

2018 IRC[®] Code and Commentary—Volume 1

First Printing: September 2018

ISBN: 978-1-60983-767-9 (soft-cover edition)

COPYRIGHT © 2018

INTERNATIONAL CODE COUNCIL, INC.

ALL RIGHTS RESERVED. This 2018 *IRC[®] Code and Commentary—Volume 1* is a copyrighted work owned by the International Code Council, Inc. (ICC). Without advance written permission from the ICC, no part of this book may be reproduced, distributed or transmitted in any form or by any means, including, without limitation, electronic, optical or mechanical means (by way of example, and not limitation, photocopying, or recording by or in an information storage retrieval system). For information on use rights and permissions, please contact: ICC Publications, 4051 Flossmoor Road, Country Club Hills, IL 60478. Phone 1-888-ICC-SAFE (422-7233).

Trademarks: “International Code Council,” the “International Code Council” logo, “ICC,” the “ICC” logo, “International Residential Code,” “IRC” and other names and trademarks appearing in this book are registered trademarks of the International Code Council, Inc., and/or its licensors (as applicable), and may not be used without permission.

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 2018 *International Residential Code*[®]. The person who is serious about effectively designing, constructing and regulating buildings and structures will find the Commentary to be a reliable data source and reference to almost all components of the built environment.

As a follow-up to the *International Residential Code*, we offer a companion document, the *IRC*[®] *Code and Commentary, Volume 1*. Volume 1 covers Chapters 1 through 11 of the 2018 *International Residential Code*. The basic appeal of the Commentary is thus: it provides, in a small package and at reasonable cost, thorough coverage of many issues likely to be dealt with when using the *International Residential Code*—and then supplements that coverage with historical and technical background. Reference lists, information sources and bibliographies are also included.

Throughout all of this, 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 and implications of the code text. Guidelines suggest the most effective method of application and the consequences of not adhering to the code text. Illustrations 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 2018 *International Residential Code*. 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 Residential Code*, and all commentary is indented below the code text and begins with the symbol ❖. All code figures and tables are reproduced as they appear in the IRC. Commentary figures are identified in the text by the word "Commentary" (as in "see Commentary Figure 704.3"), and each has a full border.

Readers should note that the Commentary is to be used in conjunction with the *International Residential 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, and through your input, we can improve future editions. Please direct your comments to the Codes and Standards Development Department at the Central Regional Office.

TABLE OF CONTENTS

Part I—Administrative

CHAPTER 1 SCOPE AND APPLICATION 1-1 – 1-26

Part II—Definitions

CHAPTER 2 DEFINITIONS 2-1 – 2-48

Part III—Building Planning and Construction

CHAPTER 3 BUILDING PLANNING 3-1 – 3-162

CHAPTER 4 FOUNDATIONS 4-1 – 4-68

CHAPTER 5 FLOORS 5-1 – 5-62

CHAPTER 6 WALL CONSTRUCTION 6-1 – 6-246

CHAPTER 7 WALL COVERING..... 7-1 – 7-44

CHAPTER 8 ROOF-CEILING CONSTRUCTION 8-1 – 8-64

CHAPTER 9 ROOF ASSEMBLIES 9-1 – 9-38

CHAPTER 10 CHIMNEYS AND FIREPLACES 10-1 – 10-24

Part IV—Energy Conservation

CHAPTER 11 ENERGY EFFICIENCY 11-1 – 11-90

INDEX INDEX-1 – INDEX-18