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A collaborative program between the
ADA National Network and the
US Access Board



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We will be testing sound quality periodically

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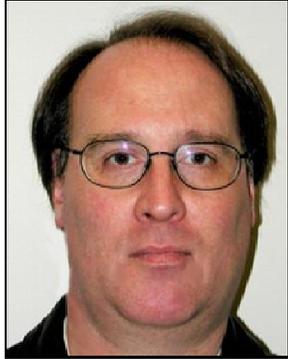
Webinar Features



- **Closed captioning** – click **CC** icon (top of screen) or control-F8 and adjust the captioning screen as needed
- **Customize your view** – choose “View” from the menu bar at the top of the screen and choose the layout you prefer from the dropdown menu.
- **Questions** - type and submit questions in the Chat Area Text box or press control-M and enter text in the Chat Area
- **Emotions/Hand-raising:** Please do not use these features during this session

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Presenters



Jim Pecht



Dave Yanchulis

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ADA Standards: “The Basics”

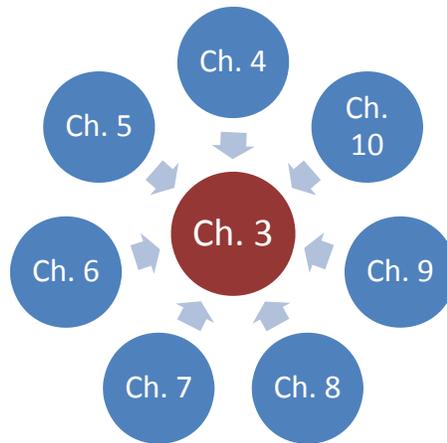
Session Agenda

Chapter 3: Building Blocks

- Floor or Ground Surfaces (§302 & 303)
- Space Requirements (§304 & 305)
- Knee and Toe Clearance (§306)
- Protruding Objects (§307)
- Operable Parts/ Reach Ranges (§308 & 309)

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“Building Blocks”



Other technical chapters reference Ch. 3 provisions

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Floor & Ground Surfaces

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Ground/ Floor Surfaces (§302)



Firm, stable, and “slip resistant”

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Ground/ Floor Surfaces



Loose surface materials:

- most do not comply unless properly treated (e.g., binders, consolidants, compaction, and grid forms)
- repeated maintenance often required

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Slip Resistance

Slip resistance – minimum level (“coefficient of friction”) not specified



- Standard practices for minimizing slipperiness often suffice
- Specify according to likely conditions (e.g. exposure to moisture)

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Surface Smoothness



Surface smoothness – changes in level
Avoid rough surfaces composed of cobblestones, Belgian blocks, etc. = difficult or painful to negotiate

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Carpet

- **1/2" max. pile height (measured to the backing, cushion, or pad)**
- **Texture: level or textured loop, level cut pile, or level cut/uncut pile**
- **Firm backing, cushions, pads**
(avoid cushions/ pads for greater firmness)
- **firm securement, edging**

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Carpet



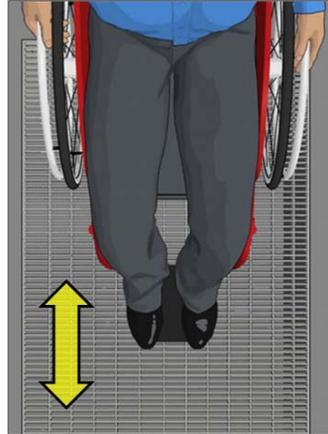
Securement/ attachment to prevent rolling or buckling (which makes maneuvering difficult)

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Openings

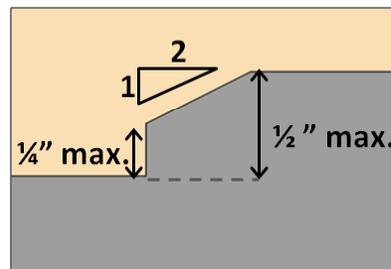
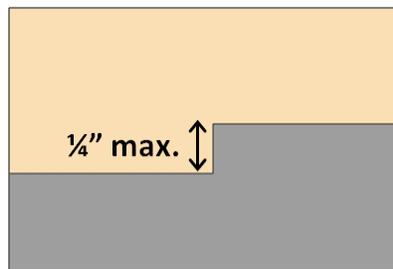
$\frac{1}{2}$ " max. in one dimension

Long dimension =
perpendicular to travel
direction



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Changes in Level (§303)



$\frac{1}{4}$ " maximum – no treatment

$\frac{1}{2}$ " maximum – 1:2 max. bevel

$> \frac{1}{2}$ " – treatment as ramp/ other means of
vertical access

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Changes in Level



Apply to all level changes along accessible routes, including thresholds

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Turning Space

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Turning Space (§304)

Wheelchair Turning



Manual Wheelchair



Power Chair

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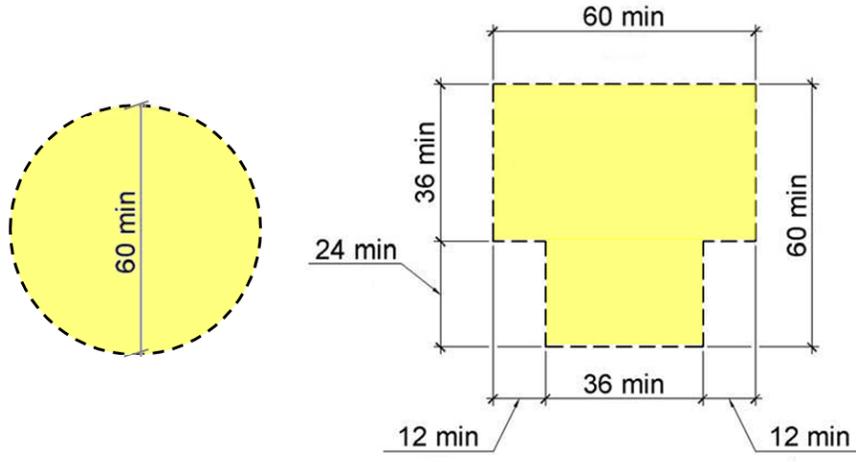
Turning Space (§304)

3-point turn



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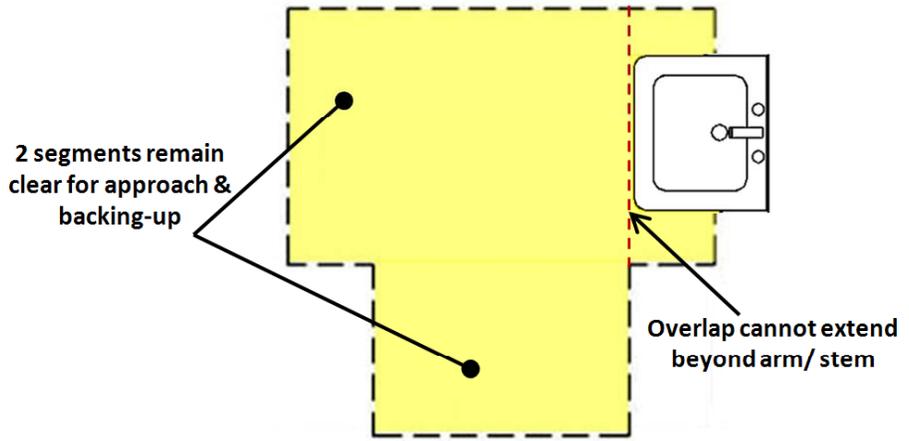
Turning Space



60" Diameter Circle

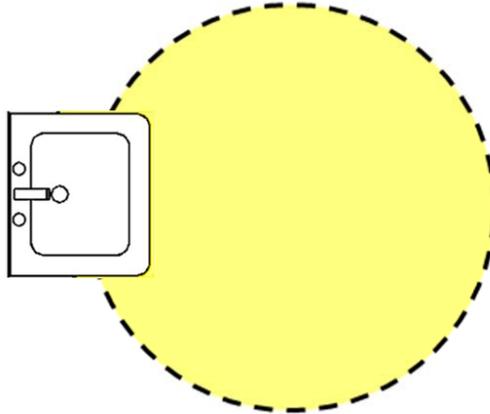
T-Shaped Space

Overlap of Turning Space



Elements with knee/toe space can overlap either 1 arm or stem

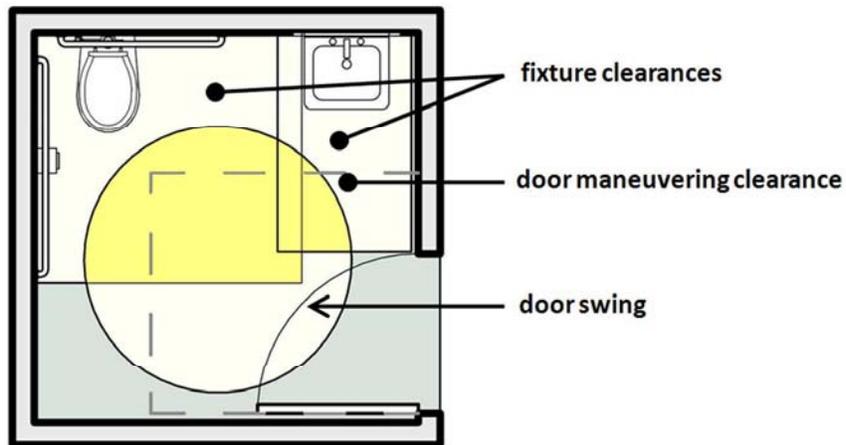
Overlap of Turning Space



Overlap of circular space (25" max)
Recommended: avoid any overlap or limit to approximately 12" (wheelchair space remains clear)

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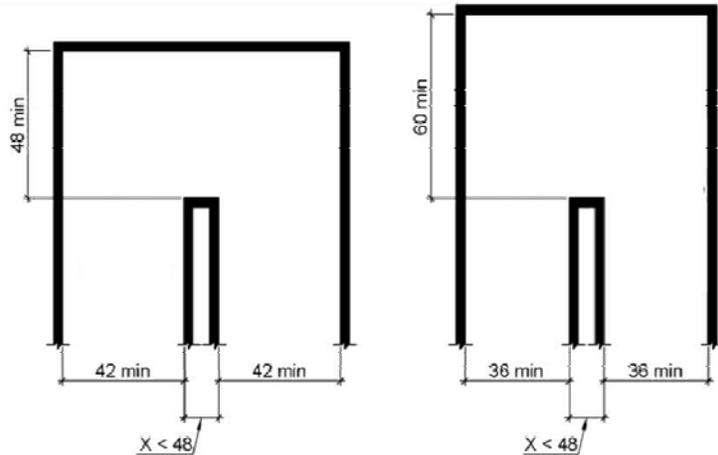
Turning Space



Turning space can overlap other clearances; door can swing into turning space

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Turning Space along Routes



Required at 180 degree turns around narrow obstructions (< 48" long) unless route width at least 42" wide

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Turning Space in Rooms and Spaces

- toilet/ bathing facilities
- dressing/ fitting/ locker rooms
- transient lodging guest rooms
- dwelling units (all rooms on accessible routes)
- patient bedrooms
- holding and housing cells
- saunas and steam rooms
- courtrooms (raised stations served by ramps)
- certain recreation spaces

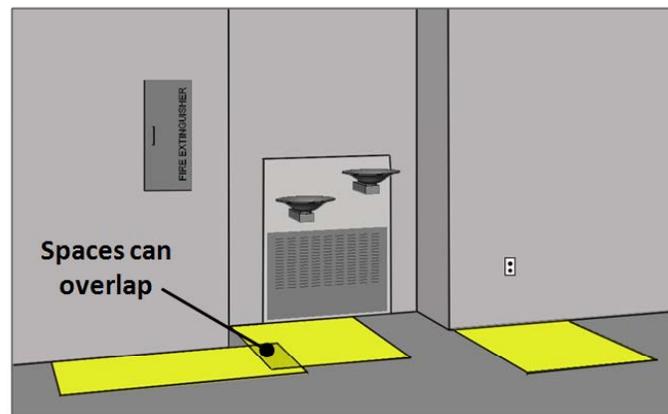


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Clear Floor/Ground Space

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Clear Floor/ Ground Space (§305)



Clearances required at all accessible elements
(e.g., storage cabinets, drinking fountains, outlets, etc.)

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Clear Floor/ Ground Space



Forward Approach:
Required at dining/ work surfaces, DFs, lavatories, most sinks, urinals

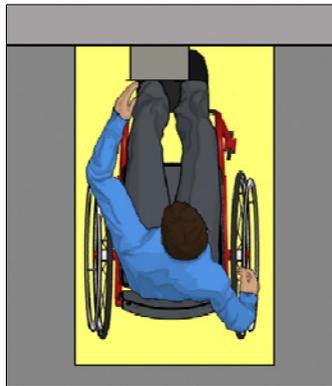


Side Approach:
Specified/ usually provided at sales & service counters, beds, and most appliances

Either approach allowed at other elements

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Size/ Centering

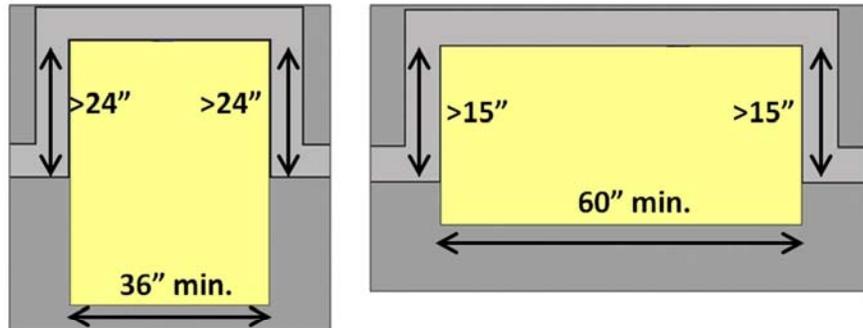


**Minimum size:
30" x 48"
(unconfined)**

**Centering = required at only certain elements
(DFs, kitchen work surfaces, washers/ dryers)**

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Size (Confined)



**Additional clearance where space confined on 3 sides
(and more than half of space depth confined)**

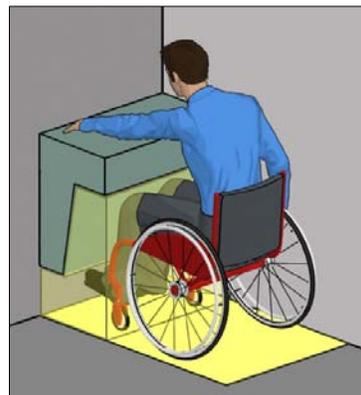
29

Knee & Toe Space

**Elements providing knee/ toe clearance can overlap space;
can help reduce reach to operable parts**



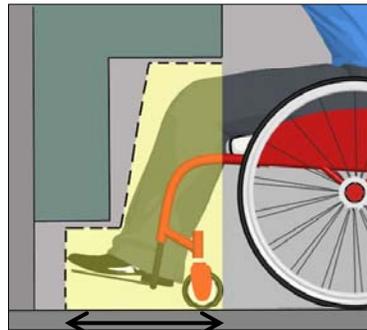
Toe Space:
9" high
6" deep max



Knee & Toe Space:
27" min. high (knee)
25" deep max

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Knee & Toe Space



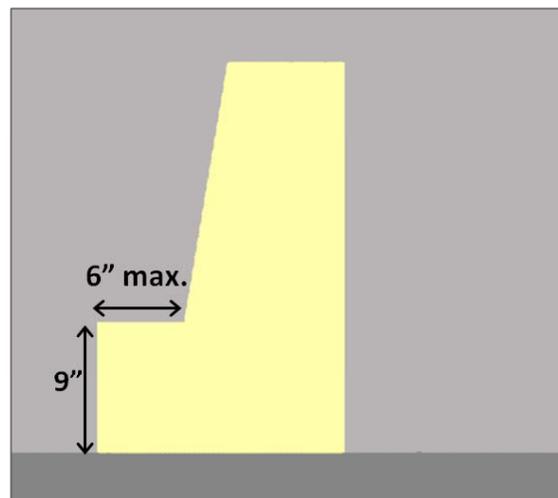
17" min
(where knee/toe
space required)

Knee/ toe space required
at certain elements:

- DFs,
- lavatories
- most sinks,
- dining/ work surfaces

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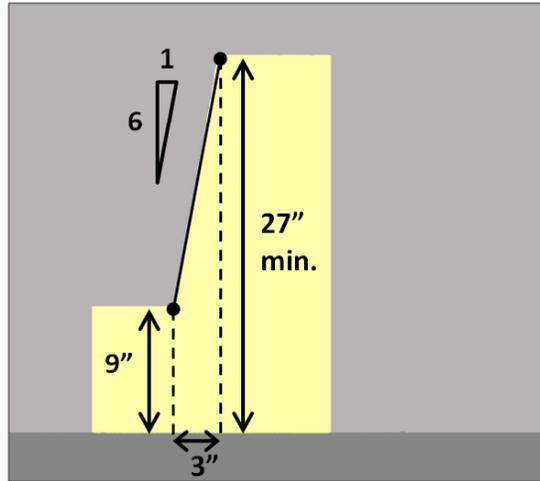
Knee & Toe Space



Toe space

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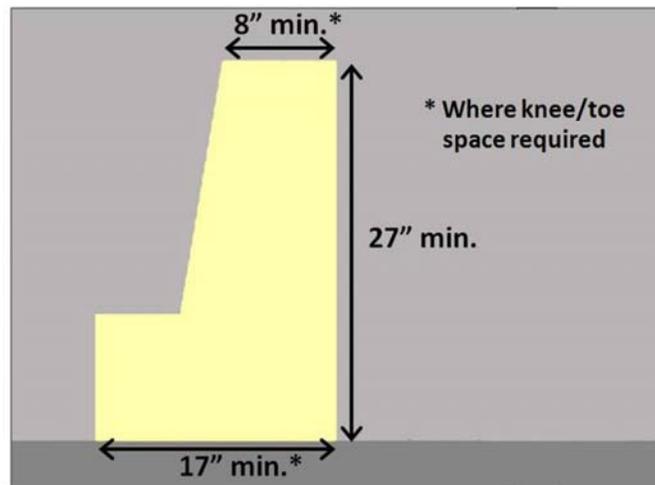
Knee & Toe Space



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

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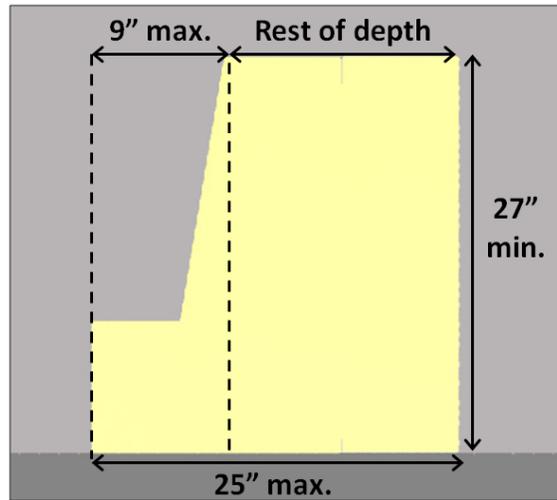
Knee & Toe Space



Remainder of space must provide full clearance for knees (27" min.)

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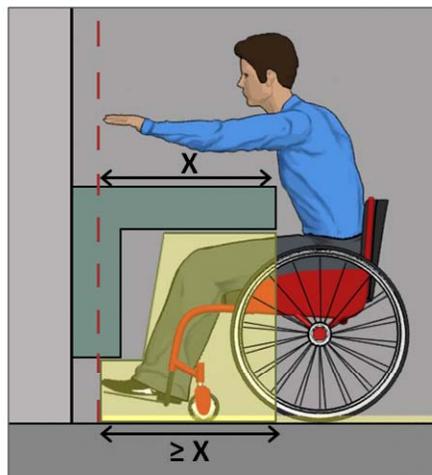
Knee & Toe Space



Additional depth must provide 27" min. clearance
(9" of depth can be less than 27")

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Knee & Toe Space



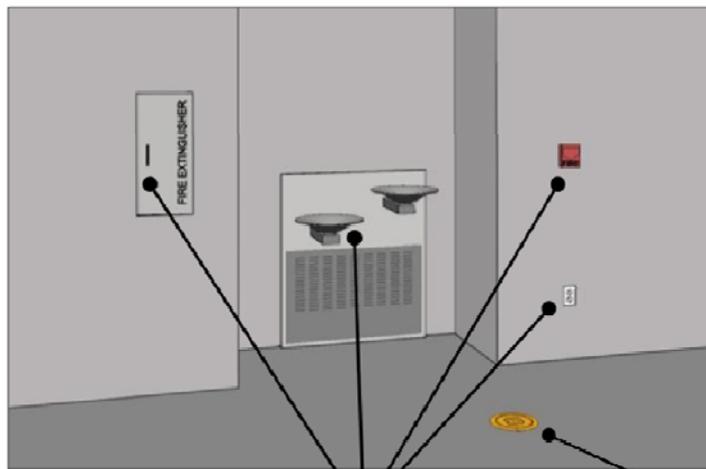
Knee/ toe space must be at least as deep as the reach
to any operable parts (both limited to 25" depth)

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Operable Parts & Reach Ranges

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Operable Parts (§309)



Exempt: floor receptacles

Examples of Operable Parts

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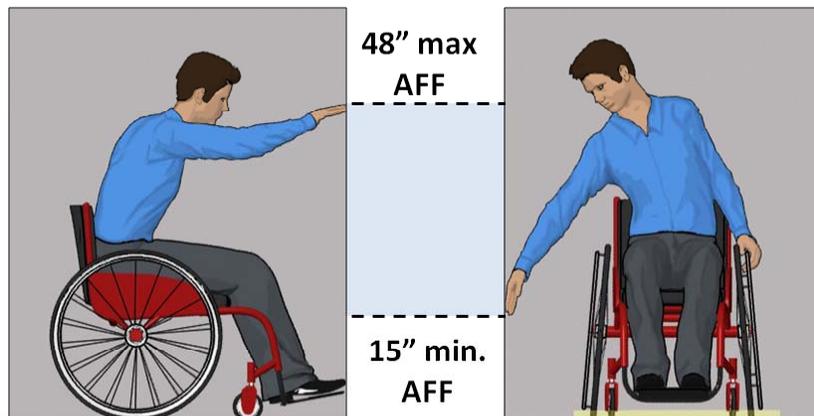
Operable Parts

- Operability
- Reach range
- Clear floor space
- Connected by accessible route



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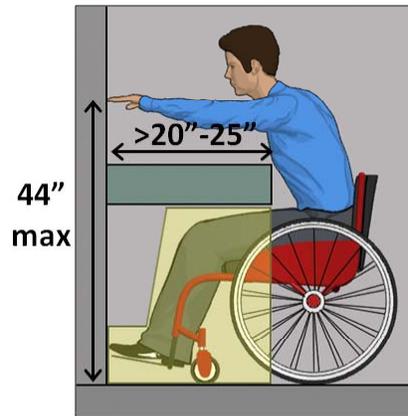
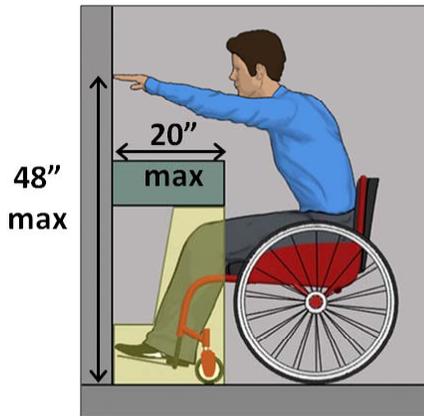
Reach Ranges (§308)



Unobstructed forward and side reaches

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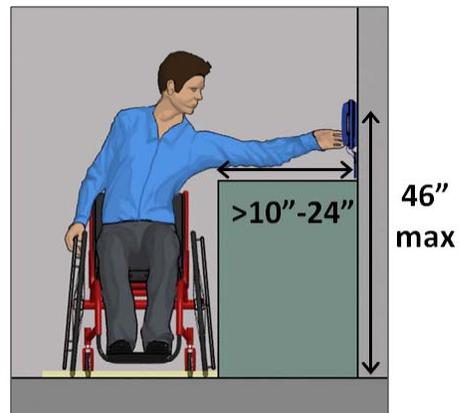
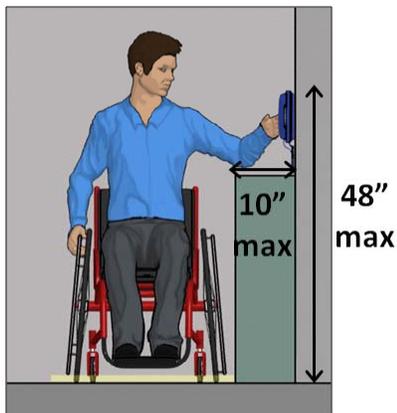
Forward Reach (Obstructed)



Obstructed reach: 44" max. if reach depth exceeds 20"

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Side Reach (Obstructed)

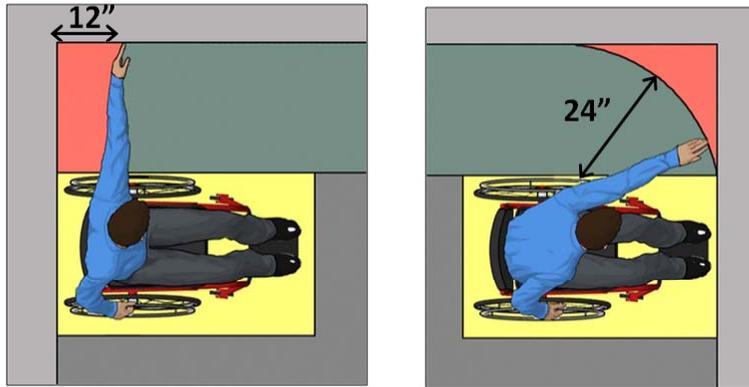


Obstructed reach: 46" max. if reach depth exceeds 10"

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Side Reach (Obstructed)

Recommendation: consider standard reach radius in locating operable parts accessed from side approach

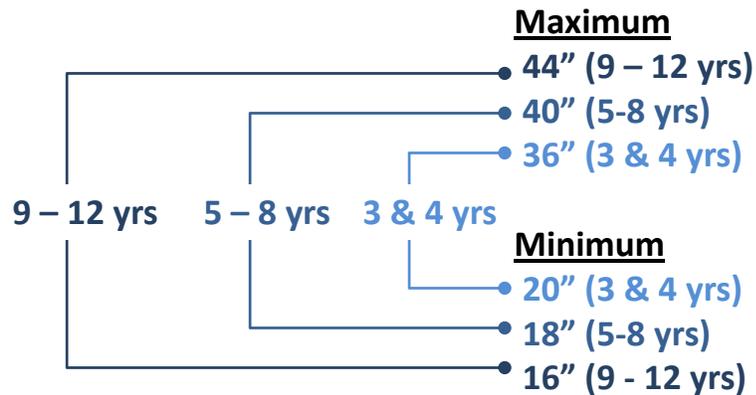


Elements in corners can be hard to reach from side approach

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Children's Reach Ranges

Advisory (non-mandatory): Forward & Side

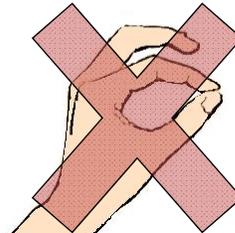


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Operability



- 1 hand operation
- no tight grasping, pinching, or twisting of wrist
- 5 lbf maximum



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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)

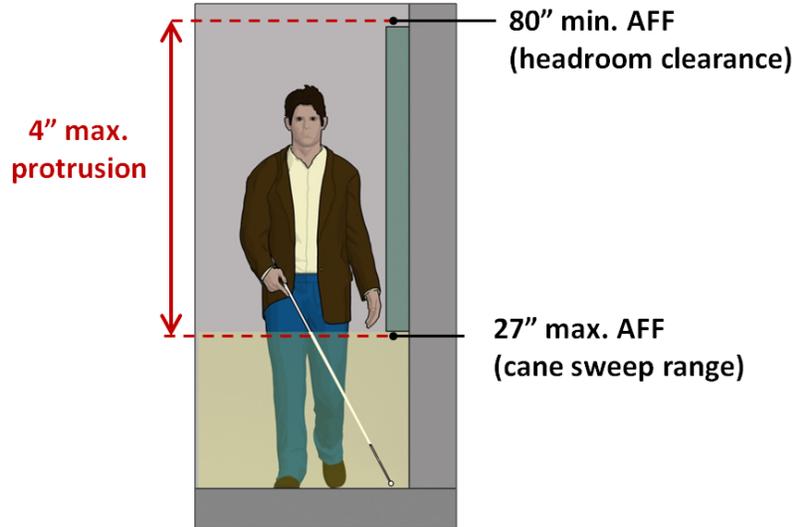


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Protruding Objects

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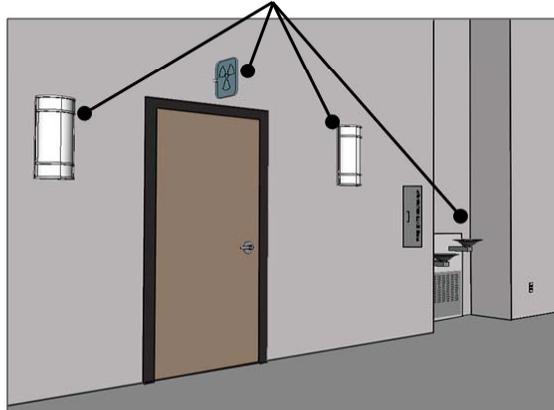
Protruding Objects (§307)



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Protruding Objects

Examples of protruding objects

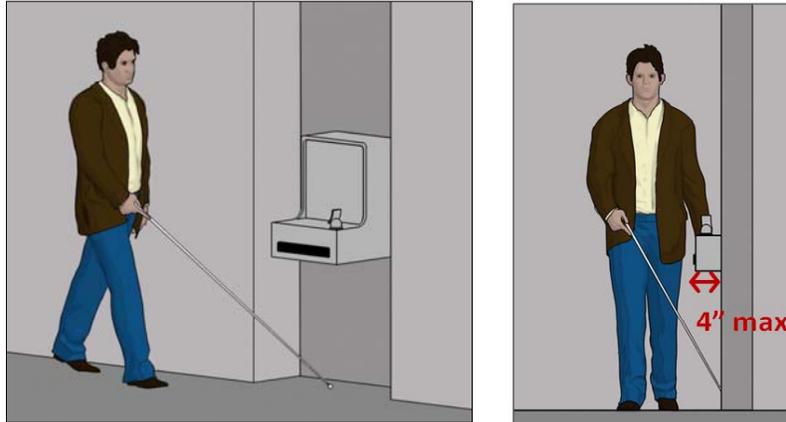


Protrusion limits apply to all areas of circulation
– not limited to accessible routes

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Protruding Objects

Drinking Fountains



Elements often recessed to comply (e.g., drinking fountains at standard heights)

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Protruding Objects

Post-mounted objects

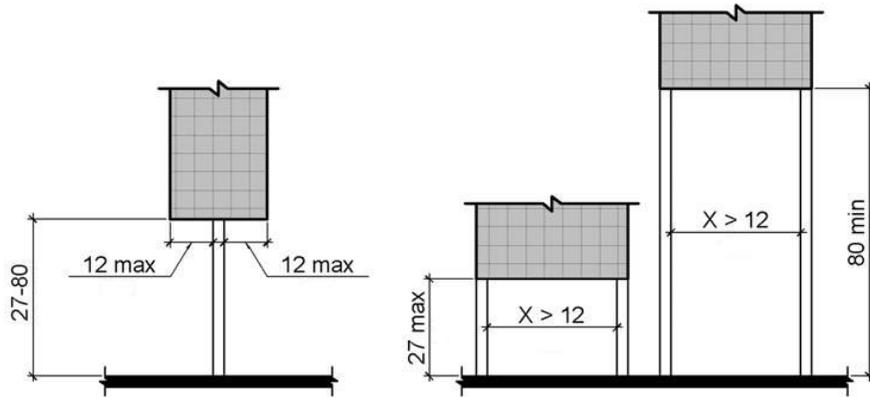


Protrusion limits also apply to objects mounted on posts

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Protruding Objects

Post-mounted objects



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Questions?

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in today's webinar**



Next scheduled session:

Accessible Communication Elements and Features

May 3, 2012

2:30 - 4:00 (ET)

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