

CHAPTER 28 MECHANICAL SYSTEMS

SECTION 2801 GENERAL

2801.1 Scope. Provisions of this chapter and the the *Florida Building Code, Mechanical and Fuel Gas* shall govern heating, air conditioning, refrigeration, mechanical ventilation and plenums and the design and construction of factory-built chimneys, fireplaces and barbecues.

SECTION 2802 DEFINITIONS

For definitions, see Chapter 2.

SECTION 2803 HEATING, AIR CONDITIONING, REFRIGERATION AND VENTILATION

All heating, air conditioning, refrigeration and ventilation equipment shall conform to the requirements set forth in the *Florida Building Code, Mechanical*.

SECTION 2804 CHIMNEYS

2804.1 General

2804.1.1 Chimneys shall be required for all heating or heat-producing appliances except electrical heating and appliances listed for use with venting systems. Every chimney shall be constructed and every venting system shall be installed in accordance with the applicable requirements of this chapter.

2804.1.2 Every chimney, vent or venting system shall be capable of producing a draft at the appliance not less than that required for the safe operation of the appliance connected thereto. A power exhauster may be used except with incinerators to increase low draft. When an exhauster is used, provision shall be made to shut off the fuel supply to the appliance in the event of failure to the exhauster.

2804.1.3 Nothing in this code shall prohibit the joining of two or more connectors into a combined connector provided that all pipes are of sufficient size to serve all of the appliances thus connected, and provided that all pipes are constructed to comply with the severest requirements for any of those connected.

2804.1.4 The connector of a fuel-burning appliance shall not be connected into the chimney flue of an incinerator which has the rubbish chute identical with the chimney flue.

2804.2 Chimney construction

2804.2.1 A chimney shall not carry any load other than its own dead weight.

2804.2.2 Chimney crickets of metal or other roofing materials shall be laid or installed on solid roof decking consistent with the construction of the roof.

2804.2.3 All chimneys which are or become unsafe or dangerous shall be made safe or taken down.

2804.2.4 Chimneys shall extend at least 3 ft (914 mm) above the highest point where they pass through the roof of the building and at least 2 ft (610 mm) higher than any portion of the roof or building located within 10 ft (3048 mm) horizontally of such chimney.

2804.2.5 An appliance equipped with a forced or induced draft system which may result in positive pressure in the venting system shall be connected to a pressure-tight venting system.

2804.3 Raising adjoining chimneys

2804.3.1 Whenever a building is hereafter erected, enlarged or raised, the owner of such building shall, at his own expense, carry up, either independently or on his own building, all chimneys, smoke stacks, and smoke flues of any adjoining buildings which are within 10 ft (3048 mm) of any portion of the wall extending above such chimney or flue.

2804.3.2 The construction of such chimney shall conform to all requirements of this code. Such a chimney shall be carried up simultaneously with the walls.

2804.3.3 It shall be the duty of the owner of the building to be erected, enlarged or raised, to notify in writing, at least 10 days before such work is to begin, the owner of the chimney affected, of his intention to carry up such chimney.

2804.4 Factory-Built chimneys

2804.4.1 Factory-built chimneys shall be listed and shall be installed in accordance with the conditions of the listing, and the manufacturer's instructions. Nothing contained in this code shall be construed as prohibiting the use of insulated suspended factory-built chimneys provided such assemblies have been tested and approved by a recognized laboratory for the use intended and are installed in accordance with their approval.

2804.4.2 Factory-built chimneys may be installed with zero clearance from wood structural members, such as framing, roof rafters, floor and ceiling joists and other component structural members, when it has been determined by test reports of recognized and approved testing laboratories that the unit does not transmit heat to the supporting combustible members of more than 90°F (50°C) above room temperature. Supports for such chimneys

attached to ceiling or floor joists shall be permitted provided the joists are of adequate size to support additional load.

2804.4.3 All chimney installations shall conform with the height requirements of this code.

2804.4.4 Factory-built chimneys for use with closed combustion wood-burning appliances shall comply with the Type HT requirements of UL 103.

2804.4.5 Chimneys for use with factory-built fireplaces shall meet the requirements of UL 127.

SECTION 2805 MASONRY CHIMNEYS AND BARBECUES

Provisions for masonry chimneys and barbecues are contained in 2113 and 2114.

SECTION 2806 FIREPLACES—FACTORY-BUILT

2806.1 Factory-Built fireplaces

2806.1.1 Factory-built fireplaces shall be listed and shall be installed in accordance with the conditions of the listing.

2806.1.2 Factory-built fireplaces shall be tested in accordance with and meet the requirements of UL 127.

2806.1.3 Hearth extensions of approved factory-built fireplaces and fireplace stoves shall be installed in accordance with the listing. Masonry hearth extensions, if used with factory-built fireplaces, shall be installed as required in 2114.3.8. The hearth extension shall be readily distinguished from the surrounding area.

2806.1.4 Factory-built fireplaces shall be installed in accordance with 2114.3.12.

2806.2 Factory-Built fireplace stoves and solid fuel room heaters

2806.2.1 Factory-built fireplace stoves and solid fuel type room heaters shall be listed and shall be installed in accordance with the conditions of the listing. The factory-built fireplace stoves shall be tested in accordance with and meet the requirements of UL 737. The solid fuel type room heaters shall be tested in accordance with and meet the requirements of UL 1482.

2806.2.2 Factory-built fireplace stoves shall also be installed in accordance with 2806.1.2 and 2114.3.12.

SECTION 2807 FALSE FIREPLACES

False fireplaces may be used in connection with listed gas or electric heaters, provided such fireplaces are constructed of noncombustible materials.

SECTION 2808 BARBECUES—FACTORY-BUILT

Factory-built barbecues shall be of an approved type and shall be installed in accordance with the manufacturer's instructions.

SECTION 2809 GAS APPLIANCES

Gas appliances shall be installed and vented in accordance with the requirements of the *Florida Building Code, Fuel Gas*.

SECTION 2810 FRESH AIR INTAKES

Fresh air intakes shall be screened with a corrosion-resistant material not larger than 1/2-inch (12.7 mm) mesh. Fresh air intakes shall not be taken from a location closer than 10 ft (3 m) from any chimney or vent outlet, or sanitary sewer vent outlet, unless such vent is not less than 24 inches (610 mm) above the fresh air vent. Fresh air intake vents located on roofs will be properly marked with a universal marking, "intake," permanently attached. See 705.1.1.4 for fire protection.

SECTION 2811 PLENUM FLOOR SYSTEMS

Plenum floor systems shall comply with the requirements of Section 602 of the *Florida Building Code, Mechanical*.