NEW DESIGN FOR THE 2024 INTERNATIONAL CODES

The 2024 International Codes® (I-Codes®) have undergone substantial formatting changes as part of the digital transformation strategy of the International Code Council® (ICC®) to improve the user experience. The resulting product better aligns the print and PDF versions of the I-Codes with the ICC’s Digital Codes® content.

The changes, promoting a cleaner, more modern look and enhancing readability and sustainability, include:

- Single-column text
- Modernized font styles
- Shading for table headers and notes
- Consistent grouping of associated content (e.g., tables immediately follow parent sections)
- Streamlined lists
- QR codes to identify code changes more accurately
  (For further details, see Formatting Changes to the 2024 International Codes.)
- Modernized font styles

More information can be found at iccsafe.org/design-updates.
PREFACE

FORMATTING CHANGES TO THE 2024 INTERNATIONAL CODES

The 2024 International Codes® (I-Codes®) have undergone substantial formatting changes as part of the digital transformation strategy of the International Code Council® (ICC®) to improve the user experience. The resulting product better aligns the print and PDF versions of the I-Codes with the ICC’s Digital Code content. Additional information can be found at iccsafe.org/design-updates.

Replacement of Marginal Markings with QR Codes

Through 2021, print editions of the I-Codes identified technical changes from prior code cycles with marginal markings [solid vertical lines for new text, deletion arrows ( ), asterisks for relocations (*)]. The 2024 I-Code print editions replace the marginal markings with QR codes to identify code changes more precisely.

A QR code is placed at the beginning of any section that has undergone technical revision. If there is no QR code, there are no technical changes to that section.

In the following example from the 2024 International Existing Building Code® (IEBC®), a QR code indicates there are changes to Section 101 from the 2021 IEBC. Note that the change may occur in the main section or in one or more subsections of the main section.

To see the code changes, the user need only scan the QR code with a smart device. If scanning a QR code is not an option, changes can be accessed by entering the 7-digit code beneath the QR code at the end of the following URL: qr.iccsafe.org/ (in the above example, “qr.iccsafe.org/2823a0f”). Those viewing the code book via PDF can click on the QR code.

All methods take the user to the appropriate section on ICC’s Digital Codes website, where technical changes from the prior cycle can be viewed. Digital Codes Premium subscribers who are logged in will be automatically directed to the Premium view. All other users will be directed to the Digital Codes Basic free view. Both views show new code language in blue text along with deletion arrows for deleted text and relocation markers for relocated text.

Digital Codes Premium offers additional ways to enhance code compliance research, including revision histories, commentary by code experts and an advanced search function. A full list of features can be found at codes.iccsafe.org/premium-features.

ACCESSING ADDITIONAL FEATURES VIA REGISTRATION OF BOOK

Beginning with the 2024 International Mechanical Code® (IMC®) and the 2024 International Plumbing Code® (IPC®), users will be able to validate the authenticity of their book and register it with the ICC to receive incentives. Digital Codes Premium (codes.iccsafe.org) provides advanced features and exclusive content to enhance code compliance. To validate and register, the user will tap the ICC tag (pictured here and located on the front cover) with a near-field communication (NFC) compatible device. Visit iccsafe.org/nfc for more information and troubleshooting tips regarding NFC tag technology.

ABOUT THE I-CODES

The 2024 I-Codes, published by the ICC, are 15 fully compatible titles intended to establish provisions that adequately protect public health, safety and welfare; that do not unnecessarily increase construction costs; that do not restrict the use of new materials, products or methods of construction; and that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

The I-Codes are updated 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 I-Code can be approved by the building official where the proposed materials, designs or methods comply with the intent of the provisions of the code.

The I-Codes are used as the basis of laws and regulations in communities across the US and in other countries. They are also used in a variety of nonregulatory settings, including:

- Voluntary compliance programs.
- The insurance industry.

SECTION 101—SCOPE AND GENERAL REQUIREMENTS

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

[A] 101.2 Scope. The provisions of this code shall apply to the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

Exception: Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height, and their accessory structures not more than three stories above grade plane in height, shall comply with this code or the International Residential Code.

[A] 101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted or referenced.

2823a0f
Scan for Changes
• Certification and credentialing for building design, construction and safety professionals.
• Certification of building and construction-related products.
• Facilities management.
• “Best practices” benchmarks for designers and builders.
• College, university and professional school textbooks and curricula.
• Reference works related to building design and construction.

Code Development Process
The code development process regularly provides an international forum for building professionals to discuss requirements for building design, construction methods, safety, performance, technological advances and new products. Proposed changes to the I-Codes, submitted by code enforcement officials, industry representatives, design professionals and other interested parties, are deliberated through an open code development process in which all interested and affected parties may participate.

• American Gas Association (AGA)
• American Institute of Architects (AIA)
• American Society of Plumbing Engineers (ASPE)
• International Association of Fire Chiefs (IAFC)
• National Association of Home Builders (NAHB)
• National Association of State Fire Marshals (NASFM)
• National Council of Structural Engineers Association (NCSEA)
• National Multifamily Housing Council (NMHC)
• Plumbing Heating and Cooling Contractors (PHCC)
• Pool and Hot Tub Alliance (PHTA) formerly The Association of Pool and Spa Professionals (APSP)

Code development committees evaluate and make recommendations regarding proposed changes to the codes. Their recommendations are then subject to public comment and council-wide votes. The ICC’s governmental members—public safety officials who have no financial or business interest in the outcome—cast the final votes on proposed changes.

The I-Codes are subject to change through future code development cycles and by any governmental entity that enacts the code into law. For more information regarding the code development process, contact the Codes and Standards Development Department of the ICC at iccsafe.org/products-and-services/i-codes/code-development/.

While the I-Code development procedure is thorough and comprehensive, the ICC, its members and those participating in the development of the codes expressly disclaim any liability resulting from the publication or use of the I-Codes, or from compliance or noncompliance with their provisions. NO WARRANTY OF ANY KIND, IMPLIED, EXPRESSED OR STATUTORY, IS GIVEN WITH RESPECT TO THE I-CODES. The ICC does not have the power or authority to police or enforce compliance with the contents of the I-Codes.

Openness, transparency, balance, due process and consensus are the guiding principles of both the ICC Code Development Process and OMB Circular A-119, which governs the federal government’s use of private-sector standards. The ICC process is open to anyone without cost. Remote participation is available through cdpAccess®, the ICC’s cloud-based app.

In order to ensure that organizations with a direct and material interest in the codes have a voice in the process, the ICC has developed partnerships with key industry segments that support the ICC’s important public safety mission. Some code development committee members were nominated by the following industry partners and approved by the ICC Board:

Code Development Committee Responsibilities (Letter Designations in Front of Section Numbers)
In each cycle, proposed changes are considered by the Code Development Committee assigned to a specific code or subject matter. Committee Action Hearings result in recommendations regarding a proposal to the voting membership. Where changes to a code section are not considered by that code’s own committee, the code section is preceded by a bracketed letter designation identifying a different committee. Bracketed letter designations for the I-Code committees are:

[A] = Administrative Code Development Committee
[BE] = IBC—Egress Code Development Committee
[BF] = IBC—Fire Safety Code Development Committee
[BG] = IBC—General Code Development Committee
[BS] = IBC—Structural Code Development Committee
[E] = Developed under the ICC’s Standard Development Process
[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
For the development of the 2027 edition of the I-Codes, the ICC Board of Directors approved a standing motion from the Board Committee on the Long-Term Code Development Process to revise the code development cycle to incorporate two committee action hearings for each code group. This change expands the current process from two independent 1-year cycles to a single continuous 3-year cycle. There will be two groups of code development committees and they will meet in separate years. The current groups will be reworked. With the energy provisions of the International Energy Conservation Code® (IECC®) and Chapter 11 of the International Residential Code® (IRC®) now moved to the Code Council’s Standards Development Process, the reduced volume of code changes will be distributed between Groups A and B.

Code change proposals submitted for code sections that have a letter designation in front of them will be heard by the respective committee responsible for such code sections. Because different committees hold Committee Action Hearings in different years, proposals for most codes will be heard by committees in both the 2024 (Group A) and the 2025 (Group B) code development cycles. It is very important that anyone submitting code change proposals understands which code development committee is responsible for the section of the code that is the subject of the code change proposal.

Please visit the ICC website at iccsafe.org/products-and-services/i-codes/code-development/current-code-development-cycle for further information on the Code Development Committee responsibilities as it becomes available.

Coordination of the I-Codes
The coordination of technical provisions allows the I-Codes to be used as a complete set of complementary documents. Individual codes can also be used in subsets or as stand-alone documents. Some technical provisions that are relevant to more than one subject area are duplicated in multiple model codes.

Italicized Terms
Words and terms defined in Chapter 2, Definitions, are italicized where they appear in code text and the Chapter 2 definitions apply. Although care has been taken to ensure applicable terms are italicized, there may be instances where a defined term has not been italicized or where a term is italicized but the definition found in Chapter 2 is not applicable. For example, Chapter 2 of the International Building Code® (IBC®) contains a definition for “Listed” that is applicable to equipment, products and services. The term “listed” is also used in that code to refer to a list of items within the code or within a referenced document. For the latter, the Chapter 2 definition would not be applicable.

Adoption of International Code Council Codes and Standards
The International Code Council maintains a copyright in all of its codes and standards. Maintaining copyright allows the Code Council to fund its mission through sales of books in both print and digital formats. The Code Council welcomes incorporation by reference of its codes and standards by jurisdictions that recognize and acknowledge the Code Council’s copyright in the codes and standards, and further acknowledge the substantial shared value of the public/private partnership for code development between jurisdictions and the Code Council. By making its codes and standards available for incorporation by reference, the Code Council does not waive its copyright in its codes and standards.

The Code Council’s codes and standards may only be adopted by incorporation by reference in an ordinance passed by the governing body of the jurisdiction. “Incorporation by reference” means that in the adopting ordinance, the governing body cites only the title, edition, relevant sections or subsections (where applicable), and publishing information of the model code or standard, and the actual text of the model code or standard is not included in the ordinance (see graphic, “Adoption of International Code Council Codes and Standards”). The Code Council does not consent to the reproduction of the text of its codes or standards in any ordinance. If the governing body enacts any changes, only the text of those changes or amendments may be included in the ordinance.
The Code Council also recognizes the need for jurisdictions to make laws accessible to the public. Accordingly, all I-Codes and I-Standards, along with the laws of many jurisdictions, are available to view for free at codes.iccsafe.org/codes/i-codes. These documents may also be purchased, in both digital and print versions, at shop.iccsafe.org.

To facilitate adoption, some I-Code sections contain blanks for fill-in information that needs to be supplied by the adopting jurisdiction as part of the adoption legislation. For example, the IEBC contains:

Section 101.1. Insert: [NAME OF JURISDICTION]

Section 103.1. Insert: [NAME OF DEPARTMENT]

For further information or assistance with adoption, including a sample ordinance, jurisdictions should contact the Code Council at incorporation@iccsafe.org.

For a list of frequently asked questions (FAQs) addressing a range of foundational topics about the adoption of model codes by jurisdictions and to learn more about the Code Council’s code adoption resources, scan the QR code or visit iccsafe.org/code-adoption-resources.

INTRODUCTION TO THE INTERNATIONAL EXISTING BUILDING CODE

The IEBC establishes minimum requirements for existing buildings using prescriptive and performance-related provisions. It is founded on broad-based principles intended to encourage the use and reuse of existing buildings while requiring reasonable upgrades and improvements.

The IEBC is a model code in the International Code family of codes intended to provide requirements for repair and alternative approaches for alterations, changes of occupancy and additions to existing buildings. 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 compliance with all the requirements for new construction could require extensive changes that go well beyond the value of the building or the original scope of the alteration. At the same time, it is necessary to regulate construction in existing buildings that undergo additions, alterations, 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 meet basic safety levels. To accomplish this objective, and to make the alteration process easier, this code allows for options for controlled departure from full compliance with the International Codes dealing with new construction, while maintaining basic levels for fire safety, structural and life safety features of the rehabilitated building.
This code provides three main options for a designer in dealing with alterations of existing buildings. These are laid out in Section 301 of this code:

Option 1: Work for alteration, change of occupancy or addition of all existing buildings shall be done in accordance with the Prescriptive Compliance Method given in Chapter 5. It should be noted that this method originates from the former Chapter 34 of the IBC (2012 and earlier editions).

Option 2: Work for alteration, change of occupancy or addition of all existing buildings shall be done in accordance with the Work Area Compliance Method given in Chapters 6 through 12.

Option 3: Work for alteration, change of occupancy or addition of all existing buildings shall be done in accordance with the Performance Compliance Method given in Chapter 13. It should be noted that this option was also provided in the former Chapter 34 of the IBC (2012 and earlier editions).

Under limited circumstances, a building alteration can be made to comply with the laws under which the building was originally built, as long as the accessibility requirements are met, there has been no substantial structural damage and there will be limited structural alteration. Flood hazard provisions also must still be addressed where there is a substantial improvement.

Note that all repairs must comply with Chapter 4 and all relocated buildings are addressed by Chapter 14.

ARRANGEMENT AND FORMAT OF THE 2024 IEBC

The format of the IEBC allows each chapter to be devoted to a particular subject. The following table shows how the IEBC is divided. The subsequent table shows IEBC requirements that are correlated with other I-Codes. The chapter synopses detail the scope and intent of the provisions of the IEBC.

<table>
<thead>
<tr>
<th>CHAPTER TOPICS</th>
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<td>Appendix E</td>
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<td>Resource A</td>
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</table>

INTERNATIONAL BUILDING CODE CORRELATED TOPICS

The IEBC requirements for construction safeguards are directly correlated to the requirements of the IBC. The following table shows chapters of the IBC that are correlated with the IEBC:

<table>
<thead>
<tr>
<th>IEBC/IBC CORRELATED TOPICS</th>
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<tbody>
<tr>
<td>IEBC CHAPTER/SECTION</td>
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<tr>
<td>Chapter 15</td>
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</table>

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. The provisions of Chapter 1 establish the authority and duties of the code official appointed by the authority having jurisdiction and also establish the rights and privileges of the design professional, contractor and property owner.
Chapter 2 Definitions.
Chapter 2 is the repository of the definitions of terms used in the body of the code. 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 Provisions for All Compliance Methods.
Chapter 3 guides the use of the three compliance methods of the IEBC and provides requirements that apply globally. The globally applicable requirement include general requirements related to buildings materials and other applicable codes, storm shelters, structural loads, in-situ load tests, accessibility, smoke alarms, carbon monoxide detection and exterior wall coverings.

Chapter 4 Repairs.
Chapter 4, a chapter independent of the three compliance methods, governs the repair of existing buildings. The provisions define conditions under which repairs may be made using materials and methods like those of the original construction or the extent to which repairs must comply with requirements for new buildings.

Chapter 5 Prescriptive Compliance Method.
Chapter 5 provides one of the three main options of compliance available in the IEBC for buildings and structures undergoing alteration, addition or change of occupancy. The base requirements are more administrative in nature. The structural triggers for upgrades are consistent with the Work Area Method.

Chapter 6 Classification of Work.
Chapter 6 provides an overview of the Work Area Method and defines the different classifications of work including alterations, change of occupancy, additions and historic buildings. Detailed requirements for all of these are given in subsequent Chapters 7 through 12.

Chapter 7 Alterations—Level 1.
Chapter 7 provides the technical requirements for those existing buildings that undergo Level 1 alterations as described in Section 602, which includes replacement or covering of existing materials, elements, equipment or fixtures using new materials for the same purpose. This chapter is distinguished from Chapters 8 and 9 by only involving replacement of building components with new components with no reconfiguration of space.

Chapter 8 Alterations—Level 2.
A Level 2 alteration is an alteration involving space reconfiguration that could be up to and including 50 percent of the area of the building or addition of a new building system. Level 2 alterations also include the extension or addition of any system or equipment. The purpose of Chapter 8 is to provide detailed requirements and provisions to identify the required improvements in the existing building elements, means of egress, fire protection, structural systems, energy efficiency, and other building systems include electrical, mechanical and plumbing when a building is being altered.

Chapter 9 Alterations—Level 3.
Chapter 9 provides the technical requirements for those existing buildings that undergo Level 3 alterations. Level 3 alterations are those involving alterations that cover 50 percent of the aggregate area of the building. Under certain situations, this chapter also intends to improve the safety of certain building features beyond the work area and in other parts of the building where no alteration work might be taking place.

Chapter 10 Change of Occupancy.
The purpose of Chapter 10 is to address existing buildings that are subject to a change of occupancy. This chapter is an assembly of requirements to upgrade safety without having to comply fully as a new building. A change of occupancy classification is considered a change of occupancy, however, it will involve a higher level of regulation since the use of the building has made a more significant change.

Chapter 11 Additions.
Chapter 11 provides the requirements for additions, which are considered new construction. The requirements focus on safely integrating the addition with the existing building. This includes issues such as limiting the overall height and area of the building where the addition is not separated by a fire wall.

Chapter 12 Historic Buildings.
Chapter 12 provides exceptions to the application of the work area (Chapters 7 through 11) for buildings that are accredited as being of historic significance by a state or local authority. In addition, there is the ability provided to generate a report documenting how
the intent of the code is met where strict code compliance is not possible. The provisions of this chapter primarily focus on fire and life safety and structural integrity.

**Chapter 13 Performance Compliance Methods.**
Chapter 13 allows for existing buildings to be evaluated to show that alterations or a change of occupancy, while not meeting new construction requirements, will provide a level of safety to demonstrate compliance. Provisions are based on a numerical scoring system involving 21 safety parameters where, when evaluated, such buildings must meet a minimum overall safety score.

**Chapter 14 Relocated or Moved Buildings.**
Chapter 14 is applicable to any building that is moved or relocated. This chapter is independent of any of the three compliance methods and focuses on the structural loads where the building is being relocated.

**Chapter 15 Construction Safeguards.**
Chapter 15 establishes specific regulations in order to minimize the risk to the public and adjacent property during construction. Additionally, this chapter addresses fire and life safety and means of egress during the construction process. This includes requirements for a site safety plan. This chapter is also consistent with Chapter 33 of the IBC and Chapter 33 of the *International Fire Code®* (IFC®).

**Chapter 16 Referenced Standards.**
Chapter 16 lists all of the product and installation standards and codes that are referenced throughout Chapters 1 through 15 and includes identification of the promulgators and the section numbers in which the standards and codes are referenced. As stated in Section 102.4, these standards and codes become an enforceable part of the code (to the prescribed extent of the reference) as if printed in the body of the code.

**Appendix A Guidelines for the Seismic Retrofit of Existing Buildings.**
Appendix A provides guidelines for upgrading the seismic resistance capacity of different types of existing buildings. It is organized into separate chapters which deal with buildings of different types, including unreinforced masonry buildings, reinforced concrete and reinforced masonry wall buildings, and lightframe wood buildings. This appendix includes its own referenced standards.

**Appendix B Supplementary Accessibility Requirements for Existing Buildings and Facilities.**
Chapter 11 of the IBC contains provisions that set forth requirements for accessibility to buildings and their associated sites and facilities for people with physical disabilities. Section 306 addresses accessibility provisions and alternatives permitted in existing buildings. Appendix B was added to address accessibility in construction for items that are not typically enforceable through the traditional building code enforcement process.

**Appendix C Guidelines for the Wind Retrofit of Existing Buildings.**
The purpose of Appendix C is to provide voluntary prescriptive alternatives for addressing the retrofit of buildings in high-wind areas. Currently, there are two chapters which deal with the retrofit of gable ends and the fastening of roof decks, Appendix Chapters C1 and C2, respectively. This appendix includes its own referenced standards.

**Appendix D Board of Appeals.**
Appendix D contains the provisions for appeal and the establishment of a board of appeals. The provisions include the application for an appeal, the makeup of the board of appeals and the conduct of the appeal process.

**Appendix E Temporary Emergency Uses.**
Appendix E is intended to provide guidance for designers, engineers, architects and fire and building officials on allowing temporary emergency uses of existing buildings with respect to the minimum code requirements. This appendix is a template or checklist that references the relevant code requirement of concerns.

**Resource A Guidelines on Fire Ratings of Archaic Materials and Assemblies.**
In the process of repair and alteration of existing buildings, based on the nature and the extent of the work, the IEBC might require certain upgrades in the fire-resistance rating of building elements, at which time it becomes critical for the designers and the code officials to be able to determine the fire-resistance rating of the existing building elements as part of the overall evaluation for the assessment of the need for improvements. These guidelines are based upon the *Guideline on Fire Ratings of Archaic Materials* published by the National Institute of Building Sciences (NIBS).
## RELOCATION OF TEXT OR TABLES

The following table indicates relocation of sections and tables in the 2024 edition of the IEBC from the 2021 edition.

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