



# ADA Standards Part 1

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## Agenda

- Access onto Sites
- Entrances & Doors
- Spaces Covered
- Operable Parts & Elements  
(Chapters 1 – 5)

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## 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

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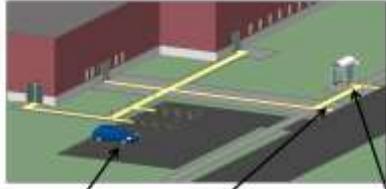
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## Accessible Routes (§206)

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



- parking & passenger loading zones
- streets & sidewalks
- transportation stops

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## 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

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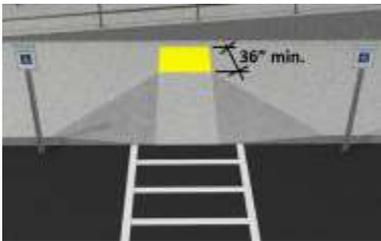
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## Curb Ramps (§406)

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



Curb ramps cannot protrude into access aisle

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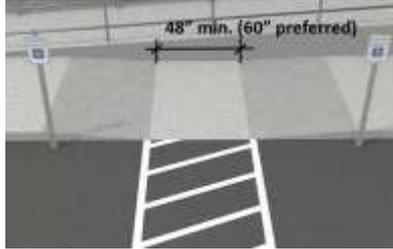
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## Curb Ramps: Parallel

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



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## Where are detectable warnings required?



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## 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



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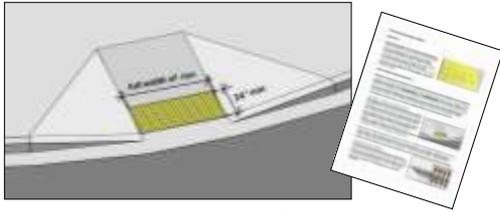
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# Detectable Warnings

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

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# Entrances

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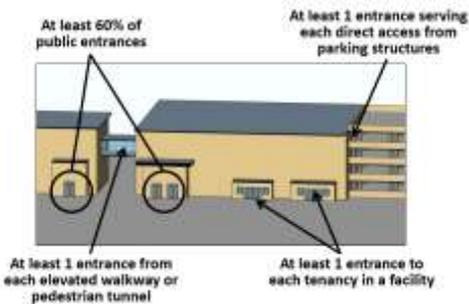
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## Entrances (§206.4)

Minimum Number



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## Entrances



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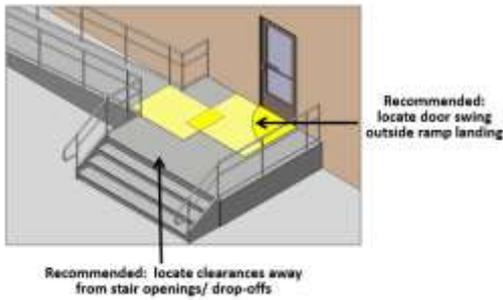
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## Entrances

Landings must accommodate door man. clearances



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## Entrances

Exterior Doors: Automation Recommended



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

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# Which rooms and spaces must comply?

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## New Construction (§201)

All areas must comply except:

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

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## General Exceptions (§203)

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



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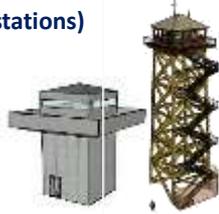
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## General Exceptions

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



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## General Exceptions (§203)

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



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## 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



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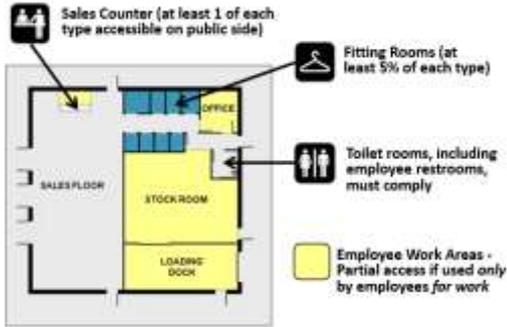
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## Example: Retail Facility




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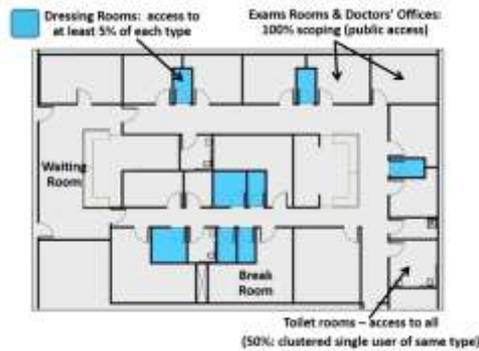
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## Example: Medical Care Suite

Public & Common Use Areas: Full Access




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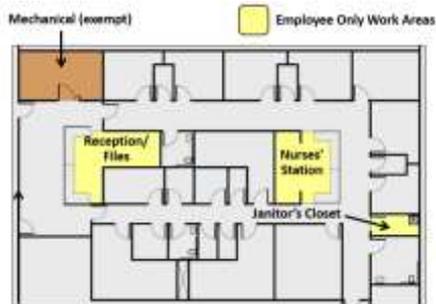
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## Example: Medical Care Suite

Employee Work Areas & Exempt Spaces




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# What level of access is required for work areas?

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## Employee Work Areas (§203.9)

### Minimum requirements:

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



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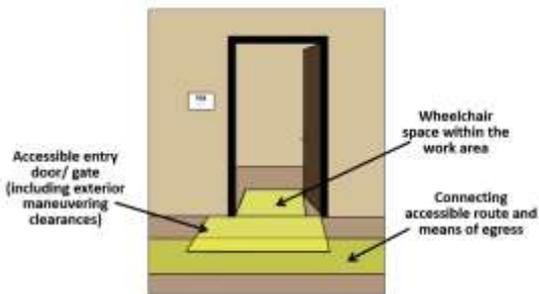
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## Employee Work Areas

Access for “approach, entry, & exit”



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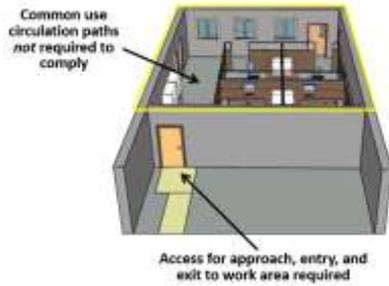
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## Employee Work Areas

Less than 1,000 SF



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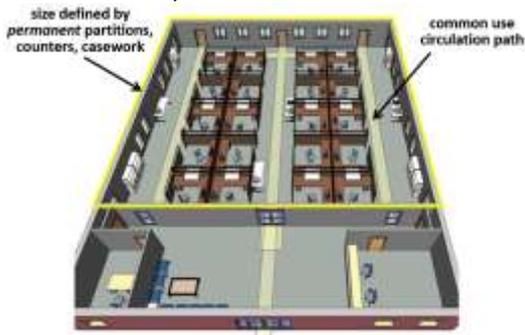
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## Employee Work Areas

1,000 SF or more in size



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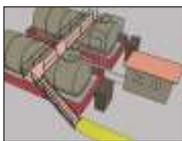
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## Employee Work Areas (§206.2.8)

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



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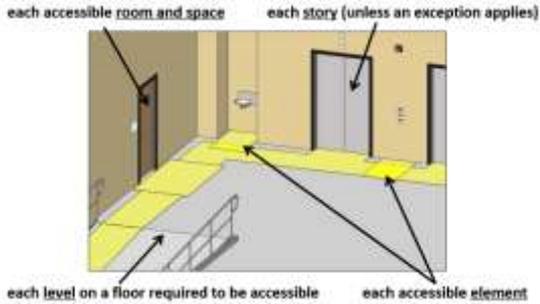
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## Accessible Routes

Must connect to:




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# Doors, Doorways, and Gates

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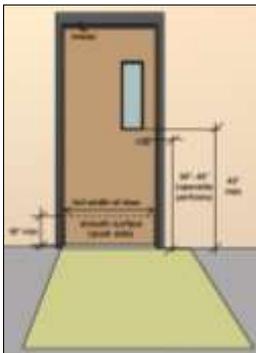
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## Doors, Doorways, Gates (§404)



- 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)

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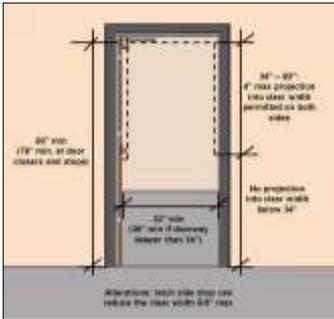
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## Doors, Doorways, Gates



Limited projections into door clear width

Hardware height: 34" – 48"

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## Maneuvering Clearances

Minimum space for positioning/  
maneuvering at doors



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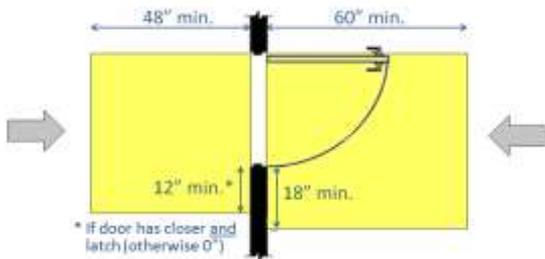
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## Maneuvering Clearances

Forward Approach



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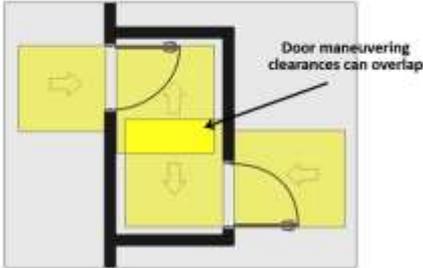
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## Maneuvering Clearances

Required at each accessible door based on approach & swing



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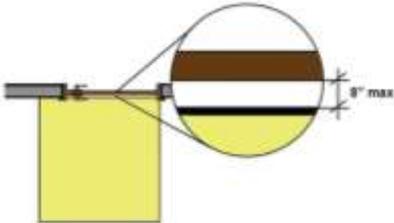
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## Maneuvering Clearances

Maneuvering clearance must be 8" max. from the face of the door



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## Maneuvering Clearances



8" max. offset from face of door

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## 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

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## Multi-Story Facilities (§206.2.3)

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



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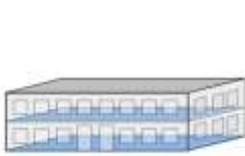
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## Exceptions (§206.2.3)

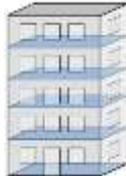
AR between floors (“elevator exception”)

Private sector facilities only:



less than 3 stories

OR



less than 3,000 sf/ flr)

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## 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



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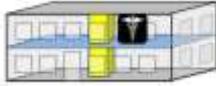
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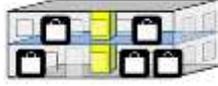
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## Exceptions

Accessible route required to upper story:



containing a health care facility



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

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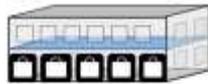
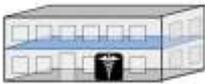
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## Exceptions

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



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## 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.

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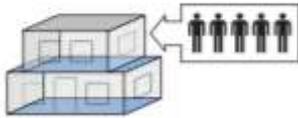
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## Exception: Gov't Buildings

Exception for public (government) buildings:

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



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## Exceptions: Mezzanines

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



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 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



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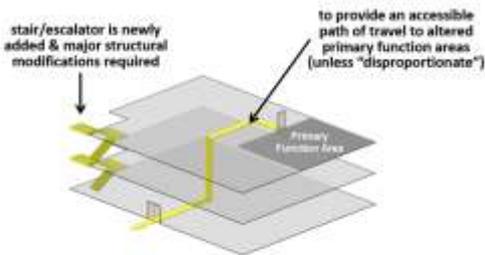
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## Alterations: Vertical Access

An accessible routes between stories is required where:



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

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## Operable Parts & Elements

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## Operable Parts (§205)

Examples



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

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## Operable Parts (§309)

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



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## Reach Ranges (§308)

Side reach range reduced:

48" – 15"

(same as forward reach)



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## 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

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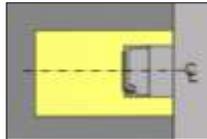
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## Clear Floor Space

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

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



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## 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"

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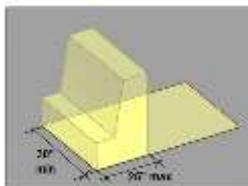
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## Clear Floor Space

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)

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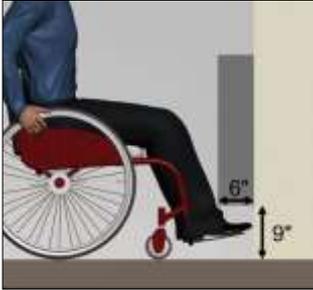
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## Knee & Toe Space



Toe space

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## Knee & Toe Space



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

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## Knee & Toe Space



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

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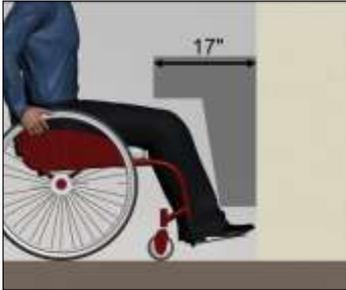
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## Knee & Toe Space



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

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## Knee & Toe Space



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

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## Knee & Toe Space



Space beyond 25" depth can exist but is not usable

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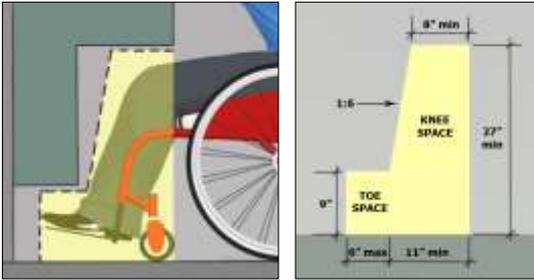
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# Knee & Toe Space (§306)

Knee and Toe Clearances



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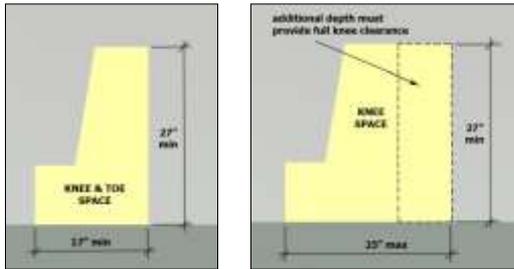
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# Knee & Toe Space



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

25" max. depth (all elements)

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# Knee & Toe Space

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



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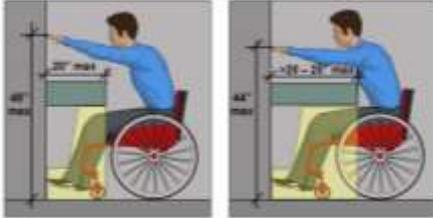
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## Reach Range (§308)

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



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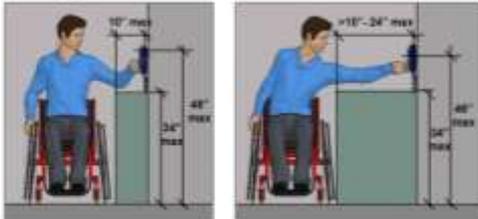
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## Reach Range

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



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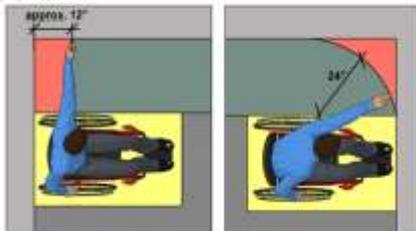
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## Reach Range

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



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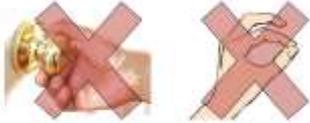
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## Operability

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



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## Operability

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



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## 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)



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## Technical Guides on the Standards

Available on the Board's website



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**U.S. Access Board**

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