

2015 International Fire Code

Study Companion

ISBN: 978-1-60983-546-0

Cover Design:	Ricky Razo
Publications Manager:	Mary Lou Luif
Project Editor:	Greg Dickson
Illustrator/Interior Design:	Sue Brockman
Manager of Development:	Doug Thornburg

COPYRIGHT 2015



ALL RIGHTS RESERVED. This publication is a copyrighted work owned by the International Code Council. Without advance written permission from the copyright owner, 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 and retrieval system). For information on permission to copy material exceeding fair use, please contact: ICC Publications, 4051 Flossmoor Rd, Country Club Hills, IL 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" and the ICC logo are trademarks of International Code Council, Inc.

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

First Printing: May 2015

Printed in the United States of America

TABLE OF CONTENTS

Study Session 1:

2015 IFC Chapters 1, 2, 11 and Appendix A—Administration	1
Quiz	25

Study Session 2:

2015 IFC Section 202 and IBC Chapters 3 and 5—Occupancy Classification	33
Quiz	52

Study Session 3:

2015 IFC Chapters 3, 4 and 5—General Requirements, Emergency Planning and Preparedness, and Fire Service Features	59
Quiz	82

Study Session 4:

2015 IFC Chapters 6 through 8—Building Services and Systems; Fire and Smoke Protection Features; and Interior Finish, Decorative Materials and Furnishings	91
Quiz	114

Study Session 5:

2015 IFC Chapter 9—Fire Protection Systems, Part I	123
Quiz	147

Study Session 6:

2015 IFC Chapter 9—Fire Protection Systems, Part II	157
Quiz	181

Study Session 7:

2015 IFC Chapter 10—Means of Egress	189
Quiz	212

Study Session 8:

2015 IFC Chapters 20 through 23—Special Occupancies and Operations, Part I: Aviation Facilities, Dry Cleaning, Combustible Dust-producing Operations, and Motor Fuel-dispensing Facilities and Repair Garages	219
Quiz	239

Study Session 9:

2015 IFC Chapters 24 through 27—Special Occupancies and Operations, Part II: Flammable Finishes, Fruit and Crop Ripening, Fumigation and Insecticidal Fogging, and Semiconductor Fabrication Facilities	247
Quiz	268

Study Session 10:

2015 IFC Chapters 28 through 31—Special Occupancies and Operations, Part III: Lumber Yards and Agro-industrial, Solid Biomass and Woodworking Facilities, Manufacture of Organic Coatings, Industrial Ovens, and Tents and Membrane Structures 277
Quiz 298

Study Session 11:

2015 IFC Chapters 32 through 37—Special Occupancies and Operations, Part IV: High-piled Combustible Storage, Fire Safety During Construction and Demolition, Tire Rebuilding and Tire Storage, Welding and Other Hot Work, Marinas, and Combustible Fibers 305
Quiz 328

Study Session 12:

2015 IFC Chapter 50—Hazardous Materials 335
Quiz 357

Study Session 13:

2015 IFC Chapters 51 through 55—Aerosols, Compressed Gases, Corrosive Materials and Cryogenic Fluids 365
Quiz 388

Study Session 14:

2015 IFC Chapter 56—Explosives and Fireworks. 397
Quiz 418

Study Session 15:

2015 IFC Chapter 57—Flammable and Combustible Liquids—Part I 425
Quiz 446

Study Session 16:

2015 IFC Chapter 57—Flammable and Combustible Liquids—Part II. 453
Quiz 474

Study Session 17:

2015 IFC Chapters 58 through 61—Flammable Gases and Flammable Cryogenic Fluids, Flammable Solids, Highly Toxic and Toxic Materials, and Liquefied Petroleum Gases. 481
Quiz 502

Study Session 18:

2015 IFC Chapters 62 through 67—Organic Peroxides; Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids; Pyrophoric Materials; Pyroxylin Plastics; Unstable (Reactive) Materials; and Water-Reactive Solids and Liquids 509
Quiz 528

Answer Keys 535

INTRODUCTION

This study companion provides practical learning assignments for independent study of the provisions of the 2015 *International Fire Code*[®] (IFC[®]). The independent study format affords a method for the student to complete the study program in an unregulated time period. 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 IFC 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 IFC 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 IFC 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 located in the back of the workbook in the answer key.

Kevin Scott is President of KH Scott & Associates LLC. He has extensive experience in the development of fire safety, building safety and hazardous materials regulations. Kevin has actively worked for over 25 years in the development of fire code, building code and fire safety regulations at the local, state, national and international levels. Kevin provides consulting services regarding plan review, interpretation, application and enforcement of fire codes and building codes. He has authored several books and articles on fire safety and fire prevention. Kevin previously worked as a Senior Regional Manager with the International Code Council. Prior to that, he was Deputy Chief for the Kern County Fire Department, California, where he worked for 30 years.

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.

Headquarters: 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070

Regional Offices: Birmingham, AL; Chicago, IL; Los Angeles, CA

1-888-422-7233

www.iccsafe.org