BOONE COUNTY COMMISSION

ADDENDUMS 2006 INTERNATIONAL CODES ORDER NUMBER 15–2007

EFFECTIVE APRIL 2, 2007

Please Note Significant Changes to 2006 IRC:

- Pg. 6 R105.2(1)
 - 8 R404.1
 - 12 R602.6.1
 - 13 M1308.2
 - 13 M1401.3
 - 13 G2415.5
 - 14 G2426.7
 - 14 P2903.4
 - 14 P2903.4.1
 - 15 E3601.6
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 - 16 E3801.11
 - 16 AG105.1

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A COMMISSION ORDER ADOPTING AND GOVERNING THE FABRICATION, ERECTION, CONSTRUCTION, ENLARGEMENT, ALTERATION, REPAIR, LOCATION AND USE OF DETACHED ONE AND TWO FAMILY DWELLINGS, THEIR APPURTENANCES AND ACCESSORY STRUCTURES IN THE JURISDICTION OF BOONE COUNTY, MISSOURI: AND PROVIDING FOR THE ISSUANCE OF PERMITS THEREFORE PROVIDING PENALTIES FOR THE VIOLATION THEREOF, AND REPEALING ALL ORDINANCES AND PARTS OF ORDINANCES IN CONFLICT THEREWITH.

Be it ordained by the Boone County Commission of the jurisdiction of Boone County, Missouri as follows:

SECTION 1. ADOPTION OF THE INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS: ADDITIONS, INSERTIONS, DELETIONS AND CHANGES.

That a certain document, three (3) copies of which are on file in the office of Building Official of the Boone County Department of Planning and Building Inspection and are being marked and designated as "International Residential Code For One and Two Family Dwellings – 2006", as published by the International Code Council, is hereby adopted as the Residential Building Code of Boone County, Missouri for the control of residential structures as provided herein; and each and all of the regulations, provisions, penalties, conditions and terms of "International Residential Code For One and Two Family Dwellings – 2006", are hereby referred to, adopted and made part hereof, including all listed appendices, as is more fully set out in this Ordinance, with the additions, insertions, deletions and changes as hereinafter prescribed.

The following sections of the International Residential Code for One- and Two-Family Dwellings of 2006 are hereby repealed, amended or modified as follows:

- 100.1 Wherever (name of jurisdiction) appears in this code, it shall read "County of Boone, Missouri".
- 100.1.1 Wherever "Department of Building Inspection" appears in this code, it shall read "Department of Planning and Building Inspection of Boone County, Missouri".
- 100.1.2 Wherever "Chief Appointing Authority of the jurisdiction" appears in this Code, it shall read "Boone County Commission of Boone County, Missouri".
- **R101.1 Title:** These provisions shall be known as the "Residential Code for One- and Two-Family Dwellings of <u>The County of Boone</u>" and shall be cited as such and will be referred to herein as "this code."
- R101.2 Scope: The provisions of the International Residential Code for One and Two Family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location and removal of detached one

and two family dwellings and multiple single family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

Note: the provisions of this code do not apply to agricultural buildings or structures. Where the construction of agricultural buildings or structures requires a building permit, such structures shall be designed and built in accordance with the provisions of the International Building Code or other standards approved by the Building Official.

SECTION R103 DEPARTMENT OF BUILDING SAFETY. Delete.

SECTION R 103 DEPARTMENT OF PLANNING AND BUILDING INSPECTION

- R103.1 Enforcement Agency. The department of Planning and Building Inspection previously created by the Boone County Commission will continue as the enforcement agency for this code. The Director of Planning and Building Inspection shall be known as the building official. The building official is hereby authorized and directed to administer and enforce all provisions of this code.
- R103.2 Appointment. The Director of Planning and Building Inspection shall be appointed by the Boone County Commission.
- R103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the Boone County Commission, the Director of Planning and Building Inspection shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have the powers as delegated by the building official.
- R104.10.1 Areas prone to flooding. The building official shall not grant modifications to any provisions related to areas prone to flooding as established by Table R301.2 (1) without the granting of a variance to such provisions by the Zoning Board of Adjustment.
- **R105.2(1)** One story detached accessory structures, provided the floor area does not exceed 160 square feet. Such buildings must comply with all setback requirements found in the zoning regulations. Such buildings used to house hazardous materials (paint, gasoline, etc.) must be placed at least 10 feet from any property line and have a door that can be secured by a lock.
- R105.2(2) Fences not over twelve (12) feet high.
- R106.1 Submittal documents. Construction documents, special inspection and structural observation programs, and other data may be required to be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professions where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.
- R112.2.1 Determination of substantial improvements in areas prone to flood: (Delete)
- R112.2.2 Criteria for issuance of a variance for areas prone to flooding: (Delete)

R112.3 Qualifications: (Delete)

R113.4 Violation penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of an approved plan or directive of the building official or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided by law. Each day that a violation continues shall be deemed a separate offense.

R202 DEFINITIONS

ACCESSORY STRUCTURE (Delete)

Add: ACCESSORY STRRUCTURE. In one— and two-family dwellings not more than three stories high with separate means of egress, a building, the use of which is incidental to that of the main building and which is located on the same lot.

Table R301.2(1) – The following values shall be inserted into Table R301.2(1):

Roof Snow Load – 20 lbs/sq. ft.

Wind – 90

Seismic Design Category – B

Weathering - Severe;

Frost Line Depth - 30 inches

Termite – Moderate to Heavy

Decay - Slight to Moderate

Winter Design Temp - + 4° Fahrenheit

Ice Shield Underlayment Required – No – 27.8° Fahrenheit

Flood Hazards – 6/2/1983 – date of adoption of flood regulations

6/15/1983 – date of Flood Insurance Rate Map

Air Freezing Index – 1000

Mean Annual Temperature – 55° Fahrenheit

R309.2 Separation required: The garage shall be completely separated from the residence and its attic area by means of 5/8-inch gypsum board or equivalent applied to the garage side.

R311.5.3.1 Riser Height. The maximum riser height shall be 8 ¼ inches. The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch.

R311.5.3.2 Tread Depth. The minimum tread depth shall be 9 inches. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch. Winder treads shall have a minimum tread depth of 9 inches measured as above at a point 12 inches from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 6 inches at any point. Within any flight of stairs, the greatest winder tread depth at the 12 inch walk line shall not exceed the smallest by more than 3/8 inch.

R311.5.8.3 Circular stairways. Circular stairways shall have a minimum tread depth and a maximum riser height in accordance with Section 311.5.3, including winders. The radius of the narrower end of treads shall not be less than twice the width of the stairway.

R313.3 Power source: In new construction, required smoke detectors shall receive their primary power from the building wiring when such wiring is served from a commercial source. In addition to the required primary power source, required smoke detectors shall receive power from a battery when the primary power source is interrupted. Smoke detectors may be battery operated when installed in existing buildings, or in buildings without commercial power, or in buildings which undergo alterations, repairs or additions as regulated by Section R313.1.1.

R403.3 Frost protected shallow foundations. Delete.

R404.1 Concrete and masonry foundation walls. Add the following: Provisions 2 and 3 above shall be considered satisfied by any of the following alternatives provided the joists are toe nailed to the top plate in accordance with fastener schedule table R602.3(1) and the anchor bolt spacing does not exceed 6 feet:

Alternative #1. Configurations where thrust from the joists is transferred to the foundation by direct bearing on the foundation. A graphic example of Alternative #1 may be obtained from the Department of Planning and Building Inspection.

Alternative #2. A steel angle attached to the bottom of each joist. A graphic example of Alternative #2 may be obtained from the Department of Planning and Building Inspection.

Alternative #3. A Type C connection to one joist at least every four feet maximum is acceptable for 8 and 9 foot walls with not more than 8 ½ feet of unbalanced backfill. A graphic example of Alternative #3 may be obtained from the Department of Planning and Building Inspection.

Alternative #4. Corners, perpendicular concrete walls and foundation offsets of at least 6 feet in plan length provide lateral support at those points. If such support is provided at least every 15 feet along the length of the wall in plan, soil pressure from unbalanced backfill can be transferred to those supports by providing adequate horizontal reinforcement in the foundation wall. For up to 7 ½ feet of unbalanced backfill on an 8 inch thick wall, horizontal reinforcement must consist of at least 2 #4 grade 60 bars every 2 feet of wall height. For up to 9 feet of unbalanced fill on an 8 inch thick wall, horizontal reinforcement must consist of at least 3, #4 grade 60 bars every 2 feet of wall height. A graphic example of Alternative #4 may be obtained from the Department of Planning and Building Inspection.

Table R404.1.1(5): An Alternate Concrete Reinforcement Equivalent Table accepted by the Building Official may be used to comply with the minimum vertical reinforcement size and spacing as shown in this table, see equivalent table #1.

R404.1.3 Design required: A design in accordance with accepted engineering practice may be required for concrete or masonry foundation walls when any of the following conditions occur:

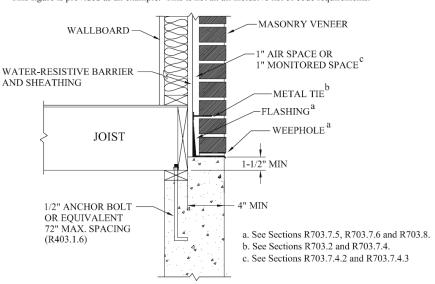
- 1. Walls are subject to hydrostatic pressure from groundwater.
- 2. Walls supporting more than 48 inches of unbalanced backfill that do not have permanent lateral support at the top and bottom.

ALTERNATE 1

2006 IRC

Section R404 Foundations and Retaining Walls Section R404.1 Concrete and Masonary Foundation Walls Alternatives for Provisions 2 and 3 of 5

*This figure is provided as an example. This is not an all inclusive list of code requirements.

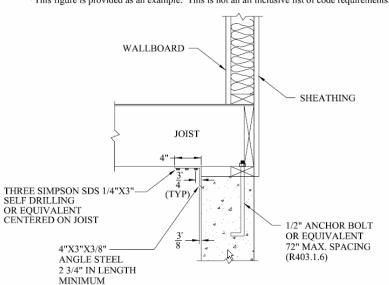


ALTERNATE 2

2006 IRC

Section R404 Foundations and Retaining Walls Section R404.1 Concrete and Masonary Foundation Walls Alternatives for Provisions 2 and 3 of 5

*This figure is provided as an example. This is not an all inclusive list of code requirements.

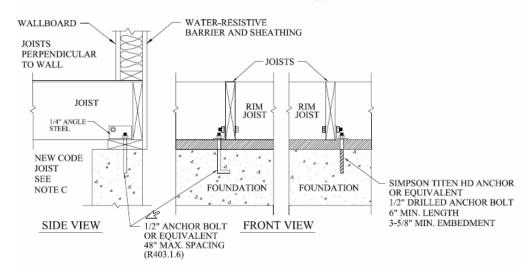


ALTERNATE 3

2006 IRC Section R404 Foundations and Retaining Walls Section R404.1 Concrete and Masonary Foundation Walls Alternatives for Provisions 2 and 3 of 5

*This figure is provided as an example. This is not an all inclusive list of code requirements.

NOTE C: One 1/4" thick steel angle. Horizontal leg attached to sill bolt adjacent to joist/blocking, vertical leg attached to joist/blocking with 1/2" minimum diameter bolt. See table R404.1(1)



ALTERNATE 4

2006 IRC

Section R404 Foundations and Retaining Walls Section R404.1 Concrete and Masonary Foundation Walls Alternatives for Provisions 2 and 3 of 5

*This figure is provided as an example. This is not an all inclusive list of code requirements.

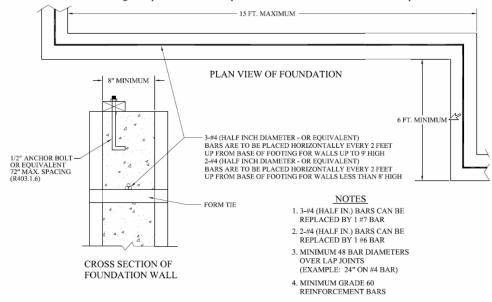


TABLE # 1 ALTERNATE CONCRETE REINFORCEMENT EQUIVALENTS FOR TABLE R-404.1.1(5) CONCRETE FOUNDATION WALLS

CODE REQUIREMENT EQUIVALENT 1/2" BAR

#5 @ 36 inches	#4 @ 23 inches
#5 @ 37 inches	#4 @ 24 inches
#5 @ 38 inches	#4 @ 24 inches
#5 @39 inches	#4 @ 25 inches
#5 @ 40 inches	#4 @26 inches
#5 @ 41 inches	#4 @ 26 inches
#5 @ 43 inches	#4 @ 28 inches
#5 @ 46 inches	#4 @ 29 inches
#5 @ 47 inches	#4 @ 30 inches
#5 @ 48 inches	#4 @ 31 inches
#6 @ 19 inches	#4 @ 8 inches
#6 @ 22 inches	#4 @ 9 inches
#6 @ 24 inches	#4 @ 10 inches
#6 @ 27 inches	#4 @ 12 inches
#6 @ 28 inches	#4 @ 12 inches
#6 @ 30 inches	#4 @ 13 inches
#6 @ 32 inches	#4 @ 14 inches
#6 @ 33 inches	#4 @ 14 inches
#6 @ 34 inches	#4 @ 15 inches
#6 @ 35 inches	#4 @ 15 inches
#6 @ 36 inches	#4 @ 16 inches
#6 @ 37 inches	#4 @ 16 inches
#6 @ 38 inches	#4 @ 17 inches
#6 @ 39 inches	#4 @ 17 inches
#6 @ 43 inches	#4 @ 19 inches
#6 @ 44 inches	#4 @ 19 inches
#6 @ 45 inches	#4 @ 20 inches
#6 @ 47 inches	#4 @ 21 inches
#6 @ 48 inches	#4 @ 21 inches
#7 @ 30 inches	#4 @ 9 inches
#7 @ 31 inches	#4 @ 10 inches
#7 @ 35 inches	#4 @ 11 inches
#7 @ 38 inches	#4 @ 12 inches
#7 @ 39 inches	#4 @ 12 inches
#7 @ 41 inches	#4 @ 13 inches
#7 @ 47 inches	#4 @ 15 inches
#7 @ 48 inches	#4 @ 15 inches

- R502.11.4 Truss design drawings. Truss design drawings, prepared in compliance with Section R502.11.1 shall be available on-site at the time of inspection and shall be provide to the building official at that time. Truss design drawings shall be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include, at a minimum, the information specified below: (remainder of section unchanged).
- R602.6.1 Drilling and notching of top plate. Exception 2: An angled 20 gauge galvanized metal tie may be used provided it provides a minimum 1 inch flange and extends down at least 3 inches. The metal tie shall span the distance between the adjacent studs.
- R613.2 Window sills. Delete.
- R802.3.1 Ceiling joist and rafter connections. Add: Rafter ties shall be spaced not more than 4 feet on center.
- R806.3 Vent and insulation clearance. Where eave or cornice vents are installed, insulation shall not block the free flow of air. A minimum of a 1 inch (25 mm) space shall be provided between the insulation and the roof sheathing at the location of the vent.
- N1101.2.1 Detached one and two family dwellings: Compliance shall be demonstrated by either:
- 1. Meeting the requirements of this chapter for buildings with a glazing area that does not exceed 15 percent of the gross area of exterior walls; or
- 2. All buildings shall be insulated in accordance with the following: ceiling or roof -- R-38; exterior wall -- R-15 (in assembly); floor above unheated area or crawl space and ducts shall have a value of R-19 for the assembly; finished exterior basement walls and interior garage walls shall have insulating batts, blankets, fills or similar types of materials with a value of R-13.
 - Joints in the building conditioned envelope that are sources of air leakage, such as
 around window and door frames, between wall cavities and window or door
 frames, between wall assemblies or their sill plates and foundations, between utility
 service penetrations through the building envelope, shall be properly sealed with
 compatible and durable caulking, gasketing, weather-stripping or other materials in
 an approved manner.
 - All exterior walls shall have a vapor barrier or equivalent, capable of reducing vapor transmission to less than 1 perm, installed on the inside or the warm surface side of the insulated wall or ceiling. Only those ceilings that are attached directly to the underside of the roof rafters, such as flat roofs or cathedral ceilings, are required to install the vapor barrier.
 - Ducts in heated areas do not require insulation.
 - Ducts in unheated areas and not exposed to outside ventilation, such as a garage, shall have an insulation value of R-4.

• All windows shall have a maximum Thermal Transmittance (U) value of 0.55.

M1308.2 Change thickness of protective shields from a minimum of 0.062 inch thick steel to 20 gauge thick. A thicker gauge (up to 16 gauge) may be required when necessary to protect gas or refrigerant lines.

M1401.3 Sizing – Heating and cooling equipment shall be sized based on building loads calculated in accordance with ACCA Manual J (Residential Load Calculation – Seventh Edition) or other approved heating and cooling calculation methodologies. Equipment shall be sized at a maximum of 700 sq. ft. of habitable floor space per ton of equipment capacity. Unfinished basement areas shall be provided with a minimum of ½ ton of equipment capacity for the every 2000 sq. ft. of unfinished area.

M1501.1 Outdoor discharge. Delete.

M1502.6 Duct length: The maximum developed length of a clothes dryer exhaust duct generally shall not exceed 25 feet from the dryer location to the wall or roof termination. The maximum length of the duct shall be reduced 2.5 feet for each 45-degree bend and 5 feet for each 90-degree bend. The maximum developed length of the exhaust duct does not include the transition duct.

Section M1506 EXHAUST DUCTS – re-number subsection to M1506.1 Ducts.

Section M1507 MECHANICAL VENTILATION – re-number subsection "M1506.2" to M1507.2 Recirculation of air. Exhaust air from bathrooms and toilet rooms shall not be recirculated within a residence or to another dwelling unit and shall be exhausted directly to the outdoors or the soffit.

M2005.2 Prohibited locations: Fuel-fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure with a self-closing door so that combustion air will not be taken from the living space. Direct-vent water heaters are not required to be installed within an enclosure.

G2414.5.2 Copper tubing: Copper tubing shall comply with standard Type K or L of ASTM B 88 or ASTM B 280.

Copper and brass tubing shall not be used if the gas contains more than an average of 0.3 grains of hydrogen sulfide per 100 standard cubic feet of gas (0.7 milligrams per 100 liters). Natural gas supplied by Ameren UE in Boone County exceeds this level therefore copper or brass shall not be used with natural gas.

G2415.1 Prohibited locations. Piping shall not be installed in or through a circulating air duct, clothes chute, chimney or gas vent, ventilating duct, dumbwaiter or elevator shaft.

G2415.5 Protection against physical damage. (Piping systems) Shield plates shall be a minimum of 20 gauge steel.

- G2426.7 Protection against physical damage. (Vents) Shield plats shall be a minimum of 20 gauge steel.
- G2439.5.1 Maximum Length. The maximum developed length of a clothes dryer exhaust duct generally shall not exceed 25 feet from the dryer location to the wall or roof termination. The maximum length of the duct shall be reduced 2.5 feet for each 45-degree bend and 5 feet for each 90-degree bend. Then maximum developed length of the exhaust duct does not include the transition duct.
- P2503.5 DWV system testing. Rough and finished plumbing installations may be tested in accordance with Sections P2503.5.1 and P2503.5.2.
- P2503.5.1 Rough Plumbing. DWV systems may be required to be tested on completion of the rough piping installation by water or air with no evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough piping has been installed, as follows: (remainder of text as per code).
- P2503.5.2 Finished Plumbing. After the plumbing fixtures have been set and their traps filled with water, their connections may be required to be tested and proved gas tight and/or water tight as follows: (remainder of text as per code).
- P2602.1.1 Public water supply. A public water supply is considered available if a lot is within 300 feet of a public water main to which connection is practical and is permitted by the governmental agency or utility responsible for the water main.
- P2602.1.2 Public sewer system. A public sewer system is considered to be available if a lot is within 225 feet of a sanitary sewer system to which connection is practical and is permitted by the governmental agency or utility responsible for the sanitary sewer.
- P2603.6.1 Sewer depth: Building sewers that connect to private sewage disposal systems shall be a minimum of eighteen (18) inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of eighteen (18) inches below grade.
- P2903.4 Thermal Expansion. In addition to the required pressure relief valve, an approved device for thermal expansion control shall be installed on any water supply system utilizing storage water heating equipment whenever the building supply pressure exceeds the pressure-reducing valve setting or when any device, such as a pressure reducing valve, backflow preventer or check valve, is installed that prevents pressure relief through the building supply. The thermal expansion control device shall be sized in accordance with the manufacturer's installation instructions.
- P2903.4.1 Pressure reducing valve: An approved pressure-reducing valve conforming to ASSE 1003 shall be installed on the domestic water branch main or riser at the connection to the water-service pipe.
- P2904.5.1 Under concrete slabs: Inaccessible water distribution piping under slabs shall be copper water tube minimum Type M, brass, ductile iron pressure pipe, cross linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pressure pipe, chlorinated polyvinyl chloride (CPVC) or polybutylene (PB) or cross-linked polyethylene (PEX) plastic pipe or tubing all to be installed with approved fittings or bends.

Polyethylene (PE) may be allowed provided it is installed without fittings and completely sleeved by a suitable material. The minimum pressure rating for plastic pipe or tubing installed under slabs shall be 100 psi at 180° F (689 kPA at 82°C)

P3103.1 Roof extension: All open vent pipes which extend through a roof shall be terminated at least 12 inches above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134 mm) above the roof.

E3301.3 Not covered: Chapters 33 through 42 do not cover the following:

- 1. Installations, including associated lighting, under the exclusive control of communications utilities and electric utilities.
- 2. Services over 400 amperes.
- 3. Installations in agricultural buildings. Such installations shall conform to the requirements of 2005 NEC (National Electric Code).

E3306.2 Conductor material. Conductors used to conduct current shall be of copper except as otherwise provided in Chapters 33 through 42. Where conductors material is not specified, the material and the sizes given in these chapters shall apply to copper conductors. Where other materials are used, the conductor sizes shall be changed accordingly. In no case shall any aluminum current carrying conductor be smaller than #2.

E3503.3.3 Location: The service over current device shall be an integral part of the service disconnecting means or shall be located no further away than the next full stud space.

E3504.5 Service masts as supports: Where a service mast is used for the support of service-drop conductors, it shall be installed as allowed by the utility service provider.

E3505.5 Protection of service cables against damage. Change "Schedule 80 rigid non-metallic conduit" to "Schedule 40 rigid non-metallic conduit."

E3601.6 Circuit limits: load calculations shall be provided to the Building Official prior to installation. Alternatively, installation can proceed without providing load calculations provided that no more than 8 duplex receptacle outlets and / or light fixtures are installed per 14/2 wiring circuit or no more than 10 duplex receptacle outlets and / or light fixtures are installed per 12/2 wiring circuit.

E3702.3.2 Protection from physical damage. Where subject to physical damage, cables shall be protected by rigid metal conduit, intermediate metal conduit, electrical metallic tubing, Schedule 40 PVC rigid nonmetallic conduit, or other approved means. Where passing through a floor, the cable shall be enclosed in rigid metal conduit, intermediate metal conduit, electrical metallic tubing, Schedule 40 PVC rigid nonmetallic conduit or other approved means extending not less than 6 inches above the floor.

Exception: When subject to severe physical damage Schedule 80 PVC rigid nonmetallic conduit may be required.

E3801.3 Small appliance receptacles: In the kitchen, dining room, pantry, breakfast room and similar areas, two or more small appliance branch circuits shall serve all wall and floor receptacle outlets, all countertop receptacle outlets and receptacle outlets for refrigeration equipment. One or both of the required small appliance branch circuits shall be permitted to serve other receptacle outlets in the same kitchen and in the other rooms previously specified. Additional small appliance circuits shall be permitted. Small appliance circuits are not permitted to serve outlets outside of these rooms or areas, and shall not serve more than one kitchen.

Small appliance branch circuits are intended to serve kitchen appliances and utilization equipment. No more than three outlets or openings shall be allowed on a small appliance branch circuit, except that all dining room receptacles may be served by a small appliance branch circuit. Small appliance branch circuits are not allowed to serve room lighting, except or unless the lighting is a manufactured part of equipment served by these circuits.

A refrigerator may be served by a dedicated 15 amp circuit.

A microwave oven shall be served by a dedicated 20 amp circuit.

In no case shall the load exceed the rating of a branch circuit.

E3801.4.2 Island counter spaces. At least one receptacle outlet shall be installed at each island counter space with a long dimension of 24 inches or greater and a short dimensions of 12 inches or greater.

E3801.11 HVAC outlet. A 125-volt, single phase, 15 or 20 ampere-rated convenience receptacle outlet shall be installed for the servicing of heating, air-conditioning and refrigeration equipment located in attics and crawl spaces. The receptacle shall be accessible and shall be located on the same level and within 25 feet of the heating, air-conditioning and refrigeration equipment. The receptacle outlet shall not be connected to the load side of the HVAC equipment disconnecting means and shall be protected in accordance with Section E3802.4.

Exception: A receptacle shall not be required for the servicing of evaporative coolers.

E3802.12 Arc-fault protection of bedroom outlets. Delete.

APPENDIX G SWIMMING POOLS, SPAS AND HOT TUBS

AG105.1 Application. The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drowning and near-drowning by restricting access to swimming pools, spas and hot tubs. Barriers are to be constructed of metal chain link fence, wood, stone or masonry or other material approved by the building official.

AG105.2 11 All swimming pool excavation sites are required to be enclosed by a temporary construction barrier during installation. Any temporary construction barrier shall comply with the design standards of AG105.2. A permanent barrier shall be installed upon completion of the pool structure.

COMMISSION ORDER NUMBER 15-2007

Effective date: __April 2, 2007_

A COMMISSION ORDER ADOPTING AND GOVERNING THE DESIGN, CONSTRUCTION, ALTERATION, ENLARGEMENT, EQUIPMENT REPAIR, DEMOLITION, REMOVAL, CONVERSION, USE OR MAINTENANCE OF ALL BUILDINGS AND STRUCTURES; AND FURTHER PROVIDING FOR THE ISSUE OF SAID PERMITS, COLLECTING OF FEES, MAKING OF INSPECTIONS, AND PROVIDING PENALTIES FOR THE VIOLATION THEREOF.

BE IT ORDAINED BY THE COUNTY COMMISSION OF BOONE COUNTY, MISSOURI, AS FOLLOWS:

SECTION 1. ADOPTION OF THE BUILDING CODE: ADDITIONS, INSERTIONS, DELETIONS AND CHANGES.

Commission Order Number 15-2007, known as the "Building Code of Boone County, Missouri", that a certain document, three (3) copies of which are on file in the office of Building Official of the Boone County Department of Planning and Building Inspection and are being marked and designated as "The International Building Code – 2006 Edition", as published by the International Code Council, be and is hereby adopted as the Building Code of Boone County, Missouri for the control of buildings and structures as provided herein; and each and all of the regulations, provisions, penalties, conditions and terms of "The International Building Code – 2006 Edition", are hereby referred to, adopted and made part hereof, as is more fully set out in this Ordinance, with the additions, insertions, deletions and changes as hereinafter prescribed.

SECTION 2. JURISDICTIONAL TITLE.

- 0.1 Wherever (name of jurisdiction) appears in this code, it shall read "County of Boone, Missouri".
- 0.1.1 Wherever "Department of Building Safety" appears in this code, it shall read "Department of Planning and Building Inspection of Boone County, Missouri".
- 0.1.2 Wherever "Chief Appointing Authority of the Jurisdiction" appears in this Code, it shall read "Boone County Commission of Boone County, Missouri".
- 0.2.1 Farm structure exemption: The provisions of this Code shall not be exercised so as to impose regulations or to require permits with respect to the erection, maintenance, repair, alteration or extension of farm buildings or farm structures further than seventy-five feet (75') from a dwelling provided that such buildings or structures are located on tracts of 20 acres or more and such buildings or structures are used exclusively for agricultural purposes. Farm dwellings shall conform to the provisions of this code as herein provided.
- 0.2.2 Manufactured home exemption: Manufactured homes, recreational vehicles or modular units which carry a seal as provided in Section 700.010 to 700.115 RSMo. shall be exempt from these provisions, provided that no alteration of the unit takes place once it has been placed upon a tract of land.

0.2.3 Portable building exemption: Portable buildings as defined by Section 202.0 shall be exempt from these provisions. Portable buildings must comply with all setback requirements found in the zoning regulations. Portable buildings used to house hazardous materials (paint, gasoline, etc.) must be placed at least 10 feet from any property line and have a door that can be secured by a lock.

SECTION 3. AMENDMENTS TO THE INTERNATIONAL BUILDING CODE - 2006.

The International Building Code - 2006 is amended by additions, deletions and changes including the changing of Articles, Sections, Sub-section titles and the addition of new sections and new sub-sections as follows:

SECTION 101.2 Exception 2: Existing buildings undergoing repair, alterations, or additions and change of occupancy shall be permitted to comply with the requirements of Chapter 34.

SECTION 101.4.5 Property maintenance. Delete

SECTION 104.6 Right of entry: The code official shall have the authority to enter at any reasonable time any structure or premises for which a permit has been issued but has not received a certificate of occupancy in accordance with Section 110.0. Permit holders are required to provide means of access to all parts of structures subject to inspection, including the provision of ladders where required.

For all other structures or premises, when the code official has reasonable cause to believe that a code violation exists, the code official is authorized to enter the structure or premises at reasonable times to inspect subject to constitutional restrictions on unreasonable searches and seizures. If entry is refused or not obtained, the code official is authorized to pursue recourse as provided by law.

SECTION 106.1 Submitted documents: Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the Chapter 327 RSMo. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional. Buildings or structures exempt from these requirements are:

- (a) A dwelling house; or
- (b) A multiple family dwelling house, flat or apartment containing not more than two families; or
- (c) A commercial or industrial building or structure buildings <u>having less than 1200 square</u> <u>feet of floor area</u> which provides for the employment, assembly, housing, sleeping or eating of not more than nine persons; or
- (d) Any one structure containing less than twenty thousand cubic feet, except as provided in (b) and (c) above, and which is not a part or a portion of a project which contains more than one structure; or

Add:

SECTION 106.6 Compliance with other Regulatory Agency Fire and Life Safety Codes: No permit shall be issued unless the plans and specifications or other required documentation for permit issuance has been approved by other Boone County regulatory agencies having jurisdiction for compliance with applicable fire and life safety codes. These provisions shall not apply to one and two family dwellings or residences.

Add:

SECTION 106.7 Compliance with other Regulatory Agency Fire and Life Safety Codes: No final inspection or periodic inspection made at the conclusion of a building phase shall be passed or approved unless similar inspections for compliance with applicable fire and life safety codes have been made and approved or passed by other Boone County regulatory agencies having jurisdiction. These provisions shall not apply to one and two family dwellings or residences.

SECTION 108.6 Delete in its entirety. Add: Refunds: In the case of a revocation of a permit or abandonment or discontinuance of a building project, the portion of the work actually completed shall be computed and any excess fee for the incomplete work shall be returned to the permit holder upon written request. All plan examination and permit processing fees and all penalties that have been imposed on the permit holder under the requirements of this code shall first be collected. The code official shall authorize the refunding of fees according to Boone County policies under the following additional circumstances:

- 1. The full amount of any fee paid hereunder which was erroneously paid or collected.
- 2. When no work has been done, the permit fee, less a processing fee of \$20.00 may be refunded to the original permittee.

The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the fee was paid.

Add:

SECTION 112.4 Court review: Any party before the board of appeals who is aggrieved by a decision of the board of appeals may seek redress or relief before the court of competent jurisdiction as permitted by law.

SECTION 113.4 Delete in its entirety. Insert: Violation penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of an approved plan or directive of the building official or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided by law. Each day that a violation continues shall be deemed a separate offense.

SECTION 114.3 Delete in its entirety. Insert: Unlawful continuance: Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, shall be guilty of a misdemeanor, punishable as provided by law.

SECTION 202.0 Add:

<u>Portable building</u> - a structure constructed off-site and transported to the property by means of a truck or trailer; or one built from a pre-manufactured kit and placed on skids.

Portable buildings may enclose no more than 160 sq. ft. of floor space, do not have interior finish, electrical service or plumbing fixtures. Portable buildings must comply with all setback requirements found in the zoning regulations. Portable buildings used to house hazardous materials (paint, gasoline, etc.) must be placed at least 10 feet from any property line and have a door that can be secured by a lock.

SECTION 903.2.1.2 Change Item 2. The fire area has an occupant load of 200 or more; or

- 1301.1.2: Use group R-2, R-3 and R-4 shall comply with this section or the requirements of International Energy Conservation Code. All buildings of Use Group R-2, R-3 and R-4 shall be insulated in accordance with the following:
 - Ceiling or roof -- R-38; exterior wall-- R-15 (in assembly); floor above unheated area or crawl space and ducts shall have a value of R-19 for the assembly; finished exterior basement walls and interior garage walls shall have insulating batts, blankets, fills or similar types of materials with a value of R-13.
 - Joints in the building conditioned envelope that are sources of air leakage, such as around window and door frames, between wall cavities and window or door frames, between wall assemblies or their sill plates and foundations, between utility service penetrations through the building envelope, shall be properly sealed with compatible and durable caulking, gasketing, weather-stripping or other materials in an approved manner.
 - All exterior walls shall have a vapor barrier or equivalent, capable of reducing vapor transmission to less than 1 perm, installed on the inside or the warm surface side of the insulated wall or ceiling. Only those ceilings that are attached directly to the underside of the roof rafters, such as flat roofs or cathedral ceilings, are required to install the vapor barrier.
 - Ducts in heated areas do not require insulation.
 - Ducts in unheated areas and not exposed to outside ventilation, such as a garage, shall have an insulation value of R-4.
 - All windows shall have a maximum Thermal Transmittance (U) value of 0.55.
- 3109.4 Residential swimming pools. Residential swimming pools shall comply with Sections 3109.4.1 through 3109.4.3. Residential swimming pools shall be enclosed by a barrier consisting of metal chain link fence, wood, stone or masonry or other material approved by the building official. All swimming pool excavation sites are required to be enclosed by a temporary construction barrier during installation. A permanent barrier shall be installed upon completion of the pool structure.

COMMISSION ORDER NUMBER 15-2007

A COMMISSION ORDER ESTABLISHING THE MINIMUM REGULATIONS GOVERNING THE DESIGN, INSTALLATION AND CONSTRUCTION OF PLUMBING SYSTEMS, BY PROVIDING REASONABLE SAFEGUARDS FOR SANITATION TO PROTECT THE PUBLIC HEALTH AGAINST THE HAZARDS OF INADEQUATE, DEFECTIVE OR UNSANITARY PLUMBING INSTALLATIONS; KNOWN AS THE PLUMBING CODE OF BOONE COUNTY, MISSOURI.

BE IT ORDAINED BY THE COUNTY COMMISSION OF BOONE COUNTY, MISSOURI, AS FOLLOWS:

SECTION 1. ADOPTION OF THE PLUMBING CODE:

That a certain document, three (3) copies of which are on file in the office of Building Official of the Boone County Department of Planning and Building Inspection being marked and designated as the "International Plumbing Code/2006", as published by the International Code Council, Inc., be and is hereby adopted as the Plumbing Code of Boone County, Missouri for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of "International Plumbing Code/2006", are hereby referred to, adopted and made part hereof, as is more fully set out in this Ordinance, with the additions, insertions, deletions and changes as hereinafter prescribed.

SECTION 2. JURISDICTIONAL TITLE.

- 100.1 Wherever (name of jurisdiction) appears in this code, it shall read "County of Boone, Missouri".
- 100.1.1 Wherever "Department of Plumbing Inspection" appears in this code, it shall read "Department of Planning and Building Inspection of Boone County, Missouri".
- 100.1.2 Wherever "Chief Appointing Authority of the Jurisdiction" appears in this Code, it shall read "Boone County Commission of Boone County, Missouri".

SECTION 3. AMENDMENTS TO THE INTERNATIONAL PLUMBING CODE/2006:

The International Plumbing Code/2006, is amended by additions, deletions and changes, including the changing of Articles, Sections, Sub-sections and Subsection titles, and the addition of new Sections and new Sub-Sections reads as follows:

- 101.2.1 Appendices. Appendices B, C, D, E, F and G are adopted as part of this code.
- 106.6.3 Fee Refunds: The code official shall authorize the refunding of fees as follows:
 - 1. The full amount of any fee paid hereunder that was erroneously paid or collected.

- 2. Not more than 75% of the permit fee paid when no work has been done under a permit issued in accordance with this code.
- 3. Not more than 75% of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

The code official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

108.4 Delete in its entirety.

Add:

108.4 Violation penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall install plumbing work in violation of an approved plan or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided by law. Each day that a violation continues shall be deemed a separate offense.

108.5 Stop work orders: Delete last sentence. Insert: Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe conditions, shall be guilty of a misdemeanor, punishable as provided by law.

109.2 Delete in its entirety.

Add:

109.2 Membership of the board: The board of appeals as established in Section 112 of the International Building Code / 2006 shall serve as the board of appeals for the International Plumbing Code.

305.6 Delete.

Add:

305.6 Freezing: Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperature unless adequate provision is made to protect such pipes from freezing by insulation or heat or both.

Exterior water supply system piping shall be installed not less than 6 inches below the frost line (frost line is 30") and not less than 12 inches below grade

305.6.1 Delete.

Add:

305.6.1 Sewer Depth: Building sewers that connect to private sewage disposal systems shall be a minimum of eighteen (18) inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of eighteen (18) inches below grade.

Add:

602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized. A potable public supply system shall be considered available to a lot if the lot is located within 300 feet of the public water main.

701.2 Delete in its entirety.

Add:

701.2 Sewer required: Every building in which plumbing fixtures are installed and every premises having drainage piping shall be connected to a public sewer, where available, or where a public sewer is not available, a private sewage disposal system in accordance with the requirements of the Columbia/Boone County Health Department or the Missouri Department of Natural Resources.

Add:

701.2.1 A public sewer system shall be considered available if a lot is within 225 feet of a sanitary sewer system to which connection is practical and is permitted by the governmental agency or utility responsible for the sanitary sewer.

Add:

904.1 Roof extension. All open vent pipes that extend through a roof shall be terminated at least 12 inches above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet above the roof.

COMMISSION ORDER NUMBER: 15-2007

A COMMISSION ORDER ESTABLISHING THE MINIMUM REGULATIONS GOVERNING THE DESIGN, INSTALLATION AND CONSTRUCTION OF MECHANICAL SYSTEMS, BY PROVIDING REASONABLE SAFEGUARDS TO PROTECT THE PUBLIC HEALTH AND SAFETY AGAINST THE HAZARDS OF INADEQUATE, DEFECTIVE OR UNSAFE MECHANICAL SYSTEMS AND INSTALLATIONS; KNOWN AS THE MECHANICAL CODE OF BOONE COUNTY, MISSOURI.

BE IT ORDAINED BY THE COUNTY COMMISSION OF BOONE COUNTY, MISSOURI, AS FOLLOWS:

SECTION 1. ADOPTION OF THE MECHANICAL CODE:

That a certain document, three (3) copies of which are on file in the office of Building Official of the Boone County Department of Planning and Building Inspection being marked and designated as "International Mechanical Code/2006", as published by the International Code Council, Inc., be and is hereby adopted as the Mechanical Code of Boone County, Missouri for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of "The International Mechanical Code/2006", are hereby referred to, adopted and made part hereof, as is more fully set out in this Ordinance, with the additions, insertions, deletions and changes as hereinafter prescribed.

SECTION 2. JURISDICTIONAL TITLE.

- 100.1 Wherever (name of jurisdiction) appears in this code, it shall read "County of Boone, Missouri".
- 100.1.1 Wherever "Department of Mechanical Inspection" appears in this code, it shall read "Department of Planning and Building Inspection of Boone County, Missouri".
- 100.1.2 Wherever "Chief Appointing Authority of the Jurisdiction" appears in this Code, it shall read "Boone County Commission of Boone County, Missouri".

SECTION 3. AMENDMENTS TO THE INTERNATIONAL MECHANICAL CODE/2006:

The International Mechanical Code/2006 is amended by additions, deletions and changes, including the changing of Articles, Sections, Sub-sections and Subsection titles, and the addition of new Sections and new Sub-Sections reads as follows:

- 101.2 Scope Exception 2: Mechanical systems in existing buildings undergoing repair, alterations or additions and change of occupancy shall be permitted to comply with the International Building Code or other applicable codes.
- 101.2.1 Appendices. Appendix A is adopted as part of this code.

- 106.3.1 Construction Documents. Add to exception: Buildings or structures exempt from these requirements are as follows:
 - a. One-Family dwellings.
 - b. Two family dwellings.
 - c. Commercial or industrial buildings having less than 1200 square feet of floor space, or which provide for the employment, sleeping, assembly, housing or eating of not more than nine (9) persons.
 - d. Any structure containing less than twenty-thousand cubic feet, except as provided above.
 - e. Any building or structure used exclusively for farm purposes.
- 106.5.2 Fee schedule. The fees for mechanical work shall be as approved by the Boone County Commission.
- 106.5.3 Delete in its entirety.

Add:

106.5.3 Fee Refunds: The code official shall authorize the refunding of fees as follows:

- 1. The full amount of any fee paid hereunder that was erroneously paid or collected.
- 2. When no work has been done, the permit fee, less a processing fee of 25% of the original fee may be refunded to the original permittee.

The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the fee was paid.

- 108.4 Delete in its entirety. Insert: Violation penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair mechanical equipment or systems in violation of an approved plan or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided by law. Each day that a violation continues shall be deemed a separate offense.
- 108.5 Delete last sentence. Insert: Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be guilty of a misdemeanor, punishable as provided by law. Each day that a violation continues shall be deemed a separate offense.
- 109.2 Delete in its entirety. Insert:
- 109.2 Membership of the board: The board of appeals as established in Section 112 of the International Building Code / 2006 shall serve as the board of appeals for the International Mechanical Code.
- 109.2.1 Delete in its entirety.
- 109.2.2 Delete in its entirety.

- 109.2.3 Delete in its entirety.
- 109.2.4 Delete in its entirety.
- 109.2.5 Delete in its entirety.
- 109.2.6 Delete in its entirety.
- 109.3 Delete in its entirety.
- 109.4 Delete in its entirety.
- 109.4.1 Delete in its entirety.
- 109.5 Delete in its entirety.
- 109.6 Delete in its entirety.
- 109.6.1 Delete in its entirety.
- 109.6.2 Delete in its entirety.
- 109.7 Delete in its entirety.

COMMISSION ORDER NUMBER ____ 15-2007

A COMMISSION ORDER ESTABLISHING THE MINIMUM REGULATIONS GOVERNING THE DESIGN, INSTALLATION AND CONSTRUCTION OF ELECTRICAL SYSTEMS, BY PROVIDING REASONABLE SAFEGUARDS TO PROTECT THE PUBLIC HEALTH AGAINST THE HAZARDS OF INADEQUATE, DEFECTIVE OR UNSAFE ELECTRICAL INSTALLATIONS; KNOWN AS THE ELECTRICAL CODE OF BOONE COUNTY, MISSOURI.

BE IT ORDAINED BY THE COUNTY COMMISSION OF BOONE COUNTY, MISSOURI, AS FOLLOWS:

SECTION 1. ADOPTION OF THE ELECTRICAL CODE:

That a certain document, three (3) copies of which are on file in the office of Building Official of the Boone County Department of Planning and Building Inspection being marked and designated as "The National Electrical Code 2005", as published by the National Fire Protection Association, be and is hereby adopted as the Electrical Code of Boone County, Missouri for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of "The National Electrical Code 2005", are hereby referred to, adopted and made part hereof, as is more fully set out in this Ordinance, with the additions, insertions, deletions and changes as hereinafter prescribed.

SECTION 2. AMENDMENTS TO THE NATIONAL ELECTRICAL CODE 2005:

The National Electrical Code 2005 is amended by additions, deletions and changes, including the changing of Articles, Sections, Sub-sections and Subsection titles, and the addition of new Sections and new Sub-Sections reads as follows:

ADD:

- 90.10. Plans and specifications: Plans and specifications shall be required for all work involving commercial, industrial, multiple family and buildings used for purposes of public assembly, or as determined by the building official.
- 90.11. Violation penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall install, alter or repair electrical wiring in violation of this Code or without a proper permit shall be guilty of a misdemeanor and punishable by fine, or by imprisonment, or by both as directed by a court of law. Each day that a violation continues shall be deemed a separate offense,
- 90-12. Means of appeal: The owner of a building or structure or any other person may appeal a decision of the building official. Application for appeal may be filed in the office of the Department of Planning and Building Inspection.
- 90.13. Membership of the Board of Appeals: For the purposes of the Electrical Code, the board of appeals appointed under Section 112 of the ICC International Building

Code/2006 (Boone County Building Code) as adopted, shall serve as the board of appeals for matters referred to it for consideration under the Electrical Code.

Article 100

Add:

Agriculture or Farming Activity: An agricultural activity shall be defined as the cultivating of the soil, producing of crops and the raising of animals for food or fiber and including horticulture, beekeeping, aquaculture, silviculture and forestry. Concentrated animal feeding operations must conform to the Missouri department of Natural Resource's regulations pertaining to waste water management and odor control. The raising and keeping of horses for any purpose other than the production of food and fiber is not considered agricultural activity.

Switch, Transfer: Change to read – An automatic or non-automatic device for transferring one or more load conductor connections from one power source to another. The transfer switch on activation shall disconnect all current carrying conductors to include the neutral to prevent back-feed to the utility.

110.5. Delete in its entirety. Insert: Conductors. Conductors normally used to carry current shall be of copper unless otherwise provided for in this code. Where the conductor material is not specified, the sizes given in this code shall apply to copper conductors. Where other materials are used, the size shall be changed accordingly. Aluminum and copper aluminum will be approved only as designed and recommended by a Registered Professional Engineer or a Registered Architect or the enforcing authority. In no case shall any aluminum current carrying conductor be smaller than #2.

210.8 (A) (7) Add:

Exception. Dedicated circuits installed for specific appliances such as clothes washers, refrigerators and microwaves shall not be required to be GFCI-protected where located within 6 feet of laundry, utility or wet bar sinks in a dwelling.

210.12 Arc-Fault Circuit Interrupter Protection. Delete.

210.52 (B)(1). This section shall read as follows; In the kitchen, dining room, pantry, breakfast room and similar areas, two or more small appliance branch circuits shall serve all wall and floor receptacle outlets, all countertop receptacle outlets and receptacle outlets for refrigeration equipment. One or both of the required small appliance branch circuits shall be permitted to serve other receptacle outlets in the same kitchen and in the other rooms previously specified. Additional small appliance circuits shall be permitted. Small appliance circuits are not permitted to serve outlets outside of these rooms or areas, and shall not serve more than one kitchen.

Small appliance branch circuits are intended to serve kitchen appliances and utilization equipment. No more than three outlets or openings shall be allowed on a small appliance branch circuit, except that all dining room receptacles may be served by a small appliance branch circuit. Small appliance branch circuits are not allowed to serve room lighting, except or unless the lighting is a manufactured part of equipment served by these circuits.

A refrigerator may be served by a dedicated 15 amp circuit.

A microwave oven shall be served by a dedicated 20 amp circuit.

In no case shall the load exceed the rating of a branch circuit."

210.52 (B)(3). This section shall read as follows; Receptacles installed in the kitchen to serve countertop surfaces shall be supplied by not less than two small appliance branch circuits, except that these circuits shall also be permitted to serve electric clock receptacles and electric loads associated with gas-fired appliances.

230.70(A)(1). Add: Inside the nearest point of entrance is defined as the first full stud space inside structure.

250.50 Grounding Electrode System. All grounding electrodes as described in 250.52(A)(1) through (A)(6) that are present at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes exist, one or more of the grounding electrodes specified in 250.52(A)(4) through (A)(7) shall be installed and used, except where there exists a metal water pipe in contact with earth for 10 feet or more, for one- and two-family dwellings, a single grounding electrode as required by the serving electrical utility shall be permitted to fill the requirements of Article 250.50.

410.14 (B) Access to Boxes. Delete.

Article 545. Manufactured Building.

ADD:

545.14. Release from liability: Due to the fact that the Boone County Planning and Building Inspection Department is unable to properly inspect wiring, outlets, junction boxes, etc., in manufactured buildings, the owner is responsible for insuring that all electrical components are in compliance with this code.

Article 550. Mobile Homes and Mobile Home Parks.

ADD:

550.34. Release from liability: Due to the fact that the Boone County Planning and Building Inspection Department is unable to properly inspect wiring, outlets, junction boxes, etc. in manufactured buildings, the owner is responsible for insuring that all electrical components are in compliance with this code.

COMMISSION ORDER NUMBER: ____15-2007_

A COMMISSION ORDER ESTABLISHING THE MINIMUM REGULATIONS GOVERNING THE DESIGN, INSTALLATION AND CONSTRUCTION OF FUEL GAS SYSTEMS AND GAS FIRED-APPLIANCES, BY PROVIDING REASONABLE SAFEGUARDS TO PROTECT THE PUBLIC HEALTH AND SAFETY AGAINST THE HAZARDS OF INADEQUATE, DEFECTIVE OR UNSAFE FUEL GAS SYSTEMS AND GAS FIRED APPLIANCES; KNOWN AS THE FUEL GAS CODE OF BOONE COUNTY, MISSOURI.

BE IT ORDAINED BY THE COUNTY COMMISSION OF BOONE COUNTY, MISSOURI, AS FOLLOWS:

SECTION 1. ADOPTION OF THE FUEL GAS CODE:

That a certain document, three (3) copies of which are on file in the office of Building Official of the Boone County Department of Planning and Building Inspection being marked and designated as "International Fuel Gas Code/2006", as published by the International Code Council, Inc., be and is hereby adopted as the Fuel Gas Code of Boone County, Missouri for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of "The International Fuel Gas Code/2006", are hereby referred to, adopted and made part hereof, as is more fully set out in this Ordinance, with the additions, insertions, deletions and changes as hereinafter prescribed.

SECTION 2. JURISDICTIONAL TITLE.

- 100.1 Wherever (name of jurisdiction) appears in this code, it shall read "County of Boone, Missouri".
- 100.1.1 Wherever "Department of Inspection" appears in this code, it shall read "Department of Planning and Building Inspection of Boone County, Missouri".
- 100.1.2 Wherever "Chief Appointing Authority of the Jurisdiction" appears in this Code, it shall read "Boone County Commission of Boone County, Missouri".
- SECTION 3. AMENDMENTS TO THE INTERNATIONAL FUEL GAS CODE/2006: The International Fuel Gas Code/2006 is amended by additions, deletions and changes, including the changing of Articles, Sections, Sub-sections and Subsection titles, and the addition of new Sections and new Sub-Sections reads as follows:
- 101.2 Scope Exception 2: As an alternative to the provisions of this code, fuel-gas piping systems, fuel-gas utilization equipment and related accessories in existing buildings that are undergoing repairs, alterations, changes in occupancy or construction of additions shall be permitted to comply with the International Building Code or other applicable codes.

- 101.3 Appendices. Appendices A, B and C are adopted as part of this code.
- 106.3.1 Construction Documents. Add to exception: Buildings or structures exempt from these requirements are as follows:
 - f. One-Family dwellings.
 - g. Two family dwellings.
 - h. Commercial or industrial buildings having less than 1200 square feet of floor space, or which provide for the employment, sleeping, assembly, housing or eating of not more than nine (9) persons.
 - i. Any structure containing less than twenty-thousand cubic feet, except as provided above.
 - j. Any building or structure used exclusively for farm purposes.
- 106.5.2 Fee schedule. The fees for mechanical work shall be as approved by the Boone county Commission.
- 106.5.3 Delete in its entirety.

Add:

106.5.3 Fee Refunds: The code official shall authorize the refunding of fees as follows:

- 1. The full amount of any fee paid hereunder that was erroneously paid or collected.
- 2. When no work has been done, the permit fee, less a processing fee of 25% of the original fee may be refunded to the original permittee.

The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the fee was paid.

- 108.4 Delete in its entirety. Insert: Violation penalties: Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair mechanical equipment or systems in violation of an approved plan or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor, punishable as provided by law. Each day that a violation continues shall be deemed a separate offense.
- 108.5 Delete last sentence. Insert: Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be guilty of a misdemeanor, punishable as provided by law. Each day that a violation continues shall be deemed a separate offense.
- 109.2 Delete in its entirety. Insert:
- 109.2 Membership of the board: The board of appeals as established in Section 112 of the International Building Code / 2006 shall serve as the board of appeals for the International Fuel Gas Code Code.
- 109.2.1 Delete in its entirety.
- 109.2.2 Delete in its entirety.

- 109.2.3 Delete in its entirety.
- 109.2.4 Delete in its entirety.
- 109.2.5 Delete in its entirety.
- 109.2.6 Delete in its entirety.
- 109.3 Delete in its entirety.
- 109.4 Delete in its entirety.
- 109.4.1 Delete in its entirety.
- 109.5 Delete in its entirety.
- 109.6 Delete in its entirety.
- 109.6.1 Delete in its entirety.
- 109.6.2 Delete in its entirety.
- 403.4.3 Copper and brass. Copper and brass pipe shall not be used if the gas contains more than an average of 0.3 grains of hydrogen sulfide per 100 standard cubic feet of gas (0.7 milligrams per 100 liters). Natural gas supplied by Ameren UE in Boone County exceeds this level therefore copper or brass shall not be used with natural gas. Threaded copper, brass and aluminum-alloy pipe shall not be used with gases corrosive to such metals.
- 403.5.2 Copper and brass tubing. Copper tubing shall comply with standard Type K or L of ASTM B 88 or ASTM B 280.

Copper and brass tubing shall not be used if the gas contains more than an average of 0.3 grains of hydrogen sulfide per 100 standard cubic feet of gas (0.7 milligrams per 100 liters). Natural gas supplied by Ameren UE in Boone County exceeds this level therefore copper or brass shall not be used with natural gas.