# IN THE COUNTY LEGISLATURE OF JACKSON COUNTY, MISSOURI

AN ORDINANCE enacting Chapter 54, Jackson County Code, 1984, relating to the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of buildings and structures in the unincorporated area of Jackson County and providing for the issuance of permits and collection of fees therefor, with a penalty provision and an effective date, consisting of seven sections, to be known as sections 5400., 5401., 5402., 5403., 5404., 5405., and 5406., and repealing subsections 8160.5 through 8160.14 and subsection 8160.18 of

**ORDINANCE # 2101,** May 26, 1992

INTRODUCED BY Mary Lou Smith, County Legislator

WHEREAS, the Legislature deems it necessary to provide minimum building code and standards to safeguard life, health, property, and public welfare within the unincorporated area of Jackson County; therefore,

BE IT ORDAINED, by the County Legislature of Jackson County, Missouri, as follows:

Section A. Enacting Clause. Subsections 8160.5 through 8160.14 and subsection 8160.18 of section 8160., <u>Jackson County Code</u>, 1984, are hereby repealed and Chapter 54 enacted, consisting of seven new sections, to be known as sections 5400., 5401,. 5402., 5403., 5404., 5405., and 5406., to read as follows:

#### CHAPTER 54

#### BUILDING CODE

## 5400. Building Code.

Certain documents, copies of which are on file and are open for inspection by the public in the offices of the director of public works and clerk of the county legislature, being marked and designated as:

Uniform Building Code, 1991 edition, published by the International Conference of Building Officials, including the generic fire-resistive assemblies listed in the Fire Resistance Design Manual, Twelfth Edition, dated August, 1988, published by the Gypsum Association as referenced in Tables Nos. 43-A, 43-B, and 43-C of the specified Uniform Building Code, including Appendix Chapters as follows:

- 1 Life-Safety Requirements for Existing Buildings;
- 7 Aviation Control Towers;
- 10 Detention and Correctional Facilities;
- 11 Agricultural Buildings;
- Regulations for Group R Division 3 Occupancies;
- 23 Flood Resistant Construction;
- 24 Prescriptive Masonry High Wind Areas;
- 25 Light Frame High Wind Area;
- Protection of Residential Concrete Exposed to Freeze/Thaw;

- Waterproofing and Dampproofing Foundations;
- 31 Site Accessibility;
- 32 Reroofing;
- 35 Sound Transmission Control;
- 38 Basement Pipe Inlets;
- 49 Patio Covers;
- Elevators, Dumbwaiters, Escalators, and Moving Walks; See ANSI/ASME A17.1, 1984, Safety Code for Elevators and Escalators, including Supplements A17.1a-1985, A17.1b-1985, A17.1c-1986, A17.1d-1986, and A17.1e-1987, published by the American Society of Mechanical Engineers. Copies of this code are also on file in the offices of the director of public works and clerk of the county legislature;
- Energy Conservation in New Building Construction;
- 55 Membrane Structures;
- Fallout Shelters; and
- 70 Excavation and Grading.

Uniform Building Code Standards, 1991 Edition, published by the International Conference of Building Officials, including (i) Structural Welding Code-Reinforcing Steel, AWS D1.4-79 (U.B.C. Standard No. 26-8); (ii) Structural Welding Code-Steel, ANSI/AWS D1.1-90 (U.B.C. Standard No. 27-6); (iii) Structural Welding Code-Sheet Steel, ANSI/AWS D1.3-81 (U.B.C. Standard No. 27-13), published by the American Welding Society, Inc.; and (iv) Standard for buildings and Facilities-Providing Accessibility and Usability

for Physically Handicapped People, All7.1-1986 (U.B.C. Standard No. 31-1), published by the American National Standards Institute, as modified or amended in the Uniform Building Code Standards referenced below:

- 1988 Uniform Plumbing Code;
- 1990 National Electrical Code;
- 1991 Uniform Fire Code;
- 1991 Uniform Mechanical Code;
- 1991 Uniform Housing Code;
- 1991 Uniform Code for the Abatement of Dangerous Buildings;
- 1991 Uniform Sign Code;
- 1991 Uniform Security Code;
- 1991 Uniform Code for Building Conservation;
- 1991 Uniform CABO One and Two Family Dwelling Code; and
- 1991 Uniform Disaster Mitigation Plan,

as said publications may be amended, are adopted as the code of Jackson County for regulating the erection, construction, occupancy, equipment, use, height, area and maintenance of all buildings or structures in the unincorporated area of Jackson County, except as provided in section 5401. of this chapter. Each and all of the regulations, provisions, conditions and terms of such Uniform Building Code, 1991 Edition, and Uniform Building Code Standards, 1991 Edition, published by the International Conference of Building Officials, and the secondary publications referenced above, as said publications may be amended, all of

which are on file in the offices of the director of public works and clerk of the county legislature are referred to, adopted, and made a part hereof as if fully set out in this section.

## 5401. Exceptions to Uniform Building Code and Related Codes.

The following sections of the Uniform Building Code and Related Codes are modified in the following respects:

## 1991 UNIFORM BUILDING CODE

## Access and Exit Facilities and Emergency Escapes

Section 1204. Exits shall be provided as specified in Chapter 33. (See also Section 3317 for special requirements and Section 3314 for exit markings.)

Access to, and egress from, buildings required to be accessible shall be provided as specified in Chapter 31.

[Basements in dwelling units and] Every sleeping room below the fourth story shall have at least one operable window or door approved for emergency escape or rescue which shall open directly into a public street, public alley, yard or exit court. The units shall be operable from the inside to provide a full clear opening without the use of separate tools.

All escape or rescue windows shall have a minimum net clear openable area of 5.7 square feet. The minimum net clear openable height dimension shall be 24 inches. The minimum net clear

openable width dimension shall be 20 inches. When windows are provided as a means of escape or rescue they shall have a finished sill height not more than 44 inches above the floor.

Bars, grilles, grates or similar devices may be installed on emergency escape or rescue windows or doors, provided:

- 1. The devices are equipped with approved release mechanisms which are openable from the inside without the use of a key or special knowledge or effort; and
- 2. The building is equipped with smoke detectors installed in accordance with Section 1210.

Section 1210.

4. Location within dwelling units. In dwelling units a detector shall be installed in each sleeping room and mounted on the ceiling or wall at a point centrally located in the corridor or area giving access to each separate sleeping area. When the dwelling unit has more than one story and in dwellings with basements, a detector shall be installed on each story and in the basement. In dwelling units where a story or basement is split into two or more levels, the smoke detector shall be installed on the upper level, except that when the lower level contains a sleeping area, a detector shall be installed on each level. When sleeping rooms are on an

upper level, the detector shall be placed at the ceiling of the upper level in close proximity to the stairway. In dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches or more, smoke detector shall be installed in the hallway and in the adjacent room. Detectors shall sound an alarm audible in all sleeping areas of the dwelling unit in which they are located.

### Section 3704(c)

Reinforcing and Seismic Anchorage. Unless a specific design is provided, every masonry or concrete chimney in Seismic Zones Nos. [2,] 3 and 4 shall be reinforced with less than four No. not 4 steel reinforcing bars conforming to the provisions of Chapter 24 or 26 of this The bars shall extend the full height of the chimney and shall be spliced in accordance with applicable requirements of Chapters 24 and 26. In masonry chimneys the vertical bars shall have a minimum cover of 1/2 inch of grout or mortar tempered to a pouring consistency. The bars shall be tied horizontally at 18-inch intervals with not less than 1/4-inch-diameter steel ties. The slope of the inclined portion of the offset in vertical bars shall not exceed 1 horizontal in 2 inches vertical. Two ties shall also be placed at each bend in vertical bars. Where the width of the chimney exceeds 40 inches, two additional No. 4

vertical bars shall be provided for each additional flue incorporated in the chimney or for each additional 40 inches in width or fraction thereof.

In Seismic Zones Nos. [2,] 3 and 4, all masonry and concrete chimneys shall be anchored at each floor or ceiling line more than 6 feet above grade, except when constructed completely within the exterior walls of the building. Anchorage shall consist to two 3/16-inch by 1-inch steel straps cast at least 12 inches into the chimney with a 180-degree bend with a 6-inch extension around the vertical reinforcing bars in the outer face of the chimney.

Each strap shall be fastened to the structural framework of the building with two 1/2-inch-diameter bolts per strap. Where the joists do not head into the chimney, the anchor strap shall be connected to 2-inch by 4-inch ties crossing a minimum of four joists. The ties shall be connected to each joist with two 16d nails. As an alternative to the 2-inch by 4-inch ties, each anchor strap shall be connected to the structural framework by two 1/2-inch-diameter bolts in an approved manner. Metal chimneys shall be anchored at each joist with two 1 1/2-inch by 1/8-inch metal straps looped around the outside of the chimney installations and nailed with six 8d nails per strap to the roof or ceiling framing.

### 1990 NATIONAL ELECTRICAL CODE

- 210.8. Ground-Fault Circuit-Interrupter Protection for Personnel.
  - (a) Dwelling Units.
- (1) All 125-volt, single-phase, 15- and 20-ampere receptacles installed in bathrooms shall have ground-fault circuit-interrupter protection for personnel.
- (2) All 125-volt, single-phase, 15- and 20-ampere receptacles installed in garages shall have ground-fault circuit-interrupter protection for personnel.

Exception No. 1 to (a)(2): Receptacles which are not readily accessible.

Exception No. 2 to (a)(2): Receptacles for appliances occupying dedicated space which are cord- and plug-connected in accordance with Section 400-7 (a)(7), or (a)(8).

Receptacles installed under Exceptions to Section 210-8(a)(2) shall not be considered as meeting the requirements of Section 210-52(1).

(3) All 125-volt, single-phase, 15- and 20-ampere receptacles installed outdoors where there is direct grade level access to the dwelling unit and to the receptacles shall have ground-fault circuit-interrupter protection for personnel.

## (FPN): See Section 215-9 for feeder protection/

For the purposes of this section, "direct grade level access" is defined as being located not more than 6 feet, 6 inches (1.98 m) above grade level and being readily accessible without entering or passing through a dwelling unit.

- (4) At least one 125-volt, single-phase, 15- or 20-ampere receptacle installed in a basement shall have ground-fault circuit-interrupter protection for personnel and it shall be so identified.
- (5) All 125-volt, single-phase, 15- or 20-ampere receptacles required by Section 210-52(b) installed within 6 feet (1.83 m) of the kitchen sink above counter top surfaces shall have ground-fault circuit-interrupter protection for personnel excluding receptacles on peninsulas and islands.
- (FPN): The intent of this section is to permit the exemption of receptacles which are located specifically for appliances such as refrigerators and freezers from ground-fault circuit-interrupter protection for personnel.

- (6) All 125-volt, single-phase, 15- or 20-ampere receptacles installed in boathouses shall have ground-fault circuit-interrupter protection for personnel.
- (b) Hotels and Motels. All 125-volt, single-phase, 15- and 20-ampere receptacles installed in bathrooms of guest rooms in hotels and motels shall have ground-fault circuit-interrupter protection for personnel.

#### 1991 UNIFORM MECHANICAL CODE

#### Fire Dampers

Sec. 1006.(a) Cross References. See U.B.C. Standard No. 43-7 and Chapter 43 of the Building Code for the construction and installation of duct openings in walls and ceilings. U.B.C. Standard No. 43-7 is reprinted in Appendix A. Fire dampers shall not be located in a combustion-air duct or opening: see Uniform Mechanical Code Section 602(b) [Supply- and return-air ducts or plenums may pass through the wall, floor or ceiling separating a Ground R, Division 3 from a Group M Occupancy without a fire damper, provided the ducts and plenums within the Group M Occupancy are constructed of steel having a thickness of not less than 0.019 inch (No. 26 galvanized sheet gage) and have no openings into the Group M Occupancy; see Building Code Section 503.]

- (b) Access Openings. Suitable openings with tightly fitted covers shall be provided to make fire dampers accessible for inspection and shall be large enough to permit maintenance and resetting of the damper. When a fire damper is installed in an air duct, a tight-fitting hinged or sliding access door shall be provided on the duct and the door shall comply with all of the following requirements:
  - The door shall be constructed of metal which is equal to or greater in thickness than the duct and of the same material.
  - 2. Each access door shall have a label with letters not less than 1/2 inch in height reading "FIRE DAMPER."
  - 3. External duct insulation may conceal a fire damper access door when there is a label attached to the insulation indicating the exact location of the door.
- (c) Freedom from Interference. Fire dampers shall be installed in a manner to ensure positive closing. Interior insulation and acoustical linings shall be placed so as not to interfere with positive closing of the fire damper.

(d) Temperature Classification of Fusible Links. Fusible links shall be classified in accordance with U.M.C. Standard No. 10-4. Fusible link-actuated fire dampers shall be equipped with listed fusible links having 165°F. temperature classification and listed to sustain the design load.

EXCEPTIONS: 1. Fire dampers serving duct openings in a warm-air furnace room or enclosure may be equipped with links having a high-temperature classification.

- 2. Fusible links with a temperature rating classification higher than ordinary may be used in locations approved by the building official.
- (e) Connection. Ductwork shall be connected to fire damper sleeves or assemblies in such a way that collapse of the ductwork will not dislodge the damper.

#### Material

Sec. 1002. (a) General. 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 Nos. 10-A, 10-B and 10-C; metal ducts complying with U.M.C. Standard No. 10-2 with prior approval; or factory-made air ducts complying with U.M.C. Standard No. 10-1. Ducts, plenums and

fittings may be constructed of asbestos cement, concrete, clay or ceramics when installed in the ground or in a concrete slab, provided the joints are tightly sealed.

Corridors shall not be used to convey air to or from rooms if the corridor is required to be of the fire-resistive construction by Section 3305 of the Building Code.

Concealed building space 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, to 125°F, and moisture content shall be controlled so that the material is not adversely affected. Gypsum products shall not be exposed in ducts serving evaporative coolers.

Venting systems and exhaust ducts shall not extend into or through ducts or plenums.

(b) Combustibles within Ducts or Plenums. Materials exposed within ducts or plenums shall have a flame-spread index of not more than 25 and a smoke-developed rating of not more than 50 when tested in accordance with the test for Surface Burning Characteristics of Building Materials, U.B.C. Standard No. 42-1.

EXCEPTIONS: 1. Return-air and outside-air ducts, plenums or concealed spaces which serve a dwelling unit may be of combustible construction.

- 2. Air filters serving a dwelling unit.
- 3. Air filters listed by an approved testing agency as complying with reference standards included in Appendix C.
- 4. Air filters used as water evaporation medium in an evaporative cooler.
- 5. Charcoal filters when protected with an approved fire suppression system.
- 6. Electrical wiring in plenums shall comply with the Electrical Code. Flame propagation and smoke production characteristics of exposed electric cables installed in concealed space used as air plenums shall:
  - A. Exhibit a flame travel of 5 feet or less, and
- B. Produce smoke having n average optical density not greater than 0.15 and having a peak optical density of 0.5 or less when tested in accordance with U.M.C. Standard No. 10-3.

- C. Wiring meeting these requirements shall be listed and labeled as plenum cable as required by the Electrical Code.
- 7. Nonmetallic fire sprinkler piping in plenums shall be listed and shall meet the following requirements:
  - A. Exhibit flame travel of 5 feet or less, and
- B. Produce smoke having an average optical density not greater than 0.15 and having a peak optical density of 0.5 or less when tested in accordance with U.M.C. Standard No. 10-3.
- (b) Factory-made Air Ducts. Factory-made air ducts shall be approved for the use intended or shall conform to the requirements of U.M.C. Standard No. 10-1. Each portion of a factory-made air duct system shall be identified by the manufacturer with a label or other suitable identification indicating compliance with U.M.C. Standard no. 10-1 and its class designation. These ducts shall be listed and shall be installed in accordance with the terms of their listing, and the requirements of U.M.C. Standard No. 10-5.
- (c) Joints and Seams of Ducts. Joints of duct systems shall be made substantially airtight by means of tapes, mastics, gasketing or other means.

Crimp joints for residential round ducts shall have a contact lap of at least 1 1/2 inch and shall be mechanically fastened by means of at least [three] one sheet-metal screw[s equally spaced around the joint] on the down side or an equivalent fastening method.

Joints and seams for 0.016-inch (No. 28 gage) and 0.013-inch (No. 30 gage) residential rectangular ducts shall be as specified in Table No. 10-A for 0.019-inch (No. 26 gage) material.

Joints and seams for rectangular duct systems shall be as specified in Table No. 10-A.

Joints and seams for flat oval ducts and round ducts in other than single dwelling units shall be as specified in Table No. 10-B.

Joints and seams and all reinforcements for factory-made air ducts and plenums shall meet with the conditions of prior approval in accordance with the installation instructions that shall accompany the product.

#### Environmental Air Ducts

Sec. 1104. Environmental air ducts not regulated by other provisions of this code shall comply with this section. Ducts shall be substantially airtight and shall comply with the

provisions of Chapter 10. Exhaust ducts shall terminate outside the building and shall be equipped with back-draft dampers. Environmental air ducts which have an alternate function as a part of an approved smoke-control system do not require design as Class 1 product-conveying ducts.

Ducts used for domestic kitchen range ventilation [and domestic clothes dryers] shall be of metal and shall have smooth interior surfaces. Commercial dryer exhaust ducts shall be installed in accordance with their listing. For additional requirements for domestic dryer exhaust systems, see Section 1903.

EXCEPTION: Approved flexible duct connectors not more than 6 feet in length may be used in connection with domestic dryer exhausts. Flexible duct connectors shall not be concealed within construction. Bathroom ventilation ducts may terminate in the attic.

Bathroom and laundry room exhaust ducts may be a gypsum wallboard subject to the limitations of Section 1002(a). Exhaust ducts shall not extend into or through ducts or plenums.

#### 5402. Penalty Provision.

It shall be unlawful for any person, firm, partnership, or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, occupy, or maintain any building or structure, or cause or permit the same to

be done without first obtaining a valid, unrevoked permit from the director of public works, as provided in this chapter, or to violate any other provision of this chapter. A violation of this section shall be punishable by imprisonment in the county jail for a term not to exceed one (1) year or by a fine not to exceed one thousand dollars (\$1,000), or both.

#### 5403. Fees.

No permit shall be issued pursuant to section 5402. of this chapter until the applicant therefor has paid the fee specified below, based on the fair market value of the property for which the permit is sought, as determined by the director of assessment:

Total Valuation	<u>Fee</u>	
\$ 0 to \$ 10,000	\$50.00	
\$ 10,001 to \$ 50,000	\$75.00	
\$ 50,001 to \$100,00	\$75.00 for first \$50,000.00 plus	
	\$3.50 for each additional	
	\$1,000.00 or fraction thereof, to	
	and including \$100,000.00	
\$100,001 and up	\$250.00 for first \$100,000.00	
	plus \$1.00 for each additional	
	\$1,000.00 or fraction thereof.	

Additional fees, for inspections and other services, shall be due as set out below:

	Service	Fee
1.	Inspections outside of normal business	\$30.00 per hour
	hours (minimum charge-two hours)	
2.	Reinspection fees assessed under	\$30.00 per hour
	provisions of Section 305 (g),	
	Uniform Building Code	
3.	Inspections for which no fee	\$30.00 per hour
	is specifically indicated	
	(minimum charge-one-half hour)	
4.	Additional plan review required	\$30.00 per hour
	by changes, additions or revisions	
	to approved plans (minimum	
	charge-one-half hour)	

## 5404. Severability Clause.

If any section, subsection, sentence, clause, or phrase of this chapter is, for any reason, held to be invalid or unconstitutional, such decision shall not affect the validity or constitutionality of the remaining portions of this chapter. The county legislature hereby declares that it would have adopted this

chapter, and each section, subsection, clause and phase hereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional.

#### 5405. Publication of Notice.

The clerk of the county legislature is ordered and directed to cause notice of the adoption of this chapter to be published in a newspaper of general circulation in Jackson County once each week for three consecutive weeks, prior to the effective date of this chapter.

#### 5406. Effective Date.

This chapter and the rules, regulations, provisions, requirements, orders, and matters established and adopted herein, shall take effect and be in full force and effect 90 days from and after the date of its final passage and adoption.