

Welcome to the AccessibilityOnline Webinar Series



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



The Session is Scheduled to begin at 2:30pm Eastern Time
We will be testing sound quality periodically

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Presenters

U.S. Access Board



Scott Windley



Dave Yanchulis

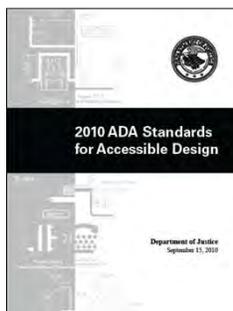
Accessible Doors

Session Agenda

- Where required
- Manual Doors
- Automated Doors
- Questions

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New ADA Standards



DOJ's 2010 standards
(mandatory March 15, 2012)



**Based on the Board's ADA-
ABA Guidelines (2004)**



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ADA and ABA Standards

ADA :

- DOJ's standards (2010)
- DOT's standards (2006) for transit facilities



ABA (Federal Sector):

- ABA standards updated (GSA, DOD, USPS)
- Update of HUD standards still pending
- (UFAS still applies to housing covered by ABA)

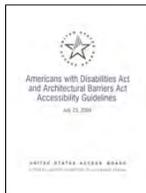
5

Door & Entrance Scoping

Section 206 (Accessible Routes)



p. 55



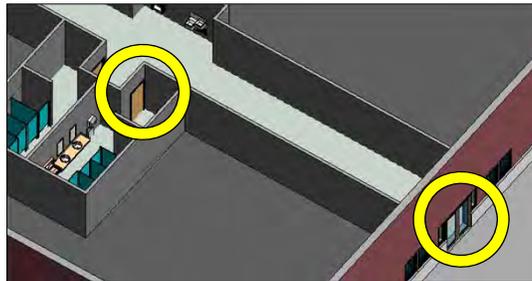
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Doors Scoping (206.5)

- Covers doors providing user passage at:
- required accessible entrances
- accessible rooms/spaces (at least 1)
- along accessible routes & MOE



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Doors Scoping (206.5)

- Additional requirements:
- Transient Lodging: all guest rooms must have doors meeting 32" clear width
- Dwelling Units: all doors in accessible units must comply



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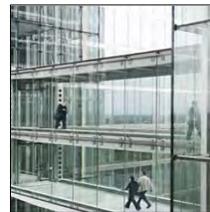
Entrances (206.4)

- At least 60% of public entrances must comply
- Public entrance = any entrance that is not a service or restricted entrance

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Entrances

- In addition to the 60% requirement:
- direct access from parking structures (all)
- direct access from tunnels or elevated walkways
- different fixed routes in transit facilities
- entrances to each tenant space
- restricted entrance (at least 1)
- secured entrance (at least 1)



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Secured Entrances (404.1)

- Doors operated only by security personnel exempt from provisions for:
 - Hardware (404.2.7)
 - Closing speed (404.2.8)
 - Opening force (404.2.9)
- (automated doors subject to clear width & threshold requirements only)



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Rooms & Spaces

- All rooms/spaces must comply in new construction unless exempted/ partially scoped
- Exceptions:
 - areas raised for security, life/fire safety
 - machinery/ equipment spaces
 - certain single occupant structures
 - other spaces listed in 203 (General Exceptions)



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Rooms & Spaces

- Work Areas (203.9):
- Entry doors/ gates must comply (most other requirements do not apply in the ADA standards)



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Stairwells

- Doors on accessible route/ MOE must comply
- (e.g., route to area of refuge or emergency exit in stairwell)



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Doors Covered (404)

- **Manual: swing, sliding, folding (404.2)**
- **Automated: full powered and low energy/
power assisted (404.3)**
- **Gates also covered by 404**
- **Revolving doors (including automated) can't
serve as accessible door**



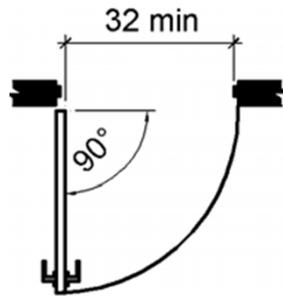
15

Manual Doors

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Clear Width (404.2.3)

32" min. measured from stop to face of door open 90°

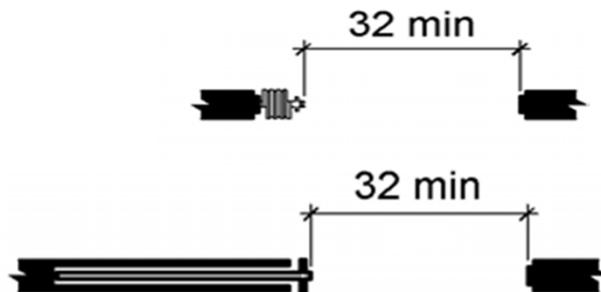


alterations: 5/8" max. projection into latch side stop allowed

17

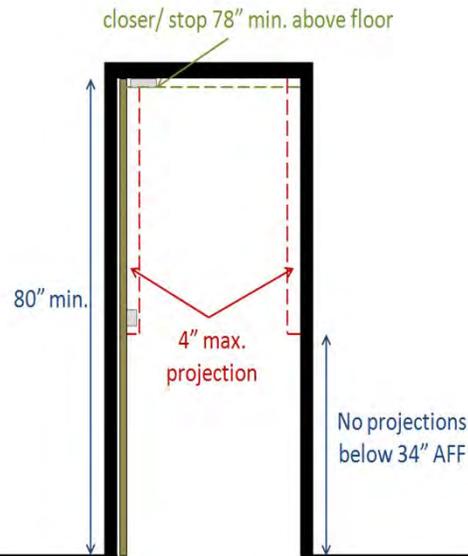
Clear Width

32" min. clear width: sliding and folding doors



18

Clear Width

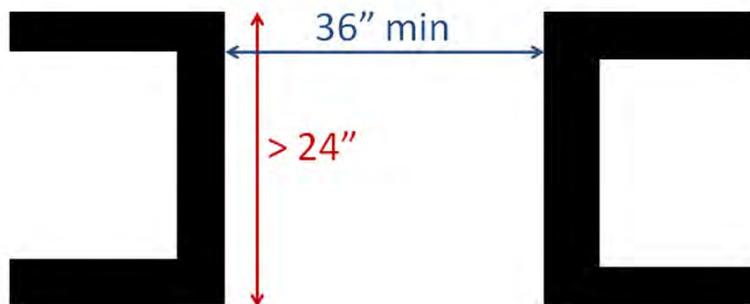


**Limited
projections into
door clear width**

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Clear Width

**36" min. clear width required if opening
more than 24" deep**



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Maneuvering Clearances (404.2.4)

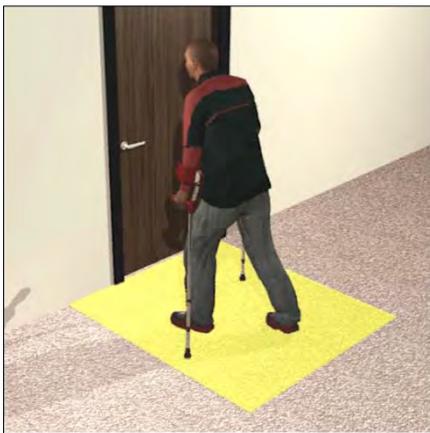
- Minimum space for positioning/
maneuvering at doors



21

Maneuvering Clearances

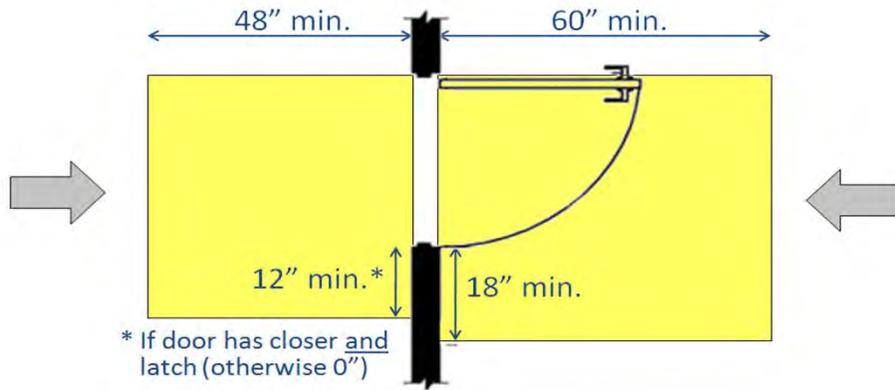
- Accommodates all types of mobility aids



22

Maneuvering Clearances

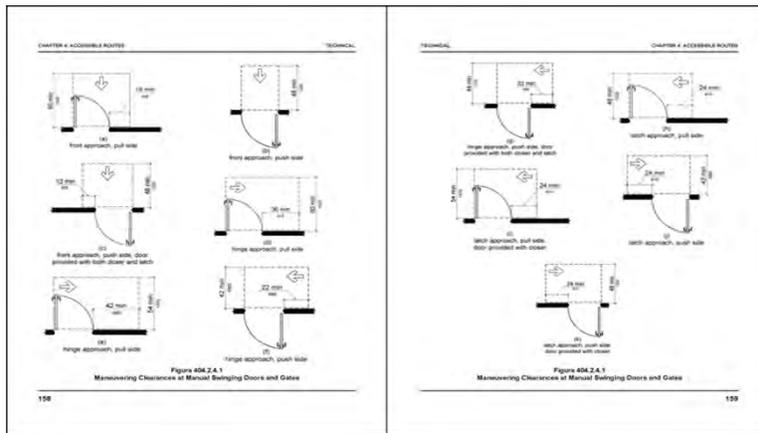
Forward Approach



23

Maneuvering Clearances

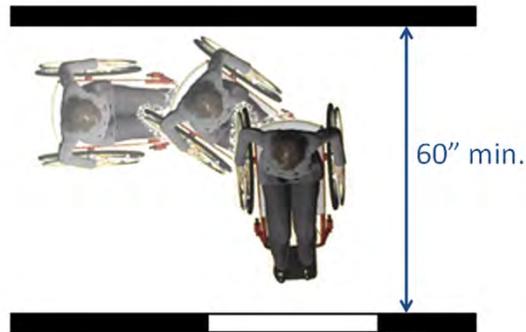
- Forward, latch-side, hinge-side approaches



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Maneuvering Clearances

If space is at least 60" deep, a forward approach can be provided (instead of side)



25

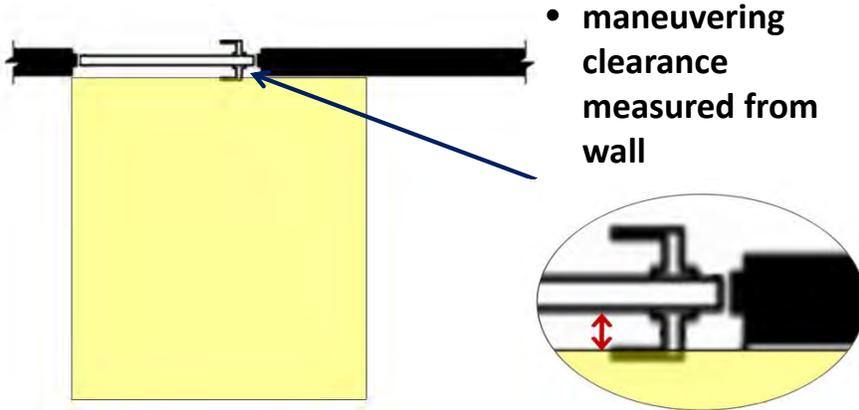
Maneuvering Clearances



- clearance applies to full height (80" min.)
- No changes in level (other than thresholds)

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Maneuvering Clearances

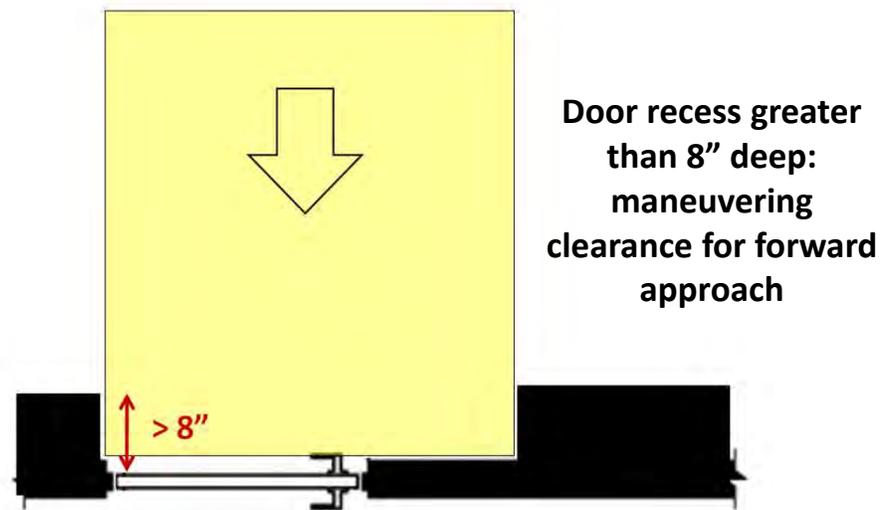


- maneuvering clearance measured from wall

Max. offset from face of door: 8"

27

Maneuvering Clearances



Door recess greater than 8" deep:
maneuvering clearance for forward approach

28

Maneuvering Clearances



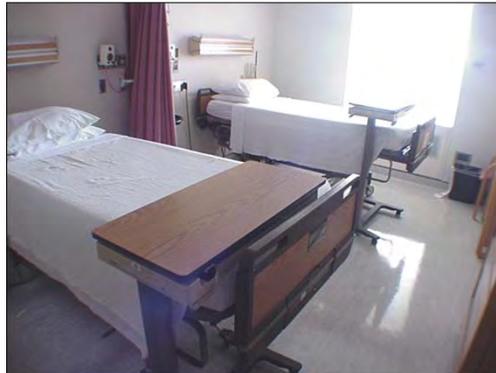
Recess: 8" max.



Recess: greater than 8"

29

Maneuvering Clearances



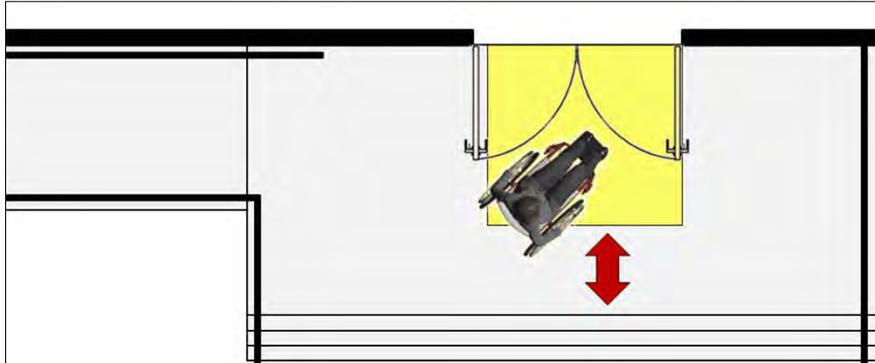
**Hospital Patient Rooms:
latch side clearance not required at entry doors
(404.2.4, exception)**

30

Maneuvering Clearances

Landings must accommodate maneuvering clearance

Tip: Locate maneuvering clearance away from stair openings/ drop-offs

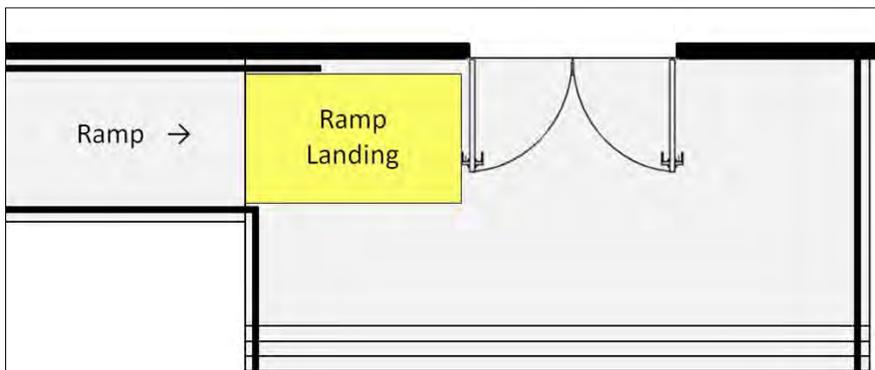


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Landings

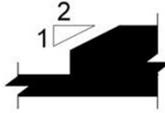
Maneuvering clearance and ramp landings can overlap

Tip: Locate doors outside ramp landings to prevent hazards



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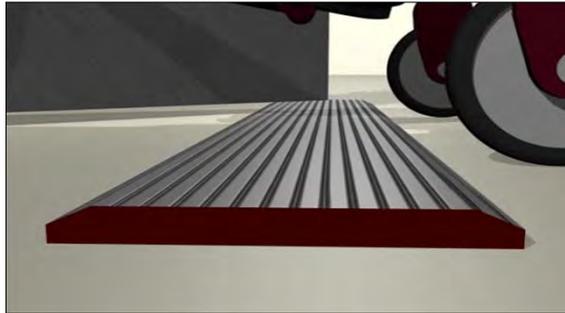
Thresholds (404.2.5)



½" max. (beveled)

¼" max. (vertical)

Existing/altered: ¾" (beveled) allowed



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Doors in Series (404.2.6)

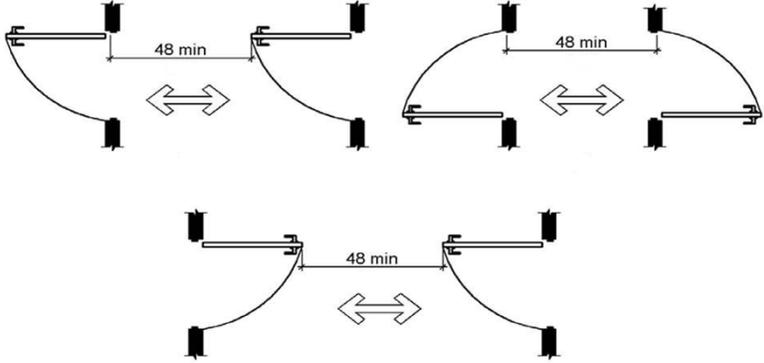
48" min. separation between swing of doors



34

Doors in Series

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



35

Vestibules

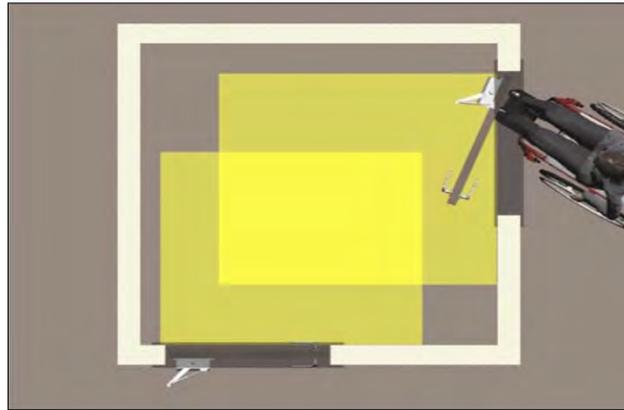
Tip: Wheelchair space beyond door swing is advisable in other types of vestibules



36

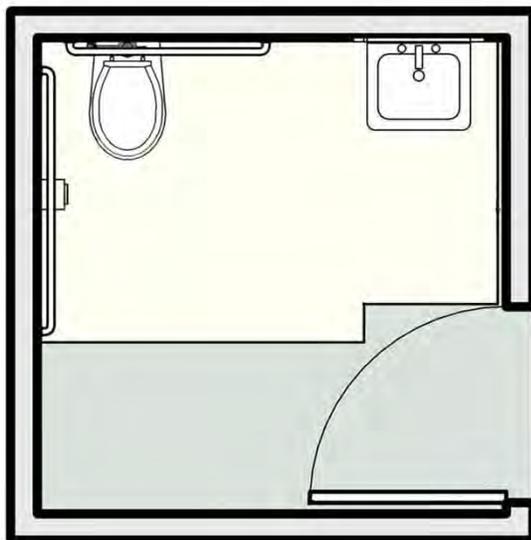
Vestibules

Door maneuvering clearances can overlap



37

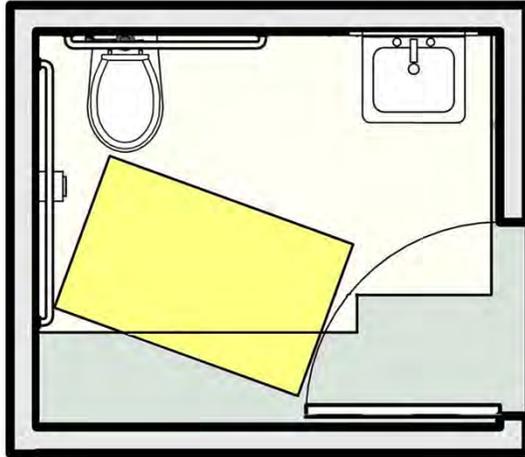
Toilet/Bath/Dressing Rooms



Door cannot
swing into
toilet/bathroom
fixture
clearances or
into dressing
rooms unless ...

38

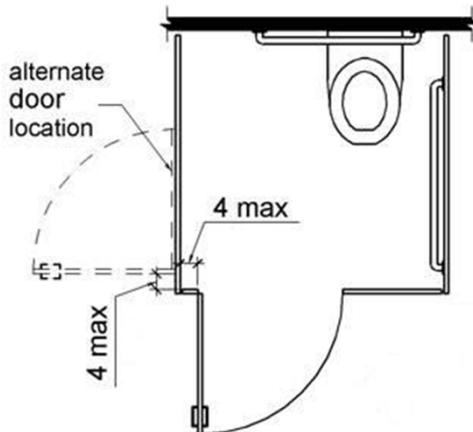
Toilet/Bath/Dressing Rooms



... unobstructed wheelchair space (30"x 48") is provided beyond door swing

39

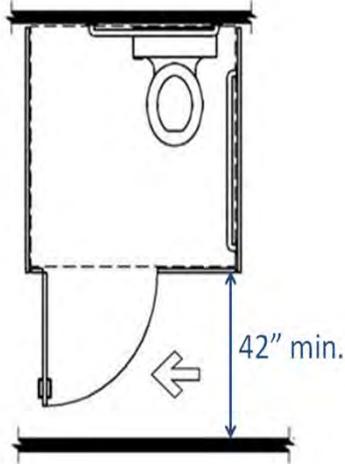
Toilet Stall Doors (604.8)



- Self-closing
- Door pull (both sides)
- Can't swing into minimum stall area
- Location

40

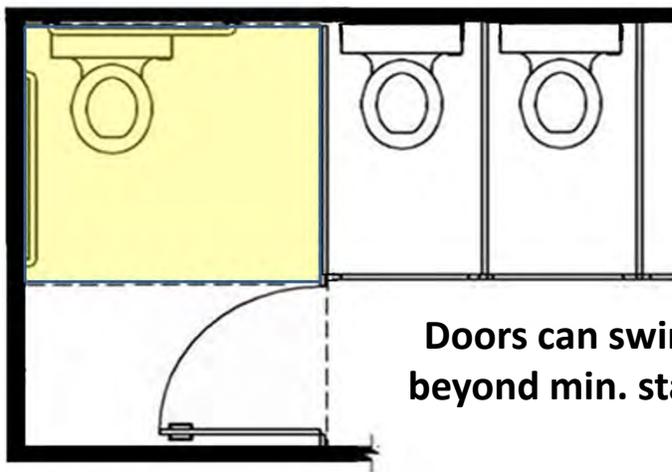
Toilet Stall Doors



**Must meet man. clearances
(42" min. clearance allowed
for latch side approaches)**

41

Toilet Stall Doors



**Doors can swing into stall
beyond min. stall clearance**

42

Hardware (404.2.7)

- 1 hand operation
- No tight grasping, pinching, twisting of wrist
- 5 lbf max. force
- Height: 34" – 48" AFF (exception for certain existing doors and gates at pools)



43

Hardware

Levers, pulls, and other types comply
Not compliant: rounded knobs



44

Hardware

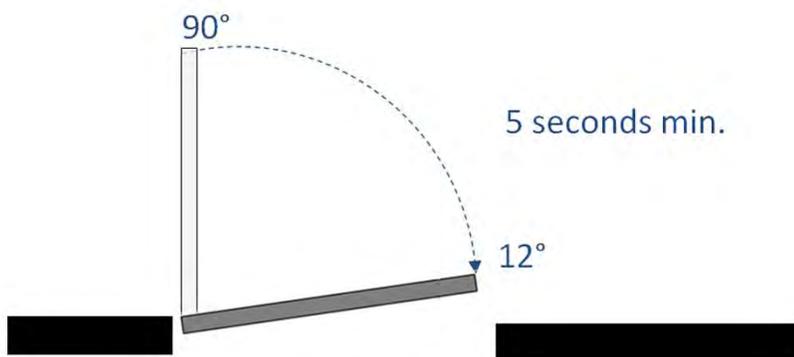
Closed fist/ loose grip operability = good
(but not required)



45

Closing Speed (404.2.8)

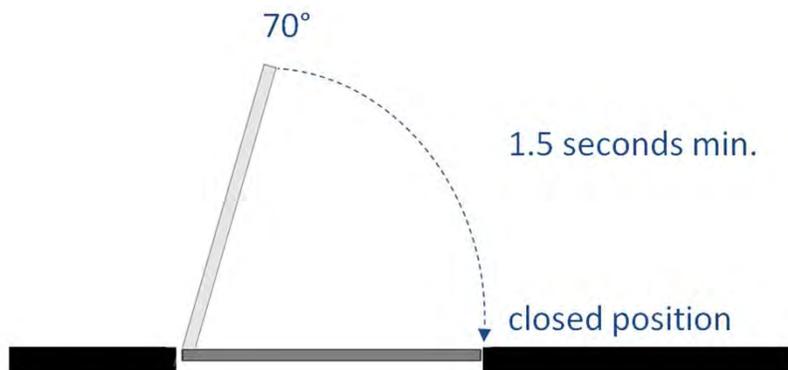
Door Closers



46

Closing Speed

Spring Hinges



47

Opening Force (404.2.9)

5 lbf max.

Except:

- Fire Doors (min. required by code)
- Exterior Hinged Doors (min. feasible)

48

Opening Force

Exterior Doors: Automation Recommended



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

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Opening Force

- **Applies to continuous opening force**

Does not apply to:

- **Initial force to overcome inertia of door**
- **Force to retract bolts/ disengage devices holding door in closed position**

50

Opening Force

Available devices for measuring opening force:

- Door gauges
- Tensionometers
- Fish scale



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Door Surface (404.2.10)

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



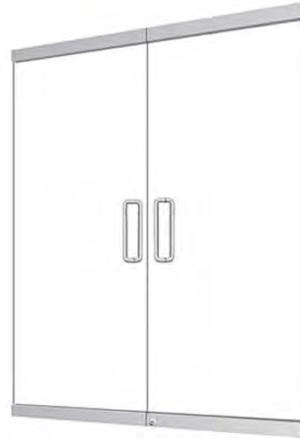
Kick plates can be used to protect door

52

Bottom Surface

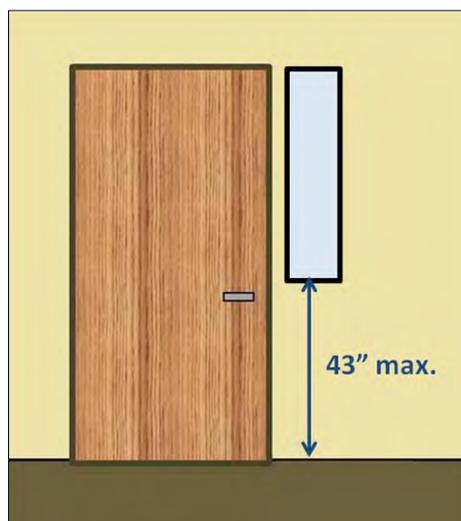
Exceptions:

- Sliding doors
- Some tempered glass doors without stiles
- Existing doors
- Doors not extending to 10" AFF



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Vision Lights (404.2.11)



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

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Other Requirements

55

Signs

Labels / directional signs (with ISA) required at entrances (when not all are accessible)



56

2-Way Communication Systems



**Entrances:
Communication
devices must have
both visual and
audible signals**

57

Notification Devices

Communication accessible units only

Transient Lodging (806.3.2):

- **Visible notification of door knock/bell**



Residential Dwelling Units (809.5.5):

- **Hard-wired doorbell – audible & visible**
- **Means to identify visitors without opening door (e.g., window/ vision panel, peephole, door scope, etc.)**



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Peepholes

Tip: Prisms/ lenses (door scopes) available that provide wide-angle view and are usable from standing and seated positions



(standards do not address peephole height)

59

Security Barriers (206.8)

Alternative route permitted at security screen devices



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Security Barriers

Security barriers (e.g., bollards) cannot obstruct accessible route to entrances



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Automated Doors

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Automatic and Power-Assisted Doors (404.3)

- Thresholds (same as manual doors)
- Doors in series (same as manual doors)
- Clear width
- Break Out Opening
- Controls
- Maneuvering Clearance
- ANSI/BHMA Standards (for safety and operation)



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Clear Width (404.3.1)

- 32" minimum in power-on and power-off mode
- If both leaves open when activated the clear width is based on the opening provided by all leaves in the open position



64

Break Out Opening



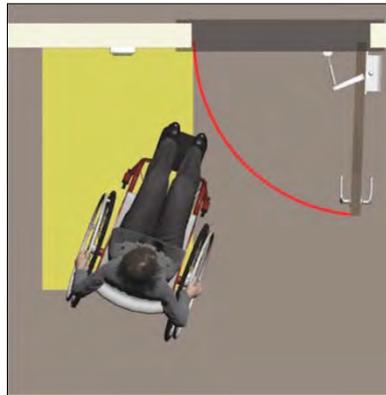
**Doors on MOE:
32" min. clear break out
opening (emergency
mode)**

Unless:

- **Door has standby power**
or
- **Compliant manual door
serves the same MOE**

65

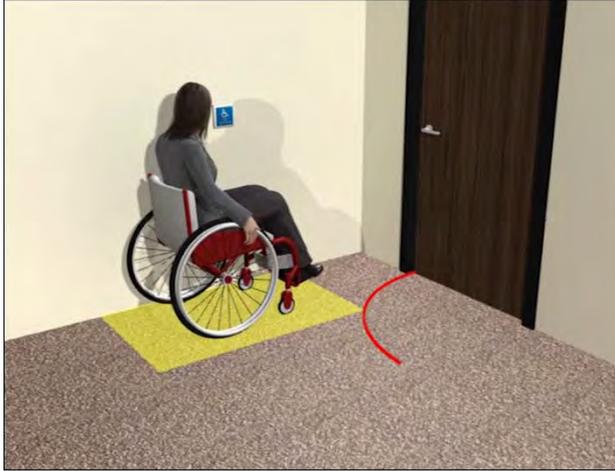
Controls



**Wheelchair space at controls must be outside
the door swing**

66

Controls



Control on adjacent wall/post can provide easier access

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Maneuvering Clearance

Compliance with 404.2.4 required for:

- **Power-assisted doors**
- **Automatic doors on accessible MOE (except those with standby power or that stay open in power-off mode)**



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Two BHMA/ANSI Standards

AMERICAN NATIONAL STANDARD
FOR
POWER ASSIST AND LOW ENERGY POWER OPERATED DOORS

ANSI/BHMA A156.10-1999



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BUILDERS HARDWARE MANUFACTURERS ASSOCIATION, INC.

AMERICAN NATIONAL STANDARD
FOR
POWER OPERATED PEDESTRIAN DOORS



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AMERICAN NATIONAL STANDARDS INSTITUTE, INC.

Approved 9/20/2005
AMERICAN NATIONAL STANDARDS INSTITUTE, INC.

ANSI APPROVED 4/20/2007

ANSI/BHMA A156.19

ANSI/BHMA A156.10

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ANSI/BHMA

A156.10 Full-Powered Automatic Doors

- Activated by mats or overhead sensors
- Do not require actuation
- Often provided at retail facilities, airports etc.



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ANSI/BHMA

A156.19 Low-Energy Power-Assisted Doors

- Covers doors that function more like a standard hinged door but with a power closer/opener option
- Require actuation (e.g., push plate)



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ANSI/BHMA

Both referenced standards address:

- Sensors or actuating devices
- How fast the door opens
- Safety features
- Sign requirements
- General performance



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Questions?

**You may type and submit questions in the
Chat Area Text Box or press Control-M
and enter text in the Chat Area**

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U.S. Access Board

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**Thank you for participating
in today's webinar**



**Next scheduled session:
*Accessible Hospitals and Other Health
Care Facilities (July 7th)***

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