

ICC A117.1-2009 STANDARD AND COMMENTARY

ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES



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Accessible and Usable Buildings and Facilities Commentary
(ICC A117.1-2009)

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FOREWORD

[The information contained in this foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. As such, this foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the standard.]

Development

The 1961 edition of ANSI Standard A117.1 presented the first criteria for accessibility to be approved as an American National Standard and was the result of research conducted by the University of Illinois under a grant from the Easter Seal Research Foundation. The National Easter Seal Society and the President's Committee on Employment of People with Disabilities became members of the Secretariat, and the 1961 edition was reaffirmed in 1971.

In 1974, the U.S. Department of Housing and Urban Development joined the Secretariat and sponsored needed research, which resulted in the 1980 edition. After further revision that included a special effort to remove application criteria (scoping requirements), the 1986 edition was published and, when requested in 1987, the Council of American Building Officials (CABO) assumed the Secretariat. Central to the intent of the change in the Secretariat was the development of a standard that, when adopted as part of a building code, would be compatible with the building code and its enforcement. The 1998 edition largely achieved that goal. The 2009 edition of the standard is the latest example of the A117.1 committee's effort to continue developing a standard that is compatible with the building code. [When CABO was consolidated into the International Code Council (ICC) in 1998, the Secretariat duties were assumed by ICC.]

2009 Edition

New to the 2009 edition are coordinated criteria for the various types of dwelling units that provide a step-down between the unit types; technical requirements for Type C (Visitable) Units; Variable Message Signs (i.e., signs that change the information they show such as gate information in train stations and airports); better consistency of sign requirements regarding when raised characters and braille are required; location of toilet paper dispensers (more design options, recessed fixtures addressed, single point of measurement, etc.); a new chapter for a variety of types of recreational facilities; an index and margin markings that will help users find requirements and identify changes from the 2003 edition. In addition, the new standard continued to provide a level of coordination between the accessible provisions of this standard and the federal government accessibility requirements in the Fair Housing Accessibility Guidelines (FHAG) and the 2010 Americans with Disabilities Act (ADA) Standard for Accessible Design.

ANSI Approval

This Standard was processed and approved for submittal to ANSI by the Accredited Standards Committee A117 on Architectural Features and Site Design of Public Buildings and Residential Structures for Persons with Disabilities. ANSI approved the 2009 edition on October 20, 2010. Committee approval of the Standard does not necessarily imply that all Committee members voted for its approval.

Adoption

ICC A117.1–2009 is available for adoption and use by jurisdictions internationally. Its use within a governmental jurisdiction is intended to be accomplished through adoption by reference in accordance with proceedings establishing the jurisdiction's laws.

Formal Interpretations

Requests for Formal Interpretations on the provisions of ICC A117.1–2009 should be addressed to: ICC, Chicago District Office, 4051 W. Flossmoor Road, Country Club Hills, IL 60478–5795.

Maintenance—Submittal of Proposals

All ICC standards are revised as required by ANSI. Proposals for revising this edition are welcome. Please visit the ICC web site at www.iccsafe.org for the official “Call for proposals” announcement. A proposal form and instructions can also be downloaded from www.iccsafe.org.

ICC, its members and those participating in the development of ICC A117.1-2009 do not accept any liability resulting from compliance or noncompliance with the provisions of ICC A117.1-2009. ICC does not have the power or authority to police or enforce compliance with the contents of this standard. Only the governmental body that enacts this standard into law has such authority.

Marginal Markings

In the ICC A117.1 Standard (but not in this commentary) solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the 2003 edition. Deletion indicators in the form of an arrow (➡) are provided in the margin where an entire section, paragraph, exception or table has been deleted or an item in a list of items or a table has been deleted.

**Accredited Standards Committee A117 on Architectural Features and
Site Design of Public Buildings and Residential Structures for
Persons with Disabilities**

At the time of ANSI approval, the A117.1 Committee consisted of the following members:

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U.S. Department of Agriculture (USDA) (R)	William Downs Meghan Walsh (Alt)
U.S. Department of Housing and Urban Development (HUD) (R)	Cheryl D. Kent Louis F. Borray (Alt)
World Institute on Disability (WID) (CU)	Hale Zukas

Individual Members

Shahriar Amiri, CBO (P)
Todd Andersen, AIA (P)
George P. McAllister, Jr. (P)
Jake L. Pauls, CPE (P)
Ed Roether (P)
John P. S. Salmen, AIA (P)
Kenneth M. Schoonover, P.E. (P)

Acknowledgment

The updating of this standard over the past 6 years could only be accomplished by the hard work of not only the current committee members listed at the time of approval but also the many committee members who participated and contributed to the process over the course of development. ICC recognizes their contributions as well as those of the participants who, although not on the committee, provided valuable input during this update cycle.

INTEREST CATEGORIES

Builder/Owner/Operator (BO) – Members in this category include those in the private sector involved in the development, construction, ownership and operation of buildings or facilities; and their respective associations.

Consumer/User (CU) – Members in this category include those with disabilities, or others who require accessibility features in the built environment for access to buildings, facilities and sites; and their respective associations.

Producer/Distributor (PD) – Members in this category include those involved in manufacturing, distributing, or sales of products; and their respective associations.

Professional (P) – Members in this category include those qualified to engage in the development of the body of knowledge and policy relevant to their area of practice, such as research, testing, consulting, education, engineering or design; and their respective associations.

Regulatory (R) – Members in this category include federal agencies, representatives of regulatory agencies or organizations that promulgate or enforce codes or standards; and their respective associations.

Individual Expert (IE) (Nonvoting) – Members in this category are individual experts selected to assist the consensus body. Individual experts shall serve for a renewable term of one year and shall be subject to approval by vote of the consensus body. Individual experts shall have no vote.

Category	Number
Builder/Owner/Operator – (BO)	6
Consumer/User – (CU)	11
Professional – (P)	15
Producer/Distributor – (PD)	7
Regulatory – (R)	7
TOTAL	46

PREFACE

Purpose and Application

This standard contains technical specifications (i.e., how to) for elements that are used in creating accessible functional spaces. For example, it specifies technical requirements for making doors, routes, seating and other elements accessible. These accessible elements are used for designing accessible functional spaces such as classrooms, hotel rooms, lobbies or offices.

This standard does not include scoping criteria (i.e., what, where and how many). Scoping provisions are contained in laws, ordinances or model building codes that reference this standard. This standard is for adoption by government agencies and by organizations setting model codes to achieve uniformity in the technical design criteria in building codes and other regulations. This standard is also used by nongovernmental entities as technical design guidelines or requirements to make buildings and facilities accessible to and usable by persons with physical disabilities.

Provisions of this standard are suitable for:

- the design and construction of new buildings and facilities, including both spaces and elements, site improvements and public walks.
- remodeling, alteration and rehabilitation of existing construction.
- permanent, temporary and emergency conditions.

Criteria are established for individual building spaces and elements. The intention is that these accessible spaces and elements combine to provide accessibility throughout a building and related site facilities. General criteria, such as the minimum width of an accessible route, can apply to different building or site elements, including sidewalks, corridors and aisles between library stacks. Other criteria are for specific elements such as drinking fountains, water closets, sinks and lavatories.

The principal purpose of the commentary is to provide a basic volume of knowledge and facts relating to building construction as it pertains to the regulations set forth in the ICC A117.1.

In the chapters that follow, discussions focus on the full meaning and implications of the text. Guidelines suggest the most effective method of application, and the consequences of not adhering to the text. Illustrations are provided to aid understanding; they do not necessarily illustrate the only methods of achieving compliance.

The format of the commentary includes the full text of each section, table and figure in the standard, followed immediately by the commentary applicable to that text. At the time of printing, the commentary reflects the most up-to-date text of the 2009 ICC A117.1. Each section's narrative includes a statement of its objective and intent and usually includes a discussion about why the requirement commands the conditions set forth. Standard text and commentary text are easily distinguished from each other. All standard text is shown as it appears in the ICC A117.1 and all commentary is indented below the code text with the symbol ❖.

Readers should note that the commentary is to be used in conjunction with the ICC A117.1 and not as a substitute for the standard. The commentary is advisory only; the code official alone possesses the authority and responsibility for interpreting the code and referenced standards.

Comments and recommendations are encouraged, for through your input, we can improve future editions. Please direct your comments to the Codes and Standards Development Department at the Chicago District Office.

Recommendations to Adopting Authorities

Administration

This standard does not establish which occupancy or building types are covered and the extent to which each type is covered. Such requirements for application of this standard must be specified by the adopting authority, including which and how many functional spaces and elements are to be made accessible within each building type.

The standard does not establish which or how many buildings, facilities and spaces or elements within these spaces must be made accessible. This standard correlates with the adoption of scoping provisions by the administrative authority. This is typically accomplished through the adoption of a model building code which references this standard. The adopted scoping provisions will establish where accessibility is required, and this standard will establish how those required elements and spaces are to be made accessible. A set of recommended scoping provisions was developed by the Board for the Coordination of the Model Codes of the Council of American Building Officials, and is reflected in the current editions of the model building codes. The International Code Council (ICC) continues developing requirements through their public hearings and code development process.

By adopting this standard through the building code, enforcement can be accomplished at the state or local level. In contrast, the requirements of Titles II and III of the Americans with Disabilities Act (ADA) can be enforced only as a civil rights statute by the United States Department of Justice. Although many provisions in this standard are comparable to parallel requirements contained in the 2010 Americans with Disabilities Act (ADA) Standard for Accessible Design, compliance with the ADA should be verified independently.

The ICC A117.1 1998 and 2003 editions have been designated by the department of Housing and Urban Development (HUD) as ‘safe harbor’ documents for compliance with the technical provisions of the Fair Housing Act (FHA). However, scoping provisions for how many units must comply are contained in the FHA or the *International Building Code* (IBC®) 2003 or 2006 editions. The 2009 ICC A117.1 and the 2009 and 2012 IBC are currently under review by HUD.

Number of Spaces and Elements

The administrative authority adopting this standard must specify the actual number of spaces and elements—or establish procedures for determining them—based on, but not limited to:

- population to be served.
- availability to occupants, employees, customers and visitors.
- distances and time required to use the accessible elements.
- provision of equal opportunity and treatment under the law.

The need for accessible spaces and elements can vary widely. For example, the number of parking spaces for some medical facilities may be significantly greater than for most commercial office buildings.

Remodeling

The specifications in this standard are based on the functional requirements of persons with physical disabilities. The administrative authority adopting this standard must specify the extent to which it is to cover remodeling, alteration or rehabilitation within its jurisdiction.

The administrative authority specifies the extent to which this standard applies to existing buildings, including buildings of historic significance. Accessibility in historic buildings and facilities that must be made accessible and usable by persons with disabilities should be accomplished in a manner that maintains the significant historic fabric and historic aspects of such buildings and facilities.

Historic aspects are the particular features of the historic site, building or facility that give it its historic significance. These may include historic background, noteworthy architecture, unique design, works of art, memorabilia and artifacts. Historic fabric consists of the original materials and portions of the building intact when exposed, or as they appeared and were used in the past. Historic buildings are buildings and facilities that are eligible for listing or are listed in the National Register of Historic Places, or such properties designated as historic under a statute of the appropriate state or local government body.

If the historic fabric or historic aspects are threatened or destroyed by strict compliance with the provisions of this standard, reasonably equivalent access and use may be accomplished by using these concepts. Reasonably equivalent access and use means that the entry to, and use of, a building or facility by persons with disabilities is achieved with standards or measures which are individually tailored to the historic building or facility.

Should the above still be deemed to destroy the historic fabric or historic aspect, additional consideration may be given to the following:

1. Deviations should be on an item-by-item or case-by-case basis.
2. Interpretive exhibits and/or equal services of significant historic aspects which do not comply with this standard are provided for the public in a location fully accessible to and usable by persons with disabilities, including people with hearing and sight impairments.
3. Services are provided in an accessible location equal to those services provided in the locations that do not comply with this standard.
4. The owner/designer has submitted written documentation stating the reasons for the consequent exemption. Such statements should include the opinions and/or comments of a representative local group of persons with disabilities and should be submitted to the administrative authority for approval.

Review Procedures

To promote effective compliance with the requirements of this standard, the administrative authority adopting it should establish a review and approval procedure for construction projects that come under its jurisdiction.

Where this standard is adopted by the administrative authority, a construction project that must comply with these provisions should be reviewed for compliance in the same manner the project is reviewed to determine compliance with other provisions of the building code.

Contents

Chapter 1. Application and Administration	1-1
101 Purpose	1-1
102 Anthropometric Provisions	1-2
103 Compliance Alternatives	1-2
104 Conventions	1-4
105 Referenced Documents	1-4
106 Definitions	1-6
Chapter 2. Scoping	2-1
201 General	2-1
202 Dwelling and Sleeping Units	2-1
203 Administration	2-2
Chapter 3. Building Blocks	3-1
301 General	3-1
302 Floor Surfaces	3-1
303 Changes in Level	3-3
304 Turning Space	3-3
305 Clear Floor Space	3-5
306 Knee and Toe Clearance	3-8
307 Protruding Objects	3-11
308 Reach Ranges	3-15
309 Operable Parts	3-17
Chapter 4. Accessible Routes	4-1
401 General	4-1
402 Accessible Routes	4-1
403 Walking Surfaces	4-3
404 Doors and Doorways	4-8
405 Ramps	4-23
406 Curb Ramps	4-31
407 Elevators	4-39
408 Limited-use/Limited-application Elevators	4-53
409 Private Residence Elevators	4-57
410 Platform Lifts	4-60
Chapter 5. General Site and Building Elements	5-1
501 General	5-1
502 Parking Spaces	5-1
503 Passenger Loading Zones	5-6
504 Stairways	5-8
505 Handrails	5-11
506 Windows	5-17

Chapter 6. Plumbing Elements and Facilities	6-1
601 General	6-1
602 Drinking Fountains	6-1
603 Toilet and Bathing Rooms	6-4
604 Water Closets and Toilet Compartments	6-8
605 Urinals	6-22
606 Lavatories and Sinks	6-23
607 Bathtubs	6-26
608 Shower Compartments	6-29
609 Grab Bars	6-37
610 Seats	6-40
611 Washing Machines and Clothes Dryers	6-41
612 Saunas and Steam Rooms	6-43
Chapter 7. Communication Elements and Features	7-1
701 General	7-1
702 Alarms	7-2
703 Signs	7-3
704 Telephones	7-26
705 Detectable Warnings	7-28
706 Assistive Listening Systems	7-30
707 Automatic Teller Machines (ATMs) and Fare Machines	7-32
708 Two-way Communication Systems	7-34
Chapter 8. Special Rooms and Spaces	8-1
801 General	8-1
802 Assembly Areas	8-1
803 Dressing, Fitting, and Locker Rooms	8-12
804 Kitchens and Kitchenettes	8-15
805 Transportation Facilities	8-20
806 Holding Cells and Housing Cells	8-24
807 Courtrooms	8-27
Chapter 9. Built-In Furnishings and Equipment	9-1
901 General	9-1
902 Dining Surfaces and Work Surfaces	9-1
903 Benches	9-5
904 Sales and Service Counters	9-7
905 Storage Facilities	9-11
Chapter 10. Dwelling Units and Sleeping Units	10-1
1001 General	10-2
1002 Accessible Units	10-2
1003 Type A Units	10-12
1004 Type B Units	10-34

1005 Type C (Visitable) Units	10-57
1006 Units with Accessible Communication Features	10-60
Chapter 11. Recreational Facilities	11-1
1101 General	11-1
1102 Amusement Rides	11-4
1103 Recreational Boating Facilities	11-9
1104 Exercise Machines and Equipment	11-15
1105 Fishing Piers and Platforms	11-17
1106 Golf Facilities	11-20
1107 Miniature Golf Facilities	11-23
1108 Play Areas	11-25
1109 Swimming Pools, Wading Pools, Hot Tubs and Spas	11-39
1110 Shooting Facilities with Firing Positions	11-50
Index	INDEX-1

List of Figures

Chapter 1. Application and Administration	1-1
Figure C102(a) Dimensions of Adult-sized Wheelchairs	1-2
Figure C102(b) Examples of Manual Wheelchair, Power and Scooter	1-3
Figure 104.3 Graphic Convention for Figures	1-5
Figure C106(a) Boat Launch Ramp	1-8
Figure C106(b) Boat Slip	1-8
Figure C106(c) Marked Crossing	1-9
Chapter 2. Scoping (No figures)	2-1
Chapter 3. Building Blocks.	3-1
Figure C301.2 Example of Overlap at Doors	3-1
Figure 302.2 Carpet on Floor Surfaces	3-2
Figure 302.3 Openings in Floor Surfaces.	3-2
Figure C302.3(a) Grate Openings Create Problems for Wheelchairs.	3-2
Figure C302.3(b) Grate Openings Perpendicular to Direction of Travel	3-3
Figure 303.2 Vertical Change in Level	3-3
Figure 303.3 Beveled Changes in Level	3-3
Figure C304.1 Turning Circles Required	3-3
Figure 304.3 Size of Turning Space.	3-4
Figure C304.3.1(a) Circular Space.	3-4
Figure C304.3.1(b) Circular Space with Obstructions	3-5
Figure C304.3.2(a) T-Shaped Space	3-5
Figure C304.3.2(b) T-Shaped Space with Obstructions.	3-5
Figure 305.3 Size of Clear Floor Space	3-6
Figure C305.4 Knee and Toe Clearance	3-6
Figure 305.5 Position of Clear Floor Space	3-7
Figure 305.7 Maneuvering Clearance in Alcove	3-7
Figure C306.1(a) Knee and Toe Clearance Under Work Surfaces.	3-8
Figure C306.1(b) Maximum Depth for Knee and Toe Clearances	3-8
Figure C306.1(c) Minimum Depth for Knee and Toe Clearances	3-8
Figure 306.2 Toe Clearance.	3-9
Figure 306.3 Knee Clearance	3-10
Figure C307 Examples of Protruding Objects	3-11
Figure C307.1(a) Detectable Reach for a Long Cane User	3-11
Figure C307.1(b) Sweep for a Long Cane User	3-11
Figure C307.1(c) Objects In Detectable Range	3-12
Figure 307.2 Limits of Protruding Objects	3-12
Figure 307.3 Post-mounted Protruding Objects	3-13
Figure 307.4 Reduced Vertical Clearance	3-14
Figure C307.4 Barrier Under Stairway	3-14

Figure C307.5	Required Clear Width.	3-14
Table C308.1	Unobstructed Children's Reach Ranges	3-15
Figure 308.2.1	Unobstructed Forward Reach	3-15
Figure 308.2.2	Obstructed High Forward Reach	3-16
Figure 308.3.1	Unobstructed Side Reach	3-16
Figure C308.3.1	Recommended Side Reach	3-17
Figure 308.3.2	Obstructed High Side Reach	3-17
Figure C309.4	Gas Pumps	3-18
Chapter 4. Accessible Routes		4-1
Figure C402.2	Accessible Route Components	4-2
Figure 403.5	Clear Width of an Accessible Route.	4-4
Figure C403.5	Clear Width of an Accessible Route.	4-4
Figure 403.5.1	Clear Width at 180° Turn	4-5
Figure C403.5.1	Width of Accessible Route for 90 Degree	4-6
Figure C403.5.2(a)	Passing Space Width.	4-6
Figure C403.5.2(b)	Passing Space Width—Straight Route	4-6
Figure C403.5.2(c)	Passing Space Width—with Intersections	4-7
Figure C403.5.2(d)	Example of Exterior Pasing Space.	4-7
Figure 404.2.2	Clear Width of Doorways	4-9
Figure C404.2.2(a)	Typical Door Opening Clearance.	4-9
Figure C404.2.2(b)	Clear Width and Projections.	4-9
Figure C404.2.3	Maneuvering at Doors	4-10
Figure C404.2.3(e)	Obstructions to the Maneuvering Clearance at Doors	4-10
Table 404.2.3.2	Maneuvering Clearances at Manual Swinging Doors	4-11
Figure 404.2.3.2	Maneuvering Clearances at Manual Swinging Doors	4-13
Figure C404.2.3.2	Door Operation.	4-14
Table 404.2.3.3	Maneuvering Clearances at Sliding and Folding Doors.	4-14
Figure 404.2.3.3	Maneuvering Clearance at Sliding and Folding Doors.	4-15
Table 404.2.3.4	Maneuvering Clearances for Doorways without Doors	4-15
Figure 404.2.3.4	Maneuvering Clearance at Doorways without Doors	4-16
Figure 404.2.3.5	Maneuvering Clearance at Recessed Doors	4-16
Figure C404.2.4	Door Threshold Height Limitations.	4-17
Figure 404.2.5	Two Doors in a Series	4-18
Figure C404.2.5(a)	Door in a Series	4-18
Figure C404.2.5(b)	Door in a Series—Offset	4-18
Figure C404.2.6	Door Hardware.	4-19
Figure C404.2.9(a)	Door Surface Obstruction.	4-20
Figure C404.2.9(b)	Bottom of Door Surface	4-20
Figure C404.2.10	Vision Lites.	4-21
Figure C404.3.5	Control Switch for Automatic Doors	4-22
Figure C405	Ramp with Guard	4-23

Table 405.2	Allowable Ramp Dimensions for Construction in Existing Sites, Buildings and Facilities	4-23
Figure C405.5	Minimum Clear Width	4-24
Figure 405.7	Ramp Landings	4-25
Figure C405.7.4	Ramp Landings	4-25
Figure C405.7.5(a)	Ramp Landings at Doors	4-26
Figure C405.7.5(b)	Ramp Landings Adjacent to Lockable Doors	4-26
Figure 405.9	Edge Protection—Limited Drop Off	4-27
Figure C405.9	Edge Protection Options	4-28
Figure 405.9.1	Extended Floor Surface	4-29
Figure 405.9.2	Ramp Edge Protection	4-29
Figure C405.9.2	Curb Detail at Walk	4-29
Figure C405.9.2.1	Ramp Edge Protection—Curb Option	4-30
Figure C405.9.2.2(a)	Ramp Edge Protection—Wall Option	4-30
Figure C405.9.2.2(b)	Ramp Edge Protection—Ornamental Barrier Option	4-30
Figure 406.2	Counter Slope of Surfaces Adjacent to Curb Ramps	4-31
Figure 406.3	Sides of Curb Ramps	4-32
Figure C406.3.1(a)	Curb Ramp with Flared Sides	4-32
Figure C406.3.1(b)	Curb Ramp with Grass Sides	4-32
Figure C406.3.2	Example of Curb Ramp Marking	4-32
Figure C406.6	Curb Ramps at Marked Crossings	4-34
Figure 406.7	Landings	4-35
Figure C406.7(a)	Curb Ramp Option	4-35
Figure C406.7(b)	Built Up Curb Ramps	4-35
Figure 406.10	Diagonal Curb Ramps	4-37
Figure 406.11	Islands	4-37
Figure C406.11	Islands	4-37
Figure C406.13.2	Detectable Warning Location	4-38
Figure C406.14	Detectable Warnings at Raised Marked Crossing and Cut-through Medians	4-39
Figure C407.1	Elevators	4-39
Figure 407.2.1.1	Height of Elevator Call Buttons	4-41
Figure 407.2.1.7	Destination-oriented Elevator Indication	4-42
Figure 407.2.2.2	Elevator Visible Signals	4-43
Figure 407.2.3.1	Floor Designation	4-44
Figure 407.2.3.2	Destination-oriented Elevator Car Identification	4-44
Figure C407.3.4	Timing Equation	4-46
Table 407.4.1	Minimum Dimensions of Elevator Cars	4-46
Figure 407.4.1	Inside Dimensions of Elevator Cars	4-47
Figure C407.4.6	Elevator Control Panel	4-48
Figure 407.4.6.2	Elevator Car Control Buttons	4-49
Figure C407.4.7.1.2(a)	Braille Numbers	4-50

Figure C407.4.7.1.2(b)	Braille Cells	4-50
Table 407.4.7.1.3	Control Button Identification	4-51
Figure C408.1	LULA Elevator	4-53
Figure 408.3.3	Door Locations for Limited Use/Limited Application (LULA) Elevators	4-55
Figure 408.4.1	Inside Dimensions of Limited Use/Limited Application (LULA) Elevator Cars	4-56
Figure C409.1	Private Residence Elevators	4-57
Figure C409.3.1	Power Operated Doors and Gates for Private Residence Elevators	4-58
Figure 409.4.6.3	Location of Controls in Private Residence Elevators	4-59
Figure C410	Examples of Types of Platform Lifts	4-60
Figure C410.1(a)	Inclined Platform Lift	4-61
Figure C410.1(b)	Vertical Lift	4-61
Figure C410.1(c)	Person Using a Scooter On a Platform Lift	4-62
Figure 410.2.1	Platform Lift Doors and Gates	4-62
Figure C410.2.1	Exception to Section 410.2.1	4-63
Chapter 5. General Site and Building Elements		5-1
Figure C502.1	Accessible Parking Space	5-1
Figure 502.2	Vehicle Parking Space Size	5-2
Figure 502.4	Parking Space Access Aisle	5-2
Figure C502.4.1(a)	Access Aisle Connected to an Accessible Route	5-3
Figure C502.4.1(b)	Accessible Street Parking	5-4
Figure C502.4.2	Accessible Van	5-4
Figure C502.7	Example of Accessible Parking Space Signage	5-6
Figure C503.1	Passenger Drop-off	5-6
Figure 503.3	Passenger Loading Zone Access Aisle	5-7
Figure C503.5	Example of Entrance Canopy	5-8
Figure 504.2	Treads and Risers for Accessible Stairways	5-8
Figure C504.2	Correct Method of Measuring the Height of Risers and Depths of Treads	5-9
Figure C504.5	Stair Nosing and Foot Placement	5-9
Figure 504.5	Stair Nosings	5-10
Figure C505.2(a)	Aisle Stair Handrails	5-11
Figure C505.2(b)	Intermediate Handrails on a Ramp	5-12
Figure 505.4	Handrail Height	5-13
Figure 505.5	Handrail Clearance	5-13
Figure C505.6	Handrail/Crash Guard Combination	5-13
Figure 505.7	Handrail Cross Section	5-14
Figure C505.10	Handrail Extensions	5-15

Figure 505.10.1	Top and Bottom Handrail Extensions at Ramp	5-16
Figure 505.10.2	Top Handrail Extensions at Stairs	5-16
Figure C505.10.2	Example of Top Extensions at Stairs	5-16
Figure 505.10.3	Bottom Handrail Extensions at Stairs	5-17
Chapter 6. Plumbing Elements and Facilities		6-1
Figure C602.1	Drinking Fountains In Alcove	6-2
Figure 602.2	Parallel Approach at Drinking Fountains Primarily for Children’s Use (Exception 2)	6-2
Figure C602.2(a) and (b)	Drinking Fountains with Forward Approach	6-3
Figure C602.2(c)	Existing Drinking Fountains with Parallel Side Approach	6-3
Figure 602.5	Drinking Fountain Spout Location	6-4
Figure C603.2	Examples of Toilet Room Plans with Overlap	6-5
Figure C603.2.3	Door Swing	6-6
Figure C603.4	Example of Purse Shelf	6-7
Figure C603.5(a)	Example of Toilet Room Plan with Diaper Changing Table	6-7
Figure C603.5(b) and (c)	Diaper Changing Station—Folded and Unfolded	6-7
Figure C603.6(a)	Towel Dispenser	6-8
Figure C603.6(b)	Measuring Reach Depth and Height	6-8
Table 603.6	Maximum Reach Depth and Height	6-8
Figure 604.2	Water Closet Location	6-9
Figure 604.3	Size of Clearance for Water Closet	6-9
Figure 604.3.1(a)	Side Transfer	6-10
Figure 604.3.1(b)	Front or Diagonal Transfer	6-10
Figure 604.3.3	Clearance Overlap	6-11
Figure 604.4	Water Closet Seat Height	6-12
Figure C604.5	Suicide Prevention Grab Bar	6-13
Figure 604.5.1	Side Wall Grab Bar for Water Closet	6-13
Figure C604.5.1	Type B Units Only, Section 604.5.1, Exception 2	6-13
Figure 604.5.2	Rear Wall Grab Bar for Water Closet	6-13
Figure C604.5.2	Flush-O-Meter	6-14
Figure C604.7	Recessed Dispensers	6-14
Figure 604.7	Dispenser Outlet Location	6-15
Figure 604.9.2	Wheelchair Accessible Toilet Compartments	6-16
Table 604.9.3.1	Door Opening Location	6-17
Figure 604.9.3.1(a) and (b)	Wheelchair Accessible Compartment Door Openings	6-17
Figure 604.9.3.1(c)	Wheelchair Accessible Compartment Door Openings—Alternate	6-18
Figure C604.9.3.1	Example of the Stall Door Requirements on Larger Stalls	6-18
Figure 604.9.5	Wheelchair Accessible Compartment Toe Clearance	6-19
Figure 604.10	Ambulatory Accessible Compartment	6-19

Table C604.11	Advisory Specifications for Water Closets Serving Children Ages 3 Through 12	6-20
Figure 604.11.2	Children’s Water Closet Location	6-21
Figure 604.11.4	Children’s Water Closet Height	6-21
Figure 604.11.7	Children’s Dispenser Outlet Location	6-22
Figure C605.1	Urinal and Partitions	6-22
Figure 605.2	Height of Urinals	6-23
Figure C606.2(a)	Lavatories and Sinks	6-24
Figure C606.2(b)	Kitchenette	6-24
Figure C606.2(c)	Side Approach Sinks—Exception 1, 4 and 6	6-25
Figure 606.3	Height of Lavatories and Sinks	6-25
Figure C606.5	Example of Enhanced Reach Range Faucet	6-25
Figure 607.2	Clearance for Bathtubs	6-26
Figure 607.4.1	Grab Bars for Bathtubs with Permanent Seats	6-27
Figure 607.4.2	Grab Bars for Bathtubs without Permanent Seats	6-28
Figure 607.5	Location of Bathtub Controls	6-28
Figure 608.2.1	Transfer-type Shower Compartment Size and Clearance	6-29
Figure C608.2.1.2	Transfer Shower with Privacy Alcove	6-30
Figure 608.2.2	Standard Roll-in-type Shower Compartment Size and Clearance	6-30
Figure C608.2.2.1	Transfer to Seat	6-31
Figure 608.2.3	Alternate Roll-in-type Shower Compartment Size and Clearance	6-32
Figure C608.2.3.1(a)	Transfer to Seat In Alternate Roll-in Shower	6-32
Figure C608.2.3.1(b)	Alternate Roll-in Shower Options	6-33
Figure 608.3.1	Grab Bars in Transfer-type Showers	6-33
Figure 608.3.2	Grab Bars in Standard Roll-in-type Shower	6-34
Figure 608.3.3	Grab Bars in Alternate Roll-in-type Shower	6-34
Figure 608.4.1	Transfer-type Shower Control and Hand shower Location	6-35
Figure 608.4.2	Standard Roll-in-type Shower Control and Hand shower Location	6-35
Figure 608.4.3	Alternate Roll-in-type Shower Control and Hand shower Location	6-36
Figure C608.5	Example of Adjustable Hand Shower	6-36
Figure C608.6	Shower Threshold	6-37
Figure 609.2	Size of Grab Bars	6-37
Figure 609.3	Spacing of Grab Bars	6-38
Figure C609.3	Recessed Dispensers—Exception 2	6-38
Figure 609.4.2	Position of Children’s Grab Bars	6-39
Figure 610.2	Bathtub Seats	6-40
Figure 610.3.1	Rectangular Shower Compartment Seat	6-41
Figure 610.3.2	L-shaped Shower Compartment Seat	6-41

Figure 611.2	Clear Floor Space	6-42
Figure 611.4	Height of Laundry Equipment	6-43
Figure C612.1	Plan of a Sauna or Steam Room	6-43
Chapter 7. Communication Elements and Features		7-1
Figure C702	Audible Alarm and Visible Signal Appliance	7-2
Figure C703	Tactile and Visual Signage with Pictograms	7-3
Figure C703.1.3	Pictogram	7-5
Figure C703.2(a)	Visual Signage	7-5
Figure C703.2(b)	Visual Signage	7-6
Figure C703.2.3	Prohibited Character Styles	7-6
Figure C703.2.4	Height of Signs As Related to Character Height	7-7
Table 703.2.4	Visual Character Height	7-8
Figure C703.2.6	Minimum and Maximum Stroke Thickness—Visual Signage	7-8
Table C703.2.10	Finish and Contrast Recommendations	7-9
Figure C703.3.2	Tactile Characters	7-10
Figure C703.3.4	Sans Serif	7-10
Figure 703.3.5	Character Height	7-10
Figure C703.3.6	Character Width	7-11
Figure C703.3.7	Maximum and Minimum Stroke Width for Tactile Characters	7-11
Figure 703.3.10	Height of Raised Characters above Floor	7-12
Figure 703.3.11	Location of Signs at Doors	7-13
Figure C703.3.11	Alternate Sign Placement	7-13
Figure C703.4.1	Grade I and II Braille	7-14
Table 703.4.3	Braille Dimensions	7-14
Figure 703.4.3	Braille Measurement	7-15
Figure 703.4.4	Position of Braille	7-15
Figure 703.4.5	Height of Braille Characters Above Floor	7-15
Figure 703.5	Pictogram Field	7-16
Figure C703.5.1	Pictogram	7-16
Figure 703.6.3.1	International Symbol of Accessibility	7-17
Figure 703.6.3.2	International TTY Symbol	7-17
Figure 703.6.3.3	International Symbol of Access for Hearing Loss	7-18
Figure 703.6.3.4	Volume-controlled Telephone	7-18
Figure C703.7.2	Low Resolution VMS Examples—Case Requirement	7-19
Figure C703.7.3	Low Resolution VMS Examples—Style Requirement	7-19
Table 703.7.4	Low Resolution VMS Character Height	7-20
Table 703.7.5	Pixel Count for Low Resolution VMS Signage	7-21
Figure 703.7.5	Low Resolution VMS Signage Character	7-21
Figure C703.7.5	Low Resolution VMS Examples—Character Width	7-22
Figure C703.7.6	Low Resolution VMS Examples—Stroke Width	7-22
Figure C703.7.7	Low Resolution VMS Examples—Character Spacing	7-23

Figure C704	Telephones	7-26
Figure 704.2.1	Clear Floor Space for Telephones	7-26
Figure C704.4	TTY	7-28
Figure C705	Raised Marked Crossing	7-28
Figure 705.5	Truncated Dome Size and Spacing	7-29
Table C706	Summary of Assistive Listening Devices	7-31
Figure C707	ATM	7-32
Figure 707.5	Numeric Key Layout.	7-33
Table 707.6.1	Raised Symbols	7-33
Figure C708	Example of Two Way Communication System	7-35
Chapter 8. Special Rooms and Spaces.		8-2
Figure C802.1	Assembly Seating	8-2
Figure C802.1(g)	Team Seating.	8-3
Figure C802.2	Wheelchair Space Barrier	8-3
Figure 802.3	Width of a Wheelchair Space in Assembly Areas	8-3
Figure C802.3	Examples of Wheelchair Space Size and Approach	8-4
Figure 802.4	Depth of a Wheelchair Space in Assembly Areas	8-5
Figure 802.7.2	Shoulder Alignment	8-6
Figure 802.8	Designated Aisle Seats	8-7
Figure 802.8.1	Pew Type Seating in Courtroom	8-7
Figure 802.9.1.1	Lines of Sight Over the Heads of Seated Spectators.	8-8
Figure 802.9.1.2	Lines of Sight Between the Heads of Seated Spectators	8-8
Figure 802.9.2	Line of Sight Over Standing Spectators.	8-9
Table 802.9.2.2	Required Wheelchair Space Location Elevation Over Standing Spectators	8-10
Table 802.10	Wheelchair Space Location Dispersion	8-10
Figure C802.10.2	Bleacher Seating Examples.	8-12
Figure C803(a)	Locker Area	8-13
Figure C803(b)	Locker Room	8-13
Figure C803(c)	Dressing Area at Shower.	8-13
Figure C803.1	Dressing Room	8-14
Figure C804	Example of Kitchenette	8-15
Figure 804.2.1	Pass-through Kitchen Clearance	8-16
Figure 804.2.2	U-shaped Kitchen Clearance	8-17
Figure C804.3	Accessible Work Surface Clearance	8-17
Figure C804.4	Accessible Sinks	8-17
Figure C804.5.3	Examples of Access to Dishwasher.	8-18
Figure C804.5.4.3	Examples of Access to Range	8-19
Figure C804.5.6	Refrigerator/Freezer Access	8-20
Figure 805.2.2	Size of Bus Boarding and Alighting Areas	8-21
Figure C805.2.2	Kneeling Bus	8-21
Figure 805.3	Bus Shelters.	8-22

Figure C805.3	Bus Shelter	8-22
Figure C805.5.2	Platform Edge	8-23
Figure 805.10	Track Crossings	8-24
Figure C805.10	Track Crossings and Tactile Warnings	8-25
Figure C806.1	Accessible Housing Cell	8-25
Figure C806.2.4	Accessible Housing Cell Toilet and Lavatory	8-26
Figure C806.3.2	Visitor Area with Phones	8-26
Figure C807.1(a)	Courtroom for Panel of Judges	8-27
Figure C807.1(b)	Criminal Courtroom With Judge and Jury	8-27
Figure C807.1(c)	Traffic/Small Claims Court	8-28
Figure C807.1(d)	Jury Deliberation Room.	8-28
Figure C807.3(a)	Witness Box	8-28
Figure C807.3(b)	Jury Box	8-29
Figure C807.3(c)	Plan for Raised Courtroom Area	8-29
Figure C807.4	Counselor’s Table and Lectern	8-29
Figure C807.5	Gallery Seating	8-30
Chapter 9. Built-In Furnishings and Equipment		9-1
Figure C902	Examples of Dining and Work Surfaces	9-2
Figure C902.2(a)	Drink Surface	9-3
Figure C902.2(b)	Low Dining Surface	9-3
Table C902.4	Convenient Heights of Work Surfaces for Seated People	9-4
Figure 903	Benches	9-5
Figure C903.2(a)	Transfer to Bench with Back	9-6
Figure C903.2(b)	Example of Accessible Dressing Room	9-6
Figure C904.3.1	Service Counter Parallel Approach	9-8
Figure C904.3.2	Service Counter Forward Approach	9-8
Figure C904.4	Checkout Aisle	9-9
Figure 904.4.2	Height of Checkout Counters	9-9
Figure 904.5.1	Self-Service Shelves and Dispensing Devices	9-10
Figure 904.5.2	Cafeteria Tray Slide	9-10
Figure 904.6(a)	Security Glazing at Ticket Windows	9-10
Figure 904.6(b)	Security Glazing at Service Window	9-11
Figure C905.2	Accessible Route to Storage Facilities	9-11
Figure 905.3	Reach Range for Storage	9-12
Chapter 10. Dwelling Units and Sleeping Units		10-1
Figure C1002.3.2	Turning Space Exception for Closets or Pantries	10-4
Figure C1002.5	Exceptions to Door and Doorway Requirements	10-5
Figure C1002.7	Private Residence Elevators	10-6
Figure C1002.9	Operable Parts—Electrical Panelboards.	10-7
Figure C1002.10(a)	Laundry Room.	10-8
Figure C1002.10(b)	Laundry Closet	10-8

Figure C1002.10(c)	Example of Laundry Room.	10-9
Figure C1002.13	Windows.	10-10
Figure C1002.14	Examples of Kitchen Pantry Storage	10-11
Figure C1002.15	Open Bed Frame for Bed Lift	10-12
Figure C1003.9	Examples of Operable Parts	10-16
Figure C1003.10	Examples of Laundry Room.	10-17
Figure C1003.11.1	Blocking Location.	10-18
Figure 1003.11.2.4	Water Closets in Type A Units	10-21
Figure 1003.11.2.5.1	Clearance for Bathtubs in Type A Units.	10-23
Figure 1003.11.2.5.2	Standard Roll-in-type Shower Compartment in Type A Units.	10-23
Figure 1003.12.1.1	Minimum Kitchen Clearance in Type A Units.	10-24
Figure 1003.12.1.2	U-shaped Kitchen Clearance in Type A Units	10-25
Figure 1003.12.3	Work Surface in Kitchen for Type A Units	10-25
Figure C1003.12.3.1	Example of Built-in Work Surface	10-26
Figure 1003.12.4	Kitchen Sink for Type A Units	10-27
Figure C1003.12.4.1(a)	Clear Floor Space At Double Bowl Sink.	10-28
Figure C1003.12.4.1(b)	Clear Floor Space At Kitchen Sink.	10-28
Figure C1003.12.5.3(a)	Example of Access to Dishwasher.	10-29
Figure C1003.12.5.3(b)	Dishwasher Access Options	10-29
Figure C1003.12.5.4	Cooktop and Oven	10-30
Figure C1003.12.5.5	Example of a Wall Oven.	10-31
Figure C1003.12.5.6(a)	Example of Access to Refrigerator/Freezer	10-32
Figure C1003.12.5.6(b)	Refrigerator/Freezer Access Options.	10-33
Figure C1004.3.1(a)	Type B Unit - Accessible Route— Living/Dining Room With Sunken Areas.	10-35
Figure C1004.3.1(b)	Type B Unit - Accessible Route—Loft Areas	10-36
Figure C1004.4.2	Exterior Deck Change In Elevation	10-37
Figure C1004.10(a)	Laundry Room, Type B Units.	10-41
Figure C1004.10(b)	Laundry Closet, Type B Units	10-41
Figure C1004.10(c)	Clear Floor Space Arrangement and Location.	10-41
Figure C1004.11.1(a)	Type B Units Only, Section 604.5.1, Exception 2	10-43
Figure C1004.11.1(b)	Type B Unit, Only, Option A Bathroom With Swing-Up Grab Bar	10-44
Figure 1004.11.1.1	Swing-Up Grab Bar for Water Closet.	10-45
Figure C1004.11.1.1	Swing-Up Grab Bar for Water Closet.	10-45
Figure C1004.11.3.1(a)	Type B Dwelling Unit Option A Bathrooms	10-46
Figure C1004.11.3.1(b)	Clearance Requirement for Option A Bathroom with Multiple Lavatories	10-47
Figure C1004.11.3.1(c)	Multiple Lavatories	10-47
Figure 1004.11.3.1.1	Lavatory in Type B Units – Option A Bathrooms	10-48
Figure 1004.11.3.1.2	Clearance at Water Closets in Type B Units	10-48

Figure 1004.11.3.1.3.1	Parallel Approach Bathtub in Type B Units– Option A Bathrooms	10-51
Figure 1004.11.3.1.3.2	Forward Approach Bathtub in Type B Units– Option A Bathrooms	10-51
Figure C1004.11.3.1.3.2	Type B Units, Option A Bathrooms, Forward Approach Bathtub, Permitted Overlap.	10-51
Figure 1004.11.3.1.3.3	Transfer-type Shower Compartment in Type B Units	10-52
Figure C1004.11.3.2	Type B Dwelling Unit Option B Bathroom	10-53
Figure 1004.11.3.2.1	Lavatory in Type B Units – Option B Bathrooms.	10-53
Figure 1004.11.3.2.3.1	Bathroom Clearance in Type B Units – Option B Bathrooms .	10-54
Figure 1004.12.1.1	Minimum Kitchen Clearance in Type B Units	10-55
Figure 1004.12.1.2	U-shaped Kitchen Clearance in Type B Units.	10-55
Figure C1004.12.2.1	Clear Floor Space at Double Bowl Sink	10-56
Figure C1004.12.2.2	Dishwasher Access Options	10-56
Figure C1004.12.2.3.3	Range Access Options	10-57
Figure C1004.12.2.5	Refrigerator/Freezer Access Options	10-58
Chapter 11. Recreational Facilities.		11-1
Figure C1101.2.1(a)	Water Slides	11-2
Figure C1101.2.1(b)	Zoo	11-2
Figure C1101.2.1(c)	Bowling Lanes.	11-2
Figure C1101.2.1(d)	Bumper Cars	11-2
Figure C1101.2.2	Area of Sports Activity Examples	11-3
Figure C1101.2.3	Example of Boat Cleat	11-4
Figure C1102	Example of Amusement Ride	11-4
Figure C1102.4.3	Allowable Gap and Alternative Methods.	11-6
Figure C1102.4.4.1	Allowable Protrusions Into Wheelchair Spaces.	11-6
Figure 1102.4.4.3	Protrusions in Wheelchair Spaces in Amusement Rides	11-7
Figure C1102.5	Ride Seat Designed for Transfer.	11-8
Figure C1102.5.3	Options for Transfer Devices and Size of Transfer Entry	11-8
Figure C1103	Example of Boat Slips.	11-9
Figure C1103.2.1(a)	Example of Gangway	11-10
Figure C1103.2.1(b)	Transition Plate	11-10
Figure 1103.3.1(a)	Boat Slip Clearance	11-12
Figure 1103.3.1(b)	(Exception 1) Clear Pier Space Reduction at Boat Slips	11-12
Figure 1103.3.1(c)	(Exception 2) Edge Protection at Boat Slips	11-13
Figure C1103.3.1(a)	Opening Clearance Along Accessible Boarding Area.	11-13
Figure C1103.3.1(b)	Clear Width Along Pier at Accessible Boardwalk Areas	11-13
Figure C1103.3.1(c)	Edge Protection Along Pier at Accessible Boarding	11-14
Figure 1103.3.2(a)	Boarding Pier Clearance	11-14
Figure 1103.3.2(b)	(Exception 1) Clear Pier Space Reduction at Boarding Piers.	11-15
Figure 1103.3.2(c)	(Exception 2) Edge Protection at Boarding Piers	11-15

Figure C1104	Example of Exercise Equipment	11-16
Figure C1105(a), (b) and (c)	Example of Fishing Piers	11-17
Figure C1105.1(a) and (b)	Example of Accessible Routes Fishing to Piers.	11-18
Figure C1105.2	Example of Fishing Pier Without Guards	11-18
Figure C1105.3.1(a), (b), (c)	Example of Railing and Edge Protection at Accessible Fishing Locations	11-19
Figure 1105.3.2	Extended Ground or Deck Surface at Fishing Piers and Platforms	11-20
Figure C1105.3.2	12-inch Deck Extension Without Edge Protection	11-20
Figure C1106(a)	Example of a Golf Course	11-21
Figure C1106(b)	Example of a Accessible Golf Cart.	11-21
Figure C1106.2(a)	Golf Cart Rental	11-22
Figure C1106.2(b)	Practice Putting Green.	11-22
Figure C1106.2(c)	Golf Tee	11-22
Figure C1106.2(d)	Golf Green	11-22
Figure C1106.2(e)	Driving Range	11-22
Figure C1106.2(f)	Bag Drop Areas	11-22
Figure C1106.3.2	Course Barriers	11-23
Figure C1106.4	Weather Shelters	11-23
Figure C1107(a) and (b)	Examples of Miniature Golf	11-23
Figure C1107.2(a)	(Exception 2) Accessible Route on Playing Surface with Opening Onto Adjacent Accessible Route	11-24
Figure C1107.2(b)	(Exceptions 3-5) Accessible Route on the Playing Surface.	11-24
Figure C1107.3.1(a)	Start of Play Area Orientation	11-25
Figure C1107.3.1(b)	Alternate Start of Play Area Orientation.	11-25
Figure 1107.3.2	Golf Club Reach Range Area.	11-25
Figure C1107.3.2(a)	Examples of Golf Club Reach Ranges on Playing Surface	11-26
Figure C1107.3.2(b)	Accessible Routes Adjacent to Playing Surface	11-26
Figure C1108.2.2	Soft Contained Play Structures	11-26
Figure C1108	Examples of Playgrounds	11-27
Table 1108.3.2.1.2	Number and Types of Ground Level Play Components Required to be on Accessible Routes	11-28
Figure C1108.3.2.1	Examples of Ground Level Play Components	11-29
Figure C1108.3.2.2	Examples of Elevated Play Components.	11-30
Figure C1108.4.1.3	Examples of Water Play Components	11-31
Figure C1108.4.1.4.1(a)	(Exception 1) Clear Width of an Accessible Route in Play Areas Less Than 1000 Square Feet.	11-32
Figure C1108.4.1.4.1(b)	(Exception 2) Clear Width of an Accessible Route in Play Areas at Ground level.	11-32
Figure C1108.4.1.4.2	(Exception 1) Clear Width of an Accessible Route in Elevated Play Areas.	11-33
Figure C1108.4.1.5	Examples Of Ramps to and Within Play Structures.	11-34
Figure C1108.4.2	Examples of Transfer Systems	11-36

Figure 1108.4.2.1	Transfer Platforms	11-36
Figure 1108.4.2.2	Transfer Steps	11-37
Figure C1108.4.3.1	Access to Swings	11-38
Figure C1108.4.3.3	Play Tables	11-38
Figure C1108.4.3.4	Example of Entry Points	11-38
Figure C1109	Swimming Pool	11-39
Figure C1109.1.1(a)	(Exception 2) Lazy River	11-40
Figure C1109.1.1(b)	(Exception 3) Catch Pools	11-40
Figure C1109.1.2	Wading Pool	11-40
Figure C1109.1.3	Hot Tub or Spa	11-41
Figure C1109.2	Pool Lift	11-41
Figure 1109.2.2	Pool Lift Seat Location	11-42
Figure C1109.2.2	Pool Lift-Seat Location and Clear Deck Space	11-42
Figure 1109.2.3	Clear Deck Space at Pool Lifts	11-42
Figure 1109.2.4	Pool Lift Seat Height	11-42
Figure 1109.2.8	Pool Lift Submerged Depth	11-43
Figure C1109.3(a)	Sloped Entry in a Swimming Pool	11-43
Figure C1109.3(b)	Sloped Entry at a Lazy River	11-43
Figure C1109.3(c)	Wheelchair for Pool Access	11-44
Figure C1109.3.1	Sloped Entry at Ramp	11-45
Figure 1109.3.2	Sloped Entry Submerged Depth	11-45
Figure 1109.3.3	Handrails for Sloped Entry	11-45
Figure C1109.4(a)	Transfer Wall with One Grab Bar	11-45
Figure C1109.4(b)	Transfer Wall with Two Grab Bars	11-46
Figure 1109.4.1	Clear Deck Space at Transfer Walls	11-46
Figure 1109.4.2	Transfer Wall Height	11-46
Figure 1109.4.3	Depth and Length of Transfer Wall	11-46
Figure 1109.4.5	Grab Bars for Transfer Walls	11-47
Figure C1109.5	Transfer System Platform and Steps	11-48
Figure 1109.5.1	Size of Transfer Platform	11-48
Figure 1109.5.2	Clear Deck Space at Transfer Platform	11-48
Figure C1109.5.2	Clear Deck Space Located at Transfer System	11-48
Figure 1109.5.4	Transfer Steps	11-49
Figure 1109.5.6	Size of Transfer Steps	11-49
Figure 1109.5.7	Grab Bars	11-49
Figure C1109.5.7	Continuous Grab Bar at Transfer System	11-50
Figure C1109.6	Pool Stairs	11-50
Figure C1110(a)	Archery Range	11-51
Figure C1110(b)	Covered Pistol Range	11-51
Figure C1110(c)	Rifle Range with Clay Pigeons	11-51
Figure C1110(d)	Indoor Pistol Range	11-51

Chapter 1. Application and Administration

❖ Chapter 1 provides for the general application of this document.

- Section 101 establishes the purpose of the standard.
- Section 102 establishes the basis for the technical requirements.
- Section 103 allows for alternative compliance.
- Section 104 establishes conventions used for the requirements.
- Section 105 provides a list of referenced standards.
- Section 106 includes definitions for the purpose of this document.

101 Purpose

The technical criteria in Chapters 3 through 9, Sections 1002, 1003 and 1006 and Chapter 11 of this standard make sites, facilities, buildings and elements accessible to and usable by people with such physical disabilities as the inability to walk, difficulty walking, reliance on walking aids, blindness and visual impairment, deafness and hearing impairment, incoordination, reaching and manipulation disabilities, lack of stamina, difficulty interpreting and reacting to sensory information, and extremes of physical size. The intent of these sections is to allow a person with a physical disability to independently get to, enter, and use a site, facility, building, or element.

Section 1004 of this standard provides criteria for Type B units. These criteria are intended to be consistent with the intent of the criteria of the U.S. Department of Housing and Urban Development (HUD) *Fair Housing Accessibility Guidelines*. The Type B units are intended to supplement, not replace, Accessible units or Type A units as specified in this standard.

Section 1005 of this standard provides criteria for minimal accessibility features for one and two family dwelling units and townhouses which are not covered by the U.S. Department of Housing and Urban Development (HUD) *Fair Housing Accessibility Guidelines*.

This standard is intended for adoption by government agencies and by organizations setting model codes to achieve uniformity in the technical design criteria in building codes and other regulations.

❖ Independence for persons with physical and sensory disabilities is a primary goal of this standard. It is essential that accessibility into and throughout buildings and facilities be part of the initial design process. ICC A117.1 provides details, dimensions and specifications to help building designers develop their plans so that the facility will offer unobstructed entry and ease of use to all users with disabilities.

The technical specifications in this standard are intended to create elements and spaces that can be used independently by persons with disabilities. The requirements are based on anthropometrics for an average adult male, and may not be appropriate for all applications (see commentary, Section 102).

The intent is to serve as wide a spectrum of persons with disabilities as possible, based on currently available knowledge and experience. Because needs and capabilities vary from individual to individual, it is not possible to set technical criteria that would permit independent use by all persons with disabilities. For example, not everyone is able to transfer from a wheelchair to a water closet, even though the clearances necessary for such a transfer satisfy this standard. Criteria contained in the standard are based on the best information and research available to the A117.1 Standard Review Committee during the process of review and update. The committee welcomes results of recent research from all interested and affected parties.

For dwelling units and sleeping units, the Standard provides four distinct sets of criteria: Accessible units, Type A units, Type B units and Type C units. The requirements in Section 1004 for Type B dwelling units and sleeping units are technical criteria that are consistent with the requirements of the Fair Housing Act. For additional information, see the commentary to Chapter 10.

Understanding and consistency in the application of the criteria throughout the country would be of immeasurable value to the person with a disability, as well as building regulators, designers and owners, and the community in general. Consistency would result in a greater level of comfort for a person with a disability in his or her daily activities. A person with a disability would know what to expect within a facility instead of finding new obstacles to overcome in each situation. There are many accessibility features that benefit not only people with disabilities, but also are a tangible benefit to people without disabilities.

101.1 Applicability. Sites, facilities, buildings, and elements required to be accessible shall comply with the applicable provisions of Chapters 3 through 9 and Chapter 11. Dwelling units and sleeping units shall comply with the applicable provisions of Chapter 10.

❖ Criteria are established for individual building spaces and elements. These accessible spaces and elements are intended to combine to provide accessibility throughout a building and related site facilities. General criteria, such as the minimum width of an accessible route, can apply to different building or site elements, including sidewalks, corridors and aisles. Other criteria are provided for specific elements such as drinking fountains, water closets, sinks and lavatories.

Specifics are provided for Accessible, Type A, Type B and Type C dwelling units and sleeping units in Chapter 10.