



SIGNIFICANT CHANGES TO THE

FLORIDA BUILDING CODE: BUILDING AND RESIDENTIAL

5TH EDITION (2014)

Significant Changes to the 5th Edition (2014)
Florida Building Code: Building and Residential
International Code Council

ICC Staff:

Executive Vice President and Director of Business
Development: Mark A. Johnson

Senior Vice President, Business and
Product Development: Hamid Naderi

Vice President and Technical Director, Education
and Product Development: Doug Thornburg

Director, Project and Special Sales:
Suzane Nunes

Senior Marketing Specialist: Dianna Hallmark

ISBN: 978-1-60983-308-4

Cover Design: Lisa Triska

Project Editor: Daniel Mutz

Project Head: Hamid Naderi

Publications Manager: Mary Lou Luif

COPYRIGHT © 2015



ALL RIGHTS RESERVED. This publication 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 Flossmoor Road, Country Club Hills, IL 60478. Phone 1-888-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 book should not be considered by the user to be 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 "International Code Council" logo are trademarks of International Code Council, Inc.

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

First Printing: February 2015

PRINTED IN THE U.S.A.

Contents



SIGNIFICANT CHANGES TO THE FLORIDA BUILDING CODE: BUILDING

PART 1

Administration Chapters 1 and 2

- **102.4**
Conflicting Provisions between Codes and Standards

PART 2

Building Planning Chapters 3 through 6

- **303.1.3**
Assembly Rooms Associated with Group E Occupancies
- **303.3**
Occupancy Classification of Casino Gaming Floors
- **303.3, 306.2**
Occupancy Classification of Commercial Kitchens
- **Table 307.1(1), Section 307.4**
Facilities Generating Combustible Dusts
- **308.2, 202**
Definitions of Care Facilities

1	■ 308.4 Occupancy Classification for Medical Care Facilities	14
2	■ 310.6 Uses Classified as Group R-4 Occupancies	16
2	■ 402 Open Mall Buildings	18
3	■ 403.6.1 High-Rise Buildings—Fire Service Access Elevators	20
3	■ 406.4 Public Parking Garages	22
5	■ 406.5.2.1 Open Parking Garages—Openings below Grade	24
7	■ 406.5.5 Open Parking Garages—Height and Area Increases	26
9	■ 410.6.3, 202 Technical Production Areas	28
9	■ 412.4.6.2 Aircraft Hangar Fire Areas	31
11	■ 419, 202 Live/Work Units	33
12	■ 422 Ambulatory Care Facilities	37

■ 424	Children’s Play Structures	39	■ 706.2	Double Fire Walls	77
■ 501.2	Address Identification	42	■ 706.6, 706.6.2	Fire Wall Height at Sloped Roofs	79
■ 505.2.2	Mezzanine Means of Egress	43	■ 707.8, 707.9	Intersections of Fire Barriers at Roof Assemblies	81
■ 506.2	Allowable Area Frontage Increase	45	■ 708.1	Fire Partitions	83
■ 507.1	Unlimited Area Buildings— Accessory Occupancies	48	■ 709.4	Continuity of Smoke Barriers	85
■ 507.1	Unlimited Area Buildings—Open Space	50	■ 712	Vertical Openings	86
■ 507.8	Unlimited Area Buildings— Group H Occupancies	52	■ 713.13	Refuse and Laundry Chutes in Group I-2 Occupancies	88
■ 509	Incidental Uses—General Provisions	55	■ 713.13.4	Fire Protection of Termination Rooms	90
■ 509	Incidental Uses—Separation and Protection	57	■ 713.14.1	High-Rise Buildings—Elevator Lobbies	92
■ Table 509	Incidental Uses—Rooms or Areas	59	■ 714.4.1.1.2	Floor Penetrations of Horizontal Assemblies	95
■ Table 602, Note h	Fire Ratings of Exterior Walls	61	■ 714.4.1.2	Interruption of Horizontal Assemblies	97
PART 3			■ 714.5, 715.6, 202	L Ratings	99
Fire Protection			■ 715.4	Exterior Curtain Wall/Floor Intersection	101
Chapters 7 through 9			■ 716.3, 202	Marking of Fire-Rated Glazing Assemblies	103
■ 701.2	Multiple-Use Fire Assemblies	65	■ Table 716.5	Opening Protection Ratings and Markings	105
■ 703.4	Establishing Fire Resistance Ratings	67	■ 716.5.5.1	Glazing in Exit Enclosure and Exit Passageway Doors	108
■ 703.7	Identification of Fire and Smoke Separation Walls	68	■ Table 716.6	Fire-Protection-Rated Glazing	110
■ 704.11	Fire Protection of Bottom Flanges	70	■ 716.6.4	Wired Glass in Fire Window Assemblies	112
■ 705.2	Extent of Projections beyond Exterior Walls	71	■ 717.5.4	Fire Damper Exemption for Fire Partitions	114
■ 705.2.3	Protection of Combustible Projections	73			
■ 705.3	Projections from Buildings on the Same Lot	75			

■ 718.2.6 Fireblocking within Exterior Wall Coverings	116		
■ 803.12 High-Density Polyethylene (HDPE) and Polypropylene (PP)	118		
■ 804.4 Interior Floor Finish Requirements	119		
■ 901.8 Pump and Riser Room Size	121		
■ 903.2.2 Sprinklers in Ambulatory Care Facilities	122		
■ 903.2.4, 903.2.7, 903.2.9 Furniture Storage and Display in Group F-1, M, and S-1 Occupancies	124		
■ 903.2.11.1.3 Sprinkler Protection for Basements	126		
■ 903.2.11.2 Sprinkler Protection of Rubbish and Linen Chutes	128		
■ 904.3.2 Actuation of Multiple Fire-Extinguishing Systems	131		
■ 905.4 Location of Class I Standpipe Hose Connections	133		
■ 906.1 Portable Fire Extinguishers in Group R-2 Occupancies	135		
■ 907.2.1 Fire Alarms Systems in Group A Occupancies	136		
■ 907.2.1.2 Emergency Voice/Alarm Communication Captions	138		
■ 907.2.3 Group E Fire Alarm Systems	140		
■ 907.2.9.3 Smoke Detection in Group R-2 College Buildings	142		
■ 907.2.11.3 Wireless Interconnection of Smoke Alarms	145		
		PART 4	
		Means of Egress	
		Chapter 10	147
		■ 1001.4 Fire Safety and Evacuation Plans	149
		■ 1004.1.2, Table 1004.1.2 Design Occupant Load—Areas without Fixed Seating	151
		■ 1005 Means of Egress Capacity Determination	153
		■ 1008.1.2 Door Swing	157
		■ 1008.1.9.9 Electromagnetically Locked Egress Doors	158
		■ 1009, 1010, 202 Interior Stairways and Ramps	160
		■ 1009.1 Application of Stairway Provisions	164
		■ 1011.2 Floor-Level Exit Signs in Group R-1	165
		■ 1012.2 Handrail Height	166
		■ 1012.3.1, 1012.8 Handrail Graspability and Projections	168
		■ 1013.1, 1013.8 Guards at Operable Windows	170
		■ 1013.3 Guard Height	173
		■ 1021.2 Exits from Stories	175
		■ 1021.2.1 Exits from Mixed Occupancy Buildings	177
		■ 1021.2.3, Table 1021.2(1) Exits from Dwelling Units	178
		■ 1022.5 Enclosure Penetrations of Interior Exit Stairways	182
		■ 1028.1.1.1 Separation of Spaces under Grandstands and Bleachers	184

PART 5**Building Envelope, Structural Systems,
and Construction Materials
Chapters 12 through 26****185**

■ 1203.1	Mechanical Ventilation Required	187
■ 1203.2	Ventilation of Attic Spaces	189
■ 1208.3	Minimum Kitchen Floor Area	191
■ 1403.5	Flame Propagation at Exterior Walls	192
■ Chapters 14–26	High-Velocity Hurricane Zones	194
■ 1507.2.8	Roof Covering Underlayment	196
■ Table 1604.3	Deflection Limits	199
■ Table 1607.1	Minimum Live Loads	200
■ 1607.6, 202	Helipads	204
■ 1607.7	Heavy Vehicle Loads	206
■ 1611.2, 202	Ponding Instability	208
■ 1810.3.3.1.6	Uplift Capacity of Grouped Deep Foundation Elements	209
■ Chapter 19	Concrete Construction	210
■ 1905.1.9	Shear Wall to Concrete Foundation Connection	214
■ 2101.2	Design Methods for Masonry Structures	218
■ 2406.1, 2406.4	Safety Glazing—Hazardous Locations	219
■ 2406.2	Safety Glazing—Impact Test	225
■ 2510.6	Water-Resistive Barriers for Stucco Applications	227

■ 2603.4.1.14	Foam Plastic Insulation Installed in Floor Assemblies	229
■ 2603.7, 2603.8	Interior Finish in Plenums	231
■ 2603.10, 2603.10.1	Special Approval of Foam Plastics	233
■ 2610.3	Slope Requirements of a Dome Skylight	235
■ 2612, 202	Fiber-Reinforced Polymer	237

PART 6**Building Services, Special Devices,
and Special Conditions
Chapters 27 through 34****241**

■ 3007	Fire Service Access Elevators	242
■ 3008	Occupant Evacuation Elevators	247
■ Appendix M	Tsunami-Generated Flood Hazards	251

**SIGNIFICANT CHANGES TO
THE FLORIDA BUILDING CODE:
RESIDENTIAL****253****PART 7****Definitions
Chapter 2****254**

■ R202	Definitions, Structural Composite Lumber	255
--------	--	-----

PART 8**Building Planning and Construction
Chapters 3 through 10****257**

■ Table R301.5	Minimum Uniformly Distributed Live Loads	259
■ R302.1	Exterior Walls	262
■ R302.2.2	Parapet Exception	265

■ R302.5.1	Garage Opening Protection	267	■ R602.1.1	End-Jointed Lumber	312
■ R303	Mechanical Ventilation	269	■ R703.7.3.2	Masonry Veneer Lintel	313
■ R303.5	Ventilation Intake Openings	273	■ R703.7.4	Masonry Veneer Anchorage	315
■ R308.4	Hazardous Locations for Glazing	275	■ R703.7.4.2	Grout Fill behind Masonry Veneer	318
■ R308.4.5	Glazing and Wet Surfaces	277	■ R703.11.2.2	Design Wind Pressure Rating of Vinyl Siding Installed over Foam Plastic Sheathing	320
■ R308.4.6	Glazing Adjacent Stairs and Ramps	279	■ R703.12	Adhered Masonry Veneer	322
■ R308.4.7	Glazing Adjacent to the Bottom Stair Landing	282	■ R806	Roof Ventilation	324
■ R309.5	Garage Fire Sprinklers	284	■ R806.5	Unvented Attic Assemblies	327
■ R310.1	Emergency Escape and Rescue Openings	286	■ R903.2.2	Crickets and Saddles	329
■ R310.2.2	Window Well Drainage	288	■ R905.2.7	Roof Covering Underlayment Application	330
■ R311.3	Floors and Landings at Exterior Doors	289	■ R1003.9.1, R1003.9.3	Masonry Chimney Caps and Rain Caps	332
■ R311.7.5	Stair Treads and Risers	291	■ R1005.7	Factory-Built Chimney Offsets	333
■ R311.7.6	Landings for Stairways	293			
■ R312	Guards and Window Fall Protection	294	PART 9		
■ R314	Smoke Alarms	298	Mechanical		
■ R316.4	Thermal Barrier	301	Chapters 12 through 23		334
■ R316.5.13	Thermal Barrier for Floors	303	■ M1301	Identification and Certification of Pipe, Tubing, and Fittings	335
■ R405.1	Foundation Drainage	305	■ M1411.6	Locking Access Port Caps	337
■ R501.3	Fire Protection of Floors	307	■ M1502.4	Dryer Exhaust Duct	338
■ R507	Decks	309	■ M1506	Exhaust Openings	341
			■ M1507	Mechanical Ventilation	343

■ M1602.2	Prohibited Sources of Outdoor and Return Air	347	■ P2606	Sealing of Annular Spaces	362
■ M1901	Ranges and Ovens	349	■ P2609.1, P2609.4	Identification and Certification	364
■ M2301, M2302	Thermal and Photovoltaic Solar Energy Systems	351	■ P2702.1, P2706.1	Plumbing Fixtures	366
PART 10			■ P2709.1, P2709.2	Shower Receptors and Linings	368
Fuel Gas			■ P2709.2.4	Liquid-Type Shower Lining	371
Chapter 24			■ P2713.1	Bathtub Waste Outlets and Overflows	372
353			■ P2904.2.4.2	Minimum Fire Sprinkler Separation from Obstruction	373
■ G2409.1	Reduced Clearance to Combustible Materials	354	■ P3007.3.5	Ejector Connection to the Drainage System	375
■ G2419.4	Sediment Trap	355	■ P3009	Gray-Water Recycling Systems	376
■ G2442.4	Prohibited Sources of Outdoor and Return Air	356	■ P3103.5	Location of Vent Terminal	378
PART 11			PART 12		
Plumbing			Electrical		
Chapters 25 through 33			Chapters 34 through 43		
358			380		
■ P2601.2	Connections to Drainage System	359			
■ P2603.4	Pipes through Foundation Walls	361			

Preface

The purpose of *Significant Changes to the 5th Edition (2014) Florida Building Code: Building and Residential* is to familiarize building officials, fire officials, plans examiners, inspectors, design professionals, contractors, and others in the construction industry with many of the important changes in the 5th Edition (2014) *Florida Building Code, Building* (FBCB) and the 5th Edition (2014) *Florida Building Code, Residential* (FBCR). This publication is designed to assist those code users in identifying the specific code changes that have occurred and, more important, understanding the reason behind the change. It is also a valuable resource for jurisdictions in their code adoption process.

Only a portion of the total number of code changes to the FBCB and FBCR are discussed in this book. The changes selected were identified for a number of reasons, including their frequency of application, special significance, or change in application. However, the importance of those changes not included is not to be diminished. Further information on code changes can be found in the *Code Changes Resource Collection*, available from the International Code Council® (ICC®) and www.floridabuilding.org. The resource collection provides the published documentation for each successful code change contained in the base code (2012 *International Building Code*®) since the 2009 Edition. All Florida-specific amendments to base code can be found under the “Proposed Code Modifications” section at www.floridabuilding.org.

This book is organized into seven general categories, each representing a distinct grouping of code topics. It is arranged to follow the general layout of the FBCB and FBCR, including code sections and section number format. The table of contents, in addition to providing guidance in use of this publication, allows for quick identification of those significant code changes that occur in the 5th Edition (2014) FBCB and FBCR.

Throughout the book, each change is accompanied by a photograph, an application example, or an illustration to assist and enhance the reader’s understanding of the specific change. A summary and a discussion of the significance of the changes are also provided. Each code change is identified by type, be it an addition, modification, clarification, or deletion.

The code change itself is presented in a format similar to the style utilized for code-change proposals. Deleted code language is shown with

a strike-through, whereas new code text is indicated by underlining. As a result, the actual 5th Edition (2014) code language is provided, as well as a comparison with the 2010 language, so the user can easily determine changes to the specific code text.

As with any code-change text, *Significant Changes to the 5th Edition (2014) Florida Building Code: Building and Residential* is best used as a study companion to the 5th Edition (2014) FBCB and FBCR. Because only a limited discussion of each change is provided, the code itself should always be referenced in order to gain a more comprehensive understanding of the code change and its application.

The commentary and opinions set forth in this text are those of the authors and do not necessarily represent the official position of the ICC, the Florida Department of Business and Professional Regulation, or the Florida Building Commission. In addition, they may not represent the views of any enforcing agency, as such agencies have the sole authority to render interpretations of the FBCB and FBCR. In many cases, the explanatory material is derived from the reasoning expressed by the code-change proponent.

Comments concerning this publication are encouraged and may be directed to the ICC at significantchanges@iccsafe.org.

About the Florida Building Code

The *Florida Building Code* is based on national model building code and national consensus standards, which are amended where necessary for Florida's specific needs. However, code requirements that address snow loads and earthquake protection are pervasive; they are left in place but should not be utilized or enforced because Florida has no snow load or earthquake threat. The code incorporates all building construction-related regulations for public and private buildings in the State of Florida other than those specifically exempted by Section 553.73, Florida Statutes. It has been harmonized with the *Florida Fire Prevention Code*, which is developed and maintained by the Department of Financial Services, Office of the State Fire Marshal, to establish unified and consistent standards.

The base codes for the 5th Edition (2014) of the *Florida Building Code* include: the *International Building Code*[®], 2012 Edition; the *International Plumbing Code*[®], 2012 Edition; the *International Mechanical Code*[®], 2012 Edition; the *International Fuel Gas Code*[®], 2012 Edition; the *International Residential Code*[®], 2012 Edition; the *International Existing Building Code*[®], 2012 Edition; the *International Energy Conservation Code*[®], 2012 Edition; the National Electrical Code, 2011 Edition; and, substantial criteria from the American Society of Heating, Refrigerating and Air-conditioning Engineers' (ASRAE) Standard 90.1-2010. State and local codes adopted and incorporated into the code include the *Florida Building Code, Accessibility*, and special hurricane protection standards for the High-Velocity Hurricane Zone.

The code is composed of nine main volumes: the *Florida Building Code, Building*, which also includes state regulations for licensed facilities; the *Florida Building Code, Plumbing*; the *Florida Building Code, Mechanical*; the *Florida Building Code, Fuel Gas*; the *Florida Building Code, Existing Building*; the *Florida Building Code, Residential*; the

Florida Building Code, Energy Conservation; the *Florida Building Code, Accessibility*; and, the *Florida Building Code, Test Protocols for High-Velocity Hurricane Zones*. Chapter 27 of the *Florida Building Code, Building* adopts the National Electrical Code's NFPA 70 by reference.

Acknowledgments

A special thank you is extended to Scott Stookey, Senior Technical Staff with ICC, for his assistance with the fire protection portions of this text. Thanks also to ICC staff members Alan Carr, Kim Paarlberg, Bill Rehr, and Kermit Robinson for their valued review and input.

About the Authors

Douglas W. Thornburg, AIA, CBO
International Code Council
Technical Director of Product Development

Douglas W. Thornburg is the Technical Director of Product Development for the International Code Council (ICC), where he provides leadership in technical development and positioning of support products for the council. In addition, Doug develops and reviews technical products, reference books, and resource materials relating to construction codes and their supporting documents. Prior to employment with the ICC in 2004, he spent nine years as a code consultant and educator on building codes. Formerly Vice-President/Education for the International Conference of Building Officials (ICBO), Doug continues to present building code seminars nationally and has developed numerous educational texts and resource materials, including *the IBC Handbook—Fire- and Life-Safety Provisions*. He was presented with ICC's inaugural Educator of the Year Award in 2008, in recognition of his outstanding contributions to education and professional development. A graduate of Kansas State University and a registered architect, Doug has more than 30 years of experience in building code training and administration, including 10 years with the ICBO and 5 years with the City of Wichita, Kansas. He is certified as a building official, building inspector, and plans examiner, as well as in seven other code enforcement categories.

John R. Henry, P.E.
International Code Council
Principal Staff Engineer

John R. Henry is a Principal Staff Engineer with the International Code Council (ICC) Business and Product Development Department, where he is responsible for the research and development of technical resources pertaining to the structural engineering provisions of the *International*

Building Code (IBC). John also develops and presents technical seminars on the structural provisions of the IBC. He has a broad range of experience that includes structural design in private practice, plan-check engineering with consulting firms and building department jurisdictions, and 14 years as an International Conference of Building Officials (ICBO)/ICC Staff Engineer. John graduated with honors from California State University in Sacramento with a Bachelor of Science Degree in Civil Engineering and is a Registered Civil Engineer in the State of California. He is a member of the American Society of Civil Engineers (ASCE) and the Structural Engineers Association of California (SEAOC) and is an ICC Certified Plans Examiner. John has written several articles on the structural provisions of the IBC that have appeared in *Structure Magazine* and *Structural Engineering and Design* magazine's Code Series. He is also the coauthor with S. K. Ghosh, PhD, of the IBC Handbook—Structural Provisions.

Jay Woodward
International Code Council
Senior Staff Architect

Jay is a senior staff architect with the ICC's Business and Product Development Department and works out of the Lenexa, Kansas, Distribution Center. His current responsibilities include serving as the Secretariat for the ICC A117.1 standard committee and assisting in the development of new ICC publications.

With more than 28 years of experience in building design, construction, code enforcement, and instruction, Jay's experience provides him with the ability to address issues of code application and design for code enforcement personnel as well as architects, designers, and contractors. Jay has previously served as the Secretariat for the ICC's *International Energy Conservation Code* and the *International Building Code's* Fire Safety Code Development committee.

A graduate of the University of Kansas and a registered architect, Jay has also worked as an architect for the Leo A. Daly Company in Omaha, Nebraska; as a building Plans Examiner for the City of Wichita, Kansas; and as a Senior Staff Architect for the International Conference of Building Officials (ICBO) prior to working for the ICC. He is also author of *Significant Changes to the A117.1 Accessibility Standard 2009 Edition*.

T. Eric Stafford, P.E.
T. Eric Stafford & Associates, LLC
President

T. Eric Stafford is a registered professional engineer specializing in wind hazard mitigation and code development activities. He is currently President of T. Eric Stafford & Associates and serves as a building code consultant for various groups including the Institute for Business and Home Safety. Stafford recently partnered with ASCE Press to publish the *Significant Changes to the Wind Load Provisions of ASCE 7-10* and *Significant Changes to the Seismic Load Provisions of ASCE 7-10*. Stafford has also partnered with International Code Council, Building Officials Association of Florida and AIA Florida to publish Commentaries on the Florida Building Codes and Commentaries on the North Carolina

Building Codes. Previously, he served as Vice President/Technical Services for the Federal Alliance for Safe Homes. He has a Bachelor of Civil Engineering and a Master of Science (Structural emphasis) from Auburn University. Stafford is a member of ASCE 7 Task Committee on Wind Loads, previous member of the National Hurricane Conference Planning Committee, Chairman Emeritus of the National Hurricane eConference Engineering Topic Committee, a member of the ICC 600 Committee, Former Staff Liaison to the SBCCI Wind Load Committee, and former Staff Liaison to the International Building Code Structural Code Development Committee. Stafford is national lecturer on the wind provision of the *International Building Code* and ASCE 7. Stafford also was a Manager of Codes for the International Code Council and Director/Code Development for the Southern Building Code Congress. He was the recipient of the 2004 National Hurricane eConference Hurricane Mitigation Award.

About the ICC

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:

Eastern Regional Office (BIR)
Central Regional Office (CH)
Western Regional Office (LA)

888-ICC-SAFE
(888-422-7233)
www.iccsafe.org