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Multiple chemical sensitivities. The Department received comments from a number of individuals asking the Department to add specific language to the final rule addressing the needs of individuals with chemical sensitivities. These commenters expressed concern that the presence of chemicals interferes with their ability to participate in a wide range of activities. These commenters also urged the Department to add multiple chemical sensitivities to the definition of a disability.

The Department has determined not to include specific provisions addressing multiple chemical sensitivities in the final rule. In order to be viewed as a disability under the ADA, an impairment must substantially limit one or more major life activities. An individual's major life activities of respiratory or neurological functioning may be substantially limited by allergies or sensitivity to a degree that he or she is a person with a disability. When a person has this type of disability, a covered entity may have to make reasonable modifications in its policies and practices for that person. However, this determination is an individual assessment and must be made on a case-by-case basis.

[AG Order No. 3181–2010, 75 FR 56258, Sept. 15, 2010; 76 FR 13287, Mar. 11, 2011]

APPENDIX B TO PART 36—ANALYSIS AND COMMENTARY ON THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

APPENDIX B TO PART 36

Analysis and Commentary on the 2010 ADA Standards for Accessible Design

The following is a discussion of substantive changes in the scoping and technical requirements for new construction and alterations resulting from the adoption of new ADA Standards for Accessible Design (2010 Standards) in the final rules for title II (28 CFR part 35) and title III (28 CFR part 36) of the Americans with Disabilities Act (ADA). The full text of the 2010 Standards is available for review at *http://www.ada.gov*.

In the Department's revised ADA title II regulation, 28 CFR 35.104 Definitions, the Department defines the term ''2010 Standards'' to mean the 2010 ADA Standards for Accessible Design. The 2010 Standards consist of the 2004 ADA Accessibility Guidelines (ADAAG) and the requirements contained in 28 CFR 35.151.

In the Department's revised ADA title III regulation, 28 CFR 36.104 Definitions, the Department defines the term ''2010 Standards'' to mean the 2010 ADA Standards for Accessible Design. The 2010 Standards consist of the 2004 ADA Accessibility Guidelines (ADAAG) and the requirements contained in 28 CFR part 36 subpart D.

This summary addresses selected substantive changes between the 1991 ADA Standards for Accessible Design (1991 Standards) codified at 28 CFR part 36, app. A (2009) and the 2010 Standards.

Editorial changes are not discussed. Scoping and technical requirements are discussed together, where appropriate, for ease of understanding the requirements. In addition, this document addresses selected public comments received by the Department in response to its September 2004 Advance Notice of Proposed Rulemaking (ANPRM) and its June 2008 Notice of Proposed Rulemaking (NPRM).

The ANPRM and NPRM issued by the Department concerning the proposed 2010 Standards stated that comments received by the Access Board in response to its development of the ADAAG upon which the 2010 Standards are based would be considered in the development of the final Standards. Therefore, the Department will not restate here all of the comments and responses to them issued by the Access Board. The Department is supplementing the Access Board's comments and responses with substantive comments and responses here. Comments and responses addressed by the Access Board that also were separately submitted to the Department will not be restated in their entirety here.

SECTION-BY-SECTION ANALYSIS WITH PUBLIC COMMENTS

Application and Administration

102 Dimensions for Adults and Children

Section 2.1 of the 1991 Standards stated that the specifications were based upon adult dimensions and anthropometrics. The 1991 Standards did not provide specific requirements for children's elements or facilities.

Section 102 of the 2010 Standards states that the technical requirements are based on adult dimensions and anthropometrics. In addition, technical requirements are also provided based on children's dimensions and anthropometrics for drinking fountains, water closets and other elements located in toilet compartments, lavatories and sinks, dining surfaces, and work surfaces.

103 Equivalent Facilitation

This section acknowledges that nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided that the alternatives result in substantially equivalent or greater accessibility and usability.

A commenter encouraged the Department to include a procedure for determining

equivalent facilitation. The Department believes that the responsibility for determining and demonstrating equivalent facilitation properly rests with the covered entity. The purpose of allowing for equivalent facilitation is to encourage flexibility and innovation while still ensuring access. The Department believes that establishing potentially cumbersome bureaucratic provisions for reviewing requests for equivalent facilitation is inappropriate.

104 Conventions

Dimensions. Section 104.1 of the 2010 Standards notes that dimensions not stated as a ''maximum'' or ''minimum'' are absolute. Section 104.1.1 of the 2010 Standards provides that all dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points. A commenter stated that the 2010 Standards restrict the application of construction tolerances only to those few requirements that are expressed as an absolute dimension.

This is an incorrect interpretation of sections 104.1 and 104.1.1 of the 2010 Standards. Construction and manufacturing tolerances apply to absolute dimensions as well as to dimensions expressed as a maximum or minimum. When the requirement states a specified range, such as in section 609.4 where grab bars must be installed between 33 inches and 36 inches above the finished floor, that range provides an adequate tolerance. Advisory 104.1.1 gives further guidance about tolerances.

Section 104.2 of the 2010 Standards provides that where the required number of elements or facilities to be provided is determined by calculations of ratios or percentages and remainders or fractions result, the next greater whole number of such elements or facilities shall be provided. Where the determination of the required size or dimension of an element or facility involves ratios or percentages, rounding down for values less than one-half is permissible.

A commenter stated that it is customary in the building code industry to round up rather than down for values less than one-half. As noted here, where the 2010 Standards provide for scoping, any resulting fractional calculations will be rounded to the next whole number. The Department is retaining the portion of section 104.2 that permits rounding down for values less than one-half where the determination of the required size or dimension of an element or facility involves ratios or percentages. Such practice is standard with the industry, and is in keeping with model building codes.

105 Referenced Standards

Section 105 lists the industry requirements that are referenced in the 2010 Standards. This section also clarifies that where there is a difference between a provision of the 2010 Standards and the referenced requirements, the provision of the 2010 Standards applies.

106 Definitions

Various definitions have been added to the 2010 Standards and some definitions have been deleted.

One commenter asked that the term public right-of-way be defined; others asked that various terms and words defined by the 1991 Standards, but which were eliminated from the 2010 Standards, plus other words and terms used in the 2010 Standards, be defined.

The Department believes that it is not necessary to add definitions to this text because section 106.3 of the 2010 Standards provides that the meanings of terms not specifically defined in the 2010 Standards, in the Department's ADA regulations, or in referenced standards are to be defined by collegiate dictionaries in the sense that the context implies. The Department believes that this provision adequately addresses these commenters' concerns.

Scoping and Technical Requirements

202 Existing Buildings and Facilities

Alterations. Under section 4.1.6(1)(c) of the 1991 Standards if alterations to single elements, when considered together, amount to an alteration of a room or space in a building or facility, the entire room or space would have to be made accessible. This requirement was interpreted to mean that if a covered entity chose to alter several elements in a room there would come a point when so much work had been done that it would be considered that the entire room or space would have to be made accessible. Under section 202.3 of the 2010 Standards entities can alter as many elements within a room or space as they like without triggering a requirement to make the entire room or space accessible based on the alteration of individual elements. This does not, however, change the requirement that if the intent was to alter the entire room or space, the entire room or space must be made accessible and comply with the applicable requirements of Chapter 2 of the 2010 Standards.

Alterations to Primary Function Areas. Section 202.4 restates a current requirement under title III, and therefore represents no change for title III facilities or for those title II facilities that have elected to comply with the 1991 Standards. However, under the revised title II regulation, state and local government facilities that have previously elected to comply with the Uniform Federal Accessibility Standards (UFAS) instead of the 1991 Standards will no longer have that option, and thus will now be subject to the path of travel requirement. The path of travel requirement provides that when a primary

function area of an existing facility is altered, the path of travel to that area (including restrooms, telephones, and drinking fountains serving the area) must also be made accessible, but only to the extent that the cost of doing so does not exceed twenty percent (20%) of the cost of the alterations to the primary function area. The UFAS requirements for a substantial alteration, though different, may have covered some of the items that will now be covered by the path of travel requirement.

Visible Alarms in Alterations to Existing Facilities. The 1991 Standards, at sections 4.1.3(14) and 4.1.6(1)(b), and sections 202.3 and 215.1 of the 2010 Standards require that when existing elements and spaces of a facility are altered, the alterations must comply with new construction requirements. Section 215.1 of the 2010 Standards adds a new exception to the scoping requirement for visible alarms in existing facilities so that visible alarms must be installed only when an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.

Some commenters urged the Department not to include the exception and to make visible alarms a mandatory requirement for all spaces, both existing and new. Other commenters said that the exception will make the safety of individuals with disabilities dependent upon the varying age of existing fire alarm systems. Other commenters suggested that including this requirement, even with the exception, will result in significant cost to building owners and operators.

The Department believes that the language of the exception to section 215.1 of the 2010 Standards strikes a reasonable balance between the interests of individuals with disabilities and those of the business community. If undertaken at the time a system is installed, whether in a new facility or in a planned system upgrade, the cost of adding visible alarms is reasonable. Over time, existing facilities will become fully accessible to individuals who are deaf or hard of hearing, and will add minimal costs to owners and operators.

203 General Exceptions

Limited Access Spaces and Machinery Spaces. The 1991 Standards, at section 4.1.1, contain an exception that exempts ''non-occupiable'' spaces that have limited means of access, such as ladders or very narrow passageways, and that are visited only by service personnel for maintenance, repair, or occasional monitoring of equipment, from all accessibility requirements. Sections 203.4 and 203.5 of the 2010 Standards expand this exception by removing the condition that the exempt spaces be ''non-occupiable,'' and by separating the other conditions into two independent exceptions: one for spaces with limited means of access, and the other for machinery spaces. More spaces are exempted by the exception in the 2010 Standards.

203, 206 and 215 Employee Work Areas

Common Use Circulation Paths in Employee Work Areas. The 1991 Standards at section 4.1.1(3), and the 2010 Standards at section 203.9, require employee work areas in new construction and alterations *only* to be designed and constructed so that individuals with disabilities can approach, enter, and exit the areas. Section 206.2.8 of the 2010 Standards requires accessible common use circulation paths within employee work areas unless they are subject to exceptions in sections 206.2.8, 403.5, 405.5, and 405.8. The ADA, 42 U.S.C. 12112 (b)(5)(A) and (B), requires employers to make reasonable accommodations in the workplace for individuals with disabilities, which may include modifications to work areas when needed. Providing increased access in the facility at the time of construction or alteration will simplify the process of providing reasonable accommodations when they are needed.

The requirement for accessible common use circulation paths will not apply to existing facilities pursuant to the readily achievable barrier removal requirement. The Department has consistently taken the position that barrier removal requirements do not apply to areas used exclusively by employees because the purpose of title III is to ensure that access is provided to clients and customers. *See* Appendix B to the 1991 regulation implementing title III, 28 CFR part 36.

Several exceptions to section 206.2.8 of the 2010 Standards exempt common use circulation paths in employee work areas from the requirements of section 402 where it may be difficult to comply with the technical requirements for accessible routes due to the size or function of the area:

- Employee work areas, or portions of employee work areas, that are less than 300 square feet and are elevated 7 inches or more above the ground or finish floor, where elevation is essential to the function of the space, are exempt.
- Common use circulation paths within employee work areas that are less than 1,000 square feet and are defined by permanently installed partitions, counters, casework, or furnishings are exempt. Kitchens in quick service restaurants, cocktail bars, and the employee side of service counters are frequently covered by this exception.
- Common use circulation paths within exterior employee work areas that are fully exposed to the weather are exempt. Farms, ranches, and outdoor maintenance facilities are covered by this exception.

The 2010 Standards in sections 403.5 and 405.8 also contain exceptions to the technical requirements for accessible routes for circulation paths in employee work areas:

• Machinery and equipment are permitted to reduce the clear width of common use circulation paths where the reduction is essential to the function of the work performed. Machinery and equipment that must be placed a certain way to work properly, or for ergonomics or to prevent workplace injuries are covered by this exception.

• Handrails are not required on ramps, provided that they can be added in the future.

Commenters stated that the requirements set out in the 2010 Standards for accessible common use circulation paths in employee work areas are inappropriate, particularly in commercial kitchens, storerooms, and behind cocktail bars where wheelchairs would not be easily accommodated. These commenters further urged the Department not to adopt a requirement that circulation paths in employee work areas be at least 36 inches wide, including those at emergency exits.

These commenters misunderstand the scope of the provision. Nothing in the 2010 Standards requires all circulation paths in non-exempt areas to be accessible. The Department recognizes that building codes and fire and life safety codes, which are adopted by all of the states, require *primary* circulation paths in facilities, including employee work areas, to be at least 36 inches wide for purposes of emergency egress. Accessible routes also are at least 36 inches wide. Therefore, the Department anticipates that covered entities will be able to satisfy the requirement to provide accessible circulation paths by ensuring that their required *primary* circulation paths are accessible.

Individual employee work stations, such as a grocery checkout counter or an automobile service bay designed for use by one person, do not contain common use circulation paths and are not required to comply. Other work areas, such as stockrooms that typically have narrow pathways between shelves, would be required to design only one accessible circulation path into the stockroom. It would not be necessary to make each circulation path in the room accessible. In alterations it may be technically infeasible to provide accessible common use circulation paths in some employee work areas. For example, in a stock room of a department store significant existing physical constraints, such as having to move walls to avoid the loss of space to store inventory, may mean that it is technically infeasible (*see* section 106.5 ''Defined Terms'' of the 2010 Standards) to make even the primary common use circulation path in that stock room wide enough to be accessible. In addition, the 2010 Standards include exceptions for common use circulation paths in employee work areas where it may be difficult to comply with the technical requirements for accessible routes due to the size or function of the areas. The Department believes that these exceptions will provide the flexibility necessary to ensure that this requirement does not interfere with legitimate business operations.

Visible Alarms. Section 215.3 of the 2010 Standards provides that where employee work areas in newly constructed facilities have audible alarm coverage they are required to have wiring systems that are capable of supporting visible alarms that comply with section 702 of the 2010 Standards. The 1991 Standards, at section 4.1.1(3), require visible alarms to be provided where audible fire alarm systems are provided, but do not require areas used only by employees as work areas to be equipped with accessibility features. As applied to office buildings, the 1991 Standards require visible alarms to be provided in public and common use areas such as hallways, conference rooms, break rooms, and restrooms, where audible fire alarm systems are provided.

Commenters asserted that the requirements of section 215.3 of the 2010 Standards would be burdensome to meet. These commenters also raised concerns that all employee work areas within existing buildings and facilities must be equipped with accessibility features.

The commenters' concerns about section 215.3 of the 2010 Standards represent a misunderstanding of the requirements applicable to employee work areas.

Newly constructed buildings and facilities merely are required to provide wiring so that visible alarm systems can be added as needed to accommodate employees who are deaf or hard of hearing. This is a minimal requirement without significant impact.

The other issue in the comments represents a misunderstanding of the Department's existing regulatory requirements. Employee common use areas in covered facilities (*e.g.*, locker rooms, break rooms, cafeterias, toilet rooms, corridors to exits, and other common use spaces) were required to be accessible under the 1991 Standards; areas in which employees actually perform their jobs are required to enable a person using a wheelchair or mobility device to approach, enter, and exit the area. The 2010 Standards require increased access through the accessible common use circulation path requirement, but neither the 1991 Standards nor the 2010 Standards require employee work stations to be accessible. Access to specific employee *work stations* is governed by title I of the ADA.

205 and 309 Operable Parts

Section 4.1.3, and more specifically sections 4.1.3(13), 4.27.3, and 4.27.4 of the 1991 Standards, require operable parts on accessible elements, along accessible routes, and in accessible rooms and spaces to comply with the technical requirements for operable parts, including height and operation. The 1991 Standards, at section 4.27.3, contain an

exception, ''* * * where the use of special equipment dictates otherwise or where electrical and communications systems receptacles are not normally intended for use by building occupants,'' from the technical requirement for the height of operable parts. Section 205.1 of the 2010 Standards divides this exception into three exceptions covering operable parts intended only for use by service or maintenance personnel, electrical or communication receptacles serving a dedicated use, and floor electrical receptacles. Operable parts covered by these new exceptions are exempt from all of the technical requirements for operable parts in section 309. The 2010 Standards also add exceptions that exempt certain outlets at kitchen counters; heating, ventilating and air conditioning diffusers; redundant controls provided for a single element, other than light switches; and exercise machines and equipment from all of the technical requirements for operable parts. Exception 7, in section 205.1 of the 2010 Standards, exempts cleats and other boat securement devices from the accessible height requirement. Similarly, section 309.4 of the 2010 Standards exempts gas pump nozzles, but only from the technical requirement for activating force.

Reach Ranges. The 1991 Standards set the maximum height for side reach at 54 inches above the floor. The 2010 Standards, at section 308.3, lower that maximum height to 48 inches above the finish floor or ground. The 2010 Standards also add exceptions, as discussed above, to the scoping requirement for operable parts for certain elements that, among other things, will exempt them from the reach range requirements in section 308.

The 1991 Standards, at sections 4.1.3, 4.27.3, and 4.2.6, and the 2010 Standards, at sections 205.1, 228.1, 228.2, 308.3, and 309.3, require operable parts of accessible elements, along accessible routes, and in accessible rooms and spaces to be placed within the forward or side-reach ranges specified in section 308. The 2010 Standards also require at least five percent (5%) of mailboxes provided in an interior location and at least one of each type of depository, vending machine, change machine, and gas pump to meet the technical requirements for a forward or a side reach.

Section 4.2.6 of the 1991 Standards specifies a maximum 54-inch high side reach and a minimum 9-inch low side reach for an unobstructed reach depth of 10 inches maximum. Section 308.3.1 of the 2010 Standards specifies a maximum 48-inch high side reach and a minimum 15-inch low side reach where the element being reached for is unobstructed. Section 308.3.1, Exception 1, permits an obstruction that is no deeper than 10 inches between the edge of the clear floor or ground space and the element that the individual with a disability is trying to reach. Changes in the side-reach range for new construction and alterations in the 2010 Standards will affect a variety of building elements such as light switches, electrical outlets, thermostats, fire alarm pull stations, card readers, and keypads.

Commenters were divided in their views about the changes to the unobstructed side-reach range. Disability advocacy groups and others, including individuals of short stature, supported the modifications to the proposed reach range requirements. Other commenters stated that the new reach range requirements will be burdensome for small businesses to comply with. These comments argued that the new reach range requirements restrict design options, especially in residential housing.

The Department continues to believe that data submitted by advocacy groups and others provides compelling evidence that lowered reach range requirements will better serve significantly greater numbers of individuals with disabilities, including individuals of short stature, persons with limited upper body strength, and others with limited use of their arms and fingers. The change to the side-reach range was developed by the Access Board over a prolonged period in which there was extensive public participation. This process did not produce any significant data to indicate that applying the new unobstructed side-reach range requirement in new construction or during alterations would impose a significant burden.

206 and Chapter 4 Accessible Routes

Slope. The 2010 Standards provide, at section 403.3, that the cross slope of walking surfaces not be steeper than 1:48. The 1991 Standards' cross slope requirement was that it not exceed 1:50. A commenter recommended increasing the cross slope requirement to allow a maximum of ½ inch per foot (1:24) to prevent imperfections in concrete surfaces from ponding water. The Department continues to believe that the requirement that a cross slope not be steeper than 1:48 adequately provides for water drainage in most situations. The suggested changes would double the allowable cross slope and create a significant impediment for many wheelchair users and others with a mobility disability.

Accessible Routes from Site Arrival Points and Within Sites. The 1991 Standards, at sections 4.1.2(1) and (2), and the 2010 Standards, at sections 206.2.1 and 206.2.2, require that at least one accessible route be provided within the site from site arrival points to an accessible building entrance and that at least one accessible route connect accessible facilities on the same site. The 2010 Standards also add two exceptions that exempt site arrival points and accessible facilities within a site from the accessible route requirements where the only means of access between them is a vehicular way that does not provide pedestrian access.

Commenters urged the Department to eliminate the exception that exempts site arrival points and accessible facilities from the accessible route requirements where the only means of access between them is a vehicular way not providing pedestrian access. The Department declines to accept this recommendation because the Department believes that its use will be limited. If it can be reasonably anticipated that the route between the site arrival point and the accessible facilities will be used by pedestrians, regardless of whether a pedestrian route is provided, then this exception will not apply. It will apply only in the relatively rare situations where the route between the site arrival point and the accessible facility dictates vehicular access—for example, an office complex on an isolated site that has a private access road, or a self-service storage facility where all users are expected to drive to their storage units.

Another commenter suggested that the language of section 406.1 of the 2010 Standards is confusing because it states that curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 405.10. The 1991 Standards require that curb ramps be provided wherever an accessible route crosses a curb.

The Department declines to change this language because the change is purely editorial, resulting from the overall changes in the format of the 2010 Standards. It does not change the substantive requirement. In the 2010 Standards all elements on a required accessible route must be accessible; therefore, if the accessible route crosses a curb, a curb ramp must be provided.

Areas of Sport Activity. Section 206.2.2 of the 2010 Standards requires at least one accessible route to connect accessible buildings, facilities, elements, and spaces on the same site. Advisory section 206.2.2 adds the explanation that an accessible route must connect the boundary of each area of sport activity (*e.g.*, courts and playing fields, whether indoor or outdoor). Section 206.2.12 of the 2010 Standards further requires that in court sports the accessible route must directly connect both sides of the court.

Limited-Use/Limited-Application Elevators, Destination-Oriented Elevators and Private Residence Elevators. The 1991 Standards, at section 4.1.3(5), and the 2010 Standards, at sections 206.2 and 206.6, include exceptions to the scoping requirement for accessible routes that exempt certain facilities from connecting each story with an elevator. If a facility is exempt from the scoping requirement, but nonetheless installs an elevator, the 1991 Standards require the elevator to comply with the technical requirements for elevators. The 2010 Standards add a new exception that allows a facility that is exempt from the scoping requirement to install a limited-use/limited-application (LULA) elevator. LULA elevators are also permitted in the 1991 Standards and the 2010 Standards as an alternative to platform lifts. The 2010 Standards also add a new exception that permits private residence elevators in multistory dwelling and transient lodging units. The 2010 Standards contain technical requirements for LULA elevators at section 408 and private residence elevators at section 409.

Section 407.2.1.4 of the 2010 Standards includes an exception to the technical requirements for locating elevator call buttons for destination-oriented elevators. The advisory at section 407.2.1.4 describes lobby controls for destination-oriented elevator systems. Many elevator manufacturers have recently developed these new ''buttonless'' elevator control systems. These new, more efficient elevators are usually found in high-rise buildings that have several elevators. They require passengers to enter their destination floor on an entry device, usually a keypad, in the elevator lobby. The system then sends the most efficient car available to take all of the passengers going to the sixth floor, for example, only to the sixth floor, without making stops at the third, fourth, and fifth floors on the way to the sixth floor. The challenge for individuals who are blind or have low vision is how to know which elevator car to enter, after they have entered their destination floor into the keypad.

Commenters requested that the Department impose a moratorium on the installation of destination-oriented elevators arguing that this new technology presents wayfinding challenges for persons who are blind or have low vision.

Section 407.2.1.5 of the 2010 Standards allows destination-oriented elevators to not provide call buttons with visible signals to indicate when each call is registered and when each call is answered *provided* that visible and audible signals, compliant with 407.2.2 of the 2010 Standards, indicating which elevator car to enter, are provided. This will require the responding elevator car to automatically provide audible and visible communication so that the system will always verbally and visually indicate which elevator car to enter.

As with any new technology, all users must have time to become acquainted with how to use destination-oriented elevators. The Department will monitor the use of this new technology and work with the Access Board so that there is not a decrease in accessibility as a result of permitting this new technology to be installed.

Accessible Routes to Tiered Dining Areas in Sports Facilities. The 1991 Standards, at sections 4.1.3(1) and 5.4, and section 206.2.5 of the 2010 Standards require an accessible route to be provided to all dining areas in new construction, including raised or sunken dining

areas. The 2010 Standards add a new exception for tiered dining areas in sports facilities. Dining areas in sports facilities are typically integrated into the seating bowl and are tiered to provide adequate lines of sight for individuals with disabilities. The new exception requires accessible routes to be provided to at least 25 percent (25%) of the tiered dining areas in sports facilities. Each tier must have the same services and the accessible routes must serve the accessible seating.

Accessible Routes to Press Boxes. The 1991 Standards, at sections 4.1.1(1) and 4.1.3(1), cover all areas of newly constructed facilities required to be accessible, and require an accessible route to connect accessible entrances with all accessible spaces and elements within the facility. Section 201.1 of the 2010 Standards requires that all areas of newly designed and constructed buildings and facilities and altered portions of existing buildings and facilities be accessible. Sections 206.2.7(1) and (2) of the 2010 Standards add two exceptions that exempt small press boxes that are located in bleachers with entrances on only one level, and small press boxes that are free-standing structures elevated 12 feet or more above grade, from the accessible route requirement when the aggregate area of all press boxes in a sports facility does not exceed 500 square feet. The Department anticipates that this change will significantly reduce the economic impact on smaller sports facilities, such as those associated with high schools or community colleges.

Public Entrances. The 1991 Standards, at sections 4.1.3(8) and 4.1.6(1)(h), require at least fifty percent (50%) of public entrances to be accessible. Additionally, the 1991 Standards require the number of accessible public entrances to be equivalent to the number of exits required by applicable building and fire codes. With very few exceptions, building and fire codes require at least two exits to be provided from spaces within a building and from the building itself. Therefore, under the 1991 Standards where two public entrances are planned in a newly constructed facility, both entrances are required to be accessible.

Instead of requiring accessible entrances based on the number of public entrances provided or the number of exits required (whichever is greater), section 206.4.1 of the 2010 Standards requires at least sixty percent (60%) of public entrances to be accessible. The revision is intended to achieve the same result as the 1991 Standards. Thus, under the 2010 Standards where two public entrances are planned in a newly constructed facility, both entrances must be accessible.

Where multiple public entrances are planned to serve different site arrival points, the 1991 Standards, at section 4.1.2(1), and section 206.2.1 of the 2010 Standards require at least one accessible route to be provided from each type of site arrival point provided, including accessible parking spaces, accessible passenger loading zones, public streets and sidewalks, and public transportation stops, to an accessible public entrance that serves the site arrival point.

Commenters representing small businesses recommended retaining the 1991 requirement for fifty percent (50%) of public entrances of covered entities to be accessible. These commenters also raised concerns about the impact upon existing facilities of the new sixty percent (60%) requirement.

The Department believes that these commenters misunderstand the 1991 Standards. As explained above, the requirements of the 1991 Standards generally require more than fifty percent (50%) of entrances in small facilities to be accessible. Model codes require that most buildings have more than one means of egress. Most buildings have more than one entrance, and the requirements of the 1991 Standards typically resulted in these buildings having more than one accessible entrance. Requiring at least sixty percent (60%) of public entrances to be accessible is not expected to result in a substantial increase in the number of accessible entrances compared to the requirements of the 1991 Standards. In some very large facilities this change may result in fewer accessible entrances being required by the 2010 Standards. However, the Department believes that the realities of good commercial design will result in more accessible entrances being provided for the convenience of all users.

The 1991 Standards and the 2010 Standards also contain exceptions that limit the number of accessible entrances required in alterations to existing facilities. When entrances to an existing facility are altered and the facility has an accessible entrance, the entrance being altered is not required to be accessible, unless a primary function area also is altered and then an accessible path of travel must be provided to the primary function area to the extent that the cost to do so is not disproportionate to the overall cost of the alteration.

Alterations to Existing Elevators. When a single space or element is altered, the 1991 Standards, at sections 4.1.6(1)(a) and (b), require the space or element to be made accessible. When an element in one elevator is altered, the 2010 Standards, at section 206.6.1, require the same element to be altered in all elevators that are programmed to respond to the same call button as the altered elevator.

The 2010 Standards, at sections 407.2.1–407.4.7.1.2, also contain exceptions to the technical requirements for elevators when existing elevators are altered that minimize the impact of this change.

Commenters expressed concerns about the requirement that when an element in one elevator is altered, the 2010 Standards, at section 206.6.1, will require the same element to be altered in all elevators that are programmed to respond to the same call button as the altered elevator. Commenters noted that such a requirement is burdensome and will result in costly efforts without significant benefit to individuals with disabilities.

The Department believes that this requirement is necessary to ensure that when an individual with a disability presses a call button, an accessible elevator will arrive. Without this requirement, individuals with disabilities would have to wait unnecessarily for an accessible elevator to make its way to them arbitrarily. The Department also believes that the effort required to meet this provision is minimal in the majority of situations because it is typical to upgrade all of the elevators in a bank at the same time.

Accessible Routes in Dwelling Units with Mobility Features. Sections 4.34.1 and 4.34.2 of the UFAS require the living area, kitchen and dining area, bedroom, bathroom, and laundry area, where provided, in covered dwelling units with mobility features to be on an accessible route. Where covered dwelling units have two or more bedrooms, at least two bedrooms are required to be on an accessible route.

The 2010 Standards at sections 233.3.1.1, 809.1, 809.2, 809.2.1, and 809.4 will require all spaces and elements within dwelling units with mobility features to be on an accessible route. These changes exempt unfinished attics and unfinished basements from the accessible route requirement. Section 233.3.5 of the 2010 Standards also includes an exception to the dispersion requirement that permits accessible single-story dwelling units to be constructed, where multi-story dwelling units are one of the types of units provided.

Location of Accessible Routes. Section 4.3.2(1) of the 1991 Standards requires accessible routes connecting site arrival points and accessible building entrances to coincide with general circulation paths, to the maximum extent feasible. The 2010 Standards require all accessible routes to coincide with or be located in the same general area as general circulation paths. Additionally, a new provision specifies that where a circulation path is interior, the required accessible route must also be located in the interior of the facility. The change affects a limited number of buildings. Section 206.3 of the 2010 Standards requires all accessible routes to coincide with or be located in the same general area as general circulation paths. Designing newly constructed interior accessible routes to coincide with or to be located in the same area as general circulation paths will not typically present a difficult design challenge and is expected to impose limited design constraints. The change will have no impact on exterior accessible routes. The 1991 Standards and the 2010 Standards also require accessible routes to be located in the interior of the facility where general circulation paths are located in the interior of the facility. The revision affects a limited number of buildings.

Location of Accessible Routes to Stages. The 1991 Standards at section 4.33.5 require an accessible route to connect the accessible seating and the performing area. Section 206.2.6 of the 2010 Standards requires the accessible route to directly connect the seating area and the accessible seating, stage, and all areas of the stage, where a circulation path directly connects the seating area and the stage. Both the 1991 Standards and the 2010 Standards also require an accessible route to connect the stage and ancillary areas, such as dressing rooms, used by performers. The 2010 Standards do not require an additional accessible route to be provided to the stage. Rather, the changes specify where the accessible route to the stage, which is required by the 1991 Standards, must be located.

207 Accessible Means of Egress

General. The 1991 Standards at sections 4.1.3(9); 4.1.6(1)(g); and 4.3.10 establish scoping and technical requirements for accessible means of egress. Section 207.1 of the 2010 Standards reference the International Building Code (IBC) for scoping and technical requirements for accessible means of egress.

The 1991 Standards require the same number of accessible means of egress to be provided as the number of exits required by applicable building and fire codes. The IBC requires at least one accessible means of egress and at least two accessible means of egress where more than one means of egress is required by other sections of the building code. The changes in the 2010 Standards are expected to have minimal impact since the model fire and life safety codes, which are adopted by all of the states, contain equivalent requirements with respect to the number of accessible means of egress.

The 1991 Standards require areas of rescue assistance or horizontal exits in facilities with levels above or below the level of exit discharge. Areas of rescue assistance are spaces that have direct access to an exit, stair, or enclosure where individuals who are unable to use stairs can go to call for assistance and wait for evacuation. The 2010 Standards incorporate the requirements established by the IBC. The IBC requires an evacuation elevator designed with standby power and other safety features that can be used for emergency evacuation of individuals with disabilities in facilities with four or more stories above or below the exit discharge level, and allows exit stairways and evacuation elevators to be used as an accessible means of egress in conjunction with areas of refuge or horizontal exits. The

change is expected to have minimal impact since the model fire and life safety codes, adopted by most states, already contain parallel requirements with respect to evacuation elevators.

The 1991 Standards exempt facilities equipped with a supervised automatic sprinkler system from providing areas of rescue assistance, and also exempt alterations to existing facilities from providing an accessible means of egress. The IBC exempts buildings equipped with a supervised automatic sprinkler system from certain technical requirements for areas of refuge, and also exempts alterations to existing facilities from providing an accessible means of egress.

The 1991 and 2010 Standards require signs that provide direction to or information about functional spaces to meet certain technical requirements. The 2010 Standards, at section 216.4, address exit signs. This section is consistent with the requirements of the IBC. Signs used for means of egress are covered by this scoping requirement. The requirements in the 2010 Standards require tactile signs complying with sections 703.1, 703.2 and 703.5 at doors at exit passageways, exit discharge, and at exit stairways. Directional exit signs and signs at areas of refuge required by section 216.4.3 must have visual characters and features complying with section 703.5.

Standby Power for Platform Lifts. The 2010 Standards at section 207.2 require standby power to be provided for platform lifts that are permitted to serve as part of an accessible means of egress by the IBC. The IBC permits platform lifts to serve as part of an accessible means of egress in a limited number of places where platform lifts are allowed in new construction. The 1991 Standards, at 4.1.3(5) Exception 4(a) through (d), and the 2010 Standards, at sections 206.7.1 through 206.7.10, similarly limit the places where platform lifts are allowed in new construction.

Commenters urged the Department to reconsider provisions that would require standby power to be provided for platform lifts. Concerns were raised that ensuring standby power would be too burdensome. The Department views this issue as a fundamental life safety issue. Lift users face the prospect of being trapped on the lift in the event of a power failure if standby power is not provided. The lack of standby power could be life-threatening in situations where the power failure is associated with a fire or other emergency. The use of a platform lift is generally only one of the options available to covered entities. Covered entities that are concerned about the costs associated with maintaining standby power for a lift may wish to explore design options that would incorporate the use of a ramp.

208 and 502 Parking Spaces

General. Where parking spaces are provided, the 1991 Standards, at sections 4.1.2(5)(a) and (7) and 7(a), and the 2010 Standards, at section 208.1, require a specified number of the parking spaces to be accessible. The 2010 Standards, at section 208, include an exception that exempts parking spaces used exclusively for buses, trucks, delivery vehicles, law enforcement vehicles, or for purposes of vehicular impound, from the scoping requirement for parking spaces, provided that when these lots are accessed by the public the lot has an accessible passenger loading zone.

The 2010 Standards require accessible parking spaces to be identified by signs that display the International Symbol of Accessibility. Section 216.5, Exceptions 1 and 2, of the 2010 Standards exempt certain accessible parking spaces from this signage requirement. The first exception exempts sites that have four or fewer parking spaces from the signage requirement. Residential facilities where parking spaces are assigned to specific dwelling units are also exempted from the signage requirement.

Commenters stated that the first exception, by allowing a small parking lot with four or fewer spaces not to post a sign at its one accessible space, is problematic because it could allow all drivers to park in accessible parking spaces. The Department believes that this exception provides necessary relief for small business entities that may otherwise face the prospect of having between twenty-five percent (25%) and one hundred percent (100%) of their limited parking area unavailable to their customers because they are reserved for the exclusive use of persons whose vehicles display accessible tags or parking placards. The 2010 Standards still require these businesses to ensure that at least one of their available parking spaces is designed to be accessible.

A commenter stated that accessible parking spaces must be clearly marked. The Department notes that section 502.6 of the 2010 Standards provides that accessible parking spaces must be identified by signs that include the International Symbol of Accessibility. Also, section 502.3.3 of the 2010 Standards requires that access aisles be marked so as to discourage parking in them.

Access Aisle. Section 502.3 of the 2010 Standards requires that an accessible route adjoin each access aisle serving accessible parking spaces. The accessible route connects each access aisle to accessible entrances.

Commenters questioned why the 2010 Standards would permit an accessible route used by individuals with disabilities to coincide with the path of moving vehicles. The Department believes that the 2010 Standards appropriately recognize that not all parking facilities provide separate pedestrian routes.

Section 502.3 of the 2010 Standards provides the flexibility necessary to permit designers and others to determine the most appropriate location of the accessible route to the accessible entrances. If all pedestrians using the parking facility are expected to share the vehicular lanes, then the ADA permits covered entities to use the vehicular lanes as part of the accessible route. The advisory note in section 502.3 of the 2010 Standards, however, calls attention to the fact that this practice, while permitted, is not ideal. Accessible parking spaces must be located on the shortest accessible route of travel to an accessible entrance. Accessible parking spaces and the required accessible route should be located where individuals with disabilities do not have to cross vehicular lanes or pass behind parked vehicles to have access to an accessible entrance. If it is necessary to cross a vehicular lane because, for example, local fire engine access requirements prohibit parking immediately adjacent to a building, then a marked crossing running perpendicular to the vehicular route should be included as part of the accessible route to an accessible entrance.

Van Accessible Parking Spaces. The 1991 Standards, at sections 4.1.2(5)(b), 4.6.3, 4.6.4, and 4.6.5, require one in every eight accessible parking spaces to be van accessible. Section 208.2.4 of the 2010 Standards requires one in every six accessible parking spaces to be van accessible.

A commenter asked whether automobiles other than vans may park in van accessible parking spaces. The 2010 Standards do not prohibit automobiles other than vans from using van accessible parking spaces. The Department does not distinguish between vehicles that are actual ''vans'' versus other vehicles such as trucks, station wagons, sport utility vehicles, etc. since many vehicles other than vans may be used by individuals with disabilities to transport mobility devices.

Commenters' opinions were divided on this point. Facility operators and others asked for a reduction in the number of required accessible parking spaces, especially the number of van accessible parking spaces, because they claimed these spaces often are not used. Individuals with disabilities, however, requested an increase in the scoping requirements for these parking spaces.

The Department is aware that a strong difference of opinion exists between those who use such spaces and those who must provide or maintain them. Therefore, the Department did not increase the total number of accessible spaces required. The only change was to increase the proportion of spaces that must be accessible to vans and other vehicles equipped to transport mobility devices.

Direct Access Entrances From Parking Structures. Where levels in a parking garage have direct connections for pedestrians to another facility, the 1991 Standards, at section 4.1.3(8)(b)(i), require at least one of the direct connections to be accessible. The 2010 Standards, at section 206.4.2, require all of these direct connections to be accessible.

209 and 503 Passenger Loading Zones and Bus Stops

Passenger Loading Zones at Medical Care and Long-Term Care Facilities. Sections 6.1 and 6.2 of the 1991 Standards and section 209.3 of the 2010 Standards require medical care and long-term care facilities, where the period of stay exceeds 24 hours, to provide at least one accessible passenger loading zone at an accessible entrance. The 1991 Standards also require a canopy or roof overhang at this passenger loading zone. The 2010 Standards do not require a canopy or roof overhang.

Commenters urged the Department to reinstate the requirement for a canopy or roof overhang at accessible passenger loading zones at medical care and long-term care facilities. While the Department recognizes that a canopy or roof overhang may afford useful protection from inclement weather conditions to everyone using a facility, it is not clear that the absence of such protection would impede access by individuals with disabilities. Therefore, the Department declined to reinstate that requirement.

Passenger Loading Zones. Where passenger loading zones are provided, the 1991 Standards, at sections 4.1.2(5) and 4.6.6, require at least one passenger loading zone to be accessible. Sections 209.2.1 and 503 of the 2010 Standards, require facilities such as airport passenger terminals that have long, continuous passenger loading zones to provide one accessible passenger loading zone in every continuous 100 linear feet of loading zone space. The 1991 Standards and the 2010 Standards both include technical requirements for the vehicle pull-up space (96 inches wide minimum and 20 feet long minimum). Accessible passenger loading zones must have an access aisle that is 60 inches wide minimum and extends the full length of the vehicle pull-up space. The 1991 Standards permit the access aisle to be on the same level as the vehicle pull-up space, or on the sidewalk. The 2010 Standards require the access aisle to be on the same level as the vehicle pull-up space and to be marked so as to discourage parking in the access aisle.

Commenters expressed concern that certain covered entities, particularly airports, cannot accommodate the requirements of the 2010 Standards to provide passenger loading zones, and urged a revision that would require one accessible passenger loading zone located in reasonable proximity to each building entrance served by the curb.

Commenters raised a variety of issues about the requirements at section 503 of the 2010 Standards stating that the requirements

for an access aisle, width, length, and marking of passenger loading zones are not clear, do not fully meet the needs of individuals with disabilities, may run afoul of state or local requirements, or may not be needed because many passenger loading zones are typically staffed by doormen or valet parkers. The wide range of opinions expressed in these comments indicates that this provision is controversial. However, none of these comments provided sufficient data to enable the Department to determine that the requirement is not appropriate.

Valet Parking and Mechanical Access Parking Garages. The 1991 Standards, at sections 4.1.2(5)(a) and (e), and sections 208.2, 209.4, and 209.5 of the 2010 Standards require parking facilities that provide valet parking services to have an accessible passenger loading zone. The 2010 Standards extend this requirement to mechanical access parking garages. The 1991 Standards contained an exception that exempted valet parking facilities from providing accessible parking spaces. The 2010 Standards eliminate this exception. The reason for not retaining the provision is that valet parking is a service, not a facility type.

Commenters questioned why the exception for valet parking facilities from providing accessible parking spaces was eliminated. The provision was eliminated because valet parkers may not have the skills necessary to drive a vehicle that is equipped to be accessible, including use of hand controls, or when a seat is not present to accommodate a driver using a wheelchair. In that case, permitting the individual with a disability to self-park may be a required reasonable modification of policy by a covered entity.

210 and 504 Stairways

The 1991 Standards require stairs to be accessible only when they provide access to floor levels not otherwise connected by an accessible route (*e.g.*, where the accessible route is provided by an elevator, lift, or ramp). The 2010 Standards, at sections 210.1 and 504, require all newly constructed stairs that are part of a means of egress to comply with the requirements for accessible stairs, which include requirements for accessible treads, risers, and handrails. In existing facilities, where floor levels are connected by an accessible route, only the handrail requirement will apply when the stairs are altered. Exception 2 to section 210.1 of the 2010 Standards permits altered stairs to not comply with the requirements for accessible treads and risers where there is an accessible route between floors served by the stairs.

Most commenters were in favor of this requirement for handrails in alterations and stated that adding handrails to stairs during alterations would be feasible and not costly while providing important safety benefits. The Department believes that it strikes an appropriate balance by focusing the expanded requirements on new construction. The 2010 Standards apply to stairs which are part of a required means of egress. Few stairways are not part of a means of egress. The 2010 Standards are consistent with most building codes which do not exempt stairways when the route is also served by a ramp or elevator.

211 and 602 Drinking Fountains

Sections 4.1.3(10) and 4.15 of the 1991 Standards and sections 211 and 602 of the 2010 Standards require drinking fountains to be provided for persons who use wheelchairs and for others who stand. The 1991 Standards require wall and post-mounted cantilevered drinking fountains mounted at a height for wheelchair users to provide clear floor space for a forward approach with knee and toe clearance and free standing or built-in drinking fountains to provide clear floor space for a parallel approach. The 2010 Standards require drinking fountains mounted at a height for wheelchair users to provide clear floor space for a forward approach with knee and toe clearance, and include an exception for a parallel approach for drinking fountains installed at a height to accommodate very small children. The 2010 Standards also include a technical requirement for drinking fountains for standing persons.

212 and 606 Kitchens, Kitchenettes, Lavatories, and Sinks

The 1991 Standards, at sections 4.24, and 9.2.2(7), contain technical requirements for sinks and only have specific scoping requirements for sinks in transient lodging. Section 212.3 of the 2010 Standards requires at least five percent (5%) of sinks in each accessible space to comply with the technical requirements for sinks. The technical requirements address clear floor space, height, faucets, and exposed pipes and surfaces. The 1991 Standards, at section 4.24, and the 2010 Standards, at section 606, both require the clear floor space at sinks to be positioned for a forward approach and knee and toe clearance to be provided under the sink. The 1991 Standards, at section 9.2.2(7), allow the clear floor space at kitchen sinks and wet bars in transient lodging guest rooms with mobility features to be positioned for either a forward approach with knee and toe clearance or for a parallel approach.

The 2010 Standards include an exception that permits the clear floor space to be positioned for a parallel approach at kitchen sinks in any space where a cook top or conventional range is not provided, and at a wet bar.

A commenter stated that it is unclear what the difference is between a sink and a lavatory, and that this is complicated by requirements that apply to sinks (five percent (5%) accessible) and lavatories (at least one

accessible). The term ''lavatory'' generally refers to the specific type of plumbing fixture required for hand washing in toilet and bathing facilities. The more generic term ''sink'' applies to all other types of sinks located in covered facilities.

A commenter recommended that the mounting height of sinks and lavatories should take into consideration the increased use of three-wheeled scooters and some larger wheelchairs. The Department is aware that the use of three-wheeled scooters and larger wheelchairs may be increasing and that some of these devices may require changes in space requirements in the future. The Access Board is funding research to obtain data that may be used to develop design guidelines that provide access to individuals using these mobility devices.

213, 603, 604, and 608 Toilet and Bathing Facilities, Rooms, and Compartments

General. Where toilet facilities and bathing facilities are provided, they must comply with section 213 of the 2010 Standards.

A commenter recommended that all accessible toilet facilities, toilet rooms, and compartments should be required to have signage indicating that such spaces are restricted solely for the use of individuals with disabilities. The Department believes that it is neither necessary nor appropriate to restrict the use of accessible toilet facilities. Like many other facilities designed to be accessible, accessible toilet facilities can and do serve a wide range of individuals with and without disabilities.

A commenter recommended that more than one wheelchair accessible compartment be provided in toilet rooms serving airports and train stations because these compartments are likely to be occupied by individuals with luggage and persons with disabilities often take longer to use them. The Access Board is examining airport terminal accessibility as part of an ongoing effort to facilitate accessibility and promote effective design. As part of these efforts, the Access Board will examine requirements for accessible toilet compartments in larger airport restrooms. The Department declines to change the scoping for accessible toilet compartments at this time.

Ambulatory Accessible Toilet Compartments. Section 213.3.1 of the 2010 Standards requires multi-user men's toilet rooms, where the total of toilet compartments and urinals is six or more, to contain at least one ambulatory accessible compartment. The 1991 Standards count only toilet stalls (compartments) for this purpose. The 2010 Standards establish parity between multi-user women's toilet rooms and multi-user men's toilet rooms with respect to ambulatory accessible toilet compartments.

Urinals. Men's toilet rooms with only one urinal will no longer be required to provide an accessible urinal under the 2010 Standards. Such toilet rooms will still be required to provide an accessible toilet compartment.

Commenters urged that the exception be eliminated. The Department believes that this change will provide flexibility to many small businesses and it does not alter the requirement that all common use restrooms must be accessible.

Multiple Single-User Toilet Rooms. Where multiple single-user toilet rooms are clustered in a single location, fifty percent (50%), rather than the one hundred percent (100%) required by the 1991 Standards, are required to be accessible by section 213.2, Exception 4 of the 2010 Standards. Section 216.8 of the 2010 Standards requires that accessible single-user toilet rooms must be identified by the International Symbol of Accessibility where all single-user toilet rooms are not accessible.

Hospital Patient Toilet Rooms. An exception was added in section 223.1 of the 2010 Standards to allow toilet rooms that are part of critical or intensive care patient sleeping rooms to no longer be required to provide mobility features.

Water Closet Location and Rear Grab Bar. Section 604.2 of the 2010 Standards allows greater flexibility for the placement of the centerline of wheelchair accessible and ambulatory accessible water closets. Section 604.5.2, Exception 1 permits a shorter grab bar on the rear wall where there is not enough wall space due to special circumstances (*e.g.*, when a lavatory or other recessed fixture is located next to the water closet and the wall behind the lavatory is recessed so that the lavatory does not overlap the required clear floor space at the water closet). The 1991 Standards contain no exception for grab bar length, and require the water closet centerline to be exactly 18 inches from the side wall, while the 2010 Standards requirement allows the centerline to be between 16 and 18 inches from the side wall in wheelchair accessible toilet compartments and 17 to 19 inches in ambulatory accessible toilet compartments.

Water Closet Clearance. Section 604.3 of the 2010 Standards represents a change in the accessibility requirements where a lavatory is installed adjacent to the water closet. The 1991 Standards allow the nearest side of a lavatory to be placed 18 inches minimum from the water closet centerline and 36 inches minimum from the side wall adjacent to the water closet. However, locating the lavatory so close to the water closet prohibits many individuals with disabilities from using a side transfer. To allow greater transfer options, including side transfers, the 2010 Standards prohibit lavatories from overlapping the clear floor space at water closets, except in covered residential dwelling units.

A majority of commenters, including persons who use wheelchairs, strongly agreed with the requirement to provide enough space for a side transfer. These commenters believed that the requirement will increase the usability of accessible single-user toilet rooms by making side transfers possible for many individuals who use wheelchairs and would have been unable to transfer to a water closet using a side transfer even if the water closet complied with the 1991 Standards. In addition, many commenters noted that the additional clear floor space at the side of the water closet is also critical for those providing assistance with transfers and personal care for persons with disabilities. Numerous comments noted that this requirement is already included in other model accessibility standards and many state and local building codes and its adoption in the 2010 Standards is a important part of harmonization efforts. The Department agrees that the provision of enough clear floor space to permit side transfers at water closets is an important feature that must be provided to ensure access for persons with disabilities in toilet and bathing facilities. Furthermore, the adoption of this requirement closely harmonizes with the model codes and many state and local building codes.

Other commenters urged the Department not to adopt section 604.3 of the 2010 Standards claiming that it will require single-user toilet rooms to be two feet wider than the 1991 Standards require, and this additional requirement will be difficult to meet. Multiple commentators also expressed concern that the size of single-user toilet rooms would be increased but they did not specify how much larger such toilet rooms would have to be in their estimation. In response to these concerns, the Department developed a series of single-user toilet room floor plans demonstrating that the total square footage between representative layouts complying with the 1991 Standards and the 2010 Standards are comparable. The Department believes the floor plan comparisons clearly show that size differences between the two Standards are not substantial and several of the 2010 Standards-compliant plans do not require additional square footage compared to the 1991 Standards plans. These single-user toilet room floor plans are shown below.

Several commenters concluded that alterations of single-user toilet rooms should be exempt from the requirements of section 604.3 of the 2010 Standards because of the significant reconfiguration and reconstruction that would be required, such as moving plumbing fixtures, walls, and/or doors at significant additional expense. The Department disagrees with this conclusion since it fails to take into account several key points. The 2010 Standards contain provisions for in-swinging doors, 603.2.3, Exception 2, and recessed fixtures adjacent to water closets, 604.5.2, Exception 1. These provisions give flexibility to create more compact room designs and maintain required clearances around fixtures. As with the 1991 Standards, any alterations must comply to the extent that it is technically feasible to do so.

The requirements at section 604.3.2 of the 2010 Standards specify how required clearance around the water closet can overlap with specific elements and spaces. An exception that applies only to covered residential dwelling units permits a lavatory to be located no closer than 18 inches from the centerline of the water closet. The requirements at section 604.3.2 of the 2010 Standards increase accessibility for individuals with disabilities. One commenter expressed concern about other items that might overlap the clear floor space, such as dispensers, shelves, and coat hooks on the side of the water closet where a wheelchair would be positioned for a transfer. Section 604.3.2 of the 2010 Standards allows items such as associated grab bars, dispensers, sanitary napkin disposal units, coat hooks, and shelves to overlap the clear floor space. These are items that typically do not affect the usability of the clear floor space.

Toilet Room Doors. Sections 4.22.2 and 4.22.3 of the 1991 Standards and Section 603.2.3 of the 2010 Standards permit the doors of all toilet or bathing rooms with in-swinging doors to swing into the required turning space, but not into the clear floor space required at any fixture. In single-user toilet rooms or bathing rooms, Section 603.2.3 Exception 2 of the 2010 Standards permits the door to swing into the clear floor space of an accessible fixture if a clear floor space that measures at least 30 inches by 48 inches is provided outside of the door swing.

Several commenters expressed reservations about Exception 2 of Section 603.2.3. Concerns were raised that permitting doors of single-user toilet or bathing rooms with in-swinging doors to swing into the clearance around any fixture will result in inaccessibility to individuals using larger wheelchairs and scooters. Additionally, a commenter stated that the exception would require an unacceptable amount of precision maneuvering by individuals who use standard size wheelchairs. The Department believes that this provision achieves necessary flexibility while providing a minimum standard for maneuvering space. The standard does permit additional maneuvering space to be provided, if needed.

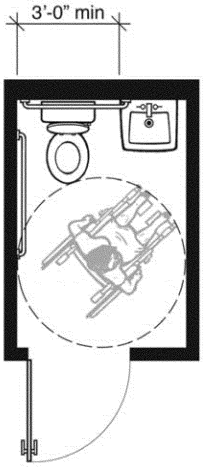
In the NPRM, the Department provided a series of plan drawings illustrating comparisons of the minimum size single-user toilet rooms. These floor plans showed typical examples that met the minimum requirements of the proposed ADA Standards. A commenter was of the opinion that the single-user toilet plans shown in the NPRM demonstrated that the new requirements will not

result in a substantial increase in room size. Several other commenters representing industry offered criticisms of the single-user toilet floor plans to support their assertion that a 2010 Standards-compliant single-user toilet room will never be smaller and will likely be larger than such a toilet room required under the 1991 Standards. Commenters also asserted that the floor plans prepared by the Department were of a very basic design which could be accommodated in a minimal sized space whereas the types of facilities their customers demand would require additional space to be added to the rooms shown in the floor plans. The Department recognizes that there are many design choices that can affect the size of a room or space. Choices to install additional features may result in more space being needed to provide sufficient clear floor space for that additional feature to comply. However, many facilities that have these extra features also tend to have ample space to meet accessibility requirements. Other commenters asserted that public single-user toilet rooms always include a closer and a latch on the entry door, requiring a larger clear floor space than shown on the push side of the door shown in Plan 1B. The Department acknowledges that in instances where a latch is provided and a closer is required by other regulations or codes, the minimum size of a room with an out-swinging door may be slightly larger than as shown in Plan 1C.

Additional floor plans of single-user toilet rooms are now included in further response to the commentary received.

Comparison of Single-User Toilet Room Layouts

1991 Standards

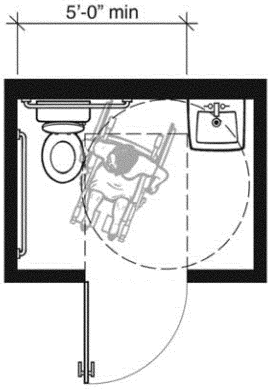


Plan-1A: 1991 Standards Minimum with Out-Swinging Door

5'-0" x 7'-3" • 36.25 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 1991 Standards. The size of this space is determined by the minimum width required for the water closet and lavatory between the side walls, the minimum wheelchair turning space, and the space required for the out-swinging door. A lavatory with knee space can overlap the clear floor space required for the water closet provided that at least 36 inches of clearance is maintained between the side wall next to the water closet and the lavatory (see section 4.16.2 and Fig. 28 of the 1991 Standards). A wheelchair turning space meeting section 4.2.3 of the 1991 Standards must be provided. The size of this room requires that the entry door swing out. The room would be larger if the door were in-swinging.

2010 Standards



Plan-1B: 2010 Standards Minimum with Out-Swinging Door

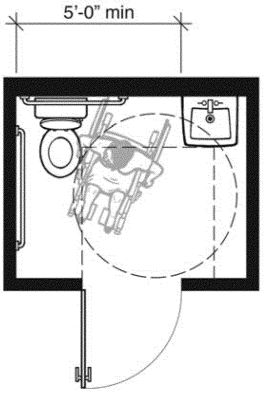
7'-0" x 5'-0" • 35.00 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 2010 Standards. Features include: five-foot minimum width between the side wall of the water closet and the lavatory; 60-inch minimum circular wheelchair turning space; and 36-inch by 48-inch clear maneuvering space for the out-swinging entry door. Section 604.3.1 of the 2010 Standards requires a floor clearance at a water closet that is a minimum of 60 inches wide by 56 inches deep regardless of approach. Section 604.3.2 prohibits any other plumbing fixtures from being located in this clear space, except in residential dwelling units. The 2010 Standards, at section 304.3, allows the turning space to extend into toe and knee space provided beneath fixtures and other elements. Required maneuvering space for the entry door (inside the room) must be clear of all fixtures. If the door had both a closer and latch, section 404.2.4.1 and Figure 404.2.4.1(c) require additional space on the latch side.

This layout is three point five percent (3.5%) smaller than the accompanying Plan-1A: 1991 Standards Minimum with Out-Swinging Door example.

Comparison of Single-User Toilet Room Layouts

2010 Standards



Plan-1C: 2010 Standards Minimum with Out-Swinging Door
(entry door has both closer and latch)

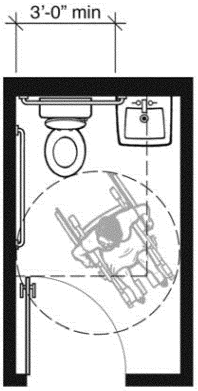
7'-0" x 5'-6" • 38.50 Square Feet

This plan shows the same typical features of a single-user toilet room that meets the minimum requirements of the 2010 Standards as Plan-1B does except the entry door has both a closer and latch. Because the door has both a closer and latch, a minimum additional foot of maneuvering space is required on the latch side (see section 404.2.4.1 and Figure 404.2.4.1(c) of the 2010 Standards).

This layout is six point two percent (6.2%) larger than the accompanying Plan-1A: 1991 Standards Minimum with Out-Swinging Door example.

Comparison of Single-User Toilet Room Layouts

1991 Standards

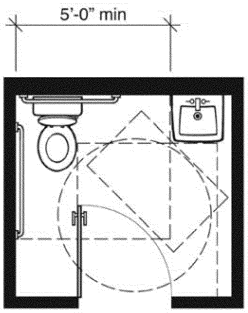


Plan-2A: 1991 Standards Minimum with In-Swinging Door

5'-0" x 8'-6" • 42.50 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 1991 Standards. Depending on the width of the hallway and other circulation issues, it can be preferable to swing the entry door into the toilet room. Businesses and public entities typically prefer to have an in-swinging door. The in-swinging door increases overall room size because it cannot swing over the required clear floor space at any accessible fixture, (see section 4.22.2 of the 1991 Standards). This increases the room depth from Plan-1A. The door is permitted to swing over the required turning space shown as a 60-inch circle.

2010 Standards



Plan-2B: 2010 Standards Minimum with In-Swinging Door

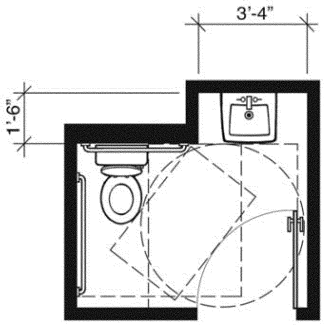
7'-0" x 6'-6" • 45.50 Square Feet

This plan shows a typical example of a single-user toilet room that meets the minimum requirements of the 2010 Standards when the entry door swings into the room. In the 2010 Standards an exception allows the entry door to swing over the clear floor spaces and clearances required at the fixtures if a clear floor space complying with section 305.3 (minimum 30 inches by 48 inches) is provided outside the arc of the door swing, section 603.3.3 exception 2. The required maneuvering space for the door, section 404.2.4.1 and Figure 404.2.4.1(a), also is a factor in room size. This clear space cannot be obstructed by the plumbing fixtures. Note that this layout provides more space for turning when the door is closed than Plan-1B.

This layout is seven percent (7%) larger than the accompanying Plan-2A: 1991 Standards Minimum with In-Swinging Door example.

Comparison of Single-User Toilet Room Layouts

2010 Standards



Plan-2C: 2010 Standards Minimum with In-Swinging Door

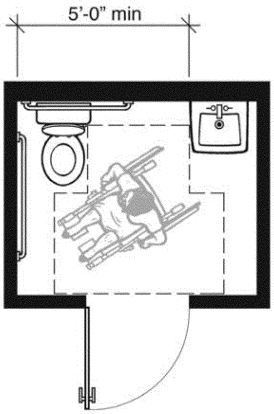
7'-0" x 6'-6" • 40.00 Square Feet
(plumbing chase not included)

This plan shows the same typical features of a single-user toilet room that meets the minimum requirements of the 2010 Standards as Plan-2B when the entry door swings into the room. Note that this layout also provides more space for turning when the door is closed than Plan-1B.

This layout is six point two five percent (6.25%) smaller than the accompanying Plan-2A: 1991 Standards Minimum with In-Swinging Door example.

Comparison of Single-User Toilet Room Layouts

1991 Standards and 2010 Standards



Plan-3: Meets Both 1991 Standards and 2010 Standards

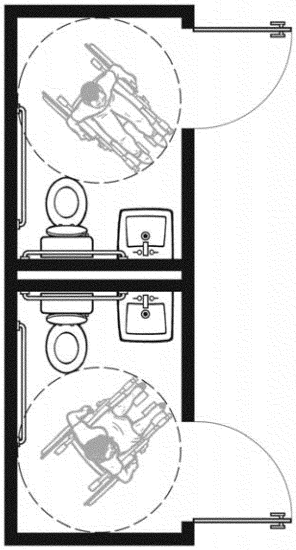
7'-0" x 5'-9" • 40.25 Square Feet

This plan shows an example of a single-user toilet room that meets the minimum requirements of both the 1991 Standards and 2010 Standards. A T-shaped turning space has been used (see Fig. 3(a) of the 1991 Standards and Figure 304.3.2 of the 2010 Standards) to maintain a compact room size. An out-swinging door also minimizes the overall layout depth and cannot swing over the required clear floor space or clearance at any accessible plumbing fixture.

This layout is eleven percent (11%) larger than the Plan-1A: 1991 Standards Minimum with Out-Swinging Door example shown at the beginning of these plan comparisons.

Comparison of Single-User Toilet Room "Pairs" With Fixtures Side-by-Side

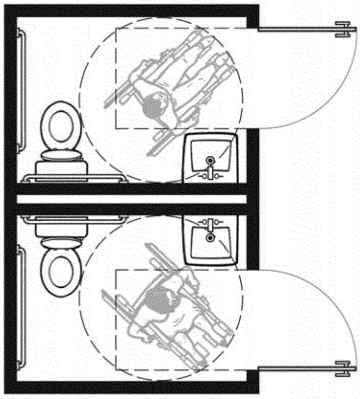
1991 Standards



Plan-1A Pair: 1991 Standards with Out-Swinging Doors

Two 5'-0" x 7'-3" Rooms – 72.50 Square Feet Total

2010 Standards



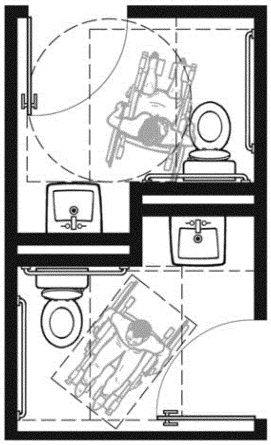
Plan-1B Pair: 2010 Standards with Out-Swinging Doors

Two 7'-0" x 5'-0" Rooms – 70.00 Square Feet Total

These plans show men's/women's room configurations using Plans 1A and 1B.

Comparison of Single-User Toilet Room "Pairs" With Fixtures Side-by-Side

2010 Standards



Plan-2C Pair: 2010 Standards with In-Swinging Doors

Two 7'-2" x 6'-6" Rooms - 82.00 Square Feet Total

This plan shows a men's/women's room configuration using Plan 2C.

Toilet Paper Dispensers. The provisions for toilet paper dispensers at section 604.7 of the 2010 Standards require the dispenser to be located seven inches minimum and nine inches maximum in front of the water closet measured to the centerline of the dispenser. The paper outlet of the dispenser must be located 15 inches minimum and 48 inches maximum above the finish floor. In the 1991 Standards the location of the toilet paper dispenser is determined by the centerline and forward edge of the dispenser. In the 2010 Standards

the mounting location of the toilet paper dispenser is determined by the centerline of the dispenser and the location of the outlet for the toilet paper.

One commenter discussed the difficulty of using large roll toilet paper dispensers and dispensers with two standard size rolls stacked on top of each other. The size of the large dispensers can block access to the grab bar and the outlet for the toilet paper can be too low or too high to be usable. Some dispensers also control the delivery of the toilet paper which can make it impossible to get the toilet paper. Toilet paper dispensers that control delivery or do not allow continuous paper flow are not permitted by the 1991 Standards or the 2010 Standards. Also, many of the large roll toilet paper dispensers do not comply with the 2010 Standards since their large size does not allow them to be mounted 12 inches above or 1½ inches below the side grab bar as required by section 609.3.

Shower Spray Controls. In accessible bathtubs and shower compartments, sections 607.6 and 608.6 of the 2010 Standards require shower spray controls to have an on/off control and to deliver water that is 120 °F (49 °C) maximum. Neither feature was required by the 1991 Standards, but may be required by plumbing codes. Delivering water that is no hotter than 120 °F (49 °C) will require controlling the maximum temperature at each accessible shower spray unit.

Shower Compartments. The 1991 Standards at sections 4.21 and 9.1.2 and the 2010 Standards at section 608 contain technical requirements for transfer-type and roll-in shower compartments. The 2010 Standards provide more flexibility than the 1991 Standards as follows:

• Transfer-type showers are exactly 36 inches wide by 36 inches long.

• The 1991 Standards and the 2010 Standards permit a ½-inch maximum curb in transfer-type showers. The 2010 Standards add a new exception that permits a 2-inch maximum curb in transfer-type showers in alterations to existing facilities, where recessing the compartment to achieve a ½-inch curb will disturb the structural reinforcement of the floor slab.

• Roll-in showers are 30 inches wide minimum by 60 inches long minimum. Alternate roll-in showers are 36 inches wide by 60 inches long minimum, and have a 36-inch minimum wide opening on the long side of the compartment. The 1991 Standards require alternate roll-in showers in a portion of accessible transient lodging guest rooms, but provision of this shower type in other facilities is generally permitted as an equivalent facilitation. The 1991 Standards require a seat to be provided adjacent to the opening; and require the controls to be located on the side adjacent to the seat. The 2010 Standards permit alternate roll-in showers to be used in any facility, only require a seat in transient lodging guest rooms, and allow location of controls on the back wall opposite the seat as an alternative.

Commenters raised concerns that adding a new exception that permits a 2-inch maximum curb in transfer-type showers in alterations to existing facilities, where recessing the compartment to achieve a ½-inch curb will disturb the structural reinforcement of the floor slab, will impair the ability of individuals with disabilities to use transfer-type showers.

The exception in section 608.7 of the 2010 Standards permitting a 2-inch maximum curb in transfer-type showers is allowed only in existing facilities where provision of a ½-inch high threshold would disturb the structural reinforcement of the floor slab. Whenever this exception is used the least high threshold that can be used should be provided, up to a maximum height of 2 inches. This exception is intended to provide some flexibility where the existing structure precludes full compliance.

Toilet and Bathing Rooms. Section 213 of the 2010 Standards sets out the scoping requirements for toilet and bathing rooms.

Commenters recommended that section 213, Toilet Facilities and Bathing Facilities, of the 2010 Standards include requirements that unisex toilet and bathing rooms be provided in certain facilities. These commenters suggested that unisex toilet and bathing rooms are most useful as companion care facilities.

Model plumbing and building codes require single-user (unisex or family) toilet facilities in certain occupancies, primarily assembly facilities, covered malls, and transportation facilities. These types of toilet rooms provide flexibility for persons needing privacy so that they can obtain assistance from family members or persons of the opposite sex. When these facilities are provided, both the 1991 Standards and 2010 Standards require that they be accessible. The 2010 Standards do not scope unisex toilet facilities because plumbing codes generally determine the number and type of plumbing fixtures to be provided in a particular occupancy and often determine whether an occupancy must provide separate sex facilities in addition to single-user facilities. However, the scoping at section 213.2.1 of the 2010 Standards coordinates with model plumbing and building code requirements which will permit a small toilet room with two water closets or one water closet and one urinal to be considered a single-user toilet room provided that the room has a privacy latch. In this way, a person needing assistance from a person of the opposite sex can lock the door to use the facility while temporarily inconveniencing only one other potential user. These provisions strike a reasonable balance and impose less impact on covered entities.

A commenter recommended that in shower compartments rectangular seats as provided in section 610.3.1 of the 2010 Standards should not be permitted as a substitute for L-shaped seats as provided in 610.3.2.

The 2010 Standards do not indicate a preference for either rectangular or L-shaped seats in shower compartments. L-shaped seats in transfer and certain roll-in showers have been used for many years to provide users with poor balance additional support because they can position themselves in the corner while showering.

214 and 611 Washing Machines and Clothes Dryers

Sections 214.2 (washing machines) and 214.3 (clothes dryers) of the 2010 Standards specify the number of each type of these machines required to be accessible (one to two depending upon the total number of machines provided) and section 611 specifies the technical requirements. An exception will permit the maximum height for the tops of these machines to be 2 inches higher than the general requirement for maximum high reach over an obstruction.

A commenter objected to the scoping provision for accessible washing machines and clothes dryers stating that the probability is low that more than one accessible machine would be needed at the same time in the laundry facility of a place of transient lodging.

The scoping in this provision is based on the relative size of the facility. The Department assumes that the size of the facility (and, therefore, the number of accessible machines provided) will be determined by the covered entity's assessment of the demand for laundry facilities. The Department declines to assume that persons with disabilities will have less use for accessible facilities in transient lodging than in other public accommodations.

216 and 703 Signs

The following types of signs, though they are not specifically subject to the 1991 Standards requirement for signs, will now be explicitly exempted by sections 216 and 703 of the 2010 Standards. These types of signs include: seat and row designations in assembly areas; occupant names, building addresses; company names and logos; signs in parking facilities (except those identifying accessible parking spaces and means of egress); and exterior signs identifying permanent rooms and spaces that are not located at the door to the space they serve. This requirement also clarifies that the exception for temporary signs applies to signs used for seven days or less.

The 2010 Standards retain the option to provide one sign where both visual and tactile characters are provided or two signs, one with visual, and one with tactile characters.

217 and 704 Telephones

Drive-up Public Telephones. Where public telephones are provided, the 1991 Standards, at section 4.1.3(17)(a), and section 217.2 of the 2010 Standards, require a certain number of telephones to be wheelchair accessible. The 2010 Standards add a new exception that exempts drive-up public telephones.

Text Telephones (TTY). Section 4.1.3(17) of the 1991 Standards requires a public TTY to be provided if there are four or more public pay telephones at a site and at least one is in an interior location. Section 217.4.2 of the 2010 Standards requires that a building or facility provide a public TTY on each floor that has four or more public telephones, and in each telephone bank that has four or more telephones. Additionally, section 217.4.4 of the 2010 Standards requires that at least one public TTY be installed where four or more public pay telephones are provided on an exterior site. Section 217.4.5 of the 2010 Standards also requires that a public TTY be provided where at least one public pay telephone is provided at a public rest stop, emergency roadside stop, or service plaza. Section 217.4.6 of the 2010 Standards also requires that a public TTY be provided at each location where at least one public pay telephone is provided serving a hospital emergency room, a hospital recovery room, or a hospital waiting room. Section 217.4.7 of the 2010 Standards also requires that, in addition to the requirements for a public TTY to be provided at each location where at least four or more public pay telephones are provided at a bank of pay telephones and where at least one public pay telephone is provided on a floor or in a public building, where at least one public pay telephone serves a particular entrance to a bus or rail facility at least one public TTY must serve that entrance. In airports, in addition to the requirements for the provision of a public TTY at phone banks, on floors, and in public buildings with pay phones, where four or more public pay phones are located in a terminal outside the security areas, in a concourse within the security areas, or a baggage claim area in a terminal at least one public TTY must be provided. Section 217.4.8 of the 2010 Standards also requires that a TTY be provided in at least one secured area where at least one pay telephone is provided in a secured area used only by detainees or inmates and security personnel in detention and correctional facilities.

Wheelchair Accessible Telephones

Section 217.2 of the 2010 Standards requires that where public telephones are provided wheelchair accessible telephones complying

with section 704.2 must be provided in accordance with Table 217.2.

A commenter stated that requiring installation of telephones within the proposed reach range requirements would adversely impact public and telephone owners and operators. According to the commenter, individuals without disabilities will not use telephones that are installed within the reach range requirements because they may be inconvenienced by having to stoop to operate these telephones, and, therefore, owners and operators will lose revenue due to less use of public telephones.

This comment misunderstands the scoping requirements for wheelchair accessible telephones. Section 217.2 of the 2010 Standards provides that where one or more single units are provided, only one unit per floor, level, or exterior site is required to be wheelchair accessible. However, where banks of telephones are provided, only one telephone in each bank is required to be wheelchair accessible. The Department believes these scoping requirements for wheelchair accessible telephones are reasonable and will not result in burdensome obligations or lost revenue for owners and operators.

218 and 810 Transportation Facilities

Detectable Warnings. Detectable warnings provide a distinctively textured surface of truncated domes. The 1991 Standards at sections 4.1.3(15), 4.7.7, 4.29.2, 4.29.5, 4.29.6, and 10.3.1(8) require detectable warnings at curb ramps, hazardous vehicular areas, reflecting pools, and transit platform edges. The 2010 Standards at sections 218, 810.5, 705.1, and 705.2 only require detectable warnings at transit platform edges. The technical specifications for the diameter and spacing of the truncated domes have also been changed. The 2010 Standards also delete the requirement for the material used to contrast in resiliency or sound-on-cane contact from adjoining walking surfaces at interior locations.

The 2010 Standards apply to detectable warnings on developed sites. They do not apply to the public right-of-way. Scoping for detectable warnings at all locations other than transit platform edges has been eliminated from the 2010 Standards. However, because detectable warnings have been shown to significantly benefit individuals with disabilities at transit platform edges, the 2010 Standards provide scoping and technical requirements for detectable warnings at transit platform edges.

219 and 706 Assistive Listening Systems

Signs. Section 216.10 of the 2010 Standards requires each covered assembly area to provide signs at each auditorium to inform patrons that assistive listening systems are available. However, an exception to this requirement permits assembly areas that have ticket offices or ticket windows to display the required signs at the ticket window.

A commenter recommended eliminating the exception at 216.10 because, for example, people who buy tickets through the mail, by subscription, or on-line may not need to stop at a ticket office or window upon arrival at the assembly area. The Department believes that an individual's decision to purchase tickets before arriving at a performance does not limit the discretion of the assembly operator to use the ticket window to provide other services to its patrons. The Department retained the exception at 216.10 to permit the venue operator some flexibility in determining how to meet the needs of its patrons.

Audible Communication. The 1991 Standards, at section 4.1.3(19)(b), require assembly areas, where audible communication is integral to the use of the space, to provide an assistive listening system if they have an audio amplification system or an occupant load of 50 or more people and have fixed seating. The 2010 Standards at section 219 require assistive listening systems in spaces where communication is integral to the space and audio amplification is provided and in courtrooms.

The 1991 Standards require receivers to be provided for at least four percent (4%) of the total number of fixed seats. The 2010 Standards, at section 219.3, revise the percentage of receivers required according to a table that correlates the required number of receivers to the seating capacity of the facility. Small facilities will continue to provide receivers for four percent (4%) of the seats. The required percentage declines as the size of the facility increases. The changes also require at least twenty-five percent (25%), but no fewer than two, of the receivers to be hearing-aid compatible. Assembly areas served by an induction loop assistive listening system will not have to provide hearing-aid compatible receivers.

Commenters were divided in their opinion of this change. The Department believes that the reduction in the required number of assistive listening systems for larger assembly areas will meet the needs of individuals with disabilities. The new requirement to provide hearing-aid compatible receivers should make assistive listening systems more usable for people who have been underserved until now.

Concerns were raised that the requirement to provide assistive listening systems may have an adverse impact on restaurants. This comment misunderstands the scope of coverage. The 2010 Standards define the term ''assembly area'' to include facilities used for entertainment, educational, or civic gatherings. A restaurant would fall within

this category only if it is presenting programs to educate or entertain diners, and it provides an audio amplification system.

Same Management or Building. The 2010 Standards add a new exception that allows multiple assembly areas that are in the same building and under the same management, such as theaters in a multiplex cinema and lecture halls in a college building, to calculate the number of receivers required based on the total number of seats in all the assembly areas, instead of each assembly area separately, where the receivers are compatible with the assistive listening systems used in each of the assembly areas.

Mono Jacks, Sound Pressure, Etc. Section 4.33.7 of the 1991 Standards does not contain specific technical requirements for assistive listening systems. The 2010 Standards at section 706 require assistive listening systems to have standard mono jacks and will require hearing-aid compatible receivers to have neck loops to interface with telecoils in hearing aids. The 2010 Standards also specify sound pressure level, signal-to-noise ratio, and peak clipping level. Currently available assistive listening systems typically meet these technical requirements.

220 and 707 Automatic Teller Machines and Fare Machines

Section 707 of the 2010 Standards adds specific technical requirements for speech output, privacy, tactilely-discernible input controls, display screens, and Braille instructions to the general accessibility requirements set out in the 1991 Standards. Machines shall be speech enabled and exceptions are provided that cover when audible tones are permitted, when advertisements or similar information are provided, and where speech synthesis cannot be supported. The 1991 Standards require these machines to be accessible to and independently usable by persons with visual impairments, but do not contain any technical specifications.

221 Assembly Areas

Wheelchair Spaces/Companion Seats. Owners of large assembly areas have historically complained to the Department that the requirement for one percent (1%) of seating to be wheelchair seating is excessive and that wheelchair seats are not being sold. At the same time, advocates have traditionally argued that persons who use wheelchairs will increasingly participate in activities at assembly areas once they become accessible and that at least one percent (1%) of seats should be accessible.

The 1991 Standards, at sections 4.1.3(19)(a) and 4.33.3, require assembly areas to provide wheelchair and companion seats. In assembly areas with a capacity of more than five hundred seats, accessible seating at a ratio of one percent (1%) (plus one seat) of the number of traditional fixed seats must be provided. The 2010 Standards, at section 221.2, require assembly areas with 501 to 5000 seats to provide at least six wheelchair spaces and companion seats plus one additional wheelchair space for each additional 150 seats (or fraction thereof) between 501 through 5000. In assembly areas with more than 5000 seats at least 36 wheelchair spaces and companion seats plus one additional wheelchair space for each 200 seats (or fraction thereof) more than 5000 are required. See sections 221.1 and 221.2 of the 2010 Standards.

Commenters questioned why scoping requirements for large assembly areas are being reduced. During the development of the 2004 ADAAG, industry providers, particularly those representing larger stadium-style assembly areas, supplied data to the Access Board demonstrating the current scoping requirements for large assembly areas often exceed the demand. Based on the data provided to the Access Board, the Department believes the reduced scoping requirements will adequately meet the needs of individuals with disabilities, while balancing concerns of the industry.

Commenters representing assembly areas supported the reduced scoping. One commenter asked that scoping requirements for larger assembly areas be reduced even further. Although the commenter referenced data demonstrating that wheelchair spaces in larger facilities with seating capacities of 70,000 or more may not be used by individuals with disabilities, the data was not based on actual results, but was calculated at least in part based on probability assumptions. The Department is not convinced that further reductions should be made based upon those projections and that further reductions would not substantially limit accessibility at assembly areas for persons who use wheelchairs.

Section 221.2.1.3 of the 2010 Standards clarifies that the scoping requirements for wheelchair spaces and companion seats are to be applied separately to general seating areas and to each luxury box, club box, and suite in arenas, stadiums, and grandstands. In assembly areas other than arenas, stadiums, and grandstands, the scoping requirements will not be applied separately. Thus, in performing arts facilities with tiered boxes designed for spatial and acoustical purposes, the scoping requirement is to be applied to the seats in the tiered boxes. The requisite number of wheelchair spaces and companion seats required in the tiered boxes are to be dispersed among at least twenty percent (20%) of the tiered boxes. For example, if a performing arts facility has 20 tiered boxes with 10 fixed seats in each box, for a total of 200 seats, at least five wheelchair spaces and companion seats must be provided in the

boxes, and they must be dispersed among at least four of the 20 boxes.

Commenters raised concerns that the 2010 Standards should clarify requirements for scoping of seating areas and that requiring accessible seating in each luxury box, club box, and suite in arenas, stadiums and grandstands could result in no wheelchair and companion spaces available for individuals with disabilities in the general seating area(s). These comments appear to misunderstand the requirements. The 2010 Standards require each luxury box, club box, and suite in an arena, stadium or grandstand to be accessible and to contain wheelchair spaces and companion seats as required by sections 221.2.1.1, 221.2.1.2 and 221.3. In addition, the remaining seating areas not located in boxes must also contain the number of wheelchair and companion seating locations specified in the 2010 Standards based on the total number of seats in the entire facility excluding luxury boxes, club boxes and suites.

Wheelchair Space Overlap in Assembly Areas. Section 4.33.3 of the 1991 Standards and the 2010 Standards, at sections 402, 403.5.1, 802.1.4, and 802.1.5, require walkways that are part of an accessible route to have a 36-inch minimum clear width. Section 802.1.5 of the 2010 Standards specifically prohibits accessible routes from overlapping wheelchair spaces. This change is consistent with the technical requirements for accessible routes, since the clear width of accessible routes cannot be obstructed by any object. The 2010 Standards also specifically prohibit wheelchair spaces from overlapping circulation paths. An advisory note clarifies that this prohibition applies only to the circulation path width required by applicable building codes and fire and life safety codes since the codes prohibit obstructions in the required width of assembly aisles.

Section 802.1.5 of the 2010 Standards provides that where a main circulation path is located in front of a row of seats that contains a wheelchair space and the circulation path is wider than required by applicable building codes and fire and life safety codes, the wheelchair space may overlap the ''extra'' circulation path width. Where a main circulation path is located behind a row of seats that contains a wheelchair space and the wheelchair space is entered from the rear, the aisle in front of the row may need to be wider in order not to block the required circulation path to the other seats in the row, or a mid-row opening may need to be provided to access the required circulation path to the other seats.

Line of Sight and Dispersion of Wheelchair Spaces in Assembly Areas. Section 4.33.3 of the 1991 Standards requires wheelchair spaces and companion seats to be an integral part of any fixed seating plan in assembly areas and to provide individuals with disabilities a choice of admission prices and lines of sight comparable to those available to other spectators. Section 4.33.3 also requires wheelchair spaces and companion seats to be dispersed in assembly areas with more than 300 seats. Under the 1991 Standards, sports facilities typically located some wheelchair spaces and companion seats on each accessible level of the facility. In 1994, the Department issued official guidance interpreting the requirement for comparable lines of sight in the 1991 Standards to mean wheelchair spaces and companion seats in sports stadia and arenas must provide patrons with disabilities and their companions with lines of sight over standing spectators to the playing field or performance area, where spectators were expected to stand during events. See ''Accessible Stadiums,'' *www.ada.gov/stadium.pdf*. The Department also interpreted the section 4.33.3 comparable lines of sight requirement to mean that wheelchair spaces and companion seats in stadium-style movie theaters must provide patrons with disabilities and their companions with viewing angles comparable to those provided to other spectators.

Sections 221.2.3 and 802.2 of the 2010 Standards add specific technical requirements for providing lines of sight over seated and standing spectators and also require wheelchair spaces and companion seats (per section 221.3) to provide individuals with disabilities choices of seating locations and viewing angles that are substantially equivalent to, or better than, the choices of seating locations and viewing angles available to other spectators. This applies to all types of assembly areas, including stadium-style movie theaters, sports arenas, and concert halls. These rules are expected to have minimal impact since they are consistent with the Department's longstanding interpretation of the 1991 Standards and technical assistance.

Commenters stated that the qualitative viewing angle language contained in section 221.2.3 is not appropriate for an enforceable regulatory standard unless the terms of such language are defined. Other commenters requested definitions for viewing angles, an explanation for precisely how viewing angles are measured, and an explanation for precisely how to evaluate whether one viewing angle is better than another viewing angle. The Department is convinced that the regulatory language in the 2010 Standards is sufficient to provide a performance-based standard for designers, architects, and other professionals to design facilities that provide comparable lines of sight for wheelchair seating in assembly areas, including viewing angles. The Department believes that as a general rule, the vast variety of sizes and configurations in assembly areas requires it

to establish a performance standard for designers to adapt to the specific circumstances of the venue that is being designed. The Department has implemented more explicit requirements for stadium-style movie theaters in 28 CFR 36.406(f) and 35.151(g) of the final regulations based on experience and expertise gained after several major enforcement actions.

Another commenter inquired as to what determines whether a choice of seating locations or viewing angles is better than that available to all other spectators. The answer to this question varies according to each assembly area that is being designed, but designers and venue operators understand which seats are better and that understanding routinely drives design choices made to maximize profit and successful operation of the facility, among other things. For example, an ''equivalent or better'' line of sight in a major league football stadium would be different than for a 350-seat lecture hall. This performance standard is based upon the underlying principle of equal opportunity for a good viewing experience for everyone, including persons with disabilities. The Department believes that for each specific facility that is designed, the owner, operator, and design professionals will be able to distinguish easily between seating locations and the quality of the associated lines of sight from those seating locations in order to decide which ones are better than others. The wheelchair locations do not have to be exclusively among the seats with the very best lines of sight nor may they be exclusively among the seats with the worst lines of sight. Rather, wheelchair seating locations should offer a choice of viewing experiences and be located among the seats where most of the audience chooses to sit.

Section 4.33.3 of the 1991 Standards requires wheelchair spaces and companion seating to be offered at a choice of admission prices, but section 221.2.3.2 of the 2010 Standards no longer requires wheelchair spaces and companion seats to be dispersed based on admission prices. Venue owners and operators commented during the 2004 ADAAG rulemaking process that pricing is not always established at the design phase and may vary from event to event within the same facility, making it difficult to determine where to place wheelchair seats during the design and construction phase. Their concern was that a failure by the venue owner or operator to provide a choice of ticket prices for wheelchair seating as required by the 1991 Standards governing new construction could somehow unfairly subject parties involved in the design and construction to liability unknowingly.

Sections 221.2.3.2 and 221.3 of the 2010 Standards require wheelchair spaces and companion seats to be vertically dispersed at varying distances from the screen, performance area, or playing field. The 2010 Standards, at section 221.2.3.2, also require wheelchair spaces and companion seats to be located in each balcony or mezzanine served by an accessible route. The final regulations at 28 CFR 35.151(g)(1) and 36.406(f)(1) also require assembly areas to locate wheelchair spaces and companion seats at all levels of the facility that include seating and that are served by an accessible route. The Department interprets that requirement to mean that wheelchair and companion seating must be provided in a particular area even if the accessible route may not be the same route that other individuals use to reach their seats. For example, if other patrons reach their seats on the field by an inaccessible route (e.g., by stairs), but there is an accessible route that complies with section 206.3 that could be connected to seats on the field, accessible seats must be placed on the field even if that route is not generally available to the public. The 2010 Standards, at section 221.2.3.2, provide an exception for vertical dispersion in assembly areas with 300 or fewer seats if the wheelchair spaces and companion seats provide viewing angles that are equivalent to, or better than, the average viewing angle provided in the facility.

Section 221.3 of the 2010 Standards requires wheelchair spaces and companion seats to be dispersed horizontally. In addition, 28 CFR 35.151(g)(2) and 36.406(f)(2) require assembly areas that have seating around the field of play or performance area to place wheelchair spaces and companion seating all around that field of play or performance area.

Stadium-Style Movie Theaters

Pursuant to 28 CFR 35.151(g) and 36.406(f), in addition to other obligations, stadium-style movie theaters must meet horizontal and vertical dispersion requirements set forth in sections 221.2.3.1 and 221.2.3.2 of the 2010 Standards; placement of wheelchair and companion seating must be on a riser or cross-aisle in the stadium section of the theater; and placement of such seating must satisfy at least one of the following criteria: (i) It is located within the rear sixty percent (60%) of the seats provided in the auditorium; or (ii) it is located within the area of the auditorium where the vertical viewing angles are between the 40th and 100th percentile of vertical viewing angles for all seats in that theater as ranked from the first row (1st percentile) to the back row (100th percentile). The line-of-sight requirements recognize the importance to the movie-going experience of viewing angles, and the final regulations ensure that movie patrons with disabilities are provided views of the movie screen comparable to other theater patrons. Some commenters supported regulatory language that would require stadium-style theaters to meet standards of accessibility equal

to those of non-stadium-style theaters, with larger theaters being required to provide accessible seating locations and viewing angles equal to those offered to individuals without disabilities.

One commenter noted that stadium-style movie theaters, sports arenas, music venues, theaters, and concert halls each pose unique conditions that require separate and specific standards to accommodate patrons with disabilities, and recommended that the Department provide more specific requirements for sports arenas, music venues, theaters, and concert halls. The Department has concluded that the 2010 Standards will provide sufficient flexibility to adapt to the wide variety of assembly venues covered.

Companion Seats. Section 4.33.3 of the 1991 Standards required at least one fixed companion seat to be provided next to each wheelchair space. The 2010 Standards at sections 221.3 and 802.3 permit companion seats to be movable. Several commenters urged the Department to ensure that companion seats are positioned in a manner that places the user at the same shoulder height as their companions using mobility devices. The Department recognizes that some facilities have created problems by locating the wheelchair space and companion seat on different floor elevations (often a difference of one riser height). Section 802.3.1 of the 2010 Standards addresses this problem by requiring the wheelchair space and the companion seat to be on the same floor elevation. This solution should prevent any vertical discrepancies that are not the direct result of differences in the sizes and configurations of wheelchairs.

Designated Aisle Seats. Section 4.1.3(19)(a) of the 1991 Standards requires one percent (1%) of fixed seats in assembly areas to be designated aisle seats with either no armrests or folding or retractable armrests on the aisle side of the seat. The 2010 Standards, at sections 221.4 and 802.4, base the number of required designated aisle seats on the total number of aisle seats, instead of on all of the seats in an assembly area as the 1991 Standards require. At least five percent (5%) of the aisle seats are required to be designated aisle seats and to be located closest to accessible routes. This option will almost always result in fewer aisle seats being designated aisle seats compared to the 1991 Standards. The Department is aware that sports facilities typically locate designated aisle seats on, or as near to, accessible routes as permitted by the configuration of the facility.

One commenter recommended that section 221.4, Designated Aisle Seats, be changed to require that aisle seats be on an accessible route, and be integrated and dispersed throughout an assembly area. Aisle seats, by their nature, typically are located within the general seating area, and integration occurs almost automatically. The issue of dispersing aisle seats or locating them on accessible routes is much more challenging. During the separate rulemaking on the 2004 ADAAG the Access Board specifically requested public comment on the question of whether aisle seats should be required to be located on accessible routes. After reviewing the comments submitted during the 2004 Access Board rulemaking, the Access Board concluded that this could not be done without making significant and costly changes in the design of most assembly areas. However, section 221.4 of the 2004 ADAAG required that designated aisle seats be the aisle seats closest to accessible routes. The Department proposed the same provision and concurs in the Access Board's conclusion and declines to implement further changes.

Team or Player Seating Areas. Section 221.2.1.4 of the 2010 Standards requires that at least one wheelchair space compliant with section 802.1 be provided in each team or player seating area serving areas of sport activity. For bowling lanes, the requirement for a wheelchair space in player seating areas is limited to lanes required to be accessible.

Lawn Seating. The 1991 Standards, at section 4.1.1(1), require all areas of newly constructed facilities to be accessible, but do not contain a specific scoping requirement for lawn seating in assembly areas. The 2010 Standards, at section 221.5, specifically require lawn seating areas and exterior overflow seating areas without fixed seats to connect to an accessible route.

Aisle Stairs and Ramps in Assembly Areas. Sections 4.1.3 and 4.1.3(4) of the 1991 Standards require that interior and exterior stairs connecting levels that are not connected by an elevator, ramp, or other accessible means of vertical access must comply with the technical requirements for stairs set out in section 4.9 of the 1991 Standards. Section 210.1 of the 2010 Standards requires that stairs that are part of a means of egress shall comply with section 504's technical requirements for stairs. The 1991 Standards do not contain any exceptions for aisle stairs in assembly areas. Section 210.1, Exception 3 of the 2010 Standards adds a new exception that exempts aisle stairs in assembly areas from section 504's technical requirements for stairs, including section 505's technical requirements for handrails.

Section 4.8.5 of the 1991 Standards exempts aisle ramps that are part of an accessible route from providing handrails on the side adjacent to seating. The 2010 Standards, at section 405.1, exempt aisle ramps adjacent to seating in assembly areas and not serving elements required to be on an accessible route, from complying with all of section 405's technical requirements for ramps. Where aisle ramps in assembly areas serve elements required to be on an accessible route, the 2010 Standards require that the

aisle ramps comply with section 405's technical requirements for ramps. Sections 505.2 and 505.3 of the 2010 Standards provide exceptions for aisle ramp handrails. Section 505.2 states that in assembly areas, a handrail may be provided at either side or within the aisle width when handrails are not provided on both sides of aisle ramps. Section 505.3 states that, in assembly areas, handrails need not be continuous in aisles serving seating.

222 and 803 Dressing, Fitting, and Locker Rooms

Dressing rooms, fitting rooms, and locker rooms are required to comply with the accessibility requirements of sections 222 and 803 of the 2010 Standards. Where these types of rooms are provided in clusters, five percent (5%) but at least one room in each cluster must comply. Some commenters stated that clothing and retail stores would have to expand and reconfigure accessible dressing, fitting and locker rooms to meet the changed provision for clear floor space alongside the end of the bench. Commenters explained that meeting the new requirement would result in a loss of sales and inventory space. Other commenters also expressed opposition to the changed requirement in locker rooms for similar reasons.

The Department reminds the commenters that the requirements in the 2010 Standards for the clear floor space to be beside the short axis of the bench in an accessible dressing, fitting, or locker room apply only to new construction and alterations. The requirements for alterations in the 2010 Standards at section 202.3 do not include the requirement from the 1991 Standards at section 4.1.6(1)(c) that if alterations to 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. Therefore, under the 2010 Standards, the alteration requirements only apply to specific elements or spaces that are being altered. So providing the clear floor space at the end of the bench as required by the 2010 Standards instead of in front of the bench as is allowed by the 1991 Standards would only be required when the bench in the accessible dressing room is altered or when the entire dressing room area is altered.

224 and 806 Transient Lodging Guest Rooms

Scoping. The minimum number of guest rooms required to be accessible in transient lodging facilities is covered by section 224 of the 2010 Standards. Scoping requirements for guest rooms with mobility features and guest rooms with communication features are addressed at section 224.2 and section 224.4, respectively. Under the 1991 Standards all newly constructed guest rooms with mobility features must provide communication features. Under the 2010 Standards, in section 224.5, at least one guest room with mobility features must also provide communication features. Additionally, not more than ten percent (10%) of the guest rooms required to provide mobility features and also equipped with communication features can be used to satisfy the minimum number of guest rooms required to provide communication features.

Some commenters opposed requirements for guest rooms accessible to individuals with mobility disabilities stating that statistics provided by the industry demonstrate that all types of accessible guest rooms are unused. They further claimed that the requirements of the 2010 Standards are too burdensome to meet in new construction, and that the requirements will result in a loss of living space in places of transient lodging. Other commenters urged the Department to increase the number of guest rooms required to be accessible. The number of guest rooms accessible to individuals with mobility disabilities and the number accessible to persons who are deaf or who are hard of hearing in the 2010 Standards are consistent with the 1991 Standards and with the IBC. The Department continues to receive complaints about the lack of accessible guest rooms throughout the country. Accessible guest rooms are used not only by individuals using mobility devices such as wheelchairs and scooters, but also by individuals with other mobility disabilities including persons who use walkers, crutches, or canes.

Data provided by the Disability Statistics Center at the University of California, San Francisco demonstrated that the number of adults who use wheelchairs has been increasing at the rate of six percent (6%) per year from 1969 to 1999; and by 2010, it was projected that two percent (2%) of the adult population would use wheelchairs. In addition to persons who use wheelchairs, three percent (3%) of adults used crutches, canes, walkers, and other mobility devices in 1999; and the number was projected to increase to four percent (4%) by 2010. Thus, in 2010, up to six percent (6%) of the population may need accessible guest rooms.

Dispersion. The 2010 Standards, in section 224.5, set scoping requirements for dispersion in facilities covered by the transient lodging provisions. This section covers guest rooms with mobility features and guest rooms with communication features and applies in new construction and alterations. The primary requirement is to provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. An advisory in section 224.5 provides guidance that ''factors to be considered in providing an equivalent range of options may include, but are not limited to, room size, bed size, cost, view, bathroom fixtures such as hot tubs and spas, smoking

and nonsmoking, and the number of rooms provided.''

Commenters asked the Department to clarify what is meant by various terms used in section 224.5 such as ''classes,'' ''types,'' ''options,'' and ''amenities.'' Other commenters asked the Department to clarify and simplify the dispersion requirements set forth in section 224.5 of the 2010 Standards, in particular the scope of the term ''amenities.'' One commenter expressed concern that views, if considered an amenity, would further complicate room categories and force owners and operators to make an educated guess. Other commenters stated that views should only be a dispersion criteria if view is a factor for pricing room rates.

These terms are not to be considered terms of art, but should be used as in their normal course. For example, ''class'' is defined by Webster's Dictionary as ''a division by quality.'' ''Type'' is defined as ''a group of * * * things that share common traits or characteristics distinguishing them as an identifiable group or class.'' Accordingly, these terms are not intended to convey different concepts, but are used as synonyms. In the 2010 Standards, section 224.5 and its advisory require dispersion in such a varied range of hotels and lodging facilities that the Department believes that the chosen terms are appropriate to convey what is intended. Dispersion required by this section is not ''one size fits all'' and it is imperative that each covered entity consider its individual circumstance as it applies this requirement. For example, a facility would consider view as an amenity if some rooms faced mountains, a beach, a lake, or other scenery that was considered to be a premium. A facility where view was not marketed or requested by guests would not factor the view as an amenity for purposes of meeting the dispersion requirement.

Section 224.5 of the 2010 Standards requires that guest rooms with mobility features and guest rooms with communication features ''shall be dispersed among the various classes of guest rooms, and shall provide choices of types of guest rooms, number of beds, and other amenities comparable to the choices provided to other guests. When the minimum number of guest rooms required is not sufficient to allow for complete dispersion, guest rooms shall be dispersed in the following priority: guest room type, number of beds and amenities.''

This general dispersion requirement is intended to effectuate Congress' directive that a percentage of each class of hotel rooms is to be fully accessible to persons with disabilities. See H.R. Rep. No. 101–485 (II) at 391. Accordingly, the promise of the ADA in this instance is that persons with disabilities will have an equal opportunity to benefit from the various options available to hotel guests without disabilities, from single occupancy guest rooms with limited features (and accompanying limited price tags) to luxury suites with lavish features and choices. The inclusion of section 224.5 of the 2010 Standards is not new. Substantially similar language is contained in section 9.1.4 of the 1991 Standards.

Commenters raised concerns that the factors included in the advisory to section 224.5 of the 2010 Standards have been expanded. The advisory provides: ''[f]actors to be considered in providing an equivalent range of options may include, but are not limited to, room size, bed size, cost, view, bathroom fixtures such as hot tubs and spas, smoking and nonsmoking, and the number of rooms provided.''

As previously discussed, the advisory materials provided in the 2010 Standards are meant to be illustrative and do not set out specific requirements. In this particular instance, the advisory materials for section 224.5 set out some of the common types of amenities found at transient lodging facilities, and include common sense concepts such as view, bathroom fixtures, and smoking status. The intention of these factors is to indicate to the hospitality industry the sorts of considerations that the Department, in its enforcement efforts since the enactment of the ADA, has considered as amenities that should be made available to persons with disabilities, just as they are made available to guests without disabilities.

Commenters offered several suggestions for addressing dispersion. One option included the flexibility to use an equivalent facilitation option similar to that provided in section 9.1.4(2) of the 1991 Standards.

The 2010 Standards eliminated all specific references to equivalent facilitation. Since Congress made it clear that each class of hotel room is to be available to individuals with disabilities, the Department declines to adopt such a specific limitation in favor of the specific requirement for new construction and alterations found in section 224.5 of the 2010 Standards.

In considering the comments of the hospitality industry from the ANPRM and the Department's enforcement efforts in this area, the Department sought comment in the NPRM on whether the dispersion requirements should be applied proportionally, or whether the requirements of section 224.5 of the 2010 Standards would be complied with if access to at least one guest room of each type were to be provided.

One commenter expressed concern about requiring different guest room types to be proportionally represented in the accessible guest room pool as opposed to just having each type represented. Some commenters also expressed concern about accessible guest rooms created in pre-1993 facilities and they requested that such accessible guest rooms be safe harbored just as they are safe

harbored under the 1991 Standards. In addition, one commenter requested that the proposed dispersion requirements in section 224.5 of the 2010 Standards not be applied to pre-1993 facilities even when they are altered. Some commenters also offered a suggestion for limitations to the dispersion requirements as an alternative to safe harboring pre-1993 facilities. The suggestion included: (1) Guest rooms' interior or exterior footprints may remain unchanged in order to meet the dispersion requirements; (2) Dispersion should only be required among the types of rooms affected by an alteration; and (3) Subject to (1) and (2) above and technical feasibility, a facility would need to provide only one guest room in each guest room type such as single, double and suites. One commenter requested an exception to the dispersion criteria that applies to both existing and new multi-story timeshare facilities. This requested exception waives dispersion based on views to the extent that up to eight units may be vertically stacked in a single location.

Section 224.1.1 of the 2010 Standards sets scoping requirements for alterations to transient lodging guest rooms. The advisory to section 224.1.1 further explains that compliance with 224.5 is more likely to be achieved if all of the accessible guest rooms are not provided in the same area of the facility, when accessible guest rooms are added as a result of subsequent alterations.

Some commenters requested a specific exemption for small hotels of 300 or fewer guest rooms from dispersion regarding smoking rooms. The ADA requires that individuals with disabilities be provided with the same range of options as persons without disabilities, and, therefore, the Department declines to add such an exemption. It is noted, however, that the existence of this language in the advisory does not require a place of transient lodging that does not offer smoking guest rooms at its facility to do so only for individuals with disabilities.

Guest Rooms with Mobility Features. Scoping provisions for guest rooms with mobility features are provided in section 224.2 of the 2010 Standards. Scoping requirements for alterations are included in 224.1.1. These scoping requirements in the 2010 Standards are consistent with the 1991 Standards.

One commenter expressed opposition to the new scoping provisions for altered guest rooms, which, according to the commenter, require greater numbers of accessible guest rooms with mobility features.

Section 224.1.1 of the 2010 Standards provides scoping requirements for alterations to guest rooms in existing facilities. Section 224.1.1 modifies the scoping requirements for new construction in section 224 by limiting the application of section 224 requirements only to those guest rooms being altered or added until the number of such accessible guest rooms complies with the minimum number required for new construction in section 224.2 of the 2010 Standards. The minimum required number of accessible guest rooms is based on the total number of guest rooms altered or added instead of the total number of guest rooms provided. These requirements are consistent with the requirements in the 1991 Standards. Language in the 2010 Standards clarifies the provision of section 104.2 of the 2010 Standards which requires rounding up values to the next whole number for calculations of percentages in scoping.

Guest Rooms with Communication Features. The revisions at section 224.4 of the 2010 Standards effect no substantive change from the 1991 Standards with respect to the number of guest rooms required to provide communication features. The scoping requirement is consolidated into a single table, instead of appearing in three sections as in the 1991 Standards. The revised provisions also limit the overlap between guest rooms required to provide mobility features and guest rooms required to provide communication features. Section 224.5 of the 2010 Standards requires that at least one guest room providing mobility features must also provide communications features. At least one, but not more than ten percent (10%), of the guest rooms required to provide mobility features can also satisfy the minimum number of guest rooms required to provide communication features.

Commenters suggested that the requirements for scoping and dispersion of guest rooms for persons with mobility impairments and guest rooms with communication features are too complex for the industry to effectively implement.

The Department believes the requirements for guest rooms with communications features in the 2010 Standards clarify the requirements necessary to provide equal opportunity for travelers with disabilities. Additional technical assistance will be made available to address questions before the rule goes into effect.

Visible Alarms in Guest Rooms with Communication Features. The 1991 Standards at sections 9.3.1 and 4.28.4 require transient lodging guest rooms with communication features to provide either permanently installed visible alarms that are connected to the building fire alarm system or portable visible alarms that are connected to a standard 110-volt electrical outlet and are both activated by the building fire alarm system and provide a visible alarm when the single station smoke detector is activated. Section 215.4 of the 2010 Standards no longer includes the portable visible alarm option and instead requires that transient lodging guest rooms with communication features be equipped with a fire alarm system which includes permanently installed audible and visible

alarms in accordance with NFPA 72 National Fire Alarm Code (1999 or 2002 edition). Such guest rooms with communication features are also required by section 806.3.2 of the 2010 Standards to be equipped with visible notification devices that alert room occupants of incoming telephone calls and a door knock or bell.

The 2010 Standards add a new exception for alterations to existing facilities that exempts existing fire alarm systems from providing visible alarms, unless the fire alarm system itself is upgraded or replaced, or a new fire alarm system is installed. Transient lodging facilities that alter guest rooms are not required to provide permanently installed visible alarms complying with the NFPA 72 if the existing fire alarm system has not been upgraded or replaced, or a new fire alarm system has not been installed.

Commenters representing small providers of transient lodging raised concerns about the proposed changes to prohibit the use of portable visible alarms used in transient lodging guest rooms. These commenters recommended retaining requirements that allow the use of portable visible alarms.

Persons who are deaf or hard of hearing have reported that portable visible alarms used in transient lodging guest rooms are deficient because the alarms are not activated by the building fire alarm system, and the alarms do not work when the building power source goes out in emergencies. The 2010 Standards are consistent with the model building, fire, and life safety codes as applied to newly constructed transient lodging facilities. One commenter sought confirmation of its understanding of visible alarm requirements from the Department. This commenter interpreted the exception to section 215.1 of the 2010 Standards and the Department's commentary to the NPRM to mean that if a transient lodging facility does not have permanently installed visible alarms in its communication accessible guest rooms, it will not be required to provide such alarms until such time that its fire alarm system is upgraded or replaced, or a new fire alarm system is installed. In addition, this commenter also understood that, if a hotel already has permanently installed visible alarms in all of its mobility accessible guest rooms, it would not have to relocate such visible alarms and other communication features in those rooms to other guest rooms to comply with the ten percent (10%) overlap requirement until the alarm system is upgraded or replaced.

This commenter's interpretation and understanding are consistent with the Department's position in this matter. Section 215.4 of the 2010 Standards requires that guest rooms required to have communication features be equipped with a fire alarm system complying with section 702. Communication accessible guest rooms are required to have all of the communication features described in section 806.3 of the 2010 Standards including a fire alarm system which provides both audible and visible alarms. The exception to section 215.1 of the 2010 Standards, which applies only to fire alarm requirements for guest rooms with communication features in existing facilities, exempts the visible alarm requirement until such time as the existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed. If guest rooms in existing facilities are altered and they are required by section 224 of the 2010 Standards to have communication features, such guest rooms are required by section 806.3 to have all other communication features including notification devices.

Vanity Counter Space. Section 806.2.4.1 of the 2010 Standards requires that if vanity countertop space is provided in inaccessible transient lodging guest bathrooms, comparable vanity space must be provided in accessible transient lodging guest bathrooms.

A commenter questioned whether in existing facilities vanity countertop space may be provided through the addition of a shelf. Another commenter found the term ''comparable'' vague and expressed concern about confusion the new requirement would cause. This commenter suggested that the phrase ''equal area in square inches'' be used instead of comparable vanity space.

In some circumstances, the addition of a shelf in an existing facility may be a reasonable way to provide a space for travelers with disabilities to use their toiletries and other personal items. However, this is a determination that must be made on a case-by-case basis. Comparable vanity countertop space need not be one continuous surface and need not be exactly the same size as the countertops in comparable guest bathrooms. For example, accessible shelving within reach of the lavatory could be stacked to provide usable surfaces for toiletries and other personal items.

Shower and Sauna Doors in Transient Lodging Facilities. Section 9.4 of the 1991 Standards and section 206.5.3 of the 2010 Standards both require passage doors in transient lodging guest rooms that do not provide mobility features to provide at least 32 inches of clear width. Congress directed this requirement to be included so that individuals with disabilities could visit guests in other rooms. See H. Rept. 101–485, pt. 2, at 118 (1990); S. Rept. 101–116, at 70 (1989). Section 224.1.2 of the 2010 Standards adds a new exception to clarify that shower and sauna doors in such inaccessible guest rooms are exempt from the requirement for passage doors to provide at least 32 inches of clear width. Two commenters requested that saunas and steam rooms in existing facilities be exempt from the section 224.1.2 requirement and that the requirement be made applicable to new construction only.

The exemption to the section 224.1.2 requirement for a 32-inch wide clearance at doors to shower and saunas applies only to those showers and saunas in guest rooms which are not required to have mobility features. Showers and saunas in other locations, including those in common use areas and guest rooms with mobility features, are required to comply with the 32-inch clear width standard as well as other applicable accessibility standards. Saunas come in a variety of types: portable, pre-built, pre-cut, and custom-made. All saunas except for custom-made saunas are made to manufacturers' standard dimensions. The Department is aware that creating the required 32-inch clearance at existing narrower doorways may not always be technically feasible. However, the Department believes that owners and operators will have an opportunity to provide the required doorway clearance, unless doing so is technically infeasible, when an alteration to an existing sauna is undertaken. Therefore, the Department has retained these requirements.

Platform Lifts in Transient Lodging Guest Rooms and Dwelling Units. The 1991 Standards, at section 4.1.3(5), exception 4, and the 2010 Standards, at sections 206.7 and 206.7.6, both limit the locations where platform lifts are permitted to be used as part of an accessible route. The 2010 Standards add a new scoping requirement that permits platform lifts to be used to connect levels within transient lodging guest rooms and dwelling units with mobility features.

806 Transient Lodging Guest Rooms

In the NPRM, the Department included floor plans showing examples of accessible guest rooms and bathrooms designs with mobility features to illustrate how compliance with the 2010 Standards could be accomplished with little or no additional space compared to designs that comply with the 1991 Standards.

Commenters noted that the Department's plans showing accessible transient lodging guest rooms compliant with the 2010 Standards were not common in the transient lodging industry and also noted that the plans omitted doors at sleeping room closets.

The Department agrees that the configuration of the accessible bathrooms is somewhat different from past designs used by the industry, but this was done to meet the requirements of the 2010 Standards. The plans were provided to show that, with some redesign, the 2010 Standards do not normally increase the square footage of an accessible sleeping room or bathroom with mobility features in new construction. The Department has also modified several accessible guest room plans to show that doors can be installed on closets and comply with the 2010 Standards.

A commenter stated that the Department's drawings suggest that the fan coil units for heat and air conditioning are overhead, while the typical sleeping room usually has a vertical unit, or a packaged terminal air conditioning unit within the room. The Department's drawings are sample plans, showing the layout of the space, relationship of elements to each other, and required clear floor and turning spaces. It was not the intent of the Department to provide precise locations for all elements, including heating and air conditioning units.

Commenters noted that in guest rooms with two beds, each bed was positioned close to a wall, reducing access on one side. Another commenter stated that additional housekeeping time is needed to clean the room when beds are placed closer to walls. The 2010 Standards require that, when two beds are provided, there must be at least 36 inches of clear space between the beds. The plans provided in the NPRM showed two bed arrangements with adequate clear width complying with the 1991 Standards and the 2010 Standards. Additional space can be provided on the other side of the beds to facilitate housekeeping as long as the clear floor space between beds is at least 36 inches wide.

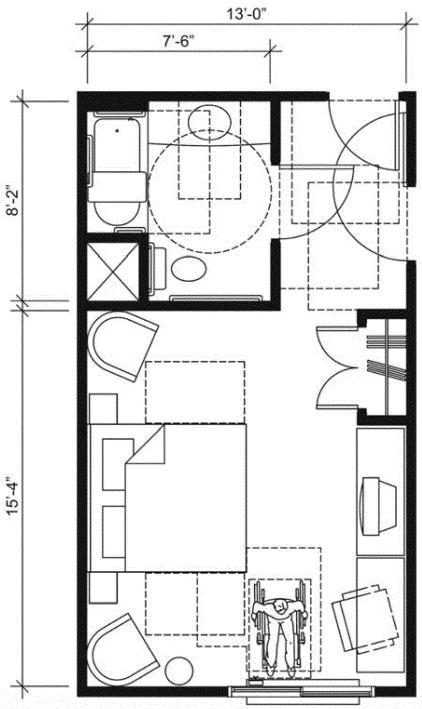
Commenters stated that chases in sleeping room bathrooms that route plumbing and other utilities can present challenges when modifying existing facilities. In multi-story facilities, relocating or re-routing these elements may not be possible, limiting options for providing access. The Department recognizes that relocating mechanical chases in multi-story facilities may be difficult or impossible to accomplish. While these issues do not exist in new facilities, altered existing facilities must comply with the 2010 Standards to the extent that it is technically feasible to do so. When an alteration cannot fully comply because it is technically infeasible to do so, the alteration must still be designed to comply to the greatest extent feasible.

Commenters noted that on some of the Department's plans where a vanity is located adjacent to a bathtub, the vanity may require more maintenance due to exposure to water. The Department agrees that it would be advisable that items placed next to a bathtub or shower be made of materials that are not susceptible to water damage.

Transient Lodging Guest Room Floor Plans and Related Text. The Department has included the following floor plans showing application of the requirements of the 2010 Standards without significant loss of guest room living space in transient lodging compared to the 1991 Standards.

Plan 1A: 13-Foot Wide Accessible Guest Room

This drawing shows an accessible 13-foot wide guest room with features that comply with the 2010 Standards. Features include a standard bathtub with a seat, comparable vanity, clothes closet with swinging doors, and door connecting to adjacent guest room. Furnishings include a king bed and additional seating.



The following accessible features are provided in the bathroom:

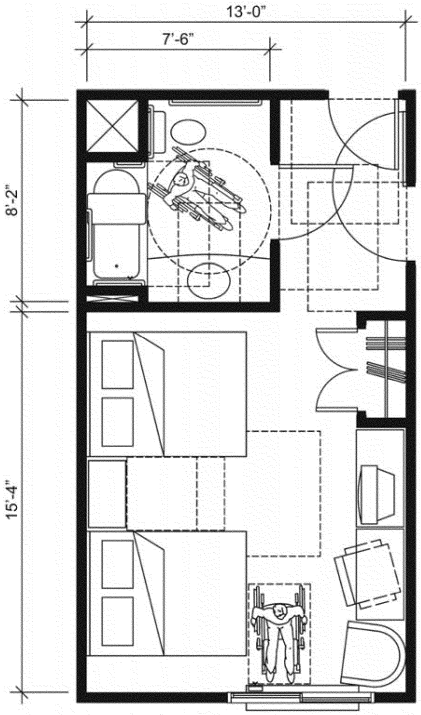
- Comparable vanity counter top space (section 806);
- Bathtub with a lavatory at the control end (section 607.2);
- Removable bathtub seat (section 607.3);
- Clearance in front of the bathtub extends its full length and is 30 inches wide min. (section 607.2);
- Recessed bathtub location permits shorter rear grab bar at water closet (section 604.5.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Turning space includes knee and toe clearance at lavatory (section 304.3);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space on both sides of the bed (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 309); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 1B: 13-Foot Wide Accessible Guest Room

This drawing shows an accessible 13-foot wide guest room with features that comply with the 2010 Standards. Features include a standard bathtub with a seat, comparable vanity, clothes closet with swinging doors, and door connecting to adjacent guest room. Furnishings include two beds.



The following accessible features are provided in the bathroom:

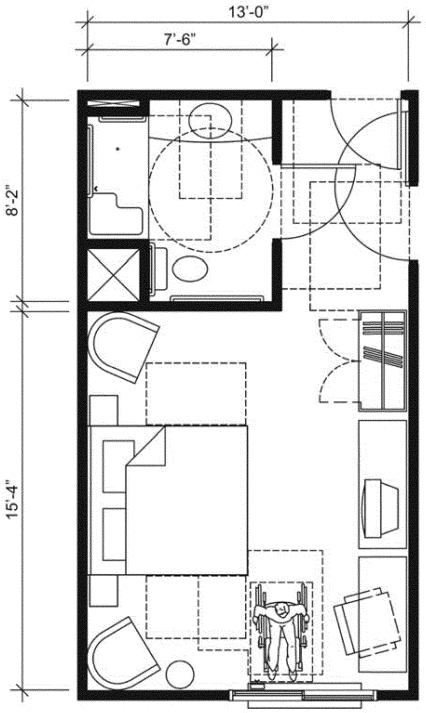
- Comparable vanity counter top space (section 806);
- Bathtub with a lavatory at the control end (section 607.2);
- Removable bathtub seat (section 607.3);
- Clearance in front of the bathtub extends its full length and is 30 inches wide min. (section 607.2);
- Recessed bathtub location permits shorter rear grab bar at water closet (section 604.5.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Turning space includes knee and toe clearance at lavatory (section 304.3);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3);

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space between beds (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 309); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 2A: 13-Foot Wide Accessible Guest Room

This drawing shows an accessible 13-foot wide guest room with features that comply with the 2010 Standards. Features include a standard roll-in shower with a seat, comparable vanity, wardrobe, and door connecting to adjacent guest room. Furnishings include a king bed and additional seating.



The following accessible features are provided in the bathroom:

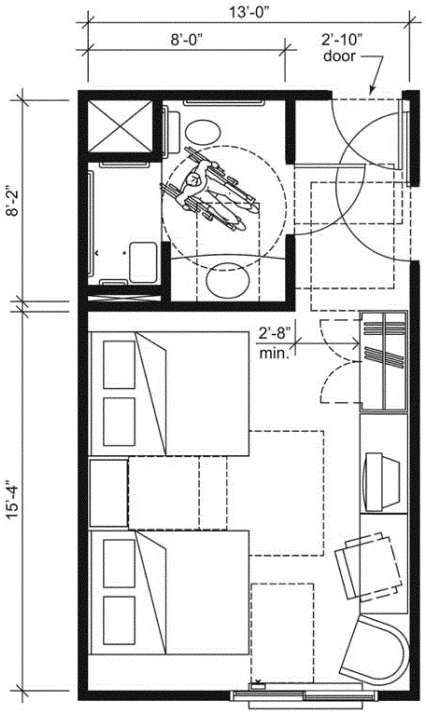
- Comparable vanity counter top space (section 806);
- Standard roll-in type shower with folding seat (section 608.2.2);
- Recessed roll-in shower location permits shorter rear grab bar at water closet (section 604.5.2);
- Clear floor space adjacent to shower min. 30 inches wide by 60 inches long (section 608.2.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Turning space includes knee and toe clearance at lavatory (section 304.3);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space on both sides of the bed (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 309); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 2B: 13-Foot Wide Accessible Guest Room

This drawing shows an accessible 13-foot wide guest room with features that comply with the 2010 Standards. Features include an alternate roll-in shower with a seat, comparable vanity, wardrobe, and door connecting to adjacent guest room. Furnishings include two beds.



The following accessible features are provided in the bathroom:

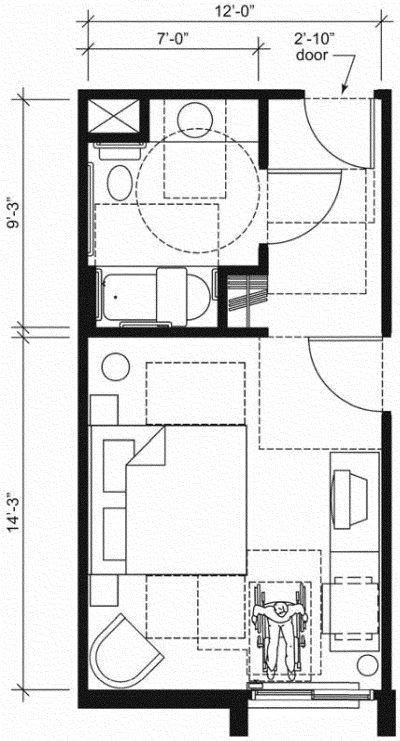
- Comparable vanity counter top space (section 806);
- Alternate roll-in type shower with folding seat is 36 inches deep and 60 inches wide (section 608.2.3);
- Alternate roll-in shower has a 36-inch wide entry at one end of the long side of the compartment (section 608.2.3);
- Recessed alternate roll-in shower location permits shorter rear grab bar at water closet (section 604.5.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Turning space includes knee and toe clearance at lavatory (section 304.3);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space between beds (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 309); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 3A: 12-Foot Wide Accessible Guest Room

This drawing shows an accessible 12-foot wide guest room with features that comply with the 2010 Standards. Features include a bathtub with a seat, comparable vanity, open clothes closet, and door connecting to adjacent guest room. Furnishings include a king bed and additional seating.



The following accessible features are provided in the bathroom:

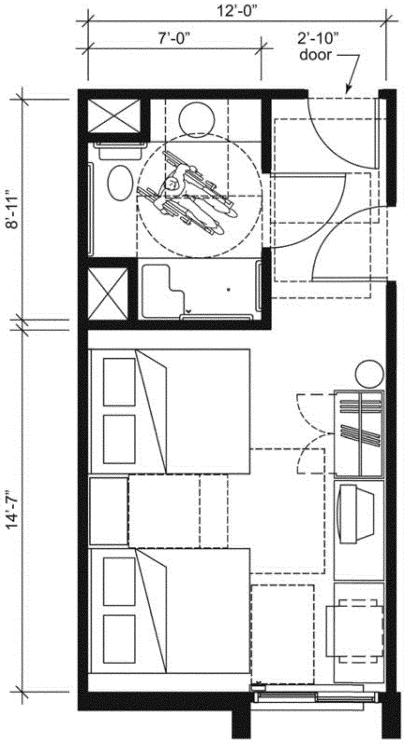
- Comparable vanity counter top space (section 806);
- Bathtub (section 607.2);
- Removable bathtub seat (section 607.3);
- Clearance in front of the bathtub extends its full length and is 30 inches wide min. (section 607.2);
- Recessed lavatory with vanity countertop permits shorter rear grab bar at water closet (section 604.5.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Turning space includes knee and toe clearance at lavatory (section 304.3);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space on both sides of the bed (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 309); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 3B: 12-Foot Wide Accessible Guest Room

This drawing shows an accessible 12-foot wide guest room with features that comply with the 2010 Standards. Features include a standard roll-in shower with a seat, comparable vanity, wardrobe, and door connecting to adjacent guest room. Furnishings include two beds.



The following accessible features are provided in the bathroom:

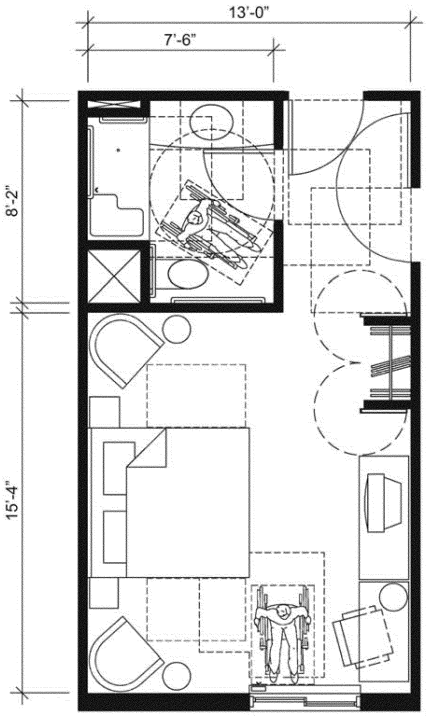
- Comparable vanity counter top space (section 806);
- Standard roll-in type shower with folding seat (section 608.2.2);
- Recessed lavatory with vanity counter top permits shorter rear grab bar at water closet (section 604.5.2);
- Clear floor space adjacent to shower min. 30 inches wide by 60 inches long (section 608.2.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Turning space includes knee and toe clearance at lavatory (section 304.3);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space between beds (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 309); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 4A: 13-Foot Wide Accessible Guest Room

This drawing shows an accessible 13-foot wide guest room with features that comply with the 2010 Standards. Features include a standard roll-in shower with a seat, comparable vanity, clothes closet with swinging doors, and door connecting to adjacent guest room. Furnishings include a king bed and additional seating.



The following accessible features are provided in the bathroom:

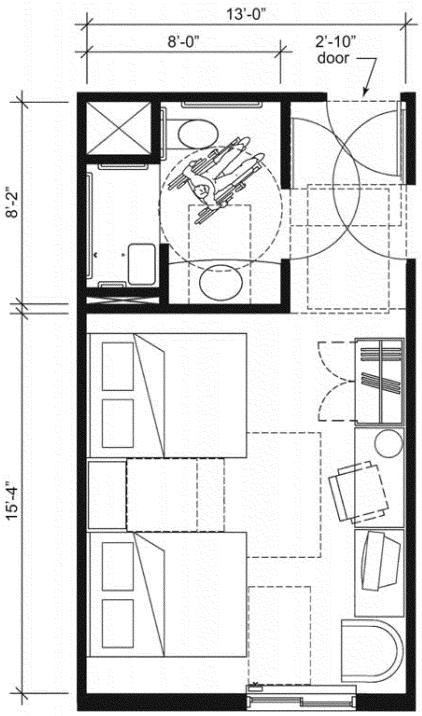
- Comparable vanity counter top space (section 806);
- Standard roll-in type shower with folding seat (section 608.2.2);
- Clear floor space adjacent to shower min. 30 inches wide by 60 inches long (section 608.2.2);
- Recessed roll-in shower location permits shorter rear grab bar at water closet (section 604.5.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Turning space includes knee and toe clearance at lavatory (section 304.3);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).
- 30-inch wide by 48-inch long minimum clear floor space provided beyond the arc of the swing of the entry door (section 603.2.3 exception 2).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space on both sides of the bed (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 309); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 4B: 13-Foot Wide Accessible Guest Room

This drawing shows an accessible 13-foot wide guest room with features that comply with the 2010 Standards. Features include an alternate roll-in shower with a seat, comparable vanity, wardrobe, and door connecting to adjacent guest room. Furnishings include two beds.



The following accessible features are provided in the bathroom:

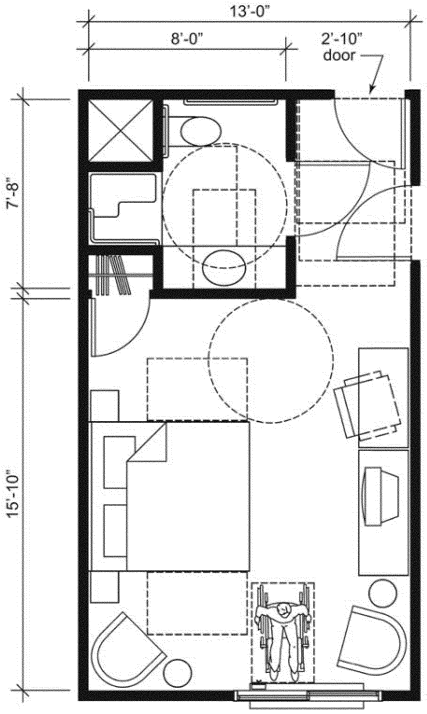
- Comparable vanity counter top space (section 806);
- Alternate roll-in type shower with folding seat is 36 inches deep and 60 inches wide (section 608.2.3);
- Alternate roll-in shower has a 36-inch wide entry at one end of the long end of the compartment (section 608.2.3);
- Recessed alternate roll-in shower location permits shorter rear grab bar at water closet (section 604.5.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Turning space includes knee and toe clearance at lavatory (section 304.3);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space between beds (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 309); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 5A: 13-Foot Wide Accessible Guest Room

This drawing shows an accessible 13-foot wide guest room with features that comply with the 2010 Standards. Features include a transfer shower, comparable vanity, clothes closet with swinging door, and door connecting to adjacent guest room. Furnishings include a king bed and additional seating.



The following accessible features are provided in the bathroom:

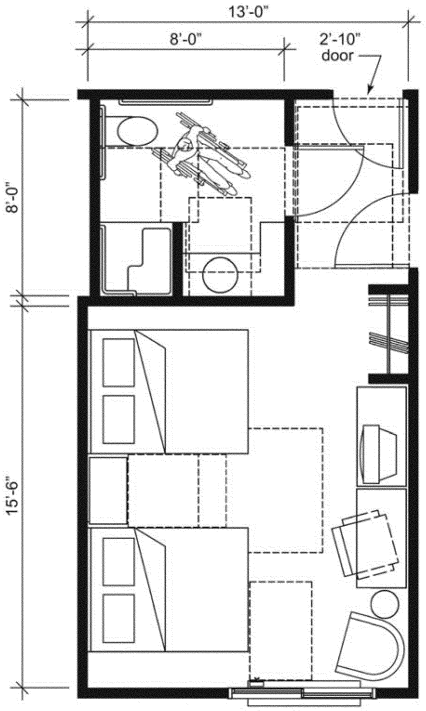
- Comparable vanity counter top space (section 806);
- Transfer shower (section 603.2);
- Shower seat (section 610.3);
- Clearance in front of the shower extends beyond the seat and is 36 inches wide min. (section 607.2);
- Recessed transfer shower location permits shorter rear grab bar at water closet (section 604.5.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- Circular turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space on both sides of the bed (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 229); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 5B: 13-Foot Wide Accessible Guest Room

This drawing shows an accessible 13-foot wide guest room with features that comply with the 2010 Standards. Features include a transfer shower, comparable vanity, open clothes closet, and door connecting to adjacent guest room. Furnishings include two beds.



The following accessible features are provided in the bathroom:

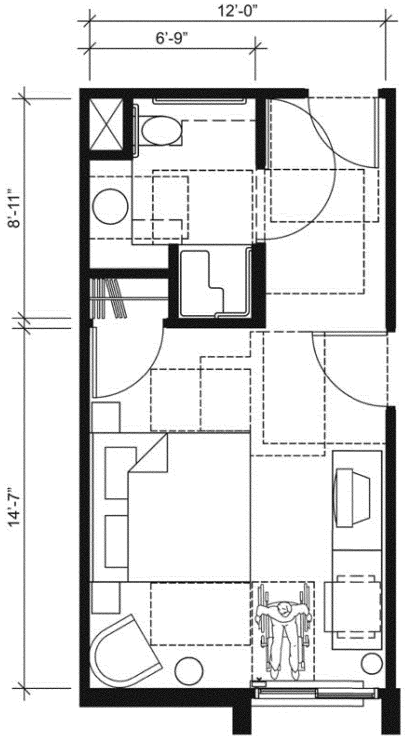
- Comparable vanity counter top space (section 806);
- Transfer shower (section 603.2);
- Shower seat (section 610.3);
- Clearance in front of the shower extends beyond the seat and is 36 inches wide min. (section 607.2);
- Lavatory with vanity counter top recessed to permit shorter rear grab bar at water closet (section 604.5.2);
- T-shaped turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16-18 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space between beds (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 229); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 6A: 12-Foot Wide Accessible Guest Room

This drawing shows an accessible 12-foot wide guest room with features that comply with the 2010 Standards. Features include a transfer shower, water closet length (rim to rear wall) 24 inches maximum, comparable vanity, clothes closet with swinging door, and door connecting to adjacent guest room. Furnishings include a king bed and additional seating.



The following accessible features are provided in the bathroom:

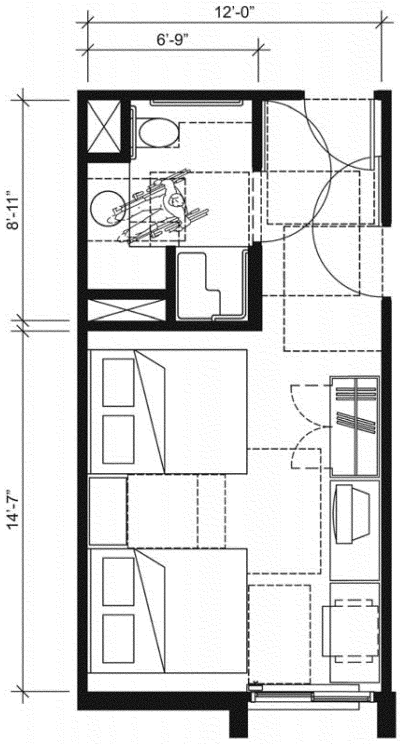
- Comparable vanity counter top space (section 806);
- Transfer shower (section 603.2);
- Shower seat (section 610.3);
- Clearance in front of the shower extends beyond the seat and is 36 inches wide min. (section 607.2);
- Recessed lavatory with vanity counter top permits shorter rear grab bar at water closet (section 604.5.2);
- T-shaped turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- T-shaped turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space on both sides of the bed (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 229); and
- Accessible controls for the heat and air conditioning (section 309).

Plan 6B: 12-Foot Wide Accessible Guest Room

This drawing shows an accessible 12-foot wide guest room with features that comply with the 2010 Standards. Features include a transfer shower, water closet length (rim to rear wall) 24 inches maximum, comparable vanity, wardrobe, and door connecting to adjacent guest room. Furnishings include two beds.



The following accessible features are provided in the bathroom:

- Comparable vanity counter top space (section 806);
- Transfer shower (section 603.2);
- Shower seat (section 610.3);
- Clearance in front of the shower extends beyond the seat and is 36 inches wide min. (section 607.2);
- Recessed lavatory with vanity counter top permits shorter rear grab bar at water closet (section 604.5.2);
- Circular turning space in room (section 603.2.1);
- Required clear floor spaces at fixtures and turning space overlap (section 603.2.2);
- Water closet clearance is 60 inches at back wall and 56 inches deep (section 604.3);
- Centerline of the water closet at 16 inches from side wall (section 604.2); and
- No other fixtures or obstructions located within required water closet clearance (section 604.3).

The following accessible features are provided in the living area:

- Circular turning space (section 304.3.2);
- Accessible route (section 402);
- Clear floor space between beds (section 806.2.3);
- Maneuvering clearances at all doors (section 404.2);
- Accessible operable window (section 229); and
- Accessible controls for the heat and air conditioning (section 309).

225 and 811 Storage

Section 225 of the 2010 Standards provides that where storage is provided in accessible spaces, at least one of each type shall comply with the 2010 Standards. Self-service shelving is required to be on an accessible route, but is not required to comply with the reach range requirements. These requirements are consistent with the 1991 Standards.

Section 225.3 adds a new scoping requirement for self-storage facilities. Facilities with 200 or fewer storage spaces will be required to make at least five percent (5%) of the storage spaces accessible. Facilities with more than 200 storage spaces will be required to provide ten accessible storage spaces, plus two percent (2%) of the total storage spaces over 200.

Sections 225.2.1 and 811 of the 2010 Standards require lockers to meet accessibility requirements. Where lockers are provided in clusters, five percent (5%) but at least one locker in each cluster will have to comply. Under the 1991 Standards, only one locker of each type provided must be accessible.

Commenters recommended that the Department adopt language requiring public accommodations to provide access to all self-service shelves and display areas available to

customers. Other commenters opposed this requirement as too burdensome to retail and other entities and claimed that significant revenue would be lost if this requirement were to be implemented.

Other commenters raised concerns that section 225.2.2 of the 2010 Standards scopes only self-service shelving whereas section 4.1.3(12)(b) of the 1991 Standards applies to both ''shelves or display units.''

Although ''display units'' were not included in the 2010 Standards under the belief that displays are not to be touched and therefore by definition cannot be ''self-service,'' both the 2010 Standards and the 1991 Standards should be read broadly to apply to all types of shelves, racks, hooks, and similar self-service merchandising fittings, including self-service display units. Such fixtures are permitted to be installed above or below the reach ranges possible for many persons with disabilities so that space available for merchandising is used as efficiently as possible.

226 and 902 Dining Surfaces and Work Surfaces

Section 226.1 of the 2010 Standards require that where dining surfaces are provided for the consumption of food or drink, at least five percent (5%) of the seating spaces and standing spaces at the dining surfaces comply with section 902. Section 902.2 requires the provision of accessible knee and toe clearance.

Commenters stated that basing accessible seating on seating spaces and standing spaces potentially represents a significant increase in scoping, particularly given the ambiguity in what represents a ''standing space'' and urged a return to the 1991 Standard of requiring accessible seating based on fixed dining tables. The scoping change merely takes into account that tables may vary in size so that basing the calculation on the number of tables rather than on the number of individuals that may be accommodated by the tables could unnecessarily restrict opportunities for persons with disabilities. The revised scoping permits greater flexibility by allowing designers to disperse accessible seating and standing spaces throughout the dining area. Human factors data, which is readily available to designers, provides information about the amount of space required for both eating and drinking while seated or standing.

227 and 904 Sales and Service

Check-Out Aisles and Sales and Service Counters. The 1991 Standards, at section 7.2, and the 2010 Standards, at section 904.4, contain technical requirements for sales and service counters. The 1991 Standards generally require sales and service counters to provide an accessible portion at least 36 inches long and no higher than 36 inches above the finish floor. The nondiscrimination requirements of the ADA regulations require the level of service provided at the accessible portion of any sales and service counter to be the same as the level of service provided at the inaccessible portions of the counter.

The 2010 Standards specify different lengths for the accessible portion of sales and service counters based on the type of approach provided. Where a forward approach is provided, the accessible portion of the counter must be at least 30 inches long and no higher than 36 inches, and knee and toe space must be provided under the counter. The requirement that knee and toe space be provided where only clear floor space for a forward approach to a sales and service counter is provided is not a new requirement. It is a clarification of the ongoing requirement that part of the sales and service counter be accessible. This requirement applies to the entire accessible part of sales and service counters and requires that the accessible clear floor or ground space adjacent to those counters be kept clear of merchandise, equipment, and other items so that the accessible part of the counter is readily accessible to and usable by individuals with disabilities. The accessible part of the counter must also be staffed and provide an equivalent level of service as that provided to all customers.

Where clear floor space for a parallel approach is provided, the accessible portion of the counter must be at least 36 inches long and no higher than 36 inches above the finish floor. A clear floor or ground space that is at least 48 inches long × 30 inches wide must be provided positioned for a parallel approach adjacent to the 36-inch minimum length of counter.

Section 904.4 of the 2010 Standards includes an exception for alterations to sales and service counters in existing facilities. It permits the accessible portion of the counter to be at least 24 inches long, where providing a longer accessible counter will result in a reduction in the number of existing counters at work stations or existing mailboxes, provided that the required clear floor or ground space is centered on the accessible length of the counter.

Section 904.4 of the 2010 Standards also clarifies that the accessible portion of the counter must extend the same depth as the sales or service counter top. Where the counter is a single-height counter, this requirement applies across the entire depth of the counter top. Where the counter is a split-height counter, this requirement applies only to the customer side of the counter top. The employee-side of the counter top may be higher or lower than the customer-side of the counter top.

Commenters recommended that the Department consider a regulatory alternative exempting small retailers from the new knee and toe clearance requirement and retaining existing wheelchair accessibility standards for sales and service counters. These commenters believed that the knee and toe clearance requirements will cause a reduction in the sales and inventory space at check-out aisles and other sales and service counters.

Both the 1991 and the 2010 Standards permit covered entities to determine whether they will provide a forward or a parallel approach to sales and service counters. So any facility that does not wish to provide the knee or toe clearance required for a front approach to such a counter may avoid that option. However, the Department believes that permitting a forward approach without requiring knee and toe clearance is not adequate to provide accessibility because the person using a wheelchair will be prevented from coming close enough to the counter to see the merchandise or to transact business with a degree of convenience that is comparable to that provided to other customers.

A parallel approach to sales and service counters also can provide the accessibility required by the 2010 Standards. Individuals using wheelchairs can approach sales and service counters from the side, and, assuming the necessary elements, features, or merchandise necessary to complete a business transaction are within the reach range requirements for a side approach, the needs of individuals with disabilities can be met effectively.

Section 227 of the 2010 Standards clarifies the requirements for food service lines. Queues and waiting lines serving counters or check-out aisles, including those for food service, must be accessible to individuals with disabilities.

229 Windows

A new requirement at section 229.1 of the 2010 Standards provides that if operable windows are provided for building users, then at least one window in an accessible space must be equipped with controls that comply with section 309.

Commenters generally supported this provision but some commenters asked whether the maximum five-pounds (5 lbs.) of force requirement of section 309 applies to the window latch itself or only to the force required to open the window. Section 309 applies to all controls and operating mechanisms, so the latch must comply with the requirement to operate with no more than five pounds of force (5 lbf).

230 and 708 Two-Way Communication Systems

New provisions of the 2010 Standards at sections 230.1 and 708 require two-way communications systems to be equipped with visible as well as audible signals.

231 and 808 Judicial Facilities and Courtrooms

Section 231 of the 2010 Standards adds requirements for accessible courtrooms, holding cells, and visiting areas.

Accessible Courtroom Stations. Sections 231.2, 808, 304, 305, and 902 of the 2010 Standards provide increased accessibility at courtroom stations. Clear floor space for a forward approach is required for all courtroom stations (judges' benches, clerks' stations, bailiffs' stations, deputy clerks' stations, court reporters' stations, and litigants' and counsel stations). Other applicable specifications include accessible work surface heights and toe and knee clearance.

Accessible Jury Boxes, Attorney Areas, and Witness Stands. Section 206.2.4 of the 2010 Standards requires, in new construction and alterations, at least one accessible route to connect accessible building or facility entrances with all accessible spaces and elements within the building or facility that are connected by a circulation path unless they are exempted by Exceptions 1–7 of section 206.2.3. Advisory 206.2.4 Spaces and Elements Exception 1 explains that the exception allowing raised courtroom stations to be used by court employees, such as judge's benches, to be adaptable does not apply to areas of the courtroom likely to be used by members of the public such as jury areas, attorney areas, or witness stands. These areas must be on an accessible route at the time of initial construction or alteration.

Raised Courtroom Stations Not for Members of the Public. Section 206.2.4, Exception 1 of the 2010 Standards provides that raised courtroom stations that are used by judges, clerks, bailiffs, and court reporters will not have to provide full vertical access when first constructed or altered if they are constructed to be easily adaptable to provide vertical accessibility.

One commenter suggested that a sufficient number of accessible benches for judges with disabilities, in addition to requiring accessible witness stands and attorney areas, be required. The Department believes that the requirements regarding raised benches for judges are easily adaptable to provide vertical access in the event a judge requires an accessible bench. Section 206.2.4 of the 2010 Standards provides that raised courtroom stations used by judges and other judicial staff do not have to provide full vertical access when first constructed or altered as long as the required clear floor space, maneuvering space, and electrical service,

where appropriate, is provided at the time of new construction or can be achieved without substantial reconstruction during alterations.

A commenter asserted that there is nothing inherent in clerks' stations, jury boxes, and witness stands that require them to be raised. While it would, of course, be easiest to provide access by eliminating height differences among courtroom elements, the Department recognizes that accessibility is only one factor that must be considered in the design process of a functioning courtroom. The need to ensure the ability of the judge to maintain order, the need to ensure sight lines among the judge, the witness, the jury, and other participants, and the need to maintain the security of the participants all affect the design of the space. The Department believes that the 2010 Standards have been drafted in a way that will achieve accessibility without unduly constraining the ability of a designer to address the other considerations that are unique to courtrooms.

Commenters argued that permitting courtroom stations to be adaptable rather than fully accessible at the time of new construction likely will lead to discrimination in hiring of clerks, court reporters, and other court staff. The Department believes that the provisions will facilitate, not hinder, the hiring of court personnel who have disabilities. All courtroom work stations will be on accessible routes and will be required to have all fixed elements designed in compliance with the 2010 Standards. Elevated work stations for court employees may be designed to add vertical access as needed. Since the original design must provide the proper space and electrical wiring to install vertical access, the change should be easily accomplished.

232 Detention Facilities and Correctional Facilities

Section 232 of the 2010 Standards establishes requirements for the design and construction of cells, medical care facilities, and visiting areas in detention facilities and in correctional facilities. Section 35.151(k) of the Department's title II rule provides scoping for newly constructed general holding cells and general housing cells requiring mobility features compliant with section 807.2 of the 2010 Standards in a minimum of three percent (3%) of cells, but no fewer than one cell. Section 232.2 of the 2010 Standards provides scoping for newly constructed cells with communications features requiring a minimum of two percent (2%) of cells, but at least one cell, to have communication features.

The Department's title II rule at §35.151(k) also specifies scoping for alterations to detention and correctional facilities. Generally a minimum of three percent (3%), but no fewer than one, of the total number of altered cells must comply with section 807.2 of the 2010 Standards and be provided within each facility. Altered cells with mobility features must be provided in each classification level, including administrative and disciplinary segregation, each use and service area, and special program. The Department notes that the three percent (3%), but no fewer than one, requirement is a minimum. As corrections systems plan for new facilities or alterations, the Department urges planners to include in their population estimates a projection of the numbers of inmates with disabilities so as to have sufficient numbers of accessible cells to meet inmate needs.

233 Residential Facilities

Homeless Shelters, Group Homes, and Similar Social Service Establishments. Section 233 of the 2010 Standards includes specific scoping and technical provisions that apply to new construction and alteration of residential facilities. In the 1991 Standards scoping and technical requirements for homeless shelters, group homes, and similar social service establishments were included in section 9 Transient Lodging. These types of facilities will be covered by section 233 of the 2010 Standards and by 28 CFR 35.151(e) and 36.406(d) and will be subject to requirements for residential facilities rather than the requirements for transient lodging. This approach will harmonize federal accessibility obligations under both the ADA and section 504 of the Rehabilitation Act of 1973, as amended. In sleeping rooms with more than 25 beds that are covered by §36.406(d) a minimum of five percent (5%) of the beds must have clear floor space compliant with section 806.2.3 of the 2010 Standards. In large facilities with more than 50 beds, at least one roll-in shower compliant with section 608.2.2 or section 608.2.3 of the 2010 Standards must be provided. Where separate shower facilities are provided for men and for women, at least one roll-in shower must be provided for each gender.

Housing Operated By or On Behalf of Places of Education. Housing at a place of education includes: Residence halls, dormitories, suites, apartments, or other places of residence operated by or on behalf of places of education. Residence halls or dormitories operated by or on behalf of places of education are covered by the provisions in sections 224 and 806 of the 2010 Standards. The Department has included in the title III rule at §36.406(e) requirements that apply to housing at places of education that clarify requirements for residence halls and dormitories and other types of student housing. Requirements for housing at a place of education covered by the title II rule are included at §35.151(f).

Kitchens and Kitchenettes. Section 4.34.2 of the UFAS requires a clear turning space at least 60 inches in diameter or an equivalent T-shaped turning space in kitchens. Section 4.34.6 requires a clearance between opposing base cabinets, counters, appliances, or walls of at least 40 inches except in a U-shaped kitchen where the minimum clearance is 60 inches.

Section 804 of the 2010 Standards provides technical requirements for kitchens and kitchenettes. Section 804.2.1 requires that pass through kitchens, which have two entries and counters, appliances, or cabinets on two opposite sides or opposite a parallel wall, provide at least 40 inches minimum clearance. Section 804.2.2 requires that U-shaped kitchens, which are enclosed on three continuous sides, provide at least 60 inches minimum clearance between all opposing base cabinets, countertops, appliances, or walls within kitchen work areas. Kitchens that do not have a cooktop or conventional range are exempt from the clearance requirements but still must provide an accessible route.

If a kitchen does not have two entries, the 2010 Standards require the kitchen to have 60 inches minimum clearance between the opposing base cabinets, counters, appliances, or walls.

One commenter supported the provisions of section 804 of the 2010 Standards but sought clarification whether this section applies to residential units only, or to lodging and office buildings as well. Section 212 makes section 804 applicable to all kitchens and kitchenettes in covered buildings.

Residential Facilities. Section 4.1.4(11) of the UFAS contains scoping requirements for the new construction of housing. Under the 1991 title II regulation, state and local governments had the option of complying with the UFAS or the 1991 Standards. After the compliance date for the 2010 Standards, state and local governments will no longer have the option of complying with the UFAS, but will have to use the 2010 Standards for new construction and alterations.

Sections 233.1, 233.2, 233.3, 233.3.1, and 233.3.2 of the 2010 Standards differentiate between entities subject to the United States Department of Housing and Urban Development (HUD) regulations implementing section 504 of the Rehabilitation Act of 1973 and entities not subject to the HUD regulations. The HUD regulations apply to recipients of federal financial assistance through HUD, and require at least five percent (5%) of dwelling units in multi-family projects of five or more dwelling units to provide mobility features and at least two percent (2%) of the dwelling units to provide communication features. The HUD regulations define a project unique to its programs as ''one or more residential structures which are covered by a single contract for federal financial assistance or application for assistance, or are treated as a whole for processing purposes, whether or not located on a common site.'' To avoid any potential conflicts with the HUD regulations, the 2010 Standards require residential dwelling units subject to the HUD regulations to comply with the scoping requirements in the HUD regulations, instead of the scoping requirements in the 2010 Standards.

For entities not subject to the HUD regulations, the 2010 Standards require at least five percent (5%) of the dwelling units in residential facilities to provide mobility features, and at least two percent (2%) of the dwelling units to provide communication features. The 2010 Standards define facilities in terms of buildings located on a site. The 2010 Standards permit facilities that contain 15 or fewer dwelling units to apply the scoping requirements to all the dwelling units that are constructed under a single contract, or are developed as whole, whether or not located on a common site.

Alterations to Residential Facilities. Section 4.1.6 of the UFAS requires federal, state, and local government housing to comply with the general requirements for alterations to facilities. Applying the general requirements for alterations to housing can result in partially accessible dwelling units where single elements or spaces in dwelling units are altered.

The 2010 Standards, at sections 202.3 Exception 3, 202.4, and 233.3, contain specific scoping requirements for alterations to dwelling units. Dwelling units that are not required to be accessible are exempt from the general requirements for alterations to elements and spaces and for alterations to primary function areas.

The scoping requirements for alterations to dwelling units generally are based on the requirements in the UFAS:

• Where a building is vacated for purposes of alterations and has more than 15 dwelling units, at least five percent (5%) of the altered dwelling units are required to provide mobility features and at least two percent (2%) of the dwelling units are required to provide communication features.

• Where a bathroom or a kitchen is substantially altered in an individual dwelling unit and at least one other room is also altered, the dwelling unit is required to comply with the scoping requirements for new construction until the total number of dwelling units in the facility required to provide mobility features and communication features is met.

As with new construction, the 2010 Standards permit facilities that contain 15 or fewer dwelling units to apply the scoping requirements to all the dwelling units that are altered under a single contract, or are developed as a whole, whether or not located on a common site. The 2010 Standards also permit

a comparable dwelling unit to provide mobility features where it is not technically feasible for the altered dwelling unit to comply with the technical requirements.

234 and 1002 Amusement Rides

New and Altered Permanently Installed Amusement Rides. Section 234 of the 2010 Standards sets out scoping requirements and section 1002 sets out the technical requirements for the accessibility of permanently installed amusement rides. These requirements apply to newly designed and constructed amusement rides and used rides when certain alterations are made.

A commenter raised concerns that smaller amusement parks tend to purchase used rides more frequently than new rides, and that the conversion of a used ride to provide the required accessibility may be difficult to ensure because of the possible complications in modifying equipment to provide accessibility.

The Department agrees with this commenter. The Department notes, however, that the 2010 Standards will require modifications to existing amusement rides when a ride's structural and operational characteristics are altered to the extent that the ride's performance differs from that specified by the manufacturer or the original design. Such an extensive alteration to an amusement ride may well require that new load and unload areas be designed and constructed. When load and unload areas serving existing amusement rides are newly designed and constructed they must be level, provide wheelchair turning space, and be on an accessible route compliant with Chapter 4 of the 2010 Standards except as modified by section 1002.2 of the 2010 Standards.

Mobile or Portable Amusement Rides. The exception in section 234.1 of the 2010 Standards exempts mobile or portable amusement rides, such as those set up for short periods of time at carnivals, fairs or festivals, from having to comply with the 2010 Standards. However, even though the mobile/portable ride itself is not subject to the Standards, these facilities are still subject to the ADA's general requirement to ensure that individuals with disabilities have an equal opportunity to enjoy the services and amenities of these facilities.

Subject to these general requirements, mobile or portable amusement rides should be located on an accessible route and the load and unload areas serving a ride should provide a level wheelchair turning space to provide equal opportunity for individuals with disabilities to be able to participate on the amusement ride to the extent feasible.

One commenter noted that the exception in Section 234.1 of the 2010 Standards for mobile or portable amusement rides limits the opportunities of persons with disabilities to participate on amusement rides because traveling or temporary amusement rides by their nature come to their customers' town or a nearby town rather than the customer having to go to them and so are less expensive than permanent amusement parks. While the Department understands the commenter's concerns, the Department notes that most amusement rides are too complex to be reasonably modified or re-engineered to accommodate the majority of individuals with disabilities and that additional complexities and safety concerns are added when the rides are mobile or portable.

A commenter asked that section 234 of the 2010 Standards make clear that the requirements for accessible routes include the routes leading up to and including the loading and unloading areas of amusement rides. Sections 206.2.9 and 1002.2 of the 2010 Standards clarify that the requirements for accessible routes include the routes leading up to and including the loading and unloading areas of amusement rides.

A commenter requested that the final rule specifically allow for wheelchair access through the exit or other routes, or alternate means of wheelchair access routes to amusement rides. The commenter stated that the concept of wheelchair access through the exit or alternate routes was a base assumption for the 2010 Standards. The commenter noted that the concept is apparent in the signage and load/unload area provisions in Section 216.12 (" * * * where accessible unload areas also serve as accessible load areas, signs indicating the location of the accessible load and unload areas shall be provided at entries to queues and waiting lines"). The Department agrees with the commenter that accessible load and unload areas may be the same where signs that comply with section 216.12 are provided.

Wheelchair Space or Transfer Seat or Transfer Device. Sections 234.3 and 1002.4–1002.6 of the 2010 Standards provide that each new and altered amusement ride, except for mobile/portable rides and a few additional excepted rides, will be required to provide at least one type of access by means of one wheelchair space or one transfer seat or one transfer device (the design of the transfer device is not specified).

Commenters urged the Department to revise the requirements for wheelchair spaces and transfer seats and devices because most amusement rides are too complex to be reasonably modified or re-engineered to accommodate the majority of individuals with disabilities. They argued that the experience of amusement rides will be significantly reduced if the proposed requirements are implemented.

The 2004 ADAAG, which the Department adopted as part of the 2010 Standards, was developed with the assistance of an advisory committee that included representation from the design staffs of major amusement

venues and from persons with disabilities. The Department believes that the resulting 2004 ADAAG reflected sensitivity to the complex problems posed in adapting existing rides by focusing on new rides that can be designed from the outset to be accessible.

To permit maximum design flexibility, the 2010 Standards permit designers to determine whether it is more appropriate to permit individuals who use wheelchairs to remain in their chairs on the ride, or to provide for transfer access.

Maneuvering Space in Load and Unload Areas. Sections 234.2 and 1002.3 of the 2010 Standards require that a level wheelchair turning space be provided at the load and unload areas of each amusement ride. The turning space must comply with sections 304.2 and 304.3.

Signs Required at Waiting Lines to Amusement Rides. Section 216.12 of the 2010 Standards requires signs at entries to queues and waiting lines identifying type and location of access for the amusement ride.

235 and 1003 Recreational Boating Facilities

These sections require that accessible boat slips and boarding piers be provided. Most commenters approved of the requirements for recreational boating facility accessibility and urged the Department to keep regulatory language consistent with those provisions. They commented that the requirements appropriately reflect industry conditions. Individual commenters and disability organizations agreed that the 2010 Standards achieve acceptable goals for recreational boating facility access.

Accessible Route. Sections 206.2.10 and 1003.2 of the 2010 Standards require an accessible route to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps. Section 1003.2.1 provides a list of exceptions applicable to structures such as gangways, transition plates, floating piers, and structures containing combinations of these elements that are affected by water level changes. The list of exceptions specifies alternate design requirements applicable to these structures which, because of water level variables, cannot comply with the slope, cross slope, and handrail requirements for fixed ramps contained in sections 403.3, 405.2, 405.3, 405.6, and 405.7 of the 2010 Standards. Exceptions 3 and 4 in Section 1003.2.1, which permit a slope greater than that specified in Section 405.2, are available for structures that meet specified length requirements. Section 206.7.10 permits the use of platform lifts as an alternative to gangways that are part of accessible routes.

Commenters raised concerns that because of water level fluctuations it may be difficult to provide accessible routes to all accessible boating facilities, including boat slips and boarding piers at boat launch ramps. One of the specific concerns expressed by several commenters relates to the limits for running slope permitted on gangways that are part of an accessible route as gangways may periodically have a steeper slope than is permitted for a fixed ramp. The exceptions contained in section 1003.2 of the 2010 Standards modify the requirements of Chapter 4. For example, where the total length of a gangway or series of gangways serving as an accessible route is 80 feet or more an exception permits the slope on gangways to exceed the maximum slope in section 405.2.

Some commenters suggested that permissible slope variations could be reduced further by introducing a formula that ties required gangway length to anticipated water level fluctuations. Such a formula would incorporate predictions of tidal level changes such as those issued by the National Oceanographic and Atmospheric Administration (NOAA) and the United States Geologic Survey (USGS). This suggested approach would be an alternative to the gangway length exceptions and limits in section 1003.2.1 of the 2010 Standards. These commenters noted that contemporary building materials and techniques make gangways of longer length and alternative configurations achievable. These commenters provided at least one example of a regional regulatory authority using this type of formula. While this approach may be successfully implemented and consistent with the goals of the ADA, the example provided was applied in a highly developed area containing larger facilities. The Department has considered that many facilities do not have sufficient resources available to take advantage of the latest construction materials and design innovations. Other commenters supported compliance exceptions for facilities that are subject to extreme tidal conditions. One commenter noted that if a facility is located in an area with limited space and extreme tidal variations, a disproportionately long gangway might intrude into water travel routes. The Department has considered a wide range of boating facility characteristics including size, water surface areas, tidal fluctuations, water conditions, variable resources, whether the facility is in a highly developed or remote location, and other factors. The Department has determined that the 2010 Standards provide sufficient flexibility for such broad application. Additionally, the length requirement for accessible routes in section 1003.2.1 provides an easily determinable compliance standard.

Accessible Boarding Piers. Where boarding piers are provided at boat launch ramps, sections 235.3 and 1003.3.2 of the 2010 Standards require that at least five percent (5%) of boarding piers, but at least one, must be accessible.

Accessible Boat Slips. Sections 235.2 and 1003.3.1 of the 2010 Standards require that a

specified number of boat slips in each recreational boating facility meet specified accessibility standards. The number of accessible boat slips required by the 2010 Standards is set out in a chart in section 235.2. One accessible boat slip is required for facilities containing 25 or fewer total slips. The number of required accessible boat slips increases with the total number of slips at the facility. Facilities containing more than one thousand (1000) boat slips are required to provide twelve (12) accessible boat slips plus one for each additional one hundred slips at the facility.

One commenter asserted the need for specificity in the requirement for dispersion of accessible slips. Section 235.2.1 of the 2010 Standards addresses dispersion and requires that boat slips ''shall be dispersed throughout the various types of boat slips provided.'' The commenter was concerned that if a marina could not put accessible slips all on one pier, it would have to reconstruct the entire facility to accommodate accessible piers, gangways, docks and walkways. The provision permits required accessible boat slips to be grouped together. The Department recognizes that economical and structural feasibility may produce this result. The 2010 Standards do not require the dispersion of the physical location of accessible boat slips. Rather, the dispersion must be among the various types of boat slips offered by the facility. Section 235.2.1 of the 2010 Standards specifies that if the required number has been met, no further dispersion is required. For example, if a facility offers five different 'types' of boat slips but is only required to provide three according to the table in Section 235.2, that facility is not required to provide more than three accessible boat slips, but the three must be varied among the five 'types' of boat slips available at the facility.

236 and 1004 Exercise Machines and Equipment

Accessible Route to Exercise Machines and Equipment. Section 206.2.13 of the 2010 Standards requires an accessible route to serve accessible exercise machines and equipment.

Commenters raised concerns that the requirement to provide accessible routes to serve accessible exercise machines and equipment will be difficult for some facilities to provide, especially some transient lodging facilities that typically locate exercise machines and equipment in a single room. The Department believes that this requirement is a reasonable one in new construction and alterations because accessible exercise machines and equipment can be located so that an accessible route can serve more than one piece of equipment.

Exercise Machines and Equipment. Section 236 of the 2010 Standards requires at least one of each type of exercise machine to meet clear floor space requirements of section 1004.1. Types of machines are generally defined according to the muscular groups exercised or the kind of cardiovascular exercise provided.

Several commenters were concerned that existing facilities would have to reduce the number of available exercise equipment and machines in order to comply with the 2010 Standards. One commenter submitted prototype drawings showing equipment and machine layouts with and without the required clearance specified in the 2010 Standards. The accessible alternatives all resulted in a loss of equipment and machines. However, because these prototype layouts included certain possibly erroneous assumptions about the 2010 Standards, the Department wishes to clarify the requirements.

Section 1004.1 of the 2010 Standards requires a clear floor space ''positioned for transfer or for use by an individual seated in a wheelchair'' to serve at least one of each type of exercise machine and equipment. This requirement provides the designer greater flexibility regarding the location of the clear floor space than was employed by the commenter who submitted prototype layouts. The 2010 Standards do not require changes to exercise machines or equipment in order to make them more accessible to persons with disabilities. Even where machines or equipment do not have seats and typically are used by individuals in a standing position, at least one of each type of machine or equipment must have a clear floor space. Therefore, it is reasonable to assume that persons with disabilities wishing to use this type of machine or equipment can stand or walk, even if they use wheelchairs much of the time. As indicated in Advisory 1004.1, ''the position of the clear floor space may vary greatly depending on the use of the equipment or machine.'' Where exercise equipment or machines require users to stand on them, the clear floor space need not be located parallel to the length of the machine or equipment in order to provide a lateral seat-to-platform transfer. It is permissible to locate the clear floor space for such machines or equipment in the aisle behind the device and to overlap the clear floor space and the accessible route.

Commenters were divided in response to the requirement for accessible exercise machines and equipment. Some supported requirements for accessible machines and equipment; others urged the Department not to require accessible machines and equipment because of the costs involved. The Department believes that the requirement strikes an appropriate balance in ensuring that persons with disabilities, particularly those who use wheelchairs, will have the opportunity to use the exercise equipment. Providing access to exercise machines and equipment recognizes the need and desires of

individuals with disabilities to have the same opportunity as other patrons to enjoy the advantages of exercise and maintaining health.

237 and 1005 Fishing Piers and Platforms

Accessible Route. Sections 206.2.14 and 1005.1 of the 2010 Standards require an accessible route to each accessible fishing pier and platform. The exceptions described under Recreational Boating above also apply to gangways and floating piers. All commenters supported the requirements for accessible routes to fishing piers and platforms.

Accessible Fishing Piers and Platforms. Sections 237 and 1005 of the 2010 Standards require at least twenty-five percent (25%) of railings, guards, or handrails (if provided) to be at a 34-inch maximum height (so that a person seated in a wheelchair can cast a fishing line over the railing) and to be located in a variety of locations on the fishing pier or platform to give people a variety of locations to fish. An exception allows a guard required to comply with the IBC to have a height greater than 34 inches. If railings, guards, or handrails are provided, accessible edge protection and clear floor or ground space at accessible railings are required. Additionally, at least one turning space complying with section 304.3 of the 2010 Standards is required to be provided on fishing piers and platforms.

Commenters expressed concerns about the provision for fishing piers and platforms at the exception in section 1005.2.1 of the 2010 Standards that allows a maximum height of 42 inches for a guard when the pier or platform is covered by the IBC. Two commenters stated that allowing a 42-inch guard or railing height for facilities covered by another building code would be difficult to enforce. They also thought that this would hinder access for persons with disabilities because the railing height would be too high for a person seated in a wheelchair to reach over with their fishing pole in order to fish. The Department understands these concerns but believes that the railing height exception is necessary in order to avoid confusion resulting from conflicting accessibility requirements, and therefore has retained this exception.

238 and 1006 Golf Facilities

Accessible Route. Sections 206.2.15, 1006.2, and 1006.3 of the 2010 Standards require an accessible route to connect all accessible elements within the boundary of the golf course and, in addition, to connect golf car rental areas, bag drop areas, teeing grounds, putting greens, and weather shelters. An accessible route also is required to connect any practice putting greens, practice teeing grounds, and teeing stations at driving ranges that are required to be accessible. An exception permits the accessible route requirements to be met, within the boundaries of the golf course, by providing a ''golf car passage'' (the path typically used by golf cars) if specifications for width and curb cuts are met.

Most commenters expressed the general viewpoint that nearly all golf courses provide golf cars and have either well-defined paths or permit the cars to drive on the course where paths are not present, and thus meet the accessible route requirement.

The Department received many comments requesting clarification of the term ''golf car passage.'' Some commenters recommended additional regulatory language specifying that an exception from a pedestrian route requirement should be allowed only when a golf car passage provides unobstructed access onto the teeing ground, putting green, or other accessible element of the course so that an accessible golf car can have full access to those elements. These commenters cautioned that full and equal access would not be provided if a golfer were required to navigate a steep slope up or down a hill or a flight of stairs in order to get to the teeing ground, putting green, or other accessible element of the course.

Conversely, another commenter requesting clarification of the term ''golf car passage'' argued that golf courses typically do not provide golf car paths or pedestrian paths up to actual tee grounds or greens, many of which are higher or lower than the car path. This commenter argued that if golf car passages were required to extend onto teeing grounds and greens in order to qualify for an exception, then some golf courses would have to substantially regrade teeing grounds and greens at a high cost.

Some commenters argued that older golf courses, small nine-hole courses, and executive courses that do not have golf car paths would be unable to comply with the accessible route requirements because of the excessive cost involved. A commenter noted that, for those older courses that have not yet created an accessible pedestrian route or golf car passage, the costs and impacts to do so should be considered.

A commenter argued that an accessible route should not be required where natural terrain makes it infeasible to create an accessible route. Some commenters cautioned that the 2010 Standards would jeopardize the integrity of golf course designs that utilize natural terrain elements and elevation changes to set up shots and create challenging golf holes.

The Department has given careful consideration to the comments and has decided to adopt the 2010 Standards requiring that at least one accessible route connect accessible elements and spaces within the boundary of the golf course including teeing grounds, putting greens, and weather shelters, with an exception provided that golf car passages

shall be permitted to be used for all or part of required accessible routes. In response to requests for clarification of the term ''golf car passage,'' the Department points out that golf car passage is merely a pathway on which a motorized golf car can operate and includes identified or paved paths, teeing grounds, fairways, putting greens, and other areas of the course. Golf cars cannot traverse steps and exceedingly steep slopes. A nine-hole golf course or an executive golf course that lacks an identified golf car path but provides golf car passage to teeing grounds, putting greens, and other elements throughout the course may utilize the exception for all or part of the accessible pedestrian route. The exception in section 206.2.15 of the 2010 Standards does not exempt golf courses from their obligation to provide access to necessary elements of the golf course; rather, the exception allows a golf course to use a golf car passage for part or all of the accessible pedestrian route to ensure that persons with mobility disabilities can fully and equally participate in the recreational activity of playing golf.

Accessible Teeing Grounds, Putting Greens, and Weather Shelters. Sections 238.2 and 1006.4 of the 2010 Standards require that golf cars be able to enter and exit each putting green and weather shelter. Where two teeing grounds are provided, the forward teeing ground is required to be accessible (golf car can enter and exit). Where three or more teeing grounds are provided, at least two, including the forward teeing ground, must be accessible.

A commenter supported requirements for teeing grounds, particularly requirements for accessible teeing grounds, noting that accessible teeing grounds are essential to the full and equal enjoyment of the golfing experience.

A commenter recommended that existing golf courses be required to provide access to only one teeing ground per hole. The majority of commenters reported that most public and private golf courses already provide golf car passage to teeing grounds and greens. The Department has decided that it is reasonable to maintain the requirement. The 2010 Standards provide an exception for existing golf courses with three or more teeing grounds not to provide golf car passage to the forward teeing ground where terrain makes such passage infeasible.

Section 1006.3.2 of the 2010 Standards requires that where curbs or other constructed barriers prevent golf cars from entering a fairway, openings 60 inches wide minimum shall be provided at intervals not to exceed 75 yards.

A commenter disagreed with the requirement that openings 60 inches wide minimum be installed at least every 75 yards, arguing that a maximum spacing of 75 yards may not allow enough flexibility for terrain and hazard placements. To resolve this problem, the commenter recommended that the standards be modified to require that each golf car passage include one 60-inch wide opening for an accessible golf car to reach the tee, and that one opening be provided where necessary for an accessible golf car to reach a green. The requirement for openings where curbs or other constructed barriers may otherwise prevent golf cars from entering a fairway allows the distance between openings to be less than every 75 yards. Therefore, the Department believes that the language in section 1006.3.2 of the 2010 Standards allows appropriate flexibility. Where a paved path with curbs or other constructed barrier exists, the Department believes that it is essential that openings be provided to enable golf car passages to access teeing grounds, fairways and putting greens, and other required elements. Golf car passage is not restricted to a paved path with curbs. Golf car passage also includes fairways, teeing grounds, putting greens, and other areas on which golf cars operate.

Accessible Practice Putting Greens, Practice Teeing Grounds, and Teeing Stations at Driving Ranges. Section 238.3 of the 2010 Standards requires that five percent (5%) but at least one of each of practice putting greens, practice teeing grounds, and teeing stations at driving ranges must permit golf cars to enter and exit.

239 and 1007 Miniature Golf Facilities

Accessible Route to Miniature Golf Course Holes. Sections 206.2.16, 239.3, and 1007.2 of the 2010 Standards require an accessible route to connect accessible miniature golf course holes and the last accessible hole on the course directly to the course entrance or exit. Accessible holes are required to be consecutive with an exception permitting one break in the sequence of consecutive holes provided that the last hole on the miniature golf course is the last hole in the sequence.

Many commenters supported expanding the exception from one to multiple breaks in the sequence of accessible holes. One commenter noted that permitting accessible holes with breaks in sequence would enable customers with disabilities to enjoy the landscaping, water and theme elements of the miniature golf course. Another commenter wrote in favor of allowing multiple breaks in accessible holes with a connecting accessible route.

Other commenters objected to allowing multiple breaks in the sequence of miniature golf holes. Commenters opposed to this change argued that allowing any breaks in the sequence of accessible holes at a miniature golf course would disrupt the flow of play for persons with disabilities and create a less socially integrated experience. A commenter noted that multiple breaks in sequence would not necessarily guarantee the

provision of access to holes that are most representative of those with landscaping, water elements, or a fantasy-like experience.

The Department has decided to retain the exception without change. Comments did not provide a sufficient basis on which to conclude that allowing multiple breaks in the sequence of accessible holes would necessarily increase integration of accessible holes with unique features of miniature golf courses. Some designs of accessible holes with multiple breaks in the sequence might provide equivalent facilitation where persons with disabilities gain access to landscaping, water or theme elements not otherwise represented in a consecutive configuration of accessible holes. A factor that might contribute to equivalent facilitation would be an accessible route designed to bring persons with disabilities to a unique feature, such as a waterfall, that would otherwise not be served by an accessible route connecting consecutive accessible holes.

Specified exceptions are permitted for accessible route requirements when located on the playing surfaces near holes.

Accessible Miniature Golf Course Holes. Sections 239.2 and 1007.3 of the 2010 Standards require at least fifty percent (50%) of golf holes on miniature golf courses to be accessible, including providing a clear floor or ground space that is 48 inches minimum by 60 inches minimum with slopes not steeper than 1:48 at the start of play.

240 and 1008 Play Areas

Section 240 of the 2010 Standards provides scoping for play areas and section 1008 provides technical requirements for play areas. Section 240.1 of the 2010 Standards sets requirements for play areas for children ages 2 and over and covers separate play areas within a site for specific age groups. Section 240.1 also provides four exceptions to the requirements that apply to family child care facilities, relocation of existing play components in existing play areas, amusement attractions, and alterations to play components where the ground surface is not altered.

Ground Surfaces. Section 1008.2.6 of the 2010 Standards provides technical requirements for accessible ground surfaces for play areas on accessible routes, clear floor or ground spaces, and turning spaces. These ground surfaces must follow special rules, incorporated by reference from nationally recognized standards for accessibility and safety in play areas, including those issued by the American Society for Testing and Materials (ASTM).

A commenter recommended that the Department closely examine the requirements for ground surfaces at play areas. The Department is aware that there is an ongoing controversy about play area ground surfaces arising from a concern that some surfaces that meet the ASTM requirements at the time of installation will become inaccessible if they do not receive constant maintenance. The Access Board is also aware of this issue and is working to develop a portable field test that will provide more relevant information on installed play surfaces. The Department would caution covered entities selecting among the ground surfacing materials that comply with the ASTM requirements that they must anticipate the maintenance costs that will be associated with some of the products. Permitting a surface to deteriorate so that it does not meet the 2010 Standards would be an independent violation of the Department's ADA regulations.

Accessible Route to Play Components. Section 206.2.17 of the 2010 Standards provides scoping requirements for accessible routes to ground level and elevated play components and to soft contained play structures. Sections 240.2 and 1008 of the 2010 Standards require that accessible routes be provided for play components. The accessible route must connect to at least one ground level play component of each different type provided (e.g., for different experiences such as rocking, swinging, climbing, spinning, and sliding). Table 240.2.1.2 sets requirements for the number and types of ground level play components required to be on accessible routes. When elevated play components are provided, an accessible route must connect at least fifty percent (50%) of the elevated play components. Section 240.2.1.2, provides an exception to the requirements for ground level play components if at least fifty percent (50%) of the elevated play components are connected by a ramp and at least three of the elevated play components connected by the ramp are different types of play components.

The technical requirements at section 1008 include provisions where if three or fewer entry points are provided to a soft contained play structure, then at least one entry point must be on an accessible route. In addition, where four or more entry points are provided to a soft contained play structure, then at least two entry points must be served by an accessible route.

If elevated play components are provided, fifty percent (50%) of the elevated components are required to be accessible. Where 20 or more elevated play components are provided, at least twenty five percent (25%) will have to be connected by a ramp. The remaining play components are permitted to be connected by a transfer system. Where less than 20 elevated play components are provided, a transfer system is permitted in lieu of a ramp.

A commenter noted that the 2010 Standards allow for the provision of transfer steps to elevated play structures based on the

number of elevated play activities, but asserted that transfer steps have not been documented as an effective means of access.

The 2010 Standards recognize that play structures are designed to provide unique experiences and opportunities for children. The 2010 Standards provide for play components that are accessible to children who cannot transfer from their wheelchair, but they also provide opportunities for children who are able to transfer. Children often interact with their environment in ways that would be considered inappropriate for adults. Crawling and climbing, for example, are integral parts of the play experience for young children. Permitting the use of transfer platforms in play structures provides some flexibility for creative playground design.

Accessible Play Components. Accessible play components are required to be on accessible routes, including elevated play components that are required to be connected by ramps. These play components must also comply with other accessibility requirements, including specifications for clear floor space and seat heights (where provided).

A commenter expressed concerns that the general requirements of section 240.2.1 of the 2010 Standards and the advisory accompanying section 240.2.1 conflict. The comment asserts that section 240.2.1 of the 2010 Standards provides that the only requirement for integration of equipment is where there are two or more required ground level play components, while the advisory appears to suggest that all accessible components must be integrated.

The commenter misinterprets the requirement. The ADA mandates that persons with disabilities be able to participate in programs or activities in the most integrated setting appropriate to their needs. Therefore, all accessible play components must be integrated into the general playground setting. Section 240.2.1 of the 2010 Standards specifies that where there is more than one accessible ground level play component, the components must be both dispersed and integrated.

241 and 612 Saunas and Steam Rooms

Section 241 of the 2010 Standards sets scoping for saunas and steam rooms and section 612 sets technical requirements including providing accessible turning space and an accessible bench. Doors are not permitted to swing into the clear floor or ground space for the accessible bench. The exception in section 612.2 of the 2010 Standards permits a readily removable bench to obstruct the required wheelchair turning space and the required clear floor or ground space. Where they are provided in clusters, five percent (5%) but at least one sauna or steam room in each cluster must be accessible.

Commenters raised concerns that the safety of individuals with disabilities outweighs the usefulness in providing accessible saunas and steam rooms. The Department believes that there is an element of risk in many activities available to the general public. One of the major tenets of the ADA is that individuals with disabilities should have the same opportunities as other persons to decide what risks to take. It is not appropriate for covered entities to prejudge the abilities of persons with disabilities.

242 and 1009 Swimming Pools, Wading Pools, and Spas

Accessible Means of Entry to Pools. Section 242 of the 2010 Standards requires at least two accessible means of entry for larger pools (300 or more linear feet) and at least one accessible entry for smaller pools. This section requires that at least one entry will have to be a sloped entry or a pool lift; the other could be a sloped entry, pool lift, a transfer wall, or a transfer system (technical specifications for each entry type are included at section 1009).

Many commenters supported the scoping and technical requirements for swimming pools. Other commenters stated that the cost of requiring facilities to immediately purchase a pool lift for each indoor and outdoor swimming pool would be very significant especially considering the large number of swimming pools at lodging facilities. One commenter requested that the Department clarify what would be an ''alteration'' to a swimming pool that would trigger the obligation to comply with the accessible means of entry in the 2010 Standards.

Alterations are covered by section 202.3 of the 2010 Standards and the definition of ''alteration'' is provided at section 106.5. A physical change to a swimming pool which affects or could affect the usability of the pool is considered to be an alteration. Changes to the mechanical and electrical systems, such as filtration and chlorination systems, are not alterations. Exception 2 to section 202.3 permits an altered swimming pool to comply with applicable requirements to the maximum extent feasible if full compliance is technically infeasible. ''Technically infeasible'' is also defined in section 106.5 of the 2010 Standards.

The Department also received comments suggesting that it is not appropriate to require two accessible means of entry to wave pools, lazy rivers, sand bottom pools, and other water amusements where there is only one point of entry. Exception 2 of Section 242.2 of the 2010 Standards exempts pools of this type from having to provide more than one accessible means of entry provided that the one accessible means of entry is a swimming pool lift compliant with section 1009.2, a sloped entry compliant with section 1009.3, or a transfer system compliant with section 1009.5 of the 2010 Standards.

Accessible Means of Entry to Wading Pools. Sections 242.3 and 1009.3 of the 2010 Standards

require that at least one sloped means of entry is required into the deepest part of each wading pool.

Accessible Means of Entry to Spas. Sections 242.4 and 1009.2, 1009.4, and 1009.5 of the 2010 Standards require spas to meet accessibility requirements, including an accessible means of entry. Where spas are provided in clusters, five percent (5%) but at least one spa in each cluster must be accessible. A pool lift, a transfer wall, or a transfer system will be permitted to provide the required accessible means of entry.

243 Shooting Facilities with Firing Positions

Sections 243 and 1010 of the 2010 Standards require an accessible turning space for each different type of firing position at a shooting facility if designed and constructed on a site. Where firing positions are provided in clusters, five percent (5%), but at least one position of each type in each cluster must be accessible.

Additional Technical Requirements

302.1 Floor or Ground Surfaces

Both section 4.5.1 of the 1991 Standards and section 302.2 of the 2010 Standards require that floor or ground surfaces along accessible routes and in accessible rooms and spaces be stable, firm, slip-resistant, and comply with either section 4.5 in the case of the 1991 Standards or section 302 in the case of the 2010 Standards.

Commenters recommended that the Department apply an ASTM Standard (with modifications) to assess whether a floor surface is ''slip resistant'' as required by section 302.1 of the 2010 Standards. The Department declines to accept this recommendation since, currently, there is no generally accepted test method for the slip-resistance of all walking surfaces under all conditions.

304 Turning Space

Section 4.2.3 of the 1991 Standards and Section 304.3 of the 2010 Standards allow turning space to be either a circular space or a T-shaped space. Section 304.3 permits turning space to include knee and toe clearance complying with section 306. Section 4.2.3 of the 1991 Standards did not specifically permit turning space to include knee and toe clearance. Commenters urged the Department to retain the turning space requirement, but exclude knee and toe clearance from being permitted as part of this space. They argued that wheelchairs and other mobility devices are becoming larger and that more individuals with disabilities are using electric three and four-wheeled scooters which cannot utilize knee clearance.

The Department recognizes that the technical specifications for T-shaped and circular turning spaces in the 1991 and 2010 Standards, which are based on manual wheelchair dimensions, may not adequately meet the needs of individuals using larger electric scooters. However, there is no consensus about the appropriate dimension on which to base revised requirements. The Access Board is conducting research to study this issue in order to determine if new requirements are warranted. For more information, see the Access Board's Web site at *http://www.access-board.gov/research/current-projects.htm#suny*. The Department plans to wait for the results of this study and action by the Access Board before considering any changes to the Department's rules. Covered entities may wish to consider providing more than the minimum amount of turning space in confined spaces where a turn will be required. Appendix section A4.2.3 and Fig. A2 of the 1991 Standards provide guidance on additional space for making a smooth turn without bumping into surrounding objects.

404 Doors, Doorways, and Gates

Automatic Door Break Out Openings. The 1991 Standards do not contain any technical requirement for automatic door break out openings. The 2010 Standards at sections 404.1, 404.3, 404.3.1, and 404.3.6 require automatic doors that are part of a means of egress and that do not have standby power to have a 32-inch minimum clear break out opening when operated in emergency mode. The minimum clear opening width for automatic doors is measured with all leaves in the open position. Automatic bi-parting doors or pairs of swinging doors that provide a 32-inch minimum clear break out opening in emergency mode when both leaves are opened manually meet the technical requirement. Section 404.3.6 of the 2010 Standards includes an exception that exempts automatic doors from the technical requirement for break out openings when accessible manual swinging doors serve the same means of egress.

Maneuvering Clearance or Standby Power for Automatic Doors. Section 4.13.6 of the 1991 Standards does not require maneuvering clearance at automatic doors. Section 404.3.2 of the 2010 Standards requires automatic doors that serve as an accessible means of egress to either provide maneuvering clearance or to have standby power to operate the door in emergencies. This provision has limited application and will affect, among others, in-swinging automatic doors that serve small spaces.

Commenters urged the Department to reconsider provisions that would require maneuvering clearance or standby power for automatic doors. They assert that these requirements would impose unreasonable financial and administrative burdens on all

covered entities, particularly smaller entities. The Department declines to change these provisions because they are fundamental life-safety issues. The requirement applies only to doors that are part of a means of egress that must be accessible in an emergency. If an emergency-related power failure prevents the operation of the automatic door, a person with a disability could be trapped unless there is either adequate maneuvering room to open the door manually or a back-up power source.

Thresholds at Doorways. The 1991 Standards, at section 4.13.8, require the height of thresholds at doorways not to exceed ½ inch and thresholds at exterior sliding doors not to exceed ¾ inch. Sections 404.1 and 404.2.5 of the 2010 Standards require the height of thresholds at all doorways that are part of an accessible route not to exceed ½ inch. The 1991 Standards and the 2010 Standards require raised thresholds that exceed ¼ inch in height to be beveled on each side with a slope not steeper than 1:2. The 2010 Standards include an exception that exempts existing and altered thresholds that do not exceed ¾ inch in height and are beveled on each side from the requirement.

505 Handrails

The 2010 Standards add a new technical requirement at section 406.3 for handrails along walking surfaces.

The 1991 Standards, at sections 4.8.5, 4.9.4, and 4.26, and the 2010 Standards, at section 505, contain technical requirements for handrails. The 2010 Standards provide more flexibility than the 1991 Standards as follows:

• Section 4.26.4 of the 1991 Standards requires handrail gripping surfaces to have edges with a minimum radius of ⅛ inch. Section 505.8 of the 2010 Standards requires handrail gripping surfaces to have rounded edges.

• Section 4.26.2 of the 1991 Standards requires handrail gripping surfaces to have a diameter of 1¼ inches to 1½ inches, or to provide an equivalent gripping surface. Section 505.7 of the 2010 Standards requires handrail gripping surfaces with a circular cross section to have an outside diameter of 1¼ inches to 2 inches. Handrail gripping surfaces with a non-circular cross section must have a perimeter dimension of 4 inches to 6¼ inches, and a cross section dimension of 2¼ inches maximum.

• Sections 4.8.5 and 4.9.4 of the 1991 Standards require handrail gripping surfaces to be continuous, and to be uninterrupted by newel posts, other construction elements, or obstructions. Section 505.3 of the 2010 Standards sets technical requirements for continuity of gripping surfaces. Section 505.6 requires handrail gripping surfaces to be continuous along their length and not to be obstructed along their tops or sides. The bottoms of handrail gripping surfaces must not be obstructed for more than twenty percent (20%) of their length. Where provided, horizontal projections must occur at least 1½ inches below the bottom of the handrail gripping surface. An exception permits the distance between the horizontal projections and the bottom of the gripping surface to be reduced by ⅛ inch for each ½ inch of additional handrail perimeter dimension that exceeds 4 inches.

• Section 4.9.4 of the 1991 Standards requires handrails at the bottom of stairs to continue to slope for a distance of the width of one tread beyond the bottom riser nosing and to further extend horizontally at least 12 inches. Section 505.10 of the 2010 Standards requires handrails at the bottom of stairs to extend at the slope of the stair flight for a horizontal distance at least equal to one tread depth beyond the last riser nosing. Section 4.1.6(3) of the 1991 Standards has a special technical provision for alterations to existing facilities that exempts handrails at the top and bottom of ramps and stairs from providing full extensions where it will be hazardous due to plan configuration. Section 505.10 of the 2010 Standards has a similar exception that applies in alterations.

A commenter noted that handrail extensions are currently required at the top and bottom of stairs, but the proposed regulations do not include this requirement, and urged the Department to retain the current requirement. Other commenters questioned the need for the extension at the bottom of stairs.

Sections 505.10.2 and 505.10.3 of the 2010 Standards require handrail extensions at both the top and bottom of a flight of stairs. The requirement in the 1991 Standards that handrails extend horizontally at least 12 inches beyond the width of one tread at the bottom of a stair was changed in the 2004 ADAAG by the Access Board in response to public comments. Existing horizontal handrail extensions that comply with 4.9.4(2) of the 1991 Standards should meet or exceed the requirements of the 2010 Standards.

Commenters noted that the 2010 Standards will require handrail gripping surfaces with a circular cross section to have an outside diameter of 2 inches, and that this requirement would impose a physical barrier to individuals with disabilities who need the handrail for stability and support while accessing stairs.

The requirement permits an outside diameter of 1¼ inches to 2 inches. This range allows flexibility in meeting the needs of individuals with disabilities and designers and architects. The Department is not aware of any data indicating that an outside diameter of 2 inches would pose any adverse impairment to use by individuals with disabilities.

Handrails Along Walkways. The 1991 Standards do not contain any technical requirement for handrails provided along walkways

that are not ramps. Section 403.6 of the 2010 Standards specifies that where handrails are provided along walkways that are not ramps, they shall comply with certain technical requirements. The change is expected to have minimal impact.

[AG Order No. 3181–2010, 75 FR 56317, Sept. 15, 2010]

APPENDIX C TO PART 36—GUIDANCE ON ADA REGULATION ON NONDISCRIMINATION ON THE BASIS OF DISABILITY BY PUBLIC ACCOMMODATIONS AND IN COMMERCIAL FACILITIES ORIGINALLY PUBLISHED ON JULY 26, 1991

NOTE: For the convenience of the reader, this appendix contains the text of the preamble to the final regulation on nondiscrimination on the basis of disability by public accommodations and in commercial facilities beginning at the heading ''Section-by-Section Analysis and Response to Comments'' and ending before ''List of Subjects in 28 CFR part 36'' (56 FR 35546, July 26, 1991).

SECTION-BY-SECTION ANALYSIS AND RESPONSE TO COMMENTS

Subpart A—General

Section 36.101 Purpose

Section 36.101 states the purpose of the rule, which is to effectuate title III of the Americans with Disabilities Act of 1990. This title prohibits discrimination on the basis of disability by public accommodations, requires places of public accommodation and commercial facilities to be designed, constructed, and altered in compliance with the accessibility standards established by this part, and requires that examinations or courses related to licensing or certification for professional or trade purposes be accessible to persons with disabilities.

Section 36.102 Application

Section 36.102 specifies the range of entities and facilities that have obligations under the final rule. The rule applies to any public accommodation or commercial facility as those terms are defined in §36.104. It also applies, in accordance with section 309 of the ADA, to private entities that offer examinations or courses related to applications, licensing, certification, or credentialing for secondary or postsecondary education, professional, or trade purposes. Except as provided in §36.206, ''Retaliation or coercion,'' this part does not apply to individuals other than public accommodations or to public entities. Coverage of private individuals and public entities is discussed in the preamble to §36.206.

As defined in §36.104, a public accommodation is a private entity that owns, leases or leases to, or operates a place of public accommodation. Section 36.102(b)(2) emphasizes that the general and specific public accommodations requirements of subparts B and C obligate a public accommodation only with respect to the operations of a place of public accommodation. This distinction is drawn in recognition of the fact that a private entity that meets the regulatory definition of public accommodation could also own, lease or lease to, or operate facilities that are not places of public accommodation. The rule would exceed the reach of the ADA if it were to apply the public accommodations requirements of subparts B and C to the operations of a private entity that do not involve a place of public accommodation. Similarly, §36.102(b)(3) provides that the new construction and alterations requirements of subpart D obligate a public accommodation only with respect to facilities used as, or designed or constructed for use as, places of public accommodation or commercial facilities.

On the other hand, as mandated by the ADA and reflected in §36.102(c), the new construction and alterations requirements of subpart D apply to a commercial facility whether or not the facility is a place of public accommodation, or is owned, leased, leased to, or operated by a public accommodation.

Section 36.102(e) states that the rule does not apply to any private club, religious entity, or public entity. Each of these terms is defined in §36.104. The exclusion of private clubs and religious entities is derived from section 307 of the ADA; and the exclusion of public entities is based on the statutory definition of public accommodation in section 301(7) of the ADA, which excludes entities other than private entities from coverage under title III of the ADA.

Section 36.103 Relationship to Other Laws

Section 36.103 is derived from sections 501 (a) and (b) of the ADA. Paragraph (a) provides that, except as otherwise specifically provided by this part, the ADA is not intended to apply lesser standards than are required under title V of the Rehabilitation Act of 1973, as amended (29 U.S.C. 790–794), or the regulations implementing that title. The standards of title V of the Rehabilitation Act apply for purposes of the ADA to the extent that the ADA has not explicitly adopted a different standard from title V. Where the ADA explicitly provides a different standard from section 504, the ADA standard applies to the ADA, but not to section 504. For example, section 504 requires that all federally assisted programs and activities be readily accessible to and usable by individuals with