

# Accessibility Overview

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# Accessibility Overview

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## Instructor Steve Thomas, CBO

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- ▶ Colorado Regional Manager, Education Director
- ▶ >40-years' experience in code administration
- ▶ ICBO Committees
  - ▶ Small Jurisdictions
  - ▶ Fire & Life Safety Code Development
  - ▶ Means of Egress Review
- ▶ ICC Means of Egress Code Development, Codes and Standards and Code Correlation Committees
- ▶ Author of Building Code Basics, based on 2009 & 2012 IBC, Building Code Essentials 2015 & 2018 IBC, Applying Codes to Cannabis Facilities



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## Today's Discussion

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- ▶ Accessibility Requirements
  - ▶ 2021 International Building Code
  - ▶ 2017 ICC/ANSI A117.1
- ▶ Application of Code Requirements
- ▶ Cover both commercial and residential projects



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## Federal Regulations

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- ▶ Americans with Disabilities Act
  - ▶ ADA
  - ▶ ADA Standards for Accessible Design (ADASAD)
- ▶ Architectural Barriers Act
  - ▶ ABA
- ▶ Uniform Federal Accessibility Standards
  - ▶ UFAS



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## 1103 Scope

- ▶ Sites, buildings, structures, facilities, elements and spaces, temporary or permanent, shall be accessible to individuals with disabilities.
- ▶ Translation:
  - ▶ Everything must be accessible
  - ▶ EXCEPT...



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## 1103.2.2 Employee work areas

- ▶ Spaces and elements within employee work areas shall only be required to comply with Sections 907.5.2.3.2 (R-1/I-1 visible alarm), 1009 (AMOE) and 1104.3.1 (employee work areas) and shall be designed and constructed so that individuals with disabilities can approach, enter and exit the work area.



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## Definition Employee Work Area

- ▶ All or any portion of a space used only by employees and only for work.
- ▶ Corridors, toilet rooms, kitchenettes and break rooms are not employee work areas.



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## 1103.2.2 Employee work areas

- ▶ Work areas, or portions of work areas, other than raised courtroom stations in accordance with Section 1108.4.1.4, that are less than 300 square feet in area and located 7 inches or more above or below the ground or finished floor where the change in elevation is essential to the function of the space shall be exempt from all requirements.



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## 1103.2.4 Utility buildings

- ▶ Group U occupancies are not required to comply with this chapter other than the following:
  - ▶ 1. In agricultural buildings, access is required to paved work areas and areas open to the general public.
  - ▶ 2. Private garages or carports that contain required accessible parking.



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## 1103.2.5 Construction sites

- ▶ Structures, sites and equipment directly associated with the actual processes of construction including, but not limited to, scaffolding, bridging, materials hoists, materials storage or construction trailers are not required to comply with this chapter.



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## 1103.2.6 Raised areas

- ▶ Raised areas used primarily for purposes of security, life safety or fire safety including, but not limited to, observation galleries, prison guard towers, fire towers or lifeguard stands are not required to comply with this chapter.



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## 1103.2.7 Limited access spaces

- ▶ Spaces accessed only by ladders, catwalks, crawl spaces, freight elevators or very narrow passageways are not required to comply with this chapter.



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## 1103.2.8

## Areas in places of religious worship

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- Raised or lowered areas, or portions of areas, in places of religious worship that are less than 300 square feet in area and located 7 inches or more above or below the finished floor and used primarily for the performance of religious ceremonies are not required to comply with this chapter.



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## 1103.2.9

## Equipment spaces

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- Spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment are not required to comply with this chapter.



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## 1103.2.12

## Day care facilities

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- Where a day care facility is part of a dwelling unit, only the portion of the structure utilized for the day care facility is required to comply with this chapter.



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## 1103.2.13

## Detention and correctional facilities

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- In detention and correctional facilities, common use areas that are used only by inmates or detainees and security personnel, and that do not serve holding cells or housing cells required to be Accessible units, are not required to comply with this chapter.



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## 1103.2.14

## Walk-in coolers and freezers

- Walk-in cooler and freezer equipment accessed only from employee work areas is not required to comply with this chapter.



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Other than that,  
everything needs to be  
accessible.

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## 1104

## Accessible Route

- At least one accessible route within the site shall be provided from public transportation stops, accessible parking, accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance served.
- Exception: Other than in buildings or facilities containing or serving Type B units, an accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing for pedestrian access.



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1104.2  
Within a site

- At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same site.
- Exceptions:
  - 1. An accessible route is not required between accessible buildings, accessible facilities, accessible elements and accessible spaces that have, as the only means of access between them, a vehicular way not providing for pedestrian access.
  - 2. An accessible route to recreational facilities shall only be required to the extent specified in Section 1110.



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## 1104.3 Connected spaces

- ▶ When a building or portion of a building is required to be accessible, at least one accessible route shall be provided to each portion of the building, to accessible building entrances connecting accessible pedestrian walkways and to the public way.



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## 1104.3 Connected spaces - Exceptions

1. Stories and mezzanines exempted by Section 1104.4.
2. In a building, room or space used for assembly purposes with fixed seating, an accessible route shall not be required to serve levels where wheelchair spaces are not provided.
3. Vertical access to elevated employee work stations within a courtroom complying with Section 1108.4.1.4.
4. An accessible route to recreational facilities shall only be required to the extent specified in Section 1110.



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## 1104.3.1 Employee work areas

- ▶ Common use circulation paths within employee work areas shall be accessible routes.
- ▶ Exceptions:
  1. Common use circulation paths, located within employee work areas that are less than 1,000 square feet in size and defined by permanently installed partitions, counters, casework or furnishings, shall not be required to be accessible routes.



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## 1104.3.1 Employee work areas

- ▶ 2. Common use circulation paths, located within employee work areas, that are an integral component of equipment, shall not be required to be accessible routes.
- ▶ 3. Common use circulation paths, located within exterior employee work areas that are fully exposed to the weather, shall not be required to be accessible routes.



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## 1104.4 Multistory buildings and facilities

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- ▶ At least one accessible route shall connect each accessible story, mezzanine and occupied roofs in multilevel buildings and facilities.
- ▶ EXCEPTIONS...



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## 1104.4 Multistory buildings and facilities

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- ▶ Exceptions
  - ▶ 1. An accessible route is not required to stories and mezzanines that have an aggregate area of not more than 3,000 square feet and are located above and below accessible levels.
- ▶ This exception shall not apply to:



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## 1104.4 Multistory buildings and facilities

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- ▶ 1.1. Multiple tenant facilities of Group M occupancies containing five or more tenant spaces used for the sales or rental of goods and where at least one such tenant space is located on a floor level above or below the accessible levels;



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## 1104.4 Multistory buildings and facilities

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- ▶ 1.2. Stories or mezzanines containing offices of health care providers (Group B or I);



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## 1104.4

## Multistory buildings and facilities

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- ▶ 1.3. Passenger transportation facilities and airports (Group A-3 or B); or
- ▶ 1.4. Government buildings.
- ▶ 1.5 Structures with four or more dwelling units.



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1104.5  
Location

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- ▶ Accessible routes shall coincide with or be located in the same area as a general circulation path. Where the circulation path is interior, the accessible route shall also be interior.
- ▶ Where only one accessible route is provided, the accessible route shall not pass through kitchens, storage rooms, restrooms, closets or similar spaces.



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Accessible Routes  
A117.1

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- ▶ Walking Surfaces
- ▶ Doors and Doorways
- ▶ Ramps
- ▶ Curb Ramps
- ▶ Elevators
- ▶ Limited-use/Limited Application Elevators (LULA's)
- ▶ Platform Lifts



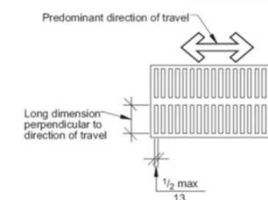
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403  
Walking Surfaces

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- ▶ Floor Surface must comply with Section 302.
  - ▶ Carpet securely attached
  - ▶ Maximum pile height 1/2 inch
  - ▶ Level loop, textured loop, level cut pile, or level cut/uncut pile texture
  - ▶ Openings in floor surfaces shall be of a size that does not permit the passage of a 1/2 inch diameter sphere.
  - ▶ Elongated openings shall be placed so that the long dimension is perpendicular to the predominant direction of travel.



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### 403.3 Slope

- ▶ The running slope of walking surfaces shall not be steeper than 1:20.
- ▶ The cross slope of a walking surface shall not be steeper than 1:48.
- ▶ Over 1:20 IT'S A RAMP!



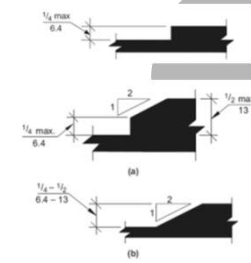
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### 403.4 Changes in Level

- ▶ Changes in level shall comply with Section 303.
- ▶ Changes in level of 1/4 inch maximum in height shall be permitted to be vertical.
- ▶ Changes in level greater than 1/4 inch in height and not more than 1/2 inch maximum in height shall be beveled with a slope not steeper than 1:2.
- ▶ Greater than 1/2 inch = RAMP!



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### 403.5.1 Accessible clear width

- ▶ The clear width of an interior accessible route shall be 36 inches minimum.
- ▶ The clear width of an exterior accessible route shall be 48 inches minimum.
- ▶ Exceptions!

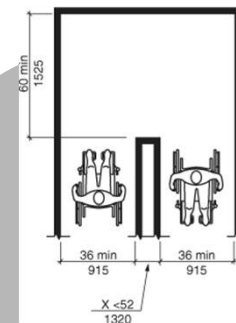


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### 403.5.2 - Clear width at 180-degree turn New buildings and facilities



- ▶ In new building and facilities, where an accessible route makes a 180-degree turn around an object that is equal to or greater than 52 inches in width, the clear widths in the turn shall comply with Section 403.5.3.1.
- ▶ Where an accessible route makes a 180-degree turn around an object that is less than 52 inches in width, the clear widths approaching the turn, during the turn and leaving the turn, shall be one of the following sets of dimensions:

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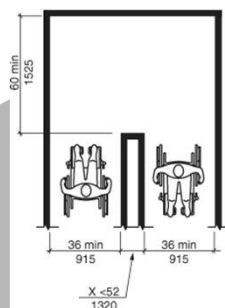
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### 403.5.2 - Clear width at 180-degree turn New buildings and facilities

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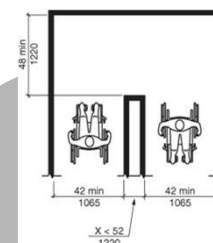
- 1. Approaching width is 36 inches minimum, during width is 60 inches minimum, and leaving width is 36 inches minimum.

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### 403.5.2 - Clear width at 180-degree turn New buildings and facilities

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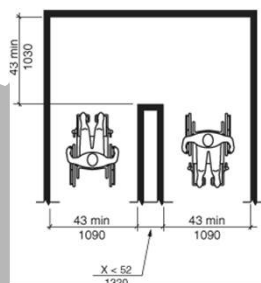
- 2. Approaching width is 42 inches minimum, during width is 48 inches minimum, and leaving width is 42 inches minimum.

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### 403.5.2 - Clear width at 180-degree turn New buildings and facilities

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- 3. Approaching width is 43 inches minimum, during width is 43 inches minimum, and leaving width is 43 inches minimum.

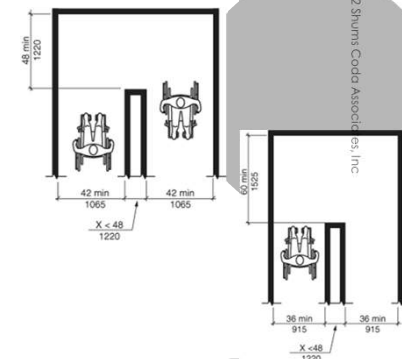
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### 403.5.2.2 Existing buildings and facilities

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- In existing buildings and facilities, where an accessible route makes a 180 degree turn around an object that is less than 48 inches in width, clear widths shall be 42 inches minimum approaching the turn, 48 inches minimum during the turn, and 42 inches minimum leaving the turn.
- Exception: This section shall not apply where the clear width during the turn is 60 inches minimum.

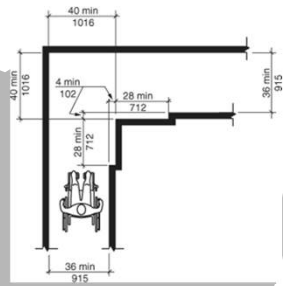


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### 403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

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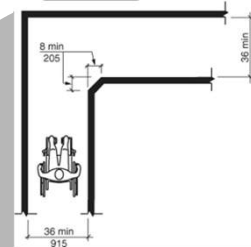
- ▶ In new buildings and facilities, where an accessible route makes a 90-degree turn the clear widths approaching the turn and leaving the turn shall be one of the following sets of dimensions:
- ▶ 1. Both legs of the turn shall be 40 inches minimum in width. The width of each leg of the turn shall be maintained for 28 inches minimum from the inner corner.

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### 403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

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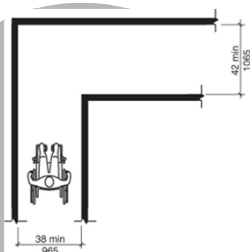
- ▶ 2. Where the interior corners of the turn are chamfered for 8 inches minimum along both walls, both legs of the turn shall be 36 inches minimum in width.

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### 403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

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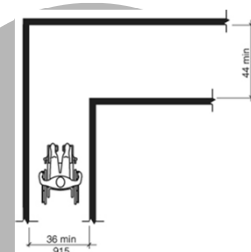
- ▶ 3. Where one leg of the turn is 42 inches minimum in width, the other shall be permitted to be 38 inches minimum in width.

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### 403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

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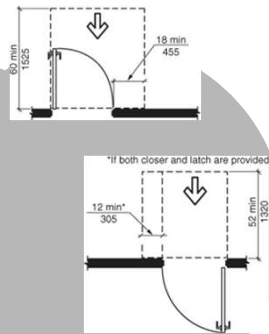
- ▶ 4. Where one leg of the turn is 44 inches minimum in width, the other shall be permitted to be 36 inches minimum in width.

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### 403.5.3.1 - Clear width at 90-degree turn New buildings and facilities.

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- Exceptions:
1. Where an accessible route makes a 90-degree turn at doors, doorways and gates complying with Section 404.2.3, the route shall not be required to comply with this section.
  2. Where an accessible route makes a 90-degree turn at an elevator or platform lift complying with Sections 407 through 410, the accessible route shall not be required to comply with this section.

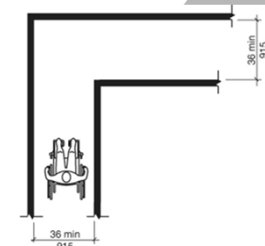
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### 403.5.3.2 - Existing buildings and facilities

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- In existing buildings and facilities, where an accessible route makes a 90-degree turn the clear widths approaching the turn and leaving the turn shall be 36 inches minimum.

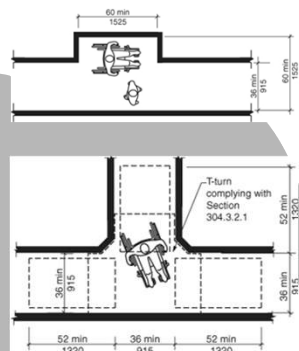


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### 403.5.4.1 Passing space New buildings and facilities

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- In new buildings and facilities, an accessible route with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum.
- Passing spaces shall be either a 60-inch minimum by 60-inch minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space complying with Section 304.3.2.1, provided the base and arms of the T-shaped space extend 52 inches minimum beyond the intersection.

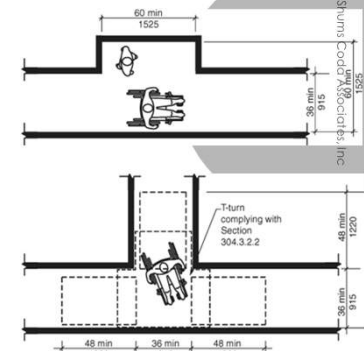
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### 403.5.4.2 - Existing buildings and facilities

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- In existing buildings and facilities, an accessible route with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum.
- Passing spaces shall be either a 60-inch minimum by 60-inch minimum space, or an intersection of two walking surfaces that provide a T-shaped turning space complying with Section 304.3.2, provided the base and arms of the T-shaped space extend 48 inches minimum beyond the intersection.



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## 404.2 - Manual doors, doorways and manual gates

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- Manual doors, doorways and manual gates intended for user passage shall comply with Section 404.2.

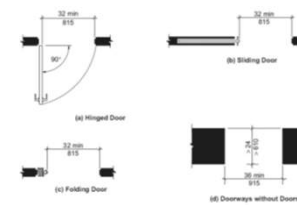
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## 404.2.2 Clear Width

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- Doorways shall have a clear opening width of 32 inches minimum.
- Clear opening width of doorways with swinging doors shall be measured between the face of door and stop, with the door open 90 degrees.
- Openings more than 24 inches in depth at doors and doorways without doors shall provide a clear opening width of 36 inches minimum.



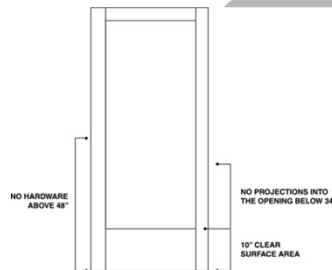
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## 404.2.2 Clear Width

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- There shall be no projections into the clear opening width lower than 34 inches above the floor.
- Projections into the clear opening width between 34 inches and 80 inches above the floor shall not exceed 4 inches.
- EXCEPTIONS:
  - 1. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.
  - 2. In alterations, a projection of 5/8 inch (16 mm) maximum into the required clear opening width shall be permitted for the latch side stop.



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## 404.2.3.2 Swinging Door Maneuvering Clearance

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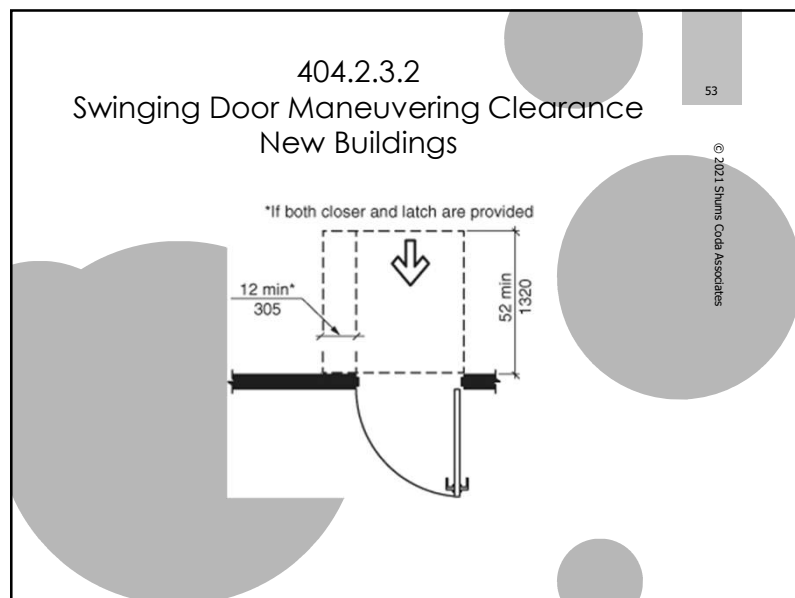
- Swinging doors shall have maneuvering clearances complying with Table 404.2.3.2.

TABLE 404.2.3.2 Maneuvering Clearances at Manual Swinging Doors and Gates

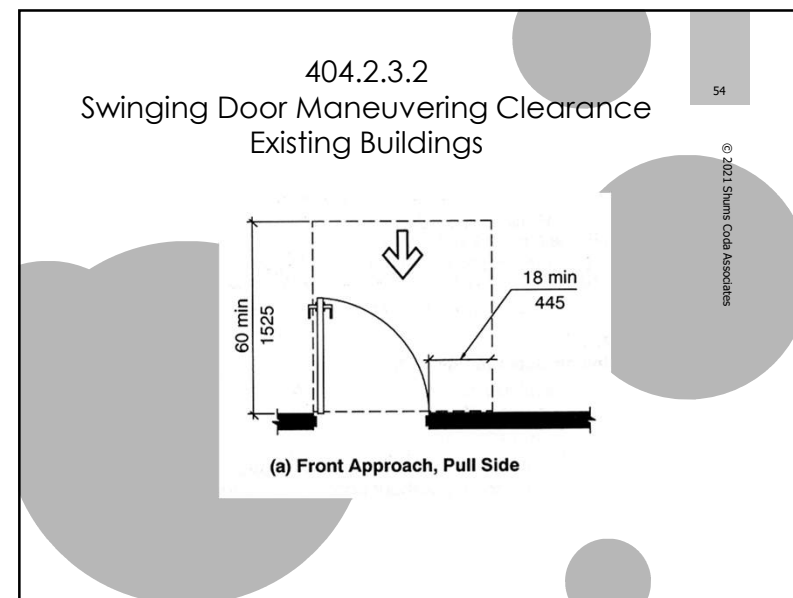
Approach Direction	Door or Gate Side	MINIMUM MANEUVERING CLEARANCES	
		Perpendicular to Doorway	Parallel to Doorway (beyond latch unless noted)
From front	Pull	60 inches (1525 mm)	18 inches (455 mm)
From front	Push	48 inches (1220 mm) <sup>1</sup> 52 inches (1320 mm) <sup>2</sup>	0 inches (0 mm) <sup>3</sup>
From hinge side	Pull	60 inches (1525 mm)	36 inches (915 mm)
From hinge side	Pull	54 inches (1370 mm)	42 inches (1065 mm)
From hinge side	Push	42 inches (1065 mm) <sup>1</sup>	22 inches (560 mm) <sup>2, 4</sup>
From latch side	Pull	48 inches (1220 mm) <sup>2</sup>	24 inches (610 mm)
From latch side	Push	42 inches (1065 mm) <sup>2</sup>	24 inches (610 mm)

1. Add 6 inches (150 mm) if closer and latch provided.  
 2. Add 6 inches (150 mm) if closer provided.  
 3. Add 6 inches (150 mm) beyond latch if closer and latch provided.  
 4. To Beyond Door Edge.  
 5. To Beyond Door Edge and Latch.

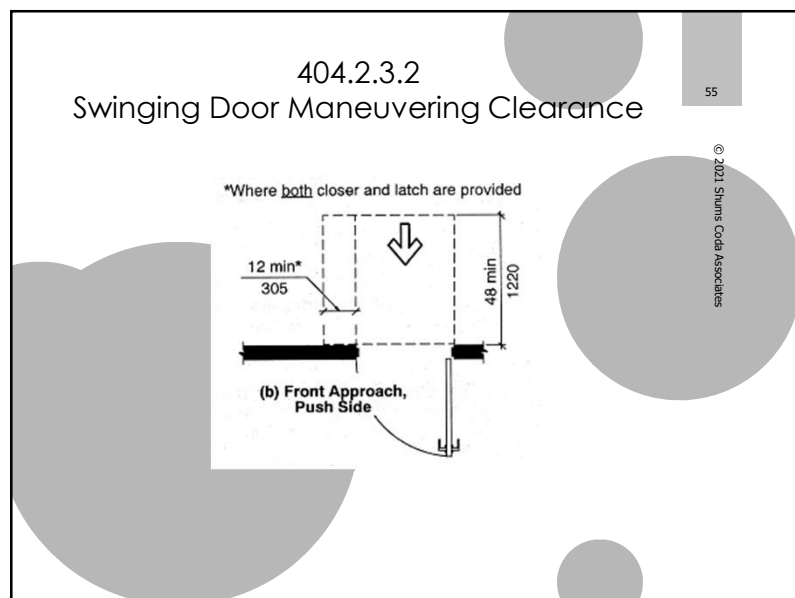
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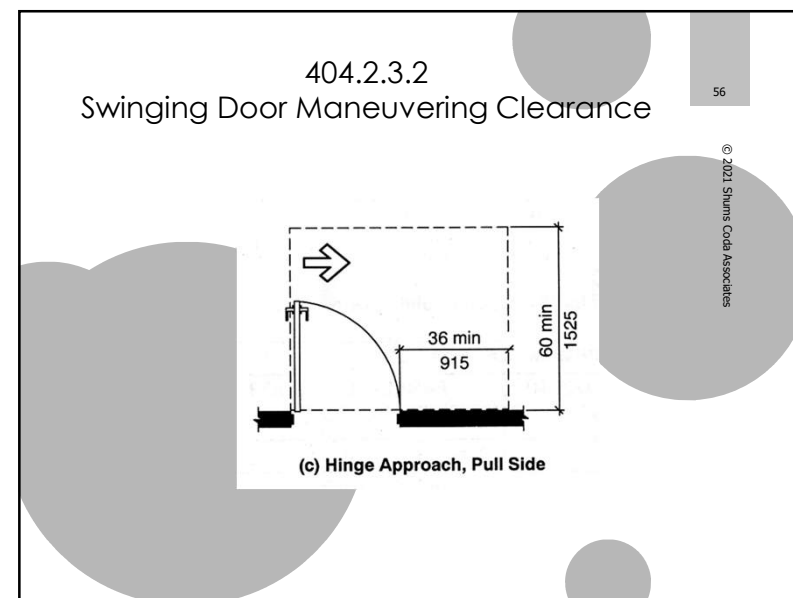
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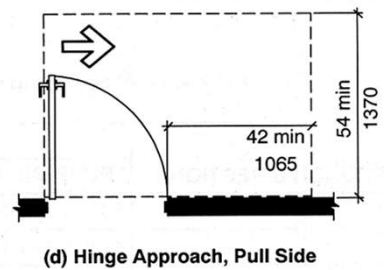


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### 404.2.3.2 Swinging Door Maneuvering Clearance



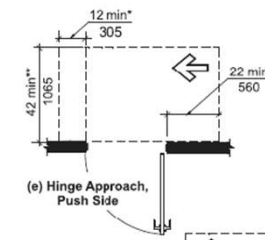
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### 404.2.3.2 Swinging Door Maneuvering Clearance

\* If both closer and latch are provided  
 \*\* 48 min (1220) if both closer and latch provided

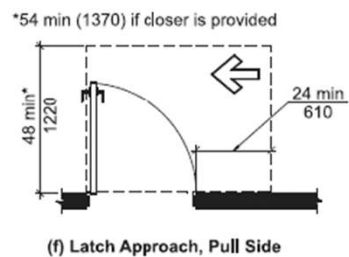


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### 404.2.3.2 Swinging Door Maneuvering Clearance

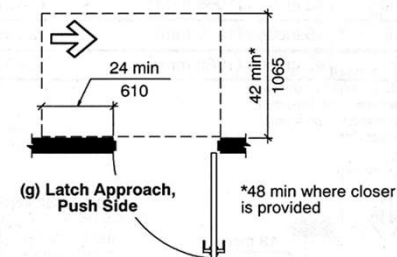


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### 404.2.3.2 Swinging Door Maneuvering Clearance



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### 404.2.3.3 Sliding and Folding Doors

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- ▶ Sliding doors and folding doors shall have maneuvering clearances complying with Table 404.2.3.3.

TABLE 404.2.3.3  
MANEUVERING CLEARANCES AT SLIDING AND FOLDING DOORS

Approach Direction	MINIMUM MANEUVERING CLEARANCES	
	Perpendicular to Doorway	Parallel to Doorway (beyond stop or latch side unless noted)
From front	48 inches (1220 mm)	0 inches (0 mm)
From nonlatch side	42 inches (1065 mm)	22 inches (560 mm) <sup>1</sup>
From latch side	42 inches (1065 mm)	24 inches (610 mm)

<sup>1</sup> Beyond pocket or hinge side.

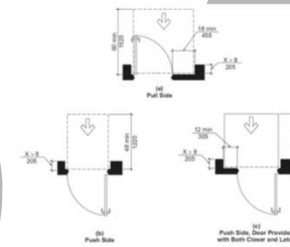
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### 404.2.3.5 Recessed Doors

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- ▶ Where any obstruction within 18 inches of the latch side of a doorway projects more than 8 inches beyond the face of the door, measured perpendicular to the face of the door, maneuvering clearances for a forward approach shall be provided.



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### 404.2.4 Thresholds

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- ▶ If provided, thresholds at doorways shall be 1/2 inch maximum in height.
- ▶ Raised thresholds and changes in level at doorways shall comply with Sections 302 and 303.
  - ▶ EXCEPTION: An existing or altered threshold shall be permitted to be 3/4 inch maximum in height provided that the threshold has a beveled edge on each side with a maximum slope of 1:2 for the height exceeding 1/4 inch.



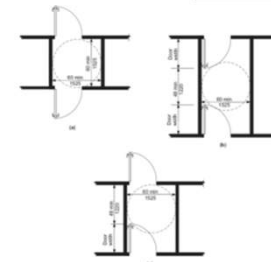
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### 404.2.5 Two Doors in Series

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- ▶ Distance between two hinged or pivoted doors in series shall be 48 inches minimum plus the width of any door swinging into the space.
- ▶ The space between the doors shall provide a turning space complying with Section 304.



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## 404.2.6

### Door and gate hardware

- ▶ Handles, pulls, latches, locks and other operable parts on doors and gates shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching or twisting of the wrist to operate.
- ▶ The operational force to retract latches or disengage devices that hold the door or gate in a closed position shall be as follows:
  - ▶ 1. Hardware operation by a forward, pushing or pulling motion: 15 pounds maximum.
  - ▶ 2. Hardware operation by a rotational motion: 28 inch-pounds maximum.



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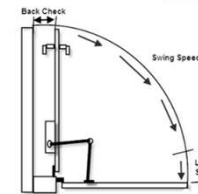
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## 404.2.7

### Closing Speed

- ▶ Door Closers
  - ▶ Door closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to an open position of 12 degrees shall be 5 seconds minimum.
- ▶ Spring Hinges
  - ▶ Door spring hinges shall be adjusted so that from an open position of 70 degrees, the door shall move to the closed position in 1.5 seconds minimum.



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## 404.2.8

### Door-Opening Force

- ▶ Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.
- ▶ The force for pushing or pulling open doors other than fire doors shall be as follows:
  - ▶ 1. Interior hinged door: 5.0 pounds maximum
  - ▶ 2. Sliding or folding door: 5.0 pounds maximum
- ▶ These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.



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## 404.2.9

### Door Surface

- ▶ Door surfaces within 10 inches of the floor, measured vertically, shall be a smooth surface on the push side extending the full width of the door.
- ▶ Parts creating horizontal or vertical joints in such surface shall be within 1/16 inch of the same plane as the other.
- ▶ Cavities created by added kick plates shall be capped.



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## 404.2.9 Door Surface

### ▶ EXCEPTIONS:

- ▶ 1. Sliding doors shall not be required to comply with Section 404.2.9.
- ▶ 2. Tempered glass doors without stiles and having a bottom rail or shoe with the top leading edge tapered at no less than 60 degrees from the horizontal shall not be required to comply with the 10-inch bottom rail height requirement.
- ▶ 3. Doors that do not extend to within 10 inches of the floor shall not be required to comply with Section 404.2.9.



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## 405.1 Ramp Slope

- ▶ Ramp runs shall have a running slope greater than 1:20 and not steeper than 1:12.
- ▶ EXCEPTION: In existing buildings or facilities, ramps shall be permitted to have slopes steeper than 1:12 complying with Table 405.2 where such slopes are necessary due to space limitations.

TABLE 405.2  
ALLOWABLE RAMP DIMENSIONS FOR CONSTRUCTION IN EXISTING SITES, BUILDINGS AND FACILITIES

Slope <sup>1</sup>	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)

<sup>1</sup> A slope steeper than 1:8 shall not be permitted.

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## 405 Ramps

71



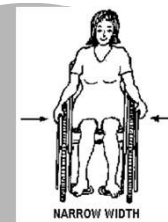
- ▶ 405.3 – Cross Slope
- ▶ 1:48 Maximum
- ▶ 405.4 – Floor or Ground Surfaces
- ▶ Shall comply with Section 302

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## 405 Ramps

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- ▶ 405.5 – Clear Width
- ▶ 36 inches minimum
- ▶ Handrails and handrail supports that are provided on the ramp run shall not project into the required clear width of the ramp run.

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## Slide 72

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**DO1**

The ANSI Standard previously stated that the measurement was "between the handrails".  
DELL OWNER, 1/20/2004

## 405 Ramps

73

### ► 405.6 – Rise

- 30 inches
- Maximum



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## 405 Ramps

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### ► 405.7 – Landings

- Required at the
- Top and Bottom
- of each run.



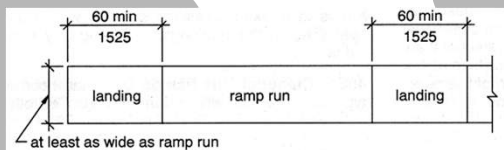
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## 405 Ramps

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- 405.7.1 – Slope = 1:48 Maximum
- 405.7.2 – Width = Wide as Ramp Run
- 405.7.3 – Length = 60" Minimum



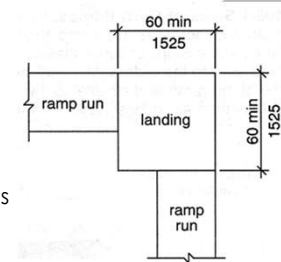
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## 405 Ramps

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- 405.7.4 - Change in Direction
- 60" x 60" Minimum
- 405.7.5 – Doorways
- Maneuvering clearances may overlap



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## 405 Ramps

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- ▶ 405.8 – Handrails
  - ▶ If Rise > 6 inches, then they are required
  - ▶ Shall not reduce required clearances



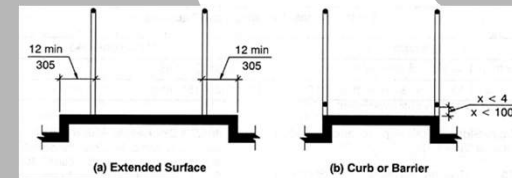
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## 405 Ramps

78

- ▶ 405.9 – Edge Protection
  - ▶ 405.9.1 - Extend 12" minimum each side OR
  - ▶ 405.9.2 - Provide Curb or Barrier (4" dia.)
  - ▶ (see Exceptions)



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## 407 Elevators

79

- ▶ Regulates:
  - ▶ Call Buttons
  - ▶ Hall Signals
  - ▶ Tactile Characters
  - ▶ Doors
  - ▶ Car Call Delays
  - ▶ Car Dimensions
  - ▶ Operating Controls



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## 409 Platform Lifts

80

- ▶ Platform lifts shall comply with Section 410 and ASME A18.1 listed in Section 105.2.6. Platform lifts shall not be attendant operated and shall provide unassisted entry and exit from the lift.
  - ▶ Lift Entry
  - ▶ Floor Surfaces
  - ▶ Platform to Runway Clearance
  - ▶ Clear Floor Space
  - ▶ Operable Parts



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## 1105.1 Public entrances

- ▶ In addition to accessible entrances required by Sections 1105.1.1 through 1105.1.7, at least 60 percent of all public entrances shall be accessible.

- ▶ Exceptions:

- ▶ 1. An accessible entrance is not required to areas not required to be accessible.
- ▶ 2. Loading and service entrances that are not the only entrance to a tenant space.



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## 1105 Accessible Entrances

- ▶ Parking Garage direct access
- ▶ Tunnels or elevated walkways
- ▶ Restricted entrances
- ▶ Entrances for inmates or detainees
- ▶ Service entrances
- ▶ Tenant spaces
- ▶ Dwelling units and sleeping units



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## 1106.1 Parking Required

- ▶ Where parking is provided, accessible parking spaces shall be provided in compliance with Table 1106.1, except as required by Sections 1106.2 through 1106.4.
- ▶ Where more than one parking facility is provided on a site, the number of parking spaces required to be accessible shall be calculated separately for each parking facility.

- ▶ Exception: This section does not apply to parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles or vehicular impound and motor pools where lots accessed by the public are provided with an accessible passenger loading zone.

**TABLE 1106.1  
ACCESSIBLE PARKING SPACES**

TOTAL PARKING SPACES PROVIDED IN PARKING FACILITIES	REQUIRED MINIMUM NUMBER OF ACCESSIBLE 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 1,000	2% of total
1,001 and over	20, plus one for each 100, or fraction thereof, over 1,000

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## 1106.5 Van spaces

- ▶ For every six or fraction of six accessible parking spaces, at least one shall be a van-accessible parking space.



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## 1106.6 Location

- ▶ Accessible parking spaces shall be located on the shortest accessible route of travel from adjacent parking to an accessible building entrance.
- ▶ In parking facilities that do not serve a particular building, accessible parking spaces shall be located on the shortest route to an accessible pedestrian entrance to the parking facility.
- ▶ Where buildings have multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances.



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## 1106.6 Location

- ▶ Exceptions:
  1. In multilevel parking structures, van-accessible parking spaces are permitted on one level.
  2. Accessible parking spaces shall be permitted to be located in different parking facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, parking fee and user convenience.



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## 1107.2 Electrical vehicle charging stations

- ▶ Electrical vehicle charging stations shall comply with Sections 1107.2.1 and 1107.2.2.
- ▶ Exception: Electrical vehicle charging stations provided to serve Group R-2, R-3 and R-4 occupancies are not required to comply with this section.



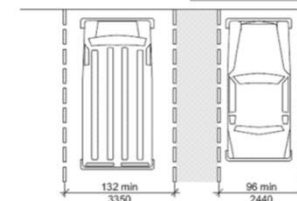
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## 502.2 Vehicle Space Size

- ▶ Car parking spaces shall be 96 inches minimum in width.
- ▶ Van parking spaces shall be 132 inches minimum in width.
- ▶ EXCEPTION: Van parking spaces shall be permitted to be 96 inches minimum in width where the adjacent access aisle is 96 inches minimum in width.



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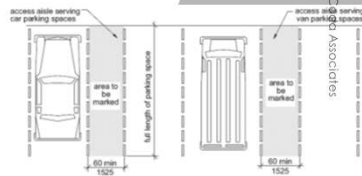
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## 502 Access Aisles

- ▶ Access aisles serving car and van parking spaces shall be 60 inches minimum in width.
- ▶ Access aisles shall extend the full length of the parking spaces they serve.



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## 502.4.4 Marking

- ▶ Access aisles shall be marked so as to discourage parking in them. Where access aisles are marked with lines, the width measurements of access aisles and adjacent parking spaces shall be made from the centerline of the markings.
- ▶ EXCEPTION: Where access aisles or parking spaces are not adjacent to another access aisle or parking space, measurements shall be permitted to include the full width of the line defining the access aisle or parking space.



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## 502.5 Floor Surfaces

- ▶ Parking spaces and access aisles shall comply with Section 302 and have surface slopes not steeper than 1:48.
- ▶ Access aisles shall be at the same level as the parking spaces they serve.



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## 502.6 Vertical Clearance

- ▶ A vertical clearance of 98 inches minimum shall be provided at the following locations:
- ▶ 1. Parking spaces for vans.
- ▶ 2. The access aisles serving parking spaces for vans.
- ▶ 3. The vehicular routes serving parking spaces for vans.



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## 502.7 Identification

- ▶ Where accessible parking spaces are required to be identified by signs, the signs shall include the International Symbol of Accessibility complying with Section 703.6.3.1.
- ▶ Signs identifying van parking spaces shall contain the designation "van accessible."
- ▶ Such signs shall be 60 inches minimum above the floor of the parking space, measured to the bottom of the sign.



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## 1109.2.9 Dining and drinking areas

- ▶ In dining and drinking areas, all interior and exterior floor areas shall be accessible and be on an accessible route.
- ▶ Exceptions:
  1. Accessible levels and stories above or below is not required where permitted by Section 1104.4, Exception 1.
  2. Mezzanine, provided the mezzanine contains less than 25 percent of the total combined area for dining and drinking and the same services, and decor are provided in the accessible area.
  3. In sports facilities, tiered dining areas at least 25 percent of the dining area, provided that accessible routes serve accessible seating and where each tier is provided with the same services.
  - ▶ 4. Employee-only work areas.



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## 1109.2.9.1 Dining surfaces

- ▶ Where dining surfaces for the consumption of food or drink are provided, at least 5 percent, but not less than one, of the dining surfaces for the seating and standing spaces shall be accessible and be distributed throughout the facility and located on a level accessed by an accessible route.



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## 1110.2 Toilet and bathing facilities

- ▶ Each toilet room and bathing room shall be accessible.
- ▶ Where a floor level is not required to be connected by an accessible route, the only toilet rooms or bathing rooms provided within the facility shall not be located on the inaccessible floor.
- ▶ Except as provided for in Sections 1109.2.2 and 1109.2.3, at least one of each type of fixture, element, control or dispenser in each accessible toilet room and bathing room shall be accessible.



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## 1110.2

## Toilet and bathing facilities

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- ▶ 1. Toilet rooms or bathing rooms accessed only through a private office, not for common or public use and intended for use by a single occupant, shall be permitted to comply with the specific exceptions in ICC A117.1.
- ▶ 2. This section is not applicable to toilet and bathing rooms that serve dwelling units or sleeping units that are not required to be accessible by Section 1107.
- ▶ 3. Where multiple single-user toilet rooms or bathing rooms are clustered at a single location, at least 50 percent but not less than one room for each use at each cluster shall be accessible.
- ▶ 4. Where no more than one urinal is provided in a toilet room or bathing room, the urinal is not required to be accessible.



97

## 1110.2

## Toilet and bathing facilities

98

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- ▶ 5. Toilet rooms or bathing rooms that are part of critical care or intensive care patient sleeping rooms serving Accessible units are not required to be accessible.
- ▶ 6. Toilet rooms or bathing rooms designed for bariatrics patients are not required to comply with the toilet room and bathing room requirement in ICC A117.1. The sleeping units served by bariatrics toilet or bathing rooms shall not count toward the required number of Accessible sleeping units.



98

## 1110.2

## Toilet and bathing facilities

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- ▶ 7. Where permitted in Section 1108, in toilet rooms or bathrooms serving Accessible units, water closets designed for assisted toileting shall comply with Section 1110.2.2.
- ▶ 8. Where permitted in Section 1108, in bathrooms serving Accessible units, showers designed for assisted bathing shall comply with Section 1110.2.3.
- ▶ 9. Where toilet facilities are primarily for children's use, required accessible water closets, toilet compartments and lavatories shall be permitted to comply with children's provision of ICC A117.1.



99

## 1110.2.1 Family or assisted-use toilet and bathing rooms

100

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- ▶ In assembly and mercantile occupancies, an accessible family or assisted-use toilet room shall be provided where an aggregate of six or more male and female water closets is required.
- ▶ In buildings of mixed occupancy, only those water closets required for the assembly or mercantile occupancy shall be used to determine the family or assisted-use toilet room requirement.



100

## 1110.2.1 Family or assisted-use toilet and bathing rooms

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- ▶ In recreational facilities where separate-sex bathing rooms are provided, an accessible family or assisted-use bathing room shall be provided.
- ▶ Fixtures located within family or assisted-use toilet and bathing rooms shall be included in determining the number of fixtures provided in an occupancy.
  - ▶ Exception: Where each separate-sex bathing room has only one shower or bathtub fixture, a family or assisted-use bathing room is not required.



101

## 1110.2.1.2 Family or assisted-use toilet rooms

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- ▶ Family or assisted-use toilet rooms shall include only one water closet and only one lavatory.
- ▶ A family or assisted-use bathing room in accordance with Section 1110.2.1.3 shall be considered a family or assisted-use toilet room.
  - ▶ Exception: The following additional fixtures shall be permitted in a family or assisted-use toilet room:
    1. A urinal.
    2. A child-height water closet.
    3. A child-height lavatory.



102

## 1110.2.1.4 Location

103

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- ▶ Family or assisted-use toilet and bathing rooms shall be located on an accessible route.
- ▶ Family or assisted-use toilet rooms shall be located not more than one story above or below separate-sex toilet rooms.
- ▶ The accessible route from any separate-sex toilet room to a family or assisted-use toilet room shall not exceed 500 feet



103

## 1110.2.1.6 Privacy

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- ▶ Doors to family or assisted-use toilet and bathing rooms shall be securable from within the room and be provided with an "occupied" indicator.



104

## 1110.2.4

## Water closet compartment

105

- Where water closet compartments are provided in a toilet room or bathing room, at least 5 percent of the total number of compartments shall be wheelchair accessible.



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## 1110.2.4

## Water closet compartment

106

- Where the combined total water closet compartments and urinals provided in a toilet room or bathing room is six or more, at least 5 percent of the total number of compartments shall be ambulatory accessible, provided in addition to the wheelchair-accessible compartment.



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## 603

## Toilet and Bathing Rooms

107

- Accessible toilet and bathing rooms shall comply with Section 603.



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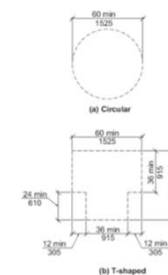
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## 603.2.1

## Turning Space

108

- A turning space complying with Section 304 shall be provided within the room.
- The required turning space shall not be provided within a toilet compartment.



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### 304.3.1.1 Turning Space -New buildings and facilities

109

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- ▶ In new buildings and facilities, the turning space shall be a circular space with a 67-inch minimum diameter.

109

### 304.3.1.1.1 Overlap

110

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- ▶ Turning spaces shall be permitted to include knee and toe clearance complying with Section 306. Where the turning space includes knee and toe clearances under an obstruction, the overlap shall comply with all of the following:
  1. The depth of the overlap shall not be more than 10 inches, and
  2. The depth shall not exceed the depth of the knee and toe clearances provided, and
  3. The overlap shall be permitted only within the turning circle area shown shaded in Figure 304.3.1.



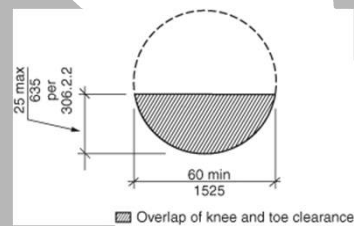
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### 304.3.1.2 Existing buildings and facilities

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- ▶ In existing buildings and facilities, the turning space shall be a circular space with a 60-inch minimum diameter.



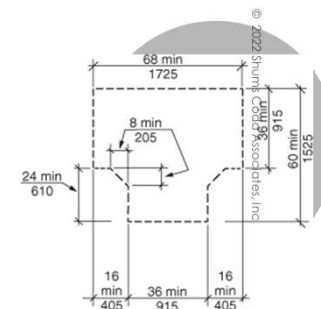
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### 304.3.2.1 - New buildings and facilities

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- ▶ In new buildings and facilities, the turning space shall be a T-shaped space complying with one of the following:
  1. A T-shaped space, clear of obstruction, that fits within an area 68 inches wide and 60 inches deep, with two arms and one base that are all 36 inches minimum in width.
  - ▶ Each arm shall extend 16 inches minimum from each side of the base located opposite the other, and the base shall extend 24 inches minimum from the arms.
  - ▶ At the intersection of each arm and the base, the interior corners shall be chamfered for 8 inches minimum along both the arm and along the base.

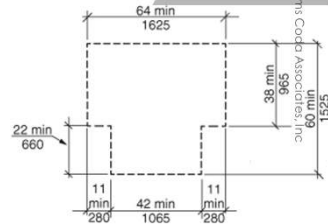


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### 304.3.2.1 - New buildings and facilities

113

- ▶ 2. A T-shaped space, clear of obstruction, that fits within an area 64 inches wide and 60 inches deep, with two arms 38 inches minimum in width and a base 42 inches minimum in width.
- ▶ Each arm shall extend 11 inches minimum from each side of the base, located opposite the other, and the base shall extend 22 inches minimum from each arm.



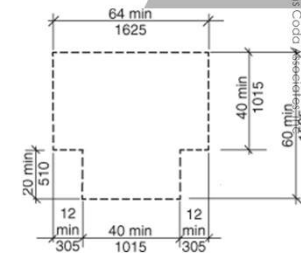
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### 304.3.2.1 - New buildings and facilities

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- ▶ 3. A T-shaped space, clear of obstruction, 64 inches wide and 60 inches deep, with two arms and one base 40 inches minimum in width.
- ▶ Each arm shall extend 12 inches minimum from each side of the base and the base shall extend 20 inches minimum from each arm.



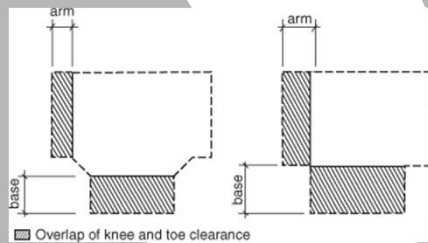
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### 304.3.2.1.1 Overlap

115

- ▶ Turning spaces shall be permitted to include knee and toe clearance complying with Section 306 of either the base or one arm.
- ▶ For Option 1, the base or arm is the portion beyond the chamfer.



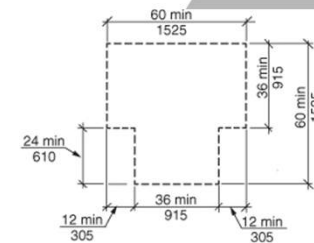
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### 304.3.2.2 - Existing buildings and facilities

116

- ▶ In existing buildings and facilities, the turning space shall be a T-shaped space within a 60-inch minimum square, with arms and base 36 inches minimum in width.
- ▶ Each arm of the T shall be clear of obstructions 12 inches minimum in each direction, and the base shall be clear of obstructions 24 inches minimum.



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## 603.2.2 Door Swing

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- ▶ Doors shall not swing into the clear floor space or clearance for any fixture.
- ▶ EXCEPTIONS:
  - ▶ 1. Doors to a toilet or bathing room for a single occupant, accessed only through a private office and not for common use or public use shall be permitted to swing into the clear floor space, provided the swing of the door can be reversed to comply with Section 603.2.2.
  - ▶ 2. Where the room is for individual use and a clear floor space complying with Section 305.3 is provided within the room beyond the arc of the door swing, the door shall not be required to comply with Section 603.2.2.



117

## 603.3 Mirrors

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- ▶ Where mirrors are located above lavatories, a mirror shall be located over the accessible lavatory and shall be mounted with the bottom edge of the reflecting surface 40 inches maximum above the floor.
- ▶ Where mirrors are located above counters that do not contain lavatories, the mirror shall be mounted with the bottom edge of the reflecting surface 40 inches maximum above the floor.



118

## 603.3 Mirrors

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- ▶ EXCEPTION:
- ▶ Other than within Accessible dwelling or sleeping units, mirrors are not required over the lavatories or counters if a mirror is located within the same toilet or bathing room and mounted with the bottom edge of the reflecting surface 35 inches maximum above the floor.



119

## 603.4 Coat Hooks and Shelves

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- ▶ Coat hooks shall be located within one of the reach ranges specified in Section 308.
- ▶ Shelves shall be 40 inches minimum and 48 inches maximum above the floor.



120



## 603.5 Diaper Changing Tables

- ▶ Diaper changing tables shall comply with Sections 309 and 902
  - ▶ Operable parts
  - ▶ Work Surfaces



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## 603.6 Operable Parts

- ▶ Operable parts on towel dispensers and hand dryers serving accessible lavatories shall comply with Table 603.6.

TABLE 603.6  
MAXIMUM REACH DEPTH AND HEIGHT

Maximum Reach Depth	0.5 inch (13 mm)	2 inches (51 mm)	5 inches (125 mm)	6 inches (150 mm)	9 inches (230 mm)	11 inches (280 mm)
Maximum Reach Height	48 inches (1220 mm)	46 inches (1170 mm)	42 inches (1065 mm)	40 inches (1015 mm)	36 inches (915 mm)	34 inches (865 mm)

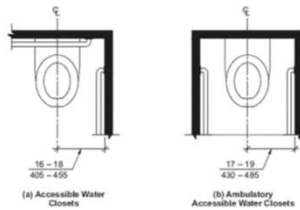
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## 604.2 Location

- ▶ The water closet shall be located with a wall or partition to the rear and to one side.
- ▶ The centerline of the water closet shall be 16 inches minimum and 18 inches maximum from the side wall or partition.
- ▶ Water closets located in ambulatory accessible compartments specified in Section 604.10 shall have the centerline of the water closet 17 inches minimum and 19 inches maximum from the side wall or partition.



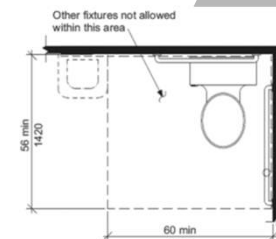
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## 604.3 Clearance

- ▶ Width – 60 inches minimum in width, measured perpendicular from the sidewall.
- ▶ Depth – 56 inches minimum in depth, measured perpendicular from the rear wall.



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### 604.3.3 Clearance Overlap

- ▶ The required clearance around the water closet shall be permitted to overlap the water closet, associated grab bars, paper dispensers, sanitary napkin receptacles, coat hooks, shelves, accessible routes, clear floor space at other fixtures and the turning space.
- ▶ No other fixtures or obstructions shall be within the required water closet clearance.



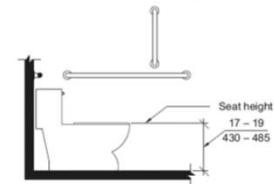
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### 604.4 Height

- ▶ The height of water closet seats shall be 17 inches minimum and 19 inches maximum above the floor, measured to the top of the seat. Seats shall not be sprung to return to a lifted position.
- ▶ EXCEPTION: A water closet in a toilet room for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with Section 604.4.



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### 604.5 Grab Bars

- ▶ Grab bars for water closets shall comply with Section 609 and shall be provided in accordance with Sections 604.5.1 and 604.5.2. Grab bars shall be provided on the rear wall and on the side wall closest to the water closet.
- ▶ EXCEPTIONS:
  1. In a toilet room for a single occupant, accessed only through a private office and not for common use or public use, provided reinforcement has been installed in walls and located so as to permit the installation of grab bars complying with Section 604.5.
  2. In detention or correction facilities, grab bars are not required to be installed in housing or holding cells or rooms that are specially designed without protrusions for purposes of suicide prevention.

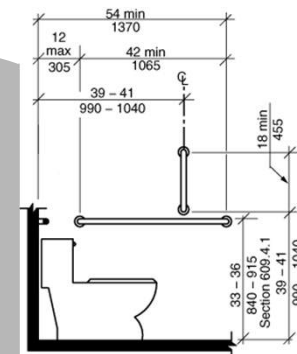


127

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127

### 604.5.1 Fixed Side Wall Grab Bars



Note: For children's dimensions see Fig. 609.4.2

128

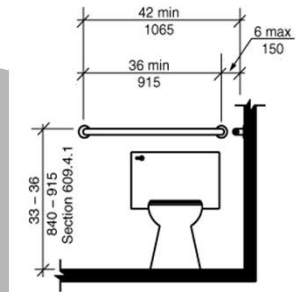
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128

## 604.5.2 Rear Wall Grab Bars

129

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Note: For children's dimensions see Fig. 609.4.2

### EXCEPTIONS:

1. The rear grab bar shall be permitted to be 24 inches minimum in length, centered on the water closet, where wall space does not permit a grab bar 36 inches minimum in length due to the location of a recessed fixture adjacent to the water closet.
2. Where an administrative authority requires flush controls for flush valves to be located in a position that conflicts with the location of the rear grab bar, that grab bar shall be permitted to be split or shifted to the open side of the toilet area.

129

## 604.6 Flush Controls

130

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- ▶ Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 309.
- ▶ Flush controls shall be located on the open side of the water closet.
  - ▶ EXCEPTION: In ambulatory accessible compartments

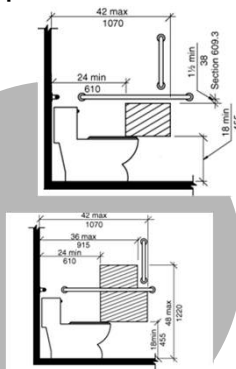


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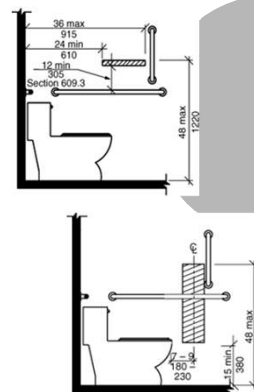
## 604.7 Dispensers

131

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Note: For children's dimensions see Fig. 604.11.7 dispenser outlet location

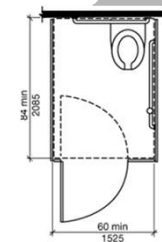
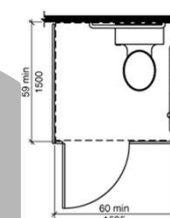
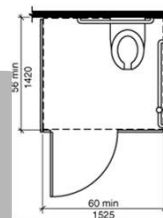


131

## 604.9 Wheelchair Accessible Compartments

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## 604.9.3 Doors

- ▶ Toilet compartment doors, wheelchair accessible toilet compartment doors, including door hardware, shall comply with Section 404. The door shall be self-closing.
- ▶ A door pull complying with Section 404.2.6 shall be placed on both sides of the door near the latch.
- ▶ Wheelchair accessible toilet compartment doors shall not swing into the required minimum area of the compartment.



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## 604.9.3.1 Door opening location

- ▶ The farthest edge of the wheelchair accessible toilet compartment door opening shall be located in the front wall or partition or in the side wall or partition as required by Table 604.9.3.1.

TABLE 604.9.3.1 DOOR OPENING LOCATION

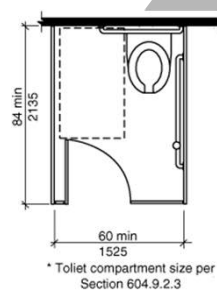
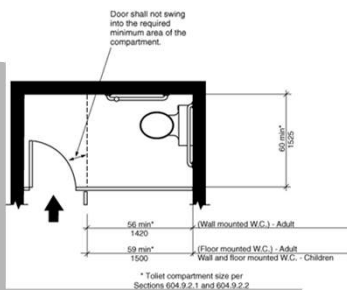
Door Opening Location	Measured From	Dimension
Front Wall or Partition	From the side wall or partition closest to the water closet	56 inches (1420 mm) minimum
	or	
	From the side wall or partition farthest from the water closet	4 inches (100 mm) maximum
Side Wall or Partition Wall-Hung Water Closet	From the rear wall	52 inches (1320 mm) minimum
	or	
	From the front wall or partition	4 inches (100 mm) maximum
Side Wall or Partition Floor-Mounted Water Closet	From the rear wall	55 inches (1395 mm) minimum
	or	
	From the front wall or partition	4 inches (100 mm) maximum

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## 604.9.3.1 Door Opening Location

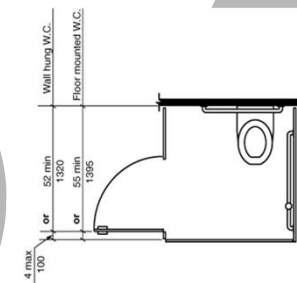
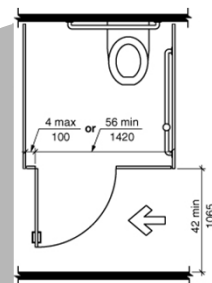


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## 604.9.3.1 Door Opening Location



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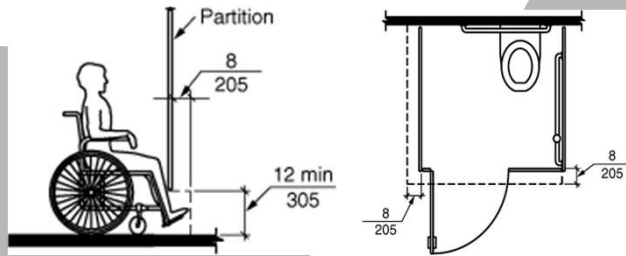
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136

## 604.9.5 Toe Clearance

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137

## 604.9.5 Toe Clearance

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- EXCEPTIONS:
- 1. Toe clearance at the front partition is not required in a wheelchair accessible toilet compartment greater than 64 inches in depth with a wall-hung water closet, or in greater than 67 inches depth with a floor-mounted water closet.
  - 2. Toe clearance at the side partition is not required in a wheelchair accessible toilet compartment greater than 68 inches in width.



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## 604.9.6 Grab Bars

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- Grab bars shall comply with Section 609.
- Side wall grab bars complying with Section 604.5.1 located on the wall closest to the water closet, and a rear wall grab bar complying with Section 604.5.2, shall be provided.

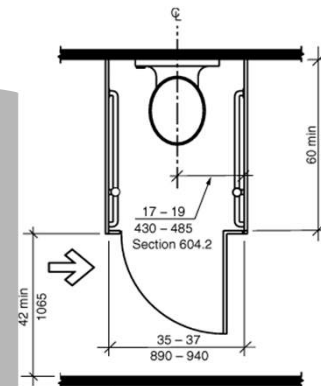


139

## 604.10 Ambulatory Accessible Compartments

140

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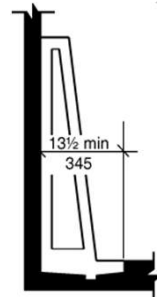
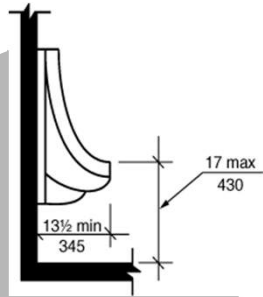


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## 605 Urinals

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## 605 Urinals

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- ▶ A clear floor space complying with Section 305, positioned for forward approach, shall be provided.
- ▶ Flush controls shall be hand operated or automatic. Hand operated flush controls shall comply with Section 309.



142

## 1110.2.5 Lavatories

143

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- ▶ Where lavatories are provided, at least 5 percent, but not less than one, shall be accessible.
- ▶ Where an accessible lavatory is located within the accessible water closet compartment at least one additional accessible lavatory shall be provided in the multi-compartment toilet room outside the water closet compartment.
- ▶ Where the total lavatories provided in a toilet room or bathing facility is six or more, at least one lavatory with enhanced reach ranges shall be provided.



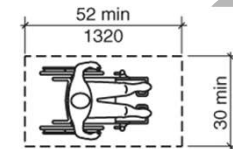
143

## 606.2 Clear Floor Space

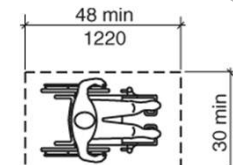
144

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- ▶ A clear floor space complying with Section 305.3, positioned for forward approach, shall be provided.
- ▶ Knee and toe clearance complying with Section 306 shall be provided.
- ▶ The dip of the overflow shall not be considered in determining knee and toe clearances.



New buildings



Existing buildings

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## 306 Knee and Toe Clearance

- ▶ Where space beneath an element is included as part of clear floor space at an element, clearance at an element, or a turning space, the space shall comply with Section 306.
- ▶ Additional space shall not be prohibited beneath an element, but shall not be considered as part of the clear floor space or turning space.

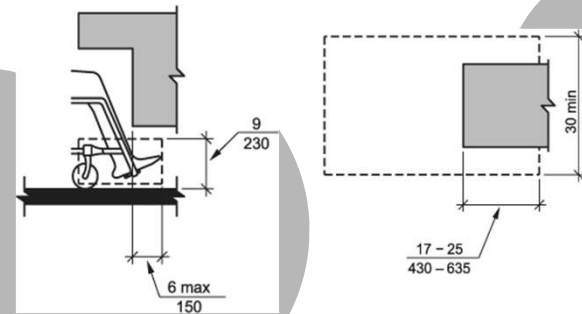


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## 306.2 Toe Clearance

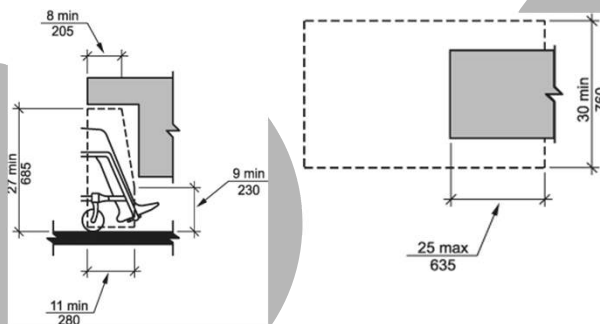


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## 306.3 Knee Clearance



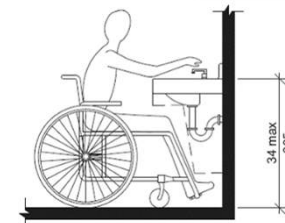
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## 606.3 Height

- ▶ The front of lavatories and sinks shall be 34 inches maximum above the floor, measured to the higher of the rim or counter surface.
- ▶ EXCEPTION: A lavatory in a toilet or bathing facility for a single occupant, accessed only through a private office and not for common use or public use, shall not be required to comply with Section 606.3.



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## 606.4 Faucets

- ▶ Faucets shall comply with Section 309.
- ▶ Hand-operated metering faucets shall remain open for 10 seconds minimum.



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## 309.4 Operation

- ▶ 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 5.0 pounds maximum.



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## 606.6 Exposed Pipes and Surfaces

- ▶ Water supply and drainpipes 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.

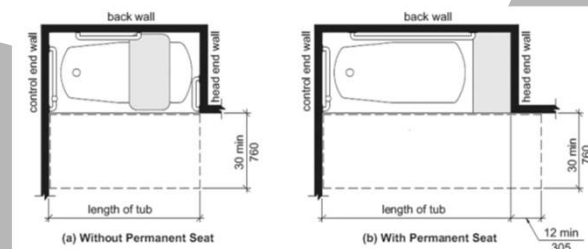


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## 607 Bathtubs



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### 607.3 Seat

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

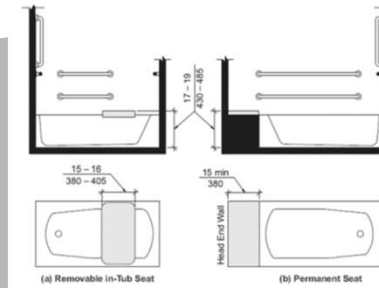


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### 610.2 Bathtub Seats

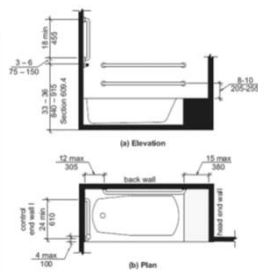


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### 607.4.1 Bathtubs with Permanent Seats Grab Bars

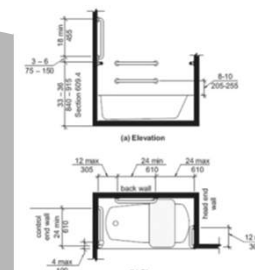


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### 607.4.2 Bathtubs without Permanent Seats Grab Bars



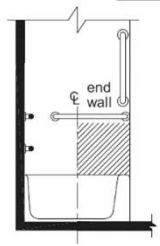
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## 607.5 Controls

- ▶ Controls, other than drain stoppers, shall be provided on an end wall, located between the bathtub rim and grab bar, and between the open side of the bathtub and the centerline of the width of the bathtub.
- ▶ Controls shall comply with Section 309.4.



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## 607.6 Hand Shower

- ▶ A hand shower with a hose 59 inches minimum in length, that can be used as both a fixed shower head and as a hand shower, shall be provided.
- ▶ The hand shower shall have a control with a nonpositive shut-off feature.
- ▶ Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.



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## 607.7 Bathtub Enclosures

- ▶ Enclosures for bathtubs shall not obstruct controls, faucets, shower and spray units or obstruct transfer from wheelchairs onto bathtub seats or into bathtubs.
- ▶ Enclosures on bathtubs shall not have tracks installed on the rim of the bathtub.



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## 607.8 Water Temperature

- ▶ Bathtubs shall deliver water that is 120°F maximum.



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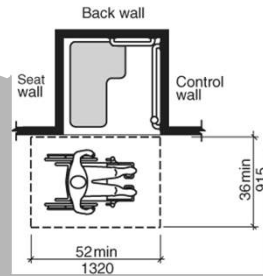
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160

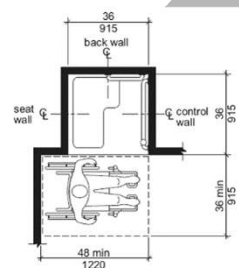
## 608.2.1 Transfer-type Shower Compartments

161

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New Buildings



Existing Buildings

161

## 610.3 Shower Compartment Seats

162

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- ▶ The height of shower compartment seats shall be 17 inches minimum and 19 inches maximum above the bathroom floor, measured to the top of the seat.
- ▶ In transfer-type and alternate roll-in-type showers, the seat shall extend along the seat wall to a point within 3 inches of the compartment entry.

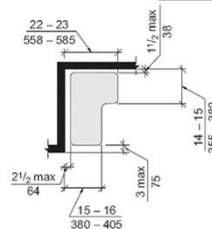
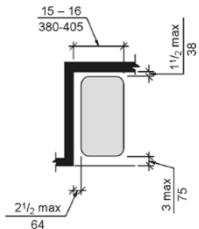


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## 610.3 Shower Compartment Seats

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## 610.4 Structural Strength

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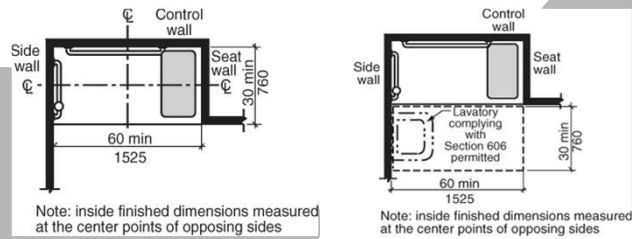
- ▶ Allowable stresses shall not be exceeded for materials used where a vertical or horizontal force of 250 pounds is applied at any point on the seat, fastener mounting device, or supporting structure.



164

### 608.2.2.1 Standard Roll-in-type Shower Compartments

165

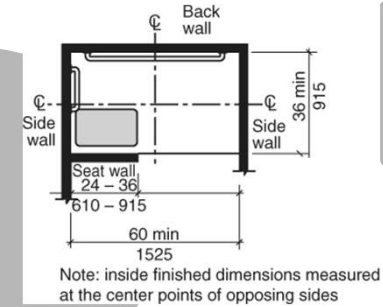


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### 608.2.3 Alternate Roll-in-type Shower Compartments

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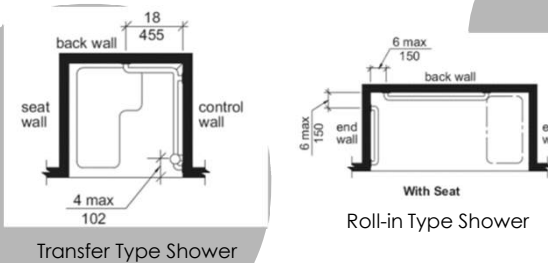


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166

### 608.3.1 Transfer-Type Showers Grab Bars

167

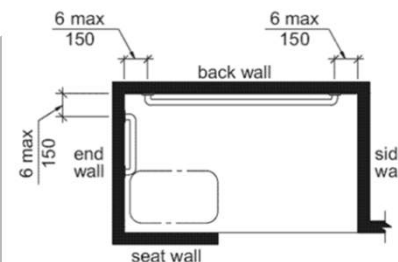


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### 608.3.3 Alternate Roll-in-Type Showers Grab Bars

168



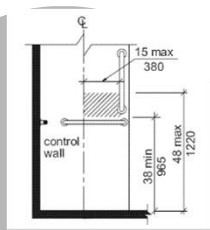
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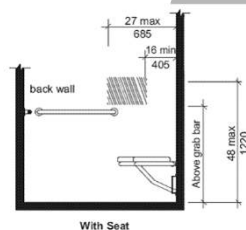
## 608.4 Controls and Hand Showers

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Transfer Type Shower

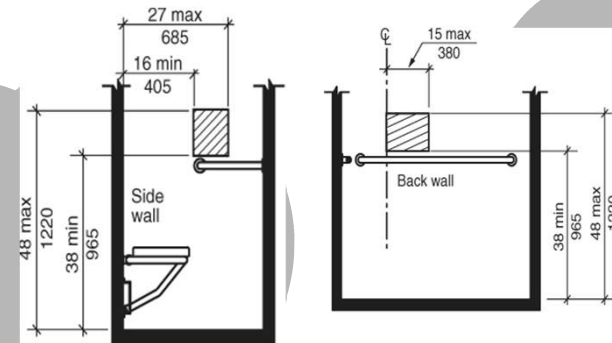
With Seat  
Standard Roll-in shower

169

## 608.4.3 Alternate Roll-in Showers Grab Bars

170

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## 608.5 Hand Showers

171

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- ▶ A hand shower with a hose 59 inches minimum in length, that can be used both as a fixed shower head and as a hand shower, shall be provided.
- ▶ The hand shower shall have a control with a nonpositive shut off feature.



171

## 608.5 Hand Showers

172

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- ▶ Where provided, an adjustable-height hand shower mounted on a vertical bar shall be installed so as to not obstruct the use of grab bars.
- ▶ A means to hold the hand shower wand while in the on or off position shall be located at a height of 38 inches minimum and 48 inches maximum above the shower finish floor.

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## 608.6 Thresholds

173

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- ▶ Thresholds in roll-in-type shower compartments shall be 1/2 inch maximum in height in accordance with Section 303. In transfer-type shower compartments, thresholds 1/2 inch maximum in height shall be beveled, rounded, or vertical.
- ▶ EXCEPTION: In existing facilities, in transfer-type shower compartments where provision of a threshold 1/2 inch in height would disturb the structural reinforcement of the floor slab, a threshold 2 inches maximum in height shall be permitted.



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## 1110.4 Kitchens and kitchenettes

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- ▶ Where kitchens and kitchenettes are provided in accessible spaces or rooms, they shall be accessible.



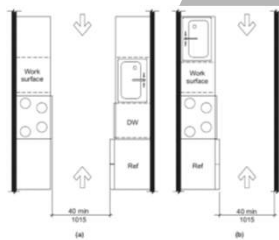
174

## 804.2.1 Pass-through Kitchens

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- ▶ In pass-through kitchens where counters, appliances or cabinets are on two opposing sides, or where counters, appliances or cabinets are opposite a parallel wall, clearance between all opposing base cabinets, counter tops, appliances, or walls within kitchen work areas shall be 40 inches minimum.
- ▶ Pass-through kitchens shall have two entries.



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## 804.2.2 U-Shaped Kitchens

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## 804.3 Work Surface

- ▶ At least one accessible work surface 30 inches minimum in length shall be provided in accordance with Section 902.
- ▶ The work surface shall be located in accordance with Section 804.5.5.2 or 804.5.5.3.
- ▶ Exception: Spaces that do not provide a cooktop or conventional range shall not be required to provide an accessible work surface.



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## 902 Dining Surfaces and Work Surfaces

- ▶ A clear floor space positioned for a forward approach.
- ▶ Knee and toe clearance complying shall be provided.
- ▶ No sharp or abrasive surfaces under the exposed portions of dining surfaces and work surfaces.
- ▶ The tops of dining surfaces and work surfaces shall be 28 inches minimum and 34 inches maximum in height above the floor.



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## 804.4 Sinks

- ▶ The sink shall comply with Section 606.
- ▶ A clear floor space positioned for forward approach
- ▶ Knee and toe clearance shall be provided.
- ▶ The front sinks shall be 34 inches maximum above the floor, measured to the higher of the rim or counter surface.
- ▶ Faucets shall comply with Section 309.
- ▶ Water supply and drainpipes under lavatories and sinks protected.



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## 804.5 Appliances

- ▶ A clear floor space complying with Section 305 shall be provided at each kitchen appliance.
- ▶ All appliance controls shall comply with Section 309 (Reach Range).
- ▶ EXCEPTIONS:
  - ▶ 1. Appliance doors and door latching devices shall not be required to comply with Section 309.4.
  - ▶ 2. Bottom-hinged appliance doors, when in the open position, shall not be required to comply with Section 309.3.



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### 804.5.3 Dishwasher

- ▶ A clear floor space positioned adjacent to the dishwasher door, shall be provided.
- ▶ The dishwasher door in the open position shall not obstruct the clear floor space for the dishwasher or an adjacent sink.



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### 804.5.4 Cooktop

- ▶ A clear floor space, positioned for a parallel or forward approach
- ▶ Clear floor space is positioned for a forward approach, knee and toe clearance shall be provided. The underside of the cooktop shall be insulated.
- ▶ Clear floor space positioned for a parallel approach, the clear floor space shall be centered on the appliance.
- ▶ The location of controls shall not require reaching across burners.



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### 804.5.5 Oven

- ▶ A clear floor space shall be provided. The oven door in the open position shall not obstruct the clear floor space for the oven.
- ▶ Side-hinged door ovens shall have a work surface complying with Section 804.3 positioned adjacent to the latch side of the oven door.
- ▶ Bottom-hinged door ovens shall have a work surface complying with Section 804.3 positioned adjacent to one side of the door.
- ▶ The location of controls shall not require reaching across burners.



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### 804.5.6 Refrigerator/Freezer

- ▶ Combination refrigerators and freezers shall have at least 50 percent of the freezer compartment shelves, including the bottom of the freezer, 54 inches maximum above the floor when the shelves are installed at the maximum heights possible in the compartment.
- ▶ A clear floor space, positioned for a parallel approach to the refrigerator/freezer, shall be provided.
- ▶ The centerline of the clear floor space shall be offset 24 inches maximum from the centerline of the appliance.



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## 1110.5 Drinking Fountains

- ▶ No fewer than two drinking fountains shall be provided.
- ▶ One drinking fountain shall comply with the requirements for people who use a wheelchair and one drinking fountain shall comply with the requirements for standing persons.



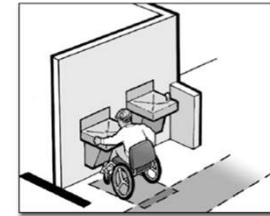
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## 602.2 Clear Floor Space

- ▶ A clear floor space, positioned for a forward approach to the drinking fountain, shall be provided.
- ▶ Knee and toe space complying with Section 306 shall be provided.
- ▶ The clear floor space shall be centered on the drinking fountain.



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## 602.2.3 Spout Outlet Height

- ▶ Spout outlets of wheelchair accessible drinking fountains shall be 36 inches maximum above the floor.
- ▶ 602.3.2
- ▶ Spout outlets of drinking fountains shall be 38 inches minimum and 43 inches maximum above the floor.



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## 1110.6 Bottle-filling stations



- ▶ Where bottle-filling stations are provided, they shall be accessible.
- ▶ Exception: Bottle-filling stations over drinking fountains for standing persons are not required to be accessible, provided that bottle-filling stations are also located over the drinking fountains for persons using wheelchairs.

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## IBC 1110.8 Elevators



- ▶ Elevators shall comply with Section 3001.3 (ICC A117.1)
- ▶ A117.1 Section 407
  - ▶ Commercial elevators
  - ▶ 408 – LULA
  - ▶ 409 – Private Res. Elev.

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## 1110.10 Storage

- ▶ Where fixed or built-in storage elements such as cabinets, coat hooks, shelves, medicine cabinets, lockers, closets and drawers are provided in required accessible spaces, at least 5 percent, but not less than one of each type shall be accessible.



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## 1110.10 Storage

- ▶ Accessible facilities and spaces shall be provided with the same storage elements as provided in the similar nonaccessible facilities and spaces.
- ▶ Self-service shelves and display units shall be located on an accessible route. Such shelving and display units shall not be required to comply with reach-range provisions.



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## 1110.12 Seating at tables, counters and work surfaces

- ▶ Where seating or standing space at fixed or built-in tables, counters or work surfaces is provided in accessible spaces, at least 5 percent of the seating and standing spaces, but not less than one, shall be accessible.



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## 904.3 Sales and Service Counters

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- ▶ Parallel Approach.
- ▶ A portion of the counter surface 36 inches minimum in length and 36 inches maximum in height above the floor shall be provided.
- ▶ Where the counter surface is less than 36 inches in length, the entire counter surface shall be 36 inches maximum in height above the floor.
- ▶ A clear floor space complying with Section 305, positioned for a parallel approach adjacent to the accessible counter, shall be provided.



193

## 904.3 Sales and Service Counters

194

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- ▶ Forward Approach.
- ▶ A portion of the counter surface 30 inches minimum in length and 36 inches maximum in height above the floor shall be provided.
- ▶ A clear floor space complying with Section 305, positioned for a forward approach to the accessible counter, shall be provided.
- ▶ Knee and toe clearance complying with Section 306 shall be provided under the accessible counter.



194

## 1110.13.2 Sales and service counters and windows

195

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- ▶ Where counters or windows are provided for sale or distribution of goods or services, at least one of each type of counter and window provided shall be accessible.
- ▶ Where such counters or windows are dispersed throughout the building or facility, accessible counters or windows shall also be dispersed.



195

## 1110.13.3 Food service lines

196

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- ▶ Food service lines shall be accessible.
- ▶ Where self-service shelves are provided, at least 50 percent, but not less than one, of each type provided shall be accessible.



196

## 1110.15 Controls, operating mechanisms and hardware

197

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- ▶ Controls, operating mechanisms and hardware intended for operation by the occupant, including switches that control lighting and ventilation and electrical convenience outlets, in accessible spaces, along accessible routes or as parts of accessible elements shall be accessible.



197

## 1110.15 Controls, operating mechanisms and hardware

198

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- ▶ Exceptions:
  - ▶ 1. Operable parts that are intended for use only by service or maintenance personnel shall not be required to be accessible.
  - ▶ 2. Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to comply with Section 1010.2.3.
  - ▶ 3. Operable parts exempted in accordance with ICC A117.1 are not required to be accessible.



198

## 1111.1 General

199

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- ▶ Recreational facilities shall be provided with accessible features in accordance with Sections 1111.2 through 1111.4.



199

## 1111.2.1 Facilities serving Accessible units

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- ▶ In Group R-2 and R-4 occupancies where recreational facilities serve Accessible units, every recreational facility of each type serving Accessible units shall be accessible.



200

## 1111.4.1 Area of sport activity

201

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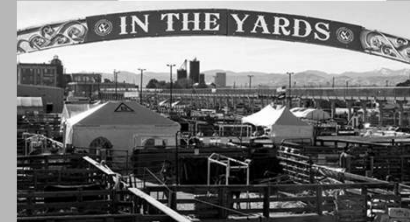
- ▶ Each area of sport activity shall be on an accessible route and shall not be required to be accessible except as provided for in Sections 1111.4.2 through 1111.4.14.

201

## 1111.4.7 Animal containment areas

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- ▶ Animal containment areas that are not within public use areas are not required to be accessible or to be on an accessible route.

202

## 1111.4.8 Amusement rides

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- ▶ Amusement rides that move persons through a fixed course within a defined area shall comply with Sections 1111.4.8.1 through 1111.4.8.3.
- ▶ Exception: Mobile or portable amusement rides shall not be required to be accessible.

203

## 1111.4.9 Recreational boating facilities

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- ▶ Boat slips required to be accessible by Sections 1111.4.9.1 and 1111.4.9.2 and boarding piers at boat launch ramps required to be accessible by Section 1111.4.9.3 shall be on an accessible route.

204

## 1111.4.10

## Exercise machines and equipment

205

- ▶ At least one of each type of exercise machine and equipment shall be on an accessible route.



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## 1111.4.11

## Fishing piers and platforms

206

- ▶ Fishing piers and platforms shall be accessible and be on an accessible route.



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## 1111.4.12

## Miniature golf facilities

207

- ▶ Miniature golf facilities shall comply with Sections 1110.4.12.1 through 1110.4.12.3.



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## 1111.4.13

## Play areas

208

- ▶ Play areas containing play components designed and constructed for children shall be located on an accessible route.

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## 1111.4.14 Swimming pools, wading pools, cold baths, hot tubs and spas.

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- Swimming pools, wading pools, cold baths, hot tubs and spas shall be accessible and be on an accessible route.



- Exceptions

209

## 1111.4.15 - Shooting facilities with firing positions

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- Where shooting facilities with firing positions are designed and constructed at a site, at least 5 percent, but not less than one, of each type of firing position shall be accessible and be on an accessible route.



210

## 1112 Signage

211

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- Required accessible elements shall be identified by the International Symbol of Accessibility at the following locations.
- 1. Accessible parking spaces required by Section 1106.2.
  - Exception: Where the total number of parking spaces provided is four or less, identification of accessible parking spaces is not required.
- 2. Accessible parking spaces required by Section 1106.3.
  - Exception: In Group I-1, R-2, R-3 and R-4 facilities, where parking spaces are assigned to specific dwelling units or sleeping units, identification of accessible parking spaces is not required.



211

## 1111 Signage

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- 3. Accessible passenger loading zones.
- 4. Accessible toilet or bathing rooms where not all toilet or bathing rooms are accessible.
- 5. Accessible entrances where not all entrances are accessible.



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## 1111 Signage

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- ▶ 6. Accessible check-out aisles where not all aisles are accessible. The sign, where provided, shall be above the check-out aisle in the same location as the checkout aisle number or type of check-out identification.



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## 1111 Signage

- ▶ 7. Accessible dressing, fitting and locker rooms where not all such rooms are accessible.
- ▶ 8. Accessible areas of refuge in accordance with Section 1009.9.
- ▶ 9. Exterior areas for assisted rescue in accordance with Section 1009.9.
- ▶ 10. In recreational facilities, lockers that are required to be accessible in accordance with Section 1111.10.



213

214

## 1112.2 - Signs identifying toilet or bathing rooms

215

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- ▶ Signs required in Section 403.4 of the International Plumbing Code identifying toilet rooms and bathing rooms shall be visual characters, raised characters and braille complying with ICC A117.1.
- ▶ Where pictograms are provided as designations for toilet rooms and bathing rooms, the pictograms shall have visual characters, raised characters and braille complying with ICC A117.1.

215

## 1112.3 Directional signage

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- ▶ Directional signage indicating the route to the nearest like accessible element shall be provided at the following locations.
- ▶ These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1.



216



## 1112.3

## Directional signage

217

- ▶ 1. Inaccessible building entrances.
- ▶ 2. Inaccessible public toilets and bathing facilities.
- ▶ 3. Elevators not serving an accessible route.
- ▶ 4. At each separate-sex toilet and bathing room indicating the location of the nearest family/assisted use toilet or bathing room where provided in accordance with Section 1110.2.1.



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## 1111.2

## Directional signage

218

- ▶ 5. At exits and exit stairways serving a required accessible space, but not providing an approved accessible means of egress, signage shall be provided in accordance with Section 1009.10.
- ▶ 6. Where drinking fountains for persons using wheelchairs and drinking fountains for standing persons are not located adjacent to each other, directional signage shall be provided indicating the location of the other drinking fountains.



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703  
Signs

219

- ▶ Tactile signs shall contain both raised characters and braille.
- ▶ Where signs with both visual and raised characters are required, either one sign with both visual and raised characters, or two separate signs, one with visual, and one with raised characters, shall be provided.



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703  
Signs

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- ▶ Visual Characters
- ▶ Raised Characters
- ▶ Braille
- ▶ Pictograms
- ▶ Symbols of Accessibility
- ▶ Variable Message Signs



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## Residential Accessibility

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## 1108.3 Accessible Spaces



- Accessible Spaces  
Public and Residential  
Common Areas

### Include:

- Toilet and Bathing
- Kitchen
- Living and Dining
- Exterior Spaces including  
Patos, Terraces, and  
Balconies
- Recreational Facilities per  
1109.14

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## 1108.4 Accessible Route

- Accessible Route
- Shall be provided  
between  
accessible units  
and interior and  
exterior facilities  
serving the units.



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## 1108.4 Accessible Route



- Accessible Route  
Exceptions
  1. Slope > 1:12, then  
Vehicular route w/  
parking  
permitted.
  2. Type B impervious  
decks, patios,  
balconies may be  
4" below interior  
floor.

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### 1108.5.1 Group I-1, Condition 1



- At least 4% but not less than 1 sleeping rooms/baths shall be Accessible units
- Every dwelling & sleeping unit intended to be occupied as a residence shall be Type B

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### 1108.5.1 Group I-1, Condition 2



- At least 10% but not less than 1 sleeping rooms/baths shall be Accessible units
- Every dwelling & sleeping unit intended to be occupied as a residence shall be Type B

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### 1108.5.2 Group I-2 Nursing Homes

- 50% Accessible units
- Every dwelling & sleeping unit intended to be occupied as a residence shall be Type B



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### 1108.5.3 Group I-2 Hospitals

- 10% of Hospital patient rooms = Accessible units
- Every dwelling & sleeping unit intended to be occupied as a residence shall be Type B



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## 1108.5 Group I-2 Rehab Facilities

- Mobility treatment specialty
- 100% Accessible units



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## 1108.5.4 Group I-3



- 3% shall be Accessible units
- At least one special holding or housing cell shall be accessible...

The "Hole" ???

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## 1108.6 Group R



- R-1 – Hotel and Boarding
- R-2 – Apartment/Condo
- R-3 – Single Family – "Townhouse"
- IRC Townhouses R322

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## ANSI A117.1 – Chapter 10 Dwelling Units

- |  |   |
|--|---|
| • Section 1103<br>Type A Dwellings                       | • Section 1104<br>Type B Dwellings  |
| • Intended for compliance with building code provisions. | • Intended for compliance with the Federal Fair Housing Act... Via the building code. |

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1108.6.1  
Group R-1

- Accessible Units provided per Table 1108.6.1.1
- ADA derived.

TABLE 1107.6.1.1  
ACCESSIBLE DWELLING AND SLEEPING UNITS

TOTAL NUMBER OF UNITS PROVIDED	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS ASSOCIATED WITH ROLL-IN SHOWERS	TOTAL NUMBER OF REQUIRED ACCESSIBLE UNITS
1 to 25	0	1
26 to 50	0	2
51 to 75	1	4
76 to 100	1	5
101 to 150	2	7
151 to 200	2	8
201 to 300	3	10
301 to 400	4	12
401 to 500	4	13
501 to 1,000	1% of total	3% of total
Over 1,000	10, plus 1 for each 100, or fraction thereof, over 1,000	30, plus 2 for each 100, or fraction thereof, over 1,000

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1108.6.1  
Group R-1

- All facilities on site determines number of units.
- Accessible units must be dispersed among various class of units.
- Roll-in Showers must have folding seat.

1108.6.1.2  
Every dwelling & sleeping unit intended to be occupied as a residence shall be Type B

4

234

1108.6.2  
Group R-2



- 1. Apartment Houses, Monasteries, and Convents and...
- 2. Other than Apartment Houses, Monasteries, and Convents
- Groups R-3 and R-4

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1108.6.2.2  
Group R-2

- Apartments, Monasteries, and Convents
- Type A Units: 2%
  - 20 or more dwellings on a site (Except existing)
  - Type A units shall be dispersed among classes



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### 1108.6.2.2 Group R-2

- Apartments, monasteries, & convents
- Type B Units: ALL!
  - Required with 4 or more dwelling units in a building.
  - Exception: Reduction in units per 1108.7



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### IBC 1108 – Type B

- 4 or more in a building?
  - All units shall be Type B
- Does it have an elevator or not?



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### 1108.7.1.1 Type B – No Elevator



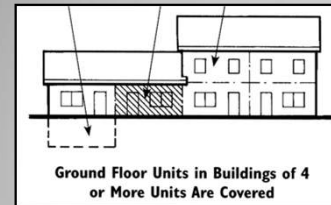
- Type B required on at least one story that:
  - Has dwelling and/or sleeping units
  - Has an accessible entrance from the exterior.
  - Units intended to be occupied as a “residence” shall be Type B units

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### 1108.7.2 TYPE B – No Elevator



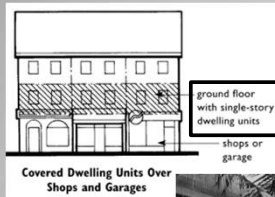
- If unit is multi-story, it is not required to be Type B
  - Unfinished attics and basements are not stories
  - Mezzanine – Lofts are not stories

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### 1108.7.3 Mixed Use – Ground Floor



- First floor containing residential is the “ground floor”.

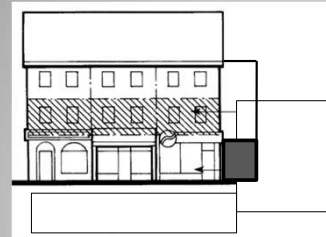


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### 1108.7.3 Type B – Not “Elevator Building”



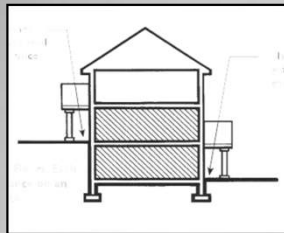
- Elevator service to the lowest story with units.
- Only that story served shall be required to be Type B units

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### 1108.7.1.2 Type B – No Elevator



- Additional stories where:
  1. **Existing** grade within 50 feet is 10% or less between the entrance and **all** vehicular or pedestrian arrival points
  2. **Proposed** grade within 50 feet is 10% or less between the entrance and **all** vehicular or pedestrian arrival points

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### Type B – Elevator Provided



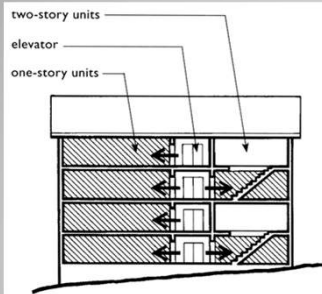
- If the building is provided with an elevator...
  - **All** units shall be Type B

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## 1108.7.2 Type B - ELEVATOR



Buildings with Elevator(s):  
All Single-Story Units and the Primary Entry  
Level of Multistory Units Are Covered

- If elevator to one floor of multistory unit, only floor served to be Type B
  - Type B Toilet Facility and kitchen also required on that floor.

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## 1108.6.2.3 Group R-2

- In other than apartment houses, monasteries and convents.
- Accessible units and Type B units shall be provided in accordance with Sections 1108.6.2.1 and 1108.6.2.2



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## 1108.6.2.3 Group R-2



- Applies to Dormitories, Boarding, Fraternity, and Sorority Houses
- Hotel timeshares, etc.
- Accessible Units per Table 1108.6.1.1
- Type B Units: ALL!
  - Exceptions per 1108.7

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## 1108.6.3 Group R-3

- Type B: ALL!
  - When 4 or more units in a building.
  - Exceptions per 1108.7
- Cross referenced from International Residential Code (IRC) Section R322.1



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## 1108.6.4 Group R-4

- Accessible Units: 1 Min.
- Type B: ALL!
  - When there are 4 or more units.
  - Exceptions per 1108.7



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## Three Accessible Unit Configurations

- Accessible Units    ANSI 1102
  - Intended to address ADA requirements
- Type A Units        ANSI 1103
  - Derived from 1973 Rehab. Act Dwelling Units
- Type B Units        ANSI 1104
  - Safe Harbor for Fed. Fair Housing Act Req's.

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## Accessible /Type A 1102.2 /1103.2 – Primary Entrance



- Shall be on accessible route, not through bedroom.

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## Type B 1104.2 – Primary Entrance



- Primary entrance
- Shall be accessible
- Shall be on an accessible route
- Shall not be to a bedroom

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### Accessible /Type A/Type B 1102.3/1103.3/1104.3 Accessible Route



- Accessible routes shall coincide with or be located in the same area as a general circulation path.

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### Accessible /Type A/Type B 1102.3/1103.3/1104.3 Accessible Route



- Shall consist of:
  - Floor or ground <1:20
  - Ramps
  - Elevators
  - Platform Lifts

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### Accessible /Type A 1102.3/1103.3 Accessible Route



- All spaces shall have a wheelchair turning space.
- Except:
  - That are not required to comply with Section 1102.11.2.
- Within closets or pantries that are 48 inches maximum in depth.

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### Accessible /Type A 1102.3/1103.3 Accessible Route



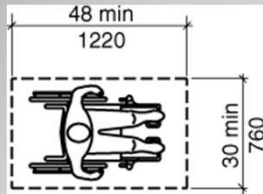
- Shall connect all spaces (if only one route, shall not pass through toilet/bathing rooms, closets, & similar)
  - Except: unfinished basements and attics

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## Type B 1104.1.1 Clear Floor Space



- clear floor spaces shall be 48 inches minimum in length and 30 inches minimum in width.

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## Type B 1104.3- Accessible Route

- Accessible Route shall connect all spaces and elements that are part of the dwelling
- If only one, shall not pass through toilet/bathing rooms, closets, or similar



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## Type B 1104.3- Accessible Route

- *An accessible route is NOT required to an attached garage UNLESS the garage is accessible.*
- IBC Section 1104.3 Connected spaces?



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- Accessible routes from parking garages contained within and serving Type B units are not required to be interior.

## NEW 2009 Section 1104.4 Accessible Route Exceptions

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## Type B 1104.3- Accessible Route



- Accessible route exceptions:
  - Raised or sunken floor in portion of living, dining, or sleeping room
  - Mezzanine that does not have plumbing fixtures or habitable space

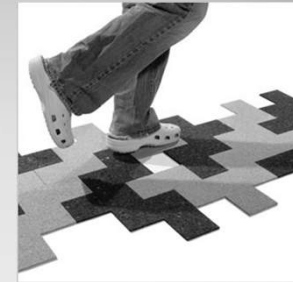
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## Accessible/ Type A 1102.4/1103.4 Walking Surfaces

- Walking surfaces that are part of an accessible route shall comply with Section 403.



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## Type B 1104.4 – Walking Surfaces

- Width per 403.5
- Changes in level per 303
  - Except impervious exterior deck/patio may have floor 4" below the finished floor of the dwelling



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## Accessible/Type A 1102.5/1103.5 Doors and Doorways



- Primary entrance and all other doorways intended for user passage shall comply with 404.

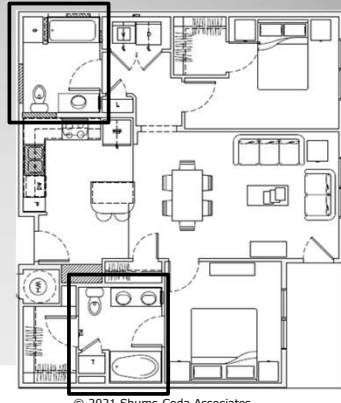
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### Accessible/Type A 1102.5/1103.5 Doors and Doorways

- Exception:
  - In toilet rooms and bathrooms not required to comply with Section 1103.11, maneuvering clearances required by Section 404.2.3 are not required on the toilet room or bathroom side of the door.



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### Type A/Type B 1103.5/1104.5 – Doors & Doorways



NOT Compliant!!

- ½" Threshold
- Except:
  - Thresholds at exterior sliding doors shall be permitted to be ¾ inch maximum in height, provided they are beveled with a slope not steeper than 1:2.

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### 1104.5.1 – Type B Primary Entrance Door

- Section 404.2.5 maneuvering clearances is required on BOTH sides of the primary entrance door.



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### Type B 1104.5 – Doors & Doorways



- Primary entrance shall comply with 404 on **BOTH SIDES**
- Other User Passage Doors = 31¾"
  - 2'-10" door??
  - 31-5/8 per FFHADM
- No requirements for approach clearances aside from exterior side of primary entrance.

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### Accessible, Type A and Type B 1102.6/1103.6/1104.6 Ramps

- Shall comply with 405



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### Accessible, Type A and Type B 1102.7/1103.7/1104.7 Private Residence Elevators

- Within the Unit:
- Shall comply with 407, 408 or 409
  - 407 – Standard
  - 408 – LULA
  - 409 – Private Residence Elevators



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### Accessible, Type A and Type B 1102.8/1103.8/1104.8 Platform Lifts

- Permitted within the unit
- Shall comply with ASME/ANSI A17.1



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### Accessible/Type A 1102.9/1103.9 Operable Parts

- Shall comply w/309
  - Light Switches
  - Receptacles
  - Environmental
  - Appliance
  - Window Hardware
  - Plumbing Fixture
  - Security or Intercom



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### Accessible and Type A Operable Parts

- Electrical panelboards shall not be required to comply with Section 309.4 (pinching, twisting, etc.)
- Implies that they ARE required to be accessible but...
- Not for force or graspability
- Intended to apply only to interior installations

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### Type B 1104.9 – Operable Parts

- Same as for Accessible/Type A

Except:

- Windows
- Controls for Plumbing Fixtures
- Appliance controls



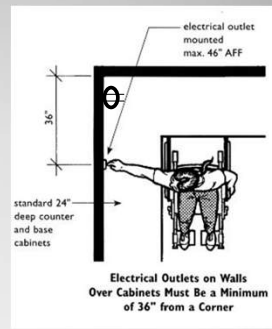
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### Accessible, Type A and Type B 1102.9/1103.9/1104.9 Operable Parts

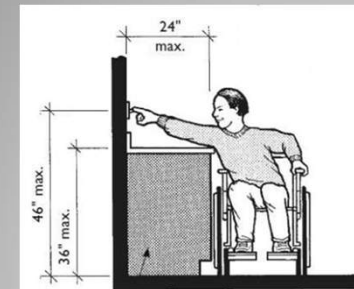
- Dedicated Receptacle Exception
- Single outlet with:
  - On a countertop not interrupted by a sink or appliance
  - At least one complying receptacle is provided
  - All other receptacles on that length of counter comply



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### Type B Operable Parts

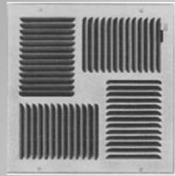
- Bathrooms and kitchens:
- Lighting controls, switches, and receptacles
- May NOW be located over 36" high counters with 25.5" maximum depth

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### Accessible, Type A and Type B 1102.9/1103.9/1104.9 Operable Parts



- Exceptions:
  - Floor receptacles
  - HVAC Diffusers
  - One redundant accessible control per space
  - Controls mounted on ceiling fans
  - Electrical panelboards

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### Type A 1103.10 Laundry Equipment

- Type A references 611
- Parallel clear floor space CENTERED
- Controls and operating mechanisms, including doors, lint screens, detergent and bleach compartments shall comply with 309.



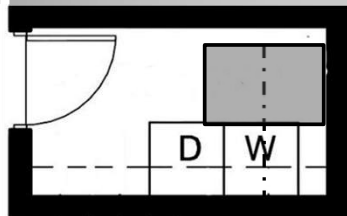
Condensing  
All-in-one WD  
acceptable



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- Front loading machines now permit 24" offset of clear floor space.
- Front or parallel approach permitted.
- Previously had to be centered.
- May reduce room length by up to 9".

### 611 – Laundry Equipment

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### Type B 1104.10 Laundry Equipment



- Parallel approach
  - Not required to be centered
- No requirements for controls
  - Stacking W/D OK

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### Accessible 1102.11 Toilet and Bathing Facilities

- At least one toilet and bathing facility must comply with Sections 603 through 610.



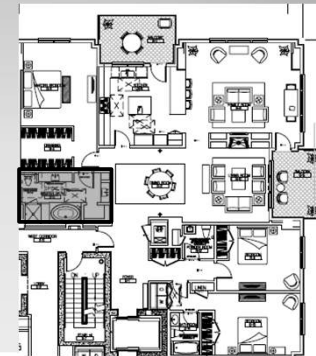
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### Type A 1103.11 Toilet and Bathing Facilities

- At least one toilet and bathing facility shall comply with Section 1103.11.
- At least one lavatory, one water closet and either a bathtub or shower within the unit shall comply with Section 1103.11.
- The accessible toilet and bathing fixtures shall be in a single toilet/bathing area, such that travel between fixtures does not require travel through other parts of the unit.



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### Type B 1104.11.3 – Bathroom Fixtures

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• <u>Option A</u></li> <li>• Each bathroom must provide the <u>required clearances</u>. <ul style="list-style-type: none"> <li>◦ Except 1/2 bath when additional fixtures provided on that level</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• <u>Option B</u></li> <li>• Only one bathroom must comply for <u>maneuvering clearances</u>.</li> <li>• Lavatory shall be 34" max. AFF</li> <li>• May not encroach into the clearance in front of the bathtub</li> </ul> |
|--|--|

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### Type B 1104.11.3 – Bathroom Fixtures

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• <u>Option A</u></li> <li>• Each fixture <u>PROVIDED</u> must comply</li> <li>• That means EVERY SINGLE one provided!!!</li> </ul> | <ul style="list-style-type: none"> <li>• <u>Option B</u></li> <li>• One of each TYPE of fixture must comply</li> <li>• Meaning... <ul style="list-style-type: none"> <li>◦ One lavatory</li> <li>◦ One WC</li> <li>◦ One bathing fixture</li> </ul> </li> </ul> |
|--|---|

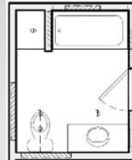
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## Type B 1104.11.3 – Bathroom Fixtures

- Option B
- One of each type of fixture provided shall comply with Section 1104.11.3.2.
  - The accessible fixtures shall be in a single toilet/bathing area, such that travel between fixtures does not require travel through other parts of the unit.



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## Accessible, Type A and Type B 603.2.3(2)/1103.11/1104.11 - Bathrooms



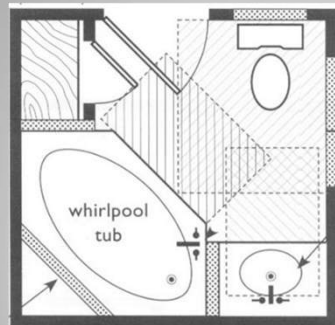
- Doors shall not swing into clear floor space or clearances
- Unless clear space is provided outside the door swing
- Type B – 30x48 outside of door swing shall not include knee and toe clearances

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## Accessible, Type A and Type B 603.2.2/1103.11/1104.11 - Bathrooms



- Clearances are permitted to overlap

Diagram depicts Type B configuration

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## Accessible and Type A 606.2/1103.11.5 - Lavatories



- 34" max. Height
- Knee and toe clearances req'd.
- 30" width

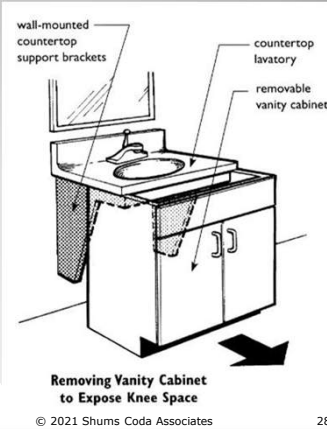
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## Type A 1103.11.5 - Lavatories

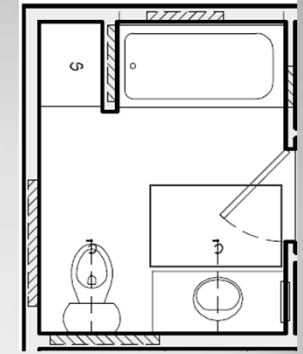
- Exception- Cabinetry may be added that:
  - Can be removed without removal of the lavatory
  - Finish floor extends under cabinet
  - Walls behind & surrounding cabinet are finished



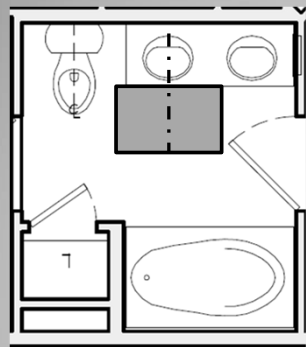
289

## Type B 1104.11.3 - Lavatories

- Option A and B
- 30x48 Parallel clear floor space centered on lavatory.
- Option B
- Lavatory rim at 34" AFF



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- 1104.11.3.1
- When multiple lavatories are provided in a single toilet/bath room, only one lavatory is required to be accessible.

## Type B – Option A Multiple Lavatories

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## Accessible and Type A 1103.11.6 - Mirrors



- If above lavatory, shall be 40" max. AFF
- Accessible - Mirrors not located above lavatories, sinks or counters shall be mounted with the bottom edge of the reflecting surface 35" max. AFF

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## Water Closets



- Multiple differing requirements for each unit classification.

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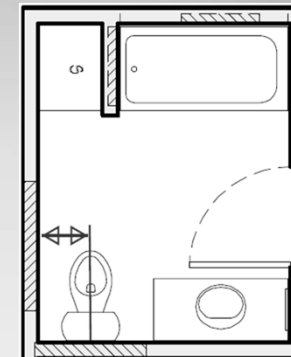
293

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## Accessible and Type A 604.2/1103.11.7 – Water Closets

- Shall be positioned with a wall at the rear and one side.
- 16-18" from side wall

Type A bathroom configuration depicted

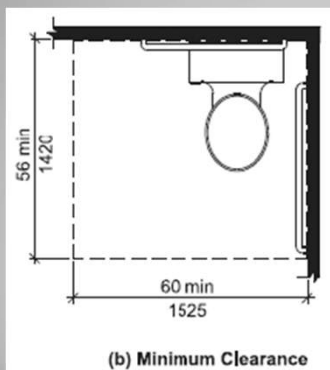


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## Accessible and Type A 604.3.1/1103.11.7 – Water Closets



(b) Minimum Clearance

- Clearance
- 56x60"

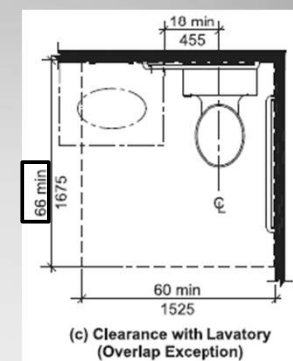
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## Type A 1103.11.7 – Water Closets

- EXCEPTION:
- Lavatory permitted on the rear wall 18 inches min. from C/L of the water closet.
- 66" forward



(c) Clearance with Lavatory (Overlap Exception)

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### Accessible and Type A 604.4/1103.11.7 – Water Closets

- Accessible Height
  - 17-19"
- Type A Height
  - 15-19"



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### Accessible and Type A 604.6/1103.11.7 – Water Closets

- Flush Controls
  - Comply with 309
  - Located on open side
  - Automatic permitted for accessible



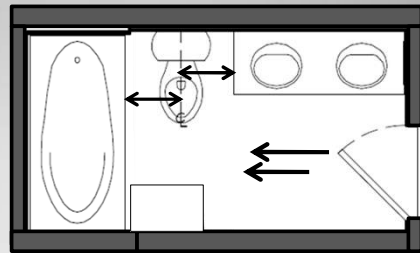
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### Type B 1104.11.3 - Toilets

- WC C/L to bathtub or lavatory = 18" Min.
  - Side opposite the direction of approach
- 15 inches minimum on the other side.



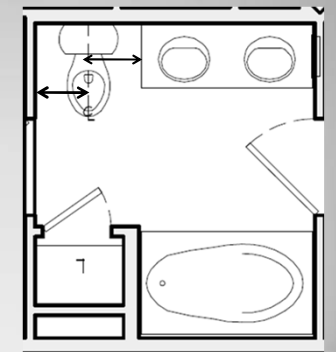
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### Type B 1104.11.3 - Toilets

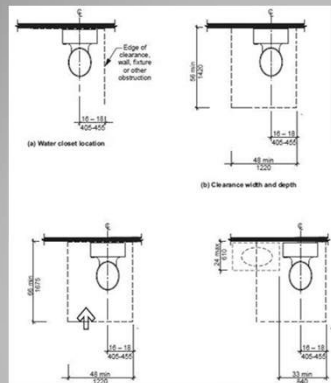
- WC C/L to an adjacent wall shall be **18 inches**
- The lateral distance from the centerline of the water closet to a lavatory or bathtub shall be 15 inches minimum.



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### Type B Water Closet Clearances

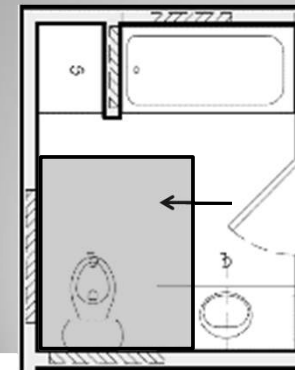
- Requirements for 18" absolute have been revised to 16-18" for all applications
- 33" minimum width must be provided if sink or vanity encroaches.

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### Type B 1104.11.3 - Toilets



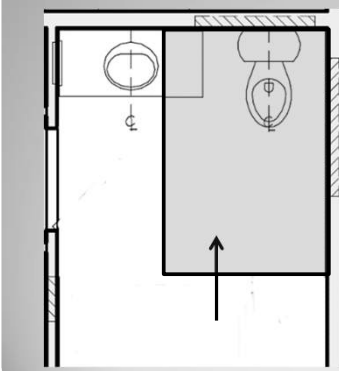
- Parallel Approach
- 48 x 56" space
  - Lavatory may encroach

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### Type B 1104.11.3 - Toilets



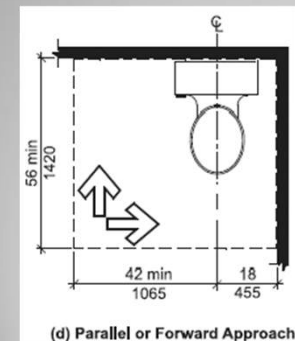
- Front Approach
- 48 x 66" space
  - Lavatory may encroach

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### Type B 1104.11.3 - Toilets



- Both Parallel and Forward Approaches
- 56 x 60"
  - No Lavatory encroachment
  - VERY SUBJECTIVE!

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- Accessible and Type A require the WC at a side wall.

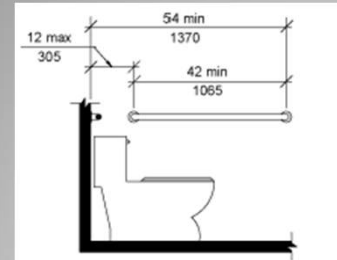


## Water Closet Grab Bars

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- Sidewall grab bars shall be 42 inches minimum in length, located 12 inches) maximum from the rear wall and extending 54 inches minimum from the rear wall.
- Type A and B, no vertical bar req'd.

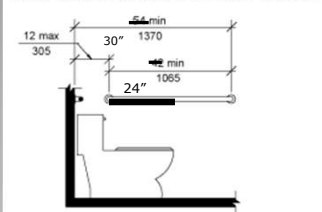
## Accessible, Type A and Type B

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### Side Wall Grab Bar for Water Closet



- When a side wall is not available for a 42-inch grab bar, the sidewall grab bar shall be permitted to be 24 inches minimum in length, located 12 inches maximum from the rear wall and extending 30 inches minimum from the rear wall.

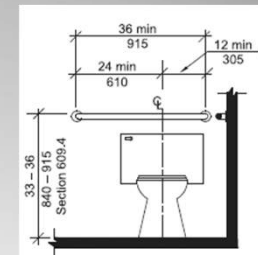
## Type B Sidewall Grab Bar

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- Exceptions:
- Accessible : 24" centered on WC when recessed fixture provided.
- Type A or Type B: 24" if space does not permit full 36" bar.



## Accessible, Type A and Type B

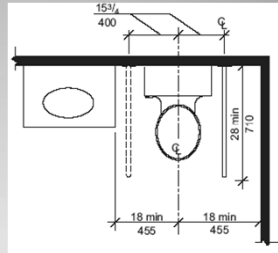
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- 604.5 Exceptions:

- 4. In Type B institutional facilities and assisted living facilities:
  - 2 swing-up grab bars shall be permitted to be installed in lieu of the rear wall and side wall grab bars.
- 5. In a Type B unit, where fixtures are located on both sides of the water closet:
  - A swing-up grab bar complying with Sections 604.5.3 and 609 shall be permitted. The swing-up grab bar shall be installed on the side of the water closet with the 18 inch (455 mm) clearance required by Section 1104.11.3.1.2.



Exception 4 Depicted

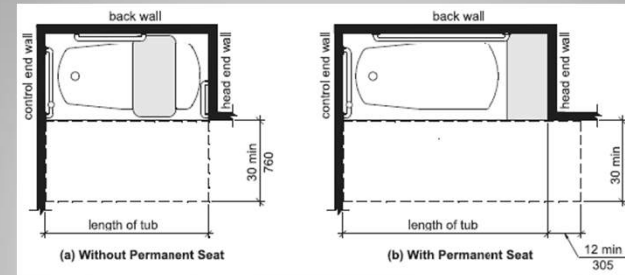
## Type B Swing-Up Grab Bar

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## Accessible and Type A 607/1103.11.8 - Bathing Facilities



- Bathtubs per 607

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## Type A 1103.11.8 - Bathing Facilities



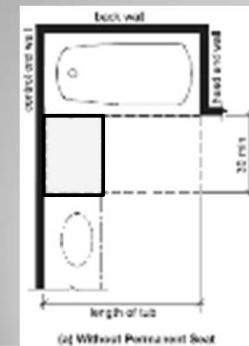
- Bathtub Exceptions:
  - Removable seat is not required
  - Grab bars not required if backing provided

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## Type A 1103.11.8 - Bathing Facilities



- Counter tops and cabinetry shall be permitted at the control end of the clearance
  - Provided such counter tops and cabinetry can be removed and the floor finish extends under such cabinetry.

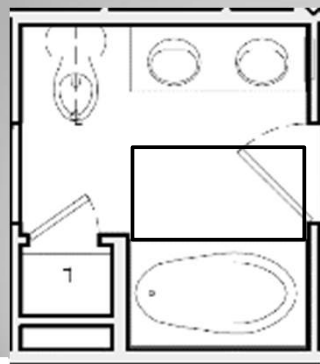
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## Type B 1104.11.3- Bathing Facilities



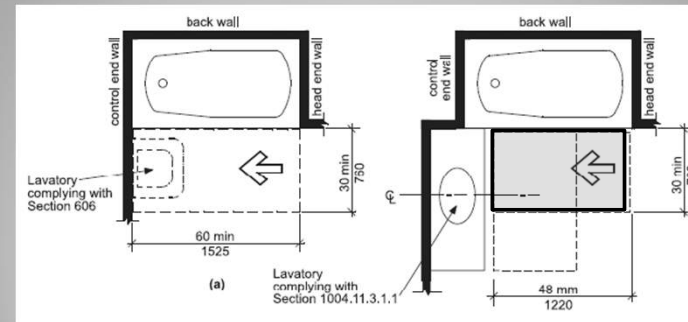
- 60 x 30" in front of bathtubs
- Parallel approach

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## Type B 1104.11.3- Bathing Facilities



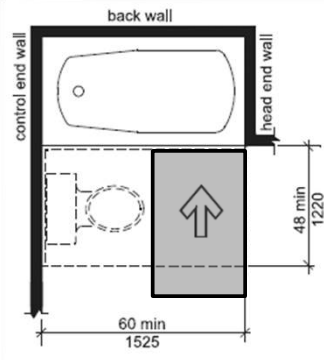
Option A Exception – Parallel Approach

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## Type B 1104.11.3- Bathing Facilities



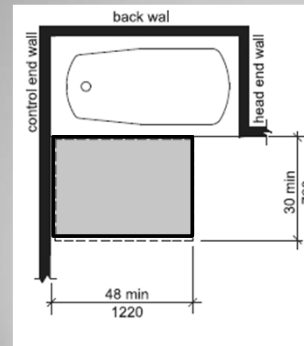
- Option A Exception
- Forward Approach
- 48" Clearance

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## Type B 1104.11.3- Bathing Facilities



- Option B
- 30 x 48"
- Control End

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## Accessible and Type A 608/1103.11 - Showers

- Section 608
- Roll-in or Transfer
- **1/2" Max. Threshold**



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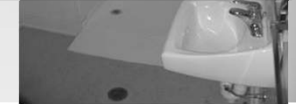
317

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## Accessible Roll-in Showers

- TABLE 1108.6.1.1 for roll-in scope
- Roll-in showers provided in Accessible units shall include a permanently mounted folding shower seat.

TOTAL NUMBER OF UNITS PROVIDED	MINIMUM REQUIRED NUMBER OF ACCESSIBLE UNITS ASSOCIATED WITH ROLL-IN SHOWERS
1 to 25	0
26 to 50	0
51 to 75	1
76 to 100	1
101 to 150	2
151 to 200	2
201 to 300	3
301 to 400	4
401 to 500	4
501 to 1,000	1% of total
Over 1,000	10, plus 1 for each 100, or fraction thereof, over 1,000



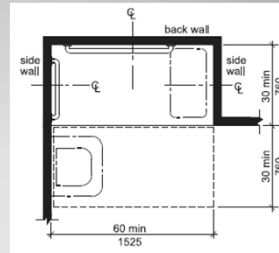
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## Accessible and Type A 608/1103.11 - Roll-in Showers

- A lavatory complying with Section 606 shall be permitted at the end of the clearance opposite the shower compartment side where shower controls are positioned.
- Type A - Where shower controls are located on the back wall and no seat is provided, the lavatory shall be permitted at either end of the clearance.



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- Standard roll-in type showers:
- Type A - Grab bars shall be provided on three walls of showers without seats.
- With seat: grab bars shall be provided on the back wall and on the wall opposite the seat.
- Grab bars shall not be provided above the seat.



## Accessible and Type A Roll-in

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## Type A 1103.11 - Showers

- Exceptions:
  - Shower seat not req'd for transfer showers
    - Reinforcement is req'd for transfer showers
    - Roll-in showers can be designed without seats
  - Grab bars not req'd
    - Reinforcement is required
  - Counter tops and cabinetry shall be permitted at the control end of the clearance, provided such counter tops and cabinetry can be removed and the floor finish extends under such cabinetry.

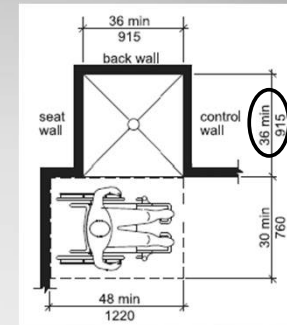
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## Type B 1103.11 - Showers

- Transfer clearances are similar to Accessible and Type A
- Accessible and Type A state 36" **ABSOLUTE!!!**



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## Type B 1103.11 - Showers

- 36 x 36" minimum
  - Accessible and Type A require 36" absolute depth for transfer showers
- NO threshold limits



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## Type B 1103.11 - Showers

- Reinforcing:
  - Same as Type A
    - Requires vertical grab bar backing.
  - No seat reinforcing required IF stall is greater than 36 x 36"
    - (1104.11.3.1.3.3)

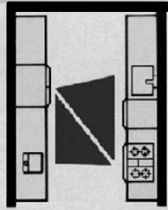


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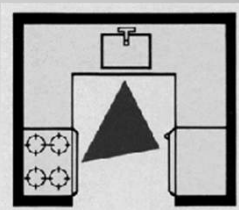
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## Type A and Type B 1103.12/1104.12 - Kitchens



Galley – 40"

U-Shaped – 60"  
U = 3 contiguous sides

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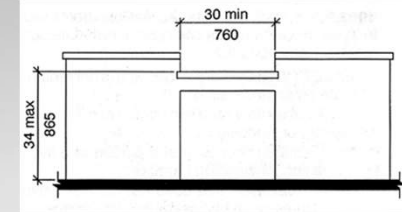
325

325

## Type A 1103.12 - Kitchens

### Work Surface

- 30" wide
- Knee and Toe space underneath
- 34" max. height
  - Exception: adj. counter 29-36"



- No sharp or abrasive surfaces under the work counter.
- A removable cabinet may be used if:

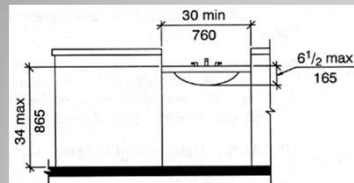
- Top is stationary
- floor finish extends under
- walls behind and surrounding cabinetry are finished.

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## Type A 1103.12 - Kitchens



- Kitchen Sink
- 30" min. width
- Clear floor space with knee & toe clearance underneath
- 34" max. height to the sink rim or counter.

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## Type A 1103.12 - Kitchens

- The requirement for knee and toe clearance shall not apply to more than one bowl of a multi-bowl sink.
- Faucets per 309
- Exposed pipes and sink surfaces shall be protected.



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## Type A 1103.12 - Kitchens

- Exceptions:
  - Cabinet permitted if removable without affecting sink & if finished floor provided, etc.
  - An adjustable sink and counter (29"-36") may be used (rough-in plumbing must permit 29" height)



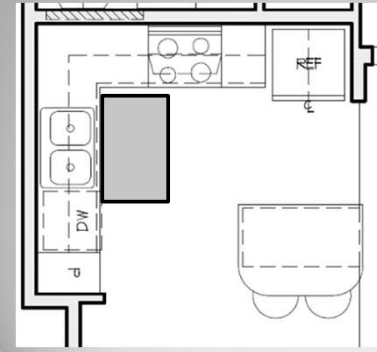
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## Type B 1104.12 - Kitchens

- 30 x 48" space parallel
- "Centered on the sink bowl"



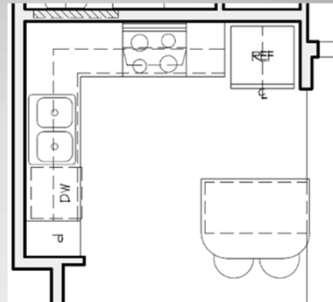
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## Accessible and Type A 1102.12/1103.12 - Kitchens

- Appliances
- Clear floor space shall be provided
- Parallel or forward approach
- Clear space may overlap



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## Accessible and Type A 1102.12/1103.12 - Kitchens

- Controls per 309
- Exceptions
  - 1. Appliance doors and door latching devices shall not be required to comply with operable parts provisions
  - 2. Bottom-hinged appliance doors, when in the open position, shall not be required to comply with reach ranges



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### Type B 1104.12 Kitchens

- Clear Floor Space required at appliances.
- Controls are not regulated.

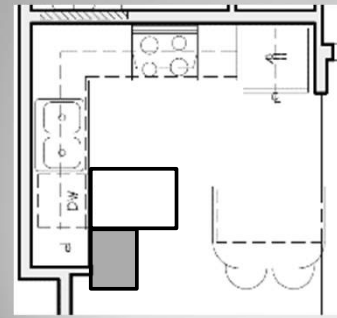


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### Accessible and Type A 1102.12/1103.12 - Kitchens



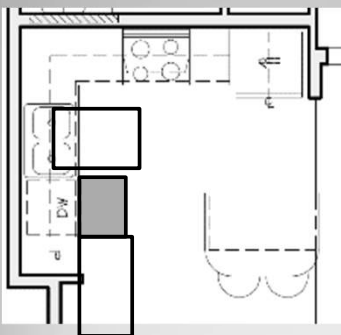
- Dishwashers
- Clear space shall be positioned adjacent to the door.
- Dishwasher door shall not obstruct clear space for the dishwasher or an adjacent sink.

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### Type B 1104.12 - Kitchens



- Dishwashers
- The clear floor space shall be positioned beyond the swing of the dishwasher door.

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### Accessible and Type A 1102.12/1103.12 - Kitchens

- Range or Cooktop
- Parallel Approach centered.
- IF a forward approach is USED, knee and toe clearance are required!!!
- Underside shall be insulated or covered

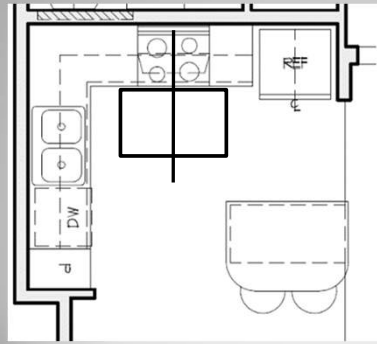


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### Type B 1104.12 - Kitchens



- A clear floor space, positioned for a parallel or forward approach to the cooktop, shall be provided.
- The centerline of the clear floor space shall align with the centerline of the cooktop.

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### Accessible 1102.12/804 - Kitchens



- 804.6.5.3 Ovens shall have controls on front panels.
  - Bottom hinged – Must have counter adjacent to one side of the door.
  - If side opening, the latch side shall be next to the countertop.

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### Type A 1103.12 - Kitchens



- Oven
- Ovens shall have controls on the front panel ON EITHER SIDE OF THE DOOR.
  - Bottom hinged – Must have counter adjacent to one side of the door.
  - If side opening, the latch side shall be next to the countertop.

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### Type B 1104.12 - Kitchens



- A clear floor space, positioned for a parallel or forward approach to the oven

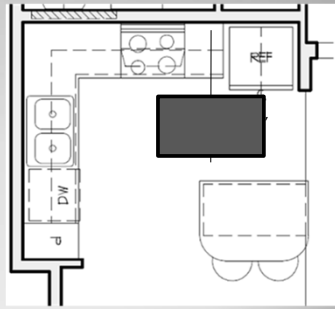
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## Accessible and Type A 1103.12 - Kitchens

- Refrigerator/Freezer
- Combination units:  
50% of freezer space shall be 54" maximum above the floor.
- Clear floor space may be offset 24" from unit C/L
- Forward or Parallel approach permitted



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## Accessible and Type A 1102.13/1103.13 - Windows

- Operable windows required for ventilation.
- Regulates:
  - Clear floor space
  - Height of operable parts



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## Accessible and Type A 1102.13/1103.13 - Windows

- Operable windows required to provide an emergency escape and rescue opening shall comply with Section 309.2.
  - Clear floor space.



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## Accessible and Type A 1102.14/1103.14 - Storage Facilities

- Storage facilities:
- Parallel or Forward clear floor space
- Portion within reach ranges per 308
- Except: Kitchen Cabinets



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