GOVERNMENT OF PUERTO RICO
Public Housing Administration

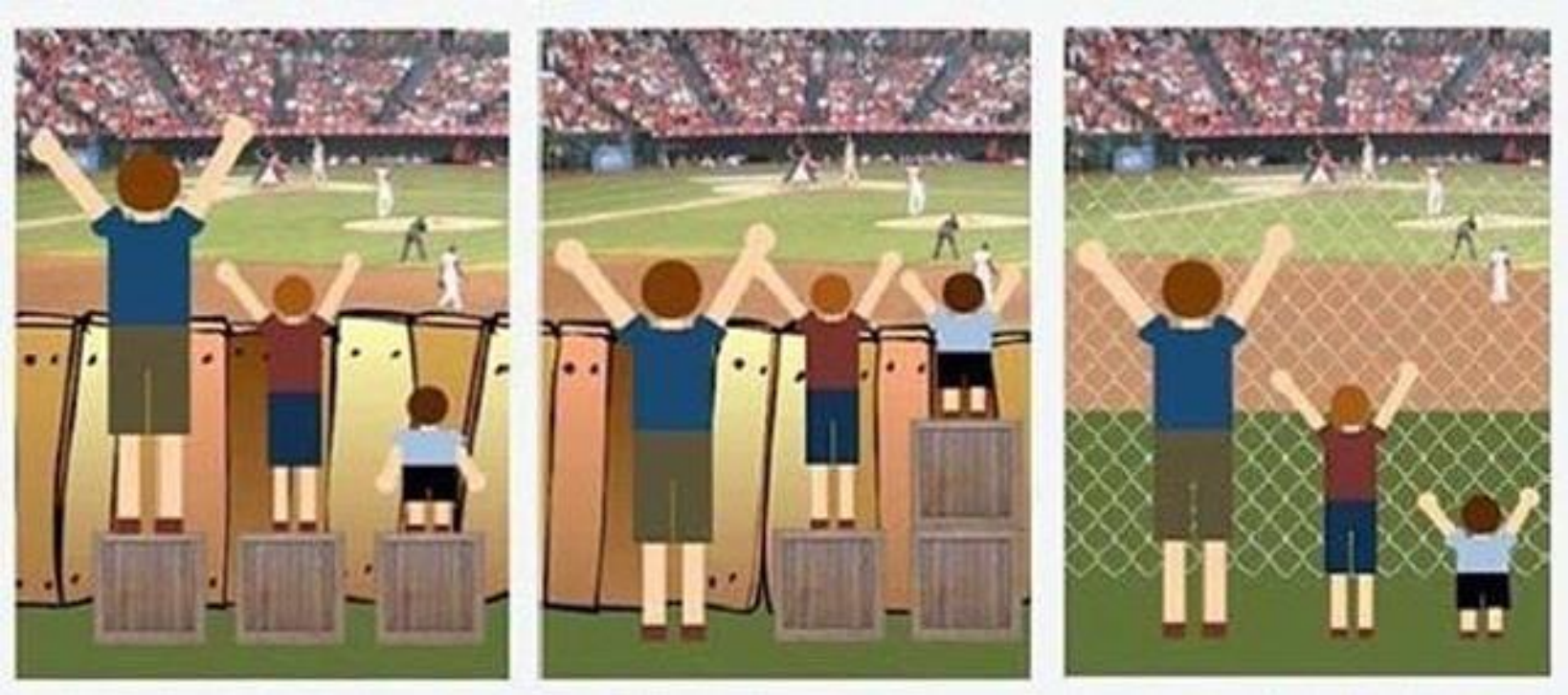
EQUAL HOUSING OPPORTUNITY

Structural Accesibility

VOLUNTARY COMPLIANCE AGREEMENT

DEPARTMENT OF HOUSING
Government of Puerto Rico

DISABILITY RIGHTS



Right to Accessible Infrastructure (Housing)

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Applicable Codes

- Uniform Federal Accesibility Standards (UFAS)
  - Voluntary Compliance Agreement (VCA) provides 13 clarifications/variations to the standard.
- ADA 2010 Standards
- FHA Design and Construction Guidelines
- ABA Standards (Architectural Barriers Act)

<u>Otros Codes:</u>

- ANSI 117.1 Accessible and Usable Design Facilities (International Code Council)

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Applicable Codes

As per VCA and HUD HUD's notice No. FR–5784–N–01, projects shall be designed to comply with UFAS or ADA 2010 (without the 10 items HUD deemed were not equal access).

In addition HUD provided 13 clarifications within the VCA that may be used.

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Discussion Topics

- BUILDING BLOCKS
- ACCESIBLE ROUTES
- DWELLING UNIT ACCESSIBILITY
- STANDARDS CLARIFICATION POINTS

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BUILDING BLOCKS

- Floor and Ground Surfaces
- Clear Floor or Ground Space and Turning Space
- Operable Parts
- Protuding Objects

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FLOOR AND GROUND SURFACES

Accessible floor and ground surfaces must be stable, firm and slip resistant.

Hardened materials such as concrete, asphalt, tile, and wood are sufficiently firm and stable for accessibility.

Most loose materials, including gravel will not meet these requirements unless properly treated to provide sufficient surface integrity and resilience.

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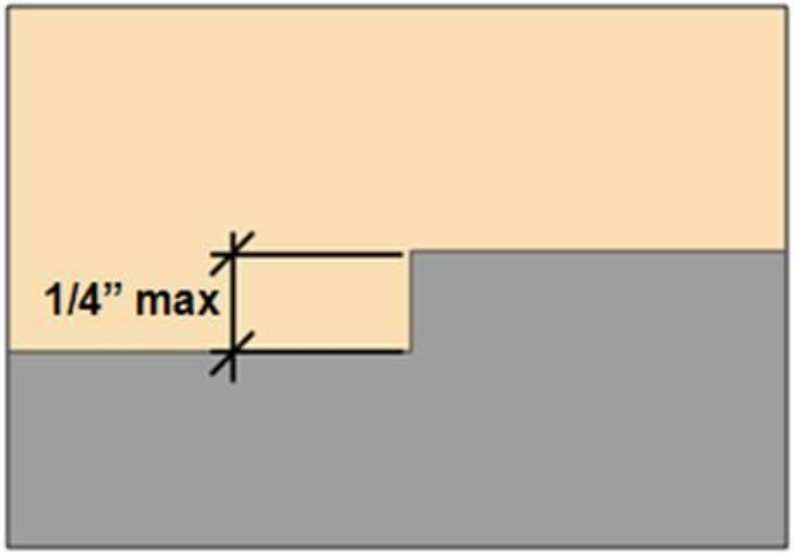
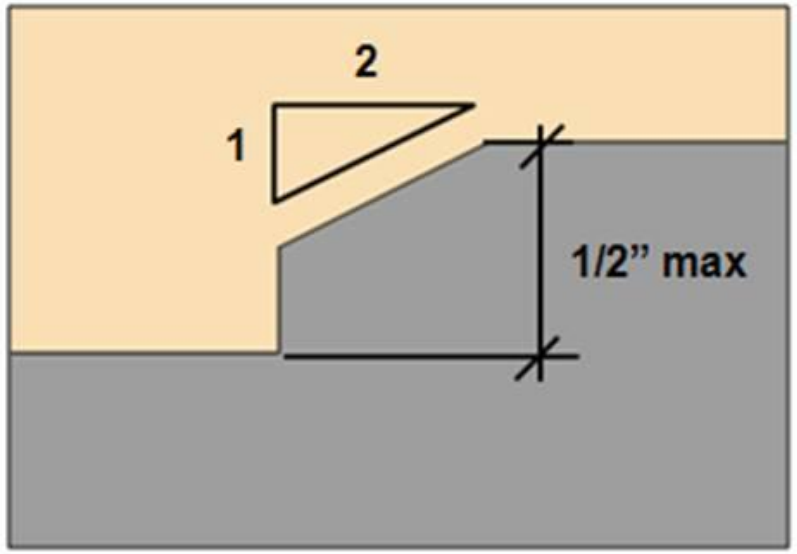
FLOOR AND GROUND SURFACES

Changes in Level

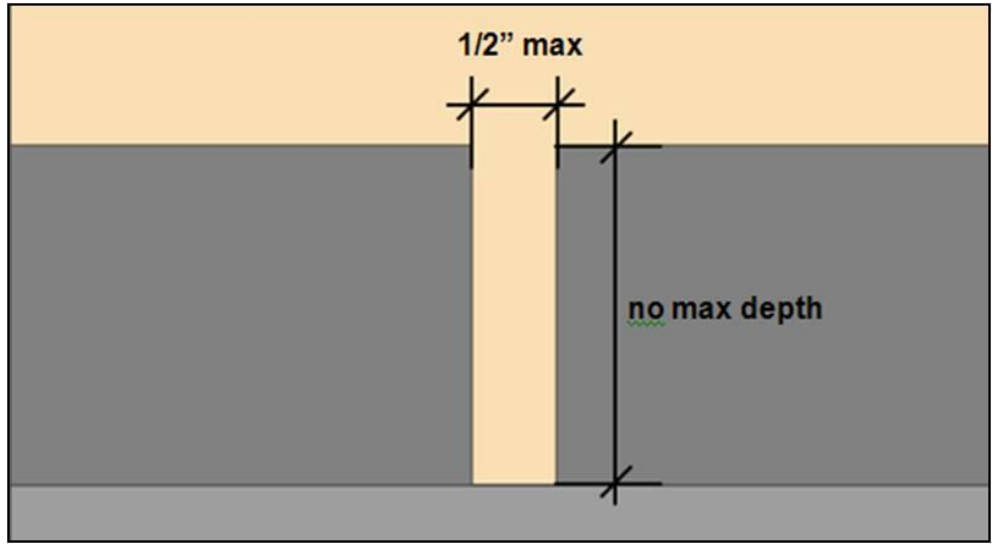


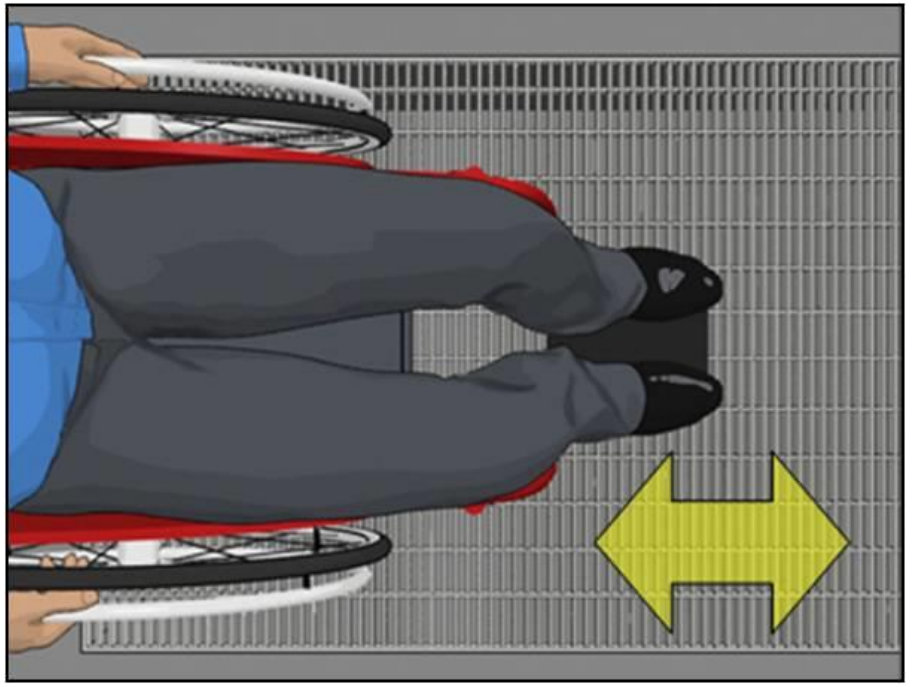


Changes in level can be up to ¼" without treatment or ½" if beveled with a slope no steeper than 1:2. Changes in level above a ½" must be treated as a ramp or curb ramp (or a walkway if a slope no steeper than 1:20 can be achieved). These specifications apply to all portions of accessible routes, including thresholds and carpet trim.

FLOOR AND GROUND SURFACES

Surface Opening





Elongated openings, like those of most grates, must be oriented so that the long dimension is perpendicular to the dominant travel direction.

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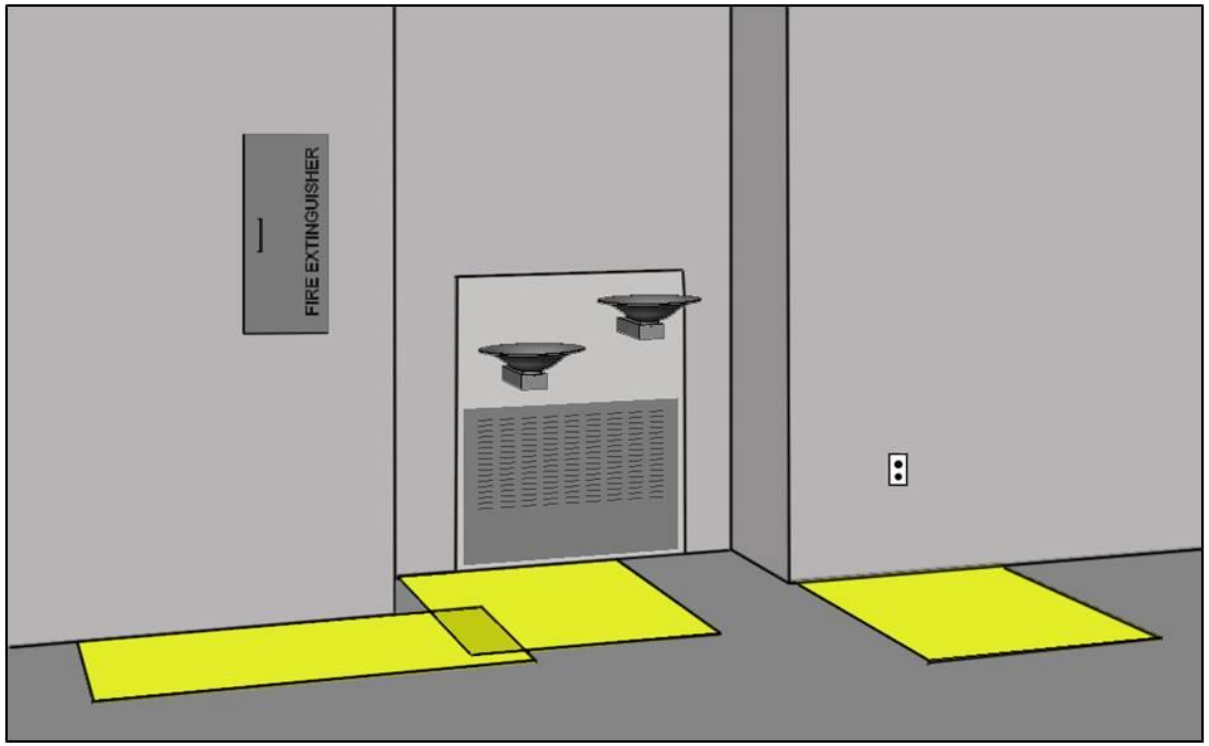
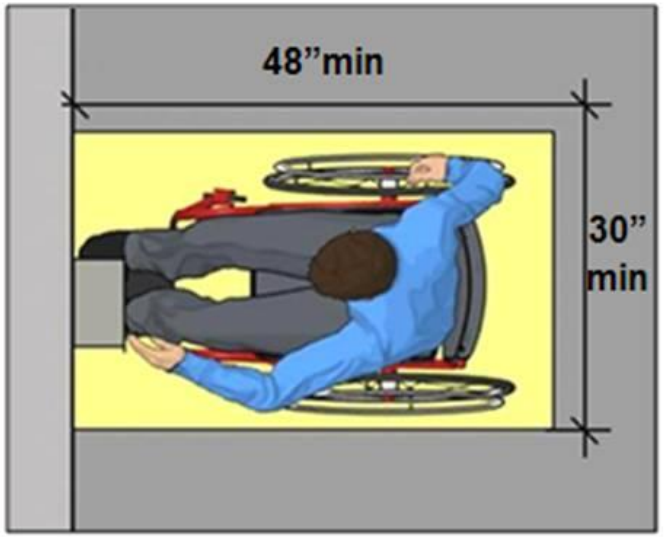
CLEAR FLOOR AND GROUND SPACES

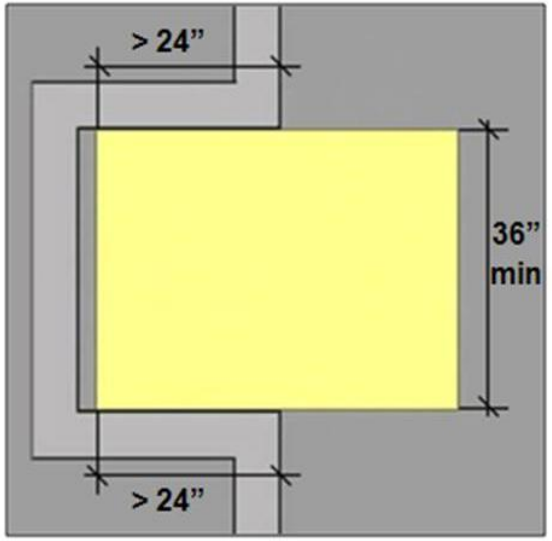


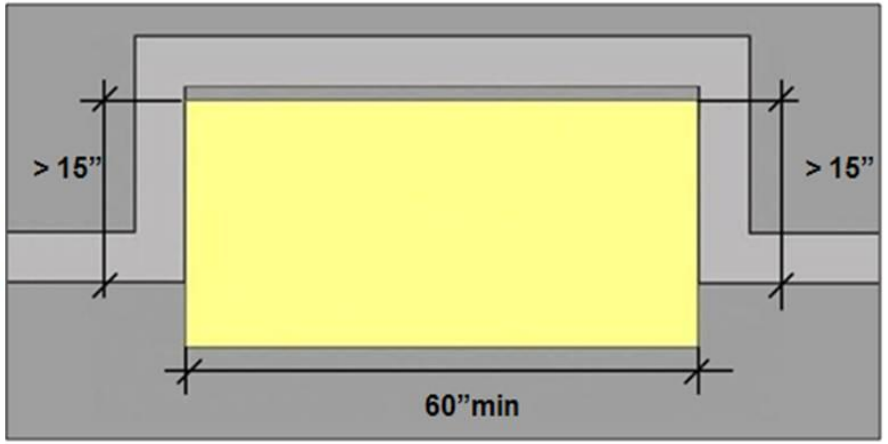
Clear floor space is required at each accessible element, including storage cabinets, drinking fountains and other fixtures, and electrical outlets. Clear floor spaces can overlap where elements are in close proximity.

CLEAR FLOOR AND GROUND SPACES

Surface and Size







The minimum size (30” by 48”) applies whether the space is positioned for forward or side approaches. Additional space is required when the space is confined on three sides and is obstructed for more than half the depth, such as when elements are recessed in alcoves.

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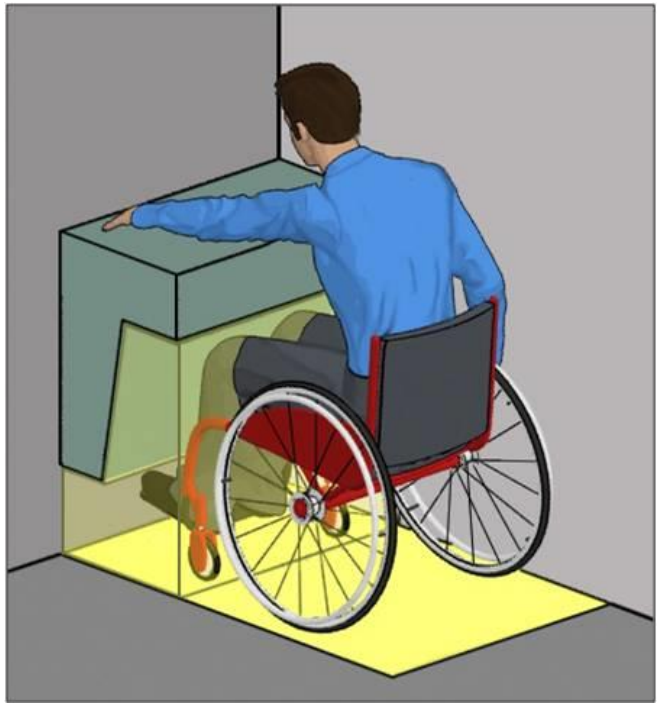
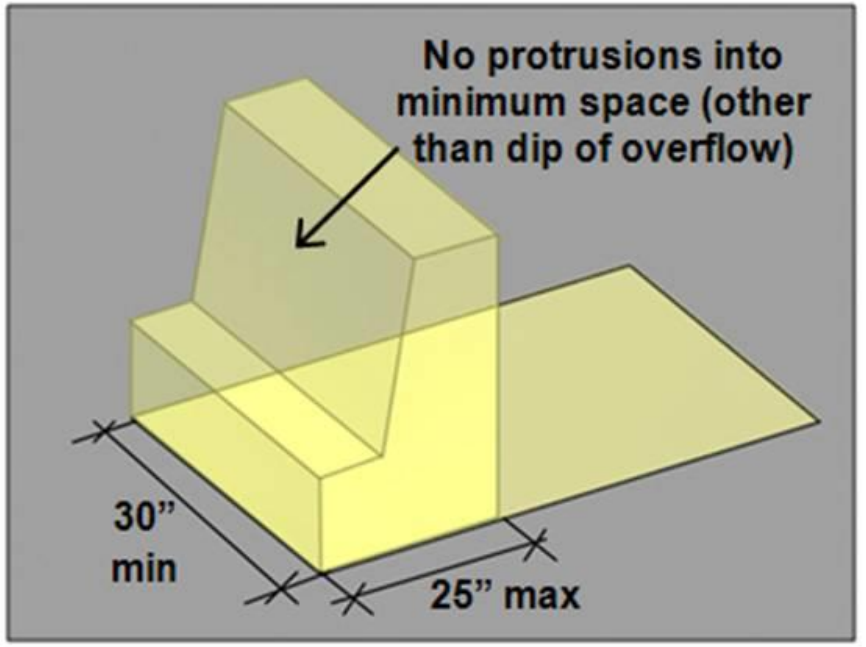
CLEAR FLOOR AND GROUND SPACES

Knee and Toe Space

Objects that provide clearance for toes can overlap a portion of the clear floor space.



Objects that provide clearance for knees and toes can overlap a greater portion of the clear floor space (up to a depth of 25”).



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CLEAR FLOOR AND GROUND SPACES

Knee and Toe Space Depth

Where knee and toe space is required, it must be at least 17" deep. In all cases, the minimum depth may be further determined by the required reach to operable parts served by the clear floor space.

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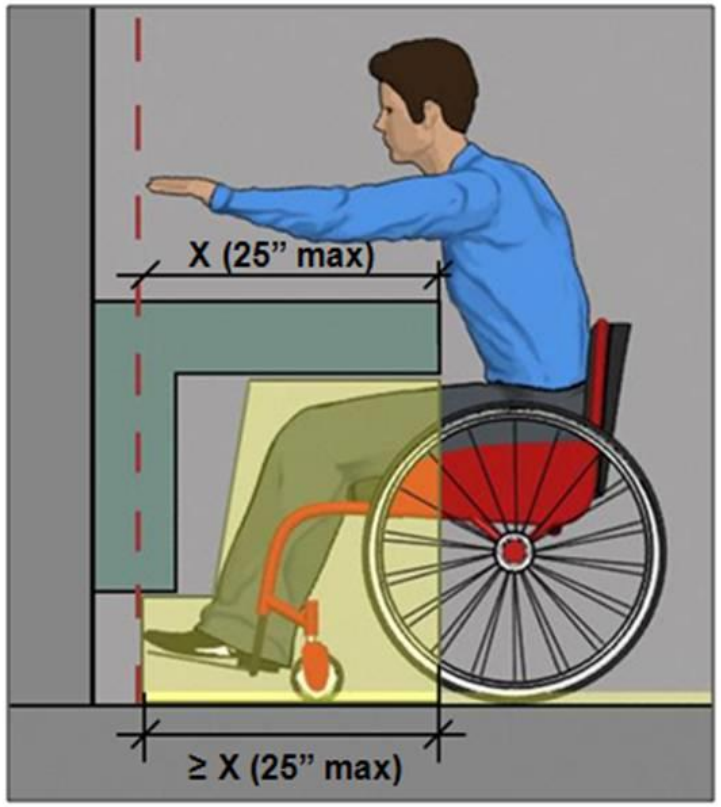
CLEAR FLOOR AND GROUND SPACES

Obstructed Reach Depth



At any element, the knee and toe space must be as deep as the required reach to operable parts. This facilitates access since a forward reach does not extend far beyond the toes. Both the reach depth and the knee and toe space depth are limited to 25” measured from the leading edge of obstructions. Space beyond this depth is not usable.

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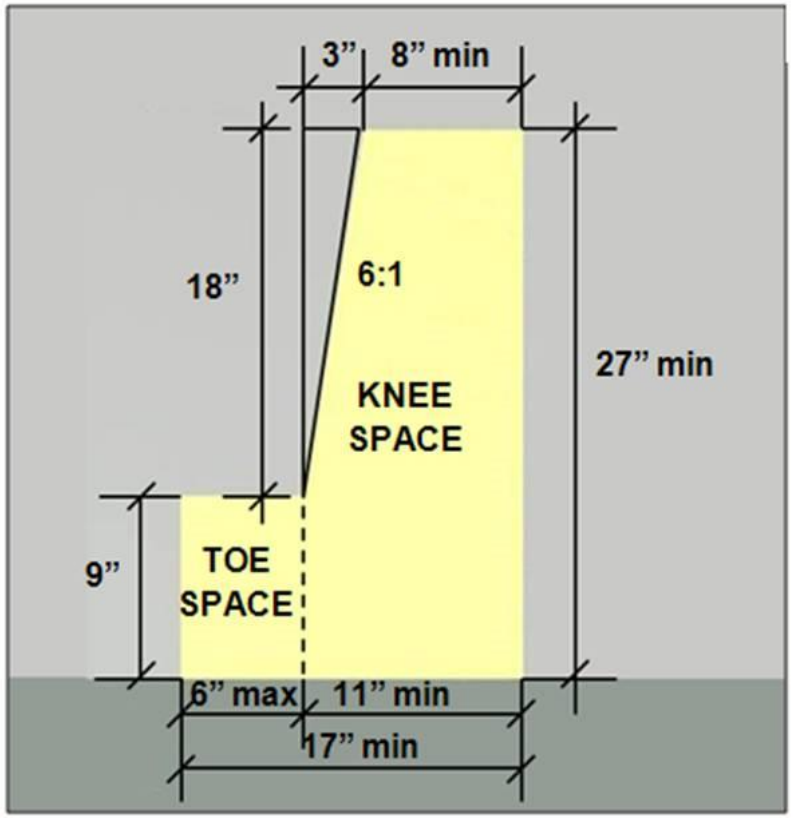
CLEAR FLOOR AND GROUND SPACES

Knee and Toe Clerances



Where knee and toe space is required at an element, it must be at least 17” deep. Beyond a depth of 8” measured from the leading edge, the 27” minimum high knee clearance can reduce 18” (to the 9” toe space) over a 3” span.

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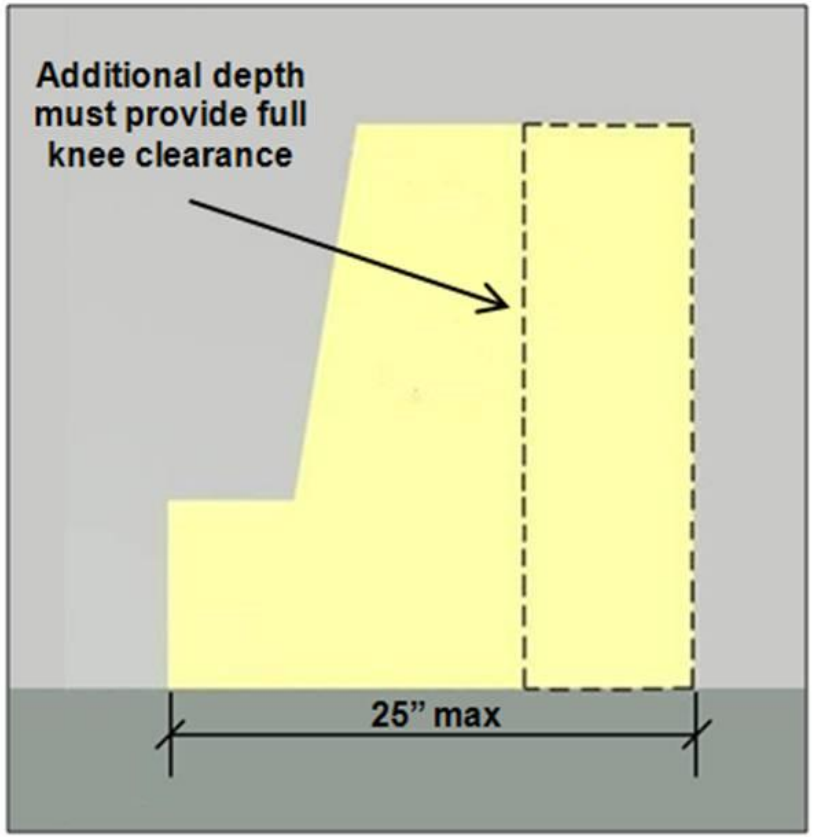
CLEAR FLOOR AND GROUND SPACES

Knee and Toe Clerances



When the knee and toe depth exceeds the 17" minimum, the additional space must provide full knee clearance at least 27" high.

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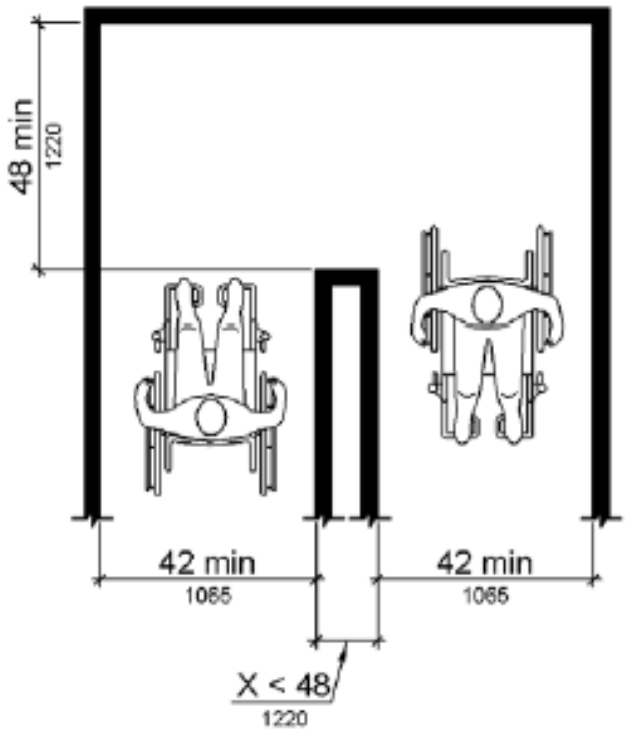
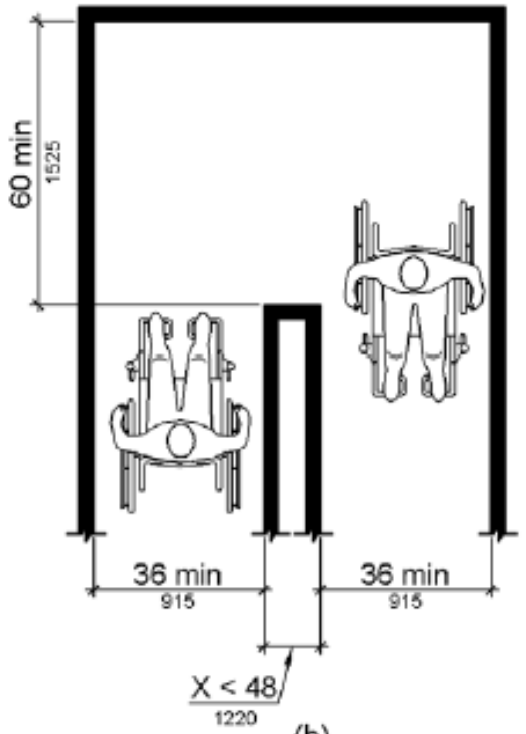
TURNING SPACES

180 degree turn at obstruction (**Be aware of UFAS/ADA 2010 difference**)



(a)
180 degree turn



(b)
180 degree turn
(Exception)

Space for turning is also required along accessible routes where a 180 degree turn around an obstruction less than 48" wide is required. ***UFAS does not identify Figure b. Nevertheless the 60" provide adequate turning space.***

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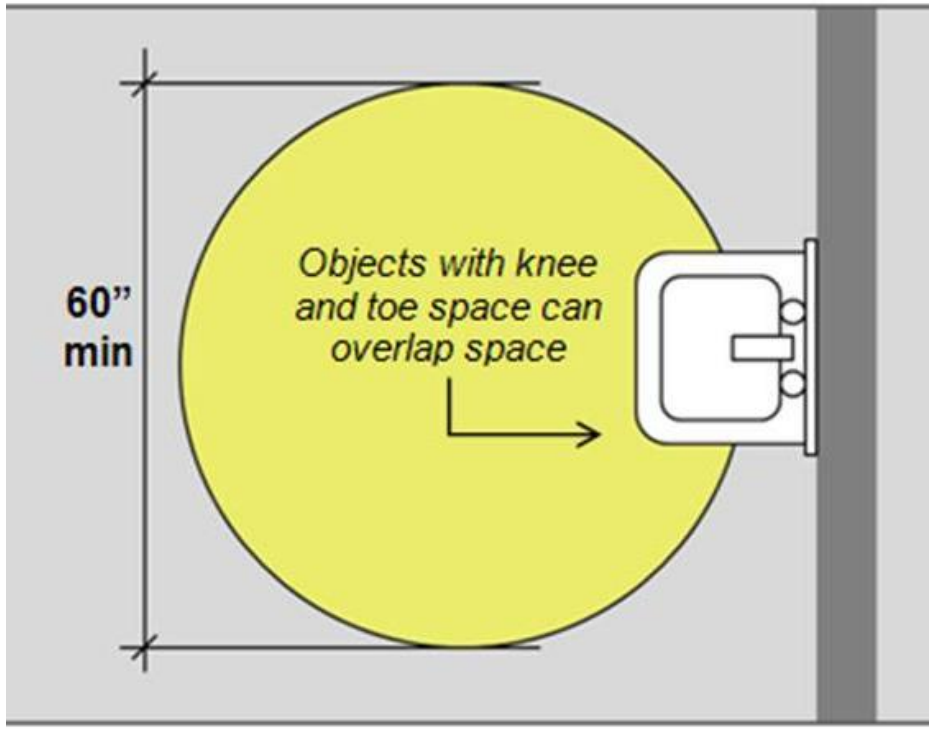
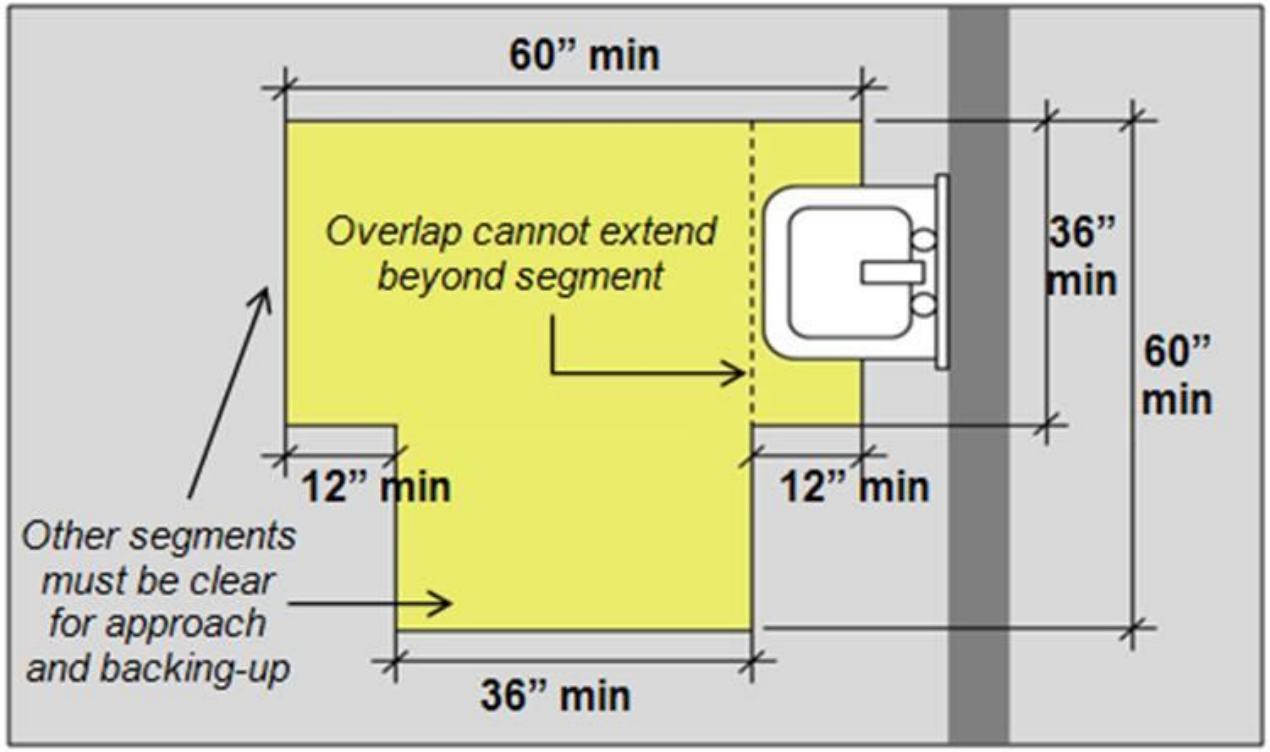
TURNING SPACES

Types and Sizes





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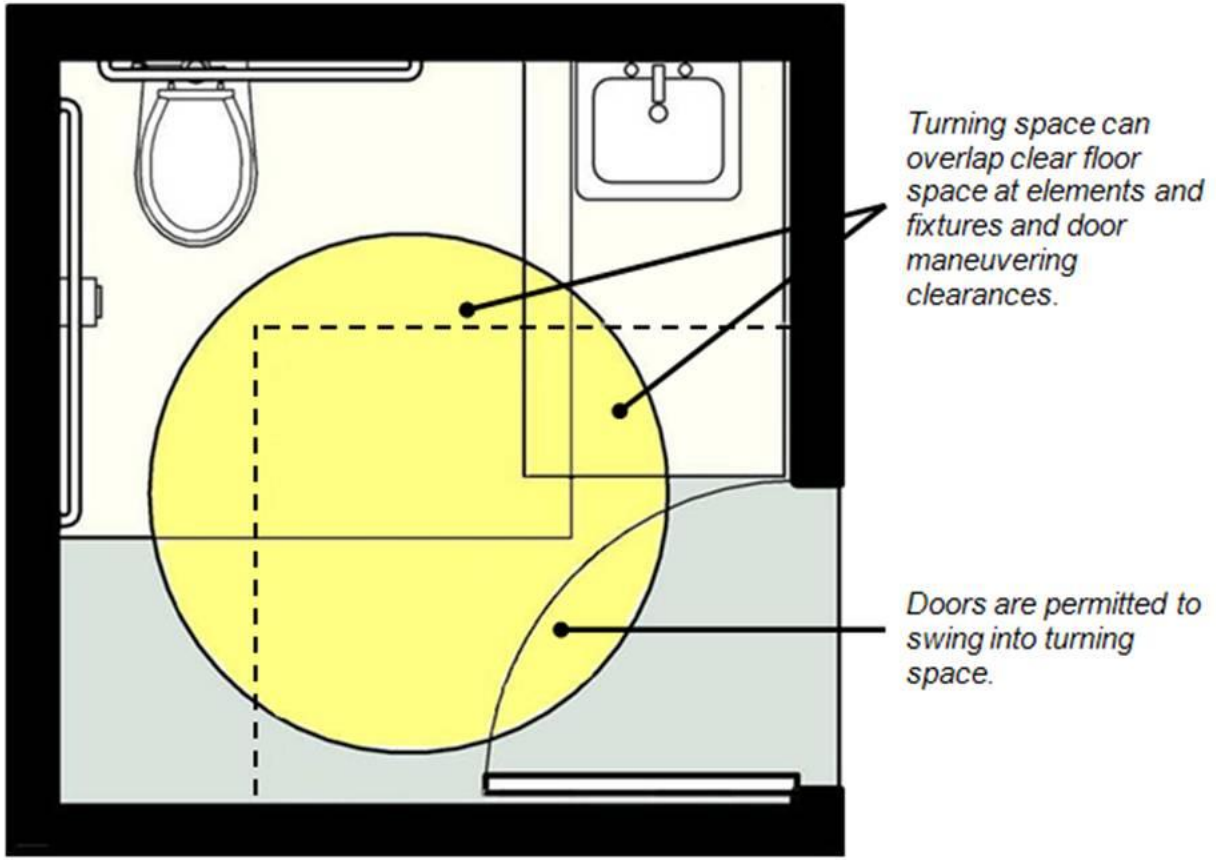
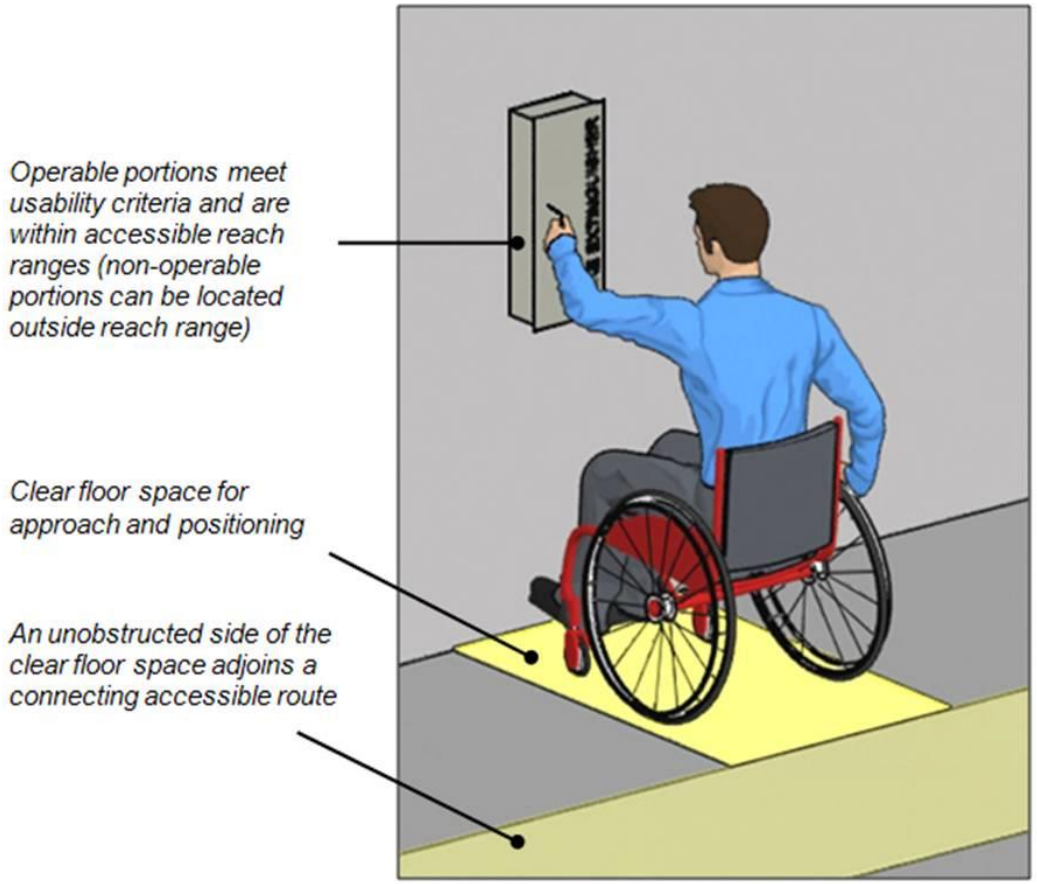
TURNING SPACES



OPERABLE PARTS



Compliance is required for operable parts located in accessible spaces and along accessible routes. Operable parts include light switches, electrical and communication receptacles, thermostats, alarm pulls, automatic door controls, and other elements used by facility occupants.

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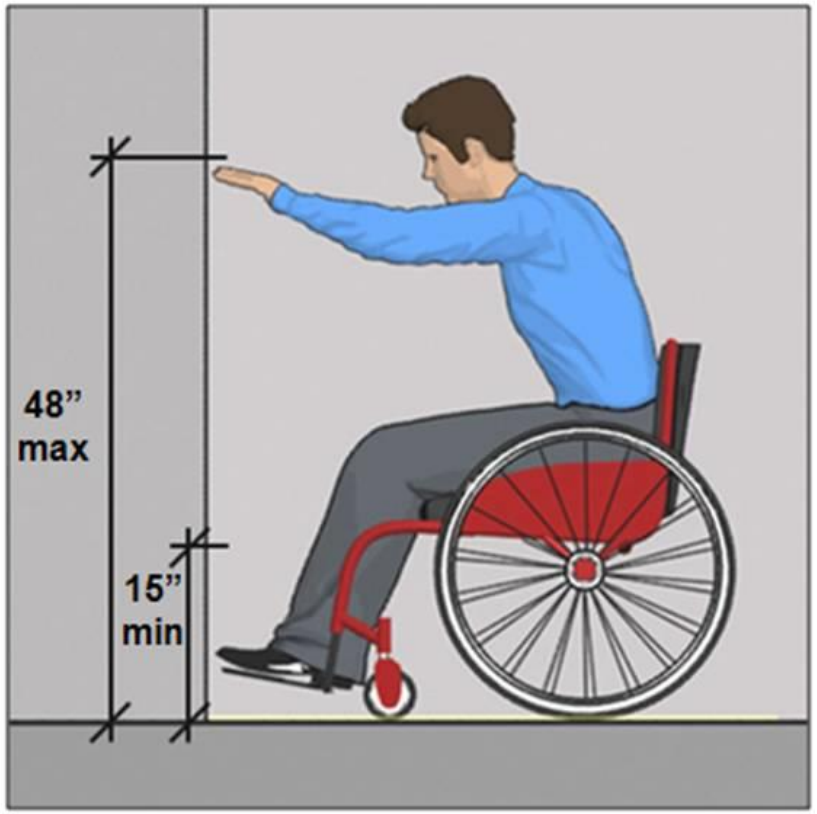
OPERABLE PARTS (REACH RANGES)

Forward Reach



The range for unobstructed reaches (15” – 48”) applies only to those portions of elements that are operable. Non-operable portions can be located outside the range.

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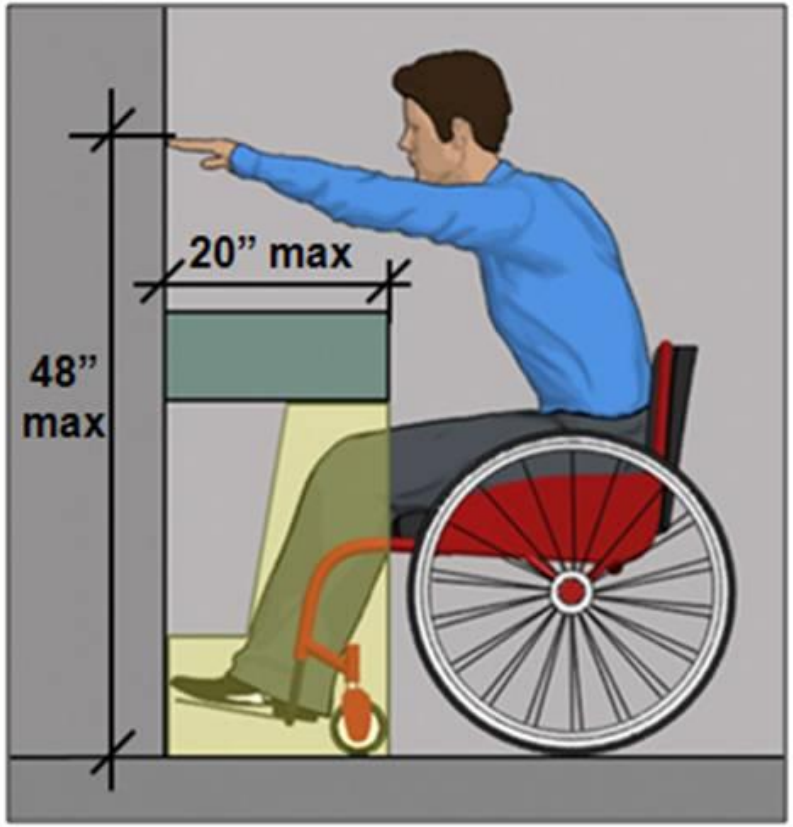
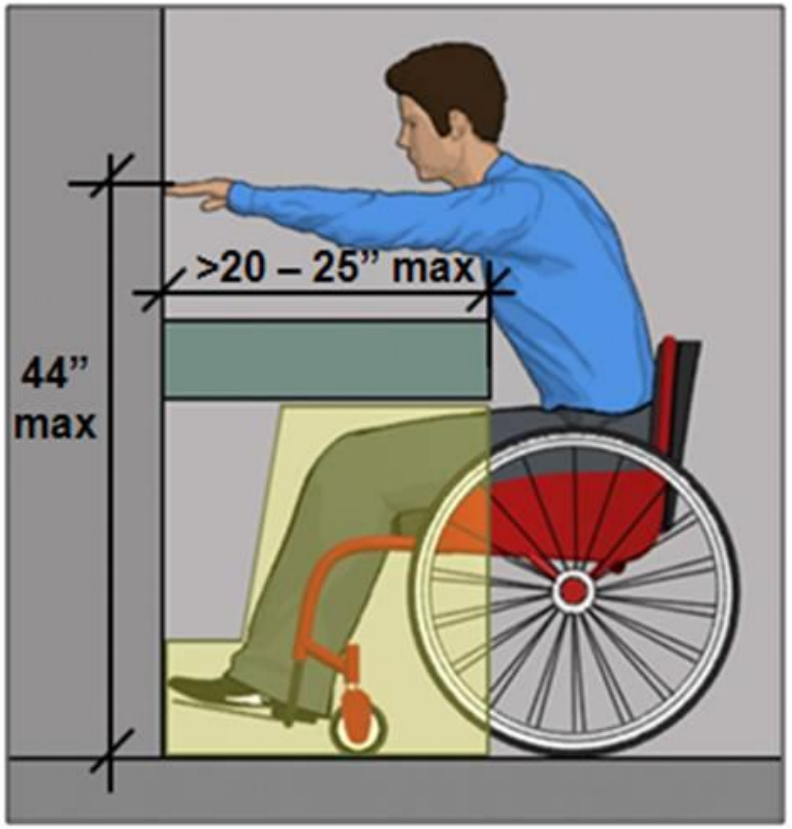
OPERABLE PARTS (REACH RANGES)

Obstructed High Reach





The maximum reach of 48" is reduced to 44" when the depth of reach over an obstruction exceeds 20." Knee and toe space must extend the full depth of reach.

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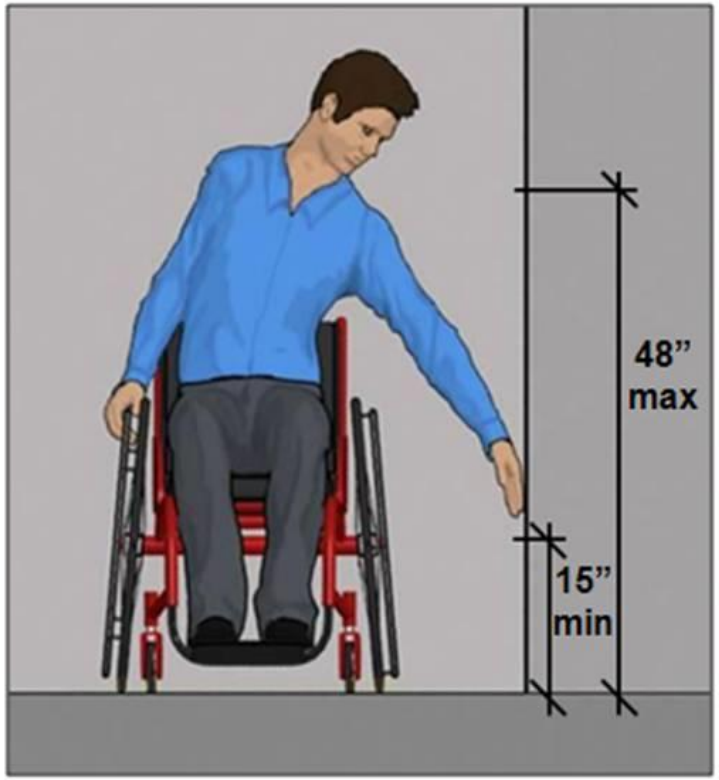
OPERABLE PARTS (REACH RANGES)

Side Reach (**Be aware of UFAS/ADA 2010 difference**)



The range for side reach, like forward reach is 15” to 48” if unobstructed **(UFAS Allows up to 54”).** The maximum reach depth for this range is 10” measured from the available clear floor space.

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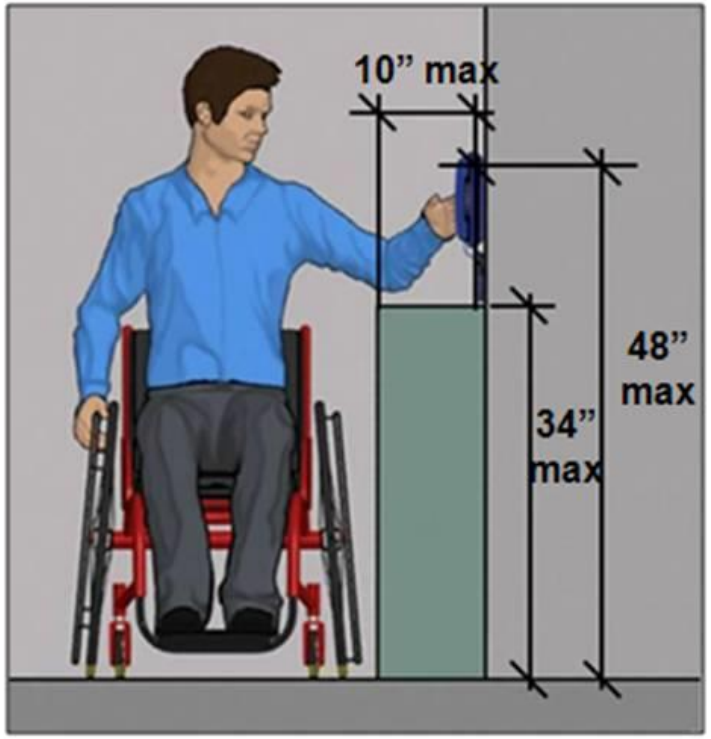
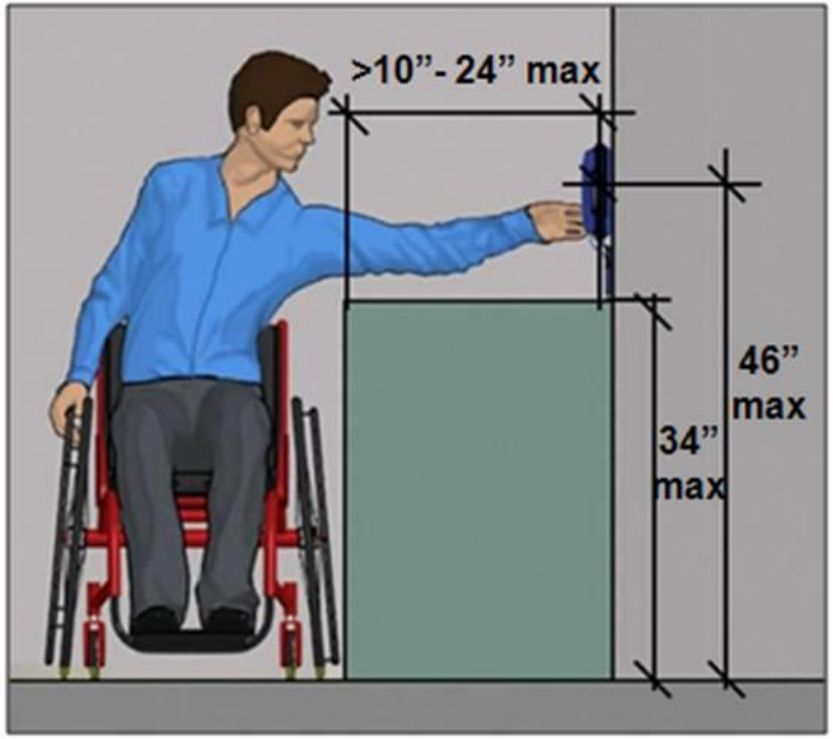
OPERABLE PARTS (REACH RANGES)

Side Reach with obstruction





The maximum high reach is reduced to 46” when the reach over an obstruction is deeper than 10” (to a maximum of 24”). Obstructions at side reaches are limited to a height of 34”.

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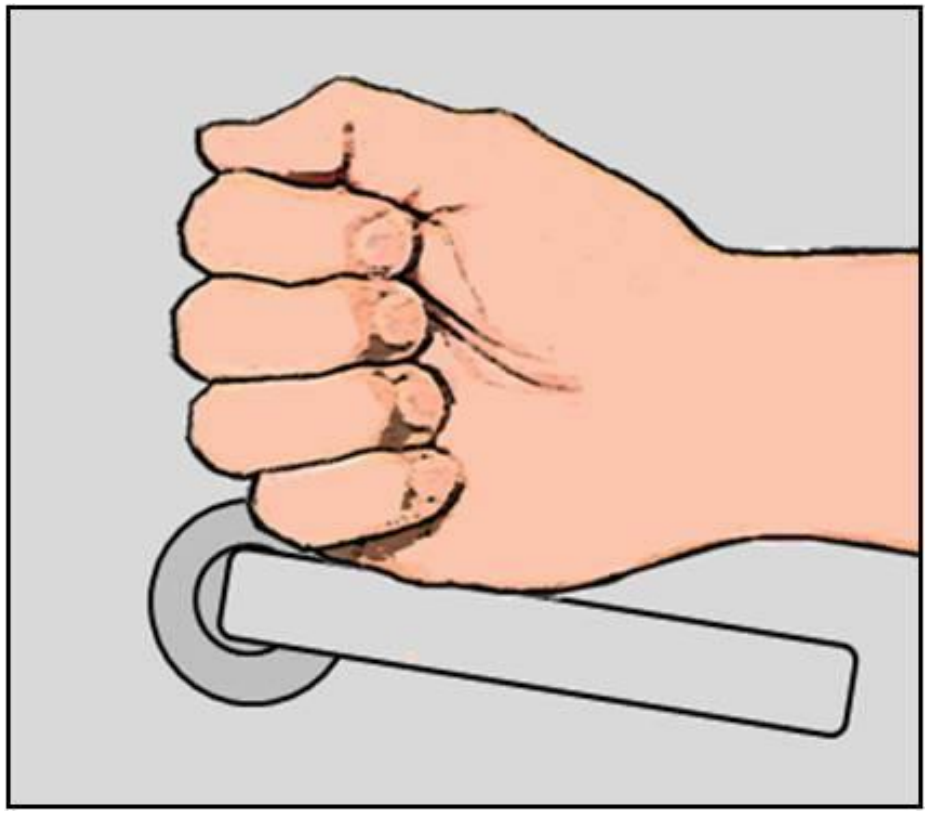
OPERABLE PARTS (OPERATION)



Operable parts must be usable with one hand and not require:

- tight grasping, pinching, or twisting of the wrist, or
- more than 5 pounds of force (lbf) to operate.

Parts that can be operated without hand or finger dexterity, fine motor movement, or simultaneous actions provide easier access and accommodate a broader range of users.

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OPERABLE PARTS

Push Plates, Buttons, and Bars

Push-activated controls not requiring more than 5 lbf are acceptable. Buttons that are raised or flush are easier to use than those that are recessed. (Elevator control buttons cannot be recessed, and input keys at ATM and fare machines must be raised.)

Handles, Pulls, and Knobs

Standard U-shaped pulls and lever-shaped handles are acceptable. Stationary knobs with a shape that can be loosely gripped also are acceptable. Knobs that require a full hand grip and turning, including round door knobs and shower controls, do not comply because they require twisting of the wrist.

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OPERABLE PARTS

Latches and Locks

Latches and locks with small parts that must be manipulated can be difficult to use and will not comply if pinching is necessary. However, non-fixed portions of locks and other operable parts, such as keys and access cards, are not required to comply (but those that do not require pinching or turning provide better access). Hardware that does not require simultaneous actions are better, but some types, such as handles with thumb latches are acceptable.

Controls and Switches

Dials and other controls that can be turned with the fingers but not the full hand can be used if they do not require twisting of the wrist or pinching. Flip switches and similar controls are acceptable, though push plate types can provide easier access.

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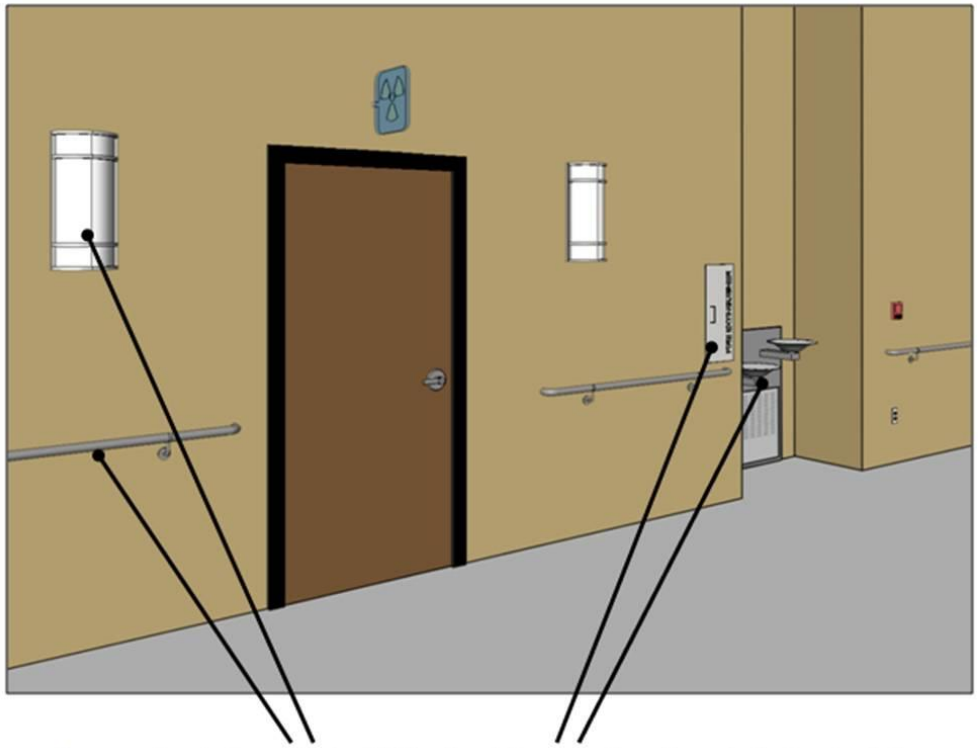
PROTRUDING OBJECTS



Sconces, handrails, cabinets, drinking fountains and other elements that project into circulation paths must comply with provisions for protruding objects (unless they are located within cane sweep or above headroom clearance). Requirements for protruding objects apply to all interior and exterior circulation paths of sites. They are not limited to hallways and corridors and apply equally to circulation paths in rooms and spaces.

To prevent hazards to people with vision impairments, the standards limit the projection of objects into circulation paths. These requirements apply to all circulation paths and are not limited to accessible routes. Circulation paths include interior and exterior walks, paths, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.

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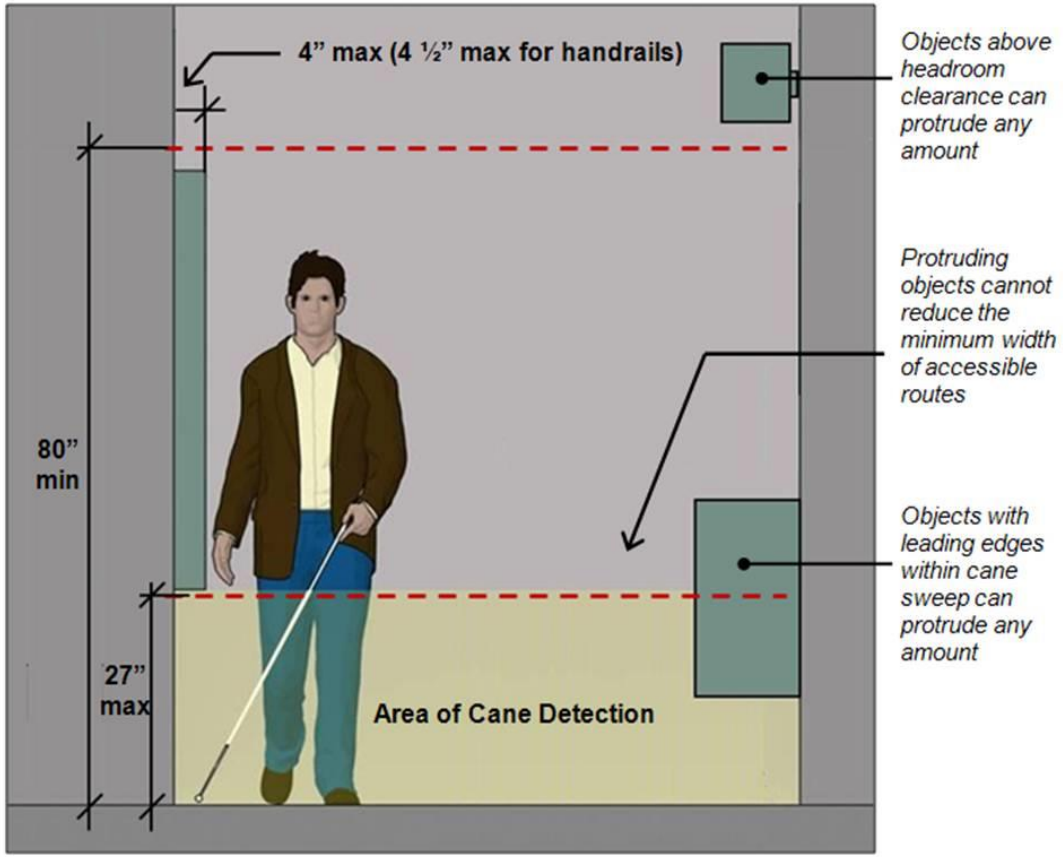
PROTRUDING OBJECTS

Protrusion Limits



People with vision impairments often travel closely along walls which can provide wayfinding cues sometime called a "shoreline." Objects mounted on walls, partitions, columns, and other elements along circulation paths can pose hazards unless their projection is limited. Those with leading edges that are within cane sweep (27" high maximum) or that provide minimum headroom clearance (80" minimum) do not pose hazards and can protrude any amount.

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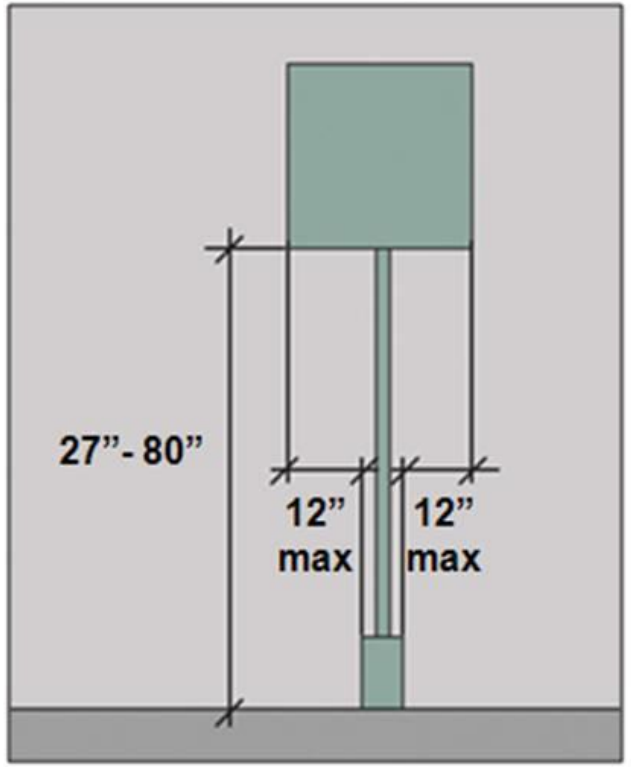
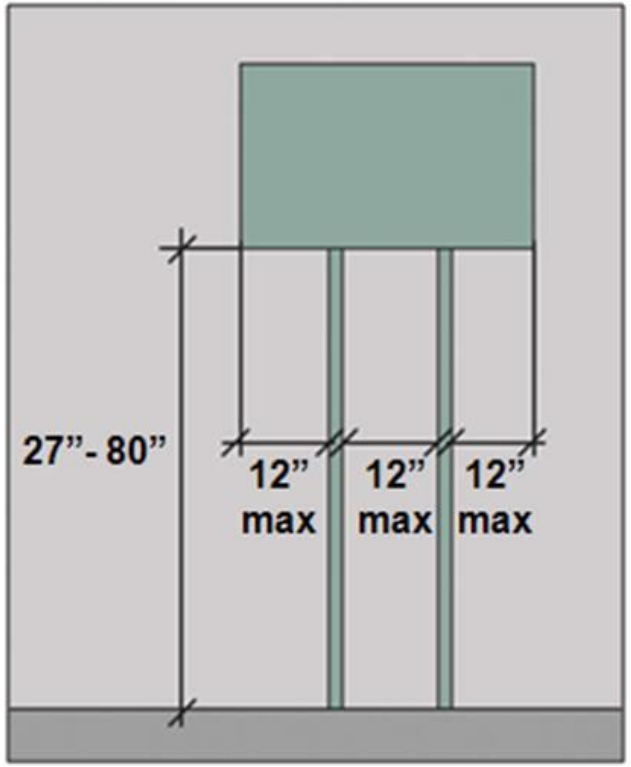
PROTRUDING OBJECTS

Post Mounted Objects





Free-standing objects with leading edges 27” to 80” high that are mounted on posts or pylons cannot protrude more than 12” into circulation paths. The 12” limit also applies to the clearance between multiple posts (excluding the sloping portions of handrails).

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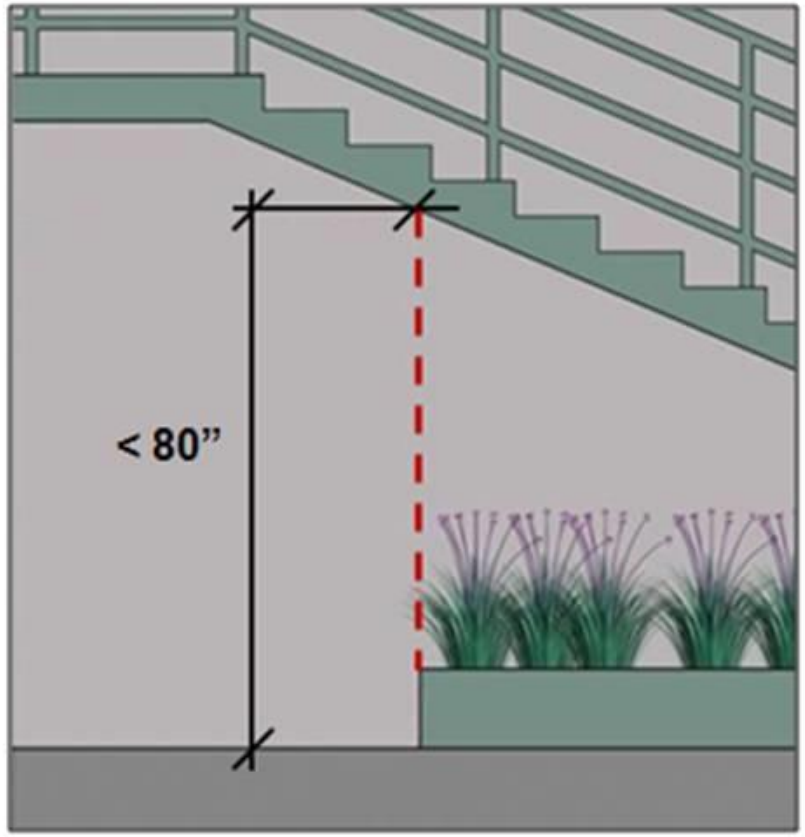
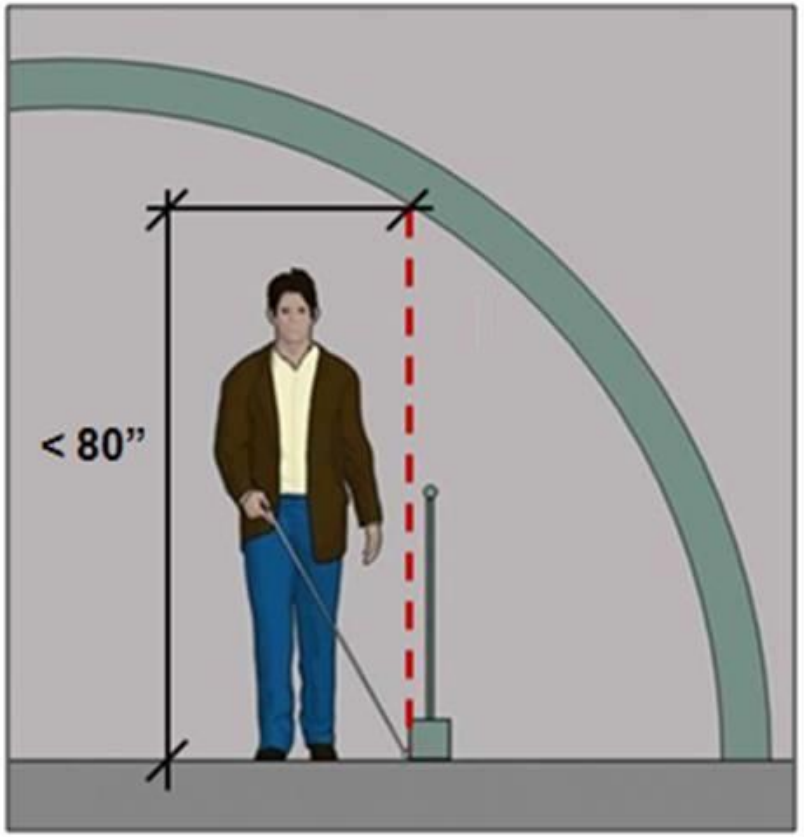
PROTRUDING OBJECTS

Vertical Clearance





Headroom clearance of at least 80” high is required along all circulation paths (except at doors and doorways where a 78” minimum clearance is permitted to accommodate door stops and closers).

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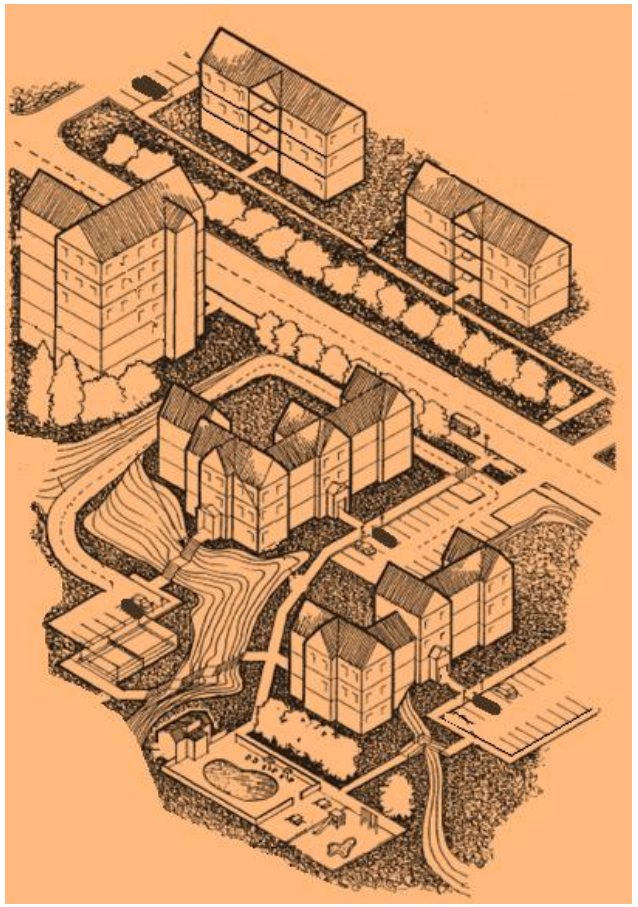
ACCESIBLE ROUTES



- Accessible Routes
- Entrances Doors and Gates
- Ramps and Curb Ramps
- Accessible Means of Egress
- Accessible Parking

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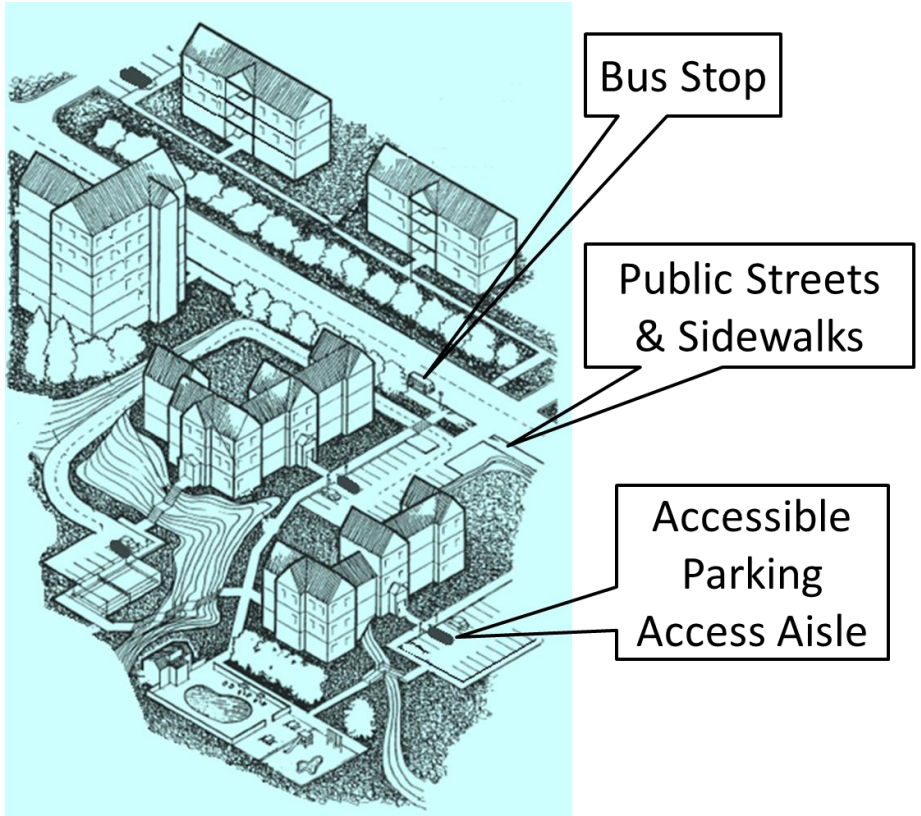
ACCESSIBLE ROUTES

Site Arrival Points



At least one accessible route must be provided within the site to accessible facility entrances from these site arrival points, where provided:

- accessible parking and accessible passenger loading zones
- public streets and sidewalks
- each public transportation stop.

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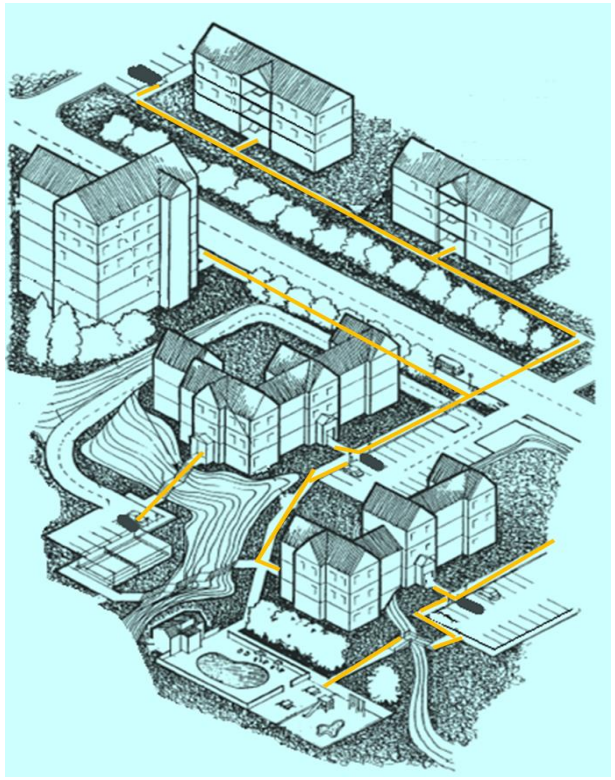
ACCESSIBLE ROUTES

Site Accessible Route



At least one accessible route within the boundary of the site originating from site arrival points must connect all accessible buildings, facilities, elements, and spaces on a site which includes but is not limited to:

- Trash disposal areas
- Recreational areas
- Community Centers
- Administrative Buildings
- Dwelling Buildings (FHA Requirement)

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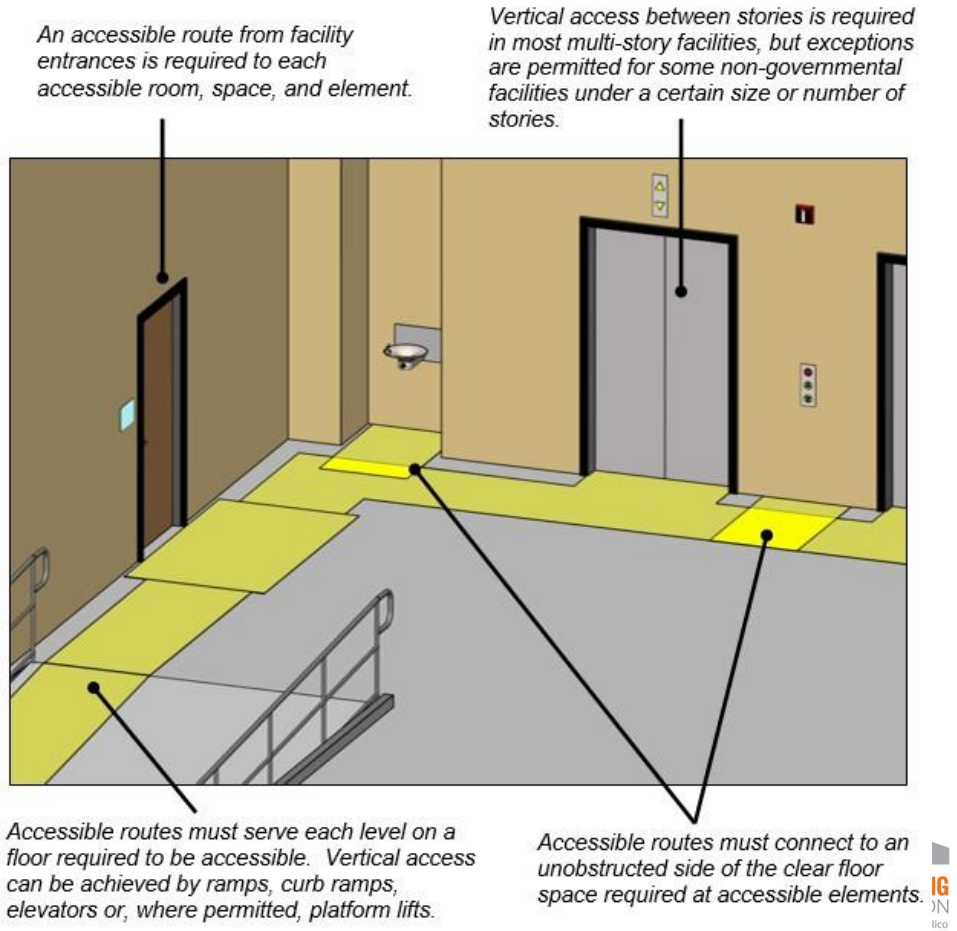
ACCESSIBLE ROUTES

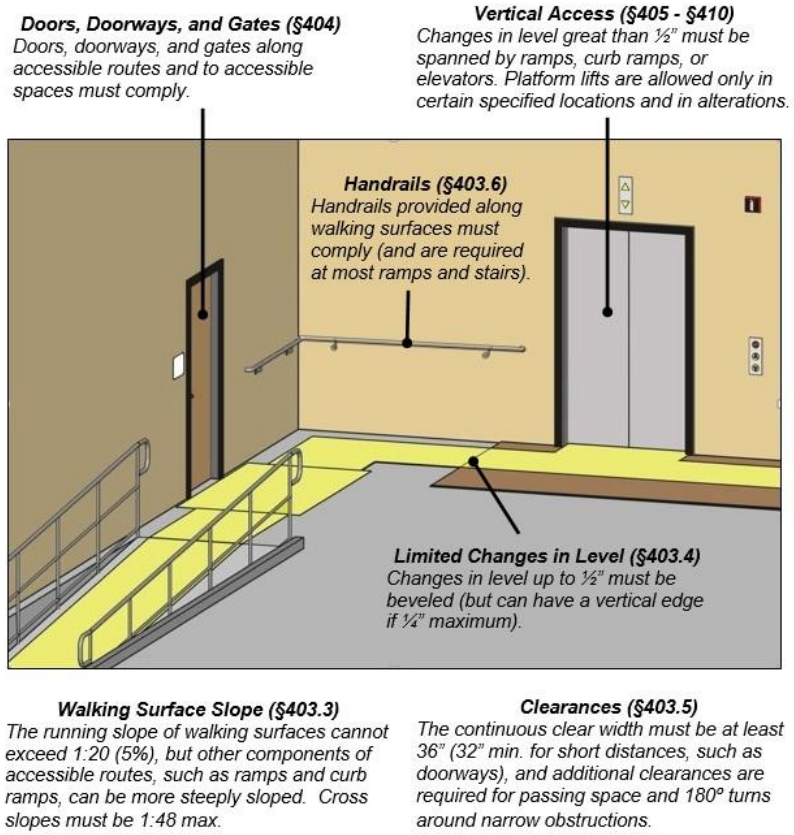
Accessible Route within building

At least one accessible route must connect all accessible spaces and elements. If a circulation path is interior, the accessible route also must be interior. Accessible vertical interior circulation must be in the same area as stairs and escalators, not isolated in the back of the facility.



ACCESSIBLE ROUTES

Accessible Route within building



Components of accessible routes include walking surfaces, doorways, ramps, curb ramps, elevators, and, where permitted, platform lifts.

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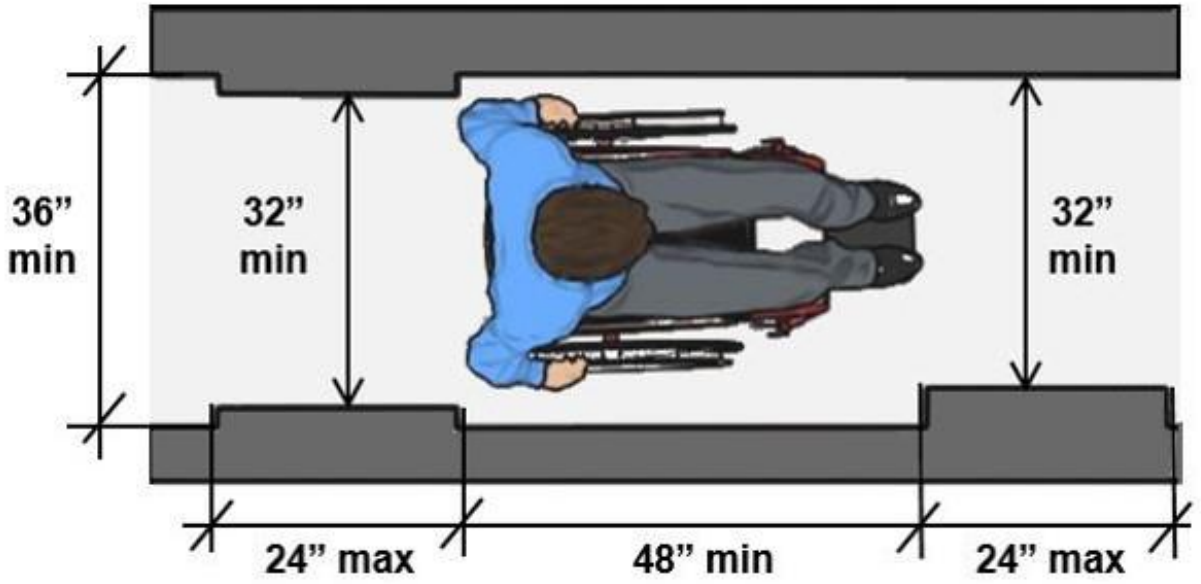
ACCESSIBLE ROUTES

Clearances



The minimum 36” continuous clear width of accessible routes can reduce to 32” at points, such as doorways, for a maximum distance of 24”. Greater clearance is required for 180 degree turns around narrow obstructions and for wheelchair turning space (as discussed previously). The minimum clearance cannot be reduced by any elements, including handrails or protruding objects.

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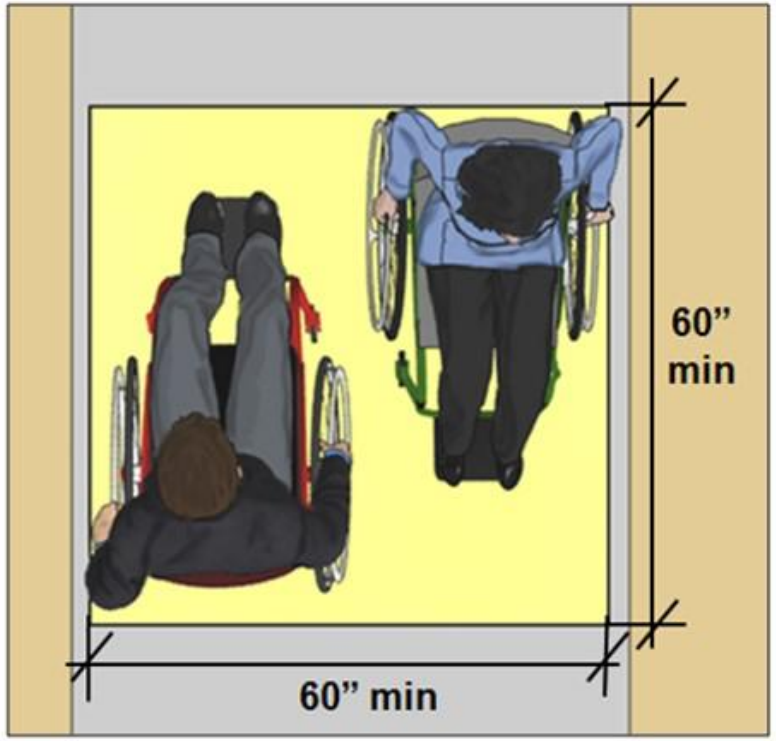
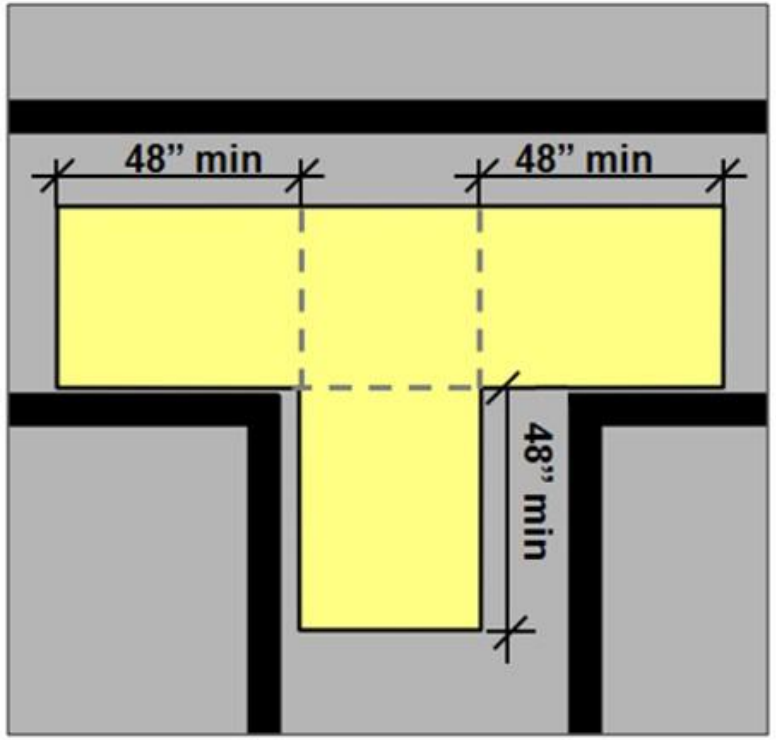
ACCESSIBLE ROUTES

Passing Space



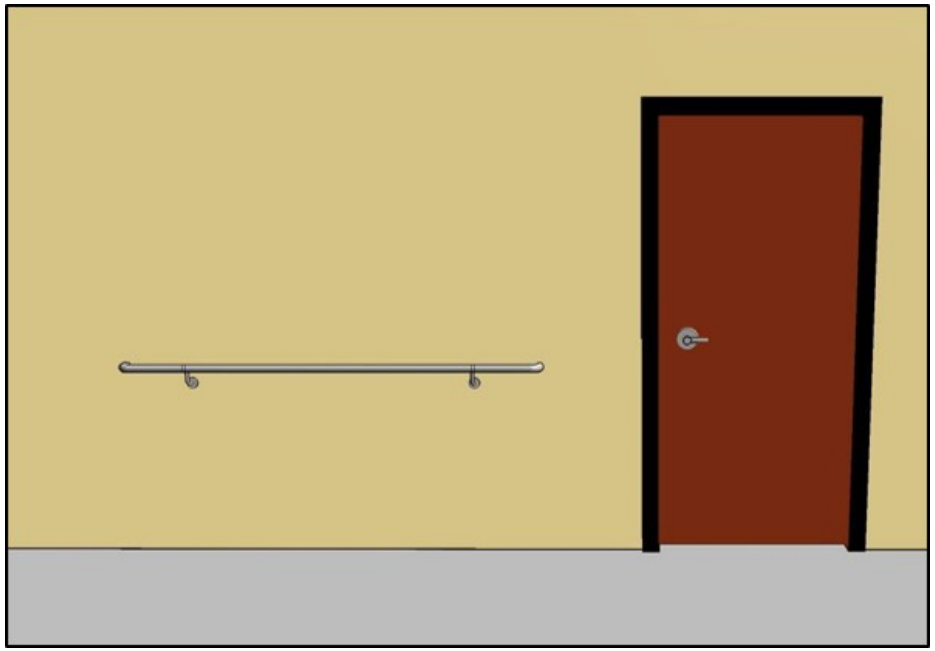


Passing space is required every 200 feet and must be provided as a 60" by 60" minimum space or as T-shaped space where each stem is at least 48" long.

EQUAL HOUSING OPPORTUNITY

ACCESSIBLE ROUTES

Handrails along walking Surfaces (Be aware of UFAS/ADA 2010 difference)



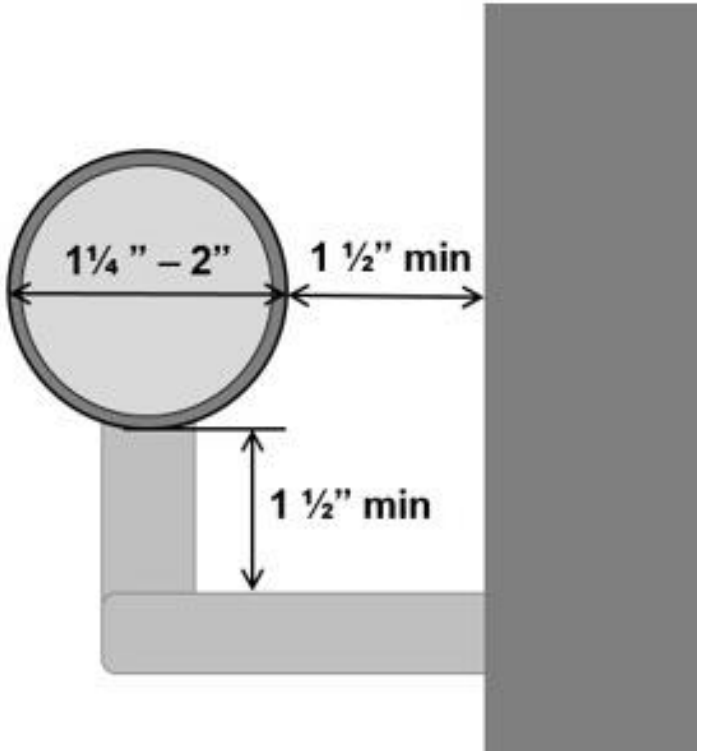
Handrails are required at ramps with a rise greater than 6” and at stairs that are part of a means of egress. Where required these must be:

- 34” – 38” high measured to the top of the gripping surface. **(UFAS states 30”-34”)**
- Gripping surface must be continuous the full length and top and sides cannot be obstructed.
- The bottom gripping surface can be obstructed up to 20% of the length (or along the full entire length when part of crash rails or bumper guards).
- No sharp or abrasive elements on gripping surfaces or adjacent surfaces, and no rotation within fittings.

EQUAL HOUSING OPPORTUNITY

ACCESSIBLE ROUTES

Handrails along walking Surfaces (Be aware of UFAS/ADA 2010 difference)



Circular handrails shall have following dimensions:

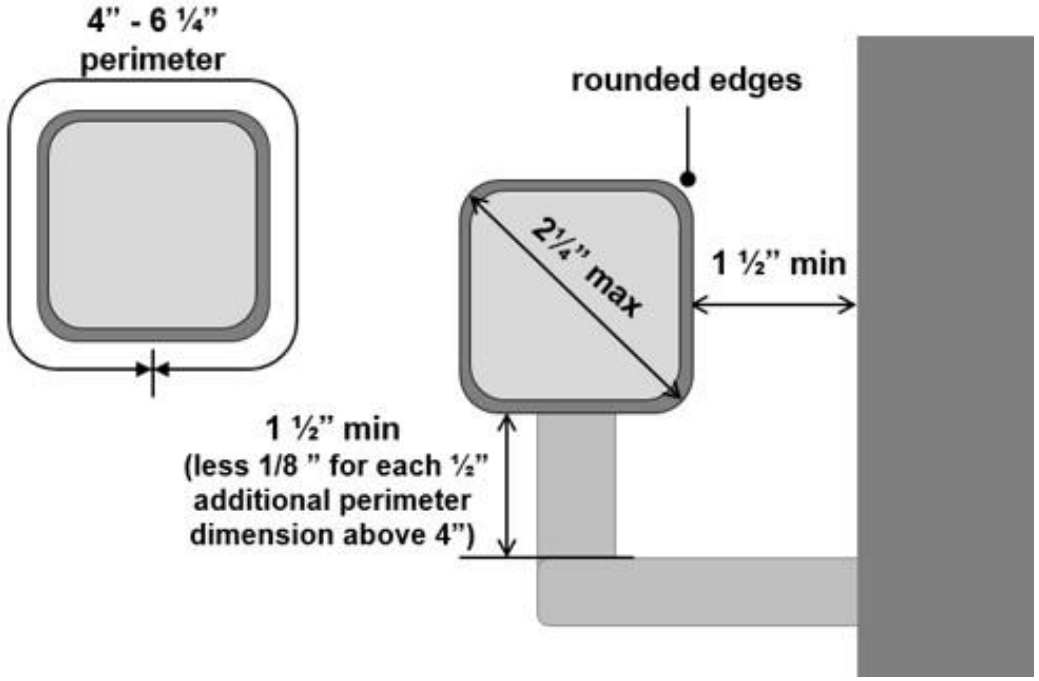
- 1.25"- 2" outside diameter. **(UFAS allows 1.25" – 1.5")**
- The space between the handrail and the wall shall be 1.5" minumum. **(UFAS states 1.5" absolute)**
- The horizontal projection below gripping surface shall be 1.5". (May be reduced if perimeter of gripping surface exceeds 4")

EQUAL HOUSING OPPORTUNITY

ACCESSIBLE ROUTES

Handrails along walking Surfaces (Be aware of UFAS/ADA 2010 difference)

Non-circular cross sections must have rounded edges and meet perimeter and cross-section dimensions. Other profiles meeting these criteria are permitted.

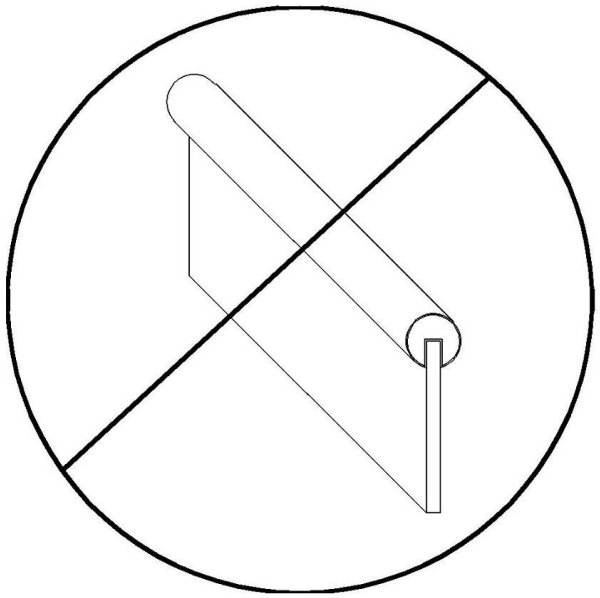


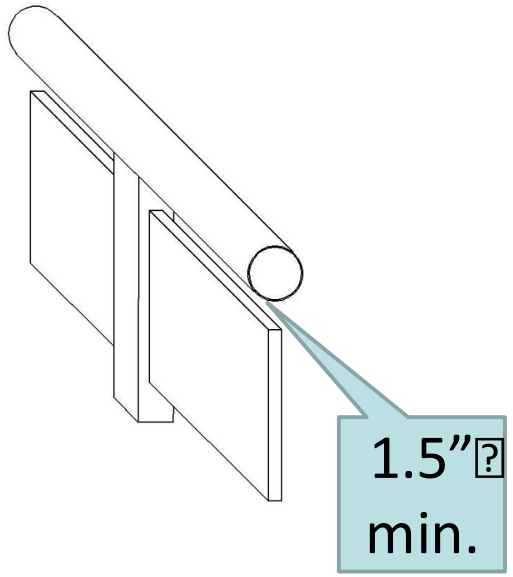
Note: Non-circular handrails are not explicitly mentioned in UFAS other than stating that the shape shall provide an equivalent gripping surface.

EQUAL HOUSING OPPORTUNITY

ACCESSIBLE ROUTES

Handrails along walking Surfaces (Be aware of UFAS/ADA 2010 difference)



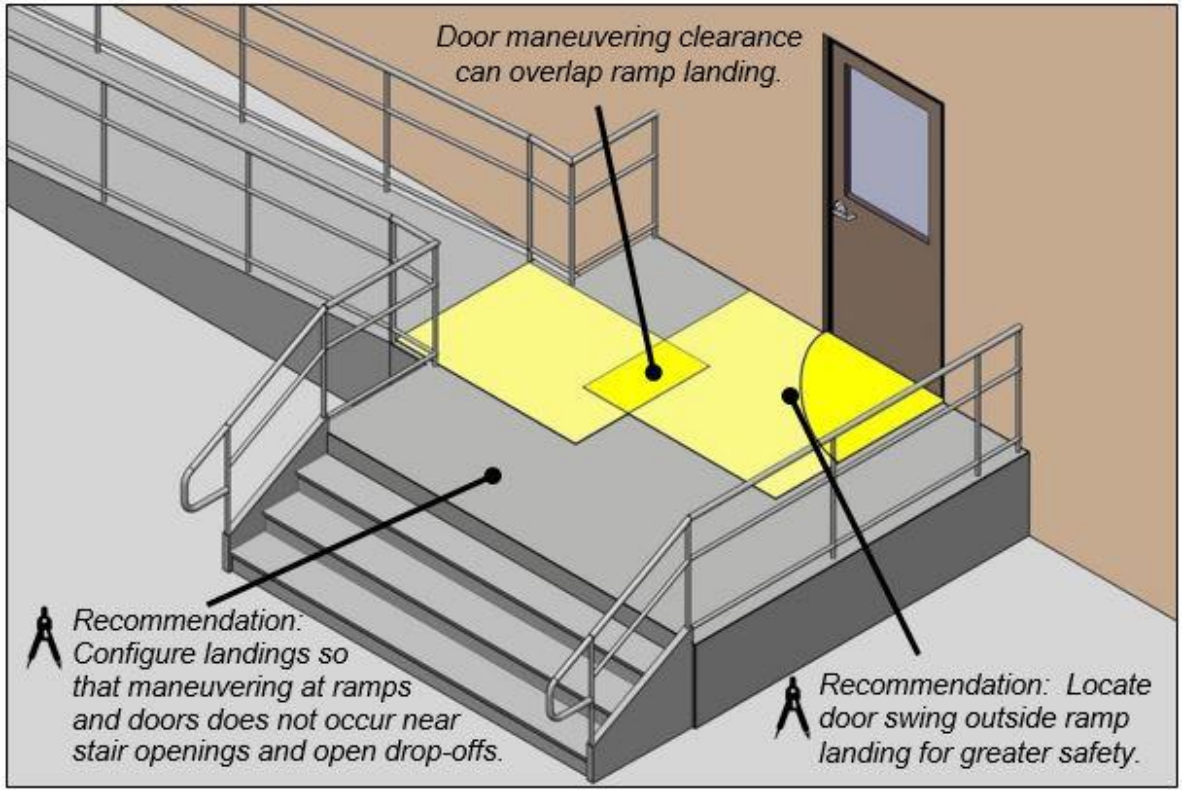


Obstructions limited to 20% along bottom of rail; prohibited on top and sides **(UFAS does not mention this requirement)**

EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Entrance Landings



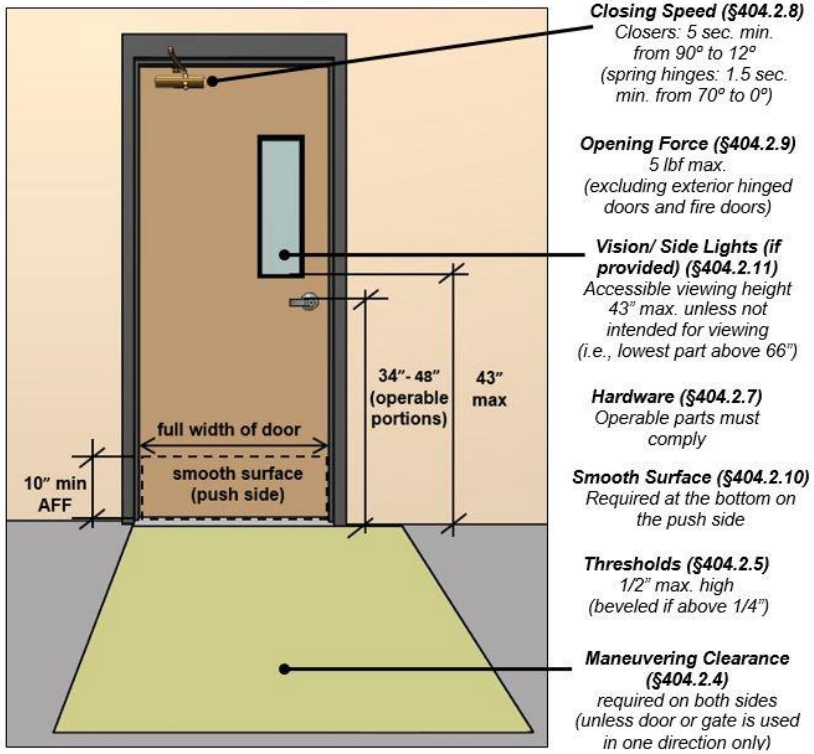
Entrance landings must accommodate door maneuvering clearances as well as landings for provided ramps.

EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Doors, Doorways and Gates

Compliance is required for doors, doorways, and gates providing user passage on accessible routes. At least one accessible door, doorway, or gate serving each accessible room, space, and entrance must comply.

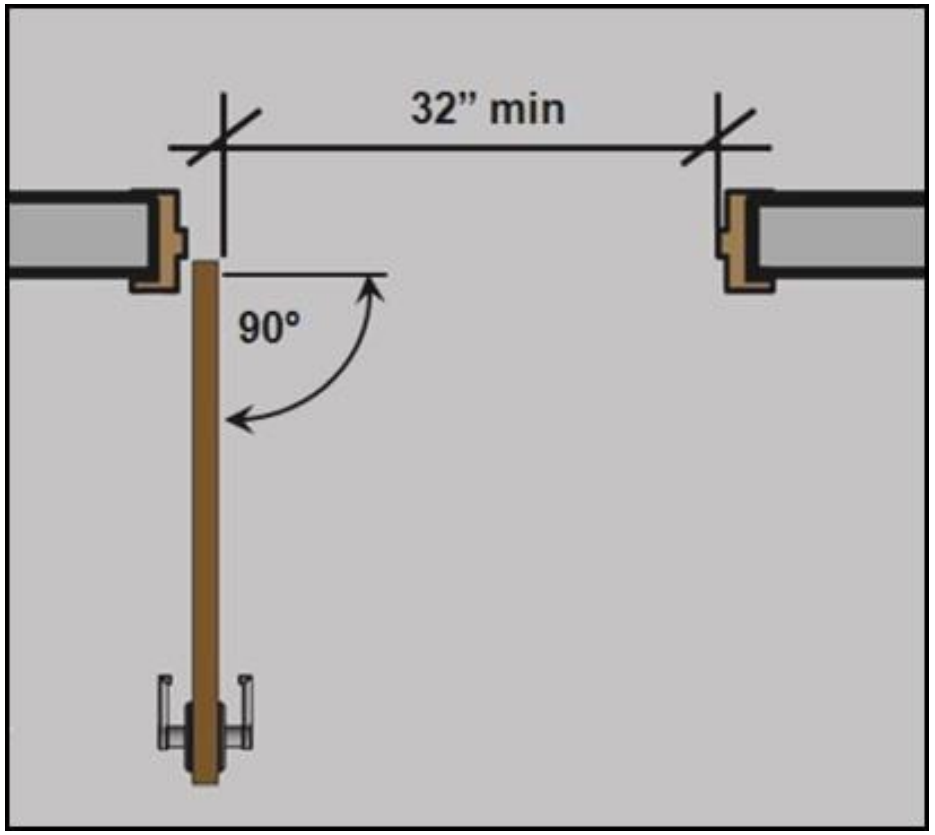


Double-Leaf Doors (§404.2.2)
One active leaf of double-leaf doors is required to meet criteria for clear width and maneuvering clearance. Other door requirements apply to both leaves.

EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Clear Width



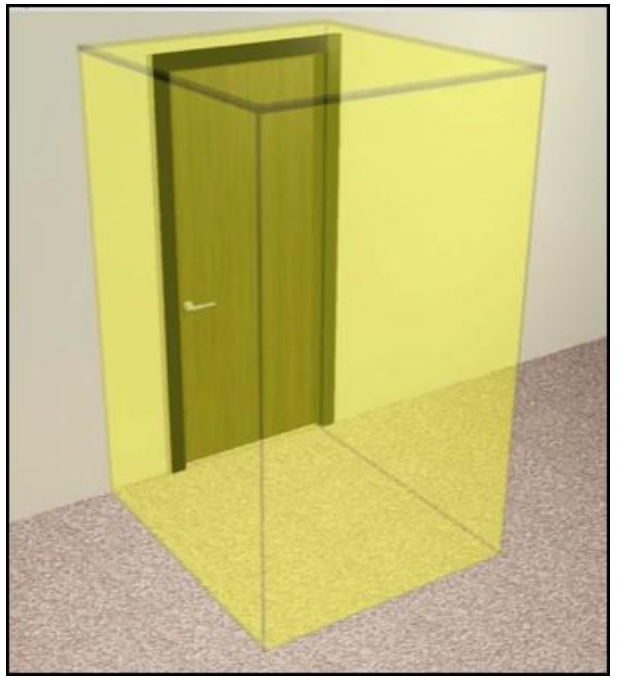
The clear width fpr a doorway shall be 32” (36” if passage is deeper than 24”). It is measured from the stop to the face of doors or gates open 90^{o} (or to the leading edge of sliding or folding doors.

EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Maneuvering Clearances

Required door clearances provide unobstructed space for maneuvering through doorways.

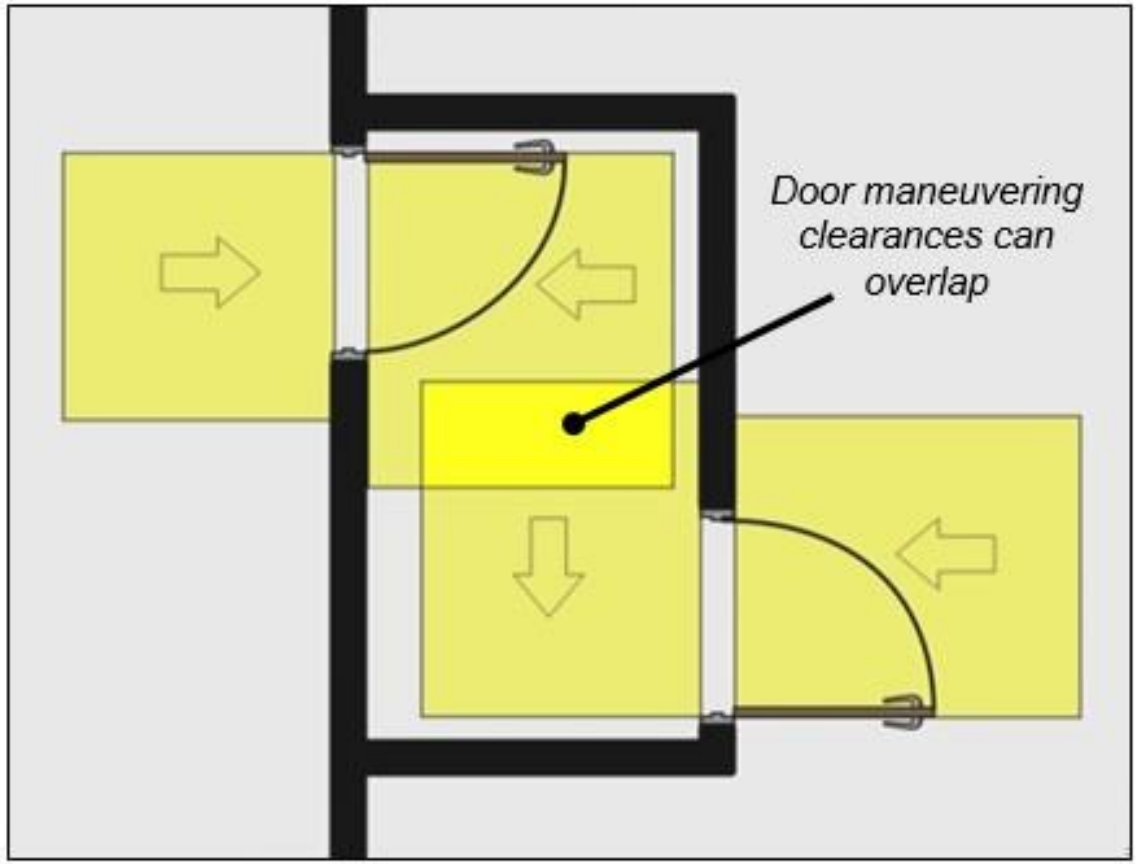


Maneuvering clearances must be free of protrusions the full height (80” min.) and changes in level (other than thresholds).

EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

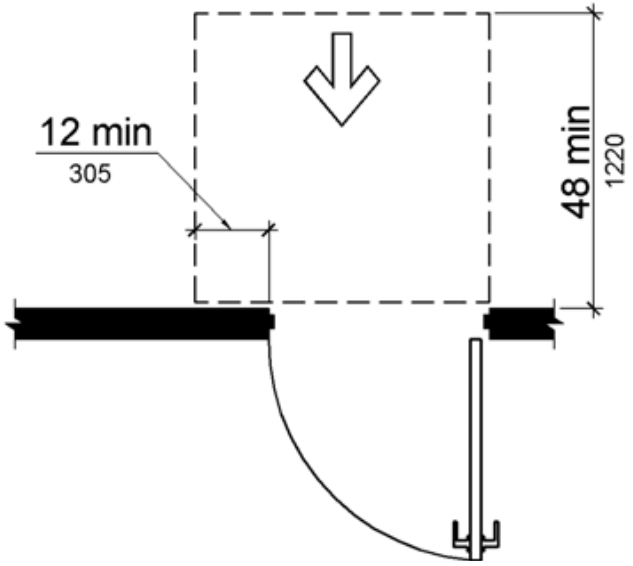
Maneuvering Clearances

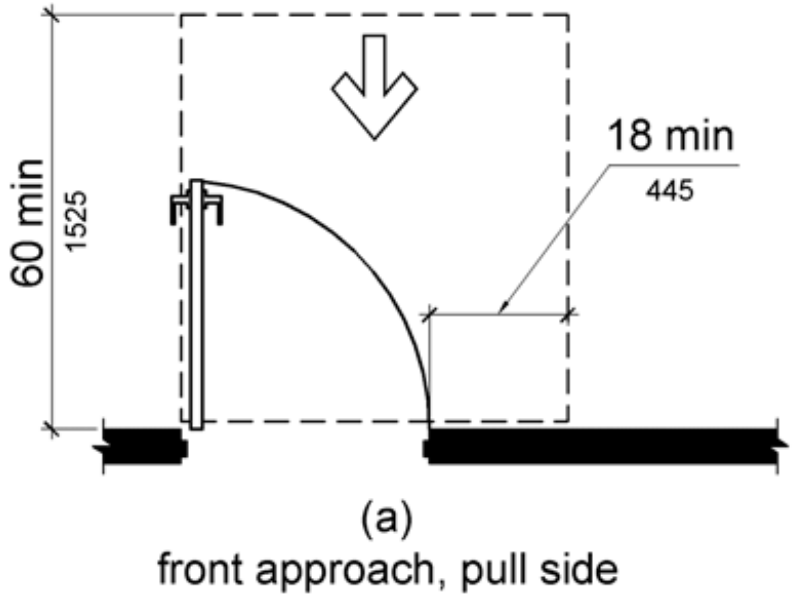


EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Clearances (Forward Approach)





Push Side:

12” (305) min. strike side clearance (if door has **both** closer & latch)

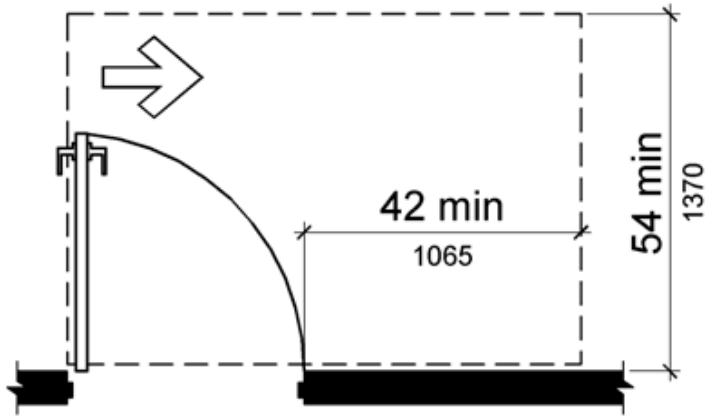
Pull Side:

18” (445) min. strike side clearance

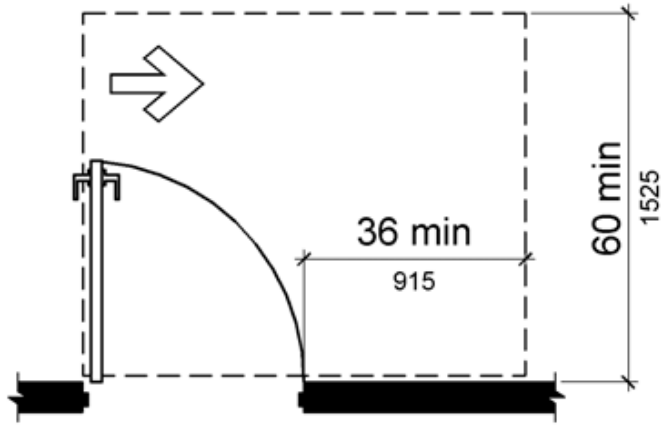
EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Clearances (Hinge Approaches)



(e)
hinge approach, pull side



(d)
hinge approach, pull side

Pull Side:

42” min. to latch if depth 54”

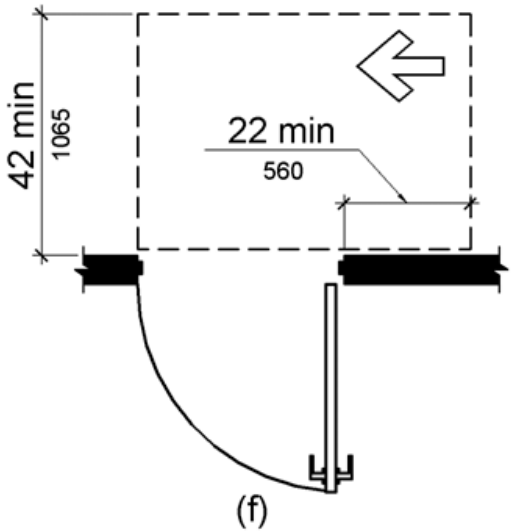
Pull Side:

36” min. to latch if depth 60”

EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Clearances (Hinge Approaches)



(f)
hinge approach, push side

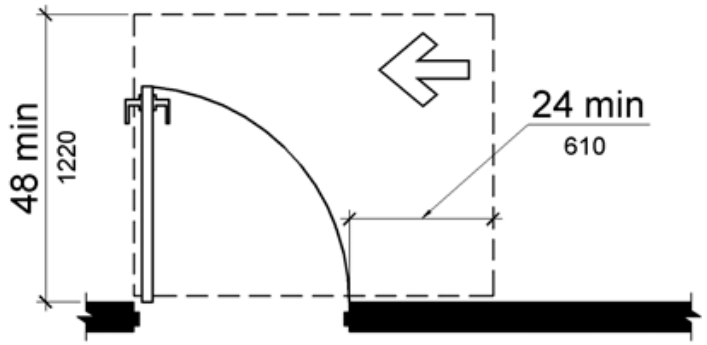
Push Side:

22” min. to hinge and 42” min. depth (48” if both closer and latch)

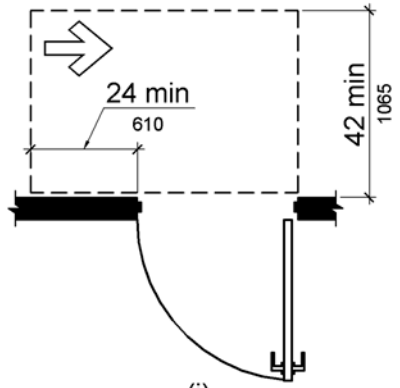
EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Clearances (Latch Approaches)



(h)
latch approach, pull side



(j)
latch approach, push side

Pull Side:

24” min. to latch and 48” min. depth
(54” if both closer and latch)

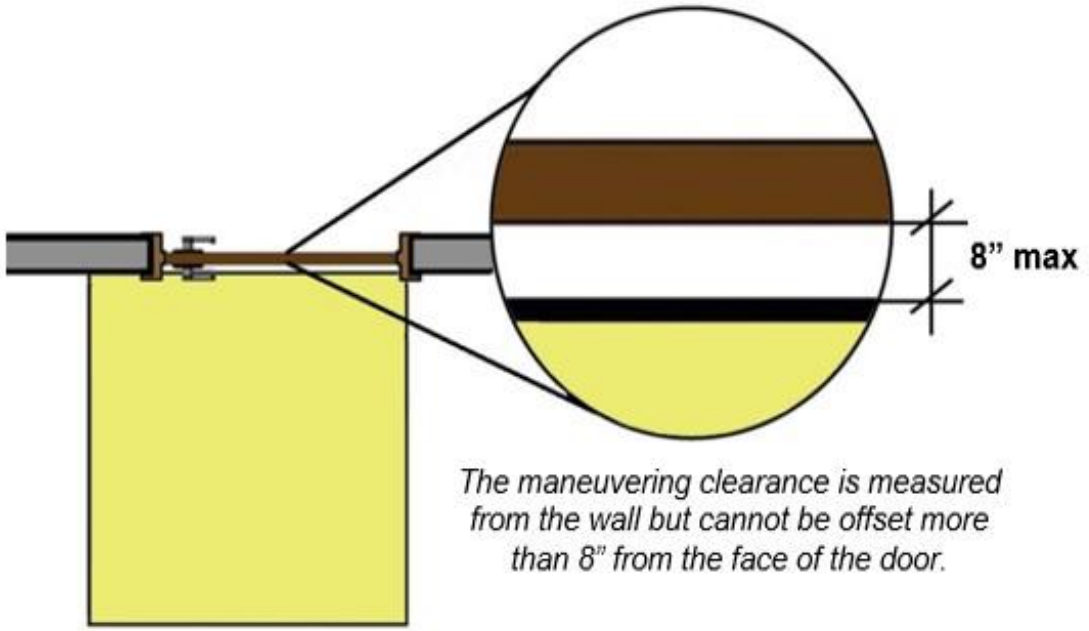
Push Side:

24” min. to latch and 42” min. depth

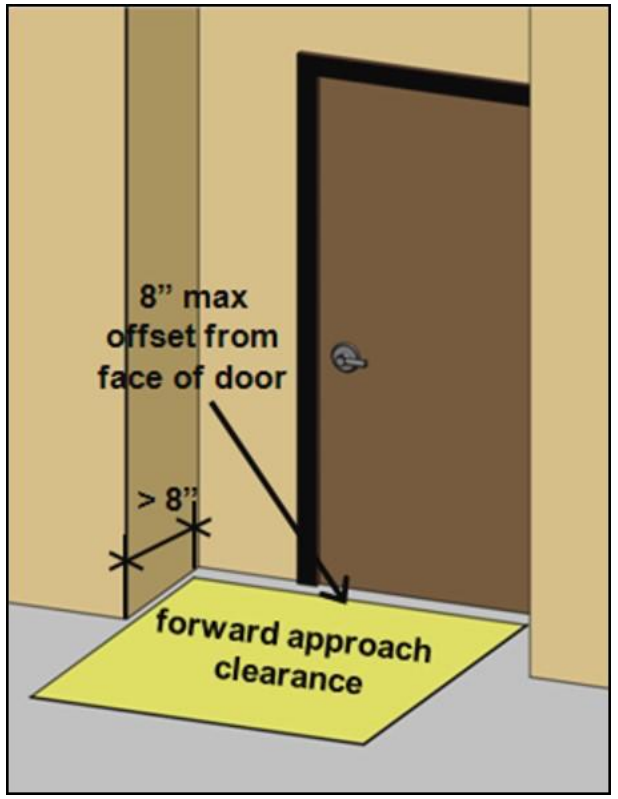
EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Recessed Doors and Gates (**Be aware of UFAS does not include this provision**)



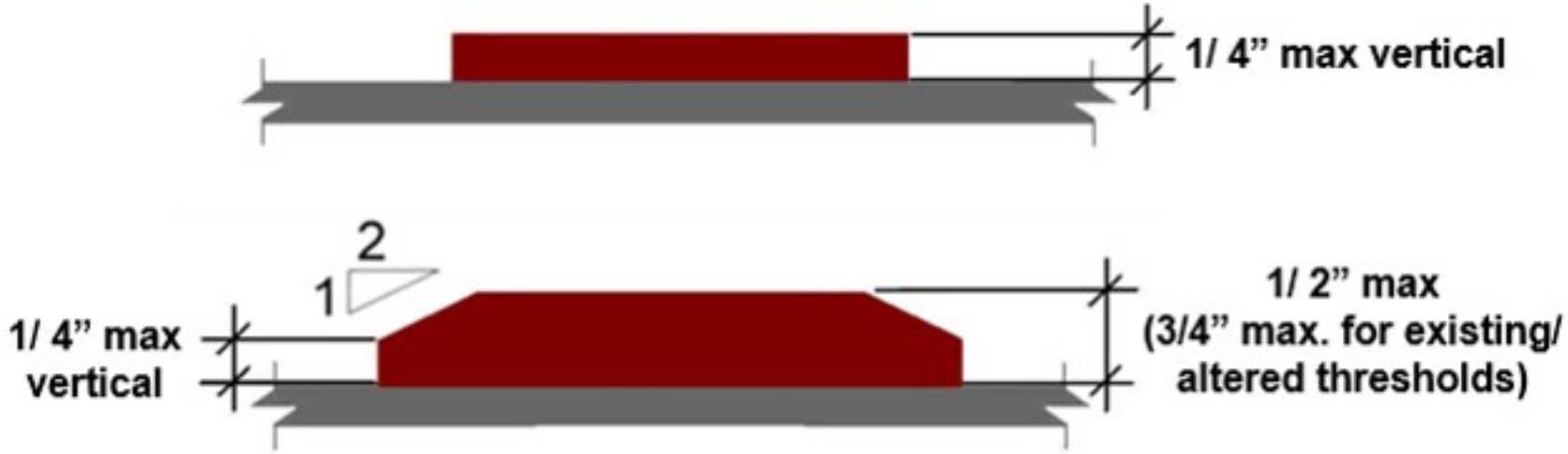
The maneuvering clearance is measured from the wall but cannot be offset more than 8" from the face of the door.



EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Thresholds (**Be aware of UFAS/ADA 2010 difference**)



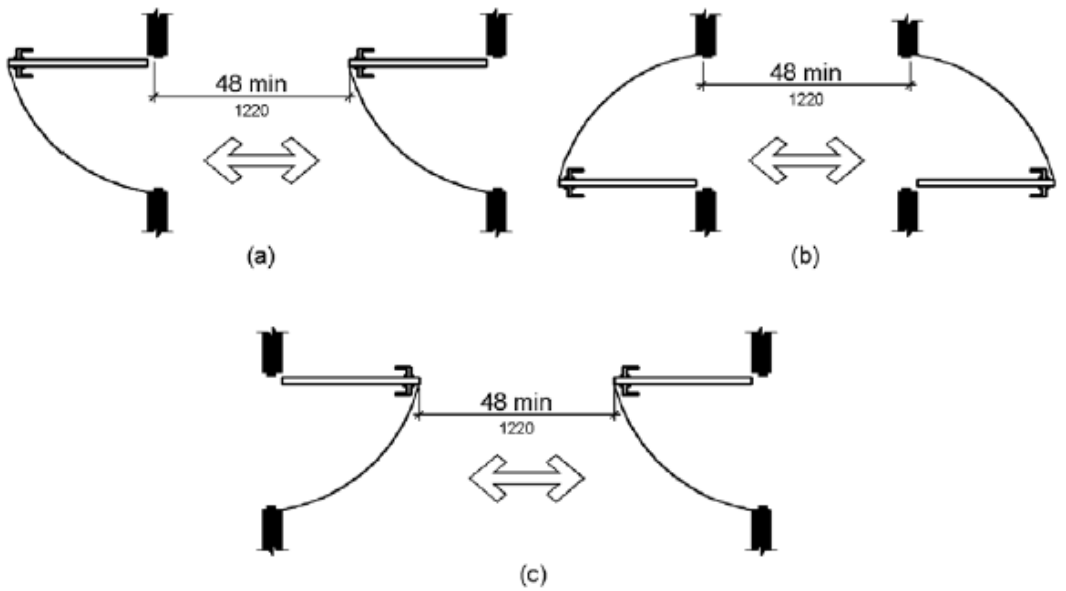
Note: vertical edge must be located below bevel, not above

- UFAS allows ¾" beveled thresholds at sliding doors
- ADA 404.2.5 EX allows ¾" at existing doors. **UFAS does not include this provision.**

EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Doors in Series



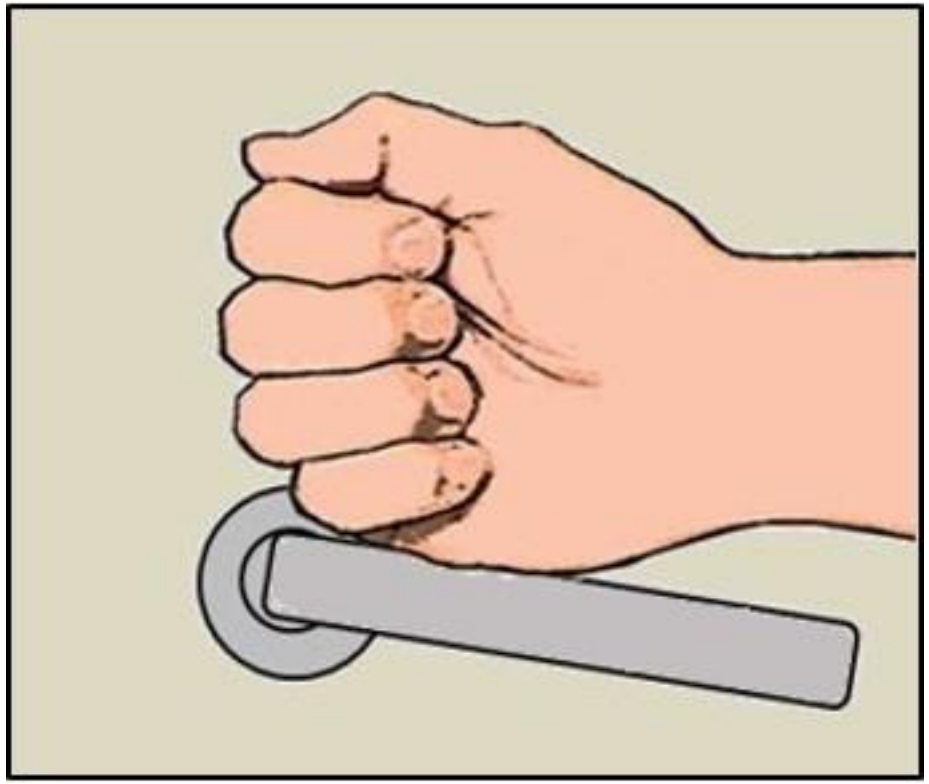
Doors in Series
48” (1220) min. separation required between the swing of doors

ENTRANCES DOORS AND GATES

Doors and Gate Hardware

Door and gate hardware must:

- allow one-hand operation
- not require tight grasping, pinching, or twisting of the wrist
- operate with 5 lbf maximum
- be located 34” to 48” above the floor or ground.



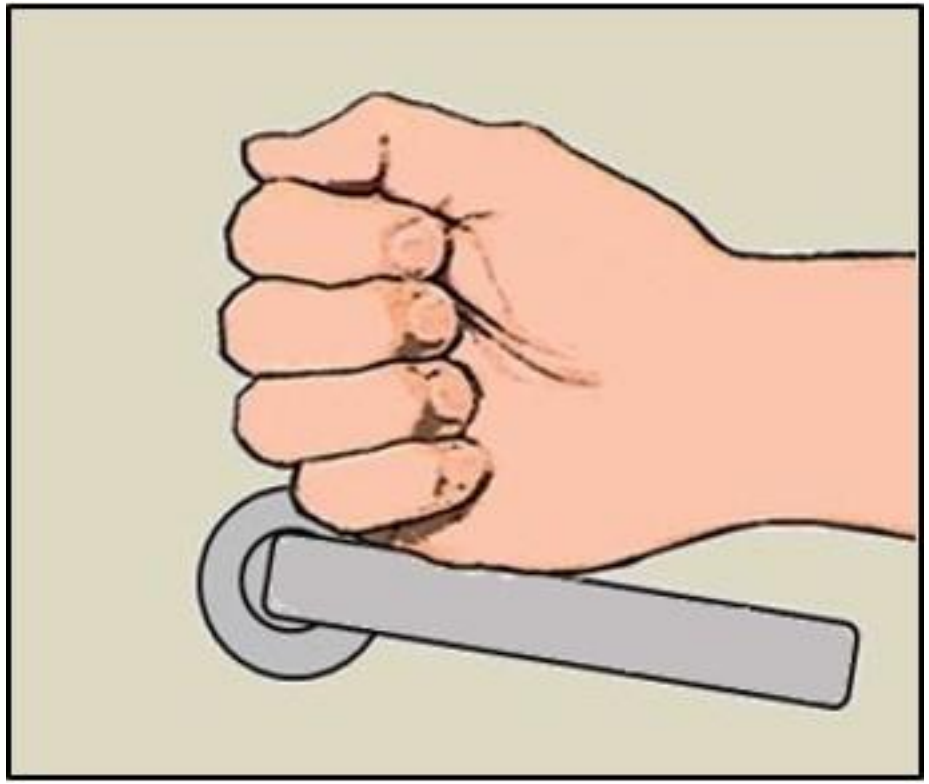
EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Doors and Gate Opening Force (Exceptions)

The maximum 5 lbf opening force applies to all accessible doors and gates except:

- fire doors (minimum opening force allowed by code)
- exterior hinged doors (no maximum specified)
- latch bolts and other devices that keep doors or gates closed



EQUAL HOUSING OPPORTUNITY

ENTRANCES DOORS AND GATES

Doors and Gate Surfaces (ADA Requirement)

The bottom surface of doors and gates on the push side must be smooth to a height of at least 10”.

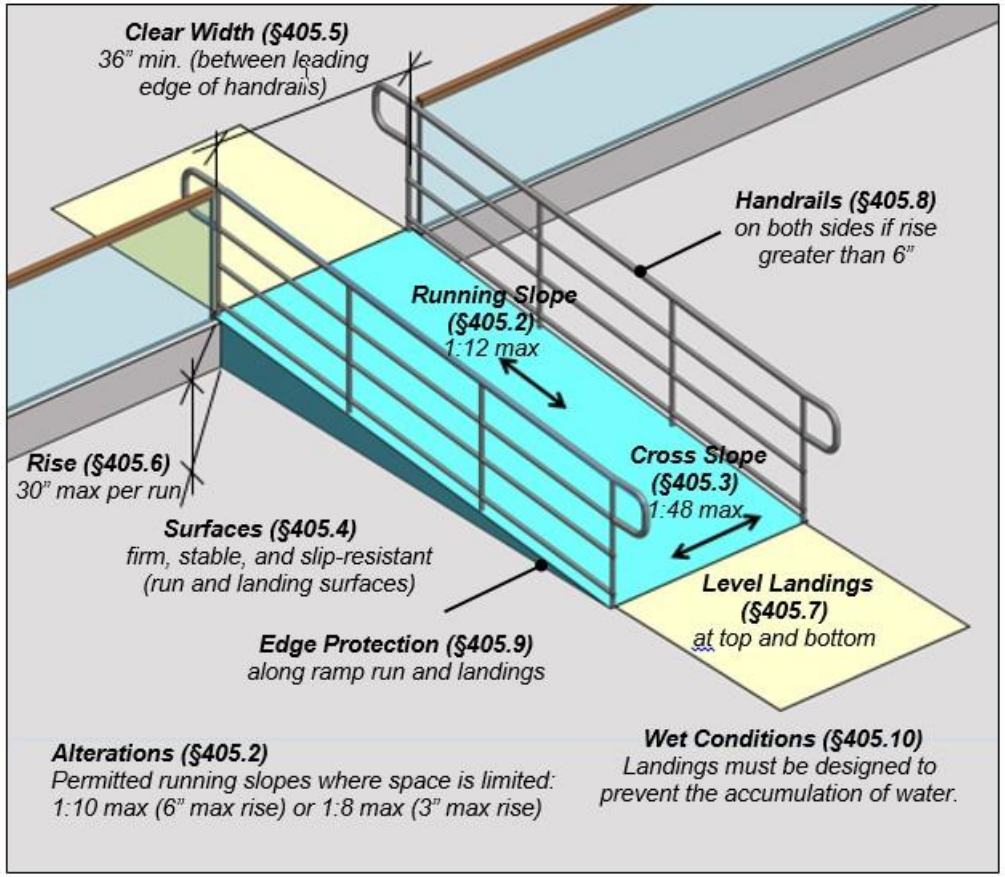
EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

Ramp and Curb Ramp Requirements

Ramps and curb ramps are required along accessible routes to span changes in level greater than ½”. Elevators and, under certain specified conditions, platform lifts, can be used as an alternative.

Accessible routes with running slopes steeper than 5% also must be treated as ramps.



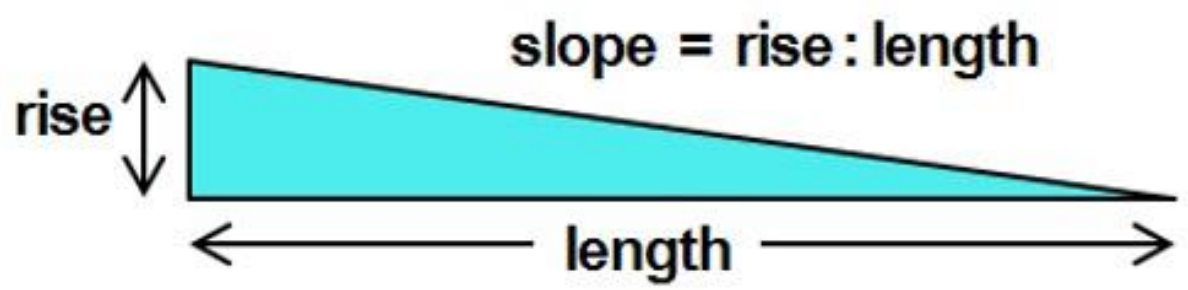
EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

Slope and Cross Slope

The running slope of a ramp shall be no more than 1:12 (8.33%) and is to be uniform along a run.

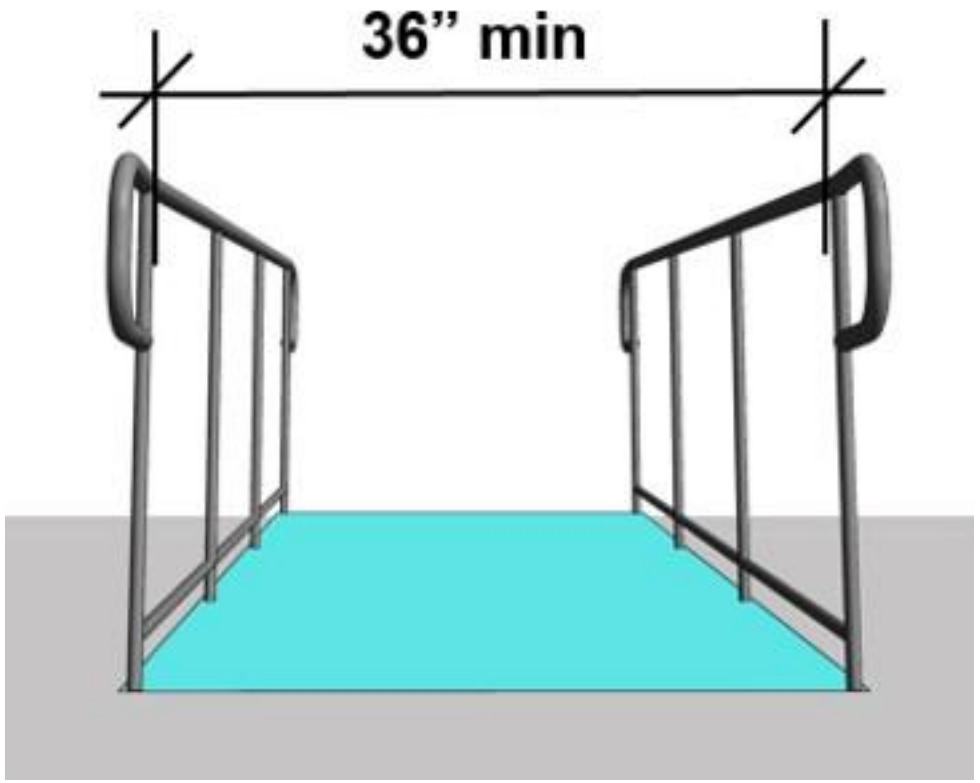
The cross slope shall be no more than 1:48 (2%).



EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

Clear Width

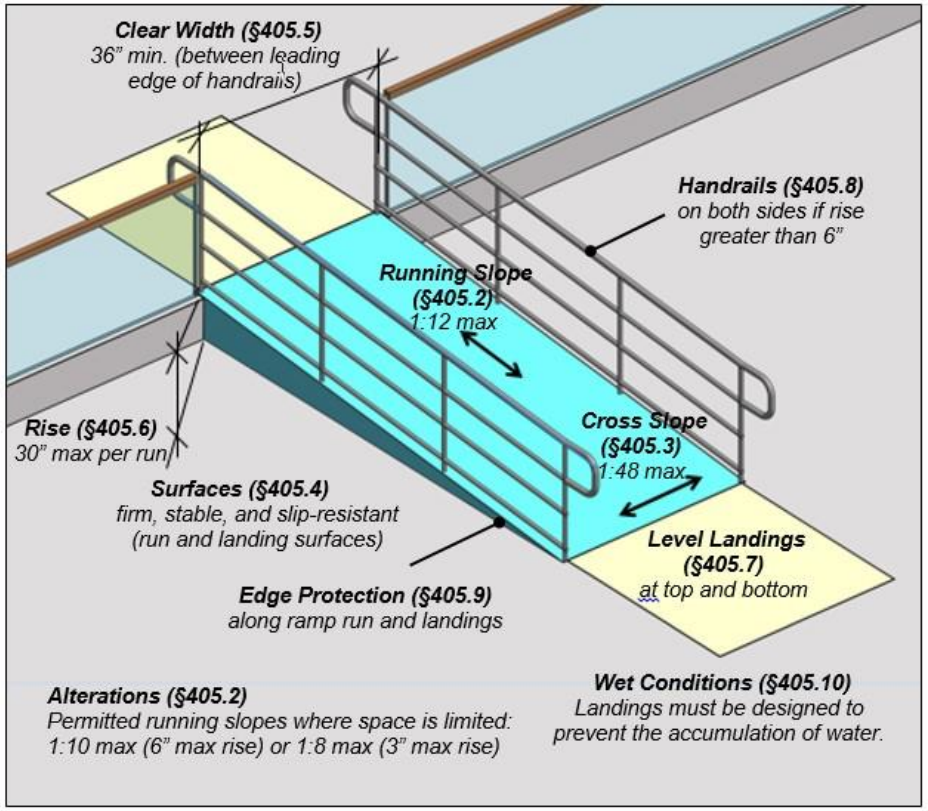


Ramp runs must have a clear width of 36” minimum (measured between handrails where provided).

EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

Rise

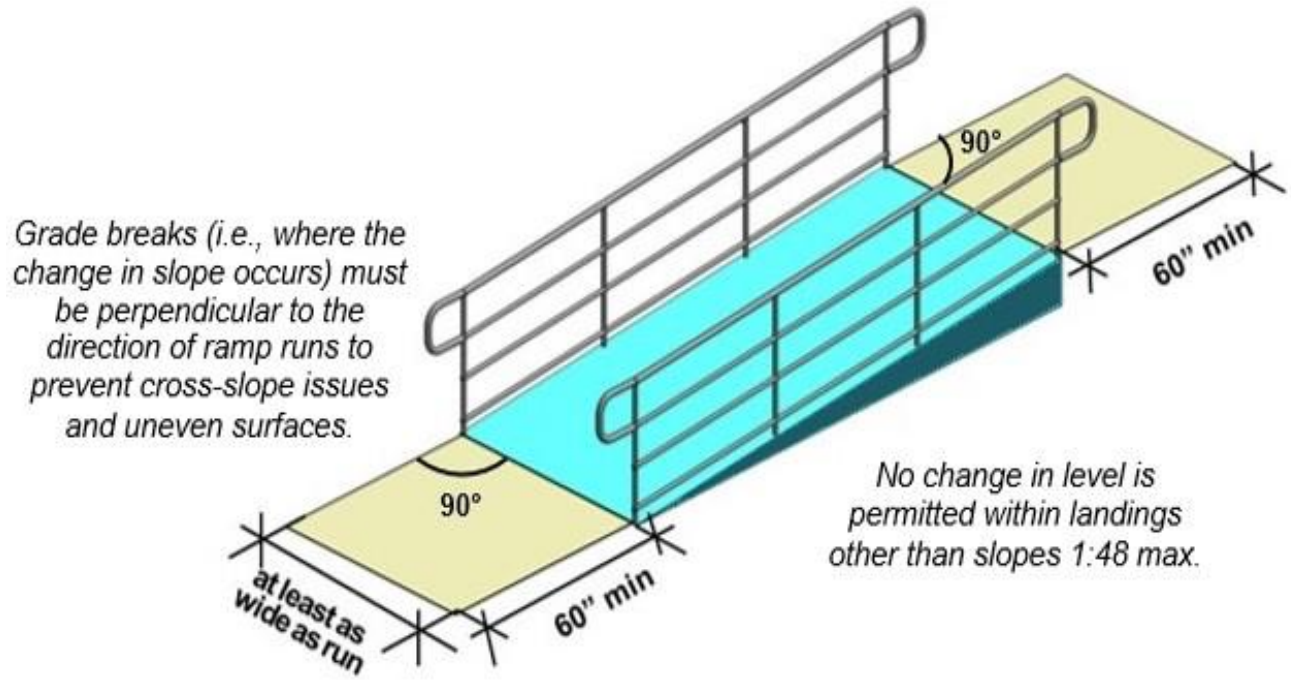


The height of runs is limited (30” max.), but there is no limit on the number of runs a ramp may have.

EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

Landings

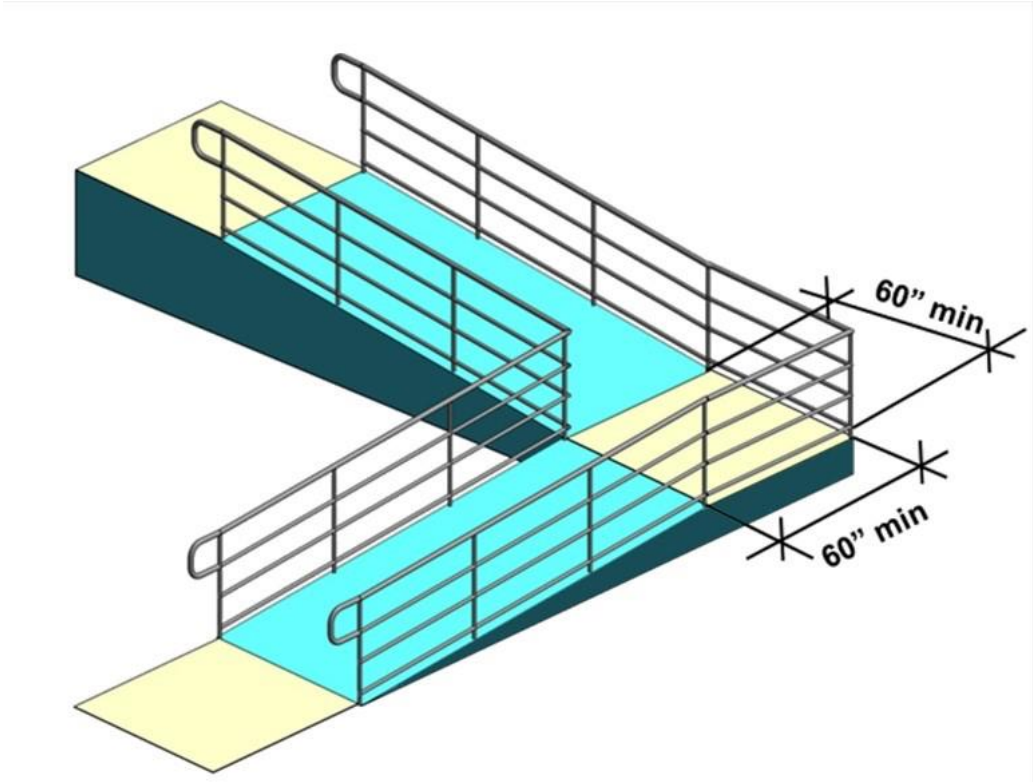


Level landings are required at the top and bottom of each run. Changes in level greater than 1:48 are not permitted at landings.

EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

Landings

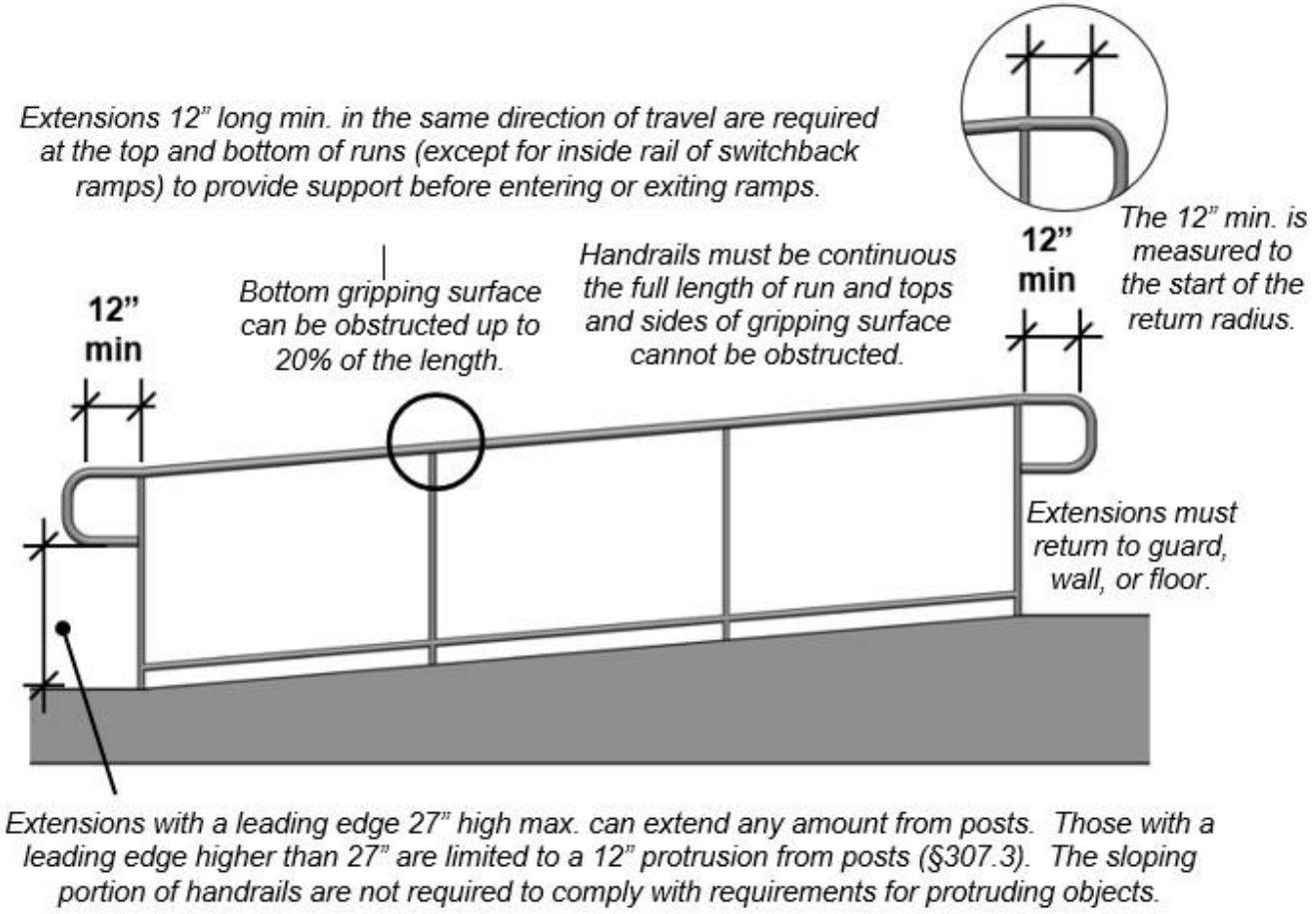


Intermediate landings between runs must be at least 60” wide clear and 60” long clear where ramps change direction (any change from linear). Handrails, edge protection, vertical posts and other elements cannot obstruct or overlap the minimum 60” by 60” clearance. The 12” minimum handrail extensions required at the top and bottom of ramp runs must be in the same direction of the run, but they can turn or wrap where handrails are continuous at the inside turn of dogleg or switchback ramps.

EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

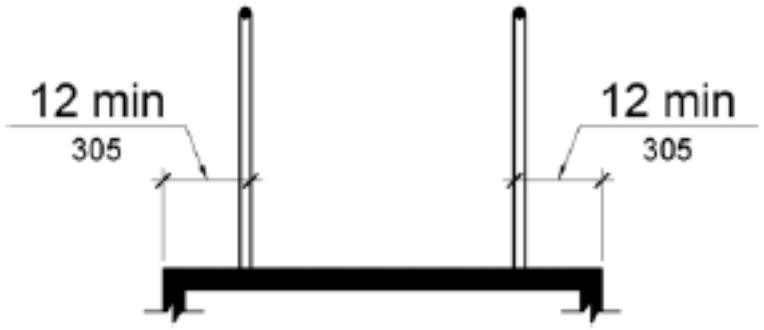
Handrails



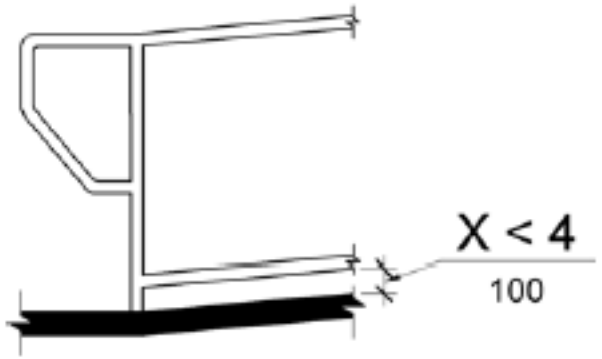
EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

Edge Protection (**Be aware of UFAS/ADA 2010 difference**)



Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail



Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface. **UFAS states curb shall be minimum 2” high.**

EQUAL HOUSING OPPORTUNITY

RAMPS AND CURB RAMPS

Edge Protection

EXCEPTIONS:

1. Edge protection shall not be required on ramps that are not required to have handrails

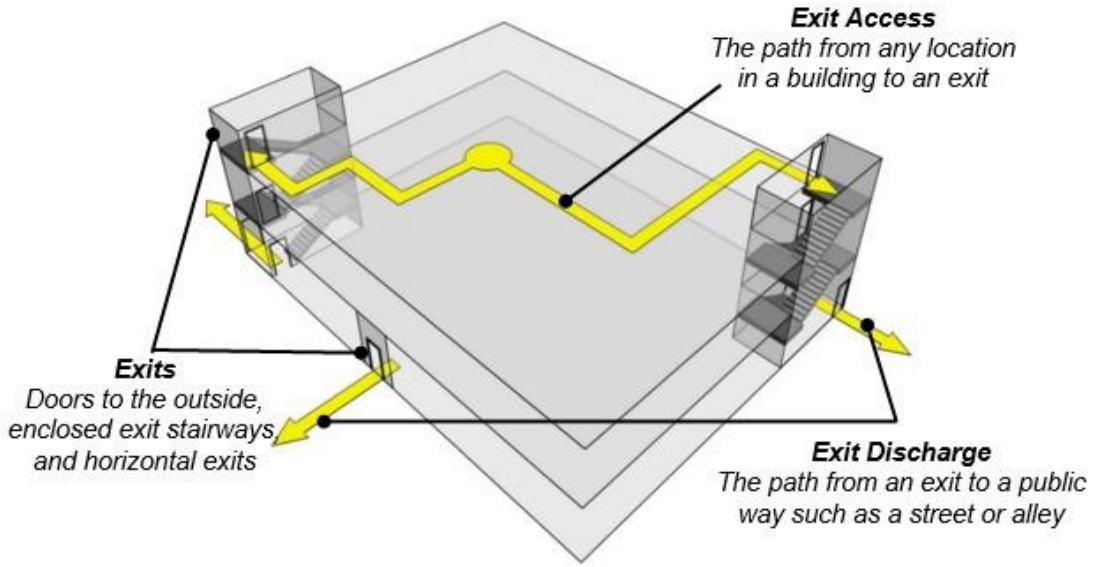
2. Edge protection shall not be required on the sides of ramp landings serving an adjoining ramp run or stairway.

3. Edge protection shall not be required on the sides of ramp landings having a vertical drop-off of 1/2 inch (13 mm) maximum within 10 inches (255 mm) horizontally of the minimum landing area.

ACCESSIBLE MEANS OF EGRESS

Means of Egress

A means of egress is an unobstructed path to leave buildings, structures, and spaces. A means of egress is comprised of exit access, exit, and exit discharge.



EQUAL HOUSING OPPORTUNITY

ACCESSIBLE MEANS OF EGRESS

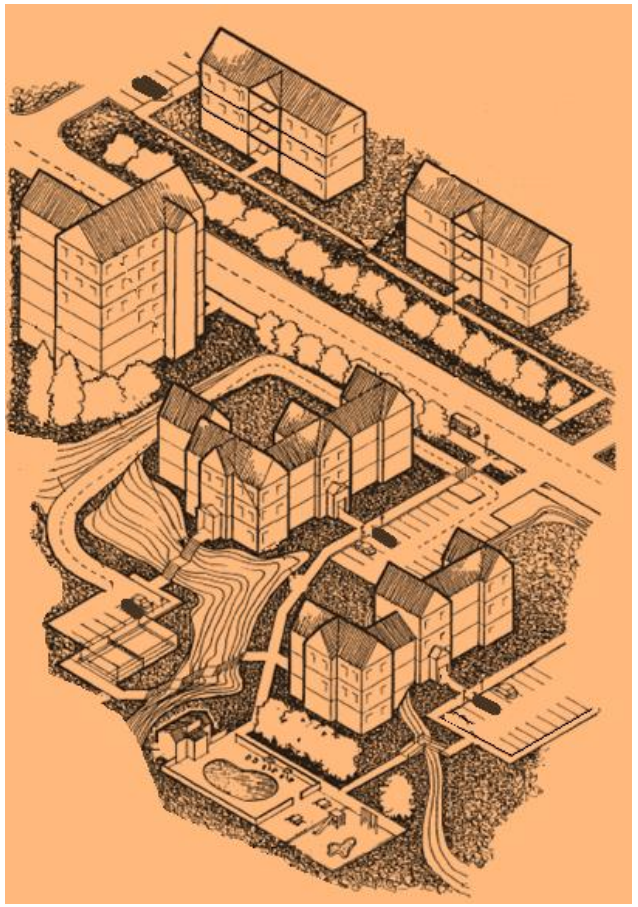
Means of Egress

Accessible means of egress must be provided according to the International Building Code (IBC). Issued by the International Code Council (ICC), the IBC addresses the number of means of egress required and technical criteria for them, including fire–resistance rating, smoke protection, travel distance, width, and other features.

For the purpose of PRPHA the escape hatches at windows at gates are not part of the Code required means of egress. Therefore they do **NOT** need to be accessible.

EQUAL HOUSING OPPORTUNITY

DWELLING UNITS

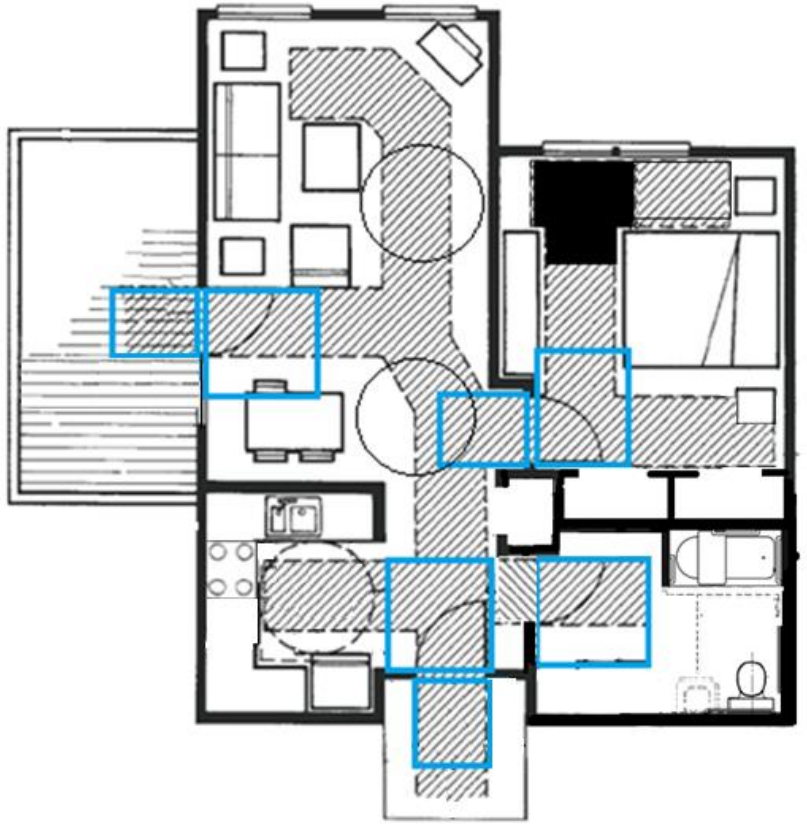


- Accessible Routes
- Bathrooms
- Kitchen
- Bedrooms
- Closets
- Laundry

EQUAL HOUSING OPPORTUNITY

DWELLING UNITS

Accessible Route

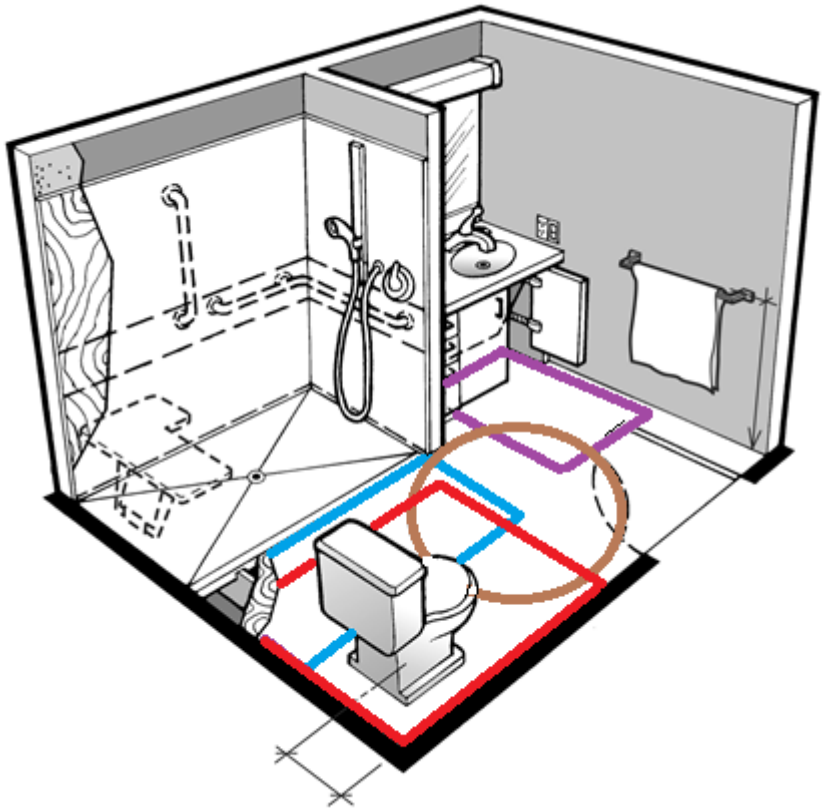


- At least one accessible route connects all features required to be accessible.
- Each accessible space must contain at least one Turning Space.
- As previously stated the AR includes:
  - Turning spaces
  - Floor clearances
  - Maneuvering clearances at doors
  - etc.

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Scoping

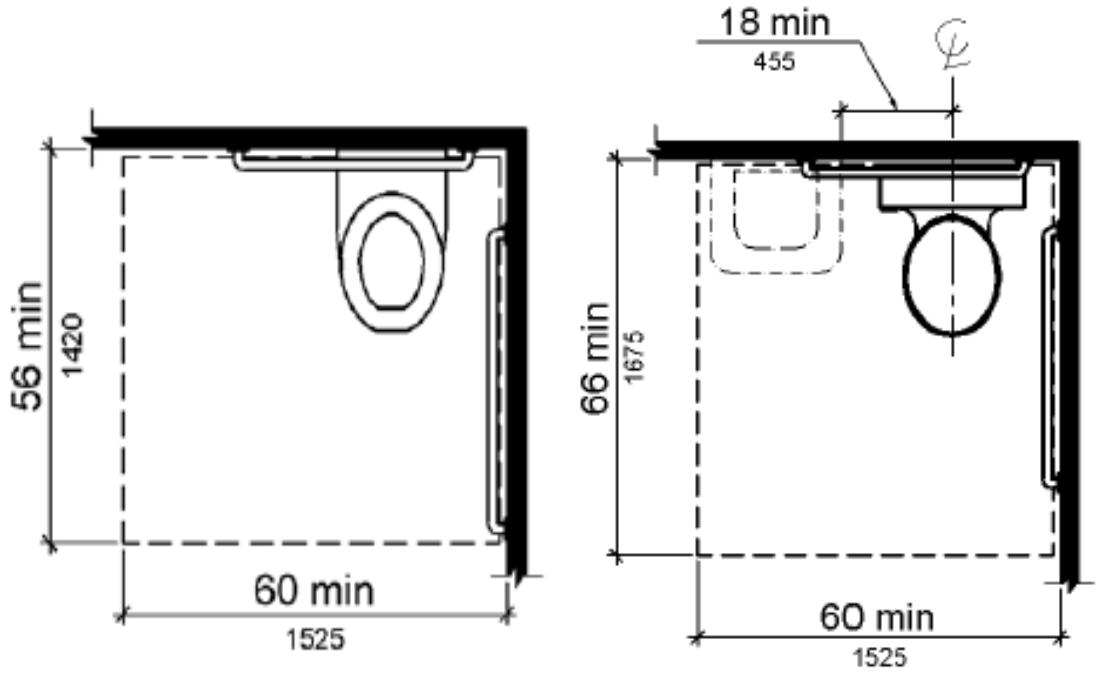


- Each accessible dwelling unit must provide at least one accessible bathroom.
- Additional bathrooms must be usable and on an accessible route.
- At accessible bathrooms UFAS states that door may not swing into clearance of any fixture but **VCA and ADA do accept it.**

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Water Closets (**Be aware of UFAS/ADA 2010 difference**)



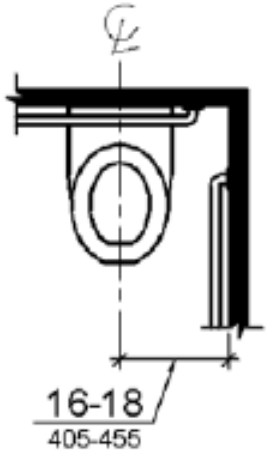
The water closet shall be positioned with a wall or partition to the rear and to one side. Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall. **(UFAS three different Clearances based on access to bathroom)**

Lavatory is permitted within 18” minimum from centerline of water closet if depth of clearance >66”

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Water Closets (**Be aware of UFAS/ADA 2010 difference**)



(a)
wheelchair
accessible
water closets

- The water closet shall be positioned with a wall or partition to the rear and to one side.
- The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm) maximum from the side wall or partition
- **UFAS states that water closet shall be 18" exactly from side wall.** Nevertheless VCA clarifications allow for 16"-18" range.

EQUAL HOUSING OPPORTUNITY

BATHROOMS

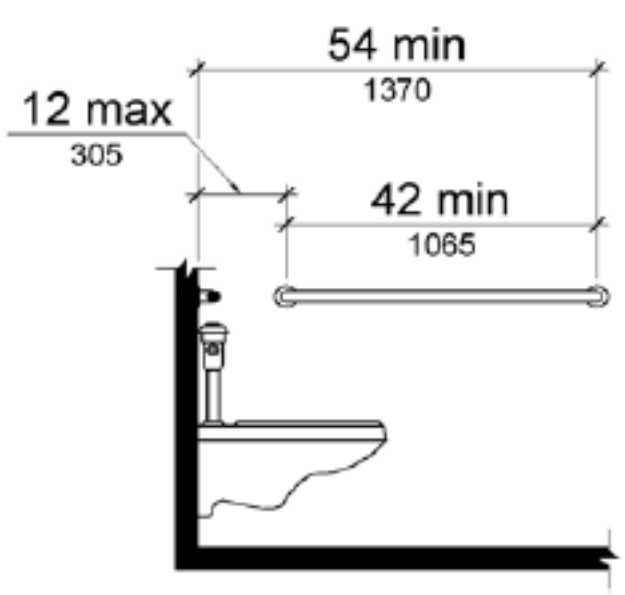
Water Closets Seat Height

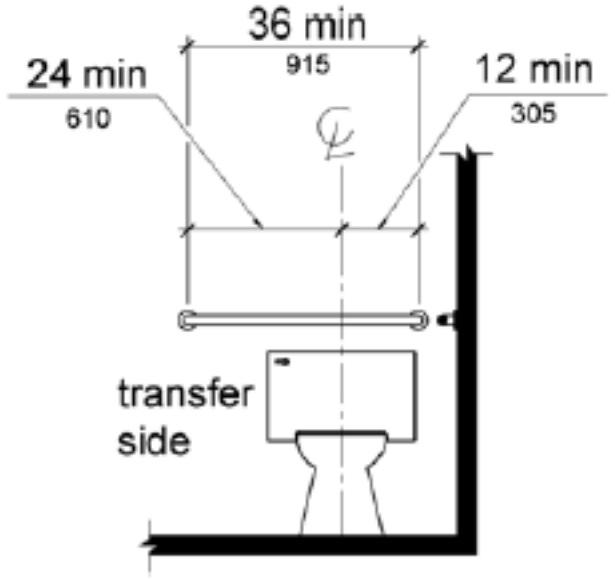
The seat height of a water closet above the finish floor shall be 15 inches minimum and 19 inches maximum measured to the top of the seat in residential dwellings.

Note: ADA 2010 establishes that the height in non-residential areas shall be 17” to 19”.

BATHROOMS

Water Closets Grab Bars



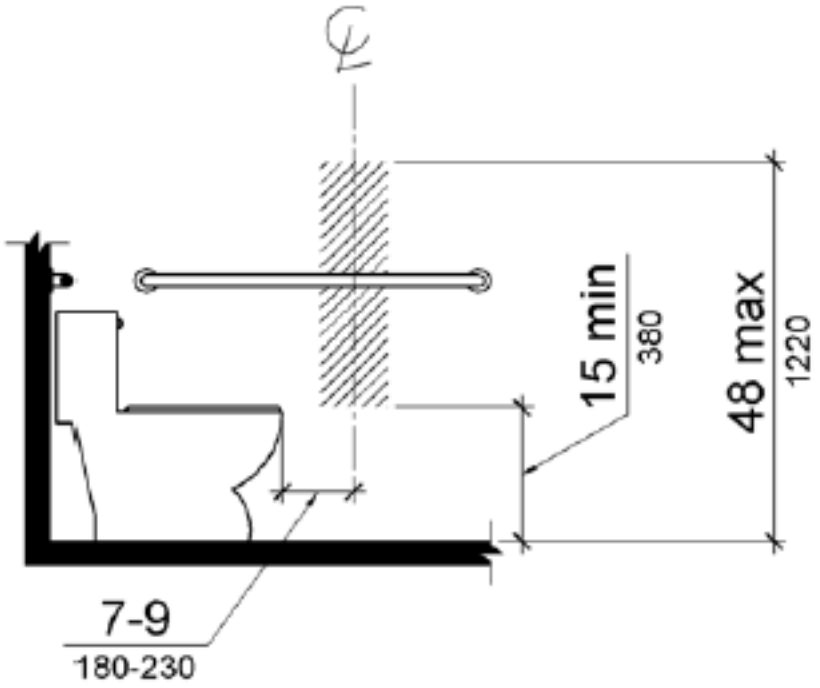


The rear grab bar shall be permitted to be 24 inches (610 mm) long minimum, centered on the water closet, where wall space does not permit a length of 36 inches (915 mm) minimum due to the location of a recessed fixture adjacent to the water closet.

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Water Closets Paper Dispenser (**Be aware of UFAS/ADA 2010 difference**)



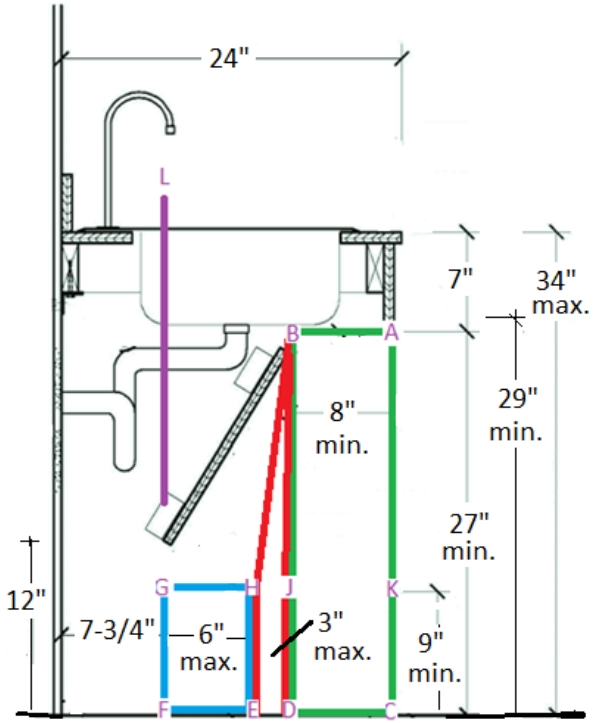
Toilet paper dispensers shall be 7 inches (180 mm) minimum and 9 inches (230 mm) maximum in front of the water closet measured to the centerline of the dispenser.

UFAS states that the front edge of dispenser shall be no more than 36” from back wall.

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Lavatory and Medicine Cabinet

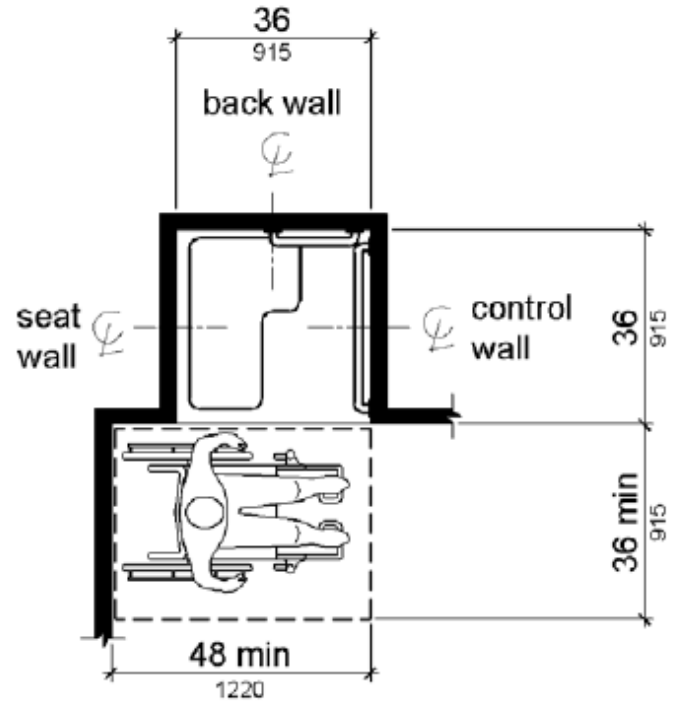


- Mirror height: 40” max to bottom
- Medicine cabinet: 1 shelf at 44” max
- Lavatory Heigth: 34” max
- Must provide knee and toe clearance
- Accessible controls

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Showers



Note: inside finished dimensions measured at the center points of opposing sides

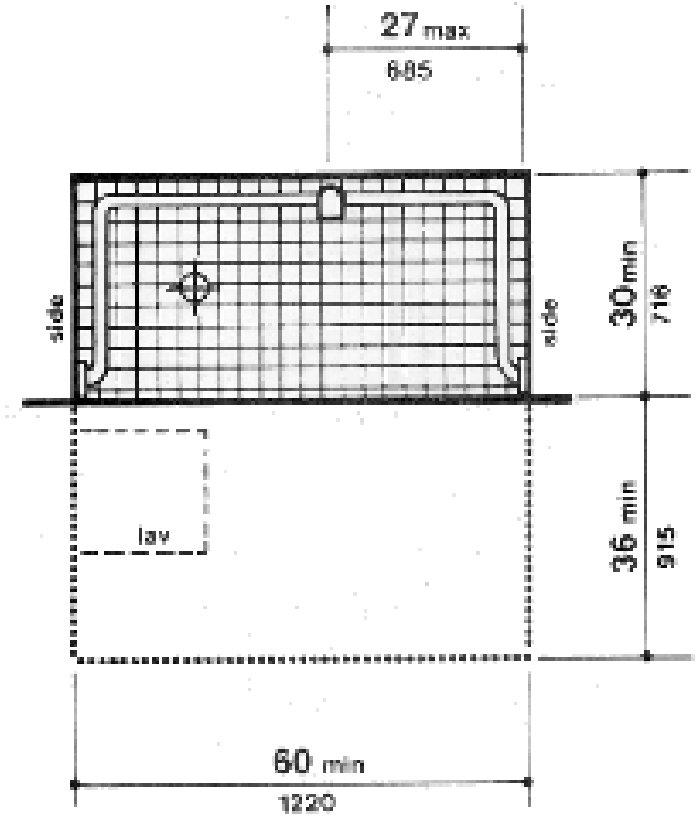
Transfer Type Shower Compartments. Transfer type shower compartments shall be 36 inches (915 mm) by 36 inches (915 mm) clear inside dimensions measured at the center points of opposing sides and shall have a 36 inch (915 mm) wide minimum entry on the face of the shower compartment. Clearance of 36 inches (915 mm) wide minimum by 48 inches (1220 mm) long minimum measured from the control wall shall be provided.

Seat shall be provided at a height of 17” to 19” AFF

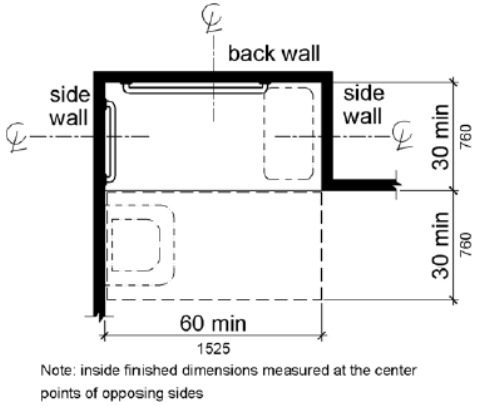
EQUAL HOUSING OPPORTUNITY

BATHROOMS

Showers (**Be aware of UFAS/ADA 2010 difference**)



Standard Roll-In Type Shower Compartments. Standard roll-in type shower compartments shall be 30 inches (760 mm) wide minimum by 60 inches (1525 mm) deep minimum clear inside dimensions measured at center points of opposing sides and shall have a 60 inches (1525 mm) wide minimum entry on the face of the shower compartment. **UFAS does not provide for seat in roll-in showers.**

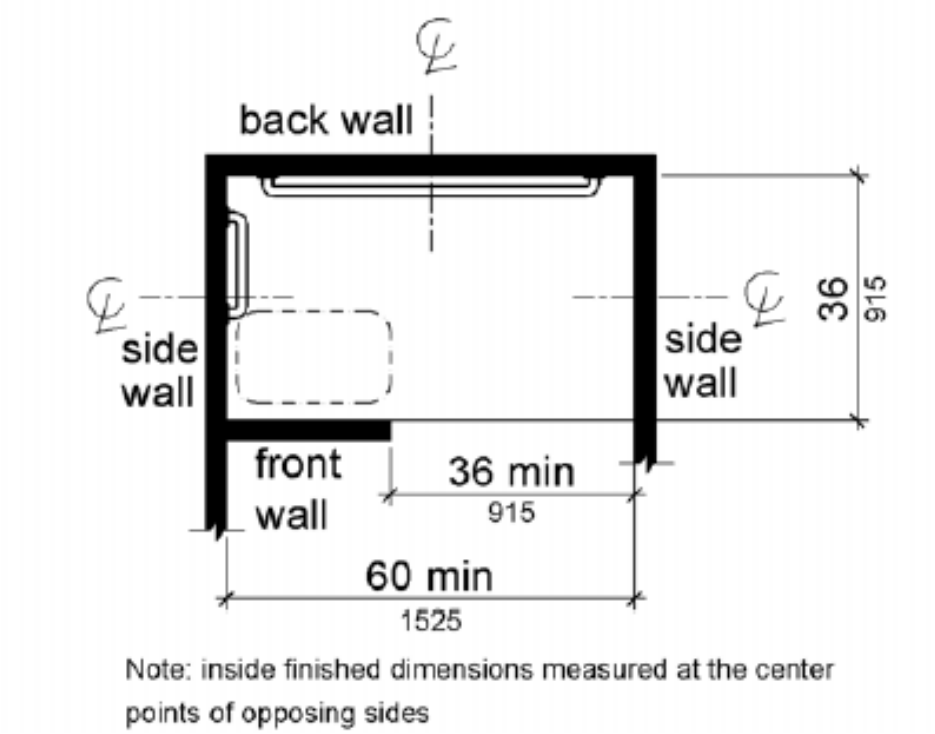


Note: inside finished dimensions measured at the center points of opposing sides

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Showers (**Be aware of UFAS/ADA 2010 difference**)



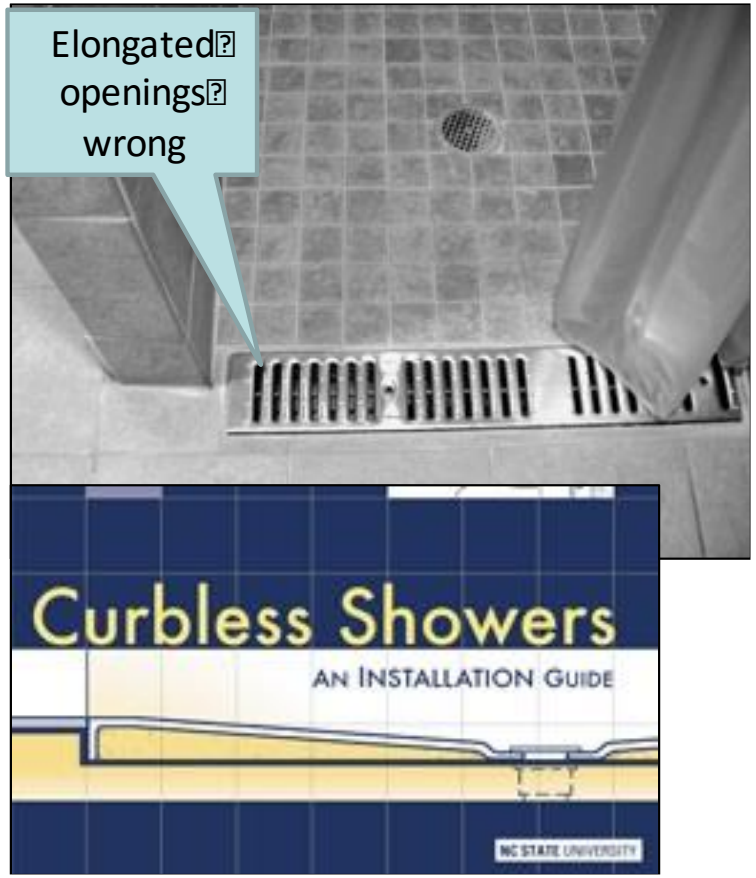
Note: inside finished dimensions measured at the center points of opposing sides

Alternate Roll-In Type Shower Compartments. Alternate roll-in type shower compartments shall be 36 inches (915 mm) wide and 60 inches (1525 mm) deep minimum clear inside dimensions measured at center points of opposing sides. A 36 inch (915 mm) wide minimum entry shall be provided at one end of the long side of the compartment. **UFAS does provide for this type of shower**

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Showers



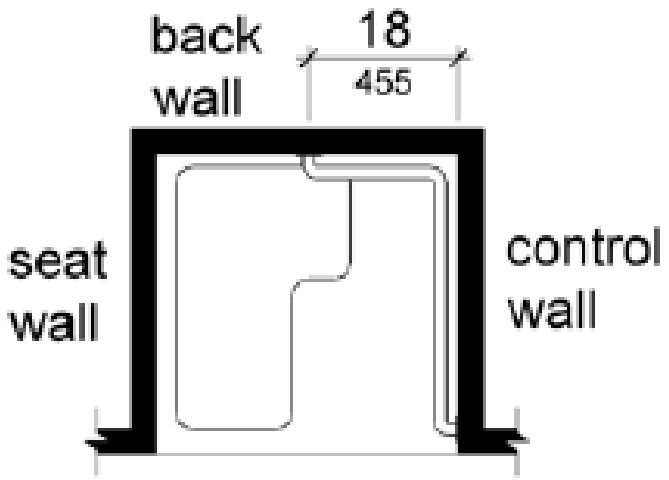
For Roll-In Type Shower Compartments:

- 2% max slope is required
- Installation of trench drain is desired

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Shower Grab Bars

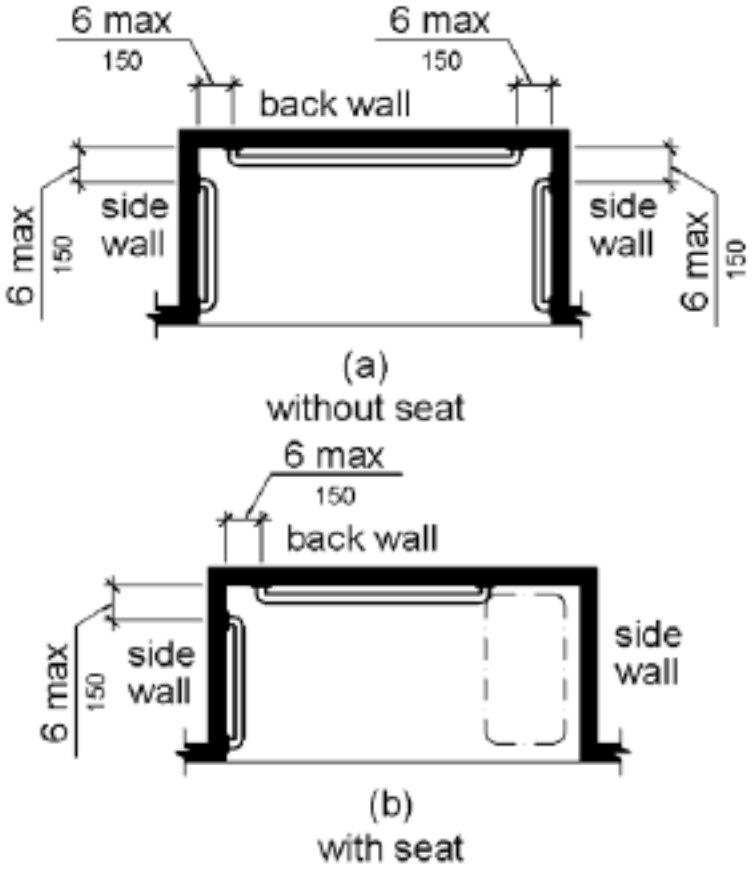


Transfer Type Shower Compartments. In transfer type compartments, grab bars shall be provided across the control wall and back wall to a point 18 inches (455 mm) from the control wall.

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Shower Grab Bars (**Be aware of UFAS/ADA 2010 difference**)

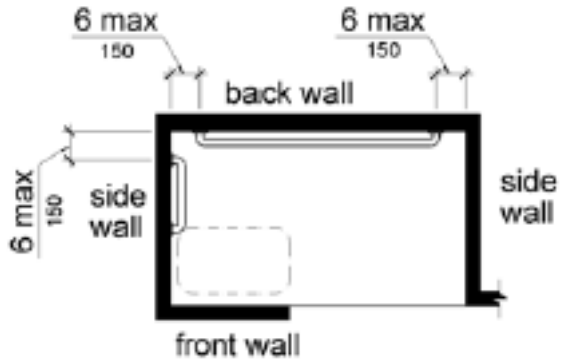


Standard Roll-In Type Shower Compartments. Where a seat is provided in standard roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall opposite the seat. Grab bars shall not be provided above the seat. Where a seat is not provided in standard roll-in type shower compartments, grab bars shall be provided on three walls. Grab bars shall be installed 6 inches (150 mm) maximum from adjacent walls. **UFAS states they shall be continous.**

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Shower Grab Bars (**Be aware of UFAS/ADA 2010 difference**)

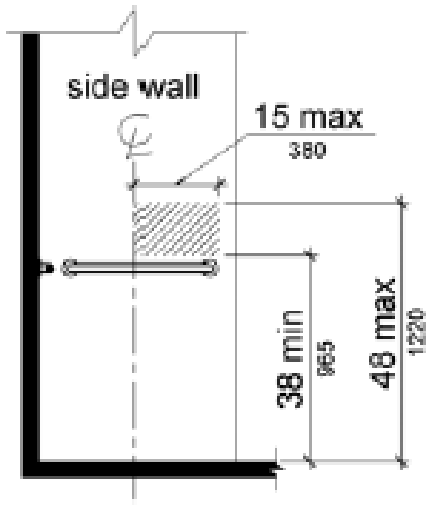


Alternate Roll-In Type Shower Compartments. In alternate roll-in type shower compartments, grab bars shall be provided on the back wall and the side wall farthest from the compartment entry. Grab bars shall not be provided above the seat. Grab bars shall be installed 6 inches (150 mm) maximum from adjacent walls. **UFAS states does not provide for this type of shower**

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Shower Controls (**Be aware of UFAS/ADA 2010 difference**)

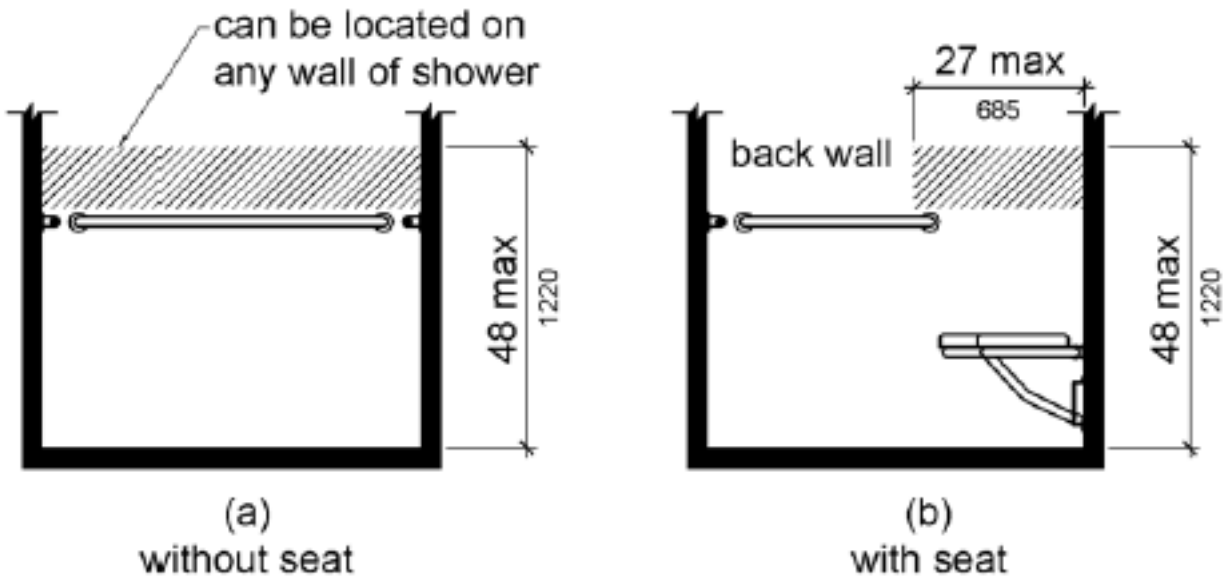


Transfer Type Shower Compartments. In transfer type shower compartments, the controls, faucets, and shower spray unit shall be installed on the side wall opposite the seat 38 inches (965 mm) minimum and 48 inches (1220 mm) maximum above the shower floor and shall be located on the control wall 15 inches (380 mm) maximum from the centerline of the seat toward the shower opening. **UFAS states that they shall be 18” from open side of shower.**

EQUAL HOUSING OPPORTUNITY

BATHROOMS

Shower Controls (**Be aware of UFAS/ADA 2010 difference**)



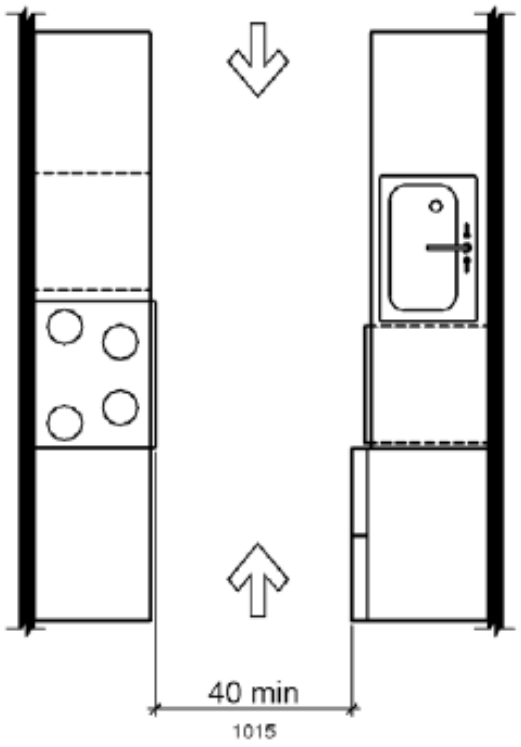
Standard Roll-In Type Shower Compartments. In standard roll-in type shower compartments, the controls, faucets, and shower spray unit shall be located above the grab bar, but no higher than 48 inches (1220 mm) above the shower floor. Where a seat is provided, the controls, faucets, and shower spray unit shall be installed on the back wall adjacent to the seat wall and shall be located 27 inches (685 mm) maximum from the seat wall. **UFAS states that they shall be 18" from open side of shower.**

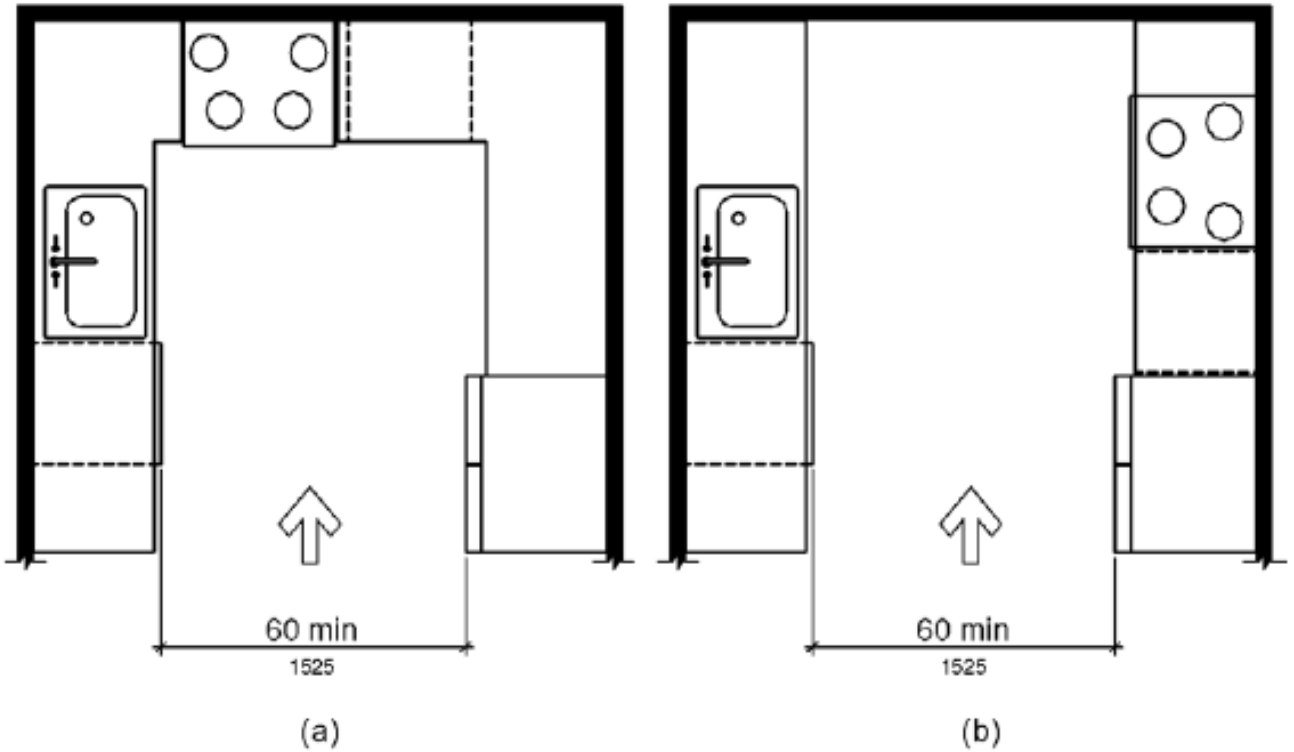
Note: PRPHA prefers maintaining controls as stated in UFAS. If seat is provided in shower a second control at shower seat is desired.

EQUAL HOUSING OPPORTUNITY

KITCHENS

CLEARANCES

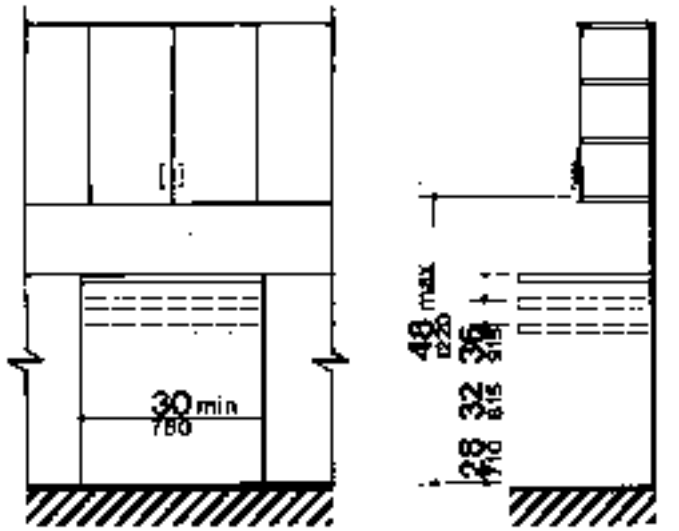




EQUAL HOUSING OPPORTUNITY

KITCHENS

WORK SURFACE



(b)
Cabinets and Base Removed and Height Alternatives

Kitchen Work Surface. In residential dwelling units required to comply at least one 30 inches (760 mm) wide minimum section of counter shall provide a kitchen work surface which provides forward approach and knee and toe clearances.

EQUAL HOUSING OPPORTUNITY

KITCHENS

KITCHEN SINK

The sink and surrounding counter shall comply with the following requirements:
(1) The sink and surrounding counter shall be mounted at a maximum height of 34 in (865 mm) above the floor, measured from the floor to the top of the counter surfaceThe total width of sink and counter area shall be 30 in (760 mm).
(2) The depth of a sink bowl shall be no greater than 6.5” (165 mm).
(3) Faucets shall be lever-operated or push-type mechanisms are two acceptable designs.
(4) Counter thickness and supporting structure shall be 2 in (50 mm) maximum over the required clear space.
(5) A clear floor space 30 in by 48 in (760 mm by 1220 mm) shall allow forward approach to the sink and allow knee and toe clearance.
(8) There shall be no sharp or abrasive surfaces under sinks. Hot water and drain pipes under sinks shall be insulated or otherwise covered.

EQUAL HOUSING OPPORTUNITY

KITCHENS

Storage (**Be aware of UFAS/ADA 2010 difference**)

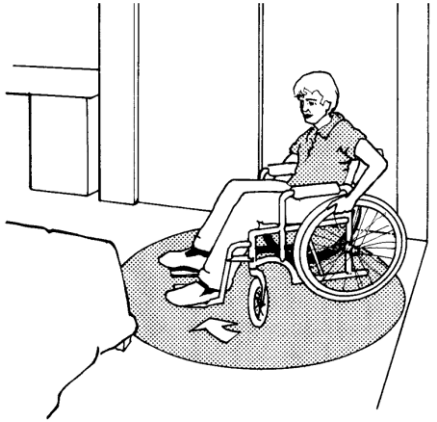
ADA requires that 50% of shelf space be within reach ranges.

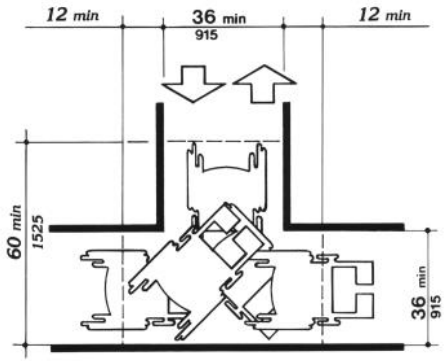
UFAS that at least one shelf above counters have a maximum height of 48”

EQUAL HOUSING OPPORTUNITY

BEDROOMS

SCOPING



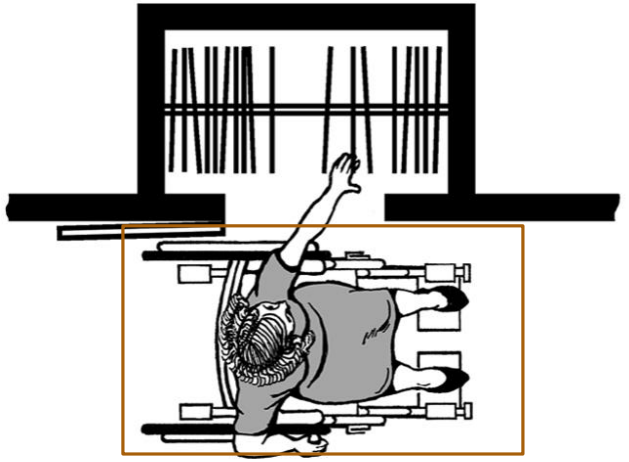


The sleeping area, or the bedroom in one bedroom dwelling units, or at least two bedrooms or sleeping spaces in dwelling units with two or more bedrooms are to be made accessible and on an accessible route

EQUAL HOUSING OPPORTUNITY

CLOSETS

SCOPING



- Provide clear floor space
- Within reach ranges
- 5 lbs. max. force, clenched fist operation

EQUAL HOUSING OPPORTUNITY

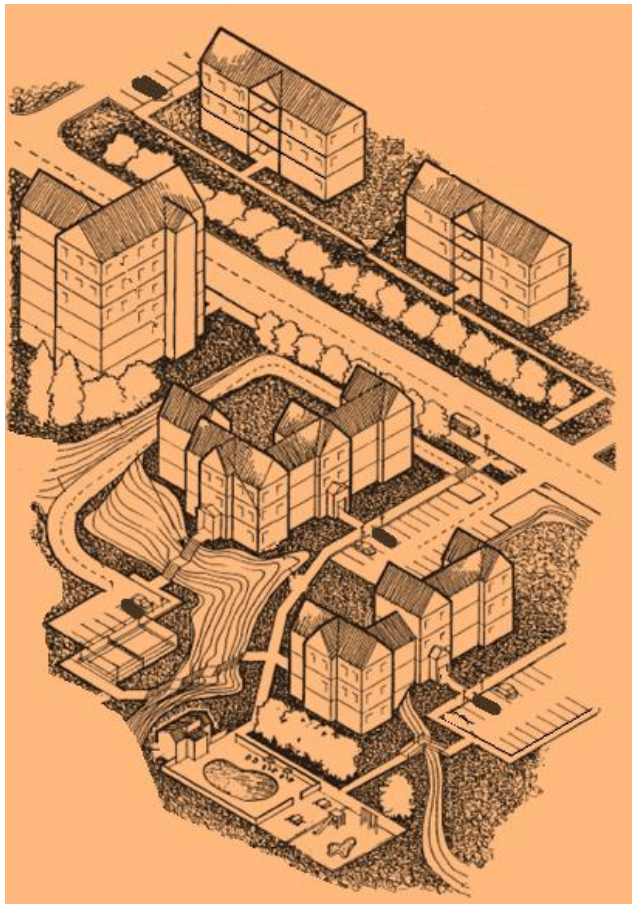
LAUNDRY

SCOPING

- Turning Space
- Clear space at appliances
- Clothesline height

EQUAL HOUSING OPPORTUNITY

STANDARDS CLARIFICATIONS



EQUAL HOUSING OPPORTUNITY

Standard Clarification Points

CLARIFICATION OF ACCESSIBILITY STANDARDS

Whenever any of the below-listed conditions are met, units will be regarded as compliant for purposes of satisfying the accessibility requirements of the VCA executed between **HUD** and **PRPHA**

EQUAL HOUSING OPPORTUNITY

Standard Clarification Points

- Bathroom door swing in renovated dwellings - VCA Appendix G
- Centering of water closet from adjacent wall - VCA Appendix G
- Small renovated bathrooms in modified units (drop-down grab bars) – VCA Appendix G
- Toilet Paper dispensers in drop down grab bars – VCA Appendix G
- Two Bedrroms must be on an accessible route – VCA Appendix G
- Circuit Breakers – VCA Appendix G
- Accesibility of additional bathrooms – VCA Appendix G
- Secondary Means of Egress – PRPHA Memo April 17, 2017
- Toilet rear wall grab bar - PRPHA Memo April 17, 2017
- 12” ramp extension - PRPHA Memo April 17, 2017

Questions

EQUAL HOUSING OPPORTUNITY