

1 **BOARD BILL #517**                    **INTRODUCED BY ALDERMAN TERRY KENNEDY**

2     An Ordinance pertaining to the Fuel Gas Code of the City of Saint Louis; repealing  
3     Ordinance 65022; adopting the International Fuel Gas Code, 2006 Edition with changes,  
4     as the Fuel Gas Code of the City of Saint Louis; and containing a savings clause, a  
5     severability clause, a penalty clause and an emergency clause.

6                    **BE IT ORDAINED BY THE CITY OF SAINT LOUIS AS FOLLOWS:**

7     **SECTION ONE.** Ordinance 65022 approved September 8, 2000, pertaining to the 1996  
8     International Fuel Gas Code, is hereby repealed.

9     **SECTION TWO.** The International Fuel Gas Code, 2006 Edition as published by the  
10    International Code Council, Inc., three copies of which are on file in the Office of the  
11    Register of the City of Saint Louis, being marked and designated as the *International*  
12    *Fuel Gas Code* as published by the International Code Council, Inc., be and is hereby  
13    adopted as "The Fuel Gas Code of the City of Saint Louis, in the State of Missouri",  
14    pursuant to this Ordinance and in conformity with Section 71.943 RSMo, for the control  
15    of building and structures as herein provided; and each and all of the regulations,  
16    provisions, penalties, conditions and terms of said *Fuel Gas Code* are hereby referred to,  
17    adopted and made a part hereto, as if fully set out in this ordinance with the additions,  
18    insertions, deletions and changes prescribed in Section Three of this Ordinance.

19    **SECTION THREE.** The International Fuel Gas Code 2006 is amended and changed in  
20    the following respects:

21    *Change Section 101.1 to read as follows:*

22    **101.1 Title:** These regulations shall be known as the Fuel Gas Code of the City of Saint  
23    Louis, hereinafter referred to as "this code".

1 *Delete Sections 103 thru 109 in their entirety.*

2 *Add new Section 103 to read as follows:*

3 **SECTION 103**

4 **ADMINISTERING OF THIS CODE**

5 **103.1 General.** Authority, permitting, fees, penalties, inspections, duties and means of  
6 appeal shall be as set forth in the *International Mechanical Code* as adopted by the City  
7 of Saint Louis.

8 *Change Section 201.3 to read as follows:*

9 **201.3 Terms defined in other codes.** Where terms are not defined in this code and are  
10 defined in the electrical code, building code, fire code, mechanical code, or plumbing  
11 code, such terms shall have meanings ascribed to them as in those codes.

12 *Modify Section 202 by the addition or modification of the following definition:*

13 **CONSTRUCTION DOCUMENTS.** All of the written, graphic and pictorial documents  
14 prepared or assembled for describing the design, location and physical characteristics of  
15 the elements of the project necessary for obtaining a permit. The construction drawings  
16 shall be drawn to an appropriate scale.

17 **DIVERSITY FACTOR.** Ratio of the maximum probable demand to the maximum  
18 possible demand.

19 **ELECTRICAL CODE.** The National Electrical Code as adopted by the City of St.  
20 Louis.

21 **FLUE GASES.** Products of combustion and excess air.

22 **HEATING VALUE, TOTAL.** The number of Btu's produced by the combustion, at  
23 constant pressure, of 1 cubic foot (0.0283 m<sup>3</sup>) of gas when the products of combustion

1 are cooled to the initial temperature of the gas and air, when the water vapor formed  
2 during combustion is condensed, and when all necessary corrections have been applied.

3 **PURGE.** To clear of air, water or other foreign substances.

4 **PLUMBING CODE.** The plumbing code adopted by the City of St. Louis.

5 **VENTING SYSTEM.** A continuous open passageway from the flue collar or draft hood  
6 of a gas-burning appliance to the outside atmosphere for the purpose of removing flue or  
7 vent gases. A venting system is usually composed of a vent or a chimney and vent  
8 connector, if used, assembled to form the open passageway.

9 **Mechanical draft venting system.** A venting system designed to remove flue or vent  
10 gases by mechanical means, that consists of an induced draft portion under nonpositive  
11 static pressure or a forced draft portion under positive static pressure.

12 **Forced-draft venting system.** A portion of a venting system using a fan or other  
13 mechanical means to cause the removal of flue or vent gases under positive static vent  
14 pressure.

15 **Induced draft venting system.** A portion of a venting system using a fan or other  
16 mechanical means to cause the removal of flue or vent gases under nonpositive static vent  
17 pressure.

18 **Power venting system.** A portion of a venting system using a fan or other mechanical  
19 means to cause the removal of flue or vent gases under positive static vent pressure.

20 **Natural draft venting system.** A venting system designed to remove flue or vent gases  
21 under nonpositive static vent pressure entirely by natural draft.

22 **WORKMANLIKE.** Executed in a skilled manner; e.g., generally plumb, level, square,  
23 in line, undamaged and without marring adjacent work.

1 *Change Section 301.6 to read as follows:*

2 **301.6 Plumbing connections.** Potable water supply and building drainage system  
3 connections to appliances regulated by this code shall be in accordance with the  
4 plumbing code.

5 *Add Section 302.8 to read as follows:*

6 **302.8 Stud Guards.** When the edge of bored holes is less than one inch (1") from the  
7 edge of a stud or a joist, and when notched studs or joists are covered, stud guards shall  
8 be installed to protect service lines from fastener damage.

9 *Change Sections 303.3 thru 303.7 to read as follows:*

10 **303.3 Prohibited locations.** Appliances shall not be located in, or obtain combustion air  
11 from, any of the following rooms or spaces:

- 12 1. Sleeping rooms.
- 13 2. Bathrooms.
- 14 3. Toilet rooms.
- 15 4. Storage closets.
- 16 5. Surgical rooms.

17 **Exceptions:**

- 18 1. Direct-vent appliances that obtain all combustion air directly from the outdoors.
- 19 2. Vented room heaters, wall furnaces, vented decorative appliances and decorative  
20 appliances for installation in vented solid fuel-burning fireplaces, provided that the room  
21 is not a confined space and the building is not of unusually tight construction.
- 22 3. A single wall-mounted unvented room heater equipped with an oxygen depletion  
23 safety shutoff system and installed in a bathroom provided that the input rating does not

1 exceed 6000 Btu per hour (1.76 kW) and the bathroom is not a confined space.  
2 4. A single wall-mounted unvented room heater equipped with an oxygen depletion  
3 safety shutoff system and installed in a bedroom provided that the input rating does not  
4 exceed 10,000 Btu per hour ( 2.93 kW) and the bedroom is not a confined space.  
5 5. Appliances installed in a dedicated enclosure in which all combustion air is taken  
6 directly from the outdoors, in accordance with Section 304.6. Access to such enclosure  
7 shall be through a solid door, weather-stripped in accordance with the exterior door air  
8 leakage requirement of *International Energy Conservation Code* and equipped with an  
9 approved self-closing device.

10 **303.5 Indoor locations.** Fuel-fired furnaces and boilers installed in closets and alcoves  
11 shall be listed for such installation. For purposes of this section, a closet or alcove shall  
12 be defined as a room or space having a volume less than 12 times the total volume of  
13 fuel-fired appliances other than boilers and less than 16 times the total volume of boilers.  
14 Room volume shall be computed using the gross floor area and the actual ceiling height  
15 up to a maximum computation height of 8 feet (2438 mm). Closets used for the  
16 installation of fuel-fired appliances shall not be used for storage.

17 *Add Section 304.13 through 304.13.2 to read as follows:*

18 **304.13 Alternatives for supplying combustion air.** One of the methods used in  
19 304.13.1 or 304.13.2 may be used as an alternative to supplying combustion air be the  
20 above methods.

21 **304.13.1 Specially engineered system.** As an alternative to the provisions of Section  
22 304.10 and 304.11, the necessary supply of air for combustion, ventilation and dilution of  
23 flue gases shall be provided by an approved engineered system.

1 **304.13.2 Forced combustion air supply.** Where all combustion air and dilution air is  
2 provided by a mechanical forced-air system, the combustion air and dilution air shall be  
3 supplied at the minimum rate of 1 cfm per 2,400 Btu/h [0.00067 m<sup>3</sup> / (s · kW)] of  
4 combined input rating of all the fuel-burning appliances served. Each of the appliances  
5 served shall be electrically interlocked to the mechanical forced-air system so as to  
6 prevent operation of the appliances when the mechanical system is not in operation.  
7 Where combustion air and dilution air is provided by the building's mechanical  
8 ventilation system, the system shall provide the specified combustion/dilution air rate in  
9 addition to the required ventilation air.

10 *Change Section 305.5 to read as follows:*

11 **305.5 Private garages.** Appliances located in private garages shall be installed with a  
12 minimum clearance of 8 feet (2439 mm) above the finished floor.

13 **Exception:** The requirements of this section shall not apply where the appliances are  
14 protected from motor vehicle impact and installed in accordance with Section 305.3 and  
15 NFPA 88B.

16 *Add Section 306.1.1:*

17 **306.1.1 Central furnaces.** Central furnaces within compartments or alcoves shall have a  
18 minimum working space clearance as specified by the manufacturer, but not less than 3  
19 inches (76 mm) along the sides, back and top with a total width of the enclosing space  
20 being at least 12 inches (305 mm) wider than the furnace. Furnaces having a firebox  
21 open to the atmosphere shall have at least 6 inches (152 mm) working space along the  
22 front combustion chamber side. Combustion air openings at the rear or side of the  
23 compartment shall comply with the requirements of Section 304.

1 **Exception:** This section shall not apply to appliances installed in existing compartments  
2 and alcoves where the working space clearances are in accordance with the equipment or  
3 appliance manufacturer's installation instructions.

4 *Change Section 306.3 to read as follows:*

5 **306.3 Appliances in attics.** Attics containing appliances requiring access shall be  
6 provided with an opening and unobstructed passageway large enough to allow removal of  
7 the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and  
8 30 inches (762 mm) wide and not more than 20 feet (6096 mm) in length when measured  
9 along the centerline of the passageway from the opening to the appliance. The  
10 passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide.  
11 A continuous level service space at least 30 inches (762 mm) deep and 30 inches (762  
12 mm) wide shall be present at the front or service side of the appliance. The clear access  
13 opening dimensions shall be a minimum of 22 inches by 30 inches (559 mm by 762 mm),  
14 where such dimensions are large enough to allow removal of the largest piece of  
15 equipment.

16 **Exception:** The passageway and level service space are not required where the appliance  
17 is capable of being serviced and removed through the required opening.

18 *Change Section 306.3.1 to read as follows:*

19 **306.3.1 Electrical requirements:** A lighting fixture controlled by a switch located at the  
20 required passageway opening and a receptacle outlet shall be provided at or near the  
21 appliance location in accordance with the electrical code.

22 *Change Section 306.4 to read as follows:*

1 **306.4 Appliances under floors.** Under floor spaces containing appliances requiring  
2 access shall be provided with an access opening and unobstructed passageway large  
3 enough to remove the largest appliance. The passageway shall not be less than 30 inches  
4 (762 mm) high and 30 inches (762 mm) wide, nor more than 20 feet (6096 mm) in length  
5 measured along the centerline of the passageway from the opening to the appliance. A  
6 level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide  
7 shall be present at the front or service side of the appliance. If the depth of the  
8 passageway or the service space exceeds 12 inches (305 mm) below the adjoining grade,  
9 the walls of the passageway shall be lined with concrete or masonry. Such concrete or  
10 masonry shall extend a minimum of 4 inches (102 mm) above the adjoining grade and  
11 shall have sufficient lateral-bearing capacity to resist collapse. The clear access opening  
12 dimensions shall be a minimum of 22 inches by 30 inches (559 mm by 762 mm), where  
13 such dimensions are large enough to allow removal of the largest appliance.

14 **Exception:** The passageway is not required where the level service space is present when  
15 the access is open and the appliance is capable of being serviced and removed through  
16 the required opening.

17 *Change Section 306.4.1 to read as follows:*

18 **306.4.1 Electrical requirements.** A lighting fixture controlled by a switch located at the  
19 required passageway opening and a receptacle outlet shall be provided at or near the  
20 appliance location in accordance with the electrical code.

21 *Change Section 306.5.2 to read as follows:*

22 **306.5.2 Electrical requirements.** A receptacle outlet shall be provided at or near the  
23 appliance location in accordance with the electrical code.

1 *Add Sections 306.5.3 and 306.5.4:*

2 **306.5.3 Outside ladders.** Permanent or portable outside ladders may be provided on the  
3 inside or outside of single story buildings not over 20 feet (6096 mm) in height. All other  
4 means of access shall be a permanent or fold-away inside stairway or ladder with railings,  
5 terminating in a enclosure, scuttle or trap door. Such scuttles or trap doors shall be at  
6 least 30 inches (762 mm) in the smallest dimension and shall open easily and safely  
7 under all conditions, especially snow, and shall be constructed so as to permit access  
8 from the roof side, unless deliberately locked from the inside. At least 6 feet (1829 mm)  
9 clearance shall be available between the access opening and the edge of a roof or similar  
10 hazard. Otherwise rigidly fixed rails or guards at least 3 feet (914 mm) in height shall be  
11 provided on the exposed side, except that parapets at least 3 feet (914 mm) in height may  
12 be utilized in lieu of guards or rails.

13 **306.5.4 Catwalks.** For elevated structures, level catwalks not less than twenty-four (24)  
14 inches wide shall be provided from the roof access to every required working platform at  
15 the appliance. Catwalks with slope greater than three (3) inches to twelve (12) inches  
16 shall be provided with substantial cleats spaced not more than sixteen (16) inches apart.  
17 The down slope side of catwalks on pitched roofs shall be provided with minimum thirty-  
18 six (36) inch high handrails.

19 *Add Sections 306.5.5 to read as follows:*

20 **306.5.1 Roof access.** Every appliance located on a roof of a building shall be installed on  
21 a level platform. Whenever the roof has a slope greater than 3 units vertical to 12 units  
22 horizontal, a level working platform not less than 30 inches (762 mm) in depth shall be  
23 provided on each down slope side of the appliance. All sides of any working platform

1 shall be protected by a substantial railing 36 inches (914 mm) in height with vertical rails  
2 not more than 21 inches (533 mm) apart, except that parapets at least 36 inches (914 mm)  
3 in height may be utilized in lieu of rails or guards. Scuttles located on other than the roof  
4 incline side of the equipment unit shall have their lids or trap doors hinged on the low  
5 side of the scuttle. Such lids or trap doors shall be equipped with means to ensure an  
6 opening radius of not less than ninety (90) degrees nor more than one hundred (100)  
7 degrees from the closed position. Scuttle lids or trap doors and hardware, when opened,  
8 shall be capable of withstanding a three hundred (300) pound lateral load from the roof  
9 incline side.

10 *Change Section 307.4 to read as follows:*

11 **307.4 Traps.** Primary condensate drains shall be trapped as required by the equipment or  
12 appliance manufacturer. An air gap shall be provided between the drain line and the  
13 sewer.

14 *Change Section 309.2 to read as follows:*

15 **309.2 Connections.** Electrical connections between equipment and the building wiring,  
16 including the grounding of the equipment, shall conform to the electrical code.

17 *Add Section 404.1.1 to read as follows:*

18 **404.1.1 Valves and regulators.** Manual valves, automatic valves and regulators shall  
19 not be installed above drop ceilings or in concealed locations.

20 Liquefied petroleum gas containers shall be located in accordance with the fire code.

21 Liquefied petroleum gas storage and dispensing equipment shall be located outdoors and  
22 in accordance with the fire code.

23 *Change Sections 413.9.2.4 and 413.9.2.5 to read as follows:*

1 **413.9.2.4 Grounding and bonding.** The structure or appurtenance used for supporting  
2 the cylinder shall be grounded in accordance with the electrical code. The cylinder valve  
3 shall be bonded prior to the commencement of venting operations.

4 *Change Section 614.6.1 to read as follows:*

5 **614.6.1 Maximum length.** The maximum length of a clothes dryer exhaust duct shall  
6 not exceed 25 feet (7620 mm) from the dryer location to the outlet terminal. The  
7 maximum length of the duct shall be reduced 2 ½ feet (762 mm) for each 45 degree (0.79  
8 rad) bend and 5 feet (1524 mm) for each 90 degree (1.6 rad) bend.

9 **Exception:** Where the make and model of the clothes dryer to be installed is known and  
10 the manufacturer's installation instructions for such dryer are provided to the code  
11 official, the maximum length of the exhaust duct, including any transition duct, shall be  
12 permitted to be in accordance with the dryer manufacturer's installation instructions. The  
13 equivalent length of the exhaust duct shall be permanently marked at the dryer location.

14 *Change Section 624.1.1 to read as follows:*

15 **624.1.1 Installation requirements.** The requirements for water heaters relative to  
16 sizing, relief valves, drain pans and scald protection shall be in accordance with the  
17 plumbing code.

18 *Change Section 623.2 to read as follows:*

19 **623.2 Water heaters utilized for space heating.** Water heaters utilized both to supply  
20 potable hot water and provide hot water for space-heating applications shall be listed and  
21 labeled for such applications by the manufacturer and shall be installed in accordance  
22 with the manufacturer's installation instructions and the plumbing code.

23 *Change Section 631.1 to read as follows:*

1 **631.1 Standards.** Boilers shall be listed in accordance with the requirements of ANSI  
2 Z21.13 or UL795. The boiler shall be designed and constructed in accordance with the  
3 requirements of ASME CSD-1 and as applicable, the ASME Boiler and Pressure Vessel  
4 Code Sections I, II, IV, V and IX, NFPA 8501, NFPA 8502, and NFPA 8504.

5 **SECTION FOUR.** That nothing in this Ordinance or in the Fuel Gas Code hereby  
6 adopted shall be construed to affect any suit or proceeding impending in any court, or any  
7 rights acquired, or liability incurred, or any cause or causes of action acquired or existing,  
8 under any act or ordinance hereby repealed as cited in Section One of this Ordinance; nor  
9 shall any just or legal right or remedy of any character be lost, impaired or affected by  
10 this Ordinance.

11 **SECTION FIVE.** If a section, subsection, sentence, clause or phrase of this code is, for  
12 any reason held to be unconstitutional, such decision shall not affect the validity of the  
13 remaining portions of this code.

14 **SECTION SIX.** Any person who shall violate a provision of this code or shall fail to  
15 comply with any of the requirements thereof, or who shall erect, construct, alter, extend,  
16 repair, remove, demolish, use or occupy any building, structure or premises or  
17 equipment regulated by this code in violation of an approved construction document or  
18 directive of the code official or the Board of Building Appeals, or of a permit, license or  
19 certificate issued under the provisions of this code, shall, upon conviction thereof, be  
20 punished by a fine of not more than five hundred dollars, or by imprisonment not  
21 exceeding ninety days, or both such fine and imprisonment. Each day that a violation  
22 continues shall constitute a separate and distinct offense.

23 **SECTION SEVEN.** This being an ordinance necessary for the immediate preservation

1 of the public safety, it is hereby declared to be an emergency measure and shall become  
2 effective immediately upon its approval by the mayor.

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