PREFACE

History

The State of Florida first mandated statewide building codes during the 1970s at the beginning of the modern construction boom. The first law required all municipalities and counties to adopt and enforce one of the four state-recognized model codes known as the “state minimum building codes.” During the early 1990s a series of natural disasters, together with the increasing complexity of building construction regulation in vastly changed markets, led to a comprehensive review of the state building code system. The study revealed that building code adoption and enforcement was inconsistent throughout the state and those local codes thought to be the strongest proved inadequate when tested by major hurricane events. The consequences of the building codes system failure were devastation to lives and economies and a statewide property insurance crisis. The response was a reform of the state building construction regulatory system that placed emphasis on uniformity and accountability.

The 1998 Florida Legislature amended Chapter 553, Florida Statutes (F.S.), Building Construction Standards, to create a single state building code that is enforced by local governments. As of March 1, 2002, the Florida Building Code, which is developed and maintained by the Florida Building Commission, supersedes all local building codes. The Florida Building Code is updated every three years and may be amended annually to incorporate interpretations and clarifications.

Scope

The Florida Building Code is based on national model building codes 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 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, NFPA 70, by reference.

Under certain strictly defined conditions, local governments may amend requirements to be more stringent than the code. All local amendments to the Florida Building Code must be adopted by local ordinance and reported to the Florida Building Commission then posted on www.florida-building.org in Legislative format for a month before being enforced. Local amendments to the Florida Building Code and the Florida Fire Prevention Code may be obtained from the Florida Building Commission web site, or from the Florida Department of Business and Professional Regulation or the Florida Department of Financial Services, Office of the State Fire Marshal, respectively.
Adoption and Maintenance

The Florida Building Code is adopted and updated with new editions triennially by the Florida Building Commission. It is amended annually to incorporate interpretations, clarifications and to update standards. Minimum requirements for permitting, plans review and inspections are established by the code, and local jurisdictions may adopt additional administrative requirements that are more stringent. Local technical amendments are subject to strict criteria established by Section 553.73, F.S. They are subject to Commission review and adoption into the code or repeal when the code is updated triennially and are subject to appeal to the Commission according to the procedures established by Section 553.73, F.S.

Eleven Technical Advisory Committees (TACs), which are constituted consistent with American National Standards Institute (ANSI) Guidelines, review proposed code changes and clarifications of the code and make recommendations to the Commission. These TACs, whose membership is constituted consistent with American National Standards Institute (ANSI) Guidelines, include: Accessibility; Joint Building Fire (a joint committee of the Commission and the State Fire Marshal); Building Structural; Code Administration/Enforcement; Electrical; Energy; Mechanical; Plumbing and Fuel Gas; Roofing; Swimming Pool; and Special Occupancy (state agency construction and facility licensing regulations).

The Commission may only issue official code clarifications using procedures of Chapter 120, Florida Statutes. To obtain such a clarification, a request for a Declaratory Statement (DEC) must be made to the Florida Building Commission in a manner that establishes a clear set of facts and circumstances and identifies the section of the code in question. Requests are analyzed by staff, reviewed by the appropriate Technical Advisory Committee, and sent to the Florida Building Commission for action. These interpretations establish precedents for situations having similar facts and circumstances and are typically incorporated into the code in the next code amendment cycle. Non-binding opinions are available from the Building Officials Association of Florida’s web site (www.BOAF.net) and a Binding Opinion process is available online at www.floridabuilding.org.

Code Development Committee Responsibilities
(Letter Designations in Front of Section Numbers)

In each code development cycle, proposed changes to this code are considered at the Code Development Hearing by the International Mechanical Code Development Committee. Proposed changes to a code section whose number begins with a letter in brackets are considered by a different code development committee. For instance, proposed changes to code sections which have the letter [B] in front (for example, [B] 309.1), are considered by one of the International Building Code development committees (IBC-General) at the Code Development Hearing.

The content of sections in this code which begin with a letter designation is maintained by another code development committee in accordance with the following:

[A] = Administrative Code Development Committee;

[B] = International Building Code Development Committee (IBC—Fire Safety, General, Means of Egress or Structural);

[EC] = International Energy Conservation Code Development Committee;

[F] = International Fire Code Development Committee; and

Marginal Markings

Solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the 2009 edition. Deletion indicators (urence) are provided in the margin where an entire section, paragraph, exception or table has been deleted or an item in a list of items or in a table has been deleted.

Dotted vertical lines in the margins within the body of the code indicate a change from the requirements of the base codes to the Florida Building Code, Mechanical, 5th Edition (2014) effective June 30, 2015.

Sections deleted from the base code are designated “Reserved” in order to maintain the structure of the base code.

Italicized Terms

Selected terms set forth in Chapter 2, Definitions, are italicized where they appear in code text. Such terms are not italicized where the definition set forth in Chapter 2 does not impart the intended meaning in the use of the term. The terms selected have definitions which the user should read carefully to facilitate better understanding of the code.

Acknowledgments

The Florida Building Code is produced through the efforts and contributions of building designers, contractors, product manufacturers, regulators and other interested parties who participate in the Florida Building Commission’s consensus processes, Commission staff and the participants in the national model code development processes.
TABLE OF CONTENTS

CHAPTER 1  SCOPE AND ADMINISTRATION  . . 1.1

PART 1—SCOPE AND APPLICATION. . . . . 1.1
Section
101  General .................................................. 1.1
102  Applicability.............................................. 1.1

PART 2—ADMINISTRATION AND ENFORCEMENT . . . . 1.1
103  Department of Mechanical Inspection (Reserved) .......... 1.1
104  Duties and Powers of the Code Official (Reserved) ....... 1.1
105  Approval (Reserved) ..................................... 1.1
106  Permits (Reserved) ....................................... 1.1
107  Inspections and Testing (Reserved) ....................... 1.1
108  Violations (Reserved) .................................... 1.1
109  Means of Appeal (Reserved) .................. 1.1
110  Temporary Equipment, Systems and Uses (Reserved). .... 1.1

CHAPTER 2  DEFINITIONS  ................. 2.1
Section
201  General .................................................. 2.1
202  General Definitions ................................... 2.1

CHAPTER 3  GENERAL REGULATIONS ...... 3.1
Section
301  General .................................................. 3.1
302  Protection of Structure .................................. 3.2
303  Equipment and Appliance Location .................... 3.3
304  Installation ................................................ 3.3
305  Piping Support .......................................... 3.5
306  Access and Service Space ............................. 3.5
307  Condensate Disposal ................................... 3.7
308  Clearance Reduction .................................... 3.8
309  Temperature Control ................................... 3.8
310  Explosion Control ................................. 3.9
311  Smoke and Heat Vents ................................ 3.9
312  Heating and Cooling Load Calculations ............ 3.9

CHAPTER 4  VENTILATION ....................... 4.1
Section
401  General .................................................. 4.1
402  Natural Ventilation ...................................... 4.1
403  Mechanical Ventilation ................................ 4.2
404  Enclosed Parking Garages ............................. 4.7
405  Systems Control ........................................ 4.7
406  Ventilation of Uninhabited Spaces ................. 4.8

CHAPTER 5  EXHAUST SYSTEMS .......... 5.1
Section
501  General .................................................. 5.1
502  Required Systems ....................................... 5.2
503  Motors and Fans ......................................... 5.8
504  Clothes Dryer Exhaust ................................ 5.8
505  Domestic Kitchen Exhaust Equipment ............. 5.10
506  Commercial Kitchen Hood Ventilation System Ducts and Exhaust Equipment ............. 5.10
507  Commercial Kitchen Hoods ........................... 5.15
508  Commercial Kitchen Makeup Air .................. 5.18
509  Fire Suppression Systems ............................ 5.18
510  Hazardous Exhaust Systems .......................... 5.18
511  Dust, Stock and Refuse Conveying Systems .... 5.20
512  Subslab Soil Exhaust Systems ...................... 5.21
513  Smoke Control Systems .............................. 5.21
514  Energy Recovery Ventilation Systems ............. 5.25
515  Mausoleum Relief Vent ................................ 5.25
516  Carbon Monoxide Control Systems ............... 5.26

CHAPTER 6  DUCT SYSTEMS ................. 6.1
Section
601  General .................................................. 6.1
602  Plenums ................................................. 6.2
603  Duct Construction and Installation ............... 6.3
604  Insulation ................................................. 6.5
605  Air Filters ................................................ 6.6
606  Smoke Detection Systems Control ............... 6.6
607  Duct and Transfer Openings ...................... 6.7
TABLE OF CONTENTS

CHAPTER 7  COMBUSTION AIR ............... 7.1
Section
701  General .......................... 7.1

CHAPTER 8  CHIMNEYS AND VENTS ......... 8.1
Section
801  General .......................... 8.1
802  Vents ............................. 8.2
803  Connectors ..................... 8.3
804  Direct-vent, Integral Vent and Mechanical Draft Systems ................. 8.4
805  Factory-built Chimneys ........... 8.5
806  Metal Chimneys ................... 8.6

CHAPTER 9  SPECIFIC APPLIANCES,
FIREPLACES AND SOLID FUEL-
BURNING EQUIPMENT ............... 9.1
Section
901  General .......................... 9.1
902  Masonry Fireplaces .............. 9.1
903  Factory-built Fireplaces ......... 9.1
904  Pellet Fuel-burning Appliances . 9.1
905  Fireplace Stoves and Room Heaters .... 9.1
906  Factory-built Barbecue Appliances . 9.1
907  Incinerators and Crematories .... 9.1
908  Cooling Towers, Evaporative Condensers and Fluid Coolers ............... 9.1
909  Vented Wall Furnaces .......... 9.2
910  Floor Furnaces .................. 9.2
911  Duct Furnaces ................... 9.2
912  Infrared Radiant Heaters ....... 9.2
913  Clothes Dryers .................. 9.2
914  Sauna Heaters ................... 9.3
915  Engine and Gas Turbine-powered Equipment and Appliances .......... 9.3
916  Pool and Spa Heaters .......... 9.3
917  Cooking Appliances .......... 9.3
918  Forced-air Warm-air Furnaces ... 9.4
919  Conversion Burners .......... 9.5
920  Unit Heaters ................... 9.5
921  Vented Room Heaters .......... 9.5
922  Kerosene and Oil-fired Stoves . 9.5
923  Small Ceramic Kilns ........... 9.5
924  Stationary Fuel Cell Power Systems 9.5
925  Masonry Heaters ................ 9.5
926  Gaseous Hydrogen Systems ...... 9.5
927  Radiant Heating Systems ...... 9.5
928  Evaporative Cooling Equipment ........ 9.6

CHAPTER 10  BOILERS, WATER HEATERS
AND PRESSURE VESSELS .......... 10.1
Section
1001  General .......................... 10.1
1002  Water Heaters .................. 10.1
1003  Pressure Vessels ................ 10.1
1004  Boilers .......................... 10.1
1005  Boiler Connections ............. 10.2
1006  Safety and Pressure Relief Valves and Controls ......................... 10.2
1007  Boiler Low-water Cutoff ....... 10.3
1008  Steam Blowoff Valve .......... 10.3
1009  Hot Water Boiler Expansion Tank .......... 10.3
1010  Gauges .......................... 10.3
1011  Tests ............................ 10.3

CHAPTER 11  REFRIGERATION .......... 11.1
Section
1101  General .......................... 11.1
1102  System Requirements .......... 11.1
1103  Refrigeration System Classification .......................... 11.2
1104  System Application Requirements ........... 11.7
1105  Machinery Room, General Requirements .......... 11.8
1106  Machinery Room, Special Requirements .......... 11.9
1107  Refrigerant Piping .......... 11.9
1108  Field Test ........................ 11.11
1109  Periodic Testing .............. 11.11

CHAPTER 12  HYDRONIC PIPING ....... 12.1
Section
1201  General .......................... 12.1
1202  Material .......................... 12.1
1203  Joints and Connections ....... 12.2
1204  Pipe Insulation ............... 12.4
1205  Valves .......................... 12.4
1206  Piping Installation ............ 12.4
1207  Transfer Fluid ................. 12.5
1208  Tests ............................ 12.5
1209  Embedded Piping .............. 12.5
## TABLE OF CONTENTS

### CHAPTER 13 FUEL OIL PIPING AND STORAGE .......................... 13.1

Section

1301 General ............................................. 13.1
1302 Material ............................................. 13.1
1303 Joints and Connections ......................... 13.1
1304 Piping Support ................................. 13.2
1305 Fuel Oil System Installation ................. 13.2
1306 Oil Gauging ......................................... 13.3
1307 Fuel Oil Valves .................................... 13.3
1308 Testing ............................................. 13.3

### CHAPTER 14 SOLAR SYSTEMS ................................. 14.1

Section

1401 General ............................................. 14.1
1402 Installation ......................................... 14.1
1403 Heat Transfer Fluids ............................... 14.2
1404 Materials ........................................... 14.2

### CHAPTER 15 REFERENCED STANDARDS .......................... 15.1

### APPENDIX A CHIMNEY CONNECTOR PASS-THROUGHS ...................... A.1

### APPENDIX B RECOMMENDED PERMIT FEE SCHEDULE .................... B.1

### INDEX .............................................. INDEX.1