

**BILL 3513**

**ORDINANCE**

**"AN ORDINANCE OF THE CITY OF RAYMORE, MISSOURI, ADOPTING AND ENACTING A REVISED CHAPTER 500: BUILDING REGULATIONS OF THE RAYMORE CITY CODE."**

**WHEREAS**, the Development Services Department is recommending adoption of the 2018 series of the International Building Codes; and

**WHEREAS**, a Building Code Review Committee comprised of representatives of the building trades assisted staff in reviewing the 2018 codes and have recommended several local amendments to the codes; and

**WHEREAS**, the City Council of the City of Raymore, Missouri, has determined it is in the best interests of the health, safety and welfare of the citizens of Raymore to adopt a new Chapter 500 of the Raymore City Code incorporating the 2018 series of International Building Codes with the recommended local amendments.

**NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF RAYMORE, MISSOURI, AS FOLLOWS:**

Section 1. Chapter 500: Building Regulations of the Raymore City Code is hereby repealed in its entirety and re-enacted as follows:

**CHAPTER 500: - BUILDING REGULATIONS**

**ARTICLE I. - IN GENERAL**

**SECTION 500.005: - TITLE OF CHAPTER; DESIGNATION OF BUILDING OFFICIAL**

- A. This Chapter shall be known as the Building and Construction Code. Unless otherwise indicated by its use and context, the term "this Chapter" shall refer to this Chapter 500 including all provisions incorporated by reference herein.
- B. The Building Official shall be known as the official charged with the administration and enforcement of the City's Building Codes, and such term shall include their authorized representatives. Further, whenever the term or title "administrative authority," "Code Enforcement Officer," "responsible official," or "Building Official" or other similar designation is used in any of the Codes adopted by reference by this Chapter, it shall be construed to mean the Building Official, or their authorized representatives.

**SECTION 500.010: - PURPOSE AND SCOPE OF CHAPTER; REFERENCED CODES**

- A. *Purpose.* This Chapter shall be construed to provide minimum requirements to safeguard the general public safety, health and general welfare, insofar as they are affected by building construction, through structural strength, adequate means of egress facilities, stability, sanitary equipment, light and ventilation,

energy conservation, erosion and sediment control and fire safety; and in general to promote safety to life and property from fire and other hazards incident to the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, location, relocation, moving, quality of materials or use and occupancy, operation and maintenance of buildings, structures or premises, and to provide safety to firefighters and emergency responders during emergency operations.

- B. *Scope.* This Chapter provides the administrative and technical provisions to be followed by all persons engaged in the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, location, relocation, land disturbance, moving, quality of materials, or use and occupancy, operation and maintenance of buildings, structures or premises, as regulated by this Chapter. This Chapter does not apply to public infrastructure or work in a public right-of-way except as expressly indicated herein. All references to any provisions in the administrative Chapters of the referenced model Codes shall be construed to be a reference to the provisions of Article I of this Chapter.
- C. *Referenced Codes.* The other Codes listed in Subsections (1) through (8) and referenced elsewhere in this Chapter shall be considered part of the requirements of this Chapter to the extent of each such reference. All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator or energy conservation Code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator or energy conservation Code specifically adopted by reference in Articles II through XI of this Chapter.
  - 1. *Building.* The provisions of the *International Building Code*, as amended, shall apply to the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, location, maintenance, land disturbance, moving, quality of materials, or use and occupancy of every building or structure or any appurtenances connected or attached to such buildings or structures. (See Article II of this Chapter.)

Exceptions:

- a. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three (3) stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the *International Residential Code*, as amended. (See Article III of this Chapter.)
- b. Existing buildings and structures undergoing repair, alterations or additions and change of occupancy shall comply with the *International Existing Building Code* and *NFPA 101 Life Safety Code* as amended. (See Article VIII of this Chapter.)
- 2. *Electrical.* The provisions of the *National Electrical Code*, as amended, shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances.

(See Article IV of this Chapter.)

3. *Gas.* The provisions of the *International Fuel Gas Code*, as amended, shall apply to the installation of gas appliances and related accessories as covered in this Code.

For requirements regarding the installation and operation of residential gas appliances and related accessories, see Article III of this Chapter.

For requirements regarding the installation of gas piping from the point of delivery to the inlet connections of appliances in commercial applications, and all aspects of a medical gas system see Article XII, *International Fuel Gas Code*.

4. *Mechanical.* The provisions of the *International Mechanical Code*, as amended shall regulate the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed to provide control of environmental conditions and related processes within buildings. This Code shall also regulate those mechanical systems, system components, equipment and appliances specifically addressed herein. (See Article V of this Chapter.)

5. *Plumbing.* The provisions of the *International Plumbing Code*, as amended, shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system. (See Article VI of this Chapter.)

The provisions of the *On-Site Private Sewage Disposal Code*, as amended, shall apply to private sewage disposal systems for all structures within the City as referenced in Chapter 710.150 of this Code. The provisions for lawn sprinkler and irrigation systems shall comply with Article X of this Chapter.

6. *Swimming Pools, Spas, and Hot tubs.* The provisions of the *International Swimming Pool, and Spa Code*, as amended, shall apply to the erection, installation, alteration, addition, repair, relocation, and replacement, addition to, use or maintenance of swimming pools, spas, or hot tub plumbing systems. In addition to this Code the provisions of Chapter 420, Section 420.050 (B) of the Unified Development Code shall also apply. (See Article VII of this Chapter.)

7. *Fire prevention.* The provisions of the *International Fire Code*, as amended, shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and, from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation. (See Article XI of this Chapter.)

8. *Energy.* The provisions of the *International Energy Conservation Code*, as amended, shall apply to all matters governing the design and construction

of buildings for energy efficiency. (See Article IX of this Chapter.)

Exception:

Existing buildings and structures undergoing repair, alterations or additions and change of occupancy shall be permitted to comply with the *International Existing Building Code* and *NFPA 101 Life Safety Code* as amended. (See Article VIII of this Chapter.)

- D. *Process.* The Building Official shall have the responsibility to make timely recommendations to update this Chapter, upon the publication of nationally recognized model Codes.

#### **SECTION 500.015: - CONFLICTING PROVISIONS**

- A. Wherever conflicting provisions or requirements occur between this Chapter and the model Codes adopted by this Chapter, this Chapter shall apply.
- B. Wherever conflicting provisions or requirements occur between this Chapter and any other municipal Codes and laws, the most restrictive shall govern. The provisions of this Chapter shall not be deemed to nullify any provisions of local, state, or federal law.
- C. Where in any specific case different Sections within this Chapter specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
- D. Where conflicts occur between any specific provisions of this Article and any administrative provisions in the remaining Articles of this Chapter which are then applicable, those provisions becoming law last in time shall prevail.
- E. Wherever in this Chapter reference is made to the appendix, the provisions in the appendix shall not apply unless specifically adopted.
- F. References to Chapter or Section numbers, or to provisions not specifically identified by number, shall be construed to refer to such Chapter, Section or provision of this Chapter.
- G. The Codes and standards referenced in this Chapter shall be considered part of the requirements of this Chapter to the extent of each such reference. Where differences occur between provisions of this Chapter and referenced Codes and standards, the provisions of this Chapter shall apply.

#### **SECTION 500.020: - APPLICABILITY OF CHAPTER TO EXISTING BUILDINGS AND BUILDING SERVICE EQUIPMENT**

- A. *Generally.* The legal use and occupancy of any structure existing on the date of adoption of this Chapter shall be permitted to continue without change provided such continued use is not dangerous to life, and as may be specifically covered in this Chapter, the fire Code or as may be deemed necessary by the Building Official for the general safety and welfare of the occupants and the public.

- B. *Ordinary repairs.* Application or notice to the Building Official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion of, the removal or cutting of any structural beam or load bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements, nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer drainage, drain leader, gas, soil, waste, vent or similar piping; electric wiring; or mechanical or other work affecting public health or general safety.
- C. *Construction in floodplain.* The provisions of Chapter 460 of the Unified Development Code must be met for any alteration, encroachment or substantial improvement accomplished in a regulatory floodplain as designated on the official floodplain document.

**SECTION 500.025: - APPROVED MATERIALS, ALTERNATE MATERIALS, DESIGN AND METHODS OF CONSTRUCTION AND EQUIPMENT**

- A. The provisions of this Chapter are not intended to prevent the installation of any material or method of construction not specifically prescribed by this Chapter, provided that any such alternative has been approved.
- B. The Building Official shall approve any alternative material, design or method of construction that is found to be satisfactory and in compliance with the provisions of this Chapter and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this Chapter in quality, strength, effectiveness, fire resistance, durability, safety and sanitation.
- C. The Building Official shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding the use of any alternative material, design, or method of construction. The details of any action granting approval shall be entered into the record of the Building Inspection Division.
- D. Materials, equipment and devices approved by the Building Official shall be constructed and installed in accordance with such approval. The use of used materials which meet the requirements of this Chapter for new materials are permitted. Used equipment and devices shall not be reused unless approved by the Building Official.

**SECTION 500.030: - MODIFICATIONS**

Whenever there are practical difficulties involved in carrying out the provisions of this Chapter, the Building Official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative. The Building Official shall first find that a special individual reason makes the strict letter of this Chapter impractical and that the modification does not lessen health, life, and fire safety requirements or any degree of structural integrity. The details of

actions granting modifications shall be entered into the record of the Building Official.

#### **SECTION 500.035: - TESTS**

- A. Whenever there is insufficient evidence of compliance with any of the provisions of this Chapter, or evidence that materials or construction do not conform to the requirements of this Chapter, or in order to substantiate claims for alternative materials or methods, the Building Official shall have the authority to require tests as evidence of compliance to be made at no expense to the City.
- B. Test methods shall be as specified in this Chapter or by other recognized test standards. In the absence of recognized and accepted test methods for the proposed alternate, the Building Official shall approve the test procedures.
- C. All tests shall be made by an approved agency. Reports of such tests shall be retained by the Building Official for the period required for the retention of records.

#### **SECTION 500.040: - DUTIES AND POWERS OF THE BUILDING OFFICIAL**

- A. *General.* The Building Official is authorized and directed to enforce the provisions of this Chapter. For such purposes, the Building Official shall have the powers of a law enforcement officer to issue written orders in the enforcement of this Chapter and deem unsafe conditions as prescribed in Section 500.045 and Chapter 510 of the City Code. The Building Official shall have the authority to render interpretations of this Chapter and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in conformance with the intent and purpose of this Chapter. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this Chapter.
- B. *Applications and permits.* The Building Official shall receive applications, review construction documents and issue permits for the erection and alteration of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this Chapter.
- C. *Written Notices and orders.* The Building Official shall issue all necessary written notices or orders to ensure compliance with this Chapter.
- D. *Inspections.* The Building Official shall make all of the required inspections, or the Building Official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The Building Official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.
- E. *Identification.* The Building Official and/ or all designated inspectors shall carry proper identification when inspecting structures or premises in the performance

of duties under this Chapter.

- F. *Right of entry.* When it is necessary to make an inspection or to enforce the provisions of this Chapter, or any other Code, ordinance, law, regulation or administrative order within the authority of the Building Official to enforce, or whenever the Building Official or an authorized representative has reasonable cause to believe that there exists in any building any condition which is contrary to or in violation of this Chapter, or any other Code, ordinance, law, regulation or administrative order, the Building Official or an authorized representative may enter the building or premises during normal work hours or, in the case of an emergency at any reasonable time to inspect or to perform any duty imposed upon the Building Official by this Chapter; provided if such property be occupied, the Building Official shall first present proper credentials and request and obtain permission to enter before entering the building or premises. Reasonable effort must be made to locate the owner or other persons having charge or control of the property when seeking permission for entry.
1. If no consent has been given to enter or inspect any building or premises, no entry or inspection shall be made without the procurement of a warrant from the judge presiding in the Raymore Municipal Court of the Circuit Court of Cass County, or if that judge is not available, from any other judge presiding in the Cass County 17th Judicial Circuit Court of Missouri. The court may, among other factors, consider the following in its decision as to whether a warrant shall be issued:
    - a. Eyewitness account of violation.
    - b. Citizen complaint(s).
    - c. Tenant complaint(s).
    - d. Plain view violation(s).
    - e. Violation apparent from City record(s).
    - f. Nature of an alleged violation, the threat of life or safety and imminent risk of significant property damage.
    - g. Previous unabated violation(s) in the building or on the premises.
  2. Cause supporting issuance of a warrant shall be deemed to exist in light of reasonable legislative and administrative standards which show that there is reason to believe that a condition of nonconformity exists with respect to a building or premises in violation of the provisions of the City Code.
  3. The Building Official may enter the premises without consent or a search warrant to make an inspection or enforce any of the provisions of the City Code only when an emergency exists as prescribed in Section 500.045 of this Chapter, or when the premises are abandoned.
  4. If a complaint in writing is filed by the Building Official or an authorized representative, any Law Enforcement Officer, deputy, City Attorney or Prosecuting Attorney of the City with the Municipal Court of the City, stating that they have probable cause to believe there exists in a building or

structure more particularly described a violation or violations of provisions of the City Code, and is within the territorial jurisdiction of the City, and if such complaint is verified by the oath or affirmation stating evidential facts from which such judge determines the existence of probable cause, then such judge shall issue a search warrant directed to the authorized person to search the structure or premises described for the purposes requested. Such a search warrant may be executed and returned only within ten (10) days after the date of its issuance. The person authorized to search shall make a return promptly after concluding the search, and such return shall contain an itemization of all violations of this Code discovered pursuant to such search. Refusal to honor a search warrant and permit inspection of the premises shall constitute an ordinance violation. Execution of a search warrant under this Section shall not be by forcible entry.

5. Unless emergency conditions exist or until a written notice of violation and a reasonable opportunity to correct the violation is afforded the person, a summons shall not be served upon a resident, property owner, or other responsible person, which alleges a violation of this Code based upon conditions discovered incidental to, and solely as a result of conducting an investigation pursuant to the authority of a search warrant, but which is not the subject of the search warrant.

G. *Stop work orders.*

1. *Written Notice.* Upon written notice from the Building Official that work on any building or structure is being pursued contrary to the provisions of this Chapter, or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to any persons working on or about the structure and to any persons owning, leasing, maintaining or occupying premises where work is being done; and shall state the conditions under which work will be permitted to resume.
2. *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 condition, shall be in violation of the Code and subject to penalties in Section 500.070 of the City Code.

H. *Occupancy violations.* Whenever any building or structure or building service equipment regulated by this Chapter is being used contrary to the provisions of the Code, the Building Official may order such use discontinued by written notice served on any person causing such use to be continued. Such person shall discontinue the use within the time prescribed by the Building Official after receipt of such written notice to make the structure, or portion of, comply with the requirements of the Code. Failing to discontinue such use when ordered is a violation of this Chapter. Unless authorized by the Building Official, removing a posted written notice or sign indicating that a structure is not to be occupied is a violation of this Chapter and subject to penalties in Section 500.070.

I. *Department records.* The Building Official shall keep official records of



applications received, permits and certificates issued, fees collected, reports of inspections, and written notices and order issued. Such records shall be retained in the official records for the period required for retention of public records.

- J. *Liability.* The Building Official or an authorized representative charged with the enforcement of this Chapter, acting in good faith and without malice in the discharge of the duties required by this Chapter or other pertinent law or ordinance, shall not be rendered personally liable for damages that may accrue to persons or property as a result of any such official act or by reason of any act or omission in the discharge of such official duties. Any suit brought against the Building Official or employee because of such act or omission, performed in the enforcement of any provision of this Chapter or other pertinent laws or ordinances implemented through the enforcement of this Chapter or enforced by the Building Official, shall be defended by the City until final termination of such proceedings. Any judgment resulting of such proceeding shall be assumed by the City. This Chapter shall not be construed to relieve from or lessen the responsibility of any person owning, operating, or controlling any building, structure or building service equipment therein for any damage to persons or property caused by defects, nor shall the Building Official or the City to be held as assuming any such liability by reason of the inspections authorized by this Chapter or approvals issued under this Chapter.
- K. *Cooperation of other officials and officers.* The Building Official may request, and shall receive, the assistance and cooperation of other City officials so far as is required in the discharge of the duties required by this Chapter or other pertinent law or ordinance.
- L. *Building numbers.* The Building Official is authorized to promulgate the standards by which buildings are numbered and to assign or reassign numbers and addresses according to the Addressing and Street Naming Policy as adopted by the Raymore Planning and Zoning Commission.
- M. *Rules and regulations.* The Building Official is authorized to make and promulgate reasonable and necessary rules and regulations to provide for the efficient administration of this Chapter, and to implement the substantive and procedural requirements of this Chapter. A copy of the rules and regulations shall be filed in the office of the City Clerk.

#### **SECTION 500.045: - UNSAFE STRUCTURES AND EQUIPMENT**

- A. *General.* No person, firm, corporation, partnership, association, organization or governmental agency properly regulated by the City shall erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, occupy, maintain, or own any building, building use, structure, sign, appendage or building service equipment in an unsafe manner.
- B. *Conditions.* Structures or equipment which are or hereafter become unsafe, unsanitary or deficient because of, but not limited to, inadequate means of egress facilities, inadequate light and ventilation, or inadequate life safety system; or which constitute a fire hazard, or are otherwise dangerous to human

life or the public welfare due to inadequate maintenance, dilapidation, obsolescence, fire, disaster, damage, failure or abandonment; or which involve illegal or improper use or occupancy; shall be deemed unsafe. Unsafe structures shall be taken down and removed or made safe as the Building Official deems necessary and as provided for in this Section and the provisions of Chapter 510. A vacant structure that is not secured against entry may be deemed unsafe by the Building Official.

- C. *Written Notice.* If an unsafe condition is found, the Building Official may serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such written notice shall require the person thus notified to declare immediately to the Building Official acceptance or rejection of the terms of the order.
- D. *Method of service.* Such written notice shall be deemed properly served if a copy is posted in a conspicuous place in or about the structure affected by such notice, and
  1. Delivered to the owner personally; or
  2. Sent by certified mail or registered mail addressed to the owner at the last known address with the return receipt requested. If the certified or registered letter is returned showing that the letter was not delivered, or the owner cannot be located, the posted written notice in or about the structure shall be sufficient for notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.
- E. *Restoration.* The structure or equipment determined to be unsafe by the Building Official is permitted to be restored to a safe condition. To the extent that repairs, alterations, moving of building, or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions, moving or change in occupancy shall comply with the requirement of Section 500.020(B) of this Chapter and the *International Existing Building Code* as amended.
- F. *Maintenance of signs.* All signs shall comply with the requirements of Chapter 435 of the Unified Development Code.
- G. *Dangerous buildings or structures.* Any building or structure determined by the Building Official as a dangerous building or structure shall comply with the requirements of Chapter 510 of the City Code.
- H. *Moving of buildings.* The moving of any building or structure in, into, through, or from the City shall comply with the requirements of Chapter 520 of the City Code.
- I. *Emergency measures.* Where it reasonably appears there is an immediate danger to the health, safety or welfare of any person, the Building Official may take emergency measures to vacate and repair or demolish an unsafe building,

building use, structure, sign, equipment, or appendage in accordance with the provisions of Chapter 510.

#### **SECTION 500.050: - SERVICE UTILITIES**

- A. *Connection of service utilities.* No person shall make connections from a utility, source of energy, fuel or power to any building or system which is regulated by this Chapter for which a permit is required, until approved and released by the Building Official.
- B. *Temporary connection.* The Building Official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power, as required by Section 500.075(A)(2) (a through d) for permits and limitations.
- C. *Authority to disconnect service utilities.* The Building Official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by the Codes adopted by this Chapter in case of emergency where necessary to eliminate an immediate hazard to life or property. The Building Official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practicable thereafter.
- D. *Connection after order to disconnect.* No person shall make connections from a utility, source of energy, fuel or power to any building or system which has been disconnected or ordered to be disconnected by the Building Official or the use of which has been ordered to be discontinued by the Building Official until the Building Official authorizes the reconnection and use of such equipment.

#### **SECTION 500.055: - RIGHT TO AN APPEAL**

- A. *Procedure for appeal of decisions relating to the Building Code.* In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this Chapter, an application for appeal to the Board of Appeals shall be made within ten (10) days from the date of the order, decision, or determination is made by the Building Official.
- B. Except in cases designated as emergencies, an appeal to the Board stays all enforcement of the determination from which the appeal is being taken.
- C. All appeal procedures shall comply with Chapter 540 of the City Code.

#### **SECTION 500.060: - VIOLATIONS**

- A. *Unlawful acts.* It shall be unlawful for any person, firm, corporation, partnership, association, organization or government agency properly regulated by the City to erect, construct, enlarge, alter, repair, move, improve, remove,

grade, excavate or add any fill material, convert or demolish, equip, use, occupy, maintain or own or cause land disturbance activities for any building, land, real estate premises, sign structure or building service equipment or cause or permit the same to be done in violation of this Chapter, or fail to comply with any order issued under the authority of the Building Official, or fail to comply with the duties and responsibilities of a licensed or registered contractor or licensed or registered supervisor.

- B. *Separate offense.* Any person, firm, corporation, partnership, association, organization or governmental agency properly regulated by the City violating any of the provisions of this Chapter shall be deemed guilty of an ordinance violation. Each and every day or portion of during which any violation of any of the provisions of this Chapter is committed, continued, or permitted shall be a separate offense.
- C. *Responsible individual.* The responsible individual(s) of a corporation shall include any officer of a corporation or the person in charge of the local office of such corporation.

### **SECTION 500.065: - REQUIRED LICENSES**

Any person, firm, or organization providing residential and/or commercial construction industry services, mechanical, plumbing or electrical contract or subcontract work within the City shall obtain an occupational business license in accordance with Chapter 605 of the City Code.

Exceptions to occupational business license:

1. Permits for work as required by this Chapter may be issued to any person to do any work regulated by this Chapter in a single family dwelling used exclusively for living purposes, including the usual accessory buildings, provided that such person is an owner of record of any such dwelling and accessory buildings, provided that the dwelling and accessory buildings are occupied by the owner, and provided that the owner shall personally purchase all material and perform all labor in connection therewith. Where the work is included in a building permit issued according to this exception, the owner may contract and direct the work of building trades subcontractor(s), which are required to be licensed under Section 605.010.
2. Public utility companies will not be required to obtain licenses for their firms or corporations or for their employees when engaged in the installation, operation, and maintenance of equipment which will be used for the production, generation, transmission, or distribution of the product or service from the source of the product or service through the facilities owned or operated by such utility company to the point of the customer service, including the metering.
3. Provisions of this Chapter requiring employment of certified or licensed mechanics, craftsmen, or engineers shall apply to maintenance or operation of equipment and accessories used for operations, production, or processing by public utilities, government agencies, manufacturing or processing

plants, or commercial enterprises which maintain regular maintenance and operating staff supervised by a professional engineer registered by the state. However, work under such supervision shall be performed to comply in all respects with all applicable provisions of this Chapter, including provisions for permits and inspections.

4. The property owner or owner of business on the property may install a temporary sign, as defined in Chapter 435 of the Unified Development Code, after obtaining the required permit(s).
5. The owner of record may demolish any one-story building which is less than one hundred twenty-one (121) square feet. Such work must be done by the owner.

### **SECTION 500.070: - PENALTIES**

A. Upon conviction or a plea of guilty, any person, firm or corporation violating or failing to comply with any of the provisions of this Chapter shall be subject to the penalty provisions provided for in Section 100.220 of the City Code.

B. *Penalties for offenses.*

1. Persons convicted of certain repeat violations as set forth in Subsection (B)(2) of this Section at any premises shall be punished as set forth in Subsection (A) of this Section.
2. Person convicted of violating any of the following provisions of this Chapter shall be punished as set forth in Subsection (A) of this Section:
  - a. Violating an order to stop work issued pursuant to Section 500.040(G).
  - b. Making any connection without proper authorization from the Building Official after a disconnection pursuant to Section 500.050 of the City Code.
  - c. Failure to obtain a permit, or working without a permit, when required by this Chapter in addition to the schedule of fees in Section 500.095.
  - d. Failure to obtain an inspection when required by this Chapter.
  - e. Failure to obtain a certificate of occupancy when required by this Chapter in addition to the penalties in Section 500.110(G).
  - f. Failure to comply with all responsibilities of a licensed contractor, as set forth in Chapter 605 of the City Code.
  - g. Failure to comply with all the responsibilities of a holder of a certificate of qualification, as set forth in Chapter 605 of the City Code.
  - h. Providing false information to the Building Official when submitting an application for an occupational license, certificate of qualification, or permit.
  - i. Permitting occupancy of any structure for which a temporary certificate of occupancy has been issued and such temporary certificate of occupancy has expired in addition to the penalties in Section

500.110(G).

3. For purposes of this Section, only convictions within the prior three (3) years before the date of the offense alleged shall be considered. Conviction(s) within the prior three (3) years shall be subject to an occupational license suspension or revocation as prescribed in Chapter 605 of the City Code.
- C. *Other remedies.* The imposition of penalties prescribed in this Section shall not preclude the City attorney from instituting appropriate action, including equitable and extraordinary remedies, to prevent any unlawful construction, reconstruction, alteration, repair, conversion, maintenance or use, or to restrain, correct or abate a violation, or to prevent the occupancy of a building or structure or portion of, or of the premises, or to prevent an illegal act, conduct of business or use in or about the premises.

### **SECTION 500.075: - PERMITS REQUIRED; EXCEPTIONS**

A. *Required permits; permit conditions.*

1. *Generally; emergency work; conditions of permit.*

- a. It shall be unlawful to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this Chapter, or to cause any such work to be done, without making application to the Building Official and obtaining the required permit; provided that the repairs, as defined in Section 500.020(B) of the City Code, which do not involve any violation of this Chapter, and work as specified in subsection (B) of this Section, shall be exempted from this provision.
- b. *Emergency work.* In cases of emergency, the person or other entity doing work or causing work to be done may proceed with the work and file application for a permit within seventy-two (72) hours after commencement of emergency work. Emergency shall be considered to exist only in those situations wherein life, health and safety would be adversely affected if work were not commenced immediately, and the burden shall be upon the person claiming such emergency to exist to prove the existence of such emergency by clear and convincing evidence.
- c. *Insurance.* Construction industry contractor permit holders shall keep in force insurance, issued by a company approved by the City Clerk's office, meeting the conditions set forth in Section 605.010(B)(1) of the City Code.
- d. *Indemnity.* Every person, firm, or corporation to whom permission has been granted under the terms of this Article and other ordinances to utilize public property for the permit work of any building, structure, or utility shall at all times assume full responsibility for such work and shall hold harmless and indemnify the City and the Building Official from any

and all responsibility, liability, loss, or damage resulting to any persons or property or caused by or incidental to the permitted work.

- e. Commencement and completion of work. See Section 500.090 in this Chapter pertaining to expiration and completion of granted permits.

2. *Temporary structures and uses.*

- a. The Building Official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than one hundred eighty (180) days. The Building Official is authorized to grant extensions for demonstrated cause.
- b. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of the Code as necessary to ensure the public health, safety and general welfare.
- c. Permits for temporary electrical service installations not to exceed ninety (90) days duration may be granted for fairs, carnivals, exhibitions, exterior lighting for decorative display and similar purposes. Permits for temporary electrical service installations not to exceed one hundred eighty (180) days duration may be granted for construction jobs. The time limit shall be subject to renewal, if requested in writing and if the Building Official determines that the temporary permit is not being used to evade the requirements of permanent electrical service installation, will not adversely affect the public safety, or is justified because of circumstances not within the control of the permit holder.
- d. The Building Official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

3. *Special nighttime building permits.*

- a. Notwithstanding any other provision of this Chapter or of any other provision of the City Code, no construction work, including excavation, demolition, hauling, dumping or filling, may be performed between the hours of 8:00 p.m. and 7:00 a.m. unless the Building Official issues a special building permit authorizing the work. The following types of construction work are exempted from the requirement of obtaining a special night time building permit:
  - 1. Emergency work authorized pursuant to Subsection (A)(1) of this Section.
  - 2. Construction work being completely conducted inside a closed-in structure whenever such construction work does not involve the use of jackhammers, air compressors or other heavy equipment or continuing truck operations.
  - 3. Roofing from June 1 through August 31, conducted between dawn

- to dusk.
4. Framing activities for conventional, wood-framed residential structures from June 1 through August 31, conducted between dawn to dusk.
  5. Paving activities from June 1 through August 31, conducted between dawn to dusk.
- b. The Building Official shall address in each special building permit issued authorizing nighttime work the following items:
1. Traffic routes to be used by construction equipment and trucks;
  2. Means of lighting the construction site or place of operation;
  3. Whether the noise level shall be a provision of the permit;
  4. The type of work to be done and the nature of the project; and
  5. Density of the residential area potentially affected by the nighttime work.
- c. The Director of Public Works is authorized to assist the Building Official in establishing criteria for the issuance of a special building permit authorizing nighttime work.
- d. Failure to obtain the special night time building permit pursuant to this section may result in violation of Section 280.020 of the City Code.
- B. *Exempted work.* A permit shall not be required for the types of work in each of the separate classes of permit as listed in this Subsection. Exemption from the permit requirements of this Code shall not be deemed to grant authorization for any work to be done in violation of the provisions of the City Code or any other laws or ordinances of the City.
1. *Building permits.* A building permit shall not be required for the following:
    - a. One-story detached accessory buildings used as tool and storage sheds, playhouses, and similar uses provided the floor area does not exceed one hundred ninety-nine (199) square feet.
    - b. Open arbors or pergolas.
    - c. Retaining walls which are not over four (4) feet (1219 mm) in height measured from grade on the low side of the wall, unless supporting a surcharge or impounding Class I, II, IIIA liquids.
    - d. Water tanks supported directly upon grade if the capacity does not exceed five thousand (5,000) gallons (18,927 L) and the ratio of height to diameter or width does not exceed 2:1.
    - e. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work.
    - f. Temporary motion picture, television and theater stage sets and scenery.



- g. Non-fixed and movable cases, counters and partitions not over five (5) feet and nine (9) inches (1753 mm) in height.
- h. Patios not more than thirty (30) (762 mm) inches above grade at any point and platforms and decks not more than thirty (30) inches (762 mm) above grade at any point, not attached to the primary structure and/or not over any basement or story below.
- i. Window awnings supported by an exterior wall of a Group R3 and Group U occupancies when projecting not more than fifty-four (54) (1372 mm) inches.
- j. Sidewalks and driveways not more than thirty (30) inches (762 mm) above grade, not over any basement or story below and not part of an accessible right-of-way route. Permits are required for all sidewalk and driveway installations and replacements in the right-of-way.
- k. Prefabricated swimming pools accessory to a Group R3 occupancy, detached single family dwellings, where the inside pool walls are less than twenty-four (24) inches (610 mm) deep, do not exceed five thousand (5,000) gallons (18,927 L) and are installed entirely above grade.
- l. Replacement of exterior wall covering for detached one- and two- family dwellings.
- m. Replacement of doors and windows in existing openings where fire resistance, smoke control and opening protection are not required by Articles II or III.
- n. Repairs of holes in plaster or gypsum board walls.
- o. Installation or replacement of wall or floor mounted cabinets (kitchen, bath, etc.).
- p. Installation or replacement of exterior gutters and downspouts.
- q. Tuck-pointing brick and/ or stone masonry.
- r. Replacement of soffits and wall or roof sheathing less than thirty-two (32) square feet (2.97m<sup>2</sup>) in area in detached one- and two-family dwellings.
- s. Replacement of interior or exterior trim carpentry.
- t. Walks, patios and driveways constructed on existing grade outside public right-of-ways.
- u. Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.
- v. Swings and other playground equipment accessory to one- and two-family dwellings.
- w. Any grading or excavation of any land or premises complying with Section 455.010(B)(4)(b) of the Unified Development Code.

2. *Mechanical permits.* A mechanical permit shall not be required for the following:
  - a. Any portable heating appliance.
  - b. Any portable ventilating equipment.
  - c. Any portable cooling unit
  - d. Any portable evaporative cooler.
  - e. Replacement of a component part or assembly of an appliance which does not alter its original approval and complies with other applicable requirements of this Chapter.
  - f. Any refrigerating equipment which is part of the equipment for which a permit has been issued pursuant to the requirements of this Chapter.
  - g. Replacement of grills and diffusers on existing mechanical ductwork.
  - h. Any self-contained refrigeration system that contains ten (10) pounds (4.5 kg) or less of refrigerant, or that are actuated by motors of one (1) horsepower (0.75 kW) or less.
3. *Plumbing permits.* A plumbing permit shall not be required for the following:
  - a. Repairs or replacement of defective fixtures or valves provided alterations or extensions of piping systems are not made.
  - b. Clearance of stoppages.
  - c. Replacement and repair of lavatory and sink traps.
4. *Electrical permits.* An electrical permit shall not be required for the following:
  - a. Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.
  - b. The installation, alteration or repair of electrical equipment of a power or public service company for its use in the generation, transmission, distribution or metering of electricity.
  - c. Replacement of snap switches, receptacles and fixtures where no alteration or extension of an existing circuit is required.
5. *Sign permits.* A sign permit shall not be required for signs listed as exempt in Chapter 435.020(C) of the Unified Development Code.

**SECTION 500.080: - APPLICATION FOR PERMIT; RESPONSIBILITIES OF PERMITTEE**

- A. *Application for permit.* To obtain a permit required by this Chapter, the applicant shall first file an application in writing on a form furnished by the Building Official for that purpose. Every such application shall:
  1. Identify and describe the work to be covered by the permit for which

application is made.

2. Describe the land on which the proposed work is to be done, by legal description, street address or similar description as recorded by the Cass County Recorder of Deeds office that will readily identify and definitely locate the proposed building or work.
  3. Indicate the use or occupancy for which the proposed work is intended.
  4. State the valuation of any new building or structure or any addition, remodeling or alteration to an existing building.
  5. Be signed by the permit applicant, or the applicant's authorized agent, who may be required to submit evidence to indicate such authority. It shall be presumed that a person obtaining a permit for work on property, for which the person is not the owner, obtains the permit with the knowledge and consent of the owner or other person in control or in charge of the property.
  6. Be accompanied by construction documents and other information as required in Section 500.085 of the City Code
  7. Give such other data and information as may be required by the Building Official.
- B. The permit holder shall be responsible for the following conditions and restrictions:
1. To provide minimum safety measures and equipment to protect the public as prescribed by this Chapter.
  2. To observe any other City ordinances prescribing measures for the safety of the public.
  3. To observe and comply with any other City ordinances or regulations.
  4. To provide and use adequate sanitary facilities on construction sites for worker use. If portable, sanitary facilities shall not be located in the public right-of-way or closer than five (5) feet from a side or rear property line. Sanitary facilities shall be screened and/or located in a location that is the least visible to adjacent properties.
  5. To provide adequate construction solid waste containers on construction sites. Dumpsters, garbage cans, waste containers and other similar types of containers shall be used to contain solid waste. Liquid waste and hazardous materials shall be contained and disposed of at a proper waste depository.
  6. To faithfully construct without departure from or disregard of drawings and specifications, when such drawings and specifications have been filed with and reviewed for Code compliance by the Building Official and a permit has been granted for such construction.
  7. To obtain inspections required by this Chapter.
  8. To pay any fee assessed under the authority of this Chapter.
  9. To comply with any order issued under the authority of this Chapter.

10. To maintain satisfactory levels of competence, integrity, workmanship, and recognized practices.
11. For construction industry contractors, to maintain a valid occupational business license(s) in the appropriate classification(s), company name, and ownership, per the requirements of Chapter 605 of the City Code.
12. For construction industry contractors, to maintain an active fictitious name registration with the State of Missouri, from the Office of the Secretary of State, under the business name in which the permittee is obtaining permits when conducting business under a name other than the licensee's given name.

#### **SECTION 500.085: - CONSTRUCTION DOCUMENTS**

- A. *Submittal documents.* Construction documents, special inspection and structural observation programs and other data shall be submitted in two (2) or more sets with each application for a permit. When such construction documents are not prepared by a registered design professional, the Building Official may require any applicant submitting such documents to demonstrate that State law does not require them to be prepared by a registered design professional. The Building Official may require plans, computations and specifications to be prepared and designed by a registered design professional licensed by the State to practice as such, even if not required by State law. The Building Official may waive the submission of plans, calculations, diagrams or other data, if he finds that the nature of the work applied for is such that reviewing the documents is not necessary to obtain compliance with this Chapter.
- B. Information on construction documents not governed by the Residential Code, shall be obtained from the office of the Building Official and all requirements shall be met.
- C. *Previous approvals.* This Chapter shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within one hundred eighty (180) days after the effective date of this Chapter and has not been abandoned.
- D. *Design professional in responsible charge.* When it is required that documents be prepared by a registered design professional, the Building Official shall require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, and when approved by the Building Official, the owner shall be permitted to designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The Building Official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural observation is required by Section 1710 of the *International Building Code*, the inspection program shall name the individual or firm who are to perform structural observation and describe the stages of construction at which the observation is to occur. The individual or firm shall comply with the duties specified in Section 1704 of the *International Building Code*.

E. *Deferred submittals.* For the purposes of this Section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the Building Official within a specified period.

Deferral of any submittal items shall have the prior approval of the Building Official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the Building Official.

Submittal documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the Building Official with a notation indicating that the deferred submittal documents have been reviewed and that they have been found to be in general conformance with the design of the building. The deferred submittal items shall not be installed until the design and submittal documents have been approved by the Building Official.

F. *Amended construction documents.* Work shall be installed in accordance with the reviewed construction documents, and changes which are not in substantial compliance with the reviewed construction documents shall be resubmitted for review as an amended set of construction documents prior to construction.

G. *Retention of construction documents.* One (1) set of construction documents shall be returned to the applicant and shall be kept on site of the building or work at all times during which the work authorized thereby is in progress. One set of construction documents shall be retained by the Building Official until after final inspection when it is concluded that the work complies with the provisions of this Chapter, and archived per RSMo. for retention of records.

## **SECTION 500.090: - ISSUANCE OF PERMITS; EXPIRATION OF PERMITS AND APPLICATIONS; SUSPENSION OR REVOCATION OF PERMITS**

A. *Generally.*

1. *Application examined.* The Building Official shall examine or cause to be examined the application and accompanying construction documents filed by an applicant for a permit under this Chapter. Such construction documents may be reviewed by other Departments of the City to verify compliance with any applicable laws under their jurisdiction. If the Building Official finds that the work described in an application for a permit and the

construction documents filed conform to the requirements of this Chapter and other pertinent laws and ordinances, and that the fees specified in the fee schedule have been paid, a permit shall be issued to the applicant.

2. *Withholding issuance of permit for payment of fees and charges.* No building permit shall be issued to a person, firm or corporation that is delinquent on payment of fees and charges due to the City for any property in the City. Additionally, if a fee or charge is due to the City for service to, or work upon, the property for which a building permit is requested, no permit shall be issued until full payment is received.
  3. *Time limitation of application.* An application for a permit for any proposed work shall expire by limitation and be deemed to have been abandoned ninety (90) days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the Building Official is authorized to grant one or more extensions of time for additional periods not exceeding thirty (30) days each. The extensions shall be requested in writing and justifiable cause demonstrated. Plans and other data submitted for review, but deemed to have been abandoned, may thereafter be returned to the applicant or destroyed by the Building Official. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee in accordance with the fee schedule in Section 500.095 of the City Code.
  4. *Stamped documents.* When the Building Official issues a permit where construction documents are required, they shall endorse in writing or stamp construction documents "Reviewed for Code Compliance." Such stamped construction documents shall not be changed, modified or altered without authorization from the Building Official, and all work regulated by this Chapter shall be done in accordance with the endorsed/ stamped construction documents.
  5. *Phased review for Code compliance.* The Building Official may issue a permit for the construction of part of a building, structure, or building service equipment before all of the construction documents for the entire building, structure or building service equipment have been submitted or reviewed for Code compliance, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this Chapter. The holder of such permit shall proceed at his or her own risk without assurance that the permit for the entire building, structure or building service will be granted.
- B. *Validity of permit.*
1. The issuance of a permit or the stamping of construction documents with "Reviewed for Code Compliance" shall not be construed to be a permit for, or approval of, any violation of any of the provisions of this Chapter or of any other ordinance. No permit presuming to give authority to violate or cancel the provisions of this Chapter or other ordinances shall be valid.
  2. The issuance of a permit based upon reviewed construction documents shall

not prevent the Building Official from requiring the correction of errors in the construction documents, or from preventing building operations from being carried on when in violation of this Chapter or of any other ordinances or laws. The Building Official is also authorized to prevent occupancy or use of a structure where in violation of this Chapter or of any other ordinance of the City.

C. *Expiration of permits.*

1. *Generally.* Every permit issued by the Building Official under the provisions of this Chapter shall expire by limitation and become null and void if the building or work authorized by such permit is not commenced within one hundred eighty (180) days from the date of such permit, or, if the building or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of one hundred eighty (180) days. For one- and two- family dwelling construction, in addition to the above, a permit shall become null and void when the granted permit date exceeds three hundred sixty five (365) days. Before any work can be recommenced, a new permit shall be first obtained to do so, and the fee shall be a new full permit fee.

A permit may be extended by the Building Official for a period not to exceed one hundred eighty (180) days upon written request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken.

2. *Sign permit.* A sign permit shall authorize erection or relocation of the sign or sign structure for a period of one hundred eighty (180) days. If the work authorized under a permit has not been completed within one hundred eighty (180) days after the date of issuance, the permit shall become null and void.
3. *Building moving permits.* The work authorized by a moving permit shall comply with Section 520.030 of the City Code.
4. *Demolition work.* The work authorized by a demolition permit shall be continuous until the work is completed. For the purpose of this Article, the term "continuous" shall mean the normal rate of progress in keeping with good demolition practices. If the work is suspended for more than seven (7) calendar days after the work is commenced, the job shall be deemed abandoned and the permit shall expire. The Building Official may allow the work to be suspended longer than seven (7) calendar days should it be found that weather or other conditions beyond the control of the permit holder exist. The time for demolition of a one- and two-family dwelling shall not exceed forty-five (45) days from the date the demolition work commences.

D. *Suspension or revocation.*

1. *Generally.* The Building Official may, in writing, suspend or revoke a permit issued under the provisions of this Chapter whenever the permit is issued in error or on the basis of incorrect information supplied, or in violation of any

provisions of this Chapter, or other pertinent laws or ordinances within the City Code. The Building Official may also suspend or revoke any permit issued upon failure of the holder to comply with any of the provisions of this Chapter or requirements of the permit.

2. *Traffic control obstruction.* The Building Official may revoke a permit for the erection of any sign or other structure which, by reason of its position, shape or color, may obstruct or interfere with the view of or be confused with any authorized traffic sign, signal or device.
  3. *Hearings.* The holder of a permit may request a hearing before the Board of Appeals as established in Section 500.055 of this Chapter, to consider the suspension or revocation of a permit.
- E. *Placement of permit.* The building permit card or copy shall be posted on site until completion of the project.

### **SECTION 500.095: - SCHEDULE OF FEES**

Permit applications shall be accompanied by the fee amount approved by the Governing Body and listed in the Schedule of Fees and Charges maintained in the Finance Department. A permit shall not be valid until the fees prescribed by law have been paid, nor shall an amendment to a permit be released until the additional fees, if any, have been paid. The payment of the fee for construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are provided by law.

### **SECTION 500.100: - INSPECTIONS**

- A. *Authority of Building Official; duties of permittee.*
1. All construction or work for which a permit is required under this Chapter shall be subject to inspection by the Building Official, and all such construction or work shall remain accessible and exposed for inspection purposes until approved by the Building Official. In addition, certain types of construction shall have special inspections as required in Section 500.105 of this Chapter.
  2. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this Chapter or of any other ordinances. Inspection presuming to give authority to violate or cancel the provisions of this Chapter or any other ordinances shall not be valid.
  3. It shall be the duty of the permit holder to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the City shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.
  4. A survey of the lot may be required by the Building Official to verify that the structure is located in accordance with approved plans.
  5. It shall be the duty of the permit applicant to install and maintain effective



erosion and sediment control as specified in Section 455.020 of the Unified Development Code. Should it be found that required erosion and sedimentation control measures have not been installed; the Building Official may refuse any inspection requests for work requiring inspections until such time as the site complies with the requirements of this Chapter. Should it be found that the installed erosion and sediment control measures are ineffective or are not being maintained properly, the Building Official shall give written notice to the permit holder. Subsequent inspections may be refused if the erosion and sediment control measures are ineffective, or not being maintained.

6. Before issuing a permit, the Building Official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.
- B. *Inspection requests.* It shall be the duty of the person doing the work authorized by a permit to notify the Building Official that such work is ready for inspection. The Building Official may require that every request for inspection be filed at least one (1) working day before such inspection is desired. Such request may be in writing or by telephone at the option of the Building Official.
- C. *Approval of successive portions of work, final inspection.*
1. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the Building Official. The Building Official, upon notification, shall make the requested inspections and shall either indicate that the portion of the construction or demolition is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder wherein the construction or demolition fails to comply with this Chapter. Any portions of work which do not comply shall not be covered or concealed until authorized by the Building Official.
  2. There shall be a final inspection and approval of all buildings and structures when completed and ready for occupancy and use.
- D. *Required inspections.*
1. Reinforcing steel or structural framework of any part of a building or structure shall not be covered or concealed without first obtaining the approval of the Building Official.
  2. The Building Official, upon notification from the permit holder or permit holder's agent, shall make the following inspections and shall either approve that portion of the construction or demolition work as completed or shall notify the permit holder or permit holder's agent wherein the construction or demolition work fails to comply with this Chapter:
    - a. *Footing or foundation inspection.* A footing and foundation inspection shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. All materials for the foundation shall be on the job; except, where concrete is ready-mixed in accordance with *ASTM C94*, the concrete need not be on the job.

Where the foundation is to be constructed of approved treated wood, additional inspections may be required by the Building Official.

- b. *Concrete slab or under-floor inspection.* Concrete slab and under-floor inspection shall be made after all in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place but before any concrete is poured or floor sheathing installed, including the subfloor.
  - c. *Pre-backfill.* A pre-backfill inspection shall be made after the foundation drainage and damp-proofing systems are complete and prior to backfilling.
  - d. *Rough-in inspection.* A rough-in inspection shall be made after such work as framing, fireblocking, roof, piping, vents, ductwork, chimneys, wiring, building service equipment, etc. are in place and prior to concealment.
  - e. *Fire resistive rated assembly.* A fire resistive rated assembly inspection shall be made at such time so as to verify that the construction of each fire resistive rated assembly is in accordance with its listing.
  - f. *Fire resistant penetrations.* An inspection shall be made of the firestopping or fireblocking of all penetrations, joints, etc. prior to concealment.
  - g. *Masonry throat inspection.* For masonry fireplaces only, a masonry throat inspection shall be made after the firebox is built and the first flue liner is in place. Construction of chimney may not continue until this inspection is approved.
  - h. *Utility connection inspection.* Gas or electric service inspections shall be made prior to connection to the utility source. See Section 500.050 of this Chapter.
  - i. *Performance tests.* Performance tests shall be conducted by the permit holder as required by this Chapter, or as otherwise required by the Building Official.
  - j. *Demolition (basement and sewer) inspection.* A basement and sewer inspection shall be made prior to the filling of the excavation and/or final grading of the property.
  - k. *Final inspection.* A final inspection shall be made after all work under permit has been completed for the building, tenant space or demolition.
- E. *Other inspections.* In addition to the inspections specified in Subsection (D) of this Section, the Building Official may make or require other inspections of any construction or demolition work to ascertain compliance with the provisions of this Chapter or any other ordinances.
- F. *Building service equipment inspection.* The requirements of this Section shall not be considered to prohibit the operation of any building service equipment installed to replace existing building service equipment serving an occupied

portion of the building if a request for inspection of such building service equipment has been filed with the Building Official not more than forty-eight (48) hours after such replacement work is completed, and before any portion of such building service equipment is concealed by any permanent portion of the building.

G. *Periodic inspections.*

1. *Elevators.* All elevator equipment, vertical and inclined, shall be inspected as required by state law, by persons authorized to make periodic inspections and tests.
2. *Existing commercial buildings or spaces.*
  - a. *Generally.* All new and existing commercial buildings or spaces shall be inspected for structural adequacy, occupancy use, building service equipment, etc, at least once every five (5) years. A report of the findings of such inspection shall verify the conditions found on each occasion. The report shall state that, in the opinion of the Building Official or an authorized agent, the commercial building or space is safe and in such condition that it is in Code compliance for which it was originally designed with any repairs or modifications, or what areas require repair before such certification can be given.
  - b. *Issuance of certificate of inspection.* Where the inspection indicates that the commercial building or space is in a safe operating condition, and, in the case of a new installation, conforms to this Chapter and this Article, a certificate of inspection shall be issued to the owner or the owner's agent. Such certificate shall be maintained in an appropriate location.
  - c. *Revocation of certificate of inspection.* Any certificate issued may be revoked if it is determined that the commercial building or space is not in compliance with this Chapter, and/ or the owner or owner's agent has taken no action to correct or abate any violation(s) when notified by the Building Official.

**SECTION 500.105: - SPECIAL INSPECTIONS**

When required by the Building Official, and in addition to the inspections required by Section 500.100, of the City Code, the owner or the engineer or architect of record acting as the owner's agent shall employ one or more special inspectors who shall provide inspections during construction on the types of work listed in Chapter 17 of the *International Building Code*. All special inspection activities shall be in accordance with the policies established by the Building Official.

**SECTION 500.110: - CERTIFICATE OF OCCUPANCY**

- A. *Required.* No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building, structure or portion shall be made, until the Building Official has issued a certificate of occupancy as provided in this Section. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this Chapter or of

any other ordinances. Certificates presuming to give authority to violate or cancel the provisions of this Chapter or any other ordinances shall not be valid.

- B. *Change in use.* Changes in the use of a building shall not be made except as specified in the *International Existing Building Code*, and the City's Unified Development Code.
- C. *Issuance; contents.* It shall be the responsibility of the permit holder to request a final inspection and to apply for a certificate of occupancy when required. The permit holder shall be excused from this responsibility only if the owner of property has applied for and secured a certificate of occupancy. After the Building Official or an authorized representative inspects the building or structure and finds no violations of the provisions of this Chapter or other laws which are enforced by the City, the Building Official shall issue a certificate of occupancy, which shall contain the following:
  - 1. The building permit number.
  - 2. The address of the structure.
  - 3. A description of that portion of the structure for which the certificate is issued.
  - 4. A statement that the described portion of the structure has been inspected for compliance with the requirements of this Chapter for the occupancy and the use for which the proposed occupancy is classified.
  - 5. The name of the Building Official.
  - 6. The edition of the Code under which the permit was issued.
  - 7. The use and occupancy, in accordance with the provisions of Chapter 3 of the *International Building Code*.
  - 8. The type of construction as defined in Chapter 6 of the *International Building Code*.
  - 9. Any special stipulations and conditions of the building permit.
  - 10. Whether an automatic sprinkler system is provided throughout the building.
- D. *Temporary certificate of occupancy in commercial construction.* If the Building Official finds that no substantial hazard will result from occupancy of any building or portion before the building is completed, a temporary certificate of occupancy may be issued for the use of a portion of a building or structure prior to the completion of the entire building or structure.
- E. *Temporary certificate of occupancy in residential construction.* The Building Official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided the following conditions have been met:
  - 1. Such portion or portions of work covered by the permit shall be occupied safely.

2. The owner, licensed building or general contractor shall pay a one thousand dollar (\$1,000.00) bond that shall be refundable upon issuance of a permanent certificate of occupancy.
3. The Building Official determines in their professional opinion the work items to be completed are of such a nature as to not create a situation that is of any danger to the public health, safety, or welfare.

The Building Official shall identify what work items must be completed in order for a permanent certificate of occupancy to be issued. All identified work items shall be completed within the time period established by the Building Official.

The Building Official shall set a time period of no more than one hundred twenty (120) days during which the temporary certificate of occupancy is valid. If all of the identified work items are not completed within the specified time period as established by the Building Official, the temporary certificate of occupancy becomes null and void; the owner, licensed builder or general contractor shall forfeit the one thousand dollar (\$1,000.00) bond and shall be subject to the violations and penalties in Subsection (F) and (G) below.

F. *Violations.* It shall be unlawful for:

1. A permit holder or building owner to permit occupancy of a structure before a certificate of occupancy is issued.
2. A permit holder or building owner to permit occupancy of any structure for which a temporary certificate of occupancy has been issued and the temporary certificate has expired.
3. Any person to occupy any structure for which a certificate of occupancy has not been issued.
4. Any person to occupy any structure for which a temporary certificate of occupancy has been issued and the temporary certificate has expired.

G. *Penalties.*

1. No building or owner shall allow any person or persons to occupy any newly constructed, remodeled dwelling or building prior to final inspection (certificate of occupancy) by the Building Official or authorized agent in the Building Department, which inspection shall be requested at least twenty-four (24) hours prior to the time of final inspection. Any violation of this Subsection shall incur a fine of one thousand dollars (\$1,000.00) against the offending party's next permit to build.
2. Should the same builder or owner be found guilty a second (2nd) time of the offense described above within a twelve (12) month period, a fine of two thousand dollars (\$2,000.00) against the offending party may be assessed to the builder's or owner's next permit to build.
3. Should the same builder or owner be found guilty a third (3rd) time of the offense described above within a twelve (12) month period, a fine of three thousand dollars (\$3,000.00) against the offending party may be assessed to the builder's or owner's next permit to build. Additionally, builder or

owner may be prohibited from obtaining a building permit within the City for a period of one (1) year from the date of the third (3rd) violation at the discretion of the Building Official. The builder or owner may appeal the Building Official's decision to Board of Appeals.

4. No further building permit(s) shall be issued in the City to a builder who violates this Section of the City Code by not obtaining the required certificate of occupancy. The builder is again eligible for further building permits when the structure is in compliance and issued a certificate of occupancy. A re-inspection fee shall be charged, minimum two (2) hour fee, to the builder of a structure which violates this Section of Code and desires an inspection after the structure is inhabited.
  5. In addition to the fines imposed by the City as outlined above, any person violating any provision of this Section shall be subject to the penalties of Section 500.070 of this Chapter.
- H. *Suspension or revocation.* The Building Official may, in writing, suspend or revoke a certificate of occupancy issued under the provisions of this Chapter whenever the certificate is issued in error, or on the basis of incorrect information supplied, or when it is determined that the building or structure or portion is in violation of any provisions of this Chapter, or other pertinent laws or ordinances within this Code. The holder of a suspended certificate of occupancy may request a hearing before the Board of Appeals, as established in Chapter 540 of the City Code, to consider the suspension or revocation of a certificate of occupancy.

#### **SECTION 500.115: - PREFABRICATED CONSTRUCTION**

A certificate of approval by an approved agency shall be furnished with every prefabricated assembly, except where all elements of the assembly are readily accessible to inspection at the site. Placement of prefabricated assemblies at the building site shall be inspected by the Building Official to determine compliance with this Chapter, and a final inspection shall be provided in accordance with Subsection 500.100(D)(2)(K) of this Chapter.

#### **SECTIONS 500.120—500.150: - RESERVED**

### **ARTICLE II. - INTERNATIONAL BUILDING CODE**

#### **SECTION 500.155: - ADOPTION OF THE INTERNATIONAL BUILDING CODE (2018)**

- A. The *International Building Code (2018)*, promulgated by the International Code Council, is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section. Provisions of this Article are in addition to the provisions of the *International Building Code*. The following provisions coinciding with provisions of the *International Building Code* supersede, or delete, when indicated, the

corresponding provisions of the *International Building Code*.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code are specifically adopted by reference in Articles II through XII of this Chapter, including the fire-resistive assemblies listed in the *Fire Resistance Design Manual, Twenty-first Edition, GA-600-18*, published by the Gypsum Association as referenced in Tables 721.1 (1 through 3) of the specified *International Building Code*; *American National Standard for Accessible and Useable Buildings and Facilities A117.1-2017*; *NFPA 13-2016 Installation of Sprinkler Systems*; *ASTM Standards* as referenced in the *International Building Code* and the *International Residential Code*; *American Institute of Steel Construction, latest Edition*; *American Concrete Institute for Structural Concrete and Commentary ACI 318 latest Edition*; the *NFPA 101- 2018 Life Safety Code*; *ICC/NSSA Standard for the Design and Construction of Storm Shelters, ICC 500-2014*; and the *NFPA 99 Health Care Facilities 2018 edition*.

B. The following Sections of the *International Building Code* are hereby revised or added:

Chapter 1, Administration, is deleted. See Article I of this Chapter.

423.4 Group E occupancies. In areas where the shelter design wind speed for tornados is 250 mph in accordance with Figure 304.2(1) of ICC 500, all Group E occupancies with an occupant load of 50 or more shall have a storm shelter constructed in accordance with ICC 500.

Exceptions:

1. Group E day care facilities.
2. Group E occupancies accessory to places of religious worship.
3. Group E occupancies that undergo alterations or additions where the cost of compliance with ICC 500 Section 702 is greater than 20% of the total project cost may omit the requirements of ICC 500 Section 702 only.
4. Buildings meeting the requirements for shelter design in ICC 500

## SECTION 429

### PHYSICAL SECURITY FOR DWELLING UNITS

429.1 Purpose. The purpose of this Section is to establish minimum standards that incorporate physical security to make dwelling units resistant to unlawful entry.

429.1.1 Scope. This Section shall apply to all exterior doors providing direct access into a dwelling unit, including garage walk-through doors, where the exterior door is accessible from grade.

Exceptions:

1. Vehicle access doors.
2. Storm or screen doors.
3. Garage and pantry access doors into the dwelling unit.

429.2 Doors. Doors shall comply with Sections 429.2.1 through 429.2.3.

429.2.1 Wood doors. Wood doors shall be of solid core construction such as high-density particleboard, solid wood, or wood block core with minimum nominal thickness of one and three fourths inches (1 $\frac{3}{4}$ " ) at any point.

Exception: Solid wood panels shall be a minimum of one inch (1") thick. The tapered portion of the panel that inserts into the groove of the door shall be a minimum of one quarter inch ( $\frac{1}{4}$ " ) thick. The groove shall be a minimum of one-half inch ( $\frac{1}{2}$ " ) in depth.

429.2.2 Steel doors. Steel doors shall be a minimum nominal thickness of one and three fourths inches (1 $\frac{3}{4}$ " ) and shall have a minimum skin thickness of 24 gauge.

429.2.3 Fiberglass doors. Fiberglass doors shall be a minimum nominal thickness of one and three fourths inches (1 $\frac{3}{4}$ " ) and shall have a minimum skin thickness of one sixteenth inch (1/16" ).

429.3 Door frames. Door frames shall comply with Sections 426.3.1 through 426.3.4 and shall be installed in accordance with the manufacturer's installations. Door frames shall be installed prior to rough-in inspection.

429.3.1 Wall framing at door openings. Door frames shall be set in openings constructed with double studs on each side. Doors with sidelights shall have double stud construction on each side of the door and on each side of the sidelight(s). Horizontal blocking shall be placed between studs at the door lock height for three (3) stud spaces on each side of the door opening.

Exception: Installations provided with alternative reinforcing methods as approved by the Building Official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

429.3.2 Wood frames. Door jambs shall be a minimum nominal thickness of three fourths inches ( $\frac{3}{4}$ " ) and shall be installed with solid backing in a manner so no void exists between the strike side of the jamb and the frame opening for a vertical distance of twelve inches (12" ) each side of the strike. Filler material shall consist of solid wood blocking.

Exception: Installations provided with alternative reinforcing methods as approved by the Building Official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

429.3.3 Steel frames. Steel door frames shall be constructed of 18 gauge or heavier steel with reinforcement at the hinges and strikes. Steel frames shall be anchored to the wall in accordance with manufacturer's specifications.



429.3.4 Sliding doors. Sliding door assemblies shall be installed to prevent the removal of panels and the glazing from the exterior. Shims or screws shall be installed in the upper track of doors that slide on the bottom track or doors shall be provided with equivalent protection as approved by the Building Official.

429.4 Door hardware. Door hardware shall comply with Sections 429.4.1 through 429.4.6.

429.4.1 Hinges. Hinges for swinging doors shall comply with the following:

- (a) A minimum of three (3) four inch (4") hinges shall be installed on each swinging door.
- (b) Each hinge shall be attached to the frame with at least two (2) screws, not less than three inches (3") in length and penetrating at least one inch (1") into the nearest stud. Solid wood fillers or shims shall be used to eliminate any space between the wall structure and door frame behind each hinge.

Exception: Installations provided with alternative reinforcing methods as approved by the Building Official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

- (c) Hinges for out-swinging doors shall be equipped with mechanical interlock to preclude the removal of the door from the exterior.

429.4.2 Locks. Swinging doors shall be provided with a single-cylinder deadbolt locking device (keyed on exterior only) with a minimum projection of one inch (1"). The deadbolt shall penetrate at least three-fourths inch ( $\frac{3}{4}$ ") into the strike receiving the projected bolt. All deadbolts shall meet ANSI grade 2 specifications.

Exception: Doors with integral multi-point locking devices.

429.4.3 Strike plates. The deadbolt plate shall be a minimum of 18 gauge metal with four offset screw holes. The strike plate shall be attached to the door jamb with four screws not less than three (3") in length, and penetrating at least one inch (1") into the nearest stud.

Exception: Installations provided with alternative reinforcing methods as approved by the Building Official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

429.4.4 Door edge protector. A metal L-shaped or U-shaped door edge protector shall be installed around the bolt projection of the deadbolt to protect the door's edge or equivalent as approved by the Building Official.

429.4.5 Double doors. The inactive leaf of a double swinging door shall be provided with flush bolts having an engagement of not less than one inch (1") into the head and threshold of the door frame.

429.4.6 Sliding doors. All sliding glass doors shall be equipped with a secondary locking device consisting of a metal pin, a surface mounted bolt assembly, or other equivalent device as approved by the Building Official. Where used, metal pins shall

be installed at the intersection of the inner and outer panels of the inside door and shall not penetrate the frame's exterior surface.

429.5 Entry vision and glazing. All main or front entry doors to dwelling units shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. The view may be provided by a door viewer having a field of view not less than 180 degrees or through windows or view ports.

429.6 Exterior lighting. In addition to the lighting outlet requirements of Article IV of this Chapter, exterior lighting shall be provided in accordance with this Section.

429.6.1 Front and street side exterior lighting. All doors shall be protected with a minimum of one lighting outlet providing a minimum of 60 watt lighting (or energy efficient equivalent).

429.6.2 Lighting protection. Lighting outlets required by this Section shall be located a minimum of eight feet (8') above grade or adjacent walking surface accessible from grade, or shall be of a type manufactured such that the light bulb is not readily accessible.

502.1 Address identification. New and existing buildings shall be provided with *approved* address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of ½ inch (12.7 mm). Where commercial buildings have tenants with multiple entrances located on different sides of the building, each door shall be addressed. Address characters shall be capable of being illuminated by an internal or external lighting source and maintained.

903.2.9.1 Repair garages. An *automatic sprinkler system* shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings having two (2) or more *stories above grade plane*, including basements, with a *fire area* containing a repair garage exceeding five thousand (5,000) square feet (464 m<sup>2</sup>).
2. Buildings not more than one (1) *story above grade plane*, with a *fire area* containing a repair garage exceeding five thousand (5,000) square feet (464 m<sup>2</sup>).
3. Buildings with repair garages servicing vehicles parked in basements.
4. Group S-1 *fire area* used for the repair of commercial motor vehicles where the *fire area* exceeds five thousand (5,000) square feet (464 m<sup>2</sup>).

903.4.2 Alarms. One(1) all-weather horn/strobe shall be connected to every *automatic sprinkler system* on the exterior of the building above the fire department connection (FDC) or in an approved location. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm

system is installed, actuation of the *automatic sprinkler system* shall actuate the building fire alarm system. Interior alarm notification appliances shall be installed as required with Section 903.4.2.1.

903.4.2.1 Notification device. Where an *automatic sprinkler system* is installed in a building, audible and visible notification appliances shall be installed throughout the building as follows:

1. Audible notification appliances shall be audible at fifteen (15) dBa above sound pressure level throughout the building.
2. Visible notification appliances shall be in all public and common use areas, restrooms and corridors in accordance with the spacing requirements of NFPA 72.
3. Visible notification appliances may be eliminated in regularly unoccupied portions of buildings where approved by the Fire Code Official.

Exception: The requirements of this Section do not apply to Group R-3 occupancies.

912.2 Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of fire department connections (FDC) shall be approved by the Fire Code Official. Connections shall be a locking five (5) inch Storz with a thirty (30) degree elbow type fitting and located within one hundred (100) feet of a fire hydrant, or as approved by the Fire Code Official.

1004.9 Posting of occupant load. Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place near the main exit or exit access doorway from the room or space for the intended configurations. At the main entrance to the building, the occupant load for the entire assembly use group shall be posted in a conspicuous place. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or the owner's authorized agent.

1511.3 Roof replacement. *Roof replacement* shall include the removal of all existing layers of roof coverings down to the roof deck.

Exceptions:

1. Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section R905.
2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
3. The application of a new protective roof coating over an existing protective roof coating, metal roof panel, built-up roof, spray polyurethane foam roofing

system, metal roof shingles, mineral-surfaced roll roofing, modified bitumen roofing or thermoset and thermoplastic single-ply roofing shall be permitted without tear off existing roof coverings.

1511.3.1 Roof recover, is deleted.

1511.3.1.1 Exceptions, is deleted.

1511.4 Roof recovering, is deleted.

## SECTION 1612 FLOOD LOADS

See Unified Development Code, Chapter 460—Floodplain Protection

Chapter 32-ENCROACHMENTS INTO THE PUBLIC RIGHT-OF-WAY, is deleted.

## SECTION 3303 DEMOLITION

3303.1 General. The work of demolition or moving of any building shall not commence until the structures required for protection of persons and property are in place. Such structures shall conform to the requirements as set forth in Chapter 33 of this Article.

The Building Official may require the permittee to submit plans and a complete schedule for demolition or moving work.

3303.2 Scope. In addition to the other requirements of this Article and the general ordinances, this Section shall govern the demolition and moving of buildings and structures. Any device or equipment such as scaffolds, ladders, derricks, hoists or similar items used in connection with demolition shall be constructed, installed and maintained and operated in accordance with the regulations governing the construction, installation and maintained and operated in accordance with the regulations governing the construction, installation, maintenance and operation of such device or equipment as specified in other portions of this Article.

3303.3 Loads. Structures or parts of structures, or any floor or temporary support, scaffolds, sidewalk barricade, bridge, device or equipment, shall not be loaded in excess of the safe carrying capacity.

3303.4 Warning signs. When required, demolition jobs shall be provided with danger signs which shall be conspicuously posted around the property.

3303.5 Lights. Between sunset and sunrise, adequate lights shall be provided to properly protect persons and property from hazards of pits, excavations, fences, barriers, equipment, building materials or rubbish in, upon or near a sidewalk or street.

3303.6 Dust. All material to be removed shall be wet sufficiently to lay the dust incidental to its removal.

3303.7 Rubbish and waste. All adjacent streets, alleys and other public ways and

places shall be kept free and clear of all rubbish, refuse and loose material resulting from the moving, demolition or demolition operations.

3303.8 Pedestrian protection. The work of demolishing any building shall not be commenced until pedestrian protection is in place as required by this Chapter. The Building Official may require that a fence be constructed on or around any demolition site, when deemed necessary to protect the public.

3303.9 Conditions of site. Upon completion of the removal of the building, structure or utility, all fencing, pedestrian protection and demolition debris and refuse of any kind shall be removed from the site. Excavations, basements or cellars may be filled with inorganic material; provided the top two feet (2') of fill shall be clean earth. The filling of such excavation may not be required when a building permit has been issued for a new building on a site and the construction is to start within forty-five (45) days after the completion of demolition or moving operations. The holder of the building permit shall provide such excavation with a temporary barricade protecting the excavation on all sides as specified by the Building Official. Temporary barricades may remain in position for a time not exceeding five days, after which a solid barricade shall be provided or the excavation filled.

3303.10 Temporary Erosion and Sediment Control. Erosion and sediment control measures shall be provided for disturbed areas (clearing, grading, excavating, filling, storing, or disposing of soil and earth materials) where an application has been submitted or an application is required to be submitted to the Building Official for a building permit. All erosion and sediment control measures shall comply with the adopted standards in Chapter 455 of the Unified Development Code.

Appendices: The following appendix Chapters are hereby adopted:

Appendix C - Group U - Agricultural Buildings

Appendix E - Supplemental Accessibility Requirements

Appendix H - Signs

H101.1 General. Provisions of this appendix are in addition to the provisions of Chapter 435, Signs, of the Unified Development Code.

A sign shall not be erected in a manner that would confuse or obstruct the view or interfere with exit signs required by Chapter 10 or with official traffic signs, signals or devices. Signs and sign support structures, together with their supports, braces, guys and anchors, shall be kept in repair and in proper state of preservation. The display surfaces of signs shall be kept neatly painted or posted at all times.

H101.2 Signs exempt from permits is deleted.

Appendix I - Patio Covers

Appendix J - Grading

J103 is deleted.

J105 is deleted.

702.2 ICC/NSSA Standard for the Design and Construction of Storm Shelters, ICC 500-2014 adopted by reference as part of Chapter 500 of this Code is amended and re-enacted as follows:

702.2 Sanitation facilities. Toilet and hand-washing facilities shall be located within the tornado shelter area and provided in the minimum number shown in Table 702.2.

Table 702.2

**REQUIRED SANITATION FACILITIES, TORNADO SHELTERS**

STORM SHELTER TYPE	TOILET FACILITIES <sup>a</sup>	HAND-WASHING FACILITIES
Residential, one-and two-family dwelling	Not required	Not Required
Residential, other	1	Not Required
Community (≤ 50 occupants)	1	Not Required
Community (≥ 50 occupants)	2 minimum and 1 per 500 occupants or portions of	1 per 1000 occupants

- a. Community spaces used exclusively as a storm shelter may reduce the minimum number of required toilet facilities to one (1).

**SECTIONS 500.160—500.170: - RESERVED**

**ARTICLE III. - INTERNATIONAL RESIDENTIAL CODE**

**SECTION 500.175: - ADOPTION OF INTERNATIONAL RESIDENTIAL CODE (2018)**

- A. The *International Residential Code (2018)*, promulgated by the International Code Council, is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section.

Provisions of this Article are in addition to the provisions of the *International Residential Code*. The following provisions coinciding with provisions of the *International Residential Code* supersede, or delete, when indicated, the corresponding provisions of the *International Residential Code*.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code are specifically adopted by reference in Articles II through XII of this Chapter.

B. The following Sections of the *International Residential Code* are hereby revised or added:

Part I, Chapter I, Scope and Administration, is deleted. See Article I of this Chapter.

For temporary erosion and sediment control requirements see Unified Development Code (UDC) Section 455.

For temporary certificate of occupancies see Section 500.110 of Article I of this Chapter.

R202 DEFINITIONS. The following definitions have been revised or added (remainder of Section R202 un-amended)

BEDROOM; SLEEPING ROOM. Is any space, finished or not, meeting the minimum room area requirements of Section R304, primarily used for sleeping purposes and contains a closet for storage.

TOWNHOUSE. (or Row House) A single-family dwelling unit, in which each unit extends from foundation to roof and with a yard or public way on at least two sides, constructed:

In a group of three or more attached units; or,

In a group of two attached units where a property line exists between the units on the underlying parcels.

UNFINISHED BASEMENT. Portions or areas of a basement not intended or configured (framed) as habitable rooms and limited to storage areas and the like.

Table R301.2 (1)

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND SPEED <sup>d</sup> (mph)	SEISMIC DESIGN CATEGORY <sup>f</sup>	SUBJECT TO DAMAGE FROM		
			Weathering <sup>a</sup>	Frost line depth <sup>b</sup>	Termite <sup>c</sup>

20 psf	115	A	Severe	36"	Moderate to Heavy
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WINTER DESIGN TEMP <sup>e</sup>	ICE BARRIER UNDERLAYMENT REQUIRED <sup>h</sup>	FLOOD HAZARD <sup>g</sup>	AIR FREEZING INDEX <sup>i</sup>	MEAN ANNUAL TEMP <sup>j</sup>
6°F	YES	See UDC Chapter 460	927°F days	55.5°

(See 2018 *International Residential Code* for footnotes)

Section Table R301.2(1), MANUAL J DESIGN CRITERIA, is deleted.

R309.1 Floor surface. Garage floor surfaces shall be of approved non-combustible material.

The area of floor used for parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain only if discharged to daylight, or toward the main vehicle entry doorway.

R309.2 Carports. Carports shall be open on at least two sides. Carport floor surfaces shall be of approved non-combustible material. Carports not open at least two sides shall be considered a garage and shall comply with the provisions of this Section for garages.

Exception: Asphalt surfaces shall be permitted at ground level in carports.

The area of floor used for parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain, if discharged to daylight, or toward the main vehicle entry doorway.

R310.1 Emergency escape and rescue required. No change in text ....

Exception 1 & 2; no change in text ....

Exception 3. Except where sleeping rooms are created, emergency escape and rescue openings need not be increased in existing basements undergoing interior finish renovation.



311.3.2 Floor elevations at other exterior doors. No change in text...

Exception: A top landing is not required where a stairway of not more than four (4) risers is located on the exterior side of the door, provided that the door does not swing over the stairway.

R313 AUTOMATIC FIRE SPRINKLER SYSTEMS. (Optional) A builder of a one- or two-family dwelling or townhouse shall offer to any purchaser on or before the time of entering into the purchase contract the option, at the purchaser's cost, to install or equip fire sprinklers in the dwelling or townhouse. The purchaser shall have the right to choose or decline to install a fire sprinkler system. This notification requirement is provided in accordance with, and shall expire in conjunction with, 67.281 RSMo.

315.2.2 Alterations and additions. When alterations or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with carbon monoxide alarms as required for new dwellings.

Exceptions: No change in text ....

319.1 Address identification. Building shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property, near a luminaire (light). Each number character shall not be less than four (4) inches and shall contrast with their background. Numbers shall not spelled out. Where required by the Building Official, address identification shall be provided in additional approved location to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. The assigned address number shall be clearly posted on the site as soon as work commences and shall remain in place and maintained until the building is removed from that site.

R322 Flood-Resistant Construction is deleted. See Chapter 460 of the Unified Development Code.

## SECTION R328 PHYSICAL SECURITY

R328.1 Purpose. The purpose of this Section is to establish minimum standards that incorporate physical security to make dwelling units resistant to unlawful entry.

R328.1.1 Scope. This Section shall apply to all exterior doors providing direct access into a dwelling unit, including garage walk-through doors, where the exterior door is accessible from grade.

Exceptions:

1. Vehicle access doors.
2. Storm or screen doors.

3. Garage and pantry access doors into the dwelling unit.

R328.2 Doors. Doors shall comply with Sections R324.2.1 through R324.2.3.

R328.2.1 Wood doors. Wood doors shall be of solid core construction such as high-density particleboard, solid wood, or wood block core with minimum nominal thickness of one and three fourths inches ( $1\frac{3}{4}$ " ) at any point.

Exception: Solid wood panels shall be a minimum of one inch (1") thick. The tapered portion of the panel that inserts into the groove of the door shall be a minimum of one quarter inch ( $\frac{1}{4}$ " ) thick. The groove shall be a minimum of one-half inch ( $\frac{1}{2}$ " ) in depth.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code are specifically adopted by reference in Articles II through XI of this Chapter, Steel doors shall be a minimum nominal thickness of one and three fourths inches ( $1\frac{3}{4}$ " ) and shall have a minimum skin thickness of 24 gauge.

R328.2.3 Fiberglass doors. Fiberglass doors shall be a minimum nominal thickness of one and three fourths inches ( $1\frac{3}{4}$ " ) and shall have a minimum skin thickness of one sixteenth inch ( $1/16$ " ).

R328.3 Door frames. Door frames shall comply with Sections R328.3.1 through R328.3.4 and shall be installed in accordance with the manufacturer's installations. Door frames shall be installed prior to rough-in inspection.

R328.3.1 Wall framing at door openings. Door frames shall be set in openings constructed with double studs on each side. Doors with sidelights shall have double stud construction on each side of the door and on each side of the sidelight(s). Horizontal blocking shall be placed between studs at the door lock height for three (3) stud spaces on each side of the door opening.

Exception: Installations provided with alternative reinforcing methods as approved by the Building Official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

R328.3.2 Wood frames. Door jambs shall be a minimum nominal thickness of three fourths inches ( $\frac{3}{4}$ " ) and shall be installed with solid backing in a manner so no void exists between the strike side of the jamb and the frame opening for a vertical distance of twelve inches (12" ) each side of the strike. Filler material shall consist of solid wood blocking.

Exception: Installations provided with alternative reinforcing methods as approved by the Building Official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

R328.3.3 Steel frames. Steel door frames shall be constructed of eighteen (18) gauge or heavier steel with reinforcement at the hinges and strikes. Steel frames shall be anchored to the wall in accordance with manufacturer's specifications.

R328.3.4 Sliding doors. Sliding door assemblies shall be installed to prevent the removal of panels and the glazing from the exterior. Shims or screws shall be installed in the upper track of doors that slide on the bottom track or doors shall be provided with equivalent protection as approved by the Building Official.

R328.4 Door hardware. Door hardware shall comply with Sections R328.4.1 through R328.4.6.

R328.4.1 Hinges. Hinges for swinging doors shall comply with the following:

- (a) A minimum of three (3) four inch (4") hinges shall be installed each swinging door.
- (b) Each hinge shall be attached to the frame with at least two (2) screws, not less than three inches (3") in length and penetrating at least one inch (1") into the nearest stud. Solid wood fillers or shims shall be used to eliminate any space between the wall structure and door frame behind each hinge.

Exception: Installations provided with alternative reinforcing methods as approved by the Building Official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

- (c) Hinges for out-swinging doors shall be equipped with mechanical interlock to preclude the removal of the door from the exterior.

R328.4.2 Locks. Swinging doors shall be provided with a single-cylinder deadbolt locking device (keyed on exterior only) with a minimum projection of one inch (1"). The deadbolt shall penetrate at least three-fourths inch ( $\frac{3}{4}$ ") into the strike receiving the projected bolt. All deadbolts shall meet ANSI grade 2 specifications.

Exception: Doors with integral multi-point locking devices.

R328.4.3 Strike plates. The deadbolt plate shall be a minimum of 18 gauge metal with four offset screw holes. The strike plate shall be attached to the door jamb with four screws not less than three inches (3") in length, and penetrating at least one inch (1") into the nearest stud.

Exception: Installations provided with alternative reinforcing methods as approved by the Building Official where it is determined that such alternative methods are at least the equivalent of that prescribed with respect to strength and safety.

R328.4.4 Door edge protector. A metal L-shaped or U-shaped door edge protector shall be installed around the bolt projection of the deadbolt to protect the door's edge or equivalent as approved by the Building Official.

R328.4.5 Double doors. The inactive leaf of a double swinging door shall be provided with flush bolts having an engagement of not less than one inch (1") into the head and threshold of the door frame.

R328.4.6 Sliding doors. All sliding glass doors shall be equipped with a secondary locking device consisting of a metal pin, a surface mounted bolt assembly, or other equivalent device as approved by the building official. Where used, metal pins shall

be installed at the intersection of the inner and outer panels of the inside door and shall not penetrate the frame's exterior surface.

R328.5 Entry vision and glazing. All main or front entry doors to dwelling units shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. The view may be provided by a door viewer having a field of view not less than 180 degrees or through windows or view ports.

R328.6 Exterior lighting. In addition to the lighting outlet requirements of Article IV of this Chapter, exterior lighting shall be provided in accordance with this Section.

R328.6.1 Front and street side exterior lighting. All doors shall be protected with a minimum of one lighting outlet providing a minimum of sixty (60) watt lighting (or energy efficient equivalent).

R328.6.2 Lighting protection. Lighting outlets required by this Section shall be located a minimum of eight feet (8') above grade or adjacent walking surface accessible from grade, or shall be of a type manufactured such that the light bulb is not readily accessible.

R329 Moved Structures. Structures moved into or within the jurisdiction shall comply with Chapter 520, Moving of Buildings and Building Systems and the provisions of this Code for new structures.

R403.1.1 Minimum size, reinforcement, support and cover, and lap splices. The minimum width (W) and thickness (T) for concrete footings shall in accordance with Tables R403.1(1) through R403.1(3), Figure R403.1(1) with the following exceptions. The footing width shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Footing projections (P) shall not be less than two (2) inches (51 mm) and shall not exceed the thickness of the footing. Footing thickness and projection for fireplaces shall be in accordance with Section R1001.2 The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood foundations shall be in accordance with the details set forth in Section R403.2, and Figures R403.1(2) and R403.1(3). Footings for precast foundations shall be in accordance with the details set forth in Section R403.4, Table R403.4, and Figures R403.4(1) and R403.4(2). Support and cover shall comply with R403.1.3.5.3. Lap splices shall comply with R403.1.3.5.4.

Exceptions:

1. 2-#4 continuous reinforcing bars, spaced not less than 6 inches, centered on the footing, shall be installed in monolithic slab-on-ground with turned-down footings, thickened slab-on-ground footings at bearing walls or braced wall lines, spread footings and footings with concrete stem and footing combined. If the footing width exceeds twenty (24) inches (609.6 mm) a third #4 bar shall be placed and all three bars equally spaced across the width of the footing with concrete cover satisfied.
2. #4 horizontal reinforcing bars shall be placed not more than 6 inches from the top and bottom of the stem wall and not more than eighteen (18) inches

(457.2 mm) on center between top and bottom reinforcing bars. Horizontal reinforcing bars shall be supported at not less than twenty-four (24) inches (609.6 mm), tied to vertical dowels or reinforcing bars or supported by form ties.

3. Stem walls shall be tied to footings with #4 vertical steel reinforcing dowels spaced not more than twenty-four (24) inches on center, extending not less than eighteen (18) inches (457.2 mm) into the stem wall; straight dowels shall be embedded not less than five (5) inches (127 mm) into the footing, dowels with standard hooks shall be embedded not less than three (3) inches (76.2 mm) into the footing.
4. An alternative structural design by a Registered Missouri Structural Engineer Professional.

R404.1.7 Backfill placement. Backfill shall not be placed against the wall until the wall has sufficient strength or has been sufficiently braced to prevent damage by the backfill.

Exception: Bracing is not required for wall supporting less than forty-eight (48) inches (1.219 m) of unbalanced backfill.

R404.4 Retaining walls. Retaining walls that are not laterally supported at the top and that retain in excess of forty eight (48) inches (1219 mm) of unbalanced fill, that support a surcharge, or are adjacent to a public right-of-way or retaining walls exceeding 24 inches (610 mm) in height that resist lateral loads in addition to soil, shall be designed in accordance with accepted engineering practice to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning. This section shall not apply to foundation walls supporting buildings.

R405.1, Exception 2. A filter membrane is not required where the gravel or crushed stone drain extends at least eighteen inches (18") above the top of the footing, or where the perforated pipe is covered with at least eighteen inches (18") of washed gravel or crushed stone.

405.2.3 Drainage system. In other than Group I soils, a sealed or gasket sump shall be provided to drain the porous layer and footings. The sump shall be at least twenty four inches (24") (610 mm) in diameter or 20 inches square (0.0129m<sup>2</sup>), shall extend at least twenty four inches (24") (610 mm) below the bottom of the basement floor and shall be capable of positive gravity or mechanical drainage to remove any accumulated water. Sumps receiving storm water from any exposed exterior drain(s) or opening(s) shall be provided with back-up system(s) capable of ensuring proper operation in case of power failure. The drainage system shall discharge to an approved storm sewer system or daylight.

R506.2.5 Interior underslab drainage. Where foundations retain earth and enclose habitable or usable space(s) located below grade, drains shall be provided below the floor slab. Drainage tiles, perforated pipe or other approved systems or materials shall be installed at or below the areas(s) to be protected, around the

inner perimeter of the area(s) and shall discharge by positive gravity or mechanical drainage to an approved storm sewer system or daylight. Interior underslab drainage systems installed on non-compacted fill material shall be supported by mechanical means adequately tied into the concrete slab.

R507.9.2 Lateral connection, is deleted.

R704.1 Exterior Paint. In the event a latex paint is utilized on the exterior of the home, a 100% acrylic latex paint product shall be utilized and applied in accordance with the manufacturer's specifications.

R801.3 Roof drainage. All dwellings shall have a controlled method of water disposal from roofs that will collect and discharge roof drainage to the ground surface not less than three (3) feet (1 m) from foundation walls or to an approved drainage system.

R802.11.1 Uplift resistance. Roof assemblies shall have uplift resistance in accordance with Section R802.11.1.1 and R802.11.1.2. Ties, tiedowns, anchors or screws manufactured specifically to resist uplift, as indicated in the manufacturer's listing(s), literature or specification(s), minimum forty-eight (48) inches on center, is required.

908.3 Roof replacement. *Roof replacement* shall include the removal of all existing layers of roof coverings down to the roof deck.

Exceptions:

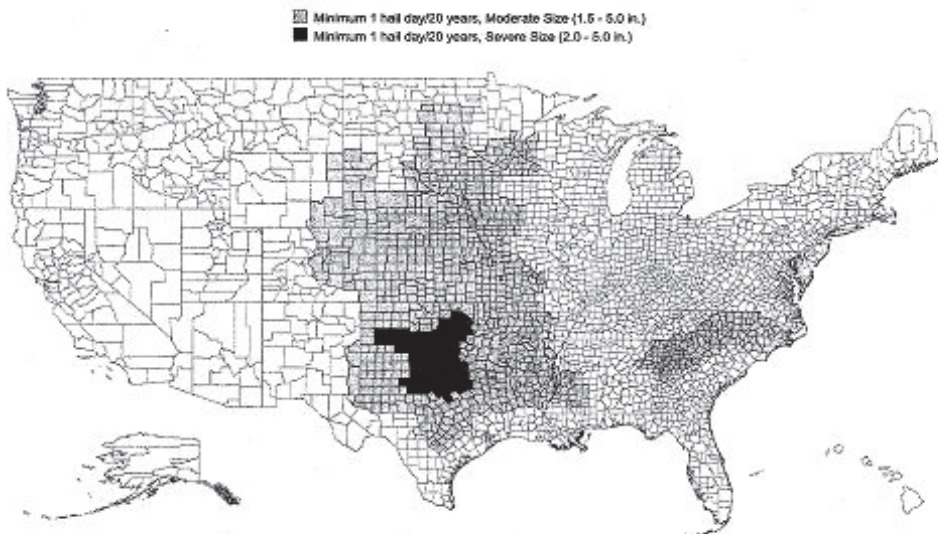
1. Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 905.
2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
3. The application of a new protective roof coating over an existing protective roof coating, metal roof panel, built-up roof, spray polyurethane foam roofing system, metal roof shingles, mineral-surfaced roll roofing, modified bitumen roofing or thermoset and thermoplastic single-ply roofing shall be permitted without tear off existing roof coverings.
4. For asphalt shingles, when the building is located in an area subject to moderate or severe hail exposure according to Figure R908.5, a repair of five (5) percent or less of the total roof covering in any three (3) year period may utilize approved roofing materials comparable to the existing roofing materials.

R908.3.1 Roof recover, is deleted.

R908.3.1.1 Roof recover not allowed, is deleted.

R908.4 Roof recovering, is deleted.

Figure R908.3 Hail Exposure Map



Chapter 11, Energy Efficiency is deleted and replaced with the following:

One -and- two family dwellings shall comply with the *2009 International Energy Conservation Code* as amended. See Article IX in this Code.

Chapter 12, Mechanical Administration is deleted.

M1602.2, Prohibited Sources (Return Air), Item 4, Exception #2. Closets with a minimum floor area of seventy (70) square feet and minimum interior dimension of seven feet (7'), and that are conditioned by a source of air supply.

G2414.5.3 (403.5.3) Copper and brass tubing shall not be installed for the distribution of natural gas (CNG) or distribute any other fuel gas within a building or structure.

G2415.2.1 CSST Prohibited use. Corrugated Stainless Steel Tubing (CSST) shall not be used or connect appliance(s) in the following locations:

1. Outdoor appliances;
2. Underground or under slab on ground; or
3. On the building's exterior.

Exception: Where Corrugated Stainless Steel Tubing (CSST) is installed in conduit for protection.

G2415.2.1.2 Minimum size. Minimum size of CSST gas piping shall be one-half inch (1/2") or larger to connect any appliance.

G2417.4.1 (406.4.1) Test pressure. The test on all gas piping designed for two(2)

PSIG and less, shall not less than one and one-half times the proposed maximum working pressure, but not less than ten (10) PSIG (68.9kPa) irrespective of design pressure, with a twenty (20) minute duration. The test on all gas piping designed for greater than 2 PSIG (68.9kPa) shall be a minimum of twenty (20) PSIG with a one hundred twenty (120) minute duration. The measurement range of the test gauge shall be not less than sixty (60) PSIG and shall be readily visible for reading on the inside of the building.

G2417.4.2 Test duration, is deleted.

Chapter 25, Plumbing Administration, is deleted.

P2602.1.1. For the purpose of this Section, available means located in a public way or easement abutting the subject property and within three hundred (300) feet of the proposed building.

P2601.2.1 Prohibited connection to drainage system. Sanitary sewer system shall be designed, built and maintained in such a manner to prevent all storm or ground water from draining, discharging or entering into the sanitary sewer system. Connection of sump pumps, foundation drains, yard drains, gutter downspouts and any other storm drainage receptacles(s) or system(s) are specifically prohibited from being connected to the sanitary sewer system.

P2603.5.1 Sewer depth. Building sewers shall not be less than twelve (12) inches below grade.

2604.5 Inspection. Excavations required for the installation of a building drainage system shall be open trench work, kept open and identification side of piping facing up until the piping has been inspected and approved to cover, or as approved by the Building Official for repairs.

P2902.5.3 Lawn irrigation systems. Lawn irrigation systems shall comply with Article X of this Chapter.

P2903.3.1 Maximum pressure. An approved water-pressure reducing valve conforming to ASSE 1003 with strainer shall be installed on the domestic water branch main or riser at the connection to the water-service pipe to reduce the pressure in the building water distribution piping to not more than eighty (80) psi (552 kPa) static.

P2903.8.2 Minimum size. The minimum size of individual distribution lines shall be one half (1/2") inch (12.7 mm). Certain fixtures such as one-piece water closets and whirlpool bathtubs shall require a larger size where specified by the manufacturer. If a water heater is fed from one end of a cold water manifold, the manifold shall be one size larger than the water heater feed.

Exception: An individual distribution line that feeds a refrigerator, mechanical humidifier, or similar appliance that distribute minimal amount of water.

P3001.1.1 Private Sewage Disposal Systems shall comply with Title VII, Chapter



710, Section 710.150 of the City Code.

Table 3002.1 (2) UNDERGROUND BUILDING DRAINAGE AND VENT PIPE. Cellular core is deleted.

Table 3002.2 BUILDING SEWER PIPE. Cellular core and Vitrified clay pipe is deleted.

P3105.4 Floor drains. A floor drain (where used as such) need not be vented, provided it is within twenty five feet (25') of a three-inch (3") stack or horizontal drain which has at least a three-inch (3") diameter vent extension through the roof.

P3114.3 Where permitted. Vents may terminate to an air admittance valve under the following conditions:

- (1) For sinks located where there is no wall accessible from the sink location (ex: island sinks); or where access to the vent system would require notching or boring of studs in excess of the limitations of Section R602.6.
- (2) In existing construction, where the existing vent system is not accessible to the fixture location without the removal of finish materials or other existing construction.

P3302.1 Subsoil drains. Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the standards indicated in Table P3302.1. Such drains shall be not less than 4 inches (102 mm) in diameter. Subsoil drains shall discharge to a sump or approved location above ground. The subsoil sump shall not be required to have a vent. The sump and pumping system shall comply with Section P3303.

E3601.6.2 Service disconnect location. The service disconnecting means shall be installed at a readily accessible location either outside of the building or inside nearest the point of entrance of the service conductors. Service conductors ten (10) or more from the point of entry (electric meter) to the service panel, a separate means of disconnect shall be installed at the electric meter to the building or structure. Service disconnecting means shall not be installed in bathrooms, bedrooms, closets or within fifteen (15) feet measured along the wall(s) of an egress window in the basement. Each occupant shall have access to the disconnect serving the dwelling unit in which they reside.

Exceptions:

1. A service disconnecting means may be located in a bedroom or closer than fifteen (15) feet to an egress window in a basement, provided a separate means of disconnect is installed at the point of entry (electric meter).
2. An electrical service upgrade in an existing bedroom or basement near a required egress window, in an existing one-and-two family dwellings built before 2005 .

E3601.8 Residential service upgrades. All one-and-two family dwellings requiring an electrical service upgrade for renovation, room additions, fire or storm damage repair to an electrical system, the following improvement upgrades shall be

included:

1. GFI receptacles in kitchens and bathrooms;
2. Smoke and carbon monoxide detectors in accordance with Chapter 3 of this Code.
3. Any hazards or inferior wiring repaired or replaced.

E3602.1 Ampacity of ungrounded conductors. Ungrounded service conductors shall have an ampacity of not less than the load served. For one- and two- family dwellings, the ampacity of the ungrounded conductors shall not be less than two hundred (200) amperes, 3 wire. For all other installations, the ampacity of the ungrounded conductors shall be not less than sixty (60) amperes. [230.42(B), 230.79 (C) & (D)]

E3902.2 (Garage and accessory building receptacles), Exception. Receptacles permanently marked to indicate "[Type of equipment] Only—No GFCI Protection" for:

1. A dedicated single receptacle supplying only a garage door opener.
2. A dedicated single receptacle supplying only a refrigerator and/or freezer.

E3902.5 (Unfinished basement receptacles), Exception. Receptacles permanently marked to indicate "[Type of equipment] Only—No GFCI Protection" for:

1. A dedicated single receptacle supplying only a permanently installed fire alarm or burglar alarm system.
2. A dedicated single receptacle supplying only a sump pump.
3. A dedicated single receptacle supplying only a radon control fan.
4. A dedicated single receptacle supplying only a refrigerator and/or freezer.

3902.16 Arc-fault circuit-interrupter protection. All branch circuits that supply 120-volt, single-phase, 15- and 20-ampere outlets installed in bedrooms shall be protected by a combination type arc-fault circuit interrupter installed to provide protection of the entire branch circuit.

Part X, Appendices: The following appendix Chapters are hereby adopted:

Appendix A: Sizing and Capacities of Gas Piping

Appendix B: Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category 1 Appliances and Appliances Listed for Use with Type B Vents

Appendix C: Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems

Appendix E :Manufactured Housing Used as Dwellings

Section AE 101.1 General.

Section AE 101.1.1 Design. A manufactured home of residential design shall comply

with Section 420.010 (D) of the Unified Development Code.

Appendix F : Radon Control Methods

Appendix M: Home Day Care -- R-3 Occupancy

Appendix Q: Tiny Houses

AQ101.1 Scope. This appendix shall be applicable to tiny houses use as single dwelling units.

AQ101.2 Design. Tiny houses shall comply with Section 420.010 (C) 11 of the Unified Development Code except as otherwise stated in this appendix.

**SECTIONS 500.180—500.190: - RESERVED**

**ARTICLE IV. - NATIONAL ELECTRICAL CODE**

**SECTION 500.195: - Adoption of the National Electrical Code (2017)**

A. The *National Electrical Code (2017)*, promulgated as a standard of the National Fire Protection Association (NFPA) 70, is adopted and incorporated in this Article by reference as if fully set forth.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code specifically adopted by reference in Articles II through XII of this Chapter.

B. The following Sections of the *National Electrical Code* are hereby revised or added:

Article 100 Definitions

Service Repair. The repair or replacement of a device or element of the service with a new device or element of the service, provided the repair or replacement material is of the same size or ampacity as the original.

Service Upgrade. Any service work that cannot be defined as a service repair.

210.12 (A) Dwelling Units. All 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit bedrooms shall be protected by a listed arc-fault circuit interrupter, combination type, installed to provide protection of the branch circuit.

Exceptions 1, 2, & 3 remain unchanged.

225.39 Rating of Disconnect. No change in text ....

(A)No change in text ....

(B)No change in text ....

- (C) For one- and two- family dwellings the feeder disconnecting means for new construction, service upgrade or replacement shall be in accordance with the International Residential Code (IRC).
- (D) For multi-family dwellings, the feeder disconnecting means for new construction, service upgrade or replacement shall have a rating of not less than one hundred (100) amperes.
- (E) All others. For all other installations, the feeder or branch-circuit disconnecting means shall have a rating of not less than sixty (60) amperes.

#### Part VI. Service Equipment --- Disconnecting Means

230.70 (A) Location. The service disconnecting means shall not be installed in accordance with 230.70 (A) 1, (A) 2, and (A)3.

(1) No change in text ....

(2) Bathrooms, Closets and Bedrooms. Service disconnecting means shall not be installed in bathrooms, clothes closets or bedrooms.

(3) No change in text ....

#### 410.36 Means of Support.

(B) Suspended Ceilings. Framing members of suspended ceiling systems used to support luminaires shall be securely fastened to each other and shall be securely attached to the building structure at appropriate intervals. Luminaires shall be securely fastened to the ceiling framing member by mechanical means such as bolts, screws, or rivets. Listed clips identified for use with the type of ceiling member(s) and luminaire(s) shall also be permitted.

In addition, all commercial electrical projects, luminaire(s) two feet (2') by two feet (2') or larger in suspended ceilings shall be secured by minimum two 12 gauge approved wires at opposite corners of luminaire(s) to the building structure.

C. The following Sections are hereby added to the *National Electrical Code*:

#### **SECTION 500.200: - AMENDMENTS**

- A. Approved load rated outlet boxes must be installed in all living areas except hallways, bathrooms and kitchens.
- B. Circuits of all electrical wiring systems shall be in minimum flexible metal conduit (FMC) for all commercial electrical projects.

#### **SECTIONS 500.205—500.215: - RESERVED**

### **ARTICLE V. - INTERNATIONAL MECHANICAL CODE**

#### **SECTION 500.220: - ADOPTION OF INTERNATIONAL MECHANICAL CODE (2018)**

A. The *International Mechanical Code (2018)*, promulgated by the International

Code Council (ICC), is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section. Provisions of this Article are to regulate all commercial projects.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code specifically adopted by reference in Articles II through XII of this Chapter.

B. The following Section of the *International Mechanical Code* is hereby revised or added:

Chapter 1, Administration, is deleted.

401.2 Ventilation required. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403. Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407.

502.14 Motor Vehicle Operation. No change in text ....

Exceptions: 1, 2 and 3, no change in text ....

4. Upon approval by the Building Official, an area of motor vehicle operation in an existing building, previously used as a motor vehicle operation area with no additional increase of space, a listed and labeled exhaust hose not greater than eight (8) feet in length may be substituted, provided the listed hose is connected to the vehicle while in operation and securely attached to a permanent opening through the exterior surface of the building.

506.3.2.5 Grease duct test. Prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed. Ducts shall be considered to be concealed where installed in shafts or covered by coatings or wraps that prevent the ductwork from being visually inspected on all sides. The permit holder shall be responsible to provide the necessary equipment and perform the grease duct leakage test.

A vacuum or air pressure test shall be performed to determine that all welded and brazed joints are liquid tight on the installed grease duct to a minimum of four (4) inches water column (995 pa, 0.144 psi). The test shall be witnessed by the Building Official or designated person for a period of not less than fifteen (15) minutes with no leakage. Test measurement shall be made with a digital manometer or pressure gauge connected to the test cover of the hood and duct connection. The measurement device shall be readily accessible for reading.

Appendix: The following Chapter of the appendix are hereby adopted:

**SECTIONS 500.225—500.240: - RESERVED**

**ARTICLE VI. - INTERNATIONAL PLUMBING CODE**

**SECTION 500.245: - ADOPTION OF INTERNATIONAL PLUMBING CODE (2018)**

A. The *International Plumbing Code (2018)*, promulgated by the International Code Council (ICC), is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section. Provisions of this Article are to regulate all commercial projects.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code specifically adopted by reference in Articles II through XII of this Chapter.

B. The following Sections of the *International Plumbing Code* are revised or added: Chapter 1, Administration, is deleted. See Article I of this Chapter.

305.4.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be installed not less than eighteen (18) inches below finished grade at the point of septic tank connection. Building sewers shall be installed not less than twelve (12) inches below grade.

403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Except for mercantile and business uses, occupancies which do not serve food or beverages to be consumed within the structure or tenant space, do not require separate facilities when the total occupant load, including both employees and customers, is forty-nine (49) or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is one hundred (100) or fewer.
4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is twenty-five (25) or fewer.

410.4 Substitution. Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In all other occupancies where the occupant load is forty-nine (49) or fewer and drinking fountains are required, a bottled water dispenser or water cooler with a minimum two (2) gallon capacity may be substituted.

603.5.6 Protection from Lawn Sprinklers and Irrigation Systems. Lawn Sprinklers and Irrigation Systems listed in Article II, Chapter 705.230(C)(14) #14 shall comply with Article X of this Chapter.

604.8 Maximum pressure. An approved water-pressure reducing valve conforming to ASSE 1003 with strainer shall be installed on the domestic water branch main or riser at the connection to the water-service pipe to reduce the pressure in the building water distribution piping to not more than eighty (80) psi (552 kPa) static.

Exception: Service lines to sill cocks and outside hydrants, and main supply risers where pressure from the mains is reduced to 80 psi (522 kPa) or less at individual fixtures.

Table 702.2 UNDERGROUND BUILDING DRAINAGE AND VENT PIPE. Cellular core is deleted.

Table 702.3 BUILDING SEWER PIPE. Cellular core and Vitrified clay pipe is deleted.

918.3 Where permitted. The use of air-admittance valves shall not be permitted in new buildings or additions, unless otherwise approved by the Building Official.

Exception: Vents may terminate to an air admittance valve under the following conditions:

1. For sinks located where there is no wall accessible from the sink location (ex: island or peninsula sinks); or where access to the vent system would require notching or boring of studs in excess of the limitations of Article II, Chapter 23.
2. In existing construction, where the existing vent system is not accessible to the fixture location without the removal of finish materials or structural members.

1003.3.1 Grease interceptors and automatic grease removal devices required. A grease interceptor or automatic grease-removal device shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, day care facilities of Group I-4 or E occupancies, bars, factory cafeterias and clubs. Fixtures and equipment shall include mop sinks, kitchen floor drains and sinks, culinary sinks, pot sinks, pre-rinse sinks; soup kettles or similar devices; wok stations; floor drains or sinks which kettles are drained; automatic hood wash units and dishwashers without pre-rinse sinks. Grease interceptors and automatic grease removal devices shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged. Where lack of space or other constraints prevent the installation or replacement of a grease interceptor, one or more grease interceptors shall be permitted to be installed on or above the floor and upstream of an existing grease interceptor.

1003.3.1.2 Location. Each grease interceptor shall be so installed, connected and easily accessible for inspection, cleaning, and removal of the intercepted grease. A gravity grease interceptor shall not be installed in a building where food is handled.

Location of the grease interceptor shall meet the approval of the Building Official.

1003.3.1.2.1 Interceptors. Interceptors shall be placed as close as practical to the fixtures they serve.

1003.3.1.2.2 Business Establishment. Each business establishment for which a gravity grease or hydromechanical grease interceptor is required shall have an interceptor which shall serve that establishment.

1003.3.1.2.3 Access. Each gravity grease interceptor shall be located so as to be readily accessible to the equipment required for maintenance.

1003.3.3 Additives to grease interceptors. Dispensing systems that dispense interceptor performance additives to a grease interceptor shall not be installed. Systems that discharge emulsifiers, chemicals or enzymes to grease interceptors are prohibited.

1003.11 Sampling manhole. Where a grease interceptor or automatic grease removal device is required, a sampling manhole shall be installed to monitor the entire facility or individual tenant space as determined by Raymore Public Works.

1102.4 Building Storm Sewers. Building storm sewers shall be in accordance with the applicable standards referenced in 1102.4 for building sewer pipe and fittings, or the adopted Raymore Technical Specifications & Design Criteria for Utility and Street Construction, latest edition.

TABLE 1102.4 BUILDING STORM SEWER PIPE. Cellular core is deleted.

Section 1202.2 Medical gas piping installation. The installation of all medical gas piping shall be installed by a certified medical gas installer holding an unexpired 6010 National Inspection Testing & Certification (NITC), or an equivalent certification as approved by the Building Official.

Section 1202.3 Medical gas piping inspections. Inspections and the special final inspection of a medical gas system shall be inspected by a certified medical gas inspector holding an unexpired 6020 National Inspection Testing & Certification (NITC), or an equivalent certification as approved by the Building Official. All inspection reports shall be submitted to the Building Official before issuance of any Certificate of Occupancy.

Appendices: The following Chapters of the appendix are hereby adopted:

Appendix B: Rates of Rainfall for Various Cities

Appendix C: Structural Safety

Appendix D: Degree Day and Design Temperature

Appendix E: Sizing of Water Piping System

**SECTIONS 500.250—Section 500.265: - RESERVED**



## **ARTICLE VII. - INTERNATIONAL SWIMMING POOL, AND SPA CODE**

### **SECTION 500.270: - Adoption of International Swimming Pool, and Spa Code (2018)**

- A. The *International Swimming Pool, and Spa Code (2018)*, promulgated by the International Code Council (ICC), is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section. Provisions of this Article are to regulate all commercial and residential projects.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code specifically adopted by reference in Articles II through XII of this Chapter.

- B. The following Section of the *International Swimming Pool, and Spa Code* is hereby revised:

Chapter 1, Administration, is deleted. See Article I of this Chapter.

### **SECTION 500.275: - RESERVED**

## **ARTICLE VIII. - INTERNATIONAL EXISTING BUILDING CODE; LIFE SAFETY CODE**

### **SECTION 500.280: - ADOPTION OF THE INTERNATIONAL EXISTING BUILDING CODE (2018) AND NFPA 101 LIFE SAFETY CODE ( 2018)**

- A. The *International Existing Building Code (2018)*, promulgated by the International Code Council, and the *NFPA 101 Life Safety Code (2018)* promulgated by the National Fire Protection Association is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section. Provisions of this Article are in addition to the provisions of the *International Existing Building Code* and the *NFPA 101 Life Safety Code*. The following provisions coinciding with provisions of the *International Existing Building Code* and the *NFPA 101 Life Safety Code* supersede, or delete, when indicated, the corresponding provisions of the *International Existing Building Code* and the *NFPA 101 Life Safety Code*.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code specifically adopted by reference in Articles II through XII of this

Chapter.

B. The following Sections of the *International Existing Building Code* are hereby revised or added:

Chapter 1, Scope and Administration— This Chapter is deleted, except for the following Sections (see Article I of this Chapter):

Section 101.2— Scope

Section 101.3— Intent

In Section 202, the following definition has been revised:

Flood Hazard Area. See the Unified Development Code Chapter 460.

401.3 Flood hazard areas is deleted. See Article I of this Chapter.

502.3 Flood hazard areas is deleted. See Article I of this Chapter.

701.3 Flood hazard areas is deleted. See Article I of this Chapter.

705.3 Roof replacement. Roof replacement shall be in accordance with 1511.3 of the International Building Code.

705.3.1 Roof recover, is deleted.

705.3.1.1 Exceptions, is deleted.

705.4 Roof Recovering, is deleted.

904.1 Automatic Sprinkler Systems. Automatic sprinkler systems shall be provided in all work areas where required by the *International Building Code*.

1103.3 Flood hazard areas is deleted. See Article I of this Chapter.

1201.4 Flood hazard areas is deleted. See Article I of this Chapter.

Appendices: The following appendix is hereby adopted:

Appendix C: Guidelines for the Wind Retrofit of Existing Buildings

**SECTIONS 500.285—500.295: - RESERVED**

## **ARTICLE IX. - INTERNATIONAL ENERGY CONSERVATION CODE**

### **SECTION 500.300: - ADOPTION OF INTERNATIONAL ENERGY CONSERVATION CODE (2009)**

A. The *International Energy Conservation Code (2009)*, promulgated by the International Code Council, is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section. Provisions of this Article are in addition to the

provisions of the *International Energy Conservation Code*. The following provisions coinciding with provisions of the *International Energy Conservation Code* supersede, or delete, when indicated, the corresponding provisions of the *International Energy Conservation Code*.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code specifically adopted by reference in Articles II through XII of this Chapter.

B. The following Sections of the *International Energy Conservation Code* are hereby revised or added:

101.1 Title, is deleted.

Sections 103,104, 105, 107, 108 and 109 are deleted. See Article I of this Chapter.

402.1.1 Insulation and fenestration criteria. The building thermal envelope shall meet the requirements of Table 402.1.1.

Table 402.1.1

Insulation and Fenestration Requirements by Component<sup>a</sup>

<b>Clima te Zone</b>	<b>Fenes tra-ti on U-Fac tor<sup>b</sup></b>	<b>Skyli ght<sup>b</sup> U-Fac tor</b>	<b>Glazed Fenestr ation SHGC<sup>b,e</sup></b>	<b>Ceili ng R-Va lue</b>	<b>Woo d Fra me Wall R-Va lue</b>	<b>Mass Wall R-Va lue<sup>i</sup></b>	<b>Floo r R-Va lue</b>	<b>Base - men t<sup>c</sup> R-Va lue</b>	<b>Slab<sup>d</sup> R-Val ue &amp; Dept h</b>	<b>Craw l Spac e<sup>c</sup> Wall R-Val ue</b>
<b>4 exce pt Marin e</b>	<b>0.35</b>	<b>0.55</b>	<b>0.40</b>	<b>49</b>	<b>15</b>	<b>5/10</b>	<b>19</b>	<b>10/1 3</b>	<b>10,2</b>	<b>10/1 3</b>

(Footnotes unchanged)

402.2.1.1 Eave baffle. For air permeable insulation in attics, a baffle shall be installed adjacent to soffit and eave vents. Baffles shall maintain an opening equal or greater than the size of the vent. The baffle shall extend over the top of the attic insulation. The baffle shall be permitted to be any solid material.

403.4 Service hot water systems. Energy conservation measures for service hot water systems shall be in accordance with Sections 403.4.1 and 403.4.2.

403.4.1 Circulating hot water systems (Mandatory). Circulating hot water

systems shall be provided with an automatic or readily accessible manual switch that can turn off the hot-water circulating pump when the system is not in use.

403.4.2 Hot water pipe insulation (Prescriptive). Insulation for hot water pipe with a minimum thermal resistance (R-value) of R-3 shall be applied to the following:

1. Piping located outside the conditioned space.
2. Piping located under a floor slab.
3. Buried piping less than thirty-six (36) inches.

403.6 Equipment Sizing (Mandatory). Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculations methodologies.

404.1 No change in text ....

Exception: Low-voltage lighting shall not be required to utilize high-efficiency lamps.

404.1.1 Lighting equipment (Mandatory). Fuel gas lighting systems shall not have continuously burning pilot lights.

502.2.4 Below-grade walls. The minimum thermal resistance (R-value) of the insulating material installed in, or continuously on, the below grade walls shall be R-7.5 continuous insulation (ci), and shall extend to a depth of ten (10) feet below the outside finished ground level, or to the level of the floor, whichever is less.

502.2.6 Slabs on grade. The minimum thermal resistance (R-value) of the insulation around the perimeter of unheated or heated slab-on-grade floors shall be R-10. The insulation shall be placed on the outside or on the inside of the foundation wall. The insulation shall extend downward from the top of the slab for a minimum of twenty-four (24) inches below grade, or downward to at least the bottom of the slab and then horizontally to the interior for the total distance of twenty-four (24) inches.

## **SECTION 500.305: - RESERVED**

## **ARTICLE X. - LAWN SPRINKLER SYSTEMS AND CROSS-CONNECTION CODE**

### **SECTION 500.310: - PURPOSE**

#### *Lawn Sprinkler Regulations*

In addition to Chapter 700, Article II, Sections 705.180 through 705.270 of the City Code, this Article is to provide minimum requirements to safeguard the public safety, health and general welfare, insofar as they are affected by lawn sprinkler

and irrigation systems.

No lawn sprinkler or irrigation system shall be installed or maintained or shall be connected to any domestic water supply when such installation or connection provides a possibility of polluting such water supply or cross-connection between a distributing system of water that becomes contaminated by such lawn sprinkler or irrigation system unless there is provided a backflow prevention device approved for the potential hazard.

### **SECTION 500.315: - DEFINITIONS**

As used in this Article, the following terms shall have the meaning set forth next to them.

**Air Gap, Irrigation System.** A complete physical separation between the free flowing discharge end of a potable water supply pipe and an open or non-pressure receiving vessel.

**Atmospheric Vacuum Breaker.** An assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum.

**Backflow Prevention, Irrigation System.** The mechanical prevention of reverse flow, or water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.

**City right-of-way.** Any land over which the City has a right to allow the public or the City's agents to pass. For purposes of this Article and the release and indemnity document specified hereunder, the definition of right-of-way set forth above shall apply whether the City's legal interest in the land is in fact a right-of-way, an easement, a license or a fee simple interest.

**Cross-Connection.** An actual or potential connection between a potable water source and an irrigation system that may contain contaminants or pollutants or any source of water that has been treated to a lesser degree in the treatment process.

**Double Check Valve.** An assembly that is composed of two independently acting approved check valves, including tightly closed resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks.

**Installer, Irrigation System.** A person who actually connects an irrigation system to a private or public raw or potable water supply system.

**Irrigation Plan.** A scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.

**Irrigation System.** An assembly of component parts, including the backflow device

and all equipment downstream, that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to reduce dust or control erosion. This term does not include a system that is used on or by an agriculture operation.

Irrigation Zone. A subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographical features (such as slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.

Lawn Sprinkler system. Any system, wholly or partly affixed or buried beneath the ground surface, by which domestic water is transported through pipes or hoses to sprinkler heads (above or below ground) designed to spray water over surrounding vegetation.

Major Maintenance, Alteration, Repair, or Service (Irrigation System). Any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.

Pressure Vacuum Breaker. An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve.

Reclaimed Water. Domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.

Reduced Pressure Principle Backflow Prevention Assembly. An assembly containing two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.

Seed Bed Preparation. The preparation of topsoil for any seeding, sodding or planting. A seed bed shall consist of a minimum 4 inches of topsoil.

Static Water Pressure. The pressure of water when it is not moving.

Water Conservation, Irrigation System. The design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

### **SECTION 500.320: - PERMIT REQUIRED**

No lawn sprinkler system shall be installed within the City until the owner of the land to be benefited by the system shall have first obtained a completed irrigation permit and submit an irrigation plan to the City.

Exceptions:

- (1) An irrigation system used on or by agriculture operation as defined by the Missouri Department of Natural Resources.
- (2) An irrigation system connected to a groundwater well used by a property owner for domestic use.

### **SECTION 500.325: - PERMIT APPLICATION; FEES**

The process for obtaining a lawn and irrigation sprinkler permit is in Section 500.080 and 500.095 of this Chapter subject to the following restrictions:

- (1) The landowner shall complete an application for lawn sprinkler system permit generally in the forms available in the office of the Building Official.
- (2) The Building Official shall review the application to determine the following:
  - (a) That the application identifies all record owners of the property.
  - (b) That the proposed installation presents no threat to public safety.
  - (c) That the proposed installation presents no threat of damage to existing facilities of the City, the City's lessees or those to whom the City has granted easements or licenses.
  - (d) That if anyone other than the landowner proposes to install the system, then that person or firm is properly licensed under state law and local ordinances.

### **SECTION 500.330: - LIMITATIONS ON PERMITS**

The granting of a permit pursuant to this Article shall create no easement, license or other right in the landowner, other than the limited permissive use of the City's right-of-way.

It shall be a condition of every permit that the landowner shall expressly release, indemnify and hold harmless the City, and its employees, agents, contractors, lessees, licensees and permittees on City's right-of-way, from any and all liability, claims, suits or demands, whatsoever, which they or others may now have or which may hereafter have arising out of the placement of sprinkler heads or related components in City right-of-way.

### **SECTION 500.335: - CONSTRUCTION AND OPERATION OF A LAWN AND LANDSCAPE IRRIGATION SYSTEM**

The location of lines and sprinkler heads for a lawn and landscape irrigation system may be located within the City right-of-way or easement subject to the following conditions and prior approval of the City:

- (1) The owner of the lawn and landscape irrigation system is responsible for any maintenance or repair of the lawn and landscape irrigation system;

- (2) The owner of the lawn and landscaping irrigation system shall operate the same in a manner that does not cause damage to adjacent property or City infrastructure.

Prior to any seed, sod or landscaping being placed within the lawn and landscape irrigation system, there shall be proper seedbed preparation by the owner.

In accordance with Municipal Code Section 705.010, the Mayor may place an irrigation ban or other restrictions on the use of any lawn and irrigation system connected to the City water supply system.

## **SECTIONS 500.340—500.350: - RESERVED**

### **ARTICLE XI. - INTERNATIONAL FIRE CODE**

#### **SECTION 500.355: - ADOPTION OF THE INTERNATIONAL FIRE CODE (2018)**

- A. The *International Fire Code (2018)*, promulgated by the International Code Council, is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section. Provisions of this Article are in addition to the provisions of the *International Fire Code*. The following provisions coinciding with provisions of the *International Fire Code* supersede, or delete, when indicated, the corresponding provisions of the *International Fire Code*.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code are specifically adopted by reference in Articles II through XII of this Chapter, including the fire-resistive assemblies listed in the *Fire Resistance Design Manual, Nineteenth Edition, GA-600-18*, published by the Gypsum Association as referenced in Tables 721.1 (1 through 3) of the specified *International Building Code; American National Standard for Accessible and Useful Buildings and Facilities A117.1-2017; NFPA 13-2016 Installation of Sprinkler Systems; ASTM Standards* as referenced in the *International Building Code* and the *International Residential Code; American Institute of Steel Construction, latest Edition; American Concrete Institute for Structural Concrete and Commentary ACI 318 latest Edition; the NFPA 101-2018 Life Safety Code; ICC/NSSA Standard for the Design and Construction of Storm Shelters, ICC 500-2014; and the NFPA 99 Health Care Facilities 2018 edition*.

- B. The following Chapters and Sections of the *2018 International Building Code* may also be enforced by the South Metropolitan Fire District:
  - (1) Detention and correctional facilities—Chapter 4, Section 408.
  - (2) Motion picture projection rooms—Chapter 4, Section 409.
  - (3) Aircraft-related occupancies—Chapter 4, Section 412.
  - (4) Fire-resistant materials and construction—Chapter 7, all Sections.
  - (5) Fire protection systems and fire alarm systems—Chapter 9, all Sections.



- (6) Egress, access and exit facilities and emergency escapes—Chapter 10, all Sections.
- (7) Chimneys, fireplaces and barbeques—Chapter 21 Sections 2111 through 2113.
- (8) Elevator and conveying systems—Chapter 30, all Sections.

C. The following Sections of the *International Fire Code* are hereby revised or added:

307.2 Permits required. A permit shall be obtained by the Fire Code Official prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pest or a bonfire. Application for such approval shall only be presented by and permit issued to the owner of the land upon which the fire is to be kindled.

307.4 Location. The location for open burning shall be not less than the State regulations in Mo DNR 10 CSR 10-6.045 unless conducted and approved by the Fire Code Official in accordance with Sections 307.4.1 through 307.4.3.

Exceptions, no change in text ....

307.4.1 Bonfires. A *bonfire* shall not be conducted within fifty (50) feet (15.24 m) of a structure or combustible material unless the fire is contained in a barbecue pit. Conditions that could cause a fire to spread with fifty (50) feet (15.24 m) of a structure shall be eliminated prior to ignition.

307.4.2 Recreational fires. *Recreational fires* shall not be conducted within twenty-five (25) feet (7.62 m) of a structure or combustible material. Conditions that could cause a fire to spread within twenty-five (25) feet (7.62 m) of a structure shall be eliminated prior to ignition.

307.4.3 Portable outdoor fireplaces. *Portable outdoor fireplaces* shall be used in accordance with the manufacturer's instructions and shall not be operated within fifteen (15) feet (4.572 m) of a structure or combustible material.

307.4.3 Exception, is deleted.

503.3 Marking. Where required by the Fire Code Official, approved signs, striping or markings shall be red paint with white letters that include the words NO PARKING OR STANDING---FIRE LANE and provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

505.1 Address identification. New and existing buildings shall be provided with *approved* address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches (102 mm) high with a

minimum stroke width of ½ inch (12.7 mm). Where commercial buildings have tenants with multiple entrances located on different sides of the building, each door shall be addressed. Address characters shall be capable of being illuminated by an internal or external lighting source and maintained.

507.5 Fire hydrants systems. Fire hydrants systems shall comply with Section 507.5.1 through 507.5.6.

507.5.1 Where required. Where a portion of the facility or building constructed or moved into or within the jurisdiction is more than three hundred (300) feet (91.44 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the Fire Code Official.

Exception: For Group R-2, R-3 and U occupancies, the distance requirement shall be five hundred (500) feet (152.4 m).

507.5.1 Exception 2, is deleted.

903.2.9.1 Repair garages. An *automatic sprinkler system* shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings having two (2) or more *stories above grade plane*, including basements, with a *fire area* containing a repair garage exceeding five thousand (5,000) square feet (464 m<sup>2</sup>).
2. Buildings not more than one (1) *story above grade plane*, with a *fire area* containing a repair garage exceeding five thousand (5,000) square feet (464 m<sup>2</sup>).
3. Buildings with repair garages servicing vehicles parked in basements.
4. Group S-1 *fire area* used for the repair of commercial motor vehicles where the *fire area* exceeds five thousand (5,000) square feet (464 m<sup>2</sup>).

903.4.2 Alarms. One(1) all-weather horn/strobe shall be connected to every *automatic sprinkler system* on the exterior of the building above the fire department connection (FDC) or in an approved location. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the *automatic sprinkler system* shall actuate the building fire alarm system. Interior alarm notification appliances shall be installed as required with Section 903.4.2.1.

903.4.2.1 Notification device. Where an *automatic sprinkler system* is installed in a building, audible and visible notification appliances shall be installed throughout the building as follows:

1. Audible notification appliances shall be audible at fifteen (15) dBa above sound pressure level throughout the building.
2. Visible notification appliances shall be in all public and common use

areas, restrooms and corridors in accordance with the spacing requirements of NFPA 72.

3. Visible notification appliances may be eliminated in regularly unoccupied portions of buildings where approved by the Fire Code Official.

Exception: The requirements of this Section do not apply to Group R-3 occupancies.

912.2 Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of fire department connections (FDC) shall be approved by the Fire Code Official. Connections shall be a locking five (5) inch Storz with a thirty (30) degree elbow type fitting and located within one hundred (100) feet of a fire hydrant, or as approved by the Fire Code Official.

1004.9 Posting of occupant load. Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place near the main exit or exit access doorway from the room or space for the intended configurations. At the main entrance to the building, the occupant load for the entire assembly use group shall be posted in a conspicuous place. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or the owner's authorized agent.

1013.2 Low-level exit signs in Group A and R-1. Where exit signs are required in Group A with an occupant load of one hundred fifty (150) or more or Group R-1 occupancies by Section 1013.1, additional low-level exit signs shall be provided in all areas serving the exits in Group A or guestrooms in Group R-1 occupancies and shall comply with Section 1013.5.

The bottom of the sign shall be not less than ten (10) inches (254 mm) nor more than eighteen (18) inches (455 mm) above the floor level. The sign shall be flush mounted to the door or wall. Where mounted on the wall, the edge of the sign shall be within four (4) inches (102 mm) of the door frame on the latch side.

1013.6.3 Power source. Exit signs shall be illuminated at all times. To ensure continued illumination for a duration of not less than ninety (90) minutes in case of primary power loss, the sign illumination means shall be connected to an emergency power system provided from storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Section 604. Group I-2 Condition 2 exit sign illumination shall not be provided by unit equipment batteries only.

Exception: For all occupancies other than Group I-1 and I-2, with an occupant load of 49 or less, an approved *self-luminous* or *photoluminescent* exit sign illumination type, in accordance with UL 924, that provide continuous illumination independent of external power sources for a duration of ninety (90) minutes, in case of primary power loss, are not required to be connected to an emergency electrical system.

Appendices: The following appendix Chapters are hereby adopted:

Appendix B: Fire-Flow Requirements for Buildings

Exception B105.1: One-and two- family dwellings, Group R3 and R4 and buildings and townhouses. Where a fire sprinkler is installed, the minimum fire-flow and flow duration requirements for one- and two- family dwellings, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.2 and B105.1(2).

Appendix C: Fire Hydrant Locations and Distribution

Appendix D: Fire Apparatus Access Roads

## **SECTIONS 500.360—500.375: - RESERVED**

### **ARTICLE XII. - INTERNATIONAL FUEL GAS CODE**

#### **SECTION 500.380: - ADOPTION OF INTERNATIONAL FUEL GAS CODE (2018)**

A. The *International Fuel Gas Code (2018)*, promulgated by the International Code Council (ICC), is adopted and incorporated in this Article by reference as if fully set forth, except as it is amended by the following provisions of this Section. Provisions of this Article are to regulate all commercial projects.

All references within the model Codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building Code specifically adopted by reference in Articles II through XII of this Chapter.

B. The following Sections of the *International Plumbing Code* are revised or added: Chapter 1, Administration, is deleted. See Article I of this Chapter.

401.5 Identification. All gas piping shall be identified by a yellow background marked "Gas" in black letters. Identification shall in the form of a tag, stencil, or other permanent marking. Identification shall be clear and legible from the floor of the room or space where gas piping is located. Identification spacing of black steel pipe shall be at intervals of not more than fifteen (15) feet in concealed locations, twenty-five (25) feet in exposed locations, and not less than once in any room or space. Identification marking for all other piping shall be at intervals not exceeding five (5) feet and not less than once in any room or space.

403.4.3 Copper and copper alloy. Copper and brass tubing shall not be installed for the distribution of fuel gas.

403.4.4 Aluminum. Aluminum or aluminum alloy tubing shall not be installed for the distribution of fuel gas.

403.5.1 Steel tubing. Steel tubing shall not be installed for the distribution of compressed natural gas (CNG) or shall it distribute any other fuel gas within a building or structure.

403.5.3 Copper and copper alloy tubing. Copper and brass tubing shall not be

installed for the distribution of compressed natural gas (CNG) or shall it distribute any other fuel gas within a building or structure.

403.5.4 Aluminum tubing. Aluminum tubing shall not be installed for the distribution of compressed natural gas (CNG) or shall it distribute any other fuel gas within a building or structure.

406.4.1 Test pressure. The test on all gas piping designed for two(2) PSIG and less, shall not less than one and one-half times the proposed maximum working pressure, but not less than ten (10) PSIG (68.9kPa) irrespective of design pressure, with a twenty (20) minute duration. The test on all gas piping designed for greater than 2 PSIG (68.9kPa) shall be a minimum of twenty (20) PSIG with a one hundred twenty (120) minute duration. The measurement range of the test gauge shall be not less than sixty (60) PSIG and shall be readily visible for reading on the inside of the building.

406.4.2 Test duration, is deleted.

Appendices: The following appendix Chapters are hereby adopted:

Appendix A: Sizing and Capacities of Gas Piping

Appendix B: Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category 1 Appliances and Appliances Listed for Use with Type B Vents

Appendix C: Exit Terminals of Mechanical Draft and Direct-vent Venting Systems

Section 2. Effective Date. The effective date of approval of this Ordinance shall be January 1, 2020.

Section 3. Severability. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

**DULY READ THE FIRST TIME THIS 9TH DAY OF DECEMBER, 2019.**

**BE IT REMEMBERED THAT THE ABOVE ORDINANCE WAS APPROVED AND ADOPTED THIS 23RD DAY OF DECEMBER, 2019, BY THE FOLLOWING VOTE:**

Councilmember Abdelgawad  
Councilmember Barber  
Councilmember Berendzen  
Councilmember Burke III  
Councilmember Circo  
Councilmember Holman  
Councilmember Jacobson  
Councilmember Townsend

ATTEST:

APPROVE:

\_\_\_\_\_  
Jean Woerner, City Clerk

\_\_\_\_\_  
Kristofer P. Turnbow, Mayor

\_\_\_\_\_  
Date of Signature