



# Illinois ADA Project Conference on Legal Updates *2010 ADA Standards for Accessible Design & the Illinois Accessibility Code*

Chicago, IL  
October 27, 2011

## Session Agenda

- **Session format** – Includes comparison with the Illinois Accessibility Code
  - **Using the standards**
  - **Application/ Scoping (Ch 1 & 2)**
  - **Building Blocks (Ch 3)**
  - **Accessible Routes (Ch 4)**
  - **Site/ Bldg Elements (Ch 5)**

## Session Agenda

- Plumbing Elements (Ch 6)
  - Communication Elements (Ch 7)
  - Special Rooms/ Spaces (Ch 8)
  - Built-in Elements (Ch 9)
  - Recreation Facilities (Ch 10)

The slide features the U.S. Access Board logo in the top left corner, which consists of a stylized red, white, and blue star with the text "UNITED STATES ACCESS BOARD" around it. The main title "U.S. Access Board" is in large blue letters. Below the title is the tagline "Providing leadership in accessible design" in white. To the right of the tagline is a bulleted list of services: Guidelines and Standards, Technical Assistance, Training and Outreach, Research, and ABA Enforcement. The background is a dark blue gradient. In the bottom left corner, there is a photograph of a modern building with large glass windows and a curved facade. The slide is numbered "4" in the bottom right corner.

# New Construction

# ADA Standards (2010)



Take effect March 15, 2012  
can be used now instead of  
original standards:

## Effective Date – 3/15/2012

- **TITLE III - building permit/ permit extension application is certified as complete (or is submitted where completion not certified)**

OR

- **TITLE II - start of physical construction or alteration (where no permit required)**

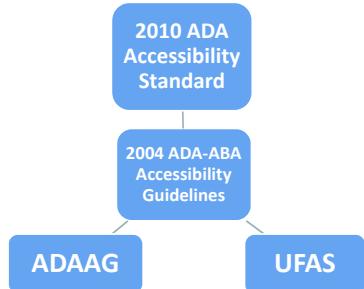
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## 2010 ADA Standards



Same as the Board's  
ADA-ABA Guidelines  
(2004)  
... plus requirements  
DOJ added

## Updated accessibility guidelines and standards



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## 2010 ADA Standards



### Additional DOJ requirements:

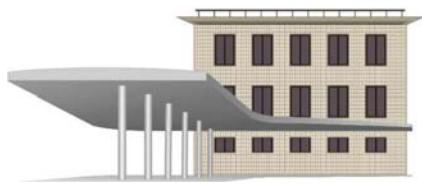
- Social Service Center Establishments
  - Housing at Places of Education
  - Assembly Areas
  - Medical Care Facilities
  - Residential Dwelling Units
  - Detention and Correctional Facilities
  - Places of Lodging

## ADA Standards

## Transit Facilities

(e.g., bus stops/stations, rail stations):

## DOT's ADA standards (2006)



## Additional DOT Requirements

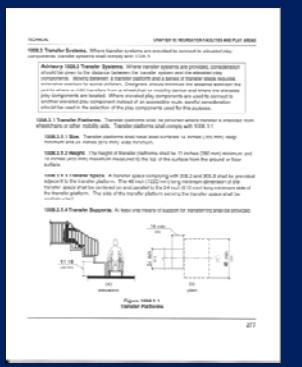
## **Revisions in DOT's standards:**



- Location of accessible routes (206.3)
  - Detectable warnings on curb ramps (406.8)
  - Bus boarding and alighting areas (810.2.2)
  - Rail station platforms (810.5.3)

## New Format

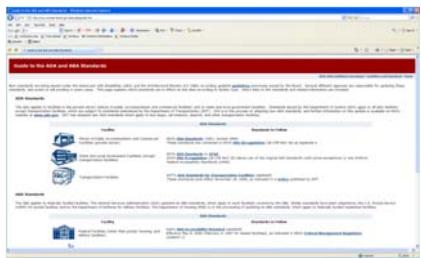
- Numbering system
  - New figures  
(informational only)
  - All dimensions in text  
(not just figures)
  - New advisory notes  
follow provision



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## Online Guidance

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



## Harmonization



ICC/ANSI A117.1-2003

IBC 2003

## Side-by-side Comparisons

| New ADAAG*  | ADA Accessibility Act Accessibility Standard*   | 2009 International Building Code*  |
|---|---|--|
| <b>3.12 Dimensions for Adults and Children</b><br>The following table provides the minimum clear dimensions and clearances required. In addition, the standard provides specific requirements for accessible features and spaces, including requirements for drinking fountains, water closets, user controls, accessible routes, and areas, along surfaces, and work surfaces. | <b>3.12.1 Provisions for Adults</b> The specifications in this section apply to accessible clear dimensions and clearances.   | <b>AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) 312.1</b> Dimensions and clearances required for accessible features and spaces, including requirements for drinking fountains, water closets, user controls, accessible routes, and areas, along surfaces, and work surfaces. |
| <b>3.12.2 Provisions for Children</b><br>Wherever applicable, the use of design, products, or technologies as alternative to those required for adults is permitted to accommodate children or provide accessibility and safety.  | <b>3.12.2 Provisions for Children</b> The provisions of this section apply to the use of other design, products, or technologies as alternative to those required for adults to accommodate children or provide accessibility and safety. | <b>AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) 312.2</b> Dimensions and clearances required for accessible features and spaces, including requirements for drinking fountains, water closets, user controls, accessible routes, and areas, along surfaces, and work surfaces. |
| <b>3.14 Miscellaneous Instructions and Definitions</b>  | <b>3.14.1 General</b> Wherever applicable, the use of design, products, or technologies as alternative to those required for adults is permitted to accommodate children or provide accessibility and safety.                             | <b>AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) 314.1</b> General.   |

New ADAAG, original ADA standards, and IBC/ ANSI

## Existing Facilities

### What Standards Apply to Existing Facilities?

- Title II — Program accessibility
- Title III — “Readily achievable” barrier removal

## Safe Harbor – Existing Facilities

- Elements that comply with 1991 Standards do not need to be modified to meet the 2010 Standards unless those elements are altered on or after March 15, 2012.

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## Covered by Safe Harbor



1991 Standard




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## Safe Harbor – Existing Facilities

Safe Harbor does not apply to elements in existing facilities that were not subject to specific requirements in the 1991 Standards

- |   |   |
|---|---|
| (A) Residential facilities and dwelling units | (J) Swimming pools, wading pools, and spas,     |
| (B) Amusement rides                           | (K) Shooting facilities with firing positions,  |
| (C) Recreational boating facilities           | (L) Miscellaneous.                              |
| (D) Exercise machines and equipment           | (1) Team or player seating                      |
| (E) Fishing piers and platforms               | (2) Accessible route to bowling lanes           |
| (F) Golf facilities                           | (3) Accessible route in court sports facilities |
| (G) Miniature golf facilities                 |   |
| (H) Play areas                                |   |
| (I) Saunas and steam rooms                    |   |

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## CHAPTER 1

### Application and Administration

- Purpose
- Dimensions for Adults and Children
- Equivalent Facilitation
- Conventions
- Referenced Standards
- Definitions

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## Conventions

- Dimensions – range instead of absolute dimension where possible
- Construction *and manufacturing* tolerances
- Scoping percentages/ratios (round up)
- Figures – informational; text governs

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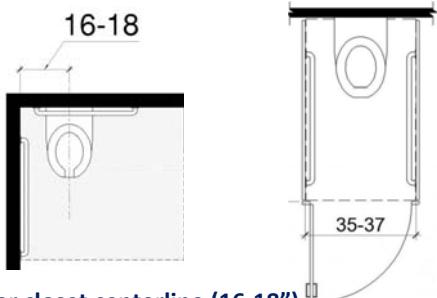
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### Ranges instead of absolute dimensions



Water closet centerline (16-18")

Width of ambulatory accessible stall (35"- 37")

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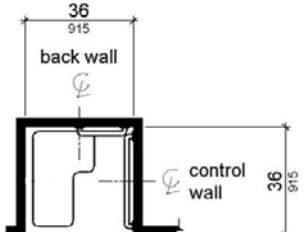
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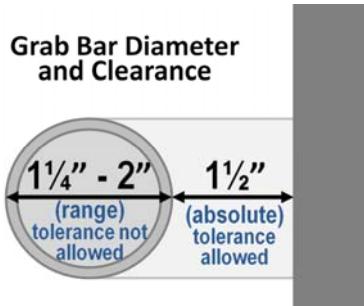
Some absolute dimensions remain

e.g. transfer shower stall (36" x 36")



(measured to center points; manufacturing tolerances recognized)

Tolerances do not apply to ranges



## Referenced Standards

- powered doors (ANSI/BHMA A156.10 & A156.19)
- elevators and lifts (ASME A17.1 & A18.1)
- egress (IBC)
- alarms (NFPA 72)
- play surfacing & equipment (ASTM standards)

## CHAPTER 2

### Scoping Requirements:

- New Construction
- Exceptions
- Additions and Alterations
- Primary Function Areas – Path of Travel
- Qualified Historic Facilities

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## New Construction

**All areas must comply except:**

- Exempted structures/ spaces
- Work areas (ADA facilities)
- Partially scoped spaces

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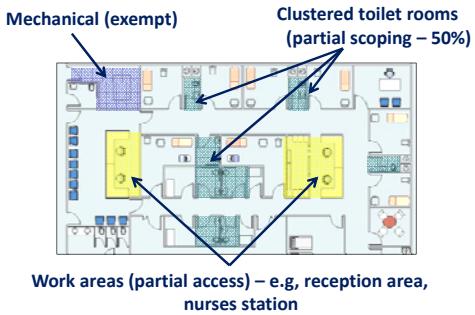
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## New Construction

Example: Medical Care Suite



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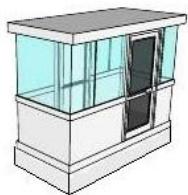
## General Exceptions

- construction sites
  - raised areas (security, life/fire safety)
  - spaces accessed by ladders, catwalks, crawl spaces, narrow passageways
  - machinery spaces



## General Exceptions

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



## General Exceptions

## Recreation Facilities

- raised structures used solely for refereeing, judging, or scoring a sport
  - raised boxing/ wrestling rings
  - water slides and raised diving boards/ platforms
  - animal containment areas not open to the public



## Work Areas

### Minimum requirements:

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

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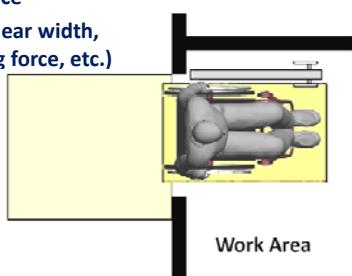


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## Work Areas

### Access for “approach, entry, & exit”

- Door man. clearance
- Compliant door (clear width, hardware, opening force, etc.)
- Clear floor space




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## Work Areas

### Accessible circulation paths



#### Exceptions:

- areas  $< 1000$  sq. ft.
- paths = integral part of equipment
- exterior areas fully exposed to weather

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## Work Areas

### Exempt:

**Areas under 300 s.f. that are elevated at least 7" as an essential functional condition of the space (excluding raised courtroom stations)**



## Alterations

## Alterations

### Standards apply based on:

- planned scope of work
  - technical feasibility
  - primary function areas/ path of travel

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## Alterations

***Limited alterations:*** standards apply element-by-element

*Alteration of room/space: standards apply fully to the space*

**Minimum number:** scoping is based on the total number altered

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## Alterations

### ***“Technical Infeasibility” =***

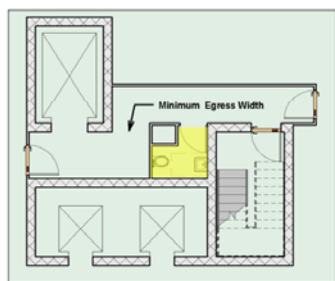
## Existing physical/site constraints that prohibit compliance

**Example: removing fixture to create accessible stall conflicts with plumbing code**

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## Alterations

### Space limitations and technical infeasibility



## Alterations



Where renovation = more extensive,  
technical infeasibility = less likely

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## Alterations

### Technical Infeasibility:

- case-by-case determination
- based on existing constraints/ conditions and scope of work
- compliance required to the *maximum extent feasible*

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## Alterations

Additional requirements for alterations to areas containing a **“primary function”** (major activity intended for facility)

Example: classrooms at a school

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## Alterations

Alterations to primary function areas require accessible “path of travel”:

- accessible route (from site arrival points, parking, building entrances)
- restrooms
- phones
- drinking fountains

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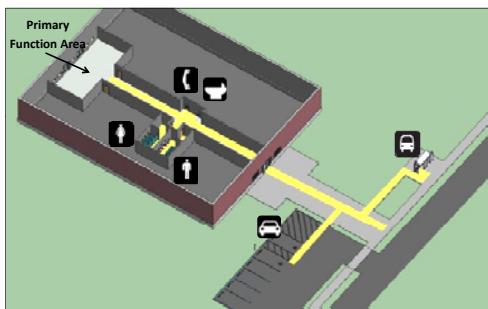
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## Alterations

Example of “path of travel”




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## Alterations

Path of travel:

Compliance required except where  
“disproportionate” to the project cost  
 (more than 20%)

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## CHAPTER 3

### Building Blocks:

- Floor/ Ground Surfaces
- Changes in Level
- Turning Space
- Clear Floor Space
- Knee & Toe Clearance
- Protruding Objects
- Reach Ranges and Operable Parts

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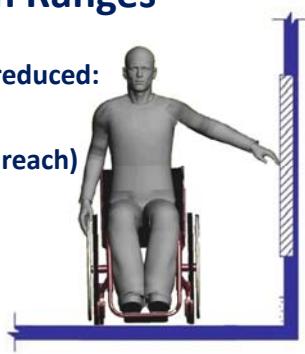
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### Reach Ranges

Side reach range reduced:

48" – 15"

(same as forward reach)



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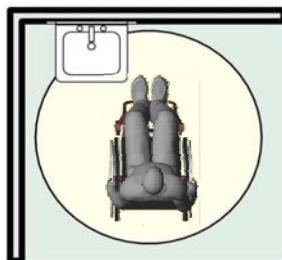
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### Turning Space



Permitted overlap clarified  
(objects with required knee/ toe clearance)

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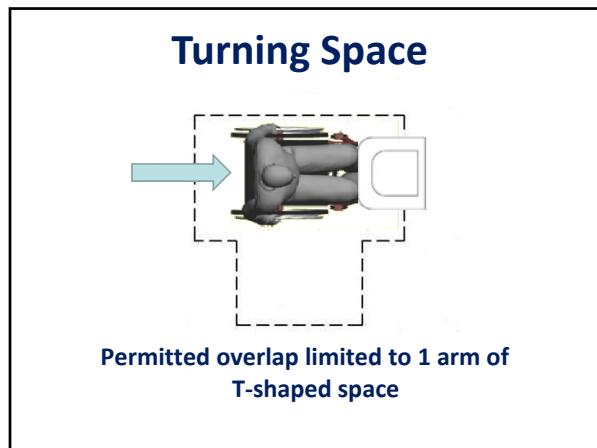
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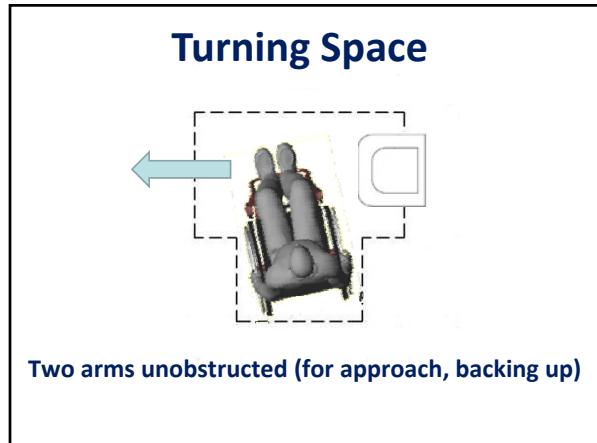
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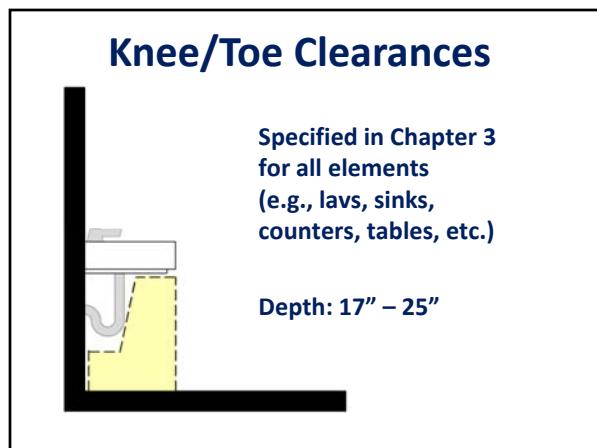
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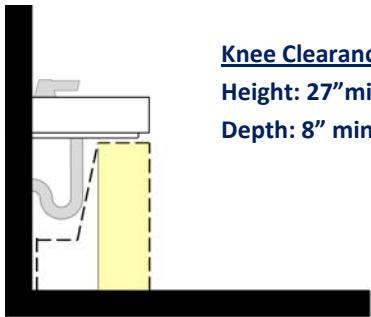
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## Knee/Toe Clearances



Knee Clearance:

Height: 27" min.

Depth: 8" min.

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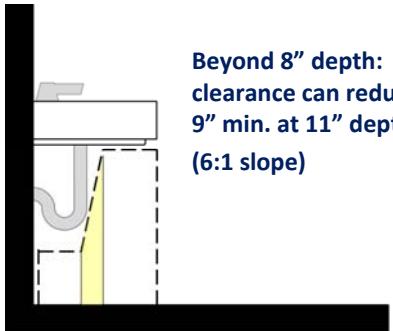
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## Knee/Toe Clearances



Beyond 8" depth:  
clearance can reduce to  
9" min. at 11" depth  
(6:1 slope)

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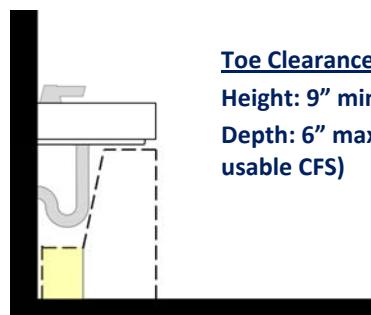
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## Knee/Toe Clearances



Toe Clearance:

Height: 9" min.

Depth: 6" max. (of  
usable CFS)

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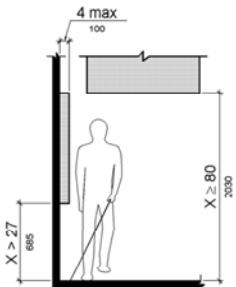
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## Protruding Objects & Headroom



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## CHAPTER 4

### Accessible Routes:

- walking surfaces
- doors and gates
- ramps and curb ramps
- elevators (standard, LULA, residential)
- platform lifts



## Accessible Routes

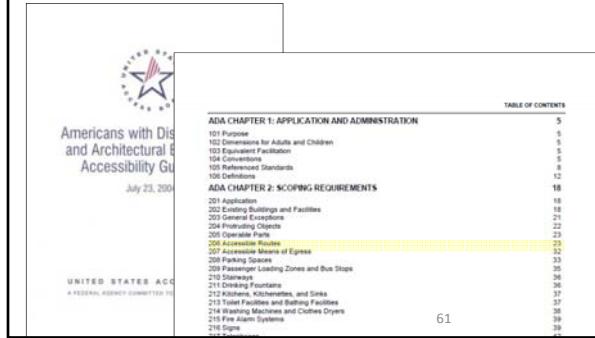
At least one accessible route to building entrances from:

- Streets and sidewalks
- Transportation stops
- Parking
- Passenger loading zones  
(where provided)

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# Accessible Route Scoping

## Section 206



## Accessible Routes

## Clarifications:

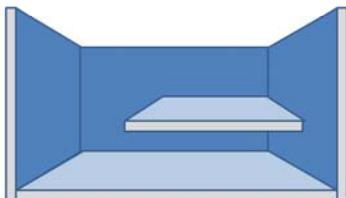
- AR not req'd if no pedestrian route provided
  - if circulation path interior, AR must be interior



## Accessible Routes

## Clarification:

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



## 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 (206.2.3)

Exception not allowed for:

- Shopping centers/ malls
- Professional offices of health care providers
- Terminal, depots, or stations used for public transportation

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## Exceptions (206.2.3)

New exception for public (gov't) buildings:

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

e.g. train dispatch  
or boat traffic towers




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## Exceptions (206.2.3)

### Additional exceptions:

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




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## Press Boxes

### New exception:

- 500 sq ft or less (aggregate) and
- on bleachers entered on 1 level or
- or elevated 12' or more (free standing)




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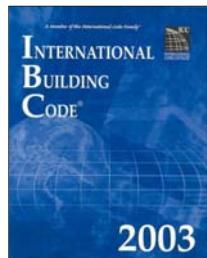
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## Accessible Means of Egress

- Reference to the International Building Code (IBC)
- Standby power for platform lifts on egress routes



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## Entrances

### Scoping:

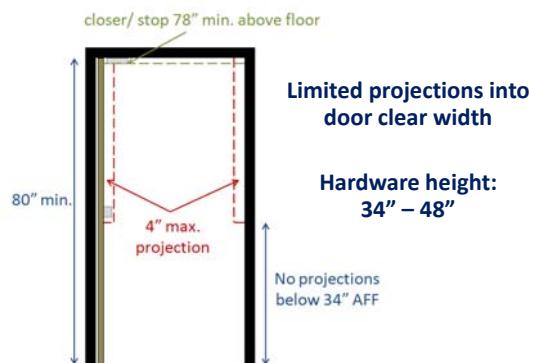
At least 60% of public entrances to comply

### Also:

- direct access from parking structures (all)
- direct access from tunnels or elevated walkways
- different fixed routes in transit facilities
- entrances to different tenant spaces
- restricted or secured entrances (at least 1)

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## Clear Width (32" min.)



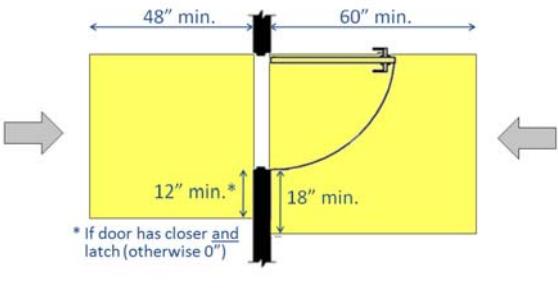
## Maneuvering Clearances

Minimum space for positioning/  
maneuvering at doors



## Maneuvering Clearances

### Forward Approach




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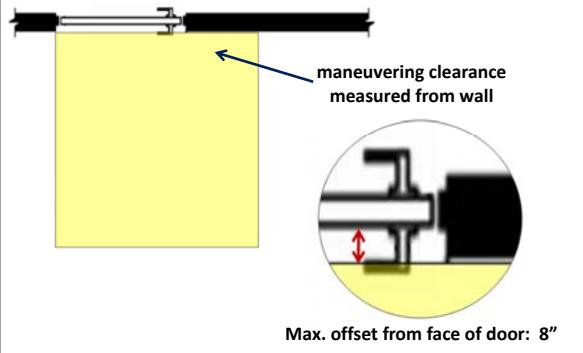


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## Maneuvering Clearances




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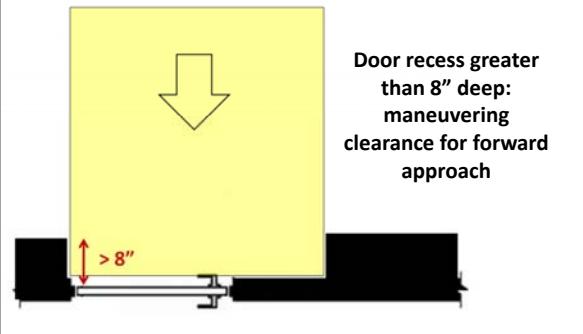


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## Maneuvering Clearances




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## Maneuvering Clearances



Recess: 8" max.



Recess: greater than 8"

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## Doors in Series (404.2.6)

48" min. separation between swing of doors




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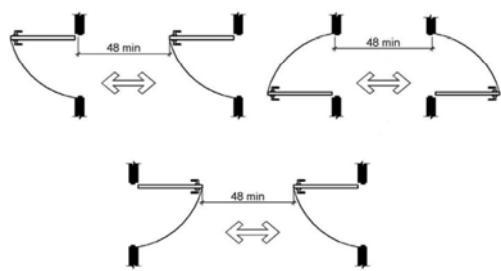
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## Doors in Series

Requirement applies in all cases  
(same direction, in-swinging, out-swinging)




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## Door Surface

Bottom 10" must be smooth (full width of door)



Kick plates can be used to protect door

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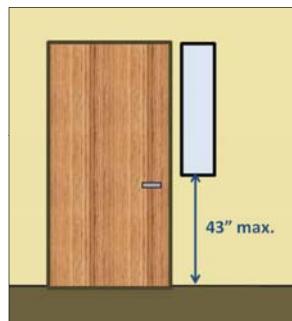
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## Vision Lights



If provided, vision lights: 43" max. AFF  
(not required if bottom edge is above 66")

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## Exterior Doors

Automation recommended (not required)



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## Controls



Wheelchair space at controls must be outside the door swing

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## Controls



Control on adjacent wall/post can provide easier access

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## Entrances



Communication devices must have both visual and audible signals

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## Security Barriers

Alternative route permitted at security screen devices



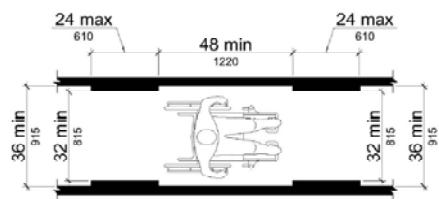
## Walking Surfaces

(level areas of routes between ramps, elevators, lifts)

walking surface  
1:20 max. slope

$> 1:20$  = ramp

## Walking Surfaces



New: minimum separation (48")  
between reduced clear widths

## Cross Slope

**Cross slope: 1:48 max.**



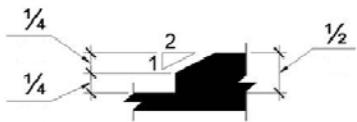
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**changes in level: 1/4" max (vertical)**



**1/2" max (beveled)**



## Surfaces

**must be: firm, stable, “slip-resistant”**



**Loose materials generally not compliant  
(unless properly treated)**

## Ramps

- slope: 1:12 max.
- cross slope: 1:48 max.
- clear width: 36" min.
- rise: 30" max.
- level landings
- handrails (both sides)
- edge protection




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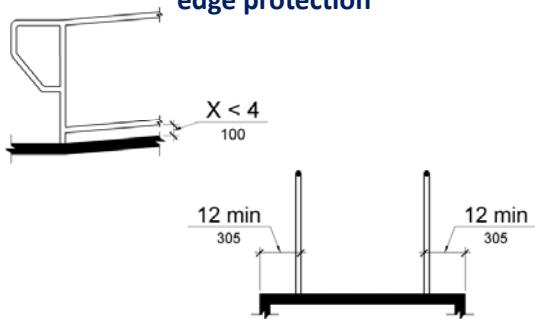
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## Ramps

### edge protection




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## Handrails

### Ramps, stairs, and walkways

- knuckle clearance: 1 ½" min. (not absolute)
- diameter: 1 ¼" – 2" (not 1 ½" max.)
- applies to outer diameter (clarification)




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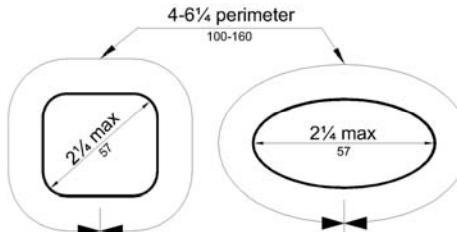
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## Handrails

gripping surface – more detail, more options



criteria for circular & non-circular cross sections

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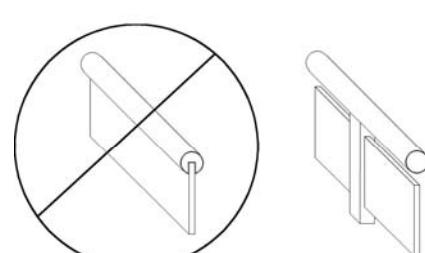
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## Handrails



Obstructions limited along bottom of rail;  
prohibited on top and sides

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## Handrails

Handrails must comply where provided along walkways



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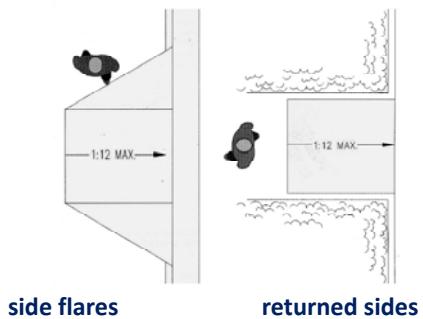
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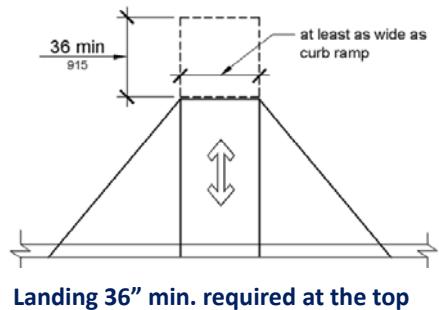
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## Curb Ramps



## Curb Ramps



## Curb Ramps



Lack of space at top makes curb ramps difficult to use

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## Curb Ramps

**Detectable Warnings – no longer required on curb ramps (except at transit facilities) or hazardous vehicular areas**

**Board to revisit issue in rulemaking on public rights-of-way**




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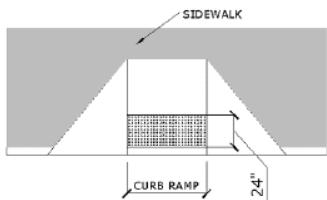
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## Curb Ramps

**DWs – revised specifications available where provided (draft ROW guidelines)**




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## Detectable Warnings

[www.access-board.gov/adaag/dws/update.htm](http://www.access-board.gov/adaag/dws/update.htm)




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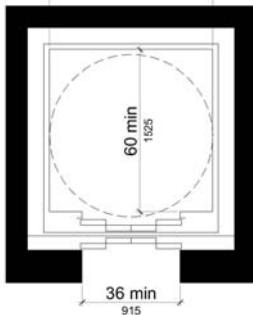
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## Elevators

- Standard Elevators
- Destination-Oriented Elevators
- Existing Elevators (alterations)
- Limited Use/ Limited Application Elevators (LULAs)
- Private Residence Elevators

UNITED STATES ACCESS BOARD

### Standard Elevators



Car sizes – more alternatives  
designs providing turning space within car recognized

### Standard Elevators

#### Alterations:

where one car is altered, all cars programmed to respond to the same hall call must be altered



## LULA Elevators

### Allowed only:

- where standard elevator not required
  - as alternative to platform lifts
  - in residential dwelling units (private residence elevator also permitted)

UNITED STATES ACCESS BOARD

## Private Residence Elevators

- allowed only in residential dwelling units
  - required compliance with ASME A17.1



## Platform Lifts

### **Allowed only at:**

- performance areas/ speakers' platforms
  - wheelchair spaces in assembly areas
  - incidental spaces
  - judicial spaces (e.g., witness stands, judges' benches)
  - existing site constraints

UNITED STATES ACCESS BOARD

## Platform Lifts

- Low-energy, powered gates/ doors
- back-up power – MOE

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## Platform Lifts

Side Entry

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## CHAPTER 5

General Site & Building Elements :

- Parking
- Passenger Loading Zones
- Stairways
- Handrails

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## Parking

### Clarifications/ revisions:

- Exempt: parking for buses, trucks, delivery and law enforcement vehicles, impound
- Marking of access aisles
- Sign height (60" min.)
- Van spaces: increased scoping (1:6 instead of 1:8)
- Angled vans spaces (aisle on passenger side)




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## Parking

### Scoping applies to each parking facility

| Total Number of Parking Spaces | Min. Number of Accessible Spaces                        |
|--------------------------------|---|
| 1 to 25                        | 1   |
| 26 to 50                       | 2   |
| 51 to 75                       | 3   |
| 76 to 100                      | 4   |
| 101 to 150                     | 5   |
| 151 to 200                     | 6   |
| 201 to 300                     | 7   |
| 301 to 400                     | 8   |
| 401 to 500                     | 9   |
| 501 to 1000                    | 2 percent of total                                      |
| 1001 and over                  | 20, plus 1 for each 100, or fraction thereof, over 1000 |

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## Parking

### Van Spaces: 1 of 6 accessible spaces




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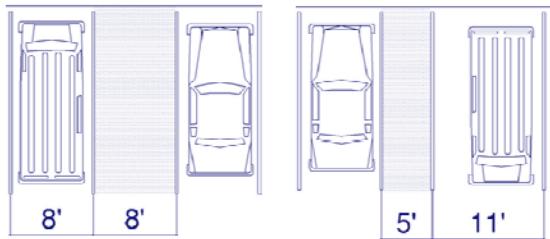
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## Parking Van Spaces

Additional 3' width can be added to aisle or space

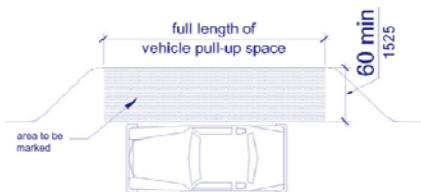


## Passenger Loading Zones



At least 1 for every 100 linear ft. of loading zone space provided

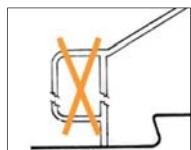
## Passenger Loading Zones



- Aisles - same level as pull-up space
- Aisles to be marked
- No level changes in space or aisle

## Stairways

**Covered: all stairs that are part of means of egress  
(exceptions for altered and assembly stairs)**



- Removed: level 12" h-rail extension at bottom
  - Riser height (4"-7")

## CHAPTER 6

## Plumbing Elements & Facilities:

- Drinking Fountains
  - Toilet & Bathing Rooms
  - Water Closets, Toilet Compartments, Urinals
  - Lavatories & Sinks
  - Bathtubs & Shower Compartments
  - Washing Machines & Clothes Dryers
  - Saunas & Steam Rooms

## Drinking Fountains

**Where provided at exterior site or floor, 2 units required (wheelchair & standing access)**

- alternative: single “hi-lo” unit
  - multiple installations:  
50% of each type  
(can round up or down)



## Drinking Fountains

- forward approach - all wheelchair units
  - revised specs for spout location & water flow
  - clear floor space to be “centered”
  - height for standard units: 38”- 43”

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## Toilet Rooms and Bathing Facilities

## Clustered Toilet Rooms

## New exception:

Access to at least 50% of single user toilet rooms clustered at one location that serve same users (instead of 100%)

## UNITED STATES ACCESS BOARD

## Clustered Toilet Rooms

Example: medical office suite




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## Private Toilet Rooms

“Adaptability” permitted:

- private (not common) use
- single occupant
- accessed only through private office




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## Private Toilet Rooms

Clarified that adaptability allows:

- later provision of grab bars (reinforcement/ blocking)
- alternative toilet seat & lavatory heights
- removable base cabinetry at lavs
- door swing into fixture clearances (where swing can be reversed)

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## Water Closet Clearance

Lavatory overlap no longer permitted




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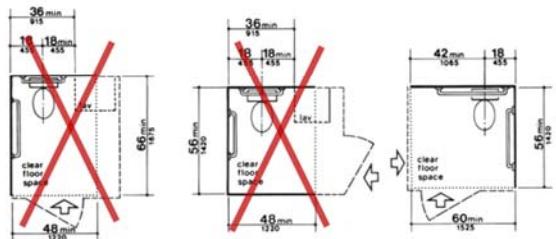
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## Water Closets

Original ADAAG (fig. 28) permitted overlap




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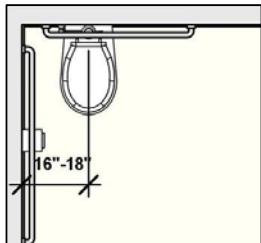


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## Toilet Rooms



- Range for toilet centerline
- lavatory cannot overlap toilet clearance (except in dwelling units)

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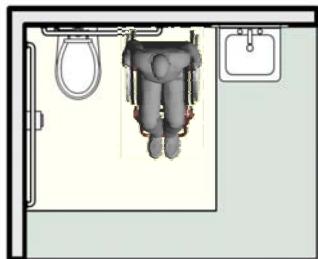
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## Toilet Rooms

Allows space for side transfers



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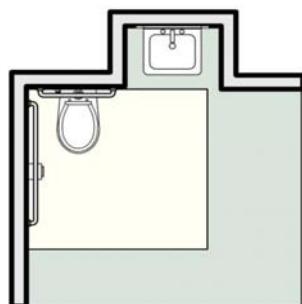
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## Toilet Rooms



- fixtures can be recessed
- shorter (24" min.) rear grab bar allowed in this case

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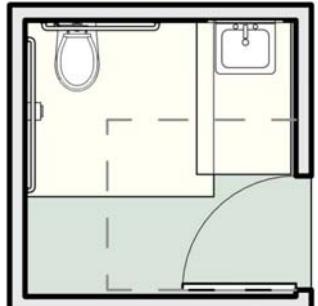
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## Toilet Rooms



Door man. clearance; swing outside fixture clearances

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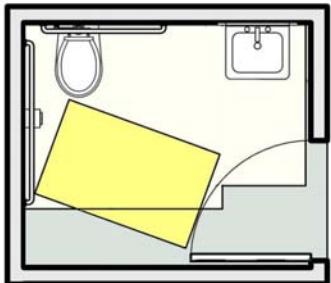
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## Toilet Rooms



Doors can swing into fixture clearances if clear floor space (30" x 48" min.) provided outside swing

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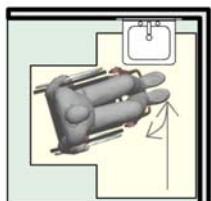
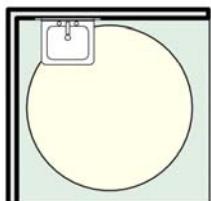
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## Turning Space

60" Diameter circle or "T" turn  
(elements with knee/toe clearance can overlap)



T-Turn: overlap limited to one segment

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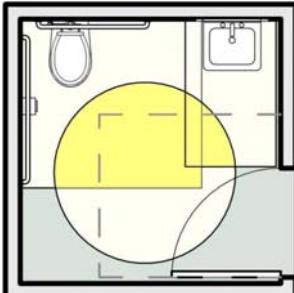
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## Toilet Rooms



Turning space can overlap fixture & door clearances;  
door can swing into turning space

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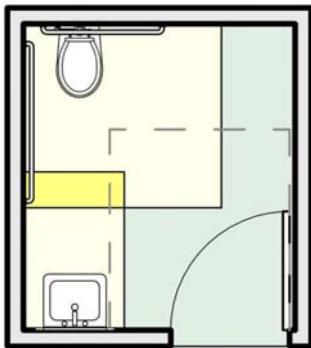
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## Toilet Rooms

Same requirements apply for any design/configuration

(turning space not shown)




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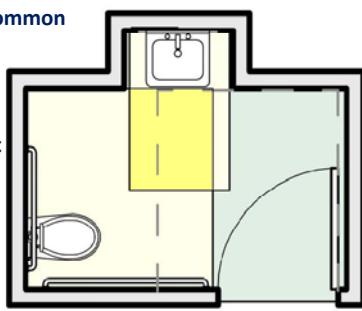


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## Toilet Rooms

... including less common designs

(turning space not shown)




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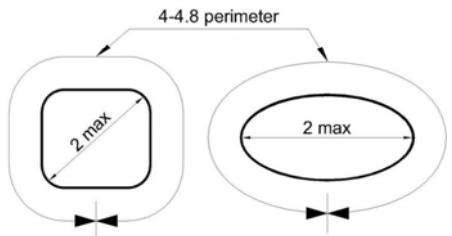
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## Grab Bars

- wider diameter – 2" max. (instead of 1 ½")
- circular and non-circular cross sections




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## Grab Bars



Clearances at grab bars help ensure usability

## Grab Bars

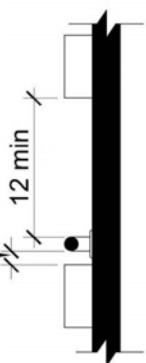
### Clearances:

1 1/2" behind (absolute)

1 1/2" min. below

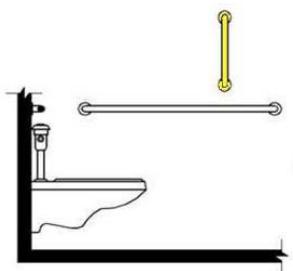
### New:

12" min. above 1 1/2 min



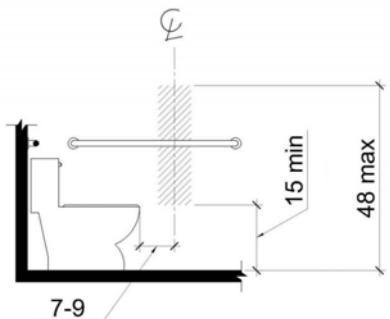
## Grab Bars

ANSI A117.1 requires 18" min. vertical grab bar  
(ADA and ABA guidelines do not)



## TP Dispenser

### Dispenser location



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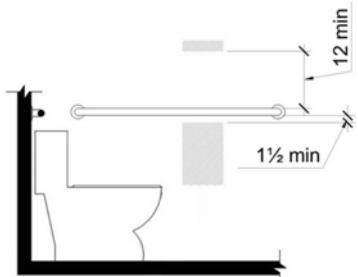
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## TP Dispenser

grab bar height (33"-36") and clearances further limit location of non-recessed dispensers



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## Dispensers

*Common problem:* large dispensers above grab bar impact usability



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## Dispensers

... below bar they can be out of reach range and obstruct space at WC




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## Children's Toilets

Alternate specifications permitted for toilets designed for children 12 & younger




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## Children's Toilets

Advisory information provides guidance according to age group

|                    | Ages 3 & 4 | Ages 5 - 8 | Ages 9 - 12 |
|--------------------|------------|------------|-------------|
| WC Centerline      | 12 in      | 12 - 15 in | 15 - 18 in  |
| Toilet Seat Height | 11 - 12 in | 12 - 15 in | 15 - 17 in  |
| Grab Bar Height    | 18 - 20 in | 20 - 25 in | 25 - 27 in  |
| Dispenser Height   | 14 in      | 14 - 17 in | 17 - 19 in  |

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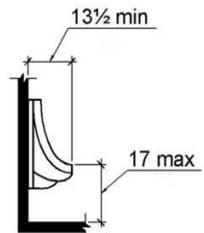


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## Urinals

17" max. height, elongated rim

New standards: "elongated" = 13 1/2" min.



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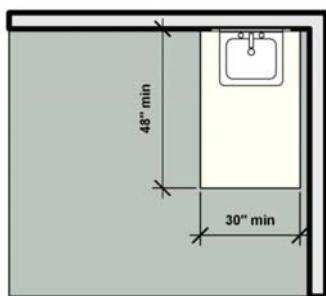
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## Lavatories

Clear floor space at lavatories



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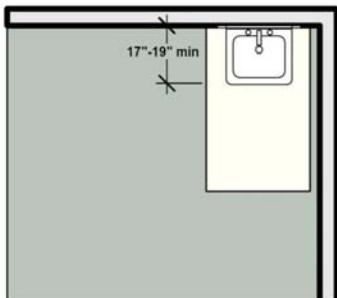
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## Lavatories

Required lavatory overlap of CFS



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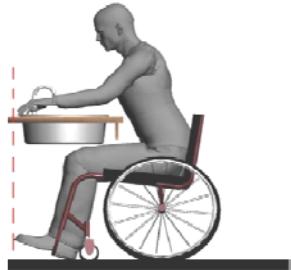
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## Lavatories

Locate controls & dispensers above, not beyond, usable CFS to be within reach




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## Lavatories

*Tip:* Avoid hospital style lavs with deep projections



They take up more space and require a greater reach to faucet controls and dispensers

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## Lavatories and Sinks

- apron clearance (29" min.) removed
- parallel approach - kitchen sinks in spaces without cook tops/ ranges
- removable cabinetry: allowed in dwelling units (if certain conditions met)




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## Sinks

**Public/ Common Use:  
full access to 5%**

- Classrooms
- Research laboratory *(if used for instruction)*
- Break room\*
- Preschool classroom\*

\* side approach access allowed

**Work Areas: access not  
required (recommended)**

- Commercial laboratory
- Research laboratory *(employee use only)*
- Restaurant kitchen
- Janitor's sink *(exempt)*

**Dwelling Units: adaptability  
allowed**

- Kitchens

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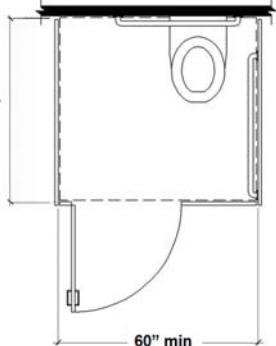


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## Toilet Stalls

**Standard Stall**

56" min. (wall hung WC)  
59" min. (floor-mounted or  
children's WC)




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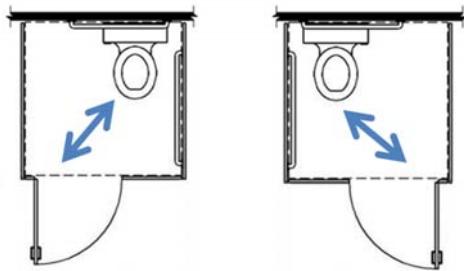
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## Toilet Stalls

**Door and WC: offset configuration**




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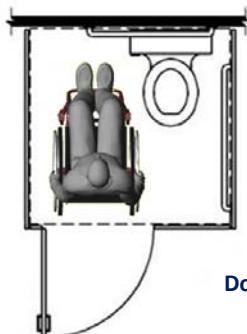


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### Toilet Stalls



Door must swing out.

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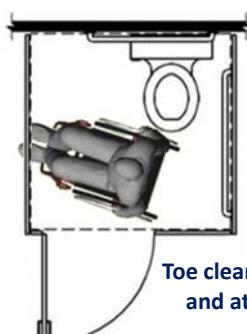
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### Toilet Stalls



Toe clearance (9" min) below front  
and at least one side partition

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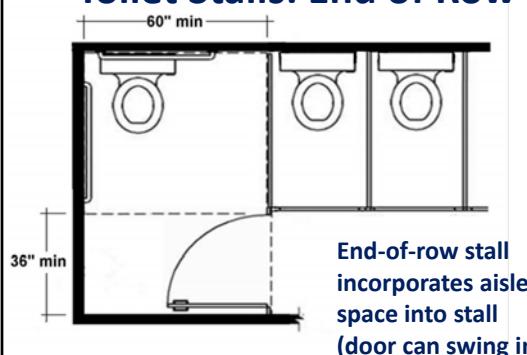
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### Toilet Stalls: End of Row



End-of-row stall  
incorporates aisle  
space into stall  
(door can swing in)

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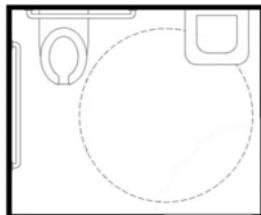
## Toilet Stalls

Lavs in toilet stalls

**New standards:**

Stalls with more >1 plumbing fixture treated as toilet room

Second accessible lav required outside stall




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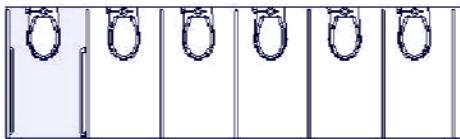
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## Ambulatory Stall

Required where 6 or more stalls provided




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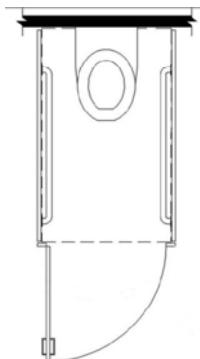
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## Ambulatory Stall

- parallel grab bars
- width: 35" – 37"
- depth: 60" min.
- doors: out-swinging, self-closing




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## Bathing Facilities

At least one shower or tub required

Options:

- transfer shower stall
- roll-in shower
- combination transfer/roll-in shower  
(required in some transient lodging rooms)
- tubs

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## Transfer Stall



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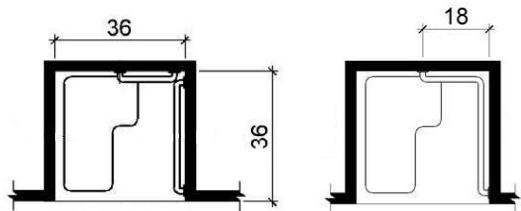
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## Transfer Stall

Stall dimensions: absolute, not minimum

New standards: 36" measured at center point



Grab bars can be continuous or split

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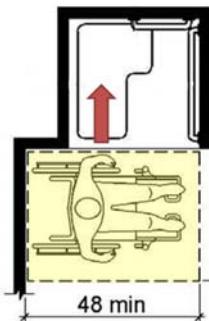
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### Transfer Stall



Clear floor space positioned for alignment with seat

Curb:  $\frac{1}{2}$ " max.

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### Transfer Stall



Common error:  
Insufficient space at seat wall

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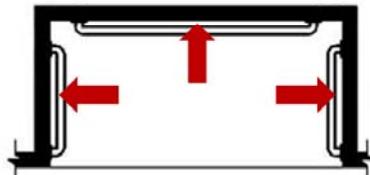
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### Roll-in Shower (no seat)

Shower head and controls permitted on any wall if no seat provided



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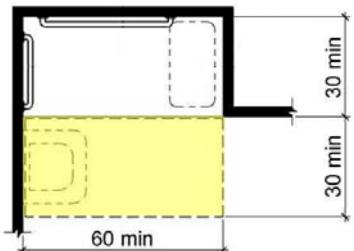
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## Roll-in Shower (with seat)

grab bar ends at seat, seat must be folding



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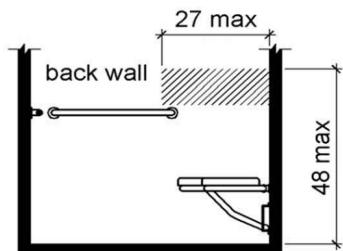
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## Roll-in Shower (with seat)

Shower head/controls required on back within reach from seat



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## Roll-in Shower (with seat)

Improper location makes controls and shower spray unit unusable from seat



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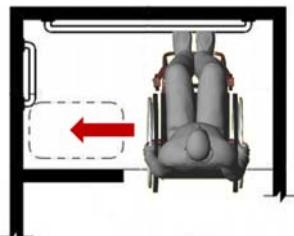
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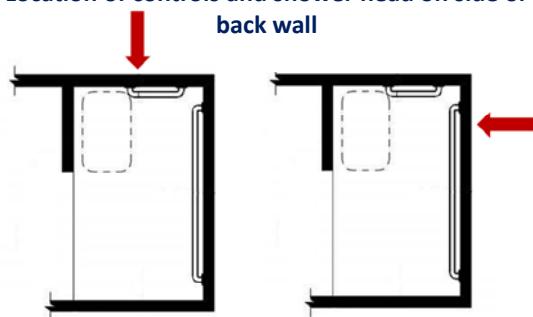
## Alternate Roll-in/Transfer

36" depth allows alignment with seat for transfer



## Alternate Roll-in/Transfer

Location of controls and shower head on side or back wall



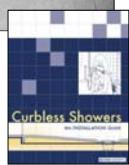
## Roll-in Showers

½" max. beveled curb allowed (new)

Other ways to control water:

- 2% max. slope allowed
- consider trench drain
- Resource from the

Center for Universal Design  
[www.design.ncsu.edu](http://www.design.ncsu.edu)



## Shower Spray Unit

Hand-held shower spray unit required (exception for "unmonitored" facilities)

- on/off control
- water temperature (120 degrees max.)



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## Seats

- dimensions
- location
- height (17" – 19")
- securement
- structural strength



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## Showers

*Common Error:*



Grab bar on seat wall

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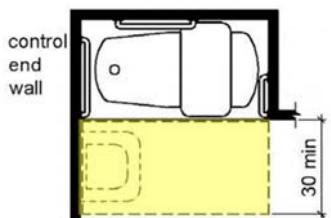
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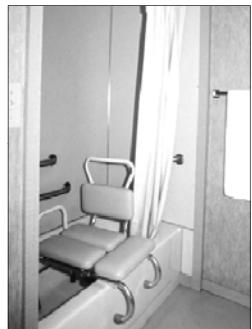
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## Bath Tub (removable seat)

### **Clear floor space at tub with removable seat**



## Bath Tub (removable seat)

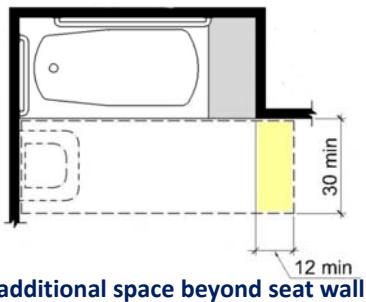


## Bath Tub (Permanent Seat)



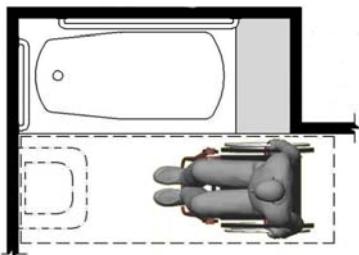
## Bath Tub (Permanent Seat)

Clear floor space at tub with permanent seat



## Bath Tub (Permanent Seat)

Space beyond seat wall allows alignment for transfer



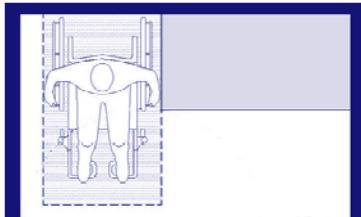
## Washing Machines & Dryers

- 1 accessible where 3 or fewer provided
- 2 accessible where more than 3 provided



## Saunas & Steam Rooms

- Compliant bench
  - Turning space



## CHAPTER 7

## Communication Elements & Features:

- Fire Alarm Systems
  - Signs
  - Telephones
  - Detectable Warnings
  - Assistive Listening Systems
  - ATMs & Fare Machines
  - Two-Way Communication Systems

## Fire Alarm Systems

### Where provided, compliance required in:

- public and common use areas
  - employee work areas (wiring)
  - transient lodging guest rooms
  - residential dwelling units

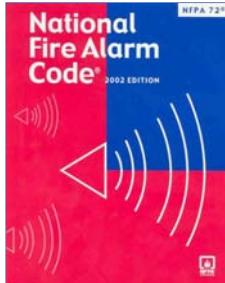
Alterations: compliance required only when system upgraded/ replaced or new one is installed

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## Fire Alarms

NFPA 72  
(1999 or 2002)

guidelines require  
110 dB max.



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## Fire Alarms

NFPA 72 covers:

- flash rate & pulse duration
- location - wall & ceiling
- minimum intensity
- larger coverage thru fewer appliances
- many spaces (other than corridors) can be covered by 1 appliance
- synchronization of multiple appliances



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## Signs

- Tactile/ visual – labels for permanent rooms & spaces, exit doors
- Visual only – directional or informational signs
- Exempt: temporary signs, building menus, directories, addresses, company names and logos




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## Tactile Signs

### Scoping (interior & exterior):

- Restroom labels (at entry)
- Room numbers/ names (not likely to change)
- Floor levels
- Exit access/discharge
- Areas of Rescue Assistance

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## Signs

### Tactile & Visual

“Room 123”  
“Restroom”  
“Mechanical Room”  
“Exit”  
“Floor B”  
“Ballroom A”  
“C. Smith Room”

### Visual Only

“Exit →”  
“Accounting Department”  
“Visitors must sign in”  
  
Exempt  
building directory  
“Mr. C. Smith, Accountant”

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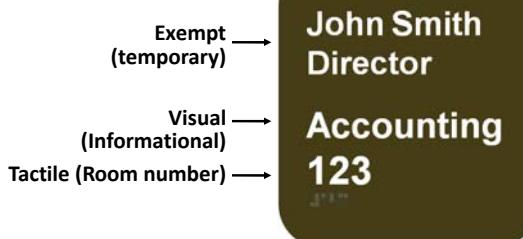


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## Signs




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## Tactile Signs

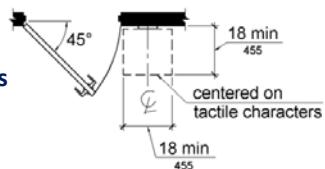
- Raised characters
- Grade 2 Braille
- Visual access (finish and contrast)
- Pictograms (designating room/space)



## Signs

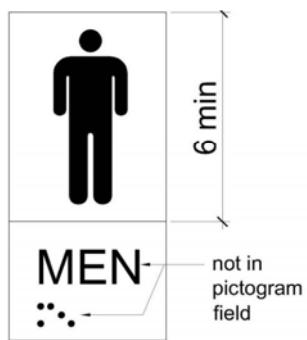
### Raised Characters

- sans serif
- character proportion, height, spacing
- line spacing
- height (48" – 60")
- placement at doors



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## Pictograms




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## Visual Signs

- “conventional form”
- character proportion & spacing
- character height based on viewing distance
- location (40" min. height)
- stroke thickness
- line spacing
- finish & contrast

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## Character Style

New standards specify “conventional form”

Prohibited:

*Italic      Oblique      script*  
*highly decorative*  
*or other      unusual forms*

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## Telephones

- volume controls on all phones
- volume control – to 20 dB (12 dB intermediate step)
- automatic reset
- wheelchair access (at least 1 per floor/level, bank, exterior site)



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## Telephones - TTYS

Scoping based on pay phones provided:

- banks – where 4 or more provided (exception for banks within 200 ft.)
- floors and buildings:
  - - where 1 provided (public building)
  - - where 4 or more provided (private bldg.)
- exterior sites – where 4 or more provided (34" min. height keyboard unless seat provided)

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## Detectable Warnings

Where required:

- Transit platforms (8.10.5)
- Curb ramps at transit facilities (DOT rule) – bottom 2'

Public streets & sidewalks – recommend use of draft ROW guidelines

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## Detectable Warnings

Greater range of designs & products allowed



- dome diameter (range)
- spacing (range)
- removed: resiliency/ sound-on-cane contact
- color contrast doesn't have to be integral

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## Assistive Listening Systems

Required where:

- audible communication = integral to use of the space and
- audio amplification
- Courtrooms



Not triggered by fixed seating or occupant load

New technical criteria (sound pressure level, signal-to-noise ratio, peak clipping level)

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## ATMs & Fare Machines

Access to 1 of each type at each location

- speech output
- privacy
- input controls
- display screen
- Braille instructions (for speech mode)




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## 2-Way Communication Systems



- applies where provided
- audible and visual signals
- handsets (cord length)
- systems serving dwelling units

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## CHAPTER 8

### Special Rooms, Spaces & Elements:

- Assembly areas
- Dressing, fitting, and locker rooms
- Kitchens and kitchenettes
- Medical care and long-term care
- Transient lodging
- Prison cells
- Courtrooms
- Dwelling units
- Transportation facilities
- Storage

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## Assembly Areas

### Wheelchair Spaces

lower scoping for assembly areas with more than 500 seats:



- 501 – 5,000 seats: 1 space/ every 150 seats (instead of 1%)
- > 5,000: 0.5% scoping

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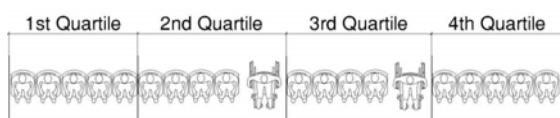


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## Assembly Areas

### Horizontal Dispersion

Exception (300 seats max.) if:  
spaces & companion seats located in the 2<sup>nd</sup> or 3<sup>rd</sup> quartile of row




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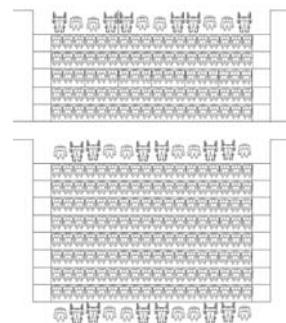
## Assembly Areas

## Vertical Dispersion

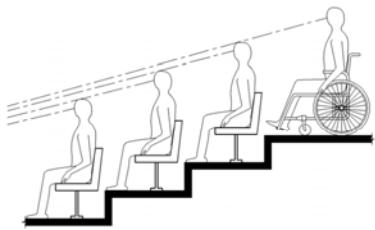
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### Exception (300 seats max.) if:

**viewing angles = or better than the average viewing angles in the assembly area**

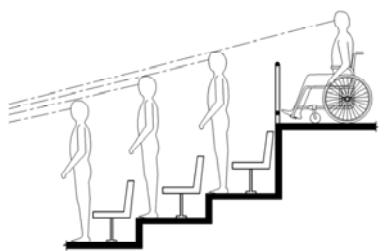


## Assembly Areas



## Wheelchair spaces must provide comparable lines of sight

## Assembly Areas



### lines of sight over standing spectators

## Assembly Areas

DOJ's regulations :

Dispersion to all levels that include seating served by an accessible route in stadiums, arenas, and grandstands.




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## Assembly Areas

Other Changes:

- Companion seat for each space (can be movable)
- Designated aisle seats - 5% of aisle seats
- Lawn seating - accessible route

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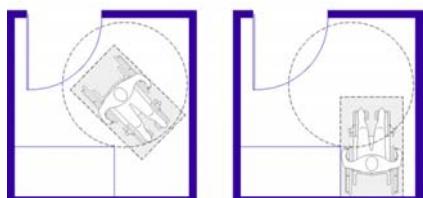
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## Dressing/ Fitting/ Locker Rooms



- Door swing into turning space (if wheelchair space beyond swing)
- Compliant bench
- Lockers – 5% scoping

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## Kitchens/ Kitchenettes

New section covers:



- Clearances
- Sinks
- Appliances
- Storage
- Work surface (dwelling units)

## Transient Lodging

| Total Number of Guest Rooms Provided | Minimum Number of Required Rooms Without Roll-in Showers | Minimum Number of Required Rooms With Roll-in Showers   | Total Number of Required Rooms                          |
|--------------------------------------|--|---|---|
| 1 to 25                              | 1  | 0   | 1   |
| 26 to 50                             | 2  | 0   | 2   |
| 51 to 75                             | 3  | 1   | 4   |
| 76 to 100                            | 4  | 1   | 5   |
| 101 to 150                           | 5  | 2   | 7   |
| 151 to 200                           | 6  | 2   | 8   |
| 201 to 300                           | 7  | 3   | 10  |
| 301 to 400                           | 8  | 4   | 12  |
| 401 to 500                           | 9  | 4   | 13  |
| 501 to 1000                          | 2 percent of total                                       | 1 percent of total                                      | 3 percent of total                                      |
| 1001 and over                        | 20, plus 1 for each 100, or fraction thereof, over 1000  | 10, plus 1 for each 100, or fraction thereof, over 1000 | 30, plus 2 for each 100, or fraction thereof, over 1000 |

## Transient Lodging

- new scoping for beds by room (5%)
- communication features no longer required in all mobility access rooms (in at least 1, no more than 10%)
- New provisions for kitchens/ kitchenettes
- All rooms: 32" min. clear width for doors

## Transient Lodging

- Bedside clearances
- Accessible routes
- Doors
- Storage
- Controls
- Bathrooms
- Kitchens/ kitchenettes



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## Housing at Places of Education

DOJ's new regulations :

- Must comply with transient lodging, plus:
- Turning space & work surfaces in kitchens
  - accessible route throughout in accessible multi-bedroom units (per requirement for dwelling units)

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## Housing at Places of Education

DOJ regs require compliance with residential facilities requirements for:

Apartments/ townhomes:

- leased on a year-round basis to graduate students or faculty
- not containing any public or common areas available for educational programming

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## Transient vs. Residential

**Transient Lodging:** primarily short-term in nature/ not used as a residence

**Residential:** Intended to be used as a residence, primarily long-term in nature.

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## Dwelling Units

### New section:

- 5% wheelchair accessible
- 2% communication access features
- Recognize coverage by HUD 504 regulations
- Technical requirements (809)




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## Medical Care Facilities

### Patient Rooms:

- Turning space
- Clear floor space on both sides of beds



### Exceptions:

- Entry door strike-side clearance (hospital rooms) - (404.2.4)
- Toilet rooms exempt in critical/intensive care patient rooms (223.1)

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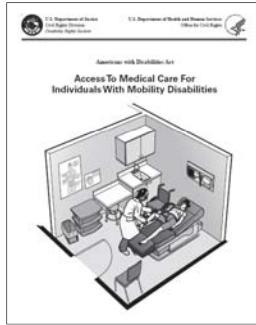


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## Medical Care Facilities

## New guidance from DOJ

[www.ada.gov](http://www.ada.gov)



## Detention/ Correction Facilities

- Accessible cells: 3% (DOJ regs)
  - Dispersion (DOJ regs)
  - Special holding cells: 1 of each type)



## Courtrooms

- jury boxes
  - witness stands
  - judges' benches
  - clerk stations
  - spectator areas
  - assistive listening systems



## Transportation Facilities

- bus boarding/
  - alighting areas
  - bus shelters
  - rail stations
  - airports



# CHAPTER 9

## Built-In Elements:

- Dining & Work Surfaces
  - Benches
  - Check-Out Aisles
  - Service Counters



## Sales & Service Counters



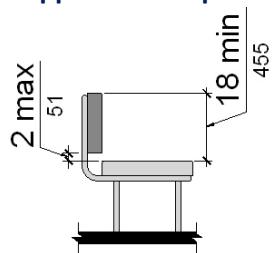
## Sales and Service Counters

- 36" max. height (accessible portion)
  - Applies to full depth of counter
  - 36" min. length (30" min. forward approach)
  - security glazing – method to facilitate voice communication

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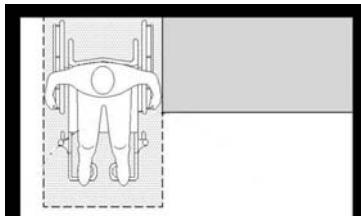
## Benches

## Back support - new specifications



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## Benches



- clear floor space (parallel to short axis)
  - size (42" min. long, 20" – 24" deep)

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## CHAPTER 10

### Recreation Facilities:

- amusement rides
- recreational boating facilities
- exercise machines
- fishing piers and platforms
- golf facilities
- miniature golf facilities
- play areas
- swimming pools, wading pools, and spas

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### Amusement rides

- One of the following per ride
  - Wheelchair space OR
  - Ride seat designed for transfer OR
  - Use of a transfer device
- YOUR CHOICE



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### E X C E P T I O N S



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## Boating facilities



- Marinas, public piers with boat slips
  - Fixed and floating (not ferry docks)

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## Boating facilities

- Gangway slope - connecting floating facilities
    - Design for 1:12 maximum slope OR provide up to an 80 foot gangway
    - Less than 25 boat slips design for 1:12 maximum slope OR provide up to a 30 foot gangway



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## Boating facilities

- Number of accessible boat slips
  - Uses modified ADAAG parking table
  - Dispersed among the different types
  - Boat slips not identified, every 40 ft

| <b>Boat Slips</b>                           | <b>Minimum<br/>Provided</b> | <b>Accessible</b> |
|---|-----------------------------|-------------------|
| 1-25  |                             | 1                 |
| 26-50                                       |                             | 2                 |
| 51-100                                      |                             | 3                 |
| 101-150                                     |                             | 4                 |
| 151-300                                     |                             | 5                 |
| 301-400                                     |                             | 6                 |
| 401-500                                     |                             | 7                 |
| 501-600                                     |                             | 8                 |
| 601-700                                     |                             | 9                 |
| 701-800                                     |                             | 10                |
| 801-900                                     |                             | 11                |
| 901-1000                                    |                             | 12                |
| 100' and over                               | *                           |                   |
| *12 + 1 for each 100 or<br>fraction thereof |                             |                   |

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## Fishing piers and platforms

- Railings - Where provided
- Maximum 34 inch height for 25% of the railing lowered railing dispersed
- Exception: where a guard is provided which complies with ICC/IBC



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## Sports facilities

- Area of sport activity =That portion of a room or space where the play or practice of sport occurs
- Accessible route to each area of sport activity
- Exempt from firm, stable, and slip resistant surface provision



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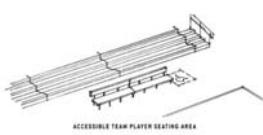
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## Team player seating areas

- Platform lift permitted



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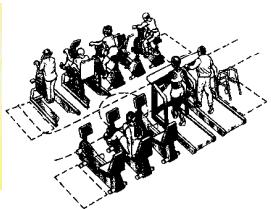
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## Exercise equipment and machines

- At least one of each type of equipment or machines



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## Bowling lanes

- 5%, not less than one of each type
- Where fixed team player seating areas are provided – not less than 1 wheelchair space at accessible lanes



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## Golf Courses

- In lieu of a compliant accessible route.
- Golf car passage - Continuous passage on which a motorized golf car can operate
- 48 inch minimum width 60 inches min width if handrails are provided



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## Miniature golf

- 50% of holes required to be accessible and consecutive
- Exception permits one break, provided the last hole is included



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## Ground-Level Play Components

- One of each Type
- Minimum number based on number of elevated components provided

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## Number of Elevated Play Components

At least 50% of the elevated play components must be on an accessible route.



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## Minimum Number of Elevated Components

**50% of all elevated play components in a play area must be reached by an accessible route**



For less than 20 elevated components:  
ramp and/or transfer = 50%

For 20 or more elevated components:  
25 % ramp + 25 % ramp and/or transfer =  
50%

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## Swimming pools

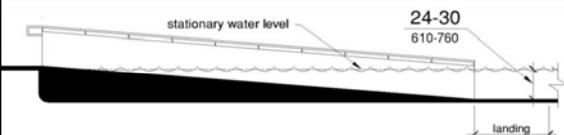
### Means of access:

- < 300 linear ft – at least 1 (lift or sloped entry)
  - 300 or more linear ft – at least 2:
    - 1) lift or sloped entry
    - 2) transfer wall/system, stairs, lift, or sloped entry



## Swimming pools

## Sloped Entry

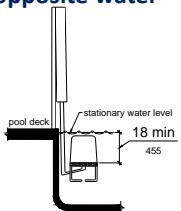


- Extend to 24" – 30" below water level
  - 1:12 maximum slope
  - Handrails – 33" – 38" max clear width

## Swimming pools

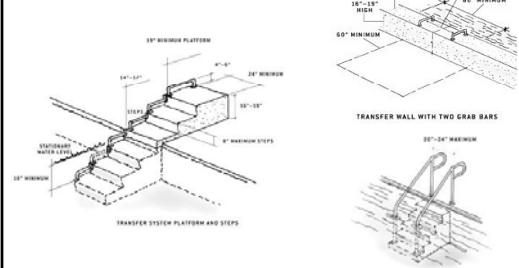
### Lifts

- Located where water does not exceed 48"
- Footrests required (that move with seat)
- Armrest (if provided) - opposite water = removable or folding
- Unassisted operation



## Swimming pools

### Transfer Wall, Transfer System, Stairs



## Recreation Facility Guides



## Where to Direct Questions



U.S. Department of Justice

- Implementing regulation and additional requirements
  - Requirements for existing facilities – title II & III
  - 2010 Accessibility Standards for new construction and alterations

(800) 514-0301 (voice)

(800) 514-0383 (TTY)

[www.ada.gov](http://www.ada.gov)

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U.S. Access Board

- 2010 Accessibility Standards for new construction and alterations

(800) 872-2253 (voice)

(800) 993-2822 (TTY)

(202) 272-0081 (FAX)

[ta@access-board.gov](mailto:ta@access-board.gov)

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

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