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2009 International Building Code®

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PREFACE

Introduction

Internationally, code officials recognize the need for a modern, up-to-date building code addressing the design and installation of building systems through requirements emphasizing performance. The *International Building Code*[®], in this 2009 edition, is designed to meet these needs through model code regulations that safeguard the public health and safety in all communities, large and small.

This comprehensive building code establishes minimum regulations for building systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new building designs. This 2009 edition is fully compatible with all the *International Codes*[®] (I-Codes[®]) published by the International Code Council (ICC)[®], including the *International Energy Conservation Code*[®], *International Existing Building Code*[®], *International Fire Code*[®], *International Fuel Gas Code*[®], *International Mechanical Code*[®], *ICC Performance Code*[®], *International Plumbing Code*[®], *International Private Sewage Disposal Code*[®], *International Property Maintenance Code*[®], *International Residential Code*[®], *International Wildland-Urban Interface Code*[™] and *International Zoning Code*[®].

The *International Building Code* provisions provide many benefits, among which is the model code development process that offers an international forum for building professionals to discuss performance and prescriptive code requirements. This forum provides an excellent arena to debate proposed revisions. This model code also encourages international consistency in the application of provisions.

Development

The first edition of the *International Building Code* (2000) was the culmination of an effort initiated in 1997 by the ICC. This included five drafting subcommittees appointed by ICC and consisting of representatives of the three statutory members of the International Code Council at that time, including: Building Officials and Code Administrators International, Inc. (BOCA), International Conference of Building Officials (ICBO) and Southern Building Code Congress International (SBCCI). The intent was to draft a comprehensive set of regulations for building systems consistent with and inclusive of the scope of the existing model codes. Technical content of the latest model codes promulgated by BOCA, ICBO and SBCCI was utilized as the basis for the development, followed by public hearings in 1997, 1998 and 1999 to consider proposed changes. This 2009 edition presents the code as originally issued, with changes reflected in the 2003 and 2006 editions and further changes approved through the ICC Code Development Process through 2008. A new edition such as this is promulgated every 3 years.

This code is founded on principles intended to establish provisions consistent with the scope of a building code that adequately protects public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

Adoption

The *International Building Code* 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. At the time of adoption, jurisdictions should insert the appropriate information in provisions requiring specific local information, such as the name of the adopting jurisdiction. These locations are shown in bracketed words in small capital letters in the code and in the sample ordinance. The sample adoption ordinance on page xv addresses several key elements of a code adoption ordinance, including the information required for insertion into the code text.

Maintenance

The *International Building Code* is kept up to date through the review of proposed changes submitted by code enforcing officials, industry representatives, design professionals and other interested parties. Proposed changes are carefully considered through an open code development process in which all interested and affected parties may participate.

The contents of this work are subject to change both through the Code Development Cycles and the governmental body that enacts the code into law. For more information regarding the code development process, contact the Code and Standard Development Department of the International Code Council.

While the development procedure of the *International Building Code* assures the highest degree of care, ICC, its members and those participating in the development of this code do not accept any liability resulting from compliance or noncompliance with the provisions because ICC does not have the power or authority to police or enforce compliance with the contents of this code. Only the governmental body that enacts the code into law has such authority.

Letter Designations in Front of Section Numbers

In each code development cycle, proposed changes to the code are considered at the Code Development Hearings by the applicable ICC Code Development Committee, whose action constitutes a recommendation to the voting membership for final action on the proposed change. Proposed changes to a code section that has a number beginning with a letter in brackets are considered by a different code development committee. For example, proposed changes to code sections that have [F] in front of them (e.g., [F] 903.1.1.1) are considered by the ICC Fire Code Development Committee at the code development hearings.

The content of sections in this code that begin with a letter designation are maintained by another code development committee in accordance with the following:

[E] = International Energy Conservation Code Development Committee;

[EB] = International Existing Building Code Development Committee;

[F] = International Fire Code Development Committee;

[FG] = International Fuel Gas Code Development Committee;

[M] = International Mechanical Code Development Committee; and

[P] = International Plumbing Code Development Committee.

Marginal Markings

Solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the 2006 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.

Chapter 7 user note: Chapter 7 of the code has been reorganized from the 2006 edition as a result of an approved code change proposal. This proposal renumbered what was Section 714 in the 2006 edition to Section 704 in this edition, which in turn resulted in renumbering Sections 704 through 713 in the 2006 edition to Sections 705 through 714 in this edition. Marginal markings are included at each section number but have not been included to reflect the subsection renumbering.

Coordination between the International Building and Fire Codes

Because the coordination of technical provisions is one of the benefits of adopting the ICC family of model codes, users will find the ICC codes to be a very flexible set of model documents. To accomplish this flexibility some technical provisions are duplicated in some of the model code documents. While the International Codes are provided as a comprehensive set of model codes for the built environment, documents are occasionally adopted as a stand-alone regulation. When one of the model documents is adopted as the basis of a stand-alone code, that code should provide a complete package of requirements with enforcement assigned to the entity for which the adoption is being made.

The model codes can also be adopted as a family of complimentary codes. When adopted together there should be no conflict of any of the technical provisions. When multiple model codes are adopted in a jurisdiction it is important for the adopting authority to evaluate the provisions in each code document and determine how and by which agency(ies) they will be enforced. It is important, therefore, to understand that where technical provisions are duplicated in multiple model documents that enforcement duties must be clearly assigned by the local adopting jurisdiction. ICC remains committed to providing state-of-the-art model code documents that, when adopted locally, will reduce the cost to government of code adoption and enforcement and protect the public health, safety and welfare.

Italicized Terms

Selected terms set forth in Chapter 2, Definitions, are italicized where they appear in code text (except those in Sections 1903 through 1908 where italics indicate provisions that differ from ACI 318). Such terms are not italicized where the definition set forth in Chapter 2 does not impart the intended meaning in the use of the term. The terms selected have definitions which the user should read carefully to facilitate better understanding of the code.

Effective Use of the International Building Code

The *International Building Code*® (IBC®) is a model code that provides minimum requirements to safeguard the public health, safety and general welfare of the occupants of new and existing buildings and structures. The IBC is fully compatible with the ICC family of codes, including: *International Energy Conservation Code*® (IECC®), *International Existing Building Code*® (IEBC®), *International Fire Code*® (IFC®), *International Fuel Gas Code*® (IFGC®), *International Mechanical Code*® (IMC®), *ICC Performance Code*® (ICCPC®), *International Plumbing Code*® (IPC®), *International Private Sewage Disposal Code*® (IPSDC®), *International Property Maintenance Code*® (IPMC®), *International Residential Code*® (IRC®), *International Wildland-Urban Interface Code*™ (IWUIC®) and *International Zoning Code*® (IZC®).

The IBC addresses structural strength, means of egress, sanitation, adequate lighting and ventilation, accessibility, energy conservation and life safety in regards to new and existing buildings, facilities and systems. The codes are promulgated on a 3-year cycle to allow for new construction methods and technologies to be incorporated into the codes. Alternative materials, designs and methods not specifically addressed in the code can be approved by the code official where the proposed materials, designs or methods comply with the intent of the provisions of the code (see Section 104.11).

The IBC applies to all occupancies, including one- and two-family dwellings and townhouses that are not within the scope of the IRC. The IRC is referenced for coverage of detached one- and two-family dwellings and townhouses as defined in the Exception to Section 101.2 and the definition for “townhouse” in Chapter 2. The IBC applies to all types of buildings and structures unless exempted. Work exempted from permits is listed in Section 105.2.

Arrangement and Format of the 2009 IBC

Before applying the requirements of the IBC, it is beneficial to understand its arrangement and format. The IBC, like other codes published by ICC, is arranged and organized to follow sequential steps that generally occur during a plan review or inspection.

Chapters	Subjects
1–2	Administration and definitions
3	Use and occupancy classifications
4, 31	Special requirements for specific occupancies or elements
5–6	Height and area limitations based on type of construction
7–9	Fire resistance and protection requirements
10	Requirements for evacuation
11	Specific requirements to allow use and access to a building for persons with disabilities
12–13, 27–30	Building systems, such as lighting, HVAC, plumbing fixtures, elevators
14–26	Structural components—performance and stability
32	Encroachment outside of property lines
33	Safeguards during construction
34	Existing building allowances
35	Referenced standards
Appendices A–K	Appendices

The IBC requirements for high hazard, fire-resistance-rated construction, interior finish, fire protection systems, means of egress, emergency and standby power, and temporary structures are directly correlated with the requirements of the IFC. The following chapters/sections of the IBC are correlated to the IFC:

IBC Chapter/Section	IFC Chapter/Section	Subject
Sections 307, 414, 415	Chapters 27–44	High-hazard requirements
Chapter 7	Chapter 7	Fire-resistance-rated construction
Chapter 8	Chapter 8	Interior finish, decorative materials and furnishings
Chapter 9	Chapter 9	Fire protection systems
Chapter 10	Chapter 10	Means of egress
Chapter 27	Section 604	Standby and emergency power
Section 3103	Chapter 24	Temporary structures

The IBC requirements for smoke control systems, and smoke and fire dampers are directly correlated to the requirements of the IMC. IBC Chapter 28 is a reference to the IMC and the IFGC for chimney, fireplaces and barbeques, and all aspects of mechanical systems. The following chapters/sections of the IBC are correlated with the IMC:

IBC Chapter/Section	IMC Chapter/Section	Subject
Section 716	Section 607	Smoke and fire dampers
Section 909	Section 513	Smoke control

The IBC requirements for plumbing fixtures and toilet rooms are directly correlated to the requirements of the IPC. The following chapters/sections of the IBC are correlated with the IPC:

IBC Chapter/Section	IPC Chapter/Section	Subject
Chapter 29	Chapters 3 & 4	Plumbing fixtures and facilities

The following is a chapter-by-chapter synopsis of the scope and intent of the provisions of the *International Building Code*.

Chapter 1 Scope and Administration. Chapter 1 establishes the limits of applicability of the code and describes how the code is to be applied and enforced. Chapter 1 is in two parts, Part 1—Scope and Application (Sections 101–102) and Part 2—Administration and Enforcement (Sections 103–116). Section 101 identifies which buildings and structures come under its purview and references other ICC codes as applicable. Standards and codes are scoped to the extent referenced (see Section 102.4).

The building code is intended to be adopted as a legally enforceable document and it cannot be effective without adequate provisions for its administration and enforcement. The provisions of Chapter 1 establish the authority and duties of the code official appointed by the jurisdiction having authority and also establish the rights and privileges of the design professional, contractor and property owner.

Chapter 2 Definitions. All terms that are defined in the code are listed alphabetically in Chapter 2. Terms are defined in Chapter 2 or there is a reference to the section where the definition is located. While a defined term may be listed in one chapter or another, the meaning is applicable throughout the code.

Codes are technical documents and every word, term and punctuation mark can impact the meaning of the code text and the intended results. The code often uses terms that have a unique meaning in the code and the code meaning can differ substantially from the ordinarily understood meaning of the term as used outside of the code. Where understanding of a term’s definition is especially key to or necessary for understanding a particular code provision, the term is shown in *italics* wherever it appears in the code.

This is true only for those terms that have a meaning that is unique to the code. In other words, the generally understood meaning of a term or phrase might not be sufficient or consistent with the meaning prescribed by the code; therefore, it is essential that the code-defined meaning be known.

Definitions are deemed to be of prime importance in establishing the meaning and intent of the code text that uses the terms. The user of the code should be familiar with and consult this chapter because the definitions are essential to the correct interpretation of the code and because the user may not be aware that a term is defined.

Chapter 3 Use and Occupancy Classification. Chapter 3 provides for the classification of buildings, structures and parts thereof based on the purpose or purposes for which they are used. Section 302 identifies the groups into which all buildings, structures and parts thereof must be classified. Sections 303 through 312 identify the occupancy characteristics of each group classification. In some sections, specific group classifications having requirements in common are collectively organized such that one term applies to all. For example, Groups A-1, A-2, A-3, A-4 and A-5 are individual groups for assembly-type buildings. The general term “Group A,” however, includes each of these individual groups. Other groups include Business (B), Educational (E), Factory (F-1, F-2), High Hazard (H-1, H-2, H-3, H-4, H-5), Institutional (I-1, I-2, I-3, I-4), Mercantile (M), Residential (R-1, R-2, R-3, R-4), Storage (S-1, S-2) and Utility (U). In some occupancies, the smaller number means a higher hazard, but that is not always the case.

Defining the use of the buildings is very important as it sets the tone for the remaining chapters of the code. Occupancy works with the height, area and construction type requirements in Chapters 5 and 6, as well as the special provisions in Chapter 4, to determine “equivalent risk,” or providing a reasonable level of protection or life safety for building occupants. The determination of equivalent risk involves three interdependent considerations: (1) the level of fire hazard associated with the specific occupancy of the facility; (2) the reduction of fire hazard by limiting the floor area(s) and the height of the building based on the fuel load (combustible contents and burnable building components) and (3) the level of overall fire resistance provided by the type of construction used for the building. The greater the potential fire hazards indicated as a function of the group, the lesser the height and area allowances for a particular construction type.

Occupancy classification also plays a key part in organizing and prescribing the appropriate protection measures. As such, threshold requirements for fire protection and means of egress systems are based on occupancy classification (see Chapters 9 and 10). Other sections of the code also contain requirements respective to the classification of building groups. For example, Section 706 deals with requirements for fire wall fire-resistance ratings that are tied to the occupancy classification of a building and Section 803.9 contains interior finish requirements that are dependent upon the occupancy classification. The use of the space, rather than the occupancy of the building is utilized for determining occupant loading (Section 1004) and live loading (Section 1607).

Chapter 4 Special Detailed Requirements Based On Use and Occupancy. Chapter 4 contains the requirements for protecting special uses and occupancies, which are supplemental to the remainder of the code. Chapter 4 contains provisions that may alter requirements found elsewhere in the code; however, the general requirements of the code still apply unless modified within the chapter. For example, the height and area limitations established in Chapter 5 apply to all special occupancies unless Chapter 4 contains height and area limitations. In this case, the limitations in Chapter 4 supersede those in other sections. An example of this is the height and area limitations for open parking garages given in Section 406.3.5, which supersede the limitations given in Section 503.

In some instances, it may not be necessary to apply the provisions of Chapter 4. For example, if a covered mall building complies with the provisions of the code for Group M, Section 402 does not apply; however, other sections that deal with a use, process or operation must be applied to that specific occupancy, such as stages and platforms, special amusement buildings and hazardous materials (Sections 410, 411 and 414).

The chapter includes requirements for buildings and conditions that apply to one or more groups, such as high-rise buildings, underground buildings or atriums. Special uses may also imply specific occupancies and operations, such as for Group H, hazardous materials, application of flammable finishes, drying rooms, organic coatings and combustible storage or hydrogen cutoff rooms, all of which are coordinated with the IFC. Unique consideration is taken for special use areas, such as covered mall buildings, motor-vehicle-related occupancies, special amusement buildings and aircraft-related occupancies. Special facilities within other occupancies are considered, such as stages and platforms, motion picture projection rooms and storm shelters. Finally, in order that the overall package of protection features can be easily understood, unique considerations for specific occupancies are addressed: Groups I-1, I-2, I-3, R-1, R-2, R-3 (by definition R-4), ambulatory care facilities and live/work units.

Chapter 5 General Building Heights and Areas. Chapter 5 contains the provisions that regulate the minimum type of construction for area limits and height limits based on the occupancy of the building. Height and area increases (including allowances for basements, mezzanines and equipment platforms) are permitted based on open frontage for fire department access, and the type of sprinkler protection provided and separation (Sections 503–506, 509). These thresholds are reduced for buildings over three stories in height in accordance with Section 506.4.1. Provisions include the protection and/or separation of incidental accessory occupancies (Table 508.2.5), accessory occupancies (Sections 508.2) and mixed uses in the same building (Sections 506.5, 508.3, 508.4 and 509). Unlimited area buildings are permitted in certain occupancies when they meet special provisions (Section 507).

Table 503 is the keystone in setting thresholds for building size based on the building's use and the materials with which it is constructed. If one then looks at Table 503, the relationship among group classification, allowable heights and areas and types of construction becomes apparent. Respective to each group classification, the greater the fire-resistance rating of structural elements, as represented by the type of construction, the greater the floor area and height allowances. The greater the potential fire hazards indicated as a function of the group, the lesser the height and area allowances for a particular construction type.

Chapter 6 Types of Construction. The interdependence of these fire safety considerations can be seen by first looking at Tables 601 and 602, which show the fire-resistance ratings of the principal structural elements comprising a building in relation to the five classifications for types of construction. Type I construction is the classification that generally requires the highest fire-resistance ratings for structural elements, whereas Type V construction, which is designated as a combustible type of construction, generally requires the least amount of fire-resistance-rated structural elements. The greater the potential fire hazards indicated as a function of the group, the lesser the height and area allowances for a particular construction type. Section 603 includes a list of combustible elements that can be part of a noncombustible building (Types I and II construction).

Chapter 7 Fire and Smoke Protection Features. The provisions of Chapter 7 present the fundamental concepts of fire performance that all buildings are expected to achieve in some form. This chapter identifies the acceptable materials, techniques and methods which proposed construction can be designed and evaluated against to determine a building's ability to limit the impact of fire. The fire-resistance-rated construction requirements within Chapter 7 provide passive resistance to the spread and effects of fire. Types of separations addressed include fire walls, fire barriers, fire partitions, horizontal assemblies, smoke barriers and smoke partitions. A fire produces heat that can weaken structural components and smoke products that cause property damage and place occupants at risk. The requirements of Chapter 7 work in unison with height and area requirements (Chapter 5), active fire detection and suppression systems (Chapter 9) and occupant egress requirements (Chapter 10) to contain a fire should it occur while helping ensure occupants are able to safely exit.

Chapter 8 Interior Finishes. This chapter contains the performance requirements for controlling fire growth within buildings by restricting interior finish and decorative materials. Past fire experience has shown that interior finish and decorative materials are key elements in the development and spread of fire. The provisions of Chapter 8 require materials used as interior finishes and decorations to meet certain flame-spread index or flame-propagation criteria based on the relative fire hazard associated with the occupancy. As smoke is also a hazard associated with fire, this chapter contains limits on the smoke development characteristics of interior finishes. The performance of the material is evaluated based on test standards.

Chapter 9 Fire Protection Systems. Chapter 9 prescribes the minimum requirements for active systems of fire protection equipment to perform the following functions: detect a fire; alert the occupants or fire department of a fire emergency; and control smoke and control or extinguish the fire. Generally, the requirements are based on the occupancy, the height and the area of the building, because these are the factors that most affect fire-fighting capabilities and the relative hazard of a specific building or portion thereof. This chapter parallels and is substantially duplicated in Chapter 9 of the *International Fire Code* (IFC); however, the IFC Chapter 9 also contains periodic testing criteria that are not contained in the IBC. In addition, the special fire protection system requirements based on use and occupancy found in IBC Chapter 4 are duplicated in IFC Chapter 9 as a user convenience.

Chapter 10 Means of Egress. The general criteria set forth in Chapter 10 regulating the design of the means of egress are established as the primary method for protection of people in buildings by allowing timely relocation or evacuation of building occupants. Both prescriptive and performance language is utilized in this chapter to provide for a basic approach in the determination of a safe exiting system for all occupancies. It addresses all portions of the egress system (i.e., exit access, exits and exit discharge) and includes design requirements as well as provisions regulating individual components. The requirements detail the size, arrangement, number and protection of means of egress components. Functional and operational characteristics also are specified for the components that will permit their safe use without special knowledge or effort. The means of egress protection requirements work in coordination with other sections of the code, such as protection of vertical openings (see Chapter 7), interior finish (see Chapter 8), fire suppression and detection systems (see Chapter 9) and numerous others, all having an impact on life safety. Chapter 10 of the IBC is duplicated in Chapter 10 of the IFC; however, the IFC contains two additional sections on the means of egress system in existing buildings.

Chapter 11 Accessibility. Chapter 11 contains provisions that set forth requirements for accessibility of buildings and their associated sites and facilities for people with physical disabilities. The fundamental philosophy of the code on the subject of accessibility is that everything is required to be accessible. This is reflected in the basic applicability requirement (see Section 1103.1). The code's scoping requirements then address the conditions under which accessibility is not required in terms of exceptions to this general mandate. While the IBC contains scoping provisions for accessibility (e.g., what, where and how many), ICC/ANSI A117.1, *Accessible and Usable Buildings and Facilities*, is the referenced standard for the technical provisions (i.e., how).

There are many accessibility issues that not only benefit people with disabilities, but also provide a tangible benefit to people without disabilities. This type of requirement can be set forth in the code as generally applicable without necessarily identifying it

specifically as an accessibility-related issue. Such a requirement would then be considered as having been “mainstreamed.” For example, visible alarms are located in Chapter 9 and ramp requirements are addressed in Chapter 10.

Accessibility criteria for existing buildings are addressed in Section 3411. Appendix E is supplemental information included in the code to address accessibility for items in the new Americans with Disabilities Act/Architectural Barriers Act Accessibility Guidelines (ADA/ABA) that were not typically enforceable through the standard traditional building code enforcement approach system (e.g., beds, room signage). The *International Residential Code (IRC)* references Chapter 11 for accessibility provisions; therefore, this chapter may be applicable to housing covered under the IRC.

Chapter 12 Interior Environment. Chapter 12 provides minimum standards for the interior environment of a building. The standards address the minimum sizes of spaces, minimum temperature levels, and minimum light and ventilation levels. The collection of requirements addresses limiting sound transmission through walls, ventilation of attic spaces and under floor spaces (crawl spaces). Finally, the chapter provides minimum standards for walls, partitions and floors to resist water intrusion and damage in rooms such as toilet and shower facilities, where water is frequently in use.

Chapter 13 Energy Efficiency. The purpose of Chapter 13 is to provide minimum design requirements that will promote efficient utilization of energy in buildings. The requirements are directed toward the design of building envelopes with adequate thermal resistance and low air leakage, and toward the design and selection of mechanical, water heating, electrical and illumination systems that promote effective use of depletable energy resources. For the specifics of these criteria, Chapter 13 requires design and construction in compliance with the *International Energy Conservation Code (IECC)*.

Chapter 14 Exterior Walls. This chapter addresses requirements for exterior walls of buildings. Minimum standards for wall covering materials, installation of wall coverings and the ability of the wall to provide weather protection are provided. This chapter also requires exterior walls that are close to lot lines, or that are bearing walls for certain types of construction, to comply with the minimum fire-resistance ratings specified in Chapters 6 and 7. The installation of each type of wall covering, be it wood, masonry, vinyl, metal composite material or an exterior insulation and finish system, is critical to its long-term performance in protecting the interior of the building from the elements and the spread of fire. Special attention to the use of combustible materials on the exterior of the building such as balconies, eaves, decks and architectural trim is the focus of Section 1406.

Chapter 15 Roof Assemblies and Rooftop Structures. Chapter 15 provides standards for both roof assemblies as well as structures which sit on top of the roof of buildings. The criteria address roof construction and covering which includes the weather-protective barrier at the roof and, in most circumstances, a fire-resistant barrier. The chapter is prescriptive in nature and is based on decades of experience with various traditional materials. These prescriptive rules are very important for satisfying performance of one type of roof covering or another. Section 1509 addresses rooftop structures including penthouses, tanks, towers and spires. Rooftop penthouses larger than prescribed in this chapter must be treated as a story under Chapter 5.

Chapter 16 Structural Design. Chapter 16 prescribes minimum structural loading requirements for use in the design and construction of buildings and structural components. It includes minimum design loads, as well as permitted design methodologies. Standards are provided for minimum design loads (live, dead, snow, wind, rain, flood and earthquake as well as load combinations). The application of these loads and adherence to the serviceability criteria will enhance the protection of life and property. The chapter references and relies on many nationally recognized design standards. A key standard is the American Society of Civil Engineer’s *Minimum Design Loads for Buildings and Other Structures (ASCE 7)*. Structural design needs to address the conditions of the site and location. Therefore maps of rainfall, seismic, snow and wind criteria in different regions are provided.

Chapter 17 Structural Tests and Special Inspections. Chapter 17 provides a variety of procedures and criteria for testing materials and assemblies, for labeling materials and assemblies, and for special inspection of structural assemblies. This chapter expands on the requirements of Chapter 1 regarding the roles and responsibilities of the building official regarding approval of building components. It also provides additional duties and responsibilities for the owner, contractor, design professionals and special inspectors. Proper assembly of structural components, proper quality of materials used, and proper application of materials are essential to ensuring that a building, once constructed, complies with the structural and fire-resistance minimums of the code and the approved design. To determine this compliance often requires continuous or frequent inspection and testing. Chapter 17 establishes these special inspection and testing standards as well as reporting of the work to the building official.

Chapter 18 Soils and Foundations. Chapter 18 contains minimum requirements for design, construction and resistance to water intrusion of foundation systems for buildings and other structures. It provides criteria for the geotechnical and structural considerations in the selection and installation of adequate support for the loads transferred from the structure above. The uncertainties of foundation construction make it extremely difficult to address every potential failure within the text of the code. The chapter includes requirements for soils investigation and site preparation for receiving a foundation including the allowed load-bearing values for soils and for protecting the foundation from water intrusion. Section 1808 addresses the basic requirements for all foundation types. Later sections address foundation requirements that are specific to shallow foundations and deep foundations. Due care

must be exercised in the planning and design of foundation systems based on obtaining sufficient soils information, the use of accepted engineering procedures, experience and good technical judgment.

Chapter 19 Concrete. This chapter provides minimum accepted practices to the design and construction of buildings and structural components using concrete—both plain and reinforced. Chapter 19 is formatted to parallel American Concrete Institute (ACI) 318, *Building Code Requirements for Structural Concrete*. The chapter also includes references to additional standards. Structural concrete must be designed and constructed to comply with this code and all listed standards. There are specific sections of the chapter addressing concrete slabs, anchorage to concrete, shotcrete, reinforced gypsum concrete and concrete-filled pipe columns. Because of the variable properties of material and numerous design and construction options available in the uses of concrete, due care and control throughout the construction process is necessary.

Chapter 20 Aluminum. Chapter 20 contains standards for the use of aluminum in building construction. Only the structural applications of aluminum are addressed. The chapter does not address the use of aluminum in specialty products such as storefront or window framing or architectural hardware. The use of aluminum in heating, ventilating or air-conditioning systems is addressed in the *International Mechanical Code* (IMC). The chapter references national standards from the Aluminum Association for use of aluminum in building construction, AA ASM 35, *Aluminum Sheet Metal Work in Building Construction*, and AA ADM 1, *Aluminum Design Manual*. By utilizing the standards set forth, a proper application of this material can be obtained.

Chapter 21 Masonry. This chapter provides comprehensive and practical requirements for masonry construction. The provisions of Chapter 21 require minimum accepted practices and the use of standards for the design and construction of masonry structures. The provisions address: material specifications and test methods; types of wall construction; criteria for engineered and empirical designs; required details of construction including the execution of construction. Masonry design methodologies including allowable stress design, strength design and empirical design are covered by provisions of the chapter. Also addressed are masonry fire-places and chimneys, masonry heaters and glass unit masonry. Fire-resistant construction using masonry is also required to comply with Chapter 7. Masonry foundations are also subject to the requirements of Chapter 18.

Chapter 22 Steel. Chapter 22 provides the requirements necessary for the design and construction of structural steel (including composite construction), cold-formed steel, steel joists, steel cable structures and steel storage racks. The chapter specifies appropriate design and construction standards for these types of structures. It also provides a road map of the applicable technical requirements for steel structures. Steel is a noncombustible building material commonly associated with Types I and II construction; however, it is permitted to be used in all types of construction. The code requires that materials used in the design of structural steel members conform to designated national standards. Chapter 22 is involved with the design and use of steel materials using the specifications and standards of the American Institute for Steel Construction, the American Iron and Steel Institute, the Steel Joist Institute and the American Society of Civil Engineers.

Chapter 23 Wood. This chapter provides minimum guidance for the design of buildings and structures that use wood and wood-based products in their framing and fabrication. The chapter is organized around three design methodologies: allowable stress design (ASD), load and resistance-factor design (LRFD) and conventional light-frame construction. Included in the chapter are references to design and manufacturing standards for various wood and wood-based products; general construction requirements; design criteria for lateral-force-resisting systems and specific requirements for the application of the three design methods. In general, only Type III, IV or V buildings may be constructed of wood. Accordingly Chapter 23 is referenced when the combination of the occupancy (determined in Chapter 3) and the height and area of the building (determined in Chapter 5) indicate that construction can be Type III, IV or V.

Chapter 24 Glass and Glazing. This chapter establishes regulations for glass and glazing used in buildings and structures that, when installed, are subjected to wind, snow and dead loads. Engineering and design requirements are included in the chapter. Additional structural requirements are found in Chapter 16. A second concern of this chapter is glass and glazing used in areas where it is likely to have an impact on the occupants. Section 2406 identifies hazardous locations where glazing installed must either be safety glazing or blocked to prevent human impact. Safety glazing must meet stringent standards and be appropriately marked or identified. Additional standards for glass and glazing in guards, handrails, elevator hoistways and elevator cars, and in athletic facilities are provided.

Chapter 25 Gypsum Board and Plaster. Chapter 25 contains the provisions and referenced standards that regulate the design, construction and quality of gypsum board and plaster. These represent the most common interior and exterior finish materials in the building industry. This chapter primarily addresses quality-control-related issues with regard to material specifications and installation requirements. Most products are manufactured under the control of industry standards. The building official or inspector primarily needs to verify that the appropriate product is used and properly installed for the intended use and location. While often simply used as wall and ceiling coverings, proper design and application are necessary to provide weather resistance and required fire protection for both structural and nonstructural building components.

Chapter 26 Plastic. The use of plastics in building construction and components is addressed in Chapter 26. This chapter provides standards addressing foam plastic insulation, foam plastics used as interior finish and trim, and other plastic veneers used on the

inside or outside of a building. Plastic siding is regulated by Chapter 14. Sections 2606 through 2611 address the use of light-transmitting plastics in various configurations such as walls, roof panels, skylights, signs and as glazing. Requirements for the use of fiber reinforced polymers, fiberglass reinforced polymers and reflective plastic core insulation are also contained in this chapter. Some plastics exhibit rapid flame spread and heavy smoke density characteristics when exposed to fire. Additionally, exposure to the heat generated by a fire can cause some plastics to deform, which can affect their performance. The requirements and limitations of this chapter are necessary to control the use of plastic and foam plastic products such that they do not compromise the safety of building occupants.

Chapter 27 Electrical. Since electrical systems and components are an integral part of almost all structures, it is necessary for the code to address the installation of such systems. For this purpose, Chapter 27 references the *National Electrical Code* (NEC). In addition, Section 2702 addresses emergency and standby power requirements. Such systems must comply with the *International Fire Code* (IFC) and referenced standards. This section also provides references to the various code sections requiring emergency and standby power, such as high-rise buildings and buildings containing hazardous materials.

Chapter 28 Mechanical Systems. Nearly all buildings will include mechanical systems. This chapter provides references to the *International Mechanical Code* (IMC) and the *International Fuel Gas Code* (IFGC) for the design and installation of mechanical systems. In addition, the chapter references Chapter 21 of the IBC for masonry chimneys, fireplaces and barbecues.

Chapter 29 Plumbing Systems. Chapter 29 regulates the minimum number of plumbing fixtures that must be provided for every type of building. This chapter also regulates the location of the required fixtures in various types of buildings and the construction of toilet rooms. This section requires separate facilities for males and females except for certain types of small occupancies. The regulations in this chapter come directly from Chapters 3 and 4 of the *International Plumbing Code* (IPC).

Chapter 30 Elevators and Conveying Systems. Chapter 30 provides standards for the installation of elevators into buildings. Referenced standards provide the requirements for the elevator system and mechanisms. Detailed standards are provided in the chapter for hoistway enclosures, hoistway venting and machine rooms. New provisions are added in the 2009 IBC for Fire Service Access Elevators required in high-rise buildings and for the optional choice of Occupant Evacuation Elevators (see Section 403).

Chapter 31 Special Construction. Chapter 31 contains a collection of regulations for a variety of unique structures and architectural features. Pedestrian walkways and tunnels connecting two buildings are addressed in Section 3104. Membrane and air-supported structures are addressed by Section 3102. Safeguards for swimming pool safety are found in Section 3109. Standards for temporary structures, including permit requirements are provided in Section 3103. Structures as varied as awnings, marquees, signs, telecommunication and broadcast towers and automatic vehicular gates are also addressed (see Sections 3105 through 3108 and 3110).

Chapter 32 Encroachments into the Public Right-of-way. Buildings and structures from time to time are designed to extend over a property line and into the public right-of-way. Local regulations outside of the building code usually set limits to such encroachments, and such regulations take precedence over the provisions of this chapter. Standards are provided for encroachments below grade for structural support, vaults and areaways. Encroachments above grade are divided into below 8 feet, 8 feet to 15 feet, and above 15 feet, because of headroom and vehicular height issues. This includes steps, columns, awnings, canopies, marquees, signs, windows, balconies. Similar architectural features above grade are also addressed. Pedestrian walkways must also comply with Chapter 31.

Chapter 33 Safeguards During Construction. Chapter 33 provides safety requirements during construction and demolition of buildings and structures. These requirements are intended to protect the public from injury and adjoining property from damage. In addition the chapter provides for the progressive installation and operation of exit stairways and standpipe systems during construction.

Chapter 34 Existing Structures. The provisions in Chapter 34 deal with alternative methods or reduced compliance requirements when dealing with existing building constraints. This chapter allows for a controlled departure from full compliance with the technical codes, without compromising the minimum standards for fire prevention and life safety features of the rehabilitated building. Provisions are divided by addition, alterations, repairs, change of occupancy and moved structures. There are further allowances for registered historic buildings. There are also special allowances for replacement of existing stairways, replacement of glass and accessibility requirements. The fire escape requirements in Section 3406 are consistent with the fire escape requirements in Section 1030 of the *International Fire Code* (IFC).

Section 3412, *Compliance Alternatives*, allows for existing buildings to be evaluated so as to show that alterations, while not meeting new construction requirements, will improve the current existing situation. Provisions are based on a numerical scoring system involving 18 various safety parameters and the degree of code compliance for each issue.

Chapter 34 is repeated in the *International Existing Building Code* (IEBC). Sections 3402 through 3409 are repeated as IEBC Chapter 3 and Section 3410 as Chapter 13.

Chapter 35 Referenced Standards. The code contains numerous references to standards that are used to regulate materials and methods of construction. Chapter 35 contains a comprehensive list of all standards that are referenced in the code, including the appendices. The standards are part of the code to the extent of the reference to the standard (see Section 102.4). Compliance with the referenced standard is necessary for compliance with this code. By providing specifically adopted standards, the construction and installation requirements necessary for compliance with the code can be readily determined. The basis for code compliance is, therefore, established and available on an equal basis to the building code official, contractor, designer and owner.

Chapter 35 is organized in a manner that makes it easy to locate specific standards. It lists all of the referenced standards, alphabetically, by acronym of the promulgating agency of the standard. Each agency's standards are then listed in either alphabetical or numeric order based upon the standard identification. The list also contains the title of the standard; the edition (date) of the standard referenced; any addenda included as part of the ICC adoption; and the section or sections of this code that reference the standard.

Appendices. Appendices are provided in the IBC to offer optional or supplemental criteria to the provisions in the main chapters of the code. Appendices provide additional information for administration of the Department of Building Safety as well as standards not typically administered by all building departments. Appendices have the same force and effect as the first 35 chapters of the IBC only when explicitly adopted by the jurisdiction.

Appendix A Employee Qualifications. Effective administration and enforcement of the family of *International Codes* depends on the training and expertise of the personnel employed by the jurisdiction and his or her knowledge of the codes. Section 103 of the code establishes the Department of Building Safety and calls for the appointment of a building official and deputies such as plans examiners and inspectors. Appendix A provides standards for experience, training and certification for the building official and the other staff mentioned in Chapter 1.

Appendix B Board of Appeals. Section 112 of Chapter 1 requires the establishment of a board of appeals to hear appeals regarding determinations made by the building official. Appendix B provides qualification standards for members of the board as well as operational procedures of such board.

Appendix C Group U—Agricultural Buildings. Appendix C provides a more liberal set of standards for the construction of agricultural buildings, rather than strictly following the Utility building provision, reflective of their specific usage and limited occupant load. The provisions of the appendix, when adopted, allow reasonable heights and areas commensurate with the risk of agricultural buildings.

Appendix D Fire Districts. Fire districts have been a tool used to limit conflagration hazards in areas of a city with intense and concentrated development. More frequently used under the model codes which preceded the *International Building Code (IBC)*, the appendix is provided to allow jurisdictions to continue the designation and use of fire districts. Fire District standards restrict certain occupancies within the district, as well as setting higher minimum construction standards.

Appendix E Supplemental Accessibility Requirements. The Architectural and Transportation Barriers Compliance Board (U.S. Access Board) has revised and updated its accessibility guidelines for buildings and facilities covered by the Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA). Appendix E includes scoping requirements contained in the new ADA/ABA Accessibility Guidelines that are not in Chapter 11 and not otherwise mentioned or mainstreamed throughout the code. Items in the appendix deal with subjects not typically addressed in building codes (e.g., beds, room signage, transportation facilities).

Appendix F Rodentproofing. The provisions of this appendix are minimum mechanical methods to prevent the entry of rodents into a building. These standards, when used in conjunction with cleanliness and maintenance programs, can significantly reduce the potential of rodents invading a building.

Appendix G Flood-resistant Construction. Appendix G is intended to fulfill the flood-plain management and administrative requirements of the National Flood Insurance Program (NFIP) that are not included in the code. Communities that adopt the *International Building Code (IBC)* and Appendix G will meet the minimum requirements of NFIP as set forth in Title 44 of the Code of Federal Regulations.

Appendix H Signs. Appendix H gathers in one place the various code standards that regulate the construction and protection of outdoor signs. Whenever possible, the appendix provides standards in performance language, thus allowing the widest possible application.

Appendix I Patio Covers. Appendix I provides standards applicable to the construction and use of patio covers. It is limited in application to patio covers accessory to dwelling units. Covers of patios and other outdoor areas associated with restaurants, mercantile buildings, offices, nursing homes or other nondwelling occupancies would be subject to standards in the main code and not this appendix.

Appendix J Grading. Appendix J provides standards for the grading of properties. The appendix also provides standards for administration and enforcement of a grading program including permit and inspection requirements. Appendix J was originally

developed in the 1960s and used for many years in jurisdictions throughout the western states. It is intended to provide consistent and uniform code requirements anywhere grading is considered an issue.

Appendix K Administrative Provisions. Appendix K primarily provides administrative provisions for jurisdictions adopting and enforcing NFPA 70—the *National Electrical Code* (NEC). The provisions contained in this appendix are compatible with administrative and enforcement provisions contained in Chapter 1 of the IBC and the other *International Codes*. Annex H of NFPA 70 also contains administrative provisions for the NEC; however, some of its provisions are not compatible with IBC Chapter 1. Section K110 also contains technical provisions that are unique to this appendix and are in addition to technical standards of NFPA 70.

ORDINANCE

The *International Codes* are designed and promulgated to be adopted by reference by ordinance. Jurisdictions wishing to adopt the 2009 *International Building Code* as an enforceable regulation governing structures and premises should ensure that certain factual information is included in the adopting ordinance at the time adoption is being considered by the appropriate governmental body. The following sample adoption ordinance addresses several key elements of a code adoption ordinance, including the information required for insertion into the code text.

SAMPLE ORDINANCE FOR ADOPTION OF THE INTERNATIONAL BUILDING CODE ORDINANCE NO. _____

An ordinance of the [JURISDICTION] adopting the 2009 edition of the *International Building Code*, regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures in the [JURISDICTION]; providing for the issuance of permits and collection of fees therefor; repealing Ordinance No. _____ of the [JURISDICTION] and all other ordinances and parts of the ordinances in conflict therewith.

The [GOVERNING BODY] of the [JURISDICTION] does ordain as follows:

Section 1. That a certain document, three (3) copies of which are on file in the office of the [TITLE OF JURISDICTION'S KEEPER OF RECORDS] of [NAME OF JURISDICTION], being marked and designated as the *International Building Code*, 2009 edition, including Appendix Chapters [FILL IN THE APPENDIX CHAPTERS BEING ADOPTED] (see *International Building Code* Section 101.2.1, 2009 edition), as published by the International Code Council, be and is hereby adopted as the Building Code of the [JURISDICTION], in the State of [STATE NAME] for regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Building Code on file in the office of the [JURISDICTION] are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

Section 2. The following sections are hereby revised:

Section 101.1. Insert: [NAME OF JURISDICTION]

Section 1612.3. Insert: [NAME OF JURISDICTION]

Section 1612.3. Insert: [DATE OF ISSUANCE]

Section 3412.2. Insert: [DATE IN ONE LOCATION]

Section 3. That Ordinance No. _____ of [JURISDICTION] entitled [FILL IN HERE THE COMPLETE TITLE OF THE ORDINANCE OR ORDINANCES IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY DEFINITE MENTION] and all other ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 4. That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The [GOVERNING BODY] hereby declares that it would have passed this ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

Section 5. That nothing in this ordinance or in the Building Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 3 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

Section 6. That the [JURISDICTION'S KEEPER OF RECORDS] is hereby ordered and directed to cause this ordinance to be published. (An additional provision may be required to direct the number of times the ordinance is to be published and to specify that it is to be in a newspaper in general circulation. Posting may also be required.)

Section 7. That this ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect [TIME PERIOD] from and after the date of its final passage and adoption.

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CHAPTER 35

REFERENCED STANDARDS

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 102.4.

Standard reference number	Title	Referenced in code section number
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="font-size: 2em; font-weight: bold; margin-right: 10px;">AA</div> <div> <p>Aluminum Association 1525 Wilson Boulevard, Suite 600 Arlington, VA 22209</p> </div> </div>		
ADMI—05	Aluminum Design Manual: Part 1-A Specification for Aluminum Structures, Allowable Stress Design; and Part 1-B—Aluminum Structures, Load and Resistance Factor Design	1604.3.5, 2002.1
ASM 35—00	Aluminum Sheet Metal Work in Building Construction (Fourth Edition)	2002.1

Standard reference number	Title	Referenced in code section number
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="font-size: 2em; font-weight: bold; margin-right: 10px;">AAMA</div> <div> <p>American Architectural Manufacturers Association 1827 Waldon Office Square, Suite 550 Schaumburg, IL 60173</p> </div> </div>		
1402—86	Standard Specifications for Aluminum Siding, Soffit and Fascia	1404.5.1
AAMA/WDMA/CSA 101/I.S.2/A440—08	North American Fenestration Standard/Specifications for Windows, Doors and Skylights	1715.5.1, 2405.5

Standard reference number	Title	Referenced in code section number
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="font-size: 2em; font-weight: bold; margin-right: 10px;">ACI</div> <div> <p>American Concrete Institute 38800 Country Club Drive Farmington Hills, MI 48331</p> </div> </div>		
216.1—07	Standard Method for Determining Fire Resistance of Concrete and Masonry Construction Assemblies	Table 720.1(2), 721.1
318—08	Building Code Requirements for Structural Concrete	1604.3.2, 1614.3.1, 1614.4.1, 1704.3.1.3, Table 1704.3, 1704.4.1, Table 1704.4, 1708.2, 1808.8.2, Table 1808.8.2, 1808.8.5, 1808.8.6, 1810.2.4.1, 1810.3.2.1.1, 1810.3.2.1.2, 1810.3.8.3.1, 1810.3.8.3.3, 1810.3.9.4.2.1, 1810.3.9.4.2.2, 1810.3.11.1, 1901.2, 1901.3, 1901.4, 1902.1, 1903.1, 1904.1, 1904.2, 1904.3, 1904.4.1, 1904.4.2, 1904.5, 1905.1.1, 1905.2, 1905.3, 1905.4, 1905.5, 1905.6.2, 1905.6.3, 1905.6.4, 1905.6.5, 1905.7, 1905.8, 1905.9, 1905.10, 1905.11, 1905.12, 1905.13, 1906.1, 1906.2, 1906.3, 1906.4, 1907.1, 1907.2, 1907.3, 1907.4, 1907.5, 1907.6, 1907.7.1, 1907.7.2, 1907.7.3, 1907.7.4, 1907.7.5, 1907.7.6, 1907.8, 1907.9, 1907.10, 1907.11, 1907.12, 1907.13, 1908.1, 1908.1.1, 1908.1.2, 1908.1.3, 1908.1.4, 1908.1.5, 1908.1.6, 1908.1.7, 1908.1.8, 1908.1.9, 1908.1.10, 1909.1, 1909.3, 1909.4, 1909.5, 1909.6, 1912.1, 2108.3, 2205.3
530—08	Building Code Requirements for Masonry Structures	1405.5, 1405.5.2, 1405.9, 1604.3.4, 1704.5, 1704.5.1, Table 1704.5.1, 1704.5.2, 1704.5.3, Table 1704.5.3, 1807.1.6.3.2, 1808.9, 2101.2.2, 2101.2.3, 2101.2.4, 2101.2.5, 2101.2.6, 2103.1.3.6, 2106.1, 2107.1, 2107.2, 2107.3, 2107.4, 2107.5, 2108.1, 2108.2, 2108.3, 2109.1, 2109.1.1, 2109.2, 2109.2.1, 2109.3, 2110.1
530.1—08	Specifications for Masonry Structures	1405.5.1, Table 1704.5.1, Table 1704.5.3, 1807.1.6.3, 2103.8, 2103.11, 2103.12, 2103.13, 2104.1, 2104.1.1, 2104.1.2, 2104.1.3, 2104.2, 2104.3, 2104.4, 2105.2.2.1.1, 2105.2.2.1.2, 2105.2.2.1.3

REFERENCED STANDARDS

AF&PA

American Forest & Paper Association
1111 19th St, NW Suite 800
Washington, DC 20036

Standard reference number	Title	Referenced in code section number
WCD No. 4—89	Wood Construction Data—Plank and Beam Framing for Residential Buildings	2306.1.2
WFCM—01	Wood Frame Construction Manual for One- and Two-family Dwellings	1609.1.1, 1609.1.1.1, 2301.2, 2308.1, 2308.2.1
NDS—05	National Design Specification (NDS) for Wood Construction with 2005 Supplement.	721.6.3.2, 1716.1.1, 1716.1.4, 1809.12, 1810.3.2.4, Table 1810.3.2.6, 2302.1, 2304.12, 2306.1, Table 2306.2.1(1), Table 2306.2.1(2), Table 2306.3, Table 2306.6, 2307.1, 2307.1.1
AF&PA—93	Span Tables for Joists and Rafters.	2306.1.1, 2308.8, 2308.10.2, 2308.10.3
ANSI/AF&PA PWF—07	Permanent Wood Foundation Design Specification.	1805.2, 1807.1.4, 2304.9.5.2
ANSI/AF&PA SDPWS—08	Special Design Provisions for Wind and Seismic	1613.6.1, 2305.1, 2306.1, 2306.2.1, 2306.2.2, 2306.2.3, 2306.3, Table 2306.3, 2306.4, 2306.5, 2306.6, 2306.7, Table 2306.7, 2307.1, 2307.1.1

AISC

American Institute of Steel Construction
One East Wacker Drive, Suite 700
Chicago, IL 60601-18021

Standard reference number	Title	Referenced in code section number
341—05	Seismic Provisions for Structural Steel Buildings, including Supplement No. 1 dated 2005.	1613.6.2, 1707.2, 1708.3, 2205.2.1, 2205.2.2, 2205.3, 2205.3.1
360—05	Specification for Structural Steel Buildings	1604.3.3, Table 1704.3, 1704.3.3, 2203.1, 2203.2, 2205.1, 2205.3

ANSI

American Iron and Steel Institute
1140 Connecticut Avenue, 705
Suite 705
Washington, DC 20036

Standard reference number	Title	Referenced in code section number
S100—07	North American Specification for the Design of Cold-formed Steel Structural Members.	1604.3.3, 2203.1, 2203.2, 2209.1, 2210.2, 2210.4, 2210.5
S200—07	North American Standard for Cold-formed Steel Framing—General Provisions	2203.1, 2203.2, 2210.1
S210—07	North American Standard for Cold-formed Steel Framing—Floor and Roof System Design.	2210.5
S211—07	North American Standard for Cold-formed Steel Framing—Wall Stud Design	2210.4
S212—07	North American Standard for Cold-formed Steel Framing—Header Design	2210.2
S213—07	North American Standard for Cold-formed Steel Framing—Lateral Design.	2210.6
S214—07	North American Standard for Cold-formed Steel Framing—Truss Design, with Supplement 2, dated 2008.	2210.3.11
S230—07	Standard for Cold-formed Steel Framing—Prescriptive Method for One- and Two-family Dwellings, with Supplement 2, dated 2008	1609.1.1, 1609.1.1.1, 2210.7

AITC

American Institute of Timber Construction
Suite 140
7012 S. Revere Parkway
Englewood, CO 80112

Standard reference number	Title	Referenced in code section number
AITC Technical Note 7—96	Calculation of Fire Resistance of Glued Laminated Timbers.	721.6.3.3
AITC 104—03	Typical Construction Details.	2306.1
AITC 110—01	Standard Appearance Grades for Structural Glued Laminated Timber	2306.1
AITC 113—01	Standard for Dimensions of Structural Glued Laminated Timber	2306.1
AITC 117—04	Standard Specifications for Structural Glued Laminated Timber of Softwood Species.	2306.1
AITC 119—96	Standard Specifications for Structural Glued Laminated Timber of Hardwood Species	2306.1

AITC—continued

AITC 200—04	Manufacturing Quality Control Systems Manual for Structural Glued Laminated Timber	2306.1
ANSI/AITC A 190.1—07	Structural Glued Laminated Timber . . . . .	.2303.1.3, 2306.1

ALI

Automotive Lift Institute
P.O. Box 85
Courtland, NY 13045

Standard reference number	Title	Referenced in code section number
ALI ALCTV—2006	Standard for Automobile Lifts—Safety Requirements for Construction, Testing and Validation (ANSI)	3001.2

ANSI

American National Standards Institute
25 West 43rd Street, Fourth Floor
New York, NY 10036

Standard reference number	Title	Referenced in code section number
A 13.1—96 (Reaffirmed 2002)	Scheme for the Identification of Piping Systems . . . . .	.415.8.6.4
A108.1A—99	Installation of Ceramic Tile in the Wet-set Method, with Portland Cement Mortar	2103.10
A108.1B—99	Installation of Ceramic Tile, quarry Tile on a Cured Portland Cement Mortar Setting Bed with Dry-set or Latex-portland Mortar	2103.10
A108.4—99	Installation of Ceramic Tile with Organic Adhesives or Water-cleanable Tile-setting Epoxy Adhesive	2103.10.6
A108.5—99	Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex-portland Cement Mortar	2103.10.1, 2103.10.2
A108.6—99	Installation of Ceramic Tile with Chemical-resistant, Water Cleanable Tile-setting and -grouting Epoxy	2103.10.3
A108.8—99	Installation of Ceramic Tile with Chemical-resistant Furan Resin Mortar and Grout	2103.10.4
A108.9—99	Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout	2103.10.5
A108.10—99	Installation of Grout in Tilework	2103.10.7
A118.1—99	American National Standard Specifications for Dry-set Portland Cement Mortar	2103.10.1
A118.3—99	American National Standard Specifications for Chemical-resistant, Water-cleanable Tile-setting and -grouting Epoxy and Water Cleanable Tile-setting Epoxy Adhesive	2103.10.3
A118.4—99	American National Standard Specifications for Latex-portland Cement Mortar	2103.10.2
A118.5—99	American National Standard Specifications for Chemical Resistant Furan Mortar and Grouts for Tile Installation	2103.10.4
A118.6—99	American National Standard Specifications for Cement Grouts for Tile Installation	2103.10.7
A118.8—99	American National Standard Specifications for Modified Epoxy Emulsion Mortar/Grout	2103.10.5
A136.1—99	American National Standard Specifications for Organic Adhesives for Installation of Ceramic Tile	2103.10.6
A137.1—88	American National Standard Specifications for Ceramic Tile	2103.5
A208.1—99	Particleboard . . . . .	.2303.1.7, 2303.1.7.1
Z 97.1—04	Safety Glazing Materials Used in Buildings—Safety Performance Specifications and Methods of Test	2406.1.2, 2406.2, Table 2406.2(2), 2406.3.1, 2407.1, 2407.1.4.1, 2408.2.1, 2408.3, 2409.1, 2409.2, 2409.3.1

APA

APA - Engineered Wood Association
7011 South 19th
Tacoma, WA 98466

Standard reference number	Title	Referenced in code section number
APA PDS—04	Panel Design Specification . . . . .	.2306.1
APA PDS Supplement 1—90	Design and Fabrication of Plywood Curved Panels (revised 1995) . . . . .	.2306.1
APA PDS Supplement 2—92	Design and Fabrication of Plywood-lumber Beams (revised 1998) . . . . .	.2306.1
APA PDS Supplement 3—90	Design and Fabrication of Plywood Stressed-skin Panels (revised 1996) . . . . .	.2306.1
APA PDS Supplement 4—90	Design and Fabrication of Plywood Sandwich Panels (revised 1993) . . . . .	.2306.1

REFERENCED STANDARDS

APA—continued

APA PDS		
Supplement 5—95	Design and Fabrication of All-plywood Beams (revised 1995)	2306.1
EWS R540—02	Builders Tips: Proper Storage and Handling of Glulam Beams	2306.1
EWS S475—01	Glued Laminated Beam Design Tables	2306.1
EWS S560—03	Field Notching and Drilling of Glued Laminated Timber Beams	2306.1
EWS T300—05	Glulam Connection Details	2306.1
EWS X440—03	Product Guide—Glulam	2306.1
EWS X450—01	Glulam in Residential Construction—Western Edition	2306.1

APSP

The Association of Pool & Spa Professionals
2111 Eisenhower Avenue
Alexandria, VA 22314

Standard reference number	Title	Referenced in code section number
ANSI/APSP 7—06	Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins	3109.5

ASABE

American Society of Agricultural and Biological Engineers
2950 Niles Road
St. Joseph, MI 49085

Standard reference number	Title	Referenced in code section number
EP 484.2 (2003)	Diaphragm Design of Metal-clad, Post-frame Rectangular Buildings	2306.1
EP 486.1 (2000)	Shallow-post Foundation Design	2306.1
EP 559 (1997)	Design Requirements and Bending Properties for Mechanically Laminated Columns	2306.1

ASCE/SEI

American Society of Civil Engineers
Structural Engineering Institute
1801 Alexander Bell Drive
Reston, VA 20191-4400

Standard reference number	Title	Referenced in code section number
3—91	Structural Design of Composite Slabs	1604.3.3, 2209.2.1
5—08	Building Code Requirements for Masonry Structures	1405.6, 1405.6.2, 1405.10, 1604.3.4, 1704.5, 1704.5.1, Table 1704.5.1, 1704.5.2, 1704.5.3, Table 1704.5.3, 1807.1.6.3.2, 1808.9, 2101.2.2, 2101.2.3, 2101.2.4, 2101.2.5, 2101.2.6, 2103.1.3.6, 2106.1, 2107.1, 2107.2, 2107.3, 2107.4, 2107.5, 2108.1, 2108.2, 2108.3, 2109.1, 2109.1.1, 2109.2, 2109.2.1, 2109.3, 2110.1
6—08	Specification for Masonry Structures	1405.6.1, Table 1704.5.1, Table 1704.5.3, 1807.1.6.3, 2103.8, 2103.11, 2103.12, 2103.13, 2104.1, 2104.1.1, 2104.1.2, 2104.1.3, 2104.2, 2104.3, 2104.4, 2105.2.2.1.1, 2105.2.2.1.2, 2105.2.2.1.3
7—05	Minimum Design Loads for Buildings and Other Structures including Supplements No. 1 and 2, excluding Chapter 14 and Appendix 11A	Table 1504.8, 1602.1, 1604.3, 1604.8.2, 1604.10, 1605.1, 1605.2.2, 1605.3.1.2, 1605.3.2, 1607.11.1, 1608.1, 1608.2, 1609.1.1, 1609.1.1.2.1, 1609.1.1.2.2, 1609.1.2, 1609.3, 1609.4.4, 1609.5.1, 1609.5.3, 1609.6, 1609.6.1, 1609.6.1.1, 1609.6.2, Table 1609.6.2(2), 1609.6.3, 1609.6.4.1, 1609.6.4.2, 1611.2, 1612.2, 1612.4, 1613.1, 1613.2, Table 1613.5.3(1), Table 1613.5.3(2), 1613.5.6, 1613.5.6.1, 1613.5.6.2, 1613.6, 1613.6.1, 1613.6.2, 1613.6.3, 1613.6.4, 1613.6.5, 1613.6.6, 1613.6.7, 1613.7, 1702.1, 1705.3.4, 1708.1, 1708.5, 1808.3.1, 1810.3.6.1, 1810.3.9.4, 1810.3.11.2, 1810.3.12, 1908.1.1, 1908.1.2, 1908.1.9, 2205.2.1, 2205.3, 2205.3.1, 2208.1, Table 2304.6.1, Table 2306.7, Table 2308.10.1, 2404.1, 2505.1, 2505.2, 3404.4, 3404.5
8—02	Standard Specification for the Design of Cold-formed Stainless Steel Structural Members	1604.3.3, 2209.1
19—96	Structural Applications of Steel Cables for Buildings	2207.1, 2207.2
24—05	Flood Resistant Design and Construction	1203.3.2, 1612.4, 1612.5, 3001.2, G103.1, G401.3, G401.4
29—05	Standard Calculation Methods for Structural Fire Protection	721.1
32—01	Design and Construction of Frost Protected Shallow Foundations	1809.5



American Society of Mechanical Engineers
 Three Park Avenue
 New York, NY 10016-5900

Standard reference number	Title	Referenced in code section number
A17.1/CSA B44—2007	Safety Code for Elevators and Escalators	907.3.3, 911.1.5, 1007.4, 1607.8.1, 1613.6.5, 3001.2, 3001.4, 3002.5, 3003.2, 3007.1, 3008.3, 3008.12, 3008.14.1, 3411.8.2
A18.1—2005	Safety Standard for Platform Lifts and Stairway Chairlifts	1109.7, 2702.2.6, 3411.8.3
A90.1—03	Safety Standard for Belt Manlifts	3001.2
B16.18—2001 (Reaffirmed 2005)	Cast Copper Alloy Solder Joint Pressure Fittings	909.13.1
B16.22—2001 (Reaffirmed 2005)	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings	909.13.1
B20.1—2006	Safety Standard for Conveyors and Related Equipment	3001.2, 3005.3
B31.3—2004	Process Piping	415.8.6.1



ASTM International
 100 Barr Harbor Drive
 West Conshohocken, PA 19428-2959

Standard reference number	Title	Referenced in code section number
A 36/A 36M—05	Specification for Carbon Structural Steel	1810.3.2.3
A 153/A 153M—05	Specification for Zinc Coating (Hot-dip) on Iron and Steel Hardware	2304.9.5
A 240/A 240M—07	Standard Specification for Chromium and Chromium-nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications	Table 1507.4.3(1)
A 252—98 (2002)	Specification for Welded and Seamless Steel Pipe Piles	1810.3.2.3
A 283/A 283M—03	Specification for Low and Intermediate Tensile Strength Carbon Steel Plates	1810.3.2.3
A 307—04e01	Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength	1911.1
A 416/A 416M—06	Specification for Steel Strand, Uncoated Seven-wire for Prestressed Concrete.	1810.3.2.2
A 463/A 463M—05	Standard Specification for Steel Sheet, Aluminum-coated, by the Hot-dip Process.	Table 1507.4.3(2)
A 572/A 572M—07	Specification for High-strength Low-alloy Columbium-vanadium Structural Steel	1810.3.2.3
A 588/A 588M—05	Specification for High-strength Low-alloy Structural Steel with 50 ksi (345 MPa) Minimum Yield Point to 4 inches (100 mm) Thick	1810.3.2.3
A 615/A 615M—04a	Specification for Deformed and Plain Billet-steel Bars for Concrete Reinforcement.	1708.2, 1810.3.10.2
A 653/A 653M—07	Specification for Steel Sheet, Zinc-coated Galvanized or Zinc-iron Alloy-coated Galvannealed by the Hot-dip Process	Table 1507.4.3(1), Table 1507.4.3(2), 2304.9.5.1
A 690/A 690M—07	Standard Specification for High-strength Low-alloy Nickel, Copper, Phosphorus Steel H-piles and Sheet Piling with Atmospheric Corrosion Resistance for Use in Marine Environments.	1810.3.2.3
A 706/A 706M—05a	Specification for Low-alloy Steel Deformed and Plain Bars for Concrete Reinforcement	Table 1704.3, 1704.4.1, 2107.4, 2108.3
A 722/A 722M—07	Specification for Uncoated High-strength Steel Bar for Prestressing Concrete.	1810.3.10.2
A 755/A 755M—07	Specification for Steel Sheet, Metallic-coated by the Hot-dip Process and Prepainted by the Coil-coating Process for Exterior Exposed Building Products.	Table 1507.4.3(1), Table 1507.4.3(2)
A 792/A 792M—06a	Specification for Steel Sheet, 55% Aluminum-zinc Alloy-coated by the Hot-dip Process	Table 1507.4.3(1), Table 1507.4.3(2)
A 875/A 875M—06	Standard Specification for Steel Sheet Zinc-5 percent, Aluminum Alloy-coated by the Hot-dip Process.	Table 1507.4.3(2)
A 913/A 913M—04	Specification for High-strength Low-alloy Steel Shapes of Structural Quality, Produced by Quenching and Self-tempering Process (QST)	1810.3.2.3
A 924/A 924M—07	Standard Specification for General Requirements for Steel Sheet, Metallic-coated by the Hot-dip Process.	Table 1507.4.3(1)
A 992/A 992M—06a	Standard Specification for Structural Shapes	1810.3.2.3
B 42—02e01	Specification for Seamless Copper Pipe, Standard Sizes	909.13.1
B 43—98(2004)	Specification for Seamless Red Brass Pipe, Standard Sizes	909.13.1
B 68—02	Specification for Seamless Copper Tube, Bright Annealed (Metric)	909.13.1
B 88—03	Specification for Seamless Copper Water Tube.	909.13.1
B 101—02	Specification for Lead-coated Copper Sheet and Strip for Building Construction.	Table 1404.5.3, Table 1507.2.9.2, Table 1507.4.3(1)
B 209—06	Specification for Aluminum and Aluminum Alloy Steel and Plate	Table 1507.4.3(1)
B 251—02e01	Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube.	909.13.1

REFERENCED STANDARDS

ASTM—continued

B 280—03	Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service	909.13.1
B 370—03	Specification for Cold-rolled Copper Sheet and Strip for Building Construction	1404.5.2, Table 1507.2.9.2, Table 1507.4.3(1)
B 695—04	Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel.	2304.9.5.1, 2304.9.5.3
C 5—03	Specification for Quicklime for Structural Purposes	Table 2507.2
C 22/C 22M—00 (2005)e01	Specification for Gypsum	Table 2506.2
C 27—98 (2002)	Specification for Standard Classification of Fireclay and High-alumina Refractory Brick.	2111.5
C 28/C 28M—00 (2005)	Specification for Gypsum Plasters	Table 2507.2
C 31/C 31M—06	Practice for Making and Curing Concrete Test Specimens in the Field	Table 1704.4
C 33—03	Specification for Concrete Aggregates	721.3.1.4, 721.4.1.1.3
C 34—03	Specification for Structural Clay Load-bearing Wall Tile	2103.2
C 35—01(2005)	Specification for Inorganic Aggregates for Use in Gypsum Plaster	Table 2507.2
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E 2072—04	Standard Specification for Photoluminescent (Phosphorescent) Safety Markings.	1024.4
E 2273—03	Standard Test Method for Determining the Drainage Efficiency of Exterior Insulation and Finish Systems (EIFS) Clad Wall Assemblies.	1408.4.1
E 2307—04e01	Standard Test Method for Determining Fire Resistance of Perimeter Fire Barrier Systems Using Intermediate-scale, Multistory Test Apparatus.	714.4
E 2404—07a	Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Vinyl Wall or Ceiling Coverings to Assess Surface Burning Characteristics	803.1.4
E 2568—07	Standard Specification for PB Exterior Insulation and Finish Systems (EIFS)	1408.2
E 2570—07	Standard Test Method for Evaluating Water-resistive Barrier (WRB) Coatings Used Under Exterior Insulation and Finish Systems (EIFS) for EIFS with Drainage.	1408.4.1.1, 1704.12.1
E 2573—07	Standard Practice for Specimen Preparation and Mounting of Site-fabricated Stretch Systems to Assess Surface Burning Characteristics.	803.9
F 547—01	Terminology of Nails for Use with Wood and Wood-based Materials	Table 2506.2
F 1346—91 (2003)	Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs	3109.4, 3109.4.1.8
F 1667—05	Specification for Driven Fasteners: Nails, Spikes and Staples	Table 720.1(2), Table 720.1(3), 1507.2.6, 2303.6, Table 2506.2
F 2006—00 (2005)	Standard/Safety Specification for Window Fall Prevention Devices for Nonemergency Escape (Egress) and Rescue (Ingress) Windows	1405.13.2
F 2090—01a (2007)	Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms	1405.13.2
F 2200—05	Standard Specification for Automated Vehicular Gate Construction	3110.3
G 152—06	Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials	1504.6
G 154—05	Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials	1504.6
G 155—05a	Practice for Operating Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials	1504.6

AWCI

Association of the Wall and Ceiling Industry
513 West Broad Street, Suite 210
Falls Church, VA 22046

Standard reference number	Title	Referenced in code section number
12-B—98	Technical Manual 12-B Standard Practice for the Testing and Inspection of Field Applied Thin Film Intumescent Fire-resistive Materials; an Annotated Guide, First Edition	1704.13

AWPA

American Wood Protection Association
P.O. Box 361784
Birmingham, AL 35236-1784

Standard reference number	Title	Referenced in code section number
C1—03	All Timber Products—Preservative Treatment by Pressure Processes	1505.6
M4—06	Standard for the Care of Preservative-treated Wood Products	1810.3.2.4.1, 2303.1.8
U1—07	USE CATEGORY SYSTEM: User Specification for Treated Wood Except Section 6, Commodity Specification H	1403.5, Table 1507.9.6, 1807.1.4, 1807.3.1, 1809.12, 1810.3.2.4.1, 2303.1.8, 2304.11.2, 2304.11.4, 2304.11.6, 2304.11.7

AWS

American Welding Society
550 N.W. LeJeune Road
Miami, FL 33126

Standard reference number	Title	Referenced in code section number
D1.1—04	Structural Welding Code—Steel	Table 1704.3, 1704.3.1.1
D1.3—98	Structural Welding Code—Sheet Steel	Table 1704.3, 1704.3.1.2
D1.4—98	Structural Welding Code—Reinforcing Steel	Table 1704.3, 1704.3.1.3, Table 1704.4, 2107.4

BHMA

Builders Hardware Manufacturers' Association
355 Lexington Avenue, 17th Floor
New York, NY 10017-6603

Standard reference number	Title	Referenced in code section number
A 156.10—06	Power Operated Pedestrian Doors	1008.1.4.2
A 156.19—02	Standard for Power Assist and Low Energy Operated Doors	1008.1.4.2

CGSB

Canadian General Standards Board
Place du Portage 111, 6B1
11 Laurier Street
Gatineau, Quebec, Canada KIA 1G6

Standard reference number	Title	Referenced in code section number
37-GP-52M (1984)	Roofing and Waterproofing Membrane, Sheet Applied, Elastomeric	1504.7, 1507.12.2
37-GP-56M (1980)	Membrane, Modified, Bituminous, Prefabricated and Reinforced for Roofing—with December 1985 Amendment	1507.11.2
CAN/CGSB 37.54—95	Polyvinyl Chloride Roofing and Waterproofing Membrane	1507.13.2

CPA

Composite Panel Association
19465 Deerfield Avenue, Suite 306
Leesburg, VA 20176

Standard reference number	Title	Referenced in code section number
ANSI A135.4—2004	Basic Hardboard	1404.3.1, 2303.1.6

REFERENCED STANDARDS

CPA—continued

ANSI A135.5—2004	Prefinished Hardboard Paneling	2303.1.6, 2304.6.2
ANSI A135.6—1998	Hardboard Siding	1404.3.2, 2303.1.6

CPSC

Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814-4408

Standard reference number	Title	Referenced in code section number
16 CFR Part 1201(1977)	Safety Standard for Architectural Glazing Material	2406.2, Table 2406.2(1), 2406.3.1, 2407.1, 2407.1.4.1, 2408.2.1, 2408.3, 2409.1, 2409.2, 2409.3.1
16 CFR Part 1209 (1979)	Interim Safety Standard for Cellulose Insulation	719.6
16 CFR Part 1404 (1979)	Cellulose Insulation.	719.6
16 CFR Part 1500 (1991)	Hazardous Substances and Articles; Administration and Enforcement Regulations	307.2
16 CFR Part 1500.44 (2001)	Method for Determining Extremely Flammable and Flammable Solids	307.2
16 CFR Part 1507 (2001)	Fireworks Devices.	307.2
16 CFR Part 1630 (2000)	Standard for the Surface Flammability of Carpets and Rugs.	804.4.1

CSA

Canadian Standards Association
5060 Spectrum Way
Mississauga, Ontario Canada L4W 5N6

Standard reference number	Title	Referenced in code section number
101/I.S.2/A440—08	Specifications for Windows, Doors and Unit Skylights	1715.5.1, 2405.5

CSSB

Cedar Shake and Shingle Bureau
P. O. Box 1178
Sumas, WA 98295-1178

Standard reference number	Title	Referenced in code section number
CSSB—97	Grading and Packing Rules for Western Red Cedar Shakes and Western Red Shingles of the Cedar Shake and Shingle Bureau.	Table 1507.8.5, Table 1507.9.6

DASMA

Door and Access Systems Manufacturers Association International
1300 Summer Avenue
Cleveland, OH 44115-2851

Standard reference number	Title	Referenced in code section number
ANSI/DASMA 107—1997 (R2004)	Room Fire Test Standard for Garage Doors Using Foam Plastic Insulation	2603.4.1.9
108—05	Standard Method for Testing Sectional Garage Doors and Rolling Doors: Determination of Structural Performance Under Uniform Static Air Pressure Difference.	1715.5.2
115—05	Standard Method for Testing Sectional Garage Doors and Rolling Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure	1609.1.2.2

DOC

U.S. Department of Commerce
National Institute of Standards and Technology
1401 Constitution Avenue NW
Washington, DC 20230

Standard reference number	Title	Referenced in code section number
PS-1—07	Structural Plywood.	2303.1.4, 2304.6.2, Table 2304.7(4), Table 2304.7(5), Table 2306.2.1(1), Table 2306.2.1(2)
PS-2—04	Performance Standard for Wood-based Structural-use Panels	2303.1.4, 2304.6.2, Table 2304.7(5), Table 2306.2.1(1), Table 2306.2.1(2)
PS 20—05	American Softwood Lumber Standard.	1810.3.2.4, 2302.1, 2303.1.1

DOJ

U.S. Department of Justice
 950 Pennsylvania Avenue, NW
 Civil Rights Division, Disability Rights Section-NYA
 Washington, DC 20530

Standard reference number	Title	Referenced in code section number
DOJ 36 CFR Part 1192	American with Disabilities Act (ADA) Accessibility Guidelines for Transportation Vehicles (ADAAG) Department of Justice, 1991	E109.2.4

DOL

U.S. Department of Labor
 c/o Superintendent of Documents
 U.S. Government Printing Office
 Washington, DC 20402-9325

Standard reference number	Title	Referenced in code section number
29 CFR Part 1910.1000 (1974)	Air Contaminants . . . . .	.902.1

DOTn

U.S. Department of Transportation
 c/o Superintendent of Documents
 1200 New Jersey Avenue, SE
 Washington, DC 20402-9325

Standard reference number	Title	Referenced in code section number
49 CFR Parts 100-185-2005	Hazardous Materials Regulations . . . . .	.307.2
49 CFR Parts 173.137 (2005)	Shippers—General Requirements for Shipments and Packaging—Class 8—Assignment of Packing Group . . . . .	.307.2
49 CFR—1998	Specification of Transportation of Explosive and Other Dangerous Articles, UN 0335, UN 0336 Shipping Containers . . . . .	.307.2

EN

European Committee for Standardization (EN)
 Central Secretariat
 Rue de Stassart 36
 B-10 50 Brussels

Standard reference number	Title	Referenced in code section number
EN 1081-98	Resilient Floor Coverings—Determination of the Electrical Resistance . . . . .	.406.5.2

FEMA

Federal Emergency Management Agency
 Federal Center Plaza
 500 C Street S.W.
 Washington, DC 20472

Standard reference number	Title	Referenced in code section number
FIA-TB11—01	Crawlspace Construction for Buildings Located in Special Flood Hazard Areas . . . . .	.1805.1.2.1

REFERENCED STANDARDS

FM	Factory Mutual Global Research Standards Laboratories Department 1301 Atwood Avenue, P.O. Box 7500 Johnston, RI 02919	
	Standard reference number	Referenced in code section number
	4450 (1989)	Approval Standard for Class 1 Insulated Steel Deck Roofs—with Supplements through July 1992 1508.1, 2603.3, 2603.4.1.5
	4470 (1992)	Approval Standard for Class 1 Roof Covers 1504.7
	4474 (04)	Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures 1504.3.1
4880 (2005)	American National Standard for Evaluating Insulated Wall or Wall and Roof/Ceiling Assemblies, Plastic Interior Finish Materials, Plastic Exterior Building Panels, Wall/Ceiling Coating Systems, Interior and Exterior Finish Systems. 2603.4, 2603.9	

GA	Gypsum Association 810 First Street N.E. #510 Washington, DC 20002-4268	
	Standard reference number	Referenced in code section number
	GA 216—07	Application and Finishing of Gypsum Panel Products Table 2508.1, 2509.2
GA 600—06	Fire-resistance Design Manual, 18th Edition Table 720.1(1), Table 720.1(2), Table 720.1(3)	

HPVA	Hardwood Plywood Veneer Association 1825 Michael Faraday Drive Reston, VA 20190	
	Standard reference number	Referenced in code section number
HP-1—2004	Standard for Hardwood and Decorative Plywood. 2303.3, 2304.6.2	

HUD	U.S. Department of Housing and Urban Development 451 7th Street, SW Washington, DC 20410	
	Standard reference number	Referenced in code section number
HUD 24 CFR Part 3280 (1994)	Manufactured Home Construction and Safety Standards. G201	

ICC	International Code Council, Inc. 500 New Jersey Ave, NW 6th Floor Washington, DC 20001	
	Standard reference number	Referenced in code section number
	ICC/ANSI A117.1—03	Accessible and Usable Buildings and Facilities 406.2.2, 907.5.2.3.4, 1007.9, 1010.1, 1010.6.5, 1010.9, 1011.3, 1022.8, 1101.2, 1102.1, 1104.4, 1106.7, 1107.2, 1108.2.2, 1108.2.3, 1108.4.1.1, 1108.4.1.2, 1108.4.1.4, 1108.4.1.5, 1109.1, 1109.2, 1109.2.1.1, 1109.2.2, 1109.2.3, 1109.3, 1109.4, 1109.8, 1109.13, 2902.4, 3001.3, 3008.13.1, 3008.13.2, 3411.6, 3411.8.2, 3411.8.3, E101.2, E104.2, E104.2.1, E104.3, E104.3.4, E105.1, E105.2.1, E105.2.2, E105.3, E105.4, E105.6, E106.2, E106.3, E106.4, E106.4.9, E106.5, E107.2, E107.3, E108.3, E108.4, E109.2.1, E109.2.2.1, E109.2.2.2, E109.2.2.3, E109.2.3, E109.2.5, E109.2.6, E109.2.8, E110.2, E110.4
	ICC 300—07	ICC Standard on Bleachers, Folding and Telescopic Seating and Grandstands 1028.1.1, Table 1607.1, 3401.1
	ICC 400—07	Standard on Design and Construction of Log Structures 2301.2
	ICC 500—08	ICC/NSSA Standard on the Design and Construction of Storm Shelters 423.1, 423.2
	ICC 600—08	Standard for Residential Construction in High Wind Regions. 1609.1.1, 1609.1.1.1, 2308.2.1
	IEBC—09	International Existing Building Code® 3401.5
	IECC—09	International Energy Conservation Code® 101.4.6, 1203.3.2, 1301.1.1

ICC—continued

IFC—09	International Fire Code®	101.4.5, 102.6, 201.3, 307.1, Table 307.1(1), Table 307.1(2), 307.1.1, 307.2, 403.4.4, 404.2, 406.5.1, 406.6.1, 410.3.6, 411.1, 412.1, 412.6.1, 413.1, 414.1.1, 414.1.2, 414.1.2.1, 414.2, 414.2.5, Table 414.2.5(1), Table 414.2.5(2), 414.3, 414.5, 414.5.1, Table 414.5.1, 414.5.2, 414.5.4, 414.5.5, 414.6, 415.1, 415.2, 415.3, 415.3.1, Table 415.3.1, Table 415.3.2, 415.6, 415.6.1, 415.6.1.4, 415.6.2, 415.6.2.3, 415.6.2.5, 415.6.2.7, 415.6.2.8, 415.6.2.9, 415.6.3, 415.6.4, 415.7, 415.8.1, 415.8.2.7, 415.8.5.1, 415.8.7.2, 415.8.9.3, 415.8.10.1, 416.1, 421.1, 421.7, 507.3, 707.1, 901.2, 901.3, 901.5, 901.6.2, 903.2.7.1, Table 903.2.11.6, 903.2.12, 903.5, 904.2.1, 905.1, 905.3.6, 906.1, 907.1.8, 907.2.5, 907.2.13.2, 907.2.15, 907.2.16, 907.6.5, 907.8, 909.20, 910.2.2, 1001.3, 1203.4.2, 1203.5, 2702.1, 2702.2.9, 2702.2.11, 2702.2.12, 2702.2.13, 2702.3, 3102.1, 3103.1, 3309.2, 3401.3, 3412.3.2, 3412.6.8.1, 3412.6.14, 3412.6.14.1
IFGC—09	International Fuel Gas Code®	101.4.1, 201.3, Table 307.1(1), 415.6.3, 2113.11.1.2, 2113.15, 2801.1, 3401.3, A101.2
IMC—09	International Mechanical Code®	101.4.2, 201.3, 307.1, Table 307.1(1), 406.4.2, 406.6.3, 406.6.5, 409.3, 412.6.6, 414.1.2, 414.3, 415.6.1.4, 415.6.2, 415.6.2.8, 415.6.3, 415.6.4, 415.8.11.1, 416.3, 421.5, 603.1, 603.1.1, 603.1.2, 708.2, 716.2.2, 716.5.4, 716.6.1, 716.6.2, 716.6.3, 717.5, 719.1, 719.7, 903.2.11.4, 904.2.1, 904.11, 908.6, 909.1, 909.10.2, 1015.5, 1018.5.1, 1203.1, 1203.2.1, 1203.4.2, 1203.4.2.1, 1203.5, 1209.3, 2304.5, 2801.1, 3004.3.1, 3401.3, 3412.6.7.1, 3412.6.8, 3412.6.8.1, A101.2
IPC—09	International Plumbing Code®	101.4.3, 201.3, 415.6.4, 717.5, 903.3.5, 912.5, 1206.3.3, 1503.4, 1805.4.3, 2901.1, Table 2902.1, 3305.1, 3401.3, A101.2
IPMC—09	International Property Maintenance Code®	101.4.4, 102.6, 103.3, 3401.3, 3412.3.2
IPSDC—09	International Private Sewage Disposal Code®	101.4.3, 2901.1, 3401.3
IRC—09	International Residential Code®	101.2, 308.2, 308.5, 310.1, 2308.1, 3401.3
IWUIC—09	International Wildland-Urban Interface Code™	Table 1505.1
SBCCI SSTD 11—97	Test Standard for Determining Wind Resistance of Concrete or Clay Roof Tiles	1716.2.1, 1716.2.2

ISO

International Organization for Standardization
 ISO Central Secretariat
 1 ch, de la Voie-Creuse, Case Postale 56
 CH-1211 Geneva 20, Switzerland

Standard reference number	Title	Referenced in code section number
ISO 8115—86	Cotton Bales—Dimensions and Density	Table 415.8.2.1.1

NAAMM

National Association of Architectural Metal Manufacturers
 800 Roosevelt Road, Bldg. C, Suite 312
 Glen Ellyn, IL 60137

Standard reference number	Title	Referenced in code section number
FP 1001—97	Guide Specifications for Design of Metal Flag Poles	1609.1.1

NCMA

National Concrete Masonry Association
 13750 Sunrise Valley
 Herndon, VA 22071-4662

Standard reference number	Title	Referenced in code section number
TEK 5-84 (1996)	Details for Concrete Masonry Fire Walls	Table 720.1(2)

REFERENCED STANDARDS



National Fire Protection Association
 1 Batterymarch Park
 Quincy, MA 02169-7471

Standard reference number	Title	Referenced in code section number
10—07	Portable Fire Extinguishers	906.2, 906.3.2, 906.3.4, Table 906.3(1), Table 906.3(2)
11—05	Low Expansion Foam	904.7
12—05	Carbon Dioxide Extinguishing Systems	904.8, 904.11
12A—04	Halon 1301 Fire Extinguishing Systems	904.9
13—07	Installation of Sprinkler Systems	708.2, 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 905.3.4, 907.6.3, 1613.6.3
13D—07	Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes	903.3.1.3, 903.3.5.1.1
13R—07	Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height	903.3.1.2, 903.3.5.1.1, 903.3.5.1.2, 903.4
14—07	Installation of Standpipe and Hose System	905.2, 905.3.4, 905.4.2, 905.6.2, 905.8
16—07	Installation of Foam-water Sprinkler and Foam-water Spray Systems	904.7, 904.11
17—02	Dry Chemical Extinguishing Systems	904.6, 904.11
17A—02	Wet Chemical Extinguishing Systems	904.5, 904.11
20—07	Installation of Stationary Pumps for Fire Protection	913.1, 913.2.1, 913.5
30—08	Flammable and Combustible Liquids Code	415.3
31—06	Installation of Oil-burning Equipment	2113.15
32—07	Dry Cleaning Plants	415.6.4
40—07	Storage and Handling of Cellulose Nitrate Film	409.1
58—08	Liquefied Petroleum Gas Code	415.6.3
61—08	Prevention of Fires and Dust Explosions in Agricultural and Food Product Facilities	415.6.1
70—08	National Electrical Code	108.3, 415.8.2.8.2, 904.3.1, 907.6.1, 909.12.1, 909.16.3, 1205.4.1, 2701.1, 3401.3, H106.1, H106.2, K101, K111.1
72—07	National Fire Alarm Code	901.6, 903.4.1, 904.3.5, 907.2, 907.2.5, 907.2.11, 907.2.13.2, 907.3, 907.3.3, 907.3.4, 907.5.2.1.2, 907.5.2.2, 907.6, 907.6.1, 907.6.5, 907.7, 907.7.1, 907.7.2, 911.1.5, 3006.5, 3007.6
80—07	Fire Doors and Other Opening Protectives	410.3.5, 508.2.5.2, 715.4, 715.4.5, 715.4.6, 715.4.7.1, 715.4.8.2, 715.5, 715.5.5, 1008.1.4.3
85—07	Boiler and Combustion System Hazards Code (Note: NFPA 8503 has been incorporated into NFPA 85)	415.6.1
92B—05	Smoke Management Systems in Malls, Atria and Large Spaces	909.8
99—05	Standard for Health Care Facilities	407.9
101—06	Life Safety Code	1028.6.2
105—07	Standard for the Installation of Smoke Door Assemblies	405.4.2, 715.4.3.1, 909.20.4.1
110—05	Emergency and Standby Power Systems	2702.1
111—05	Stored Electrical Energy Emergency and Standby Power Systems	2702.1
120—04	Coal Preparation Plants	415.6.1
170—06	Standard for Fire Safety and Emergency Symbols	1024.2.6.1
211—06	Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances	2112.5
252—03	Standard Methods of Fire Tests of Door Assemblies	715.3, 715.4.1, 715.4.2, 715.4.3, 715.4.7.3.1
253—06	Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source	402.12.1, 406.6.4, 804.2, 804.3
257—07	Standard for Fire Test for Window and Glass Block Assemblies	715.3, 715.4.3.2, 715.5, 715.5.1, 715.5.2, 715.5.9.1
259—03	Test Method for Potential Heat of Building Materials	2603.4.1.10, 2603.5.3
265—07	Method of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings on Full Height Panels and Walls	803.1.3, 803.1.3.1
268—07	Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a Radiant Heat Energy Source	1406.2.1, 1406.2.1.1, 1406.2.1.2, 2603.5.7, D105.1
285—06	Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Nonload-bearing Wall Assemblies Containing Combustible Components	1407.10.4, 2603.5.5
286—06	Standard Method of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	402.16.4, 803.1.2, 803.1.2.1, 803.9, 2603.4, 2603.9
288—07	Standard Method of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire-resistance-rated Floor Systems	712.8
409—04	Aircraft Hangars	412.4.6, Table 412.4.6, 412.4.6.1, 412.6.5
418—06	Standard for Heliports	412.7.4
484—06	Combustible Metals	415.6.1

NFPA—continued

654—06	Prevention of Fire & Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids	415.6.1
655—07	Prevention of Sulfur Fires and Explosions	415.6.1
664—07	Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities	415.6.1
701—04	Standard Methods of Fire Tests for Flame-propagation of Textiles and Films	402.12.1, 410.3.6, 801.1.4, 806.1, 806.1.2, 806.2, 3102.3, 3102.3.1, 3102.6.1.1, 3105.4, D102.2.8, H106.1.1
704—07	Standard System for the Identification of the Hazards of Materials for Emergency Response	414.7.2, 415.2
1124—06	Manufacture, Transportation and Storage of Fireworks and Pyrotechnic Articles	415.3.1
2001—08	Clean Agent Fire Extinguishing Systems . . . . .	.904.10

PCI Precast Prestressed Concrete Institute
209 W. Jackson Boulevard, Suite 500
Chicago, IL 60606-6938

Standard reference number	Title	Referenced in code section number
MNL 124—89	Design for Fire Resistance of Precast Prestressed Concrete. . . . .	.721.2.3.1
MNL 128—01	Recommended Practice for Glass Fiber Reinforced Concrete Panels . . . . .	.1903.2

PTI Post-Tensioning Institute
8601 North Black Canyon Highway, Suite 103
Phoenix, AZ 85021

Standard reference number	Title	Referenced in code section number
PTI—2007	Standard Requirements for Analysis of Shallow Concrete Foundations on Expansive Soils, Third Edition . . . . .	.1808.6.2
PTI—2007	Standard Requirements for Design of Shallow Post-tensioned Concrete Foundation on Expansive Soils, Second Edition . . . . .	.1808.6.2

RMI Rack Manufacturers Institute
8720 Red Oak Boulevard, Suite 201
Charlotte, NC 28217

Standard reference number	Title	Referenced in code section number
ANSI/MH16.1—08	Specification for Design, Testing and Utilization of Industrial Steel Storage Racks . . . . .	.2208.1

SDI Steel Deck Institute
P. O. Box 25
Fox River Grove, IL 60021

Standard reference number	Title	Referenced in code section number
ANSI/NC1.0—06	Standard for Noncomposite Steel Floor Deck . . . . .	.2209.2.2, 2209.2.2.1
ANSI/RD1.0—06	Standard for Steel Roof Deck. . . . .	.2209.2.3

SJI Steel Joist Institute
1173B London Links Drive
Forest, VA 24551

Standard reference number	Title	Referenced in code section number
CJ-1.0—06	Standard Specification for Composite Steel Joists, CJ-series . . . . .	.1604.3.3, 2203.2, 2206.1
JG-1.1—05	Standard Specification for Joist Girders. . . . .	.1604.3.3, 2203.2, 2206.1
K-1.1—05	Standard Specification for Open Web Steel Joists, K-series . . . . .	.1604.3.3, 2203.2, 2206.1
LH/DLH-1.1—05	Standard Specification for Longspan Steel Joists, LH-series and Deep Longspan Steel Joists, DLH-series . . . . .	.1604.3.3, 2203.2, 2206.1

REFERENCED STANDARDS

SPRI

Single-Ply Roofing Institute
411 Waverly Oaks Road, Suite 331B
Waltham, MA 02452

Standard reference number	Title	Referenced in code section number
SPRI/ANSI/ES-1—03	Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems	1504.5
RP-4—02	Wind Design Guide for Ballasted Single-ply Roofing Systems	1504.4

TIA

Telecommunications Industry Association
2500 Wilson Boulevard
Arlington, VA 22201-3834

Standard reference number	Title	Referenced in code section number
TIA-222-G—05	Structural Standards for Steel Antenna Towers and Antenna Supporting Structures including-Addendum 1, 222-G-1, Dated 2007.	1609.1.1, 3108.1, 3108.2

TMS

The Masonry Society
3970 Broadway, Unit 201-D
Boulder, CO 80304-1135

Standard reference number	Title	Referenced in code section number
0216—97	Standard Method for Determining Fire Resistance of Concrete and Masonry Construction Assemblies	Table 720.1(2), 721.1
0302—07	Standard Method for Determining the Sound Transmission Class Rating for Masonry Walls	1207.2.1
402—08	Building Code Requirements for Masonry Structures.	1405.6, 1405.6.2, 1405.10, 1604.3.4, Table 1703.4.5.3, 1704.5, 1704.5.1, Table 1704.5.1, 1704.5.2, 1704.5.3, 1807.1.6.3.2, 1808.9, 2101.2.2, 2101.2.3, 2101.2.4, 2101.2.5, 2101.2.6, 2103.1.3.6, 2106.1, 2107.1, 2107.2, 2107.3, 2107.4, 2107.5, 2108.1, 2108.2, 2108.3, 2109.1, 2109.1.1, 2109.2, 2109.2.1, 2109.3, 2110.1
602—08	Specification for Masonry Structures.	1405.6.1, Table 1704.5.1, Table 1704.5.3, 1807.1.6.3, 2103.8, 2103.11, 2103.12, 2103.13, 2104.1, 2104.1.1, 2104.1.2, 2104.1.3, 2104.2, 2104.3, 2104.4, 2105.2.2.1.1, 2105.2.2.1.2, 2105.2.2.1.3

TPI

Truss Plate Institute
218 N. Lee Street, Suite 312
Alexandria, VA 22314

Standard reference number	Title	Referenced in code section number
TPI 1—2007	National Design Standards for Metal-plate-connected Wood Truss Construction.	2303.4.6, 2306.1

UL

Underwriters Laboratories, Inc.
333 Pflingsten Road
Northbrook, IL 60062-2096

Standard reference number	Title	Referenced in code section number
9—2000	Fire Tests of Window Assemblies—with Revisions through April 2005	715.3, 715.4.3.2, 715.5, 715.5.1, 715.5.2, 715.5.9.1
10A—98	Tin Clad Fire Doors—with Revisions through March 2003.	715.4
10B—97	Fire Tests of Door Assemblies—with Revisions through October 2001.	715.4.2
10C—98	Positive Pressure Fire Tests of Door Assemblies—with Revisions through November 2001	715.4.1, 715.4.3
14B—98	Sliding Hardware for Standard Horizontally-mounted Tin Clad Fire Doors—with Revisions through July 2000.	715.4
14C—06	Swinging Hardware for Standard Tin Clad Fire Doors Mounted Singly and in Pairs	715.4
103—01	Factory-built Chimneys, for Residential Type and Building Heating Appliances—with Revisions through June 2006	717.2.5.1
127—96	Factory-built Fireplaces—with Revisions through November 2006.	717.2.5.1, 2111.1.1

UL—continued

199E—04	Outline of Investigation for Fire Testing of Sprinklers and Water Spray Nozzles for Protection of Deep Fat Fryers . . . . .	.904.11.4.1
217—06	Single and Multiple Station Smoke Alarms—with Revisions through August 2005	907.2.11
263—03	Standard for Fire Test of Building Construction and Materials	703.2, 703.2.1, 703.2.3, 703.3, 703.5, 704.12, 705.7, 707.7, 712.3.2, 713.3.1, 713.4.1.1, 714.1, 715.2, 716.5.2, 716.5.3, 716.6.1, Table 716.6.2(1), Table 720.1(1), 1407.10.2, 2103.2, 2603.4, 2603.5.1
268—06	Smoke Detectors for Fire Protective Signaling Systems—with Revisions through January 1999	407.7, 907.2.6.2
300—05	Fire Testing of Fire Extinguishing Systems for Protection of Restaurant Cooking Areas	904.11
305—07	Panic Hardware	1008.1.10
325—02	Door, Drapery, Gate, Louver and Window Operations and Systems—with Revisions through February 2006	406.1.5, 3110.4
555—2006	Fire Dampers	716.3
555C—2006	Ceiling Dampers	716.3, 716.6.2
555S—99	Smoke Dampers—with Revisions through July 2006	716.3, 716.3.1.1
580—2006	Test for Uplift Resistance of Roof Assemblies	1504.3.1, 1504.3.2
641—95	Type L Low-temperature Venting Systems—with Revisions through August 2005	2113.11.1.4
710B—04	Recirculating Systems—with Revisions through April 2006	904.11
723—03	Standard for Test for Surface Burning Characteristics of Building Materials—with Revisions through May 2005	402.11, 402.16.4, 406.5.3, 703.4.2, 719.1, 719.4, 802.1, 803.1.1, 803.9, 806.5, 1407.9, 1407.10.1, 2303.2, 2603.3, 2603.4.1.13, 2603.5.4, 2604.2.4, 2606.4, 3105.4, D102.2.8
790—04	Standard Test Methods for Fire Tests of Roof Coverings	1505.1, 2603.6, 2610.2, 2610.3
793—03	Standards for Automatically Operated Roof Vents for Smoke and Heat—with Revisions through April 2004	910.3.1
864—03	Standards for Control Units and Accessories for Fire Alarm Systems—with Revisions through March 2006	909.12
924—06	Standard for Safety Emergency Lighting and Power Equipment	1011.4
1040—96	Fire Test of Insulated Wall Construction—with Revisions through June 2001	1407.10.3, 2603.4, 2603.9
1256—02	Fire Test of Roof Deck Construction—with Revisions through January 2007	1508.1, 2603.3, 2603.4.1.5
1479—03	Fire Tests of Through-penetration Firestops—with Revisions through April 2007	702.1, 713.3.1.2, 713.3.2, 713.4.1.1.2
1482—96	Solid-fuel-type Room Heater—with Revisions through November 2006	2112.2, 2112.5
1715—97	Fire Test of Interior Finish Material—with Revisions through March 2004	1407.10.2, 1407.10.3, 2603.4, 2603.9
1777—04	Chimney Liners	2113.11.1, 2113.19
1784—01	Air Leakage Tests of Door Assemblies—with Revisions through December 2004	708.14.1, 711.5.2, 715.4.3.1, 715.4.6.1, 715.4.6.3, 3007.4.3
1897—04	Uplift Tests for Roof Covering Systems	1504.3.1
1975—06	Fire Test of Foamed Plastics Used for Decorative Purposes	402.11, 402.12.1, 402.16.5
1994—04	Standard for Luminous Egress Path Marking Systems—with Revisions through February 2005	411.7, 1024.2.1, 1024.2.3, 1024.2.4, 1024.4
2017—2000	Standards for General-purpose Signaling Devices and Systems—with Revisions through August 2005	3109.4.1.8
2079—04	Tests for Fire Resistance of Building Joint Systems—with Revisions through March 2006	702.1, 714.3, 714.6
2200—04	Stationary Engine Generator Assemblies—with Revisions through July 2004	2702.1.1

ULC
 Underwriters Laboratories of Canada
 7 Underwriters Road
 Toronto, Ontario, Canada M1R3B4

Standard reference number	Title	Referenced in code section number
CAN/ULC S102.2—1988	Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings and Miscellaneous Materials and Assemblies—with 2000 Revisions	719.4

REFERENCED STANDARDS

USC
 United States Code
 c/o Superintendent of Documents
 U.S. Government Printing Office
 Washington, DC 20402-9325

Standard reference number	Title	Referenced in code section number
18 USC Part 1, Ch.40	Importation, Manufacture, Distribution and Storage of Explosive Materials	307.2

WDMA
 Window and Door Manufacturers Association
 1400 East Touhy Avenue #470
 Des Plaines, IL 60018

Standard reference number	Title	Referenced in code section number
AAMA/WDMA/CSA 101/I.S.2/A440—08	Specifications for Windows, Doors and Unit Skylights	1715.5.1, 2405.5

WRI
 Wire Reinforcement Institute, Inc.
 942 Main Street, Suite 300
 Hartford, CT 06103

Standard reference number	Title	Referenced in code section number
WRI/CRSI—81	Design of Slab-on-ground Foundations—with 1996 Update.	1808.6.2