

ICC A117.1-2009 STANDARD AND COMMENTARY ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES



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STANDARD AND COMMENTARY
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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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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.

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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.

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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.