



Americans with Disabilities Act Information

NOTE: Many municipalities have adopted portions of these guidelines as mandatory building and fire codes. Check with your local authorities to be sure.

The Americans with Disabilities Act (ADA) is a civil rights law, not a building or fire safety code. It is providing accessibility and usability for persons who are physically or mentally impaired, or who are substantially limited to one or more major life activities, such as walking, seeing, hearing, breathing, speaking, performing manual tasks, learning, caring for oneself or working. The legislation is divided into four titles; employment, public service and transportation, public accommodations, and telecommunications.

The ADA national mandate challenges all new commercial building construction and renovation of existing structures to comply with a wide range of accessibility codes.

For our purpose we are most interested in the title III requirements as they apply to your business, your facility, and to your customers.

ALTERATIONS

The ADA guidelines state that when "alterations are made to a place of public accommodation or public facility after January 26, 1992 it shall be done so to ensure that, to the maximum extent feasible accessible to and usable by individuals with disabilities including those individuals who use wheelchairs."

WHAT ARE CONSIDERED BARRIERS AND HOW ARE THEY REMOVED?

The ADA regulations define barriers as a physical object that impedes a disabled person access to, or use of, a facility (ie., stairs, doorways, hallways).

These architectural barriers shall be removed in existing facilities, including communication barriers that are structural in nature, where such removal is readily achievable, ie., "easily accomplished and able to be carried out without much difficulty or expense."

Examples of procedures to remove barriers include, but are not limited to; widening doors, installing offset hinges to widen doorways, installing door hardware, handrails and grab bars.

If, as a result of compliance with the alteration requirements, the measures require removal of a barrier not readily achievable, a public accommodation may take other readily achievable measures to remove the barriers that do not fully comply with specified requirements. Such measures include; providing a ramp with a steeper slope or widening a doorway to a narrower width than that mandated by the alteration requirements. No measure shall be taken, however, that poses a significant risk to health or safety of individuals with disabilities or others.

ADA code:

4.8 RAMPS

4.8.1 * General. Any part of an accessible route with a slope greater than 1 :20 shall be considered a ramp and shall comply with 4.8.

4.8.2* Slope and Rise. The least possible slope shall be used for any ramp. The maximum slope of a ramp in new construction shall be 1:12. The maximum rise for any run shall be 30 in (760mm).

4.8.4* Landings. Ramps shall have level landings at bottom and top of each ramp and each ramp run. Landings shall have the following feature: if a doorway is located at a landing, then the area in front of the doorway shall comply with 4.13.6.

4.13 DOORS

4.13.1 General. Doors required to be accessible by 4.1 shall comply with the requirements of 4.13.

4.13.4 Double-Leaf Doorways. If doorways have two independently operated door leaves, then at least one leaf shall meet the specifications in 4.13.5 and 4.13.6. That leaf shall be an active leaf.

4.13.5 Clear Width. Doorways shall have a minimum clear opening of 32 in (815mm) with the door open 90 degrees, measured between the face of the door and the opposite stop. Openings more than 24 in (610mm) in depth shall comply with 4.2.1 and 4.3.3 .

EXCEPTION: Doors not requiring full user passage, such as shallow closets, may have the clear opening reduced to 20 in (510mm) minimum.

4.13.6 Maneuvering Clearances at Doors. Minimum maneuvering clearances at doors that are not automatic or power-assisted shall be. The floor or ground area within the required clearances shall be level and clear.

4.13.7 Two Doors in Series. The minimum space between two hinged or pivoted doors in series shall be 48 in (1220mm) plus the width of any door swinging into the space. Doors in series shall swing either in the same direction or away from the space between the doors.

4.13.8 * Thresholds at Doorways. Thresholds at doorways shall not exceed 3/4" (19mm) in height for exterior sliding doors or 1/2" (13mm) for other types of doors. Raised thresholds and floor level changes at accessible doorways shall be beveled with a slope no greater than 1:2 (see 4.5.2).

4.13.9* Door Hardware. Handles, pull, latches, locks, and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. Lever-operated mechanisms, push-type mechanisms, and U-shaped handles are acceptable designs. When sliding doors are fully open, operating hardware shall be exposed and usable from both sides. Hardware required for accessible door passage shall be mounted no higher than 48 in (1220 mm) above finished floor.

DOOR CLOSERS

Another potential barrier to a disabled person is the door closer, which is used to automatically close the door after you have passed through it. Closers with delayed action features give a person more time to maneuver through doorways. It is important that the sweep period of the door closer be adjusted so that from an open position of 70 degrees, the door should take at least 3 seconds to move to a point 3" from the latch, measured to the leading edge of the door. The suggested opening force of an exterior hinged door is 8 1/2 pounds opening force (according to the American with Disabilities Act Accessibility Guidelines - ADAAG). For interior hinged doors and sliding or folding doors they should have a maximum of 5 pounds opening force. These forces do not apply to the force required to retract latch bolts or to disengage other devices that may hold the door in a closed position.

ADA code:

4.13.10 Door Closers. If a door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 in. (75mm) from the

latch, measured to the leading edge of the door.

4.13.11 * Door Opening Force. The maximum force for pushing or pulling open a door shall be as follows:

(1) Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.

(2) Other doors.

- exterior hinged doors: (Reserved).
- interior hinged doors: 5 lbf (22.2N)
- sliding or folding doors: 5 lbf (22.2N)

These forces do not apply to the force required to retract latch bolts or disengage other devices that may hold the door in a closed position.

4.13.12* Automatic Doors and Power-Assisted Doors. If an automatic door is used, then it shall comply with ANSI/BMHA

A 156.10-1985. Slowly opening, low-powered, automatic doors shall comply with ANSI 156.19-1984.

Such doors shall not

open to back check faster than 3 seconds and shall require no more than 15 lbf (66.6N) to stop door movement. If a

power-assisted door is used, its door-opening force shall comply with 4.13.11 and its closing shall conform to the requirements in ANSI A 156.19-1984.

4.14 Entrances.

4.14.1 Minimum Number. Entrances required to be accessible by 4.1 shall be part of an accessible route complying with

4.3. Such entrances shall be connected by an accessible route to public transportation stops, to accessible parking and

passenger loading zones, and to public streets or sidewalks if available (see 4.3.2(1)). They shall also be connected by an

accessible route to all accessible spaces or elements within the building or facility.

4.14.2 Service Entrances. A service entrance shall not be the sole accessible entrance unless it is the only entrance to a building or facility (for example, in a factory or garage).

4.26 Handrails and Grab Bars

4.26.2* Size and Spacing of Grab Bars and Handrails. The diameter or width of the gripping surfaces of a handrail or grab

bar shall be 1 1/4 in to 1 1/2 in (32 mm to 38 mm), or the shape shall provide an equivalent gripping surface. If handrails or

grab bars are mounted adjacent to a wall, the space between the wall and the grab bar shall be 1 1/2 in (38

mm) . Handrails may be located in a recess if the recess is a maximum of 3 in (75 mm) deep and extends at least 18 in (455 mm) above the top of the rail.

DOOR HARDWARE

The door hardware on any new construction and alteration on existing buildings is extremely important to those with disabilities as many do not have the ability to turn a door knob. These must be replaced or retrofitted with hardware that is shaped so that it is easy to grasp with one hand and does not require tight grasping or pinching or twisting of the wrist to operate. Lever operated mechanisms, push type mechanisms and U-shaped handles are the acceptable designs. For sliding doors, the operating hardware should be exposed and usable from both sides when the door is fully opened. Also note that hardware required for accessible door passage shall be mounted no higher than 48 inches above the finished floor.

GRADE 1 LEVERSETS

Grade 1 Leversets provide a high level of security and meet all A.N.S.I. Grade 1 specifications. They are ideal for use in commercial and industrial applications where the highest level of security and safety is required.

GRADE 2 LEVERSETS

Grade 2 Leversets provide a high level of security and meet all A.N.S.I. Grade 2 specifications. They are ideal for use in light commercial and residential applications where a high level of security and safety is required at an economical cost.

MORTISE LEVERSETS

Mortise Leversets provide the highest level of security and meet all A.N.S.I. Grade 1 specifications. They are ideal for high security commercial, institutional and electrical activated applications where the highest level of security is required.

KICK PLATES

It has been noted that the utilization of kick plates on doors with closers can dramatically reduce the required maintenance of that door by allowing it to withstand bumps from the toe plates of wheelchairs. Kick plates should be no less than 8" high (16" high is preferred) and no less than 2" less than the overall width of the door and placed on the push side of the door.

EXIT DEVICES

Exit devices should be mounted no more than 36" above the floor and should be fitted with lever operated mechanisms to comply with ADA. Exposed hardware that is not part of the operating mechanism should be covered or protected.

EXIT DEVICES

Exit devices provide ease of exit from almost any door and are ideally equipped for commercial and institutional installations that require monitored exit systems.

They should be mounted no more than 36" above the floor surface to ensure access to a person in a wheelchair.

Ideally, exit devices should be mounted with lever operating mechanisms to ensure ADA compliance; power operated mechanisms described in this book are also acceptable.

Exposed hardware that is not part of the operational mechanism itself should be covered and/or protected.

The regulations listed above are a brief summary of the requirements mandated by the ADA act and is not meant to be understood as whole and final. For a more concise interpretation refer to the 'Federal Register', Friday 26, 1991, Part 3,

Nondiscrimination on the basis on Disability by Public Accommodations and in Commercial Facilities; Final Rule. Write or call Architectural and Transportation Barriers Compliance Board, 1111 18th Street, N.W., Suite 501, Washington, DC 20036. 1-800-USA-ABLE.