2018 International Building Code® Study Companion



2018 International Building Code® Study Companion

ISBN: 978-1-60983-792-1

Manager of Development: Doug Thornburg
Publications Manager: Mary Lou Luif
Project Editor: Daniel Mutz
Production Technician: Sue Brockman
Cover Design: Ricky Razo



 $\label{eq:copyright} \begin{array}{c} \text{Copyright} \ @ \ 2018 \\ \text{by} \\ \text{INTERNATIONAL CODE COUNCIL, INC.} \end{array}$

ALL RIGHTS RESERVED. This publication is a copyrighted work owned by the International Code Council, Inc. ("ICC"). Without advance written permission from the ICC, no part of this publication 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 and retrieval system). For information on use rights and permissions, please contact: ICC Publications, 4051 Flossmoor Road, Country Club Hills, Illinois 60478, phone 888-ICC-SAFE (422-7233).

The information contained in this document is believed to be accurate; however, it is being provided for informational purposes only and is intended for use only as a guide. Publication of this document by the ICC should not be construed as the ICC engaging in or rendering engineering, legal or other professional services. Use of the information contained in this workbook should not be considered by the user as a substitute for the advice of a registered professional engineer, attorney or other professional. If such advice is required, it should be sought through the services of a registered professional engineer, licensed attorney or other professional.

Trademarks: "International Code Council," the "International Code Council" logo, "ICC," the "ICC" logo, "International Building Code," "IBC" 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.

Errata on various ICC publications may be available at www.iccsafe.org/errata.

First Printing: August 2018

PRINTED IN THE USA

TABLE OF CONTENTS

Study Session 1:	
2018 IBC Chapters 1 and 35—Scope and Administration	1
Quiz	
Study Session 2:	
2018 IBC Chapter 3 and Sections 508 and 509—	
Occupancy Classification and Use	29
Quiz	54
Study Session 3:	
2018 IBC Chapter 6—Types of Construction	63
Quiz	80
Study Session 4:	
2018 IBC Chapter 5—General Building Heights and Areas	89
Quiz	110
Study Session 5:	
2018 IBC Sections 701 through 705—	
Fire and Smoke Protection Features I	119
Quiz	140
Study Session 6:	
2018 IBC Sections 706 through 712—	1.47
Fire and Smoke Protection Features II	
Quiz	165
Study Session 7:	
2018 IBC Sections 713 through 720—	
Fire and Smoke Protection Features III	
Quiz	193
Study Session 8:	
2018 IBC Chapter 9 —Fire Protection and Life Safety Systems	201
Quiz	220

Study Session 9:	
2018 IBC Sections 1001 through 1005, 1008, 1009, 1013 and 1015—	225
Means of Egress I	
Quiz	248
Study Session 10:	
2018 IBC Sections 1010 through 1012 and 1014— Means of Egress II	255
Quiz	275
Study Session 11:	
2018 IBC Sections 1006, 1007 and 1016 through 1021—	
Means of Egress III	283
Quiz	300
Study Session 12:	
2018 IBC Sections 1022 through 1030—Means of Egress IV	307
Quiz	327
Study Session 13:	
2018 IBC Chapter 11—Accessibility	335
Quiz	352
Study Session 14:	
2018 IBC Chapter 4—	
Special Detailed Requirements Based on Use and Occupancy	359
Quiz	382
Study Session 15:	
2018 IBC Chapters 14, 15 and 18— Exterior Wall Coverings, Roofs and Foundations	389
Quiz	408
Study Session 16:	
2018 IBC Chapters 16, 17, 19, 21, 22 and 23—	
Special Inspections, Concrete, Masonry and Wood	415
Quiz	432

Study Session 17:	
2018 IBC Chapters 8, 12, 25 and 30— Interior Finishes, Interior Environment, Gypsum Board and Elevators Quiz	
Study Session 18:	
2018 IBC Chapters 24 and 26—Glazing, Skylights and Plastics	467
Quiz	484
Answer Keys	491

INTRODUCTION

This study companion provides practical learning assignments for independent study of the provisions of the 2018 *International Building Code*[®] (IBC[®]). The independent study format affords a method for the student to complete the study program in an unlimited amount of time. Progressing through the workbook, the learner can measure his or her level of knowledge by using the exercises and quizzes provided for each study session.

The workbook is also valuable for instructor-led programs. In jurisdictional training sessions, community college classes, vocational training programs and other structured educational offerings, the study guide and the IBC can be the basis for code instruction.

All study sessions begin with a general learning objective, the specific sections or chapters of the code under consideration and a list of questions summarizing the key points of study. Each session addresses selected topics from the IBC and includes code text, a commentary on the code provisions and illustrations representing the provisions under discussion. Quizzes are provided at the end of each study session. Before beginning the quizzes, the student should thoroughly review the referenced IBC provisions, particularly the key points.

The workbook is structured so that after every question the student has an opportunity to record his or her response and the corresponding code reference. The correct answers are indicated in the back of the workbook in the answer key.

This study companion was initially developed by Douglas W. Thornburg, AIA, C.B.O., for the 2000 *International Building Code*. In this publication, he has updated and revised the material based on the 2018 *International Building Code*. Doug is currently Vice-President and Technical Director, Products and Services for the International Code Council[®]. In addition to authoring numerous educational texts and resource materials, he instructs seminars nationally on the IBC. Doug has over 37 years of experience in the application and enforcement of building codes.

Questions or comments concerning this workbook are encouraged. Please direct your comments to ICC at studycompanion@iccsafe.org.

About the International Code Council

The International Code Council is a member-focused association. It is dedicated to developing model codes and standards used in the design, build and compliance process to construct safe, sustainable, affordable and resilient structures. Most U.S. communities and many global markets choose the International Codes. ICC Evaluation Service (ICC-ES) is the industry leader in performing technical evaluations for code compliance fostering safe and sustainable design and construction.

Governmental Affairs: 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070 **Regional Offices:** Eastern Regional Office (BIR); Central Regional Office (CH); Western Regional Office (LA)

888-ICC-SAFE (422-7233)

www.iccsafe.org