

ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD

36 CFR Part 1191
[Docket No. 98-5]
RIN 3014-AA16

Published in the *Federal Register* on September 3, 2002.

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Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Recreation Facilities

AGENCY: Architectural and Transportation Barriers Compliance Board.

ACTION: Final rule.

SUMMARY: The Architectural and Transportation Barriers Compliance Board (Access Board) is issuing final accessibility guidelines to serve as the basis for standards to be adopted by the Department of Justice for new construction and alterations of recreation facilities covered by the Americans with Disabilities Act (ADA). The guidelines include scoping and technical provisions for amusement rides, boating facilities, fishing piers and platforms, golf courses, miniature golf, sports facilities, and swimming pools and spas. The guidelines will ensure that newly constructed and altered recreation facilities meet the requirements of the ADA and are readily accessible to and usable by individuals with disabilities.

DATES: The guidelines are effective October 3, 2002. The incorporation by reference of certain publications listed in the guidelines is approved by the Director of the Federal Register as of October 3, 2002.

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SUPPLEMENTARY INFORMATION:

Availability of Copies and Electronic Access

Single copies of this publication may be obtained at no cost by calling the Access Board's automated publications order line (202) 272-0080, by pressing 2 on the telephone keypad, then 1, and requesting publication S-43 (Recreation Facilities Final Rule). Persons using a TTY should call (202) 272-0082. Please record a name, address, telephone number and request publication S-43. This document is available in alternate formats upon request. Persons who want a copy in an alternate format should specify the type of format (cassette

tape, Braille, large print, or ASCII disk).

Background

The Americans with Disabilities Act recognizes and protects the civil rights of people with disabilities.¹ Titles II and III of the ADA require, among other things, that newly constructed and altered State and local government facilities, places of public accommodation, and commercial facilities be readily accessible to and usable by individuals with disabilities. Recreation facilities are among the types of facilities covered by titles II and III of the ADA.

The ADA designates the Access Board as the agency responsible for developing minimum accessibility guidelines to ensure that new construction and alterations of facilities covered by titles II and III of the ADA are readily accessible to and usable by individuals with disabilities.² The Access Board initially issued the Americans with Disabilities Act Accessibility Guidelines (ADAAG) in 1991.³ Current ADAAG contains general scoping and technical provisions (ADAAG 1 to 4) that apply to all types of facilities, and special application sections (ADAAG 5 to 12) that include additional scoping and technical provisions for certain types of facilities.⁴ As discussed in more detail below, this final rule will amend section 4, and create a new section 15 (Recreation Facilities).

The Department of Justice is responsible for issuing regulations to implement titles II and III of the ADA. The regulations issued by the Department of Justice must include accessibility standards for newly constructed and altered facilities covered by titles II and III of the ADA. The standards must be consistent with the minimum accessibility guidelines issued by the Access Board. The Department of Justice has adopted ADAAG as the Standard for Accessible Design for title III of the ADA.⁵

This final rule amends ADAAG by adding a new special application section for amusement rides, boating facilities, fishing piers and platforms, golf courses, miniature golf, sports facilities, and swimming pools and spas. This rulemaking has had a long history. In 1993, the Access Board established an advisory committee of 27 members to make recommendations on guidelines for recreation facilities. The Recreation Access Advisory Committee met from July 1993 to May 1994 and submitted a report to the Board, "Recommendations for Accessibility Guidelines: Recreational Facilities and Outdoor Developed Areas". After receiving the committee's report, the Board published it as an advance notice of proposed rulemaking (59 FR 48542, September 21, 1994). Over 600 comments were received on the report and questions asked in the advance notice. To obtain additional information for this rulemaking, the Board also sponsored research on access to swimming pools in 1995; held informational meetings and conducted site visits on access to miniature golf facilities in September 1996; and held informational meetings and conducted site visits on accessible amusement rides in December 1999 and March and April 2000.

A notice of proposed rulemaking (NPRM) was published in the *Federal Register* on July 9, 1999. (64 FR 37326, July 9, 1999). The comment period was originally scheduled to close on November 8, 1999, but was extended until December 8, 1999 to allow more time for the public to submit comments. These comments were submitted electronically, in writing, and as oral testimony received during two public hearings held in Dallas, TX (August 26, 1999) and Boston, MA (November 17, 1999). Over 200 people attended these hearings and approximately 54 people provided testimony. The Board received approximately 300

comments during the public comment period.

The Access Board created an ad hoc committee of Board members to review the comments received on the proposed rule. The ad hoc committee discussed significant issues associated with the comments and made recommendations to the full Board for the final rule. In an effort to provide the public with more opportunities for input into the provisions for the final rule, on July 21, 2000 the Board published a summary of the ad hoc committee's recommendations and put the summary in the rulemaking docket for public review (65 FR 4533, July 21, 2000). The comment period on the summary closed on September 19, 2000. Approximately 70 comments were received during the public comment period. Afterwards, the Board held informational meetings on the summary in Washington, DC (August 21-22, 2000) and San Francisco, CA (September 6-7, 2000).

General Issues

Incorporating the Final Rule on Recreation Facilities into Future Revisions to ADAAG

A complete review of ADAAG has been underway for several years. ADAAG was first published on July 26, 1991. The Board is committed to ensuring that ADAAG continues to reflect technological developments and is improved in terms of usability. Efforts also include coordination with changes in national standards and model code organizations and reconciling differences between ADAAG and national consensus standards, where possible. The Board published a notice of proposed rulemaking on November 16, 1999 with proposed revisions to ADAAG. The Board plans to issue final changes to ADAAG in the near future.

The Board is issuing the final guidelines for recreation facilities prior to the publication of the final ADAAG revision. The Board then plans to incorporate these final guidelines into the final revisions to ADAAG. To effectively incorporate these guidelines into the new format, some minor formatting changes will be made. For instance, the revised ADAAG will include a new format and numbering system. This rule will need to be formatted to fit that system. Some of the provisions will also be modified slightly to avoid redundancy. No substantive changes to the text are planned. Once incorporated, the Board will develop a guide to assist users with the new ADAAG.

The incorporation of the final recreation guidelines into the revised ADAAG will enhance the usability of the accessibility guidelines for architects, designers, manufacturers, operators and others using ADAAG. For example, accessibility guidelines for accessible parking spaces, toilet rooms, amusement rides, swimming pools, and exercise facilities will be combined into one document. Other improvements in the format of ADAAG will reduce redundancy through the use of basic technical provisions known as "building blocks," which will provide consistent dimensions for clear spaces, turning spaces, and knee and toe clearances for elements. These basic technical provisions will apply unless otherwise modified in the section containing accessibility guidelines for recreation facilities. For example, handrail requirements for sloped entries into swimming pools modify the requirements otherwise required in the ramp provisions (ADAAG 4.8.5).

Multiple Chemical Sensitivities and Electromagnetic Sensitivities

Individuals with multiple chemical sensitivities and electromagnetic sensitivities submitted a substantial number of written comments and attended the public information meetings on the

draft final rule. They reported that chemicals used in recreation facilities, such as chlorine used in swimming pools and spas, and pesticides and synthetic fertilizers used on golf courses, are barriers that deny them access to those facilities. They requested the Board to include provisions in the final rule to make recreation facilities accessible for them.

The Board recognizes that multiple chemical sensitivities and electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities. The Board plans to closely examine the needs of this population, and undertake activities that address accessibility issues for these individuals.

The Board plans to develop technical assistance materials on best practices for accommodating individuals with multiple chemical sensitivities and electromagnetic sensitivities. The Board also plans to sponsor a project on indoor environmental quality. In this project, the Board will bring together building owners, architects, building product manufacturers, model code and standard-setting organizations, individuals with multiple chemical sensitivities and electromagnetic sensitivities, and other individuals. This group will examine building design and construction issues that affect the indoor environment, and develop an action plan that can be used to reduce the level of chemicals and electromagnetic fields in the built environment.

Neither the proposed rule nor the draft final rule included provisions for multiple chemical sensitivities or electromagnetic sensitivities. The Board believes these issues require a thorough examination and public review before they are addressed through rulemaking. The Board does not address these issues in the final rule.

Existing Recreation Facilities

The Board received a significant number of comments related to the impact of these accessibility guidelines on existing facilities. Some commenters interpreted the proposed rule and the draft final rule to require all existing recreation facilities or elements of these facilities to be modified to meet the new accessibility guidelines. They expressed concern that the guidelines would have a significant economic impact on existing recreation facilities.

To clarify, ADAAG and the final accessibility guidelines for recreation facilities apply to newly designed or newly constructed buildings and facilities and to existing facilities when they are altered. ADAAG and the Department of Justice regulations address whether a change to a building or facility is considered an alteration. The publication of this final rule does not require that all existing facilities be modified to meet these guidelines. State and local governments who provide recreation facilities have a separate obligation under title II of the ADA to provide program accessibility which may require the removal of architectural barriers in existing facilities. See 28 CFR 35.150 (<http://www.usdoj.gov/crt/ada/reg2.html>). Private entities who own, lease (or lease to), or operate recreation facilities have a separate obligation under title III of the ADA to remove architectural barriers in existing facilities where it is readily achievable (i.e., easily accomplishable and able to be carried out without much difficulty or expense). See 28 CFR 36.304 (<http://www.usdoj.gov/crt/ada/reg3a.html>).

Federal tax credits and deductions are available to private entities for architectural barrier removal in existing facilities. Federal funds also are available through the Community Development Block Grant Program to remove architectural barriers in existing facilities. State

and local governments may use Community Development Block Grant funds to remove architectural barriers in publicly and privately operated facilities. Entities requesting guidance on their obligations for existing facilities should contact the Department of Justice.

Equivalent Facilitation

Commenters addressing various sections of the recreation rule indicated the need for flexibility in designing and constructing accessible recreation facilities and elements. Commenters wanted to ensure that alternative designs would be permitted for providing accessibility with some of the unique elements and facilities addressed in this rule. Specific concerns were raised in comments related to accessible amusement rides and miniature golf courses.

The Board recognizes that many of the facilities and elements addressed in this rule are unique and supports the need for flexibility in making them accessible. Section 2.2 of ADAAG currently permits "departures from particular technical and scoping requirements of this guideline by the use of other designs and technologies . . . where the alternative designs and technologies used will provide substantially equivalent or greater access to and usability of the facility." This provision applies to all facilities and elements addressed by ADAAG, including recreation facilities.

Section-by-Section Analysis

This section of the preamble contains a concise summary of the final rule and an analysis of the comments the Board received on each section. The final rule amends several existing sections of ADAAG and adds a new special application section. Section 4 of ADAAG has been amended to include provisions addressing miscellaneous sports facilities and elements as explained below.

Miscellaneous Sports Facilities and Elements

The accessibility guidelines for recreation facilities are primarily set forth in Section 15. Several changes, however, were also required within ADAAG section 4 to adequately address some of the unique sports facilities and elements.

3.5 Definitions "Area of Sport Activity"

An area of sport activity is defined as "that portion of a room or space where the play or practice of a sport occurs." The term is defined in order to clarify the requirements for connecting an accessible route with this type of space. The term is used broadly to define spaces where the play or practice of a sport occurs. It includes, but is not limited to, field sports such as softball, football, lacrosse, baseball, and soccer; court sports such as tennis, racquetball, and volleyball; and other sports such as gymnastics.

Comment. A few commenters suggested that further clarification would be helpful in the use of the term "sport" and "practice" of a sport.

Response. Providing an exhaustive list of sports is not practical, since it may inadvertently omit a sport, or fail to recognize an emerging sport of the future. The "area of sport activity" will vary from sport to sport. Exceptions to technical provisions in ADAAG 4.1.2 (3) and (4) and 4.1.3 (2) and (3) clarify that accessibility is not required in the "area of sport activity." This is consistent

15.8 Swimming Pools, Wading Pools, and Spas

3.5 Definitions

The final rule provides a definition for a catch pool which is defined as a pool used as a terminus for water slide flumes.

Comment. The proposed rule did not define the term catch pool. Commenters requested that catch pools be exempt since access is not required for water slides.

Response. The term "catch pool" is added to the final rule since it is used in an exception in the final rule. Exception 3 to section 15.8.1 exempts catch pools from complying with the requirements of this section, provided that an accessible route connects to the catch pool edge.

15.8.1 General

This section requires newly designed or newly constructed and altered swimming pools, wading pools, and spas to comply with 15.8. An exception has been added to the final rule that provides that an accessible route is not required to serve raised diving boards or diving platforms provided that an accessible route is provided to the base of the raised diving board or platform.

15.8.2 Swimming Pools

This section requires that at least two means of entry be provided for each public or common use swimming pool. A sloped entry or lift must be one of the primary means of access. The secondary means of access could include a pool lift, sloped entry, transfer wall, transfer system, or pool stairs.

Comment. The proposed rule permitted a moveable floor as a secondary means of entry. Commenters stated that even though moveable floors may have some practical applications they do not provide independent access and often place a person with a disability on display while the pool is evacuated and the floor raised to provide access. Additionally, commenters raised concerns regarding the removal of handrails and other means of egress prior to lifting the pool floor.

Response. The option of using a moveable floor as a secondary means of accessible entry in public or common use swimming pools has been deleted from the final rule.

The Board has also deleted the requirement that the second means of access not duplicate the first means of access in larger pools in the final rule. This should give designers additional flexibility in choosing between the various means of access. An appendix note recommends that where two means of access into the water are provided, different means are recommended.

Exception 1 Small Pools with Less than 300 Linear Feet of Pool Wall

Exception 1 permits public or common use swimming pools with less than 300 linear feet of pool wall to only provide one accessible means of entry by either a swimming pool lift or a sloped entry.

Comment. A commenter suggested that Exception 1 should be modified to refer to pool wall that is available for entry into the pool. They explained that pool walls at diving areas and pool decks where there is no available pool entry because of landscaping or adjacent structures should not be counted when determining the number of accessible means of entry required.

Response. Exception 1 is intended to provide small pools with relief from providing more than one accessible means of entry. It was not intended for large pools that could limit the locations of entry with landscaping or other structures from requiring additional accessible means of entry.

Exception 2 Pools Where Access Is Limited to One Area

Exception 2 has been added to the final rule and permits wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to only one area, to provide one accessible means of entry by either a swimming pool lift, sloped entry, or a transfer system.

Comment. Commenters from speciality pool operators and leisure river designers expressed concerns for safety, where there is wave action or moving water, when providing additional accessible means of entry in these unique water environments. Wave action pools typically provide a large area of zero grade entry, where everyone enters the water. Providing an accessible means of entry along the high walls could be very dangerous. Leisure rivers are constructed to provide a safe area where staff can assist individuals into the current at one location to control access to and from the moving water.

Response. In response to the safety concerns provided by designers and operators of these moving water experiences, only one accessible means of entry is required in the final rule, when user access is limited to one area.

Exception 3 Catch Pools

Exception 3 exempts catch pools from these requirements, provided that an accessible route connects to the catch pool edge.

Comment. The proposed rule did not include any specific requirements for access to water slides. Comments on the proposed rule and the draft final rule supported not requiring access to the top of water slides.

Response. An exception has been added to the final rule exempting water slides from accessibility. See ADAAG 4.1.1 (5) (b) (v). To be consistent with the water slide exception, the final rule also exempts the catch pool at the discharge area of a water slide from providing an accessible means of entry or exit from the catch pool, provided that an accessible route connects to the catch pool edge.

15.8.3 Wading Pools

This section requires at least one accessible means of entry into each wading pool. The means of entry must be a sloped entry.

Comment. The proposed rule required the means of entry into wading pools to be either a

sloped entry, transfer wall, or a transfer system. The proposed rule also sought comment on the appropriateness of providing a transfer wall or other transfer system as a means of access into a wading pool. Several commenters expressed concern about the potential dangers to children that may use the transfer walls or systems inappropriately for play or diving.

Response. The final rule limits the accessible means of entry into a wading pool to a sloped entry only. Examination of the different means of access into wading pools found zero grade entry to be the most appropriate and currently most provided means of entry.

15.8.4 Spas

This section requires at least one accessible means of entry into spas. The means of entry must be a pool lift, transfer wall, or transfer system. An exception allows for five percent, but not less than one spa, where spas are provided in a cluster, to be accessible. No substantive comment was received and no changes have been made to this section in the final rule.

15.8.5 Pool Lifts

This section provides the technical requirements for pool lifts.

15.8.5.1 Pool Lift Location

This provision requires pool lifts to be located where the water level does not exceed 48 inches.

Comment. The proposed rule did not specify the location of a pool lift. Commenters with disabilities and individuals who work in environments where people with disabilities use pool lifts expressed concern that pool lifts may be placed in areas where the water depth would not permit assistance in the water if needed. Comments on the draft final rule supported the requirement for a pool lift to be located in a water depth of 48 inches or less whenever possible. Commenters also gave examples of when the location of a pool lift should be allowed in an area where the water depth is greater than 48 inches.

Response. The final rule requires a pool lift to be located where the water level does not exceed 48 inches. Two exceptions have been added to the final rule in response to comments received. Exception 1 permits the use of pool lifts at any location where the entire pool has a depth greater than 48 inches. Exception 2 permits pools with multiple pool lift locations to provide at least one where the water depth does not exceed 48 inches.

15.8.5.2 Seat Location

This section requires the centerline of the seat, when in the raised position, to be located over the deck and 16 inches minimum from the edge of the pool. Additionally, the deck surface between the centerline of the seat and the pool edge must not have a slope greater than 1:48.

Comment. The proposed rule required the centerline of the seat, when in the raised position, to be located over the deck and 20 inches minimum from the pool edge. Comments from lift manufacturers expressed concern about the 20 inch minimum distance. They elaborated on the difficulties associated with providing a lift that places the user away from the pivot point of the lift a distance of 20 inches. Additionally, they commented that aquatic lifts with the

centerline of the seat at least 20 inches away from the pool edge may not clear the footrest over the curbing or pool edge provided on some pools.

Response. Based on the concerns of commenters, the distance measured from the centerline of the lift seat to the edge of the pool has been reduced from 20 inches to 16 inches minimum. The location of the seat in relation to the edge of the pool is especially important to facilitate safe transfers. The Board is concerned about locating the seat either over the water or too close to the deck edge for safety reasons. This provision has been modified to address design limitations and incorporate the maximum distance from the pool edge to ensure safety.

15.8.5.3 Clear Deck Space

This section requires a clear deck space on the side of the seat opposite the water and parallel with the seat. The space is required to be 36 inches wide minimum and to extend forward 48 inches minimum from a line located 12 inches behind the rear edge of the seat. The clear space is specified in relationship to the seat to allow unobstructed space for either side or diagonal transfer. Additionally, the clear deck space must have a slope not greater than 1:48.

Comment. The proposed rule required the clear deck space to be a minimum of 30 inches wide. Commenters requested additional space to permit greater flexibility for transfer position preferences and the varied abilities of persons requiring the use of a pool lift. Commenters expressed a preference that the clear deck space should be required to provide a level surface from which to transfer from a mobility device to the lift seat.

Response. The final rule increases the clear deck space required on the side of the seat opposite the water to be a width of 36 inches minimum and that the clear deck space provide a surface with a slope not greater than 1:48. The additional space will facilitate the maneuvering that may be needed by a person using a mobility device preparing for a transfer to the seat of a pool lift.

15.8.5.4 Seat Height

This section requires the height of a lift seat to be designed to allow a stop at 16 inches minimum to 19 inches maximum measured from the deck to the top of the seat surface when the seat is in the raised (load) position.

Comment. The proposed rule required the height of the lift seat to be 16 inches minimum to 18 inches maximum. Commenters requested a greater range of seat heights to transfer to or from when the lift is in the up position. They suggested a seat height that could accommodate the needs of users of all ages and abilities would be more beneficial.

Response. Information obtained from the Board sponsored research project supported the height requirement of a lift seat while in the upper load position to be at a height between 16 and 18 inches from the deck surface. In response to the comments received, the final rule departs slightly from the proposed rule, by permitting the lift seat to make a stop at the 16 to 19 inch height above the deck surface. The lift could provide additional stops at various heights provided that a stop is provided between 16 and 19 inches above the surface of the deck.

15.8.5.5 Seat Width

This section requires a lift seat to be 16 inches wide minimum. No substantive comment was received and no changes have been made to this section in the final rule.

Comment. The proposed rule sought information on the different types of seats that are available on pool lifts and whether a specific type should be required in the final rule. Commenters did not provide a consensus on either the type of pool lift seat or the type of materials preferred by pool lift users.

Response. The final rule does not specify the type of material or the type of seat to be provided by a pool lift. Persons with disabilities involved in the Board sponsored research project expressed interest in all types of seats. An appendix note provides additional information on pool lift seats.

15.8.5.6 Footrests and Armrests

This section requires footrests to be provided and that they move in conjunction with the seat. Additionally, this provision requires that, if provided, the armrest opposite the water be removable or fold clear of the seat when the seat is in the raised (load) position.

Comment. The proposed rule requested information on the appropriateness of requiring armrests on pool lifts and on their size and location. Commenters supported requirements based on their own personal needs with no consistent guidance on the location or size of armrests on a pool lift. One commenter questioned the appropriateness of providing a footrest on a lift for entry into a spa due to the water depth in some smaller spas.

Response. An exception has been added that provides that footrests are not required on pool lifts that provide an accessible means of entry into a spa. An appendix note encourages the use of a footrest in larger spas where possible and some type of retractable leg support is recommended for pool lifts used in all spas.

15.8.5.7 Operation

This section requires that a pool lift be capable of unassisted operation from both the deck and water levels. This section also requires that controls and operating mechanisms be unobstructed when a lift is in use and comply with ADAAG 4.27.4. That section requires that operating controls not require tight grasping, pinching, or twisting of the wrist or more than 5 pounds of pressure to operate.

Comment. The proposed rule required that the lift controls and operating mechanisms may not require continuous manual pressure for operation. Commenters with disabilities supported the requirement of unassisted operation from both the deck and water levels. They reported the difficulty in finding the responsible person when lifts require assistance, especially in environments where pools are not routinely staffed. Commenters expressed concerns about getting out of the water, if assistance is required, especially where the pool is not staffed. Someone could be stranded in the water for extended periods of time awaiting assistance. Commenters suggested that pool lifts that require continuous manual pressure give the user greater control of their descent into the water and ascent back to the deck. Concern was expressed by a manufacturer of pool lifts that providing unassisted operation encourages individuals to swim alone and the potential dangers of causing injury are greatly increased when using an automatic lift without assistance.

Response. A large percentage of the respondents in the Board sponsored research project noted the importance of using a lift without assistance. Pool facility staff also indicated the importance of a device or design that could be used without pool staff assistance. While this provision requires the lift to be independently operable it does not preclude assistance from being provided. The final rule removes the requirement that pool lifts may not require continuous manual pressure for operation.

Comment. A few commenters expressed safety concerns where pool lifts are provided in pools that are unattended.

Response. Pool lifts have been commercially available for over 20 years. While

the Board recognizes that inappropriate use of pool lifts may result in accident or injury, the Board is not aware of any incidents of injury or accidents involving pool lifts. The Board is also not aware of any evidence that shows that pool lifts are any less safe than other components of a pool facility, such as other means of pool entry, when they are used inappropriately. Manufacturers are also incorporating features which are intended to discourage inappropriate use, such as fold-up seats and covers.

15.8.5.8 Submerged Depth

This section requires that a pool lift be designed so that the seat will submerge to a water depth of 18 inches minimum. This depth is necessary to ensure buoyancy for the person on the lift seat once in the water. No substantive comment was received and no changes have been made to this section for the final rule.

15.8.5.9 Lifting Capacity

This section requires that single person pool lifts provide a minimum weight capacity of 300 pounds. Lifts also must be capable of sustaining a static load of at least one and a half times the rated load.

Comment. The proposed rule required pool lifts to provide a minimum weight capacity of 300 pounds and be capable of sustaining a static load of at least three times the rated load. Several pool lift manufacturers supported the minimum weight requirement of 300 pounds. They questioned requiring a static load of three times the weight limit. They believed it was too excessive and would eliminate viable lifts from being provided. A commenter suggested that the static load requirement reference an international standard for lifts that require a static load of 1.6 times the weight capacity.

Response. The static load requirement has been reduced to one and a half times the weight capacity requirement.

15.8.6 Sloped Entries

This section provides technical requirements for sloped entries designed to provide access into the water. Due to the similarities of this type of entry with ramps used in other buildings and facilities, existing ADAAG requirements have been referenced accordingly.

15.8.6.1 Sloped Entries

This section requires sloped entries to comply with ADAAG 4.3 (Accessible Route), except for slip resistance.

Comment. Commenters questioned the ability of providing a slip resistant surface on a sloped entry that is under water.

Response. The final rule provides an exception for sloped entries from being slip resistant.

15.8.6.2 Submerged Depth

This section requires sloped entries to extend to a depth of 24 to 30 inches below the stationary water level. This section also requires that where landings are required by ADAAG 4.8, at least one landing must be located between 24 and 30 inches below the stationary water level. Since wading pools are typically less than 24 to 30 inches deep, an exception provides that sloped entries are only required to extend to the deepest part of a wading pool. No substantive comment was received and no changes have been made to this section in the final rule.

15.8.6.3 Handrails

This section requires handrails that comply with ADAAG 4.8.5 on both sides of all sloped entries. The clear width between handrails must be between 33 and 38 inches. Exception 1 does not require handrail extensions to be provided at the bottom of a landing serving a sloped entry. Exception 2 does not require the clear width between handrails where a sloped entry is provided for wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area. Exception 3 exempts sloped entries in wading pools from providing handrails.

Comment. The proposed rule did not specifically address handrails in wading pools. Commenters expressed great concern about the potential dangers from children using handrails to play on or jump into the shallow water or the risk to other children in the wading pool.

Response. The Board is concerned about the potential dangers to children using handrails inappropriately. Exception 3 has been added to the final rule exempting wading pools from providing handrails.

15.8.7 Transfer Walls

This section provides technical requirements for transfer walls.

15.8.7.1 Clear Deck Space

This section requires clear deck space of 60 inches by 60 inches minimum with a slope not steeper than 1:48 to be provided at the base of a transfer wall. Where one grab bar is provided on a transfer wall, the clear deck space must be centered on the grab bar. This allows sufficient space for a transfer on either side of the grab bar. Where two grab bars are provided, the clear deck space must be centered on the clearance between the grab bars. No substantive comment was received and no changes have been made to this section for the final rule.

15.8.7.2 Height

This section requires the height of transfer walls to be 16 to 19 inches measured from the deck below. The height requirement is consistent with pool lift seat heights and similarly addresses the needs of some children. The maximum height above the deck has been changed to 19 inches to be consistent with other transfer heights in ADAAG.

15.8.7.3 Wall Depth and Length

This section requires the depth of a transfer wall to be 12 to 16 inches. As a minimum, the 12 inch depth of the transfer wall provides adequate space for a person to comfortably sit on the surface of the wall. The wall depth is limited to 16 inches maximum so that users are not required to traverse the wall to transfer to the water. The length of the transfer wall must be 60 inches minimum and must be centered on the clear deck space.

15.8.7.4 Surface

This section requires that the surface of a transfer wall must not be sharp and must have rounded edges. Commenters overwhelmingly supported this section and no changes have been made to this section for the final rule.

15.8.7.5 Grab Bars

This section requires at least one grab bar to be provided on a transfer wall. Grab bars are required to be perpendicular to the pool wall and extend the full depth of the wall. The top of the gripping surface must be 4 to 6 inches above the wall. Where two grab bars are provided, clearance between grab bars must be 24 inches minimum. Where one grab bar is provided, clearance must be 24 inches minimum on both sides of the grab bar. Grab bars must comply with ADAAG 4.26.

Comment. The proposed rule required the top of the gripping surface to be a maximum of 4 inches above the wall. Commenters expressed concern that 4 inches maximum above the wall surface, after factoring in the diameter of the grab bar, would not provide sufficient gripping space for persons transferring.

Response. The final rule provides a range from 4 to 6 inches above the wall to the top of the gripping surface. The range will provide greater flexibility and incorporate the diameter of the grab bar in providing users of all ages and abilities with an appropriate gripping surface.

15.8.8 Transfer Systems

This section provides technical requirements for transfer systems used as a means of access into the water. A transfer system consists of a transfer platform, combined with a series of transfer steps that descend into the water. Users must transfer from their wheelchair or mobility device to the transfer platform and continue transferring from step to step.

15.8.8.1 Transfer Platform

This section requires a transfer platform to be 19 inches deep by 24 inches wide. Transfer platforms must be provided at the head of each transfer system. No substantive comment was

received and no changes have been made to this section for the final rule.

15.8.8.2 Clear Deck Space

This section requires a clear deck space of 60 by 60 inches minimum with a slope not steeper than 1:48 at the base of the transfer platform. A level unobstructed space at the base of the transfer platform, centered along the 24 inch side, is necessary to facilitate a transfer from a wheelchair or mobility device. No substantive comment was received and no changes have been made to this section for the final rule.

15.8.8.3 Height

This section requires the height of transfer platforms to be 16 to 19 inches measured from the deck. No substantive comment was received and no changes have been made to this section for the final rule.

15.8.8.4 Transfer Steps

This section requires transfer steps to be 8 inches maximum in height. It also requires that transfer steps extend to a water depth of 18 inches minimum.

Comment. The proposed rule required transfer steps to be 7 inches maximum in height. Commenters questioned the inconsistencies between the transfer step height of 8 inches required on a play area transfer step (15.6.5.2.2) to that provided in an aquatic setting.

Response. The final rule has been changed to require an 8 inch maximum step height in aquatic settings to be consistent with the play areas transfer step (15.6.5.2.2). An appendix note has been included recommending the height of the transfer step be minimized whenever possible.

15.8.8.5 Surface

This section requires that the surface of a transfer system must not be sharp and provide rounded edges. Similar to other transfer surfaces, this is necessary to reduce the potential for injury. No substantive comment was received and no changes have been made to this section in the final rule.

15.8.8.6 Size

This section requires each transfer step to have a tread depth of 14 to 17 inches and a minimum tread width of 24 inches.

Comment. The proposed rule required a range for the transfer step depth from 12 to 17 inches and a tread width of 22 inches minimum. Commenters pointed out the inconsistencies between the size of the transfer step in the play areas final rule (15.6.5.2.1) and for swimming pools.

Response. In an effort to provide uniformity between the play areas transfer steps and those located at swimming pools, the final rule modifies the transfer step to incorporate a range of 14 to 17 inches in depth and a minimum width of 24 inches.

15.8.8.7 Grab Bars

This section requires one grab bar to be provided on each step and the transfer platform, or a continuous grab bar serving each transfer step and the transfer platform. Where provided on each step, the top of the gripping surface must be 4 to 6 inches above each step. Where a continuous grab bar is provided, the top of the gripping surface must be 4 to 6 inches above the step nosing. Grab bars must comply with ADAAG 4.26 and be located on at least one side of the transfer system. The grab bar located at the transfer platform must not obstruct transfer.

Comment. As previously discussed in section 15.8.7.5, the proposed rule required the top of the gripping surface to be 4 inches above the wall. Commenters expressed concern that 4 inches above the wall surface, after factoring in the diameter of the grab bar, would not provide sufficient space for persons transferring.

Response. The final rule requires the top of the gripping surface to be 4 to 6 inches above the wall. It is believed that the range will provide greater flexibility to users of all ages and abilities with an appropriate gripping surface.

15.8.9 Pool Stairs

This section provides technical requirements for pool stairs used as a means of entry and exit to the water.

15.8.9.1 Pool Stairs

This section requires pool stairs to comply with ADAAG 4.9 (Stairs), except as modified. ADAAG 4.9 has been referenced since stairs in pools are used in a similar manner as stairs elsewhere. No substantive comment was received and no changes have been made to this section in the final rule.

15.8.9.2 Handrails

This section requires the width between handrails to be 20 to 24 inches. To reduce the potential for underwater protrusions, handrail extensions are not required at the bottom landing serving a pool stair.

Comment. The proposed rule required a 22 inch maximum width between handrails on pool stairs. Commenters expressed concern that a maximum distance of 22 inches may be too close for people that are large in size. Commenters with mobility impairments supported the handrail distance of 22 inches for providing the needed support while entering a pool by stairs.

Response. The final rule increases the maximum width between handrails to 24 inches. Separating the handrails more than 24 inches apart would make them too far apart for a larger class of people that require the support on pool stairs.

15.8.10 Water Play Components

This section requires that where water play components are provided, the provisions of 15.6 (Play Areas) and ADAAG 4.3 apply, except where modified by this section.

Comment. The proposed rule sought comment on specific features within aquatic recreation facilities where it may be technically infeasible in new construction to comply with the proposed requirements in 15.8. Manufacturers and designers of water play components expressed concerns about having to provide ramp access to elevated play structures in standing water. Many of these components are at considerable distances from the top of the water surface and ramping would be very challenging and costly. Commenters with disabilities or individuals representing individuals with disabilities expressed a great desire to have access to these unique water experiences.

Response. The final rule requires that where water play components are provided, they must comply with 15.6 (Play Areas) and ADAAG 4.3, except as modified or otherwise provided in this section. The final rule is responsive to manufacturers and designers by providing an exception to providing ramp access, while providing persons with disabilities the opportunity to enjoy this unique family oriented water experience with their family and friends. Exception 1 exempts accessible routes, clear floor spaces, and maneuvering spaces that are submerged from the requirements for cross slope, running slope, and surface. Exception 2 permits transfer systems to be used in lieu of ramps to connect elevated play components.

Regulatory Process Matters

Executive Order 12866: Regulatory Planning and Review

This final rule is a significant regulatory action under Executive Order 12866 and has been reviewed by the Office of Management and Budget. The Board has assessed the benefits and costs of the rule. The assessment has been placed in the public docket and is available for inspection. The [assessment](#) is also available on the Board's Internet site. The assessment is summarized below:

Benefits

The benefits of the final rule are not quantifiable, but are significant and are consistent with the President's New Freedom Initiative. The primary benefit is the fulfillment of civil rights realized by individuals with disabilities. There are 52.5 million Americans with disabilities. Almost one in five adults has some type of disability. Among individuals 15 years old and over, 25 million have difficulty walking or using stairs. The final guidelines will result in newly constructed and altered recreation facilities that are accessible to individuals with disabilities and will enable them to participate in a wide range of recreational opportunities. Individuals with disabilities can also realize significant health benefits by participating in the range of recreational opportunities made accessible as a result of the final guidelines.

Costs

For each type of facility addressed by the final rule, the assessment estimates the number of existing facilities and new facilities constructed annually, identifies the requirements that have cost impacts for new construction and alterations, estimates the unit costs per facility, and calculates the total annual compliance costs. The number of small entities is reported as a percentage of the facilities. To estimate cost impacts, the assessment relies on assumptions where sufficient data is not available. The assumptions are based on interviews with professionals in the affected industries and are disclosed in the assessment. The assumptions cannot be validated and may not reflect the real world. The assumptions may result in under or

overestimating the impacts of the final rule. The relevant data for each facility type is presented below.

Amusement Rides

- Existing Facilities: 377 amusement parks.
- New Construction: 4 new amusement parks per year.
- Small Entities: 81 percent of amusement parks.
- New Amusement Rides: 343 new rides per year; 68 will be platform type rides with stepped entrances.
- New Construction Impacts: New platform type rides with stepped entrances will need a ramp (\$4,000 to \$6,700 unit cost) or a platform lift (\$12,000 to \$15,000 unit cost) to provide an accessible route to the load and unload area; and additional space (\$1,175 unit cost) in the load and unload area to provide wheelchair turning space and wheelchair storage space if a ride seat designed for transfer or transfer device is provided. For purposes of estimating the costs of providing access to new rides, the assessment assumes that a transfer device (\$5,000 unit cost) would be provided for all new rides. New rides will need a sign (\$100 unit cost) at the entrance of the queue or waiting line indicating the type of access provided (e.g., wheelchair access or transfer access).
- Alterations Impacts: Minimal.
- Total Annual Compliance Costs: \$2.5 million.

Boating Facilities

- Existing Facilities: 12,000 marinas; no data on boat launch ramps.
- New Construction: 240 new marinas per year.
- Alterations: 600 existing marinas per year.
- Small Entities: 99 percent of marinas.
- New Construction Impacts: Gangways that are part of an accessible route will need to provide a 1:12 maximum slope or a gangway at least 80 feet long. The unit cost will be site specific. The assessment assumes unit costs will range from \$15,000 to \$35,000 where the maximum vertical level change is more than 2.5 feet, but less than 10 feet; and \$33,000 to \$45,000 where the maximum vertical level change is more than 10 feet. The impacts on new accessible boat slips and new accessible boarding piers at new boat launch ramps will be minimal.
- Alterations Impacts: Alterations to existing boat slips are a primary function area and may trigger provision of an accessible route, unless the additional cost is disproportionate to the overall costs of the alterations or compliance is technically infeasible. The impacts on altered boat slips will be minimal.
- Total Annual Compliance Costs: \$10.8 million to \$18.0 million.

Fishing Piers and Platforms

- Existing Facilities: No data.
- New Construction: No data.
- Small Entities: No data.
- New Construction Impacts: Minimal.
- Alterations Impacts: Minimal.
- Total Annual Compliance Costs: Minimal

Golf Courses

- Existing Facilities: 17,108 golf courses.
- New Construction: 377 to 524 new golf courses per year.
- Small Entities: 99 percent of golf courses.
- New Construction Impacts: Minimal.
- Alterations Impacts: Minimal.
- Total Annual Compliance Costs: Minimal.

Miniature Golf Courses

- Existing Facilities: 7,500 to 10,000 miniature golf courses.
- New Construction: 150 new custom design and 170 new modular miniature golf courses per year.
- Small Entities: 100 percent of miniature golf courses.
- New Construction Impacts: The assessment discusses potential impacts on new custom design courses (low profile courses, challenge courses, and adventure style courses) and new modular courses (indoor courses and outdoor courses). The impacts on new custom design low profile courses will be minimal. For purposes of estimating the costs for making at least 50 percent of the holes on the other custom design courses accessible, the assessment assumes a 10 percent increase in construction costs for new challenge type courses, and a 25 percent increase for new adventure style courses. New indoor modular courses may need to lease additional space to provide an accessible route for at least 50 percent of the holes, and new outdoor modular courses that are not recessed in the ground will have to provide an accessible route for at least 50 percent of the holes. The assessment assumes the additional cost for new modular courses will \$5,000 per course.
- Alterations Impacts: Minimal.
- Total Annual Compliance Costs: \$5.4 million.

Exercise Equipment, Bowling Lanes, and Shooting Facilities

- Existing Facilities: 17,531 physical fitness facilities; 5,500 bowling centers; and 10,000 shooting facilities. No data on other facilities that provide exercise equipment.
- New Construction: 800 to 1,000 new physical fitness facilities; 25 new bowling centers; and 100 new shooting facilities per year.
- Small Entities: 99 percent of physical fitness facilities; and 100 percent of bowling centers and shooting facilities.
- New Construction Impacts: Minimal.
- Alterations Impacts: Minimal.
- Total Annual Compliance Costs: Minimal.

Swimming Pools, Wading Pools, and Spas

- Existing Facilities: 124,577 pools; no data on spas.
- New Construction: 1,245 new pools per year; 565 new spas per year. The assessment assumes 715 new pools per year have less than 300 linear feet of pool wall and will need at least one means of accessible entry into the pool.
- Small Entities: Ranges from 15 percent for private hospitals to 100 percent for camps and recreational vehicle parks.

- New Construction Impacts: For new pools with less than 300 linear feet of pool wall, the assessment assumes that a pool lift will be provided (\$4,000 unit cost). For pools with 300 linear feet or more of pool wall, the assessment assumes 250 of these new pools per year will provide an accessible means of entry in the absence of the final rule and will add a pool lift (\$4,000 unit cost). The assessment assumes the other new pools with 300 linear feet or more of pool wall will provide a pool lift (\$4,000 unit cost) and pool stairs (\$2,500 unit cost). The impacts on wading pools will be minimal. The assessment assumes new spas will provide a pool lift (\$4,000 unit cost).
- Alterations Impacts: Minimal.
- Total Annual Compliance Costs: \$8.0 million.

Regulatory Flexibility Act

The final regulatory flexibility analysis has been performed in conjunction with the assessment of the benefits and costs of the final rule required by Executive Order 12866 and the preparation of the preamble for the final rule. The analysis is summarized below.

Need for and Objectives of Guidelines

The Access Board is required to issue accessibility guidelines under the Americans with Disabilities Act (ADA) to ensure that new construction and alterations of facilities covered by the law are readily accessible to and usable by individuals with disabilities. Recreation facilities are among the facilities covered by the ADA. Recreation facilities have unique features that are not adequately addressed by the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The final rule will amend ADAAG to provide supplemental guidelines for making recreation facilities accessible.

Significant Issues Raised During Public Comment Period

The significant comments raised during the public comment period are summarized in the preamble to the final rule, along with the Access Board's assessment of the comments and the reason for selecting the alternative adopted in the final rule. The alternatives considered in the proposed rule and the final rule, and changes made from the proposed rule for each type of recreation facility are presented in the assessment of the benefits and costs of the final rule required by Executive Order 12866.

Numbers of Small Entities Affected by Final Rule

The numbers of small entities affected by the final rule are reported under the summary of the assessment of the benefits and costs of the final rule required by Executive Order 12866.

Reporting and Recordkeeping Requirements

There are no reporting and recordkeeping requirements.

Steps Taken to Minimize Significant Economic Impact on Small Entities

The Access Board has taken steps to minimize the significant economic impact on small entities for each of the different types of recreation facilities addressed in the final rule. These steps are listed below.

- Amusement Rides - The final rule allows designers and operators of new amusement rides the choice of providing at least one wheelchair space, or an amusement ride seat designed for transfer, or a transfer device. The final rule limits application of the guidelines to existing rides that are altered. The final rule also allows designers and operators greater flexibility in applying ADAAG to amusement rides.
- Boating Facilities - The final rule permits gangways that are part of an accessible route to exceed the 1:12 maximum slope requirement for ramps where the total length of the gangways is at least 80 feet (30 feet for smaller facilities with fewer than 25 boat slips). The final rule reduces the number of boat slips required to be accessible in new construction, and modifies the requirements for accessible boat slips in alterations so no more than one boat slip is lost. The final rule also allows designers and operators greater flexibility in applying ADAAG to boating facilities.
- Fishing Piers and Platforms - The final rule permits gangways that are part of an accessible route to exceed the maximum 1:12 requirement for ramps where the total length of the gangways is at least 30 feet. The final rule also exempts guards that comply with certain sections of the International Building Code from the maximum 34 inch height requirement.
- Golf Courses - The final rule permits a golf car passage to be provided on golf courses and driving ranges, instead of an accessible route.
- Miniature Golf Courses - The final rule requires at least 50 percent of holes on miniature golf courses to be accessible, and permits one break in the sequence of accessible holes provided the last hole in the sequence is the last hole on the course. The final rule also allows designers and operators greater flexibility in applying ADAAG to miniature golf courses.
- **Swimming Pools, Wading Pools, and Spas** - The final rule permits small pools with less than 300 linear feet of pool wall to provide at least one means of access into the water, and permits water play components to use transfer systems to connect elevated water play components.

Technical Assistance

The Access Board will provide technical assistance materials to help small entities understand the accessibility guidelines for recreation facilities. The Access Board also operates a toll-free technical assistance service to answer questions from the public about the guidelines.

Executive Order 13132: Federalism

The final rule adheres to the fundamental federalism principles and policy making criteria in Executive Order 13132. The final rule implements Federal civil rights legislation that was enacted pursuant to the Congress' authority to enforce the fourteenth amendment and to regulate commerce. Ensuring the civil rights of groups who have experienced irrational discrimination has long been recognized as a national issue and a proper function of the Federal government. The ADA was enacted "to provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities . . . and to ensure that the Federal government plays a central role in enforcing the standards established in this chapter on behalf of individuals with disabilities." 42 U.S.C. 12101(b)(1) and (3). The ADA recognizes the authority of State and local governments to enact and enforce laws that "provide greater or equal protection for the rights of individuals with disabilities than are afforded by this chapter." 42 U.S.C. 12201(b). The final rule establishes minimum guidelines. States and local governments can adopt accessibility standards that provide individuals with

with 15.5.2 shall have a slope not steeper than 1:48 and shall be 48 inches (1220 mm) minimum by 60 inches (1525 mm) minimum.

15.5.5 Golf Club Reach Range.* All areas within accessible holes where golf balls rest shall be within 36 inches (915 mm) maximum of an accessible route having a maximum slope of 1:20 for 48 inches (1220 mm) in length (see Fig. 63).

* * * * *

15.7 Exercise Equipment and Machines, Bowling Lanes, and Shooting Facilities.

15.7.1 General. Newly designed or newly constructed and altered exercise equipment and machines, bowling lanes, and shooting facilities shall comply with 15.7.

15.7.2 Exercise Equipment and Machines.* At least one of each type of exercise equipment and machines shall be provided with clear floor or ground space complying with 4.2.4 and shall be served by an accessible route. Clear floor or ground space shall be positioned for transfer or for use by an individual seated in a wheelchair. Clear floor or ground spaces for more than one piece of equipment shall be permitted to overlap.

15.7.3 Bowling Lanes. Where bowling lanes are provided, at least 5 percent, but not less than one of each type of lane shall be served by an accessible route.

15.7.4 Shooting Facilities.* Where fixed firing positions are provided at a site, at least 5 percent, but not less than one, of each type of firing position shall comply with 15.7.4.1.

15.7.4.1 Fixed Firing Position. Fixed firing positions shall contain a 60 inch (1525 mm) diameter space and shall have a slope not steeper than 1:48.

* * * * *

15.8 Swimming Pools, Wading Pools, and Spas.

15.8.1 General. Newly designed or newly constructed and altered swimming pools, wading pools, and spas shall comply with 15.8.

Exception: An accessible route shall not be required to serve raised diving boards or diving platforms.

15.8.2 Swimming Pools.* At least two accessible means of entry shall be provided for each public use and common use swimming pool. The primary means of entry shall comply with 15.8.5 (Swimming Pool Lifts) or 15.8.6 (Sloped Entries). The secondary means of entry shall comply with one of the following: 15.8.5 (Swimming Pool Lifts), 15.8.6 (Sloped Entries), 15.8.7 (Transfer Walls), 15.8.8 (Transfer Systems), or 15.8.9 (Pool Stairs).

Exception 1:* Where a swimming pool has less than 300 linear feet (91 m) of swimming pool wall, at least one accessible means of entry shall be provided and shall comply with 15.8.5 (Swimming Pool Lifts) or 15.8.6 (Sloped Entries).

Exception 2: Wave action pools, leisure rivers, sand bottom pools, and other pools

where user access is limited to one area, shall provide at least one accessible means of entry that complies with 15.8.5 (Swimming Pool Lifts), 15.8.6 (Sloped Entries), or 15.8.8 (Transfer Systems).

Exception 3: Catch pools shall be required only to be served by an accessible route that connects to the pool edge.

15.8.3 Wading Pools. At least one accessible means of entry complying with 15.8.6 (Sloped Entries) shall be provided for each wading pool.

15.8.4 Spas. At least one accessible means of entry complying with 15.8.5 (Swimming Pool Lifts), 15.8.7 (Transfer Walls), or 15.8.8 (Transfer Systems) shall be provided for each spa.

Exception: Where spas are provided in a cluster, 5 percent, but not less than one, in each cluster shall be accessible.

15.8.5* Pool Lifts. Pool lifts shall comply with 15.8.5.

15.8.5.1 Pool Lift Location. Pool lifts shall be located where the water level does not exceed 48 inches (1220 mm).

Exception 1: Where the entire pool depth is greater than 48 inches (1220 mm), 15.8.5.1 shall not apply.

Exception 2: Where multiple pool lift locations are provided, no more than one shall be required to be located in an area where the water level does not exceed 48 inches (1220 mm).

15.8.5.2 Seat Location. In the raised position, the centerline of the seat shall be located over the deck and 16 inches (405 mm) minimum from the edge of the pool. The deck surface between the centerline of the seat and the pool edge shall have a slope not greater than 1:48 (see Fig. 68).

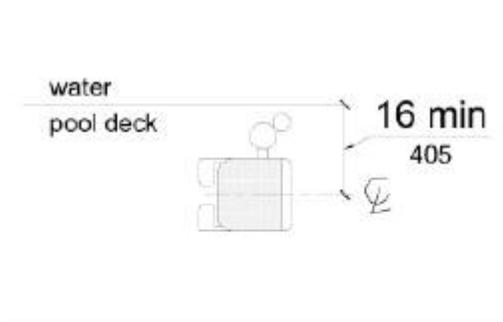


Fig. 68
Pool Lift Seat Location

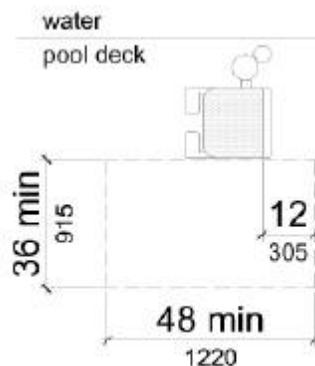
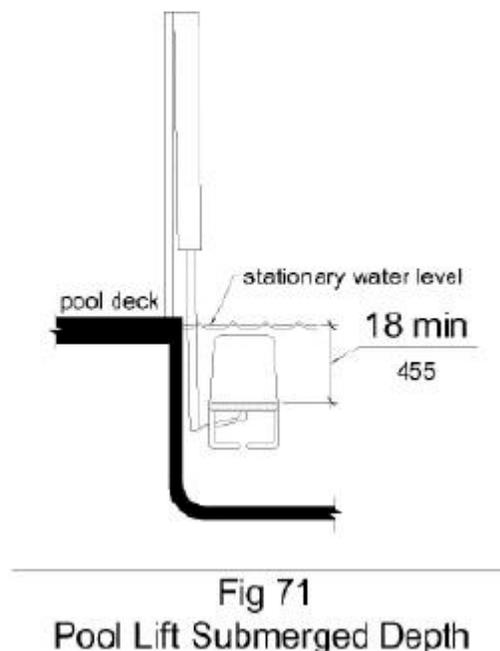
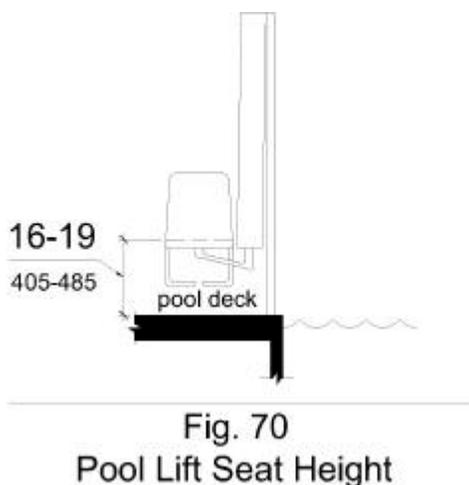


Fig. 69
Clear Deck Space at Pool Lifts

15.8.5.3 Clear Deck Space. On the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The space shall be 36 inches (915

mm) wide minimum and shall extend forward 48 inches (1220 mm) minimum from a line located 12 inches (305 mm) behind the rear edge of the seat. The clear deck space shall have a slope not greater than 1:48 (see Fig. 69).

15.8.5.4 Seat Height. The height of the lift seat shall be designed to allow a stop at 16 inches (405 mm) minimum to 19 inches (485 mm) maximum measured from the deck to the top of the seat surface when in the raised (load) position (see Fig. 70).



15.8.5.5 Seat Width. The seat shall be 16 inches (405 mm) minimum wide.

15.8.5.6* Footrests and Armrests. Footrests shall be provided and shall move with the seat. If provided, armrests positioned opposite the water shall be removable or shall fold clear of the seat when the seat is in the raised (load) position.

Exception: Footrests shall not be required on pool lifts provided in spas.

15.8.5.7* Operation. The lift shall be capable of unassisted operation from both the deck and water levels. Controls and operating mechanisms shall be unobstructed when the lift is in use and shall comply with 4.27.4.

15.8.5.8 Submerged Depth. The lift shall be designed so that the seat will submerge to a water depth of 18 inches (455 mm) minimum below the stationary water level (see Fig. 71).

15.8.5.9* Lifting Capacity. Single person pool lifts shall have a minimum weight capacity of 300 lbs. (136 kg) and be capable of sustaining a static load of at least one and a half times the rated load.

15.8.6 Sloped Entries. Sloped entries designed to provide access into the water shall comply with 15.8.6.

15.8.6.1* Sloped Entries. Sloped entries shall comply with 4.3, except as modified below.

Exception: Where sloped entries are provided, the surfaces shall not be required to be slip resistant.

15.8.6.2 Submerged Depth. Sloped entries shall extend to a depth of 24 inches (610 mm) minimum to 30 inches (760 mm) maximum below the stationary water level. Where landings are required by 4.8, at least one landing shall be located 24 inches (610 mm) minimum to 30 inches (760 mm) maximum below the stationary water level (see Fig. 72).

Exception: In wading pools, the sloped entry and landings, if provided, shall extend to the deepest part of the wading pool.

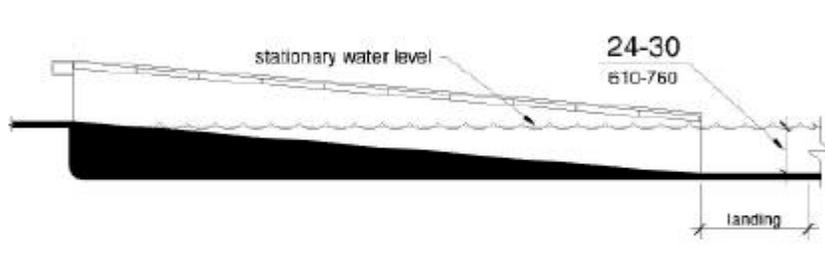


Fig. 72
Sloped Entry Submerged Depth

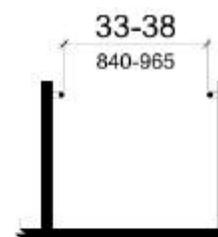


Fig. 73
Sloped Entry Handrail

15.8.6.3* Handrails. Handrails shall be provided on both sides of the sloped entry and shall comply with 4.8.5. The clear width between handrails shall be 33 inches (840 mm) minimum and 38 inches (965 mm) maximum (see Fig. 73).

Exception 1: Handrail extensions specified by 4.8.5 shall not be required at the bottom landing serving a sloped entry.

Exception 2: Where a sloped entry is provided for wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area, the required clear width between handrails shall not apply.

Exception 3: The handrail requirements of 4.8.5 and 15.8.6.3 shall not be required on sloped entries in wading pools.

15.8.7 Transfer Walls. Transfer walls shall comply with 15.8.7.

15.8.7.1 Clear Deck Space. A clear deck space of 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum with a slope not steeper than 1:48 shall be provided at the base of the transfer wall. Where one grab bar is provided, the clear deck space shall be centered on the grab bar. Where two grab bars are provided, the clear deck space shall be centered on the clearance between the grab bars (see Fig. 74).

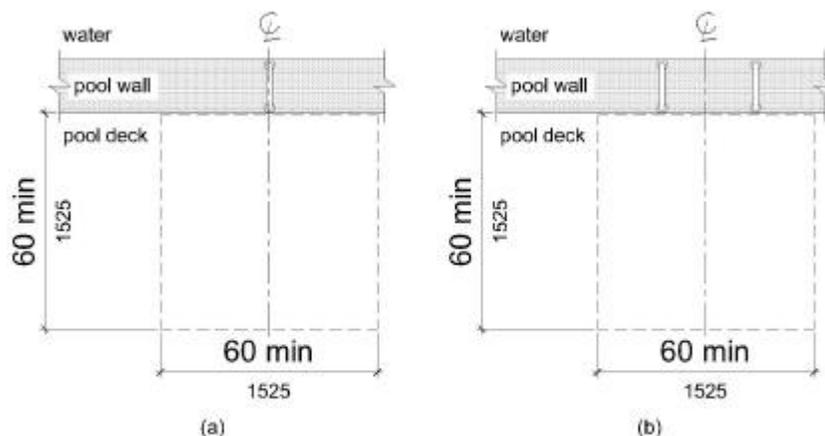


Fig. 74
Clear Deck Space at Transfer Walls

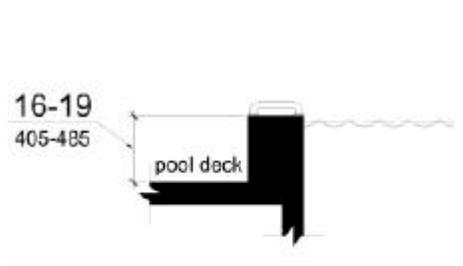


Fig. 75
Transfer Wall Height

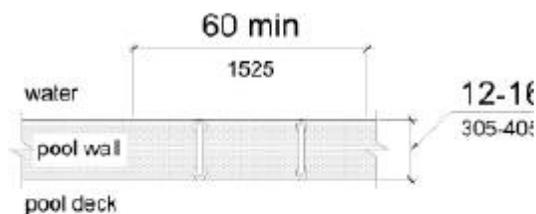


Fig. 76
Transfer Wall Depth and Length

15.8.7.2 Height. The height of the transfer wall shall be 16 inches (405 mm) minimum to 19 inches (485 mm) maximum measured from the deck (see Fig. 75).

15.8.7.3 Wall Depth and Length. The depth of the transfer wall shall be 12 inches (305 mm) minimum to 16 inches (405 mm) maximum. The length of the transfer wall shall be 60 inches (1525 mm) minimum and shall be centered on the clear deck space (see Fig. 76).

15.8.7.4 Surface. Surfaces of transfer walls shall not be sharp and shall have

rounded edges.

15.8.7.5 Grab Bars. At least one grab bar shall be provided on the transfer wall. Grab bars shall be perpendicular to the pool wall and shall extend the full depth of the transfer wall. The top of the gripping surface shall be 4 inches (100 mm) minimum and 6 inches (150 mm) maximum above walls. Where one grab bar is provided, clearance shall be 24 inches (610 mm) minimum on both sides of the grab bar. Where two grab bars are provided, clearance between grab bars shall be 24 inches (610 mm) minimum. Grab bars shall comply with 4.26 (see Fig. 77).

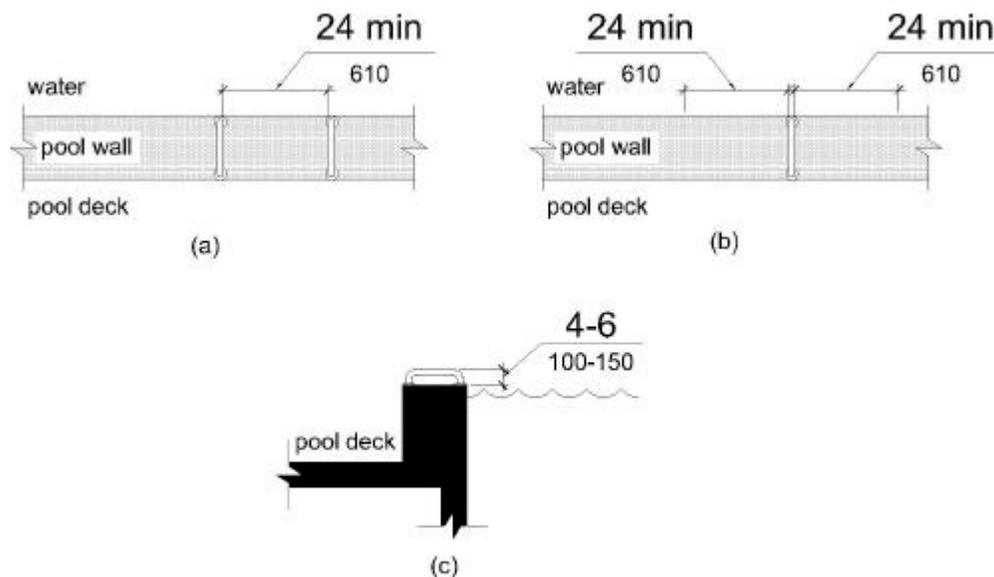


Fig. 77
Grab Bars at Transfer Walls

15.8.8 Transfer Systems. Transfer systems shall comply with 15.8.8.

15.8.8.1 Transfer Platform. A transfer platform 19 inches (485 mm) minimum clear depth by 24 inches (610 mm) minimum clear width shall be provided at the head of each transfer system (see Fig. 78).

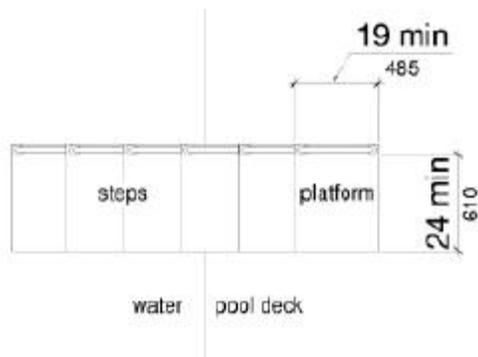


Fig. 78
Transfer System Platform

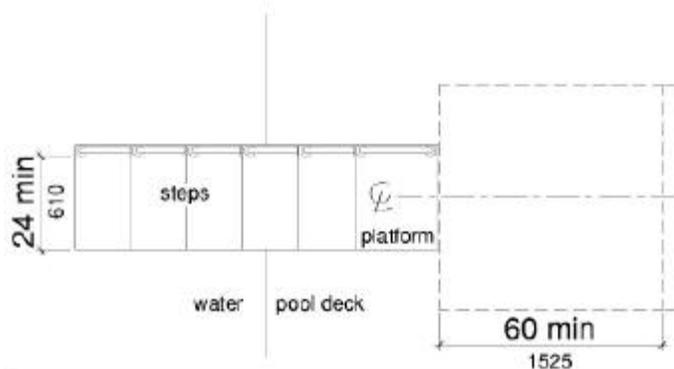


Fig. 79
Clear Deck Space at Transfer Systems

15.8.8.2 *Clear Deck Space.* A clear deck space of 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum with a slope not steeper than 1:48 shall be provided at the base of the transfer platform surface and shall be centered along a 24 inch (610 mm) minimum unobstructed side of the transfer platform (see Fig. 79).

15.8.8.3 *Height.* The height of the transfer platform shall comply with 15.8.7.2.

15.8.8.4* *Transfer Steps.* Transfer step height shall be 8 inches (205 mm) maximum. Transfer steps shall extend to a water depth of 18 inches (455 mm) minimum below the stationary water level (see Fig. 80).

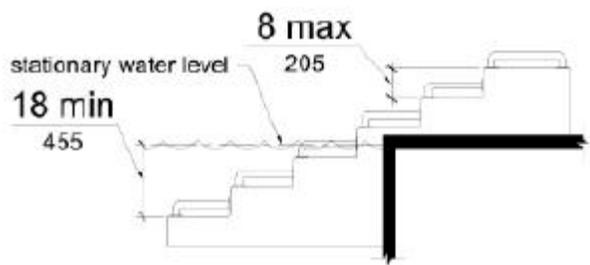


Fig. 80
Transfer System Steps

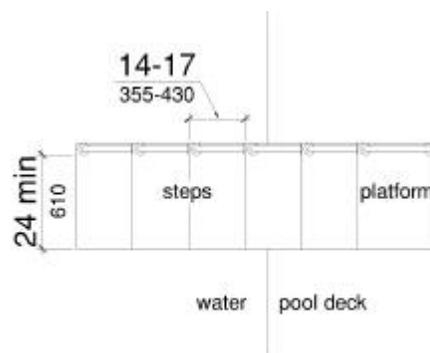


Fig. 81
Size of Transfer System Steps

15.8.8.5 *Surface.* The surface of the transfer system shall not be sharp and shall have rounded edges.

15.8.8.6 *Size.* Each transfer step shall have a tread clear depth of 14 inches (355 mm) minimum and 17 inches (430 mm) maximum and shall have a tread clear width of 24 inches (610 mm) minimum (see Fig. 81).

15.8.8.7* Grab Bars. At least one grab bar on each transfer step and the transfer platform, or a continuous grab bar serving each transfer step and the transfer platform, shall be provided. Where provided, the top of the gripping surface shall be 4 inches (100 mm) minimum and 6 inches (150 mm) maximum above each step and transfer platform. Where a continuous grab bar is provided, the top of the gripping surface shall be 4 inches (100 mm) minimum and 6 inches (150 mm) maximum above the step nosing and transfer platform. Grab bars shall comply with 4.26 and be located on at least one side of the transfer system. The grab bar located at the transfer platform shall not obstruct transfer (see Fig. 82).

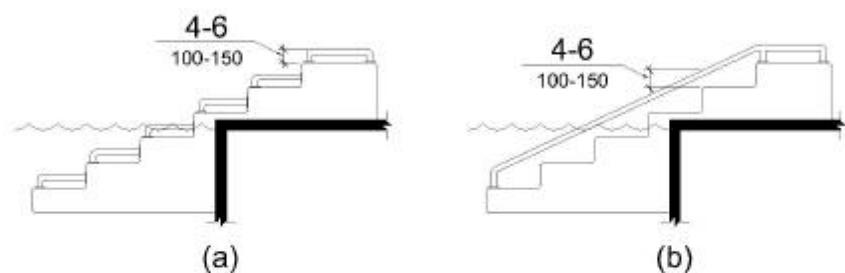


Fig. 82
Grab Bars at Transfer Systems

15.8.9. Pool Stairs. Pool stairs shall comply with 15.8.9.

15.8.9.1 Pool Stairs. Pool stairs shall comply with 4.9, except as modified below.

15.8.9.2 Handrails. The width between handrails shall be 20 inches (510 mm) minimum and 24 inches (610 mm) maximum. Handrail extensions required by 4.9.4 shall not be required at the bottom landing serving a pool stair.

15.8.10* Water Play Components. Where water play components are provided, the provisions of 15.6 and 4.3 shall apply, except as modified or otherwise provided in this section.

Exception 1: Where the surface of the accessible route, clear floor or ground spaces and maneuvering spaces connecting play components is submerged, the provisions of 15.6 and 4.3 for cross slope, running slope, and surface shall not apply.

Exception 2: Transfer systems complying with 15.6.5 shall be permitted to be used in lieu of ramps to connect elevated play components.

APPENDIX

designed for use by an individual seated in a wheelchair, however, will most likely be centered on the operating mechanisms.

Designers and operators are encouraged to select exercise equipment and machines that provide fitness opportunities for persons with lower body extremity disabilities. Upper body exercise equipment and machines that offer either cardiovascular or strength training will enhance fitness opportunities for persons with disabilities from a wheelchair or mobility device. Examples include: equipment or machines that provide arm ergometry, free weights, and weighted pulley systems that are usable from a wheelchair or mobility device.

A15.7.4 Shooting Facilities

Examples of different types of firing positions include, but are not limited to: positions having different admission prices, positions with or without weather covering or lighting, and positions supporting different shooting events such as argon, muzzle loading rifle, small bore rifle, high power rifle, bull's eye pistol, action pistol, silhouette, trap, skeet, and archery (bow and crossbow).

SWIMMING POOLS, WADING POOLS, AND SPAS

A15.8.2 Swimming Pools

Where more than one means of access is provided into the water, it is recommended that the means be different. Providing different means of access will better serve the varying needs of people with disabilities in getting into and out of a swimming pool. It is also recommended that where two or more means of access are provided, they not be provided in the same location in the pool. Different locations will provide increased options for entry and exit, especially in larger pools.

A15.8.2 Swimming Pools, Exception 1

Pool walls at diving areas and areas along pool walls where there is no pool entry because of landscaping or adjacent structures should be counted when determining the number of accessible means of entry required.

A15.8.5 Pool Lifts

There are a variety of seats available on pool lifts ranging from sling seats to those that are preformed or molded. Pool lift seats with backs will enable a larger population of persons with disabilities to use the lift. Pool lift seats that consist of materials that resist corrosion and provide a firm base to transfer will be usable by a wider range of people with disabilities. Additional options such as armrests, head rests, seat belts, and leg support will enhance accessibility and better accommodate people with a wide range of disabilities.

A15.8.5.6 Footrests and Armrests

Footrests are encouraged on lifts used in larger spas, where the foot well water depth is 34 inches or greater. Providing footrests, especially ones that support the entire foot, will facilitate safe and independent transfers by a larger population of persons with disabilities.

A15.8.5.7 Operation

Pool lifts must be capable of unassisted operation from both the deck and water levels. This will permit a person to call the pool lift when the pool lift is in the opposite position. It is extremely important for a person who is swimming alone to be able to call the pool lift when it is in the up position so he or she will not be stranded in the water for extended periods of time

awaiting assistance. The requirement for a pool lift to be independently operable does not preclude assistance from being provided.

A15.8.5.9 Lifting Capacity

Single person pool lifts must be capable of supporting a minimum weight of 300 pounds and sustaining a static load of at least one and a half times the rated load. Pool lifts should be provided that meet the needs of the population it is serving. Providing a pool lift with a weight capacity greater than 300 pounds may be advisable.

A15.8.6.1 Sloped Entries

Personal wheelchairs and mobility devices may not be appropriate for submerging in water. Some may have batteries, motors, and electrical systems that when submerged in water may cause damage to the personal mobility device or wheelchair or may contaminate the pool water. Providing an aquatic wheelchair made of non-corrosive materials and designed for access into the water will protect the water from contamination and avoid damage to personal wheelchairs or other mobility aids.

A15.8.6.3 Handrails

Handrails on both sides of a sloped entry provides stability to both persons with mobility impairments and persons using wheelchairs. For safety reasons, a single handrail is permitted on sloped entries provided at wave action pools, leisure rivers, sand bottom pools, and other pools where user access is limited to one area.

A15.8.8.4 Transfer Steps

Where possible, the height of the transfer step should be as minimal as possible. This will decrease the distance an individual is required to lift up or move down to reach the next step to gain access.

A15.8.8.7 Grab Bars

Pool operators have the choice of providing a grab bar on one side of each step and transfer platform or a continuous grab bar on one side serving each transfer step and the transfer platform. If provided on each step, the top of the gripping surface must be 4 to 6 inches above each step. Where a continuous grab bar is provided, the top of the gripping surface must be 4 to 6 inches above the step nosing. Each type has its advantages. A continuous handrail allows the person that is transferring to maintain a constant grip on the handrail while moving up or down the transfer steps. Grab bars provided on each step provide the gripping surface parallel to each step rather than on a diagonal.

A15.8.10 Water Play Components

Personal wheelchairs and mobility devices may not be appropriate for submerging in water when accessing play components located in water. Some may have batteries, motors, and electrical systems that when submerged in water may cause damage to the personal mobility device or wheelchair or may contaminate the water. Providing an aquatic wheelchair made of non-corrosive materials and designed for access into the water will protect the water from contamination and avoid damage to personal wheelchairs.