2021 IEBC® Code and Commentary

First Printing: June 2022

ISBN: 978-1-952468-59-9 (Print edition) ISBN: 978-1-955636-62-9 (PDF download)

 $\label{eq:copyright} \text{COPYRIGHT} © 2021 \\ \text{by} \\ \text{INTERNATIONAL CODE COUNCIL, INC.} \\$

ALL RIGHTS RESERVED. This 2021 *IEBC®* Code and Commentary is a copyrighted work owned by the International Code Council, Inc. ("ICC"). Without separate 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/or retrieval system). For information on use rights and permissions, please contact: ICC Publications, 4051 Flossmoor Road, Country Club Hills, Illinois 60478. Phone: 1-888-ICC-SAFE (422-7233).

Trademarks: "International Code Council," the "International Code Council" logo, "ICC," the "ICC" logo, "International Existing Building Code," "IEBC" and other names and trademarks appearing in this publication 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 2021 *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 2021 *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 (e.g., Section [BS] 1006.1) 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.

The International Code Council would like to extend its thanks to Marilyn Kaplan, Rebecca Quinn and the Structural Engineers Association of California (SEAOC) whose help as contributing authors made this document possible.

For the complete errata history of this code, please visit: https://www.iccsafe.org/errata-central/

TABLE OF CONTENTS

CHAPTER 1	SCOPE AND ADMINISTRATION1-1 – 1-26
CHAPTER 2	DEFINITIONS
CHAPTER 3	PROVISIONS FOR ALL COMPLIANCE METHODS
CHAPTER 4	REPAIRS
CHAPTER 5	PRESCRIPTIVE COMPLIANCE METHOD
CHAPTER 6	CLASSIFICATION OF WORK
CHAPTER 7	ALTERATIONS—LEVEL 1
CHAPTER 8	ALTERATIONS—LEVEL 2
CHAPTER 9	ALTERATIONS—LEVEL 3
CHAPTER 10	CHANGE OF OCCUPANCY
CHAPTER 11	ADDITIONS
CHAPTER 12	HISTORIC BUILDINGS
CHAPTER 13	PERFORMANCE COMPLIANCE METHODS
CHAPTER 14	RELOCATED OR MOVED BUILDINGS
CHAPTER 15	CONSTRUCTION SAFEGUARDS
CHAPTER 16	REFERENCED STANDARDS
APPENDIX A	GUIDELINES FOR THE SEISMIC RETROFIT OF EXISTING BUILDINGS (GSREB)
CHAPTER A1	SEISMIC STRENGTHENING PROVISIONS FOR UNREINFORCED MASONRY-BEARING WALL BUILDINGS
CHAPTER A2	EARTHQUAKE HAZARD REDUCTION IN EXISTING REINFORCED CONCRETE AND REINFORCED MASONRY WALL BUILDINGS WITH FLEXIBLE DIAPHRAGMS
CHAPTER A3	PRESCRIPTIVE PROVISIONS FOR SEISMIC STRENGTHENING OF CRIPPLE WALLS AND SILL PLATE ANCHORAGE OF LIGHT, WOOD-FRAME RESIDENTIAL BUILDINGS
CHAPTER A4	EARTHQUAKE RISK REDUCTION IN WOOD-FRAME RESIDENTIAL BUILDINGS WITH SOFT, WEAK OR OPEN FRONT WALLS
CHAPTER A5	REFERENCED STANDARDS

TABLE OF CONTENTS

APPENDIX B	SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS
	FOR EXISTING BUILDINGS AND FACILITIESB-1 – B-4
APPENDIX C	GUIDELINES FOR THE WIND RETROFIT OF EXISTING BUILDINGS
CHAPTER C1	GABLE END RETROFIT FOR HIGH-WIND AREAS
CHAPTER C2	ROOF DECK FASTENING FOR HIGH-WIND AREAS
CHAPTER C3	REFERENCED STANDARDS C-25 – C-26
APPENDIX D	BOARD OF APPEALS D-1 – D-4
RESOURCE A	GUIDELINES ON FIRE RATINGS OF ARCHAIC MATERIALS AND ASSEMBLIES
INDEX	INDEX-1 – INDEX-6