Building Code Basics: Green
Based on the 2012 International Green Construction Code™
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International Code Council
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## CONTENTS

Preface ................................................................. ix
About the *International Green Construction Code* ................ x
Acknowledgments .................................................. x
About the Author .................................................. xi
About the International Code Council ......................... xi

### PART I: EVOLUTION OF GREEN DESIGN,
CONSTRUCTION AND REGULATION 1

**Chapter 1: History and Progress of Green Philosophy** ............ 2
- Design Considerations ........................................... 3
- History of Green Building Practices .......................... 3
- Green Building Programs ............................... 4
  - R-2000 Standard .............................................. 5
  - Building Research Establishment Environmental Assessment Method ........................................ 5
  - Energy Star® .................................................. 5
  - Green Star .................................................... 5
  - Canada Green Building Council ............................................ 5
  - Green Building Initiative ........................................ 5
  - Leadership in Energy and Environmental Design ........................................ 6
- ASHRAE 189.1, Standard for the Design of High-Performance Green Buildings ........................................ 6
- California Green Building Standards Code .................. 6
- International Green Construction Code ....................... 7

**Chapter 2: Development of the International Green Construction Code** .................. 8
- Intent to Develop a Green Building Code .................. 9
- Launching the International Green Construction Code ....... 9
- Release of First Public Version (PV 1.0) of the International Green Construction Code .................. 10
- Release of the 2012 International Green Construction Code 10
- Future Development of the International Green Construction Code ........................................ 11

### PART II: REGULATION OF GREEN PRACTICES 13

**Chapter 3: Scope and Limitations** .......................... 14
- Building Codes and Green Codes: Scope .................. 15
  - International Building Code ........................................ 15
  - International Energy Conservation Code .................. 16
International Mechanical Code ..............................16
International Residential Code ...............................16
International Green Construction Code ........................17

Chapter 4: Administration of the International Green Construction Code .............................18
Code Adoption ..................................................19
Adoption of the International Green Construction Code ..............................................19
Amending the International Green Construction Code .............................................19
Appendices ..........................................................20
Authority of the Code Official ..................................20
Alternate Methods and Materials ......................................21
Permits ...............................................................21
Construction Documents ..........................................23
Fees .................................................................24
Inspections ..........................................................24
Footing and Foundation Inspection ..................................24
Frame Inspection ................................................25
Energy Efficiency Inspections ......................................25
Final Inspection ....................................................26
Board of Appeals ..................................................26

Chapter 5 Jurisdictional Requirements and Life-Cycle Assessment .............................27
Jurisdictional Requirements ..........................................28
Whole-Building Life-Cycle Assessment ......................................30

PART III: SITE DEVELOPMENT AND INTERIOR ENVIRONMENT 31

Chapter 6: Site Development and Land Use ......................................32
Building Site ........................................................33
Preservation of Natural Resources ..........................................34
Erosion Control ....................................................34
Floodplain ..........................................................34
Vegetation and Invasive Species .........................................35
Building Site Waste Management ......................................36
Infill Sites ............................................................37
Greenfield Sites ....................................................37
Brownfield Sites ....................................................37
Transportation Impact ...............................................38
Bicycle Parking and Storage ..........................................38
Vehicle Parking ....................................................38
Heat-Island Mitigation ...............................................39
Hardscape ..........................................................39
Roof Covering .....................................................40
Site Lighting and Light Pollution ......................................41
Exterior Lighting and Uplights ..........................................41
CHAPTER 7: Indoor Environmental Comfort .......................... 42
Building and Systems Indoor Air Quality Management ............. 43
  Indoor Air Quality Management Plan ....................... 43
Building Air-Handling-System Operation and Maintenance .......... 44
Heating, Ventilation, and Air-Conditioning (HVAC) System ........ 44
  Ventilation During Construction .......................... 44
  Air-Conditioning System Filters After Occupancy .......... 45
  Interior Environmental Conditions for Occupancy ........ 45
  Isolation of Pollutant Sources ............................ 46
Specific Equipment Control Measures ........................................ 46
  Fireplaces and Appliances .................................. 46
  Biomass Appliances ..................................... 47
Prohibited Materials ......................................................... 47
Material Emissions and Pollutant Control ............................... 48
  Construction Materials ...................................... 48
Acoustics .................................................................. 49
  Sound Transmission ........................................... 50
  Mechanical and Generator Equipment ................ 50
Daylighting .................................................................. 51
  Fenestration ...................................................... 52

PART IV: PROJECT CONSERVATION 53

CHAPTER 8: Building Material Conservation and Efficiency .... 54
Construction Material Storage, Handling, and Moisture Control .......... 55
Construction Material Waste Management .................................. 55
Recycling Area After Certificate of Occupancy ....................... 56
Construction Material Selection ............................................. 57
  Used Materials ................................................ 58
  Recycled Content of Building Materials ................ 60
  Bio-Based Materials ......................................... 61
  Indigenous Materials .......................................... 61
Artificial Lighting .................................................................. 62
Building-Envelope Inspections For Moisture Control .................. 64

Chapter 9: Energy Conservation and Efficiency ...................... 65
Building Performance-and Prescriptive-Based Compliance Paths .... 66
Energy Metering And Monitoring ......................................... 66
Automated Demand-Response (Auto-Dr) Infrastructure ............. 67
Building Envelope Systems ................................................... 68
Mechanical Systems ......................................................... 69
Building Service-Water Heating Systems ............................... 70
Electrical Power and Lighting ............................................... 70
Specific Appliances and Equipment ....................................... 71
Renewable Energy ............................................................. 72
Mechanical Systems Commissioning ...................................... 73
CHAPTER 10: Water Conservation and Efficiency ............... 75
  Fixtures, Equipment, and Appliances .......................... 76
    Fixtures and Flow Rates ....................................... 76
    Municipal Reclaimed Water .................................. 76
    Hot-Water Distribution Systems .............................. 77
    Equipment .......................................................... 77
  Hydronic Heating and Cooling ................................ 78
    Controls and Zones .............................................. 78
  Water Treatment ................................................... 79
    Equipment for Water Treatment ............................... 79
    Metering ............................................................ 79
    Nonpotable Water ................................................ 80
    Rainwater Collection .......................................... 80
    Gray-Water Recycling Systems ............................... 81
    Reclaimed-Water Systems .................................... 81

PART V: COMMISSIONING ........................................... 83

CHAPTER 11: Commissioning ..................................... 84
  Commissioning ...................................................... 85
    Approval by Code Official ................................. 85
    Independence of Agency ...................................... 86
    Commissioning Plan ........................................... 86
  Testing and Reports For Mechanical
    Systems Commissioning ...................................... 86

CHAPTER 12: Building Operation ................................. 89
  Maintenance Documents and Building Record .................. 90

CHAPTER 13: Appendices .......................................... 92
  Purpose and Adoption ........................................... 93
    Project Electives ................................................. 93
    Radon ................................................................. 93
    Ordinances and Enforcement ............................... 94

Glossary ............................................................... 97

Index ................................................................. 100
odes for years have regulated the construction of buildings, with emphasis on fire- and life-safety concerns such as emergency exiting, fire sprinklers, smoke alarm systems, fall protection, and fire-resistance measures, along with structural integrity and the ability of the structure to resist the effects of the environment on the building, such as wind, rain, sun, and snow. In more recent decades, the public has become more aware of the need to reduce the possible negative impact the construction of buildings has on the environment, both locally and worldwide, and also on the occupants that spend time in those commercial and residential buildings. The building and design community has responded with voluntary efforts, including the creation of various green building programs that raise the standards of performance and sustainability for both new structures and existing remodel projects.

The International Green Construction Code™ (IgCC), which this book is based on, was developed by the International Code Council (ICC) with cooperating sponsors: The American Institute of Architects (AIA); ASTM International; the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE); the Illuminating Engineering Society (IES); and the U.S. Green Building Council (USGBC). It is a comprehensive set of requirements for buildings and their sites intended to reduce the negative impact on the natural environment by creating higher performance thresholds in the areas of site preservation, energy-use reduction, water conservation, and construction waste limits, as well as to create a healthier indoor environment, while at the same time meeting or exceeding the minimum requirements of the related International Codes (I-Codes).

Building Code Basics: Green, Based on the International Green Construction Code has been written to provide an easy-to-understand overview of the code. It is an illustrated look at the most common provisions in the IgCC presented and organized in a user-friendly manner, with emphasis on technical accuracy and clear, non-code language. The content is directed to readers who are not currently familiar with green building practices, and also for those who already have a basic understanding of green and sustainable construction practices but a limited knowledge of the requirements contained in the IgCC.

Anyone involved in the design, construction, or regulatory aspects of green and sustainable building construction practices can benefit from this book, including beginning and experienced designers, builders, architects, building inspectors, code officials, green building professionals, students of construction technology or related fields, and municipal planners and administrators.

The content of Building Code Basics: Green provides guidance for the reader on the use of alternative or innovative technology in the design of the building. It discusses the administrative provisions that a building department uses to regulate the provisions of the I-Codes and the IgCC. Separate chapters address jurisdictional requirements, site development and land use, material resource conservation and efficiency, energy conservation, water resource conservation, indoor environmental quality
and comfort, building commissioning and operation, and information contained in the appendices of the IgCC.

This book is not intended to cover all provisions of the IgCC or all of the accepted alternative materials and methods of construction of green and sustainable buildings. Focusing in some detail on the most common provisions affords an opportunity to fully understand the basics without exploring every variable and alternative. This is not to say that information not covered is any less important or valid. This book is best used as a companion to the IgCC, which should be referenced for more complete information and specific code references.

Building Code Basics: Green features full-color photographs to assist the reader in visualizing the application of the requirements. Highlights of particularly useful information also aid in understanding the provisions and determining compliance with the requirements. References to the applicable sections of the IgCC are helpful in locating the corresponding topics. A glossary of code and construction terms clarifies the meaning of the technical provisions.

ABOUT THE INTERNATIONAL GREEN CONSTRUCTION CODE

The International Green Construction Code (IgCC) is a model code that provides a comprehensive set of minimum requirements intended to safeguard the environment and public health, safety, and general welfare through the establishment of requirements that are intended to reduce the negative impacts on the natural environment and building occupants. It was created with the intent that it could be adopted by government at any level on a mandatory basis, yet be administered by building officials. It was developed with the intent to be consistent and coordinated with the other ICC codes and standards. When adopted, the IgCC is applicable to commercial and residential buildings, structures and sites where such buildings are located, other than certain residential buildings including those under the scope of the International Residential Code (IRC). ASHRAE 189.1 and ICC 700 are allowed as alternative compliance paths for buildings under their own scope. In addition to mandatory requirements, the IgCC incorporates the concept of optional jurisdictional requirements that can be selected for adoption by a jurisdiction. The IgCC also encourages the use of innovative technology. The IgCC was developed with a broad-based consensus process and it is written in code-intended language compatible with the other I-Codes.

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ICC-ES Environmental Programs provide manufacturers with independent and comprehensive evaluation and/or certification that their products meet specific sustainability targets for green building codes such as the International Green Construction Code (IgCC), the California Green Building Standards Code (CALGreen), and ASHRAE 189.1, including green building ratings systems and standards such as the United States Green Building Council’s Leadership in Energy and Environmental Design (LEED), the Green Building Initiative’s GBI-01 and the National Association of Home Builder’s (NAHB) National Green Building Standard (ICC-700). Prior to his transition to ICC-ES Environmental Programs, Peter developed technical publications and conducted presentations for the Product Development Department of the International Code Council (ICC). Prior to joining the ICC in 2007, Mr. Kulczyk was an Instructor with the State of Minnesota Building Code Division, worked as a municipal building inspector and served in various positions with five residential and commercial builders. Certifications include ICC Building Inspector, ICC Plans Examiner, ICC Green Building-Residential, LEED AP Homes, CALGreen Inspector and State of Minnesota Certified Building Inspector.

ABOUT THE INTERNATIONAL CODE COUNCIL

The International Code Council® (ICC®) is a member-focused association dedicated to helping the building safety community and construction industry provide safe, sustainable, and affordable construction through the development of codes and standards used in the design, build, and compliance process. Most U.S. communities and many global markets choose the International Codes®. ICC Evaluation Service (ICC-ES), a subsidiary of the International Code Council, has been the industry leader in performing technical evaluations for code compliance fostering safe and sustainable design and construction.

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