



# **ADA Standards**

## **Part 1**

# Agenda

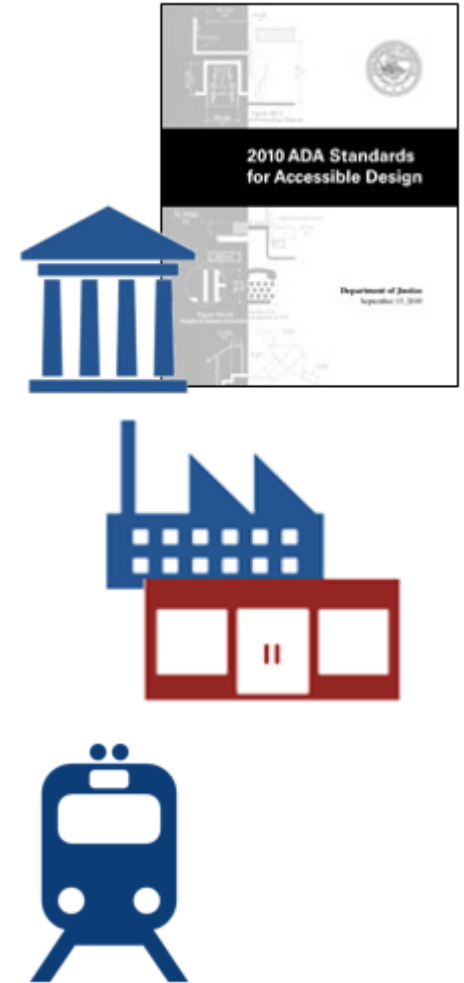
- **Access onto Sites**
- **Entrances & Doors**
- **Spaces Covered**
- **Operable Parts & Elements**

**(Chapters 1 – 5)**

# ADA Standards (2010)

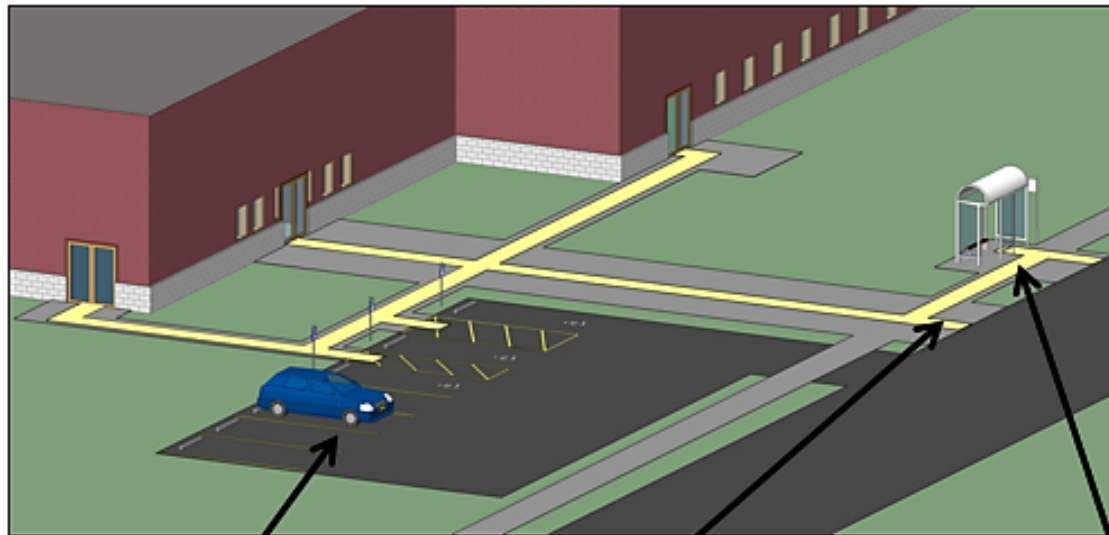
Apply to:

- State/ local gov't facilities
- Places of public accommodation
- Commercial facilities
- Transportation facilities (DOT's 2006 Standards)



# Application

Standards fully apply within boundary of the site starting with site arrival points (at least one accessible route to accessible entrance)



parking & passenger  
loading zones



streets &  
sidewalks



transportation  
stops

# Parking Spaces

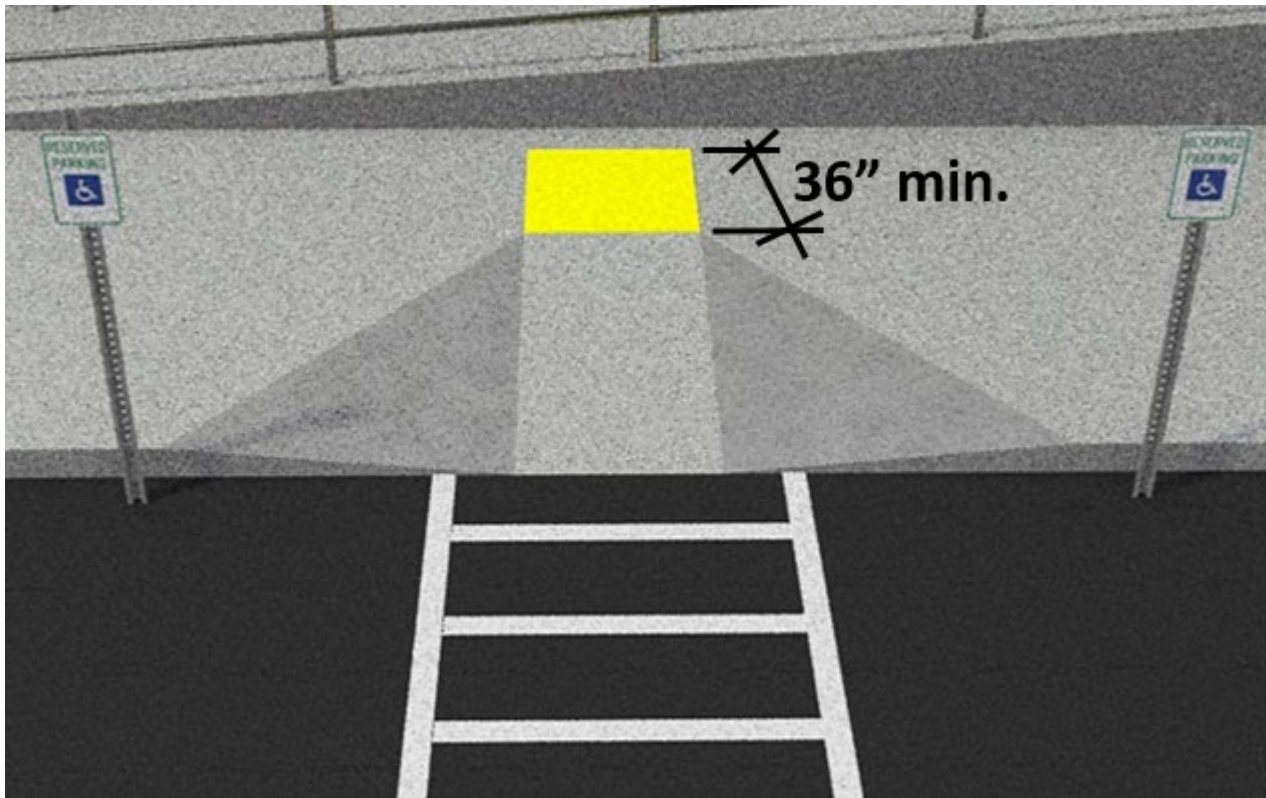
**AR must connect to access aisles at accessible parking spaces**



**Recommended: connect AR to front of aisle to prevent travel behind parked cars**

# Curb Ramps (§406)

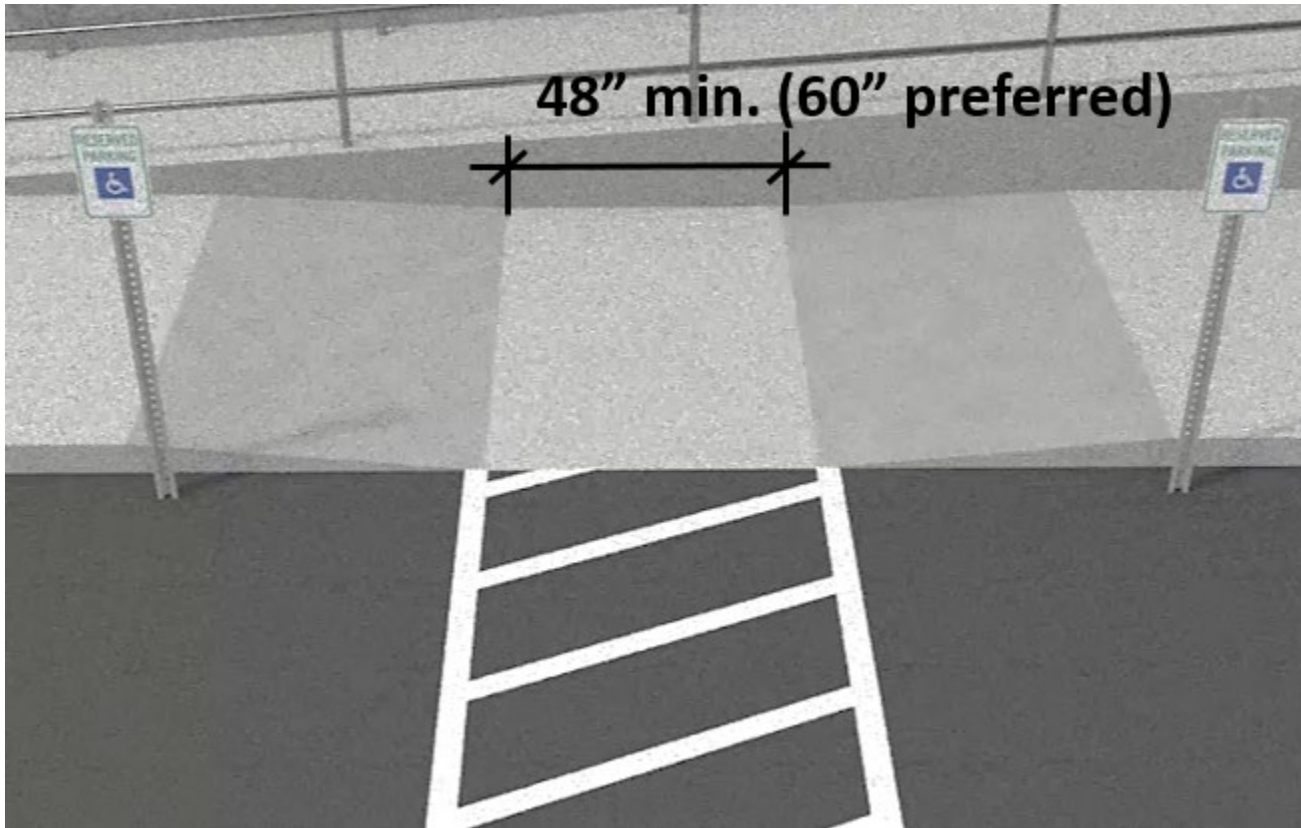
Landing 36" deep min. required at top of curb ramps in new construction



Curb ramps cannot protrude into access aisle

# Curb Ramps

Parallel curb ramps can be used where top landing space is unavailable



# Detectable Warnings



Required on curb ramps at:

- Transit facilities (DOT standards – 406.8)
- FHwy funded projects
- Public sidewalks (recommended – new ROW guidelines will address)

Not required on curb ramps at other facilities or hazardous vehicular areas

Required on rail station boarding platforms



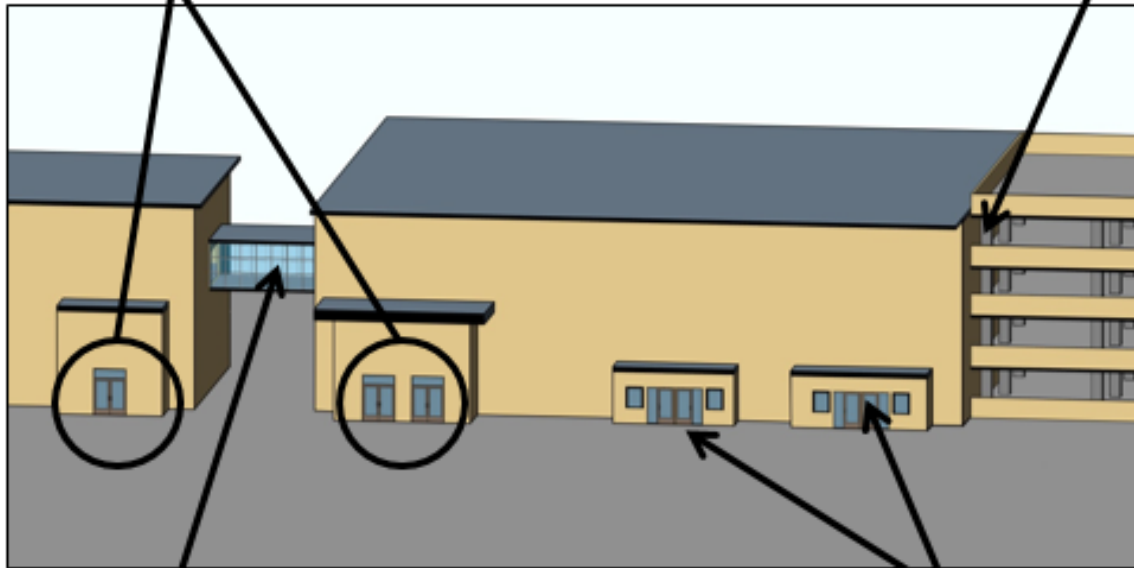


# Entrances (§206.4)

## Minimum Number

At least 60% of public entrances

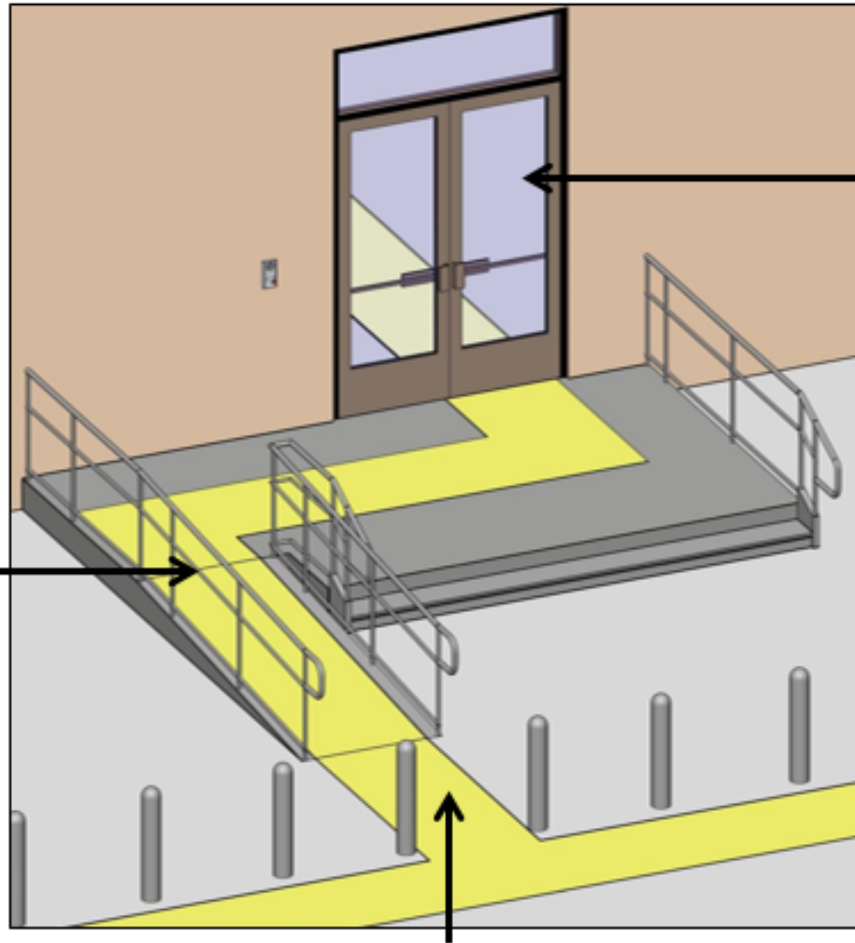
At least 1 entrance serving each direct access from parking structures



At least 1 entrance from each elevated walkway or pedestrian tunnel

At least 1 entrance to each tenancy in a facility

# Entrances



AR coincides with, or in same area as, general circulation path

At least one compliant door or doorway

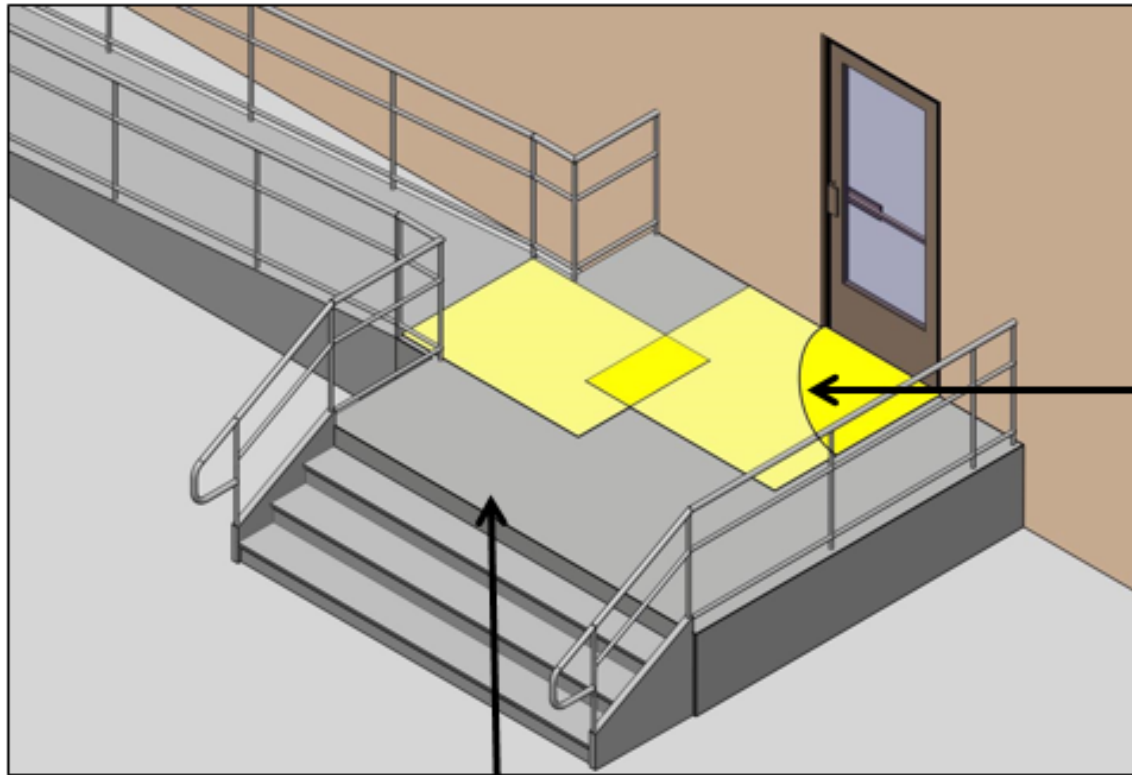


ISA required - unless all public entrances comply)

Bollards/ security barriers cannot obstruct AR

# Entrances

**Landings must accommodate door man. clearances**



**Recommended:  
locate door swing  
outside ramp landing**

**Recommended: locate clearances away  
from stair openings/ drop-offs**

# Entrances

## Exterior Doors: Automation Recommended



**Required at GSA buildings  
(Public Building Service Standards)**

**Which rooms and  
spaces must comply?**

# New Construction (§201)

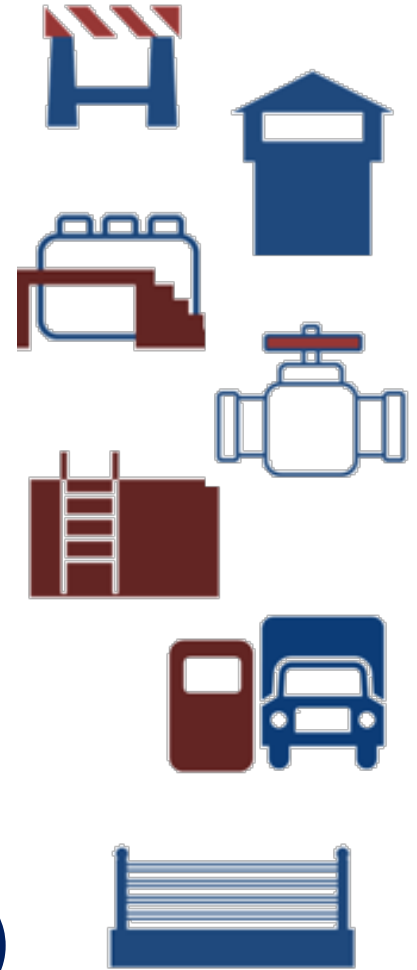
All areas must comply except:

- Exempted structures/ spaces
- Employee Work areas
- Partially scoped spaces



# General Exceptions (§203)

- construction sites
- areas raised for security, life/fire safety
- raised work areas
- machinery spaces
- spaces accessed by ladders, catwalks, crawl spaces, very narrow passageways
- certain single occupant structures (e.g., toll booths)
- certain sports structures (e.g., referee standards, boxing rings, diving platforms)



# Example: Retail Facility



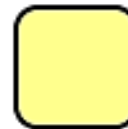
Sales Counter (at least 1 of each type accessible on public side)



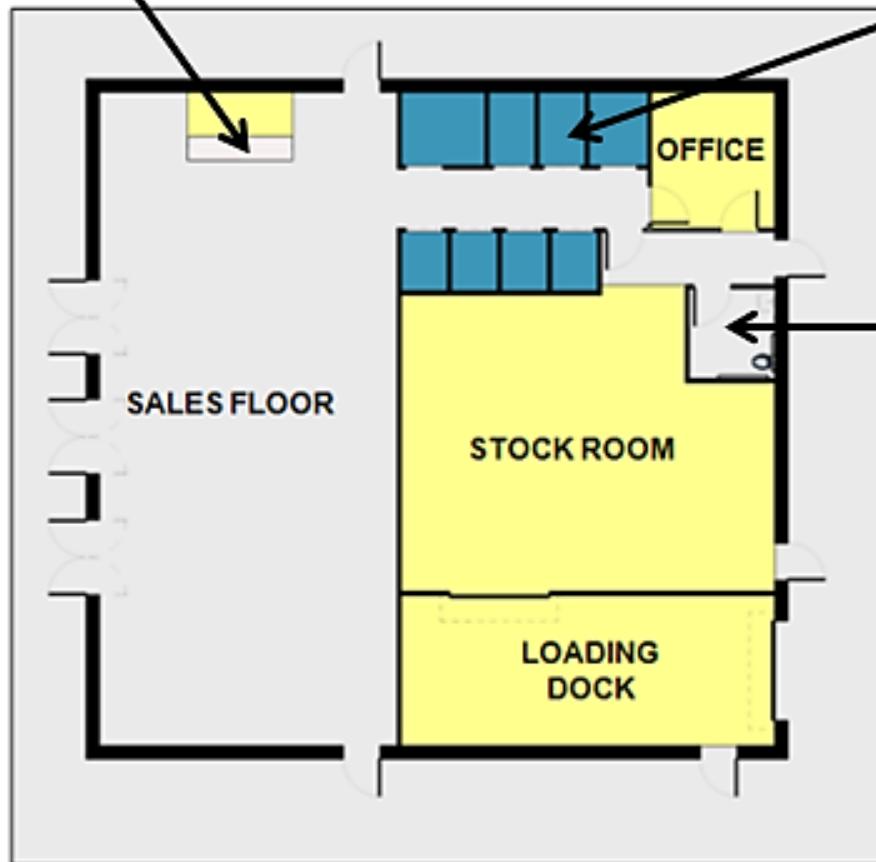
Fitting Rooms (at least 5% of each type)



Toilet rooms, including employee restrooms, must comply



Employee Work Areas - Partial access if used *only* by employees *for work*






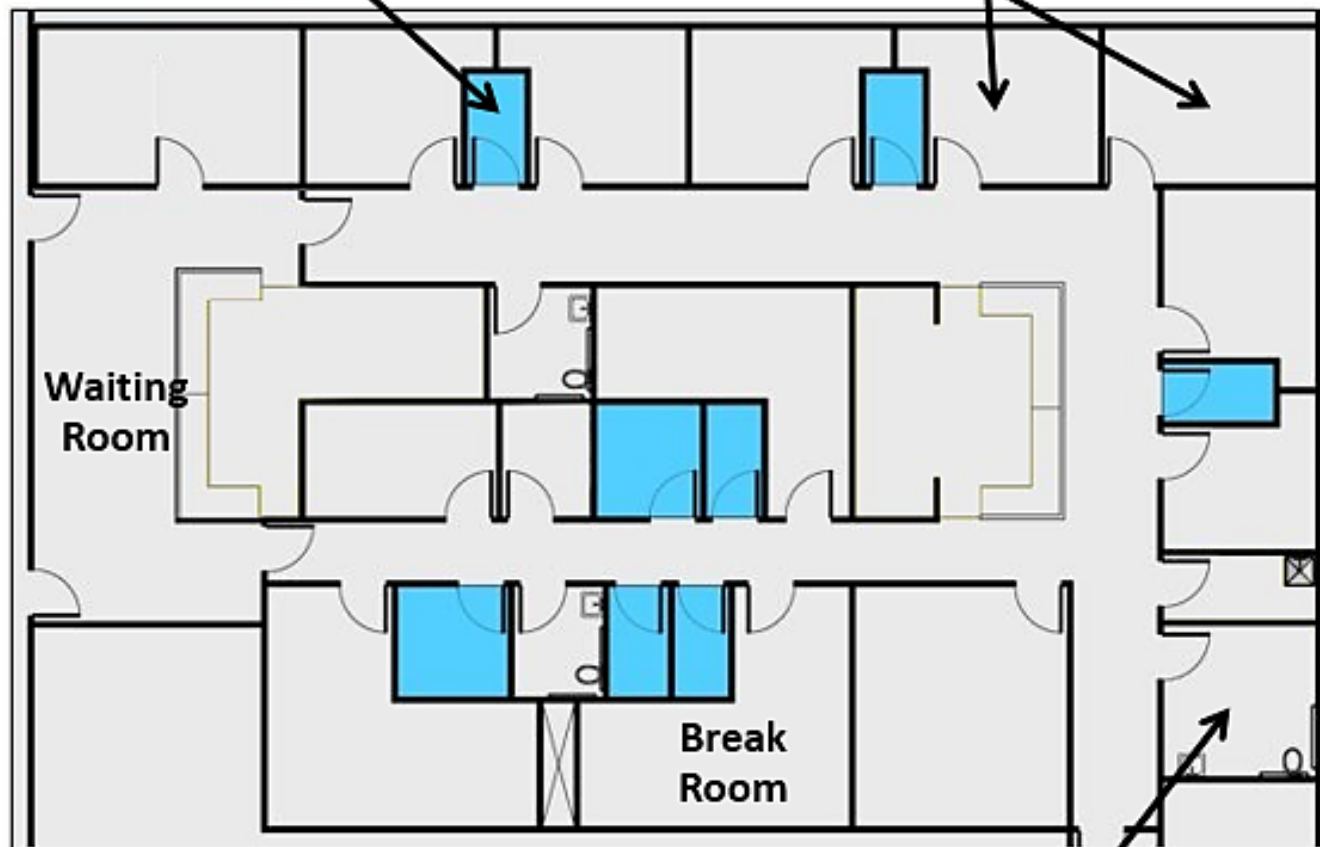


# Example: Medical Care Suite

## Public & Common Use Areas: Full Access

 Dressing Rooms: access to at least 5% of each type

Exams Rooms & Doctors' Offices: 100% scoping (public access)



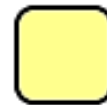
Toilet rooms – access to all  
(50%: clustered single user of same type)



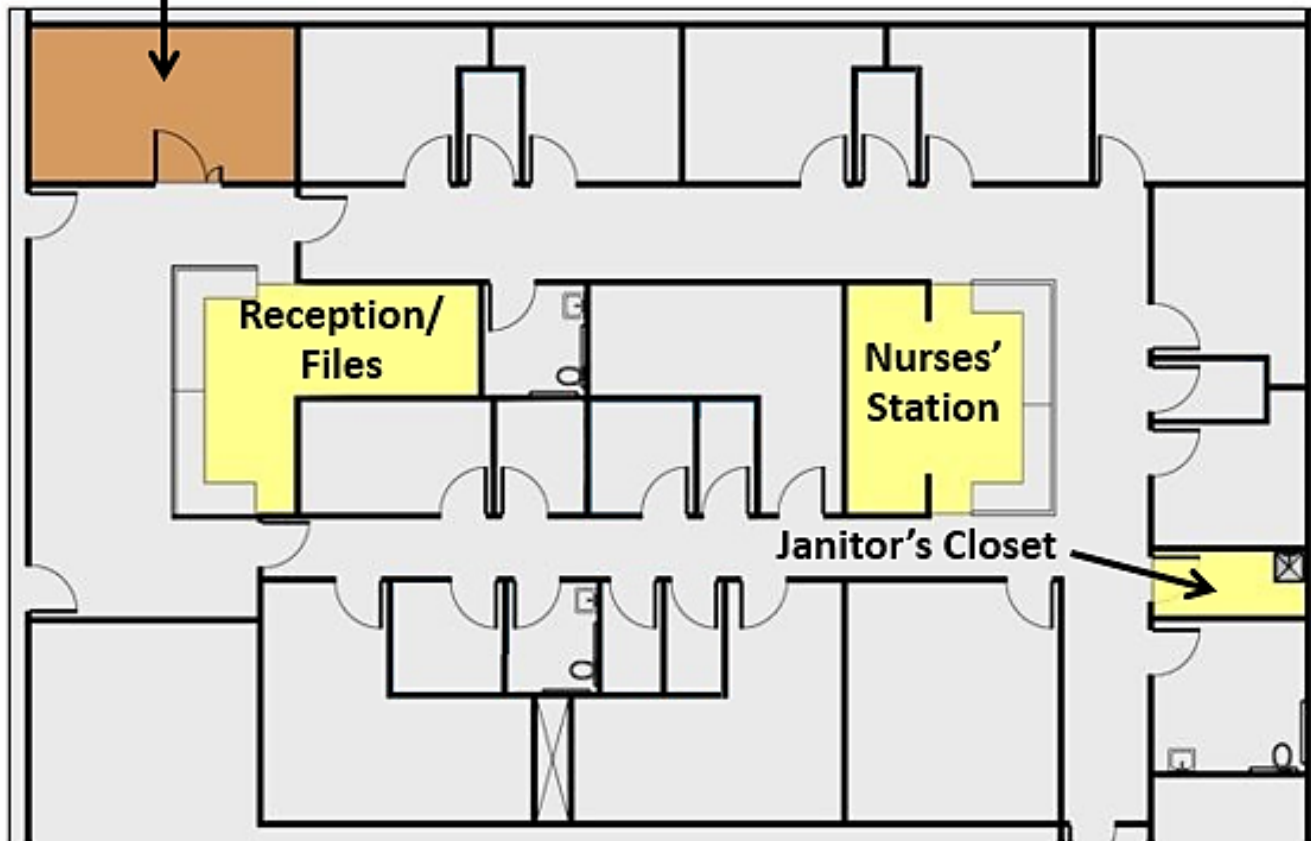
# Example: Medical Care Suite

## Employee Work Areas & Exempt Spaces

Mechanical (exempt)



Employee Only Work Areas



# Employee Work Areas (§203.9)

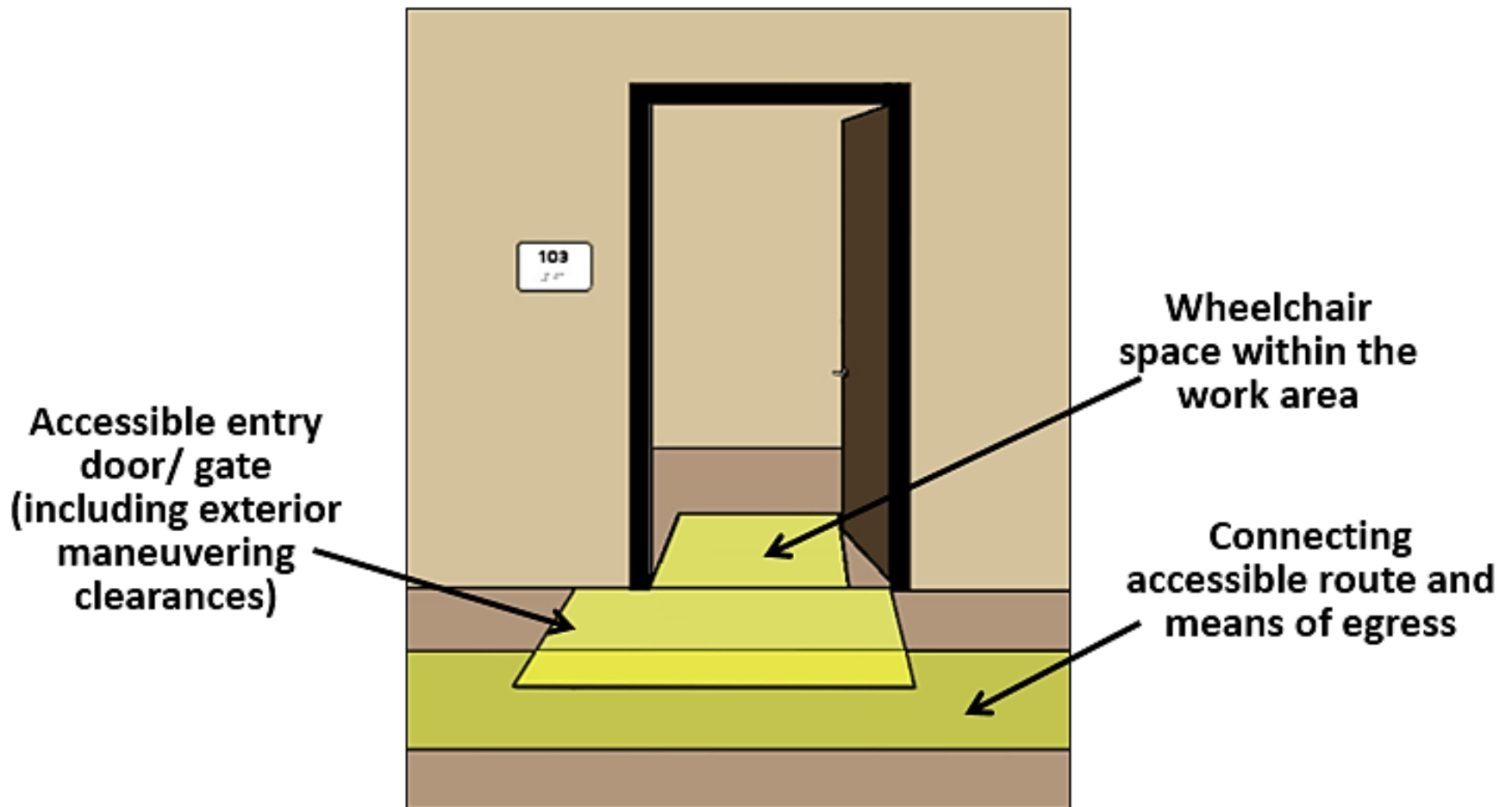
## Minimum requirements:

- “approach, entry, & exit”
- circulation paths (in areas  $\geq 1000$  sq ft)
- means of egress
- visual alarm connection



# Employee Work Areas

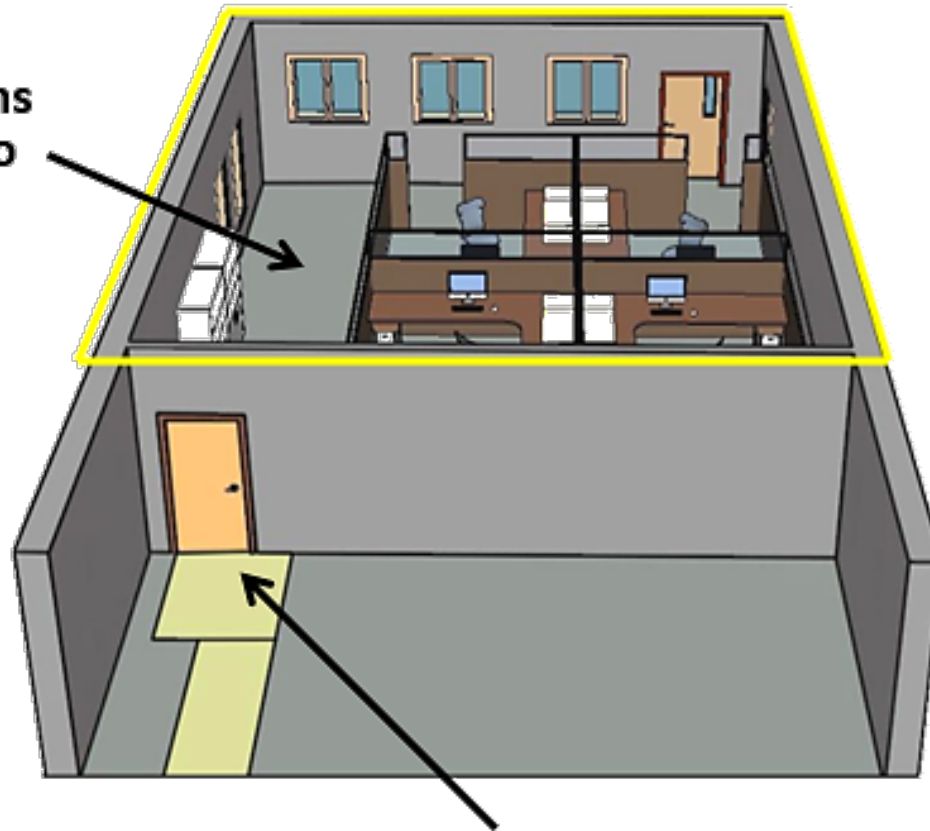
Access for “approach, entry, & exit”



# Employee Work Areas

Less than 1,000 SF

Common use  
circulation paths  
*not* required to  
comply



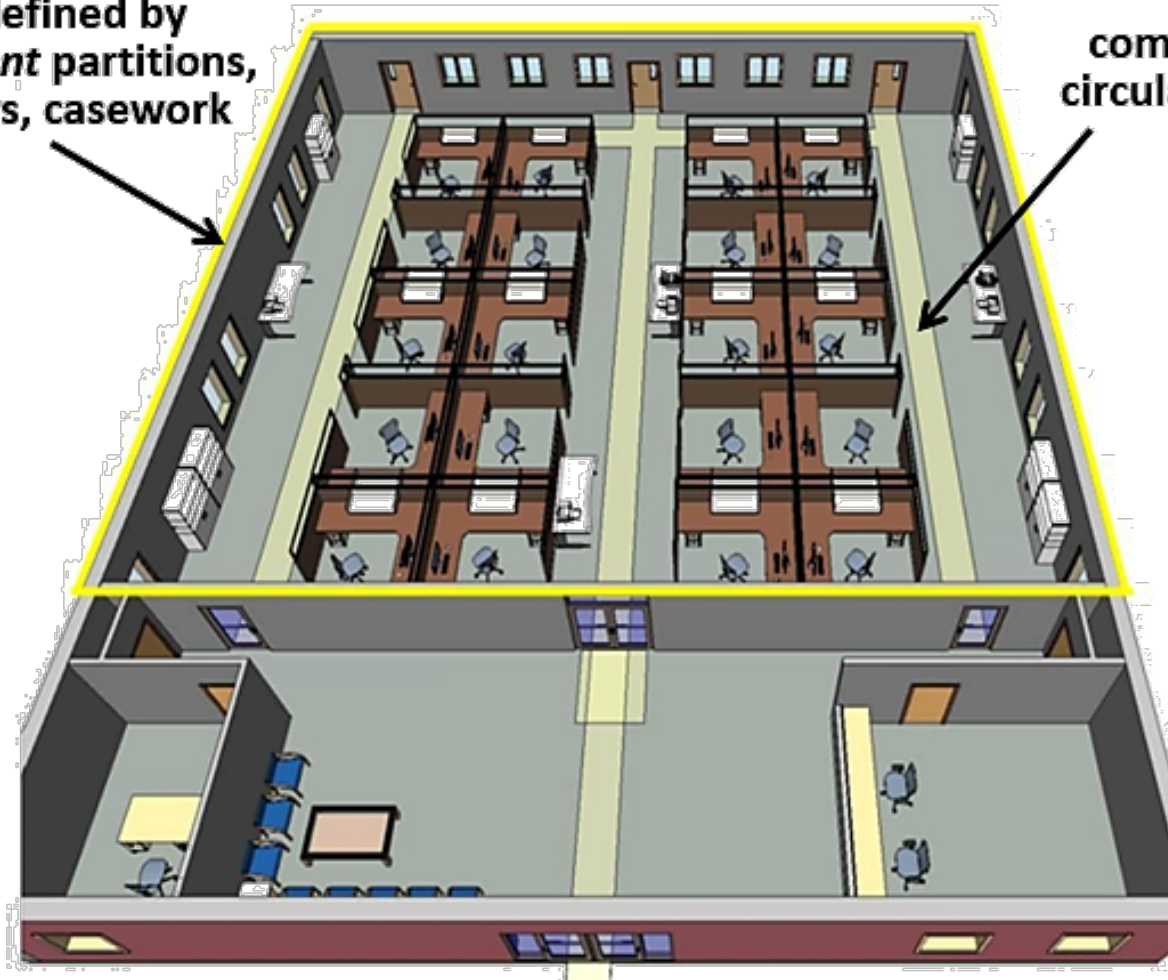
Access for approach, entry, and  
exit to work area required

# Employee Work Areas

1,000 SF or more in size

size defined by  
*permanent* partitions,  
counters, casework

common use  
circulation path

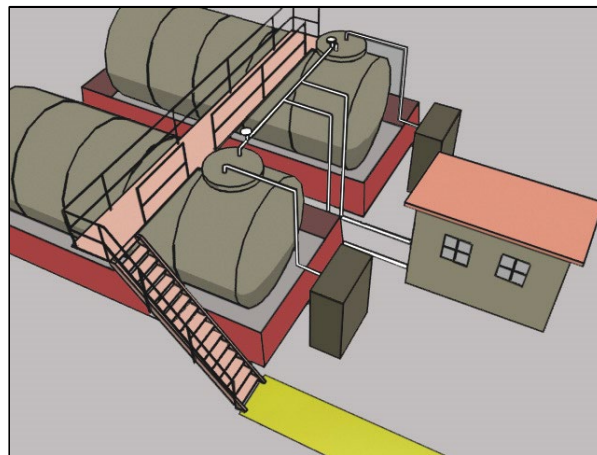


# Employee Work Areas (§206.2.8)

Common use circulation paths must comply in work areas 1,000 SF or more in size

**Exempt:**

- exterior areas fully exposed to weather
- portions of paths integral to equipment

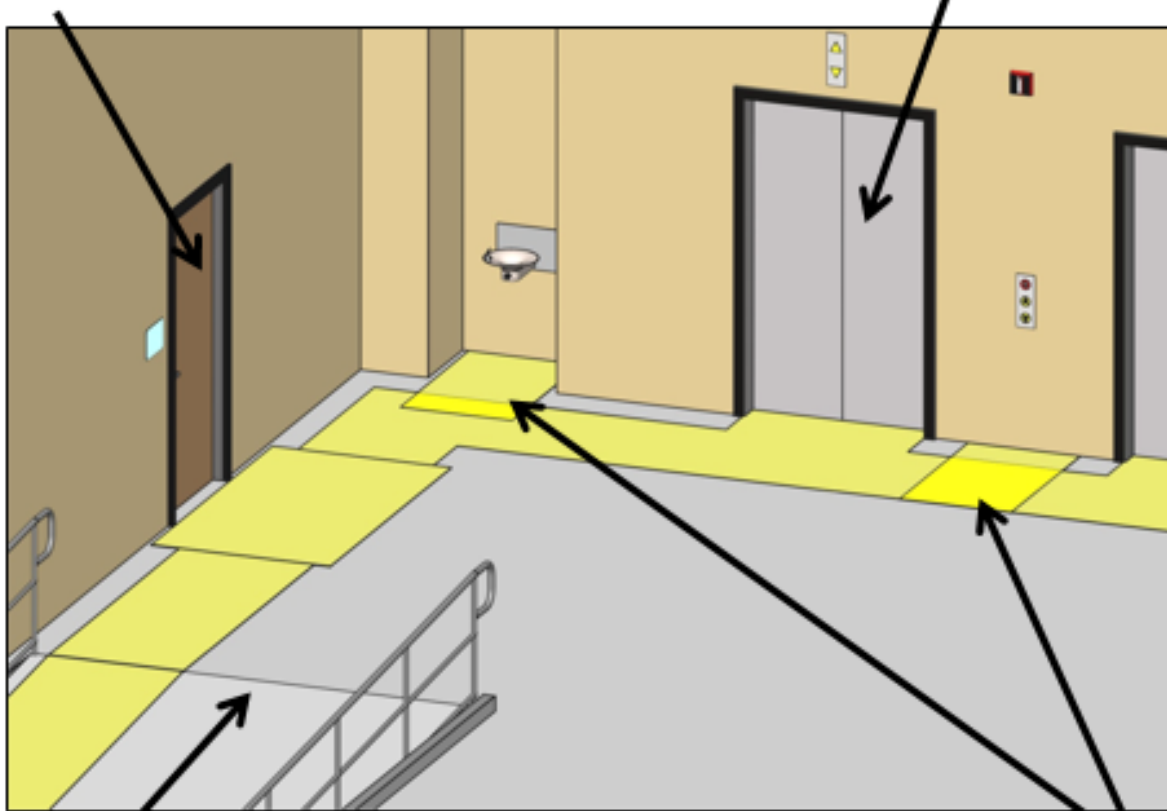


# Accessible Routes

Must connect to:

each accessible room and space

each story (unless an exception applies)



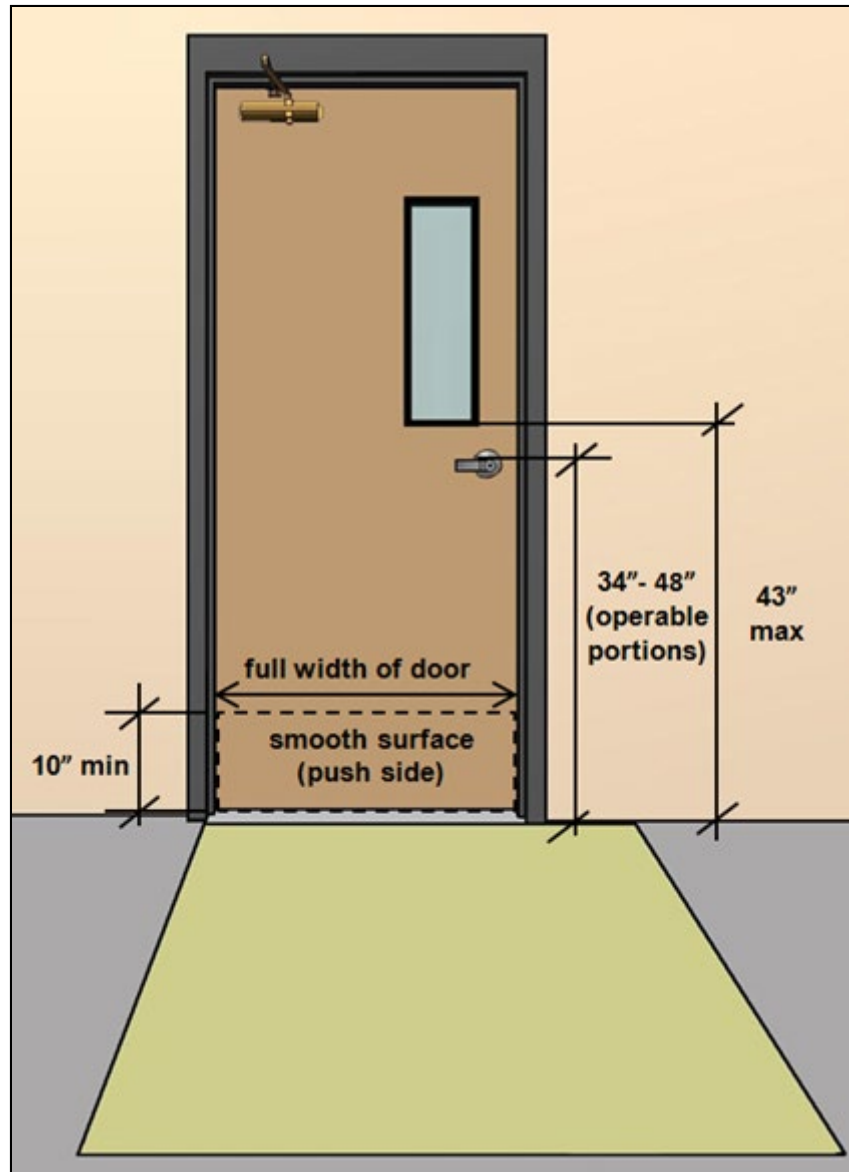
each level on a floor required to be accessible

each accessible element



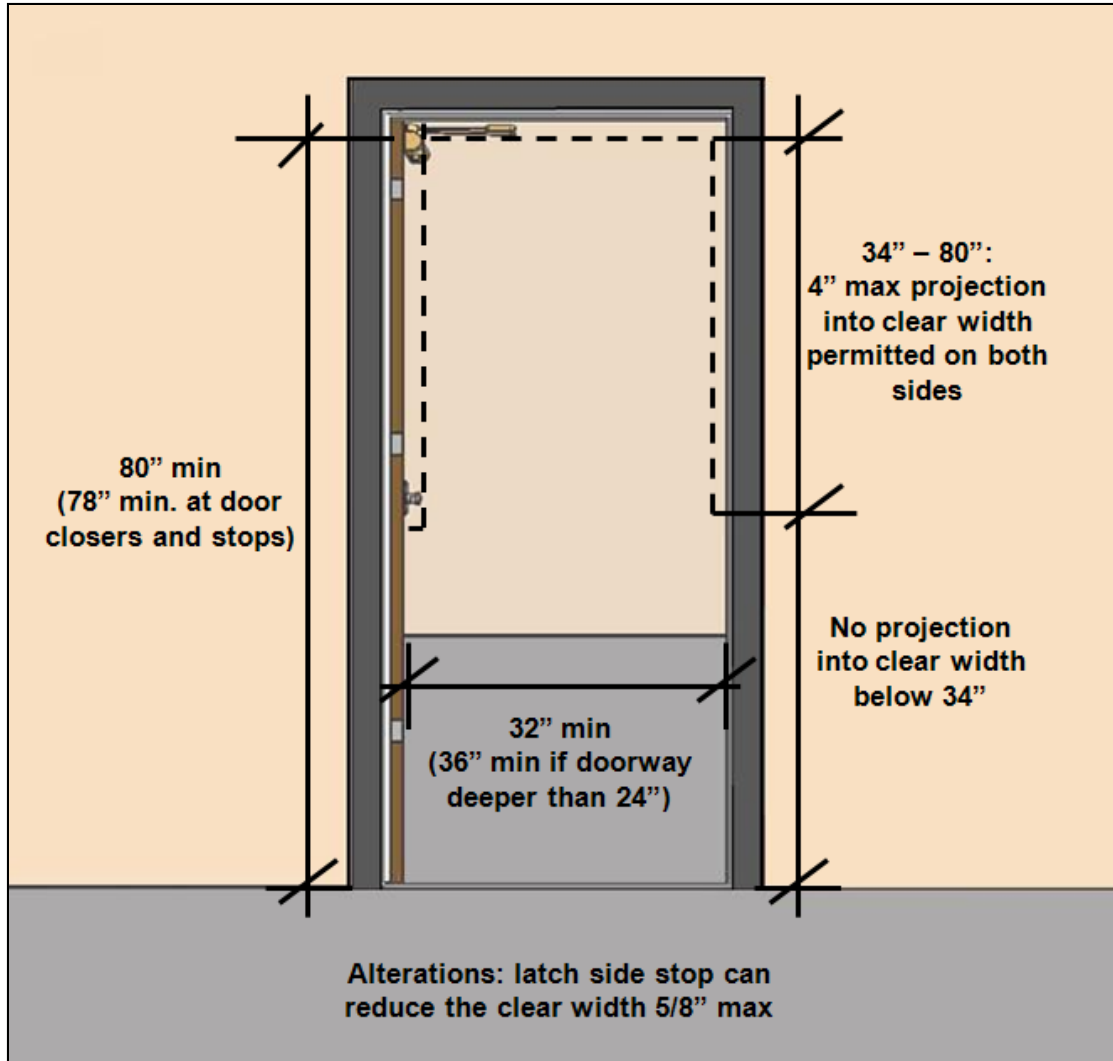
# Doors, Doorways, and Gates

# Doors, Doorways, Gates (§404)



- Clear Width (32" min.)
- Closing Speed
- Opening Force (5 lbf max)
- Vision/ Side Lights
- Compliant Hardware
- Smooth Surface (bottom, push side)
- Thresholds (1/2" max)
- Maneuvering Clearance (both sides unless usable in 1 direction only)

# Doors, Doorways, Gates

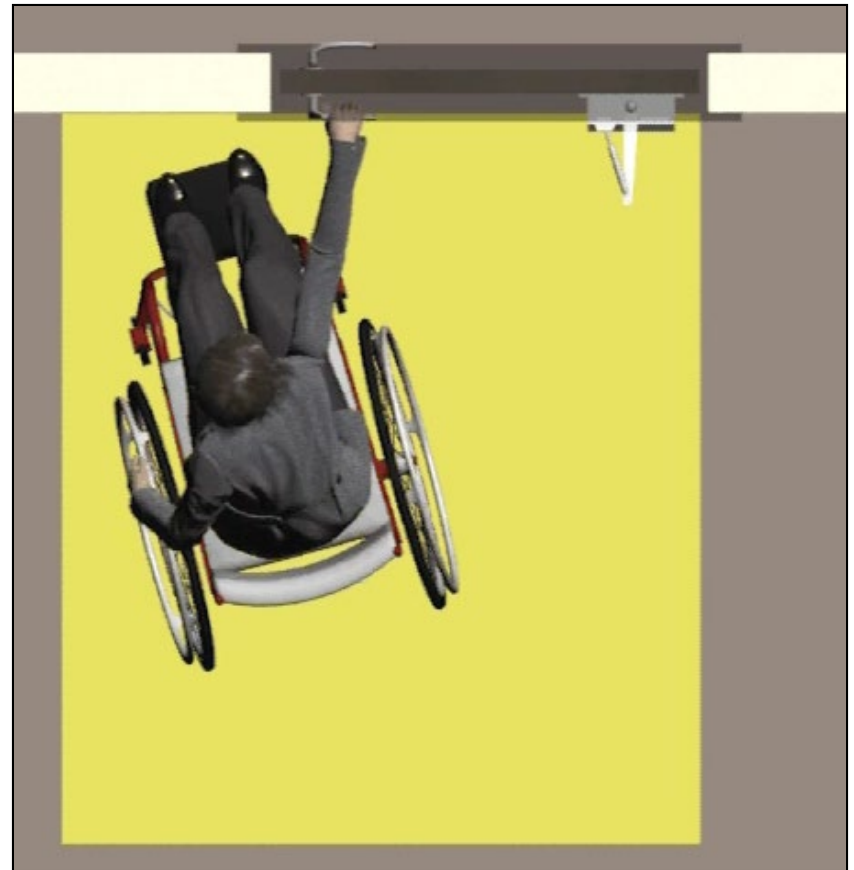


**Limited  
projections into  
door clear width**

**Hardware height:  
34" – 48"**

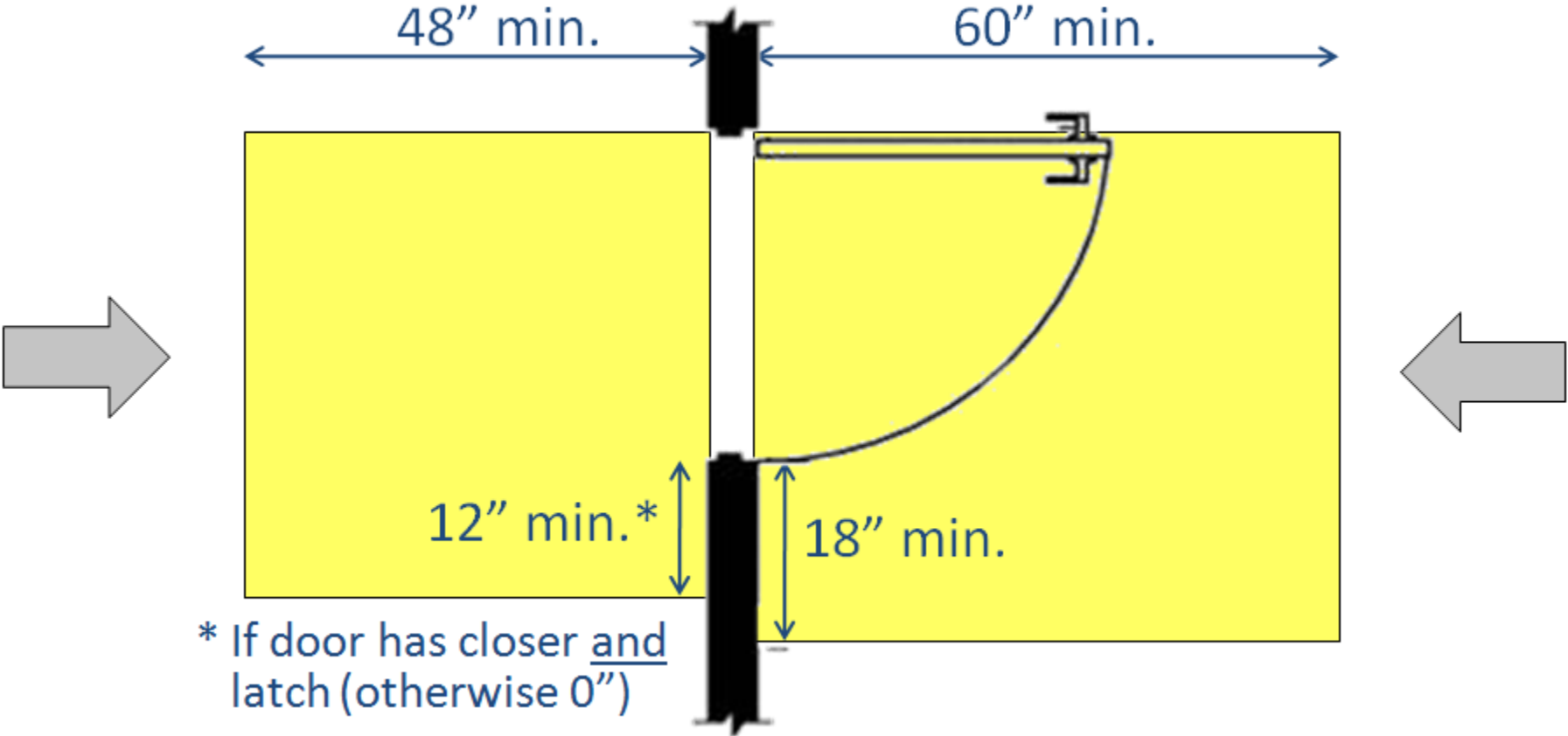
# Maneuvering Clearances

Minimum space for positioning/  
maneuvering at doors



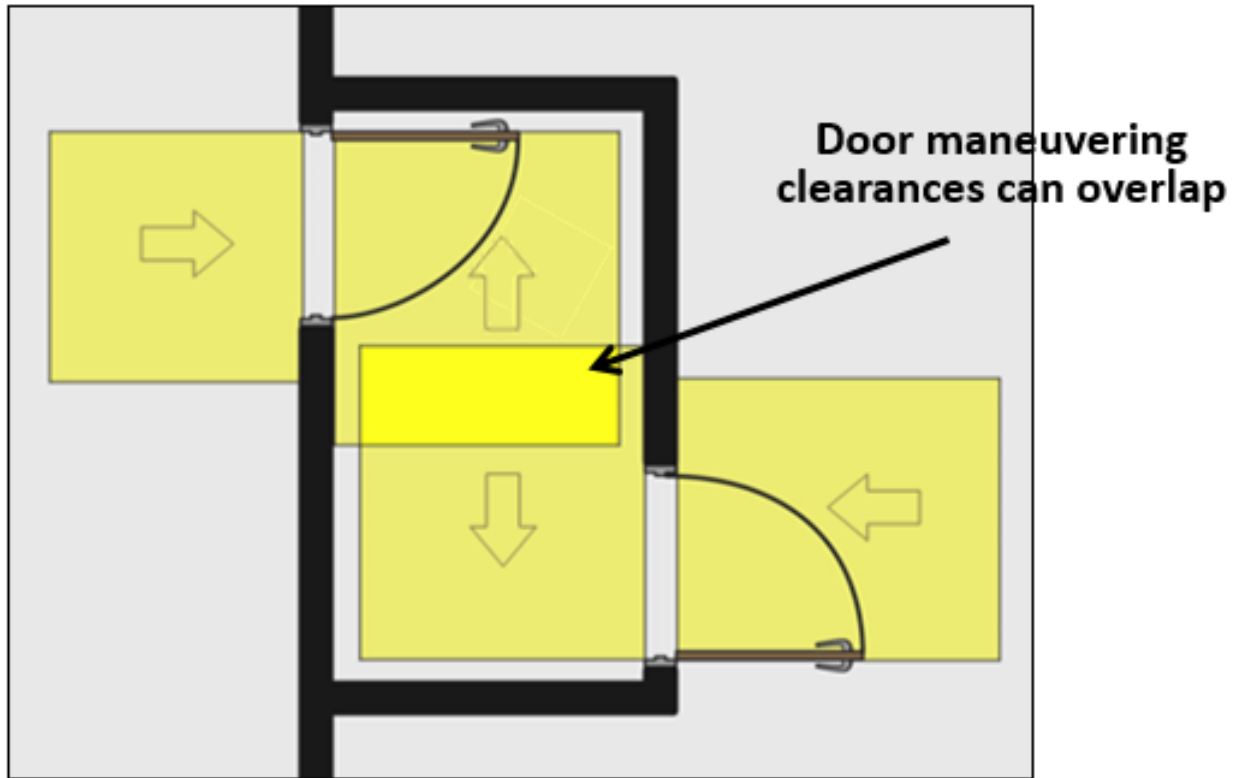
# Maneuvering Clearances

## Forward Approach



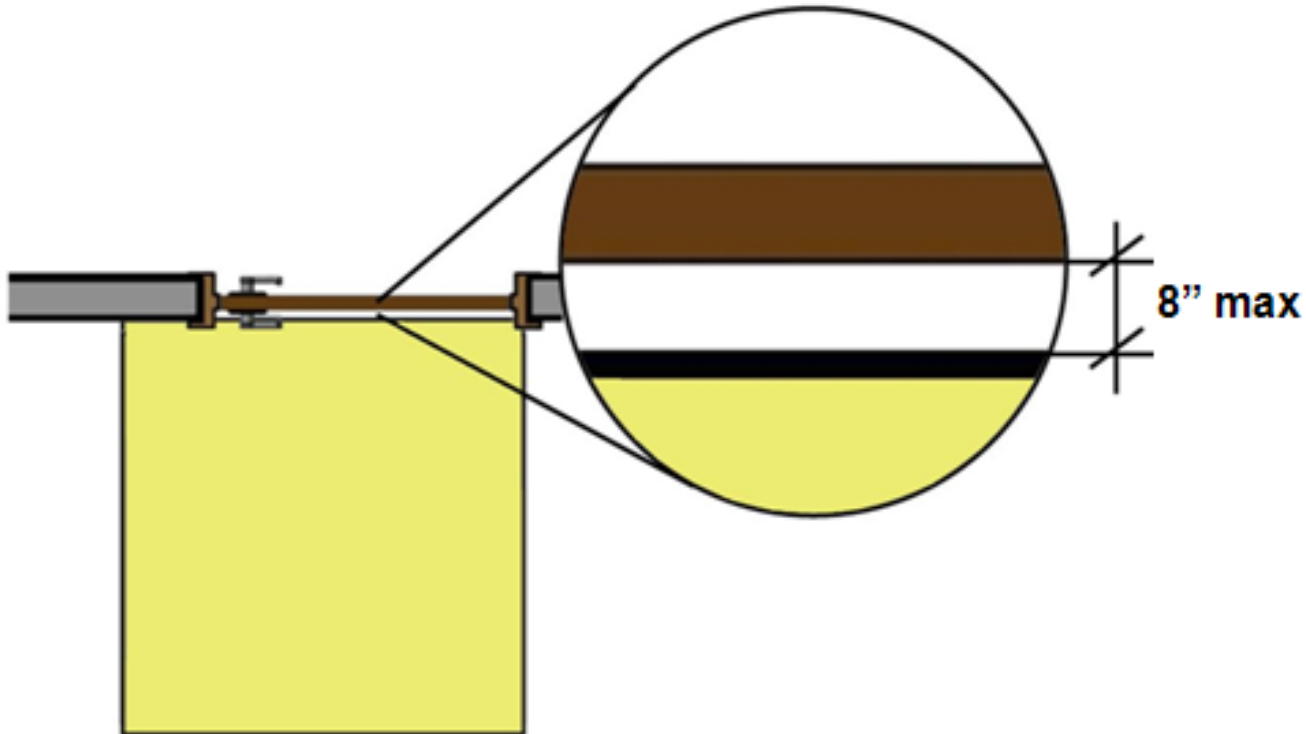
# Maneuvering Clearances

Required at each accessible door based on approach & swing



# Maneuvering Clearances

Maneuvering clearance measured from the wall - cannot be offset more than 8" from the face of the door



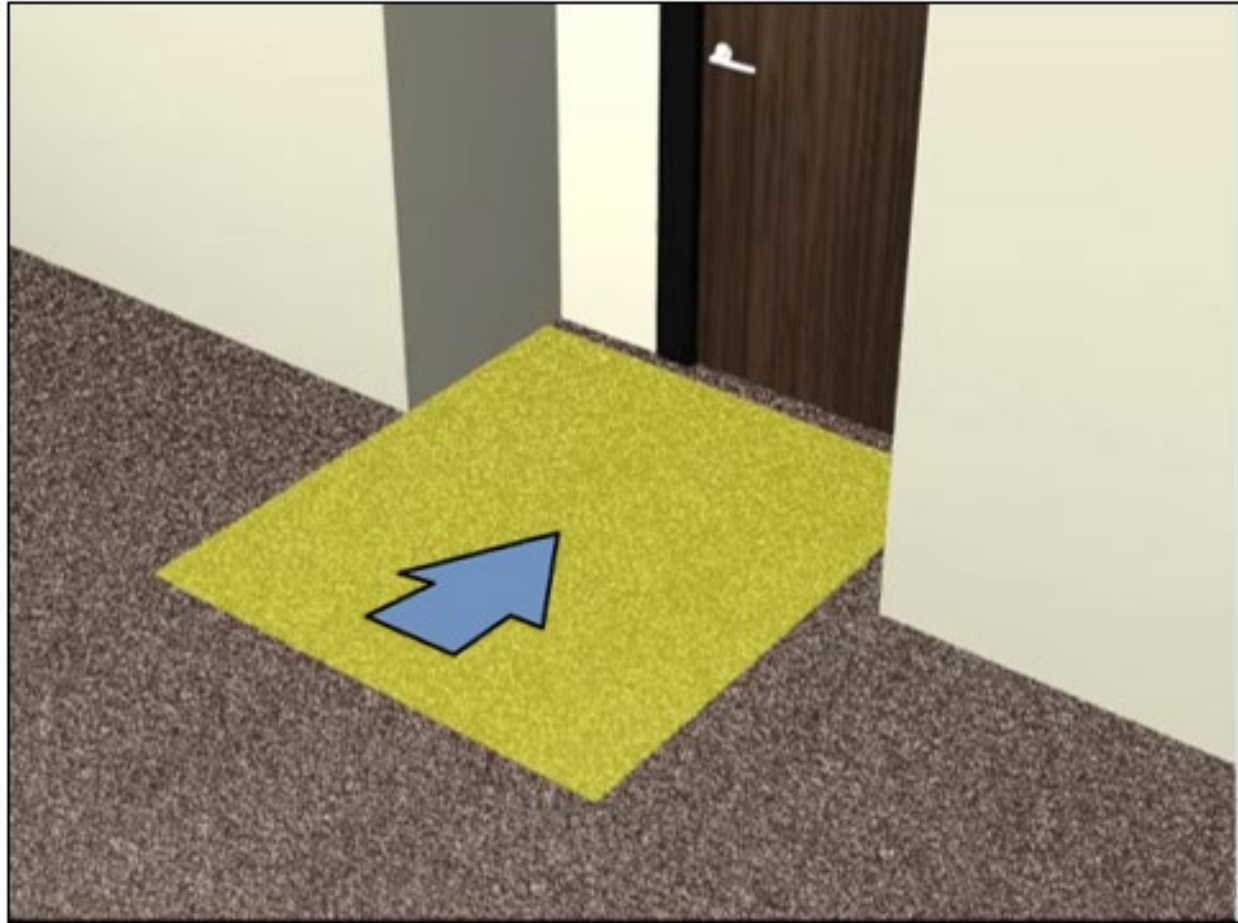
# Maneuvering Clearances

8" max. offset from face of door





# Maneuvering Clearances

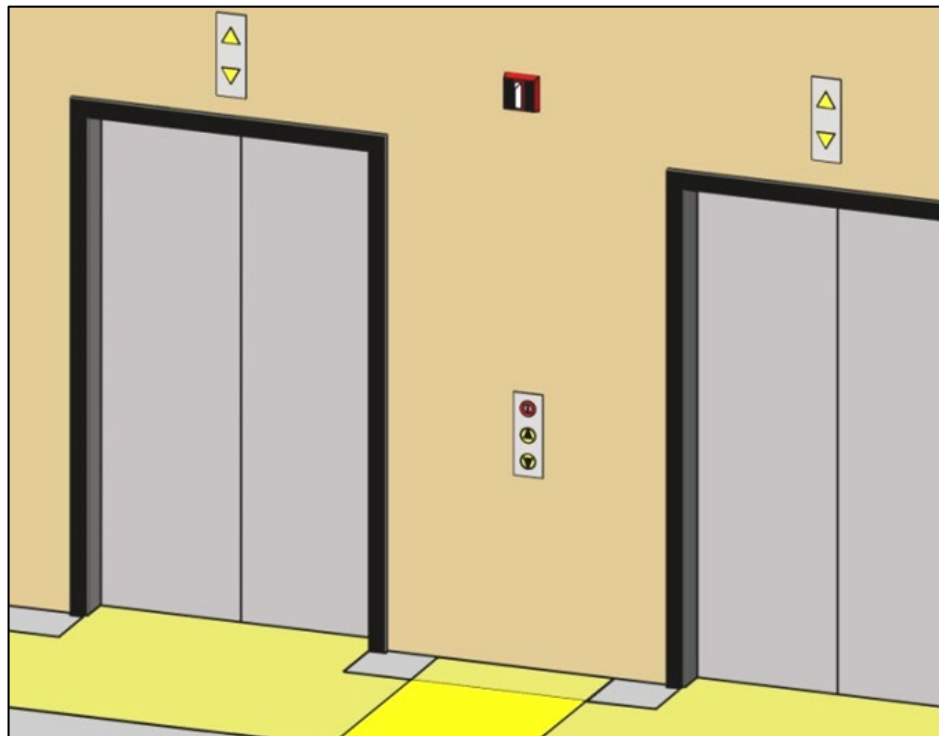


**Recess > 8": maneuvering clearance for forward approach located 8" max. from face of door**

# Accessible Routes Between Stories

# Multi-Story Facilities (§206.2.3)

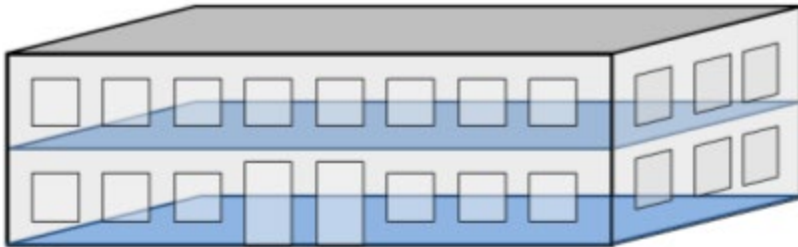
At least one accessible route must connect each story and mezzanine unless an exception applies



# Exceptions (§206.2.3)

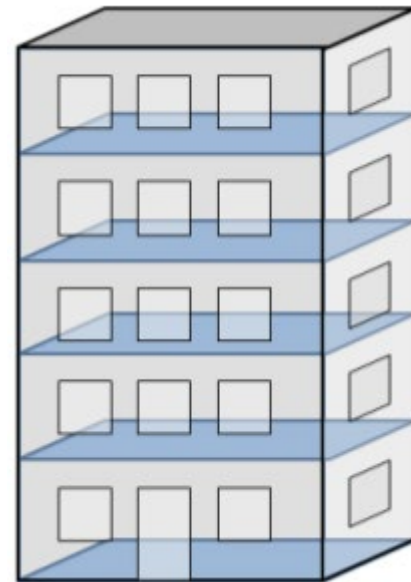
AR between floors (“elevator exception”)

Private sector facilities only:



less than 3 stories

OR



less than 3,000 sf/ flr)

# Exceptions

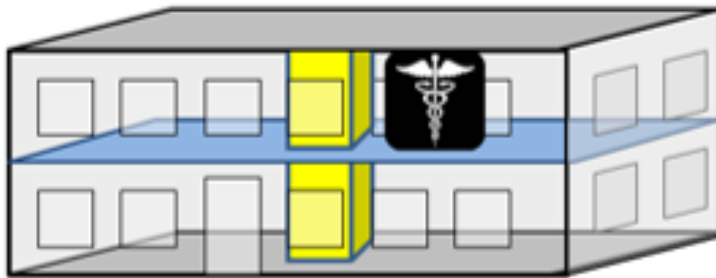
## Exception not allowed for:

- Shopping centers/ malls with 5 or more sales or rental establishments)
- Professional offices of health care providers
- Terminal, depots, or stations used for public transportation
- Government Facilities



# Exceptions

**Accessible route required to upper story:**



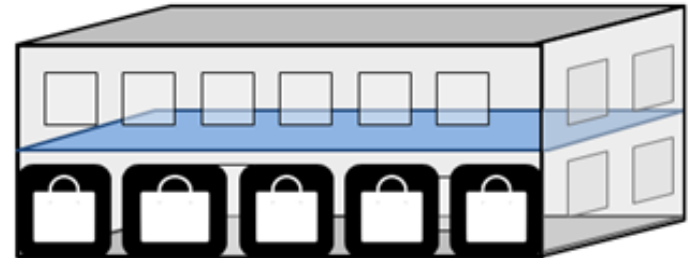
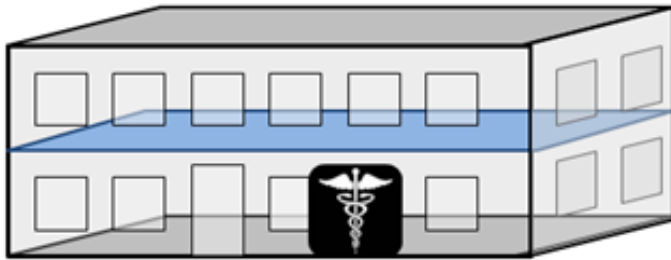
**containing a health  
care facility**



**containing a sales/rental  
establishment (if facility  
contains at least 5 total)**

# Exceptions

- Accessible route not required to upper story without a health care facility or a sales/rental establishment



# Exceptions

**If facility qualifies for exception,**

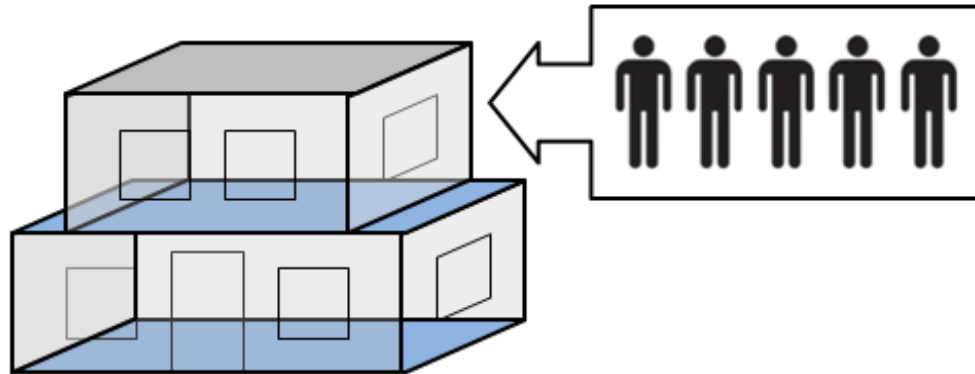
- all other provisions in the standards still apply to stories/ mezzanines not served by AR**
- elevators provided anyway must fully comply (as standard or LULA elevators)**
- vertical access still may be required by state or local code.**



# Exception: Gov't Buildings

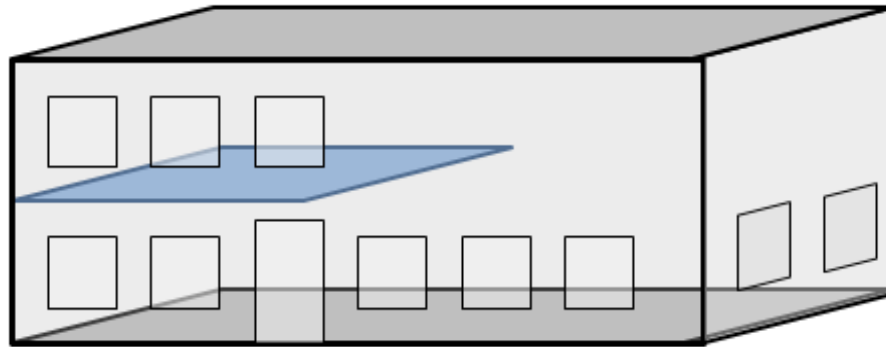
Exception for public (government) buildings:

- 2 story only AND
- 1 floor has: no public space AND max. occupancy of 5



# Exceptions: Mezzanines

**AR not required to mezzanines in buildings not required to have an elevator**



**Additional conditions for restaurants & cafeterias**

# Exceptions

## Additional exceptions:

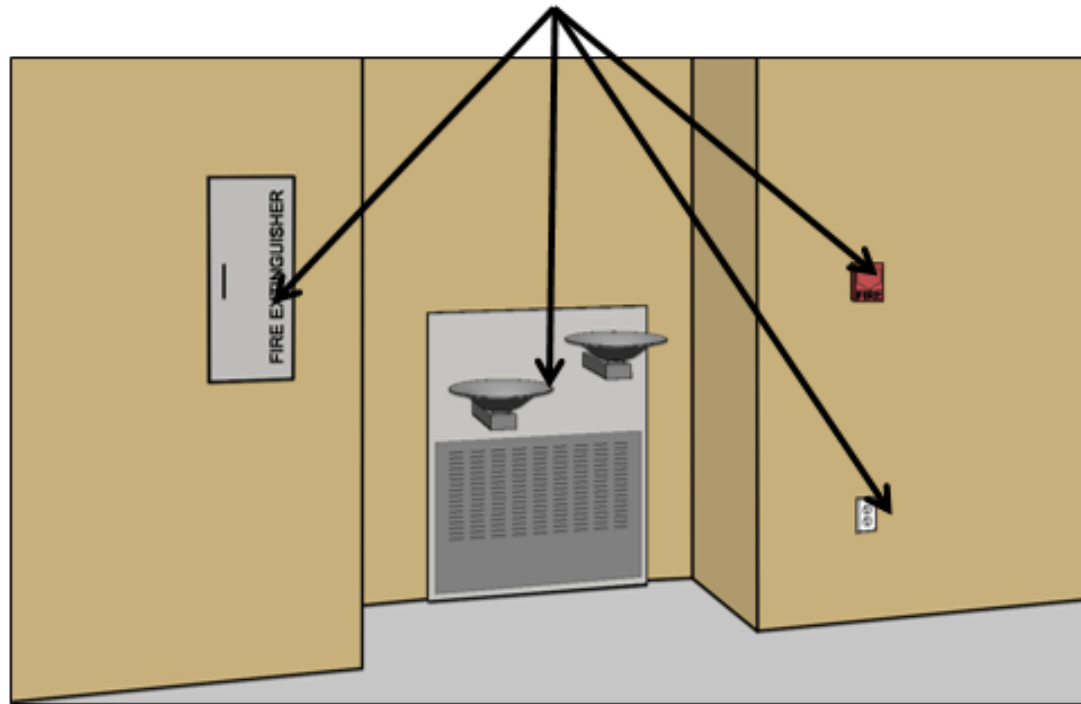
- **detention and correctional facilities**
- **residential facilities**
- **transient lodging (multi-story units)**
- **air traffic control tower cab**
- **qualified historic facilities**
- **press boxes**



# Operable Parts & Elements

# Operable Parts

Standards apply to *fixed or built-in* elements



**Moveable elements/ furnishings not covered  
by the standards**

# Operable Parts (§309)

- **Operability**
- **Reach range**
- **Clear floor space**
- **AR connection**



# Reach Ranges (§308)

Side reach range reduced:

48" – 15"

(same as forward reach)



# Clear Floor Space (§305)

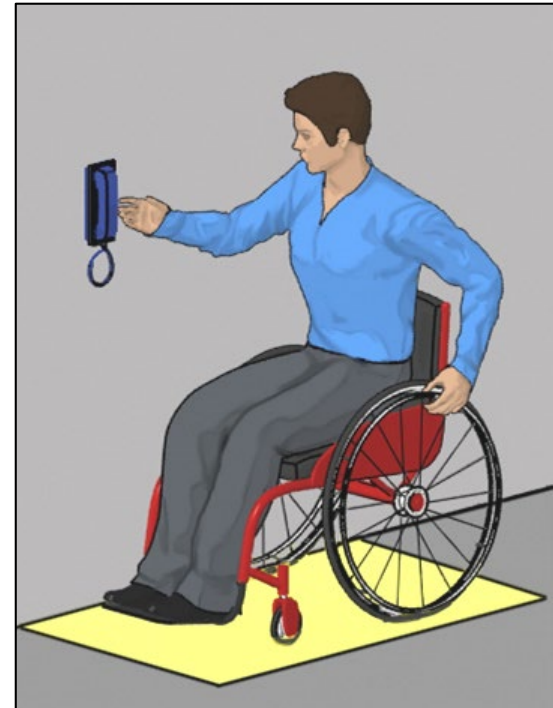
## Forward Approach



### Required at:

- dining/ work surfaces
- drinking fountains
- lavatories & most sinks

## Side Approach



Allowed at other elements  
(including sales/service  
counters), specified for:  
beds & most appliances

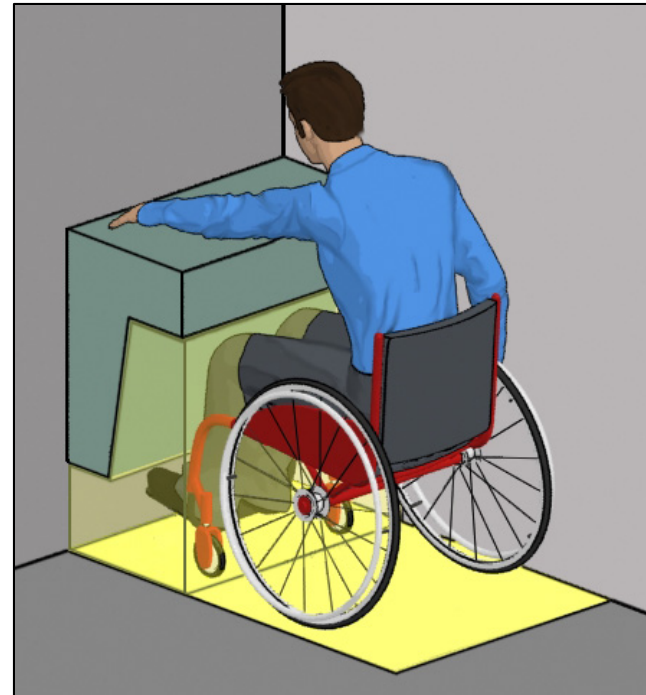


# Clear Floor Space (§306)

**Forward Approach: Objects with knee/toe clearance can overlap a portion of the space (required at some elements, e.g. DFs & lavs)**



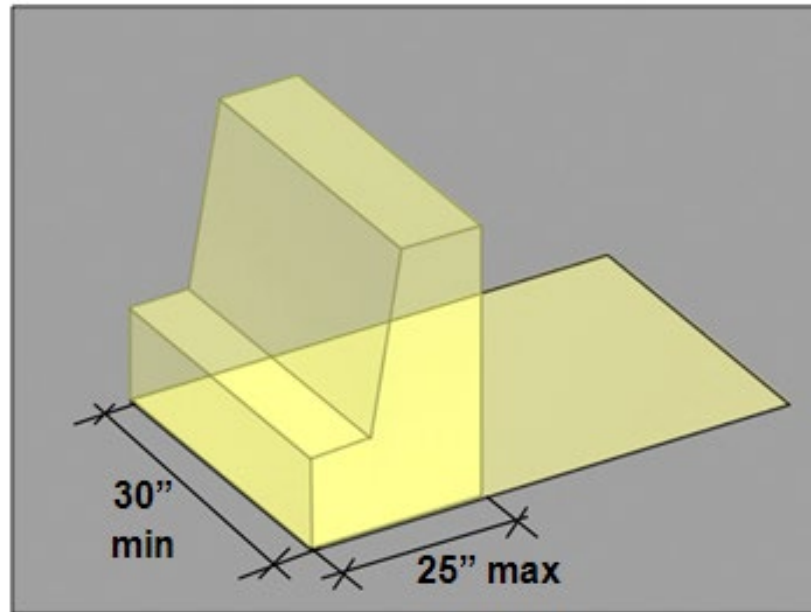
**Toe space (9" high min.):  
Max. depth 6"**



**Knee & Toe Space:  
Max. depth 25"**

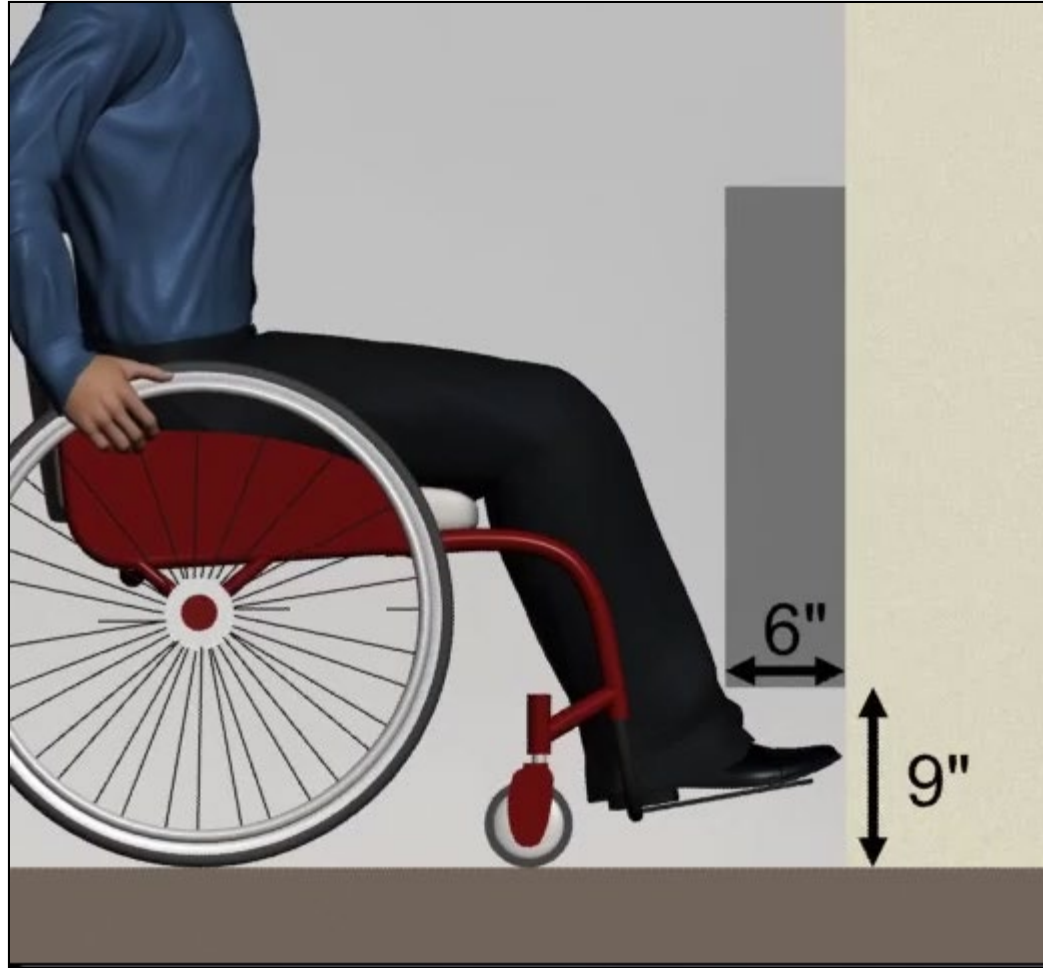
# Clear Floor Space

**Knee/toe specifications allow space for plumbing, enclosures, and supports**



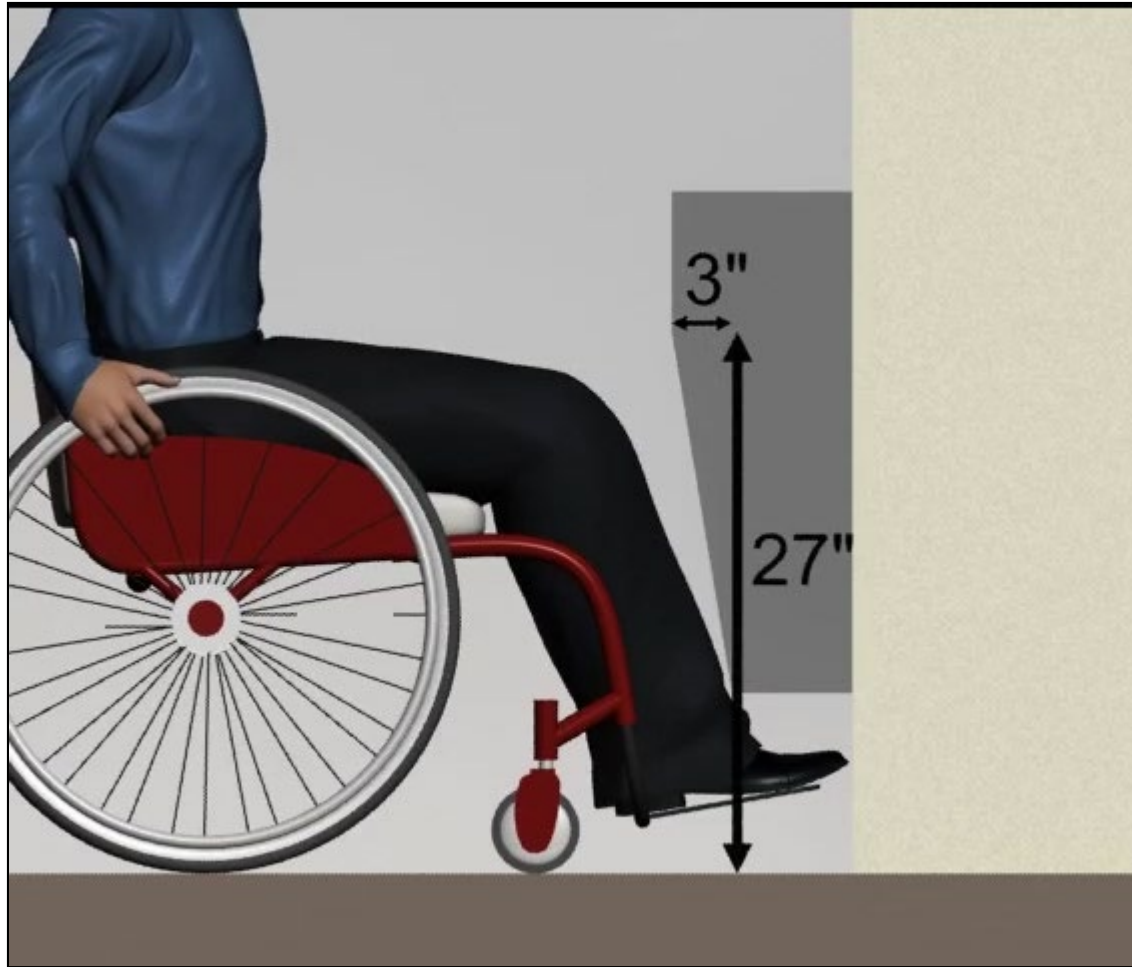
**No object can protrude into min. clearances (other than dip of overflow at lavs & sinks)**

# Knee & Toe Space



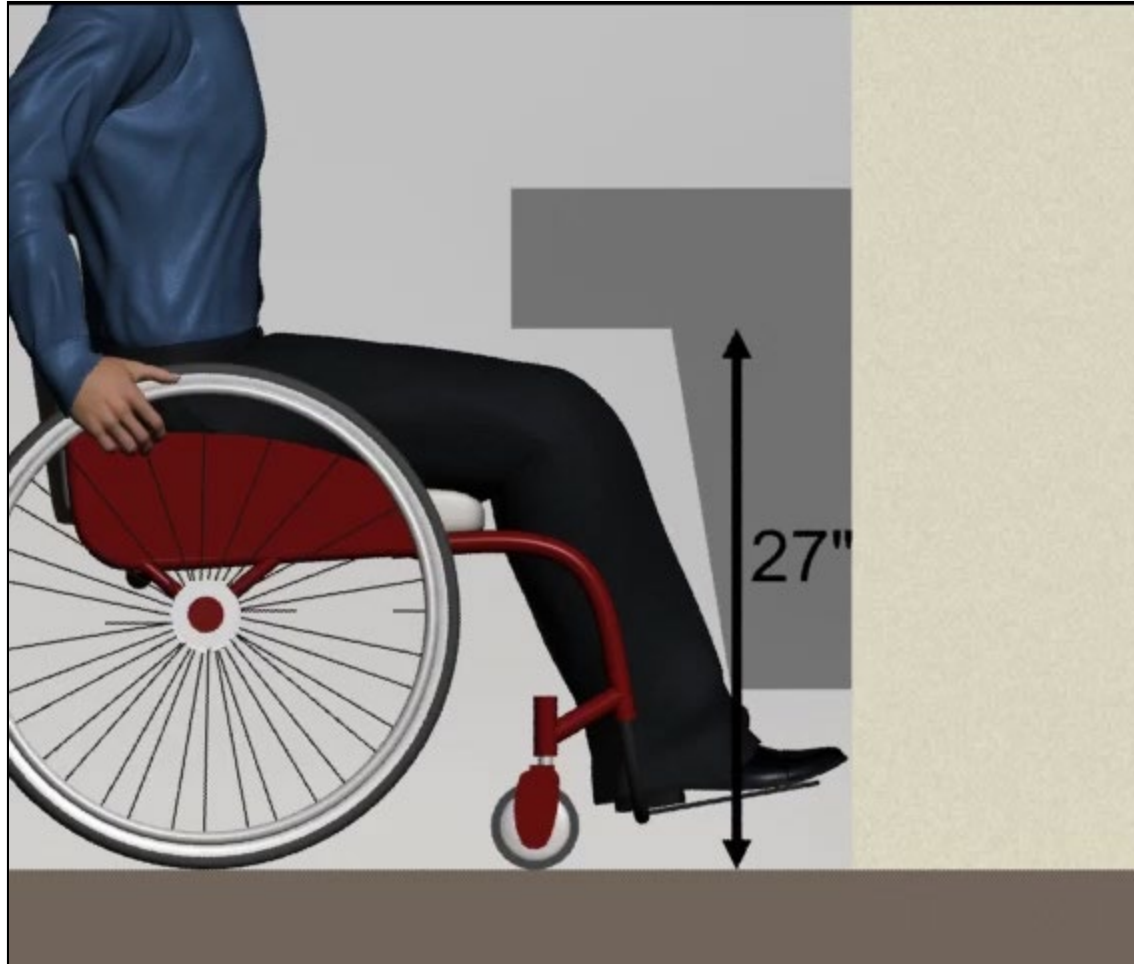
**Toe space**

# Knee & Toe Space



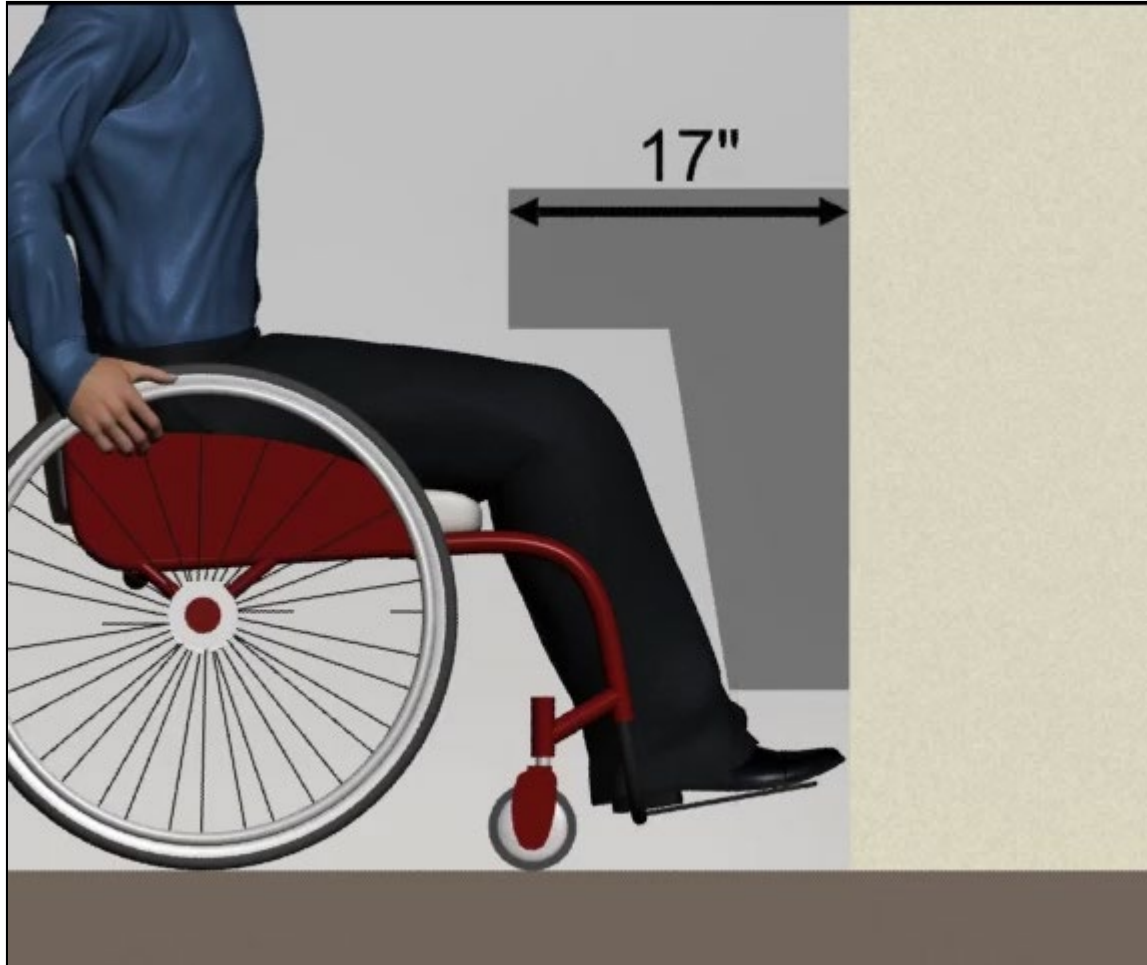
**Beyond toe space, clearance increases from 9" to 27" min. high over 3" span (6:1 slope)**

# Knee & Toe Space



**Knee Space (8" deep min. where knee space required)**

# Knee & Toe Space



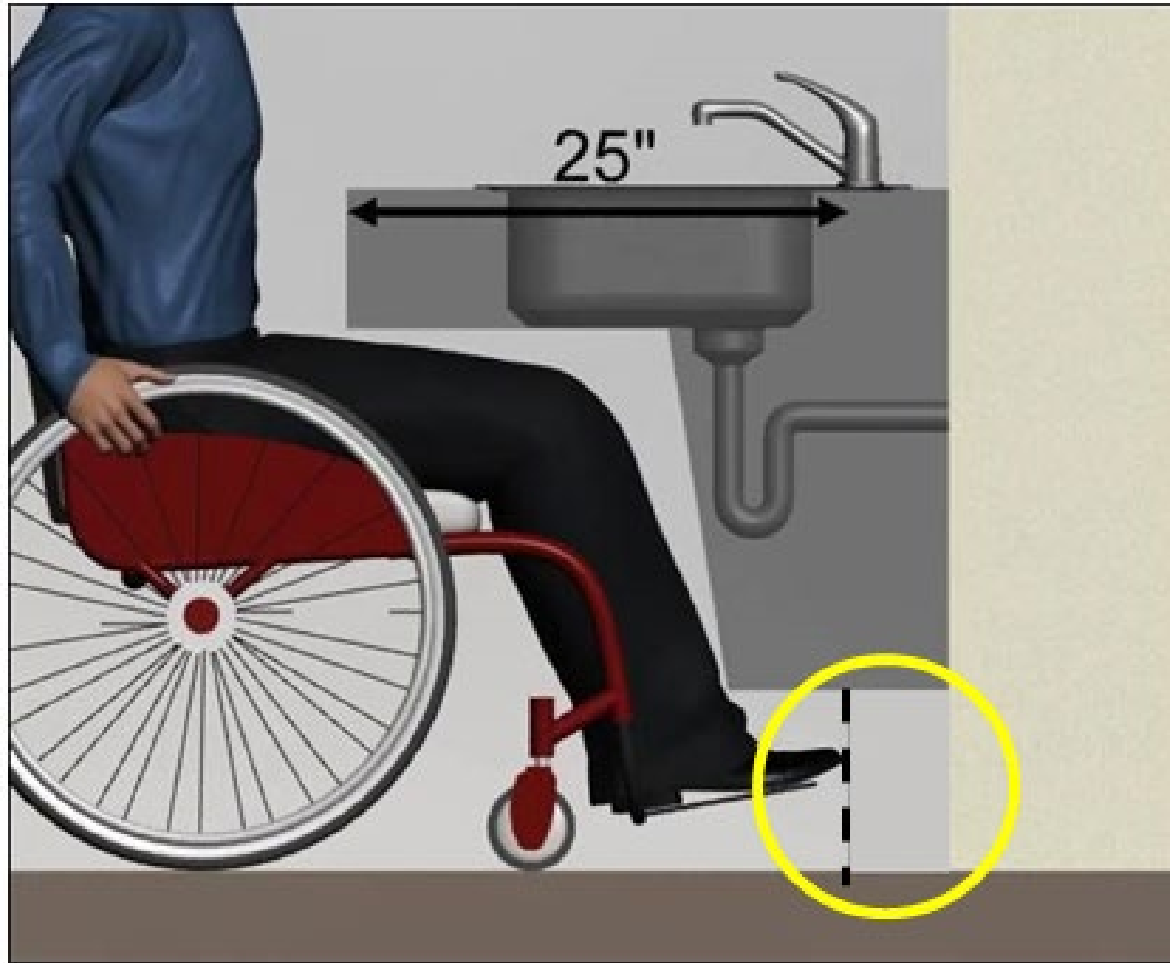
**Required knee & toe space must be at least 17" deep**

# Knee & Toe Space



**Additional depth must provide clearance for knees  
(27" high min.)**

# Knee & Toe Space

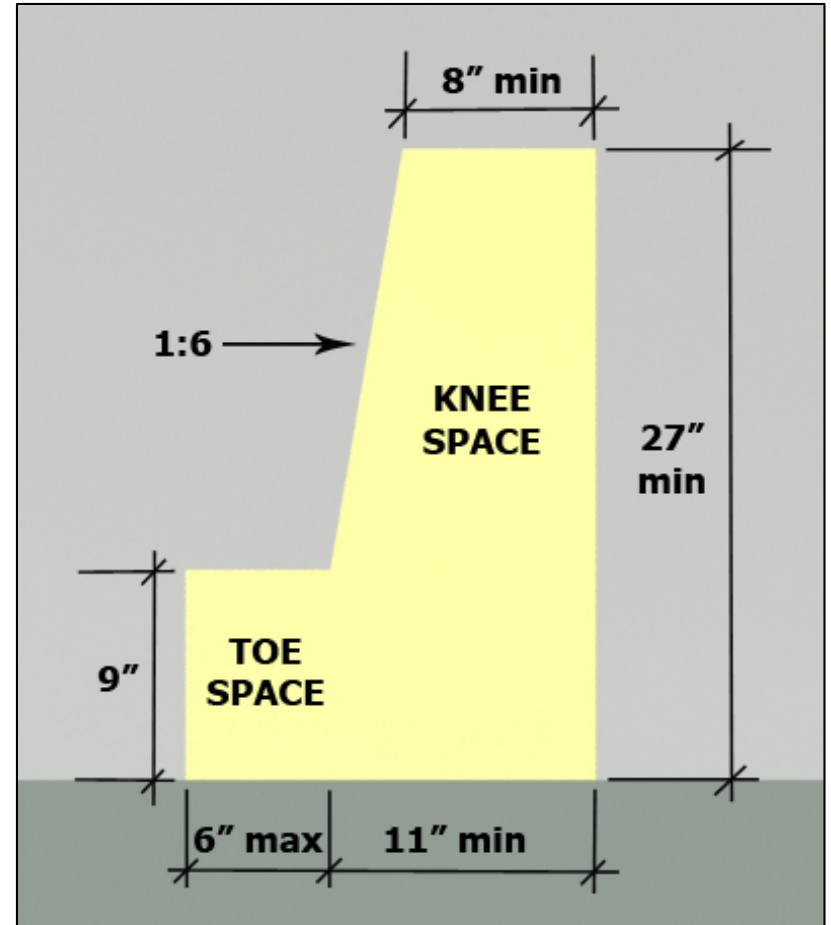
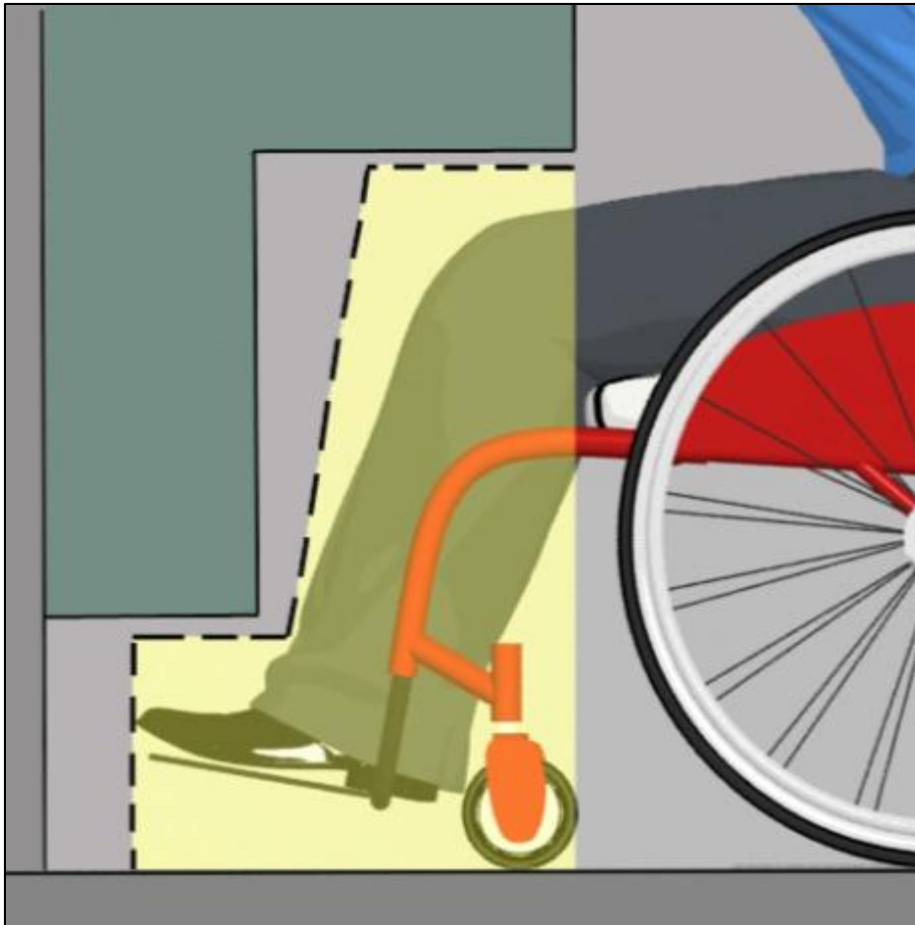


**Space beyond 25" depth can exist but is not usable**

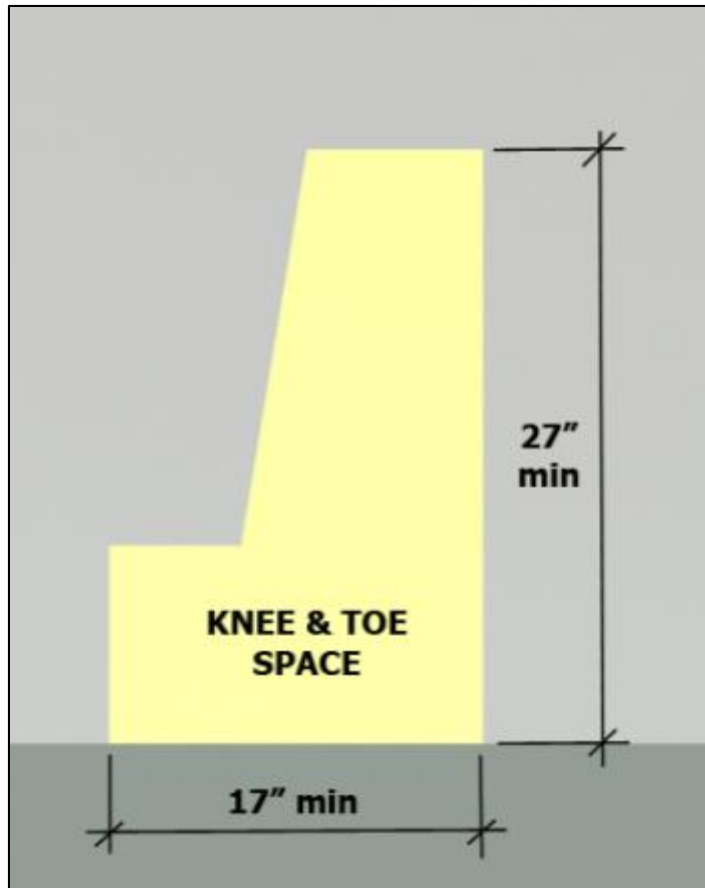


# Knee & Toe Space (§306)

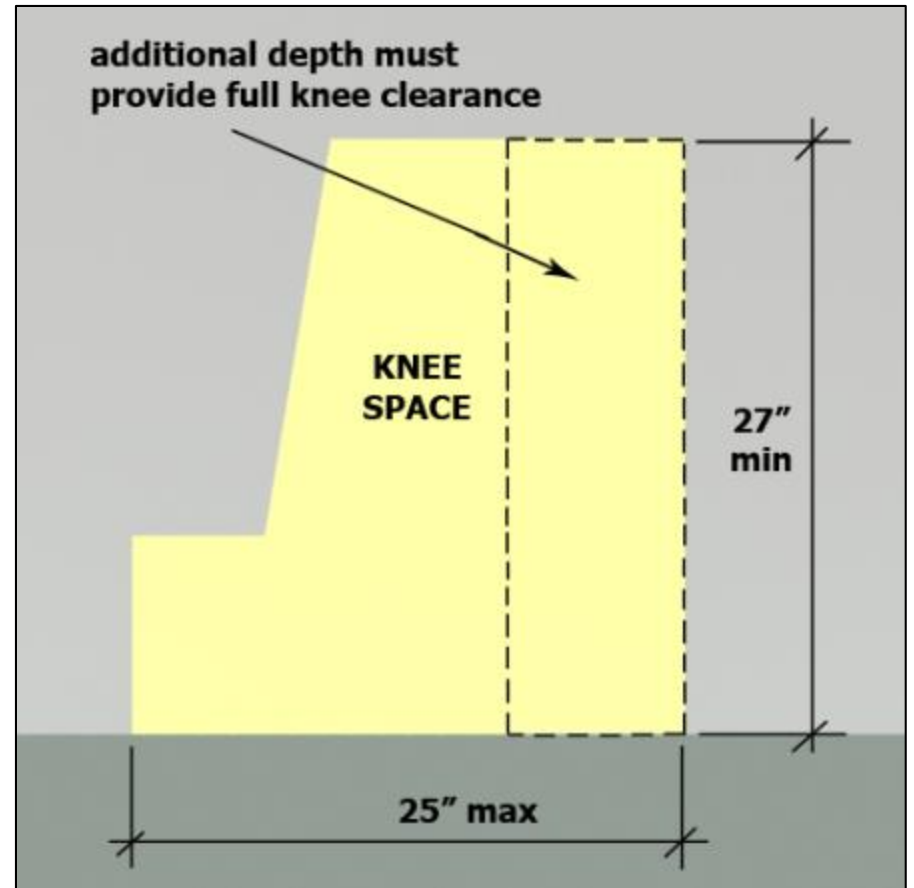
## Knee and Toe Clearances



# Knee & Toe Space



**17" min. depth at DFs, lavs,  
sinks, dining/work surfaces**



**25" max. depth (all  
elements)**

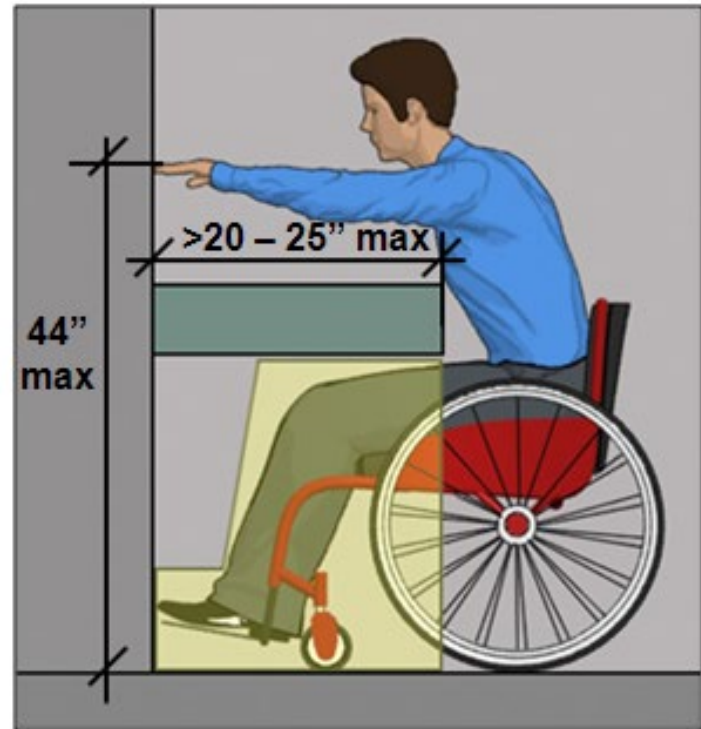
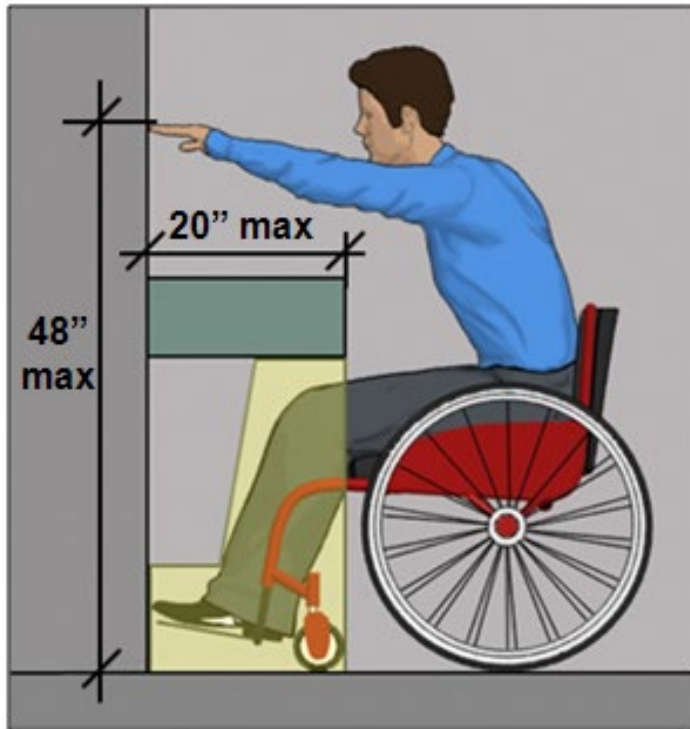
# Knee & Toe Space

Knee/ toe space must equal or exceed the reach depth over obstruction



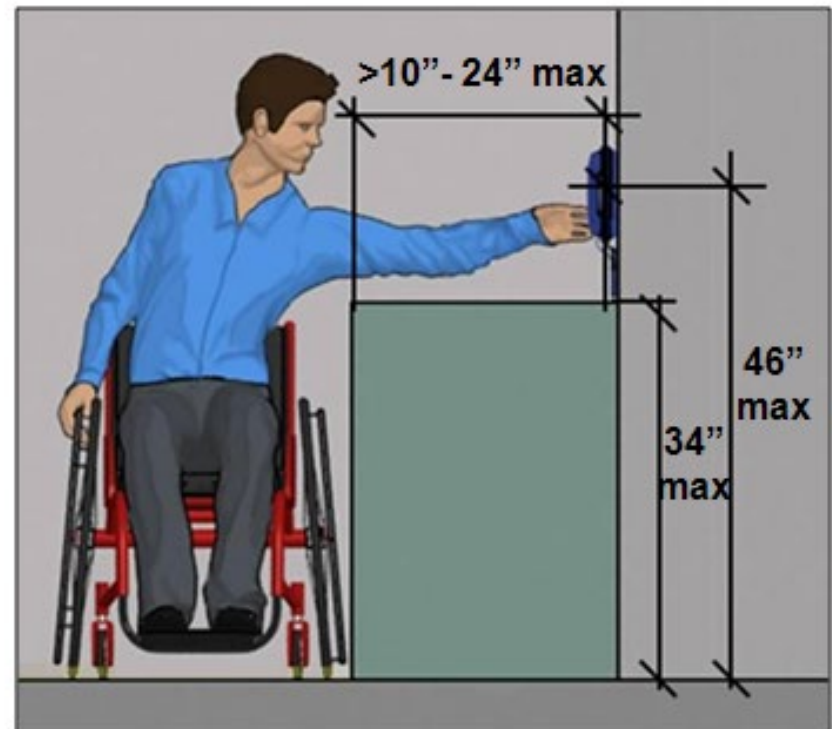
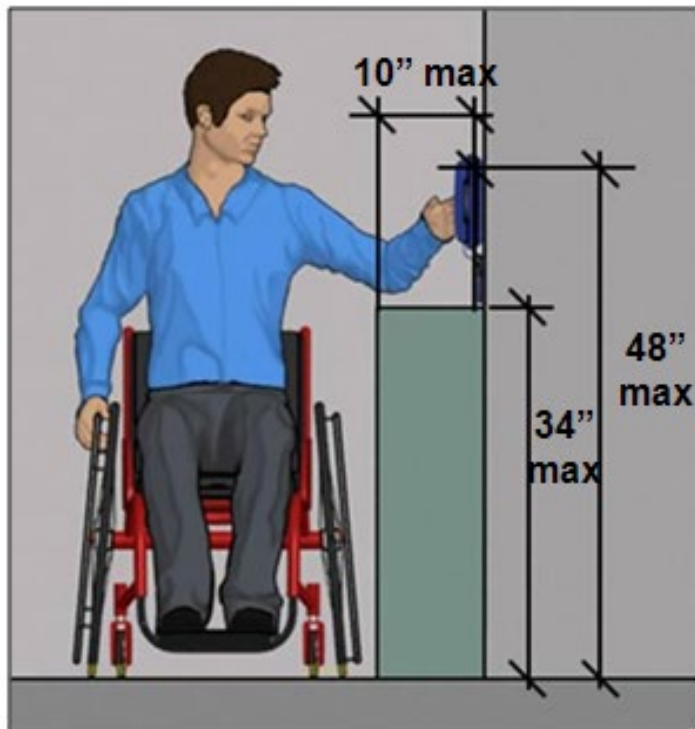
# Reach Range (§308)

Forward reach depth over obstruction limited to 25"  
(max. height reduced to 44" when depth exceeds 20")



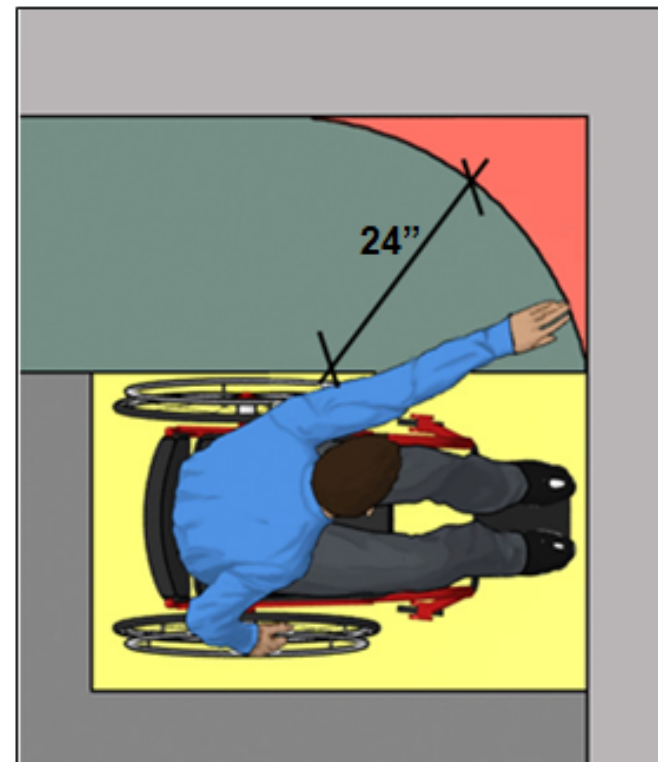
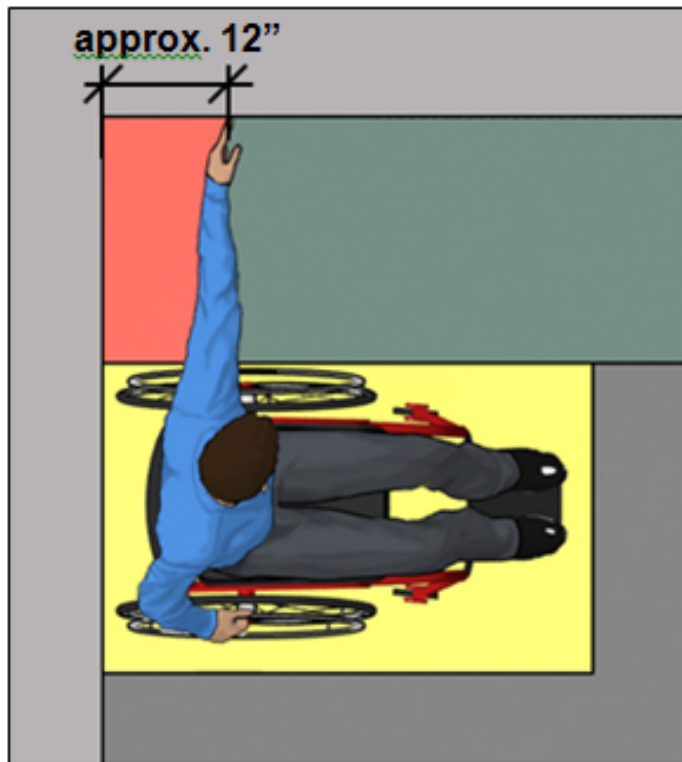
# Reach Range

Side reach depth over obstruction limited to 24"  
(max. height reduced to 46" when depth exceeds 10")



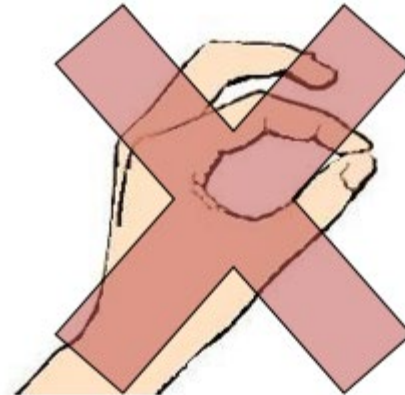
# Reach Range

Elements in corners can be hard to reach (side approach) Recommendation: locate away from corners where possible or within reach radius



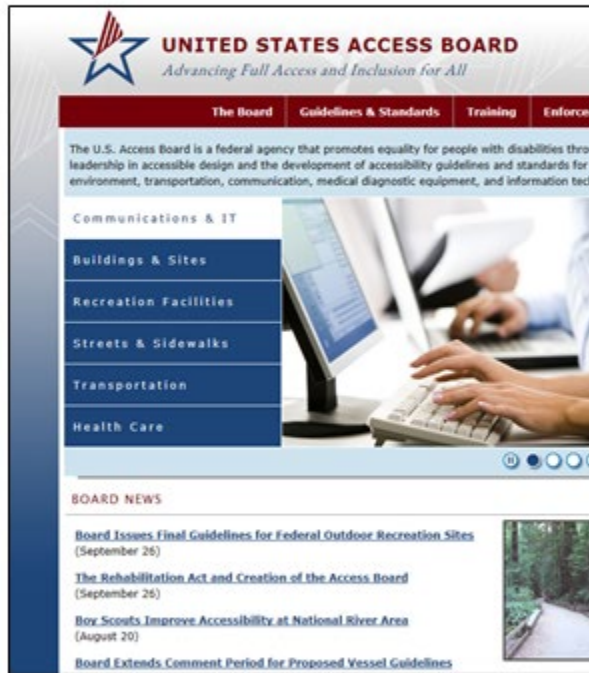
# Operability

- 1 hand operation
- no tight grasping, pinching, twisting of wrist
- 5 lbf max.



# Technical Guides on the Standards

Available on the Board's website



**UNITED STATES ACCESS BOARD**  
*Advancing Full Access and Inclusion for All*

The Board | Guidelines & Standards | Training | Enforces

The U.S. Access Board is a federal agency that promotes equality for people with disabilities through leadership in accessible design and the development of accessibility guidelines and standards for the environment, transportation, communication, medical diagnostic equipment, and information technology.

Communications & IT

- Buildings & Sites
- Recreation Facilities
- Streets & Sidewalks
- Transportation
- Health Care

**BOARD NEWS**

- [Board Issues Final Guidelines for Federal Outdoor Recreation Sites](#) (September 26)
- [The Rehabilitation Act and Creation of the Access Board](#) (September 26)
- [Boy Scouts Improve Accessibility at National River Area](#) (August 20)
- [Board Extends Comment Period for Proposed Vessel Guidelines](#)



**U.S. ACCESS BOARD TECHNICAL GUIDE**  
**Operable Parts**

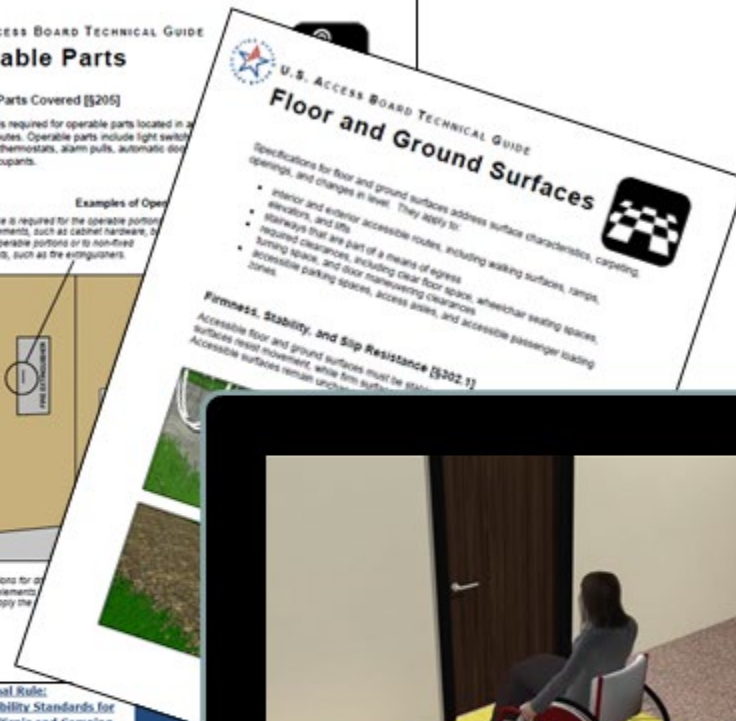
**Operable Parts Covered [§205]**

Compliance is required for operable parts located in accessible routes. Operable parts include light switch receptacles, thermostats, alarm pulls, automatic door openers, and other devices that are used by facility occupants.

**Examples of Operable Parts**

Compliance is required for the operable portion of fixed elements, such as cabinet hardware, door handles, and door pulls, but not for non-fixed components, such as the edge of a door.

Provisions for other elements also apply the



**U.S. ACCESS BOARD TECHNICAL GUIDE**  
**Floor and Ground Surfaces**

Specifications for floor and ground surfaces address surface characteristics, carpeting, openings, and changes in level. They apply to:

- interior and exterior accessible routes, including walking surfaces, ramps, elevators, and lifts
- stairways that are part of a means of egress
- required clearances, including clear floor space, wheelchair seating spaces, turning space, and floor maneuvering clearances
- accessible parking spaces, access aisles, and accessible passenger loading zones.

**Firmness, Stability, and Slip Resistance [§202.3]**

Accessible floor and ground surfaces must be firm, stable, and slip resistant. Accessible surfaces remain accessible under all conditions of use.





**Questions?**



# **U.S. Access Board**

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**(800) 993-2822 (TTY)**

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**[www.access-board.gov](http://www.access-board.gov)**