

(Published in the Topeka Metro News February 11, 2009)

ORDINANCE NO. 19216

AN ORDINANCE introduced by City Manager Norton N. Bonaparte, Jr., amending City of Topeka Code § 26-486, adopting the 2006 Uniform Mechanical Code setting forth amendments thereto and specifically repealing said original section § 26-486.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF TOPEKA, KANSAS:

Section 1. That section 26-486, Uniform Mechanical Code—Adopted, of The Code of the City of Topeka, Kansas, is hereby amended to read as follows:

Uniform Mechanical Code--Adopted.

There is hereby adopted by reference the 2006 Uniform Mechanical Code, ~~1997 Edition, of the International Conference of Building Officials, 5032 Alhambra Avenue, Los Angeles, California.~~ The code shall include all ~~codified supplements and~~ appendices to the 2006 Uniform Mechanical Code, ~~1997 Edition.~~ The code is hereby adopted as the mechanical code of the city and incorporated herein as if fully set out in this article.

Section 2. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-501, which said section reads as follows:

Chapter 2, Section 208.0, F is hereby deleted in its entirety and the following provisions shall be substituted therefore:

FIRE CODE – The fire code adopted by this jurisdiction.

FIREPLACE, SOLID-FUEL BURNING – is a listed and labeled factory-built or site-built hearth and fire chamber constructed of noncombustible material for use with solid fuels and provided with a chimney.

FIREPLACE STOVE – A chimney-connected, solid-fuel-burning stove (appliance) having part of its fire chamber open to the room.

FIRE-RESISTIVE CONSTRUCTION – Construction complying with the requirements of the Building Code for the time period specified.

FLOOD HAZARD AREA – The greater of the following two areas:

(1) The area within a floodplain subject to a 1 percent or greater chance of flooding in any given year.

(2) The area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

FLOOD HAZARD AREA SUBJECT TO HIGH VELOCITY WAVE ACTION – Area within the flood hazard area that is subject to high-velocity wave action, and shown on a Flood Insurance Rate Map or other flood hazard map as Zone V, VO, VE or V1-30.

FLOOR FURNACE – A completely self-contained furnace suspended from the floor of the space being heated, taking air for combustion from outside such space and with means for observing flames and lighting the appliance from such space.

FORCED-AIR-TYPE CENTRAL FURNACE – A central furnace equipped with a fan or blower that provides the primary means for circulation of air.

Horizontal-Type Central Furnace – A furnace designed for low-headroom installations with airflow through the appliance in a horizontal path.

Upflow-Type Central Furnace – A furnace designed with airflow essentially in a vertical path, discharging air at or near the top of the furnace.

Downflow-Type Central Furnace – A furnace designed with airflow essentially in a vertical path, discharging air at or near the bottom of the furnace.

Enclosed Furnace – A specific heating or heating and ventilating furnace incorporating an integral total enclosure and using only outside air for combustion.

FRACTIONATION – A change in composition of a blend by preferential evaporation of the more volatile component or condensation of the less volatile component.

FUSIBLE PLUG – A device arranged to relieve pressure by operation of a fusible member at a predetermined temperature.

Section 3. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-502.1, which said section reads as follows:

Chapter 4, Ventilation Air Supply is hereby amended by adding the following section:

406.0 Screened Openings. Inlets and outlets of ventilation air supply systems shall be equipped with screen, grills or louvers to prevent the introduction of foreign materials and to deny vermin admission to the system. Screens, grills or louvers shall not pass an object larger than a ¼ -inch-diameter (6.4mm) sphere.

Exception: An outside-air inlet serving a nonresidential portion of a building may be covered with screen having openings larger than 1/4 inch, but in no case larger than 1 inch.

Section 4. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-502.2, which said section reads as follows:

Chapter 4, Ventilation Air Supply is hereby amended by adding the following section:

407.0 Outside Air Location. Outside air shall be obtained from an approved location exterior to the building. Outside air shall not be obtained from the following locations:

1. Closer than ten (10) feet (3048 mm) from a vent serving fuel-burning equipment.

Exception: Listed outdoor appliance equipped with outdoor air inlet and appliance vent.

2. Closer than ten (10) feet (3048 mm) from a plumbing drainage system vent or from an exhaust system outlet, unless the outlet is three (3) feet (914 mm) above the outside air inlet.

3. Where it will pick up objectionable odors, fumes or flammable vapors; or when it is less than ten (10) feet (3048 mm) above the surface of any abutting public way or driveway; or when it is in a horizontal position in a sidewalk, street, alley or driveway.

4. A hazardous location.

5. An unsanitary location.

Section 5. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-502.3, which said section reads as follows:

Chapter 4, Ventilation Air Supply is hereby amended by adding the following section:

408.0 Return Air Location. Return air shall be obtained from an approved interior location of the same building. Return air shall not be obtained from the following locations:

- 98 1. Where it will pick up objectionable odors, fumes or flammable vapors.
- 99 2. A hazardous location.
- 100 3. An unsanitary location.
- 101 4. An area having a volume less than 25 percent of the entire volume served
102 by the supply air system, unless there is a sufficient permanent communicating
103 opening to areas having a volume equal to the required 25 percent. Appropriately
104 sized transfer grills or door undercuts may be used to provide the required opening.

105 Exception: Such opening when used for a warm-air furnace in a dwelling
106 unit may be reduced to no less than 50 percent of the required area, provided the
107 balance of the required return air is taken from a room or hall having at least
108 three doors leading to other rooms served by the furnace.

- 109 5. A refrigeration machinery room.
- 110 6. A room or space containing fuel-burning equipment.

111 Exceptions:

112 1. Fireplaces, fireplace appliances, residential cooking appliances,
113 direct-vent appliances, enclosed furnaces and domestic-type clothes
114 dryers.

115 2. A listed vented wall furnace.

116 3. A blower-type system where:

117 a. The return air is taken from a room or space having a
118 volume exceeding 1 cubic foot for each (10 Btu/h);

119 b. At least 75 percent of the supply air is discharged back into
120 the same room or space; and

c. The return-air inlet shall not be located within ten (10) feet (3048 mm) of any appliance firebox or draft diverter in the same enclosed room or confined space.

7. A closet, bathroom, toilet room or dwelling unit kitchen.

8. Corridors shall not be used to convey air to or from rooms if the corridor is required to be of fire-restrictive construction by the current Building Code.

9. Return air from one dwelling unit shall not be discharged into another dwelling unit through the heating/cooling system.

Section 6. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-503, which said section reads as follows:

Chapter 5, Section 504.3.2.2, Length Limitation, is hereby deleted in its entirety and the following provisions shall be substituted therefore:

Unless otherwise permitted or required by the dryer manufacturer's installation instructions and approved by the Authority Having Jurisdiction, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of thirty (30) feet (9135 mm), including two (2) 90 degree (1.57 rad.) elbows and not including the elbow(s) at the dryer connection. Two (2) feet (610 mm) shall be deducted for each 90 degree (1.57 rad.) elbow in excess of two (2). At no time shall the manufacturer's installation instructions be exceeded.

Section 7. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-503.1, which said section reads as follows:

Chapter 5, Section 507.1.5, is hereby deleted in its entirety and the following provisions shall be substituted therefore:

Cooking equipment that has been listed in accordance with UL 197 or an equivalent standard for reduced emissions shall be required to be submitted to the Mechanical Review Board for approval to be used without an exhaust system. All manufacturer's product data and installation instructions shall be submitted.

Section 8. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-503.2, which said section reads as follows:

Chapter 5, Section 510.3.2, is hereby deleted in its entirety and the following provisions shall be substituted therefore:

For hoods with dampers in the supply collar, an access panel for cleaning and inspection shall be provided in the duct or the hood collar. For Type I duct system, dampers shall not be permitted in the exhaust collar or in the exhaust duct. This access panel shall be as close to the hood as possible but shall not exceed eighteen (18) inches (457.2 mm).

Exception: Dampers that are accessible from under the hood.

Section 9. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-503.3, which said section reads as follows:

Chapter 5, Section 510.7.1, is hereby deleted in its entirety and the following provisions shall be substituted therefore:

In all buildings the ducts shall be enclosed in a continuous enclosure per section 507.2.3 extending from the hood, through any concealed spaces, to or through the roof so as to maintain the integrity of the fire separations required by the applicable Building Code provisions. The enclosure shall be sealed around the duct at the point of penetration of the ceiling or floor above the hood in order to maintain the fire resistance

rating of the enclosure and shall be vented to the exterior of the building through weather-protected openings.

Exception: The continuous enclosure provisions shall not be required where a field applied grease duct enclosure or a factory-built grease duct enclosure (see Section 507.2.3) is protected with a listed duct through penetration protection system equivalent to the fire resistance rating of the assembly being penetrated, and the materials are installed in accordance with the conditions of their listings and the manufacturers' instructions and are acceptable to the Authority Having Jurisdiction.

Section 10. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-503.4, which said section reads as follows:

Chapter 5, Section 511.2.1, is hereby deleted in its entirety and the following provisions shall be substituted therefore:

The air velocity through any duct shall be not more than 2,500 feet per minute nor less than 500 feet (152.4 m) per minute.

Exception: Transition duct sections shall be permitted to be connected to hoods and exhaust fans that do not meet this velocity, provided that they do not exceed three (3) feet (0.92 m) in length and do not contain traps for grease.

Section 11. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-503.5, which said section reads as follows:

Chapter 5, Section 511.4, Common Duct (Manifold) Systems is hereby deleted in its entirety and the following provisions shall be substituted therefore:

189 Master kitchen exhaust ducts that serve more than one tenant shall not be
190 installed unless approved by the Mechanical Review Board.

191 Section 12. That The Code of the City of Topeka, Kansas, is hereby amended
192 by adding a section, to be numbered 26-503.6, which said section reads as follows:

193 **Chapter 5, Section 513.0 through Section 513.11, Fire-Extinguishing**
194 **Equipment** is hereby deleted in its entirety and the following provisions shall be
195 substituted therefore:

196 Fire-extinguishing equipment shall be governed by the currently adopted Fire
197 Code of the City of Topeka.

198 Section 13. That The Code of the City of Topeka, Kansas, is hereby amended
199 by adding a section, to be numbered 26-503.7, which said section reads as follows:

200 **Chapter 5, Section 514.0 through Section 514.4, Procedures for Use and**
201 **Maintenance of Equipment** is hereby deleted in its entirety and the following
202 provisions shall be substituted therefore:

203 Procedures for the use and maintenance of equipment shall be governed by the
204 currently adopted Fire Code of the City of Topeka.

205 Section 14. That The Code of the City of Topeka, Kansas, is hereby amended
206 by adding a section, to be numbered 26-503.8, which said section reads as follows:

207 **Chapter 5, Section 515.0 through Section 515.3, Minimum Safety**
208 **Requirements for Cooking Equipment** is hereby deleted in its entirety and the
209 following provisions shall be substituted therefore:

210 Minimum safety requirements for cooking equipment shall be governed by the
211 currently adopted Fire Code of the City of Topeka.

212 Section 15. That The Code of the City of Topeka, Kansas, is hereby amended
213 by adding a section, to be numbered 26-503.9, which said section reads as follows:

214 **Chapter 5, Section 516.0 through Section 516.6, Recirculating Systems** is
215 hereby deleted in its entirety.

216 Section 16. That The Code of the City of Topeka, Kansas, is hereby amended
217 by adding a section, to be numbered 26-503.10, which said section reads as follows:

218 **Chapter 5, Section 517.7, Fire-Extinguishing Equipment for Solid-Fuel**
219 **Cooking** is hereby deleted in its entirety and the following provisions shall be
220 substituted therefore:

221 Fire-extinguishing equipment for solid-fuel cooking requirements shall be
222 governed by the currently adopted Fire Code of the City of Topeka.

223 Section 17. That The Code of the City of Topeka, Kansas, is hereby amended
224 by adding a section, to be numbered 26-503.11, which said section reads as follows:

225 **Chapter 5, Section 517.8.4,** is hereby deleted in its entirety and the following
226 provisions shall be substituted therefore:

227 No solid-fuel cooking device of any type shall be permitted for deep-fat frying nor
228 shall any solid-fuel cooking device be permitted within three (3) feet (0.92 m) of any
229 deep-fat frying unit.

230 Section 18. That The Code of the City of Topeka, Kansas, is hereby amended
231 by adding a section, to be numbered 26-504, which said section reads as follows:

232 **Chapter 6, Section 602.1, General,** is hereby deleted in its entirety and the
233 following provisions shall be substituted therefore:

Supply air, return air, and outside air for heating, cooling, or evaporative cooling systems shall be conducted through duct systems constructed of metal as set forth in Tables 6-1, 6-2, 6-3, 6-4, 6-7, 6-8, 6-9, and 6-10, or metal ducts complying with UMC Standard No. 6-2 or the referenced HVAC duct construction standard in Chapter 17, Rectangular ducts in excess of two (2) inches w.g. shall comply with UMC Standard No. 6-2 or the referenced HVAC duct construction standard in Chapter 17. Ducts, plenums, and fittings may be constructed of concrete, clay, galvanized sheet metal coated with corrosion inhibiting material, or ceramics when installed in the ground or in a concrete slab, provided the joints are tightly sealed. PVC ducts encased in a concrete slab may be used only for one and two family residential installations.

Corridors shall not be used to convey air to or from rooms if the corridor is required to be of fire-resistive construction per the Building Code.

Concealed building spaces or independent construction within buildings may be used as ducts or plenums.

When gypsum products are exposed in ducts or plenums, the air temperature shall be restricted to a range from 50°F (10°C) to 125°F (52°C), and moisture content shall be controlled so that the material is not adversely affected. For the purpose of this section, gypsum products shall not be exposed in ducts serving as supply from evaporative coolers, and in other air-handling systems regulated by this chapter when the temperature of the gypsum product will be below the dew point temperature.

See Chapter 8 for limitations on combustion products venting systems extending into or through ducts and plenums.

See Chapter 5 for limitations on environmental air systems exhaust ducts extending into or through ducts or plenums.

Exhaust ducts under positive pressure and venting systems shall not extend into or pass through ducts or plenums. For appliance vents and chimneys, see Chapter 8.

Section 19. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-504.1, which said section reads as follows:

Chapter 6, TABLE 6-6 B (I-P Units), Notes, is hereby deleted in its entirety and the following provisions shall be substituted therefore:

a. Insulation R-values, measured in (h·ft²·°F)/Btu, are for the insulation as installed and do not include film resistance. The required minimum thicknesses do not consider water vapor transmission and possible surface condensation. Where exterior walls are used as plenum walls, wall insulation shall be as required by the most restrictive condition. Insulation resistance measured on a horizontal plane in accordance with ASTM C518 at a mean temperature of 75°F at the installed thickness.

b. Includes crawl spaces, both ventilated and nonventilated.

c. Includes air return plenums with or without exposed roofs above.

d. Vapor retarders shall be installed on cooling supply ducts in spaces vented to the outside in geographic areas where the average summer dewpoint temperate based on the 2-1/2 percent column of dry-bulb and mean coincident wet-bulb temperature exceeds 60°F (16°C).

e. Insulation shall have an approved weatherproof barrier.

f. Buried heating and cooling ducts do not require insulation.

g. City of Topeka jurisdiction shall use Envelope Criteria Table 5-15 for the climate zone.

Section 20. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-506, which said section reads as follows:

Chapter 7, Combustion Air is hereby amended by adding the following section:

701.1.5 Prohibited Sources. Openings and ducts shall not connect appliance enclosures with a space in which the operation of a fan may adversely affect the flow of combustion air. Combustion air shall not be obtained from a hazardous location or from any area in which objectionable quantities of flammable vapor, lint or dust are released. Combustion air shall not be taken from a refrigeration machinery room.

Section 21. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-506.1, which said section reads as follows:

Chapter 7, Section 701.8.2 is hereby deleted in its entirety and the following provisions shall be substituted therefore:

Each of the appliances served shall be interlocked to prove positive airflow for the mechanical air supply system to prevent main burner operation where the mechanical air supply system is not in operation.

Section 22. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-506.2, which said section reads as follows:

Chapter 7, Section 701.10, Combustion Air Ducts is hereby deleted in its entirety and the following provisions shall be substituted therefore:

Combustion air ducts shall comply with the following [NFPA 54:8.3.8]

(1) Ducts shall be of galvanized steel or a material having equivalent corrosion resistance, strength, and rigidity. [NFPA 54:8.3.8.1]:

Exception: Within dwellings units, unobstructed stud and joist spaces shall not be prohibited from conveying combustion air, provided that not more than one fireblock is removed.

(2) Ducts shall terminate in an unobstructed space, allowing free movement of combustion air to the appliances. [NFPA 54:8.3.8.2]

(3) Ducts shall serve a single space. [NFPA 54:8.3.8.3]

(4) Ducts shall not service both upper and lower combustion air openings where both such openings are used. The separation between ducts serving upper and lower combustion-air openings shall be maintained to the source of combustion air. [NFPA 54:8.3.8.4]

(5) Ducts terminating in attics shall not be screened and the combustion air opening shall be provided with a galvanized sleeve of not less than 0.019 inch (0.48mm) (No. 26 gauge) steel or other approved material extending from the appliance enclosure to at least six (6) inches (153 mm) above the top of the ceiling joists and insulation. [NFPA 54:8.3.8.5]

(6) Intakes for combustion-air ducts located exterior to the building shall have the lowest side of the combustion-air intake openings located at least twelve (12) inches vertically from the adjoining grade level. [NFPA 54:9.3.8.8]

(7) Horizontal upper combustion-air ducts shall not slope downward toward the source of combustion air. [NFPA 54:9.3.8.6]

(8) The remaining space surrounding a chimney liner, gas vent, special gas vent, or plastic piping installed within a masonry chimney flue metal or factory-built chimney shall not be used to supply combustion air unless it is listed and shown in the manufacturer's installation instructions. [NFPA 54:9.3.8.7]

Section 23. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-507, which said section reads as follows:

Chapter 9, Section 904.10.3.2 is hereby deleted in its entirety and the following provisions shall be substituted therefore:

Buildings of more than fifteen (15) feet (4.6 m) in height shall have an acceptable, permanent means of access to the roof, unless other means acceptable to the Authority Having Jurisdiction are used.

Section 24. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-507.1, which said section reads as follows:

Chapter 9, Section 924.1.1 is hereby deleted in its entirety and the following provisions shall be substituted therefore:

Unvented room heaters shall not be installed in bathrooms or bedrooms. [NFPA 54:10.23.1] This subsection shall not apply to portable oil fired unvented heating appliances used as supplemental heating in Group S, Divisions 3, 4, and 5, and Group U occupancies, and regulated by the Fire Code.

No Exceptions.

Section 25. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-507.2, which said section reads as follows:

Chapter 9, Section 925.0, Stationary Gas Engines is hereby deleted in its entirety.

Section 26. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-508, which said section reads as follows:

Chapter 13, Section 1312.4, Equipment Shutoff Valves and Connections is hereby deleted in its entirety and the following provisions shall be substituted therefore:

Gas utilization equipment connected to a piping system shall have an accessible, approved manual shutoff valve with a nondisplaceable valve member or a listed gas convenience outlet [NFPA 54:9.6.4] installed within six (6) feet (1.8m) of the equipment it serves. Where a connector is used, the valve shall be installed up-stream of the connector. A union or flanged connection shall be provided downstream from this valve to permit removal of controls.

Exceptions:

(1) Shutoff valves may be accessibly located inside or under an appliance when such appliance can be removed without removal of the shutoff valve.

(2) Shutoff valves may be accessibly located inside wall heaters and wall furnaces listed for recessed installation where necessary maintenance can be performed without removal of the shutoff valve.

Section 27. That The Code of the City of Topeka, Kansas, is hereby amended by adding a section, to be numbered 26-509, which said section reads as follows:

Chapter 14, Process Piping is hereby deleted in its entirety.

Section 28. That original section § 26-486 of The Code of the City of Topeka, Kansas, is hereby specifically repealed.

Section 29. This ordinance shall take effect and be in force 60 days from and after its passage, approval and publication in the official City newspaper.

PASSED AND APPROVED by the City Council February 3, 2009.

CITY OF TOPEKA, KANSAS

William W. Buntin, Mayor

ATTEST:

Brenda Younger, City Clerk