



2012 IEBC[®]

CODE AND COMMENTARY

The complete IEBC with
commentary after each section



2012 IEBC[®]
2 CODE AND COMMENTARY



2012 International Existing Building Code® and Commentary

First Printing: May 2012

ISBN: 978-1-60983-069-4 (soft-cover edition)

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PRINTED IN THE U.S.A.

PREFACE

The principal purpose of the Commentary is to provide a basic volume of knowledge and facts relating to building construction as it pertains to the regulations set forth in the 2012 *International Existing Building Code*. The person who is serious about effectively designing, constructing and regulating existing buildings and structures will find the Commentary to be a reliable data source and reference to almost all components in the built environment.

Throughout all of this, strenuous effort has been made to keep the vast quantity of material accessible and its method of presentation useful. With a comprehensive yet concise summary of each section, the Commentary provides a convenient reference for regulations applicable to the construction of buildings and structures. In the chapters that follow, discussions focus on the full meaning of application and the consequences of not adhering to the code text. Illustrations and examples are provided to aid understanding; they do not necessarily illustrate the only methods of achieving code compliance.

The format of the Commentary includes the full text of each section, table and figure in the code, followed immediately by the commentary applicable to that text. At the time of printing, the Commentary reflects the most up-to-date text of the 2012 *International Existing Building Code*. As stated in the preface to the *International Existing Building Code*, the content of sections in the code that begin with a letter designation (i.e., Section [B]1301.2) are maintained by another code development committee. Each section's narrative includes a statement of its objective and intent, and usually includes a discussion about why the requirement commands the conditions set forth. Code text and commentary text are easily distinguished from each other. All code text is shown as it appears in the *International Existing Building Code*, and all commentary is indented below the code text and begins with the symbol ❖.

Readers should note that the Commentary is to be used in conjunction with the *International Existing Building Code* and not as a substitute for the code. The Commentary is advisory only; the code official alone possesses the authority and responsibility for interpreting the code.

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

The International Code Council would like to extend its thanks to Susan Gentry, Melvyn Green, Wayne Jewell, Ken Schoonover, Mark Stimac and the Structural Engineers Association of California (SEAOC) whose help as contributing authors made this document possible.

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Chapter 1: Scope and Administration

General Comments

This chapter contains provisions for the scope and application (Part 1), and the enforcement and administration (Part 2) of subsequent requirements of the code. In addition to establishing the scope of the code, Chapter 1 identifies which buildings and structures come under its purview. Part 1, Scope and Application, includes Sections 101 and 102 that specifically address the scope and application of the code. Section 101 addresses the scope of the code as it applies to existing structures undergoing repairs, alterations, change of occupancy and additions or relocation. Section 102 establishes the applicability of the code and addresses existing structures. Part 2, Administration and Enforcement, includes the balance of the provisions of Chapter 1, which are related to the administration and enforcement of the provisions of the code. Section 103 establishes the department of building safety and the appointment of department personnel. Section 104 outlines the duties and authority of the code official with regard to permits, inspections and right of entry. It also establishes the authority of the code official to approve alternative materials, used materials and modifications. Section 105 states when permits are required and establishes the procedures for the review of applications and the issuance of permits. Section 106 describes the information that must be included on the submittal documents submitted with the application. Section 107 authorizes the code official to issue permits for temporary structures and uses. Section 108 establishes requirements for a fee schedule. Section 109 includes the inspection duties of the code official or an inspection agency that has been approved by the code official. Provisions for the issuance of certificates of occupancy are detailed in Section 110. Section 111 gives the code official the authority to approve utility connections. Section 112 establishes the board of appeals and the criteria for making applications for appeal. Administrative provisions for violations are addressed in Section 113, including provisions for unlawful acts, violation notices, prosecution and penalties. Section 114 describes procedures for stop work orders. Section 115 establishes the criteria for unsafe structures and equipment, and the procedures to be followed by the code official for abatement and for notification to the responsible party. Section 116 describes the emergency measures that address structures in danger of collapse. Section 117 authorizes the code official to have structures demolished that are dangerous, unsafe, insanitary or otherwise unfit for human habitation or occupancy. Each state's building code enabling legislation, which is grounded within the police power of the

state, is the source of all authority to enact building codes. In terms of how it is used, police power is the power of the state to legislate for the general welfare of its citizens. This power enables passage of such laws as building codes. If the state legislature has limited this power in any way, the municipality may not exceed these limitations. While the municipality may not further delegate its police power (e.g., by delegating the burden of determining code compliance to the building owner, contractor or architect), it may turn over the administration of the building code to a municipal official, such as a code official, provided that sufficient criteria are given to the code official to establish clearly the basis for decisions as to whether or not a proposed building conforms to the code.

Chapter 1 is largely concerned with maintaining "due process of law" in enforcing the building performance criteria contained in the body of the code. Only through careful observation of the administrative provisions can the code official reasonably hope to demonstrate that "equal protection under the law" has been provided. While it is generally assumed that the administration and enforcement section of a code is geared toward a code official, this is not entirely true. The provisions also establish the rights and privileges of the design professional, contractor and building owner. The position of the code official is merely to review the proposed and completed work, and to determine if the construction conforms to the code requirements. The design professional is responsible for the design of a safe structure. The contractor is responsible for constructing the structure in conformance with the plans.

During the course of construction, the code official reviews the activity to ascertain that the spirit and intent of the law are being met and that the safety, health and welfare of the public will be protected. As a public servant, the code official enforces the code in an unbiased, proper manner. Every individual is guaranteed equal enforcement of the provisions of the code. Furthermore, design professionals, contractors and building owners have the right of due process for any requirement in the code.

Purpose

The code, as with any other code, is intended to be adopted as a legally enforceable document to safeguard health, safety, property and public welfare. A code cannot be effective without adequate provisions for its administration and enforcement. The code official charged with the administration and enforcement of building regulations has a great responsibility and with this responsibility comes authority. No matter how

detailed the code may be, the code official must, to some extent, exercise his or her own judgment in determining code compliance. The code official has the responsibility to establish that the homes in which the citizens of the community reside and the buildings in which they work are designed and constructed to be structurally stable, with adequate means of egress, light and ventilation, and to provide a minimum acceptable level of protection to life and property from fire.

A large number of existing buildings and structures do not comply with the current building code requirements for new construction. Although many of these buildings are potentially salvageable, rehabilitation is often cost prohibitive because they may not be able to comply with

all the requirements for new construction. At the same time, it is necessary to regulate construction in existing buildings that undergo additions, alterations, renovations, extensive repairs or change of occupancy. Such activity represents an opportunity to ensure that new construction complies with the current building codes and that existing conditions are maintained, at a minimum, to their current level of compliance or are improved as required. To accomplish this objective, and to make the rehabilitation process easier, this chapter allows for a controlled departure from full compliance with the technical codes, without compromising the minimum standards for the fire prevention and life safety features of the rehabilitated building.

PART 1—SCOPE AND APPLICATION

SECTION 101 GENERAL

[A] 101.1 Title. These regulations shall be known as the *Existing Building Code* of [NAME OF JURISDICTION], hereinafter referred to as “this code.”

❖ The purpose of this section is to identify the adopted regulations by inserting the name of the adopting jurisdiction into the code.

[A] 101.2 Scope. The provisions of the *International Existing Building Code* shall apply to the *repair, alteration, change of occupancy, addition* and relocation of *existing buildings*.

❖ This section establishes when the regulations contained in the code must be followed, whether all or in part. Something must happen (modification to an existing building or allowing an existing building or structure to become unsafe) for the code to be applicable. While such activity may not be as significant as for a new building, a fence is considered a structure and, therefore, its erection is within the scope of the code. The code is not a maintenance document requiring periodic inspections that will, in turn, result in an enforcement action, although periodic inspections are addressed by the *International Fire Code*® (IFC®).

[A] 101.3 Intent. The intent of this code is to provide flexibility to permit the use of alternative approaches to achieve compliance with minimum requirements to safeguard the public health, safety and welfare insofar as they are affected by the *repair, alteration, change of occupancy, addition* and relocation of *existing buildings*.

❖ The intent of the code is to set forth regulations that establish the minimum acceptable level to safeguard public health, safety and welfare. The intent becomes important in the application of sections such as Sections 102, 104.11 and 113, as well as any enforcement-oriented interpretive action or judgment. Like any code, the written text is subject to interpretation.

Interpretations should not be affected by economics or the potential impact on any party. The only considerations should be the protection of public health, safety and welfare.

[A] 101.4 Applicability. This code shall apply to the *repair, alteration, change of occupancy, addition* and relocation of all *existing buildings*, regardless of occupancy, subject to the criteria of Sections 101.4.1 and 101.4.2.

❖ All existing structures must comply with the provisions of the code when undergoing repair, alteration, change of occupancy, addition and relocation, subject to the criteria in Sections 101.4.1 and 101.4.2. Sections 101.4.1 and 101.4.2 contain provisions that are significantly different, based on whether or not the building has been previously occupied. Basically, if the building has not been previously occupied, it must comply with the requirements for new construction. This also applies to buildings undergoing alterations or additions.

[A] 101.4.1 Buildings not previously occupied. A building or portion of a building that has not been previously occupied or used for its intended purpose in accordance with the laws in existence at the time of its completion shall comply with the provisions of the *International Building Code* or *International Residential Code*, as applicable, for new construction or with any current permit for such occupancy.

❖ This section requires that all buildings that have not been previously occupied must comply with the *International Building Code*® (IBC®) or the *International Residential Code*® (IRC®). It also applies to any building that may have been completed and not occupied and used for its intended purpose. The building remains a new structure in terms of code compliance until such a time as it is occupied in whole or in part.

[A] 101.4.2 Buildings previously occupied. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *International Fire Code*, or the *International Property Maintenance Code*, or as

is deemed necessary by the *code official* for the general safety and welfare of the occupants and the public.

❖ This section allows for buildings that were legally occupied in part or in whole at the time the code was adopted to continue. There is a maintenance concern that is addressed by the requirement that the building comply with either the IFC or the *International Property Maintenance Code*® (IPMC®). These codes ensure that life safety systems, such as means of egress pathways and fire protection systems, are kept in place and able to protect the life and safety of the inhabitants of these existing structures.

[A] 101.5 Safeguards during construction. All construction work covered in this code, including any related demolition, shall comply with the requirements of Chapter 15.

❖ The fundamental rationale behind this section is to establish that reasonable safety precautions, in accordance with Chapter 15, be provided during all phases of construction and demolition. Chapter 15 also covers the protection of adjacent public and private properties.

[A] 101.6 Appendices. The *code official* is authorized to require rehabilitation and retrofit of buildings, structures or individual structural members in accordance with the appendices of this code if such appendices have been individually adopted.

❖ This section describes one of the more unique aspects of the code in that any appendix referenced in the code becomes a part of the code without the jurisdiction having to specifically adopt it. For example, in Chapter 7, voluntary alterations to lateral-force-resisting systems are allowed when conducted in accordance with Appendix A. Therefore, Appendix A, having been specifically referenced, is enforceable without having to be specifically adopted by the local jurisdiction. Any appendices not specifically referenced in the code must be individually adopted to be legally enforced.

[A] 101.7 Correction of violations of other codes. *Repairs* or *alterations* mandated by any property, housing, or fire safety maintenance code or mandated by any licensing rule or ordinance adopted pursuant to law shall conform only to the requirements of that code, rule, or ordinance and shall not be required to conform to this code unless the code requiring such *repair* or *alteration* so provides.

❖ This section is intended to keep the requirements of other codes or ordinances intact and separate from the requirements of the code.

SECTION 102 APPLICABILITY

[A] 102.1 General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where in any specific case different sections of this code specify different materials,

methods of construction or other requirements, the most restrictive shall govern.

❖ In cases where the code establishes a specific requirement for a certain condition, that requirement is applicable even if it is less restrictive than a general requirement elsewhere in the code. Also, the most restrictive code requirement is to apply where there may be different requirements in the code for a specific installation.

[A] 102.2 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state, or federal law.

❖ In some cases, other laws enacted by the jurisdiction, or the state or federal government may be applicable to a condition that is also governed by a requirement in the code. In such circumstances, the requirements of the code are in addition to that other law that is still in effect, although the code official may not be responsible for its enforcement.

[A] 102.3 Application of references. References to chapter or section numbers or to provisions not specifically identified by number shall be construed to refer to such chapter, section, or provision of this code.

❖ In a situation where the code may make reference to a chapter or section number or to another code provision without specifically identifying its location in the code, assume that the referenced section, chapter or provision is in the code and not in a referenced code or standard.

[A] 102.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.4.1 and 102.4.2.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing shall govern.

❖ A referenced code, standard or portion thereof is an enforceable extension of the code as if the content of the standard were included in the body of the code. For example, Section 301.1.4 references ASCE 31 in its entirety for the seismic evaluation and design of an existing building. In those cases where the code references only portions of a standard, the use and application of the referenced standard is limited to those portions that are specifically identified. For example, Item 4, Section 403.5 references structural irregularity as defined in ASCE 7. Therefore, it is only these portions of ASCE 7 that are applicable to this specific code requirement with respect to ASCE 7. Lastly, if conflicts between the requirements of the code and a referenced standard occur, the requirements of the code govern regardless of which requirement is more restrictive. The exception deals with possible conflicts between code requirements and the conditions of an equipment listing. If the code conflicts with or deviates from the conditions of the

SCOPE AND ADMINISTRATION

listing, this may or may not mean that the code violated the listing. For example, the listing for an appliance might allow a particular application of an appliance that is expressly prohibited by the code. In this case, the code has not violated the listing, but instead has simply limited the application allowed by the listing. The intent is for the highest level of safety to prevail.

[A] 102.4.1 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

❖ This section is clarifying that the code takes precedence over a referenced code or standard. As discussed in the commentary to Section 102.4, it is also important to understand the extent to which another code or standard has been referenced. This may reduce the number of possible conflicts to be addressed.

[A] 102.4.2 Conflicting provisions. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code as applicable, shall take precedence over the provisions in the referenced code or standard.

❖ Often it can be confusing when a standard is referenced in its entirety and has a similar scope but has very different or simply conflicting requirements. This section clarifies that, although that standard may address similar issues, the code will take precedence over those requirements as a whole.

[A] 102.5 Partial invalidity. In the event that any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

❖ Only invalid sections of the code (as established by the court of jurisdiction) can be set aside. This is essential to safeguard the application of the code text to situations where a provision is declared illegal or unconstitutional. This section preserves the legislative action that put the legal provisions in place.

PART 2—ADMINISTRATION AND ENFORCEMENT

SECTION 103 DEPARTMENT OF BUILDING SAFETY

[A] 103.1 Creation of enforcement agency. The Department of Building Safety is hereby created, and the official in charge thereof shall be known as the *code official*.

❖ This section creates the building department and describes its composition (see Section 109 for a discussion of the inspection duties of the department). Appendix A of the IBC contains qualifications for the employees of the building department involved in the enforcement of the code. If a jurisdiction desires to establish these qualifications for its employees, Appendix A must be specifically referenced in the adopting ordinance.

The executive official in charge of the building department is named the “code official” by this section. In actuality, the person who is in charge of the department may hold a different title, such as building commissioner, building inspector or construction official. For the purpose of the code, that person is referred to as the “code official.”

[A] 103.2 Appointment. The *code official* shall be appointed by the chief appointing authority of the jurisdiction.

❖ This section establishes the code official as an appointed position of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *code official* shall have the authority to appoint a deputy *code official*, the related technical officers, inspectors, plan examiners, and other employees. Such employees shall have powers as delegated by the *code official*.

❖ This section provides the code official with the authority to appoint other individuals to assist with the administration and enforcement of the code. These individuals have the authority and responsibility as designated by the code official. Such appointments, however, may be exercised only with the authorization of the chief appointing authority.

SECTION 104 DUTIES AND POWERS OF CODE OFFICIAL

[A] 104.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies, and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

❖ The duty of the code official is to enforce the code, and he or she is the “authority having jurisdiction” for all matters relating to the code and its enforcement. It is the duty of the code official to interpret the code and to determine compliance. Code compliance will not always be easy to determine and will require judgement and expertise, particularly when enforcing the provisions of Sections 104.10 and 104.11. In exercising this authority, however, the code official cannot set aside or ignore any provision of the code.

[A] 104.2 Applications and permits. The *code official* shall receive applications, review construction documents, and issue permits for the *repair, alteration, addition, demolition, change of occupancy*, and relocation of buildings; inspect the premises for which such permits have been issued; and enforce compliance with the provisions of this code.

❖ The code enforcement process is normally initiated with an application for a permit. The code official is responsible for processing applications and issuing