

**Differences Between Accessibility Requirements
found in the International Building Code/ICC ANSI
A117.1 and the 2010 ADA Standards:
*Problem Areas for Compliance***

**NEBOEA
October 7-9, 2013**





Round #1:

Applicability of the 2010
ADA Standards for
Accessible Design

vs.

Accessibility and the
International Building
Code/ICC ANSI A117.1

In other words, when do
they apply to my project?

Before we Begin – A Reminder that the ADA isn't the only federal law that mandates accessibility-

Key Federal Accessibility Laws



- The Architectural Barriers Act (ABA) -1968
- Section 504 of the Rehabilitation Act (504) -1973
- The Fair Housing Amendments Act (FHA) -1988
- The Americans with Disabilities Act (ADA) -1990



Updated ADA DOJ Regulations



-On July 26, 2010, the 20th anniversary of the signing of the Americans with Disabilities Act (ADA), the Department of Justice (DOJ) announced the issuance of revised ADA Regulations governing Title II and Title III entities (2010 Regulations) which included revised ADA Accessibility Guidelines for Buildings and Facilities (2010 ADA Standards for Accessible Design).

-The 2010 ADA Standards for Accessible Design are based on the US Access Board's 2004 ADA/ABA Accessibility Guidelines.



-On March 15, 2012 compliance with the 2010 ADA Standards for Accessible Design became mandatory for new construction, alterations to existing facilities, and existing structures to the extent they must comply with their ongoing obligation for readily achievable barrier removal (the removal of inaccessible elements without much difficulty or expense).



- Created in 1990
- Covers **State and Local Government Services and Places of Public Accommodation***
- Prior to 3/15/12 - Referenced 1991 Americans w/Disabilities Act Accessibility Guidelines (ADAAG) for new construction and alterations
- Enforced by the United States Department of Justice (DOJ)

*Broad civil rights law guarantying equal opportunity for individuals with disabilities in **State and Local Government Services and Public Accommodations**.



• **Title 2 Entities** can include:

- Library's
- Public Schools
- Courts
- Town Halls
- Etc.

State and local government funded agencies are prohibited from discriminating against a qualified individual with a disability.



ADA Title II & “Program Accessibility”



- State & local governments must ensure that individuals with disabilities are not excluded from services, programs and activities because programs are not accessible.
- Public entities will not have to make each facility accessible to individuals with disabilities as long as equivalent access to the program is ensured.

For example: Relocating a workshop from the 2nd to the 1st floor.

“Undue Burden” standard – places responsibility on the public entity to demonstrate that any accessible modifications/accommodations would result in a fundamental alteration in the nature of a service or program, or cause excessive financial and administrative burden.



• **Title 3 Entities** can include:

- Restaurants
- Businesses
- Hotels
- Malls
- Leasing Offices
- Etc.

Private entities that own, operate, or lease places of public accommodation may not discriminate on the basis of disability in providing goods and services.





ADA Title III “Barrier Removal” Standard

- Title III requires that private entities that own, operate, or lease places of public accommodation may not discriminate on the basis of disability in providing goods and services and must remove all structural and architectural barriers to accessibility by persons with a disability if such removal is **"readily achievable."** (*Easily accomplishable without much difficulty or expense*)





Barrier Removal & Title III of the ADA – No such thing as “grandfathered”!

- Barriers can often be removed by making small changes to the physical environment, **HOWEVER**, the exact costs that must be spent on barrier removal are not detailed in the ADA.
- The judgment of what is readily achievable is done on a case-by-case basis. This process is not a one-time effort, but rather is something that must continually be re-evaluated. Something that is cost prohibitive today for a facility, might be affordable if planned for in the following year’s budget.





•Structurally Impracticable

- Rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features.
- Required to comply in other aspects or features to the maximum extent practicable.





One other important note for Existing Facilities, to the extent any of the 2010 Regulations reduce the technical requirements or the number of required accessible elements below the number required in the current Standards, the technical requirements or the number of accessible elements in a facility may be reduced in accordance with the requirements of the 2010 Standards.





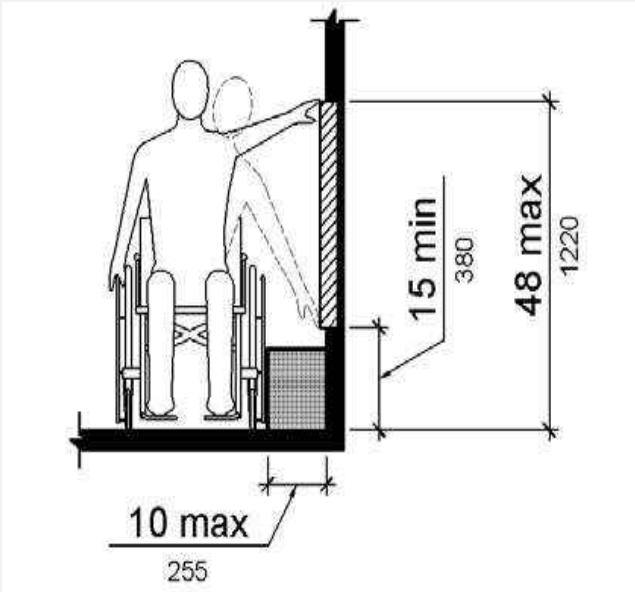
•2010 ADA Standards for Accessible Design

- New Standard was permitted as of September 15, 2010.
- New Standard became mandatory on March 15, 2012.
- The new regulations include a general **safe harbor** under which those elements in covered facilities built or altered in compliance with the 1991 Standards are not required to be brought into compliance with the 2010 Standards until those elements are scheduled for alteration(s).
- The **safe harbor** does not apply to those elements in existing facilities that were not governed by the 1991 Standards, but are now governed by the new regulations.



Example of Safe Harbor

Unobstructed Side Reach Range - 48 inches maximum
aff for high side reach and 15 inches aff for low reach (as
opposed to 54 inches for high reach and 9 inches for low
reach in 1991 ADAAG.)





- The “safe harbor” does not apply to those elements in existing facilities that were not governed by the 1991 Standards, but are now governed by the new regulations.
 - i.e. swimming pools*, play areas, recreational boating facilities, fishing piers and platforms, and others.
 - As to Title II, the new regulations also provide additional requirements for detention and judicial facilities and covered residential dwelling units.





Note for Existing Pools – US DOJ has delayed effective date



- On May 21, 2012 the US DOJ revised the regulations implementing the Americans with Disabilities Act to extend until January 31, 2013, the compliance date for the application of sections 242 and 1009 of the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design for existing pools and spas.
- www.ada.gov/regs2010/ADArege2012/finalrule_existingpools_FR_may21.htm



ADA - Tax Incentives for Improving Accessibility

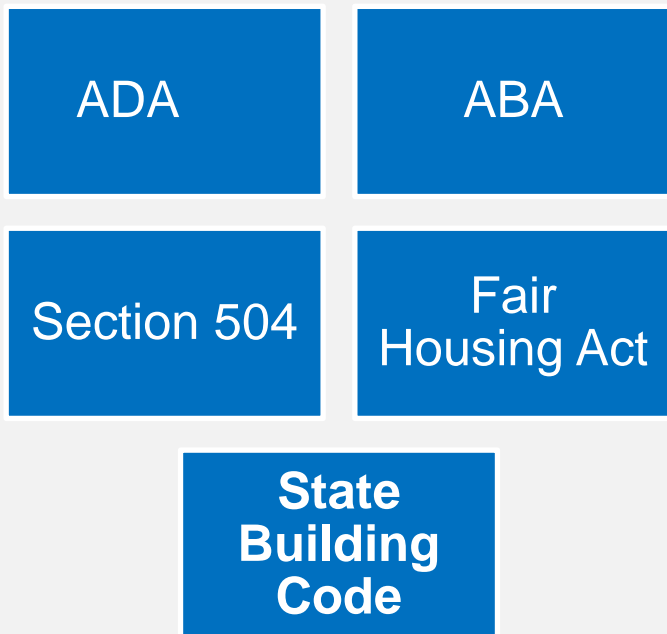
- Section 44 of IRS Code
- Tax credit maximum - \$5,000
- Tax deduction –maximum \$15,000



www.ada.gov/taxincent.htm

The Building Code

- Most state/local building codes apply accessibility requirements to commercial and multi-family residential construction.



International Building Code Accessibility Requirements

- **Scoping Requirements:**

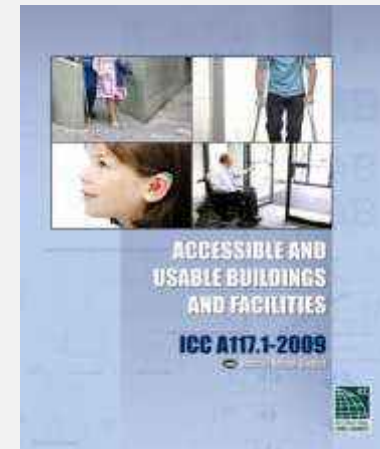
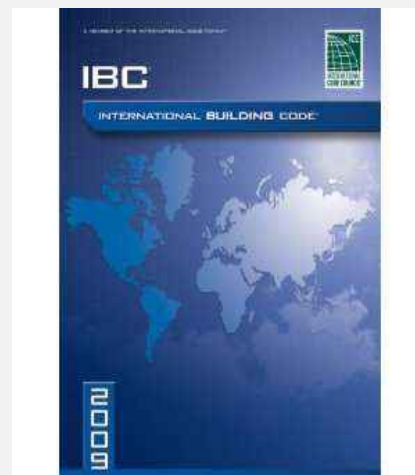
“What, Where and How Many”

(International Building Code & International Existing Building Code)

- **Technical Requirements:**

“How”

(ICC/ANSI A117.1-2003 or 2009)



Application of the IBC & the IEBC Accessibility Requirements

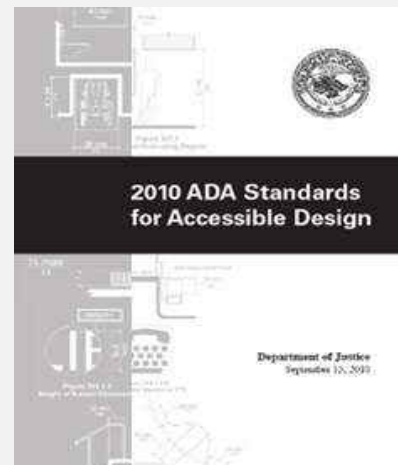
- New Construction
- Alterations
- Additions
- Change in Use/Occupancy



- **But Dom...What about Barrier Removal and Program Access obligations that you just talked about?**

Accessibility laws are often cumulative.

Note to Designers: Building officials enforce the code, while designers are responsible for meeting all applicable requirements.



Exercise #1



Project Description:

- Mixed: Commercial (Retail + Office) and Residential (R-2)
- Built by a Private Developer

Q: What federal accessibility laws does the architect need to comply with in addition to the Building Code??

ABA

504

FHA

ADA

Round #2:

Technical Differences
between the 2010 ADA
Standards for Accessible
Design

vs.

Accessibility and the
International Building
Code & ICC ANSI A117.1

In other words, what are
the differences and which
is more stringent?



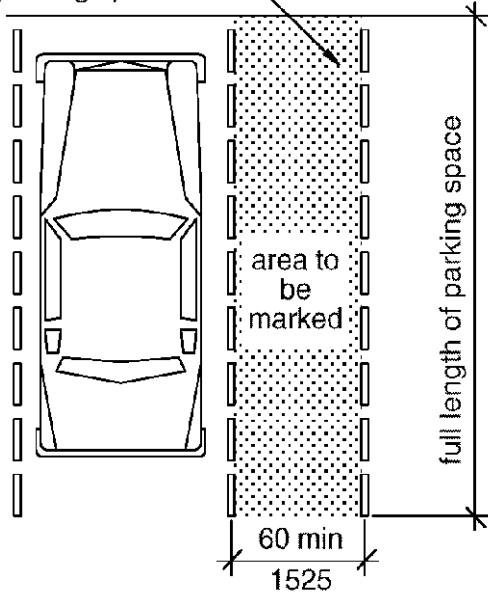
Here's the Good News...

“...As part of this update, the (Access) Board has made its guidelines more consistent with model building codes, such as the International Building Code (IBC), and industry standards. It coordinated extensively with model code groups and standard-setting bodies throughout the process so that differences could be reconciled.

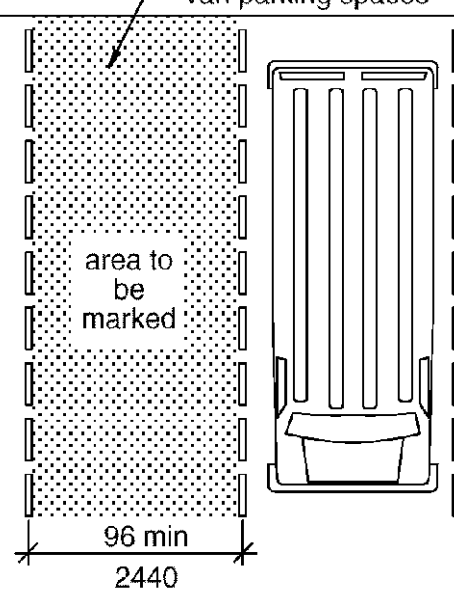
As a result, a historic level of harmonization has been achieved which has brought about improvements to the guidelines as well as to counterpart provisions in the IBC and key industry standards, including those for accessible facilities issued through the American National Standards Institute (ANSI). The Board believes that this achievement will greatly facilitate compliance.”



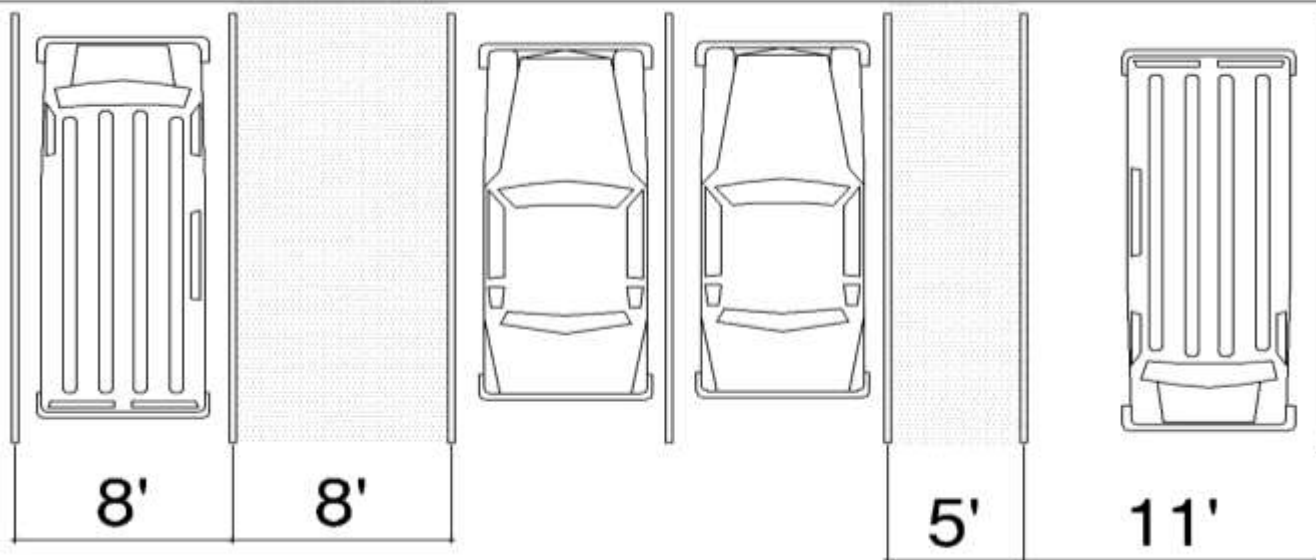
access aisle serving
car parking spaces



access aisle serving
van parking spaces



**2010 ADA
Standards
502
*1 of every 6
spaces
requires an 8
foot wide
access aisle***





State specific signage at accessible parking spaces.

The 2010 ADA Standards only require the ISA and a Van Accessible Sign mounted no lower than 60 inches above grade.

Emerging Accessibility Issue



2010 ADA Standards-

206.2.3 Multi-Story Buildings & Facilities

Accessible Routes



At least one accessible route shall connect each story and mezzanine in multi-story buildings and facilities.

Exceptions:

- *Private* facilities < 3 stories or < 3000 sq. ft./ story
- *Public* facilities (2 story) - if 1 story not open to public, occupancy of 5 or fewer

1104.4 Multilevel buildings and facilities.

At least one accessible route shall connect each accessible level, including mezzanines, in multistory buildings and facilities.

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 (278.7 m²) and are located above and below accessible levels. This exception shall not apply to:
 - 1.1. Multiple tenant facilities of Group M occupancies containing five or more tenant spaces;
 - 1.2. Levels containing offices of health care providers (Group B or I); or
 - 1.3. Passenger transportation facilities and airports (Group A-3 or B).

A117.1 408 Limited-Use/Limited Application Elevators

ASME A17.1, ANSI and the IBC recognize this type of low-rise elevator.

Its application is “limited” only by the restriction of the ASME code: 18 s.f. maximum car size, 25 foot maximum travel distance, 30 ft/min travel speed.



Important!



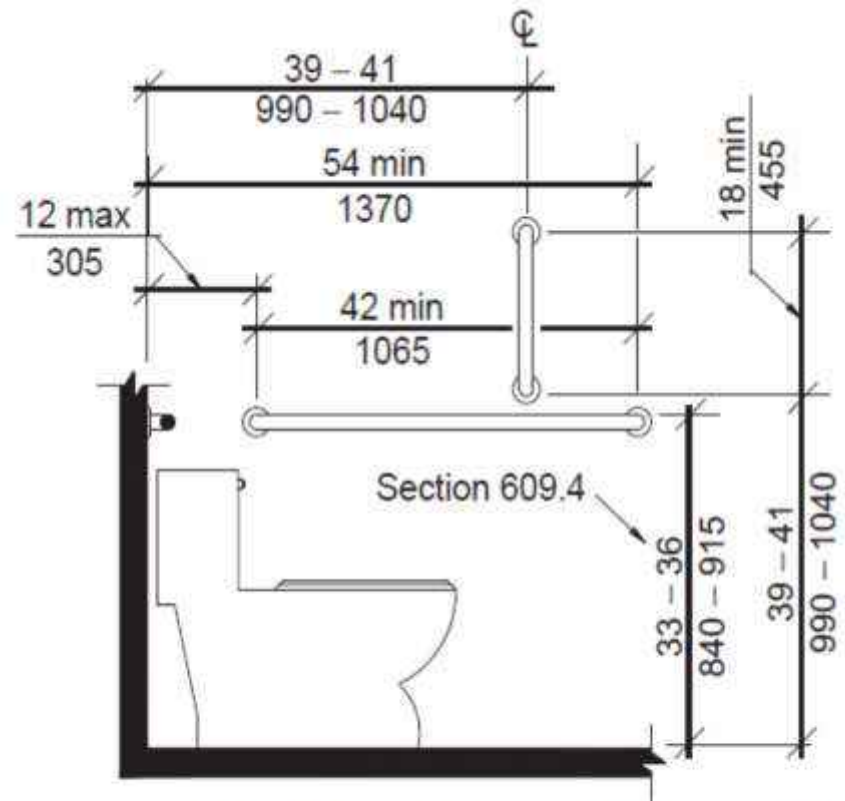
LU/LAs are “limited” by the restrictions of ASME A17.1 and not any scoping provisions in the IBC.

The 2010 ADA Standards will only permit in existing construction and to those spaces where lifts are permitted to travel in new construction

(e.g., stages/performing areas, wheelchair viewing locations in places of assembly, incidental occupiable spaces, etc.)

ANSI A117.1 604.5.1 Fixed Side Wall Grab Bars

- A vertical grab bar 18 inches minimum in length shall be mounted with the bottom of the bar located between 39 inches and 41 inches above the floor, and with the centerline of the bar located between 39 inches and 41 inches from the rear wall.



Note: For children's dimensions see Fig. 609.4.2

FIG. 604.5.1
SIDE WALL GRAB BAR FOR WATER CLOSET

Family or assisted use toilet and bathing rooms – 1109.2.1

- Required in mercantile and assembly occupancies
- Provided where an aggregate of 6 or more male and female water closets is required
- Provided in addition to accessible toilet and bathing rooms
- Intended for persons who need assistance from person of opposite sex
- Shall be located not more than one story above or below separate sex toilet rooms. The accessible route from the separate sex toilet room to a family use room shall not exceed 500 feet.



Round #3:

New 2010 ADA
Standards
Features that
Extend Beyond
the International
Building
Code...



ADA - Residential Housing

The Past



- 1991 ADA Standards for Accessible Design contained no requirements for residential facilities
- Title II entities that build residential housing encouraged to use the Uniform Federal Accessibility Standards (UFAS)

ADA Residential Housing – New Standards



- 2010 ADA Standards for Accessible Design set forth explicit requirements for residential facilities
- Scoping requirements for residential facilities are set forth in Section 233
- 5% requirement for physical access for individuals with mobility disabilities
- 2% requirement for individuals with communication disabilities

ADA - Housing at Places of Education



- Housing operated by or on behalf of a place of education (includes Greek)
 - Undergraduate housing operated during the school year only
 - follows the transient lodging standards
 - Graduate housing – uses residential standards (5% / 2%)
- Undergraduate – transient lodging ++
 - Rooms with mobility and communication features dispersed among room types
 - Accessible route throughout the unit
 - Turning space (60 inches or T-shaped turn)

ADA - Housing at Places of Public Education (cont')



- Undergraduate housing (continued)
 - Kitchens (where provided) must have:
 - 60” turning space or T-shaped turn
 - Lowered work surface (up to 34 inches AFF) at least 30 inches wide & next to oven (latch side if side opening)
 - Visible fire alarms and notification devices (telephone calls, door knock or bell)
 - Volume control phones / TTY-ready outlet
 - Multi-story housing must have an elevator



ADA - Housing at Places of Public Education (cont')

- Graduate Student Housing
 - 5% mobility / 2% communication
 - Dispersion among various unit types, unless one-story units are equivalent
 - Same kitchens except turning radius requirements
 - Doorbell (with visual notification) must be hardwired (sections §35.151(f), 224, 233, 804, 406. and 809)

ADA Guest Rooms – Transient Lodging



- What's new in the rooms:
 - Vanity counter space provided in accessible room must be comparable to that provided in non accessible rooms
 - Fire alarm signal devices, including visible signal devices, must be permanently installed
 - Audible fire alarm signals sound levels shall not exceed 110 dB



ADA – Places of Lodging

- Places of lodging subject to this part shall comply with the provisions of the 2010 Standards applicable to transient lodging, including, but not limited to, the requirements for transient lodging guest rooms in sections [224](#) and [806](#) of the 2010 Standards.
- **(1) Guest rooms.** Guest rooms with mobility features in places of lodging subject to the transient lodging requirements of 2010 Standards shall be provided as follows –
 - (i) Facilities that are subject to the same permit application on a common site that each have 50 or fewer guest rooms may be combined for the purposes of determining the required number of accessible rooms and type of accessible bathing facility in accordance with table [224.2](#) to section [224.2](#) of the 2010 Standards.



ADA – Places of Lodging

- (ii) Facilities with more than 50 guest rooms shall be treated separately for the purposes of determining the required number of accessible rooms and type of accessible bathing facility in accordance with table [224.2](#) to section 224.2 of the 2010 Standards.
- **(2) Exception.** Alterations to guest rooms in places of lodging where the guest rooms are not owned or substantially controlled by the entity that owns, leases, or operates the overall facility and the physical features of the guest room interiors are controlled by their individual owners are not required to comply with § 36.402 or the alterations requirements in section 224.1.1 of the 2010 Standards.
- **(3) Facilities with residential units and transient lodging units.** Residential dwelling units that are designed and constructed for residential use exclusively are not subject to the transient lodging standards.

ADA - Social Service Center Establishments



- Group homes, halfway houses, shelters, or similar social service center establishments that provide either temporary sleeping accommodations or residential dwelling units that are subject to this section shall comply with the provisions of the 2010 Standards applicable to residential facilities, including, but not limited to, the provisions in sections [233](#) and [809](#).(1) In sleeping rooms with more than 25 beds covered by this section, a minimum of 5% of the beds shall have clear floor space complying with section [806.2.3](#) of the 2010 Standards.

ADA - Social Service Center Establishments



- Facilities with more than 50 beds covered by this section that provide common use bathing facilities, shall provide at least one roll-in shower with a seat that complies with the relevant provisions of section [608](#) of the 2010 Standards.
- Transfer-type showers are not permitted in lieu of a roll-in shower with a seat, and the exceptions in sections [608.3](#) and [608.4](#) for residential dwelling units are not permitted. When separate shower facilities are provided for men and for women, at least one roll-in shower shall be provided for each group.



ADA – Medical Care Facilities

- Medical care facilities that are subject to this section shall comply with the provisions of the 2010 Standards applicable to medical care facilities, including, but not limited to, sections [223](#) and [805](#).
- In addition, medical care facilities that do not specialize in the treatment of conditions that affect mobility shall disperse the accessible patient bedrooms required by section [223.2.1](#) of the 2010 Standards in a manner that is proportionate by type of medical specialty.



2010 ADA Standards Recreation Facilities (234 - 243)

- amusement rides (234)
- recreational boating facilities (235)
- exercise machines (236)
- fishing piers and platforms (237)
- golf facilities (238)
- miniature golf facilities (239)
- play areas (240)
- saunas and steam rooms (241)
- swimming pools, wading pools, and spas (242)
- shooting facilities with firing positions (243)

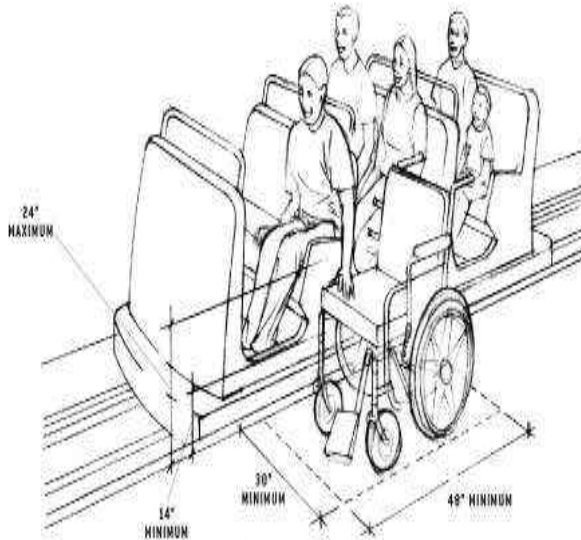
Play Areas (240)



- Accessible Routes must serve play components (with Exceptions)
- Ground surface materials used on accessible routes, clear floor spaces and turning spaces
- Details on transfer systems

Amusement Rides - 234

There are four types of rides that are not covered by the guidelines:



RISE SEAT DESIGNED FOR TRANSFER

- Mobile or portable amusement rides such as those in traveling carnivals, State and county fairs, and festivals
- Rides that are controlled or operated by the rider (such as bumper cars and go-carts)
- Rides designed for children, assisted on and off by an adult, are only required to provide an accessible route to the ride and a turning space in the load and unload area.
- Rides that do not have seats must only provide an accessible route to the load and unload areas and a turning space in the load and unload area.

Fishing Piers and Platforms (237)

- Newly designed or newly constructed and altered fishing piers and platforms.



Recreational Boating Facilities (235)

- Focus on newly designed or newly constructed and altered boating facilities. (*Passenger vessels & ferry docks to be addressed in future rulemaking*).



Includes fixed and floating facilities.

Golf Facilities (238)

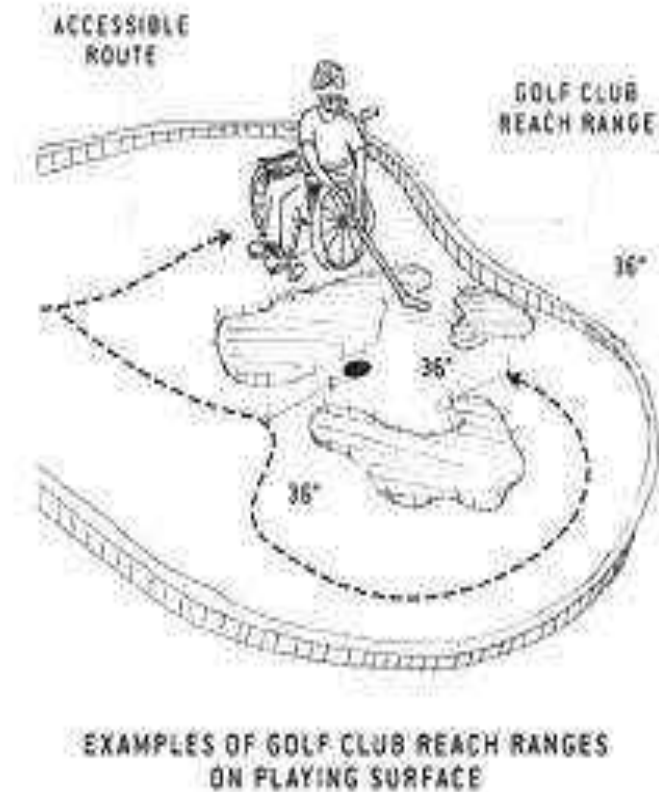


- Focus on newly designed or newly constructed and altered golf courses and driving ranges.
- Accessible route provided throughout course – can be accomplished via golf car passage route
- Access to teeing grounds, putting greens, weather shelters, etc...



Miniature Golf Facilities (239)

- At least 50 percent of the holes on a miniature golf course must be accessible—if possible, operators should make all holes accessible.
- Accessible holes must be consecutive, to offer a more socially integrated experience.



Swimming Pools – When are they required to be accessible?



Pools – What does The Fair Housing Act Say?

- **When swimming pools are provided as a public and common use amenity, what are the accessibility requirements under the Fair Housing Act?**
- Requirement 2 (of the FHA Design & Construction Requirements) covers recreational facilities such as swimming pools. A swimming pool must be located on an accessible route, but there is no requirement that an accessible route be provided into the pool. In addition, a door or gate accessing the pool must meet Requirement 3 and the route must provide access to the deck around the pool.
- Buildings and amenities in a Fair Housing Covered development, such as laundry buildings and recreational facilities (clubhouses, swimming pools, spas, game rooms, and exercise rooms), will be covered by the ADA only if they are available for use by people other than residents and their guests. If such facilities are made available to the public only periodically, such as for a festival or seasonal event, they must comply with the ADA during the event.

Pools – What does the International Building Code say?

- **1109.14 Recreational and sports facilities.**

Recreational and sports facilities shall be provided with *accessible* features in accordance with Sections 1109.14.1 through 1109.14.4.

- **1109.14.1 Facilities serving a single building.**

In Group R-2 and R-3 occupancies where recreational facilities are provided serving a single building containing *Type A units* or *Type B units*, 25 percent, but not less than one, of each type of recreational facility shall be *accessible*. Every recreational facility of each type on a site shall be considered to determine the total number of each type that is required to be *accessible*.

Pools – What does the International Building Code Say?

- **1109.14.2 Facilities serving multiple buildings.**

In Group R-2 and R-3 occupancies on a single site where multiple buildings containing *Type A units* or *Type B units* are served by recreational facilities, 25 percent, but not less than one, of each type of recreational facility serving each building shall be accessible. The total number of each type of recreational facility that is required to be accessible shall be determined by considering every recreational facility of each type serving each building on the site.

Important!

- The International Building Code typically references ICC ANSI A117.1 – 2003
- ICC ANSI A117.1 – 2003 does not contain technical requirements for pools, golf courses, playgrounds, etc.....
- **BUT...**

ICC ANSI A117.1 – 2009 Does- (*A glimpse of what's to come...*)

- 2009 ANSI A117.1 now contains technical requirements for Recreational Facilities (including pools) that previous editions of ANSI A117.1 did not contain.
- These technical requirements have been harmonized with those found in the 2010 ADA Standards for Accessible Design.

Chapter 11. Recreational Facilities

1101 General

1101.1 Scope. Recreational facilities required to be accessible by the scoping provisions adopted by the administrative authority shall comply with the applicable provisions of Chapter 11.

1102 Amusement Rides.

1102.1 General. Accessible amusement rides shall comply with Section 1102.

1102.2 Accessible Routes. Accessible routes serving amusement rides shall comply with Chapter 4.

ICC ANSI A117.1 2009 Section 1109.1 General and 1109.2 Pool Lifts

1109 Swimming Pools, Wading Pools, Hot tubs and Spas

1109.1 General. Swimming pools, wading pools, hot tubs and spas shall comply with Section 1109.

1109.1.1 Swimming pools. At least two accessible means of entry shall be provided for swimming pools. Accessible means of entry shall be swimming pool lifts complying with Section 1109.2; sloped entries complying with Section 1109.3; transfer walls complying with Section 1109.4, transfer systems complying with Section 1109.5; and pool stairs complying with Section 1109.6. At least one accessible means of entry provided shall comply with Section 1109.2 or 1109.3.

EXCEPTIONS:

1. Where a swimming pool has less than 300 linear feet (91 m) of swimming pool wall, no more than one accessible means of entry shall be required.
2. Wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area shall not be required to provide more than one accessible means of entry provided that the accessible means of entry is a swimming pool lift complying with Section 1109.2, a sloped entry complying with Section 1109.3, or a transfer system complying with Section 1109.5.
3. Catch pools shall not be required to provide an accessible means of entry provided that the catch pool edge is on an accessible route.

1109.1.2 Wading pools. At least one sloped entry complying with Section 1109.3 shall be provided in wading pools.

1109.1.3 Hot tubs and Spas. At least one accessible means of entry shall be provided for hot tubs and spas. Accessible means of entry shall comply with swimming pool lifts complying with Section 1109.2; transfer walls complying with Section 1109.4; or transfer systems complying with Section 1109.5.

EXCEPTION: Where hot tubs or spas are provided in a cluster, no more than 5 percent, but not less than one hot tub or spa in each cluster shall be required to comply with Section 1109.1.3.

1109.2 Pool Lifts. Pool lifts shall comply with Section 1109.2.

1109.2.1 Pool Lift Location. Pool lifts shall be located where the water level does not exceed 48 inches (1220 mm).

EXCEPTIONS:

1. Where the entire pool depth is greater than 48 inches (1220 mm), compliance with Section 1109.2.1 shall not be required.
2. Where multiple pool lift locations are provided, no more than one pool lift shall be required to be located in an area where the water level is 48 inches (1220 mm) maximum.

1109.2.2 Seat Location. In the raised position, the centerline of the seat shall be located over the deck and 16 inches (405 mm) minimum from the edge of the pool. The deck surface between the centerline of the seat and the pool edge shall have a slope not steeper than 1:48.

1109.2.3 Clear Deck Space. On the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The space shall be 36 inches (915 mm) minimum in width and shall extend forward 48 inches (1220 mm) minimum from a line located 12 inches (305 mm) behind the rear edge of the seat. The clear deck space shall have a slope not steeper than 1:48.

1109.2.4 Seat Height. The height of the lift seat shall be designed to allow a stop at 16 inches (405 mm) minimum and 19 inches (485 mm) maximum measured from the deck to the top of the seat surface when in the raised (load) position.

ICC ANSI A117.1 2009

Section 1109.2 Pool Lifts

1109.2.5 Seat. The seat shall be 16 inches (405 mm) minimum in width, provide a back rest, and be of a firm and stable design.

1109.2.6 Footrests and Armrests. Footrests shall be provided and shall move with the seat. If provided, the armrest positioned opposite the water shall be removable or shall fold clear of the seat when the seat is in the raised (load) position.

EXCEPTION: Footrests shall not be required on pool lifts provided in spas.

1109.2.7 Operation. The lift shall be capable of unassisted operation from both the deck and water levels. Controls and operating mechanisms shall be unobstructed when the lift is in use and shall comply with Section 309.4.

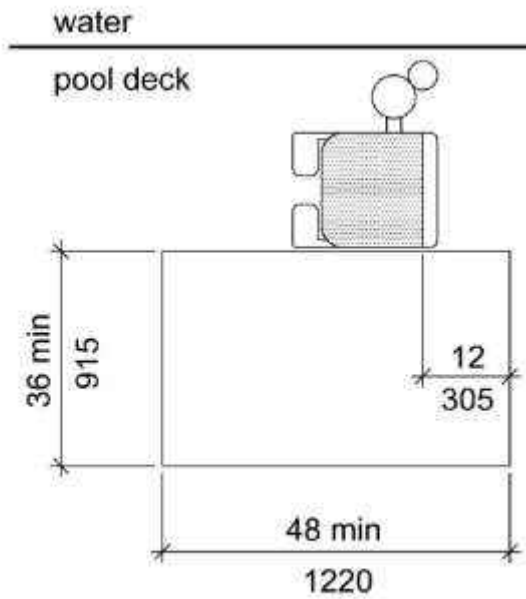


FIGURE 1109.2.3
CLEAR DECK SPACE AT POOL LIFTS

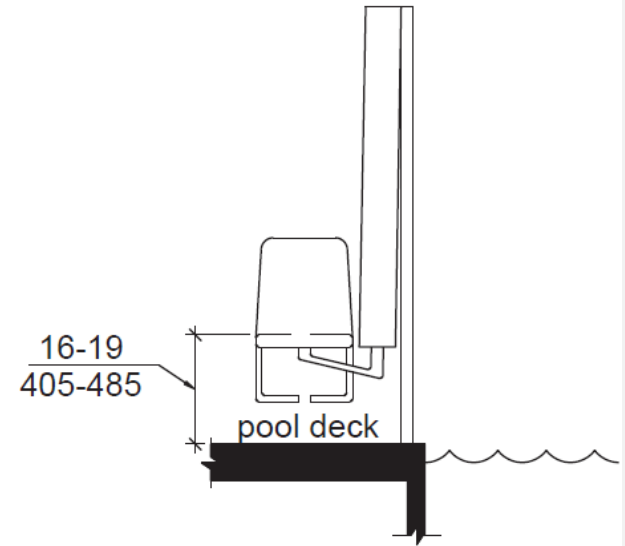


FIGURE 1109.2.4
POOL LIFT SEAT HEIGHT

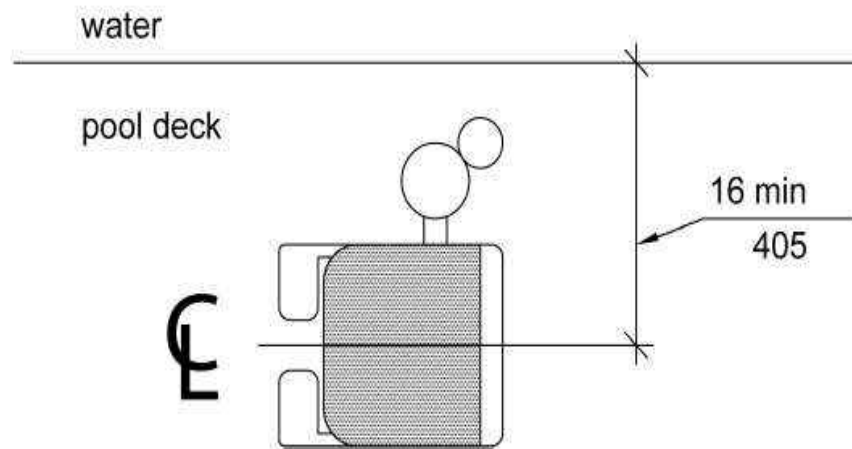


FIGURE 1109.2.2
POOL LIFT SEAT LOCATION

ICC ANSI A117.1 2009

Section 1109.2 Pool Lifts

1109.2.8 Submerged Depth. The lift shall be designed so that the seat will submerge to a water depth of 18 inches (455 mm) minimum below the stationary water level.

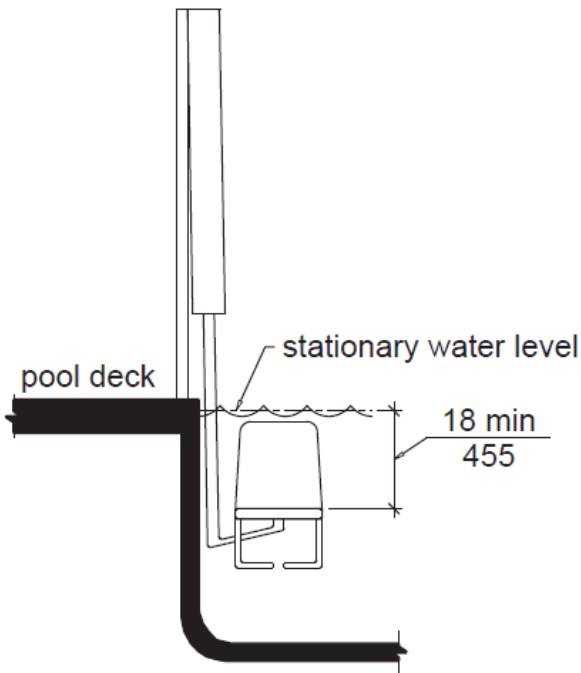


FIGURE 1109.2.8
POOL LIFT SUBMERGED DEPTH

1109.2.9 Lifting Capacity. Single person pool lifts shall have a weight capacity of 300 pounds (136 kg) minimum and be capable of sustaining a static load of at least one and a half times the rated load.

Existing Pools & the IBC

(For jurisdictions where 2009 A117.1 applies)

- **3411.6 Alterations** (*Any construction or renovation to an existing structure other than repair or addition*)
- A building, facility or element that is altered shall comply with the applicable provisions in Chapter 11 of this code and ICC A117.1, unless *technically infeasible*. Where compliance with this section is *technically infeasible*, the *alteration* shall provide access to the maximum extent technically feasible.

TECHNICALLY INFEASIBLE

- An *alteration* of a building or a facility that has little likelihood of being accomplished because the existing structural conditions require the removal or *alteration* of a load-bearing member that is an essential part of the structural frame, or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.

What about the 2010 ADA Standards?

- The 2010 ADA Standards for Accessible Design
 - Compliance Permitted as of September 15, 2010
 - Became Mandatory on March 15, 2012
 - Available at www.ada.gov
 - Enforced by the US Department of Justice
 - Compliance required for pools covered under Title II and Title III of the ADA.

ADA – Highlights of Key Regulatory Changes for Titles II and III

- Safe Harbor.
 - The new regulations include a general “safe harbor” under which those elements in covered facilities built or altered in compliance with the 1991 Standards are not required to be brought into compliance with the 2010 Standards until those elements are scheduled for alteration.

- The “safe harbor” does not apply to those elements in existing facilities that were not governed by the 1991 Standards, but are now governed by the new regulations.
 - i.e. swimming pools*, play areas, recreational boating facilities, fishing piers and platforms, and others.
 - As to Title II, the new regulations also provide additional requirements for detention and judicial facilities and covered residential dwelling units.





Note for Existing Pools – US DOJ has delayed effective date

- On May 21, 2012 the US DOJ revised the regulations implementing the Americans with Disabilities Act to extend until January 31, 2013, the compliance date for the application of sections 242 and 1009 of the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design for existing pools and spas.
- www.ada.gov/regs2010/ADAregs2012/finalrule_existingpools_FR_may21.htm

What Standards Apply to Existing Facilities NOT undergoing alterations that are required to comply with the ADA?

STATE AND LOCAL GOVERNMENTS: TITLE II

“A public entity shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.”

Program accessibility limited where actions would result in a “fundamental alteration in the nature of the program”

PLACES OF PUBLIC ACCOMMODATION: TITLE III

Remove physical and communication barriers to existing facilities by persons with disabilities

- “Readily achievable”
Easy to accomplish without much difficulty or expense

How do the IBC and ICC ANSI A117.1 – 2009 impact existing pools?

(For jurisdictions where 2009 A117.1 is enforceable)

- For the building code and the ICC ANSI A117.1 – 2009 technical requirements to “kick in”, an existing pool will have to undergo an *alteration*.
- This is different than the ADA mandated “Barrier Removal” and “Program Accessibility” standards – which are ongoing obligations, even if no alterations occur.

How can a public accommodation decide what needs to be done?

- One effective approach is to conduct a “self-evaluation” of the facility to identify existing barriers.
- While not required by the ADA, a serious effort at self-assessment and consultation can save resources by identifying the most efficient means of providing required access and can diminish the threat of litigation.
- It serves as evidence of a good faith effort to comply with the barrier removal requirements of the ADA. This process should include consultation with individuals with disabilities or with organizations representing them and procedures for annual re-evaluations.

If a public accommodation determines that its facilities have barriers that should be removed, but it is not readily achievable to undertake all of the modifications now, what should it do?

The Department of Justice recommends that a public accommodation develop an implementation plan designed to achieve compliance with the ADA's barrier removal requirements. Such a plan, if appropriately designed and executed, could serve as evidence of a good faith effort to comply with the ADA's barrier removal requirements.

Swimming Pools, Wading Pools, and Spas (242)

- Focus on newly designed or newly constructed and altered swimming pools, wading pools, aquatic recreation facilities, and spas
- Large pools must have a minimum of two accessible means of entry. A large pool is defined as any pool with over 300 linear feet of pool wall



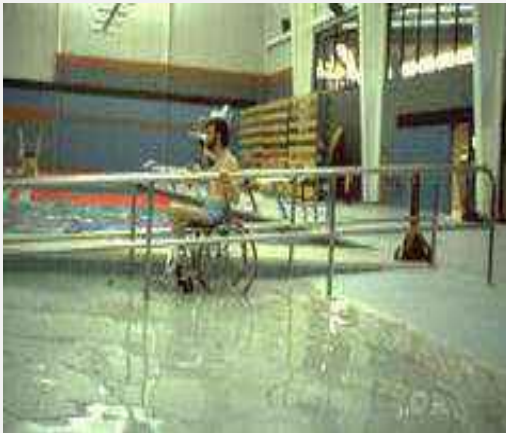


Swimming Pools, Wading Pools, and Spas (242)

- The primary means of entry must be either a sloped entry into the water or a pool lift that is capable of being independently operated by a person with a disability.
- The secondary means of entry could be a pool lift, sloped entry, transfer wall, transfer system, or pool stairs.

Swimming Pools, Wading Pools, and Spas (242)

- Pools with less than 300 linear feet of pool wall are only required to provide one accessible means of entry, which must be either a pool lift or sloped entry
- An accessible means of entry or exit is not required into catch pools. However, an accessible route must connect to the edge of the catch pool.



Swimming Pools, Wading Pools, and Spas (242)



- Spas must provide at least one accessible means of entry, which can be a pool lift, transfer wall, or transfer system.
- If spas are provided in a cluster, 5 percent of the total—or at least one spa—must be accessible. If there is more than one cluster, one spa or 5 percent per cluster must be accessible.

ADA - Pool accessibility options vary based on type and size of pool

PERMITTED MEANS OF POOL ACCESS					
POOL TYPE	SLOPED ENTRY	LIFT	TRANSFER WALLS	TRANSFER SYSTEMS	STAIRS
Swimming (less than 300 linear feet of pool wall)	✓	✓			
Swimming (300 or more linear feet of pool wall) —two means of entry required	✓*	✓*	✓	✓	✓
Wave action, leisure river, and other pools where user entry is limited to one area	✓	✓		✓	
Wading pools	✓				
Spas		✓	✓	✓	

*Primary means must be by sloped entry or lift, secondary means can be any of the permitted types.

2010 ADA Standards Section 1009

Sloped Entry

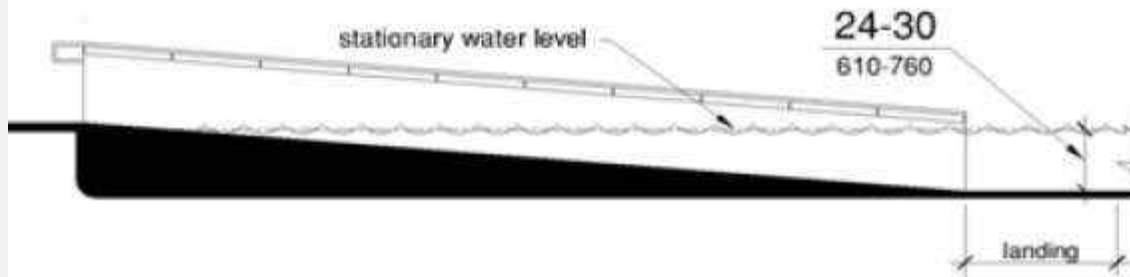
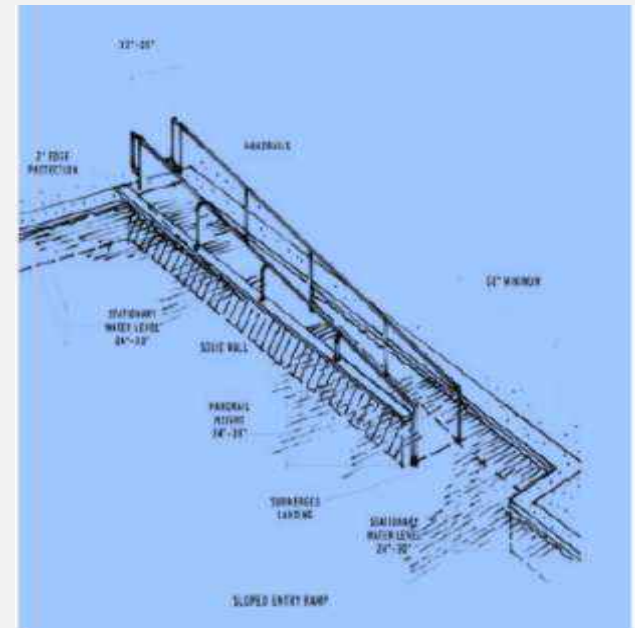
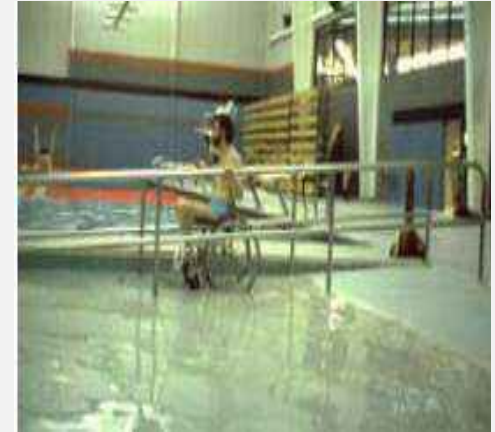


Fig. 72

Sloped Entry Submerged Depth

- Extend to 24 inches to 30 inches below stationary water level
- 1:12 maximum slope
- Handrails - 33 inches min - 38 inches max clear width



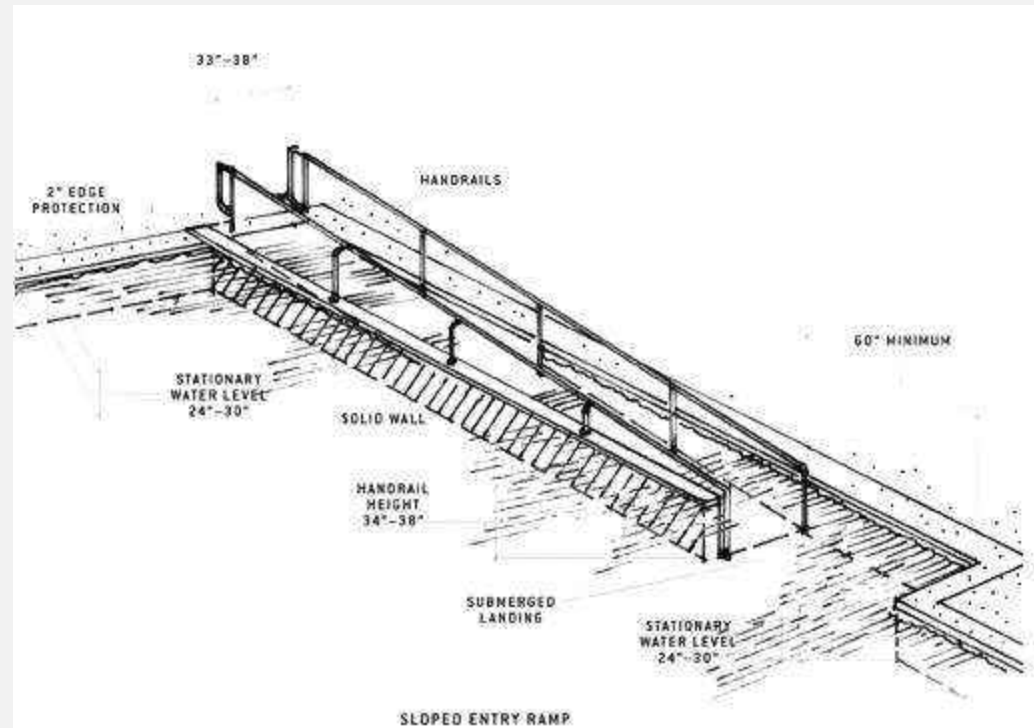
2010 ADA Standards Section 1009

Sloped Entry Ramp

- Sloped entries must comply with accessible route provisions (36 inch minimum width, maximum 1:12 or 8.33% slope), except that the surface does not need to be slip resistant.
- The slope may be designed as zero grade beach or ramp access. With either design, the maximum slope permitted is 1:12 (8.33%).
- In most cases, it is not appropriate to submerge personal wheelchairs and mobility devices in water. Some have batteries, motors, and electrical systems that can be damaged or contaminate the pool.
- Facilities that use sloped entries are encouraged to provide an aquatic wheelchair designed for access into the water. Persons transfer to the aquatic wheelchair and access the water using it, leaving their personal mobility device on the deck.



2010 ADA Standards Section 1009



2010 ADA Standards Section 1009

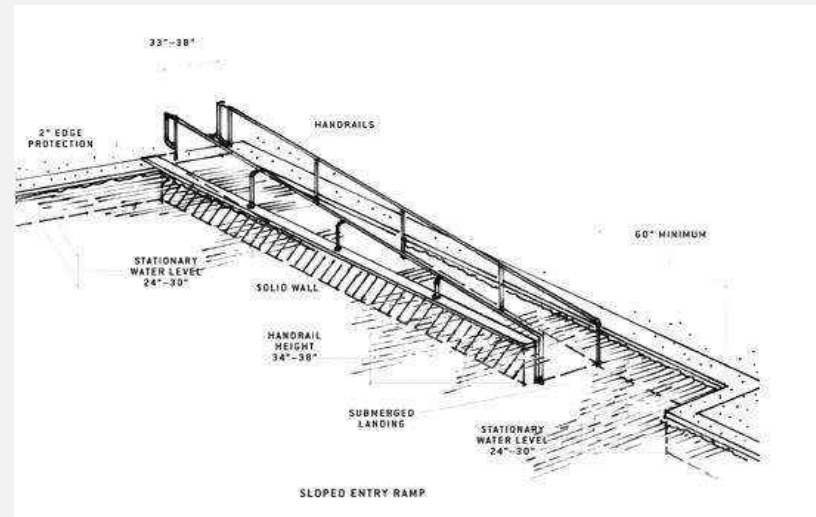
Sloped Entry Submerged Depth

- Sloped entries must extend to a depth between 24 inches minimum and 30 inches maximum below the stationary water level.
- This depth is necessary for individuals using the sloped entry to become buoyant.
- Where the sloped entry has a running slope greater than 1:20 (5%), a landing at both the top and bottom of the ramp is required.
- At least one landing must be located between 24 and 30 inches below the stationary water level.
- Landings must be a minimum of 36 inches in width and 60 inches in length. The sloped entry may be a maximum of 30 feet at 1:12 (8.33%) slope before an intermediate landing is required. Adding a solid wall on the side closest to the water can enhance safety.

2010 ADA Standards Section 1009

Sloped Entry Handrails

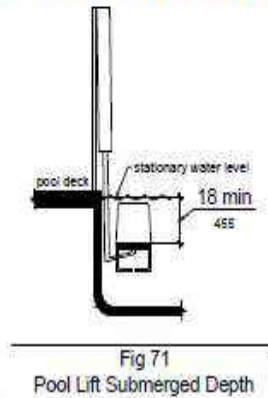
- Sloped entries must have handrails on both sides regardless of the slope.
- Handrail extensions are required at the top landing but not at the bottom.
- The clear width between handrails must be between 33 and 38 inches.
- The handrail height must be between 34 and 38 inches to the top of the gripping surface.
- This provision does not require the handrails to be below the stationary water level, which could be considered an underwater obstruction.
- No minimum width is required between handrails provided on sloped entries that serve wave action pools, leisure rivers, sand bottom pools, and other pools where people can enter only in one place. Handrails are required to comply with ADA provisions (diameter, non-rotating, and height).



2010 ADA Standards Section 1009

Pool Lift

- Located where water does not exceed 48 inches
- Footrests – must be provided and move with seat



- Pool lifts must be located where the water level is not deeper than 48 inches. This provides the opportunity for someone to provide assistance from a standing position in the water if desired.
- If multiple pool lift locations are provided, only one must be where the water is less than 48 inches.
- If the entire pool is deeper than 48 inches, an exception allows operators to use a pool lift in any location as an accessible means of entry.

2010 ADA Standards Section 1009

Pool lift

- **Armrest** – if provided opposite water shall be removable or fold in raised or load position
- **Capable of unassisted operation** – both deck and water



Pool Lift Seats

Lift seats must be a minimum of 16 inches wide. In the raised (load) position, the centerline of the seat must be located over the deck, a minimum of 16 inches from the edge of the pool. The deck surface between the centerline of the seat and the pool edge cannot have a slope greater than 1:48.

- Although not required, seats with backs will enable a larger number of persons with disabilities to use the lift independently. Pool lift seats made of materials that resist corrosion, that provide a firm base, and that are padded are more usable. Headrests, seat belts, and additional leg support may also enhance accessibility and accommodate a wider variety of people with disabilities.

2010 ADA Standards Section 1009

Pool Lift Footrests and Armrests

- Footrests and armrests provide stability for the person using the pool lift. Footrests must be provided on pool lifts, and must move together with the seat. Padding on footrests—large enough to support the whole foot—reduces the chance of injury.
- Armrests are not required, however if provided, the armrest opposite the water must be removable or be able to fold clear of the seat when the seat is in the raised (load) position. This clearance is needed for people transferring between the lift and a mobility device.

Pool Lift Operation

- Lifts must be designed and placed so that people can use them without assistance, although assistance can be provided if needed. A person must be able to call the lift when it is in either the deck or water position. It is especially important for someone who is swimming alone to be able to call the lift so she or he won't be stranded in the water for an extended period of time.
- A person must be able to use the lift with one hand, and the operating controls must not require tight grasping, pinching, or twisting of the wrist.

2010 ADA Standards Section 1009

Pool Lift Clear Deck Space

- Clear deck space must be provided to enable a person to get close enough to the pool lift seat to easily transfer from a wheelchair or mobility device. This clear deck space will ensure an unobstructed area for transfers between a mobility device and the seat.
- The clear deck space must be a minimum of 36 inches wide and extend forward a minimum of 48 inches from a line located 12 inches behind the rear edge of the seat.
- This space must be located on the side of the seat opposite the water. *The slope of the clear deck space must not be greater than 1:48 (2%). This virtually flat area will make the transfer easier and safer, while still allowing water to drain away from the deck*

Pool Lift Seat Height

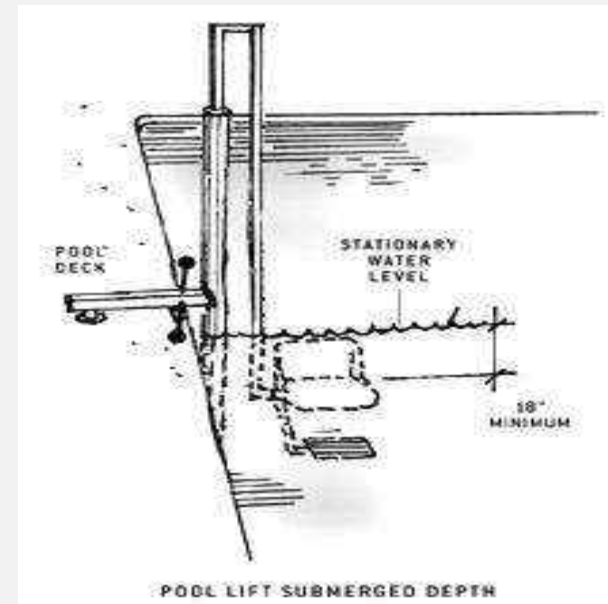
- The lift must be designed so that the seat will make a stop between a minimum of 16 inches and maximum of 19 inches (measured from the deck to the top of the seat surface, when the seat is in the raised position).
- Lifts can provide additional stops at various heights to accommodate users of all ages and abilities.



2010 ADA Standards Section 1009

Pool Lift Submerged Depth

- Lifts must be designed so that the seat will submerge to a minimum of 18 inches below the stationary water level. This will ensure buoyancy for the person on the lift and make it easier to enter or exit.

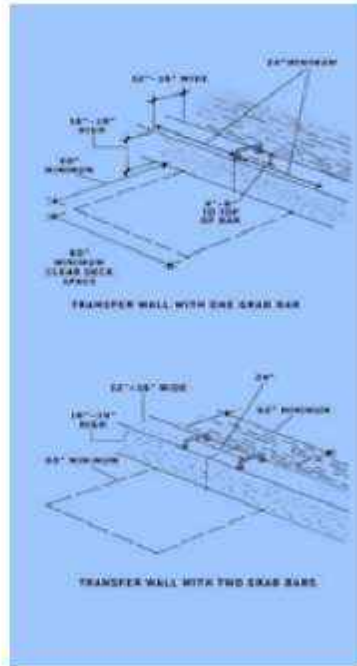


Pool Lift - Lifting Capacity

- Lifts must have the capability of supporting a minimum weight of 300 pounds and be capable of sustaining a static load that is at least 1.5 times the rated load. Where possible, lifts that can support a greater weight capacity are encouraged.

Transfer Wall

- **Clear deck space - 60 inches x 60 inches, slope 1:48 maximum**
- **Height – 16 inches to 19 inches**



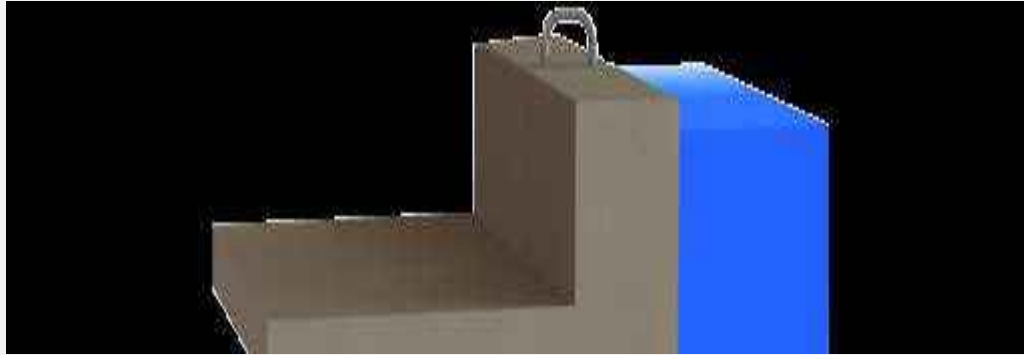
2010 ADA Standards Section 1009

A transfer wall is a wall along an accessible route that allows a person to leave a mobility device and transfer onto the wall and then into a pool or spa.

Transfer Wall Grab Bars

- Transfer walls must have at least one grab bar.
- Grab bars must be perpendicular to the pool wall and extend the full width of the wall so a person can use them for support into the water.
- The top of the gripping surface must be 4 to 6 inches above the wall to provide leverage to the person using the bars. If only one bar is provided, the clearance must be a minimum of 24 inches on each side of the bar. If two bars are provided, the clearance must be a minimum of 24 inches between the bars. The diameter of the grab bars must comply with ADA (diameter between 1.25 and 1.5 inches, not abrasive, and non-rotating).

2010 ADA Standards Section 1009



Clear Deck Space

- Clear deck space of 60 by 60 inches minimum, with a slope of not more than 1:48, must be provided at the base of a transfer wall.
- This will allow persons using a wheelchair to turn around and access the wall, depending on the side they can best use to transfer.
- If there is one grab bar on a transfer wall, the clear deck space must be centered on the one grab bar. That allows enough space for a transfer on either side of the bar.
- If two bars are provided, the clear deck space must be centered on the 24-inch clearance between the two bars.

2010 ADA Standards Section 1009



Height

- The transfer wall height must be 16 inches minimum to 19 inches maximum, measured from the deck.

Surface

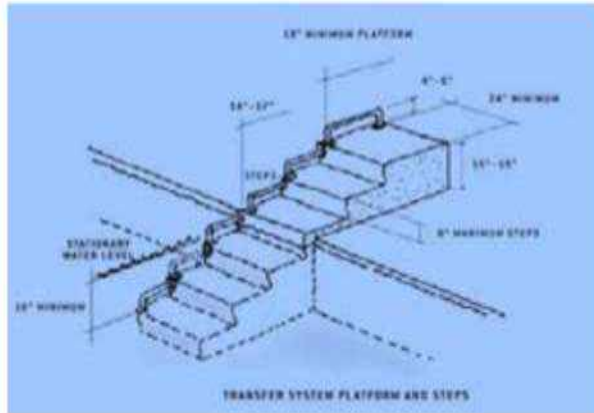
- Since people using transfer walls are in bathing suits, their skin may be in contact with the wall. To prevent injuries, the wall surface must have rounded edges and not be sharp.

Width and Length

- Transfer walls must be a minimum of 12 inches wide to a maximum of 16 inches wide. This provides enough space for a person to sit comfortably on the surface of the wall and pivot to access the water. The wall must be a minimum of 60 inches long and must be centered on the clear deck space. Additional length will provide increased space and options for transferring.

2010 ADA Standards Section 1009

Transfer System



- **Platform**
 - 19 in min depth
 - 24 in clear width
 - 16 in to 19 in height
- **Surface – not sharp and rounded edges**

- A transfer system consists of a transfer platform and a series of transfer steps that descend into the water. Users need to transfer from their wheelchair or mobility device to the transfer platform and continue transferring into the water, step by step, bumping their way in or out of the pool.

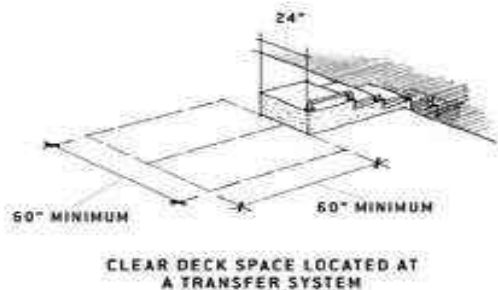
Transfer Platform

- Each transfer system must have a platform on the deck surface so users can maneuver on and off the system from their mobility device or wheelchair. Transfer platforms must be between 16 and 19 inches high, measured from the deck.
- Platforms must be a minimum of 19 inches deep by 24 inches wide. That provides enough room for a person transferring to maintain balance and provides enough space to maneuver on top of it.

2010 ADA Standards Section 1009

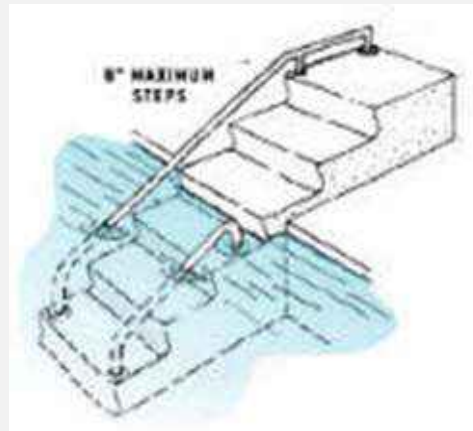
Clear Deck Space

- The base of the transfer platform must have a clear deck space adjacent to it that is 60 by 60 inches minimum, with a slope not steeper than 1:48 so a person using a wheelchair can turn around and maneuver into transfer position.
- The space must be centered along the 24-inch minimum unobstructed side of the transfer platform. A level, unobstructed space will help a person transferring from a mobility device.



Transfer Steps

- The maximum height of transfer steps is 8 inches, although shorter heights are recommended.
- Each transfer step must have a tread depth of 14 inches minimum to 17 inches maximum and a minimum tread width of 24 inches. The steps must extend into the water a minimum of 18 inches below the stationary water level.



2010 ADA Standards Section 1009

Surface

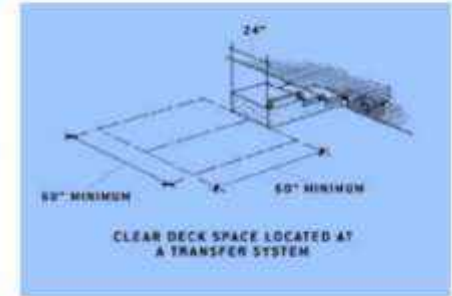
- The surface of the transfer platform and steps must not be sharp and must have rounded edges to prevent injuries.

Grab Bars

- A grab bar must be provided on at least one side of each step and on the transfer platform or as a continuous grab bar serving each step and the platform.
- The bar must not obstruct transfer onto the platform.

Transfer System

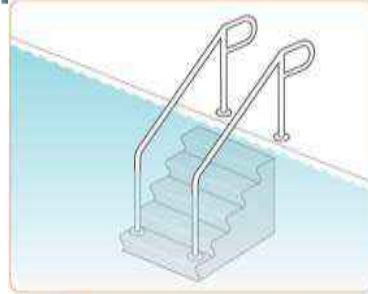
- Clear space – 60 inches x 60 inches
- Centered on 24 inch width



- If a grab bar is provided on each step, the top of the gripping surface must be 4 inches minimum to 6 inches maximum above each step.
- If a continuous bar is provided, the top of the gripping surface must be 4 inches minimum to 6 inches maximum above each step nosing.

Pool Stairs

- Comply with stairs provisions, except as modified
- Handrail width 20 to 24 inches
- Extensions not required at bottom landing



Pool Stairs

2010 ADA Standards Section 1009

- Accessible pool stairs are designed to provide assistance with balance and support from a standing position when moving from the pool deck into the water and out. ADA provisions for stairs include the requirement that all steps have uniform riser heights and uniform tread widths of not less than 11 inches, measured from riser to riser.
- Other stairs or steps provided in the pool are not required to meet these guidelines.

Handrails

Pool stairs must have handrails with a minimum width between the rails of 20 inches

and a maximum of 24 inches (intended to provide support for individuals with disabilities who are ambulatory.) Handrail extensions are required on the top landing of the stairs but are not required at the bottom landing.

Spas

2010 ADA Standards Section 1009

- **At least one means of entry:**
 - Lift - footrests not required
 - Transfer wall
 - Transfer system
- **Where provided, in a cluster, 5% but not less than one**



Spas must provide at least one accessible means of entry, which can be a pool lift, transfer wall, or transfer system. If spas are provided in a cluster, 5 percent of the total—or at least one spa—must be accessible. If there is more than one cluster, one spa or 5 percent per cluster must be accessible.

Footrests are not required on pool lifts provided at spas. However, footrests or retractable leg supports are encouraged, especially on lifts used in larger spas, where the water depth is 34 inches or more and there is sufficient space.

2010 ADA Standards Section 1009

Wading pools

- **At least one sloped entry - handrails not required**
- **Extend to the deepest part of the wading pool**



- A wading pool is a pool designed for shallow depth and is used for wading. Each wading pool must provide at least one sloped entry into the deepest part. Other forms of entry may be provided as long as a sloped entry is provided. The sloped entries for wading pools are not required to have handrails.

Leisure rivers

- **One means of access**
- **Pool lift, sloped entry, or transfer system**



2010 ADA Standards Section 1009

Water slides

- **Access not required to the top of the water slide**
- **Accessible route required to edge of catch pool**



Catch Pools

A catch pool is a body of water where water slide flumes drop users into the water. An accessible means of entry or exit is not required into the catch pool. However, an accessible route must connect to the edge of the catch pool.

Diving boards and raised platforms

Accessible route not required to serve raised diving boards or diving platforms



Accessible Sports Facilities



- **Areas of indoor and outdoor sports activity, including court sports** (such as tennis, volleyball & racquetball), sports fields (such as softball, football, lacrosse, baseball, and soccer) and other sports (such as gymnastics and wrestling)
- **Dressing, fitting, and locker rooms**
- **Exercise Equipment and Machines.**
At least one of each type of exercise equipment and machines shall be provided with clear floor or ground space and shall be served by an accessible route.

Accessible Sports Facilities



- 206.2.11 - Bowling Lanes. Where bowling lanes are provided, at least 5 percent, but not less than one of each type of lane shall be served by an accessible route.
- 243- Shooting Facilities. Where fixed firing positions are provided at a site, at least 5 percent, but not less than one, of each type of firing position shall comply.
- 243 - Fixed Firing Position. Fixed firing positions shall contain a 60 inch (1525 mm) diameter space and shall have a slope not steeper than 1:48.

Seating in Assembly Areas



DOJ Regulations Sec. 36.308

A public accommodation shall ensure that

- wheelchair spaces and companion seats are provided in each specialty seating area that provides spectators with distinct services or amenities that generally are not available to other spectators.
- If it is not readily achievable for a public accommodation to place wheelchair spaces and companion seats in each such specialty seating area, it shall provide those services or amenities to individuals with disabilities and their companions at other designated accessible locations at no additional cost.
- The number of wheelchair spaces and companion **seats provided in specialty seating areas shall be included in, rather than in addition to,** wheelchair space requirements set forth in table 221.2.1.1 in the 2010 Standards.



Seating in Assembly Areas

DOJ Regulations Sec. 36.406(f)

A public accommodation shall ensure that

- Wheelchair seating is dispersed to all levels that include seating served by an accessible route
- Wheelchair seating is dispersed horizontally similar to other seating
- Wheelchair seating is not located on temporary platforms, only individual temporary seat in wheelchair space when not needed





Assembly Area Companion Seating

- Purchasing multiple tickets - three additional tickets for contiguous seats in the same row, this may include wheelchair spaces
- Insufficient additional contiguous seats available - offer the next highest number of such seats
- Sales limited to less than four tickets where ticket sales is limit to fewer than four seats per patron

This is a ticket sales requirement set forth by DOJ
NOT a design requirement

Captioning





Round #4:

Common Accessibility Errors:

Relative to both
the ADA and
The
International
Building Code/
ICC ANSI
A117.1
Requirements



Accessible Parking – Slopes/Cross-Slopes



Accessible Parking

**Access Aisles
must be level and
have slopes no
steeper than 2%**



Good or Bad?



Parking - Vertical Clearance



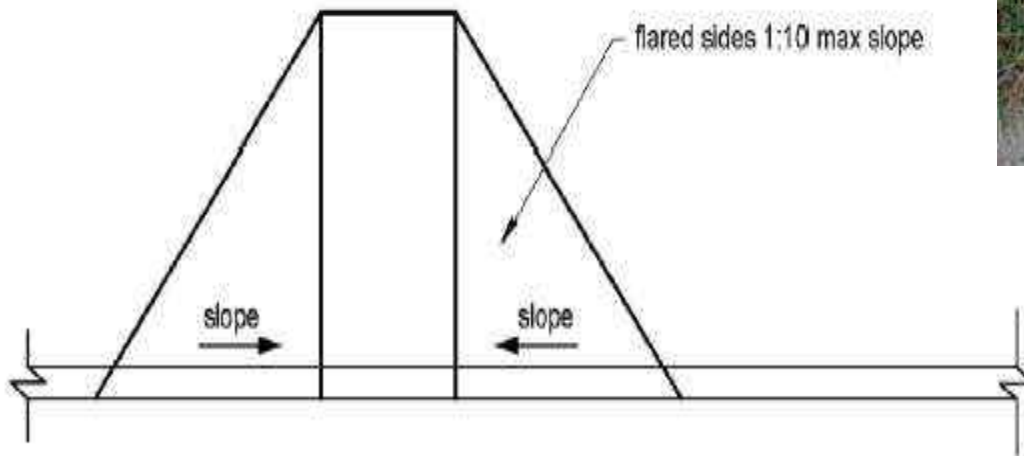
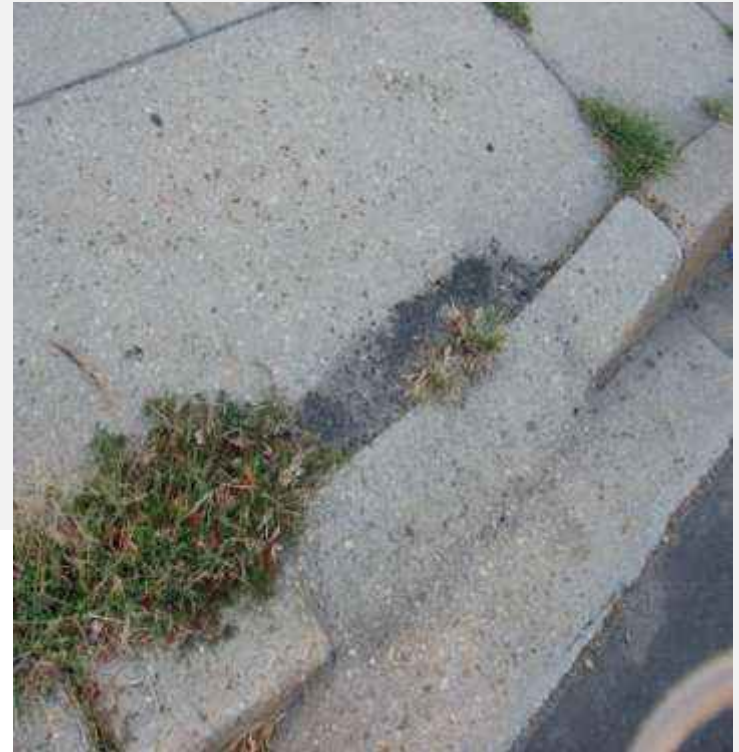
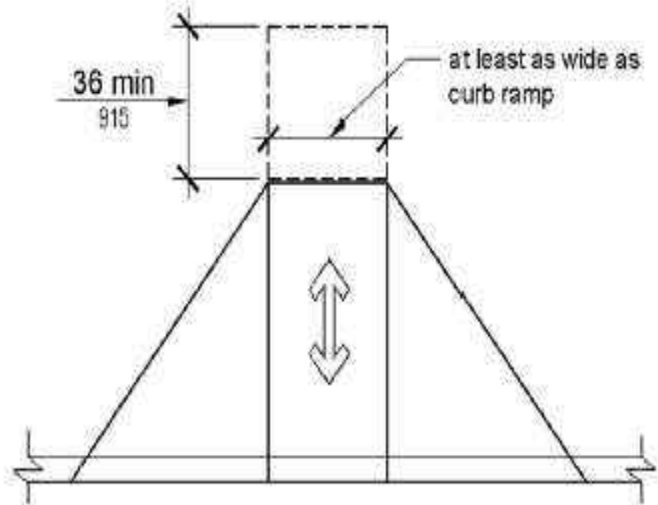
Vertical Clearance



Accessible Parking on Shortest *Accessible Route of Travel*



Curb Ramps



Curb Ramps



Interior Accessible Routes - Ramps



Protruding Objects



Protruding Objects

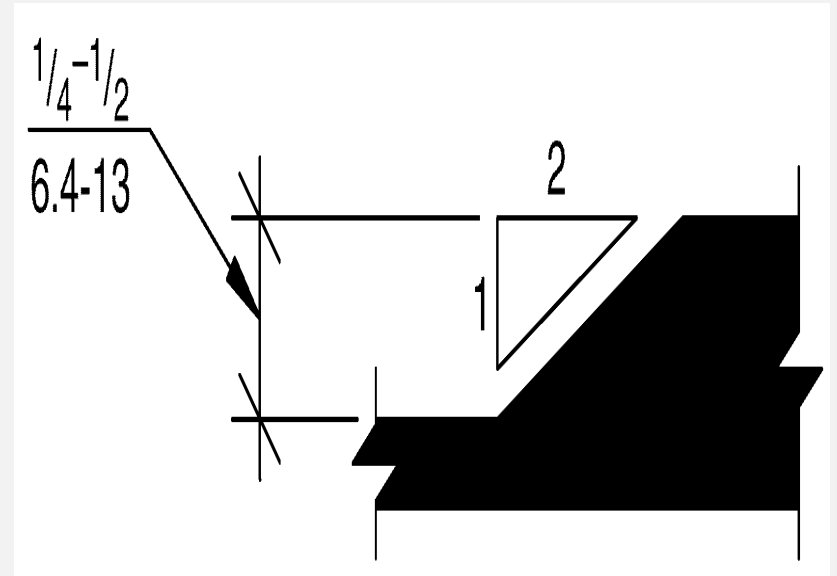
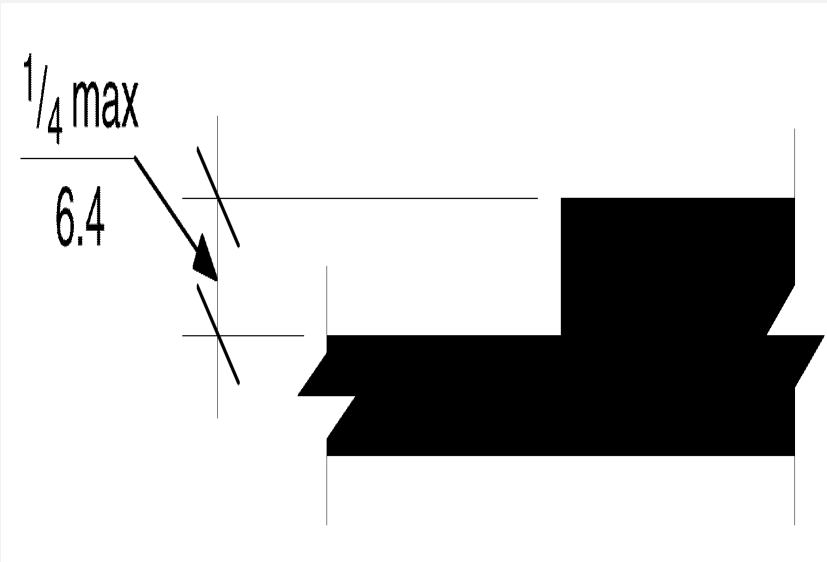


Doors - Thresholds





Small Level Changes

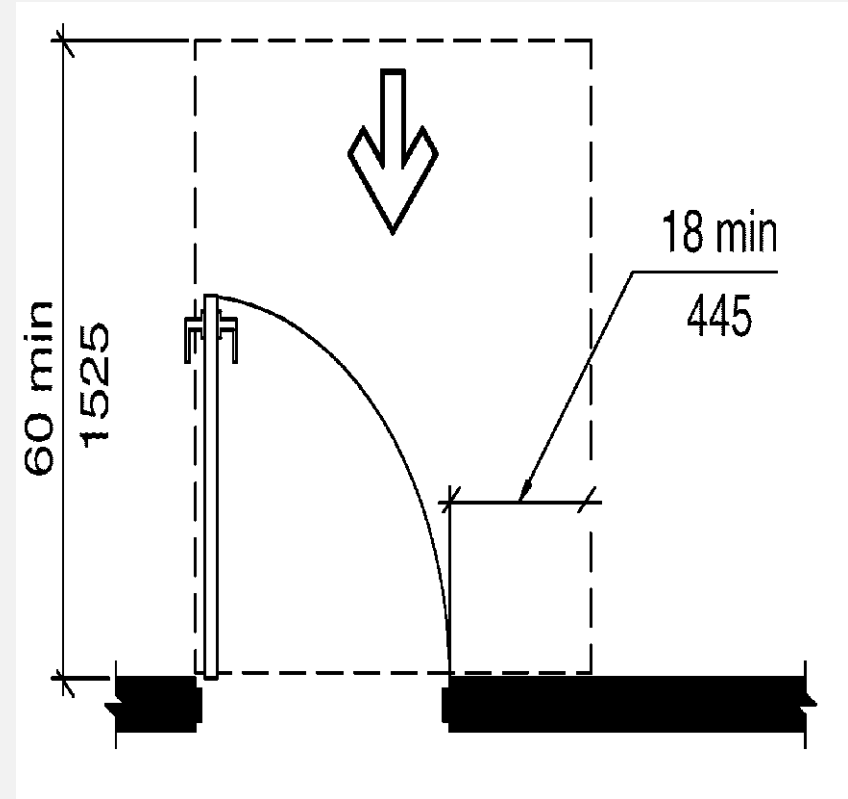




Doors - Maneuvering Clearance



404.2.3.1(a) Front Approach, Pull Side

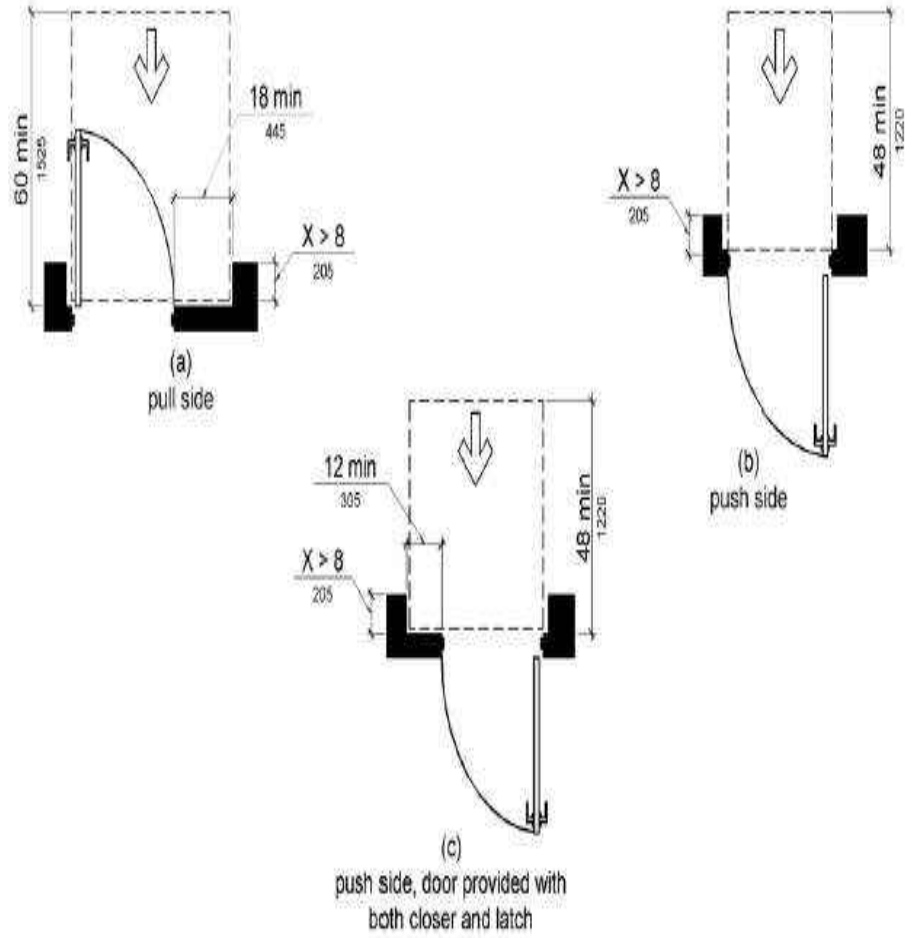




Maneuvering Clearances



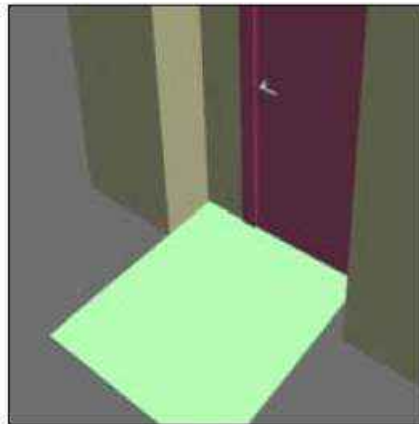
- clearance applies to full height (80" min.)
- No changes in level (other than thresholds)



Accessible Routes - Doors

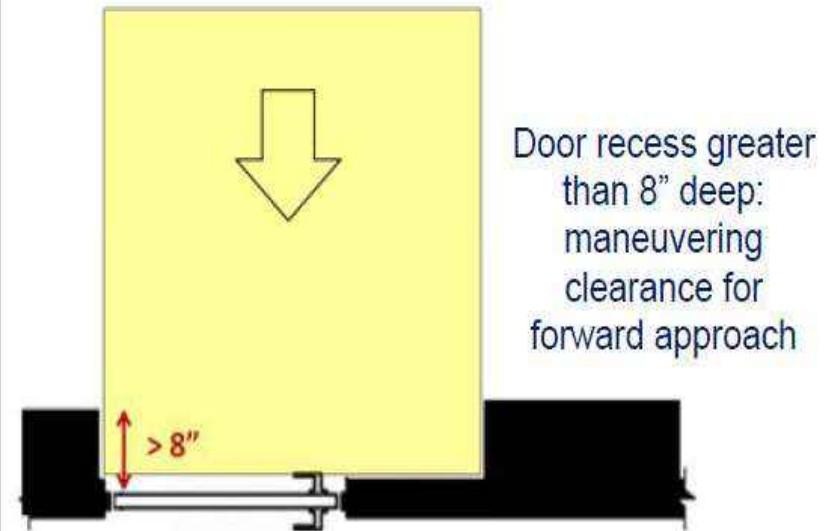


Recess: 8" max.



Recess: greater than 8"

Accessible Routes - Doors



Good or Bad?



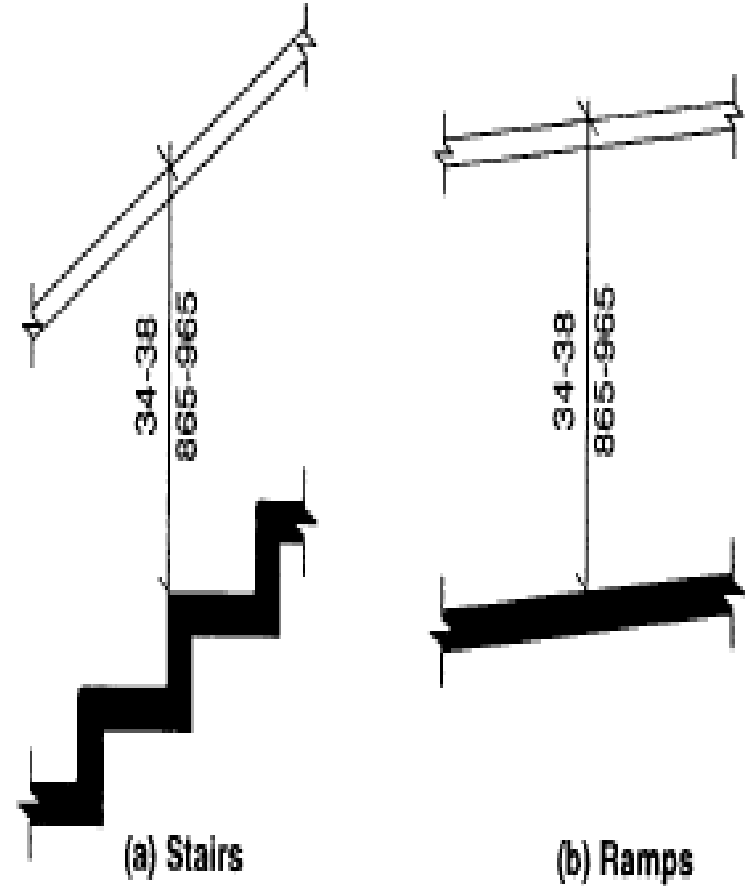
Door Hardware

Operable parts of hardware shall be 34 inches (865 mm) minimum and 48 inches (1220 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.



2010 ADA & ANSI A117.1

505.4 Handrails on Ramps







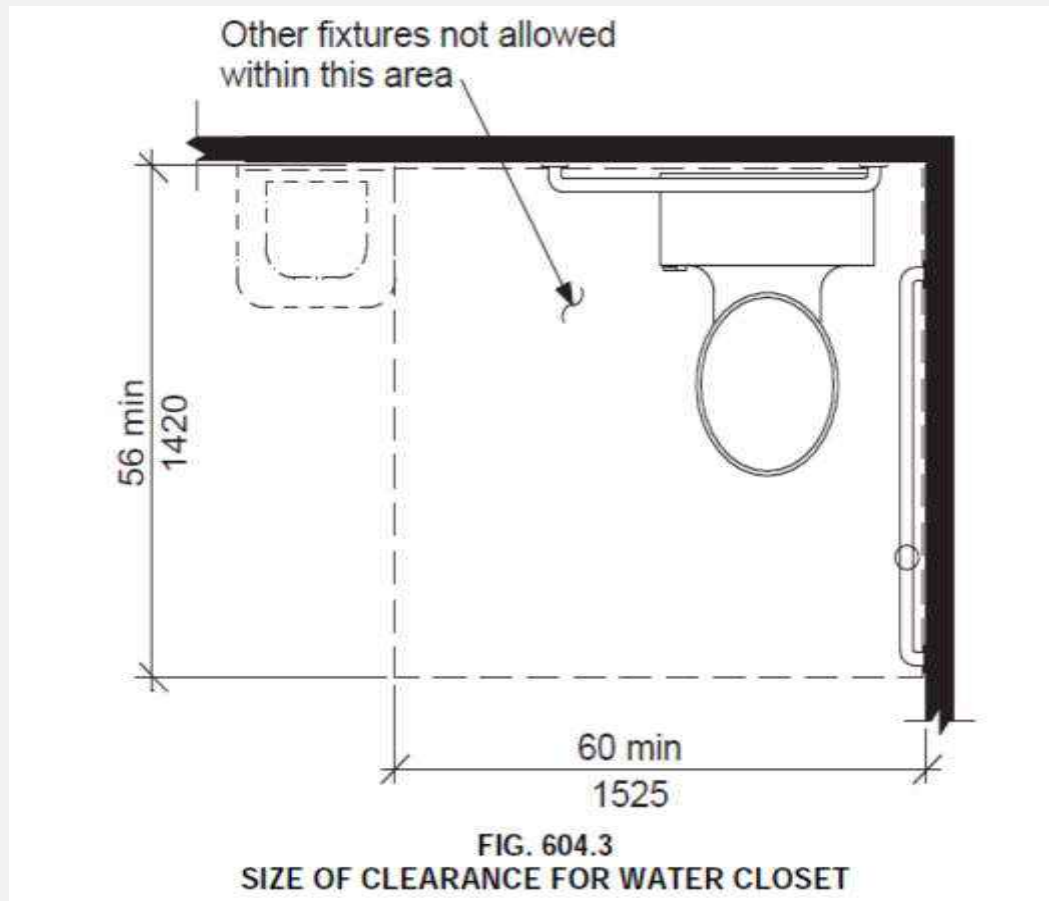
Toilet & Bathrooms



Centerline is not 16-18 inches and 56 inches of clearance is not provided at water closet

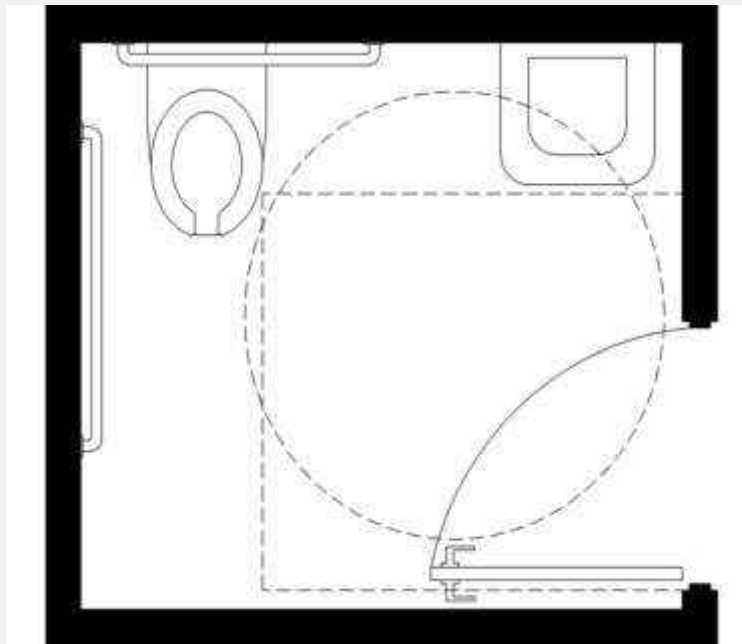
2010 ADA & A117.1

604.3.1 Size of Clearance for Water Closet

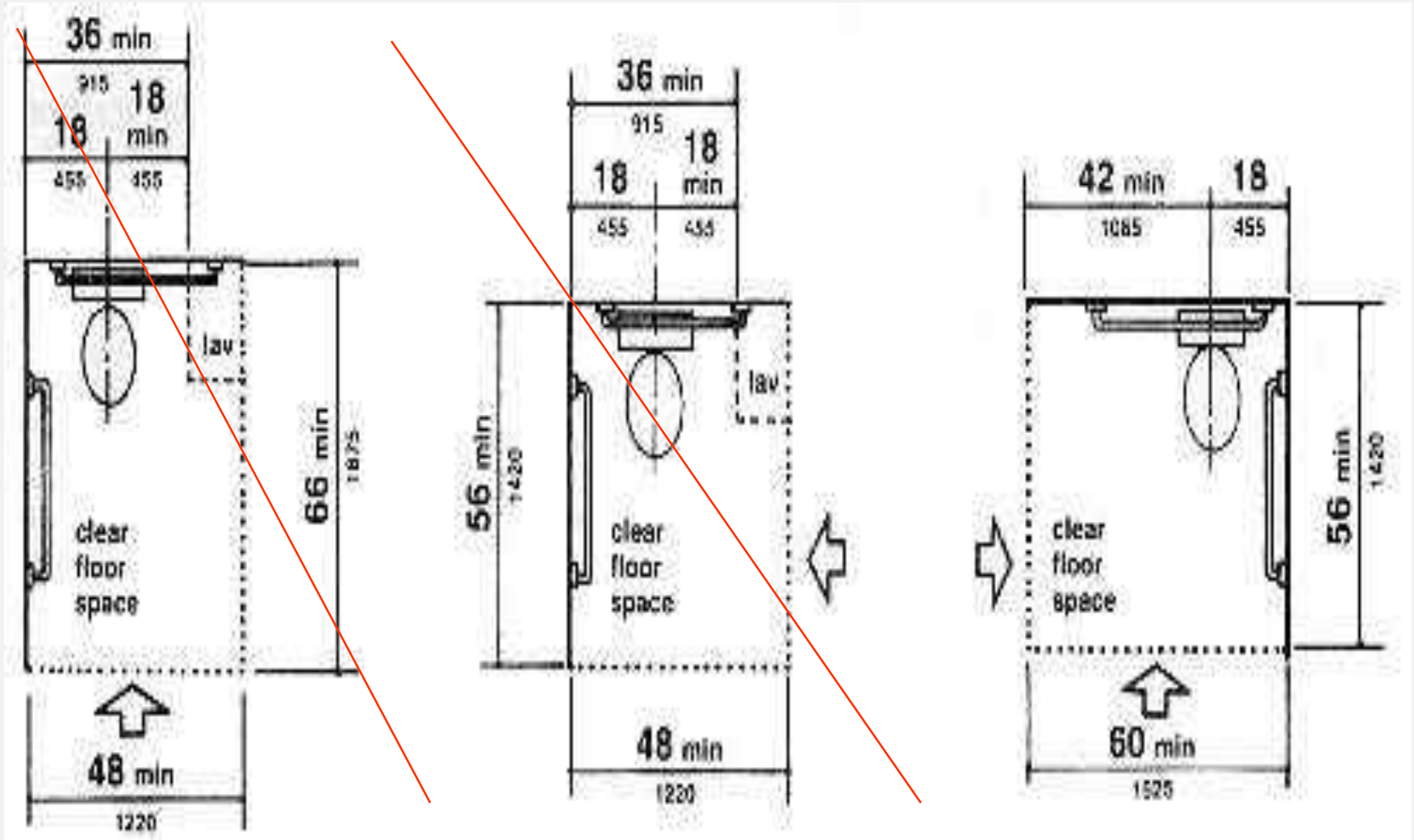


ANSI A117.1 604.3.3

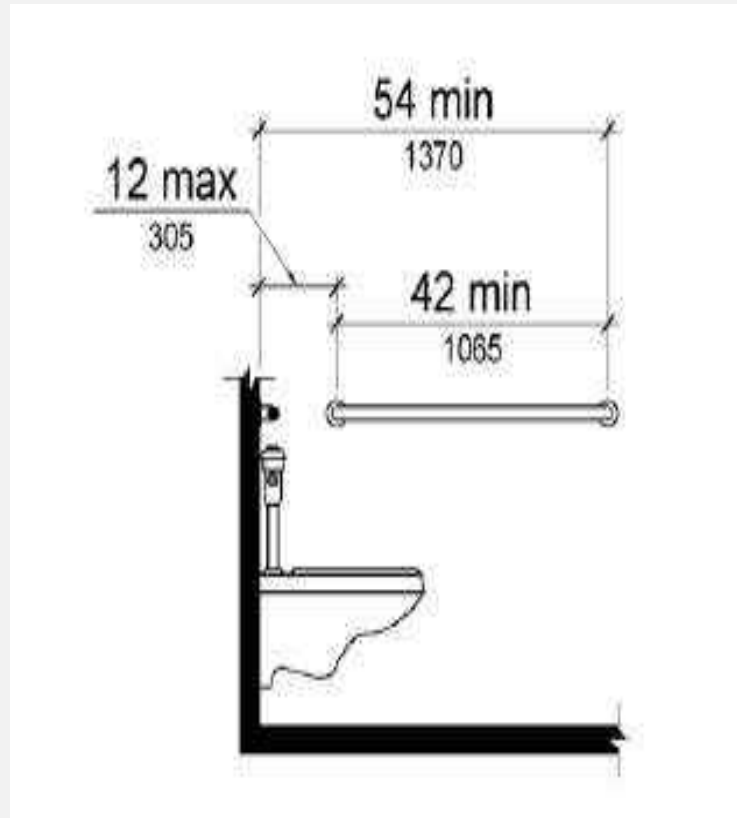
- objects permitted to overlap clearance (grab bars, dispensers, etc.)
- flush controls (standard reach range)
- toilet paper dispenser location



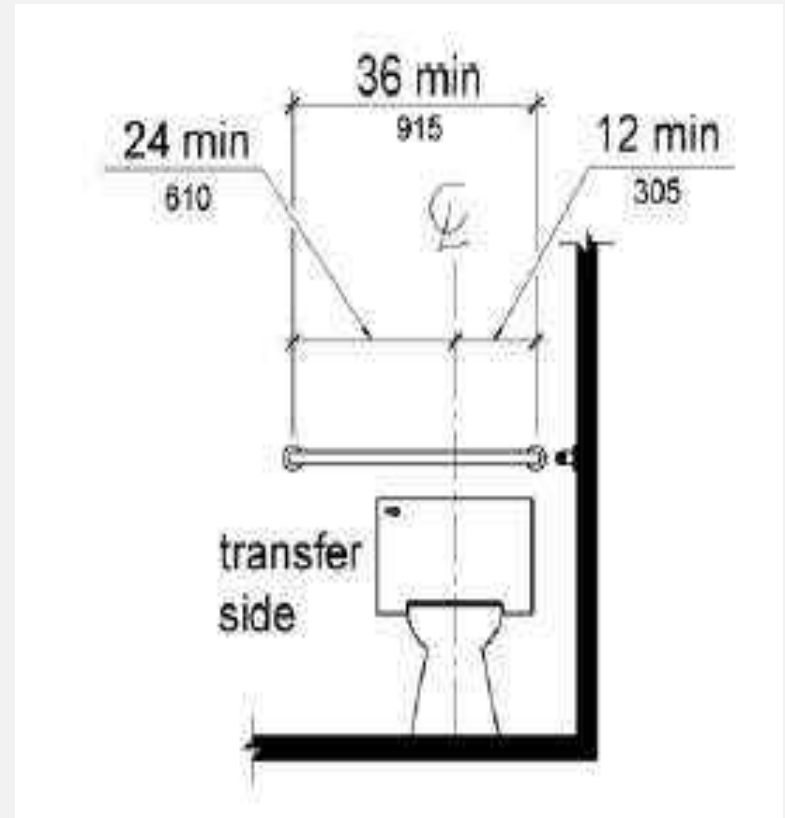
ADAAG Figure 28



2010 ADA Standards 604.5 Grab Bars at Water Closets



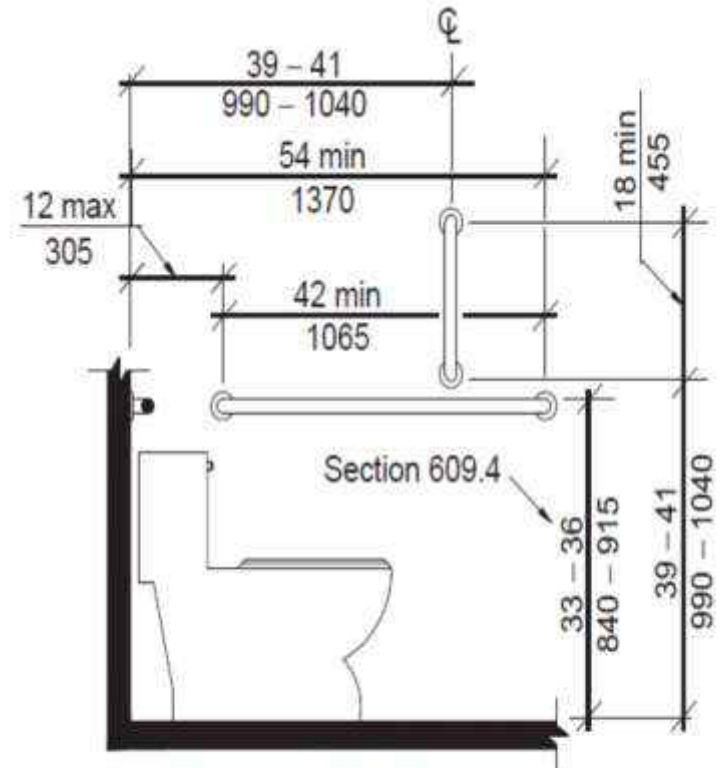
Grab bars shall be installed in a horizontal position, 33 inches minimum and 36 inches maximum above the finish floor measured to the top of the gripping surface



The space between the wall and the grab bar shall be 1 1/2 inches

A117.1 - 604.5.1 Fixed Side Wall Grab Bars

A vertical grab bar 18 inches minimum in length shall be mounted with the bottom of the bar located between 39 and 41 inches above the floor, and with the centerline of the bar located between 39 and 41 inches from the rear wall.



Note: For children's dimensions see Fig. 609.4.2

FIG. 604.5.1
SIDE WALL GRAB BAR FOR WATER CLOSET

2010 ADA & A117.1 - 609.3 Spacing

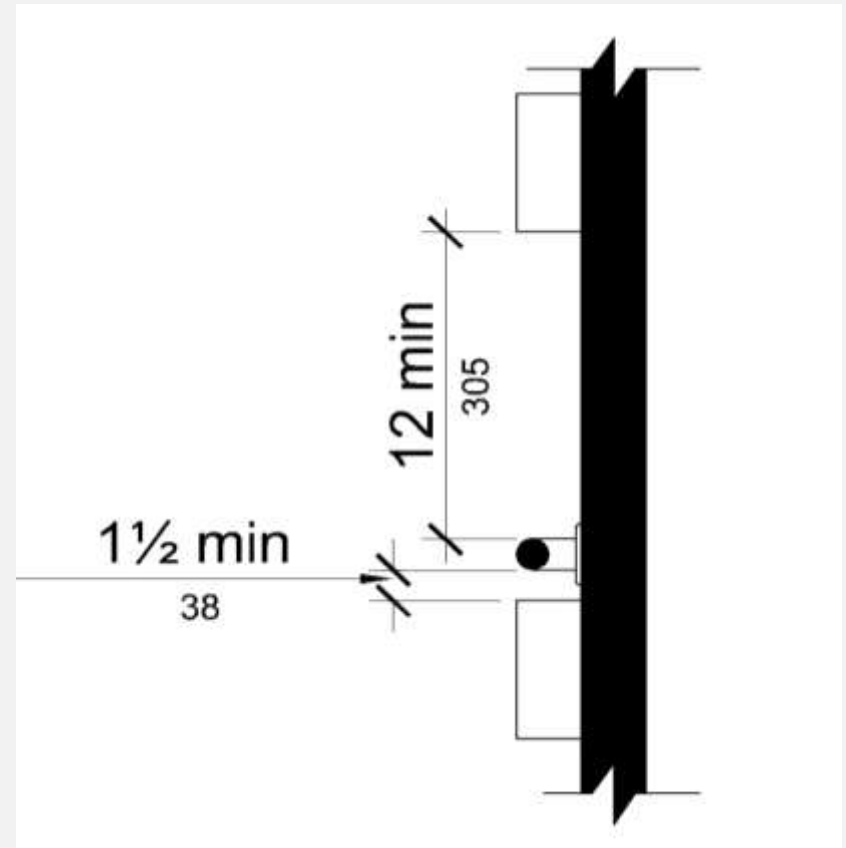
The space between the wall and the grab bar shall be 1-1/2 inches. The space between the grab bar and projecting objects below and at the ends of the grab bar shall be 1-1/2 inches minimum. The space between the grab bar and projecting objects above the grab bar shall be 12 inches minimum.



2010 ADA Standards - Grab Bars (609)

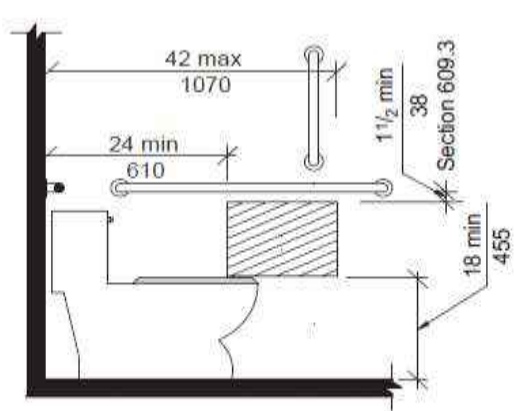
12" min.
clearance
above

1 ½" min.
below

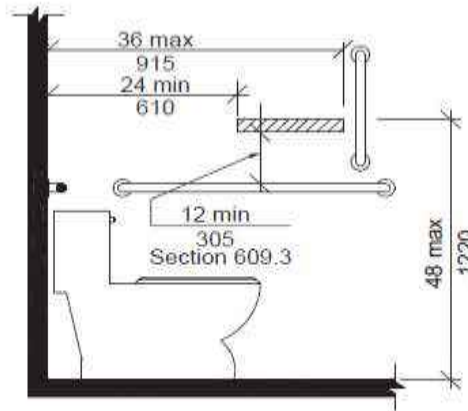


ANSI A117.1 604.7

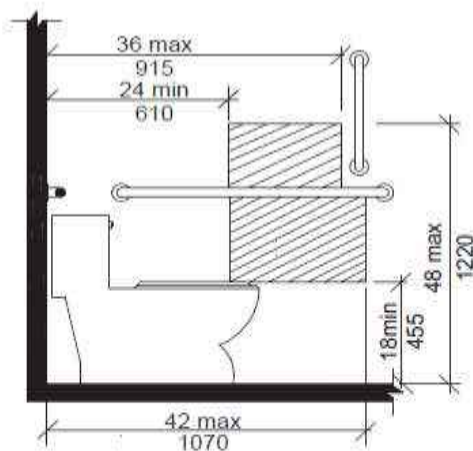
Revised location for toilet paper dispenser



(a) Protruding Dispenser Below Grab Bar



(b) Protruding Dispenser Above Grab Bar



(c) Recessed Dispenser

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

FIG. 604.7
DISPENSER OUTLET LOCATION

ANSI A117.1 - 609 Grab Bars

**-12" min. clearance
above**

-1 1/2" min. below

- **New Exception 609.3:**

2. Recessed dispensers projecting from the wall 1/4 inch (6.4 mm) maximum measured from the face of the dispenser and complying with Section 604.7 shall be permitted within the 12-inch (305 mm) space above and the 1 1/2 inch (38 mm) spaces below and at the ends of the grab bar.

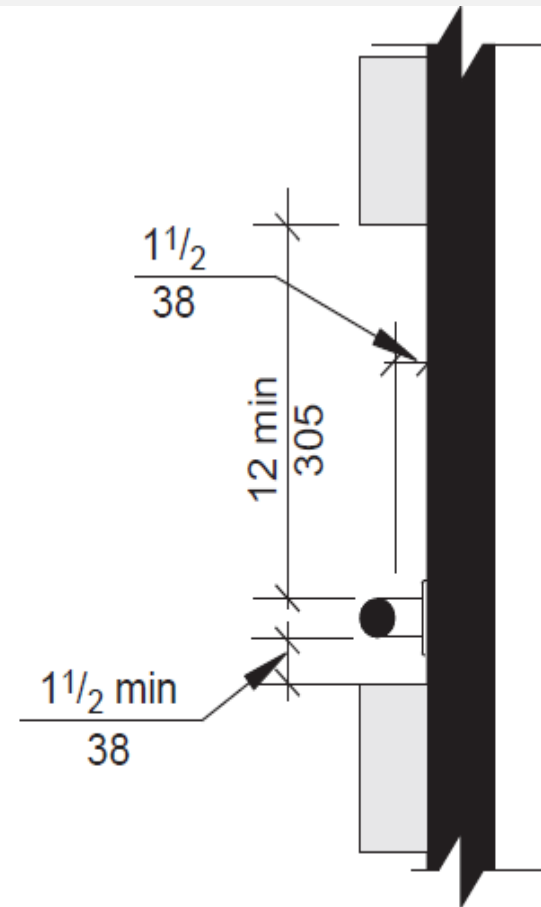


FIG. 609.3
SPACING OF GRAB BARS

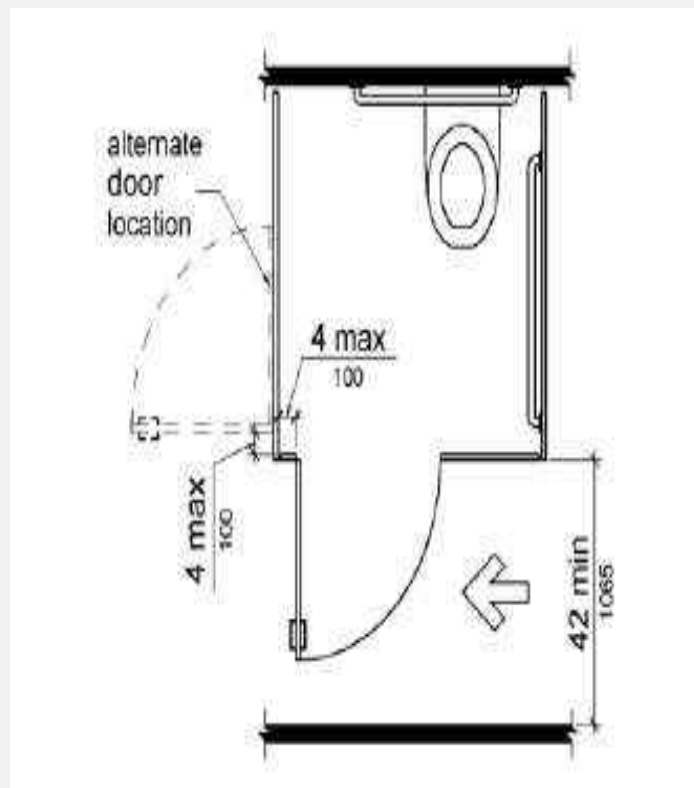
2009 A117.1 – New Requirements



- **603.5 Diaper Changing Tables.** Diaper changing tables shall comply with Sections 309 and 902
- **603.6 Operable Parts.** Operable parts on towel dispensers and hand dryers serving accessible lavatories shall comply with Table 603.6.

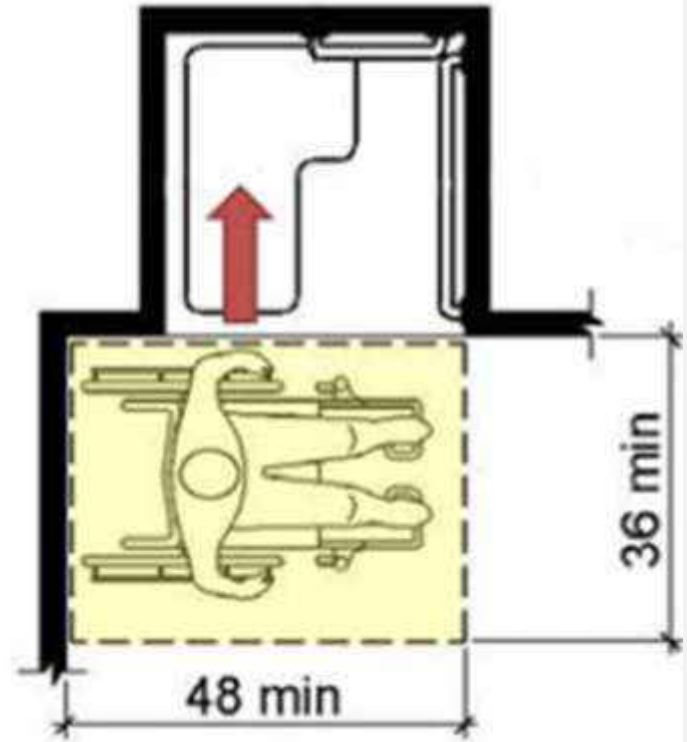
2009 A117.1 – New Requirements

- **603.3 Mirrors.** 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 (1015 mm) maximum above the floor.
- **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.



Transfer Showers

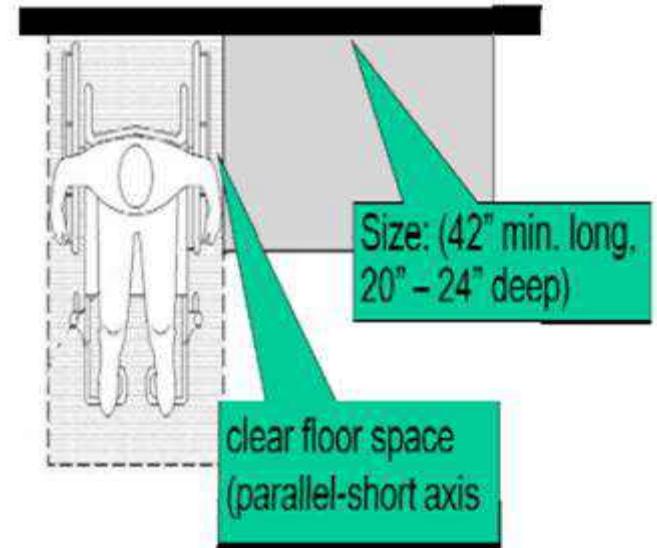




Locker Rooms



[changing] Benches (903)



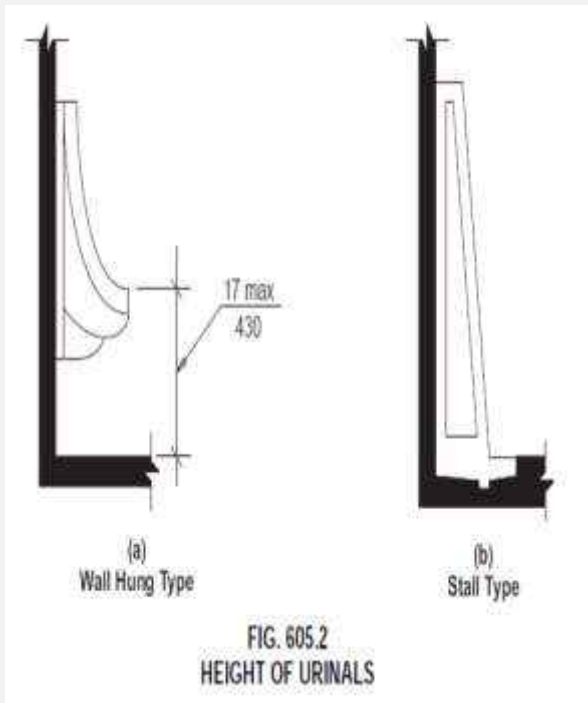
**Access to at least
5% of each type
of use in each
cluster**



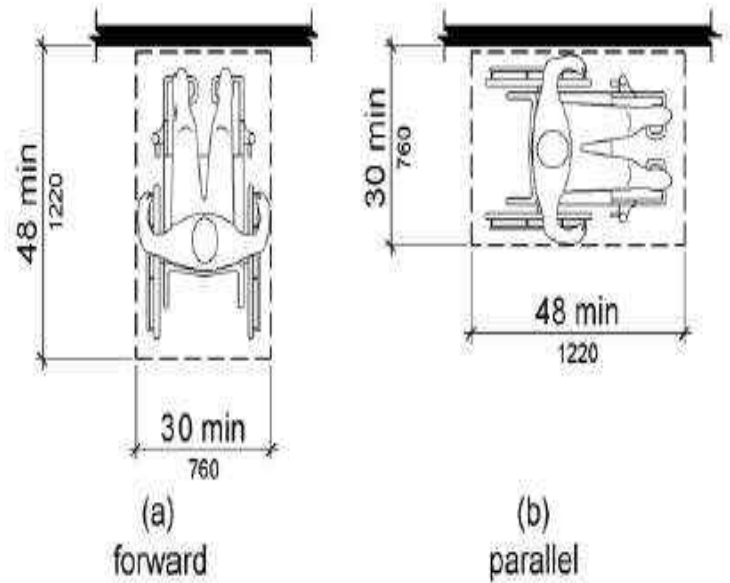
Urinals



- At least one accessible per room – if more than one is provided.
- 605.2 Height and Depth. Urinals shall be of the stall type or shall be of the wall hung type with the rim at 17 inches maximum above the floor. Wall hung urinals shall be 13 1/2 inches minimum in depth measured from the outer face of the urinal rim to the wall.



Toilet & Bathrooms



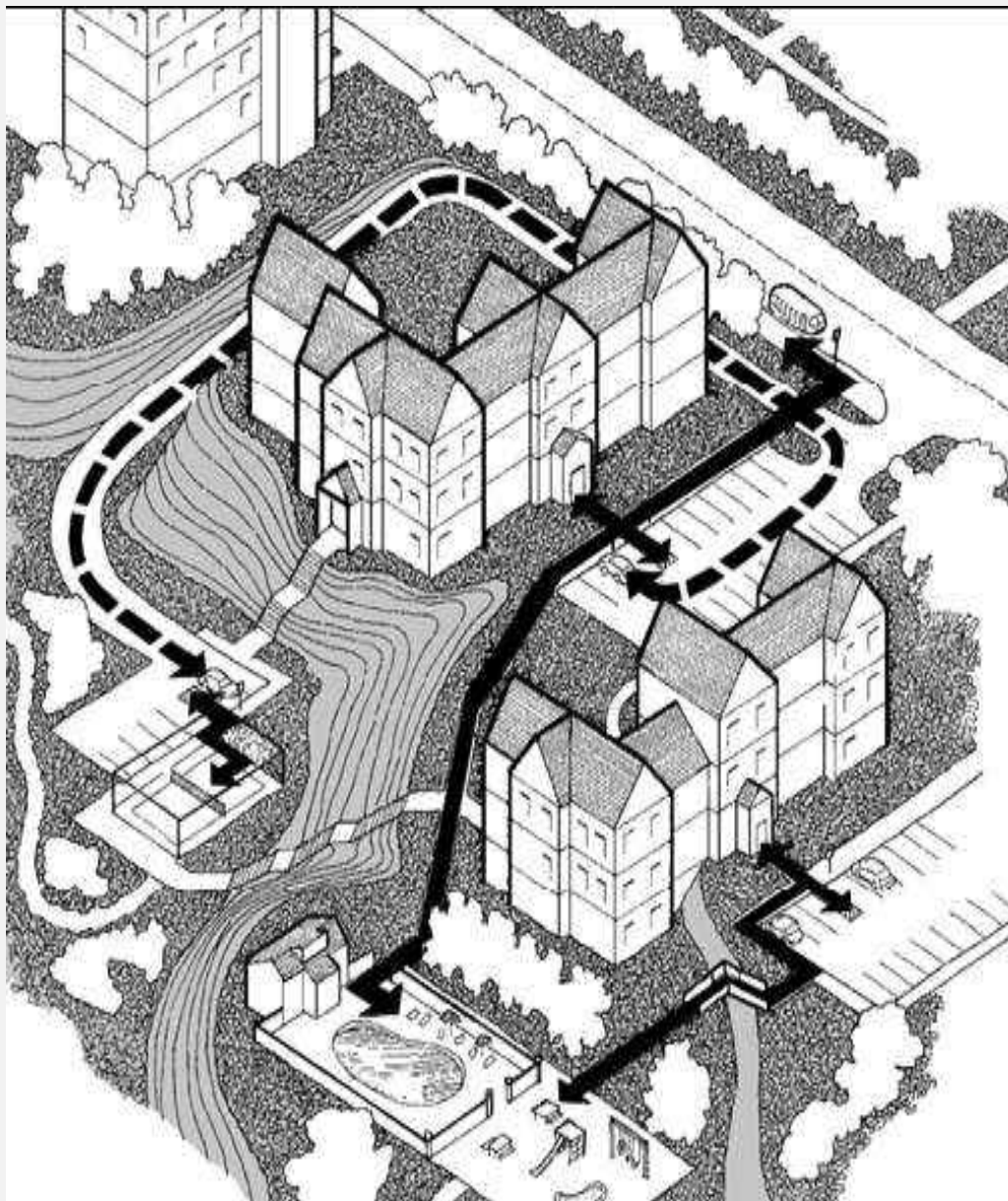
Operable Parts



Added Bonus!

Common Residential Accessibility Errors





Accessible routes are required to connect covered dwelling entrances with:

- Pedestrian arrival areas
- Site facilities and amenities
- Spaces and elements within a covered building

HUD has determined that this route should be a “Safe Route”

Interior Accessible Route – 36 inches not provided between studs diminishes accessible route throughout unit.



Outlets – clear floor space must be provided and height aff of receptacles must be considered.



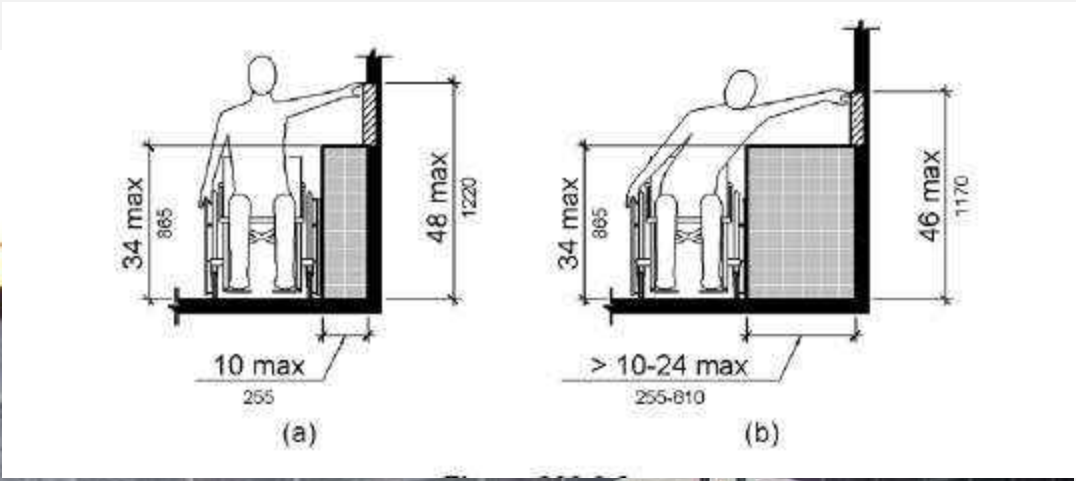
When electrical outlets are installed horizontally or vertically, duplex outlets must have both receptacles within the required reach range.

Environmental controls – 48 inches maximum aff



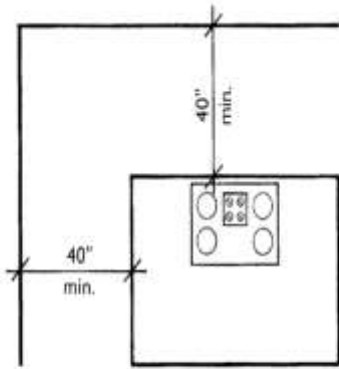
**Outlet receptacles behind kitchen counter –
46 inches to top plug- because reaching over
an obstruction.**



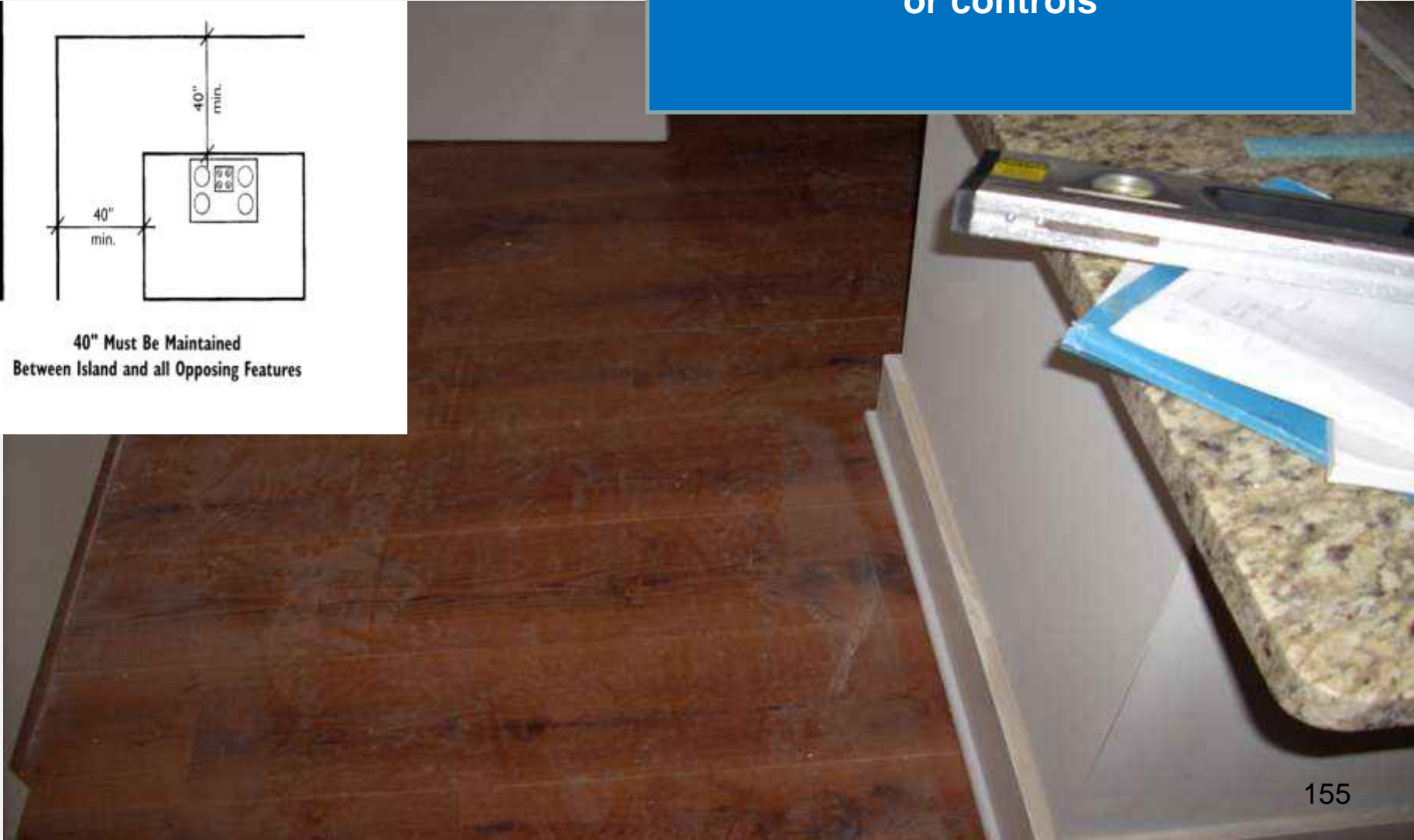


Kitchens

Measured from the edge of the countertop to the edge of the opposing countertop, face of appliance or wall, excluding handles or controls



40" Must Be Maintained
Between Island and all Opposing Features



Parallel clear floor space required – must be centered on the sink



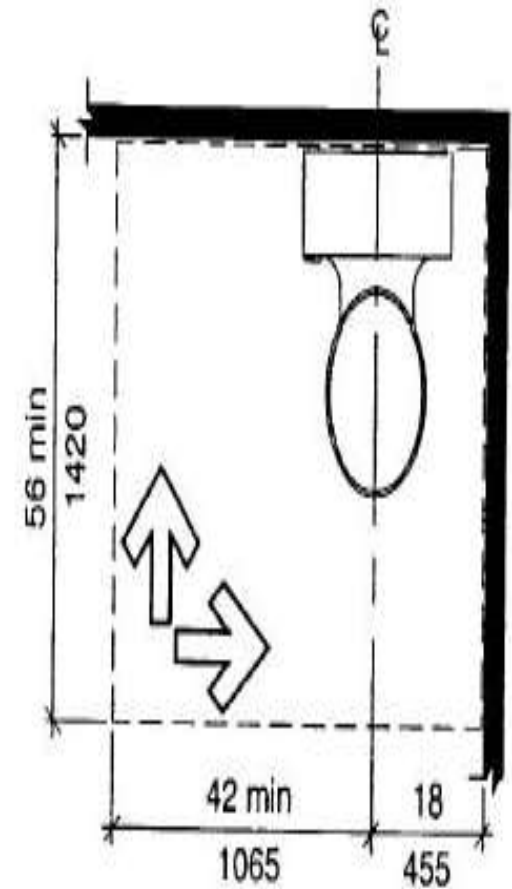
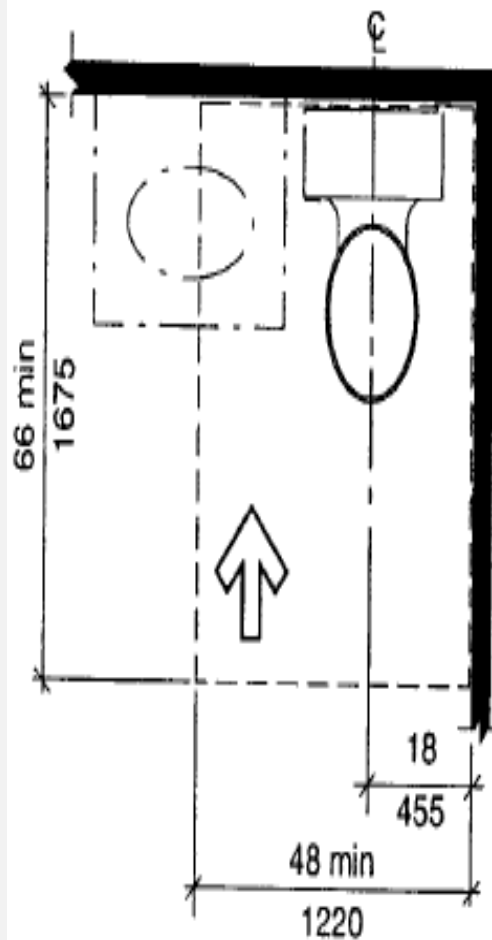
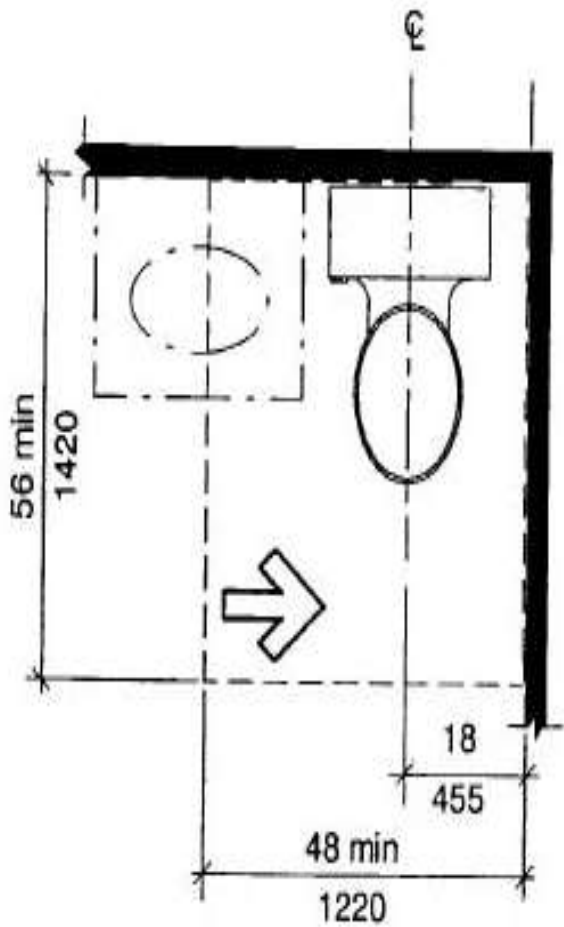
Clear floor space - parallel or forward approach to dishwasher centered on appliance.



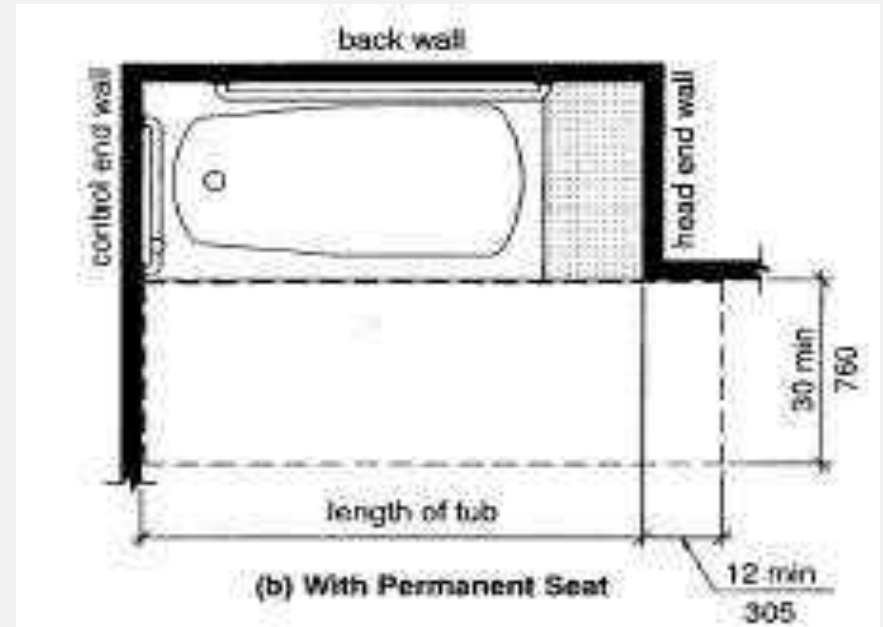
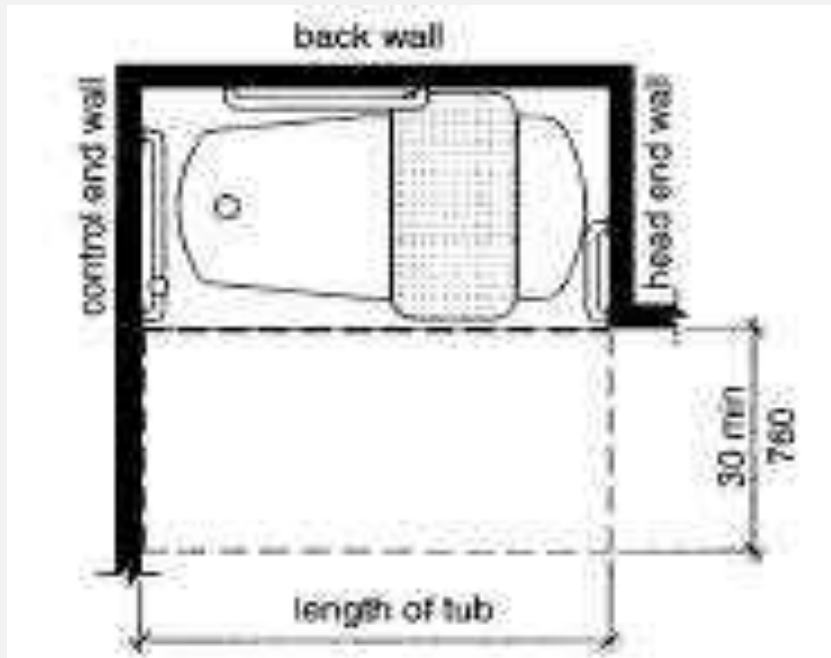
Laundry Equipment



Approach to Water Closets

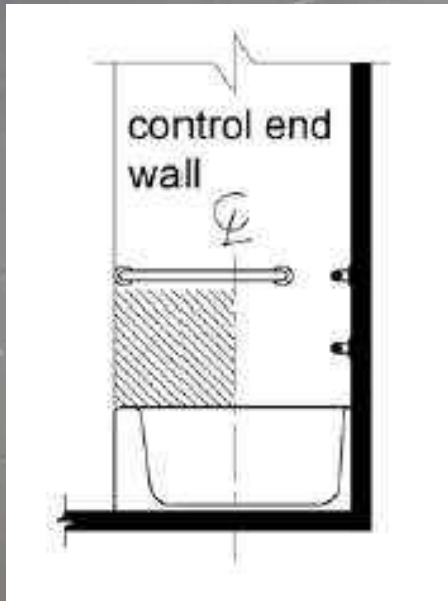


Clear Floor Space at Bathtubs

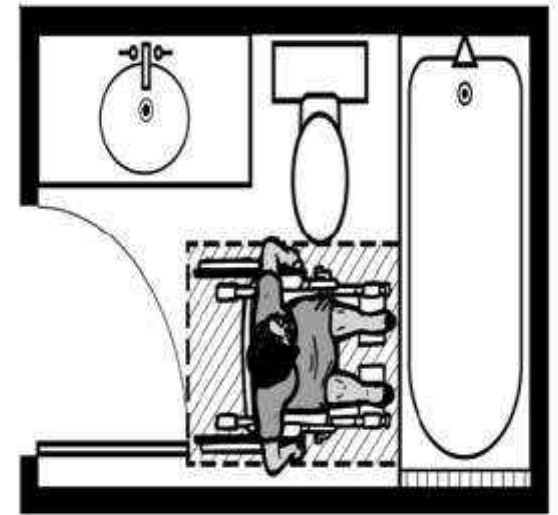


Bathtub Controls

Accessible,
Type A &
UFAS Units



30 X 48 inches clear floor space beyond door swing



Closets & Pantries



Shallow closet pantries that have an interior depth of 24 inches or less may have doors of any width. Deeper walk-in pantries must have doors that comply with Requirement 3, and an accessible route into the pantry that complies with Requirement 4.

Where exterior deck, patio or balcony surface materials are impervious, the finished exterior impervious surface shall be 4 inches maximum below the floor level of the adjacent interior spaces of the unit.



The 4-inch measurement is from the impervious surface of the patio to the finished floor of the interior of the dwelling. If carpet is installed and the pad is included, the measurement should be calculated with a fully compressed carpet and pad.



Mailboxes



Mailboxes

Fit out for mailboxes - highest operable part must be 54 inches maximum aff (Fair Housing Act) for a side reach.

IBC requires 5% at **48 inches** maximum aff for a forward reach.





Trash Chute



Roof Top Deck



Pools



Putting Green



Dumpsters





Questions



Thank you for attending!

Please remember to complete your
Program Evaluation-

Today's Speaker:



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Vice President

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www.accessibility-services.com