

Americans with Disabilities Act Side-By-Side Comparison Form

Public reporting burden for this collection of information is estimated to average 32 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to U.S. Department of Justice, Civil Rights Division, Disability Rights Section, P.O. Box 66738, Washington, D.C. 20035-6738; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Note: This comparison document contains Department of Justice requirements for new construction and alterations of places of public accommodations and commercial facilities under title III of the ADA. It includes material from both the Department's title III regulations and the ADA Standards for Accessible Design, which are enforceable standards under the ADA. Technical specifications 4.2 through 4.35 of these guidelines are based on the provisions of the American National Standards Institute's document A117.1-1980. However, sections 4.1.1 through 4.1.7 and sections 5 through 10 are different from ANSI A117.1 in their entirety. This document is intended to be used in assisting comparisons with State, local, or model code provisions. It is not intended to be used as a substitute for the regulations or the Standards, which contain additional explanatory material and illustrations.

- E** Equivalent To or Exceeds ADA Provisions
- NE** Not Equivalent To ADA Provisions
- PNE** Potentially Not Equivalent To ADA Provisions

ADA Title III Requirements for New Construction and Alterations	(Submitted Code)	Comments
<p>1 PURPOSE This document sets guidelines for accessibility to places of public accommodation and commercial facilities by individuals with disabilities. These guidelines are to be applied during the design, construction, and alteration of such buildings and facilities to the extent required by regulations issued by Federal agencies, including the Department of Justice, under the Americans with Disabilities Act of 1990.</p>		
<p>2 GENERAL 2.1 Provisions for Adults. The specifications in these guidelines are based upon adult dimensions and anthropometrics.</p>		
<p>2.2 Equivalent Facilitation. Departures from particular technical and scoping requirements of this guideline by the use of other designs and technologies are permitted where the alternative designs and technologies used will provide substantially equivalent or greater access to and usability of the facility.</p>		
<p>3 MISCELLANEOUS INSTRUCTIONS AND DEFINITIONS 3.1 Graphic Conventions. Graphic conventions are shown in Table 1. Dimensions that are not marked minimum or maximum are absolute, unless otherwise indicated in the text or captions.</p>		
<p>3.2 Dimensional Tolerances. All dimensions are subject to conventional building industry tolerances for field conditions.</p>		
<p>3.3 Notes. The text of these guidelines does not contain notes or footnotes. Additional information, explanations, and advisory materials are located in the Appendix. Paragraphs marked with an asterisk have related non-mandatory material in the Appendix. In the Appendix, the corresponding paragraph numbers are preceded by an A.</p>		
<p>3.4 General Terminology. <u>comply with.</u> Meet one or more specifications of these guidelines. <u>if, if... then.</u> Denotes a specification that applies only when the conditions described are present. <u>may.</u> Denotes an option or alternative. <u>shall.</u> Denotes a mandatory specification or requirement. <u>should.</u> Denotes an advisory specification or recommendation.</p>		
<p>3.5 Definitions.</p>		
<p>Access Aisle. An accessible pedestrian space between elements, such as parking spaces, seating, and desks, that provides clearances appropriate for use of the elements.</p>		

<p>Accessible. Describes a site, building, facility, or portion thereof that complies with these guidelines.</p>		
<p>Accessible Element. An element specified by these guidelines (for example, telephone, controls, and the like).</p>		
<p>Accessible Route. A continuous unobstructed path connecting all accessible elements and spaces of a building or facility. Interior accessible routes may include corridors, floors, ramps, elevators, lifts, and clear floor space at fixtures. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts.</p>		
<p>Accessible Space. Space that complies with these guidelines.</p>		
<p>Adaptability. The ability of certain building spaces and elements, such as kitchen counters, sinks, and grab bars, to be added or altered so as to accommodate the needs of individuals with or without disabilities or to accommodate the needs of persons with different types or degrees of disability.</p>		
<p>Addition. An expansion, extension, or increase in the gross floor area of a building or facility.</p>		
<p>Administrative Authority. A governmental agency that adopts or enforces regulations and guidelines for the design, construction, or alteration of buildings and facilities.</p>		
<p>Alteration. An alteration is a change to a building or facility made by, on behalf of, or for the use of a public accommodation or commercial facility, that affects or could affect the usability of the building or facility or part thereof. Alterations include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, changes or rearrangement of the structural parts or elements, and changes or rearrangement in the plan configuration of walls and full-height partitions. Normal maintenance, reroofing, painting or wallpapering, or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility.</p>		
<p>Area of Rescue Assistance. An area, which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation.</p>		
<p>Assembly Area. A room or space accommodating a group of individuals for recreational, educational, political, social, or amusement purposes, or for the consumption of food and drink.</p>		
<p>Automatic Door. A door equipped with a power-operated mechanism and controls that open and close the door automatically upon receipt of a momentary actuating signal. The switch that begins the automatic cycle may be a photoelectric device, floor mat, or manual switch (see power-assisted door).</p>		

<p>Building. Any structure used and intended for supporting or sheltering any use or occupancy.</p>		
<p>Circulation Path. An exterior or interior way of passage from one place to another for pedestrians, including, but not limited to, walks, hallways, courtyards, stairways, and stair landings.</p>		
<p>Clear. Unobstructed.</p>		
<p>Clear Floor Space. The minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.</p>		
<p>Closed Circuit Telephone. A telephone with dedicated line(s) such as a house phone, courtesy phone or phone that must be used to gain entrance to a facility.</p>		
<p>Commercial Facilities. (28 C.F.R. § 36.104). Commercial facilities means facilities --</p> <ul style="list-style-type: none"> (1) Whose operations will affect commerce; (2) That are intended for nonresidential use by a private entity; and (3) That are not -- <ul style="list-style-type: none"> (i) Facilities that are not covered or expressly exempted from coverage under the Fair Housing Act of 1968, as amended (42 U.S.C. 3601-3631); (ii) Aircraft; or (iii) Railroad locomotives, railroad freight cars, railroad cabooses, commuter or intercity passenger rail cars (including coaches, dining cars, sleeping cars, lounge cars, and food service cars), and any other railroad cars described in section 242 of the Act or covered under title II of the Act, or railroad rights-of-way. For purposes of this definition, "rail" and "railroad" have the meaning given the term "railroad" in section 202(e) of the Federal Railroad Safety Act of 1970 (45 U.S.C. 431(e)). 		
<p>Commercial facilities located in private residences. (28 C.F.R. § 36.401(b)).</p> <ul style="list-style-type: none"> (1) When a commercial facility is located in a private residence, the portion of the residence used exclusively as a residence is not covered by this subpart, but that portion used both for the commercial facility and for residential purposes is covered by the new construction and alterations requirements of this subpart. (2) The portion of the residence covered under paragraph (b)(1) of this section extends to those elements used to enter the commercial facility, including the homeowner's front sidewalk, if any, the door or entryway, and hallways; and those portions of the residence, interior or exterior, available to or used by employees or visitors of the commercial facility, including restrooms. 		
<p>Common Use. Refers to those interior and exterior rooms, spaces, or elements that are made available for the use of a restricted group of people (for example, occupants of a homeless shelter, the occupants of an office building, or the guests of such occupants).</p>		
<p>Cross Slope. The slope that is perpendicular to the direction of travel (see running slope).</p>		

<p>Curb Ramp. A short ramp cutting through a curb or built up to it.</p>		
<p>Detectable Warning. A standardized surface feature built in or applied to walking surfaces or other elements to warn visually impaired people of hazards on a circulation path.</p>		
<p>Disability. (28 C.F.R § 36.104). Disability means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment.</p>		
<p>Dwelling Unit. A single unit which provides a kitchen or food preparation area, in addition to rooms and spaces for living, bathing, sleeping, and the like. Dwelling units include a single family home or a townhouse used as a transient group home; an apartment building used as a shelter; guestrooms in a hotel that provide sleeping accommodations and food preparation areas; and other similar facilities used on a transient basis. For purposes of these guidelines, use of the term "Dwelling Unit" does not imply the unit is used as a residence.</p>		
<p>Egress, Means of. A continuous and unobstructed way of exit travel from any point in a building or facility to a public way. A means of egress comprises vertical and horizontal travel and may include intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, horizontal exits, courts and yards. An accessible means of egress is one that complies with these guidelines and does not include stairs, steps, or escalators. Areas of rescue assistance or evacuation elevators may be included as part of accessible means of egress.</p>		
<p>Element. An architectural or mechanical component of a building, facility, space, or site, e.g., telephone, curb ramp, door, drinking fountain, seating, or water closet.</p>		
<p>Entrance. Any access point to a building or portion of a building or facility used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform, the entrance platform itself, vestibules if provided, the entry door(s) or gate(s), and the hardware of the entry door(s) or gate(s).</p>		
<p>Facility. All or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property located on a site.</p>		
<p>Ground Floor. Any occupiable floor less than one story above or below grade with direct access to grade. A building or facility always has at least one ground floor and may have more than one ground floor as where a split level entrance has been provided or where a building is built into a hillside.</p>		
<p>Marked Crossing. A crosswalk or other identified path intended for pedestrian use in crossing a vehicular way.</p>		

<p>Maximum Extent Feasible. (28 C.F.R. § 36.402(c)). The phrase, "to the maximum extent feasible," as used in this section, applies to the occasional case where the nature of an existing facility makes it virtually impossible to comply fully with applicable accessibility standards through a planned alteration. In these circumstances, the alteration shall provide the maximum physical accessibility feasible. Any altered features of the facility that can be made accessible shall be made accessible. If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would not be feasible, the facility shall be made accessible to persons with other types of disabilities (e.g., those who use crutches, those who have impaired vision or hearing, or those who have other impairments).</p>		
<p>Mezzanine or Mezzanine Floor. That portion of a story which is an intermediate floor level placed within the story and having occupiable space above and below its floor.</p>		
<p>Multifamily Dwelling. Any building containing more than two dwelling units.</p>		
<p>Occupiable. A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes, or in which occupants are engaged at labor, and which is equipped with means of egress, light, and ventilation.</p>		
<p>Operable Part. A part of a piece of equipment or appliance used to insert or withdraw objects, or to activate, deactivate, or adjust the equipment or appliance (for example, coin slot, pushbutton, handle).</p>		
<p>Path of Travel. (28 C.F.R. § 36.403(e)). (1) A "path of travel" includes a continuous, unobstructed way of pedestrian passage by means of which the altered area may be approached, entered, and exited, and which connects the altered area with an exterior approach (including sidewalks, streets, and parking areas), an entrance to the facility, and other parts of the facility. (2) An accessible path of travel may consist of walks and sidewalks, curb ramps and other interior or exterior pedestrian ramps; clear floor paths through lobbies, corridors, rooms, and other improved areas; parking access aisles; elevators and lifts; or a combination of these elements. (3) For the purposes of this part, the term "path of travel" also includes the restrooms, telephones, and drinking fountains serving the altered area.</p>		

<p>Place of Public Accommodation. (28 C.F.R. § 36.104). Place of public accommodation means a facility, operated by a private entity, whose operations affect commerce and fall within at least one of the following categories --</p> <p>(1) An inn, hotel, motel, or other place of lodging, except for an establishment located within a building that contains not more than five rooms for rent or hire and that is actually occupied by the proprietor of the establishment as the residence of the proprietor;</p> <p>(2) A restaurant, bar, or other establishment serving food or drink;</p> <p>(3) A motion picture house, theater, concert hall, stadium, or other place of exhibition or entertainment;</p> <p>(4) An auditorium, convention center, lecture hall, or other place of public gathering;</p> <p>(5) A bakery, grocery store, clothing store, hardware store, shopping center, or other sales or rental establishment;</p> <p>(6) A laundromat, dry-cleaner, bank, barber shop, beauty shop, travel service, shoe repair service, funeral parlor, gas station, office of an accountant or lawyer, pharmacy, insurance office, professional office of a health care provider, hospital, or other service establishment;</p> <p>(7) A terminal, depot, or other station used for specified public transportation;</p> <p>(8) A museum, library, gallery, or other place of public display or collection;</p> <p>(9) A park, zoo, amusement park, or other place of recreation;</p> <p>(10) A nursery, elementary, secondary, undergraduate, or postgraduate private school, or other place of education;</p> <p>(11) A day care center, senior citizen center, homeless shelter, food bank, adoption agency, or other social service center establishment; and</p> <p>(12) A gymnasium, health spa, bowling alley, golf course, or other place of exercise or recreation.</p>		
<p>Power-assisted Door. A door used for human passage with a mechanism that helps to open the door, or relieves the opening resistance of a door, upon the activation of a switch or a continued force applied to the door itself.</p>		
<p>Primary Function. (28 C.F.R. § 36.403(b)). A "primary function" is a major activity for which the facility is intended. Areas that contain a primary function include, but are not limited to, offices and other work areas in which the activities of the public accommodation or other private entity using the facility are carried out. Mechanical rooms, boiler rooms, supply storage rooms, employee lounges or locker rooms, janitorial closets, entrances, corridors, and restrooms are not areas containing a primary function.</p>		
<p>Professional Office of a Health Care Provider. (28 C.F.R. § 36.401(d)(i)). A location where a person or entity, regulated by a State to provide professional services related to the physical or mental health of an individual, makes such services available to the public. The facility housing the "professional office of a health care provider" only includes floor levels housing at least one health care provider, or any floor level designed or intended for use by at least one health care provider.</p>		

<p>Public Use. Describes interior or exterior rooms or spaces that are made available to the general public. Public use may be provided at a building or facility that is privately or publicly owned.</p>		
<p>Ramp. A walking surface which has a running slope greater than 1:20.</p>		
<p>Running Slope. The slope that is parallel to the direction of travel (see cross slope).</p>		
<p>Service Entrance. An entrance intended primarily for delivery of goods or services.</p>		
<p>Signage. Displayed verbal, symbolic, tactile, and pictorial information.</p>		
<p>Site. A parcel of land bounded by a property line or a designated portion of a public right-of-way.</p>		
<p>Site Improvement. Landscaping, paving for pedestrian and vehicular ways, outdoor lighting, recreational facilities, and the like, added to a site.</p>		
<p>Sleeping Accommodations. Rooms in which people sleep; for example, dormitory and hotel or motel guest rooms or suites.</p>		
<p>Space. A definable area, e.g., room, toilet room, hall, assembly area, entrance, storage room, alcove, courtyard, or lobby.</p>		
<p>Specified Public Transportation. (28 C.F.R. § 36.104). Transportation by bus, rail, or any other conveyance (other than by aircraft) that provides the general public with general or special service (including charter service) on a regular and continuing basis.</p>		
<p>Story. That portion of a building included between the upper surface of a floor and upper surface of the floor or roof next above. If such portion of a building does not include occupiable space, it is not considered a story for purposes of these guidelines. There may be more than one floor level within a story as in the case of a mezzanine or mezzanines.</p>		
<p>Structural Frame. The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and all other members which are essential to the stability of the building as a whole.</p>		
<p>Tactile. Describes an object that can be perceived using the sense of touch.</p>		
<p>Text Telephone. Machinery or equipment that employs interactive graphic (i.e., typed) communications through the transmission of coded signals across the standard telephone network. Text telephones can include, for example, devices known as TDDs (telecommunication display devices or telecommunication devices for deaf persons) or computers.</p>		

<p>Transient Lodging. A building, facility, or portion thereof, excluding inpatient medical care facilities, that contains one or more dwelling units or sleeping accommodations. Transient lodging may include, but is not limited to, resorts, group homes, hotels, motels, and dormitories (see Place of Public Accommodation).</p>		
<p>Vehicular Way. A route intended for vehicular traffic, such as a street, driveway, or parking lot.</p>		
<p>Walk. An exterior pathway with a prepared surface intended for pedestrian use, including general pedestrian areas such as plazas and courts.</p>		
<p>4 ACCESSIBLE ELEMENTS AND SPACES: SCOPE AND TECHNICAL REQUIREMENTS 4.1 Minimum Requirements 4.1.1* Application. (1) General. All areas of newly designed or newly constructed buildings and facilities required to be accessible by 4.1.2 and 4.1.3 and altered portions of existing buildings and facilities required to be accessible by 4.1.6 shall comply with these guidelines, 4.1 through 4.35, unless otherwise provided in this section or as modified in a special application section.</p>		
<p>4.1.1 (2) Application Based on Building Use. Special application sections 5 through 10 provide additional requirements for restaurants and cafeterias, medical care facilities, business and mercantile, libraries, accessible transient lodging, and transportation facilities. When a building or facility contains more than one use covered by a special application section, each portion shall comply with the requirements for that use.</p>		
<p>4.1.1 (3)* Areas Used Only by Employees as Work Areas. Areas that are used only as work areas shall be designed and constructed so that individuals with disabilities can approach, enter, and exit the areas. These guidelines do not require that any areas used only as work areas be constructed to permit maneuvering within the work area or be constructed or equipped (i.e., with racks or shelves) to be accessible.</p>		
<p>4.1.1 (4) Temporary Structures. These guidelines cover temporary buildings or facilities as well as permanent facilities. Temporary buildings and facilities are not of permanent construction but are extensively used or are essential for public use for a period of time. Examples of temporary buildings or facilities covered by these guidelines include, but are not limited to: reviewing stands, temporary classrooms, bleacher areas, exhibit areas, temporary banking facilities, temporary health screening services, or temporary safe pedestrian passageways around a construction site. Structures, sites and equipment directly associated with the actual processes of construction, such as scaffolding, bridging, materials hoists, or construction trailers are not included.</p>		

<p>4.1.1 (5) General Exceptions. (a) In new construction, a person or entity is not required to meet fully the requirements of these guidelines where that person or entity can demonstrate that it is structurally impracticable to do so. Full compliance will be considered structurally impracticable only in those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features. If full compliance with the requirements of these guidelines is structurally impracticable, a person or entity shall comply with the requirements to the extent it is not structurally impracticable. Any portion of the building or facility which can be made accessible shall comply to the extent that it is not structurally impracticable.</p> <p>28 C.F.R. § 36.401(c)(3). If providing accessibility in conformance with this section to individuals with certain disabilities (e.g., those who use wheelchairs) would be structurally impracticable, accessibility shall nonetheless be ensured to persons with other types of disabilities (e.g., those who use crutches or who have sight, hearing, or mental impairments) in accordance with this section.</p>		
<p>4.1.1 (5) (b) Accessibility is not required to (i) observation galleries used primarily for security purposes; or (ii) in non-occupiable spaces accessed only by ladders, catwalks, crawl spaces, very narrow passageways, or freight (non-passenger) elevators, and frequented only by service personnel for repair purposes; such spaces include, but are not limited to, elevator pits, elevator penthouses, piping or equipment catwalks.</p>		
<p>4.1.2 Accessible Sites and Exterior Facilities: New Construction. An accessible site shall meet the following minimum requirements:</p>		
<p>4.1.2 (1) At least one accessible route complying with 4.3 shall be provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones if provided, and public streets or sidewalks, to an accessible building entrance.</p>		
<p>4.1.2 (2) At least one accessible route complying with 4.3 shall connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.</p>		
<p>4.1.2 (3) All objects that protrude from surfaces or posts into circulation paths shall comply with 4.4.</p>		
<p>4.1.2 (4) Ground surfaces along accessible routes and in accessible spaces shall comply with 4.5.</p>		

4.1.2 (5) (a) If parking spaces are provided for self-parking by employees or visitors, or both, then accessible spaces complying with 4.6 shall be provided in each such parking area in conformance with the table below. Spaces required by the table need not be provided in the particular lot. They may be provided in a different location if equivalent or greater accessibility in terms of distance from an accessible entrance, cost and convenience is ensured.

**Required Minimum Number
Total Parking in Lot 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 over 1000

Except as provided in (b), access aisles adjacent to accessible spaces shall be 60 in (1525 mm) wide minimum.

4.1.2 (5) (b) One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 in (2440 mm) wide minimum and shall be designated "van accessible" as required by 4.6.4. The vertical clearance at such spaces shall comply with 4.6.5. All such spaces may be grouped on one level of a parking structure.
EXCEPTION: Provision of all required parking spaces in conformance with "Universal Parking Design" (see appendix A4.6.3) is permitted.

4.1.2 (5) (c) If passenger loading zones are provided, then at least one passenger loading zone shall comply with 4.6.6.

4.1.2 (5) (d) At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with 4.6 shall be provided in accordance with 4.1.2(5)(a) except as follows:
(i) Outpatient units and facilities: 10 percent of the total number of parking spaces provided serving each such outpatient unit or facility;
(ii) Units and facilities that specialize in treatment or services for persons with mobility impairments: 20 percent of the total number of parking spaces provided serving each such unit or facility.

4.1.2 (5) (e)* Valet parking: Valet parking facilities shall provide a passenger loading zone complying with 4.6.6 located on an accessible route to the entrance of the facility. Paragraphs 5(a), 5(b), and 5(d) of this section do not apply to valet parking facilities.

<p>4.1.2 (6) If toilet facilities are provided on a site, then each such public or common use toilet facility shall comply with 4.22. If bathing facilities are provided on a site, then each such public or common use bathing facility shall comply with 4.23.</p> <p>For single user portable toilet or bathing units clustered at a single location, at least 5% but no less than one toilet unit or bathing unit complying with 4.22 or 4.23 shall be installed at each cluster whenever typical inaccessible units are provided. Accessible units shall be identified by the International Symbol of Accessibility.</p> <p>EXCEPTION: Portable toilet units at construction sites used exclusively by construction personnel are not required to comply with 4.1.2(6).</p>		
<p>4.1.2 (7) Building Signage. Signs which designate permanent rooms and spaces shall comply with 4.30.1, 4.30.4, 4.30.5 and 4.30.6. Other signs which provide direction to, or information about, functional spaces of the building shall comply with 4.30.1, 4.30.2, 4.30.3, and 4.30.5.</p> <p>Elements and spaces of accessible facilities which shall be identified by the International Symbol of Accessibility and which shall comply with 4.30.7 are:</p> <ul style="list-style-type: none"> (a) Parking spaces designated as reserved for individuals with disabilities; (b) Accessible passenger loading zones; (c) Accessible entrances when not all are accessible (inaccessible entrances shall have directional signage to indicate the route to the nearest accessible entrance); (d) Accessible toilet and bathing facilities when not all are accessible. 		
<p>4.1.3 Accessible Buildings: New Construction. Accessible buildings and facilities shall meet the following minimum requirements:</p>		
<p>4.1.3 (1) At least one accessible route complying with 4.3 shall connect accessible building or facility entrances with all accessible spaces and elements within the building or facility.</p>		
<p>4.1.3 (2) All objects that overhang or protrude into circulation paths shall comply with 4.4.</p>		
<p>4.1.3 (3) Ground and floor surfaces along accessible routes and in accessible rooms and spaces shall comply with 4.5.</p>		
<p>4.1.3 (4) Interior and exterior stairs connecting levels that are not connected by an elevator, ramp, or other accessible means of vertical access shall comply with 4.9.</p>		

<p>4.1.3 (5)* One passenger elevator complying with 4.10 shall serve each level, including mezzanines, in all multi-story buildings and facilities unless exempted below. If more than one elevator is provided, each full passenger elevator shall comply with 4.10.</p> <p>EXCEPTION 1: Elevators are not required in facilities that are less than three stories or that have less than 3000 square feet per story unless the building is a shopping center, a shopping mall, or the professional office of a health care provider, or another type of facility as determined by the Attorney General [e.g., a terminal, depot, or other station used for specified public transportation, or an airport passenger terminal. In such a facility, any area housing passenger services, including boarding and debarking loading and unloading baggage claim, dining facilities, and other common areas open to the public, must be on an accessible route from an accessible entrance (28 C.F.R. § 36.401(d)(2)(ii))]. The elevator exemption set forth in this paragraph does not obviate or limit in any way the obligation to comply with the other accessibility requirements established in section 4.1.3. For example, floors above or below the accessible ground floor must meet the requirements of this section except for elevator service. If toilet or bathing facilities are provided on a level not served by an elevator, then toilet or bathing facilities must be provided on the accessible ground floor. In new construction if a building or facility is eligible for this exemption but a full passenger elevator is nonetheless planned, that elevator shall meet the requirements of 4.10 and shall serve each level in the building. A full passenger elevator that provides service from a garage to only one level of a building or facility is not required to serve other levels.</p> <p>28 C.F.R. § 36.401(d)(1)(ii). Shopping center or shopping mall means --</p> <p>(A) A building housing five or more sales or rental establishments; or</p> <p>(B) A series of buildings on a common site, either under common ownership or common control or developed either as one project or as a series of related projects, housing five or more sales or rental establishments. For purposes of this section, places of public accommodation of the types listed in paragraph (5) of the definition of "place of public accommodation" in section 36.104 are considered sales or rental establishments. The facility housing a "shopping center or shopping mall" only includes floor levels housing at least one sales or rental establishment, or any floor level designed or intended for use by at least one sales or rental establishment.</p>		
<p>4.1.3 (5) EXCEPTION 2: Elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks are exempted from this requirement.</p>		
<p>4.1.3 (5) EXCEPTION 3: Accessible ramps complying with 4.8 may be used in lieu of an elevator.</p>		

<p>4.1.3 (5) EXCEPTION 4: Platform lifts (wheelchair lifts) complying with 4.11 of this guideline and applicable state or local codes may be used in lieu of an elevator only under the following conditions:</p> <ul style="list-style-type: none"> (a) To provide an accessible route to a performing area in an assembly occupancy. (b) To comply with the wheelchair viewing position line-of-sight and dispersion requirements of 4.33.3. (c) To provide access to incidental occupiable spaces and rooms which are not open to the general public and which house no more than five persons, including but not limited to equipment control rooms and projection booths. (d) To provide access where existing site constraints or other constraints make use of a ramp or an elevator infeasible. 		
<p>4.1.3 (6) Windows: (Reserved).</p>		
<p>4.1.3 (7) Doors:</p> <ul style="list-style-type: none"> (a) At each accessible entrance to a building or facility, at least one door shall comply with 4.13. (b) Within a building or facility, at least one door at each accessible space shall comply with 4.13. (c) Each door that is an element of an accessible route shall comply with 4.13. (d) Each door required by 4.3.10, Egress, shall comply with 4.13. 		
<p>4.1.3 (8) In new construction, at a minimum, the requirements in (a) and (b) below shall be satisfied independently:</p> <ul style="list-style-type: none"> (a) (i) At least 50% of all public entrances (excluding those in (b) below) must be accessible. At least one must be a ground floor entrance. Public entrances are any entrances that are not loading or service entrances. (ii) Accessible entrances must be provided in a number at least equivalent to the number of exits required by the applicable building/fire codes. (This paragraph does not require an increase in the total number of entrances planned for a facility.) (iii) An accessible entrance must be provided to each tenancy in a facility (for example, individual stores in a strip shopping center). <p>One entrance may be considered as meeting more than one of the requirements in (a). Where feasible, accessible entrances shall be the entrances used by the majority of people visiting or working in the building.</p>		
<p>4.1.3 (8) (b) (i) In addition, if direct access is provided for pedestrians from an enclosed parking garage to the building, at least one direct entrance from the garage to the building must be accessible.</p> <ul style="list-style-type: none"> (ii) If access is provided for pedestrians from a pedestrian tunnel or elevated walkway, one entrance to the building from each tunnel or walkway must be accessible. <p>One entrance may be considered as meeting more than one of the requirements in (b). Because entrances also serve as emergency exits whose proximity to all parts of buildings and facilities is essential, it is preferable that all entrances be accessible.</p>		
<p>4.1.3 (8) (c) If the only entrance to a building, or tenancy in a facility, is a service entrance, that entrance shall be accessible.</p>		

<p>4.1.3 (8) (d) Entrances which are not accessible shall have directional signage complying with 4.30.1, 4.30.2, 4.30.3 and 4.30.5, which indicates the location of the nearest accessible entrance.</p>		
<p>4.1.3 (9)* In buildings or facilities, or portions of buildings or facilities, required to be accessible, accessible means of egress shall be provided in the same number as required for exits by local building/life safety regulations. Where a required exit from an occupiable level above or below a level of accessible exit discharge is not accessible, an area of rescue assistance shall be provided on each such level (in a number equal to that of inaccessible required exits). Areas of rescue assistance shall comply with 4.3.11. A horizontal exit, meeting the requirements of local building/life safety regulations, shall satisfy the requirement for an area of rescue assistance. EXCEPTION: Areas of rescue assistance are not required in buildings or facilities having a supervised automatic sprinkler system.</p>		
<p>4.1.3 (10)* Drinking Fountains: (a) Where only one drinking fountain is provided on a floor there shall be a drinking fountain which is accessible to individuals who use wheelchairs in accordance with 4.15 and one accessible to those who have difficulty bending or stooping. (This can be accommodated by the use of a "hi-lo" fountain; by providing one fountain accessible to those who use wheelchairs and one fountain at a standard height convenient for those who have difficulty bending; by providing a fountain accessible under 4.15 and a water cooler; or by such other means as would achieve the required accessibility for each group on each floor.) (b) Where more than one drinking fountain or water cooler is provided on a floor, 50% of those provided shall comply with 4.15 and shall be on an accessible route.</p>		
<p>4.1.3 (11) Toilet Facilities: If toilet rooms are provided, then each public and common use toilet room shall comply with 4.22. Other toilet rooms provided for the use of occupants of specific spaces (i.e., a private toilet room for the occupant of a private office) shall be adaptable. If bathing rooms are provided, then each public and common use bathroom shall comply with 4.23. Accessible toilet rooms and bathing facilities shall be on an accessible route.</p>		
<p>4.1.3 (12) Storage, Shelving and Display Units: (a) If fixed or built-in storage facilities such as cabinets, shelves, closets, and drawers are provided in accessible spaces, at least one of each type provided shall contain storage space complying with 4.25. Additional storage may be provided outside of the dimensions required by 4.25. (b) Shelves or display units allowing self-service by customers in mercantile occupancies shall be located on an accessible route complying with 4.3. Requirements for accessible reach range do not apply.</p>		
<p>4.1.3 (13) Controls and operating mechanisms in accessible spaces, along accessible routes, or as parts of accessible elements (for example, light switches and dispenser controls) shall comply with 4.27.</p>		

<p>4.1.3 (14) If emergency warning systems are provided, then they shall include both audible alarms and visual alarms complying with 4.28. Sleeping accommodations required to comply with 9.3 shall have an alarm system complying with 4.28. Emergency warning systems in medical care facilities may be modified to suit standard health care alarm design practice.</p>										
<p>4.1.3 (15) Detectable warnings shall be provided at locations as specified in 4.29.</p>										
<p>4.1.3 (16) Building Signage: (a) Signs which designate permanent rooms and spaces shall comply with 4.30.1, 4.30.4, 4.30.5 and 4.30.6. (b) Other signs which provide direction to or information about functional spaces of the building shall comply with 4.30.1, 4.30.2, 4.30.3, and 4.30.5. EXCEPTION: Building directories, menus, and all other signs which are temporary are not required to comply.</p>										
<p>4.1.3 (17) Public Telephones: (a) If public pay telephones, public closed circuit telephones, or other public telephones are provided, then they shall comply with 4.31.2 through 4.31.8 to the extent required by the following table:</p> <table border="0" data-bbox="58 743 1003 846"> <thead> <tr> <th data-bbox="58 743 331 846">Number of each type of telephone provided on each floor</th> <th data-bbox="331 743 1003 846">Number of telephones required to comply with 4.31.2 through 4.31.8¹</th> </tr> </thead> <tbody> <tr> <td data-bbox="58 886 331 914">1 or more single unit installations</td> <td data-bbox="331 886 1003 914">1 per floor</td> </tr> <tr> <td data-bbox="58 919 331 946">1 bank²</td> <td data-bbox="331 919 1003 946">1 per floor</td> </tr> <tr> <td data-bbox="58 951 331 1060">2 or more banks²</td> <td data-bbox="331 951 1003 1060">1 per bank. Accessible unit may be installed as a single unit in proximity (either visible or with signage) to the bank. At least one public telephone per floor shall meet the requirements for a forward reach telephone³.</td> </tr> </tbody> </table> <p>¹ Additional public telephones may be installed at any height. Unless otherwise specified, accessible telephones may be either forward or side reach telephones. ² A bank consists of two or more adjacent public telephones, often installed as a unit. ³ EXCEPTION: For exterior installations only, if dial tone first service is available, then a side reach telephone may be installed instead of the required forward reach telephone (i.e., one telephone in proximity to each bank shall comply with 4.31).</p>	Number of each type of telephone provided on each floor	Number of telephones required to comply with 4.31.2 through 4.31.8 ¹	1 or more single unit installations	1 per floor	1 bank ²	1 per floor	2 or more banks ²	1 per bank. Accessible unit may be installed as a single unit in proximity (either visible or with signage) to the bank. At least one public telephone per floor shall meet the requirements for a forward reach telephone ³ .		
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<p>4.1.3 (17) (b)* All telephones required to be accessible and complying with 4.31.2 through 4.31.8 shall be equipped with a volume control. In addition, 25 percent, but never less than one, of all other public telephones provided shall be equipped with a volume control and shall be dispersed among all types of public telephones, including closed circuit telephones, throughout the building or facility. Signage complying with applicable provisions of 4.30.7 shall be provided.</p>										

<p>4.1.3 (17) (c) The following shall be provided in accordance with 4.31.9:</p> <p>(i) if a total number of four or more public pay telephones (including both interior and exterior phones) is provided at a site, and at least one is in an interior location, then at least one interior public text telephone shall be provided.</p> <p>(ii) if an interior public pay telephone is provided in a stadium or arena, in a convention center, in a hotel with a convention center, or in a covered mall, at least one interior public text telephone shall be provided in the facility.</p> <p>(iii) if a public pay telephone is located in or adjacent to a hospital emergency room, hospital recovery room, or hospital waiting room, one public text telephone shall be provided at each such location.</p>														
<p>4.1.3 (17) (d) Where a bank of telephones in the interior of a building consists of three or more public pay telephones, at least one public pay telephone in each such bank shall be equipped with a shelf and outlet in compliance with 4.31.9(2).</p>														
<p>4.1.3 (18) If fixed or built-in seating or tables (including, but not limited to, study carrels and student laboratory stations), are provided in accessible public or common use areas, at least five percent (5%), but not less than one, of the fixed or built-in seating areas or tables shall comply with 4.32. An accessible route shall lead to and through such fixed or built-in seating areas, or tables.</p>														
<p>4.1.3 (19)* Assembly areas:</p> <p>(a) In places of assembly with fixed seating accessible wheelchair locations shall comply with 4.33.2, 4.33.3, and 4.33.4 and shall be provided consistent with the following table:</p> <table border="0" data-bbox="58 893 588 1201"> <thead> <tr> <th style="text-align: left;">Capacity of Seating in Assembly Areas</th> <th style="text-align: left;">Number of Required Wheelchair Locations</th> </tr> </thead> <tbody> <tr> <td>4 to 25</td> <td>1</td> </tr> <tr> <td>26 to 50</td> <td>2</td> </tr> <tr> <td>51 to 300</td> <td>4</td> </tr> <tr> <td>301 to 500</td> <td>6</td> </tr> <tr> <td>over 500</td> <td>6, plus 1 additional space for each total seating capacity increase of 100</td> </tr> </tbody> </table> <p>In addition, one percent, but not less than one, of all fixed seats shall be aisle seats with no armrests on the aisle side, or removable or folding armrests on the aisle side. Each such seat shall be identified by a sign or marker. Signage notifying patrons of the availability of such seats shall be posted at the ticket office. Aisle seats are not required to comply with 4.33.4.</p>	Capacity of Seating in Assembly Areas	Number of Required Wheelchair Locations	4 to 25	1	26 to 50	2	51 to 300	4	301 to 500	6	over 500	6, plus 1 additional space for each total seating capacity increase of 100		
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<p>4.1.3 (19) (b) This paragraph applies to assembly areas where audible communications are integral to the use of the space (e.g., concert and lecture halls, playhouses and movie theaters, meeting rooms, etc.). Such assembly areas, if (1) they accommodate at least 50 persons, or if they have audio-amplification systems, and (2) they have fixed seating, shall have a permanently installed assistive listening system complying with 4.33. For other assembly areas, a permanently installed assistive listening system, or an adequate number of electrical outlets or other supplementary wiring necessary to support a portable assistive listening system shall be provided. The minimum number of receivers to be provided shall be equal to 4 percent of the total number of seats, but in no case less than two. Signage complying with applicable provisions of 4.30 shall be installed to notify patrons of the availability of a listening system.</p>		
<p>4.1.3 (20) Where automated teller machines are provided, each machine shall comply with the requirements of 4.34 except where two or more are provided at a location, then only one must comply. EXCEPTION: Drive-up-only automated teller machines are not required to comply with 4.34.2 and 4.34.3.</p>		
<p>4.1.3 (21) Where dressing and fitting rooms are provided for use by the general public, patients, customers or employees, 5 percent, but never less than one, of dressing rooms for each type of use in each cluster of dressing rooms shall be accessible and shall comply with 4.35. Examples of types of dressing rooms are those serving different genders or distinct and different functions as in different treatment or examination facilities.</p>		
<p>4.1.4 (Reserved).</p>		
<p>4.1.5 Accessible Buildings: Additions. Each addition to an existing building or facility shall be regarded as an alteration. Each space or element added to the existing building or facility shall comply with the applicable provisions of 4.1.1 to 4.1.3, Minimum Requirements (for New Construction) and the applicable technical specifications of 4.2 through 4.35 and sections 5 through 10. Each addition that affects or could affect the usability of an area containing a primary function shall comply with 4.1.6(2).</p>		
<p>28 C.F.R. § 36.402(a)(1). Alterations. Any alteration to a place of public accommodation or a commercial facility shall be made so as to ensure that, to the maximum extent feasible, the altered portions of the facility are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs.</p>		
<p>4.1.6 Accessible Buildings: Alterations. (1) General. Alterations to existing buildings and facilities shall comply with the following:</p>		
<p>4.1.6 (1) (a) No alteration shall be undertaken which decreases or has the effect of decreasing accessibility or usability of a building or facility below the requirements for new construction at the time of alteration.</p>		

<p>4.1.6 (1) (b) If existing elements, spaces, or common areas are altered, then each such altered element, space, feature, or area shall comply with the applicable provisions of 4.1.1 to 4.1.3 Minimum Requirements (for New Construction). If the applicable provision for new construction requires that an element, space, or common area be on an accessible route, the altered element, space, or common area is not required to be on an accessible route except as provided in 4.1.6(2) (Alterations to an Area Containing a Primary Function).</p>		
<p>4.1.6 (1) (c) If alterations of single elements, when considered together, amount to an alteration of a room or space in a building or facility, the entire space shall be made accessible.</p>		
<p>4.1.6 (1) (d) No alteration of an existing element, space, or area of a building or facility shall impose a requirement for greater accessibility than that which would be required for new construction. For example, if the elevators and stairs in a building are being altered and the elevators are, in turn, being made accessible, then no accessibility modifications are required to the stairs connecting levels connected by the elevator. If stair modifications to correct unsafe conditions are required by other codes, the modifications shall be done in compliance with these guidelines unless technically infeasible.</p>		
<p>4.1.6 (1) (e) At least one interior public text telephone complying with 4.31.9 shall be provided if:</p> <ul style="list-style-type: none"> (i) alterations to existing buildings or facilities with less than four exterior or interior public pay telephones would increase the total number to four or more telephones with at least one in an interior location; or (ii) alterations to one or more exterior or interior public pay telephones occur in an existing building or facility with four or more public telephones with at least one in an interior location. 		
<p>4.1.6 (1) (f) If an escalator or stair is planned or installed where none existed previously and major structural modifications are necessary for such installation, then a means of accessible vertical access shall be provided that complies with the applicable provisions of 4.7, 4.8, 4.10, or 4.11.</p>		
<p>4.1.6 (1) (g) In alterations, the requirements of 4.1.3(9), 4.3.10 and 4.3.11 do not apply.</p>		
<p>4.1.6 (1) (h)* Entrances: If a planned alteration entails alterations to an entrance, and the building has an accessible entrance, the entrance being altered is not required to comply with 4.1.3(8), except to the extent required by 4.1.6(2). If a particular entrance is not made accessible, appropriate accessible signage indicating the location of the nearest accessible entrance(s) shall be installed at or near the inaccessible entrance, such that a person with disabilities will not be required to retrace the approach route from the inaccessible entrance.</p>		

<p>4.1.6 (1) (i) If the alteration work is limited solely to the electrical, mechanical, or plumbing system, or to hazardous material abatement, or automatic sprinkler retrofitting, and does not involve the alteration of any elements or spaces required to be accessible under these guidelines, then 4.1.6 (2) does not apply.</p>		
<p>4.1.6 (1) (j) EXCEPTION: In alteration work, if compliance with 4.1.6 is technically infeasible, the alteration shall provide accessibility to the maximum extent feasible. Any elements or features of the building or facility that are being altered and can be made accessible shall be made accessible within the scope of the alteration.</p> <p><u>Technically Infeasible.</u> Means, with respect to an alteration of a building or a facility, that it has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member which is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility.</p>		
<p>4.1.6 (1) (k) EXCEPTION:</p> <p>(i) These guidelines do not require the installation of an elevator in an altered facility that is less than three stories or has less than 3,000 square feet per story unless the building is a shopping center, a shopping mall, the professional office of a health care provider, or [a terminal, depot, or other station used for specified public transportation, or an airport passenger terminal (28 C.F.R § 36.404(a))].</p> <p>(ii) The exemption provided in paragraph (i) does not obviate or limit in any way the obligation to comply with the other accessibility requirements established in these guidelines. For example, alterations to floors above or below the ground floor must be accessible regardless of whether the altered facility has an elevator. If a facility subject to the elevator exemption set forth in paragraph (i) nonetheless has a full passenger elevator, that elevator shall meet, to the maximum extent feasible, the accessibility requirements of these guidelines.</p> <p>28 C.F.R. § 36.404(a)(2). For purposes of this section, shopping center or shopping mall means --</p> <p>(A) A building housing five or more sales or rental establishments; or</p> <p>(B) A series of buildings on a common site, connected by a common pedestrian access route above or below the ground floor, that is either under common ownership or common control or developed either as one project or as a series of related projects, housing five or more sales or rental establishments. For purposes of this section, places of public accommodation of the types listed in paragraph (5) of the definition of "place of public accommodation" in section 36.104 are considered sales or rental establishments. The facility housing a "shopping center or shopping mall" only includes floor levels housing at least one sales or rental establishment, or any floor level designed or intended for use by at least one sales or rental establishment.</p>		

<p>4.1.6 (2) Alterations to an Area Containing a Primary Function: In addition to the requirements of 4.1.6(1), an alteration that affects or could affect the usability of or access to an area containing a primary function shall be made so as to ensure that, to the maximum extent feasible, the path of travel to the altered area and the restrooms, telephones, and drinking fountains serving the altered area, are readily accessible to and usable by individuals with disabilities, unless such alterations are disproportionate to the overall alterations in terms of cost and scope (as determined under criteria established by the Attorney General). (See 28 C.F.R § 36.403).</p> <p>28 C.F.R. § 36.403(c)(2). For the purposes of this section, alterations to windows, hardware, controls, electrical outlets, and signage shall not be deemed to be alterations that affect the usability of or access to an area containing a primary function.</p>		
<p>28 C.F.R. § 36.403(f). Disproportionality. (1) Alterations made to provide an accessible path of travel to the altered area will be deemed disproportionate to the overall alteration when the cost exceeds 20% of the cost of the alteration to the primary function area.</p> <p>28 C.F.R. § 36.403(g). Duty to provide accessible features in the event of disproportionality. (1) When the cost of alterations necessary to make the path of travel to the altered area fully accessible is disproportionate to the cost of the overall alteration, the path of travel shall be made accessible to the extent that it can be made accessible without incurring disproportionate costs.</p>		
<p>28 C.F.R. § 36.403(d). Landlord/tenant: If a tenant is making alterations as defined in Section 36.402 that would trigger the requirements of this section, those alterations by the tenant in areas that only the tenant occupies do not trigger a path of travel obligation upon the landlord with respect to areas of the facility under the landlord's authority, if those areas are not otherwise being altered.</p>		
<p>28 C.F.R. § 36.403(h). Series of smaller alterations. (1) The obligation to provide an accessible path of travel may not be evaded by performing a series of small alterations to the area served by a single path of travel if those alterations could have been performed as a single undertaking. (2) (i) If an area containing a primary function has been altered without providing an accessible path of travel to that area, and subsequent alterations of that area, or a different area on the same path of travel, are undertaken within three years of the original alteration, the total cost of alterations to the primary function areas on that path of travel during the preceding three year period shall be considered in determining whether the cost of making that path of travel accessible is disproportionate.</p>		

<p>4.1.6 (3) Special Technical Provisions for Alterations to Existing Buildings and Facilities:</p> <p>(a) Ramps: Curb ramps and interior or exterior ramps to be constructed on sites or in existing buildings or facilities where space limitations prohibit the use of a 1:12 slope or less may have slopes and rises as follows:</p> <p>(i) A slope between 1:10 and 1:12 is allowed for a maximum rise of 6 inches.</p> <p>(ii) A slope between 1:8 and 1:10 is allowed for a maximum rise of 3 inches. A slope steeper than 1:8 is not allowed.</p>		
<p>4.1.6 (3) (b) Stairs: Full extension of handrails at stairs shall not be required in alterations where such extensions would be hazardous or impossible due to plan configuration.</p>		
<p>4.1.6 (3) (c) Elevators:</p> <p>(i) If safety door edges are provided in existing automatic elevators, automatic door reopening devices may be omitted (see 4.10.6).</p> <p>(ii) Where existing shaft configuration or technical infeasibility prohibits strict compliance with 4.10.9, the minimum car plan dimensions may be reduced by the minimum amount necessary, but in no case shall the inside car area be smaller than 48 in by 48 in.</p> <p>(iii) Equivalent facilitation may be provided with an elevator car of different dimensions when usability can be demonstrated and when all other elements required to be accessible comply with the applicable provisions of 4.10. For example, an elevator of 47 in by 69 in (1195 mm by 1755 mm) with a door opening on the narrow dimension, could accommodate the standard wheelchair clearances shown in Figure 4.</p>		
<p>4.1.6 (3) (d) Doors:</p> <p>(i) Where it is technically infeasible to comply with clear opening width requirements of 4.13.5, a projection of 5/8 in maximum will be permitted for the latch side stop.</p> <p>(ii) If existing thresholds are 3/4 in high or less, and have (or are modified to have) a beveled edge on each side, they may remain.</p>		
<p>4.1.6 (3) (e) Toilet Rooms:</p> <p>(i) Where it is technically infeasible to comply with 4.22 or 4.23, the installation of at least one unisex toilet/bathroom per floor, located in the same area as existing toilet facilities, will be permitted in lieu of modifying existing toilet facilities to be accessible. Each unisex toilet room shall contain one water closet complying with 4.16 and one lavatory complying with 4.19, and the door shall have a privacy latch.</p> <p>(ii) Where it is technically infeasible to install a required standard stall (Fig. 30(a)), or where other codes prohibit reduction of the fixture count (i.e., removal of a water closet in order to create a double-wide stall), either alternate stall (Fig.30(b)) may be provided in lieu of the standard stall.</p> <p>(iii) When existing toilet or bathing facilities are being altered and are not made accessible, signage complying with 4.30.1, 4.30.2, 4.30.3, 4.30.5, and 4.30.7 shall be provided indicating the location of the nearest accessible toilet or bathing facility within the facility.</p>		

<p>4.1.6 (3) (f) Assembly Areas: (i) Where it is technically infeasible to disperse accessible seating throughout an altered assembly area, accessible seating areas may be clustered. Each accessible seating area shall have provisions for companion seating and shall be located on an accessible route that also serves as a means of emergency egress. (ii) Where it is technically infeasible to alter all performing areas to be on an accessible route, at least one of each type of performing area shall be made accessible.</p>		
<p>4.1.6 (3) (g) Platform Lifts (Wheelchair Lifts): In alterations, platform lifts (wheelchair lifts) complying with 4.11 and applicable state or local codes may be used as part of an accessible route. The use of lifts is not limited to the four conditions in Exception 4 of 4.1.3(5).</p>		
<p>4.1.6 (3) (h) Dressing Rooms: In alterations where technical infeasibility can be demonstrated, one dressing room for each sex on each level shall be made accessible. Where only unisex dressing rooms are provided, accessible unisex dressing rooms may be used to fulfill this requirement.</p>		
<p>4.1.7 Accessible Buildings: Historic Preservation. (1) Applicability: (a) General Rule. Alterations to a qualified historic building or facility shall comply with 4.1.6 Accessible Buildings: Alterations, the applicable technical specifications of 4.2 through 4.35 and the applicable special application sections 5 through 10 unless it is determined in accordance with the procedures in 4.1.7(2) that compliance with the requirements for accessible routes (exterior and interior), ramps, entrances, or toilets would threaten or destroy the historic significance of the building or facility in which case the alternative requirements in 4.1.7(3) may be used for the feature.</p>		
<p>4.1.7 (1) (b) Definition. A qualified historic building or facility is a building or facility that is: (i) Listed in or eligible for listing in the National Register of Historic Places; or (ii) Designated as historic under an appropriate State or local law.</p>		

<p>4.1.7 (2) Procedures.</p> <p>(a) Alterations to Qualified Historic buildings and Facilities Subject to Section 106 of the National Historic Preservation Act:</p> <p>(i) Section 106 Process. Section 106 of the National Historic Preservation Act (16 U.S.C. 470 f) requires that a Federal agency with jurisdiction over a Federal, federally assisted, or federally licensed undertaking consider the effects of the agency's undertaking on buildings and facilities listed in or eligible for listing in the National Register of Historic Places and give the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking prior to approval of the undertaking.</p> <p>(ii) ADA Application. Where alterations are undertaken to a qualified historic building or facility that is subject to section 106 of the National Historic Preservation Act, the Federal agency with jurisdiction over the undertaking shall follow the section 106 process. If the State Historic Preservation Officer or Advisory Council on Historic Preservation agrees that compliance with the requirements for accessible routes (exterior and interior), ramps, entrances, or toilets would threaten or destroy the historic significance of the building or facility, the alternative requirements in 4.1.7(3) may be used for the feature.</p>		
<p>4.1.7 (2) (b) Alterations to Qualified Historic Buildings and Facilities Not Subject to Section 106 of the National Historic Preservation Act. Where alterations are undertaken to a qualified historic building or facility that is not subject to section 106 of the National Historic Preservation Act, if the entity undertaking the alterations believes that compliance with the requirements for accessible routes (exterior and interior), ramps, entrances, or toilets would threaten or destroy the historic significance of the building or facility and that the alternative requirements in 4.1.7(3) should be used for the feature, the entity should consult with the State Historic Preservation Officer. If the State Historic Preservation Officer agrees that compliance with the accessibility requirements for accessible routes (exterior and interior), ramps, entrances or toilets would threaten or destroy the historical significance of the building or facility, the alternative requirements in 4.1.7(3) may be used.</p>		
<p>4.1.7 (2) (c) Consultation With Interested Persons. Interested persons should be invited to participate in the consultation process, including State or local accessibility officials, individuals with disabilities, and organizations representing individuals with disabilities.</p>		
<p>4.1.7 (2) (d) Certified Local Government Historic Preservation Programs. Where the State Historic Preservation Officer has delegated the consultation responsibility for purposes of this section to a local government historic preservation program that has been certified in accordance with section 101(c) of the National Historic Preservation Act of 1966 (16 U.S.C. 470a (c)) and implementing regulations (36 CFR 61.5), the responsibility may be carried out by the appropriate local government body or official.</p>		

<p>4.1.7 (3) Historic Preservation: Minimum Requirements: (a) At least one accessible route complying with 4.3 from a site access point to an accessible entrance shall be provided. EXCEPTION: A ramp with a slope no greater than 1:6 for a run not to exceed 2 ft (610 mm) may be used as part of an accessible route to an entrance.</p>		
<p>4.1.7 (3) (b) At least one accessible entrance complying with 4.14 which is used by the public shall be provided. EXCEPTION: If it is determined that no entrance used by the public can comply with 4.14, then access at any entrance not used by the general public but open (unlocked) with directional signage at the primary entrance may be used. The accessible entrance shall also have a notification system. Where security is a problem, remote monitoring may be used.</p>		
<p>4.1.7 (3) (c) If toilets are provided, then at least one toilet facility complying with 4.22 and 4.1.6 shall be provided along an accessible route that complies with 4.3. Such toilet facility may be unisex in design.</p>		
<p>4.1.7 (3) (d) Accessible routes from an accessible entrance to all publicly used spaces on at least the level of the accessible entrance shall be provided. Access shall be provided to all levels of a building or facility in compliance with 4.1 whenever practical.</p>		
<p>4.1.7 (3) (e) Displays and written information, documents, etc., should be located where they can be seen by a seated person. Exhibits and signage displayed horizontally (e.g., open books), should be no higher than 44 in (1120 mm) above the floor surface.</p>		
<p>4.2 Space Allowance and Reach Ranges. 4.2.1* Wheelchair Passage Width. The minimum clear width for single wheelchair passage shall be 32 in (815 mm) at a point and 36 in (915 mm) continuously (see Fig. 1 and 24(e)).</p>		
<p>Figure 1 of the ADA Standards. Minimum Clear Width for Single Wheelchair. <i>The minimum clear passage width for a single wheelchair passage shall be 32 in (815 mm) at a point for a maximum depth of 24 in (610 mm).</i></p>		
<p>4.2.2 Width for Wheelchair Passing. The minimum width for two wheelchairs to pass is 60 in (1525 mm) (see Fig. 2).</p>		
<p>4.2.3* Wheelchair Turning Space. The space required for a wheelchair to make a 180-degree turn is a clear space of 60 in (1525 mm) diameter (see Fig. 3(a)) or a T-shaped space (see Fig. 3(b)).</p>		

<p>Figure 3 of the ADA Standards. Wheelchair Turning Space. 3(b) <i>T-Shaped Space for 180 degree Turns.</i> The T-shaped space is created by the perpendicular intersection of two routes. Each route must be a minimum of 36 in (915 mm) in width. The route forming the top of the "T" must extend at least 12 in (305 mm) beyond the intersection in each direction and the route forming the base of the "T" must extend at least 24 in (610 mm) beyond the intersection. The "T" fits within a 60 in (1525 mm) square.</p>		
<p>4.2.4* Clear Floor or Ground Space for Wheelchairs. 4.2.4.1 Size and Approach. The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 in by 48 in (760 mm by 1220 mm). The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object. Clear floor or ground space for wheelchairs may be part of the knee space required under some objects.</p>		
<p>4.2.4.2 Relationship of Maneuvering Clearance to Wheelchair Spaces. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided as shown in Fig. 4(d) and (e).</p>		
<p>Figure 4 of the ADA Standards. Minimum Clear Floor Space for Wheelchairs. 4(d) <i>Clear Floor Space in Alcoves.</i> For a forward approach, where the depth of the alcove is equal to or less than 24 in (610 mm), the required clear floor space is 30 in by 48 in (760 mm by 1220 mm). For a parallel approach, where the depth of the alcove is equal to or less than 15 in (380 mm), the required clear floor space is 48 in by 30 in (1220 mm by 760 mm). 4(e) <i>Additional Maneuvering Clearances for Alcoves.</i> For a forward approach, if the depth of the alcove is greater than 24 in (610 mm), then in addition to the 30 in (760 mm) width, a maneuvering clearance of 6 in (150 mm) in width is required, for a total width of 36 in (915 mm). For a parallel approach, where the depth of the alcove is greater than 15 in (380 mm), then in addition to the 48 in (1220 mm) length, an additional maneuvering clearance of 12 in (305 mm) in length is required, for a total length of 60 in (1525 mm).</p>		
<p>4.2.4.3 Surfaces for Wheelchair Spaces. Clear floor or ground spaces for wheelchairs shall comply with 4.5.</p>		

<p>4.2.5* Forward Reach. If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48 in (1220 mm). The minimum low forward reach is 15 in (380 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Fig. 5(b).</p> <p>Figure 5 of the ADA Standards. Forward Reach. <i>5(b) Maximum Forward Reach over an Obstruction. The maximum depth of an obstruction with knee space below is 25 in (635 mm). When the obstruction is less than 20 in (510 mm) deep, the maximum high forward reach is 48 in (1220 mm). When the depth of the obstruction is greater than 20 in (510 mm), the maximum high forward reach is 44 in (1120 mm).</i></p>		
<p>4.2.6* Side Reach. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 in (1370 mm) and the low side reach shall be no less than 9 in (230 mm) above the floor (Fig. 6(a) and (b)). If the side reach is over an obstruction, the reach and clearances shall be as shown in Fig. 6(c).</p>		
<p>Figure 6 of the ADA Standards. Side Reach. <i>6(a) Clear Floor Space - Parallel Approach, and 6(b) High and Low Side Reach Limits. The clear floor space is located a maximum of 10 in (255 mm) from the wall.</i> <i>6(c) Maximum Side Reach over Obstruction. If the depth of the obstruction is 24 in (610 mm) and the maximum height of the obstruction is 34 in (865 mm), the maximum high side reach over the obstruction is 46 in (1170 mm).</i></p>		
<p>4.3 Accessible Route. 4.3.1* General. All walks, halls, corridors, aisles, skywalks, tunnels, and other spaces that are part of an accessible route shall comply with 4.3.</p>		
<p>4.3.2 Location. (1) At least one accessible route within the boundary of the site shall be provided from public transportation stops, accessible parking, and accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance they serve. The accessible route shall, to the maximum extent feasible, coincide with the route for the general public. (2) At least one accessible route shall connect accessible buildings, facilities, elements, and spaces that are on the same site. (3) At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements and with all accessible dwelling units within the building or facility. (4) An accessible route shall connect at least one accessible entrance of each accessible dwelling unit with those exterior and interior spaces and facilities that serve the accessible dwelling unit.</p>		
<p>4.3.3 Width. The minimum clear width of an accessible route shall be 36 in (915 mm) except at doors (see 4.13.5 and 4.13.6). If a person in a wheelchair must make a turn around an obstruction, the minimum clear width of the accessible route shall be as shown in Fig. 7(a) and (b).</p>		

<p>Figure 7 of the ADA Standards. Accessible Route. 7(a) 90 degree turn. A 90 degree turn can be made from a 36 in (915 mm) wide passage into another 36 in (915 mm) passage if the depth of each leg is a minimum of 48 in (1220 mm) on the inside dimensions of the turn. 7(b) Turns around an Obstruction. A U-turn around an obstruction less than 48 in (1220 mm) wide may be made if the width of the passages approaching and exiting the turn is a minimum of 42 in (1065 mm) and the base of the U-turn space is a minimum of 48 in (1220 mm) wide.</p>		
<p>4.3.4 Passing Space. If an accessible route has less than 60 in (1525 mm) clear width, then passing spaces at least 60 in by 60 in (1525 mm by 1525 mm) shall be located at reasonable intervals not to exceed 200 ft (61 m). A T-intersection of two corridors or walks is an acceptable passing place.</p>		
<p>4.3.5 Head Room. Accessible routes shall comply with 4.4.2.</p>		
<p>4.3.6 Surface Textures. The surface of an accessible route shall comply with 4.5.</p>		
<p>4.3.7 Slope. An accessible route with a running slope greater than 1:20 is a ramp and shall comply with 4.8. Nowhere shall the cross slope of an accessible route exceed 1:50.</p>		
<p>4.3.8 Changes in Levels. Changes in levels along an accessible route shall comply with 4.5.2. If an accessible route has changes in level greater than 1/2 in (13 mm), then a curb ramp, ramp, elevator, or platform lift (as permitted in 4.1.3 and 4.1.6) shall be provided that complies with 4.7, 4.8, 4.10, or 4.11, respectively. An accessible route does not include stairs, steps, or escalators. See definition of "egress, means of" in 3.5.</p>		
<p>4.3.9 Doors. Doors along an accessible route shall comply with 4.13.</p>		
<p>4.3.10* Egress. Accessible routes serving any accessible space or element shall also serve as a means of egress for emergencies or connect to an accessible area of rescue assistance.</p>		

4.3.11 Areas of Rescue Assistance.

4.3.11.1 Location and Construction. An area of rescue assistance shall be one of the following:

- (1) A portion of a stairway landing within a smokeproof enclosure (complying with local requirements).
- (2) A portion of an exterior exit balcony located immediately adjacent to an exit stairway when the balcony complies with local requirements for exterior exit balconies. Openings to the interior of the building located within 20 feet (6 m) of the area of rescue assistance shall be protected with fire assemblies having a three-fourths hour fire protection rating.
- (3) A portion of a one-hour fire-resistive corridor (complying with local requirements for fire-resistive construction and for openings) located immediately adjacent to an exit enclosure.
- (4) A vestibule located immediately adjacent to an exit enclosure and constructed to the same fire-resistive standards as required for corridors and openings.
- (5) A portion of a stairway landing within an exit enclosure which is vented to the exterior and is separated from the interior of the building with not less than one-hour fire-resistive doors.
- (6) When approved by the appropriate local authority, an area or a room which is separated from other portions of the building by a smoke barrier. Smoke barriers shall have a fire-resistive rating of not less than one hour and shall completely enclose the area or room. Doors in the smoke barrier shall be tight-fitting smoke- and draft-control assemblies having a fire-protection rating of not less than 20 minutes and shall be self-closing or automatic closing. The area or room shall be provided with an exit directly to an exit enclosure. Where the room or area exits into an exit enclosure which is required to be of more than one-hour fire-resistive construction, the room or area shall have the same fire-resistive construction, including the same opening protection, as required for the adjacent exit enclosure.
- (7) An elevator lobby when elevator shafts and adjacent lobbies are pressurized as required for smokeproof enclosures by local regulations and when complying with requirements herein for size, communication, and signage. Such pressurization system shall be activated by smoke detectors on each floor located in a manner approved by the appropriate local authority. Pressurization equipment and its duct work within the building shall be separated from other portions of the building by a minimum two-hour fire-resistive construction.

4.3.11.2 Size. Each area of rescue assistance shall provide at least two accessible areas each being not less than 30 inches by 48 inches (760 mm by 1220 mm). The area of rescue assistance shall not encroach on any required exit width. The total number of such 30-inch by 48-inch (760 mm by 1220 mm) areas per story shall be not less than one for every 200 persons of calculated occupant load served by the area of rescue assistance.

EXCEPTION: The appropriate local authority may reduce the minimum number of 30-inch by 48-inch (760 mm by 1220 mm) areas to one for each area of rescue assistance on floors where the occupant load is less than 200.

<p>4.3.11.3* Stairway Width. Each stairway adjacent to an area of rescue assistance shall have a minimum clear width of 48 inches between handrails.</p>		
<p>4.3.11.4* Two-way Communication. A method of two-way communication, with both visible and audible signals, shall be provided between each area of rescue assistance and the primary entry. The fire department or appropriate local authority may approve a location other than the primary entry.</p>		
<p>4.3.11.5 Identification. Each area of rescue assistance shall be identified by a sign which states "AREA OF RESCUE ASSISTANCE" and displays the international symbol of accessibility. The sign shall be illuminated when exit sign illumination is required. Signage shall also be installed at all inaccessible exits and where otherwise necessary to clearly indicate the direction to areas of rescue assistance. In each area of rescue assistance, instructions on the use of the area under emergency conditions shall be posted adjoining the two-way communication system.</p>		
<p>4.4 Protruding Objects. 4.4.1* General. Objects projecting from walls (for example, telephones) with their leading edges between 27 in and 80 in (685 mm and 2030 mm) above the finished floor shall protrude no more than 4 in (100 mm) into walks, halls, corridors, passageways, or aisles (see Fig. 8(a)). Objects mounted with their leading edges at or below 27 in (685 mm) above the finished floor may protrude any amount (see Fig. 8(a) and (b)). Free-standing objects mounted on posts or pylons may overhang 12 in (305 mm) maximum from 27 in to 80 in (685 mm to 2030 mm) above the ground or finished floor (see Fig. 8(c) and (d)). Protruding objects shall not reduce the clear width of an accessible route or maneuvering space (see Fig. 8(e)).</p>		
<p>Figure 8 of the ADA Standards. Protruding Objects. <i>8(d) Objects Mounted on Posts or Pylons. The diagram illustrates an area where an overhang can be greater than 12 in (305 mm) where the object cannot be approached on the side of the overhang.</i> <i>8(e) Example of Protection around Wall-Mounted Objects and Measurements of Clear Widths. The minimum clear width for continuous passage is 36 in (915 mm). 32 in (815 mm) is the minimum clear width for a maximum distance of 24 in (610 mm). The maximum distance an object can protrude beyond a wing wall is 4 in (100 mm).</i></p>		
<p>4.4.2 Head Room. Walks, halls, corridors, passageways, aisles, or other circulation spaces shall have 80 in (2030 mm) minimum clear head room (see Fig. 8(a)). If vertical clearance of an area adjoining an accessible route is reduced to less than 80 in (nominal dimension), a barrier to warn blind or visually-impaired persons shall be provided (see Fig. 8(c-1)).</p>		
<p>Figure 8 of the ADA Standards. Protruding Objects. <i>8(c-1) Overhead Hazards. As an example, the diagram illustrates a stair whose underside descends across a pathway. Where the headroom is less than 80 in (2030 mm), protection is offered by a railing which can be no higher than 27 in (685 mm) to ensure detectability.</i></p>		

<p>4.5 Ground and Floor Surfaces. 4.5.1* General. Ground and floor surfaces along accessible routes and in accessible rooms and spaces including floors, walks, ramps, stairs, and curb ramps, shall be stable, firm, slip-resistant, and shall comply with 4.5.</p>		
<p>4.5.2 Changes in Level. Changes in level up to 1/4 in (6 mm) may be vertical and without edge treatment (see Fig. 7(c)). Changes in level between 1/4 in and 1/2 in (6 mm and 13 mm) shall be beveled with a slope no greater than 1:2 (see Fig. 7(d)). Changes in level greater than 1/2 in (13 mm) shall be accomplished by means of a ramp that complies with 4.7 or 4.8.</p>		
<p>4.5.3* Carpet. If carpet or carpet tile is used on a ground or floor surface, then it shall be securely attached; have a firm cushion, pad, or backing, or no cushion or pad; and have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. The maximum pile thickness shall be 1/2 in (13 mm) (see Fig. 8(f)). Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with 4.5.2.</p>		
<p>4.5.4 Gratings. If gratings are located in walking surfaces, then they shall have spaces no greater than 1/2 in (13 mm) wide in one direction (see Fig. 8(g)). If gratings have elongated openings, then they shall be placed so that the long dimension is perpendicular to the dominant direction of travel (see Fig. 8(h)).</p>		
<p>4.6 Parking and Passenger Loading Zones. 4.6.1 Minimum Number. Parking spaces required to be accessible by 4.1 shall comply with 4.6.2 through 4.6.5. Passenger loading zones required to be accessible by 4.1 shall comply with 4.6.5 and 4.6.6.</p>		
<p>4.6.2 Location. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances.</p>		
<p>4.6.3* Parking Spaces. Accessible parking spaces shall be at least 96 in (2440 mm) wide. Parking access aisles shall be part of an accessible route to the building or facility entrance and shall comply with 4.3. Two accessible parking spaces may share a common access aisle (see Fig. 9). Parked vehicle overhangs shall not reduce the clear width of an accessible route. Parking spaces and access aisles shall be level with surface slopes not exceeding 1:50 (2%) in all directions.</p>		
<p>Figure 9 of the ADA Standards. Dimensions of Parking Spaces. <i>The access aisle shall be a minimum of 60 in (1525 mm) wide for cars or a minimum of 96 in (2440 mm) wide for vans. The accessible route connected to the access aisle shall be a minimum of 36 in (915 mm) wide.</i></p>		

<p>4.6.4* Signage. Accessible parking spaces shall be designated as reserved by a sign showing the symbol of accessibility (see 4.30.7). Spaces complying with 4.1.2(5)(b) shall have an additional sign "Van-Accessible" mounted below the symbol of accessibility. Such signs shall be located so they cannot be obscured by a vehicle parked in the space.</p>		
<p>4.6.5* Vertical Clearance. Provide minimum vertical clearance of 114 in (2895 mm) at accessible passenger loading zones and along at least one vehicle access route to such areas from site entrance(s) and exit(s). At parking spaces complying with 4.1.2(5)(b), provide minimum vertical clearance of 98 in (2490 mm) at the parking space and along at least one vehicle access route to such spaces from site entrance(s) and exit(s).</p>		
<p>4.6.6 Passenger Loading Zones. Passenger loading zones shall provide an access aisle at least 60 in (1525 mm) wide and 20 ft (240 in)(6100 mm) long adjacent and parallel to the vehicle pull-up space (see Fig. 10). If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp complying with 4.7 shall be provided. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1:50 (2%) in all directions.</p>		
<p>4.7 Curb Ramps. 4.7.1 Location. Curb ramps complying with 4.7 shall be provided wherever an accessible route crosses a curb.</p>		
<p>4.7.2 Slope. Slopes of curb ramps shall comply with 4.8.2. The slope shall be measured as shown in Fig. 11. Transitions from ramps to walks, gutters, or streets shall be flush and free of abrupt changes. Maximum slopes of adjoining gutters, road surface immediately adjacent to the curb ramp, or accessible route shall not exceed 1:20.</p>		
<p>Figure 11 of the ADA Standards. Measurement of Curb Ramp Slopes. <i>The ramp slope is a ratio expressed as the vertical rise divided by the horizontal run. The adjoining slope at walk or street shall not exceed 1:20.</i></p>		
<p>4.7.3 Width. The minimum width of a curb ramp shall be 36 in (915 mm), exclusive of flared sides.</p>		
<p>4.7.4 Surface. Surfaces of curb ramps shall comply with 4.5.</p>		
<p>4.7.5 Sides of Curb Ramps. If a curb ramp is located where pedestrians must walk across the ramp, or where it is not protected by handrails or guardrail, it shall have flared sides; the maximum slope of the flare shall be 1:10 (see Fig. 12(a)). Curb ramps with returned curbs may be used where pedestrians would not normally walk across the ramp (see Fig. 12(b)).</p>		
<p>Figure 12 of the ADA Standards. Sides of Curb Ramps. <i>12(a) Flared Sides. If the landing depth at the top of a curb ramp is less than 48 in (1220 mm), then the slope of the flared side shall not be steeper than 1:12.</i></p>		

<p>4.7.6 Built-up Curb Ramps. Built-up curb ramps shall be located so that they do not project into vehicular traffic lanes (see Fig. 13).</p>		
<p>4.7.7 Detectable Warnings. A curb ramp shall have a detectable warning complying with 4.29.2. The detectable warning shall extend the full width and depth of the curb ramp. [Suspended until July 26, 2001. 28 C.F.R. § 36.407.]</p>		
<p>4.7.8 Obstructions. Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.</p>		
<p>4.7.9 Location at Marked Crossings. Curb ramps at marked crossings shall be wholly contained within the markings, excluding any flared sides (see Fig. 15).</p>		
<p>4.7.10 Diagonal Curb Ramps. If diagonal (or corner type) curb ramps have returned curbs or other well-defined edges, such edges shall be parallel to the direction of pedestrian flow. The bottom of diagonal curb ramps shall have 48 in (1220 mm) minimum clear space as shown in Fig. 15(c) and (d). If diagonal curb ramps are provided at marked crossings, the 48 in (1220 mm) clear space shall be within the markings (see Fig. 15(c) and (d)). If diagonal curb ramps have flared sides, they shall also have at least a 24 in (610 mm) long segment of straight curb located on each side of the curb ramp and within the marked crossing (see Fig. 15(c)).</p>		
<p>4.7.11 Islands. Any raised islands in crossings shall be cut through level with the street or have curb ramps at both sides and a level area at least 48 in (1220 mm) long between the curb ramps in the part of the island intersected by the crossings (see Fig. 15(a) and (b)).</p>		
<p>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.</p>		
<p>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 (760 mm) (see Fig.16). Curb ramps and ramps to be constructed on existing sites or in existing buildings or facilities may have slopes and rises as allowed in 4.1.6(3)(a) if space limitations prohibit the use of a 1:12 slope or less.</p>		
<p>Figure 16 of the ADA Standards. Components of a Single Ramp Run and Sample Ramp Dimensions. <i>If the slope of a ramp is between 1:12 and 1:16, the maximum rise shall be 30 in (760 mm) and the maximum horizontal run shall be 30 ft (9 m). If the slope of the ramp is between 1:16 and 1:20, the maximum rise shall be 30 in (760 mm) and the maximum horizontal run shall be 40 ft (12 m).</i></p>		
<p>4.8.3 Clear Width. The minimum clear width of a ramp shall be 36 in (915 mm).</p>		

<p>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 features:</p> <ul style="list-style-type: none"> (1) The landing shall be at least as wide as the ramp run leading to it. (2) The landing length shall be a minimum of 60 in (1525 mm) clear. (3) If ramps change direction at landings, the minimum landing size shall be 60 in by 60 in (1525 mm by 1525 mm). (4) If a doorway is located at a landing, then the area in front of the doorway shall comply with 4.13.6. 		
<p>4.8.5* Handrails. If a ramp run has a rise greater than 6 in (150 mm) or a horizontal projection greater than 72 in (1830 mm), then it shall have handrails on both sides. Handrails are not required on curb ramps or adjacent to seating in assembly areas. Handrails shall comply with 4.26 and shall have the following features:</p> <ul style="list-style-type: none"> (1) Handrails shall be provided along both sides of ramp segments. The inside handrail on switchback or dogleg ramps shall always be continuous. (2) If handrails are not continuous, they shall extend at least 12 in (305 mm) beyond the top and bottom of the ramp segment and shall be parallel with the floor or ground surface (see Fig. 17). (3) The clear space between the handrail and the wall shall be 1-1/2 in (38 mm). (4) Gripping surfaces shall be continuous. (5) Top of handrail gripping surfaces shall be mounted between 34 in and 38 in (865 mm and 965 mm) above ramp surfaces. (6) Ends of handrails shall be either rounded or returned smoothly to floor, wall, or post. (7) Handrails shall not rotate within their fittings. 		
<p>4.8.6 Cross Slope and Surfaces. The cross slope of ramp surfaces shall be no greater than 1:50. Ramp surfaces shall comply with 4.5.</p>		
<p>4.8.7 Edge Protection. Ramps and landings with drop-offs shall have curbs, walls, railings, or projecting surfaces that prevent people from slipping off the ramp. Curbs shall be a minimum of 2 in (50 mm) high (see Fig. 17).</p>		
<p>4.8.8 Outdoor Conditions. Outdoor ramps and their approaches shall be designed so that water will not accumulate on walking surfaces.</p>		
<p>4.9 Stairs. 4.9.1* Minimum Number. Stairs required to be accessible by 4.1 shall comply with 4.9.</p>		
<p>4.9.2 Treads and Risers. On any given flight of stairs, all steps shall have uniform riser heights and uniform tread widths. Stair treads shall be no less than 11 in (280 mm) wide, measured from riser to riser (see Fig. 18(a)). Open risers are not permitted.</p>		

<p>4.9.3 Nosing. The undersides of nosing shall not be abrupt. The radius of curvature at the leading edge of the tread shall be no greater than 1/2 in (13 mm). Risers shall be sloped or the underside of the nosing shall have an angle not less than 60 degrees from the horizontal. Nosing shall project no more than 1-1/2 in (38 mm) (see Fig. 18).</p>		
<p>4.9.4 Handrails. Stairways shall have handrails at both sides of all stairs. Handrails shall comply with 4.26 and shall have the following features:</p> <p>(1) Handrails shall be continuous along both sides of stairs. The inside handrail on switchback or dogleg stairs shall always be continuous (see Fig. 19(a) and (b)).</p> <p>(2) If handrails are not continuous, they shall extend at least 12 in (305 mm) beyond the top riser and at least 12 in (305 mm) plus the width of one tread beyond the bottom riser. At the top, the extension shall be parallel with the floor or ground surface. At the bottom, the handrail shall continue to slope for a distance of the width of one tread from the bottom riser; the remainder of the extension shall be horizontal (see Fig. 19(c) and (d)). Handrail extensions shall comply with 4.4.</p> <p>(3) The clear space between handrails and wall shall be 1-1/2 in (38 mm).</p> <p>(4) Gripping surfaces shall be uninterrupted by newel posts, other construction elements, or obstructions.</p> <p>(5) Top of handrail gripping surface shall be mounted between 34 in and 38 in (865 mm and 965 mm) above stair nosing.</p> <p>(6) Ends of handrails shall be either rounded or returned smoothly to floor, wall or post.</p> <p>(7) Handrails shall not rotate within their fittings.</p>		
<p>4.9.5 Detectable Warnings at Stairs. (Reserved).</p>		
<p>4.9.6 Outdoor Conditions. Outdoor stairs and their approaches shall be designed so that water will not accumulate on walking surfaces.</p>		
<p>4.10 Elevators.</p> <p>4.10.1 General. Accessible elevators shall be on an accessible route and shall comply with 4.10 and with the ASME A17.1-1990, Safety Code for Elevators and Escalators. Freight elevators shall not be considered as meeting the requirements of this section unless the only elevators provided are used as combination passenger and freight elevators for the public and employees.</p>		
<p>4.10.2 Automatic Operation. Elevator operation shall be automatic. Each car shall be equipped with a self-leveling feature that will automatically bring the car to floor landings within a tolerance of 1/2 in (13 mm) under rated loading to zero loading conditions. This self-leveling feature shall be automatic and independent of the operating device and shall correct the overtravel or undertravel.</p>		

<p>4.10.3 Hall Call Buttons. Call buttons in elevator lobbies and halls shall be centered at 42 in (1065 mm) above the floor. Such call buttons shall have visual signals to indicate when each call is registered and when each call is answered. Call buttons shall be a minimum of 3/4 in (19 mm) in the smallest dimension. The button designating the up direction shall be on top (see Fig. 20)). Buttons shall be raised or flush. Objects mounted beneath hall call buttons shall not project into the elevator lobby more than 4 in (100 mm).</p>		
<p>4.10.4 Hall Lanterns. A visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call. Audible signals shall sound once for the up direction and twice for the down direction or shall have verbal annunciators that say "up" or "down." Visible signals shall have the following features:</p> <ul style="list-style-type: none"> (1) Hall lantern fixtures shall be mounted so that their centerline is at least 72 in (1830 mm) above the lobby floor (see Fig. 20). (2) Visual elements shall be at least 2-1/2 in (64 mm) in the smallest dimension. (3) Signals shall be visible from the vicinity of the hall call button (see Fig. 20). In-car lanterns located in cars, visible from the vicinity of hall call buttons, and conforming to the above requirements, shall be acceptable. 		
<p>4.10.5 Raised and Braille Characters on Hoistway Entrances. All elevator hoistway entrances shall have raised and Braille floor designations provided on both jambs. The centerline of the characters shall be 60 in (1525 mm) above finish floor. Such characters shall be 2 in (50 mm) high and shall comply with 4.30.4. Permanently applied plates are acceptable if they are permanently fixed to the jambs (see Fig. 20).</p>		
<p>4.10.6* Door Protective and Reopening Device. Elevator doors shall open and close automatically. They shall be provided with a reopening device that will stop and reopen a car door and hoistway door automatically if the door becomes obstructed by an object or person. The device shall be capable of completing these operations without requiring contact for an obstruction passing through the opening at heights of 5 in and 29 in (125 mm and 735 mm) above finish floor (see Fig. 20). Door reopening devices shall remain effective for at least 20 seconds. After such an interval, doors may close in accordance with the requirements of ASME A17.1-1990.</p>		
<p>4.10.7* Door and Signal Timing for Hall Calls. The minimum acceptable time from notification that a car is answering a call until the doors of that car start to close shall be calculated from the following equation:</p> $T = D/(1.5 \text{ ft/s}) \text{ or } T = D/(445 \text{ mm/s})$ <p>where T total time (in seconds) and D distance (in feet or millimeters) from a point in the lobby or corridor 60 in (1525 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door (see Fig. 21). For cars with in-car lanterns, T begins when the lantern is visible from the vicinity of hall call buttons and an audible signal is sounded. The minimum acceptable notification time shall be 5 seconds.</p>		

<p>4.10.8 Door Delay for Car Calls. The minimum time for elevator doors to remain fully open in response to a car call shall be 3 seconds.</p>		
<p>4.10.9 Floor Plan of Elevator Cars. The floor area of elevator cars shall provide space for wheelchair users to enter the car, maneuver within reach of controls, and exit from the car. Acceptable door opening and inside dimensions shall be as shown in Fig. 22. The clearance between the car platform sill and the edge of any hoistway landing shall be no greater than 1-1/4 in (32 mm).</p> <p>Figure 22 of the ADA Standards. Minimum Dimensions of Elevator Cars. <i>22(a) Illustrates an elevator with a door providing a 36 in (915 mm) minimum clear width, in the middle of the elevator. The width of the elevator car is a minimum of 80 in (2030 mm). The depth of the elevator car measured from the back wall to the elevator door is a minimum of 54 in (1370 mm). The depth of the elevator car measured from the back wall to the control panel is a minimum of 51 in (1291 mm).</i> <i>22(b) Illustrates an elevator with door providing a minimum 36 in (915 mm) clear width, located to one side of the elevator. The width of the elevator car is a minimum of 68 in (1730 mm). The depth of the elevator car measured from the back wall to the elevator door is a minimum of 54 in (1370 mm). The depth of the elevator car measured from the back wall to the control panel is a minimum of 51 in (1291 mm).</i></p>		
<p>4.10.10 Floor Surfaces. Floor surfaces shall comply with 4.5.</p>		
<p>4.10.11 Illumination Levels. The level of illumination at the car controls, platform, and car threshold and landing sill shall be at least 5 footcandles (53.8 lux).</p>		

4.10.12* Car Controls. Elevator control panels shall have the following features:

(1) Buttons. All control buttons shall be at least 3/4 in (19 mm) in their smallest dimension. They shall be raised or flush.

(2) Tactile, Braille, and Visual Control Indicators. All control buttons shall be designated by Braille and by raised standard alphabet characters for letters, arabic characters for numerals, or standard symbols as shown in Fig. 23(a), and as required in ASME A17.1-1990. Raised and Braille characters and symbols shall comply with 4.30. The call button for the main entry floor shall be designated by a raised star at the left of the floor designation (see Fig. 23(a)). All raised designations for control buttons shall be placed immediately to the left of the button to which they apply. Applied plates, permanently attached, are an acceptable means to provide raised control designations. Floor buttons shall be provided with visual indicators to show when each call is registered. The visual indicators shall be extinguished when each call is answered.

(3) Height. All floor buttons shall be no higher than 54 in (1370 mm) above the finish floor for side approach and 48 in (1220 mm) for front approach. Emergency controls, including the emergency alarm and emergency stop, shall be grouped at the bottom of the panel and shall have their centerlines no less than 35 in (890 mm) above the finish floor (see Fig. 23(a) and (b)).

(4) Location. Controls shall be located on a front wall if cars have center opening doors, and at the side wall or at the front wall next to the door if cars have side opening doors (see Fig. 23(c) and (d)).

Figure 23 of the ADA Standards. Car Controls.

23(a) Panel Detail. The diagram illustrates the symbols used for the following control buttons: main entry floor, door closed, door open, emergency alarm, and emergency stop. The diagram further states that the octagon symbol for the emergency stop shall be raised but the X (inside the octagon) is not.

4.10.13* Car Position Indicators. In elevator cars, a visual car position indicator shall be provided above the car control panel or over the door to show the position of the elevator in the hoistway. As the car passes or stops at a floor served by the elevators, the corresponding numerals shall illuminate, and an audible signal shall sound. Numerals shall be a minimum of 1/2 in (13 mm) high. The audible signal shall be no less than 20 decibels with a frequency no higher than 1500 Hz. An automatic verbal announcement of the floor number at which a car stops or which a car passes may be substituted for the audible signal.

4.10.14* Emergency Communications. If provided, emergency two-way communication systems between the elevator and a point outside the hoistway shall comply with ASME A17.1-1990. The highest operable part of a two-way communication system shall be a maximum of 48 in (1220 mm) from the floor of the car. It shall be identified by a raised symbol and lettering complying with 4.30 and located adjacent to the device. If the system uses a handset then the length of the cord from the panel to the handset shall be at least 29 in (735 mm). If the system is located in a closed compartment the compartment door hardware shall conform to 4.27, Controls and Operating Mechanisms. The emergency intercommunication system shall not require voice communication.

<p>4.11 Platform Lifts (Wheelchair Lifts). 4.11.1 Location. Platform lifts (wheelchair lifts) permitted by 4.1 shall comply with the requirements of 4.11.</p>		
<p>4.11.2* Other Requirements. If platform lifts (wheelchair lifts) are used, they shall comply with 4.2.4, 4.5, 4.27, and ASME A17.1 Safety Code for Elevators and Escalators, Section XX, 1990.</p>		
<p>4.11.3 Entrance. If platform lifts are used then they shall facilitate unassisted entry, operation, and exit from the lift in compliance with 4.11.2.</p>		
<p>4.12 Windows. 4.12.1* General. (Reserved). 4.12.2* Window Hardware. (Reserved).</p>		
<p>4.13 Doors. 4.13.1 General. Doors required to be accessible by 4.1 shall comply with the requirements of 4.13. 4.13.2 Revolving Doors and Turnstiles. Revolving doors or turnstiles shall not be the only means of passage at an accessible entrance or along an accessible route. An accessible gate or door shall be provided adjacent to the turnstile or revolving door and shall be so designed as to facilitate the same use pattern. 4.13.3 Gates. Gates, including ticket gates, shall meet all applicable specifications 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.</p>		
<p>4.13.5 Clear Width. Doorways shall have a minimum clear opening of 32 in (815 mm) with the door open 90 degrees, measured between the face of the door and the opposite stop (see Fig. 24(a), (b), (c), and (d)). Openings more than 24 in (610 mm) in depth shall comply with 4.2.1 and 4.3.3 (see Fig. 24(e)). EXCEPTION: Doors not requiring full user passage, such as shallow closets, may have the clear opening reduced to 20 in (510 mm) minimum.</p>		
<p>4.13.6 Maneuvering Clearances at Doors. Minimum maneuvering clearances at doors that are not automatic or power-assisted shall be as shown in Fig. 25. The floor or ground area within the required clearances shall be level and clear. EXCEPTION: Entry doors to acute care hospital bedrooms for in-patients shall be exempted from the requirement for space at the latch side of the door (see dimension "x" in Fig. 25) if the door is at least 44 in (1120 mm) wide.</p>		

<p>Figure 25 of the ADA Standards. Maneuvering Clearances at Doors. <i>NOTE: All doors in alcoves shall comply with the clearances for front approaches.</i></p> <p>25(a) Front Approaches -- Swinging Doors. Front approaches to pull side of swinging doors shall have maneuvering space that extends 18 in (455 mm) minimum beyond the latch side of the door and 60 in (1525 mm) minimum perpendicular to the doorway.</p> <p>Front approaches to push side of swinging doors, if equipped with both closer and latch, shall have maneuvering space that extends 12 in (305 mm) minimum beyond the latch side of the door and 48 in (1220 mm) minimum perpendicular to the doorway.</p> <p>Front approaches to push side of swinging doors, if not equipped with latch and closer, shall have maneuvering space that is the same width as door opening and extends 48 in (1220 mm) minimum perpendicular to the doorway.</p>		
<p>Figure 25 of the ADA Standards.</p> <p>25(b) Hinge Side Approaches. Hinge-side approaches to pull side of swinging doors shall have maneuvering space that extends 36 in (915 mm) minimum beyond the latch side of the door if 60 in (1525 mm) minimum is provided perpendicular to the doorway or maneuvering space that extends 42 in (1065 mm) minimum beyond the latch side of the door if 54 in (1370 mm) minimum is provided perpendicular to the doorway.</p> <p>Hinge-side approaches to push side of swinging doors, if not equipped with both latch and closer, shall have a maneuvering space of 54 in (1370 mm) minimum parallel to the doorway, extending from the latch side to beyond the hinge side, and 42 in (1065 mm) minimum perpendicular to the doorway.</p> <p>Hinge side approaches to push side of swinging doors, if equipped with both latch and closer, shall have maneuvering space of 54 in (1370 mm) minimum parallel to the doorway, extending from the latch side to beyond the hinge side, and 48 in (1220 mm) minimum perpendicular to the doorway.</p>		
<p>Figure 25 of the ADA Standards.</p> <p>25(c) Latch Side Approaches -- Swinging Doors. Latch-side approaches to pull side of swinging doors that have closers shall have maneuvering space that extends 24 in (610 mm) minimum beyond the latch side of the door and 54 in (1370 mm) minimum perpendicular to the doorway.</p> <p>Latch-side approaches to pull side of swinging doors, if not equipped with closers, shall have maneuvering space that extends 24 in (610 mm) minimum beyond the latch side of the door and 48 in (1220 mm) minimum perpendicular to the doorway.</p> <p>Latch-side approaches to push side of swinging doors that have closers shall have maneuvering space that extends 24 in (610 mm) minimum parallel to the doorway beyond the latch side of the door and 48 in (1220 mm) minimum perpendicular to the doorway.</p> <p>Latch-side approaches to push side of swinging doors, if not equipped with closers, shall have maneuvering space that extends 24 in (610 mm) minimum parallel to the doorway beyond the latch side of the door and 42 in (1065 mm) minimum perpendicular to the doorway.</p>		

<p>Figure 25 of the ADA Standards. 25(d) <i>Front Approach -- Sliding Doors and Folding Doors.</i> Front approaches to sliding doors and folding doors shall have maneuvering space that is the same width as the door opening extending 48 in (1220 mm) minimum perpendicular to the doorway. 25(e) <i>Slide-side approaches to sliding doors and folding doors shall have a maneuvering space of 54 in (1370 mm) minimum parallel to the doorway, extending from the latch side to beyond the hinge side, and 42 in (1065 mm) minimum perpendicular to the doorway.</i> 25(f) <i>Latch Side Approach - Sliding Doors and Folding Doors.</i> Latch-side approaches to sliding doors and folding doors shall have a maneuvering space that extends 24 in (610 mm) minimum beyond the latch side of the door and extends 42 in (1065 mm) minimum perpendicular to the doorway.</p>		
<p>4.13.7 Two Doors in Series. The minimum space between two hinged or pivoted doors in series shall be 48 in (1220 mm) 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 (see Fig. 26).</p>		
<p>4.13.8* Thresholds at Doorways. Thresholds at doorways shall not exceed 3/4 in (19 mm) in height for exterior sliding doors or 1/2 in (13 mm) 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).</p>		
<p>4.13.9* Door Hardware. Handles, pulls, 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.</p>		
<p>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 (75 mm) from the latch, measured to the leading edge of the door.</p>		
<p>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. (a) exterior hinged doors: (Reserved) (b) interior hinged doors: 5 lbf (22.2N) (c) 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.</p>		

<p>4.13.12* Automatic Doors and Power-Assisted Doors. If an automatic door is used, then it shall comply with ANSI/BHMA A156.10-1985. Slowly opening, low-powered, automatic doors shall comply with ANSI A156.19-1984. 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 A156.19-1984.</p>		
<p>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.</p>		
<p>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).</p>		
<p>4.15 Drinking Fountains and Water Coolers. 4.15.1 Minimum Number. Drinking fountains or water coolers required to be accessible by 4.1 shall comply with 4.15.</p>		
<p>4.15.2* Spout Height. Spouts shall be no higher than 36 in (915 mm), measured from the floor or ground surfaces to the spout outlet (see Fig. 27(a)).</p>		
<p>4.15.3 Spout Location. The spouts of drinking fountains and water coolers shall be at the front of the unit and shall direct the water flow in a trajectory that is parallel or nearly parallel to the front of the unit. The spout shall provide a flow of water at least 4 in (100 mm) high so as to allow the insertion of a cup or glass under the flow of water. On an accessible drinking fountain with a round or oval bowl, the spout must be positioned so the flow of water is within 3 in (75 mm) of the front edge of the fountain.</p>		
<p>4.15.4 Controls. Controls shall comply with 4.27.4. Unit controls shall be front mounted or side mounted near the front edge.</p>		

4.15.5 Clearances.

(1) Wall- and post- mounted cantilevered units shall have a clear knee space between the bottom of the apron and the floor or ground at least 27 in (685 mm) high, 30 in (760 mm) wide, and 17 in to 19 in (430 mm to 485 mm) deep (see Fig. 27(a) and (b)). Such units shall also have a minimum clear floor space 30 in by 48 in (760 mm by 1220 mm) to allow a person in a wheelchair to approach the unit facing forward.

(2) Free-standing or built-in units not having a clear space under them shall have a clear floor space at least 30 in by 48 in (760 mm by 1220 mm) that allows a person in a wheelchair to make a parallel approach to the unit (see Fig. 27(c) and (d)). This clear floor space shall comply with 4.2.4.

Figure 27 of the ADA Standards. Drinking Fountains and Water Coolers.

27(a) Spout Height and Knee Clearance. The 27 in (685 mm) high minimum clear knee space must be free of equipment or obstructions for a minimum of 8 in (205 mm) extending from the front edge of the fountain back toward the wall. In addition, a minimum 9 in (230 mm) high toe clearance space must be provided extending back toward the wall to a distance no more than 6 in (150 mm) from the back wall. The toe clearance space must be free of equipment or obstructions.

4.16 Water Closets.

4.16.1 General. Accessible water closets shall comply with 4.16.

4.16.2 Clear Floor Space. Clear floor space for water closets not in stalls shall comply with Fig. 28. Clear floor space may be arranged to allow either a left-handed or right-handed approach.

Figure 28 of the ADA Standards. Clear Floor Space at Water Closets.

For a side or front approach, the water closet must be located along the back wall and the centerline of the water closet must be 18 in (455 mm) from the side wall with the side grab bar.

For a front approach/transfer, there must be a clear floor space at the water closet that is a minimum 48 in (1220 mm) in width (parallel to the back wall) and a minimum of 66 in (1675 mm) in length. If there is no stall, an accessible lavatory may overlap the clear floor space at the back wall as long as a minimum 18 in (455 mm) clearance is maintained between the centerline of the water closet and the nearest edge of the lavatory.

For a side approach/transfer, there must be a clear floor space at the water closet that is a minimum of 48 in (1220 mm) in width (parallel to the back wall) and a minimum of 56 in (1420 mm) in length. If there is no stall, an accessible lavatory may overlap the clear floor space at the back wall as long as a minimum 18 in (455 mm) clearance is maintained between the centerline of the water closet and the nearest edge of the lavatory.

For a forward and side approach or for a lateral transfer, there must be a clear floor space at the water closet that is a minimum of 60 in (1525 mm) in width (parallel to the back wall) and a minimum of 56 in (1420 mm) in length. There must be a clear floor space of 42 in (1066 mm) minimum from the centerline of the water closet to the nearest obstruction/wall. A lavatory may not overlap this clear space.

<p>4.16.3* Height. The height of water closets shall be 17 in to 19 in (430 mm to 485 mm), measured to the top of the toilet seat. Seats shall not be sprung to return to a lifted position.</p>		
<p>4.16.4* Grab Bars. Grab bars for water closets not located in stalls shall comply with 4.26 and Fig. 29. The grab bar behind the water closet shall be 36 in (915 mm) minimum.</p> <p>Figure 29 of the ADA Standards. Grab Bars at Water Closets.</p> <p><i>29(a) Back Wall. A 36 in (915 mm) minimum length grab bar, mounted 33-36 in (840-915 mm) above the finish floor, is required behind the water closet. The grab bar must extend at least 12 in (305) from the centerline of the water closet toward the side wall and at least 24 in (610 mm) from the centerline of the water closet toward the open side.</i></p> <p><i>29(b) Side Wall. A 42 in (1065 mm) minimum length grab bar is required on the side wall, spaced a maximum of 12 in (305 mm) from the back wall and extending a minimum of 54 in (1370 mm) from the back wall at a height of 33-36 in (840-915 mm).</i></p>		
<p>4.16.5* Flush Controls. Flush controls shall be hand operated or automatic and shall comply with 4.27.4. Controls for flush valves shall be mounted on the wide side of toilet areas no more than 44 in (1120 mm) above the floor.</p>		
<p>4.16.6 Dispensers. Toilet paper dispensers shall be installed within reach, as shown in Fig. 29(b). Dispensers that control delivery, or that do not permit continuous paper flow, shall not be used.</p> <p><i>Fig. 29(b) . . .The toilet paper dispenser shall be mounted below the grab bar, at a minimum height of 19 in (485 mm).</i></p>		
<p>4.17 Toilet Stalls.</p> <p>4.17.1 Location. Accessible toilet stalls shall be on an accessible route and shall meet the requirements of 4.17.</p> <p>4.17.2 Water Closets. Water closets in accessible stalls shall comply with 4.16.</p>		
<p>4.17.3* Size and Arrangement. The size and arrangement of the standard toilet stall shall comply with Fig. 30(a), Standard Stall. Standard toilet stalls with a minimum depth of 56 in (1420 mm) (see Fig. 30(a)) shall have wall-mounted water closets. If the depth of a standard toilet stall is increased at least 3 in (75 mm), then a floor-mounted water closet may be used. Arrangements shown for standard toilet stalls may be reversed to allow either a left- or right-hand approach. Additional stalls shall be provided in conformance with 4.22.4.</p> <p>EXCEPTION: In instances of alteration work where provision of a standard stall (Fig. 30(a)) is technically infeasible or where plumbing code requirements prevent combining existing stalls to provide space, either alternate stall (Fig. 30(b)) may be provided in lieu of the standard stall.</p>		

Figure 30 of the ADA Standards. Toilet Stalls.

30(a) Standard Stall. The minimum width of the stall is 60 in (1525 mm). The centerline of the water closet is 18 in (455 mm) from the side wall. The location of the door is in front of the clear space and diagonal to the water closet, with a maximum stile width of 4 in (100 mm). An alternate door location is permitted to be on the adjacent side of the stall also diagonal to the water closet with a maximum stile width of 4 in (100 mm). The minimum width of the standard stall shall be 60 in (1525 mm). If a wall mounted water closet is used, the depth of the stall is required to be a minimum of 56 in (1420 mm). If a floor mounted water closet is used, the depth of the stall is required to be a minimum of 59 in (1500 mm). A grab bar at least 36 in (965 mm) long shall be located behind the water closet, with one end no further than 6 in (150 mm) from the inside corner of the stall. Another grab bar shall extend at least 52 in (1320 mm) along the side wall, with one end no more than 12 in (305 mm) from the back wall.

30(a-1) Standard Stall (end of row). If a standard stall is provided at the end of a row of stalls, and if the length of the stall is extended at least a minimum of 36 in (915 mm) beyond the required minimum length, the door (if located on the side of the stall) may swing into the stall. Two grab bars are located in the rear and the side of the water closet.

Figure 30 of the ADA Standards.

30(b) Alternate Stalls. Two alternate stalls are permitted; one alternate stall is required to be 36 in (915 mm) wide. The other alternate stall is required to be a minimum of 48 in (1220 mm) wide. In either alternate stall, if a wall mounted water closet is used, the depth of the stall is required to be a minimum of 66 in (1675 mm). If a floor mounted water closet is used, the depth of the stall is required to be a minimum of 69 in (1745 mm). The 36 in (915 mm) wide stall shall have parallel grab bars on the side walls. The 48 in (1220 mm) minimum stall shall have a grab bar behind the water closet and one on the side wall next to the water closet. Grab bars are mounted 33-36 in (840-915 mm) above the finish floor. In both alternate stalls, the centerline of the water closet is 18 in (455 mm) from a side wall. In both alternate stalls, the grab bars along the sides of the water closets shall extend at least 54 in (1370 mm) from the back wall and shall have one end no further than 12 in (305 mm) from the back wall.

30(c) Rear Wall of Standard Stall. Grab bars located behind the water closet shall be at least 36 in (915 mm) in length. All grab bars shall be located 33-36 in (840-915 mm) above the finish floor.

30(d) Side Walls. Side grab bars shall be located 33-36 in (840-915 mm) above the finish floor and shall be no more than 12 in (305 mm) from the rear wall. Grab bars shall be at least 40 in (1015 mm) long or at least 42 in (1065 mm) long for alternate stalls. Water closet seat heights shall be between 17 in (430 mm) and 19 in (485 mm). Toilet paper dispensers shall be below the grab bar and at least 19 in (485 mm) above the floor and no further than 36 in (915 mm) from the rear wall.

4.17.4 Toe Clearances. In standard stalls, the front partition and at least one side partition shall provide a toe clearance of at least 9 in (230 mm) above the floor. If the depth of the stall is greater than 60 in (1525 mm), then the toe clearance is not required.

<p>4.17.5* Doors. Toilet stall doors, including door hardware, shall comply with 4.13. If toilet stall approach is from the latch side of the stall door, clearance between the door side of the stall and any obstruction may be reduced to a minimum of 42 in (1065 mm) (Fig. 30).</p>		
<p>4.17.6 Grab Bars. Grab bars complying with the length and positioning shown in Fig. 30(a), (b), (c), and (d) shall be provided. Grab bars may be mounted with any desired method as long as they have a gripping surface at the locations shown and do not obstruct the required clear floor area. Grab bars shall comply with 4.26.</p>		
<p>4.18 Urinals. 4.18.1 General. Accessible urinals shall comply with 4.18.</p>		
<p>4.18.2 Height. Urinals shall be stall-type or wall-hung with an elongated rim at a maximum of 17 in (430 mm) above the finish floor.</p>		
<p>4.18.3 Clear Floor Space. A clear floor space 30 in by 48 in (760 mm by 1220 mm) shall be provided in front of urinals to allow forward approach. This clear space shall adjoin or overlap an accessible route and shall comply with 4.2.4. Urinal shields that do not extend beyond the front edge of the urinal rim may be provided with 29 in (735 mm) clearance between them.</p>		
<p>4.18.4 Flush Controls. Flush controls shall be hand operated or automatic, and shall comply with 4.27.4, and shall be mounted no more than 44 in (1120 mm) above the finish floor.</p>		
<p>4.19 Lavatories and Mirrors. 4.19.1 General. The requirements of 4.19 shall apply to lavatory fixtures, vanities, and built-in lavatories.</p>		
<p>4.19.2 Height and Clearances. Lavatories shall be mounted with the rim or counter surface no higher than 34 in (865 mm) above the finish floor. Provide a clearance of at least 29 in (735 mm) above the finish floor to the bottom of the apron. Knee and toe clearance shall comply with Fig. 31.</p>		
<p>Figure 31 of the ADA Standards. Lavatory Clearances. <i>The minimum knee clearance must be free of equipment or obstructions for a minimum of 8 in (205 mm) extending from the front edge of the lavatory back toward the wall. This knee clearance must be 29 in (735 mm) high at the front of the lavatory and no less than 27 in (685 mm) high at a point 8 in (205 mm) back. In addition, a minimum 9 in (230 mm) high toe clearance must be provided extending back toward the wall to a distance no more than 6 in (150 mm) from the back wall. The toe clearance space must be free of equipments.</i></p>		

<p>4.19.3 Clear Floor Space. A clear floor space 30 in by 48 in (760 mm by 1220 mm) complying with 4.2.4 shall be provided in front of a lavatory to allow forward approach. Such clear floor space shall adjoin or overlap an accessible route and shall extend a maximum of 19 in (485 mm) underneath the lavatory (see Fig. 32).</p>		
<p>Figure 32 of the ADA Standards. Clear Floor Space at Lavatories. The minimum depth of the lavatory is 17 in (430 mm).</p>		
<p>4.19.4 Exposed Pipes and Surfaces. Hot water and drain pipes under lavatories shall be insulated or otherwise configured to protect against contact. There shall be no sharp or abrasive surfaces under lavatories.</p>		
<p>4.19.5 Faucets. Faucets shall comply with 4.27.4. Lever-operated, push-type, and electronically controlled mechanisms are examples of acceptable designs. If self-closing valves are used the faucet shall remain open for at least 10 seconds.</p>		
<p>4.19.6* Mirrors. Mirrors shall be mounted with the bottom edge of the reflecting surface no higher than 40 in (1015 mm) above the finish floor (see Fig. 31).</p>		
<p>4.20 Bathtubs. 4.20.1 General. Accessible bathtubs shall comply with 4.20.</p>		
<p>4.20.2 Floor Space. Clear floor space in front of bathtubs shall be as shown in Fig. 33.</p> <p>Figure 33 of the ADA Standards. Clear Floor Space at Bathtubs. 33(a) <i>With Seat in Tub.</i> If the approach is parallel to the bathtub, a 30 in (760 mm) minimum width by 60 in (1525 mm) minimum length clear space is required alongside the bathtub. If the approach is perpendicular to the bathtub, a 48 in (1220 mm) minimum width by 60 in (1525 mm) minimum length clear space is required. An accessible lavatory is permitted within the clear space at the foot end of the tub. 33(b) <i>With Seat at Head of Tub.</i> If the approach is parallel to the bathtub, a 30 in (760 mm) minimum width by 75 in (1905 mm) minimum length clear space is required alongside the bathtub. The seat width shall be 15 in (380 mm), measured from the back wall to the front of the seat, and shall extend the full width of the tub. An accessible lavatory is permitted within the clear space at the foot end of the tub.</p>		
<p>4.20.3 Seat. An in-tub seat or a seat at the head end of the tub shall be provided as shown in Fig. 33 and 34. The structural strength of seats and their attachments shall comply with 4.26.3. Seats shall be mounted securely and shall not slip during use.</p>		

<p>4.20.4 Grab Bars. Grab bars complying with 4.26 shall be provided as shown in Fig. 33 and 34.</p> <p>Figure 34 of the ADA Standards. Grab Bars at Bathtubs. <i>34(a) With Seat in Tub.</i> At the foot of the tub, the grab bar shall be 24 in (610 mm) minimum in length measured from the outer edge of the tub. On the back wall, two grab bars are required. The grab bars mounted on the back (long) wall shall be a minimum 24 in (610 mm) in length located 12 in (305 mm) maximum from the foot of the tub and 24 in (610 mm) maximum from the head of the tub. One grab bar on the back wall shall be located 9 in (230 mm) above the rim of the tub. The other shall be 33 to 36 in (840 mm to 915 mm) above the bathroom floor. At the head of the tub, the grab bar shall be a minimum of 12 in (305 mm) in length measured from the outer edge of the tub. <i>34(b) With Seat at Head of Tub.</i> At the foot of the tub, the grab bar shall be a minimum of 24 in (610 mm) in length measured from the outer edge of the tub. On the back wall, two grab bars are required. The grab bars mounted on the back wall shall be a minimum of 48 in (1220 mm) in length located a maximum of 12 in (305 mm) from the foot of the tub and a maximum of 15 in (380 mm) from the head of the tub. Heights of grab bars are as described above. No horizontal grab bar should be placed at the head of the tub.</p>		
<p>4.20.5 Controls. Faucets and other controls complying with 4.27.4 shall be located as shown in Fig. 34.</p> <p>Figure 34 of the ADA Standards. Grab Bars at Bathtubs. <i>Controls are required to be located in an area between the open edge and the midpoint of the tub ("offset") and to be located at the foot of the tub.</i></p>		
<p>4.20.6 Shower Unit. A shower spray unit with a hose at least 60 in (1525 mm) long that can be used both as a fixed shower head and as a hand-held shower shall be provided.</p>		
<p>4.20.7 Bathtub Enclosures. If provided, enclosures for bathtubs shall not obstruct controls or transfer from wheelchairs onto bathtub seats or into tubs. Enclosures on bathtubs shall not have tracks mounted on their rims.</p>		
<p>4.21 Shower Stalls. 4.21.1* General. Accessible shower stalls shall comply with 4.21.</p>		

4.21.2 Size and Clearances. Except as specified in 9.1.2, shower stall size and clear floor space shall comply with Fig. 35(a) or (b). The shower stall in Fig. 35(a) shall be 36 in by 36 in (915 mm by 915 mm). Shower stalls required by 9.1.2 shall comply with Fig. 57(a) or (b). The shower stall in Fig. 35(b) will fit into the space required for a bathtub.

Figure 35 of the ADA Standards. Shower Size and Clearances.

35(a) 36 in by 36 in (915 mm by 915 mm) Stall (Transfer Shower). The clear floor space shall be a minimum of 48 in (1220 mm) in length by a minimum of 36 in (915 mm) in width and allow for a parallel approach. The clear floor space shall extend 12 in (305 mm) beyond the shower wall on which the seat is mounted.

35(b) 30 in by 60 in (760 mm by 1525 mm) Stall (Roll-in Shower). The clear floor space alongside the shower shall be a minimum of 60 in (1525 mm) in length by a minimum of 36 in (915 mm) in width. If the controls are located on the back (long) wall, they must be a maximum of 27 in (685 mm) from a side wall. An accessible lavatory may be located in the clear floor space at the end of the shower.

4.21.3 Seat. A seat shall be provided in shower stalls 36 in by 36 in (915 mm by 915 mm) and shall be as shown in Fig. 36. The seat shall be mounted 17 in to 19 in (430 mm to 485 mm) from the bathroom floor and shall extend the full depth of the stall. In a 36 in by 36 in (915 mm by 915 mm) shower stall, the seat shall be on the wall opposite the controls. Where a fixed seat is provided in a 30 in by 60 in minimum (760 mm by 1525 mm) shower stall, it shall be a folding type and shall be mounted on the wall adjacent to the controls as shown in Fig. 57. The structural strength of seats and their attachments shall comply with 4.26.3.

Figure 36 of the ADA Standards. Shower Seat Design.

An L-shaped shower seat shall be provided, extending the full depth of the stall. The seat shall be located 1-1/2 in (38 mm) maximum from the wall. The front of the seat (nearest to the opening) shall extend a maximum 16 in (330 mm) from the wall. The back of the seat (against the back wall) shall extend a maximum of 23 in (582 mm) from the side wall and shall be a maximum of 15 in (305 mm) deep.

4.21.4 Grab Bars. Grab bars complying with 4.26 shall be provided as shown in Fig. 37.

Figure 37 of the ADA Standards. Grab Bars at Shower Stalls.

37(a) 36 in by 36 in (915 mm by 915 mm) Transfer Stall. An L-shaped grab bar shall be provided, located along the full depth of the control wall (opposite the seat) and halfway (18 in (455 mm)) along the back wall. The grab bar shall be mounted 33-36 in (840-915 mm) above the shower floor.

37(b) 30 in by 60 in (760 mm by 1525 mm) Roll-in Stall. A U-shaped grab bar that wraps around the stall shall be provided. The grab bar shall be 33-36 in (840-915 mm) high.

<p>4.21.5 Controls. Faucets and other controls complying with 4.27.4 shall be located as shown in Fig. 37. In shower stalls 36 in by 36 in (915 mm by 915 mm), all controls, faucets, and the shower unit shall be mounted on the side wall opposite the seat.</p>		
<p>Figure 37 of the ADA Standards. Grab Bars at Shower Stalls. <i>37(a) 36 in by 36 in (915 mm by 915 mm) Transfer Stall. The controls shall be placed in an area between 38-48 in (965-1220 mm) above the floor. The controls and spray unit shall be within 18 in (455 mm) of the front of the shower.</i> <i>37(b) 30 in by 60 in (760 mm by 1525 mm) Roll-in Stall. The controls shall be placed in an area between 38-48 in (965-1220 mm) above the floor. Controls shall be located on the back (long) wall 27 in (685 mm) from the side wall. The shower head and control area may be located on the back wall or on either side wall.</i></p>		
<p>4.21.6 Shower Unit. A shower spray unit with a hose at least 60 in (1525 mm) long that can be used both as a fixed shower head and as a hand-held shower shall be provided. EXCEPTION: In unmonitored facilities where vandalism is a consideration, a fixed shower head mounted at 48 in (1220 mm) above the shower floor may be used in lieu of a hand-held shower head.</p>		
<p>4.21.7 Curbs. If provided, curbs in shower stalls 36 in by 36 in (915 mm by 915 mm) shall be no higher than 1/2 in (13 mm). Shower stalls that are 30 in by 60 in (760 mm by 1525 mm) minimum shall not have curbs.</p>		
<p>4.21.8 Shower Enclosures. If provided, enclosures for shower stalls shall not obstruct controls or obstruct transfer from wheelchairs onto shower seats.</p>		
<p>4.22 Toilet Rooms. 4.22.1 Minimum Number. Toilet facilities required to be accessible by 4.1 shall comply with 4.22. Accessible toilet rooms shall be on an accessible route.</p>		
<p>4.22.2 Doors. All doors to accessible toilet rooms shall comply with 4.13. Doors shall not swing into the clear floor space required for any fixture.</p>		
<p>4.22.3* Clear Floor Space. The accessible fixtures and controls required in 4.22.4, 4.22.5, 4.22.6, and 4.22.7 shall be on an accessible route. An unobstructed turning space complying with 4.2.3 shall be provided within an accessible toilet room. The clear floor space at fixtures and controls, the accessible route, and the turning space may overlap.</p>		
<p>4.22.4 Water Closets. If toilet stalls are provided, then at least one shall be a standard toilet stall complying with 4.17; where 6 or more stalls are provided, in addition to the stall complying with 4.17.3, at least one stall 36 in (915 mm) wide with an outward swinging, self-closing door and parallel grab bars complying with Fig. 30(d) and 4.26 shall be provided. Water closets in such stalls shall comply with 4.16. If water closets are not in stalls, then at least one shall comply with 4.16.</p>		
<p>4.22.5 Urinals. If urinals are provided, then at least one shall comply with 4.18.</p>		

<p>4.22.6 Lavatories and Mirrors. If lavatories and mirrors are provided, then at least one of each shall comply with 4.19.</p>		
<p>4.22.7 Controls and Dispensers. If controls, dispensers, receptacles, or other equipment are provided, then at least one of each shall be on an accessible route and shall comply with 4.27.</p>		
<p>4.23 Bathrooms, Bathing Facilities, and Shower Rooms. 4.23.1 Minimum Number. Bathrooms, bathing facilities, or shower rooms required to be accessible by 4.1 shall comply with 4.23 and shall be on an accessible route.</p>		
<p>4.23.2 Doors. Doors to accessible bathrooms shall comply with 4.13. Doors shall not swing into the floor space required for any fixture.</p>		
<p>4.23.3* Clear Floor Space. The accessible fixtures and controls required in 4.23.4, 4.23.5, 4.23.6, 4.23.7, 4.23.8, and 4.23.9 shall be on an accessible route. An unobstructed turning space complying with 4.2.3 shall be provided within an accessible bathroom. The clear floor spaces at fixtures and controls, the accessible route, and the turning space may overlap.</p>		
<p>4.23.4 Water Closets. If toilet stalls are provided, then at least one shall be a standard toilet stall complying with 4.17; where 6 or more stalls are provided, in addition to the stall complying with 4.17.3, at least one stall 36 in (915 mm) wide with an outward swinging, self-closing door and parallel grab bars complying with Fig. 30(d) and 4.26 shall be provided. Water closets in such stalls shall comply with 4.16. If water closets are not in stalls, then at least one shall comply with 4.16.</p>		
<p>4.23.5 Urinals. If urinals are provided, then at least one shall comply with 4.18.</p>		
<p>4.23.6 Lavatories and Mirrors. If lavatories and mirrors are provided, then at least one of each shall comply with 4.19.</p>		
<p>4.23.7 Controls and Dispensers. If controls, dispensers, receptacles, or other equipment are provided, then at least one of each shall be on an accessible route and shall comply with 4.27.</p>		
<p>4.23.8 Bathing and Shower Facilities. If tubs or showers are provided, then at least one accessible tub that complies with 4.20 or at least one accessible shower that complies with 4.21 shall be provided.</p>		
<p>4.23.9* Medicine Cabinets. If medicine cabinets are provided, at least one shall be located with a usable shelf no higher than 44 in (1120 mm) above the floor space. The floor space shall comply with 4.2.4.</p>		
<p>4.24 Sinks. 4.24.1 General. Sinks required to be accessible by 4.1 shall comply with 4.24.</p>		

<p>4.24.2 Height. Sinks shall be mounted with the counter or rim no higher than 34 in (865 mm) above the finish floor.</p>		
<p>4.24.3 Knee Clearance. Knee clearance that is at least 27 in (685 mm) high, 30 in (760 mm) wide, and 19 in (485 mm) deep shall be provided underneath sinks.</p>		
<p>4.24.4 Depth. Each sink shall be a maximum of 6-1/2 in (165 mm) deep.</p>		
<p>4.24.5 Clear Floor Space. A clear floor space at least 30 in by 48 in (760 mm by 1220 mm) complying with 4.2.4 shall be provided in front of a sink to allow forward approach. The clear floor space shall be on an accessible route and shall extend a maximum of 19 in (485 mm) underneath the sink (see Fig. 32).</p>		
<p>4.24.6 Exposed Pipes and Surfaces. Hot water and drain pipes exposed under sinks shall be insulated or otherwise configured so as to protect against contact. There shall be no sharp or abrasive surfaces under sinks.</p>		
<p>4.24.7 Faucets. Faucets shall comply with 4.27.4. Lever-operated, push-type, touch-type, or electronically controlled mechanisms are acceptable designs.</p>		
<p>4.25 Storage. 4.25.1 General. Fixed storage facilities such as cabinets, shelves, closets, and drawers required to be accessible by 4.1 shall comply with 4.25.</p>		
<p>4.25.2 Clear Floor Space. A clear floor space at least 30 in by 48 in (760 mm by 1220 mm) complying with 4.2.4 that allows either a forward or parallel approach by a person using a wheelchair shall be provided at accessible storage facilities.</p>		
<p>4.25.3 Height. Accessible storage spaces shall be within at least one of the reach ranges specified in 4.2.5 and 4.2.6 (see Fig. 5 and Fig. 6). Clothes rods or shelves shall be a maximum of 54 in (1370 mm) above the finish floor for a side approach. Where the distance from the wheelchair to the clothes rod or shelf exceeds 10 in (255 mm) (as in closets without accessible doors) the height and depth to the rod or shelf shall comply with Fig. 38(a) and Fig. 38(b).</p> <p>Figure 38 of the ADA Standards. Storage Shelves and Closets. <i>38(a) Shelves. If the clear floor space allows a parallel approach by a person in a wheelchair and the distance between the wheelchair and the shelf exceeds 10 in (255 mm), the maximum high side reach shall be 48 in (1220 mm) above the floor and the low side reach shall be a minimum of 9 in (230 mm) above the floor. The shelves can be adjustable. The maximum distance from the user to the middle of the shelf shall be 21 in (535 mm).</i> <i>38(b) Closets. If the clear floor space allows a parallel approach by a person in a wheelchair and the distance between the wheelchair and the clothes rod exceeds 10 in (255 mm), the maximum high side reach shall be 48 in (1220 mm). The maximum distance from the user to the clothes rod shall be 21 in (535 mm).</i></p>		

<p>4.25.4 Hardware. Hardware for accessible storage facilities shall comply with 4.27.4. Touch latches and U-shaped pulls are acceptable.</p>		
<p>4.26 Handrails, Grab Bars, and Tub and Shower Seats. 4.26.1* General. All handrails, grab bars, and tub and shower seats required to be accessible by 4.1, 4.8, 4.9, 4.16, 4.17, 4.20 or 4.21 shall comply with 4.26.</p>		
<p>1 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) (see Fig. 39(a), (b), (c), and (e)). 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 (see Fig. 39(d)).</p>		
<p>4.26.3 Structural Strength. The structural strength of grab bars, tub and shower seats, fasteners, and mounting devices shall meet the following specification: (1) Bending stress in a grab bar or seat induced by the maximum bending moment from the application of 250 lbf (1112N) shall be less than the allowable stress for the material of the grab bar or seat. (2) Shear stress induced in a grab bar or seat by the application of 250 lbf (1112N) shall be less than the allowable shear stress for the material of the grab bar or seat. If the connection between the grab bar or seat and its mounting bracket or other support is considered to be fully restrained, then direct and torsional shear stresses shall be totaled for the combined shear stress, which shall not exceed the allowable shear stress. (3) Shear force induced in a fastener or mounting device from the application of 250 lbf (1112N) shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load. (4) Tensile force induced in a fastener by a direct tension force of 250 lbf (1112N) plus the maximum moment from the application of 250 lbf (1112N) shall be less than the allowable withdrawal load between the fastener and the supporting structure. (5) Grab bars shall not rotate within their fittings.</p>		
<p>4.26.4 Eliminating Hazards. A handrail or grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8 in (3.2 mm).</p>		
<p>4.27 Controls and Operating Mechanisms. 4.27.1 General. Controls and operating mechanisms required to be accessible by 4.1 shall comply with 4.27.</p>		
<p>4.27.2 Clear Floor Space. Clear floor space complying with 4.2.4 that allows a forward or a parallel approach by a person using a wheelchair shall be provided at controls, dispensers, receptacles, and other operable equipment.</p>		

<p>4.27.3* Height. The highest operable part of controls, dispensers, receptacles, and other operable equipment shall be placed within at least one of the reach ranges specified in 4.2.5 and 4.2.6. Electrical and communications system receptacles on walls shall be mounted no less than 15 in (380 mm) above the floor.</p> <p>EXCEPTION: These requirements do not apply where the use of special equipment dictates otherwise or where electrical and communications systems receptacles are not normally intended for use by building occupants.</p>		
<p>4.27.4 Operation. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinning, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2 N).</p>		
<p>4.28 Alarms.</p> <p>4.28.1 General. Alarm systems required to be accessible by 4.1 shall comply with 4.28. At a minimum, visual signal appliances shall be provided in buildings and facilities in each of the following areas: restrooms and any other general usage areas (e.g., meeting rooms), hallways, lobbies, and any other area for common use.</p>		
<p>4.28.2* Audible Alarms. If provided, audible emergency alarms shall produce a sound that exceeds the prevailing equivalent sound level in the room or space by at least 15 dbA or exceeds any maximum sound level with a duration of 60 seconds by 5 dbA, whichever is louder. Sound levels for alarm signals shall not exceed 120 dbA.</p>		
<p>4.28.3* Visual Alarms. Visual alarm signal appliances shall be integrated into the building or facility alarm system. If single station audible alarms are provided then single station visual alarm signals shall be provided. Visual alarm signals shall have the following minimum photometric and location features:</p> <ol style="list-style-type: none"> (1) The lamp shall be a xenon strobe type or equivalent. (2) The color shall be clear or nominal white (i.e., unfiltered or clear filtered white light). (3) The maximum pulse duration shall be two-tenths of one second (0.2 sec) with a maximum duty cycle of 40 percent. The pulse duration is defined as the time interval between initial and final points of 10 percent of maximum signal. (4) The intensity shall be a minimum of 75 candela. (5) The flash rate shall be a minimum of 1 Hz and a maximum of 3 Hz. (6) The appliance shall be placed 80 in (2030 mm) above the highest floor level within the space or 6 in (152 mm) below the ceiling, whichever is lower. (7) In general, no place in any room or space required to have a visual signal appliance shall be more than 50 ft (15 m) from the signal (in the horizontal plane). In large rooms and spaces exceeding 100 ft (30 m) across, without obstructions 6 ft (2 m) above the finish floor, such as auditoriums, devices may be placed around the perimeter, spaced a maximum 100 ft (30 m) apart, in lieu of suspending appliances from the ceiling. (8) No place in common corridors or hallways in which visual alarm signalling appliances are required shall be more than 50 ft (15 m) from the signal. 		

<p>4.28.4* Auxiliary Alarms. Units and sleeping accommodations shall have a visual alarm connected to the building emergency alarm system or shall have a standard 110-volt electrical receptacle into which such an alarm can be connected and a means by which a signal from the building emergency alarm system can trigger such an auxiliary alarm. When visual alarms are in place the signal shall be visible in all areas of the unit or room. Instructions for use of the auxiliary alarm or receptacle shall be provided.</p>		
<p>4.29 Detectable Warnings. 4.29.1 General. Detectable warnings required by 4.1 and 4.7 shall comply with 4.29.</p>		
<p>4.29.2* Detectable Warnings on Walking Surfaces. Detectable warnings shall consist of raised truncated domes with a diameter of nominal 0.9 in (23 mm), a height of nominal 0.2 in (5 mm) and a center-to-center spacing of nominal 2.35 in (60 mm) and shall contrast visually with adjoining surfaces, either light-on-dark, or dark-on-light. The material used to provide contrast shall be an integral part of the walking surface. Detectable warnings used on interior surfaces shall differ from adjoining walking surfaces in resiliency or sound-on-cane contact.</p>		
<p>4.29.3 Detectable Warnings on Doors To Hazardous Areas. (Reserved).</p>		
<p>4.29.4 Detectable Warnings at Stairs. (Reserved).</p>		
<p>4.29.5 Detectable Warnings at Hazardous Vehicular Areas. If a walk crosses or adjoins a vehicular way, and the walking surfaces are not separated by curbs, railings, or other elements between the pedestrian areas and vehicular areas, the boundary between the areas shall be defined by a continuous detectable warning which is 36 in (915 mm) wide, complying with 4.29.2. [Suspended until July 26, 2001. 28 C.F.R. § 36.407.]</p>		
<p>4.29.6 Detectable Warnings at Reflecting Pools. The edges of reflecting pools shall be protected by railings, walls, curbs, or detectable warnings complying with 4.29.2. [Suspended until July 26, 2001. 28 C.F.R. § 36.407.]</p>		
<p>4.29.7 Standardization. (Reserved).</p>		
<p>4.30 Signage. 4.30.1* General. Signage required to be accessible by 4.1 shall comply with the applicable provisions of 4.30.</p>		
<p>4.30.2* Character Proportion. Letters and numbers on signs shall have a width-to-height ratio between 3:5 and 1:1 and a stroke-width-to-height ratio between 1:5 and 1:10.</p>		

<p>4.30.3 Character Height. Characters and numbers on signs shall be sized according to the viewing distance from which they are to be read. The minimum height is measured using an upper case X. Lower case characters are permitted.</p> <p>Height Above Finished Floor Minimum Character Height</p> <p>Suspended or Projected 3 in (75 mm) Overhead in minimum compliance with 4.4.2</p>		
<p>4.30.4* Raised and Brailled Characters and Pictorial Symbol Signs (Pictograms). Letters and numerals shall be raised 1/32 in, upper case, sans serif or simple serif type and shall be accompanied with Grade 2 Braille. Raised characters shall be at least 5/8 in (16 mm) high, but no higher than 2 in (50 mm). Pictograms shall be accompanied by the equivalent verbal description placed directly below the pictogram. The border dimension of the pictogram shall be 6 in (152 mm) minimum in height.</p>		
<p>4.30.5* Finish and Contrast. The characters and background of signs shall be eggshell, matte, or other non-glare finish. Characters and symbols shall contrast with their background -- either light characters on a dark background or dark characters on a light background.</p>		
<p>4.30.6 Mounting Location and Height. Where permanent identification is provided for rooms and spaces, signs shall be installed on the wall adjacent to the latch side of the door. Where there is no wall space to the latch side of the door, including at double leaf doors, signs shall be placed on the nearest adjacent wall. Mounting height shall be 60 in (1525 mm) above the finish floor to the centerline of the sign. Mounting location for such signage shall be so that a person may approach within 3 in (76 mm) of signage without encountering protruding objects or standing within the swing of a door.</p>		

4.30.7* Symbols of Accessibility.

(1) Facilities and elements required to be identified as accessible by 4.1 shall use the international symbol of accessibility. The symbol shall be displayed as shown in Fig. 43(a) and (b).

(2) **Volume Control Telephones.** Telephones required to have a volume control by 4.1.3(17)(b) shall be identified by a sign containing a depiction of a telephone handset with radiating sound waves.

(3) **Text Telephones.** Text telephones required by 4.1.3(17)(c) shall be identified by the international TDD symbol (Fig. 43(c)). In addition, if a facility has a public text telephone, directional signage indicating the location of the nearest text telephone shall be placed adjacent to all banks of telephones which do not contain a text telephone. Such directional signage shall include the international TDD symbol. If a facility has no banks of telephones, the directional signage shall be provided at the entrance (e.g., in a building directory).

(4) **Assistive Listening Systems.** In assembly areas where permanently installed assistive listening systems are required by 4.1.3(19)(b) the availability of such systems shall be identified with signage that includes the international symbol of access for hearing loss (Fig. 43(d)).

Figure 43 of the ADA Standards. International Symbols.

43(a) Proportions, International Symbol of Accessibility. The diagram illustrates the International Symbol of Accessibility on a grid background.

43(b) Display Conditions, International Symbol of Accessibility. The symbol contrast shall be light on dark or dark on light.

4.30.8* Illumination Levels. (Reserved).

4.31 Telephones.

4.31.1 General. Public telephones required to be accessible by 4.1 shall comply with 4.31.

<p>4.31.2 Clear Floor or Ground Space. A clear floor or ground space at least 30 in by 48 in (760 mm by 1220 mm) that allows either a forward or parallel approach by a person using a wheelchair shall be provided at telephones (see Fig. 44). The clear floor or ground space shall comply with 4.2.4. Bases, enclosures, and fixed seats shall not impede approaches to telephones by people who use wheelchairs.</p> <p>Figure 44 of the ADA Standards. Mounting Heights and Clearances for Telephones. <i>44(a) Side Reach Possible. If a parallel approach is provided at a telephone in an enclosure, the wing walls and shelf may extend beyond the face of the telephone a maximum of 10 in (255 mm). The wing walls and shelf may not overlap the required clear space. The controls shall be located no higher than 54 in (1370 mm) above the floor and the wing walls shall extend downward to 27 in (685 mm) or less above the floor.</i> <i>44(b) Forward Reach Required. If a front approach is provided at a telephone with an enclosure, the shelf may extend beyond the face of the telephone a maximum of 20 in (510 mm) into the required clear floor space. Wing walls may extend beyond the face of the telephone a maximum of 24 in (610 mm). If wing walls extend more than 24 in (610 mm) beyond the face of the telephone, an additional 6 in (150 mm) in width of clear floor space shall be provided, creating a clear floor space of 36 in by 48 in (910 mm by 1220 mm). Wing walls shall extend downward to 27 in (685 mm) or less above the floor. The highest operable part shall be located no higher than 48 in (1220 mm) above the floor.</i></p>		
<p>4.31.3* Mounting Height. The highest operable part of the telephone shall be within the reach ranges specified in 4.2.5 or 4.2.6.</p>		
<p>4.31.4 Protruding Objects. Telephones shall comply with 4.4.</p>		
<p>4.31.5 Hearing Aid Compatible and Volume Control Telephones Required by 4.1. (1) Telephones shall be hearing aid compatible. (2) Volume controls, capable of a minimum of 12 dbA and a maximum of 18 dbA above normal, shall be provided in accordance with 4.1.3. If an automatic reset is provided then 18 dbA may be exceeded.</p>		
<p>4.31.6 Controls. Telephones shall have pushbutton controls where service for such equipment is available.</p>		
<p>4.31.7 Telephone Books. Telephone books, if provided, shall be located in a position that complies with the reach ranges specified in 4.2.5 and 4.2.6.</p>		
<p>4.31.8 Cord Length. The cord from the telephone to the handset shall be at least 29 in (735 mm) long.</p>		

<p>4.31.9* Text Telephones Required by 4.1.</p> <p>(1) Text telephones used with a pay telephone shall be permanently affixed within, or adjacent to, the telephone enclosure. If an acoustic coupler is used, the telephone cord shall be sufficiently long to allow connection of the text telephone and the telephone receiver.</p> <p>(2) Pay telephones designed to accommodate a portable text telephone shall be equipped with a shelf and an electrical outlet within or adjacent to the telephone enclosure. The telephone handset shall be capable of being placed flush on the surface of the shelf. The shelf shall be capable of accommodating a text telephone and shall have 6 in (152 mm) minimum vertical clearance in the area where the text telephone is to be placed.</p> <p>(3) Equivalent facilitation may be provided. For example, a portable text telephone may be made available in a hotel at the registration desk if it is available on a 24-hour basis for use with nearby public pay telephones. In this instance, at least one pay telephone shall comply with paragraph 2 of this section. In addition, if an acoustic coupler is used, the telephone handset cord shall be sufficiently long so as to allow connection of the text telephone and the telephone receiver. Directional signage shall be provided and shall comply with 4.30.7.</p>		
<p>4.32 Fixed or Built-in Seating and Tables.</p> <p>4.32.1 Minimum Number. Fixed or built-in seating or tables required to be accessible by 4.1 shall comply with 4.32.</p>		
<p>4.32.2 Seating. If seating spaces for people in wheelchairs are provided at fixed tables or counters, clear floor space complying with 4.2.4 shall be provided. Such clear floor space shall not overlap knee space by more than 19 in (485 mm) (see Fig. 45).</p> <p>Figure 45 of the ADA Standards. Minimum Clearances for Seating and Tables. <i>If wheelchair seating is beside fixed seats, clear floor space 30 in by 48 in (760 mm by 1220 mm) minimum must be provided. If wheelchair seating is across the front of fixed seating, the minimum required clear floor space is 42 in by 48 in (1065 mm by 1220 mm). An accessible route to wheelchair seating must be provided.</i></p>		
<p>4.32.3 Knee Clearances. If seating for people in wheelchairs is provided at tables or counters, knee spaces at least 27 in (685 mm) high, 30 in (760 mm) wide, and 19 in (485 mm) deep shall be provided (see Fig. 45).</p>		
<p>4.32.4* Height of Tables or Counters. The tops of accessible tables and counters shall be from 28 in to 34 in (710 mm to 865 mm) above the finish floor or ground.</p>		
<p>4.33 Assembly Areas.</p> <p>4.33.1 Minimum Number. Assembly and associated areas required to be accessible by 4.1 shall comply with 4.33.</p>		

<p>4.33.2* Size of Wheelchair Locations. Each wheelchair location shall provide minimum clear ground or floor spaces as shown in Fig. 46.</p> <p>Figure 46 of the ADA Standards. Space Requirements for Wheelchair Seating Spaces in Series.</p> <p>46(a) <i>Forward or Rear Access.</i> If seating space for two wheelchair users is accessed from the front or rear, the minimum space required is 48 in (1220 mm) deep by 66 in (1675 mm) wide.</p> <p>46(b) <i>Side Access.</i> If seating space for two wheelchair users is accessed from the side, the minimum space required is 60 in (1525 mm) deep by 66 in (1675 mm) wide.</p>		
<p>4.33.3* Placement of Wheelchair Locations. Wheelchair areas shall be an integral part of any fixed seating plan and shall be provided so as to provide people with physical disabilities a choice of admission prices and lines of sight comparable to those for members of the general public. They shall adjoin an accessible route that also serves as a means of egress in case of emergency. At least one companion fixed seat shall be provided next to each wheelchair seating area. When the seating capacity exceeds 300, wheelchair spaces shall be provided in more than one location. Readily removable seats may be installed in wheelchair spaces when the spaces are not required to accommodate wheelchair users.</p> <p>EXCEPTION: Accessible viewing positions may be clustered for bleachers, balconies, and other areas having sight lines that require slopes of greater than 5 percent. Equivalent accessible viewing positions may be located on levels having accessible egress.</p>		
<p>4.33.4 Surfaces. The ground or floor at wheelchair locations shall be level and shall comply with 4.5.</p>		
<p>4.33.5 Access to Performing Areas. An accessible route shall connect wheelchair seating locations with performing areas, including stages, arena floors, dressing rooms, locker rooms, and other spaces used by performers.</p>		
<p>4.33.6* Placement of Listening Systems. If the listening system provided serves individual fixed seats, then such seats shall be located within a 50 ft (15 m) viewing distance of the stage or playing area and shall have a complete view of the stage or playing area.</p>		
<p>4.33.7* Types of Listening Systems. Assistive listening systems (ALS) are intended to augment standard public address and audio systems by providing signals which can be received directly by persons with special receivers or their own hearing aids and which eliminate or filter background noise. The type of assistive listening system appropriate for a particular application depends on the characteristics of the setting, the nature of the program, and the intended audience. Magnetic induction loops, infra-red and radio frequency systems are types of listening systems which are appropriate for various applications.</p>		

<p>4.34 Automated Teller Machines. 4.34.1 General. Each automated teller machine required to be accessible by 4.1.3 shall be on an accessible route and shall comply with 4.34.</p>																																																																																			
<p>4.34.2 Clear Floor Space. The automated teller machine shall be located so that clear floor space complying with 4.2.4 is provided to allow a person using a wheelchair to make a forward approach, a parallel approach, or both, to the machine.</p>																																																																																			
<p>4.34.3 Reach Ranges. (1) Forward Approach Only. If only a forward approach is possible, operable parts of all controls shall be placed within the forward reach range specified in 4.2.5.</p>																																																																																			
<p>4.34.3 (2) Parallel Approach Only. If only a parallel approach is possible, operable parts of controls shall be placed as follows:</p> <p>(a) Reach Depth Not More Than 10 in (255 mm). Where the reach depth to the operable parts of all controls as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is not more than 10 in (255 mm), the maximum height above the finished floor or grade shall be 54 in (1370 mm).</p> <p>(b) Reach Depth More Than 10 in (255 mm). Where the reach depth to the operable parts of any control as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is more than 10 in (255 mm), the maximum height above the finished floor or grade shall be as follows:</p> <table border="1" data-bbox="58 862 1001 1170"> <thead> <tr> <th colspan="2">Reach Depth</th> <th colspan="3">Maximum Height</th> <th colspan="2">Reach Depth</th> <th colspan="2">Maximum Height</th> </tr> <tr> <th>In</th> <th>Mm</th> <th>In</th> <th>Mm</th> <th>In</th> <th>Mm</th> <th>In</th> <th>Mm</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>255</td> <td>54</td> <td>1370</td> <td>17</td> <td>430</td> <td>50</td> <td>1270</td> </tr> <tr> <td>11</td> <td>280</td> <td>53 ½</td> <td>1360</td> <td>18</td> <td>455</td> <td>49 ½</td> <td>1255</td> </tr> <tr> <td>12</td> <td>305</td> <td>53</td> <td>1345</td> <td>19</td> <td>485</td> <td>49</td> <td>1245</td> </tr> <tr> <td>13</td> <td>330</td> <td>52 ½</td> <td>1335</td> <td>20</td> <td>510</td> <td>48 ½</td> <td>1230</td> </tr> <tr> <td>14</td> <td>355</td> <td>51 ½</td> <td>1310</td> <td>21</td> <td>535</td> <td>47 ½</td> <td>1205</td> </tr> <tr> <td>15</td> <td>380</td> <td>51</td> <td>1295</td> <td>22</td> <td>560</td> <td>47</td> <td>1195</td> </tr> <tr> <td>16</td> <td>405</td> <td>50 ½</td> <td>1285</td> <td>23</td> <td>585</td> <td>46 ½</td> <td>1180</td> </tr> <tr> <td>24</td> <td>610</td> <td>46</td> <td>1170</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Reach Depth		Maximum Height			Reach Depth		Maximum Height		In	Mm	In	Mm	In	Mm	In	Mm	10	255	54	1370	17	430	50	1270	11	280	53 ½	1360	18	455	49 ½	1255	12	305	53	1345	19	485	49	1245	13	330	52 ½	1335	20	510	48 ½	1230	14	355	51 ½	1310	21	535	47 ½	1205	15	380	51	1295	22	560	47	1195	16	405	50 ½	1285	23	585	46 ½	1180	24	610	46	1170						
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<p>4.34.3 (3) Forward and Parallel Approach. If both a forward and parallel approach are possible, operable parts of controls shall be placed within at least one of the reach ranges in paragraphs (1) or (2) of this section.</p>																																																																																			
<p>4.34.3 (4) Bins. Where bins are provided, for envelopes, waste paper, or other purposes, at least one of each type provided shall comply with the applicable reach ranges in paragraph (1), (2), or (3) of this section.</p>																																																																																			

<p>4.34.3 EXCEPTION: Where a function can be performed in a substantially equivalent manner by using an alternate control, only one of the controls needed to perform that function is required to comply with this section. If the controls are identified by tactile markings, such markings shall be provided on both controls.</p>		
<p>4.34.4 Controls. Controls for user activation shall comply with 4.27.4.</p>		
<p>4.34.5 Equipment for Persons with Vision Impairments. Instructions and all information for use shall be made accessible to and independently usable by persons with vision impairments.</p>		
<p>4.35 Dressing and Fitting Rooms. 4.35.1 General. Dressing and fitting rooms required to be accessible by 4.1 shall comply with 4.35 and shall be on an accessible route.</p>		
<p>4.35.2 Clear Floor Space. A clear floor space allowing a person using a wheelchair to make a 180-degree turn shall be provided in every accessible dressing room entered through a swinging or sliding door. No door shall swing into any part of the turning space. Turning space shall not be required in a private dressing room entered through a curtained opening at least 32 in (815 mm) wide if clear floor space complying with section 4.2 renders the dressing room usable by a person using a wheelchair.</p>		
<p>4.35.3 Doors. All doors to accessible dressing rooms shall be in compliance with section 4.13.</p>		
<p>4.35.4 Bench. Every accessible dressing room shall have a 24 in by 48 in (610 mm by 1220 mm) bench fixed to the wall along the longer dimension. The bench shall be mounted 17 in to 19 in (430 mm to 485 mm) above the finish floor. Clear floor space shall be provided alongside the bench to allow a person using a wheelchair to make a parallel transfer onto the bench. The structural strength of the bench and attachments shall comply with 4.26.3. Where installed in conjunction with showers, swimming pools, or other wet locations, water shall not accumulate upon the surface of the bench and the bench shall have a slip-resistant surface.</p>		
<p>4.35.5 Mirror. Where mirrors are provided in dressing rooms of the same use, then in an accessible dressing room, a full-length mirror, measuring at least 18 in wide by 54 in high (460 mm by 1370 mm), shall be mounted in a position affording a view to a person on the bench as well as to a person in a standing position.</p>		

<p>5 RESTAURANTS AND CAFETERIAS</p> <p>5.1* General. Except as specified or modified in this section, restaurants and cafeterias shall comply with the requirements of 4.1 to 4.35. Where fixed tables (or dining counters where food is consumed but there is no service) are provided, at least 5 percent, but not less than one, of the fixed tables (or a portion of the dining counter) shall be accessible and shall comply with 4.32 as required in 4.1.3(18). In establishments where separate areas are designated for smoking and non-smoking patrons, the required number of accessible fixed tables (or counters) shall be proportionally distributed between the smoking and non-smoking areas. In new construction, and where practicable in alterations, accessible fixed tables (or counters) shall be distributed throughout the space or facility.</p>		
<p>5.2 Counters and Bars. Where food or drink is served at counters exceeding 34 in (865 mm) in height for consumption by customers seated on stools or standing at the counter, a portion of the main counter which is 60 in (1525 mm) in length minimum shall be provided in compliance with 4.32 or service shall be available at accessible tables within the same area.</p>		
<p>5.3 Access Aisles. All accessible fixed tables shall be accessible by means of an access aisle at least 36 in (915 mm) clear between parallel edges of tables or between a wall and the table edges.</p>		
<p>5.4 Dining Areas. In new construction, all dining areas, including raised or sunken dining areas, loggias, and outdoor seating areas, shall be accessible. In non-elevator buildings, an accessible means of vertical access to the mezzanine is not required under the following conditions: 1) the area of mezzanine seating measures no more than 33 percent of the area of the total accessible seating area; 2) the same services and decor are provided in an accessible space usable by the general public; and, 3) the accessible areas are not restricted to use by people with disabilities. In alterations, accessibility to raised or sunken dining areas, or to all parts of outdoor seating areas is not required provided that the same services and decor are provided in an accessible space usable by the general public and are not restricted to use by people with disabilities.</p> <p>Figure 53 of the ADA Standards. Food Service Lines. <i>The clear width of the food service line shall be measured from the leading edge of the tray slide.</i></p>		
<p>5.5 Food Service Lines. Food service lines shall have a minimum clear width of 36 in (915 mm), with a preferred clear width of 42 in (1065 mm) to allow passage around a person using a wheelchair. Tray slides shall be mounted no higher than 34 in (865 mm) above the floor (see Fig. 53). If self-service shelves are provided, at least 50 percent of each type must be within reach ranges specified in 4.2.5 and 4.2.6.</p>		

<p>5.6 Tableware and Condiment Areas. Self- service shelves and dispensing devices for tableware, dishware, condiments, food and beverages shall be installed to comply with 4.2 (see Fig. 54).</p> <p><i>Figure 54 of the ADA Standards. Tableware Areas.</i> <i>The maximum height is 54 in (1370 mm).</i></p>		
<p>5.7 Raised Platforms. In banquet rooms or spaces where a head table or speaker's lectern is located on a raised platform, the platform shall be accessible in compliance with 4.8 or 4.11. Open edges of a raised platform shall be protected by placement of tables or by a curb.</p>		
<p>5.8 Vending Machines and Other Equipment. Spaces for vending machines and other equipment shall comply with 4.2 and shall be located on an accessible route.</p>		
<p>5.9 Quiet Areas. (Reserved).</p>		
<p>6 MEDICAL CARE FACILITIES</p> <p>6.1 General. Medical care facilities included in this section are those in which people receive physical or medical treatment or care and where persons may need assistance in responding to an emergency and where the period of stay may exceed twenty-four hours. In addition to the requirements of 4.1 through 4.35, medical care facilities and buildings shall comply with 6.</p> <p>(1) Hospitals - general purpose hospitals, psychiatric facilities, detoxification facilities -- At least 10 percent of patient bedrooms and toilets, and all public use and common use areas are required to be designed and constructed to be accessible.</p> <p>(2) Hospitals and rehabilitation facilities that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility -- All patient bedrooms and toilets, and all public use and common use areas are required to be designed and constructed to be accessible.</p> <p>(3) Long term care facilities, nursing homes -- At least 50 percent of patient bedrooms and toilets, and all public use and common use areas are required to be designed and constructed to be accessible.</p>		

<p>6.1 (4) Alterations to patient bedrooms.</p> <p>(a) When patient bedrooms are being added or altered as part of a planned renovation of an entire wing, a department, or other discrete area of an existing medical facility, a percentage of the patient bedrooms that are being added or altered shall comply with 6.3. The percentage of accessible rooms provided shall be consistent with the percentage of rooms required to be accessible by the applicable requirements of 6.1(1), 6.1(2), or 6.1(3), until the number of accessible patient bedrooms in the facility equals the overall number that would be required if the facility were newly constructed. (For example, if 20 patient bedrooms are being altered in the obstetrics department of a hospital, 2 of the altered rooms must be made accessible. If, within the same hospital, 20 patient bedrooms are being altered in a unit that specializes in treating mobility impairments, all of the altered rooms must be made accessible.) Where toilet/bathrooms are part of patient bedrooms which are added or altered and required to be accessible, each such patient toilet/bathroom shall comply with 6.4.</p> <p>(b) When patient bedrooms are being added or altered individually, and not as part of an alteration of the entire area, the altered patient bedrooms shall comply with 6.3, unless either: a) the number of accessible rooms provided in the department or area containing the altered patient bedroom equals the number of accessible patient bedrooms that would be required if the percentage requirements of 6.1(1), 6.1(2), or 6.1(3) were applied to that department or area; or b) the number of accessible patient bedrooms in the facility equals the overall number that would be required if the facility were newly constructed. Where toilet/bathrooms are part of patient bedrooms which are added or altered and required to be accessible, each such toilet/bathroom shall comply with 6.4.</p>		
<p>6.2 Entrances. At least one accessible entrance that complies with 4.14 shall be protected from the weather by canopy or roof overhang. Such entrances shall incorporate a passenger loading zone that complies with 4.6.6.</p>		
<p>6.3 Patient Bedrooms. Provide accessible patient bedrooms in compliance with 4.1 through 4.35. Accessible patient bedrooms shall comply with the following:</p> <p>(1) Each bedroom shall have a door that complies with 4.13.</p> <p>EXCEPTION: Entry doors to acute care hospital bedrooms for in-patients shall be exempted from the requirement in 4.13.6 for maneuvering space at the latch side of the door if the door is at least 44 in (1120 mm) wide.</p> <p>(2) Each bedroom shall have adequate space to provide a maneuvering space that complies with 4.2.3. In rooms with 2 beds, it is preferable that this space be located between beds.</p> <p>(3) Each bedroom shall have adequate space to provide a minimum clear floor space of 36 in (915 mm) along each side of the bed and to provide an accessible route complying with 4.3.3 to each side of each bed.</p>		
<p>6.4 Patient Toilet Rooms. Where toilet/bath rooms are provided as a part of a patient bedroom, each patient bedroom that is required to be accessible shall have an accessible toilet/bath room that complies with 4.22 or 4.23 and shall be on an accessible route.</p>		

<p>7 BUSINESS AND MERCANTILE</p> <p>7.1 General. In addition to the requirements of 4.1 to 4.35, the design of all areas used for business transactions with the public shall comply with 7.</p>		
<p>7.2 Sales and Service Counters, Teller Windows, Information Counters.</p> <p>(1) In department stores and miscellaneous retail stores where counters have cash registers and are provided for sales or distribution of goods or services to the public, at least one of each type shall have a portion of the counter which is at least 36 in (915 mm) in length with a maximum height of 36 in (915 mm) above the finish floor. It shall be on an accessible route complying with 4.3. The accessible counters must be dispersed throughout the building or facility. In alterations where it is technically infeasible to provide an accessible counter, an auxiliary counter meeting these requirements may be provided.</p> <p>(2) At ticketing counters, teller stations in a bank, registration counters in hotels and motels, box office ticket counters, and other counters that may not have a cash register but at which goods or services are sold or distributed, either:</p> <p>(i) a portion of the main counter which is a minimum of 36 in (915 mm) in length shall be provided with a maximum height of 36 in (915 mm); or</p> <p>(ii) an auxiliary counter with a maximum height of 36 in (915 mm) in close proximity to the main counter shall be provided; or</p> <p>(iii) equivalent facilitation shall be provided (e.g., at a hotel registration counter, equivalent facilitation might consist of: (1) provision of a folding shelf attached to the main counter on which an individual with disabilities can write, and (2) use of the space on the side of the counter or at the concierge desk, for handing materials back and forth).</p> <p>All accessible sales and service counters shall be on an accessible route complying with 4.3.</p> <p>(3)* Assistive Listening Devices. (Reserved).</p>		

7.3* Check-out Aisles.

(1) In new construction, accessible check-out aisles shall be provided in conformance with the table below:

Total Check-out Aisles of Each Design	Minimum Number of Accessible Check-out Aisles Of Each Design
1 - 4	1
5 - 8	2
8 - 15	3
over 15	3, plus 20% of additional aisles

EXCEPTION: In new construction, where the selling space is under 5000 square feet, only one check-out aisle is required to be accessible.

EXCEPTION: In alterations, at least one check-out aisle shall be accessible in facilities under 5000 square feet of selling space. In facilities of 5000 or more square feet of selling space, at least one of each design of check-out aisle shall be made accessible when altered until the number of accessible check-out aisles of each design equals the number required in new construction.

Examples of check-out aisles of different "design" include those which are specifically designed to serve different functions. Different "design" includes but is not limited to the following features - length of belt or no belt; or permanent signage designating the aisle as an express lane.

(2) Clear aisle width for accessible check-out aisles shall comply with 4.2.1 and maximum adjoining counter height shall not exceed 38 in (965 mm) above the finish floor. The top of the lip shall not exceed 40 in (1015 mm) above the finish floor.

(3) Signage identifying accessible check-out aisles shall comply with 4.30.7 and shall be mounted above the check-out aisle in the same location where the check-out number or type of check-out is displayed.

7.4 Security Bollards. Any device used to prevent the removal of shopping carts from store premises shall not prevent access or egress to people in wheelchairs. An alternate entry that is equally convenient to that provided for the ambulatory population is acceptable.

8 LIBRARIES.

8.1 General. In addition to the requirements of 4.1 to 4.35, the design of all public areas of a library shall comply with 8, including reading and study areas, stacks, reference rooms, reserve areas, and special facilities or collections.

8.2 Reading and Study Areas. At least 5 percent or a minimum of one of each element of fixed seating, tables, or study carrels shall comply with 4.2 and 4.32. Clearances between fixed accessible tables and between study carrels shall comply with 4.3.

8.3 Check-Out Areas. At least one lane at each check-out area shall comply with 7.2(1). Any traffic control or book security gates or turnstiles shall comply with 4.13.

<p>8.4 Card Catalogs and Magazine Displays. Minimum clear aisle space at card catalogs and magazine displays shall comply with Fig. 55. Maximum reach height shall comply with 4.2, with a height of 48 in (1220 mm) preferred irrespective of approach allowed.</p>		
<p>8.5 Stacks. Minimum clear aisle width between stacks shall comply with 4.3, with a minimum clear aisle width of 42 in (1065 mm) preferred where possible. Shelf height in stack areas is unrestricted (see Fig. 56).</p>		
<p>9 ACCESSIBLE TRANSIENT LODGING. (1) Except as specified in the special technical provisions of this section, accessible transient lodging shall comply with the applicable requirements of 4.1 through 4.35. Transient lodging includes facilities or portions thereof used for sleeping accommodations, when not classed as a medical care facility.</p>		
<p>9.1 Hotels, Motels, Inns, Boarding Houses, Dormitories, Resorts and Other Similar Places of Transient Lodging. 9.1.1 General. All public use and common use areas are required to be designed and constructed to comply with section 4 (Accessible Elements and Spaces: Scope and Technical Requirements). EXCEPTION: Sections 9.1 through 9.4 do not apply to an establishment located within a building that contains not more than five rooms for rent or hire and that is actually occupied by the proprietor of such establishment as the residence of such proprietor.</p>		

9.1.2 Accessible Units, Sleeping Rooms, and Suites. Accessible sleeping rooms or suites that comply with the requirements of 9.2 (Requirements for Accessible Units, Sleeping Rooms, and Suites) shall be provided in conformance with the table below. In addition, in hotels, of 50 or more sleeping rooms or suites, additional accessible sleeping rooms or suites that include a roll-in shower shall also be provided in conformance with the table below. Such accommodations shall comply with the requirements of 9.2, 4.21, and Figure 57(a) or (b).

Number of Rooms	Accessible Rooms	Rooms with Roll-in Showers
1 to 25	1	
26 to 50	2	
51 to 75	3	1
76 to 100	4	1
101 to 150	5	2
151 to 200	6	2
201 to 300	7	3
301 to 400	8	4
401 to 500	9	4, plus one for each
additional 100 over 400		
501 to 1000	2% of total	
1001 and over	20 plus 1 for each	
100 over 1000		

Figure 57 of the ADA Standards. Roll-in Shower with Folding Seat.

57(a) Where a fixed seat is provided in a 30 in minimum by 60 in (716 mm by 1220 mm) minimum shower stall, the controls and spray unit on the back (long) wall shall be located a maximum of 27 in (685 mm) from the side wall where the seat is attached.

57(b) An alternate 36 in by 60 in (915 mm by 1220 mm) minimum shower stall is permitted. The width of the stall opening shall be a minimum of 36 in (915 mm) clear located on a long wall at the opposite end of the shower from the controls. The shower seat shall be 24 in (610 mm) minimum in length by 16 in (330 mm) minimum in width and may be rectangular in shape. The seat shall be located next to the opening to the shower and adjacent to the end wall containing the shower head and controls.

9.1.3 Sleeping Accommodations for Persons with Hearing Impairments. In addition to those accessible sleeping rooms and suites required by 9.1.2, sleeping rooms and suites that comply with 9.3 (Visual Alarms, Notification Devices, and Telephones) shall be provided in conformance with the following table:

<u>Number of Elements</u>	<u>Accessible Elements</u>
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% of total
1001 and over	20 plus 1 for each 100 over 1000

9.1.4 Classes of Sleeping Accommodations.

(1) In order to provide persons with disabilities a range of options equivalent to those available to other persons served by the facility, sleeping rooms and suites required to be accessible by 9.1.2 shall be dispersed among the various classes of sleeping accommodations available to patrons of the place of transient lodging. Factors to be considered include room size, cost, amenities provided, and the number of beds provided.

(2) Equivalent Facilitation. For purposes of this section, it shall be deemed equivalent facilitation if the operator of a facility elects to limit construction of accessible rooms to those intended for multiple occupancy, provided that such rooms are made available at the cost of a single occupancy room to an individual with disabilities who requests a single-occupancy room.

9.1.5 Alterations to Accessible Units, Sleeping Rooms, and Suites. When sleeping rooms are being altered in an existing facility, or portion thereof, subject to the requirements of this section, at least one sleeping room or suite that complies with the requirements of 9.2 (Requirements for Accessible Units, Sleeping Rooms, and Suites) shall be provided for each 25 sleeping rooms, or fraction thereof, of rooms being altered until the number of such rooms provided equals the number required to be accessible with 9.1.2. In addition, at least one sleeping room or suite that complies with the requirements of 9.3 (Visual Alarms, Notification Devices, and Telephones) shall be provided for each 25 sleeping rooms, or fraction thereof, of rooms being altered until the number of such rooms equals the number required to be accessible by 9.1.3.

9.2 Requirements for Accessible Units, Sleeping Rooms and Suites.

9.2.1 General. Units, sleeping rooms, and suites required to be accessible by 9.1 shall comply with 9.2.

<p>9.2.2 Minimum Requirements. An accessible unit, sleeping room or suite shall be on an accessible route complying with 4.3 and have the following accessible elements and spaces.</p> <p>(1) Accessible sleeping rooms shall have a 36 in (915 mm) clear width maneuvering space located along both sides of a bed, except that where two beds are provided, this requirement can be met by providing a 36 in (915 mm) wide maneuvering space located between the two beds.</p>		
<p>9.2.2 (2) An accessible route complying with 4.3 shall connect all accessible spaces and elements, including telephones, within the unit, sleeping room, or suite. This is not intended to require an elevator in multi-story units as long as the spaces identified in 9.2.2(6) and (7) are on accessible levels and the accessible sleeping area is suitable for dual occupancy.</p>		
<p>9.2.2 (3) Doors and doorways designed to allow passage into and within all sleeping rooms, suites or other covered units shall comply with 4.13.</p>		
<p>9.2.2 (4) If fixed or built-in storage facilities such as cabinets, shelves, closets, and drawers are provided in accessible spaces, at least one of each type provided shall contain storage space complying with 4.25. Additional storage may be provided outside of the dimensions required by 4.25.</p>		
<p>9.2.2 (5) All controls in accessible units, sleeping rooms, and suites shall comply with 4.27.</p>		
<p>9.2.2 (6) Where provided as part of an accessible unit, sleeping room, or suite, the following spaces shall be accessible and shall be on an accessible route:</p> <ul style="list-style-type: none"> (a) the living area. (b) the dining area. (c) at least one sleeping area. (d) patios, terraces, or balconies. <p>EXCEPTION: The requirements of 4.13.8 and 4.3.8 do not apply where it is necessary to utilize a higher door threshold or a change in level to protect the integrity of the unit from wind/water damage. Where this exception results in patios, terraces or balconies that are not at an accessible level, equivalent facilitation shall be provided. (E.g., Equivalent facilitation at a hotel patio or balcony might consist of providing raised decking or a ramp to provide accessibility).</p> <ul style="list-style-type: none"> (e) at least one full bathroom (i.e., one with a water closet, a lavatory, and a bathtub or shower). (f) if only half baths are provided, at least one half bath. (g) carports, garages or parking spaces. 		

<p>9.2.2 (7) Kitchens, Kitchenettes, or Wet Bars. When provided as accessory to a sleeping room or suite, kitchens, kitchenettes, wet bars, or similar amenities shall be accessible. Clear floor space for a front or parallel approach to cabinets, counters, sinks, and appliances shall be provided to comply with 4.2.4. Countertops and sinks shall be mounted at a maximum height of 34 in (865 mm) above the floor. At least fifty percent of shelf space in cabinets or refrigerator/freezers shall be within the reach ranges of 4.2.5 or 4.2.6 and space shall be designed to allow for the operation of cabinet and/or appliance doors so that all cabinets and appliances are accessible and usable. Controls and operating mechanisms shall comply with 4.2.7.</p>		
<p>9.2.2 (8) Sleeping room accommodations for persons with hearing impairments required by 9.1 and complying with 9.3 shall be provided in the accessible sleeping room or suite.</p>		
<p>9.3 Visual Alarms, Notification Devices and Telephones. 9.3.1 General. In sleeping rooms required to comply with this section, auxiliary visual alarms shall be provided and shall comply with 4.28.4. Visual notification devices shall also be provided in units, sleeping rooms and suites to alert room occupants of incoming telephone calls and a door knock or bell. Notification devices shall <u>not</u> be connected to auxiliary visual alarm signal appliances. Permanently installed telephones shall have volume controls complying with 4.31.5; an accessible electrical outlet within 4 ft (1220 mm) of a telephone connection shall be provided to facilitate the use of a text telephone. 9.3.2 Equivalent Facilitation. For purposes of this section, equivalent facilitation shall include the installation of electrical outlets (including outlets connected to a facility's central alarm system) and telephone wiring in sleeping rooms and suites to enable persons with hearing impairments to utilize portable visual alarms and communication devices provided by the operator of the facility.</p>		
<p>9.4 Other Sleeping Rooms and Suites. Doors and doorways designed to allow passage into and within all sleeping units or other covered units shall comply with 4.13.5.</p>		
<p>9.5 Transient Lodging in Homeless Shelters, Halfway Houses, Transient Group Homes, and Other Social Service Establishments. 9.5.1 New Construction. In new construction all public use and common use areas are required to be designed and constructed to comply with section 4. At least one of each type of amenity (such as washers, dryers and similar equipment installed for the use of occupants) in each common area shall be accessible and shall be located on an accessible route to any accessible unit or sleeping accommodation. EXCEPTION: Where elevators are not provided as allowed in 4.1.3(5), accessible amenities are not required on inaccessible floors as long as one of each type is provided in common areas on accessible floors.</p>		

<p>9.5.2 Alterations.</p> <p>(1) Social service establishments which are not homeless shelters:</p> <p>(a) The provisions of 9.5.3 and 9.1.5 shall apply to sleeping rooms and beds.</p> <p>(b) Alteration of other areas shall be consistent with the new construction provisions of 9.5.1.</p> <p>(2) Homeless shelters. If the following elements are altered, the following requirements apply:</p> <p>(a) at least one public entrance shall allow a person with mobility impairments to approach, enter and exit including a minimum clear door width of 32 in (815 mm).</p> <p>(b) sleeping space for homeless persons as provided in the scoping provisions of 9.1.2 shall include doors to the sleeping area with a minimum clear width of 32 in (815 mm) and maneuvering space around the beds for persons with mobility impairments complying with 9.2.2(1).</p> <p>(c) at least one toilet room for each gender or one unisex toilet room shall have a minimum clear door width of 32 in (815 mm), minimum turning space complying with 4.2.3, one water closet complying with 4.16, one lavatory complying with 4.19 and the door shall have a privacy latch; and, if provided, at least one tub or shower shall comply with 4.20 or 4.21, respectively.</p> <p>(d) at least one common area which a person with mobility impairments can approach, enter and exit including a minimum clear door width of 32 in (815 mm).</p> <p>(e) at least one route connecting elements (a), (b), (c) and (d) which a person with mobility impairments can use including minimum clear width of 36 in (915 mm), passing space complying with 4.3.4, turning space complying with 4.2.3 and changes in levels complying with 4.3.8.</p> <p>(f) homeless shelters can comply with the provisions of (a)-(e) by providing the above elements on one accessible floor.</p>		
<p>9.5.3 Accessible Sleeping Accommodations in New Construction. Accessible sleeping rooms shall be provided in conformance with the table in 9.1.2 and shall comply with 9.2 Accessible Units, Sleeping Rooms and Suites (where the items are provided). Additional sleeping rooms that comply with 9.3 Sleeping Accommodations for Persons with Hearing Impairments shall be provided in conformance with the table provided in 9.1.3.</p> <p>In facilities with multi-bed rooms or spaces, a percentage of the beds equal to the table provided in 9.1.2 shall comply with 9.2.2(1).</p>		
<p>10 TRANSPORTATION FACILITIES</p> <p>10.1 General. Every station, bus stop, bus stop pad, terminal, building or other transportation facility, shall comply with the applicable provisions of 4.1 through 4.35, sections 5 through 9, and the applicable provisions of this section. The exceptions for elevators in 4.1.3(5) exception 1 and 4.1.6(1)(k) do not apply to a terminal, depot, or other station used for specified public transportation, or an airport passenger terminal, or facilities subject to Title II.</p>		

<p>10.2 Bus Stops and Terminals.</p> <p>10.2.1 New Construction.</p> <p>(1) Where new bus stop pads are constructed at bus stops, bays or other areas where a lift or ramp is to be deployed, they shall have a firm, stable surface; a minimum clear length of 96 inches (measured from the curb or vehicle roadway edge) and a minimum clear width of 60 inches (measured parallel to the vehicle roadway) to the maximum extent allowed by legal or site constraints; and shall be connected to streets, sidewalks or pedestrian paths by an accessible route complying with 4.3 and 4.4. The slope of the pad parallel to the roadway shall, to the extent practicable, be the same as the roadway. For water drainage, a maximum slope of 1:50 (2%) perpendicular to the roadway is allowed.</p> <p>(2) Where provided, new or replaced bus shelters shall be installed or positioned so as to permit a wheelchair or mobility aid user to enter from the public way and to reach a location, having a minimum clear floor area of 30 inches by 48 inches, entirely within the perimeter of the shelter. Such shelters shall be connected by an accessible route to the boarding area provided under paragraph (1) of this section.</p> <p>(3) Where provided, all new bus route identification signs shall comply with 4.30.5. In addition, to the maximum extent practicable, all new bus route identification signs shall comply with 4.30.2 and 4.30.3. Signs that are sized to the maximum dimensions permitted under legitimate local, state or federal regulations or ordinances shall be considered in compliance with 4.30.2 and 4.30.3 for purposes of this section.</p> <p>EXCEPTION: Bus schedules, timetables, or maps that are posted at the bus stop or bus bay are not required to comply with this provision.</p>		
<p>10.2.2 Bus Stop Siting and Alterations.</p> <p>(1) Bus stop sites shall be chosen such that, to the maximum extent practicable, the areas where lifts or ramps are to be deployed comply with section 10.2.1(1) and (2).</p> <p>(2) When new bus route identification signs are installed or old signs are replaced, they shall comply with the requirements of 10.2.1(3).</p>		
<p>10.3 Fixed Facilities and Stations.</p> <p>10.3.1 New Construction. New stations in rapid rail, light rail, commuter rail, intercity bus, intercity rail, high speed rail, and other fixed guideway systems (e.g., automated guideway transit, monorails, etc.) shall comply with the following provisions, as applicable.</p> <p>(1) Elements such as ramps, elevators or other circulation devices, fare vending or other ticketing areas, and fare collection areas shall be placed to minimize the distance which wheelchair users and other persons who cannot negotiate steps may have to travel compared to the general public. The circulation path, including an accessible entrance and an accessible route, for persons with disabilities shall, to the maximum extent practicable, coincide with the circulation path for the general public. Where the circulation path is different, signage complying with 4.30.1, 4.30.2, 4.30.3, 4.30.5, and 4.30.7(1) shall be provided to indicate direction to and identify the accessible entrance and accessible route.</p>		

<p>10.3.1 (2) In lieu of compliance with 4.1.3(8), at least one entrance to each station shall comply with 4.14, Entrances. If different entrances to a station serve different transportation fixed routes or groups of fixed routes, at least one entrance serving each group or route shall comply with 4.14, Entrances. All accessible entrance shall, to the maximum extent practicable, coincide with those used by the majority of the general public.</p>		
<p>10.3.1 (3) Direct connections to commercial, retail, or residential facilities shall have an accessible route complying with 4.3 from the point of connection to boarding platforms and all transportation system elements used by the public. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and all transportation system elements used by the public.</p>		
<p>10.3.1 (4) Where signs are provided at entrances to stations identifying the station or the entrance, or both, at least one sign at each entrance shall comply with 4.30.4 and 4.30.6. Such signs shall be placed in uniform locations at entrances within the transit system to the maximum extent practicable.</p> <p>EXCEPTION: Where the station has no defined entrance, but signage is provided, then the accessible signage shall be placed in a central location.</p>		
<p>10.3.1 (5) Stations covered by this section shall have identification signs complying with 4.30.1, 4.30.2, 4.30.3, and 4.30.5. Signs shall be placed at frequent intervals and shall be clearly visible from within the vehicle on both sides when not obstructed by another train. When station identification signs are placed close to vehicle windows (i.e., on the side opposite from boarding) each shall have the top of the highest letter or symbol below the top of the vehicle window and the bottom of the lowest letter or symbol above the horizontal mid-line of the vehicle window.</p>		
<p>10.3.1 (6) Lists of stations, routes, or destinations served by the station and located on boarding areas, platforms, or mezzanines shall comply with 4.30.1, 4.30.2, 4.30.3, and 4.30.5. A minimum of one sign identifying the specific station and complying with 4.30.4 and 4.30.6 shall be provided on each platform or boarding area. All signs referenced in this paragraph shall, to the maximum extent practicable, be placed in uniform locations within the transit system.</p>		

<p>10.3.1 (7)* Automatic fare vending, collection and adjustment (e.g., add-fare) systems shall comply with 4.34.2, 4.34.3, 4.34.4, and 4.34.5. At each accessible entrance such devices shall be located on an accessible route. If self-service fare collection devices are provided for the use of the general public, at least one accessible device for entering, and at least one for exiting, unless one device serves both functions, shall be provided at each accessible point of entry or exit. Accessible fare collection devices shall have a minimum clear opening width of 32 in; shall permit passage of a wheelchair; and, where provided, coin or card slots and controls necessary for operation shall comply with 4.27. Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches above the floor to 27 inches above the floor and shall comply with 4.13. Where the circulation path does not coincide with that used by the general public, accessible fare collection systems shall be located at or adjacent to the accessible point of entry or exit.</p>		
<p>10.3.1 (8) Platform edges bordering a drop-off and not protected by platform screens or guard rails shall have a detectable warning. Such detectable warnings shall comply with 4.29.2 and shall be 24 inches wide running the full length of the platform drop-off.</p>		
<p>10.3.1 (9) In stations covered by this section, rail-to-platform height in new stations shall be coordinated with the floor height of new vehicles so that the vertical difference, measured when the vehicle is at rest, is within plus or minus 5/8 inch under normal passenger load conditions. For rapid rail, light rail, commuter rail, high speed rail, and intercity rail systems in new stations, the horizontal gap, measured when the new vehicle is at rest, shall be no greater than 3 in. For slow moving automated guideway "people mover" transit systems, the horizontal gap in new stations shall be no greater than 1 in.</p> <p>EXCEPTION 1: Existing vehicles operating in new stations may have a vertical difference with respect to the new platform within plus or minus 1-1/2 in.</p> <p>EXCEPTION 2: In light rail, commuter rail and intercity rail systems where it is not operationally or structurally feasible to meet the horizontal gap or vertical difference requirements, mini-high platforms, car-borne or platform-mounted lifts, ramps or bridge plates, or similar manually deployed devices, meeting the applicable requirements of 36 C.F.R. part 1192, or 49 C.F.R. part 38 shall suffice.</p>		
<p>10.3.1 (10) Stations shall not be designed or constructed so as to require persons with disabilities to board or alight from a vehicle at a location other than one used by the general public.</p>		
<p>10.3.1 (11) Illumination levels in the areas where signage is located shall be uniform and shall minimize glare on signs. Lighting along circulation routes shall be of a type and configuration to provide uniform illumination.</p>		

<p>10.3.1 (12) Text Telephones: The following shall be provided in accordance with 4.31.9:</p> <p>(a) If an interior public pay telephone is provided in a transit facility (as defined by the Department of Transportation) at least one interior public text telephone shall be provided in the station.</p> <p>(b) Where four or more public pay telephones serve a particular entrance to a rail station and at least one is in an interior location, at least one interior public text telephone shall be provided to serve that entrance. Compliance with this section constitutes compliance with section 4.1.3(17)(c).</p>		
<p>10.3.1 (13) Where it is necessary to cross tracks to reach boarding platforms, the route surface shall be level and flush with the rail top at the outer edge and between rails, except for a maximum 2-1/2 inch gap on the inner edge of each rail to permit passage of wheel flanges. Such crossings shall comply with 4.29.5. Where gap reduction is not practicable, an above-grade or below-grade accessible route shall be provided.</p>		
<p>10.3.1 (14) Where public address systems are provided to convey information to the public in terminals, stations, or other fixed facilities, a means of conveying the same or equivalent information to persons with hearing loss or who are deaf shall be provided.</p>		
<p>10.3.1 (15) Where clocks are provided for use by the general public, the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals, and/or digits shall contrast with the background either light-on-dark or dark-on-light. Where clocks are mounted overhead, numerals and/or digits shall comply with 4.30.3. Clocks shall be placed in uniform locations throughout the facility and system to the maximum extent practicable.</p>		
<p>10.3.1 (16) Where provided in below grade stations, escalators shall have a minimum clear width of 32 inches. At the top and bottom of each escalator run, at least two contiguous treads shall be level beyond the comb plate before the risers begin to form. All escalator treads shall be marked by a strip of clearly contrasting color, 2 inches in width, placed parallel to and on the nose of each step. The strip shall be of a material that is at least as slip resistant as the remainder of the tread. The edge of the tread shall be apparent from both ascending and descending directions.</p>		
<p>10.3.1 (17) Where provided, elevators shall be glazed or have transparent panels to allow an unobstructed view both in to and out of the car. Elevators shall comply with 4.10.</p> <p>EXCEPTION: Elevator cars with a clear floor area in which a 60 inch diameter circle can be inscribed may be substituted for the minimum car dimensions of 4.10, Fig. 22.</p>		
<p>10.3.1 (18) Where provided, ticketing areas shall permit persons with disabilities to obtain a ticket and check baggage and shall comply with 7.2.</p>		

<p>10.3.1 (19) Where provided, baggage check-in and retrieval systems shall be on an accessible route complying with 4.3, and shall have space immediately adjacent complying with 4.2. If unattended security barriers are provided, at least one gate shall comply with 4.13. Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches above the floor to 27 inches above the floor.</p>		
<p>10.3.2 Existing Facilities: Key Stations.</p> <p>[Not reproduced because key stations are covered by title II of the ADA only and, therefore, section 10.3.2 is inapplicable to title III entities.]</p>		
<p>10.3.3 Existing Facilities: Alterations.</p> <p>(1) For the purpose of complying with 4.1.6(2) Alterations to an Area Containing a Primary Function, an area of primary function shall be as defined by applicable provisions of 49 C.F.R. 37.43(c) (Department of Transportation's ADA Rule) or 28 C.F.R. 36.403 (Department of Justice's ADA Rule).</p>		
<p>10.4 Airports.</p> <p>10.4.1 New Construction.</p> <p>(1) Elements such as ramps, elevators or other vertical circulation devices, ticketing areas, security checkpoints, or passenger waiting areas shall be placed to minimize the distance which wheelchair users and other persons who cannot negotiate steps may have to travel compared to the general public.</p>		
<p>10.4.1 (2) The circulation path, including an accessible entrance and an accessible route, for persons with disabilities shall, to the maximum extent practicable, coincide with the circulation path for the general public. Where the circulation path is different, directional signage complying with 4.30.1, 4.30.2, 4.30.3 and 4.30.5 shall be provided which indicates the location of the nearest accessible entrance and its accessible route.</p>		
<p>10.4.1 (3) Ticketing areas shall permit persons with disabilities to obtain a ticket and check baggage and shall comply with 7.2.</p>		
<p>10.4.1 (4) Where public pay telephones are provided, and at least one is at an interior location, a public text telephone shall be provided in compliance with 4.31.9. Additionally, if four or more public pay telephones are located in any of the following locations, at least one public text telephone shall also be provided in that location:</p> <ul style="list-style-type: none"> (a) a main terminal outside the security areas; (b) a concourse within the security areas; or (c) a baggage claim area in a terminal. <p>Compliance with this section constitutes compliance with section 4.1.3(17)(c).</p>		

<p>10.4.1 (5) Baggage check-in and retrieval systems shall be on an accessible route complying with 4.3, and shall have space immediately adjacent complying with 4.2.4. If unattended security barriers are provided, at least one gate shall comply with 4.13. Gates which must be pushed open by wheelchair or mobility aid users shall have a smooth continuous surface extending from 2 inches above the floor to 27 inches above the floor.</p>		
<p>10.4.1 (6) Terminal information systems which broadcast information to the general public through a public address system shall provide a means to provide the same or equivalent information to persons with a hearing loss or who are deaf. Such methods may include, but are not limited to, visual paging systems using video monitors and computer technology. For persons with certain types of hearing loss such methods may include, but are not limited to, an assistive listening system complying with 4.33.7.</p>		
<p>10.4.1 (7) Where clocks are provided for use by the general public the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals, and/or digits shall contrast with their background either light-on-dark or dark-on-light. Where clocks are mounted overhead, numerals and/or digits shall comply with 4.30.3. Clocks shall be placed in uniform locations throughout the facility to the maximum extent practicable.</p>		
<p>10.4.1 (8) Security Systems. (Reserved).</p>		
<p>10.5 Boat and Ferry Docks. (Reserved).</p>		