A decorative border featuring a dense arrangement of tropical plants and flowers. In the upper right, a vibrant red hibiscus flower is prominent. To its left, a large, light pink hibiscus flower with a yellow center is visible. The background is filled with various green leaves, including long, slender palm fronds and broad, dark green monstera leaves. The border is split by a white diagonal band that serves as the background for the title.

All Access: Navigating Accessibility Guidelines in Civic Buildings

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Course Description

The Americans with Disabilities Act of 1990 was paramount in preventing discrimination against persons with disabilities. It contains 5 major Titles and is administered by the Department of Justice.

We strive to design public facilities that meet our client and stakeholders physical, social and environmental needs, but when it comes to ADA we face some challenges with proper integration and implementation. This panel provides a fresh perspective regarding the implementation of ADA Standards. We will explore common pitfalls in designing public spaces; discuss lessons learned for avoiding major ADA violations during construction and post occupancy; discuss potential design solutions that address all our senses. ADA is more than a guideline for understanding requirements associated with the built environment. ADA is about inclusion and enforcement of basic civil rights.

Challenging our clients, communities and stakeholders to embrace, uphold, and provide innovative thinking is part of our mission as justice architects.

Learning Objectives

1. Identify common pitfalls in designing for accessible public spaces.
2. Discuss documentation strategies to avoid common ADA violations during construction and post occupancy.
3. Discuss potential design solutions that address all senses.
4. Discuss developments in social awareness that may affect ADA.

Panel Introductions



AECOM

**Kristine Johnson,
AIA, LEED AP**

- Courts Planner and PM
- Recent experience with ADA compliance in new construction



AECOM

**Nina Gladstone, AIA,
LEED AP**

- Justice Architect and PM
- Courthouse Access Advisory Committee Member



**Disability and
Communication
Access Board -
Hawaii**

Mona Higa

- Facility Access Coordinator
- Reviews design and construction drawings for State and County projects



**AA Architecture,
Interior Planning &
Design**

**Afshan Afshar, AIA,
CASp, CID, LEED AP
BD+C**

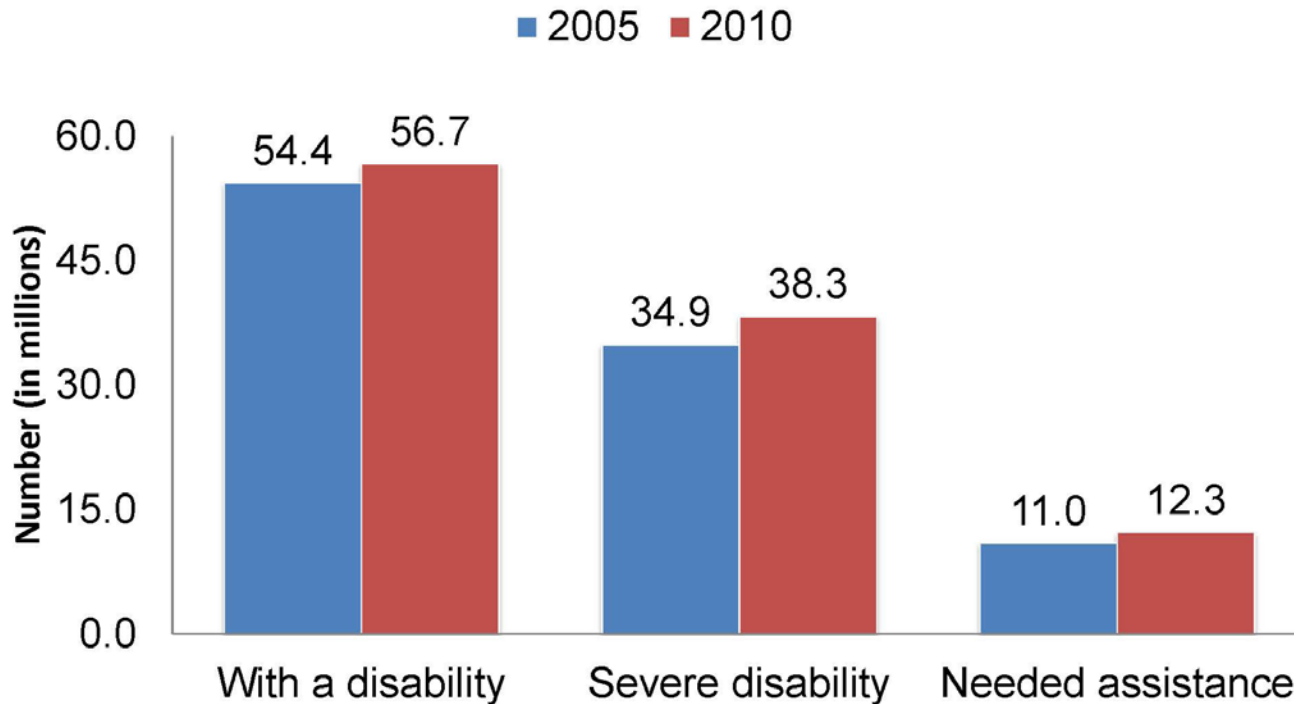
- Architect
- Certified Access Specialist

Why are we here?

- Who has encountered an ADA non-compliance issue in new construction or renovation?
- DCAB reviews over 1000+ drawings a year
- Nearly 75% of new building submittals contain non-compliance issues.
- Nearly 50% of these submittals come back 2-3 times for additional review and comment.

Why are we here?

Number of People with a Disability

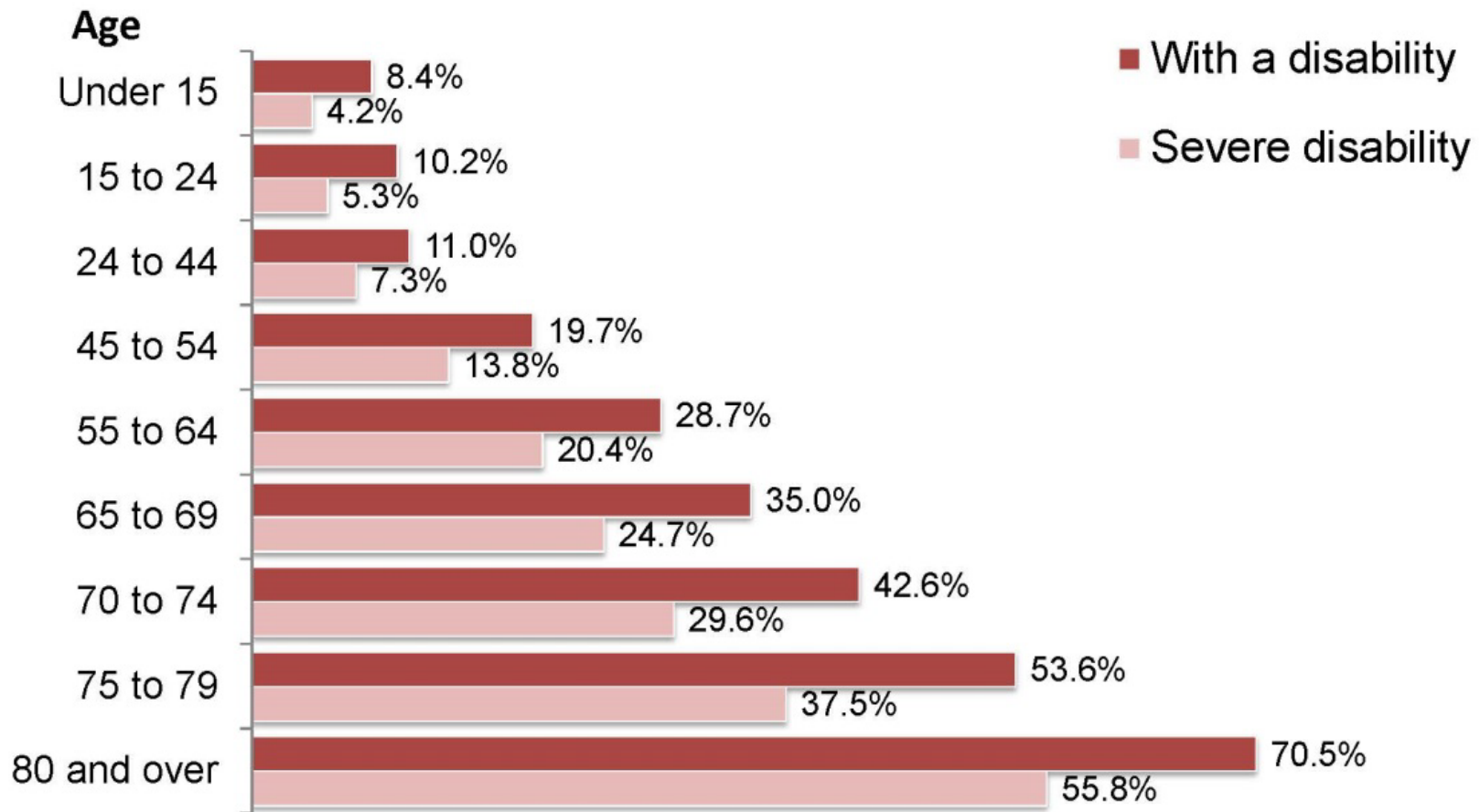


Source: U.S. Census Bureau, Survey of Income and Program Participation, 2004 and 2008 Panels, Adult and Child Functional Limitations Topical Module

Nearly 1 in 5 People Have a Disability in the U.S.

- Reported by US Census Bureau in 2012

Why are we here?



Source: U.S. Census Bureau, Survey of Income and Program Participation, 2008 Panel, Adult and Child Functional Limitations Topical Module

What is ADA?

- The **Americans with Disabilities Act (ADA)** was signed into law on July 26, 1990, by President George H.W. Bush.
- “...**civil rights legislation** that prohibits discrimination and guarantees that people with disabilities have the same opportunities as everyone else to participate in the mainstream of American life.”
- Modeled after the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973
- ADA is an **"equal opportunity" law** for people with disabilities

What is ADA?

Title I – Employment

Title II – State and Local Governments

- Prohibits discrimination on the basis of disability by “public entities,” which are programs, services and activities operated by state and local governments.
- Requires public entities to make their programs, services and activities accessible to individuals with disabilities.
- Outlines requirements for self-evaluation and planning; making reasonable modifications to policies, practices, and procedures where necessary to avoid discrimination; identifying architectural barriers; and communicating effectively with people with hearing, vision and speech disabilities.

What is ADA?

Title III - Public Accommodations and Commercial Facilities

- Prohibits places of public accommodation from discriminating against individuals with disabilities.
- Sets the minimum standards for accessibility .
- Directs businesses to make "reasonable modifications" to their usual ways of doing things when serving people with disabilities.
- Requires that businesses take steps necessary to communicate effectively with customers with vision, hearing, and speech disabilities.

Title IV – Telecommunications

Title V – Miscellaneous

Enforced and regulated by US Department of Justice

Who is protected?

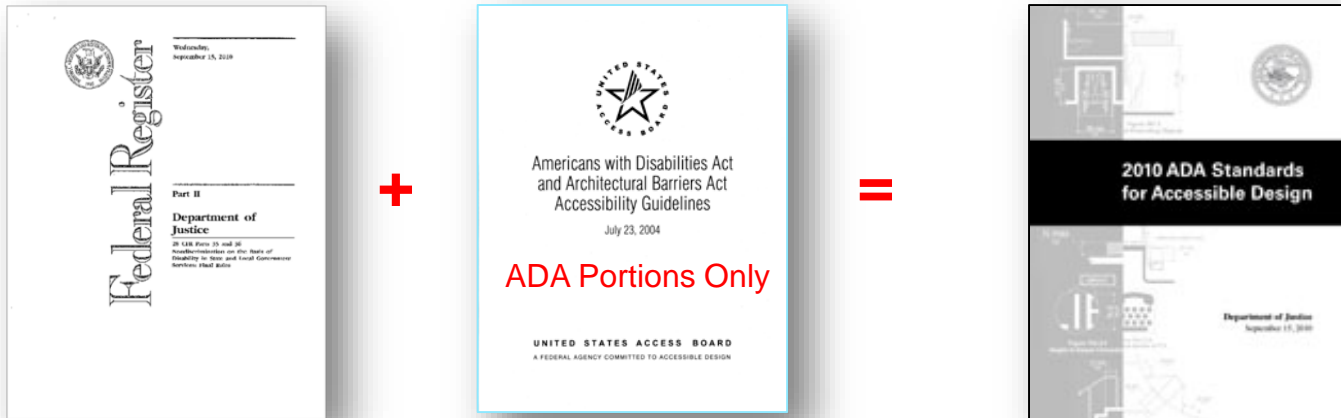
Defined by the ADA **physical or mental impairment** that **substantially limits one or more major life activities**, a person who has a **history or record of such an impairment**, or a person who is **perceived by others as having such an impairment**. The ADA does not specifically name all of the impairments that are covered.

2010 ADA Standards

September 15, 2010

- DOJ published revised regulations on how to implement the 2010 Standards
- DOJ also adopted 2004 ADA Accessibility Guidelines
- Together they create DOJ's enforceable standard

DOJ Regulation + 2004 ADAAG = 2010 ADA Standards



October 2016 Amendment

- Expanded definition of disability, effective October 11, 2016
- Easier to establish disability
 - Expand definition of “major life activities”
 - Examples: Ability to read and write, ADHD, mental and emotional, epilepsy, etc.
 - Burden of proof and request for accommodations is simplified.

We have a responsibility to expand our way of thinking about how we have complied with these regulations and our responsibilities for future compliance.

Lessons Learned...Common Pitfalls



Signage

Tactile vs Visual

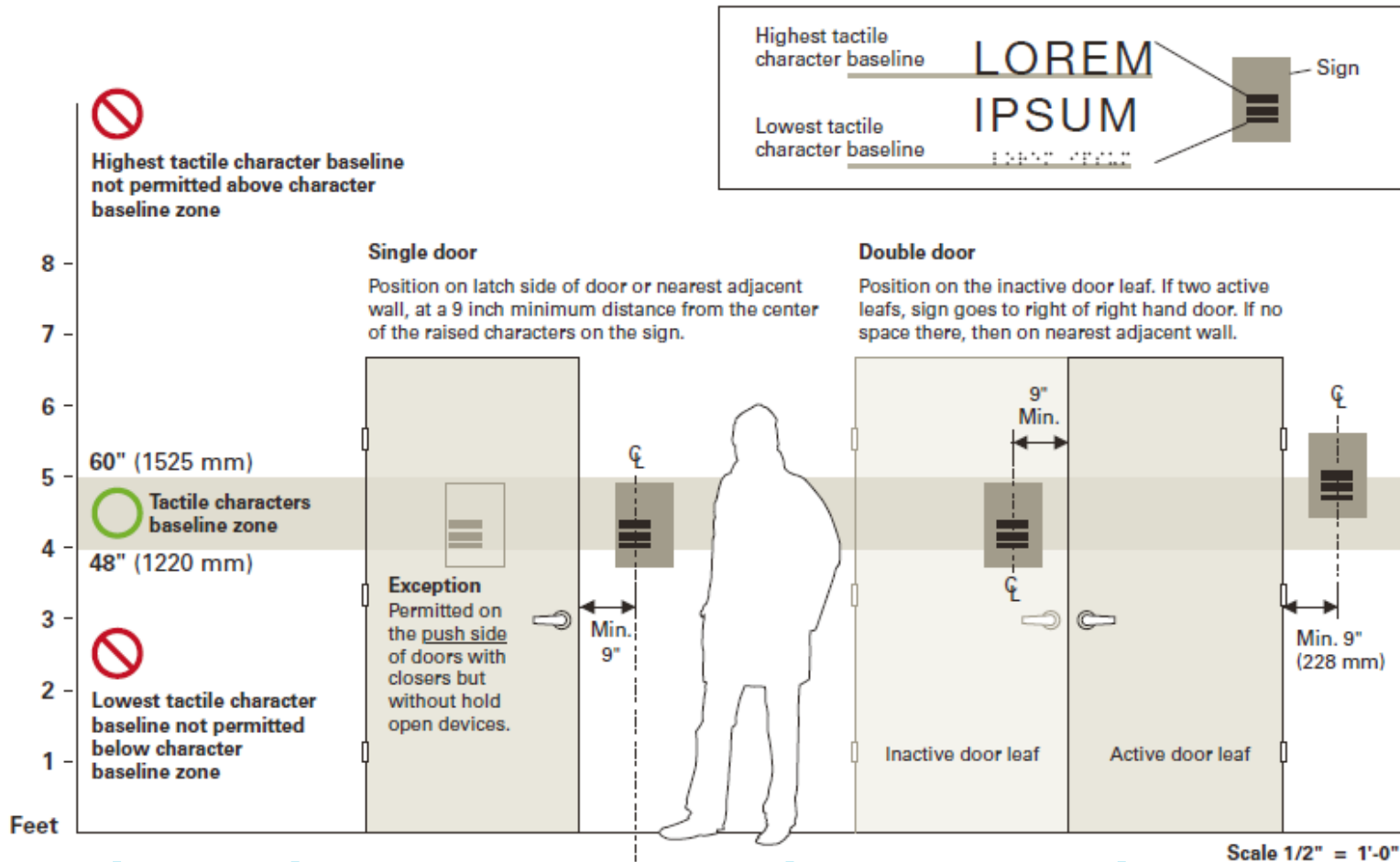
- Visual text can have lowercase and uppercase elements.
- Clearly document signage methodology.

- Tactile lettering shall be all caps.
- Height – 5/8" min, 2" max



Signage

Summary diagram for 703.4 [Tactile characters] Installation Height and Location



Mounting Heights - Do not design to the min or max range!

Signage

Layer signage

- Tactile to identify spaces
- Size of 'informational' signs based on viewing distance and mounting height



Signage typically missing on drawings:

- Exit Signs
 - Doors at exit passageways, exit discharge and exit stairways
- Stair number/floor level signs
- Designate permanent room or space



Protruding Objects

- Docket monitors
- Security and other recording or A/V devices within Courtroom
- Wall base at door openings
- Built in counters/ledges
- Fire extinguishers
- Fire sprinkler risers
- Drinking fountains
- Pay phones
- Display cabinets
- Wall sconces



Protruding Objects

Examples:

- Fixtures and accessories
 - Approach from side of element
 - Low fixture on outside for clear approach



Protruding Objects

Examples:



Barrier provided along side

What happens if someone approaches head on?

Good solution to prevent approach on both sides



Protruding Objects

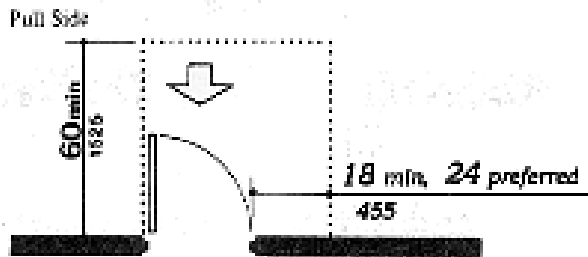
Examples:

- Don't forget that stairways are part of circulation routes
- FEC – mounted above 27" cannot protrude more than 4"



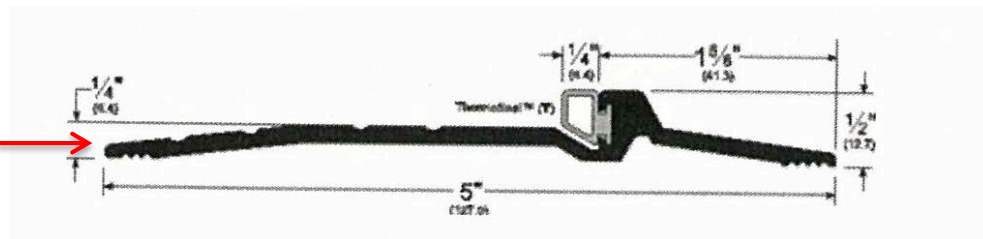
Door Clearances

- Wall base at door openings
- Applied wall base impedes required 18" at latch side for pull



- Door thresholds
- Between $\frac{1}{4}$ " – $\frac{1}{2}$ " it must be beveled

NOT
COMPLIANT:
Vertical change
between $\frac{1}{4}$ " – $\frac{1}{2}$ "
not allowed



Accessible Water Closets

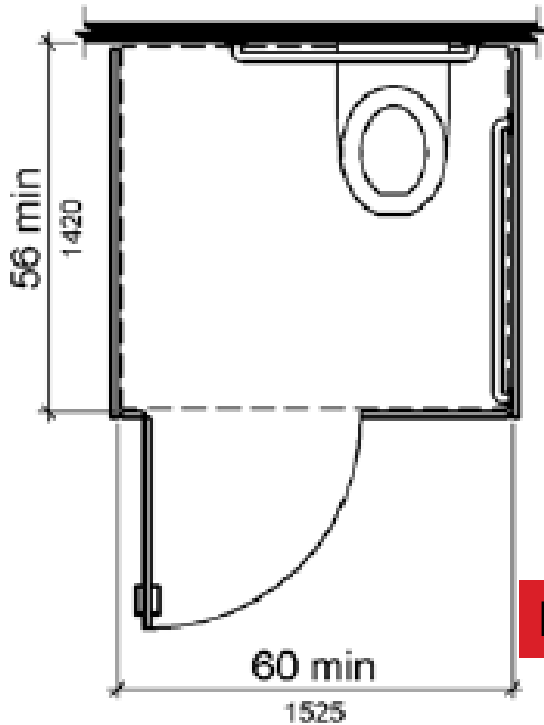
Non-compliant flush valve locations

- Must be on wide side of water closet
- Same for push button controls – must be on wide side of water closet



Accessible Water Closets

- Doors located incorrectly across water closet

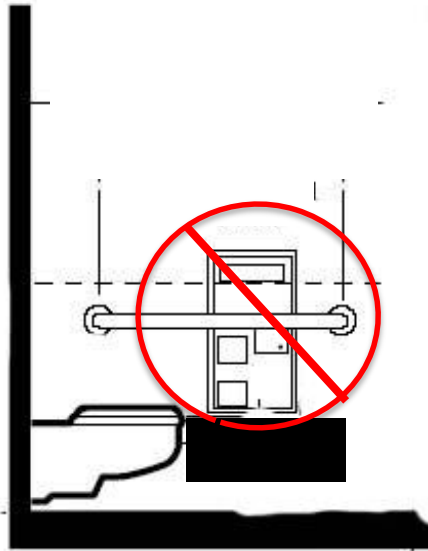


NOT Compliant

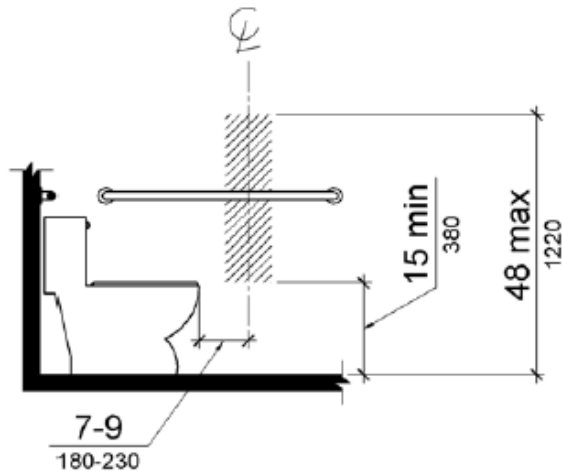
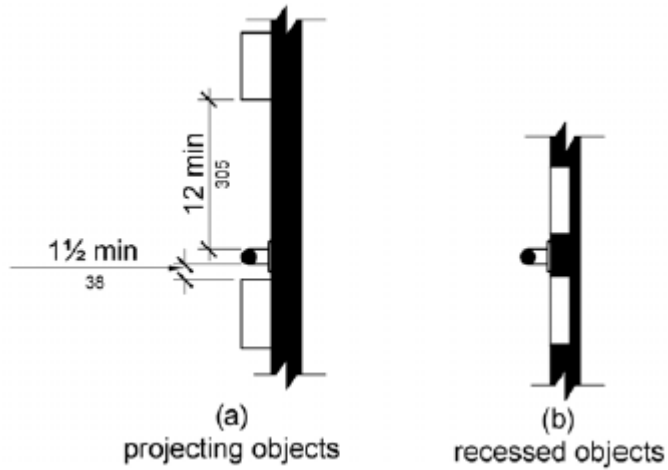


Tissue Dispensers

- “All-in-one” dispensers not compliant
 - Reducing spacing at grab bar and wall
 - 1-1/2” spacing at grab bar and wall: absolute dimension



Toilet Accessories



Baby Change Tables

- Considered work areas, require a front approach and compliant knee and toe clearance

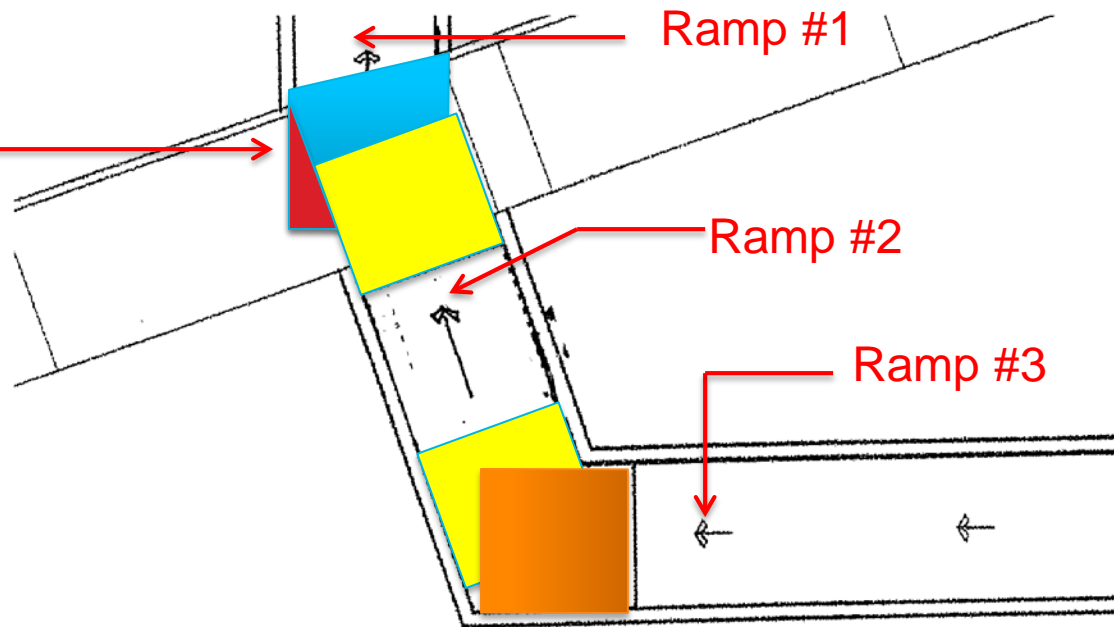


**NOT
COMPLIANT:**
Knee clearance
less than 27
inches

Interior and Exterior Ramps

- Landings must extend in the direction of the ramp run, they cannot turn or angle away from the ramp run

Non-compliant
if walkway is
sloping.
Slope: 1:48
max. in all
directions at
landings



Handrail Extensions

- Must extend in direction of stair or ramp run

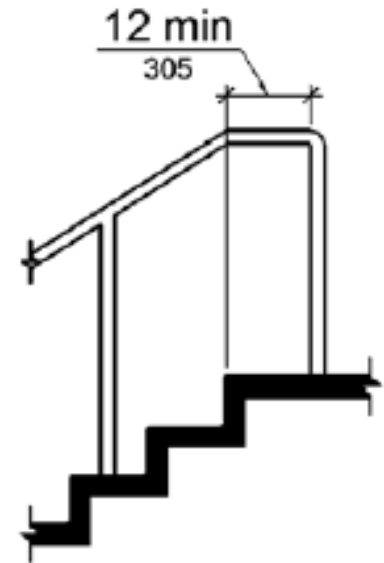
Alterations:

If there is sufficient space for a route, the handrail must extend in the direction of the stair run



Handrail Extensions

- 12" extension at stairs and ramps: Horizontal, level
 - Exclusive of radius portion



Common Use vs Employee Work

Common Use

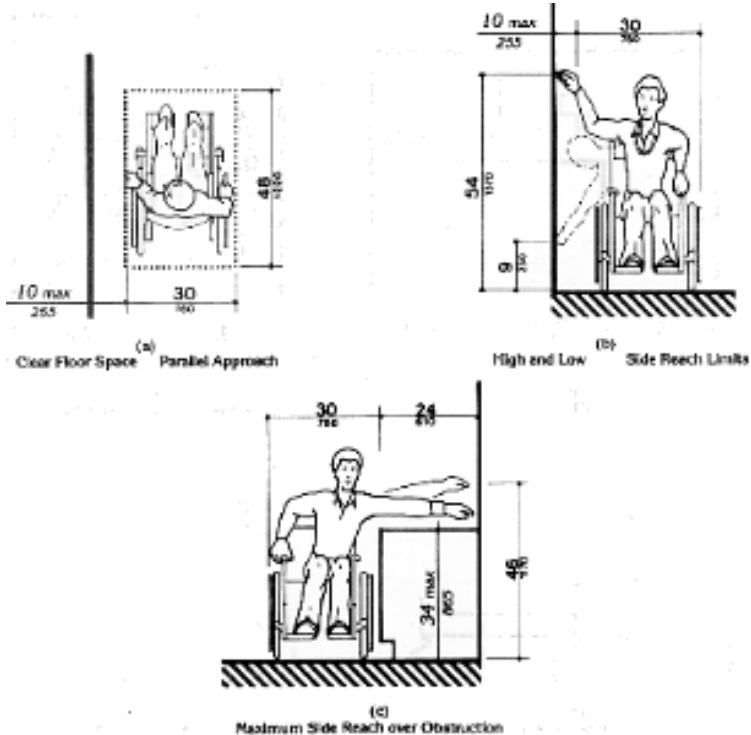
- Common use areas are required to be fully accessible
- Examples:
 - Employee only toilet rooms
 - Conference/meeting rooms
 - Break Rooms

Employee Work Areas ADA Facilities

- Provide the ability to approach, enter and exit
- Examples:
 - Private offices
 - Janitorial/Utility Rooms

Common Use vs Employee Work

- Common Use
- Employee Work Areas



Maintenance of Accessible Features

- DOJ regulations require accessible features to be maintained as accessible
 - Furniture not necessarily readily movable by an individual with a disability



Check-List



SURVEY 9 - VERTICAL CIRCULATION

Date:	LOCATION:					
Question	ADAAG Requirement/Solution	Yes	No	NA	Measurement	
Are there ramps, lifts, or elevators to all public levels?						
Stairs: If there are levels that are <i>not</i> served by a ramp, lift, or elevator, do the stairs comply with the following:						
Do stair treads have non-slip surface?						
Do stairs have continuous handrails on both sides, with 12" extensions beyond the top and bottom stairs?						
Handrail Clearance, Ramps & Stairs: Is there a min. of 1 ½" space between wall & internal face of hand rail.	Refer to Sec.505.5 ADA 2010.					
Elevators: Are there both visible and audible door opening/closing and floor level indicators?						
Are the call buttons in the hallway lower than 42 inches?					Height:	
Do the controls inside the cab have raised and Braille lettering?						
Is there a sign on both door jambs at every floor identifying the floor in raised and Braille letters?						

Lessons Learned...Common Pitfalls

- ✓ Allow for construction tolerances, Do not design to maximums and minimums!
- ✓ Push/ pull clearances at base
- ✓ Watch out for protruding objects, they may exceed allowable dimensions.
- ✓ Beware of manufacturer guarantee. DOJ does not review or approve of products or methods of construction.
- ✓ Document your intent.
- ✓ Consider ADA compliance reviews during design.

Documentation Strategies

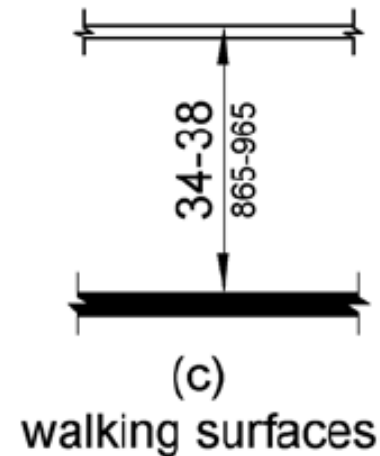
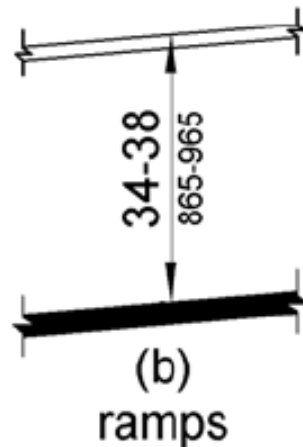
- Check references, notes, details when "reusing" from other projects
 - They may reference older 1991 ADA Standards that are no longer compliant
 - Many changes in from 1991 ADA Standard to 2010 ADA Standards
 - Examples:
 - Number of accessible van stalls
 - Handrail and grab bar mounting heights are to the top of the gripping surface, NOT centerline!
 - Clearances at water closets
 - Signage proportion, size, mounting heights have all changed
 - Bench size and back support

Documentation Strategies

- Tolerances: Recognized industry standards for field conditions or consequence of the manufacturing process
- Tolerances: Does not apply to design
- Recommendation: Look for published industry standards

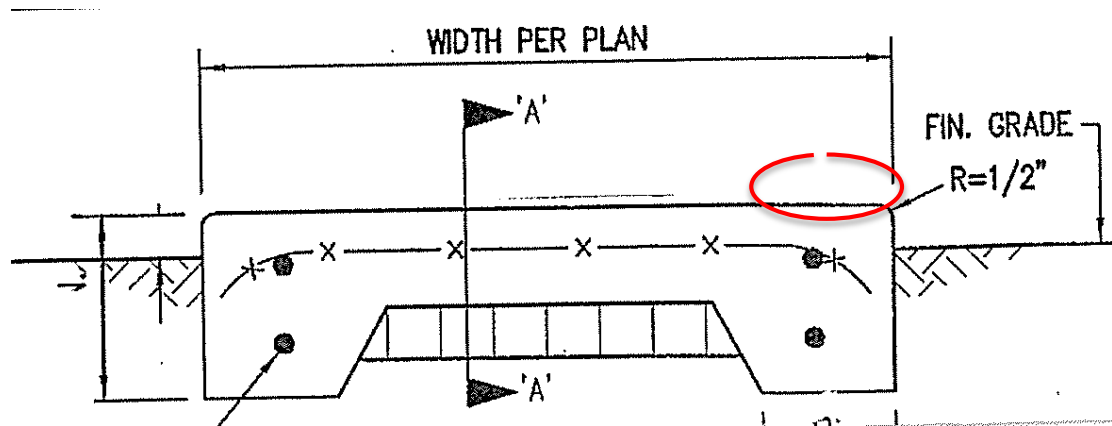
Documentation Strategies

- Current guidelines try to avoid “absolutes”
 - Ranges, maximums and minimums
- No tolerances are allowed where a range is specified
 - Example: Handrail mounting height



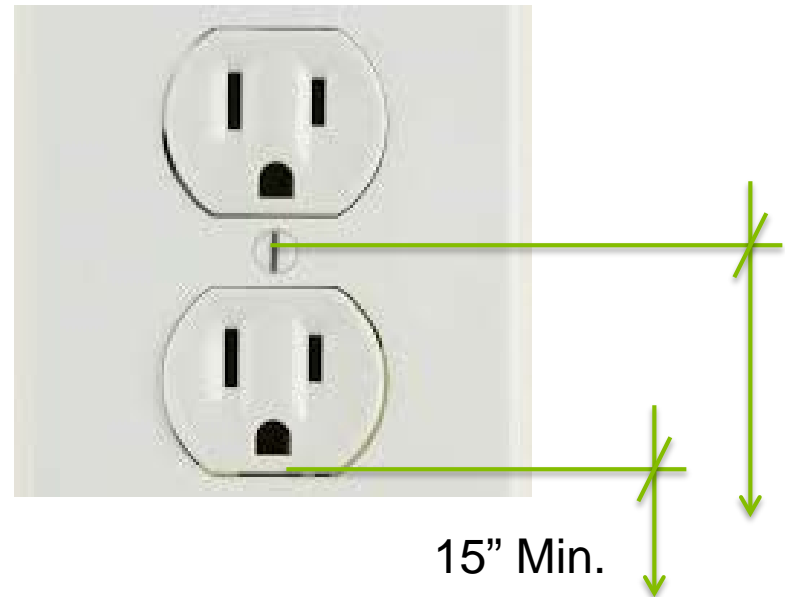
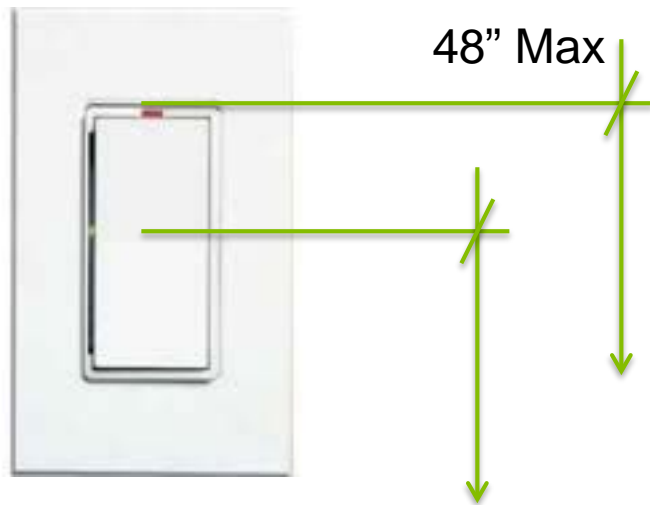
Documentation Strategies

- Avoid designing to maximum/minimum
 - Width of routes
 - Cross Slopes
 - 1:48 maximum
 - Example below not compliant if overall width is 36
 - Slope at edges exceed 1:48



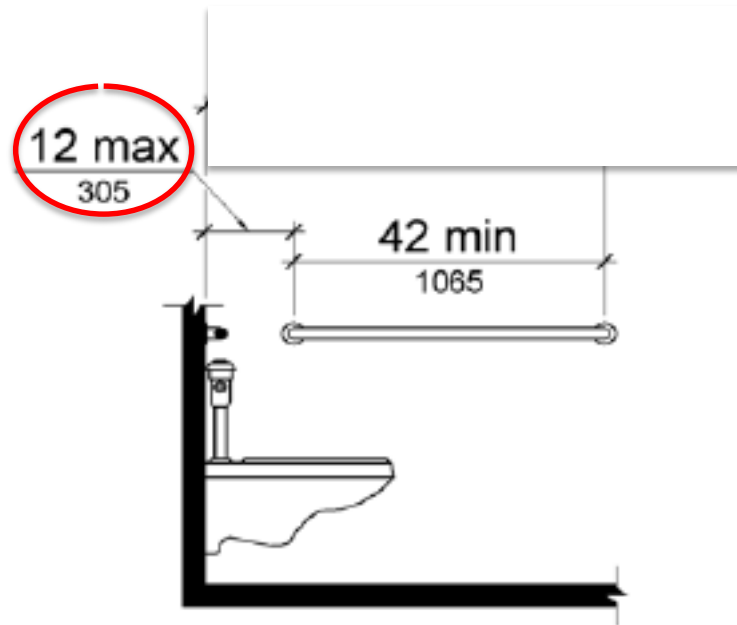
Documentation Strategies

- Dimensioning drawings
 - Indicate top, bottom or centerline
 - Centerline not always appropriate
 - Dimension to top or bottom if max./min. is critical



Documentation Strategies

- Be careful of minimum and maximum dimensions
- Example: Water closet side bar
 - Space from wall <12 inches: Longer grab bar required
 - Overall dimension from wall is 54" min.



Documentation Strategies

Check on local requirements

- May be more stringent than the 2010 ADA Standards
- Examples:
 - Hawaii projects subject to review by DCAB must comply with DCAB Interpretive Opinions
 - DCAB Interpretive Opinion 2012-01: Accessible Electric Vehicle Charging Stations
 - Hawaii Administrative Rules on Parking (Title 11, Chapter 219):
 - Requires specific signs at accessible parking stalls and access aisles serving van accessible stalls
 - Specifies how to mark an access aisle

Design for all senses

- Visual
- Auditory
- Physical
- Mental/ Emotional
- Language



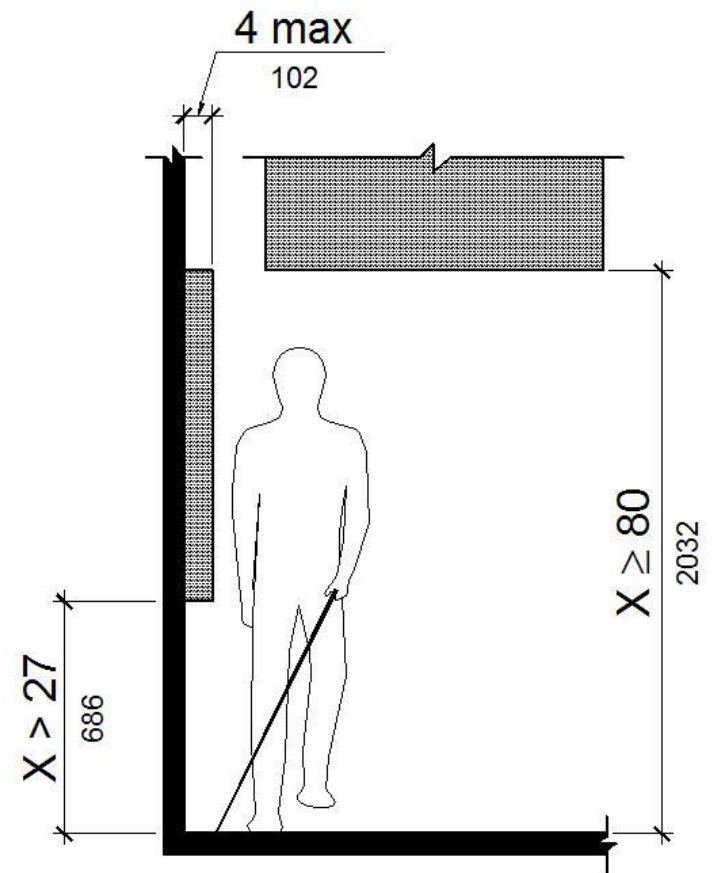
Visually Impaired

- Engaging through materials
- Surface texture
- Use of light and color
- Auditory cues
- Smell
- Legibility of building plan



Visually Impaired

- Tactile
 - Signage: Raised characters and Braille
 - Cane detection elements



Visually Impaired

- Visual access
 - Contrast

Contrast

Contrast

CONTRAST

CONTRAST

Visually Impaired

- Visual Access
 - Character size
 - Character type
 - Installation location

Size

Size

Type

Type

Visually Impaired

- Visual Access
 - Character spacing
 - Line spacing
 - Proportions



SPACING

S P A C I N G

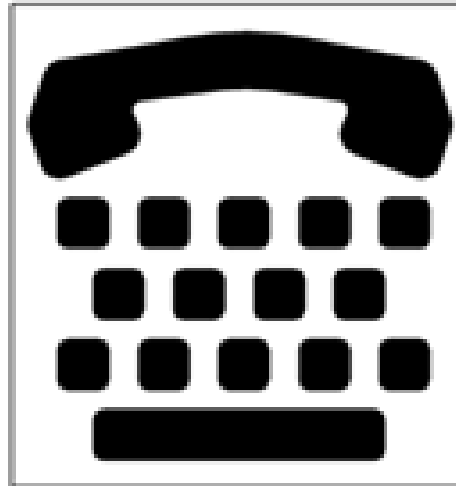
Visually Impaired

- Visual access
 - Maintenance



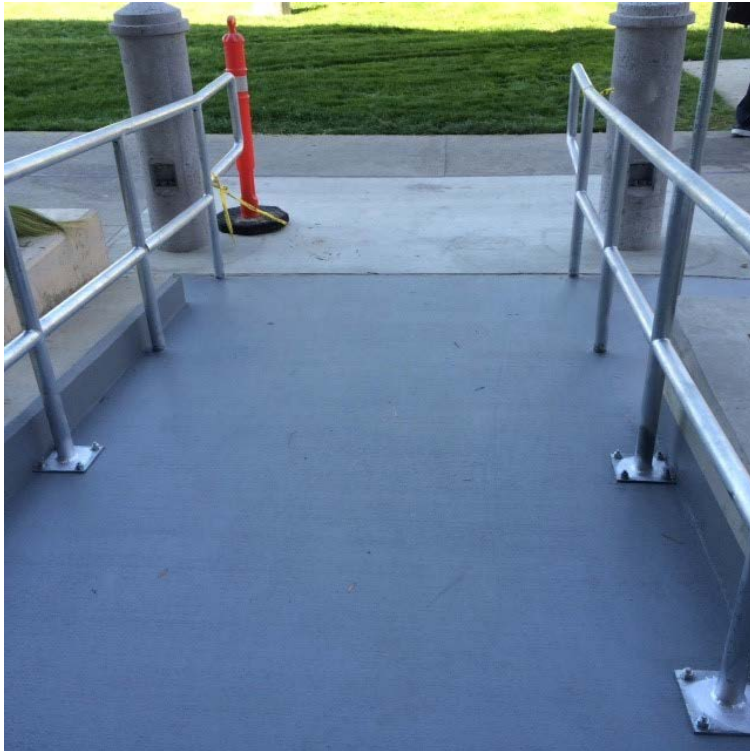
Hearing Impaired

- Assistive Listening System
- Hearing Aide compatibility
- Volume Control
- TTY
- Alternate system



Mobility Impaired

- Slopes
- Ground and floor surfaces
- Operating mechanisms



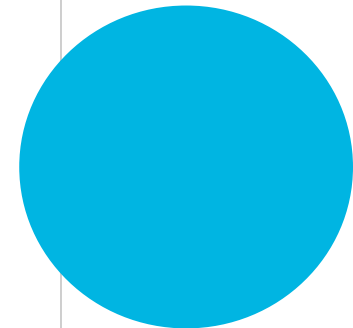
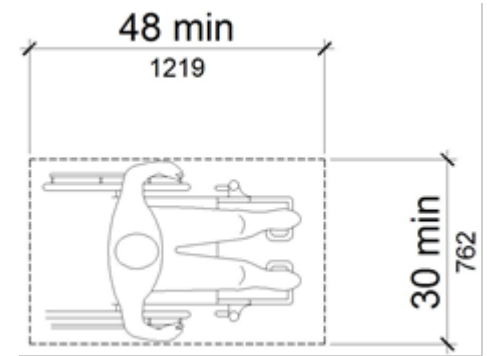
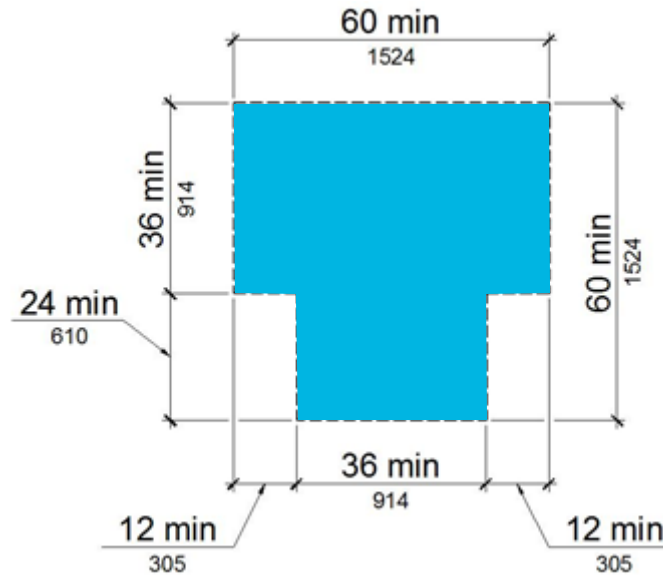
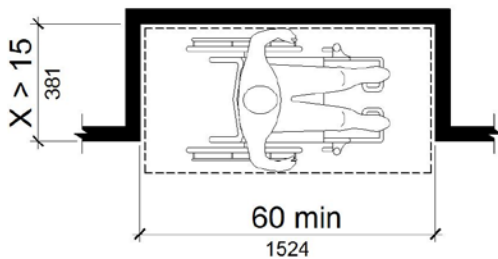
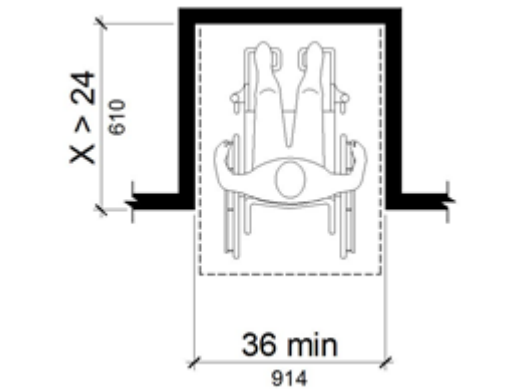
Mobility Impaired

- Operating mechanisms



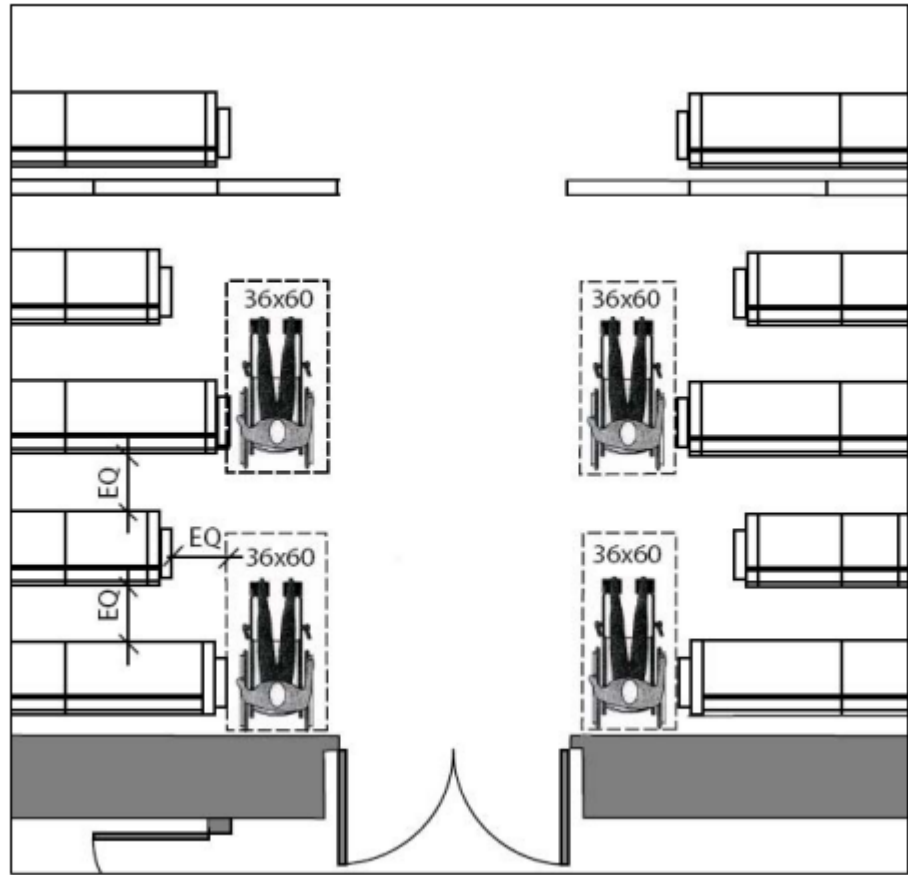
Mobility Impaired

- Spatial clearances



Mobility Impaired

- Spatial clearances in holding cells
- Companion seating



Socially/ Mentally Impaired

- Flexibility in public interactions
 - Private waiting rooms
 - Public counters in lower traffic areas
- Calming environments
 - Less contrast
 - Less noise
- Accommodations for service animals
 - Assists companion but doesn't interfere with other occupants
 - Facilities for animal care



Social Awareness and ADA

- Derived from Civil Rights legislation
 - Accommodations for families, gender diversity, aging population
- Design vs Operations
 - Provide barrier free access that can be executed independently
 - Intuitive planning, wayfinding
 - Designate a facility ADA coordinator and/ or advocates
 - Arranges special accommodations as needed
 - Provide assistance from designated entry point through completion of task
- **Provide dignified access**

What is the future of ADA?

Changes in disabled population

- Increase in need for accommodations
- Aging population
- Types of disability

Changes in Technology

- Medical Devices
 - Wheelchairs and other mobility aids
 - Prosthetics
- Audio and Visual Technology
 - Remote appearances
 - On-Demand interpretation services
 - Digital aids – Electronic Braille

What is our responsibility?

- **Understand and incorporate the regulations**
- **Stewards of Social Justice**
 - Educate stakeholders
 - Engage members of the disabled community
 - Incorporate during planning, check in throughout design and construction process
- Put yourself in someone else's shoes



Thank You

November 4, 2016