

2012 **IEBC**[®] **2 CODE AND COMMENTARY**

2012 International Existing Building Code® and Commentary

First Printing: May 2012

ISBN: 978-1-60983-069-4 (soft-cover edition)

COPYRIGHT © 2012
by
INTERNATIONAL CODE COUNCIL, INC.

ALL RIGHTS RESERVED. This 2012 *International Existing Building Code® and Commentary* is a copyrighted work owned by the International Code Council, Inc. 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 retrieval system). For information on permission to copy material exceeding fair use, please contact: Publications, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Phone 1-888-ICC-SAFE (422-7233).

Trademarks: “International Code Council,” the “International Code Council” logo and the “International Existing Building Code” are trademarks of the International Code Council, Inc.

PRINTED IN THE U.S.A.

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 2012 *International Existing Building Code*. The person who is serious about effectively designing, constructing and regulating existing buildings and structures will find the Commentary to be a reliable data source and reference to almost all components in the built environment.

Throughout all of this, strenuous 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 of application and the consequences of not adhering to the code text. Illustrations and examples 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 2012 *International Existing Building Code*. As stated in the preface to the *International Existing Building Code*, the content of sections in the code that begin with a letter designation (i.e., Section [B]1301.2) are maintained by another code development committee. 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 Existing Building Code*, and all commentary is indented below the code text and begins with the symbol ❖.

Readers should note that the Commentary is to be used in conjunction with the *International Existing Building 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, for through your input, we can improve future editions. Please direct your comments to the Code and Standards Department in the Chicago District Office.

The International Code Council would like to extend its thanks to Susan Gentry, Melvyn Green, Wayne Jewell, Ken Schoonover, Mark Stimac and the Structural Engineers Association of California (SEAOC) whose help as contributing authors made this document possible.

TABLE OF CONTENTS

CHAPTER 1	SCOPE AND ADMINISTRATION.....	1-1 – 1-24
CHAPTER 2	DEFINITIONS.....	2-1 – 2-6
CHAPTER 3	COMPLIANCE METHODS	3-1 – 3-10
CHAPTER 4	PRESCRIPTIVE COMPLIANCE METHOD.....	4-1 – 4-22
CHAPTER 5	CLASSIFICATION OF WORK	5-1 – 5-4
CHAPTER 6	REPAIRS.....	6-1 – 6-8
CHAPTER 7	ALTERATIONS—LEVEL 1.....	7-1 – 7-12
CHAPTER 8	ALTERATIONS—LEVEL 2.....	8-1 – 8-30
CHAPTER 9	ALTERATIONS—LEVEL 3.....	9-1 – 9-10
CHAPTER 10	CHANGE OF OCCUPANCY	10-1 – 10-14
CHAPTER 11	ADDITIONS	11-1 – 11-6
CHAPTER 12	HISTORIC BUILDINGS	12-1 – 12-8
CHAPTER 13	RELOCATED OR MOVED BUILDINGS.....	13-1 – 13-4
CHAPTER 14	PERFORMANCE COMPLIANCE METHODS	14-1 – 14-38
CHAPTER 15	CONSTRUCTION SAFEGUARDS	15-1 – 15-6
CHAPTER 16	REFERENCED STANDARDS	16-1 – 16-4
APPENDIX A	GUIDELINES FOR THE SEISMIC RETROFIT OF EXISTING BUILDINGS (GSREB)	A1-1
CHAPTER A1	SEISMIC STRENGTHENING PROVISIONS FOR UNREINFORCED MASONRY BEARING WALL BUILDINGS.....	A1-1 – A1-30
CHAPTER A2	EARTHQUAKE HAZARD REDUCTION IN EXISTING REINFORCED CONCRETE AND REINFORCED MASONRY WALL BUILDINGS WITH FLEXIBLE DIAPHRAGMS	A2-1 – A2-10
CHAPTER A3	PRESCRIPTIVE PROVISIONS FOR SEISMIC STRENGTHENING OF CRIPPLE WALLS AND SILL PLATE ANCHORAGE OF LIGHT, WOOD-FRAME RESIDENTIAL BUILDINGS	A3-1 – A3-30

TABLE OF CONTENTS

**CHAPTER A4 EARTHQUAKE RISK REDUCTION IN WOOD-FRAMED
RESIDENTIAL BUILDINGS WITH SOFT, WEAK OR OPEN FRONT WALLS A4-1 – A4-14**

**CHAPTER A5 EARTHQUAKE HAZARD REDUCTION IN EXISTING
CONCRETE BUILDINGS..... A5-1 – A5-8**

CHAPTER A6 REFERENCED STANDARDS A6-1 – A6-2

**APPENDIX B SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS
FOR EXISTING BUILDINGS AND FACILITIES..... B-1 – B-4**

APPENDIX C GUIDELINES FOR THE WIND RETROFIT OF EXISTING BUILDINGS C1-1

CHAPTER C1 GABLE END RETROFIT FOR HIGH-WIND AREAS C1-1 – C1-22

CHAPTER C2 ROOF DECK FASTENING FOR HIGH-WIND AREAS C2-1 – C2-2

**RESOURCE A GUIDELINES ON FIRE RATINGS OF ARCHAIC
MATERIALS AND ASSEMBLIES.....RESOURCE A-1 – A-140**

INDEX INDEX-1 – INDEX-6