrated in two pictures.

Figure 3a. Wheelchair Turning Space is shown to be 60 inches Diameter Space www.access-board.gov/adaag/html/figures/fig3a.html

Figure 3b. Wheelchair Turning Space in a T-shaped Space for 180 degree turns The T-shape space is shown as 36 inches wide at the top or entrance and a stem within a 60 inch by 60 inch square for maneuverability.

www.access-board.gov/adaag/html/figures/fig3b.html

Figure 4. Minimum Floor Space for Wheelchairs illustrate in four pictures.

Figure 4a. Clear Floor Space is shown by a person sitting in a wheelchair to be 30 by 48 inches minimum.

www.access-board.gov/adaag/html/figures/fig4a.html

Figure 4b. Forward Approach by a person in a wheelchair in a 30 by 48 inch space accessing a phone bank www.access-board.gov/adaag/html/figures/fig4b.html

Figure 4c. Parallel Approach is shown by a person in a wheelchair, 30 x 48 space www.access-board.gov/adaag/html/figures/fig4c.html

Figure 4d. Clear Floor Space in Alcoves (A 3 walled areas)
For a forward approach by a person in a wheelchair, the depth of the alcove is equal to or less than 24 inches, the required clear floor space is 30 inches by 48 inches.

www.access-board.gov/adaag/html/figures/fig4d.html

For a side approach by a person in a wheelchair, where the depth of the alcove is equal to or less than 15 inches, the required clear floor space is 30 inches by 48 inches. www.access-board.gov/adaag/html/figures/fig4d.html

Figure 4e. Additional Maneuvering Clearance for Alcoves (A 3 walled area) For a front approach, if the depth of the alcove is greater than 24 inches, then in addition to the 30 inch width, a maneuvering clearance of 6 inches in width is required.

For a side approach, where the depth of the alcove is greater than 15 inches, then in addition to the 48 inch length, an additional maneuvering clearance of 12 inches in length is required. www.access-board.gov/adaag/html/figures/fig4e.html

Figure 5. Forward Reach, 4 pictures of forward reach for persons in wheelchairs

Figure 5a. High Forward Reach Limit

The forward reach range shown in the picture is shown as a 48 inch height maximum and a 15 inch reach maximum

www.access-board.gov/adaag/html/figures/fig5a.html

Figure 5b. Maximum Forward Reach over an Obstruction

The maximum level forward reach over an obstruction for a person using a wheelchair with knee space is 25 inches. When the obstruction is less than 20 inches deep, the maximum high forward reach is 48 inches. When the obstruction projects out 20 to 25 inches, the maximum high forward reach is 44 inches. www.access-board.gov/adaag/html/figures/fig5b.html

Figure 6. Side Reach Illustrations

Figure 6a. Clear Floor Space – Parallel Approach

A person using a wheelchair is pictured in a 30 by 48 clear floor space located a maximum 10 inches from the wall. www.access-board.gov/adaag/html/figures/fig6a.html

Figure 6b. High and Low – Side Reach Limits

A person using a wheelchair is pictured in a 30 by 48 clear floor space located a maximum 10 inches from the wall with a reach height of minimum 54 inches. www.access-board.gov/adaag/html/figures/fig6b.html

Figure 6c. Maximum Side Reach Over Obstruction

Shows a person sitting in a wheelchair with an obstruction of 24 inches in reach and the maximum height of the obstruction is 34 inches, the maximum high side reach over the obstruction is 46 inches.

www.access-board.gov/adaag/html/figures/fig6c.html

Figure 7. Accessible Route

Figure 7a. 90 Degree Turn Accessible Route

Shows a 90 degree turn can be made from a 36 inch wide passage for a person in a wheelchair into another 36 inch area if the depth of each leg is a minimum of 48 inches on the inside dimensions of the turn.

www.access-board.gov/adaag/html/figures/fig7a.html

Figure 7b. Turning Around an Obstruction on an Accessible Route

A U-turn around an obstruction less than 48 inches wide may be made by a person using a wheelchair if the passage width is a minimum of 42 inches and the base of the U-turn space is a minimum of 48 inches wide.

www.access-board.gov/adaag/html/figures/fig7b.html

Figure 7c. Accessible Route with ¼ inch Change of Level Shows a cross section drawing of a maximum ¼ inch vertical change in level www.access-board.gov/adaag/html/figures/fig7c.html

Figure 7d. Shows an Accessible Route with a change in level of ¼ inch to ½ inch high with a 1:2 inch slope.

www.access-board.gov/adaag/html/figures/fig7d.html

Figure 8. Protruding Objects

Figure 8a. Shows a person with a cane walking parallel to a wall where there is a 4 inch wide protrusion. Another picture shows the person parallel to the wall with a protruding object that is 27 inches wide. www.access-board.gov/adaag/html/figures/fig8a.html

Figure 8b. Shows a person using a cane walking perpendicular to a wall with a protruding object above the baseline of the walking area. www.access-board.gov/adaag/html/figures/fig8b.html

Figure 8c. Shows a free-standing overhanging protruding object above the person walking with a cane.

www.access-board.gov/adaag/html/figures/fig8c.html

Figure 8c-1. Shows an overhead hazard of a staircase where the underside descends across a pathway. The headroom is less than 80 inches, protection is offered by a railing that can be no higher than 27 inches to ensure safety. www.access-board.gov/adaag/html/figures/fig8c1.html

Figure 8d. Shows an area where an overhang can be greater than 12 inches because the protruding object cannot be approached in the direction of the overhang. www.access-board.gov/adaag/html/figures/fig8d.html

Figure 8e. Shows an example of protection around a wall mounted objects such as a cabinet or bank of telephones. The clear width for continuous passage is 36 inches minimum. Thirty two inches is the minimum clear width for a maximum distance of 24 inches. The maximum distance an object can protrude beyond a wing wall is 4 inches.

www.access-board.gov/adaag/html/figures/fig8e.html

Figure 8f. Carpet Pile Thickness should be no more than 2 inches per ADAAG. www.access-board.gov/adaag/html/figures/fig8f.html

Figure 8g. Gratings that are used to notify persons with disabilities that a hazard is present. The grating shown is one dimension with a $\frac{1}{2}$ inch maximum measured parallel to the predominant direction of travel.

www.access-board.gov/adaag/html/figures/fig8g.html

Figure 8h. Shows a grating with a long dimension perpendicular to route of travel. www.access-board.gov/adaag/html/figures/fig8h.html

Figure 9. Dimensions of Parking Spaces

The illustration shows a parked vehicle with an access aisle of a minimum of 60 inches wide for cars or a minimum of 96 inches wide for vans. The accessible route connected to the access aisle at the front of the parking spaces shall be a minimum of 36 inches.

www.access-board.gov/adaag/html/figures/fig9.html

Figure 10. Access Aisle at Passenger Loading Zones

The illustration shows a parked vehicle in a passenger loading zone which is 240 inches minimum (12 feet), measured parallel to the vehicle pull up area and 60 inches (5 feet) minimum measured perpendicular to the vehicle area. This aisle shall be clear of obstructions and at the same level as the vehicle area. www.access-board.gov/adaag/html/figures/fig10.html

Figure 11. Measurement of Curb Ramp Slopes

An illustration of an adjoining slope where the ramp slope shall be a ratio equal to the vertical rise divided by the horizontal run. It is equal to the tangent of the angle that the plane of the ramp surface makes with a horizontal plane. For a curb ramp, the adjoining slope at the walk or street shall not exceed 1:20. www.access-board.gov/adaag/html/figures/fig11.html

Figure 12a. Side of Curb Ramps with Flared Sides

This illustration shows a curb ramp cut into a walkway perpendicular to the curb face with flared sides having a maximum slop of 1:10. The landing at the top measured from the top of the ramp to the edge of the walkway or closest obstruction. If a landing depth at the top of a curb ramp is less than 48 inches, then the slope of the flared side shall not exceed 1:12. www.access-board.gov/adaag/html/figures/fig12a.html

Figure 12b. Sides of Curb Ramps with Returned Curb

Shows a walkway with grass planted on the easement where the curb ramp is completely contained within the planting strip, so that pedestrians would not normally cross the plantings, the curb ramp sides can have steep sides including a vertical returned curb. www.access-board.gov/adaag/html/figures/fig12b.html

Figure 13. Built Up Curb Ramp

Shows that a built up curb ramp extends outward from the curb and slopes to the group surface. The sides must be tapered from the ramp surface to the ground, with a maximum slope of 1:10, so that there are no drop offs along the edges.

www.access-board.gov/adaag/html/figures/fig13.html

Figure 14. No figure

Figure 15a. Curb Ramp at Marked Crossings, 4 way stop Shows a curb ramp at a four way stop with curb ramps opening into each line of traffic with a crosswalk. www.access-board.gov/adaag/html/figures/fig15a.html

Figure 15b. Curb Ramp at Marked Crossings
Shows a curb ramp at a four way stop without a cross walk with the curb ramp

located away from the street corner. www.access-board.gov/adaag/html/figures/fig15b.html

Figure 15c. Curb Ramp at Marked Crossings
Shows the curb ramp at the circle of the street corner for diagonal crossing at the intersection or direct line street crossing. The segment of straight curb is also shown. www.access-board.gov/adaag/html/figures/fig15c.html

Figure 15d. Shows the flared curb ramp at a marked crossing with plantings at each side of the curb ramp. www.access-board.gov/adaag/html/figures/fig15d.html

Figure 16. Single Ramp Run and Sample Ramp Dimensions Illustrates the slope of a ramp. In this picture, if the slope of a ramp is between 1:15 and 1:16, the maximum rise shall be 30 inches and the maximum horizontal run shall be 30 feet. If the slope of the ramp is between 1:16 and 1:20, the maximum rise shall be 30 inches and the maximum horizontal run shall be 40 feet. www.access-board.gov/adaag/html/figures/fig16.html

Figure 17. Shows examples of edge protection and handrail extensions. www.access-board.gov/adaag/html/figures/fig17.html

Figure 18. Shows examples of stair/step tread widths and examples of acceptable nosings to be put in place for safety. www.access-board.gov/adaag/html/figures/fig18.html

Figure 19a. Shows stair handrails required at the top of a riser and the width of tread that is required at the bottom of the riser.

www.access-board.gov/adaag/html/figures/fig19a.html

Figure 19b. Shows the minimum handrail extension at each top riser and the minimum handrail extension required at the bottom. www.access-board.gov/adaag/html/figures/fig19b.html

Figure 19c. Shows the minimum handrail extension required at the top of each riser and the tread that is required at the bottom of the riser.

www.access-board.qov/adaaq/html/figures/fig19c.html

Figure 19d. Shows the minimum handrail extension required at the top of each riser and the minimum handrail extension required at the bottom riser. www.access-board.gov/adaag/html/figures/fig19d.html

Figure 20. Shows an elevator entrance that is automatic. The automatic door reopening device (automatic eye at the lower bottom of an elevator door) is activated if an object passes through and does not require direct contact but does require a movement of a cane, object or body.

www.access-board.gov/adaag/html/figures/fig20.html

Figure 21. Shows a graph of timing equation which is generally five second timing for an elevator. www.access-board.gov/adaag/html/figures/fig21.html

Figure 22. Minimum dimensions of elevator cars.

Diagram a shows an elevator with a door providing a 36 inch minimum clearance in the middle of the elevator. The width of the elevator car is 80 inches. The depth of the elevator car measured from the back wall to the elevator door is 54 inches. The depth of the car measured from the back to the control panel is 51 inches. www.access-board.gov/adaag/html/figures/fig22.html

The second diagram shows an elevator door providing a minimum of 36 inch clearance located to one side of the elevator. The width of the car is a minimum of 68 inches. The depth of the car measured from the back wall is 54 inches and the depth of the elevator car measured from the back wall to the control panel is a minimum of 51 inches.

Figure 23a. Elevator Control Panel Detail

The diagram illustrates the symbols used for the following buttons: main entry floor, door closed, door open, emergency alarm, and emergency stop. The diagram further states that the octagon symbol for the emergency stop shall be raised. www.access-board.gov/adaag/html/figures/fig23a.html

Figure 23b. Elevator Car Control Height should be a minimum of 35 inches to 54 inches in height. www.access-board.gov/adaag/html/figures/fig23b.html

Figure 23c. Shows an elevator car control panel with the center opening door of an elevator. www.access-board.gov/adaag/html/figures/fig23c.html

Figure 23d. Shows a side opening of the elevator car door with an alternate location for the control panel. www.access-board.gov/adaag/html/figures/fig23d.html

Figure 24. Doorways

Figure 24a. A diagram showing a doorway width of 32 inches minimum www.access-board.gov/adaag/html/figures/fig24a.html

Figure 24b. A diagram showing a clear doorway width and depth of a hinged door www.access-board.gov/adaag/html/figures/fig24b.html

Figure 24c. A diagram of a sliding doorway width of 32 inches minimum www.access-board.gov/adaag/html/figures/fig24c.html

Figure 24d. A diagram of a folding doorway with a width of 32 inches www.access-board.gov/adaag/html/figures/fig24d.html

Figure 24e. A diagram of a maximum doorway with of 32 inches that is 24 inches deep www.access-board.gov/adaag/html/figures/fig24e.html

Figure 24f. A doorway with the width and depth of 32 inches www.access-board.gov/adaag/html/figures/fig24f.html

Figure 25. Maneuvering Clearances at Doors. A diagram of six doors in alcoves with a clearance for a front approach. Front approaches to pull side of swinging doors shall have maneuvering space that extends 18 inches minimum beyond the latch side of the door and 60 inches minimum perpendicular to the doorway.

Front approaches to push side of swinging doors, equipped with both closer and latch, shall have maneuvering space that extends 12 inches minimum beyond the latch side of the door and 48 inches minimum perpendicular to the doorway.

Front approaches to push side of swinging doors, not equipped with latch and closer shall have maneuvering space that is the same width as door opening and extends 48 inch minimum perpendicular to the doorway.

Hinge-side approaches to pull side of swinging doors shall have maneuvering space that extends 36 inches minimum beyond the latch side of the door if 60 inches minimum is provided perpendicular to the doorway or maneuvering space that extends 42 inches minimum beyond the latch side of the door shall be provided if 54 inches minimum is provided perpendicular to the doorway.

Hinge side approaches to push side of swinging doors, not equipped with both latch and closer, shall have a maneuvering space of 54 inches minimum, parallel to the doorway and 42 inches minimum, perpendicular to the doorway.

Hinge side approaches to push side of swinging doors, equipped with both latch and closer, shall have maneuvering space of 54 inches minimum, parallel to the doorway, 48 inches minimum perpendicular to the doorway.

Latch side approaches – swinging doors. Latch side approaches to pull side of swinging doors with closers shall have maneuvering space that extends 24 inches minimum beyond the latch side of the door and 54 inches minimum perpendicular to the doorway.

Latch side approaches to pull side of swinging doors, not equipped with closers, shall have maneuvering space that extends 24 inches minimum parallel to the doorway beyond the latch side of the door and 48 inches minimum perpendicular to the doorway.

Latch side approaches to push side of swinging doors, with closers, shall have maneuvering space that extends 24 inches minimum parallel to the doorway beyond the latch side of the door and 48 inches minimum perpendicular to the doorway.

Latch side approaches to push side of swinging doors, without closers, shall have maneuvering space of 24 inches minimum parallel to the doorway beyond the latch side of the door and 42 inch minimum perpendicular to the doorway.

Front approach – Sliding Doors and Folding Doors
Front approaches to sliding doors and folding doors shall have maneuvering space
that is the same width as the door opening and shall extend 48 inches minimum
perpendicular to the doorway

Slide-side approaches to sliding doors and folding doors shall have a maneuvering space of 54 inches minimum, parallel to the doorway, and 42 inches minimum perpendicular to the doorway

Sliding doors and folding doors shall have a maneuvering space that extends 24 inches beyond the latch side of the door and extends 42 inches minimum perpendicular to the doorway

www.access-board.gov/adaag/html/figures/fig25.html

Figure 26. Diagram showing two hinged doors opposite of one another www.access-board.gov/adaag/html/figures/fig26.html

Figure 27a. Drinking Fountains and Water Coolers – Spout Height and Knee Clearance Knee clearance is required underneath the fountain: 27 inches minimum from the floor to the underside of the fountain which extends 8 inches minimum measured from the front edge underneath the fountain back towards the wall; if a minimum 9 inches of toe clearance is provided, a maximum of 6 inches of the 48 inches of clear floor space required at the fixture may extend into the toe space. www.access-board.gov/adaag/html/figures/fig27a.html

Figure 27b. A diagram of a person using a wheelchair at the water cooler in which there is 24 inch minimum to the fountain, it is a minimum of 30 inches wide for chair clearance with clear floor space. www.access-board.gov/adaag.html/figures/fig27b.html

Figure 27c. A diagram of a free standing fountain or cooler with a 30 x 48 inch area for access. www.access-board.gov/adaag/html/figures/fig27c.html

Figure 27d. A diagram of a built in fountain www.access-board.gov/adaag/html/figures/fig27d.html

Figure 28. Clear Floor Space at Water Closets

For a front transfer to the water closet, the minimum clear floor space at the water closet is a minimum of 48 inches in width by a minimum of 66 inches in length. For a diagonal transfer to the water closet, the minimum clear floor space is a minimum of 48 inches in width by a minimum of 56 inches in length. For a side transfer to the water closet, the minimum clear floor space is a minimum of 60 inches in width by a minimum of 56 inches in length.

www.access-board.gov/adaag/html/figures/fig28.html

Figure 29a. Grab Bars at Water Closets

A diagram showing a back wall grab bar. A 36 inch minimum length grab bar is required behind the water closet mounted at a height between 33 and 36 inches. The grab bar must extend a minimum of 12 inches beyond the center of the water closet toward the side wall and a minimum of 24 inches toward the open side for either a left or right side approach. www.access-board.gov/adaag/html/figures/fig29a.html

Figure 29b. A 42 inch minimum length grab bar is required to the side of the water closet spaced 12 inches maximum from the back wall and extending a minimum of 54 inches from the back wall at a height between 33 and 36 inches. The toilet

paper dispenser shall be mounted at a minimum height of 19 inches. See 4.16.3, 4.16.4, 4.16.6). www.access-board.gov/adaag/html/figures/fig29b.html

Figure 30a. Toilet Stalls (Standard)

In this figure, the location of the door is illustrated to be in front of the clear space (next to the water closet) with a maximum stile width of 4 inches. An alternate door location is illustrated to be on the side of the toilet stall with a width of 4 inches. The minimum width of the standard stall shall be 60 inches. The centerline of the water closet shall be 18 inches from the side wall.

www.access-board.gov/adaag/html/figures/fig30a.html

Figure 30a1. End of the row Toilet Stall

In this figure, the standard stall is provided at the end of a row of stalls, the door (is located to the side of the stall) swings into the stall, if the length of the stall is extended at least a minimum of 36 inches beyond the required minimum length it is ok. The doorway is the 36 inch minimum, the clear floor space is 60 inches, and grab bars are located behind the toilet and to the side of the toilet properly. www.access-board.gov/adaag/html/figures/fig30a1.html

Figure 30b. Alternate Stalls

In this figure, two alternate stalls are illustrated; one stall is 36 inches in width. The other stall is required to be a minimum of 48 inches in width. If a wall mounted water closet is used, the depth of the stall should be a minimum of 66 inches. If a floor mounted toilet is used, the depth of the stall is required to be a minimum of 69 inches. The 36 inch wide stall shall have parallel grab bars on the side walls. The 48 inch minimum stall shall have a grab bar behind the water closet and one on the side wall next to the water closet. In each figure the centerline of the water closet is 18 inches from a side wall.

www.access-board.gov/adaag/html/figures/fig30b.html

Figure 30c. Toilet Stall on the Rear Wall

The grab bar on the back wall is shown to be 36 inches in length, extending from the wall toward the open side of the water closet, 33-36 inches above the finished floor. www.access-board.gov/adaag/html/figures/fig30c.html

Figure 30d. Toilet Stalls

In this figure, the side grab bar is 40-42 inches in length, beginning 12 inches from the rear wall, 33-36 inches above the finished floor. www.access-board.gov/adaag/html/figures/fig30d.html

Figure 31 – Lavatory Clearance

In this figure, knee clearance is required underneath the lavatory as shown by a drawing of a person using a wheelchair cleaning his hands: 27 inches is the minimum from the floor to the underside of the lavatory which extends 8 inches minimum measured from the front edge underneath the lavatory back towards the wall; if a minimum 9 inches of toe clearance is provided, a maximum of 6 inches of the 48 inches of clear floor space required at the fixture can extend into the toe space. www.access-board.gov/adaag/html/figures/fig31.html

Figure 32. Clear Floor Space Minimum at Lavatories is 17 inches (4.19.3, 4.24.5) In this figure, the basin is 17 inches from the wall, there is the 30 x 48 inch minimum clear floor space. www.access-board.gov/adaag/html/figures/fig32.html

Figure 33. Clear Floor Space at Bathtubs http://www.access-board.gov/adaag/html/figures/fig33.html

Figure 33a. In this figure the tub seat is parallel to the bathtub, a 30 inch minimum width by 60 inch minimum length clear space is required alongside the bathtub. The approach is perpendicular to the bathtub, a 48 inch minimum width by 60 inch minimum length clear space is shown as being required.

Figure 33b. In this figure, the seat of the bathtub is at the head of the tub and the approach is parallel to the bathtub. There is a 30 inch minimum width by 75 inch minimum length clear space required alongside the bathtub as shown in this figure. The seat width must be 15 inches and must extend the full width of the bathtub.

Figure 34. Shows Grab Bars Installed at Bathtubs www.access-board.gov/adaag/html/figures/fig34.html

Figure 34a. This figure shows the grab bar at the foot of the tub and it must be 24 inches minimum in length measured from the outer edge of the tub. On the back wall, two grab bars are required. The grab bars are mounted on the back wall (longest wall) should be a minimum of 24 inches in length located 12 inches maximum from the foot of the tub and 24 inches maximum from the head of the tub. One grab bar shall be located 9 inches above the rim of the tub. The others shall be 33 to 36 inches above the bathroom floor. At the head of the tub, the grab bar shall be a minimum of 12 inches in length measured from the outer edge of the tub. www.access-board/adaaq/html/figures/fig34.html

Figure 34b. In this figure the seat is at the head of the tub. At the foot of the tub, the grab bar shall be a minimum of 24 inches in length measured from the outer edge of the tub. On the back wall, two grab bars are required. The grab bars mounted on the back wall should be 48 inches in length located a maximum of 12 inches from the foot of the tub and a maximum of 15 inches from the head of the tub. Heights of grab bars are shown as specified in figure 34a. www.access-board.gov/adaag/html/figures/fig34.html

Figure 35a. Shower Size and Clearances. In this figure the stall is 36 by 36 inches. The clear floor space shall be a minimum of 48 inches in length by a minimum of 36 inches in width and allow for a parallel approach. The clear floor space shall extend 1 foot beyond the shower wall on which the seat is mounted. www.accessboard.gov/adaag/html/figures/fig35a.html

Figure 35b. Show Stall that is 30 inches by 60 inches. In this figure, the clear floor space alongside the shower is 60 inches in length by a minimum of 36 inches in width. The tub is 30 inches wide plus a 36 inch width for toilet and water closet. www.access-board.gov/adaag/html/figures/fig35b.html

Figure 36. Shower Seat Design. In this figure there is an L-shaped shower seat extending the full depth of the stall. The seat in this case shall be located 1 ½ inches away from the wall. The front of the seat (nearest to the opening) shall extend a maximum 16 inches from the wall. The back of the seat (against the wall) shall extend a maximum of 23 inches from the side wall and shall be a maximum of 15 inches deep. www.access-board.gov/adaag/html/figures/fig36.html

Figure 37. Grab Bars at Shower Stalls

Figure 37a. In this figure the Stall is 36 inches by 36 inches. The L-shaped grab bar is located along the full depth of the control wall (opposite the seat) and halfway along the back wall. The grab bar shall be mounted between 33 to 36 inches above the shower floor. The bottom of the control area shall be a maximum of 38 inches high and the top of the control area shall be a maximum of 48 inches high. The shower controls and spray unit shall be within 18 inches of the front of the shower. www.access-board.gov/adaag/html/figures/fig37.html

Figure 37b. In this illustration the stall is 30 inches by 60 inches. There is a U-shaped grab bar that wraps around the stall. The grab bar shall be between 33 to 36 inches high. The controls are placed in an area between 38 inches and 48 inches above the floor. If the controls are located on the back wall they must be located 27 inches from the side wall. The shower head and control may be located on either side of the wall. www.access-board.gov/adaag/html/figures/fig37.html

Figure 38a – Storage Shelves and Closet Shelves

This figure shows a person using a wheelchair. If the clear floor space allows a parallel approach by the person in a wheelchair and the distance between the wheelchair and the shelf exceed 10 inches, the maximum high side reach shall be 48 inches above the floor and the low side reach shall be a minimum of 9 inches above the floor. The shelves can be made adjustable. The maximum distance from the user to the self shall be 21 inches. www.access-board.gov/adaag/html/figures/fig38.html

Figure 38b. In this figure the clear floor space allows a parallel approach by a person in a wheelchair and the distance between the wheelchair and the clothes rod exceeds 10 inches, the maximum high side reach shall be 48 inches. The maximum distance from the user to the clothes rod shall be 21 inches. www.access-board.gov/adaag/html/figures/fig38.html

Figure 39a. Size and spacing of handrails and grab bars This figure shows a handrail 1 $\frac{1}{2}$ inches from the reinforced wall with a 1 $\frac{1}{4}$ - 1 $\frac{1}{2}$ minimum width, 32-38 inches above the base floor. www.accessboard.gov/adaag/html/figures/fig39a.html

Figure 39b, Figure 39c, Figure 39d, Figure 39e all illustrate types of handrails and the spacing as stated above.

www.access-board.gov/adaag/html/figures/fig39b.html www.access-board.gov/adaag/html/figures/fig39c.html www.access-board.gov/adaag/html/figures/fig39d.html www.access-board.gov/adaag/html/figures/fig39e.html Figure 43a illustrates the International Symbol of Accessibility, a figure of a person and wheelchair on a grid background.

www.access-board.gov/adaag/html/figures/fig43a.html

Figure 43b is the International Symbol of Accessibility and Display Conditions. The symbol shows a contrast of light on dark or dark on light. www.access-board.gov/adaag/html/figures/fig43b.html

Figure 43c is the International TTY Symbol, assistive telephone device for hearing impaired. www.access-board.gov/adaag/html/figures/fig43c.html

Figure 43d is the International Symbol of Access for Hearing Loss. www.access-board.gov/adaag/html/figures/fig43d.html

Figure 44. Telephones. Mounting Height and Clearance www.access-board.gov/adaag/html/figures/fig44.html

Figure 44a. Figure of a Side Reach Telephone. If it is a parallel approach in an enclosure, the wing walls and shelf may extend beyond the face of the telephone a maximum of 10 inches.

Figure 44b. Figure of a Forward Reach Telephone. If a front approach is provided at a telephone with an enclosure, the shelf can extend beyond the face of the telephone a maximum of 20 inches. A wing wall may extend beyond the face of the telephone a maximum of 24 inches. If the wing wall extends more than 24 inches beyond the face of the telephone, an additional 6 inches in width of clear floor space shall be provided.

Figure 45. Minimum Clearances for Seats and Tables
The figures illustrate the accessible path of travel necessary to sit along a chair line
or at a table.

www.access-board.gov/adaag/html/figures/fig45.html

Figure 46. Space Requirements for Wheelchair Seating Spaces in Series

Figure 46a illustrates Forward or Rear Access in the left figure. If seating space for two wheelchair users is accessed from the front or rear, the minimum space required is 48 inches deep by 66 inches wide.

www.access-board.gov/adaag/html/figures/fig46.html

Figure 46b illustrates Side Access in the figure on the right. If seating space for two wheelchair users is accessed from the side, the minimum space required is 60 inches deep by 66 inches wide.

www.access-board.gov/adaag/html/figures/fig46.html

Figure 47 illustrates the minimum size of a bench for access. The bench size shown is 20 inches minimum to 24 minimum wide by 42 inches long minimum. www.access-board.gov/adaag/html/figures/fig47.html

Figure 48 illustrates a bench with back support that is 42 inches minimum long extending two inches above the top of the seat to a point 18 inches minimum above the seat. www.access-board.gov/adaag/html/figures48.html

Figure 53 illustrates a wheelchair user in a food service line with the maximum height of the food service cabinet a minimum of 34 inches from the floor. www.access-board.gov/adaag/html/figures53.html

Figure 54 illustrates a wheelchair user in a food service tableware area. The maximum height if 54 inches. www.access-board.gov/adaag/html/figures54.html

Figure 55 illustrates a card catalog at a library. The lowest shelf of a card catalog shall be 18 inches. www.access-board.gov/adaag/html/figures55.html

Figure 56 illustrates a wheelchair user between book stacks that must be a minimum of 36 inches apart. www.access-board.gov/adaag/html/figures56.html

Figure 57, 57a, 57b illustrates a Roll-in Shower with Folding Seat The diagram on the left is a fixed seat in a 30 inch minimum by 60 inch minimum shower stall, the controls and spray unit are on the back (longest) wall located 27 inches from the side wall where the seat is attached (4.21.2, 9.1.2)

The second diagram on the right is a shower stall that is 36 inch minimum by 60 inches. The width of the stall opening shall be a minimum of 36 inches clear located on a long wall at the opposite end of the shower from the controls. The shower seat shall be 24 inches minimum in length by 16 inches minimum in width and may be rectangular in shape. The seat shall be located next to the opening to the shower and adjacent to the end wall containing the shower head and controls (4.21.2, 9.1.2, A4.23.3) www.access-board.gov/adaag/html/figures/fig57.html

Figure 58 shows Protrusions in Wheelchair Spaces

The figure shows in side elevation that objects may protrude 6 inches maximum along the front of the wheelchair space where located 9 inches minimum and 27 inches maximum above the floor or ground surface of the wheelchair space. Objects may protrude a distance of 25 inches maximum along the front of the wheelchair space, where located more than 27 inches above the floor. www.access-board.gov/adaag/html/figures/fig58.html

Figure 59 Pier Clearances

This figure illustrates pier clearances where accessible boat slips are served by clear pier space 60 inches wide minimum and at least as long as the accessible boat slips. Every 10 feet maximum of linear pier edge serving the accessible boat slips contains at least one continuous clear opening 60 inches minimum wide. www.access-board.gov/adaag/html/figures/fig59.html

Figure 60 Pier Clear Space Reduction

This figure illustrates in the view that the width of the clear pier space (boardwalk above the water) can be 36 inches wide minimum for a length of 24 inches

maximum where multiple 36 inch wide segments are separated by clear segments 60 by 60 inches minimum. www.access-board.gov/adaag/html/figures/fig60.html

Figure 61 Edge Protection at a Pier

This figure illustrates an edge protection that is 4 inches high maximum and 2 inches deep maximum above the water. www.access-board.gov/adaag/html/figures/fig61.html

Figure 62 Edge Protection at Fishing Piers

There are two illustrations of a wheelchair user one a side elevation and one a front elevation that should have edge protection at fishing piers. The railing or guard is no higher than 34 inches, edge protection shall not be required if the deck surface extends 12 inches minimum beyond the inside face of the railing. Toe clearance shall be at least 9 inches high beyond the railing and at least 30 inches wide. www.access-board.gov/adaag/html/figures/fig62.html

Figure 63 Golf Club Reach Range

In this illustration the person is in a wheelchair and is showing a reach range of 36 inch maximum measured from accessible routes with a width of 36 inches minimum and a slope of 1:20 maximum. www.access-board.gov/adaag/html/figures/fig63.html

Figure 64, 64a, 64b Transfer Platforms

Figure 64a shows a transfer platform with a surface height 11 to 18 inches above the ground. Figure 64b shows a view where the transfer platform is 14 inches deep and 24 inches wide minimum; clear floor space that is 48 inches long minimum centered parallel to the 24 inch minimum long unobstructed side of the transfer platform for a person using a wheelchair. www.access-board.gov/adaag/html/figures/fig64.html

Figure 65, 65a, 65b Transfer Steps

Figure 65a shows a transfer step 8 inches high maximum and figure 65b shows a transfer step that is 14 inches deep minimum and 24 inches long minimum. www.access-board.gov/adaag/html/figures/fig65.html

Figure 68 Pool Lift Seal Location shows a pool lift seat located over the deck 16 inches minimum from the edge of the pool, measured to the seat centerline. www.access-board.gov/adaag/html/figures/fig68.html

Figure 69 Clear Deck Space at Pool Lifts is a figure of a clear deck space at least 36 inches wide and 48 inches long parallel to the seat opposite the water. The 48 inch length extends from a line located 12 inches behind the rear edge of the seat. www.access-board.gov/adaag/html/figures/fig69.html

Figure 70 Pool Lift Seat Height is an elevation drawing which shows a pool lift seat to be 16 inches minimum to 19 inches maximum measured from the deck to the top of the seat surface when in the raised (load) position.

www.access-board.gov/adaag/html/figures/fig70.html

Figure 71 Pool Lift Submerged Depth is a drawing which shows a pool lift with a seat submerged to a water depth of 18 inches minimum below the stationary water level. www.access-board.gov/adaag/html/figures/fig71.html

Figure 72 Sloped Entry Submerged Depth is a drawing which shows a sloped entry with a submerged depth of 24 inches minimum to 30 inches maximum below the stationary water level at the landing. www.access-board.gov/adaag/html/figures/fig72.html

Figure 73 Sloped Entry Handrails is a drawing that shows a sloped entry with handrails on both sides that provide a clear width of 33 inches minimum and 38 inches maximum. www.access-board.gov/adaag/html/figures/fig73.html

Figure 74 Clear Deck Space at Transfer Walls shows a clear deck space view that is 60 by 60 inches minimum. Figure 74a shows this space centered at one grab bar. Figure 74b shows this space centered on the clearance between two grab bars. www.access-board.gov/adaag/html/figures/fig74.html

Figure 75 Transfer Wall Height shows in elevation the height of a transfer wall 16 inches minimum to 19 inches maximum measured from the deck. www.access-board.gov/adaag/html/figures/fig75.html

Figure 76 Transfer Wall Depth and Length is a view of a transfer wall with a depth of 12 inches minimum to 16 inches maximum and a length of 60 inches minimum. www.access-board.gov/adaag/html/figures/fig76.html

Figure 77 Grab Bars at Transfer Walls has three illustrations that show grab bars at transfer walls that are perpendicular to the pool wall and that extend the full depth of the transfer wall. Figure 77a shows two grab bars with a clearance between them of 24 inches minimum. Figure 77b shows a grab bar with a clearance of 24 inches minimum on both sides. Figure 77c shows in elevation a height of the grab bar gripping surface 4 to 6 inches above the wall, measured to the top of the gripping surface. www.access-board.gov/adaag/html/figures/fig77.html

Figure 78 Transfer System Platform shows a transfer platform at the pool deck with a clear depth of 19 inches minimum and a clear width of 24 inches minimum clear width. www.access-board.gov/adaag/html/figures/fig78.html

Figure 79 Clear Deck Space at Transfer Systems

This figure shows clear deck space 60 by 60 inches minimum at the base of the transfer platform surface that is centered along a 24 inch minimum unobstructed side of the transfer platform. www.access-board.gov/adaag/html/figures/fig79.html

Figure 80 Transfer System Step are shown as 8 inches high maximum and extend to a water depth of 18 inches minimum below the water level. www.access-board.gov/adaag/html/figures/fig80.html

Figure 81 Size of Transfer System Steps is an illustration showing a transfer system at the pool area with each step having a tread clear depth of 14 inches minimum and 17 inches maximum and a tread clear width of 24 inches minimum.

www.access-board.gov/adaag/html/figures/fig81.html

Figure 82 Grab Bars at Transfer Systems provides two illustrations in elevation grab bars. Figure 82a shows the top of the gripping service to be 4 inches minimum and

6 inches maximum above each step and transfer platform. Figure 82bb shows a continuous grab bar with the top of the gripping surface 4 inches minimum and 6 inches minimum above the step nosing and transfer platform. www.access-board.gov/adaag/html/figures/fig82.html

Other ADAAG Figures

Figure A1 illustrates the Minimum Passage Width for One Wheelchair and One Ambulatory Person to be 48 inches minimum. www.access-board.gov/adaag/html/figures/figa1.html

Figure A2 illustrates the Space Needed for Smooth U-Turn in a Wheelchair is 78 inches minimum by 60 inches minimum. www.access-board.gov/adaag/html/figures/figa2.html

Figure A3 illustrates the Dimensions of Adult Size Wheelchairs with two pictures of persons using wheelchairs. The height of the handle of the wheelchair is shown as 36 inches. The armrest is 30 inches high. The eye level is between 43 and 51 inches. The lap is at 27 inches. The seat is at 19 inches. The toe is at 8 inches. The width of a wheelchair measured from the outer edges of the back wheels is 26 inches the length is 42 inches, the width measured from the outer edges of the footrests is 18 inches. The toes extend 6 inches beyond the edge of the footrests. www.access-board.gov/adaaq/html/figures/figa3.html

Figure A3a illustrates all of the dimensions of a wheelchair as described in Figure A3.

Figure A4 Cane Technique shows a person walking at a forward pace with a cane sweeping right to left between 36 and 60 inches in length.

www.access-board.gov/adaag/html/figures/figa4.html

Figure A5a Parking Space Alternatives. In this illustration a van accessible space is at the end of the row. The van accessible space is 96 inches wide with a 98 inch minimum space for a van lift. Other accessible parking is available on the same route with the spaces being being 96 inches minimum with a 60 inch minimum between vehicles. www.access-board.gov/adaag/html/figures/figa5a.html

Figure A5b Parking Space Alternatives using Universal Design Approach. Each parking space is 132 inches with a 60 inch median between spacing. www.access-board.gov/adaag/html/figures/figa5b.html

Figure A6, A6a, A6b Wheelchair Transfers are shown in two illustrations. A illustrates a diagonal approach to a toilet fixture. A diagonal transfer is shown in four diagrams: 1) wheelchair user takes a transfer position diagonal to the toilet fixture, swings footrest out of the way, sets brakes 2) removes armrest, transfers. 3) moves wheelchair out of the way, changes position (some people fold chairs or pivot it 90 degrees to the toilet), 4) positions on toilet, releases brake

B illustrates 3 side approach transfers to a toilet fixture. A side transfer is illustrated in 1) wheelchair user takes transfer position parallel to the side of the toilet fixture, removes armrest, sets brakes 2) transfers 3) positions on toilet (A4.16.4, A4.22.3) www.access-board.gov/adaag/html/figures/figa6.html

Figure A7 Toilet Room with Roll in Shower are provided with two illustrations, Diagram A is a 90 x 90 inch toilet room with roll shower. A 32 inch wide clear opening is centered in the middle of the long wall opposite the fixtures. On the back wall, measured from the left side wall, the centerline of the toilet is 18 inches. The centerline of the lavatory is 30 inches from the centerline of the toilet. The width of the shower stall is 30 inches measured from the right side wall. The depth of the shower seat is 18 inches measured from the front wall.

Diagram B is a 60 x 93 inch toilet room with roll in shower. A 32 inch wide clear opening is centered in the middle of the long wall. On the side wall, the centerline of the toilet is 18 inches from the back wall, and the centerline of the lavatory is 27 inches from the centerline of the toilet. The shower in on the opposite side wall. The depth of the shower seat is 18 inches measured from the front wall. www.access-board.gov/adaaq/html/figures/figa7.html

Figure A8 Control Reach Limitations. The illustrations show control reach of 15 inch minimum. www.access-board.gov/adaag/html/figures/figa8.html

FigA9. Wheelchair Spaces – Side Entry illustrates a wheelchair space side entry with a 42 inch minimum opening on the long dimension of space 60 inches long minimum and 36 inches wide minimum. www.access-board.gov/adaag/html/figures/figa9.html