



National Network of ADA Centers

2010 Department Of Justice Standards for Accessible Design

Ray Petty

Technical Assistance Coordinator

Great Plains ADA Center

2004 ADAAG

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New Format

- New numbering system
- New figures (informational only)
- All dimensions are in the text (not just in figures)
- New advisory notes follow provision

1008.3 Transfer Systems. Where transfer systems are provided to connect to *elevated play components*, transfer systems shall comply with 1008.3.

Advisory 1008.3 Transfer Systems. Where transfer systems are provided, consideration should be given to the distance between the transfer system and the elevated play components. Moving between a transfer platform and a series of transfer steps requires extensive exertion for some children. Designers should minimize the distance between the points where a child transfers from a wheelchair or mobility device and where the elevated play components are located. Where elevated play components are used to connect to another elevated play component instead of an accessible route, careful consideration should be used in the selection of the play components used for this purpose.

1008.3.1 Transfer Platforms. Transfer platforms shall be provided where transfer is intended from wheelchairs or other mobility aids. Transfer platforms shall comply with 1008.3.1.

1008.3.1.1 Size. Transfer platforms shall have level surfaces 14 inches (355 mm) deep minimum and 24 inches (610 mm) wide minimum.

1008.3.1.2 Height. The height of transfer platforms shall be 11 inches (280 mm) minimum and 18 inches (455 mm) maximum measured to the top of the surface from the ground or floor surface.

1008.3.1.3 Transfer Space. A transfer space complying with 305.2 and 305.3 shall be provided adjacent to the transfer platform. The 48 inch (1220 mm) long minimum dimension of the transfer space shall be centered on and parallel to the 24 inch (610 mm) long minimum side of the transfer platform. The side of the transfer platform serving the transfer space shall be unobstructed.

1008.3.1.4 Transfer Supports. At least one means of support for transferring shall be provided.

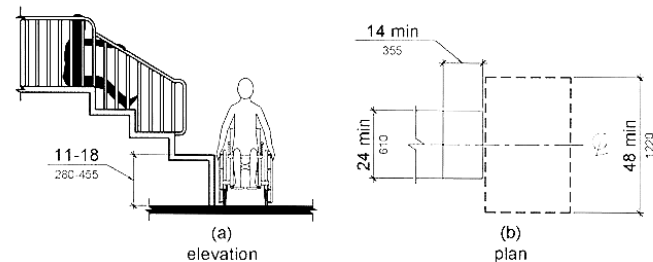


Figure 1008.3.1
Transfer Platforms

106.2 Definitions: Circulation Path

Circulation Path: An exterior or interior way of passage provided for pedestrian travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.



DOJ - Accessibility and Usability

- Sidewalks will heave and shift.
- Measuring for cross slope and slope can result in differing readings depending on a shift in a digital level.
- Running slope 1:12 is 8.33%
- Cross slope at 1:48 is 2.08%
- Is the sidewalk usable at 8.5 or 2.7 in some locations?
- How many contiguous sections are out of compliance?
- How broken is the surface – do gaps and areas need repair?



Accessible Routes: Site Arrival Points (206.2.1)

At least one accessible route shall be provided from:

- Accessible Parking Spaces
- Accessible Passenger Loading Zones
- Public Streets and Sidewalks
- Public Transportation Stops to the accessible building or facility entrance they serve
- Exception -- If the only means of access is vehicular, not providing a pedestrian route is acceptable

Accessible Routes (206)

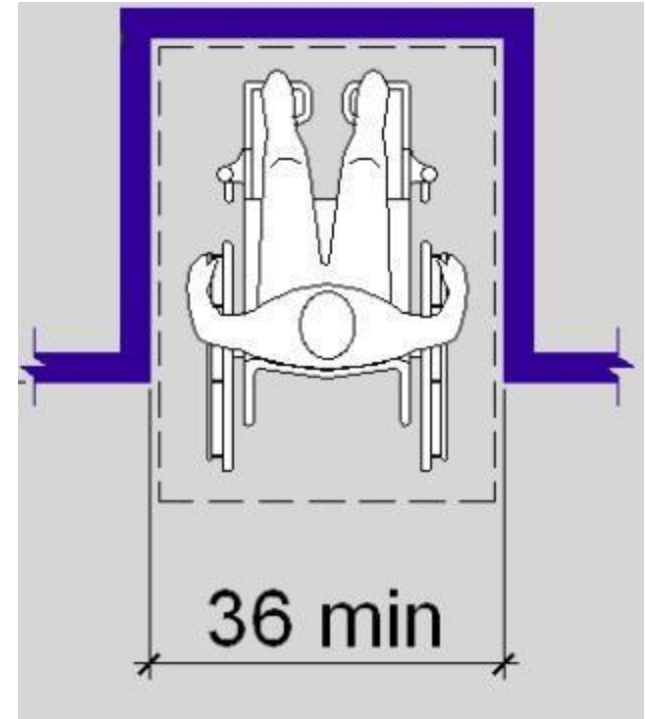
Where required:

- Between buildings
- Between stories in Title II buildings (there is no elevator exemption)
- Leading to accessible space at elements and in specific spaces



Building Blocks (Chapter 3)

- **Floor or Ground Surfaces**
- **Changes in Level**
- **Turning Space**
- **Clear Floor/ Ground Space**
- **Knee & Toe Clearance**
- **Protruding Objects**
- **Reach Ranges**
- **Operable Parts**

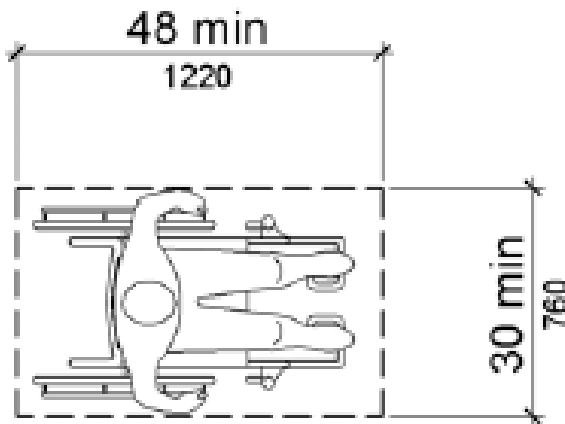


305.2 Floor or Ground Surfaces.

Floor or ground surfaces of a clear floor or ground space shall comply with 302. Changes in level are not permitted.

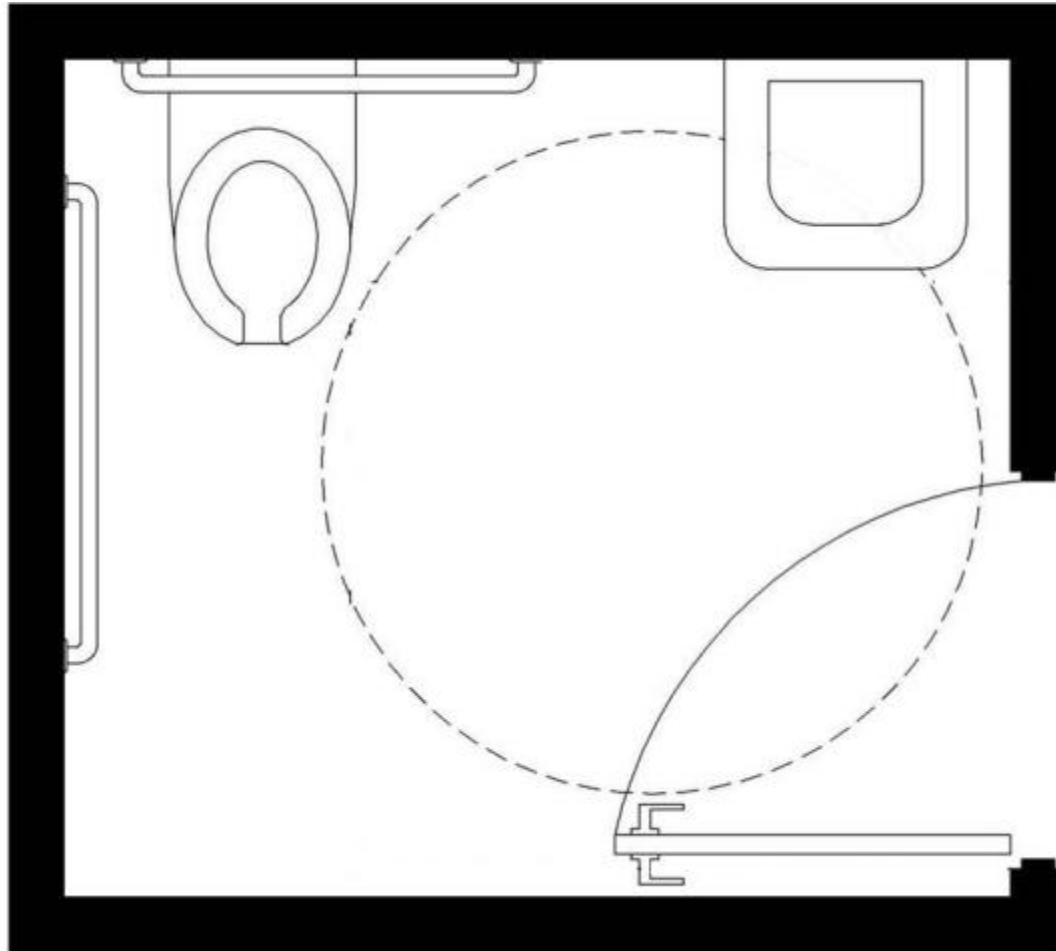
EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

305.3 Size. The clear floor or ground space shall be 30 inches (760 mm) minimum by 48 inches (1220 mm) minimum.

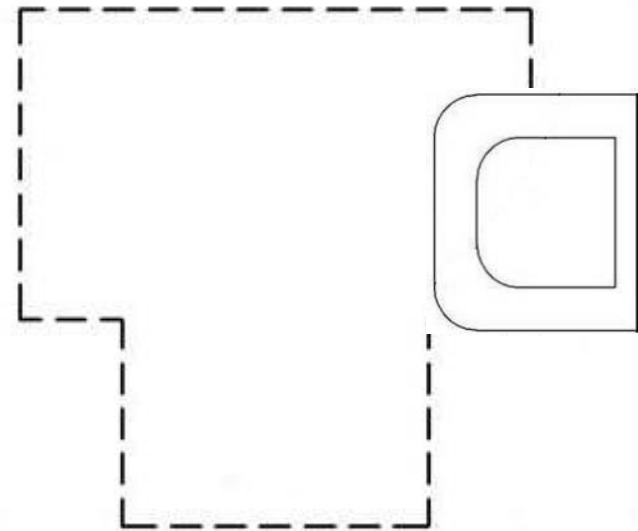
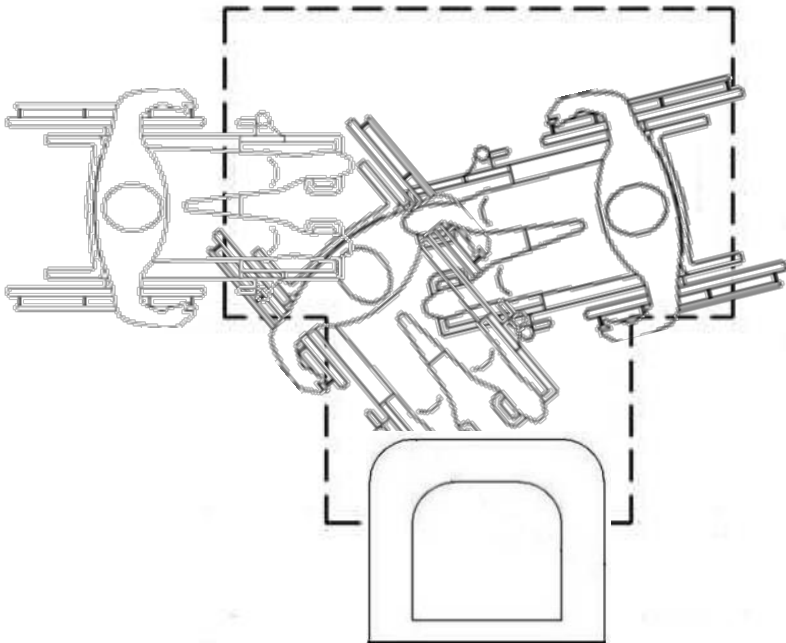


This is commonly known as the “wheelchair footprint.”

Turning Space (304)



Turning Space (304)

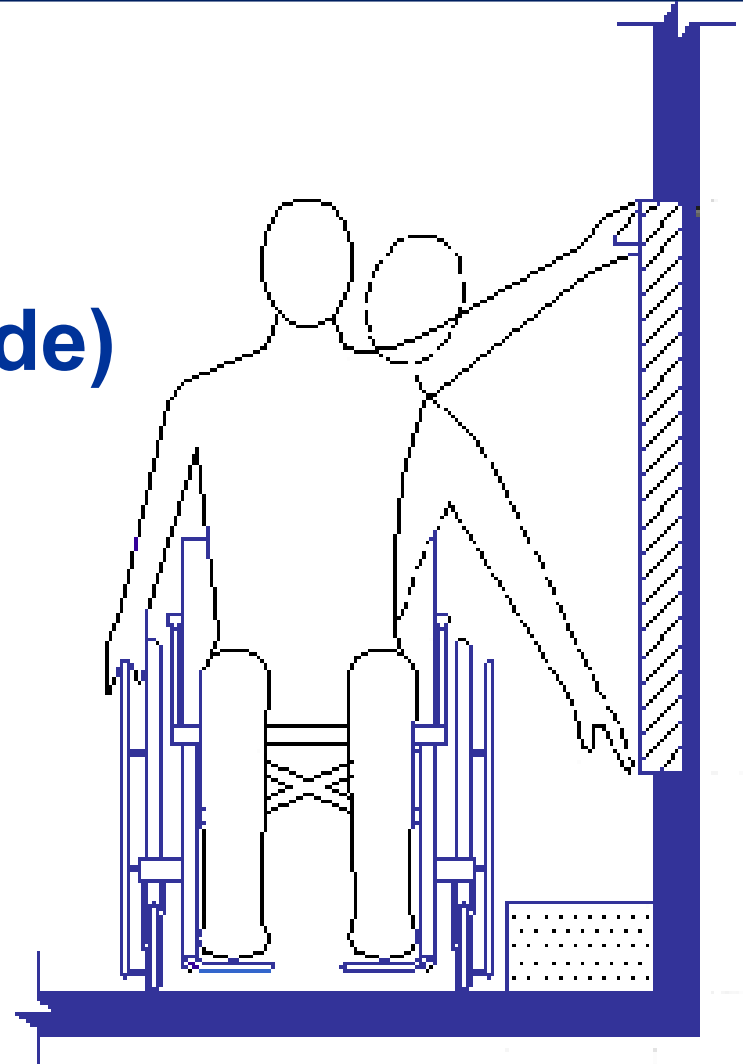


Overlap is permitted for only one arm of T-shaped space

Reach Ranges (308)

**Max. Reach – 48”
Min. Reach – 15”
(both for forward & side)**

**[previous 54” high
to 9” low side reach
is “safe-harbored”]**



Operable Parts - 309

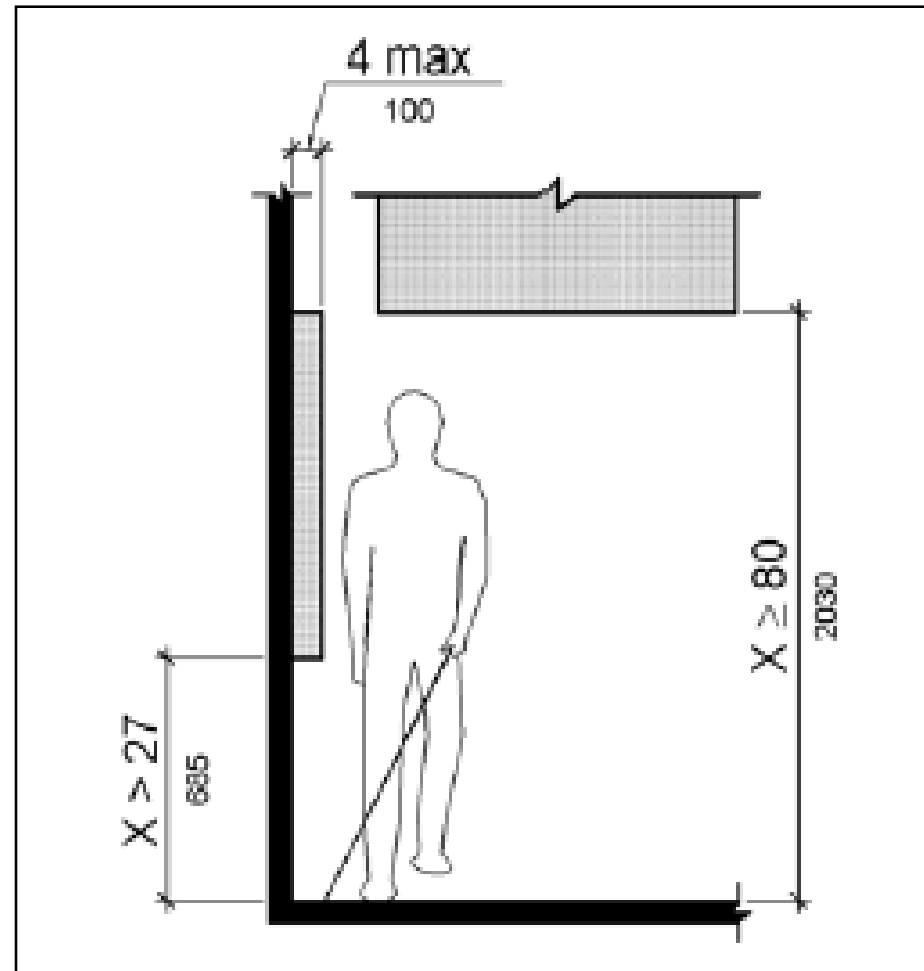
- A clear floor or ground space complying with 305 shall be provided.
- Operable parts shall be placed within one or more of the reach ranges specified in 308.
- Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.
- The force required to activate operable parts shall be 5 pounds maximum.

Protruding Objects



307.2 Protruding objects

- Toilet rooms, bathrooms and toilet compartments tend to contain protruding objects.
- The circulation path continues into all “walkable” areas



Accessible Routes (Chapter 4)

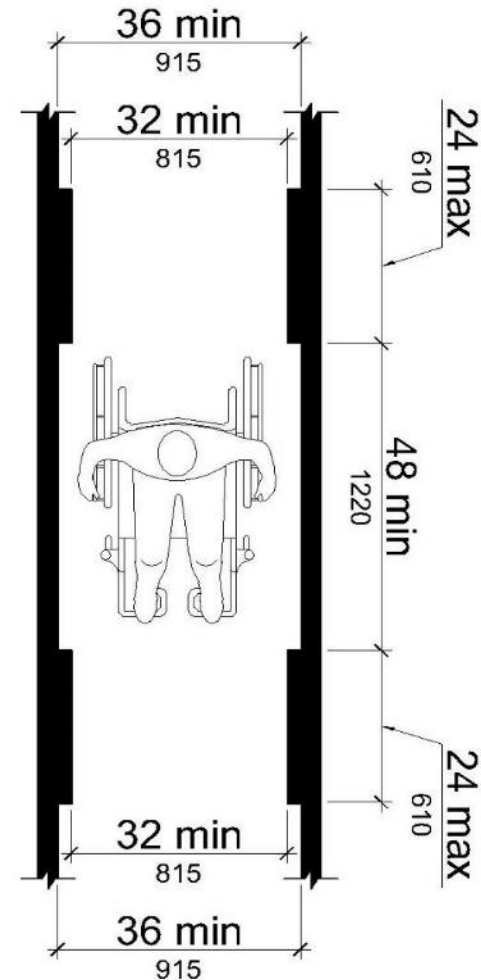
Accessible Route Components

- walking surfaces
- doors, doorways, gates
- ramps
- curb ramps
- elevators
- limited use/ limited application elevators
- platform lifts

Walking Surfaces (403)

(Portions of accessible routes that slope no more than 1:20 which is 5%)

- Minimum separation (48") between reduced clear widths
- If provided, handrails along walking surfaces are required to comply



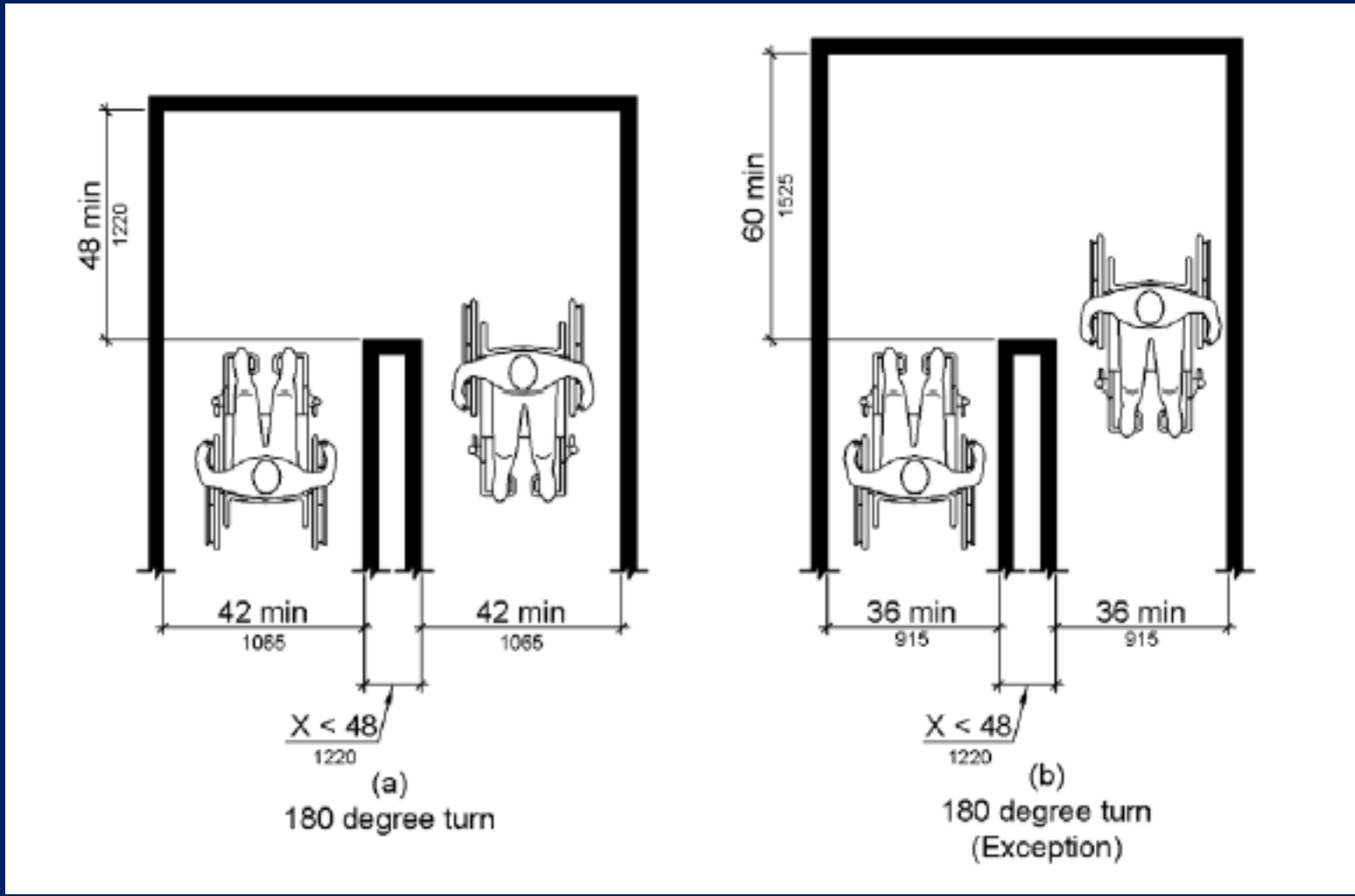
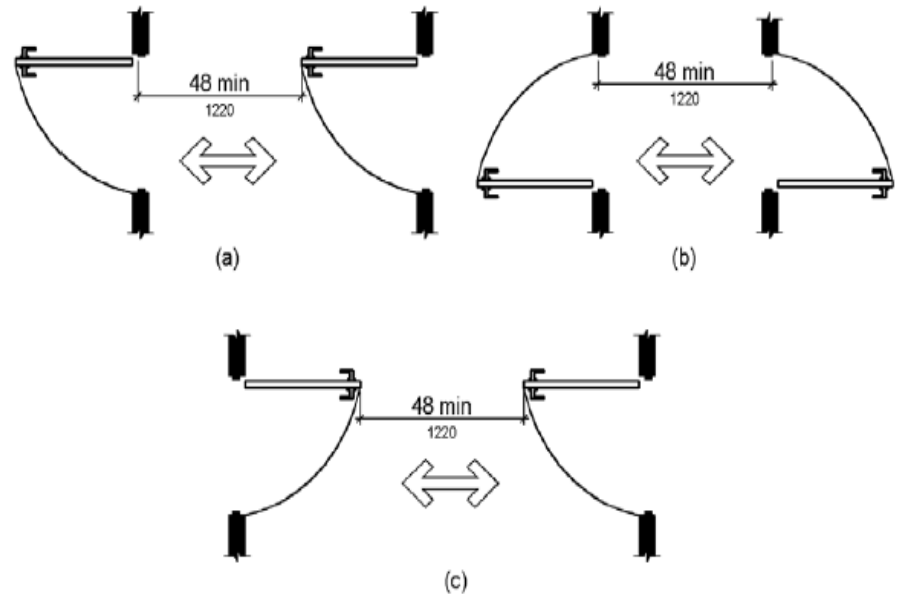


Figure 403.5.2 Clear Width at Turn

Doors, Doorways, & Gates (404)

- Doors in series
- Hardware height
- Limited projections into clear width
- Closing speed
- Surface (push side)
- Vision lights



Door and Gate Hardware

- Handles, pulls, latches, locks, and other operable parts on doors and gates shall comply with 309.4. (Operable Parts)
- Hardware shall be 34" minimum and 48" maximum above the finish floor (AFF) or ground.
- Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.



Accessible Routes and Entrances

Accessible Route to entrances is expected to coincide with general circulation routes to the **maximum extent feasible**.

Applies inside buildings as well and for emergency egress.

Don't expect PWD to “retrace steps” or get back into a car or take another path different from the general public.

Signage becomes critical when there are barriers at entrances.



Entrances - 206.4

- Minimum of 60% of public entrances in new construction are to be accessible.
- Accessible entrances are to comply with Section 404.
- Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.



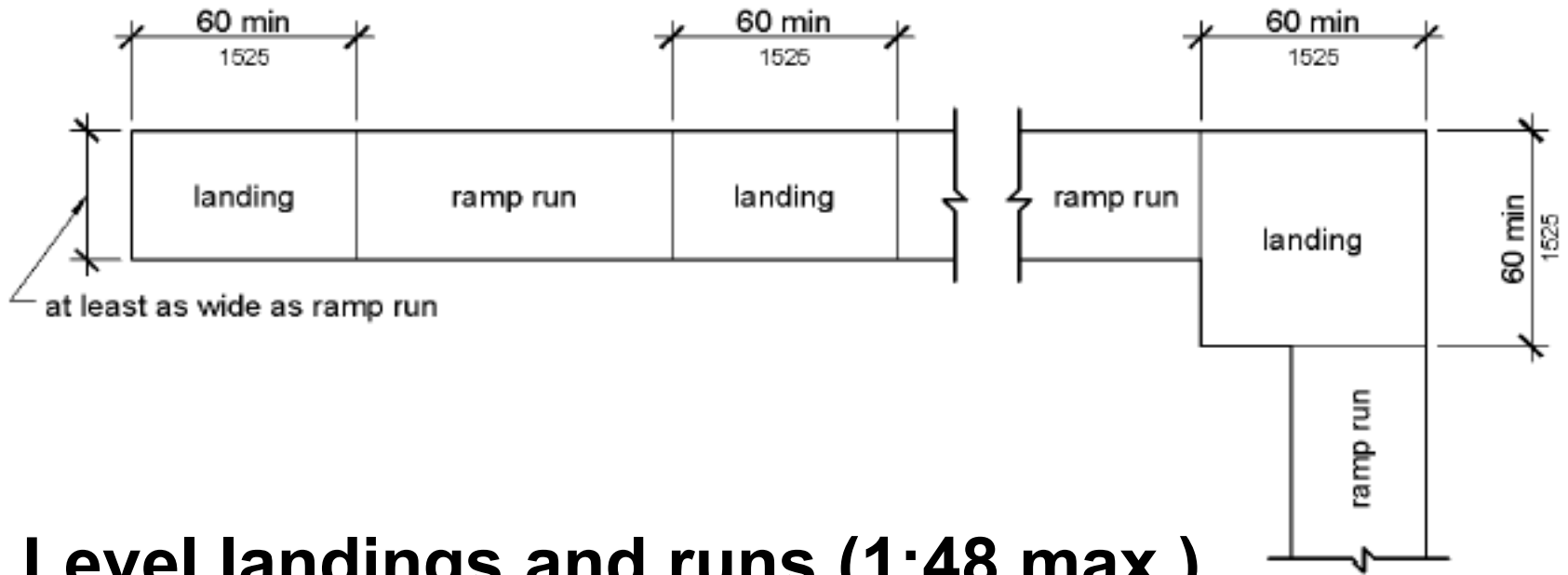
Entrances - 404

404.2.3 Clear Width. Door openings shall provide a clear width of 32 inches minimum.

- Clear openings of doorways with swinging doors shall be measured between the face of the door and the door stop, with the door open 90 degrees.
- Openings more than 24 inches deep shall provide a clear opening of 36 inches minimum.
- There shall be no projections into the required clear opening width lower than 34 inches above the finish floor or ground.
- Projections into the clear opening width between 34 inches and 80 inches above the finish floor or ground shall not exceed 4 inches.



Ramps (405)



- **Level landings and runs (1:48 max.)**
- **Edge protection (clarified specs)**

Ramps - Edge Protection

Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches minimum beyond the inside face of a handrail complying with 505.

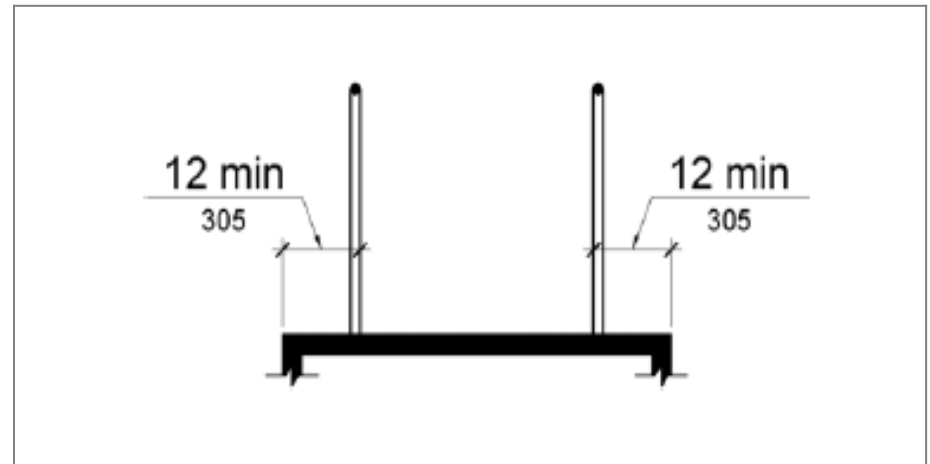
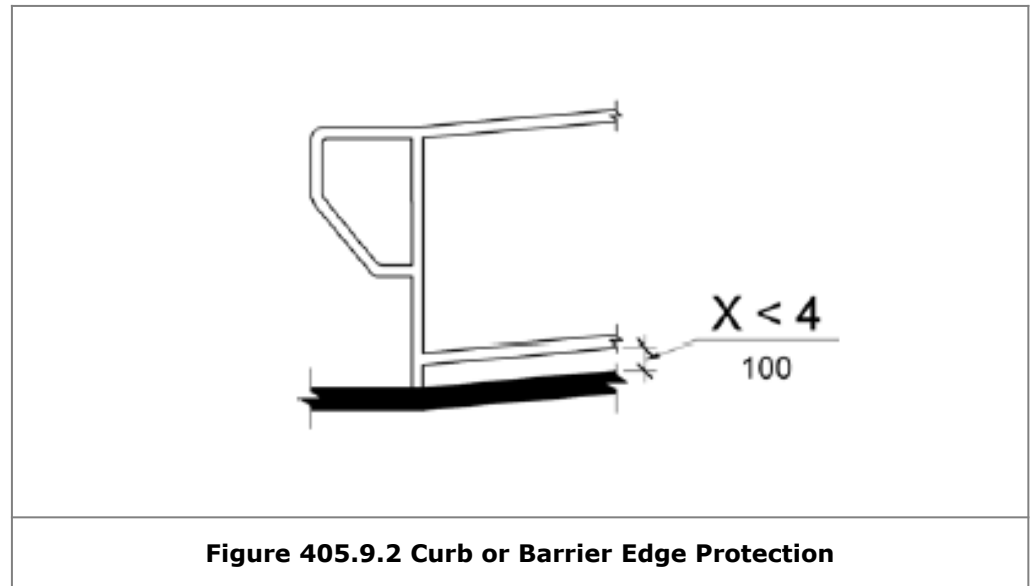


Figure 405.9.1 Extended Floor or Ground Surface Edge Protection

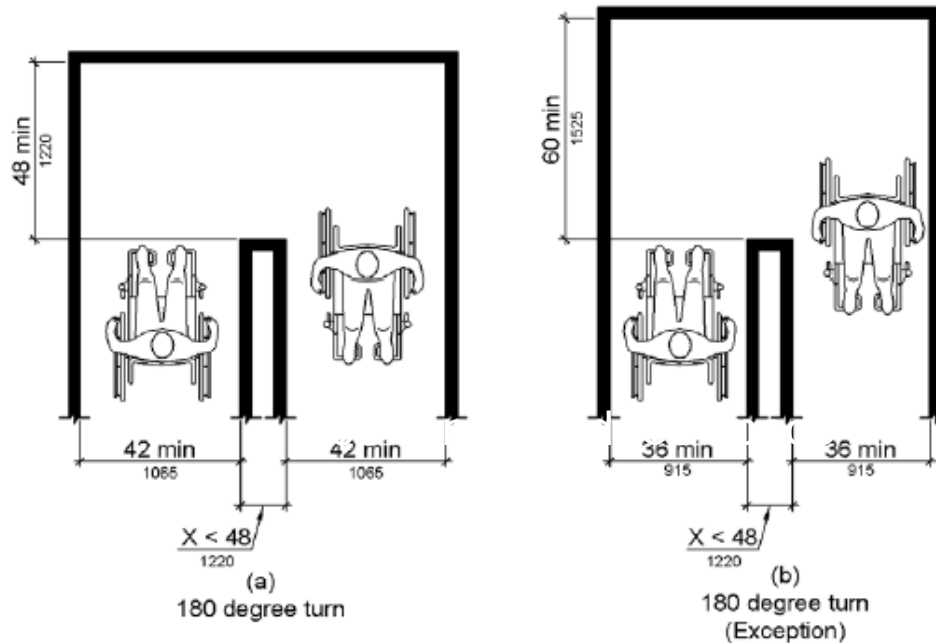
Ramps - Edge Protection

Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

405.9.2 Curb or Barrier.
A curb or barrier shall be provided that prevents the passage of a 4 inch diameter sphere, where any portion of the sphere is within 4 inches of the finish floor or ground surface.



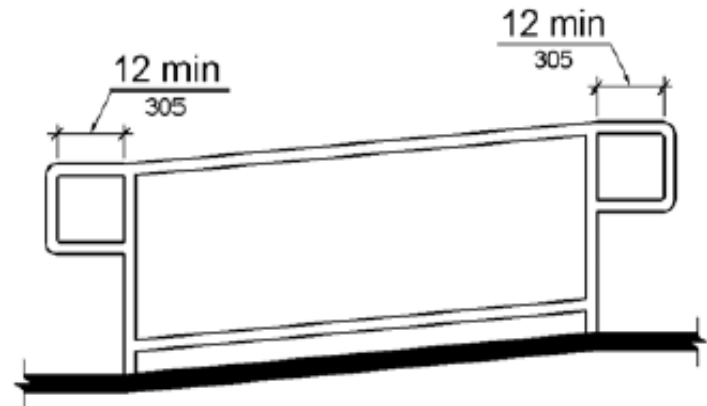
Turning space



Maintain the 48” or 60” minimum ramp landing depth, and 42” or 36” minimum width, even with vertical handrail supports.

Ramps (405)

- Slope: 1:12
maximum running
slope and 2% max
cross slope
- Handrails (if >6" rise)
 - both sides
 - 12" extensions
 - 34" to 38" height



Overview: Curb Ramps

- Smooth transition
- Side flares or returned curbs
- Level landing space (at both top and bottom)
- Diagonal ramps discouraged
- Detectable warnings

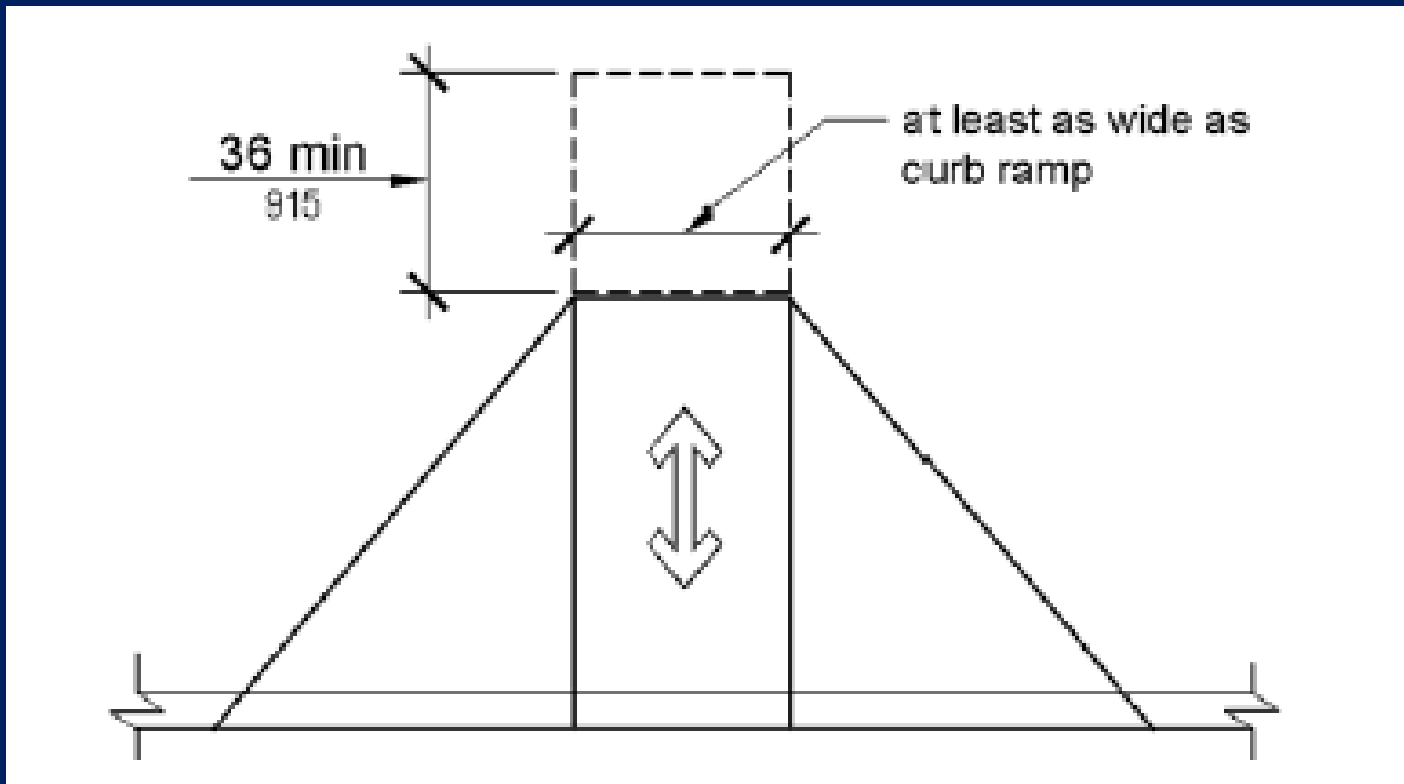


Figure 406.4 Landings at the Top of Curb Ramps

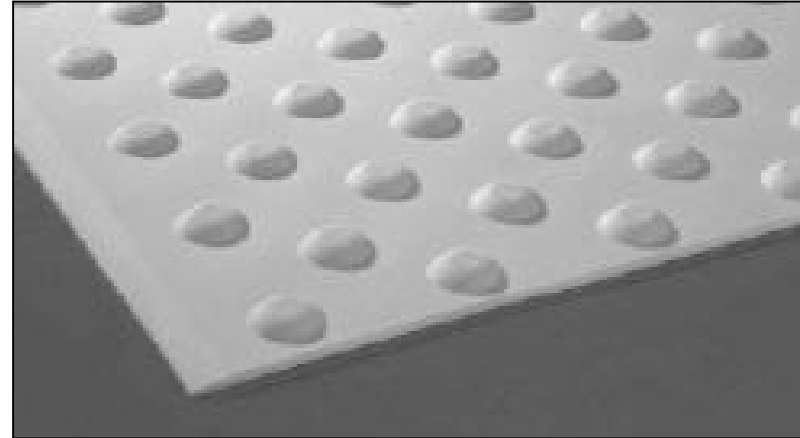
Detectable warnings

Curb ramps

On “sites” like campuses
– no

Transit facilities - yes

Rulemaking on public
rights-of-way (PROW) has
developed more specific
guidance – but not
expected to be required
anytime soon . . .



Best practice is to use these where entering vehicular way, but not, for example, entering parking access aisle.

General Site & Building Elements (Chapter 5)

- Parking
- Passenger Loading Zones
- Stairways
- Handrails

Parking spaces – 208

Table 208.2 Parking Spaces

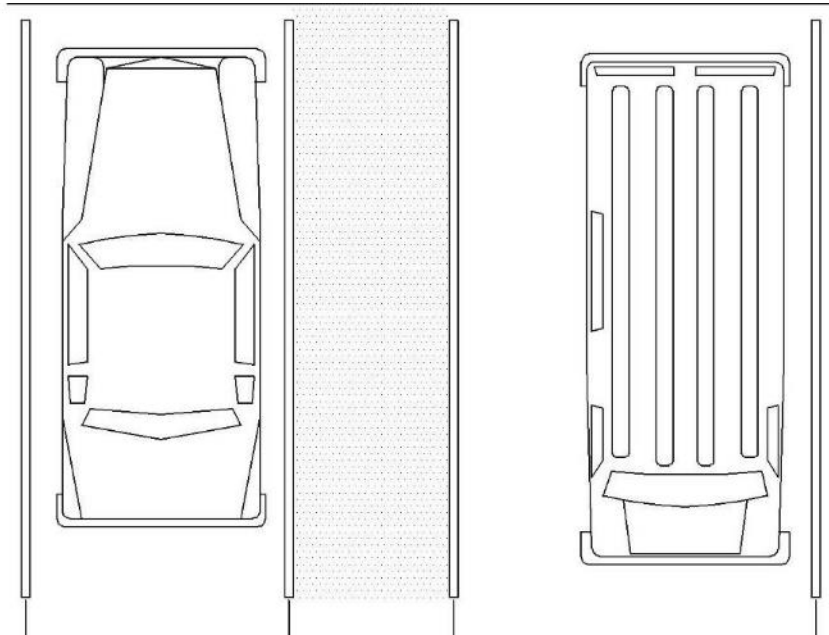
Total Number of Parking Spaces Provided in Parking Facility	Minimum Number of Required Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

Parking Scoping (208)

208.2.4 Van Parking Spaces.

For every six or fraction of six parking spaces required by 208.2 to comply with 502, at least one shall be a van parking space complying with 502.

Van Accessible Parking



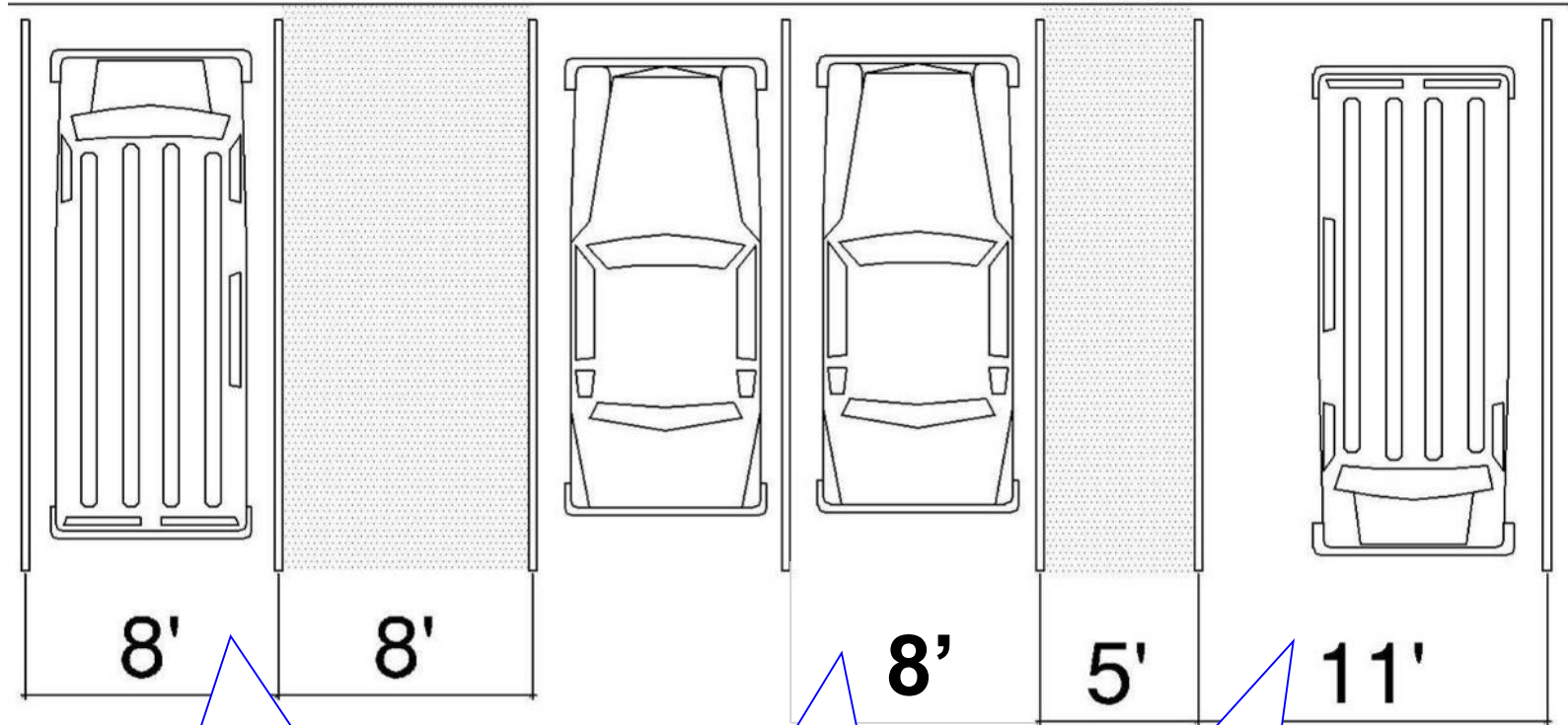
**Van Spaces - 1 of every 6 accessible spaces
(instead of 1 of 8 from ADAAG)**

Location: Parking spaces – 208

- Accessible parking shall be on the closest accessible route to the building/facility served.
- Dispersed when parking serves more than one building entrance.



Van Spaces (502)



Van space

Car space

Van space

Parking Spaces (502)

Identification

- Signs shall include the International Symbol of Accessibility
- Van spaces shall contain the designation "van accessible."
- 60" min above the finish floor or ground surface measured to the bottom of the sign.



Parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes.

502.3 Access Aisles



502.3 Access Aisle. Access aisles serving parking spaces shall comply with 502.3.

- Access aisles shall adjoin an accessible route.
- Two parking spaces shall be permitted to share a common access aisle.

502.3 Access Aisles

Advisory 502.3 Access Aisle.

- Accessible routes must connect parking spaces to accessible entrances.
- In parking facilities where the accessible route must cross vehicular traffic lanes, marked crossings enhance pedestrian safety, particularly for people using wheelchairs and other mobility aids.
- Where possible, it is preferable that the accessible route not pass behind parked vehicles.

Handrails (505)

- Provided on both sides of stairs and ramps and be continuous within each flight (plus with inside handrail between flights)
 - *Exception:* In assembly areas, handrails shall not be required on both sides of aisle ramps where a handrail is provided at either side or within the aisle width.
- Mounting height 34-38 inches
 - Measured to top of gripping surface
 - Stairs – measured from nosings to top of gripping surface (see ADA Fig. 505.4)

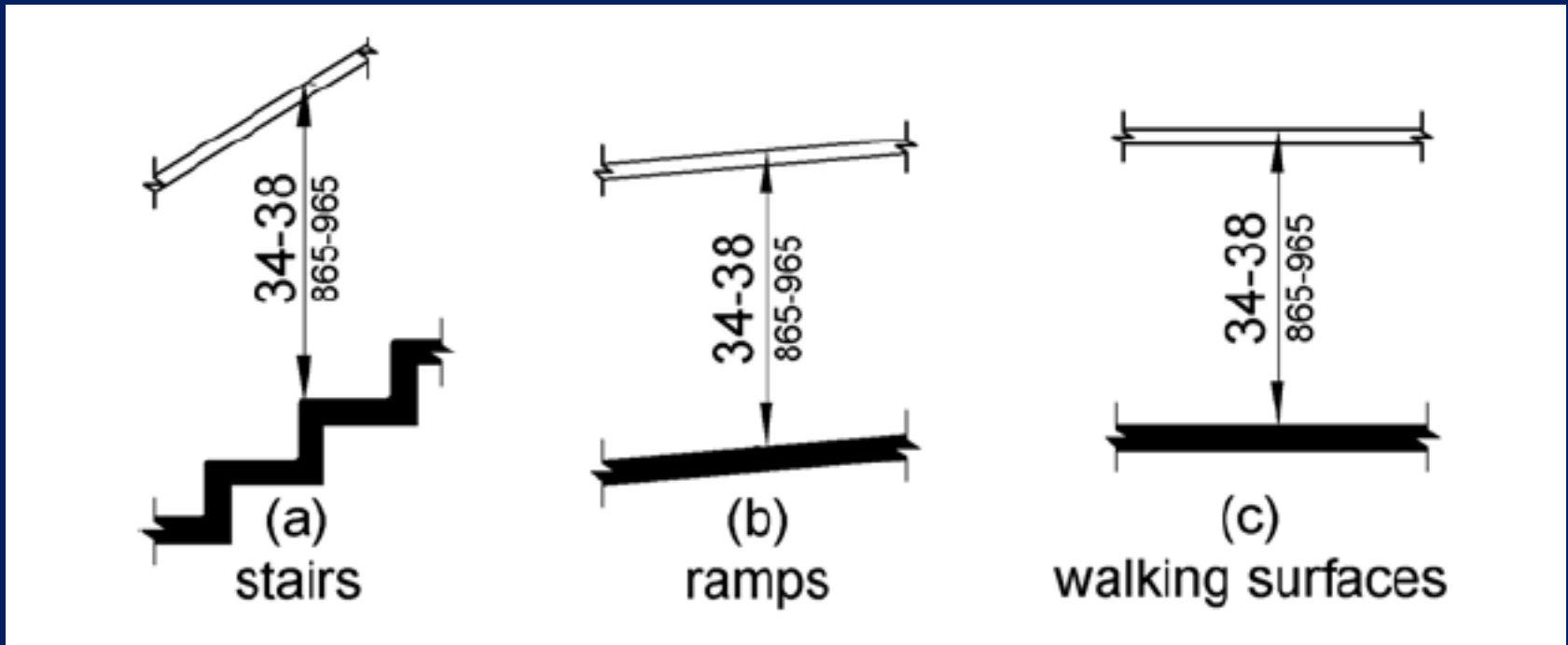


Figure 505.4 Handrail Height

Handrail Dimensions (505)

- Handrail/ surface clearance: 1 ½” min. (not absolute)
- Diameter for circular handrails: 1 ¼” – 2” (no longer 1 ½” maximum.)
- Alternate specs for non-circular handrails
- Dimension applies to outer diameter (clarification)

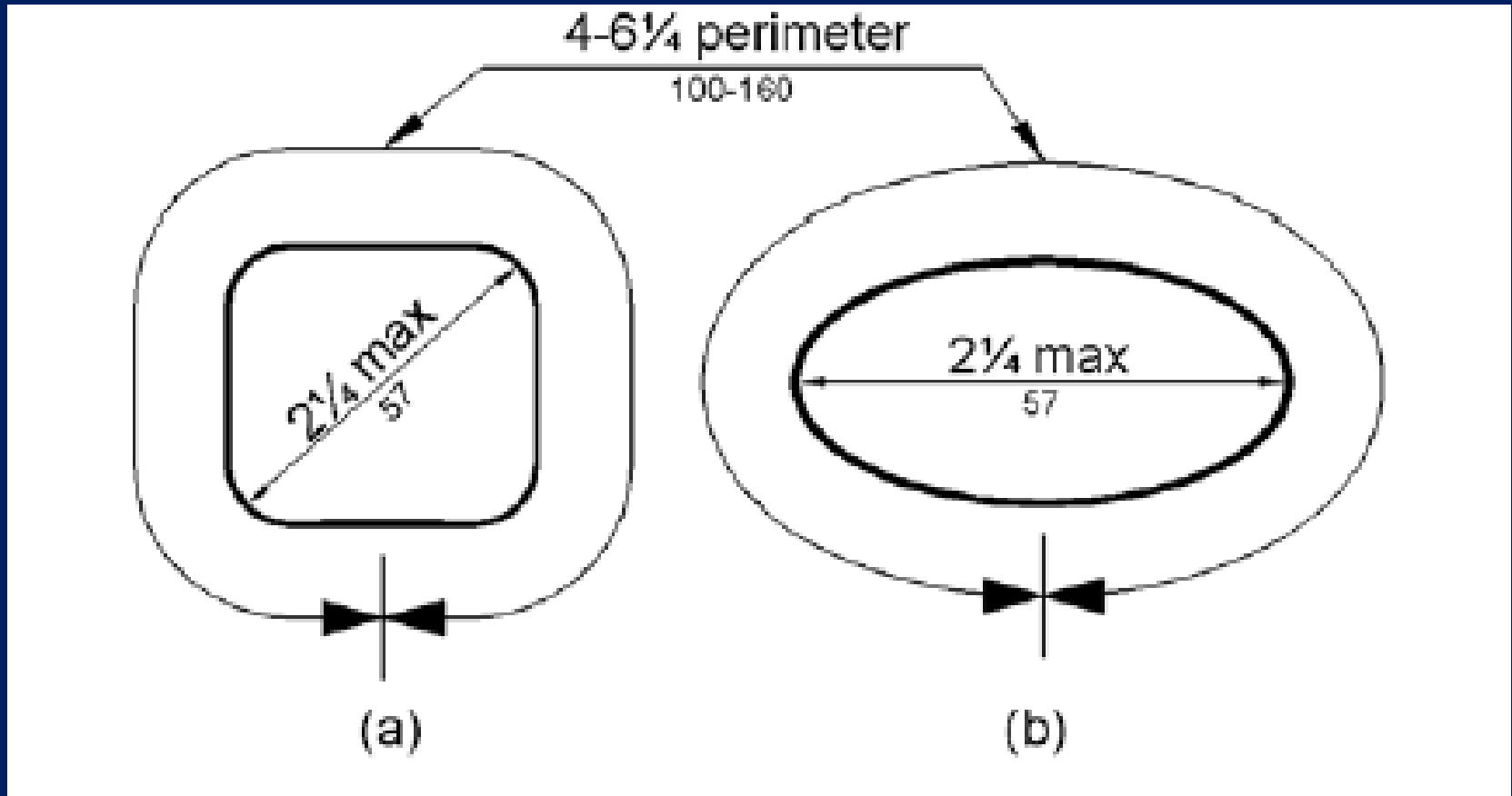
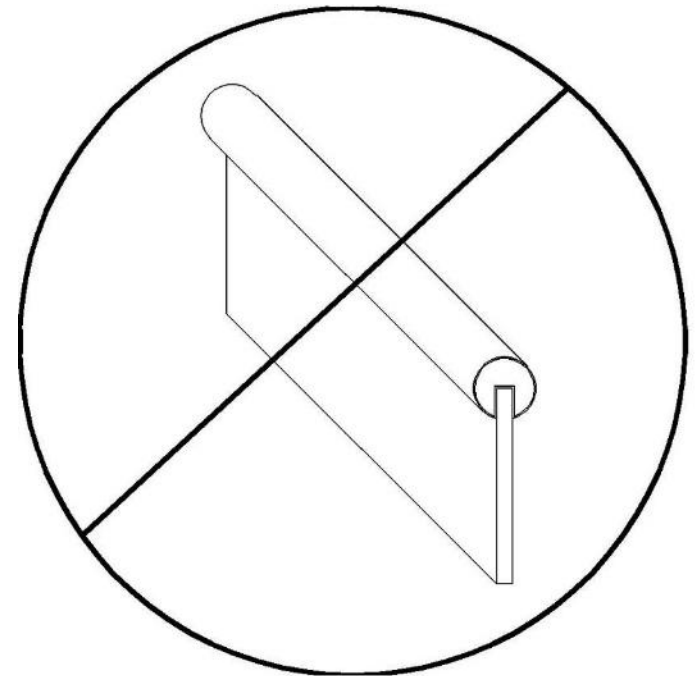
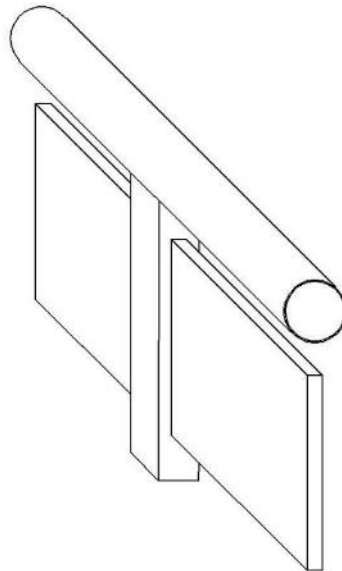


Figure 505.7.2 Handrail Non-Circular Cross Section

Handrails (505)

Gripping surfaces

- Continuous gripping surface
- No obstructions on top or sides
- Obstructions limited along bottom to 20%
- 1.5" min clear under handrail



Handrails (505)

Top and Bottom Extension at Ramps.

- Ramp handrails shall extend horizontally above the landing for 12" min beyond the top and bottom of ramp runs.

Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent ramp run.



Figure 505.10.1 Top and Bottom Handrail Extension at Ramps

Handrails (505)

Top Extension at Stairs.

- Shall extend horizontally above the landing for 12" min beginning directly above the first riser nosing.
- Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

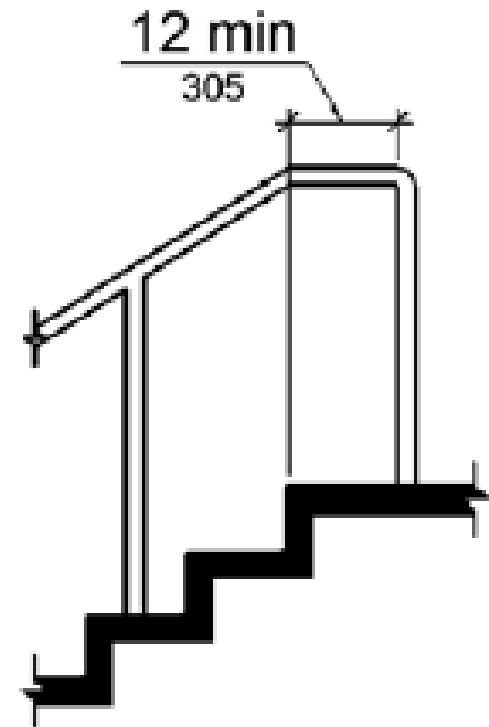
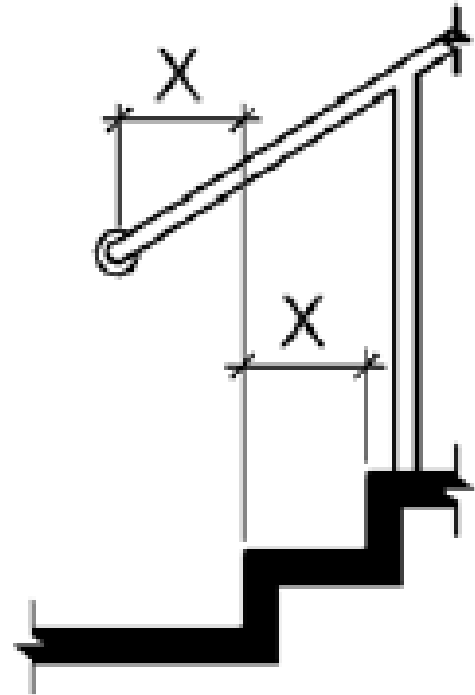


Figure 505.10.2 Top Handrail Extension at Stairs

Handrails (505)

Bottom Extension at Stairs

- shall extend at the slope of the stair flight for a horizontal distance at least equal to one tread depth beyond the last riser nosing.
- Extension shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.



Note: X = tread depth

Figure 505.10.3 Bottom Handrail Extension at Stairs

602 Drinking Fountains

- **602.1 General.** Drinking fountains shall comply with 307 and 602.
- **602.2 Clear Floor Space:** Units shall have a clear floor or ground space complying with 305 positioned for a forward approach and centered on the unit.
- Knee and toe clearance complying with 306 shall be provided (forward approach).

602 Drinking Fountains

- **602.4 Spout Height.** Spout outlets shall be 36 inches maximum above the finish floor or ground.
- **602.5 Spout Location.** The spout shall be located 15 inches minimum from the vertical support and 5 inches maximum from the front edge of the unit, including bumpers.
- **602.7 Drinking Fountains for Standing Persons.** Spout outlets of drinking fountains for standing persons shall be 38 inches minimum and 43 inches maximum above the finish floor or ground

Advisory 602.6 Water Flow

The purpose of requiring the drinking fountain spout to produce a flow of water 4 inches high minimum is so that a cup can be inserted under the flow of water to provide a drink of water for an individual who, because of a disability, would otherwise be incapable of using the drinking fountain.

Dining & Work Surfaces (226)

Access to at least 5%, not fewer than 1
[no change from UFAS and original ADAAG]



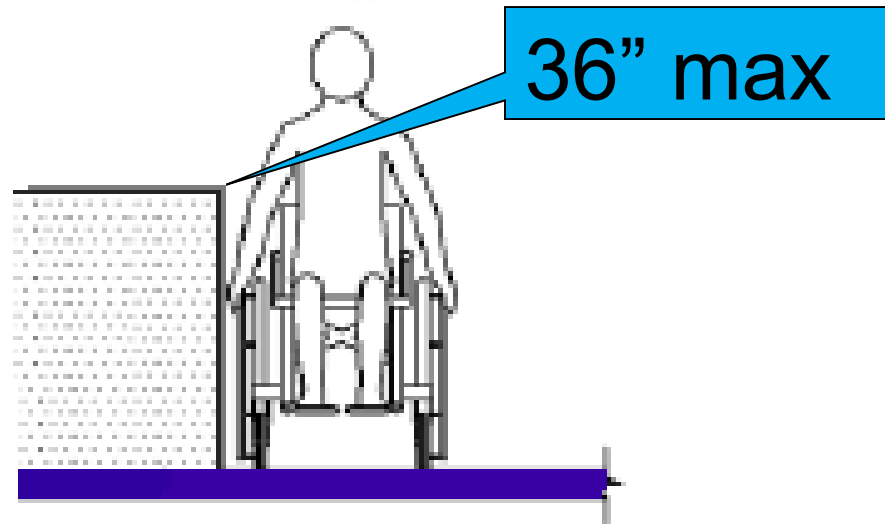
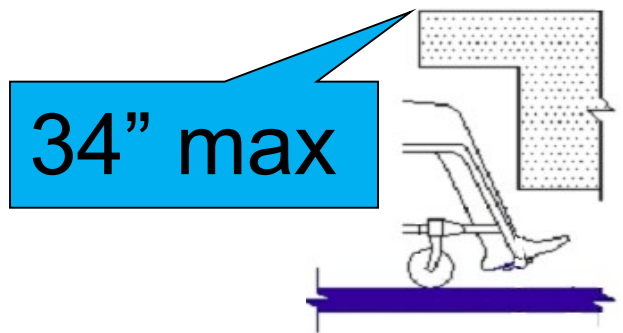
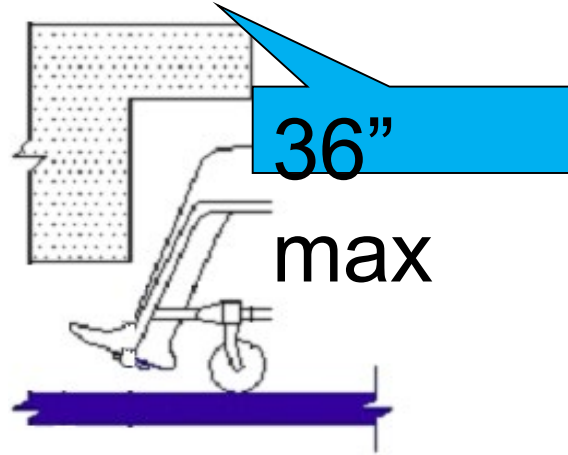
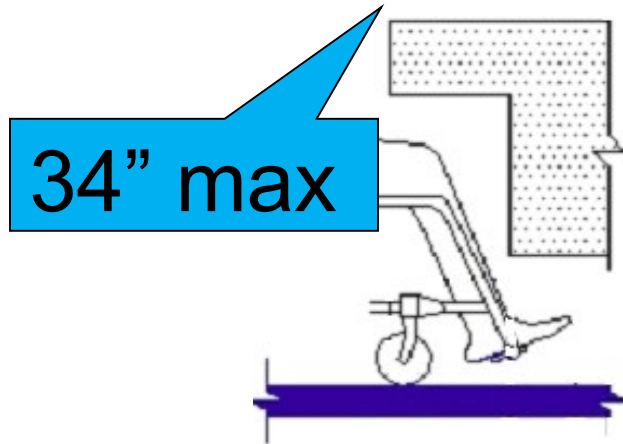
Dining & Work Surfaces (902)

- Must have forward approach with knee and toe clearance
- Tops of dining and work surfaces: 28" min to 34" max



Dining & Work Surface (902)

Service Counter (904)



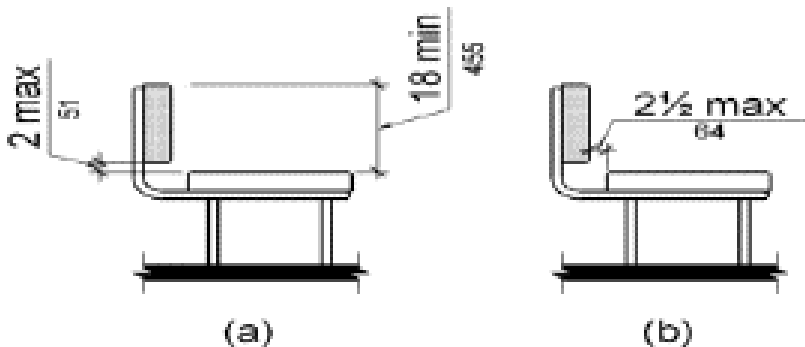
Benches (903)

Seat

- 42" long min
20" deep min
24" deep max
- 17" – 19" seat height
- 30" x 48" CFS positioned at the end of the bench seat and parallel to the short axis of the bench

Back Support

- Provide for or shall be affixed to a wall
- 42" long min
- Extends from a point 2" max above the seat surface to a point 18" min above the seat surface.
- 2 ½" from the rear edge of the seat measured horizontally.



Equivalent Facilitation

103 Equivalent Facilitation

Nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in **substantially equivalent or greater accessibility and usability.**

Alterations

TECHNICAL INFEASIBILITY

- Something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or
- Other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.

Alterations

TECHNICAL INFEASIBILITY

In alterations, where compliance with applicable requirements is technically infeasible, the alteration shall comply with the requirements to the **maximum extent feasible.**



Plumbing Elements & Facilities (Chapter 6)

- **Drinking Fountains**
- **Toilet & Bathing Rooms**
- **Water Closets & Toilet Compartments**
- **Urinals**
- **Lavatories & Sinks**
- **Bathtubs**
- **Shower Compartments**
- **Grab Bars**
- **Seats**
- **Washing Machines & Clothes Dryers**
- **Saunas & Steam Rooms**

Drinking Fountains (211)

Where provided on an exterior site or floor,

- **2 required: wheelchair accessible & standing access**
- **alternative: single unit with dual access (e.g., “hi-lo” units)**
- **multiple installations: 50% of each type**



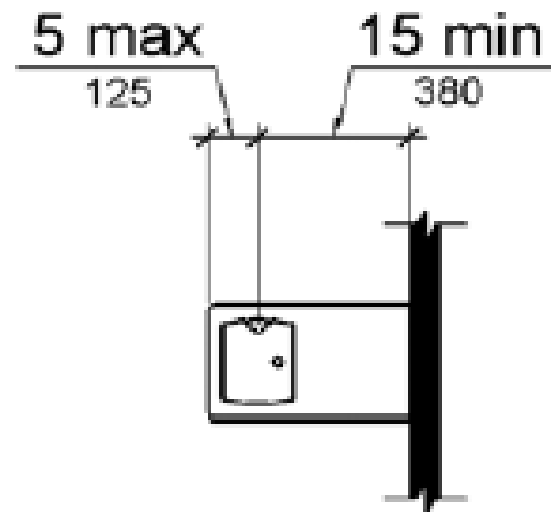
Drinking Fountains (602)

- **forward approach to all wheelchair accessible units**
- **revised specs for spout location & water flow**
- **clear floor space to be “centered”**



Drinking Fountains (602)

- **height for standard units: 38”- 43”**
- **for accessible fountain, spout outlets shall be 36 inches max. above the finish floor or ground.**
- **“reachable” spout:**
 - **5” max from front**
 - **15” minimum from back**

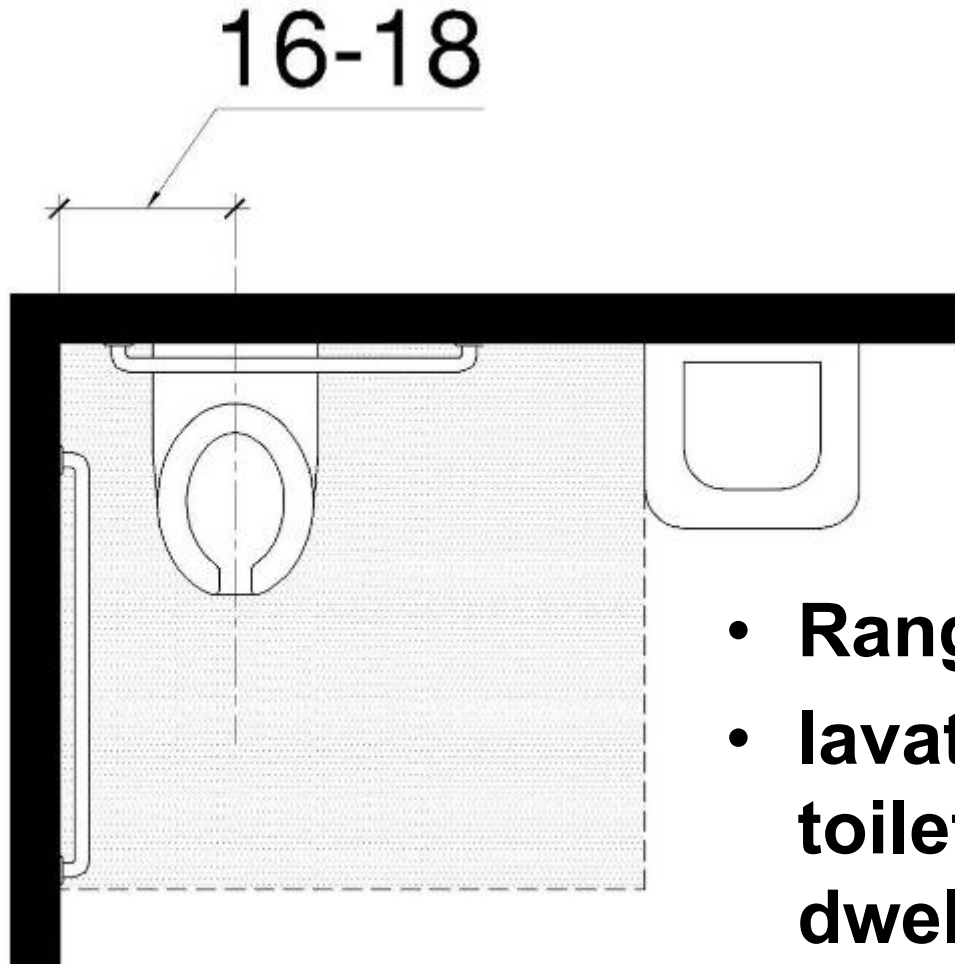


Toilet & Bathing Facilities (213)

- **Scoping for rooms & elements (e.g., toilets, lavatories, mirrors)**
- **Toilet rooms clustered at 1 location: 50% scoping**
- **Unisex toilet rooms**
- **Urinals - access where more than 1 provided**

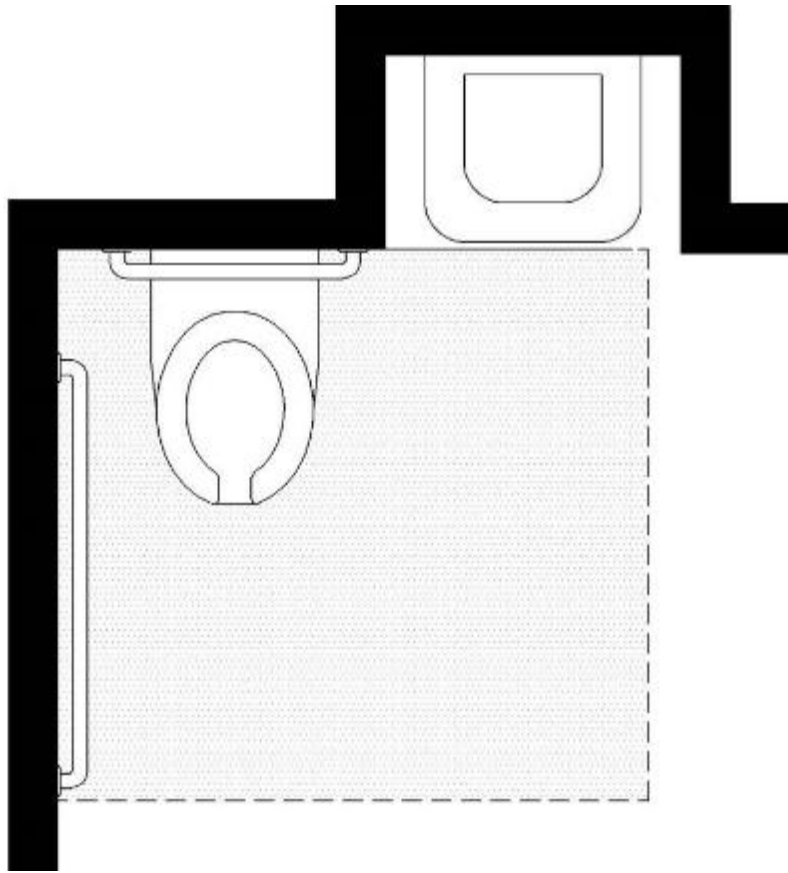


Toilet Rooms & Water Closets (603 & 604)



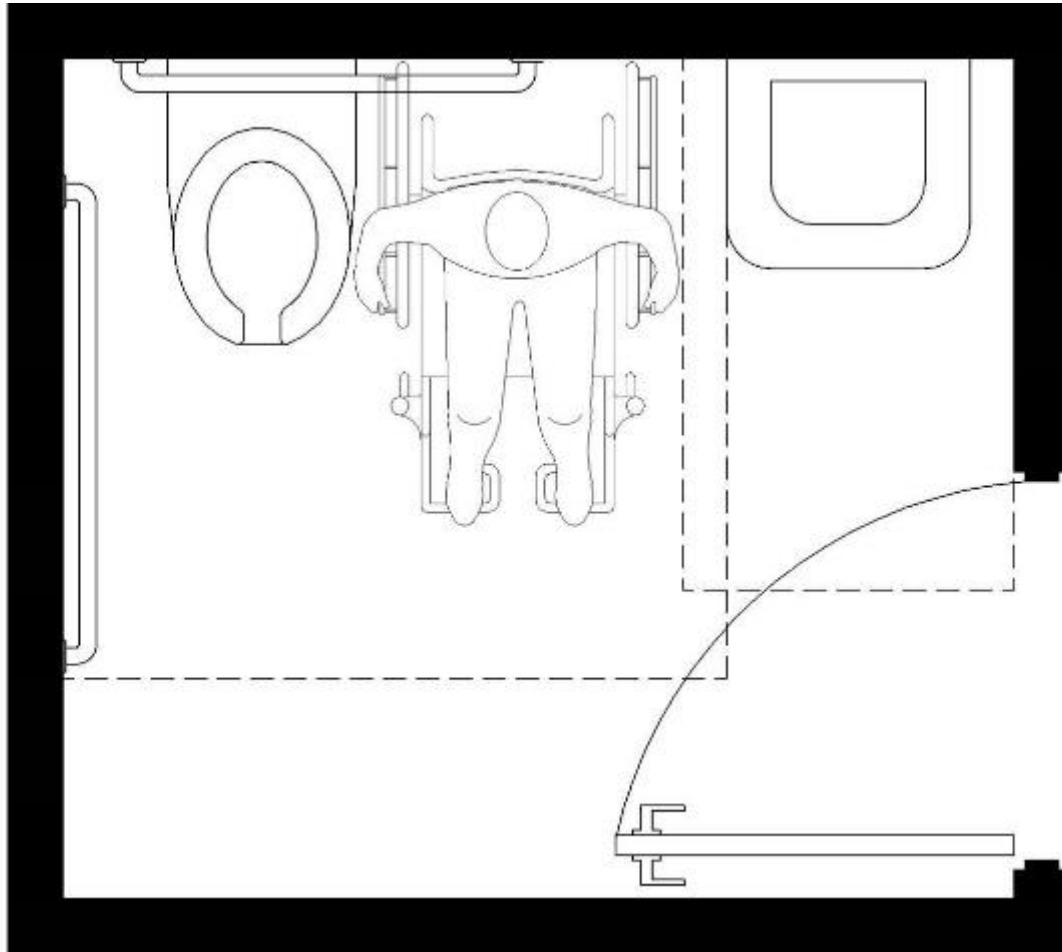
- **Range for toilet centerline**
- **lavatory cannot overlap toilet clearance (except in dwelling units)**

Toilet Rooms & Water Closets (603 & 604)



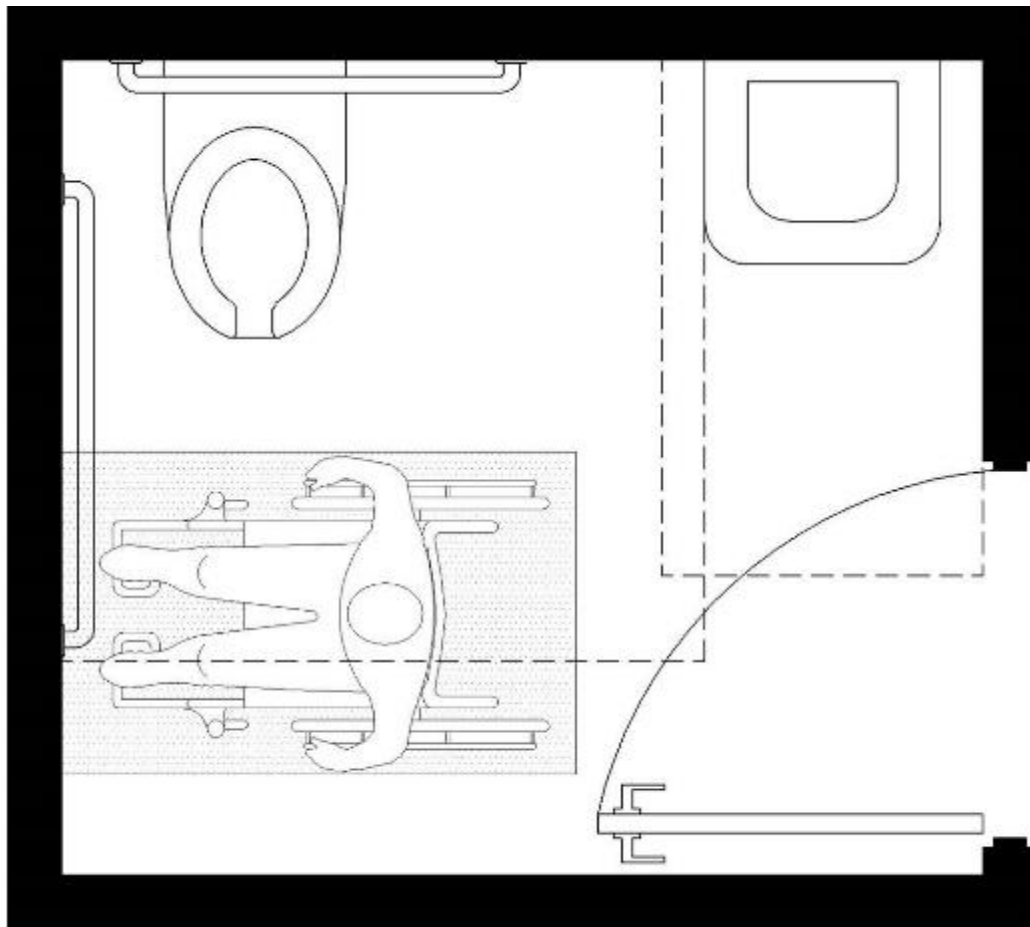
- a fixture can be recessed
- shorter (24" min.) rear grab bar allowed

Toilet & Bathing Rooms (603)



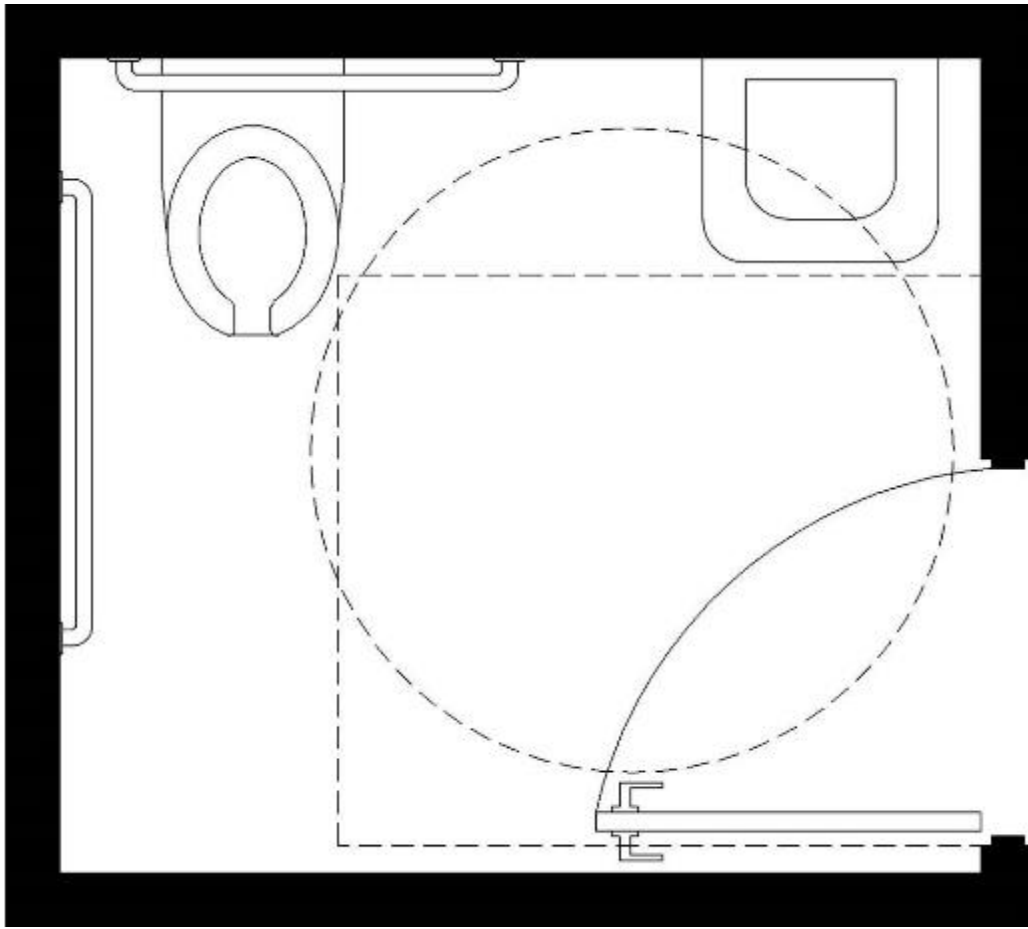
**Space for
side
transfers
provided**

Toilet & Bathing Rooms (603)



**Door can swing
into fixture
clearances if clear
floor space
provided beyond
door swing**

Toilet & Bathing Rooms (603)



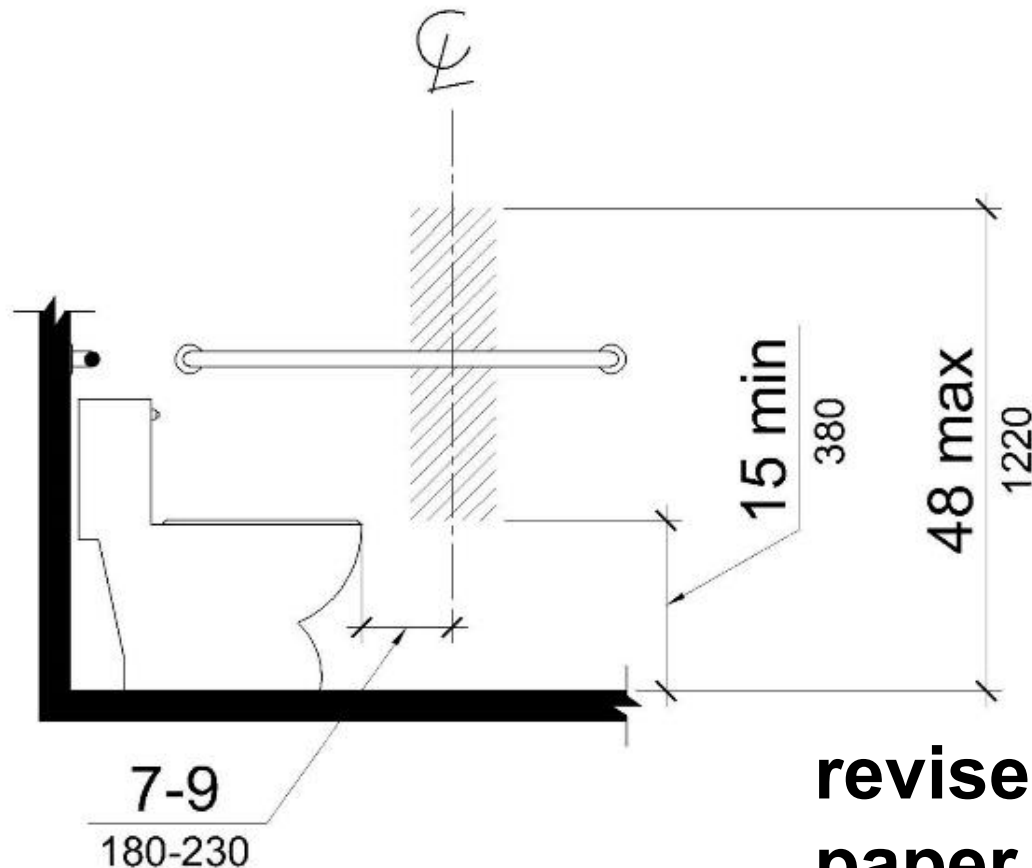
**Turning space
(which door can
swing into) and
door clearances
further define
room size**

Water Closets (604)

Other changes/ clarifications:

- **objects permitted to overlap clearance (grab bars, dispensers, etc.)**
- **flush controls (standard reach range)**
- **toilet paper dispenser location**

Water Closets (604)

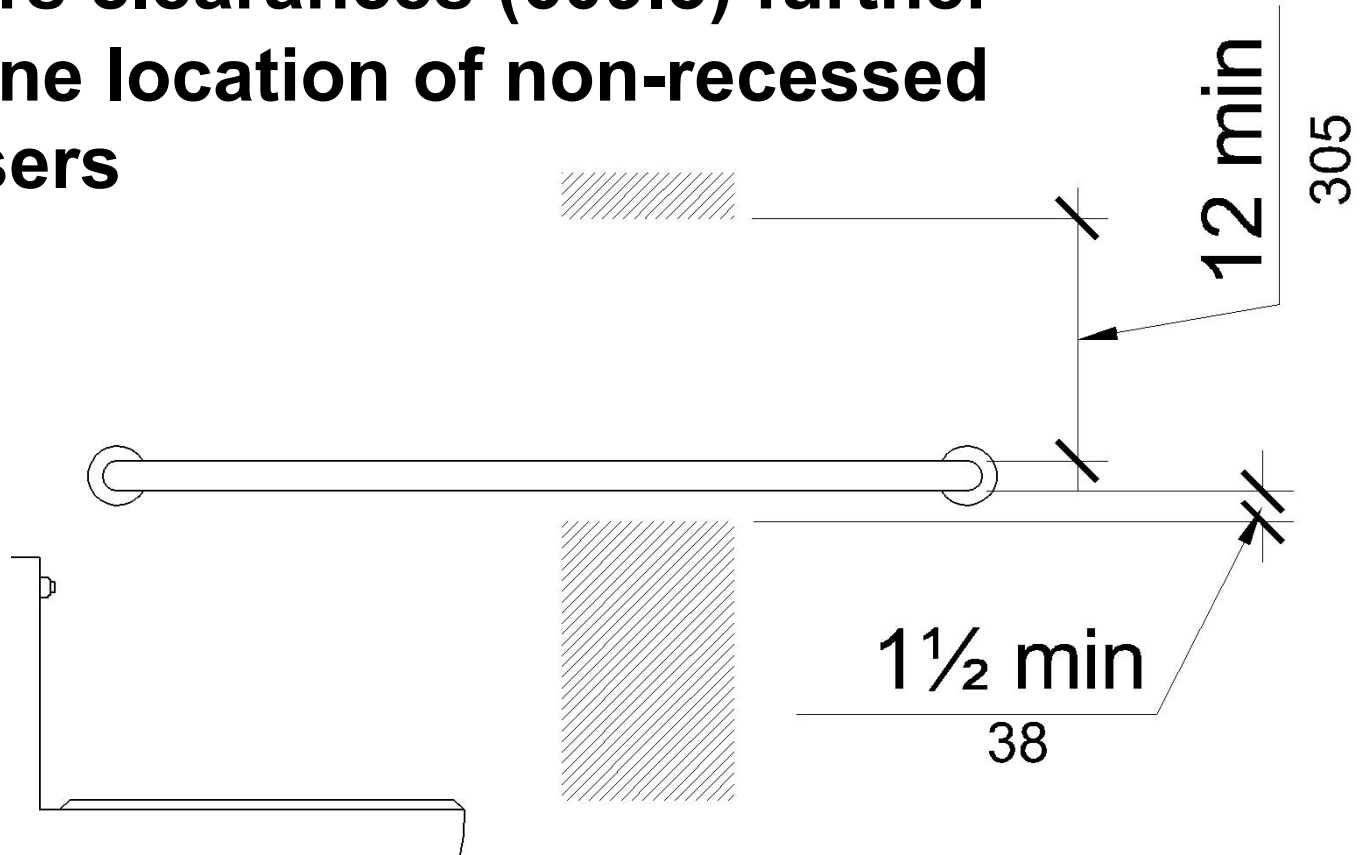


604.4 Seats. The seat height of a toilet above the finish floor (AFF) shall be 17 inches minimum and 19 inches maximum measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

revised location for toilet paper dispenser

Water Closets (604)

grab bars clearances (609.3) further determine location of non-recessed dispensers



Water Closets (604)



**large (mega)
dispensers
can conflict
with grab bar
clearance**

Water Closets (604)

What's wrong with this picture?

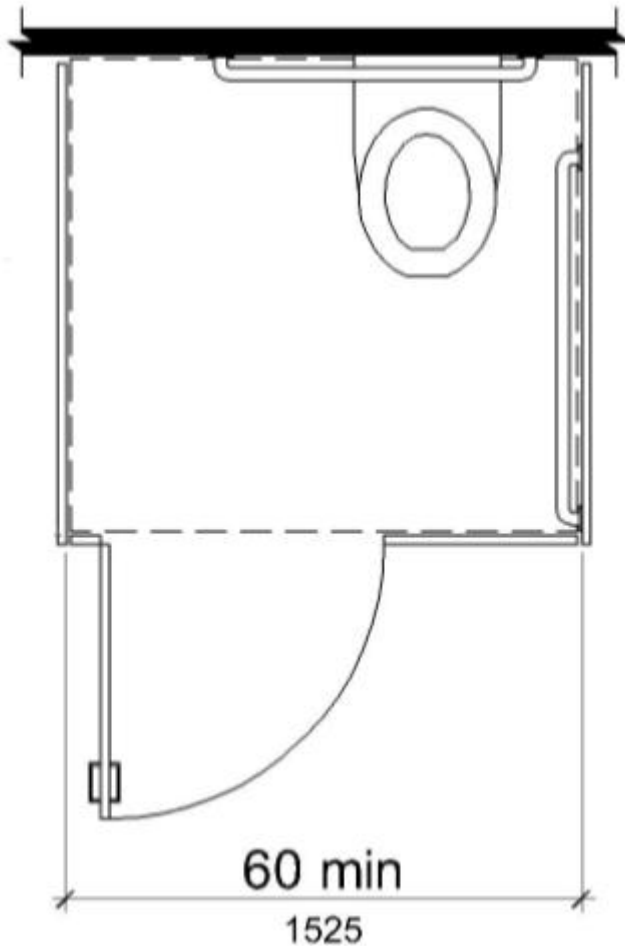


Water Closets (604)

What's wrong with this picture?



Wheelchair Compartments (604)



Standard Stall

60" min. wide

depth:

- 56" min. (wall hung toilet)
- 59" min. (floor-mounted or children's toilet)

Examples which work well



These two existing restrooms were well within what is expected for new construction or alterations.



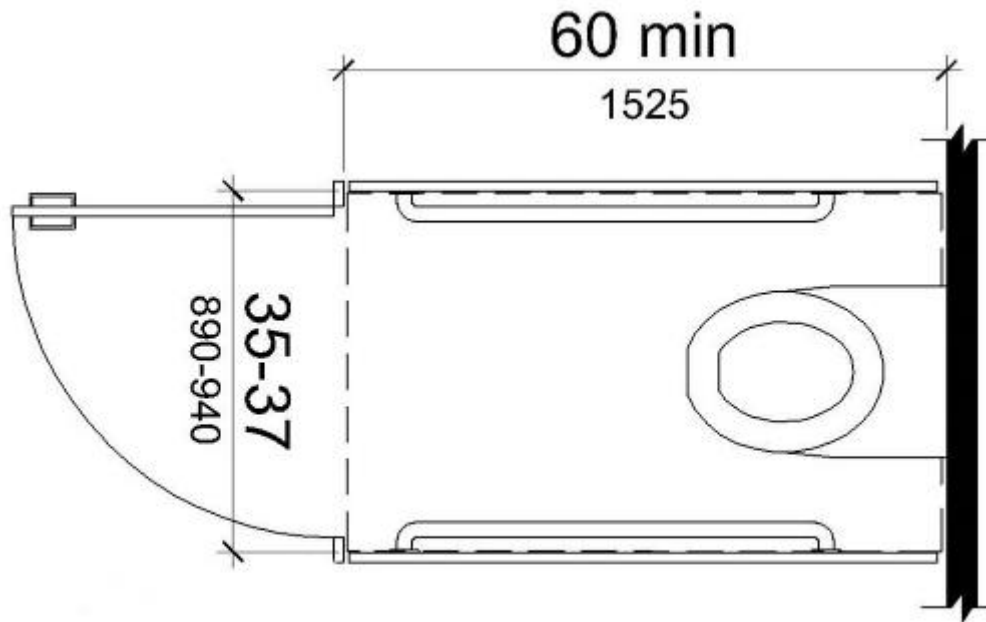
Examples which pose problems



Existing restrooms like these can't always be 100% in compliance – but can be made usable with effort and creativity.



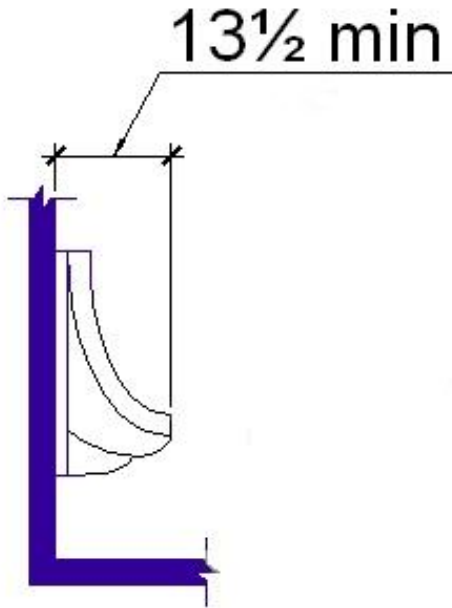
Ambulatory Accessible Stalls (604)



depth specified (60" min.)

width: 35" - 37" (instead of 36" absolute)

Urinals (605)



- **213.3.3 Urinals.** Where more than one urinal is provided, at least one shall comply with 605.

605 Urinals

- **605.1 General.** Urinals shall comply with 605.
- **Advisory 605.1 General.** Stall-type urinals provide greater accessibility for a broader range of persons, including people of short stature.
- **605.2 Height and Depth.** Urinals shall be the stall-type or the wall-hung type with the rim 17 inches maximum above the finish floor or ground. Urinals shall be 13 1/2 inches deep minimum measured from the outer face of the urinal rim to the back of the fixture.

Lavatories & Sinks (606)



Bottom of mirror to be minimum 40" AFF if above counter; 35" otherwise.

- front of the higher of the rim or counter surface 34 inches maximum above the finish floor or ground (AFF).
- 29" apron clearance removed
- parallel approach - kitchen sinks in spaces without cook tops/ conventional ranges
- removable cabinetry - sinks & lavs in dwelling units
- note drainpipe insulation at right

Lavatories & Sinks (606)



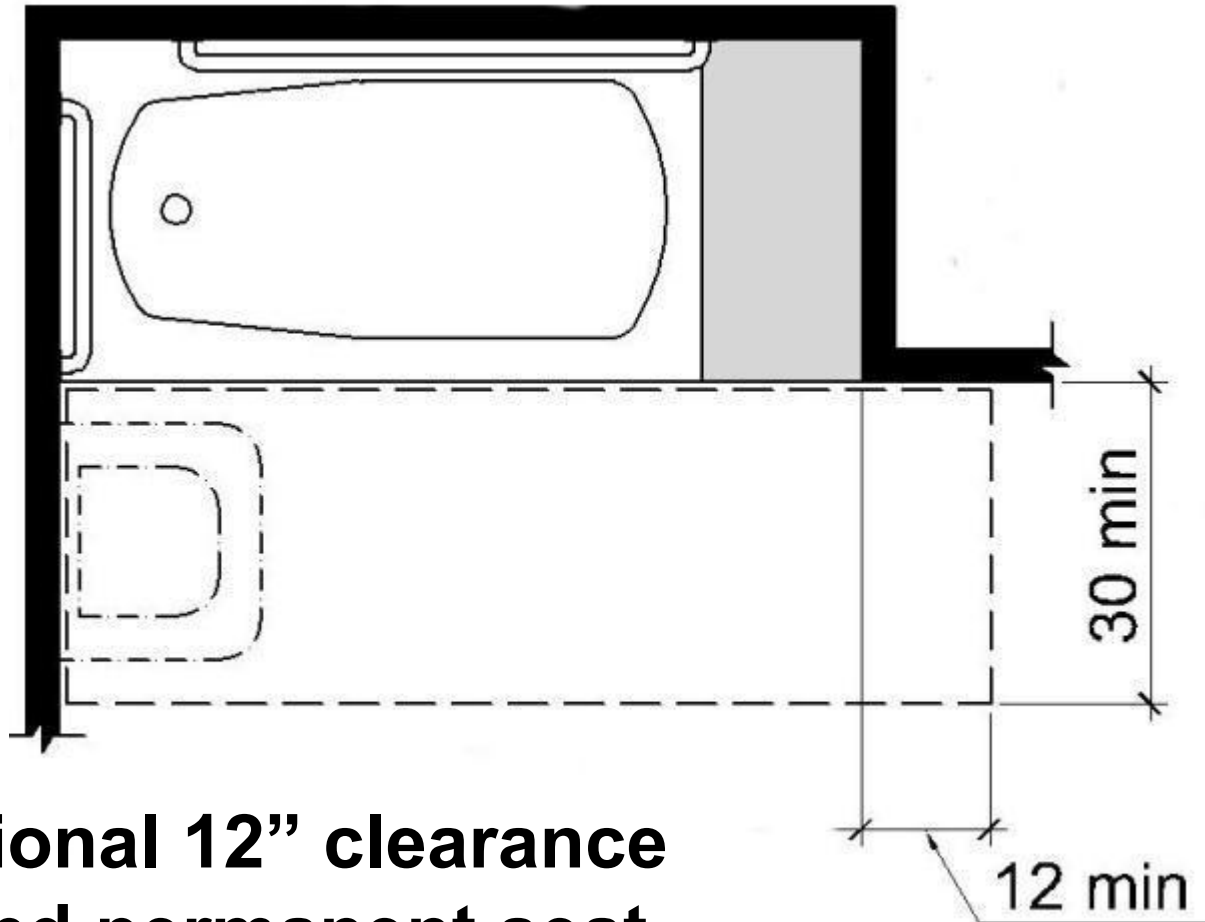
Lavatories & Sinks (606)

- **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.
- **Advisory 606.1 General.** Locate soap and towel dispensers so that they are conveniently usable by a person at the accessible lavatory.
- **606.2 Clear Floor Space.** A clear floor space complying with 305, positioned for a forward approach, and knee and toe clearance complying with 306 shall be provided.

Bathtubs & Shower Compartments (607& 608)

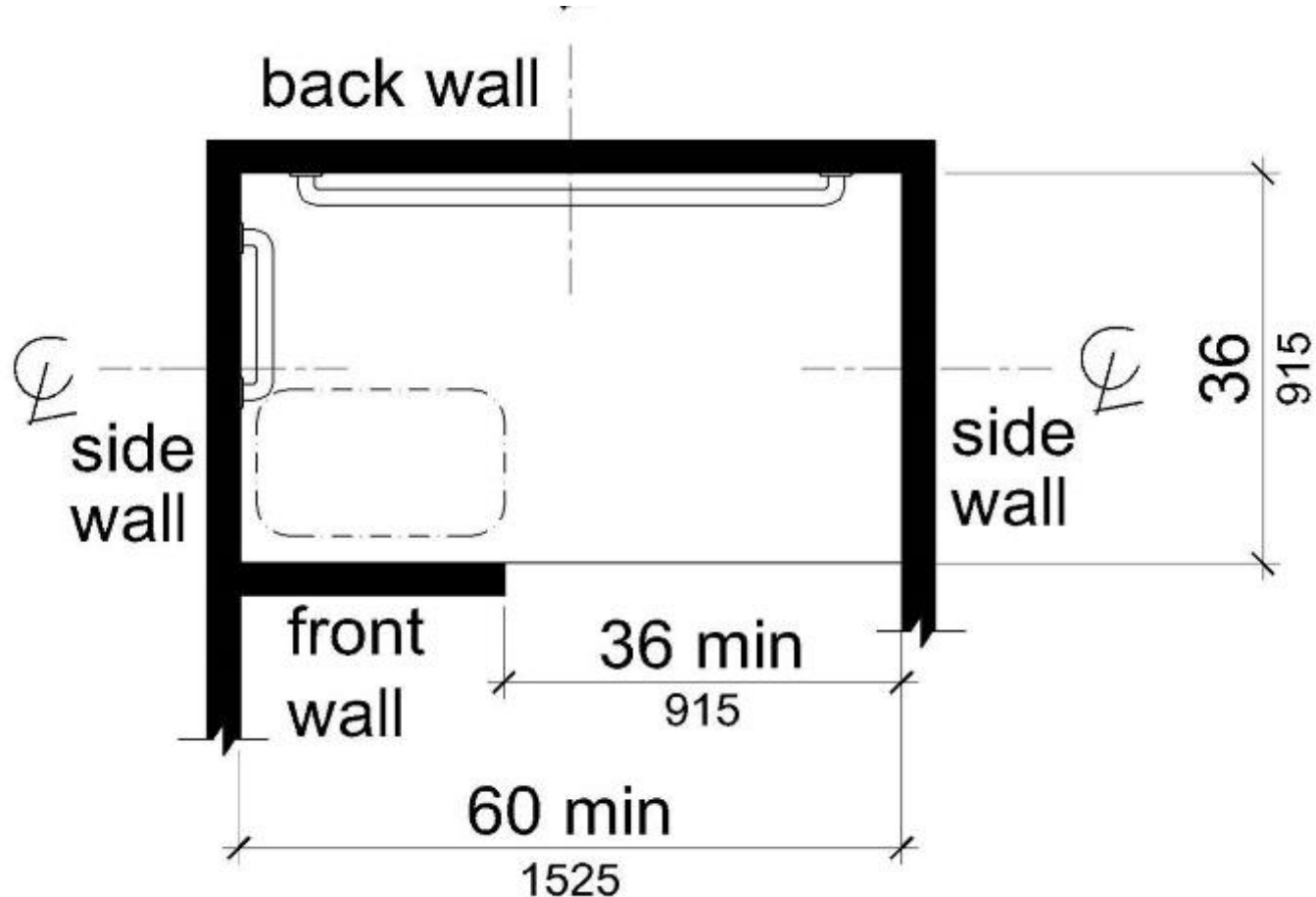
- **Hand-held shower spray (with on/off control)**
- **Water temperature (120 degrees max.)**
- **Grab bars – can be “adaptable” in private bathrooms & dwelling units bathrooms, but not for accessible dorm or hotel rooms**

Bathtubs (607)



**additional 12" clearance
beyond permanent seat**

Shower Compartments (608)



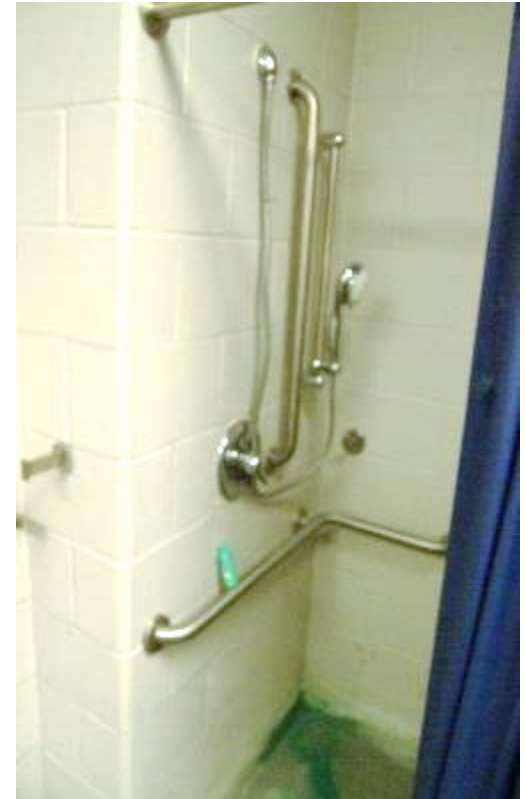
Alternate design permitted in any facility

Shower Compartments (608)

Allowed:

- **1/2” max. beveled threshold in roll-in showers**
- **a higher curb (2” max.) - transfer showers in existing facilities (where floor slab affected)**

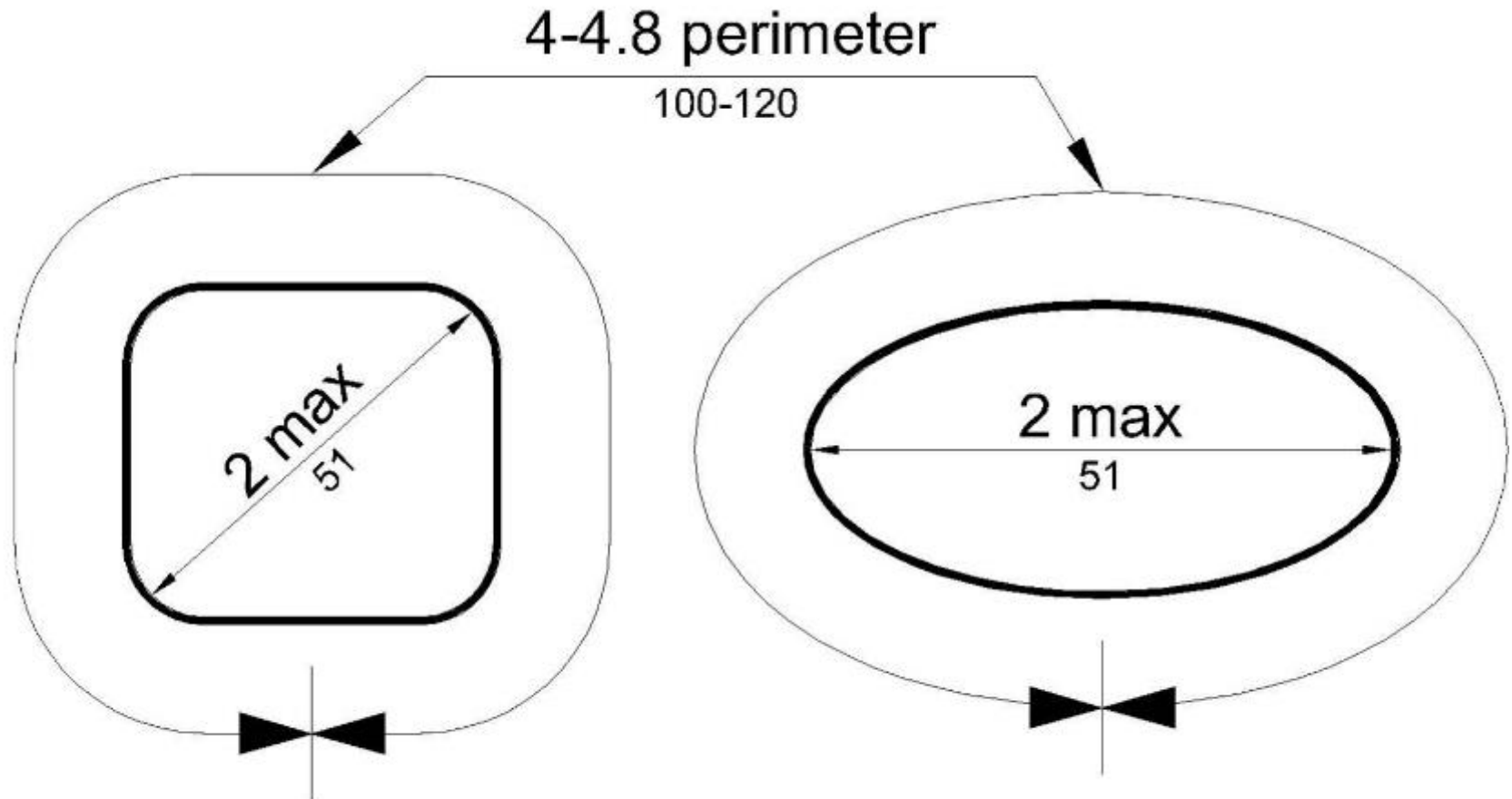
Shower Compartments (608)



Grab Bars (609)

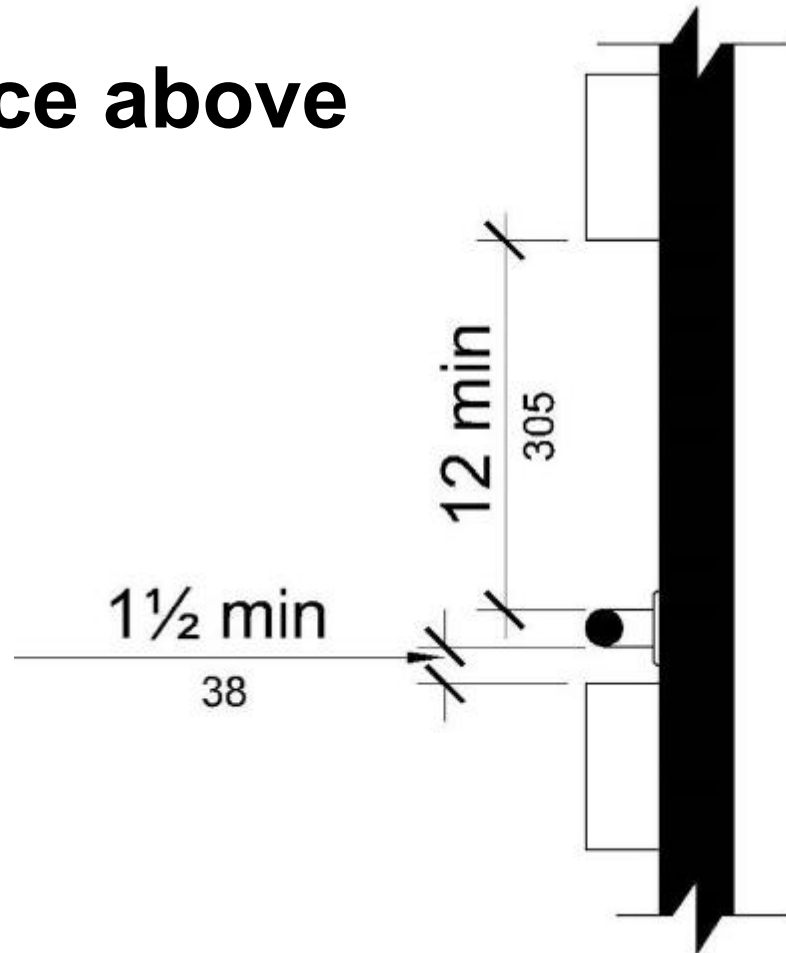
- **Wider diameter – 2” max. instead of 1 ½”**
- **Circular and non-circular cross sections**
- **4” – 4.8” perimeter dimension**
- **2 ” max. cross section dimension**

Grab Bars (609)



Grab Bars (609)

12" min. clearance above
1 1/2" min. below



Seats (610)

More detail on:

- **Size & Shape**
- **Location in showers**
- **Removable tub seats are now allowed (but they should have backs.)**



Seats (610)

- The top of bathtub seats shall be 17 in. minimum and 19 in. maximum above the bathroom floor.
- The depth of a removable in-tub seat shall be 15 inches minimum and 16 inches maximum. The seat shall be capable of secure placement.
- Permanent seats at the head end of the bathtub shall be 15 inches deep minimum and shall extend from the back wall to or beyond the outer edge of the bathtub.

Resources

Tool-Kit for OCR Reviews contains info on:

Toilet Compartments

Lavatories and Sinks

Assembly Areas

Housing at places of education

Accessible Parking

Resources

Ray Petty

Great Plains ADA Center Regional Technical Assistance Coordinator (and Kansas Coordinator)

785-842-4317 raypetty@aol.com

US Access Board: www.access-board.gov

DOJ on ADA: www.ada.gov