

## 2021 International Water Conservation Code Provisions™

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# PREFACE

## Introduction

Internationally, code officials and designers recognize the need for a modern, up-to-date code governing the impact of buildings and structures on the environment. This *International Water Conservation Code Provisions™* (IWCCP™) is designed to meet this need through model code regulations that contain clear and specific requirements with provisions that promote water conservation through safe and sustainable construction in an integrated fashion with the ICC Family of Codes. This IWCCP is the first fully integrated edition focused on the water conservation and efficiency provisions of the I-Codes. It was developed by the Code Council and is coordinated with both the International Codes and ASHRAE Standard 189.1.

The 2021 IWCCP brings together in one, easy-to-use format, the water efficiency and conservation provisions of the I-Codes which are founded on broad-based principles that make possible the use of new materials and designs. The I-Codes 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.

This 2021 edition is intended to be compatible with all of the *International Codes®* (I-Codes®) published by the International Code Council® (ICC®), including the *International Building Code®* (IBC®), *International Existing Building Code®* (IEBC®), *International Energy Conservation Code®* (IECC®), *International Fire Code®* (IFC®), *International Fuel Gas Code®* (IFGC®), *International Mechanical Code®* (IMC®), *International Code Council Performance Code®* (ICCP®), *International Plumbing Code®*, *International Private Sewage Disposal Code®* (IPSDC®), *International Property Maintenance Code®* (IPMC®), *International Residential Code®* (IRC®), *International Swimming Pool and Spa Code®* (ISPSC®), *International Wildland-Urban Interface Code®* (IWUIC®) and *International Zoning Code®* (IZC®).

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.
- Certification and credentialing for building design, construction and safety professionals.
- Certification of building and construction-related products.
- US federal agencies, to guide construction in an array of government-owned properties.
- 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.

The IWCCP is founded on principles intended to establish provisions consistent with the scope of water conservation provisions of the plumbing code, plumbing provisions of the residential code, energy conservation code, and green construction code that adequately protect the 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. This is achieved by comprehensive provisions that are enforceable, usable and adoptable.

In the development of this document, provisions were extracted from the 2021 IPC, IECC, IRC and IgCC. Those successful 2021 IPC, IRC and IECC code change proposals were considered by the applica-

ble International Code Development Committee and adopted through the ICC code development consensus process. However, the successful 2021 IgCC proposals were developed by the ASHRAE Standard 189.1 committee and approved through the ANSI standards consensus process. The Standard 189.1 provisions became the technical provisions for the IgCC. As a result, during these processes similar words or phrases used can occasionally be different but have the same meaning or intent. Where this occurs in this document we have provided a list to help provide clarity to the user.

**Informative Note:** the following list of terms used in this document shall have the same meaning as identified:

1. “authority having jurisdiction,” “building official,” and “code official.”
2. “graywater” and “greywater.”
3. “private lavatory faucet,” “residential lavatory sink faucet,” and “residential lavatory faucet.”
4. “vegetative roof” and “vegetated roof.”

## Development

The 2021 IWCCP was developed utilizing the provisions of the 2021 *International Plumbing Code* (IPC), 2021 *International Energy Conservation Code* (IECC), 2021 *International Residential Code* (IRC), 2021 *International Building Code* (IBC) and the 2021 *International Green Construction Code* (IgCC). The previous two editions (2012 and 2015) were known as the Water Efficiency Provisions (WEP) and were developed utilizing provisions from the IPC and the IgCC, which were developed through ICC’s code development process.

## Letter Designations

The 2021 IWCCP addresses both “commercial buildings” and “residential buildings” as defined in Chapter 2 of this code. The section numbers preceded by capital letters “CW” (e.g., CW301.1) indicate commercial provisions. Section numbers preceded by capital letters “RW” (e.g., RW901.1) indicate residential provisions. Where neither “CW” or “RW” precede a chapter or section number, the provisions apply to both “commercial buildings” and “residential buildings.” In parentheses immediately following the IWCCP section numbers are the code acronym and section number from the original International Code source, according to the following list:

(IECC C) *International Energy Conservation Code—Commercial*

(IECC R) *International Energy Conservation Code—Residential*

(IPC) *International Plumbing Code*

(IgCC) *International Green Construction Code*

(IRC) *International Residential Code*

(IBC) *International Building Code*

**USER NOTE:** In order to provide the requisite road map to the technical provisions of Standard 189.1, the Standard 189.1 section number is included in parentheses following the IgCC section number; for example, Section 101.2 (IgCC 101.2) (2.3). The IgCC section number is “101.2” and the corresponding section number in Standard 189.1 is “2.3.” In this instance, Section 101.2 was further modified in the ICC process to include the new first sentence, which is not in Section 2.3 of Standard 189.1.

## Format Designations

Because the IWCCP provisions are a compilation, the original text often contains language referencing back to the source code itself. However, such provisions also apply to the IWCCP as a whole. When the phrase [this code] or [this chapter] is shown in brackets, it denotes a reference to the IWCCP as a collection of the same relevant code provisions. Text shown in **san serif bold font** was added for clarity and better coordination of the base code applications to the scope of the IWCCP.

## Coordination of the International Codes

The coordination of technical provisions is one of the strengths of the ICC family of model codes. The codes can be used as a complete set of complementary documents, which will provide users with full integration and coordination of provisions. Individual codes can also be used in subsets or as stand-alone documents.

## Italicized Terms

Terms italicized in code text, other than document titles, are defined in Chapter 2. The terms selected to be italicized have definitions that the user should read carefully to better understand the code. Where italicized, the Chapter 2 definition applies. If not italicized, common-use definitions apply.

## Adoption of the 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 format. 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](https://codes.iccsafe.org/codes/i-codes). These documents may also be purchased, in both digital and print versions, at [shop.iccsafe.org](https://shop.iccsafe.org).

To facilitate adoption, sections of this code contain blanks for fill-in information that needs to be supplied by the adopting jurisdiction as part of the adoption legislation. For this code, please see:

Section 103.1. Insert: **[NAME OF DEPARTMENT]**

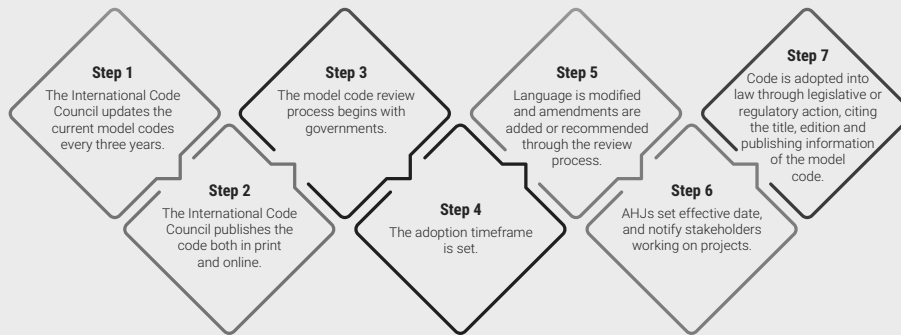
For further information or assistance with adoption, including a sample ordinance, jurisdictions should contact the Code Council at [incorporation@iccsafe.org](mailto:incorporation@iccsafe.org). For a list of frequently asked questions (FAQs) addressing a range of foundational topics about the adoption of model codes by jurisdictions and to learn more about the Code Council's code adoption resources, visit [iccsafe.org/code-adoptionresources](https://iccsafe.org/code-adoptionresources).

Be sure to review the discussion of Chapter 1 under “Effective Use of the *International Water Conservation Code Provisions*” for important information on “jurisdictional options [JO].”



## ADOPTION OF INTERNATIONAL CODE COUNCIL CODES AND STANDARDS INCORPORATED BY REFERENCE

**What does “incorporate by reference” mean?** If a governmental agency or authority having jurisdiction (AHJ) over code adoption wishes to adopt a model code for legislative or regulatory purposes, it will enact an ordinance, regulation or law to incorporate by reference (IBR) the relevant code. The actual text of the model code is not included in the law, but the enacting law will include the full text of any changes or amendments enacted by the legislative body of the AHJ.



23-22259

# Effective Use of the International Water Conservation Code Provisions (IWCCP)

The IWCCP is a model that provides minimum requirements to safeguard the environment, public health, safety and general welfare through the establishment of requirements that are intended to conserve water and reduce the negative impacts and increase the positive impacts of the built environment on the natural environment and building occupants. The IWCCP is fully compatible with the ICC family of codes, including the IBC, the ICCPC, the IECC, the IEBC, the IFC, the IFGC, the IMC, the IPC, the IPSDC, the IPMC, the IRC, the ISPSC, the IWUIC, and the IZC.

Occupancy classifications shall be determined in accordance with the IBC. These provisions will be promulgated on a 3-year cycle to allow for new construction methods and technologies to be incorporated into the code. Innovative approaches and alternative materials, designs, and methods not specifically addressed in this code can be approved by the code official where the proposed innovative approaches or materials, designs or methods comply with the intent of the provisions of the code (see Section 105.4).

The commercial provisions of the IWCCP apply to all occupancies other than single-family dwellings and multiple-family dwellings that are three stories or less in height (see Section 101.3.1).

The residential provisions of the IWCCP apply to all residential occupancies that are also applicable to the IRC.

**Informative Note:** [JO] after a section number (e.g., Section 402.1.2.1(a)(3) [JO]) indicates that this requirement is a jurisdictional option. See further discussion regarding Chapter 1 in Arrangement and Format of the 2021 IWCCP.

## Arrangement and Format of the 2021 IWCCP

Before applying the requirements of the IWCCP, it is beneficial to understand its arrangement and format. The following table shows how the IWCCP is divided. The ensuing chapter-by-chapter synopsis details the scope and intent of the provisions of the IWCCP.

Chapters	Subjects
1	Scope and Administration
2	Definitions
3	General Regulations—Commercial
4	Water Use Efficiency
5	Hot Water Systems—Commercial
6	Nonpotable Water Systems—Commercial
7	Subsurface Graywater Soil Absorption Systems
8	Construction and Plans for Operation—Commercial
9	Plumbing Administration—Residential
10	General Plumbing Requirements—Residential
11	Nonpotable Water Systems—Residential
12	Hot Water Systems—Residential
13	Referenced Standards
Appendix A	Resource Standards



# TABLE OF CONTENTS

<p><b>CHAPTER 1 SCOPE AND ADMINISTRATION . . . . . 1-1</b></p> <p><b>PART 1—SCOPE AND APPLICATION. . . . . 1-1</b></p> <p>Section</p> <p>101 Scope and General Requirements. . . . .1-1</p> <p>102 Applicability . . . . .1-2</p> <p><b>PART 2—ADMINISTRATION AND ENFORCEMENT . . . . . 1-2</b></p> <p>Section</p> <p>103 Code Compliance Agency . . . . .1-2</p> <p>104 Duties and Powers of the Authority Having Jurisdiction . . . . .1-2</p> <p>105 Approval. . . . .1-3</p> <p>106 Permits . . . . .1-3</p> <p>107 Construction Documents . . . . .1-4</p> <p>108 Fees. . . . .1-4</p> <p>109 Inspections . . . . .1-4</p> <p>110 Certificate of Occupancy . . . . .1-4</p> <p>111 Means of Appeals. . . . .1-4</p> <p><b>CHAPTER 2 DEFINITIONS. . . . . 2-1</b></p> <p>Section</p> <p>201 General . . . . .2-1</p> <p>202 General Definitions. . . . .2-1</p> <p><b>CHAPTER 3 GENERAL REGULATIONS—COMMERCIAL. . . . . 3-1</b></p> <p>Section</p> <p>CW301 General . . . . .3-1</p> <p>CW302 Materials. . . . .3-1</p> <p>CW303 Alternative Engineered Design. . . . .3-1</p> <p><b>CHAPTER 4 WATER USE EFFICIENCY . . . . . 4-1</b></p> <p>Section</p> <p>401 General . . . . .4-1</p> <p>402 Potable and Nonpotable Water Use Efficiency . . . . .4-1</p>	<p><b>CHAPTER 5 HOT WATER SYSTEMS—COMMERCIAL . . . . .5-1</b></p> <p>Section</p> <p>CW501 General Regulations. . . . .5-1</p> <p>CW502 Additional Efficiency Requirements . . . . .5-4</p> <p><b>CHAPTER 6 NONPOTABLE WATER SYSTEMS—COMMERCIAL . . . . .6-1</b></p> <p>Section</p> <p>CW601 General Regulations. . . . .6-1</p> <p>CW602 On-Site Nonpotable Water Reuse Systems . . .6-3</p> <p>CW603 Nonpotable Rainwater Collection and Distribution Systems . . . . .6-5</p> <p>CW604 Reclaimed Water Systems . . . . .6-7</p> <p><b>CHAPTER 7 SUBSURFACE GRAYWATER SOIL ABSORPTION SYSTEMS . . . . .7-1</b></p> <p>Section</p> <p>701 General. . . . .7-1</p> <p>702 System Design and Sizing . . . . .7-1</p> <p>703 Installation . . . . .7-2</p> <p><b>CHAPTER 8 CONSTRUCTION AND PLANS FOR OPERATION—COMMERCIAL . . . .8-1</b></p> <p>Section</p> <p>CW801 General. . . . .8-1</p> <p><b>CHAPTER 9 PLUMBING ADMINISTRATION—RESIDENTIAL . . . . .9-1</b></p> <p>Section</p> <p>RW901 Scope and Application . . . . .9-1</p> <p><b>CHAPTER 10 GENERAL PLUMBING REQUIREMENTS—RESIDENTIAL . . . . .10-1</b></p> <p>Section</p> <p>RW1001 General. . . . .10-1</p> <p>RW1002 Individual Water Supply and Sewage Disposal . . . . .10-1</p> <p>RW1003 Workmanship. . . . .10-1</p> <p>RW1004 Materials Evaluation and Listing. . . . .10-1</p>
--	--



**CHAPTER 11 NONPOTABLE WATER SYSTEMS—  
RESIDENTIAL ..... 11-1**

Section

RW1101 General .....11-1  
RW1102 Protection of Potable Water Supply .....11-1  
RW1103 Nonpotable Water Systems .....11-2  
RW1104 On-Site Nonpotable Water Reuse Systems ..11-5  
RW1105 Nonpotable Rainwater Collection and  
Distribution Systems .....11-6  
RW1106 Reclaimed Water Systems .....11-9

**CHAPTER 12 HOT WATER SYSTEMS—  
RESIDENTIAL ..... 12-1**

Section

RW1201 General Regulations .....12-1  
RW1202 Hot Water Distribution .....12-1

**CHAPTER 13 REFERENCED STANDARDS..... 13-1**

**APPENDIX A RESOURCE STANDARDS ..... A-1**

Excerpts from the ICC 700-2020 National Green  
Building Standard® (NGBS)  
ASABE/ICC 802-2020 Landscape Irrigation  
Sprinkler and Emitter Standard  
ANSI/RESNET/ ICC 850-2020 Standard for the Calculation  
and Labeling of the Water Use Performance of One- and  
Two-Family Dwellings Using the Water Rating Index