FLORIDA SUPPLEMENT FLORIDA BUILDING CODE, FUEL GAS

For the purposes of using this supplement the following references apply throughout:

International Building Code, use the 2010 Florida Building Code, Building.

International Residential Code, use the 2010 Florida Building Code, Residential.

International Plumbing Code, use the 2010 Florida Building Code, Plumbing.

International Mechanical Code, use the 2010 Florida Building Code, Mechanical.

International Fire Code, use the 2010 Florida Fire Prevention Code.

International Energy Conservation Code, use the 2010 Florida Building Code, Energy Conservation.

International Fuel Gas Code, use the 2009 International Fuel Gas Code with the 2010 Florida Fuel Gas Supplement.

CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Scope. The provisions of Chapter 1, *Florida Building Code, Building* shall govern the administration and enforcement of the *Florida Building Code, Fuel Gas.*

101.2 Scope. Reserved.

101.3 Appendices. Reserved.

101.4 Intent. Reserved.

101.5 Severability. Reserved.

SECTION 102 APPLICABILITY Reserved

SECTION 103 DEPARTMENT OF INSPECTION Reserved

SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL Reserved

SECTION 105 APPROVAL Reserved

SECTION 106 PERMITS Reserved

SECTION 107 INSPECTIONS AND TESTING Reserved

SECTION 108 VIOLATIONS Reserved

SECTION 109 MEANS OF APPEAL Reserved

SECTION 110 TEMPORARY EQUIPMENT, SYSTEMS AND USES Reserved

CHAPTER 2 DEFINITIONS

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have the meanings as defined in Webster's *Third New International Dictionary of the English Language Unabridged*.

CHAPTER 3 GENERAL REGULATIONS

301.1 Scope. This chapter shall govern the approval and installation of all equipment and appliances that comprise parts of the installations regulated by this code in accordance with Section 301.1.1.

301.1.1 This code shall apply to the installation of fuel gas piping systems, fuel gas utilization equipment, and related accessories as follows:

- 1. Coverage of piping systems shall extend from the point of delivery to the connections with gas utilization equipment (see "Point of delivery").
- 2. Systems with an operating pressure of 125 psig (862 kPa gauge) or less.

Piping systems for gas-air mixtures within the flammable range with an operating pressure of 10 psig (69 kPa gauge).

LP-gas piping systems with an operating pressure of 20 psig (140 kPa) or less.

- 3. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.
- 4. Requirements for gas utilization equipment and related accessories shall include installation, combustion and ventilation air and venting.

This code shall not apply to the following:

- 1. Portable LP-gas equipment of all types that are not connected to a fixed fuel piping system.
- 2. Installation of farm equipment such as brooders, dehydrators, dryers and irrigation equipment.
- 3. Raw material (feedstock) applications except for piping to special atmosphere generators.
- 4. Oxygen-fuel gas cutting and welding systems.
- 5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.
- 6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.
- 7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by chemical reactions or used in chemical reactions.
- 8. LP-gas installations at utility gas plants.
- 9. Liquefied natural gas (LNG) installations.
- 10. Fuel gas piping in power and atomic energy plants.
- 11. Proprietary items of equipment, apparatus, or instruments such as gas generating sets, compressors and calorimeters.
- 12. LP-gas equipment for vaporization, gas mixing and gas manufacturing.
- 13. Temporary LP-gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.
- 14. Installation of LP-gas systems for railroad switch heating.
- 15. Installation of LP-gas and compressed natural gas (CNG) systems on vehicles.
- 16. Gas piping, meters, gas pressure regulators, and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.
- 17. Building design and construction, except as specified herein.

301.3 Listed and labeled. Appliances regulated by this code shall be listed and labeled for the application in which they are used unless otherwise approved in accordance with Section 101.1. The approval of unlisted appliances in accordance with Section 101.1 shall be based upon approved engineering evaluation.

[B] 301.11 Flood hazard. For structures located in flood hazard areas, the appliance, equipment and system installations regulated by this code shall be located at or above the elevation required by Section 1612.4 of the *Florida Building Code*, *Building* for utilities and attendant equipment design flood elevation and shall comply with the flood-resistant construction requirements of the *Florida Building Code*, *Building*.

Exception: The appliance, equipment and system installations regulated by this code are permitted to be located

below the elevation required by Section 1612.4 of the *Florida Building Code, Building* for utilities and attendant equipment provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to such elevation.

301.12 Seismic resistance. Reserved.

305.5 Private garages. Reserved.

[M] 306.3 Appliances in attics. Attics containing appliances shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 6 feet (1829 mm) in length when measured along the centerline of the passageway from the attic access opening to the appliance's service panel. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest component of the appliance.

Exception:

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.

306.3.1 Electrical requirements. A lighting fixture with receptacle outlet, controlled by a switch located at the required passageway opening, shall be provided so as to light the passageway and service area and installed in accordance with Chapter 27 of the *Florida Building Code, Building*.

306.3.2 Air-handling units. Air-handling units shall be allowed in residential attics if the following conditions are met:

- 1. The service panel of the equipment is located within 6 feet (1829 mm) feet of an attic access.
- 2. A device is installed to alert the owner or shut the unit down when the condensation drain is not working properly.
- 3. The attic access opening is of sufficient size to replace the air handler.
- 4. A notice is posted on the electric service panel indicating to the homeowner that the air handler is located in the attic. Said notice shall be in all capitals, in 16-point type, with the title and first paragraph in bold:

NOTICE TO HOMEOWNER

A PART OF YOUR AIR-CONDITIONING SYSTEM, THE AIR HANDLER, IS LOCATED IN THE ATTIC. FOR PROPER, EFFICIENT, AND ECONOMIC OPERA-TION OF THE AIR-CONDITIONING SYSTEM, YOU MUST ENSURE THAT REGULAR MAINTENANCE IS PERFORMED. YOUR AIR-CONDITIONING SYSTEM IS EQUIPPED WITH ONE OR BOTH OF THE FOL-LOWING: 1) A DEVICE THAT WILL ALERT YOU WHEN THE CONDENSATION DRAIN IS NOT WORK-ING PROPERLY, OR 2) A DEVICE THAT WILL SHUT THE SYSTEM DOWN WHEN THE CONDENSATION DRAIN IS NOT WORKING. TO LIMIT POTENTIAL DAMAGE TO YOUR HOME, AND TO AVOID DISRUP-TION OF SERVICE, IT IS RECOMMENDED THAT YOU ENSURE PROPER WORKING ORDER OF THESE DEVICES BEFORE EACH SEASON OF PEAK OPERATION.

309.1 Grounding. Each above-ground portion of a gas piping system upstream from the equipment shutoff valve shall be electrically continuous and bonded to any grounding electrode, as defined by Chapter 27 of the *Florida Building Code, Building*.

310.1 Pipe and tubing other than CSST. Each above-ground portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas *piping* shall be considered to be bonded where it is connected to *appliances* that are connected to the *equipment* grounding conductor of the circuit supplying that *appliance*.

SECTION 311 CARBON MONOXIDE CONTROL SYSTEMS

311 Carbon monoxide control systems. See Section 916 of the *Florida Building Code, Building.*

CHAPTER 4 GAS PIPING INSTALLATIONS

401.2 Liquefied petroleum gas storage. The storage system (container, regulators, piping and all components upstream to the point of delivery) for liquefied petroleum gas shall be designed and installed in accordance with the *Florida Fire Prevention Code* and NFPA 58.

411.1.7 Outdoor appliance connectors. Outdoor gas hose connectors are permitted to connect portable outdoor gas-fired equipment. An equipment shutoff valve, a listed quick-disconnect device, or a listed gas convenience outlet shall be installed where the connector is attached to the supply piping and in such a manner as to prevent the accumulation of foreign matter. Lengths shall not exceed 12 feet (3658 mm) and the connection shall only be made in the outdoor area where the equipment is to be used.

CHAPTER 5 CHIMNEYS AND VENTS

503.8 Venting system termination location. The location of venting system terminations shall comply with the following:

1. A mechanical draft venting system shall terminate at least 3 feet (914 mm) above any forced-air inlet located within 10 feet (3048 mm).

Exceptions:

- 1. This provision shall not apply to the *combustion air* intake of a direct-vent *appliance*.
- 2. This provision shall not apply to the separation of the integral outdoor air inlet and flue gas discharge of *listed* outdoor appliances.
- 2. A mechanical draft venting system, excluding *direct-vent appliances*, shall terminate at least 4 feet (1219 mm) below, 4 feet (1219 mm) horizontally from, or 1 foot (305 mm) above any door, operable window or gravity air inlet into any building. The bottom of the vent terminal shall be located at least 12 inches (305 mm) above finished ground level.
- 3. The vent terminal of a direct-vent *appliance* with an input of 10,000 Btu per hour (3 kW) or less shall be located at least 6 inches (152 mm) from any air opening into a building, and such an *appliance* with an input over 10,000 Btu per hour (3 kW) but not over 50,000 Btu per hour (14.7 kW) shall be installed with a 9-inch (230 mm) vent termination *clearance*, and an *appliance* with an input over 50,000 Btu/h (14.7 kW) shall have at least a 12-inch (305 mm) vent termination *clearance*. The bottom of the vent terminal and the air intake shall be located at least 12 inches (305 mm) above finished ground level.
- 4. Through-the-wall vents for Category II and IV appliances and noncategorized condensing appliances shall not terminate over public walkways or over an area where condensate or vapor could create a nuisance or hazard or could be detrimental to the operation of regulators, relief valves or other *equipment*. Where local experience indicates that condensate is a problem with Category I and III appliances, this provision shall also apply. Drains for condensate shall be installed in accordance with the manufacturer's installation instructions.

503.10.14 Passage through ceilings, floors or walls. Single-wall metal pipe connectors shall not pass through any wall, floor or ceiling except as permitted by Sections 503.7.4 and 503.10.15.

CHAPTER 6 SPECIFIC APPLIANCES

SECTION 615 SAUNA HEATERS Reserved

CHAPTER 7 GASEOUS HYDROGEN SYSTEMS (NO CHANGE)

CHAPTER 8 REFERENCED STANDARDS

| | | Florida Building Commision |
|---------------------|--------------|--|
| | | c/o Florida Department of Community Affair |
| | | Building Codes and Standards |
| T 1 I | \mathbf{O} | 2555 Shumard Oak Blvd. |
| Horida | | Tallahassee Fl 32399-2100 |

| I IUIIuu V | |
|------------|---|
| Standard | Referenc |
| reference | in co |
| number | Title section numb |
| FBC-B—10 | Florida Building Code, Building |
| FBC-EC-10 | Florida Building Code, Energy Conservation |
| Chapter 27 | Florida Building Code, Building: Electrical (NEC/NFPA 70) |
| FBC-M—10 | Florida Building Code, Mechanical |
| FBC-P-10 | Florida Building Code, Plumbing |
| FBC-R-10 | Florida Building Code, Residential |
| FFPC—10 | Florida Fire Prevention Code |
| | /03.5, 704.1.2, 704.3, 704.4, 706.2, 706.3, 707.1, 707.2, 708.1 |

APPENDIX A (IFGS) SIZING AND CAPACITIES OF GAS PIPING (NO CHANGE)

APPENDIX B (IFGS) SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY 1 APPLIANCES, AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS (NO CHANGE)

APPENDIX C (IFGS) EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS RESERVED

APPENDIX D (IFGS) RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION RESERVED