



# **ADA Standards Part 1**

## **Agenda**

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

**(Chapters 1 – 5)**

# ADA Standards (2010)

Apply to:

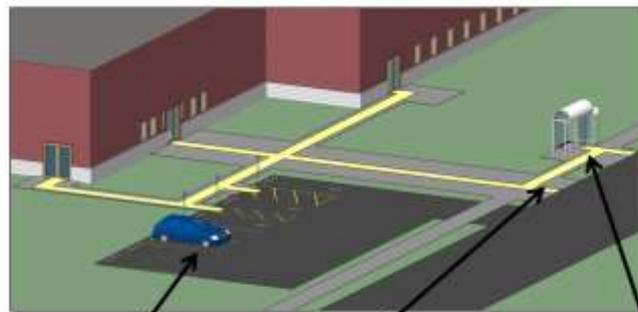
- State/ local gov't facilities
- Places of public accommodation
- Commercial facilities
- Transportation facilities (DOT's 2006 Standards)



Federal facilities covered by ABA Standards

## Accessible Routes (§206)

At least one accessible route to building entrances from site arrival points provided



parking & passenger loading zones



streets & sidewalks



transportation stops

## Parking Spaces (§208)

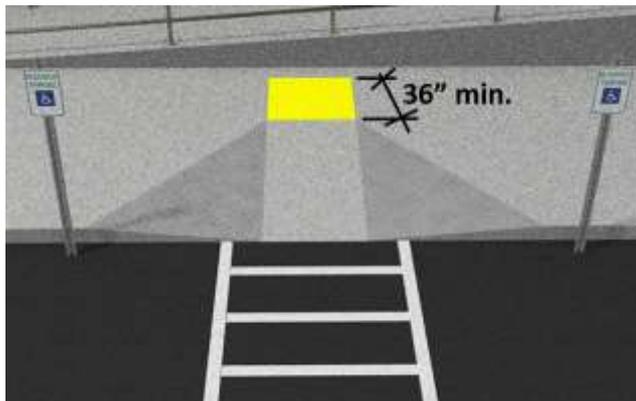
AR must connect to access aisles at accessible parking spaces



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

## Curb Ramps (§406)

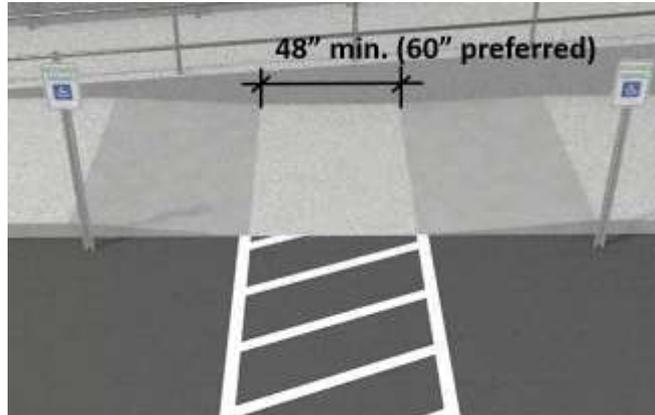
Landing 36" deep min. required at top of curb ramps in new construction



Curb ramps cannot protrude into access aisle

# Curb Ramps: Parallel

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



**Where are detectable warnings required?**



# Detectable Warnings

Required on curb ramps at:

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



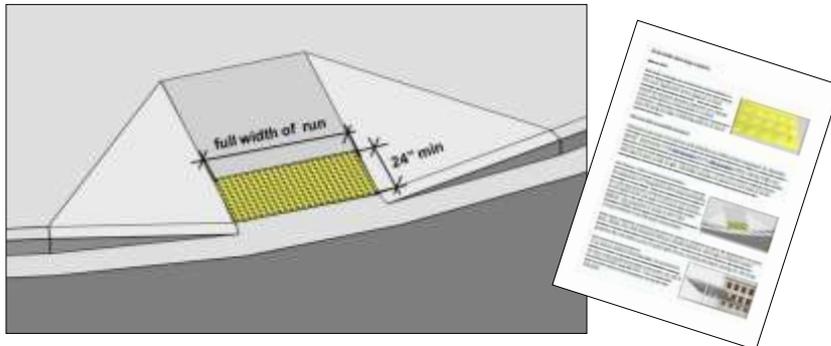
Not required on curb ramps at other facilities or hazardous vehicular areas

Required on rail station boarding platforms



# Detectable Warnings

Revised specifications for location at curb ramps



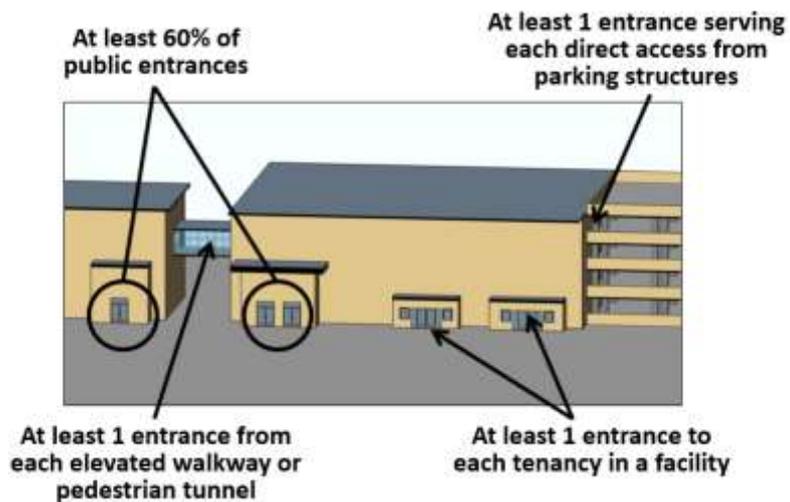
ROW guidelines will provide further guidance (e.g., placement at blended transitions)

DW Update on Board's website

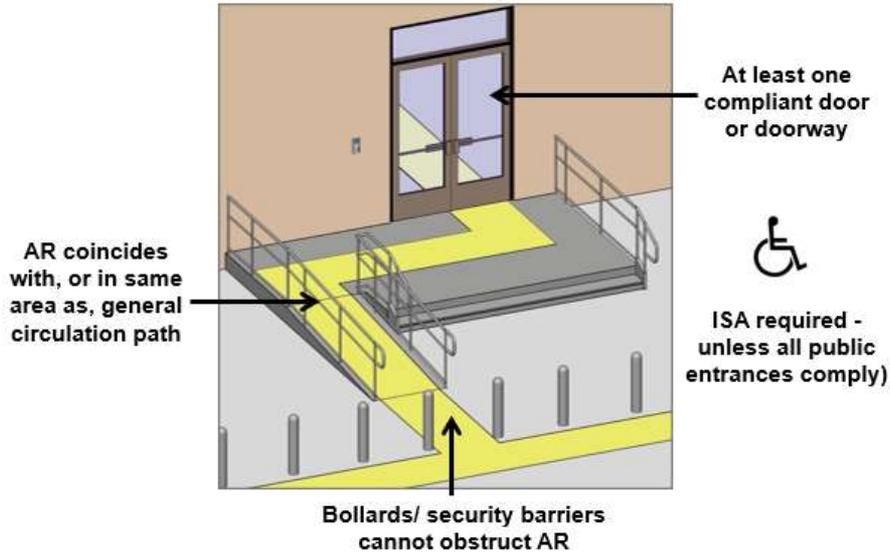
# Entrances

## Entrances (§206.4)

### Minimum Number

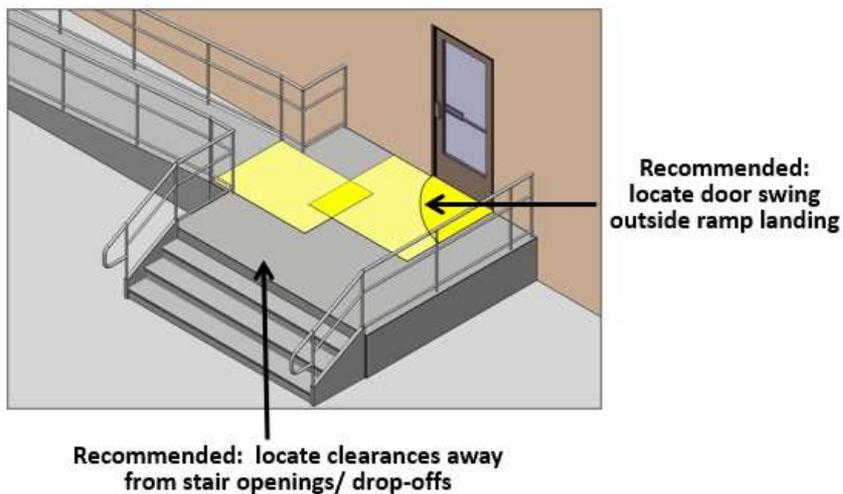


# Entrances



# Entrances

Landings must accommodate door man. clearances



# 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

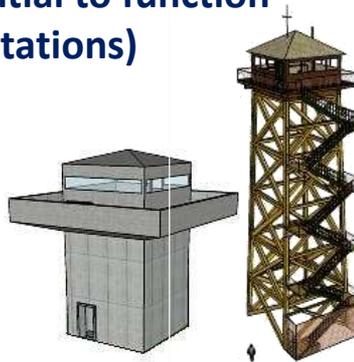
# General Exceptions (§203)

- construction sites
- machinery spaces
- spaces accessed by ladders, catwalks, crawl spaces, very narrow passageways



# General Exceptions

- areas raised for security, life/fire safety
- employee work areas < 300 SF that must be elevated 7" min - essential to function (excluding courtroom stations)



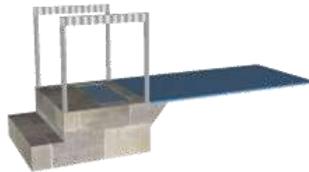
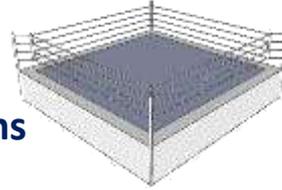
# General Exceptions (§203)

- single occupant structures accessed only by passageways below grade or elevated above standard curb height (e.g., some toll booths)

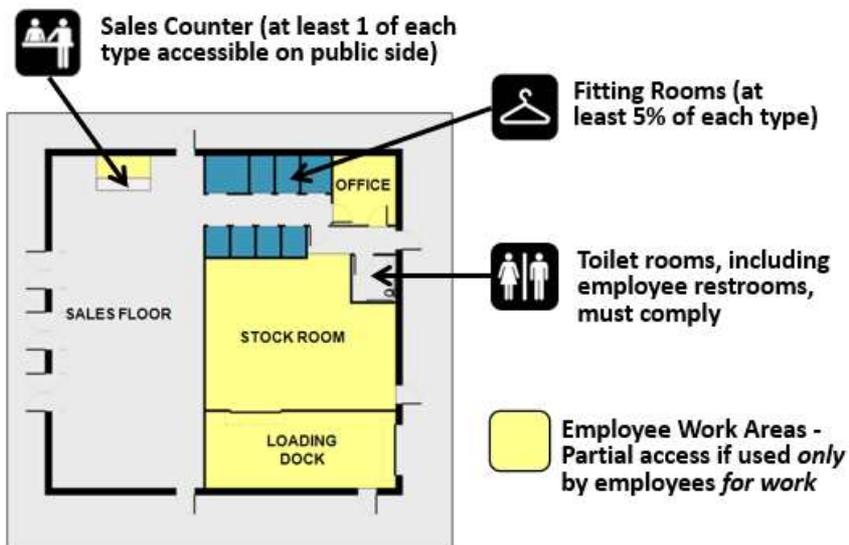


# General Exceptions

- Raised structures for refereeing, judging, scoring sports
- Raised boxing/wrestling rings
- Raised diving boards & platforms
- Water slides
- Animal containment areas not open to public



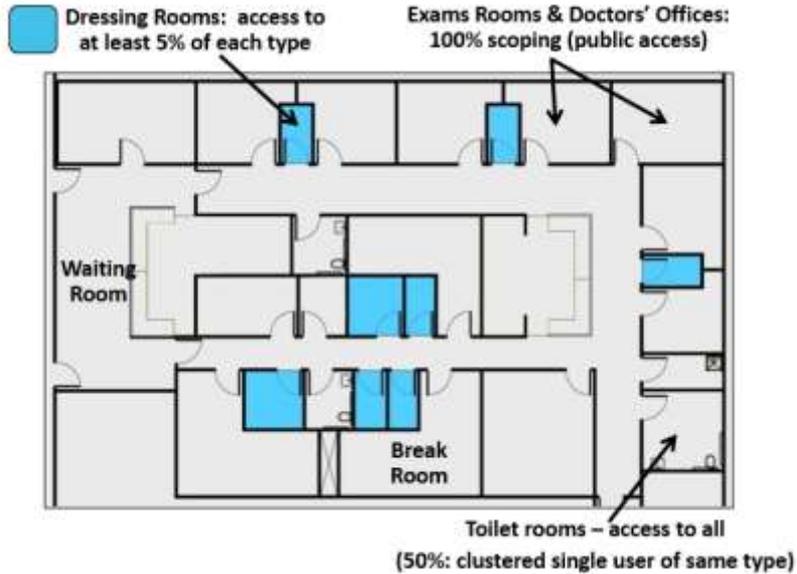
## Example: Retail Facility



# Example: Medical Care Suite



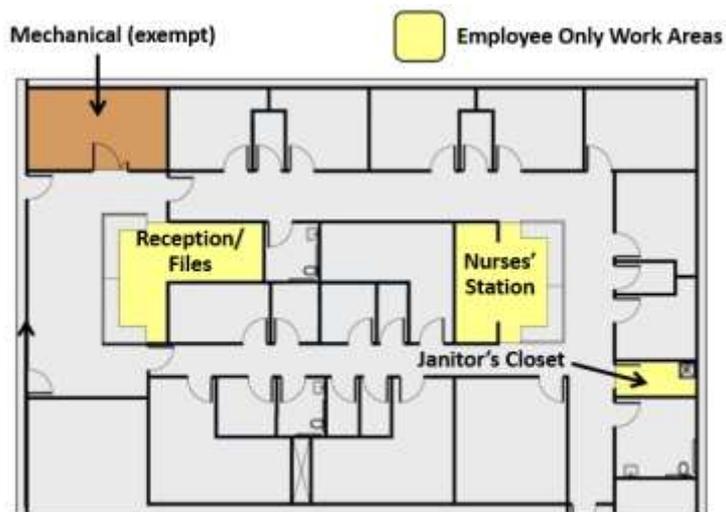
Public & Common Use Areas: Full Access



# Example: Medical Care Suite



Employee Work Areas & Exempt Spaces



# What level of access is required for work areas?

## Employee Work Areas (§203.9)

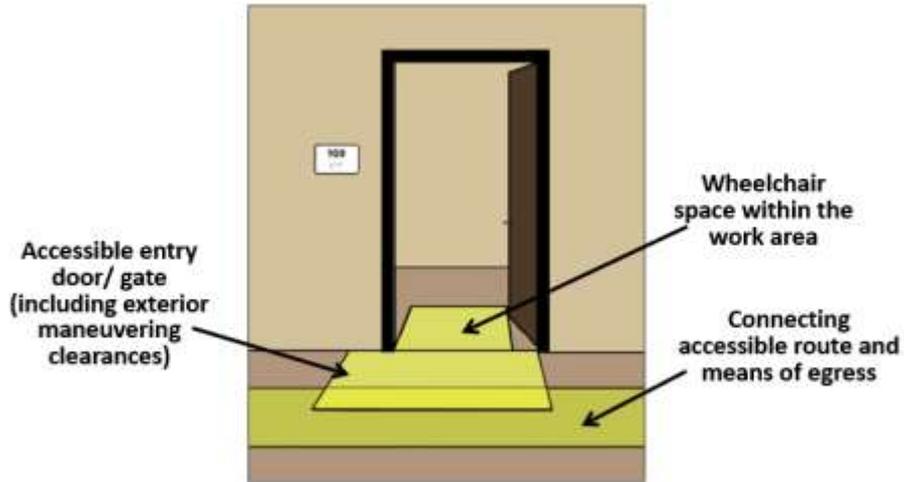
### Minimum requirements:

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



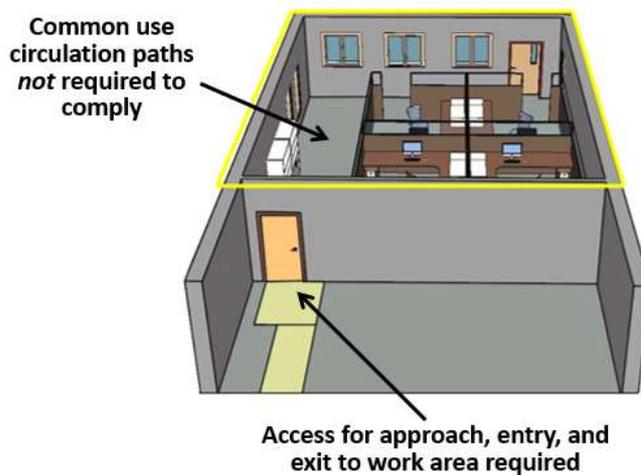
# Employee Work Areas

Access for “approach, entry, & exit”



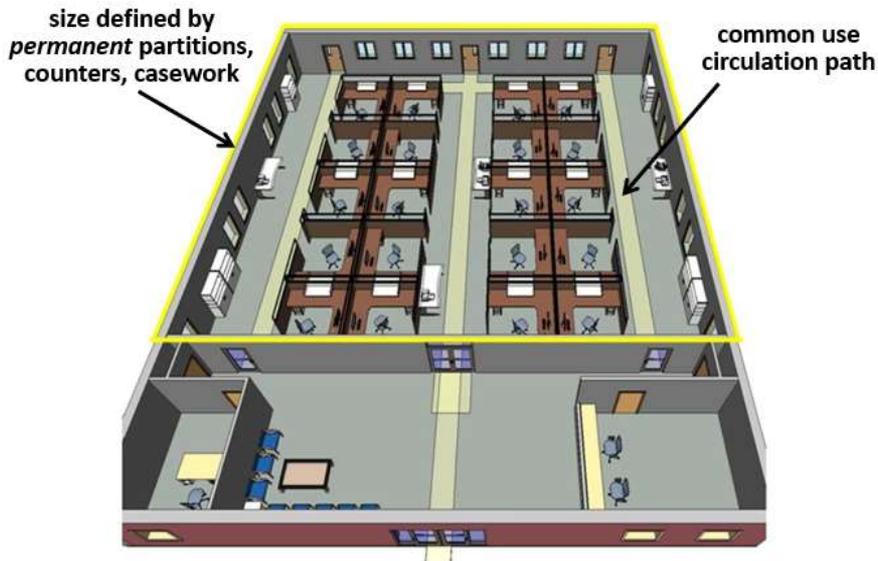
# Employee Work Areas

Less than 1,000 SF



# Employee Work Areas

1,000 SF or more in size

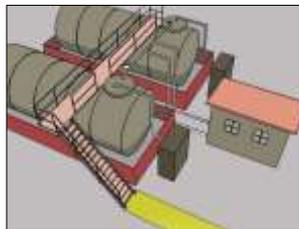


## Employee Work Areas (§206.2.8)

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

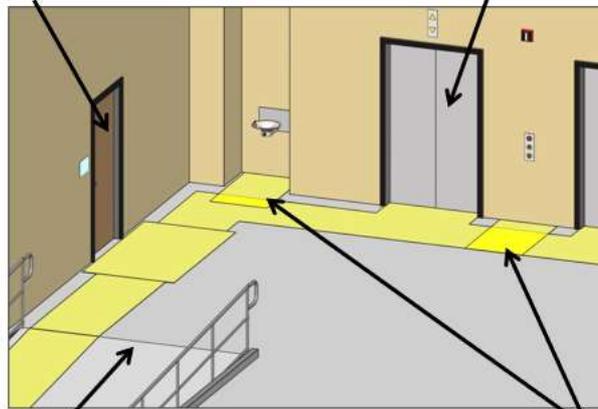


# Accessible Routes

Must connect to:

each accessible room and space

each story (unless an exception applies)

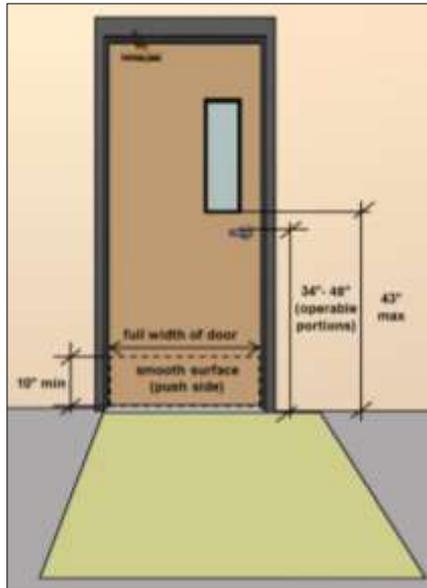


each level on a floor required to be accessible

each accessible element

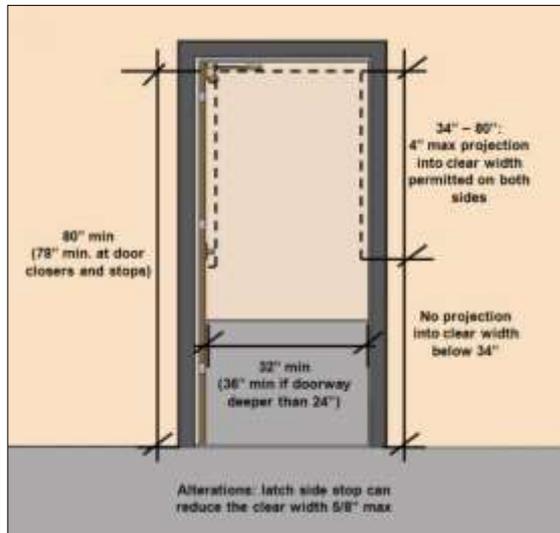
## Doors, Doorways, and Gates

# 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"**

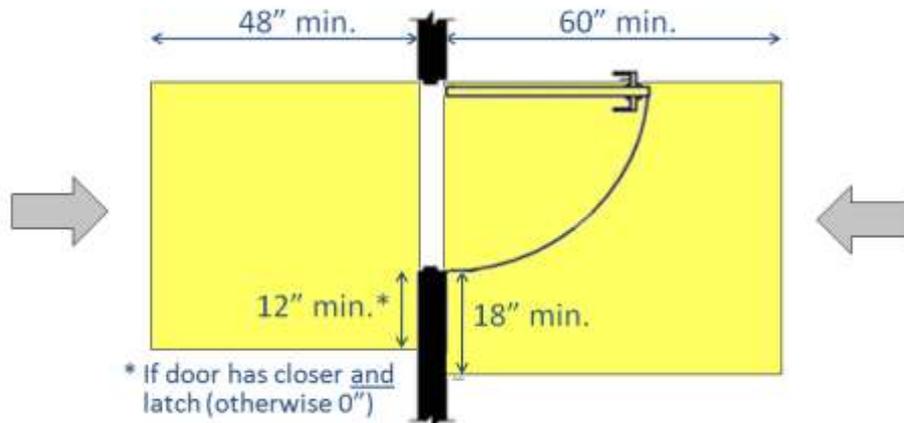
# Maneuvering Clearances

Minimum space for positioning/  
maneuvering at doors



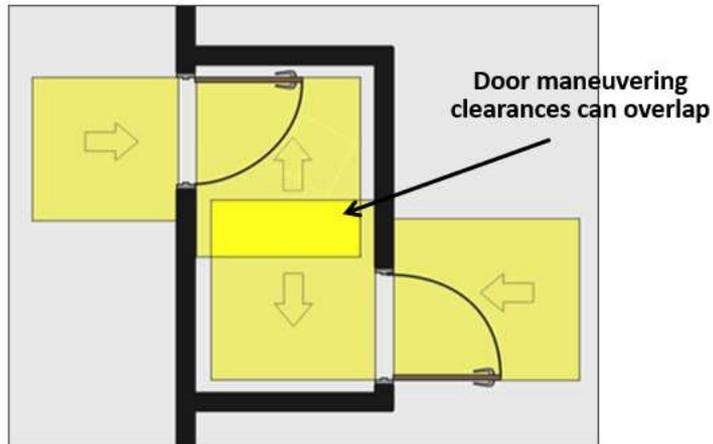
# Maneuvering Clearances

Forward Approach



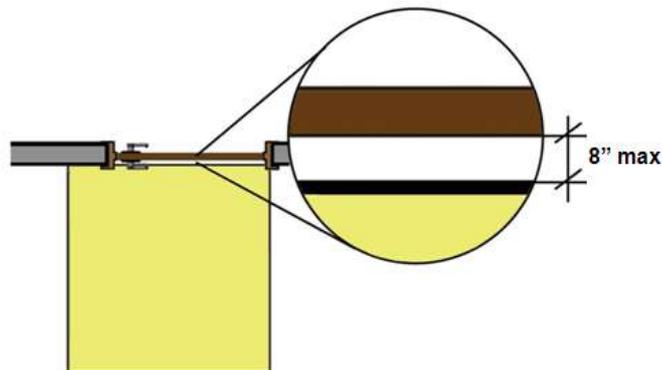
# Maneuvering Clearances

Required at each accessible door based on approach & swing



# Maneuvering Clearances

Maneuvering clearance must be 8" max. 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

# Doors in Series

48" min. separation between swing of doors



## Accessible Routes Between Stories

# Multi-Story Facilities (§206.2.3)

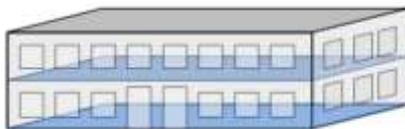
At least one accessible route must connect each story and mezzanine unless an exception applies



## Exceptions (§206.2.3)

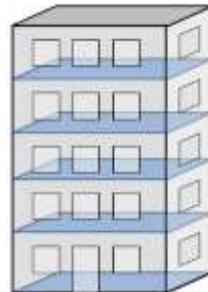
AR between floors (“elevator exception”)

Private sector facilities only:



less than 3 stories

OR



less than 3,000 sf/ flr)

# Exceptions

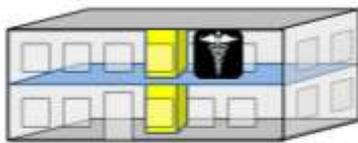
## Exception not allowed for:

- 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

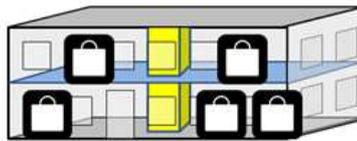


# Exceptions

## Accessible route required to upper story:



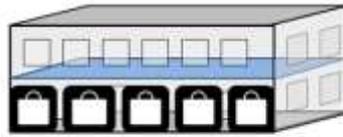
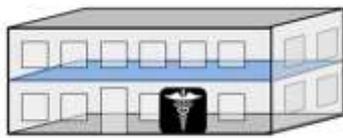
containing a health care facility



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

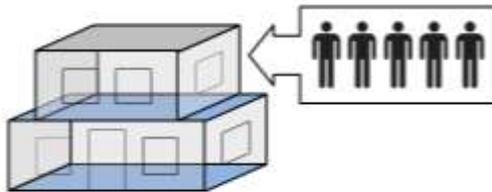
If facility qualifies for exception,

- 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

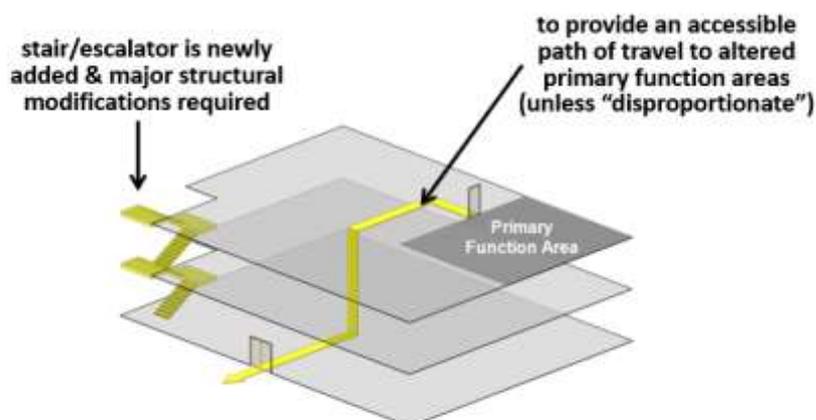
## Additional exceptions:

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



## Alterations: Vertical Access

An accessible routes between stories is required where:

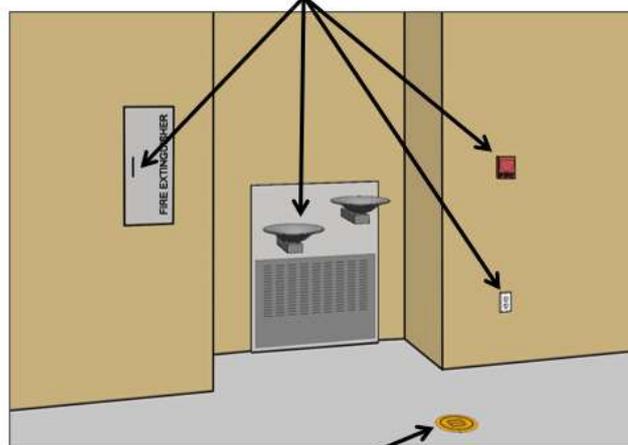


**Note:** All vertical access exceptions allowed in new construction apply fully to alterations

# Operable Parts & Elements

## Operable Parts (§205)

### Examples



*Exempt: floor receptacles and operable parts used only by service or maintenance personnel*

## 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**

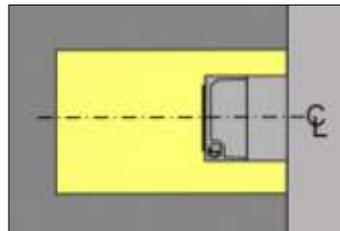


- Allowed at other elements  
(including sales/service  
counters), specified for:  
beds & most appliances**

## Clear Floor Space

Centering the space is often advisable,  
but is only required at:

- drinking fountains
- kitchen work surfaces
- washers and dryers  
(side approach)



# 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)**



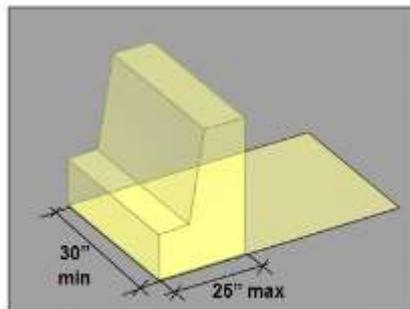
**Toe space (9" high min.):  
Max. depth 6"**



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

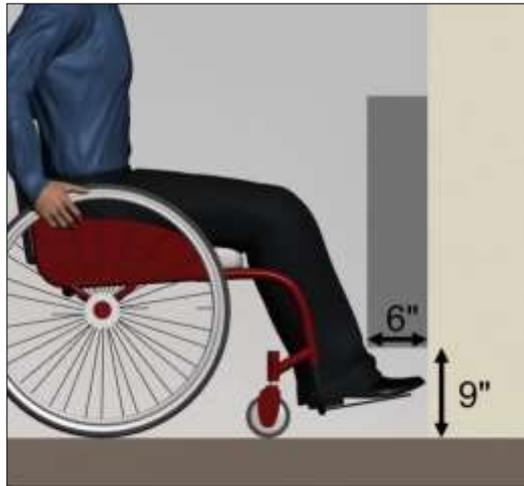
# Clear Floor Space

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



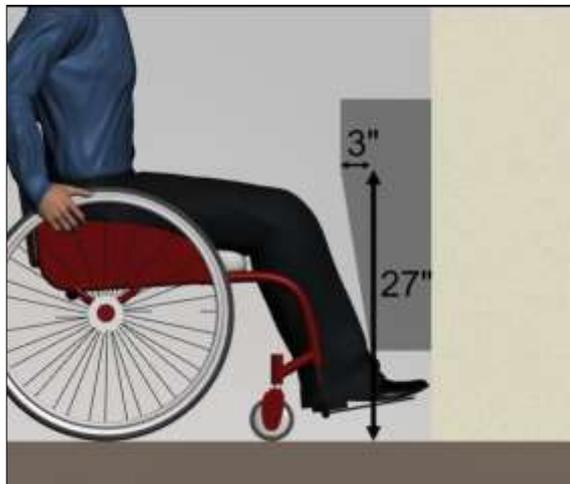
**No object can protrude into min. clearances (other than dip of overflow at lavs & sinks)**

## Knee & Toe Space



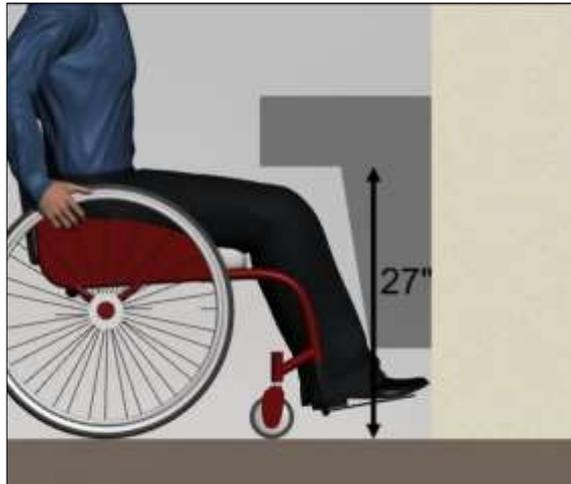
Toe space

## Knee & Toe Space



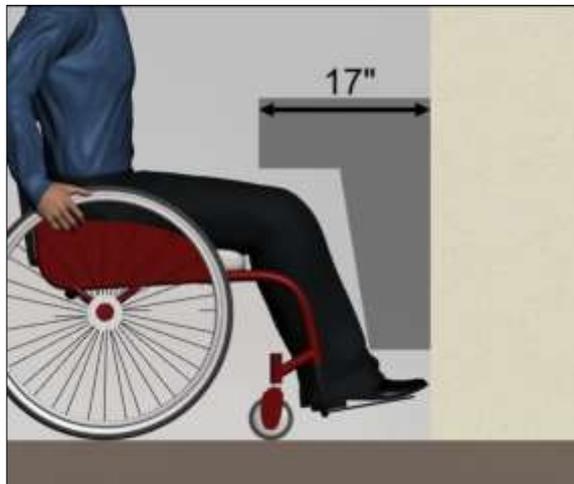
Beyond toe space, clearance increases from 9" to 27" min. high over 3" span (6:1 slope)

## Knee & Toe Space



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

## Knee & Toe Space



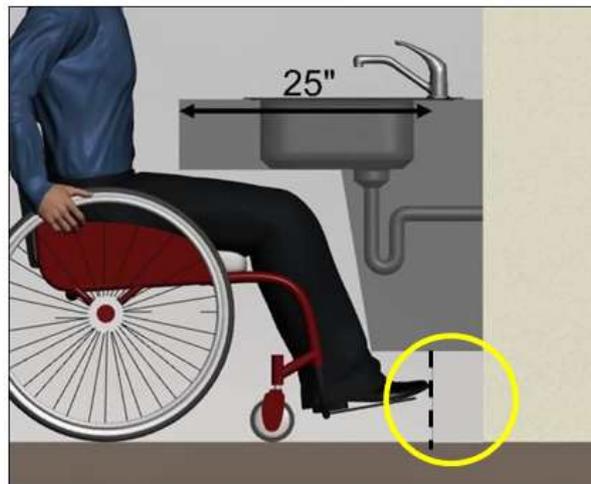
**Required knee & toe space must be at least 17" deep**

## Knee & Toe Space



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

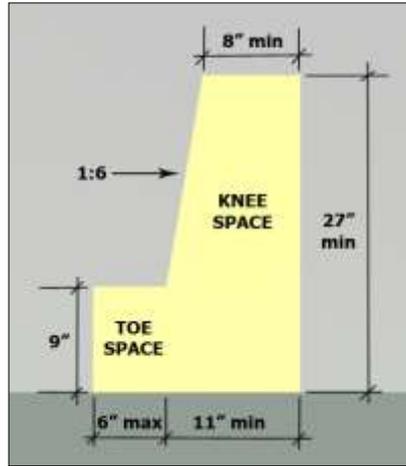
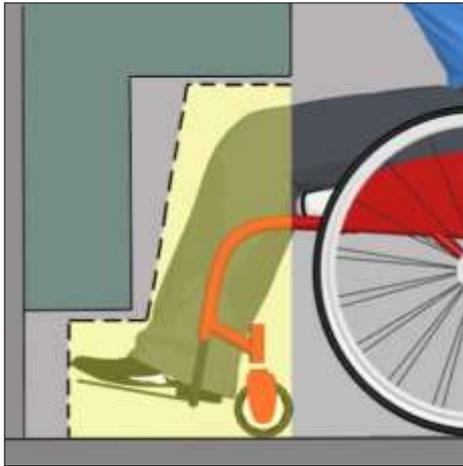
## Knee & Toe Space



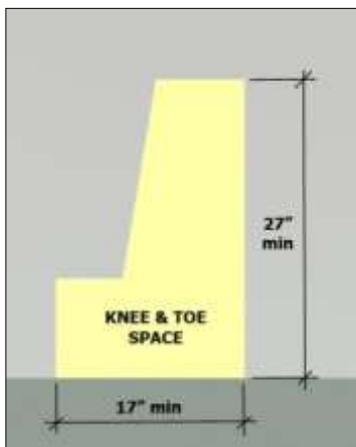
**Space beyond 25" depth can exist but is not usable**

# Knee & Toe Space (§306)

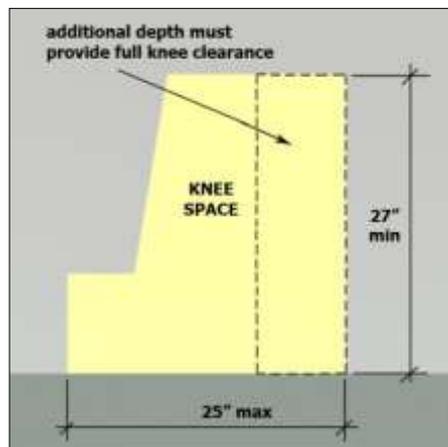
## Knee and Toe Clearances



## Knee & Toe Space



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



25" max. depth (all elements)

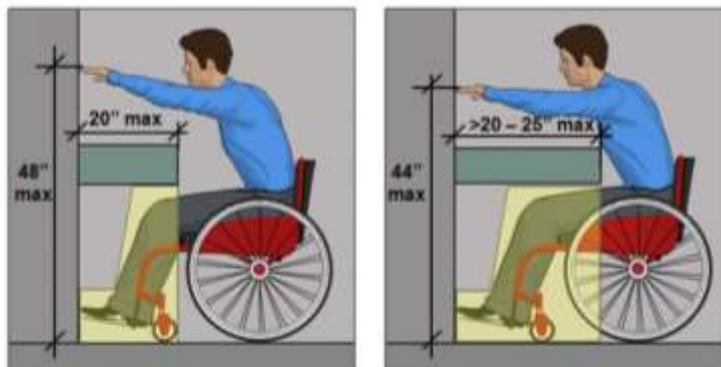
# Knee & Toe Space

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



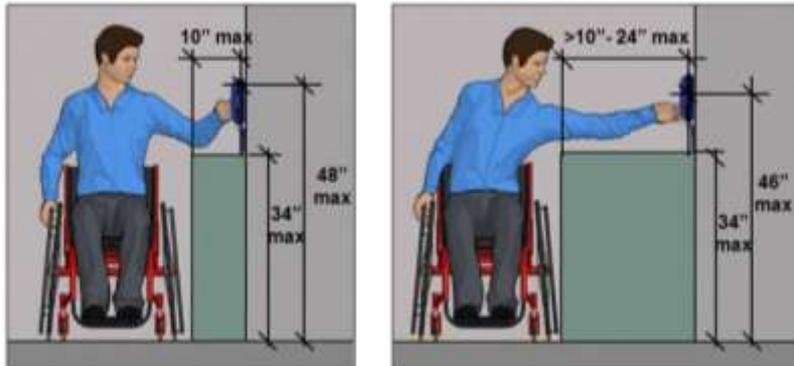
# Reach Range (§308)

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



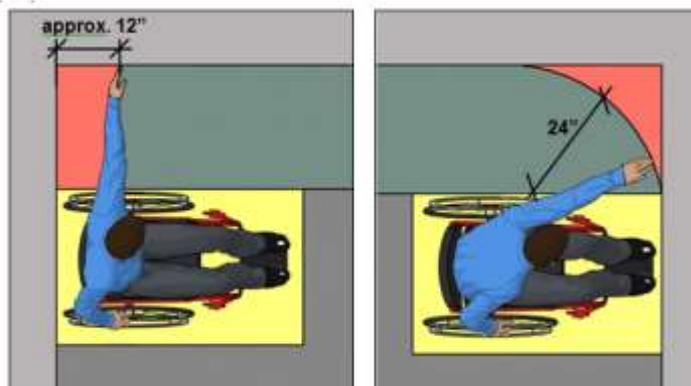
# Reach Range

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



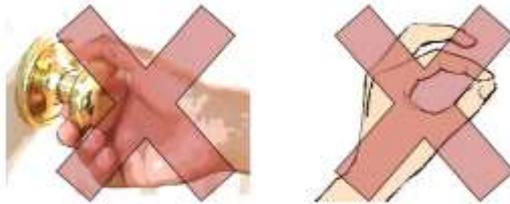
# Reach Range

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.



# Operability

**Closed fist operation = good, but not mandatory**  
**Many other types comply (e.g., U-shaped pulls)**



# Operability

## Recommended:

- buttons - raised/flush (not recessed)
- no simultaneous action/ movement
- hand or finger dexterity not required



Not required to comply: non-fixed portions  
(e.g., keys, access cards)



## Technical Guides on the Standards

Available on the Board's website



# Questions?



## U.S. Access Board

**(800) 872-2253 (voice)**

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

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