

The passage of the landmark *Americans with Disabilities Act* in 1990 has changed how security professionals and their clients look at the door as a means of access and egress.

Essentially, the ADA requires the removal of architectural barriers when readily achievable and without placing an undue burden on the entity required to comply. Generally, most places of public accommodation—restaurants, hotels, theatres, office buildings, retail stores, shopping centers, hospitals, museums, libraries, private schools and other public places are required to comply. Specifically exempted from compliance are houses of worship, religious facilities and private clubs—except facilities of the club which may be used by the public.

The provisions of the ADA are enforced through the courts when an individual files suit seeking a court order to end discrimination. On the first effective day of the ADA, an individual did file suit against the management of the Empire State building for denying access to the observation deck. Civil penalties can reach \$50,000 for the first occurrence and up to \$100,000 for subsequent violations.

Specifically, the ADA addresses four issues that relate to the most common architectural barrier—the door.

Door Size

Doorways should have a minimum *clear width* of 32", which means that the minimum width of the door should be 36". Double leaf doorways (a pair of doors) should have one leaf (the active one) that meets this requirement. Clear width is the distance from the face of the door and the opposite stop measured when the door is open at least 90°. The use of swing clear hinges may increase the clear width opening on doors which are only a little short of the required width. Doors on closets which don't require full passage are exempted from this requirement. There are other requirements for minimum floor space to accommodate wheelchairs that will not be covered here, but should be kept in mind and researched if construction is involved.

Thresholds

Thresholds should be no more than 1/2" high on swinging doors or 3/4" high on exterior sliding doors. When changing floor levels at accessible doorways, they should be beveled at a slope no greater than 1:2. In renovations, ramps should have slopes with a ratio of not greater than 1:12, which means that a rise of one inch should have a ramp no deeper than 12".

Door Closers

Closers should be adjusted so that the door moves from an open position of 70° to within three inches from the latch in no less than 3 seconds as determined from the leading edge of the door. Interior hinged, sliding or folding doors have a maximum door opening force requirement of 5 lb. (pounds force) and exterior hinged doors should not exceed 8.5 lb.. Fire doors (which may also be smoke barriers) shall have the minimum force allowable by the local authority having jurisdiction. This

generally means that standard door closers may be used on these doors only.

Standard automatic or power assisted doors must comply with ANSI A156.10-1985. Low powered or slowly opening automatic doors must comply with ANSI A156.19-1984. Such doors must not open faster than three seconds to the backcheck position (generally around 70°) or require more than 15 lb. to stop the movement of the door.

Locks

Handles, pulls, latches, locks or other operating devices shall have a shape that is easy to grasp with one hand and does not require tight grasping, pinching or twisting of the wrist to operate. Levers, U-shaped handles or push type mechanisms are acceptable designs. Hardware for accessible doors should be mounted no higher than 48" above the finished floor, which meets the forward reach requirement of the ADA. In circumstances where forward reach is not possible, hardware may be mounted as high as 54", which meets the side reach limitation. When sliding doors are fully open, the operating hardware should be exposed and usable from both sides of the door. Forward and side reach are terms which apply to persons in a wheelchair. These recommended heights would also apply to key switches, keypads or other operating actuators.

Here's a quick list of the most important things to look for with regards to the ADA when performing a survey:

- Minimum clear width of an opening
- Compliant door hardware
- Compliant threshold
- Compliant door closing means

While not specifically mandated by the ADA, there are options which enhance compliance:

- Tactile coatings on knobs or levers to indicate a dangerous condition to the visually impaired
- Delayed action door closers and power door operators
- Signage which meets ADA requirements and includes braille
- Kick plates to protect doors from damage by wheelchairs (should extend 10"-16" high)
- Protective guards for lever handles or locking hardware
- Rod and latch guards to protect vertical rod exit devices from damage by wheelchairs

This condensed treatise on the ADA should not be considered the final word on the matter. Rather, it should serve as an introduction and lead you to do more research on the Act and how it affects the products you use and install.

If you have any questions regarding compliant hardware, we would be pleased to answer your questions. Further information can be obtained from the following web sources—www.access-board.gov or from the DOJ at www.usdoj.gov/crt/ada/ or from books published on the subject.