

CHAPTER 13. CONSTRUCTION CODES

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ARTICLE 1. ADMINISTRATION

- 13-101 **TITLE.** This Chapter and the codes adopted pursuant to the various Articles of this Chapter shall be collectively known as the "Construction Codes of the Unincorporated Areas of Douglas County Kansas", hereinafter collectively referred to in this Article interchangeably as "this Code" or "the Construction Codes" or "this Chapter." [HR-22-6-2, Sec. 1]
- 13-102 **SCOPE.** The provisions of this Chapter shall apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use, and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances and systems connected or attached to such buildings or structures and located in the unincorporated areas of Douglas County, Kansas, including but not limited to the construction, conditions and maintenance of property, buildings and structures; the construction, alteration, movement, enlargement, replacement, repair, equipment, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with separate means of egress; the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of plumbing systems; the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of mechanical systems; the conditions and maintenance of plumbing systems; the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of fuel gas systems and gas-fired appliances; the design, construction, quality of materials, erection, installation,

alteration repair, location, relocation, replacement, addition to, use or maintenance of electrical systems.

- a) Appendices. Provisions in the appendices shall not apply unless specifically adopted.

[HR-22-6-2, Sec. 1]

13-103 **INTENT.** The purpose of this code is to establish the minimum requirements to safeguard the public safety, health, and general welfare through structural strength, means of egress from facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the building environment and to provide safety to fire fighters and emergency responders during emergency operations.\

- a) **Referenced Codes.** The codes referenced in this Chapter, including the separate codes identified in Sections 103.1.1 through 103.1.6, and those referenced elsewhere in this Chapter and in the foregoing separate codes shall be considered part of the requirements of this Chapter to the prescribed extent of each such reference. Where differences occur between provisions of this Chapter and referenced codes and standards, the more restrictive shall govern.

- 1) **Residential One and Two Family Dwellings.** The provisions of the International Residential Code, 2018 Edition, adopted pursuant to Article 2 of this Chapter, as amended, shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, location, use, occupancy, removal and demolition of detached one- and two-family dwellings and multiple single- family dwellings (townhouses) not more than three stories in height with separate means of egress, and their accessory buildings.
- 2) **Commercial and Multi-Family Structures.** The provisions of the International Building Code, 2018 Edition, adopted pursuant to Article 3 of this Chapter, as amended, shall apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use, and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures. Exception: Buildings or structures regulated by the International Residential Code, 2018 Edition.
- 3) **Plumbing.** The provisions of the International Plumbing Code, 2018 Edition, adopted pursuant to Article 4 of this Chapter, as amended, shall apply to the design, construction, quality of materials, erection, installation, alteration, repair, location,

relocation, replacement, addition to, use or maintenance of plumbing systems. Exception: Buildings or structures regulated by the International Residential Code, 2018 Edition.

- 4) **Mechanical.** The provisions of the International Mechanical Code, 2018 Edition, adopted pursuant to Article 5 of this Chapter, as amended, shall apply to the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of mechanical systems, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems. Exception: Buildings or structures regulated by the International Residential Code, 2018 Edition.
- 5) **Gas.** The provisions of the International Fuel Gas Code, 2018 Edition, adopted pursuant to Article 6 of this Chapter, as amended, shall apply to the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of fuel gas systems and gas-fired appliances, including gas piping from the point of delivery to the inlet connections of appliances and the installation and operation of gas appliances and related accessories. Exception: Buildings or structures regulated by the International Residential Code, 2018 Edition.
- 6) **Electrical.** The provisions of the 2017 National Electric Code (NFPA 70), 2017 Edition, adopted pursuant to Article 7 of this Chapter, as amended, shall apply to design, construction, quality of materials, erection, installation, alteration repair, location, relocation, replacement, addition to, use or maintenance of electrical systems. Exception: Buildings or structures regulated by the International Residential Code, 2018 Edition.

[HR-22-6-2, Sec. 1]
- 7) **Energy Conservation Code.** The provisions of the International Conservation Code, 2018 Edition, adopted pursuant to Article 8 of this Chapter, as amended, shall apply to the design and construction of buildings for the effective use and conservation of energy over the useful life of each building. Exception: Buildings or structures regulated by the International Residential Code, 2018 Edition.
- 8) **Swimming Pool and Spa Code.** The provisions of the International Swimming Pool and Spa Code, 2018 Edition, adopted pursuant to Article 9 of this Chapter, as amended, shall apply to the design, construction, alteration, movement, renovation,

replacement, repair and maintenance of swimming pools, spas, hot tubs, aquatic facilities and related equipment.

[HR-23-2-2. Sec.1]

13-104 **APPLICABILITY.** Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

- a) **Other Laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.
- b) **Application of References.** 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 or the applicable code, as the case may be.
- c) **Referenced Codes and Standards.** The codes and standards referenced in this Chapter, including the separate codes, as amended, adopted pursuant to the various Articles of this Chapter, shall be considered part of the requirements of this Chapter to the prescribed extent of such reference. Where differences occur between provisions of this Chapter and referenced codes and standards, the more restrictive shall govern.
- d) **Partial Invalidity.** In the event that any part or provision of this code is held to be illegal or void, it shall not have the effect of making void or illegal any of the other parts or provisions.
- e) **Existing Structures.** The legal occupancy of any structure existing on the date of adoption of this Chapter shall be permitted to continue without change, or as is otherwise deemed necessary by the building official for the general safety and welfare of the occupants and the public.

[HR-22-6-2, Sec. 1]

13-105 **ENFORCEMENT AGENCY; BUILDING OFFICIAL.** The Douglas County Department of Zoning and Codes shall administer and enforce the provisions of this Chapter and the official in charge thereof shall be known as the building official.

- a) **Appointment.** The Douglas building official shall be appointed by the Douglas County Administrator.
- b) **Deputies.** In accordance with the prescribed procedures of Douglas County, the building official shall have the authority to appoint a deputy

building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

[HR-22-6-2, Sec. 1]

13-106 DUTIES AND POWERS OF BUILDING OFFICIAL

- a) **General.** The building official is hereby authorized and directed to enforce the provisions of this Chapter. 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 compliance with the intent and purpose of this Chapter and the codes adopted pursuant to this Chapter. Such 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, demolition and moving of buildings and structures and their components, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this Chapter.
- c) **Notices and Orders.** The building official shall issue all necessary 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 qualified credentialed 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
- e) **Identification.** The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this Chapter.
- f) **Right of Entry and Inspection.** Absent exigent circumstances, when (1) it is necessary to enter a premises or structure to inspect to enforce or verify compliance with the provisions of this Chapter or other applicable law; or (2) the building official has reasonable cause to believe that (a) there exists upon a premises or in a structure or equipment upon a premises a condition which is contrary to or in violation of this Chapter or other applicable law, or (b) a condition exists upon a premises which

creates an unsafe structure, unsafe equipment, structure unfit for human occupancy, unlawful structure, or dangerous structure or premises, the building official is authorized to enter the premises or structure at reasonable times to inspect or to perform the duties imposed by this Chapter or other applicable law.

- 1) **By Consent.** If such premises or structure is unoccupied, the building official shall make a reasonable effort to locate the owner or person having charge or control of the premises or structure, present credentials, and request entry to portions of the premises or structure not open to the public. If the premises or structure is occupied, the building official shall attempt to make contact with the occupant, present proper credentials, and request entry to portions of the structure or premises that are not open to the public. If consent is given; the building official may enter the premises or structure to inspect or to perform the duties imposed by this Chapter or other applicable law.
- 2) **Administrative Search Warrant.** If the building official is unable to make contact with the owner or person having charge or control of the premises or structure, or the occupant, or the building official is denied consent to enter and inspect, or the building official believes it is unsafe or impractical under the circumstances to seek consent to enter and inspect, then the building official shall have recourse to the remedies provided by law to secure entry and inspection. Those remedies shall include seeking an administrative search warrant.
- 3) **Process for Seeking Administrative Search Warrant.** To obtain the administrative search warrant to enter and inspect, the building official shall present a sworn affidavit to a judge of the district court stating the grounds for the administrative search warrant, which shall include: (a) the name of the owner and/or occupant of the premises, if known or reasonably ascertainable; (b) the address or location of the premises; (c) a statement that the building official has reasonable cause to believe that it is necessary to enter the premises or structure to inspect to enforce or verify compliance with the provisions of this Chapter or other applicable law; or the building official has reasonable cause to believe that there exists upon the premises or in a structure or equipment upon the premises a condition which is contrary to or in violation of this Chapter or other applicable law, or a condition exists upon a premises which creates an unsafe structure, unsafe equipment, structure unfit for human occupancy, unlawful structure, or dangerous structure or premises; (d) the basis for the building official's reasonable cause to believe the condition or violation

identified in clause (c) exists, including without limitation observation of the premises or structure from areas accessible by the public, complaints from third parties, photographs and other images, video, law enforcement reports, statements or admissions by the owner or occupant, reasonable inferences of the building official, and any other reasonable basis; and (e) identification, with reasonable particularity, the area or areas of the premises, structure, or equipment sought for entry and inspection.

- 4) **Administrative Search Warrant: Contents.** The building official shall request that (a) absent exigent circumstances, the administrative search warrant specify that the building official and his or her designees as being authorized to enter the premises and structure and complete the inspection at any time between the hours of 8 a.m. and 6 p.m.; (b) the administrative search warrant describe with reasonable particularity the area or areas of the premises, structure, or equipment to be inspected; (c) the administrative search warrant direct the owner, occupant or operator of the premises to cooperate with the building official regarding access to the premises, structure, or equipment, to permit the inspection, and to not obstruct or interfere with the inspection; (d) the administrative search warrant authorize the building official to secure law enforcement to assist in the service and execution of the warrant, in the reasonable discretion of the building official; (e) the administrative search warrant authorize the building official to enter the premises or structure, have access to the equipment, and use reasonable force to obtain entry as may be necessary under the circumstances; and (f) the administrative search warrant not authorize the building official to seize any personal property or equipment, unless the property presents an imminent danger to life, property, or the public welfare, but the foregoing shall not prevent the building official from condemning any premises, structure, or equipment in accordance with this Chapter.
- g) **Department Records.** The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.
- h) **Liability.** The building official, member of the Board of Construction Codes Appeals or employee charged with the enforcement of this Chapter, while acting for Douglas County in good faith and without malice in the discharge of the duties required by this Chapter or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons

or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this Chapter shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this Chapter.

- i) **Approved Materials and Equipment.** Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.
- j) **Used Materials and Equipment.** The use of used materials which meet the requirements of this Chapter or new materials is permitted. Used equipment and devices shall not be reused unless approved by the building official.
- k) **Modifications.** Wherever 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, provided the building official shall first find that special individual reason makes the strict letter of this Chapter impractical and the modification is in compliance with the intent and purpose of this Chapter and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the department of building safety.
- l) **Flood Hazard Areas.** The building official shall not grant modifications to any provision related to flood hazard areas, as established by Section 1612.3 of the International Building Code, 2018 Edition, as the case may be, unless the Douglas County Floodplain Administrator has made a determination that:
 - 1) A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards inappropriate.
 - 2) A determination that failure to grant the modification would result in exceptional hardship by rendering the lot undevelopable.
 - 3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or resolutions.

- 4) A determination that the modification is the minimum necessary to afford relief, considering the flood hazard.
 - 5) Upon any such modification, the Floodplain Administrator shall submit to the applicant a written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.
- m) **Alternative Materials, Design and Methods of Construction and Equipment.** The provisions of this Chapter are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this Chapter, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.
- 1) **Research Reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this Chapter, shall consist of valid research reports from approved sources.
 - 2) **Tests.** Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, 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 jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

[HR-22-6-2, Sec. 1]

13-107 PERMITS

- a) **Required.** Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a

building or structure, or to erect, install, enlarge, alter, 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, shall first make application to the building official and obtain the required permit.

- b) **Annual Permit.** In lieu of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the building official is authorized to issue an annual permit upon application therefore to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.
- c) **Annual Permit Records.** The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such records at all times or such records shall be filed with the building official as designated.
- d) **Work Exempt from permit.** Exemptions from permit requirements of this Article shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Article or any other laws or regulations of Douglas County. Permits shall not be required for the following:
 - 1) Building.
 - (a) One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area is not greater than 200 square feet (18.58 m²), with a maximum allowable wall height of 10 feet, and is not connected to electricity, water, natural gas or propane, public sewer or a private sanitary system.
 - (b) Fences not over 7 feet (2134 mm) high.
 - (c) Decks not exceeding 200 square feet in area, that are not more than 30 inches above grade at any point, are not attached to a dwelling and do not serve the exit door required by Section R 311.4 of the International Residential Code. 2018 Edition.
 - (d) Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
 - (e) Water tanks supported directly upon grade if the capacity is not greater than 5,000 gallons (18,925 L) and the ratio of height to diameter or width is not greater than 2:1.

- (f) Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route.
- (g) Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- (h) Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18,925 L) and are installed entirely above ground.
- (i) Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- (j) Swings and other playground equipment accessory to detached one- and two-family dwellings.
- (k) Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
- (l) Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.
- (m) Agricultural Buildings. Constructing, moving, converting, extending, or enlarging a building to be used solely for agricultural purposes shall be exempt from the necessity of obtaining a building permit if the owner or owners fully completes and files with the building official an application containing information necessary for the building official to determine eligibility for an agricultural building exemption. Such application shall be limited to (1) a statement of the intended use of the building; (2) a description of the real estate upon which the proposed agricultural building is to be located, together with a description of the building or alterations with sufficient detail of size, location, and character or kind of proposed construction, to enable the building official to distinguish and identify it; (3) a statement of an owner acknowledging the owner or owners of the building must obtain a building permit and bring the building into compliance with the building code in the event its use subsequently changes and the building is no longer used solely for agricultural purposes; and (4) such other documents or evidence that the building official reasonably believes necessary to determine that the owner or tenant of the land on which the building is to be placed or constructed is engaged in agricultural pursuits and the building will be used as an agricultural building.

The building official shall not require the owner or owners to provide certificates or drawings of architects, engineers, or other professionals relating to the proposed agricultural building or alterations.

No fee shall be charged for requesting or receiving a building permit exemption under this subsection.

Upon receipt of such properly completed application and determining that the construction or other work is entitled to receive an exemption from the building permit requirement, the building official shall issue to the owner or owners of the building a document evidencing the agricultural building exemption.

Any owner or owners desiring an exemption from the building permit requirement with respect to any particular agricultural building shall apply for and obtain such exemption prior to commencement of the construction or other work. No construction or other work shall be exempt under this subsection unless and until a properly completed application has been filed with the building official and the building official has issued an agricultural building exemption with respect to the building. The failure of an owner or owners to apply for and receive an agricultural building exemption with respect to any building or alteration used solely for agricultural purposes, however, shall not preclude the building official from later issuing an agricultural building exemption with respect to such building or alteration.

The owner or owners of a building that is eligible for an agricultural building exemption pursuant to this subsection who fail to apply for and receive an agricultural building exemption prior to commencement of construction work shall not be subject to any fine or other penalty if an owner of the building submits an application to the building official before receiving any notice of noncompliance or other formal notice of violation.

- (n) For purposes of this subsection, an "agricultural building" and a "building to be used solely for agricultural purposes" is a structure designed, constructed, and used solely to do any one or combination of the following: (a) to house hay, grain, poultry, livestock, or other agricultural or horticultural products; (b) to sort, grade, wash, weigh, package, or otherwise prepare agricultural or horticultural products produced on site for market; (c) to prepare, sort, or house agricultural inputs if such agricultural inputs are to be planted or otherwise used in connection with agricultural pursuits (i) on site, (ii) on other property under common control of the owner or tenant of the property on which the building is located, or (iii) on

other property if the use on other property is ancillary to the use of such agricultural inputs on property under (i) or (ii); or (d) to house farm implements, tools and equipment used in connection with any of the foregoing.

Except as expressly provided above, a building is not an "agricultural building" or a "building to be used solely for agricultural purposes" if it is a place of human habitation or a place of employment where agricultural or horticultural products not produced on site are processed, treated or packaged; nor is it an agricultural building if it is a place used by the public (other than a temporary "farmer's market" predominantly for the sale of agricultural or horticultural products produced or grown on site).

The foregoing definition of agricultural building is solely for purposes of the building code and the owner's or owners' ability to obtain an exemption from the requirements of obtaining a building permit. A building used to sell agricultural products grown or produced off site may be an agricultural building for purposes of obtaining an exemption from obtaining a building permit if the predominate products sold are produced or grown on site, while such land use may still require a conditional use permit under applicable zoning regulations.

This subsection shall not exempt signs advertising or identifying agricultural uses such as farms. A building permit for such a sign, however, may be issued if the sign complies with all other applicable regulations and codes.

- 2) **Electrical.** Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.
 - (a) Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
 - (b) Temporary testing systems: A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.
 - (c) Listed cord-and-plug connected temporary decorative lighting.
 - (d) Reinstallation of attachment plug receptacles but not the outlets therefor.
 - (e) Replacement of branch circuit overcurrent devices of the required capacity in the same location.

3) **Gas.**

- (a) Portable heating, cooking or clothes drying appliances.
- (b) Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- (c) Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

4) **Mechanical.**

- (a) Portable heating appliances.
- (b) Portable ventilation appliances.
- (c) Portable cooling units.
- (d) Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
- (e) Replacement of any minor part that does not alter its approval of equipment or make such equipment unsafe.
- (f) Portable evaporative coolers.
- (g) Self-contained refrigeration system containing 10 pounds (5 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.
- (h) Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

5) **Plumbing.**

- (a) The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this Article.
 - (b) The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
- 6) **Emergency Repairs.** Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

- 7) **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 thereof, 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.
- 8) **Public Service Agencies.** A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.
- 9) **Preliminary Meeting.** When requested by the permit applicant or the building official, the permit applicant and the building official shall meet prior to the application for a permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this Chapter.
- 10) **Application for Permit.** To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the department of building safety for that purpose. Such application shall:
 - (a) Identify and describe the work to be covered by the permit for which application is made.
 - (b) Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
 - (c) Indicate the use and occupancy for which the proposed work is intended.
 - (d) Be accompanied by construction documents and other information as required in the applicable Article.
 - (e) State the valuation of the proposed work.
 - (f) Be signed by the applicant, or the applicant's authorized agent.
 - (g) Give such other data and information as required by the building official.

- 11) **Action on Application.** The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefore. If the building official is satisfied that the proposed work conforms to the requirements of this Chapter and laws and resolutions applicable thereto, the building official shall issue a permit therefore as soon as practicable.
- 12) **Time Limitation of Application.** An application for a permit for any proposed work shall be deemed to have been abandoned 180 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 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.
- 13) **Validity of Permit.** The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this Chapter or of any other applicable law, resolution or regulation. Permits presuming to give authority to violate or cancel the provisions of this Chapter or other law, resolution or regulation shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this Chapter or of any other laws, resolutions or regulations.
- 14) **Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.
- 15) **Suspension or Revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this Chapter wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this Chapter.

- 16) **Placement of Permit.** The building permit placard or permit copy shall be kept visible from the public right of way on the site of the work until the completion of the project.

[HR-22-6-2, Sec. 1]

13-108 FLOOR ROOF REQUIREMENTS

- a) **Live Loads Posted.** Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 50 psf (2.40 kN/m²), such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.
- b) **Issuance of Certificate of Occupancy.** A certificate of occupancy required by any provision of this Chapter shall not be issued until the floor load signs, required hereby have been installed.
- c) **Restrictions on Loading.** It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this Chapter.

[HR-22-6-2, Sec. 1]

13-109 SUBMITTAL DOCUMENTS

- a) **General.** Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted in two or more sets with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional. Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this Chapter.
- b) **Construction Documents.** Construction documents shall be in accordance with Sections R-106.1-R-106.5 in the 2018 International Residential Code and Sections [A]107.1-[A]107.5 in the 2018 International Building Code including a code footprint.
- 1) **Information on Construction Documents.** Construction documents shall be dimensioned and drawn upon suitable material.

Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, resolutions, rules and regulations, as determined by the building official.

- 2) **Fire Protection System Shop Drawings.** Shop drawings for the fire protection systems shall be prepared by a certified fire sprinkler designer and submitted to indicate conformance to this Chapter and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9 of the International Building Code, 2018 Edition.
- 3) **Means of Egress.** The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this Chapter. In other than occupancies in Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.
- 4) **Exterior Wall Envelope.** Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings. The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.
- 5) **Site Plan.** The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line

survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

- 6) **Design Flood Elevations; IBC.** Where design flood elevations are not specified with respect to building and structures regulated by Article 2 (i.e. the International Building Code), they shall be established in accordance with Section 1612.3.1 of the International Building Code, 2018 Edition.
- 7) **Information for Construction in Flood Hazard Areas; IRC.** For buildings and structures regulated by Article 3 (i.e. the International Residential Code) and located in whole or in part in the flood hazard areas as established by Table R301.2(1), construction documents shall include:
 - (a) Delineation of flood hazard areas, floodway boundaries and flood zones and the design flood elevation, as appropriate;
 - (b) The elevation of the proposed lowest floor, including basement; in areas of shall flooding (AO Zones), the height of the proposed lowest floor, including basement, above the highest adjacent grade;
- c) **Examination of Documents.** The building official shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this Chapter and other pertinent laws or regulations.
 - 1) **Approval of Construction Documents.** When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.
 - 2) **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 180 days after the effective date of this code and has not been abandoned.

- 3) **Phased Approval.** The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.
- 4) **Design Professional in Responsible Charge.** When it is required that documents be prepared by a registered design professional, the building official shall be authorized to 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, the owner shall 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.

- 5) **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.

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 found to be in general conformance to the design of

the building. The deferred submittal items shall not be installed until the deferred submittal documents have been approved by the building official.

- 6) **Amended Construction Documents.** Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents and may be subject to a plan review fee. A final certificate of occupancy shall not be issued until all construction documents have been reviewed and approved.
- 7) **Retention of Construction Documents.** One set of approved construction documents shall be retained by the building official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or other local laws.

[HR-22-6-2, Sec. 1]

13-110 TEMPORARY STRUCTURES AND USES

- a) **General.** 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 180 days. The building official is authorized to grant extensions for demonstrated cause.
- b) **Conformance.** Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure public health, safety and general welfare.
- c) **Temporary Power.** The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the National Electric Code, 2017 Edition, NFPA 70.
- d) **Termination of Approval.** 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.

[HR-22-6-2, Sec. 1]

13-111 FEES

- a) **Payment of Fees.** A permit shall not be valid until the fees prescribed herein have been paid. Nor shall an amendment to a permit or occupancy be released until the additional fee, if any, has been paid.
- b) **Schedule of Permit Fees.** On buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit pursuant to the codes adopted under this Chapter, a fee for each permit shall be paid as required according to the following table:

VALUATION PERMIT FEE SCHEDULE

Construction permit fees for new construction, additions & accessory structures shall be calculated by the following method:

- a. Multiply the total square footage of the structure by the applicable square footage construction cost set out in Table A.
- b. Determine the estimated actual construction cost.
- c. Apply the above values to the Total Valuation Table.

Construction permit fees for remodels, alterations, finished spaces and repairs, unless stated otherwise, all other permit fees shall be calculated by applying the estimated actual construction cost for commercial and residential projects.

The Building Official shall determine the applicable cost per square foot valuation in the tables for structures and uses not specifically listed by using the most analogous valuation.

TABLE A – Square Foot Construction Costs Table ^{a,b,c,d}

Group (2018 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage	263.06	254.15	247.55	237.53	223.05	216.6	229.9	207.42	199.94
A-1 Assembly, theaters, without stage	241.02	232.11	225.51	215.49	201.01	194.56	207.86	185.38	177.89
A-2 Assembly, nightclubs	205.93	199.8	1947.89	186.91	176.19	171.34	180.27	159.46	154.02
A-2 Assembly, restaurants, bars, banquet halls	204.93	198.8	192.89	185.91	174.19	170.34	179.27	157.46	153.02

A-3 Assembly, churches	243.83	234.92	228.32	218.3	204.21	198.79	210.67	188.58	181.10
A-3 Assembly, general, community halls, libraries, museums	204.02	195.11	187.51	178.49	163.01	157.56	170.86	147.38	140.89
A-4 Assembly, arenas	240.02	231.11	223.51	214.49	199.01	193.56	206.86	183.38	176.89
B Business	212.46	204.72	197.9	188.18	171.81	165.32	180.77	151.15	144.35
E Educational	222.69	214.99	208.81	199.81	186.17	176.74	192.93	162.78	157.80
F-1 Factory and industrial, moderate hazard	125.58	119.68	112.86	108.68	97.37	92.83	104.02	80.23	75.34
F-2 Factory and industrial, low hazard	124.58	118.68	112.86	107.68	97.37	91.83	103.02	80.23	74.34
H-1 High Hazard, explosives	117.37	111.47	105.65	100.47	90.40	84.87	95.81	73.27	0.00
H234 High Hazard	117.37	111.47	105.65	100.47	90.40	84.87	95.81	73.27	67.37
H-5 HPM	212.46	204.72	197.9	188.18	171.81	165.32	180.77	151.15	144.35
I-1 Institutional, supervised environment	211.58	204.34	198.27	190.28	175.02	170.20	190.53	156.95	152.25
I-2 Institutional, hospitals	355.95	348.21	341.39	331.67	314.48	0.00	324.26	293.82	0.00
I-2 Institutional, nursing homes	247.27	239.53	232.71	222.99	207.36	0.00	215.58	186.70	0.00
I-3 Institutional, restrained	241.59	233.85	227.03	217.31	202.46	194.97	209.90	181.80	173.00
I-4 Institutional, day care facilities	211.58	204.34	198.27	190.28	175.02	170.20	190.53	156.95	152.25
M Mercantile	153.55	147.41	141.50	134.53	123.48	119.63	127.88	106.75	102.31
R-1 Residential, hotels	213.59	206.35	200.28	192.29	176.78	171.95	192.54	158.7	154.00
R-2 Residential, multiple family	179.04	171.80	165.73	157.74	143.25	138.43	157.99	125.18	120.47

R-3 Residential, one- and two-family d	166.68	162.17	157.99	154.10	149.61	144.19	151.48	138.79	130.58
R-4 Residential, care/assisted living facilities	211.58	204.34	198.27	190.28	175.02	170.2	190.53	156.95	152.25
S-1 Storage, moderate hazard	116.37	110.47	103.65	99.47	88.40	83.87	94.81	71.27	66.37
S-2 Storage, low hazard	115.37	109.47	103.65	98.47	88.40	82.87	93.81	7.27	65.37
U Utility, miscellaneous	89.90	84.75	79.27	75.71	67.97	63.50	72.24	53.83	51.28

- a. PRIVATE GARAGES USE UTILITY, MISC;
- b. DEDUCT 20% FOR SHELL ONLY BUILDINGS;
- c. N.P.= NOT PERMITTED
- d. Unfinished basements (Group R-3) = \$23.20 per sq. ft.

TOTAL VALUATION

FEE

\$1 to \$500

\$23.50

\$501 to \$2,000

\$23.50 for the first \$500 plus \$3.05 for each additional \$100 or fraction thereof, to and including \$2,000.

\$2,000 to \$25,000

\$69.25 for the first \$2,000 plus \$10.89 for each additional \$ 1,000 or fraction thereof, to and including \$25,000.

\$25,001 to \$50,000

\$391.25 for the first \$25,000 plus \$10.10 for each additional \$1,000 or fraction thereof, to and including \$50,000.

\$50,001 to \$100,000

\$643.75 for the first \$50,000 plus \$7.00 for each additional \$1,000 or fraction thereof, to and including \$100,000.

\$100,001 to \$500,000

\$993.75 for the first \$100,000 plus \$5.60 for each additional \$1,000 or fraction thereof, to and including \$500,000.

\$500,001 to \$1,000,000

\$3,233.75 for the first \$500,000 plus \$4.75 for Each additional \$1,000 or fraction thereof, to

	and including \$1,000,000.
\$1,000,001 to \$5,000,000	\$5,608.75 for the first \$1,000,000 plus \$3.15 each Additional \$1,000 or fraction thereof, to and including \$5,000,000.
\$5,000,001 to \$15,000,000	\$17,980.92 for the first \$5,000,000 plus \$1.54 each additional \$1,000 or fraction thereof, to and including \$15,000,000.
\$15,000,001 and above	\$33,562,30 for the first \$15,000,000 plus \$1.02 each additional \$1,000 or fraction thereof.

Inspection and Other Fees:

- 1) Inspections outside of normal business hours (minimum charges – two hours) - \$47.00 per hour.
 - 2) Re-inspection fees assessed under provisions of Section 13-112 - \$47.00 per hour.
 - 3) Inspections for which no fee is specifically indicated (minimum charge - one-half hour) - \$47.00 per hour.
 - 4) Additional plan review required by changes, additions or revisions to approved plans (minimum charge - one-half hour) - \$47.00 per hour or the total hourly cost to Douglas County, whichever is the greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.
 - 5) Any person who commences any work before obtaining the necessary permits and paying the necessary permit fees shall pay an additional fee equal to 100 percent of the permit fee set forth above, which is in addition to all other required permit fees.
 - 6) The permit applicant shall pay costs of any third party plan review required by the size or complexity of the building project, as determined by the building official.
 - 7) Solar photovoltaic (PV) systems (up to 13.44 kW) and solar thermal systems requiring no structural changes to the building - \$115.00.¹ For every kW, measured in whole increments of 1 kW, over 13.44 kW the flat rate shall increase by \$10 per kW.
- c) **Building Permit Valuations.** The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If in the opinion of the building official, the valuation is underestimated on the application, the permit

shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. Final building permit valuation shall be set by the building official.

- d) **Disposition of Fees.** The building official shall keep, or cause to be kept, an accurate account of fees collected and received under the provisions of this Chapter and record the name of the person on whose account the same was paid, the date and the amount thereof together with the location of the proposed construction or installation to which the fees relate. The building official shall deposit the amount of the fees collected with the County Treasurer.
- e) **Work Commencing Before Permit Issuance.** Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to an additional fee established by the permit fee schedule, which shall be in addition to all other required permit fees.
- f) **Related Fees.** The payment of the fee for the 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 prescribed by law.
- g) **Fee Refund.** The building official may authorize the refunding of fees as follows:
 - 1) The full amount of any fee paid hereunder that was erroneously paid or collected.
 - 2) Not more than 50% of the permit fee paid when no work has been done under a permit issued in accordance with this Chapter.
 - 3) Not more than 50% of a plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

¹Flat fee covers plan review, inspection and one re-inspection. Submittal shall include structural details of the roof on which the system will be mounted. Structural Engineer's certification may be required. Installation shall be according to manufacturer's recommended method and the 2017 NEC.

[HR-22-6-2, Sec. 1]

13-112 INSPECTIONS.

- a) **General.** Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until

approved. 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 resolutions of Douglas County. Inspections presuming to give authority to violate or cancel the provisions of this Chapter or of other resolutions of Douglas County shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. The building official may order work exposed for inspection purposes and the permit applicant shall bear the cost thereof. If the permit applicant refuses to expose the work for inspection, the building official may expose the work, revoke the permit, or take other action as authorized by this Chapter or other applicable law. Neither the building official nor Douglas County shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

- b) **Preliminary Inspection.** 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.
- c) **Required Inspections.** The building official, upon notification, shall make the inspections set forth in this Article.
 - 1) **Footing, Foundation, and Structural Slab Inspection.** Footing, foundation, and structural slab inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations and structural slabs any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.
 - 2) **Concrete Slab and Under-Floor Inspection.** Concrete slab and under-floor inspections shall be made after 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 placed or floor sheathing installed, including the subfloor.
 - 3) **Lowest Floor Elevation.** In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the documentation required in Section 1612.4 of the International Building Code, 2018 Edition or Section R109.1.3 of the International Residential Code, 2018 Edition, as the case may be, shall be submitted to the building official.
 - 4) **Frame Inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fire-blocking and bracing are in

place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

- 5) **Lath and Gypsum Board Inspection.** Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished. Exception: Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.
 - 6) **Fire and Smoke-Resistant Penetrations.** Protection of joints and penetrations in fire-resistance- rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.
 - 7) **Energy Efficiency inspections.** Inspections shall be made to determine compliance with energy efficiency requirements and shall include, but not be limited to, inspections for: envelope insulation R- and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency.
 - 8) **Special Inspections.** For special inspections, see Chapter 17 of the International Building Code, 2018 Edition.
 - 9) **Final Inspection.** The final inspection shall be made after all work required by the building permit is completed.
 - 10) **Flood Hazard Documentation (Elevation Certificate).** If located in a flood hazard area, documentation of the elevations as required in Section 1612.4 of the International Building Code, 2018 Edition or Section R109.1.6.1 of the International Residential Code, 2018 Edition, as the case may be, shall be submitted to the building official prior to the final inspection.
 - 11) **Other Inspections.** In addition to the inspections specified in Sections 13 -112.3.1 through 13-112.3.10, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the department of building safety.
- d) **Inspection Agencies.** The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.
 - e) **Inspection Requests.** It shall be the duty of the holder of the building permit or their duly authorized agent to notify the building official when work is ready for inspection. it shall be the duty of the permit holder to

provide access to and means for inspections of such work that are required by this Chapter.

- f) **Approval Required.** 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 the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

[HR-22-6-2, Sec. 1]

13-113 **CERTIFICATE OF OCCUPANCY**

- a) **Use and Occupancy.** No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made, until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other resolutions of Douglas County. Exceptions:
- 1) Certificates of occupancy are not required for work exempt from permits under pursuant to this Article.
 - 2) Accessory buildings or structures.
- b) **Certificate Issued.** After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following:
- 1) The building permit number.
 - 2) The address of the structure.
 - 3) The name and address of the owner or the owner's authorized agent.
 - 4) A description of that portion of the structure for which the certificate is issued.
 - 5) A statement that the described portion of the structure has been inspected for compliance with the requirements of this Chapter for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
 - 6) The name of the building official.

- 7) The edition of the code under which the permit was issued.
 - 8) The use and occupancy, in accordance with the provisions of the applicable code.
 - 9) The type of construction as defined in the applicable code
 - 10) The design occupant load.
 - 11) If an automatic sprinkler system is provided, whether the sprinkler system is required.
 - 12) Any special stipulations and conditions of the building permit.
- c) **Revocation.** The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this Code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof, or its use or occupancy, is in violation of any ordinance or regulation or any of the provisions of this Chapter.

[HR-22-6-2, Sec. 1]

13-114 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 that is regulated by this code for which a permit is required, until 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.
- 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 this Code and the referenced and adopted codes and standards set forth therein in case of emergency where necessary to eliminate an immediate hazard to life or property or when such utility connection has been made without the required approval. 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 practical thereafter.

[HR-22-6-2, Sec. 1]

13-115 BOARD OF CONSTRUCTION CODES APEALS

- a) **General.** In order to determine the suitability of alternate materials and types of construction and in order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of the codes adopted pursuant to this Chapter, there shall be and is hereby created a Board of Construction Codes Appeals, consisting of 5 members who are qualified by experience and training to pass upon matters pertaining to building projects. The Board of Construction Codes Appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of Douglas County. Board of County Commissioners shall use reasonable efforts to appoint members to the Board of Construction Codes Appeals having one of the following qualifications: (1) a license professional engineer; (2) a licensed professional architect; (3) a building contractor or superintendent of building construction; or (4) a master plumber, electrician or other individual in the building trades. Each member of the Board of Construction Codes Appeals shall have had 10 years of experience, no less than 5 years of which shall have been in a position of responsible authority on building projects. No more than two members should be selected from the same profession, business, or trade, and at least one of the members should have professional registration and engineering experience as a structural, civil, or architectural engineer, or architect. Notwithstanding the foregoing, the failure of the members of the Board of Construction Codes Appeals to possess the foregoing qualifications shall not invalidate actions and determinations that the Board of Construction Codes Appeals makes. The building official shall be an ex-officio member and shall act as Secretary to the Board of Construction Codes Appeals. The Board of Construction Codes Appeals shall be appointed by the Board of County Commissioners for terms of office of 4 years. Notwithstanding the foregoing, the members of the Board of Construction Codes Appeals appointed and serving pursuant to the construction codes in place on the effective date of this Section shall continue as members of the Board of Construction Codes Appeals hereby created for the remainder of their appointed terms, subject to removal or resignation. The Board of Construction Codes Appeals shall adopt reasonable rules and regulations for conducting its investigations and shall render all decisions and findings in writing to the building official with a duplicate copy to the appellant, and may recommend to the Board of County Commissioners such new legislation as is consistent therewith. The Board of Construction Codes Appeals shall annually elect or reelect a Chair and a Vice-Chair from its membership.

- b) **Authority.** An application or appeal shall be based on a claim that the true intent of the applicable code or rules legally adopted thereunder have been incorrectly interpreted, the provisions of the applicable code do not fully apply, or an equally good or better form of construction is proposed. The Board of Construction Codes Appeals, however, shall not have the authority to waive requirements under the applicable code.
- c) **Rules, Meetings, and Records.** The Board of Construction Codes Appeals shall adopt rules to govern its proceedings in accordance with the provisions of this subsection.
 - 1) Meetings of the Board of Construction Codes Appeals shall be held at least once a month if there is business for the Board to consider. Additional meetings may be called at such other times as are determined by the Chair at any time or by the Board of Construction Codes Appeals at regular or special meeting.
 - 2) The Board of Construction Codes Appeals shall keep minutes of its proceedings, showing the vote of each member upon every question, or if absent or filing to vote, indicted such facts.
 - 3) The Board of Construction Codes Appeals shall keep records of hearings, examinations and other action. Such minutes and records shall be public records.
- d) **Appeals.** Any person whose application for a building permit requesting the use of an alternate material or type of construction has been denied by the building official, or who disagrees with the application of the Residential Code, Building Code, Mechanical Code, Plumbing Code, Fuel Gas Code, or Electric Code or other determination of the building official, may appeal the action of the building official to the Board of Construction Codes Appeals by serving written notice upon the building official and paying a \$100 application fee. The notice shall state the action being appealed, the reasons for appeal, and that the applicant shall pay all costs and expenses of tests deemed necessary by Board of Construction Codes Appeals in determining the merits of the appeals. The building official shall at once transmit the notice to the members of the Board of Construction Codes Appeals and schedule a hearing on the matter.
- e) **Authority of the Board of Construction Codes Appeals.** The Board of Construction Codes Appeals may reverse, affirm or modify the decision of the building official. All decisions of the Board of Construction Codes Appeals shall be by a majority of the members of the Board present and voting at which a quorum is present. Three members shall constitute a quorum for meeting purposes.

- f) **Disposition of Fee.** In the event the Board of Construction Codes Appeals reverses or modifies the decision of the building official, the \$100 application fee shall be refunded to the applicant. If the Board affirms the decision of the building official, the application fee shall be retained by Douglas County and deposited with the County Treasurer to the credit of the general fund.

[HR-22-6-2, Sec. 1]

13-116 VIOLATIONS AND STOP WORK ORDERS

- a) **Unlawful Acts.** It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish, use, or occupy any building, structure or equipment regulated by this Code, or cause the same to be done, in conflict with or in violation of any of the provisions thereof.
- b) **Notice of Violation.** The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition, use, or occupancy of a building or structure in violation of the provisions of this chapter, or in violation of a detail statement or a plan approved thereunder, or in violation of a permit or certificate issued under the provisions of this Chapter. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- c) **Violation and Penalties.** Any person who violates a provision of this Code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this Code, shall be guilty of a misdemeanor, punishable by a fine of not more than \$500 or by imprisonment for not more than one month, or by both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense. In addition to any other remedies provided by the code or other applicable law, the county or building official may bring civil suit to enjoin the violation of any provisions of the code. The availability or pendency of an appeal to the Board of Construction Code Appeals shall not preclude Douglas County or the building official from pursuing such civil or criminal actions, seeking any available remedy, including injunction, relating to any such violation, and the court need not delay or defer its adjudication of the case on the basis that such appeal may be available or pending before the Board of Construction Code Appeals.

- d) **Stop Work Orders.** Upon notice from the building official or his designee that work on any building or structure is being performed contrary to the provisions of any codes adopted in 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 the owner of the property involved, or to the owner's agent or to the person doing the work and shall state the conditions under which work will be permitted to resume. Where an emergency exists, the building official shall not be required to give a written notice prior to stopping work. 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 liable to a fine of not more than \$500 and such other penalties as prescribed by law.
- e) **Abatement and Injunction of Violation.** The imposition of the penalties herein prescribed shall not preclude the building official or Douglas County from instituting appropriate action to prevent unlawful construction or restrain, correct or abate a violation, or to prevent illegal use or occupancy of a building, structure, or premises, or to stop an illegal act, conduct, business or utilization of a building or other construction on or about any premises.

[HR-22-6-2, Sec. 1]

13-117 UNSAFE STRUCTURES AND EQUIPMENT

- a) **Condemnation.** All equipment, systems, devices and safeguards required by this Chapter, a previous statute or code applicable to the structure, premises or equipment, or other applicable law shall be maintained in good working order and repair. It shall be unlawful for an owner, operator or occupant to cause or permit any equipment, systems, devices and safeguards, or any other service, facility, equipment or utility required by this Chapter, a previous statute or code applicable to the structure, premises, or equipment, or other applicable law, to be removed, shut off, or discontinued from any occupied structure, except for such temporary interruption as necessary while repairs or alterations made in accordance with applicable law are in progress. Structures (including agricultural buildings), real property, or existing equipment that are or hereafter become unsafe, unsanitary, deficient, or in violation of applicable law because of inadequate means of egress facilities, inadequate light and ventilation, inadequate safety features, or which constitute a fire hazard or life-safety hazard, or are otherwise detrimental to public health, safety, or welfare, or that involve illegal or improper use, occupancy or inadequate maintenance, shall be condemned pursuant to

the provisions of this Chapter. Unsafe structures shall be taken down and removed or made safe, and real property shall be restored to a safe and compliant condition, as the building official deems necessary and as provided for in this Section. Structures, real property, or equipment may be condemned for any of the following reasons:

- 1) **Unsafe Structure.** An unsafe structure is a vacant structure that is not secured against entry or a structure that is found to be dangerous to life, health, property, or safety of the public or the occupants of the structure, including without limitation, by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains unsafe or improperly installed equipment, or is so damaged, decayed, dilapidated, structurally unsafe, or of such faulty construction or unstable foundation, that partial or complete collapse is possible.
- 2) **Unsafe Equipment.** Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the premises or within the structure which is in such disrepair or condition or is improperly installed or maintained that such equipment is a hazard to life, health, property or safety of the public or occupants of the premises or structure.
- 3) **Structure Unfit for Human Occupancy.** A structure is unfit for human occupancy whenever the building official finds that such structure is unsafe, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is structurally unsound or unsafe, unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.
- 4) **Unlawful Structure.** An unlawful structure is one occupied by more persons than permitted under this Chapter or other applicable law, or was erected, altered or otherwise occupied contrary to law.
- 5) **Dangerous Structure or Premises.** For the purpose of this Chapter, any structure or premises that has one or more of the following shall be considered dangerous and unsafe:
 - (a) The walking surface of any aisle, passageway, stairway, exit or other means of egress is so warped, worn loose, torn, or otherwise unsafe as to not provide safe and adequate means of egress.

(b) Any portion of a building, structure, or appurtenance that has been damaged by fire, earthquake, wind, flood, deterioration, neglect, abandonment, vandalism or by any other cause to such an extent that it is likely to partially or completely collapse, or to become detached or dislodged, or some portion of the foundation or underpinning of the building or structure is likely to fail or give way.

(c) The building or structure, or any portion thereof, is clearly unsafe for its use and occupancy, or is a threat to life or health.

(d) The building or structure is neglected, damaged, dilapidated, unsecured or abandoned so as to become an attractive nuisance to children who are unable to appreciate the risk the building or structure poses and might play in the building or structure to their danger, becomes a harbor for vagrants, criminals or immoral persons, or enables persons to resort to the building or structure for committing a nuisance or an unlawful act.

(e) Any building or structure, used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, damage, faulty construction or arrangement, inadequate light, ventilation, or otherwise, is unsanitary, unfit for human habitation, or in such a condition that is likely to cause sickness, disease, or injury.

(f) Any portion of a building which remains on a site after the demolition or destruction of the building or structure; or whenever any building or structure is abandoned so as to constitute such building or portion thereof as an attractive nuisance or hazard to the public.

(g) Notwithstanding the foregoing, however, the provisions of this Section relating to condemning structures and ordering abatement of unsafe or dangerous structures shall not apply to any agricultural building (see Section 13-107.4.1 for definition) unless the agricultural building actually presents a public nuisance that endangers public health, safety, and welfare.

- b) **Record.** The building official shall cause a report to be filed with the building official's records on an unsafe condition. The report shall state the occupancy of the structure, if any, and the nature of the unsafe condition.
- c) **Notice.** Whenever the building official has condemned a structure, real property, or equipment, the building official shall serve on the owner, agent or person in control of the premises, a written notice that describes the condition deemed unsafe, unlawful, or dangerous and specifies the

required repairs or improvements to be made to abate the unsafe condition, and the time to complete such repairs or improvements, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order. If the owner, agent or person in charge rejects or fails to comply within the time allowed, the building official shall have the authority to accept the terms of the order or to complete the repairs or demolition or otherwise remove the structure, equipment, system, or device, and to restore any real property to a safe and compliant condition, as reasonably necessary to protect public health, safety and welfare.

- d) **Method of Service.** Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested; (c) sent by certified or registered mail addressed to the owner at the address listed in the County tax records for the subject real property, with the return receipt requested; (d) posted conspicuously in or about the structure or real property affected by such notice, or (e) delivered in any other manner as prescribed by local law or reasonably calculated to reach the intended recipient. If sent by mail, the notice shall be deemed effective and complete three calendar days after mailing. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person occupying or responsible for the structure or real property shall constitute service of notice upon the owner.
- e) **Placarding.** Upon failure of the owner or person responsible to comply with the notice provisions within the time given (if any time is given), the building official shall post on the premises or on defective equipment, system or device, a placard bearing the word "Condemned" and a statement of the penalties provided for occupying the premises, operating the equipment or removing the placard.
- f) **Prohibited Occupancy.** Any structure, real property or equipment condemned and placarded by the building official shall be vacated as ordered by the building official, and shall not thereafter be occupied or used unless and until the building official authorizes. It shall be unlawful for any person to occupy a placarded premises or operate placarded equipment, and it shall be unlawful for any owner or any person responsible for the premises to permit anyone to occupy a placarded premises or operate placarded equipment. Any violator shall be subject

to the civil and criminal penalties provided for violations of the provisions of this Chapter.

- g) **Removal of Placard.** The building official shall remove the condemnation placard whenever the defect or defects upon which the condemnation and placarding action were based have been eliminated. Any person who defaces or removes a condemnation placard without the approval of the building official shall be deemed to have violated the provisions of this Chapter and shall be subject to the civil and criminal penalties provided for violations of the provisions of this Chapter.
- h) **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 this Chapter and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or when such utility connection has been made without approval. The building official shall notify the servicing utility and, whenever possible, the owner and occupant of the building, structures or service system of the decision to disconnect prior to taking such action. If not provided prior to disconnection, written notification shall be done as soon as practical thereafter.
- i) **Abatement.** The owner, operator, or occupant of a structure, premises, or equipment, system, or device deemed unsafe or dangerous by the building official shall abate or cause to be abated or corrected such unsafe or dangerous conditions either by repair, rehabilitation, demolition or other approved corrective action in the manner and within the timeframe specified by the building official. To the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with all applicable requirements of this Chapter, including the requirements of Section 101-[A]107.4.7 Chapter 1 of the International Building Code, 2018 Edition and the International Existing Building Code 2018 Edition or Appendix J of the International Residential Code, 2018 Edition, as the case may be.
- j) **Emergency Measures.** When, in the opinion of the building official, there is imminent danger of failure or collapse of a building or structure which endangers life, or when any structure or part thereof has fallen and life is endangered by the occupation of the structure, or when there is actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes, gases or vapors or the presence of toxic fumes, gases or materials, fire hazard, or operation of defective or dangerous equipment, or when any other

emergency condition exists, the building official may, without notice or hearing, order and require the occupants to vacate the premises forthwith. It shall be unlawful for any person to enter such structure, except for the purpose of securing the structure, making the required repairs, removing the hazardous condition, or of demolishing the same. Notwithstanding other provisions of this Chapter, whenever, in the opinion of the building official, there is imminent danger due to an unsafe condition, the building official may order the owner to perform the necessary work to be done to secure the structure to safeguard from imminent danger, including the boarding up or locking of openings to render such structure temporarily secure, whether or not the legal procedure described has been instituted; and shall cause such other action to be taken as the code official deems necessary to meet such imminent condition. If the owner fails to perform such work to secure the structure and safeguard from imminent danger, the building official may employ the necessary labor and materials to perform the required work as expeditiously as possible to secure the structure in an effort to provide the minimum safeguards from imminent danger. Costs incurred in the performance of emergency work shall be paid from the treasury of the jurisdiction on approval of the code official. The cost of such repairs shall be the responsibility of the owner and may be recovered in any civil or criminal action.

- k) **Appeals.** Appeals under this Section 13-117 may be made as follows:
- 1) **General.** Any person directly affected by a decision of the building official or any notice of violation, condemnation, other order issued under this Section 13-117 shall have the right to appeal to the Board of Construction Codes Appeals, provided that a written application for appeal is filed with the Director of the Zoning & Codes Department within 15 days after the day the decision, notice, or order was served (with the exception of Section 13-117.9 - Emergency Measures specified below). The appeal shall be based on a claim that the true intent of this Chapter has been incorrectly interpreted or that the provisions of this Chapter do not apply. An application for appeal shall state the specific reason or reasons for the appeal, shall provide all facts in support of the appeal, and shall state, with particularity, the way in which the true intent of this Chapter has been incorrectly interpreted or applied. An appeal under this Section shall be heard according to the procedures set forth in Section 13-115.
 - 2) **Emergency Measures.** To provide a prompt appeal for emergency notices, any person directly affected by a decision of the building official issued under Section 13-117.9 - Emergency Measures, shall

have the right to appeal to the County Administrator or the County Administrator's designee, provided that a written application for appeal is filed within 3 days after the day the decision, notice, or order was served, but any appeal not perfected within 3 days may still be made to the Board of Construction Codes Appeals within the timeframe specified above. The appeal shall be based on a claim that the true intent of this Chapter has been incorrectly interpreted or that the provisions of this Chapter do not apply. An application for appeal shall state the specific reason or reasons for the appeal, shall provide all facts in support of the appeal, and shall state, with particularity, the way in which the true intent of this Chapter has been incorrectly interpreted or applied. The decision of the County Administrator may be appealed to the Board of Construction Codes Appeals, provided that a written application for appeal is filed with the Director of the Zoning & Codes Department within 15 days after the day of the decision.

- 3) **Appeal Fees.** The appeal fees provided in Section 13-115 shall apply to appeals to the Board of Construction Codes Appeals and the County Administrator pursuant to this subsection. The fee must be paid within the timeframe for filing an appeal.
- 4) **Stays of Enforcement.** Except for Emergency Measures ordered pursuant to Section 13-117.9, appeals of notices, citations, and orders shall stay the enforcement of the notice, citation, or order until the appeal is heard by the appropriate board or official. Appeals of Emergency Measures ordered pursuant to Section 13-117.9 shall not stay the enforcement of the notice, citation, or order, but a decision of the County Administrator or the County Administrator's designee overruling or invalidating a decision, notice or order of the building official on an appeal of Emergency Measurers shall stay the enforcement of the decision, notice or order pending the decision of the Board of Construction Codes Appeals.

[HR-22-6-2, Sec. 1]

13-118 QUALIFICATIONS AND LICENSURE

- a) **Licensure of Plumbers.** All plumbers practicing their trade within the unincorporated area of Douglas County shall hold a valid license from a Kansas or Missouri jurisdiction. This license shall be subject to the requirement of K.S.A. 12-1508 et seq. and any amendment thereto. Any property owner shall be allowed to do his or her own plumbing work; provided, however, after the second failure to pass a plumbing inspection, a licensed plumber will be required to finish the work.

[HR-23-2-2, Sec 1.]

- b) **Licensure of Electricians.** All electricians practicing their trade within the unincorporated area of Douglas County shall hold a valid license from a Kansas jurisdiction. This license shall be subject to the requirement of K.S.A. 12-1525 et seq. and any amendment thereto. Any property owner shall be allowed to do his or her own electrical work; provided, however, after the second failure to pass an electrical inspection, a licensed electrician will be required to finish the work.
- c) **Licensure of Mechanical Mechanics.** All mechanical heating, ventilation and air conditioning mechanics practicing their trade within the unincorporated area of Douglas County shall hold a valid license from a Kansas jurisdiction. This license shall be subject to the requirement of K.S.A. 12-1540 et seq. and any amendment thereto. Any property owner shall be allowed to do his or her own mechanical work; provided, however, after the second failure to pass an electrical inspection, a licensed mechanical heating, ventilation and air conditioning mechanic will be required to finish the work.
- d) **Licensure of Contractors.** There shall be three separate classes of required Contractor Licenses, described generally as follows:
 - 1) Class A, General Contractor. The Class "A" License entitles the holder thereof to construct, remodel, repair, and demolish any structure. All Class "A" Contractors practicing their trade within the unincorporated area of Douglas County shall hold a valid license from a Kansas jurisdiction. Property owners shall not be allowed to do their own contractor work.
 - 2) Class B, Building Contractor. The Class "B" License shall entitle the holder thereof to construct, remodel, repair, and demolish all structures not exceeding three (3) stories in height. All Class "B" Contractors practicing their trade within the unincorporated area of Douglas County shall hold a valid license from a Kansas jurisdiction. Property owners shall not be allowed to do their own contractor work.
 - 3) Class C, Residential Contractor. The Class "C" License shall entitle the holder thereof to construct, remodel, repair, and demolish single-family or duplex residences and building accessory thereto. All Class "C" Contractors practicing their trade within the unincorporated area of Douglas County shall hold a valid license from a Kansas jurisdiction. Any owner occupant property owner shall be allowed to do his or her own contractor work; provided, however, after the second failure to pass an electrical inspection, a licensed contractor will be required to finish the work.

[HR-22-6-2, Sec. 1]

ARTICLE 2. RESIDENTIAL CODE

13-201 **ADOPTION OF INTERNATIONAL RESIDENTIAL CODE.** The International Residential Code, 2018 Edition, including the following Appendix Chapters:

- Appendix E Manufactured Housing Used as Dwellings
- Appendix F Radon Control Methods
- Appendix J Existing Buildings and Structures
- Appendix P Sizing of Water Piping systems
- Appendix Q Tiny House
- Appendix R Light Straw-Clay Construction
- Appendix S Strawbale Construction

as published by the International Code Council, is hereby adopted as the "Residential Code" of Douglas County, Kansas, for regulating and governing the construction, alteration, movement, enlargement, replacement, repair, equipment, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with separate means of egress in the unincorporated areas of Douglas County, Kansas as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions, and said Residential Code are hereby referred to, adopted, and made a part hereof, as if fully set out herein, with the additions, insertions, deletions and changes hereinafter provided.

The regulations hereby adopted, as amended, shall be known as the Residential Code of Douglas County, Kansas, hereinafter interchangeably referred to as the "Code" or the "Residential Code."

[HR-22-6-2, Sec. 1]

13-202 **COPIES.** Not less than one copy of the International Residential Code, 2018 Edition, marked and stamped in the manner provided by K.S.A. 12-3304, shall be filed with the County Clerk and shall be open to inspection and available to the public at reasonable business hours. Subsequent references to the "Residential Code" shall mean the International Residential Code, 2018 Edition, as adopted and amended herein.

[HR-22-6-2, Sec. 1]

13-203 **AMENDMENTS TO RESIDENTIAL CODE.** The International Residential Code, 2018 Edition is amended or supplemented as provided below.

- a) Chapter 1 of the Residential Code is deleted and replaced with the provisions of Article 1 of this Chapter 13.
- b) **Climatic and geographic design criteria.** Buildings shall be constructed in accordance with the 2018 International Residential Code, as adopted and modified by the provisions of the Article. Additional criteria are hereby established and are set forth in Table R301.2 (1).
- c) **Table R301.2 (1). Climatic and Geographic Design Criteria.** Table R301.2 (1) is completed and inserted to read as follows:

Table R301.2 (1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA											
GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^e	ICE BARRIER UNDERLAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^d (mph)	Topographic effects ^k		Weathering ^a	Frost line depth ^b	Termite ^c					
20 lbs psf	115 mph	No	A	Severe	30"	Moderate to Heavy	4° F	No	See note g below	778	56° F

MANUAL J DESIGN CRITERIAⁿ

Elevation	Latitude	Winter Heating	Summer Cooling	Altitude Correction	Indoor Design Temperature	Design Temperature Cooling	Heating Temperature Difference
833	39°N	10	95	.975	70°F	75°F	60
Cooking Temperature Difference			Coincident Wet Bulb	Daily Range			
20		76	M				

For SI: 1 pound per square foot = 0.0479kPa, 1mile per hour = 0.447 m/s.

- a. Where weathering requires a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with the weathering index, "negligible," "moderate" or "severe" for concrete as determined from Figure R301.2(4). The grade of masonry units shall be determined from ASTM C34, C55, C62, C73, C90, C129 C145, C216, or C652.

- b. Where the frost line depth requires deeper footings than indicated in Figure R403.1(1), the frost line depth strength required weathering shall govern. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. This part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(5)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 971/2-percent values for winter from Appendix D of the International Plumbing Code. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official. [Also see Figure R301.2(1).]
- f. This part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The date of Douglas County's entry into the National Flood Insurance Program and date of adoption of the first code or ordinance for management of flood hazard areas was 03/02/1981, (b) the Date of the Flood Insurance Study is 08/05/2010, and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or the most recent flood hazard map adopted by Douglas County.
- h. In accordance with Sections R905.1.2, R905.4.3.1, R905.6.3.1, R905.7.3.1, and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."
- i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES" Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- l. In accordance with Figure R301.2(5)A, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- m. In accordance with Section R301.2.1.2, the jurisdiction shall indicate the wind-born debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
- n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1/ of 1b from ACCA Manual J or established criteria determine by the jurisdiction.
- o. The jurisdiction shall fill in this section of the table using the Ground Snow Loads in Figure R301.2(6).

d) **Section R313.2 One- and Two-Family Dwellings Automatic Fire Systems.** First sentence is amended to read: An automatic residential fire sprinkler system may be installed in one-and two-family dwellings. [Changed from "shall be installed" to "may be installed".]

e) **Section N1101.14 (R401.3) Certificate (Mandatory).** A permanent certificate shall be completed by the builder or registered design professional and posted on the electrical panel. The certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall list the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, crawl space wall and/or floor) and ducts outside conditioned spaces; U-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration, and the results from any required duct system and building envelop air leakage test done on the building. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall list "gas-fired unvented room heater," "electric furnace,"

or “baseboard electric heater,” as appropriate. An efficiency shall not be listed for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.

- f) **Table N1102.1. (R402.1.1). Insulation and Fenestration Requirements by Component.** Table N1102.1. (R402.1.1) is amended to read as follows:

Table N1102.1.1 (R402.1.1) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT ^a										
CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ^k	FLOOR R-VALUE	BASEMENT ^c WALL R-VALUE	SLAB ^d R-VALUE AND DEPTH ^{hi}	CRAWL SPACE ^e WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or +5 ^h	8/13	19	5/13 ^f	0	5/13
4 except Marine	0.32	0.55	0.40	49	19 or +2 ^h	8/13	19	10/13	10, 2ft _i	10/13
5 and Marine 4	0.32	0.55	NR	49	20 or 13+5 ^h	13/17	30 ^g	15/19	10, 2ft ⁱ	15/19
6	0.32	0.55	NR	49	20+5 or 13+10 ^h	15/20	30 ^g	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	38	20+5 or 13+10 ^h	19/21	38 ^g	15/19	10, 4 ft	15/19

- a. R-values are minimums. U-factors and solar heat gain coefficient (SHGC) are maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation, the installed R-value of insulation shall not be less than the R-value specified in the table.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. **Exception:** In Climate Zones 1 through 3, skylights shall be permitted to be excluded from glazed fenestration SHGC requirements provided the SHGC for such skylights does not exceed 0.30.
- c. “10/13” means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation on the interior of the basement wall. Alternatively, compliance with “15/19” shall be R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home.
- d. R-5 insulation shall be provided under the full slab area of a heated slab in addition to the required slab edge insulation R-values for slabs as indicated in the table. The slab edge insulation for heated slabs shall not be required to extend below the slab.
- e. There are no SHGC requirements in the Marine Zone.
- f. Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.10 and Table N1101.10. Alternatively insulation sufficient to fill the framing cavity providing not less than an R-value of R-19.
- g. The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, “13+5” means R-13 cavity insulation plus R-5 continuous insulation.
- h. Mass walls shall be in accordance with Section N1102.2.5. The second R-value applies where more than half of the insulation is on the interior of the mass wall.

- g) **Section N1102.2.9 (R402.2.9)** of the 2018 International Residential Code is hereby amended to read as follows:

- h) **Section N1102.2.9 (R402.2.9) Basement walls.** Walls associated with conditioned basements shall be insulated from the top of the basement

wall down to 10 feet (3048) below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall meet this requirement unless the floor overhead is insulated in accordance with Section N1102.1.2 and N1102.2.8.

- 1) **Exception:** Basement walls that are otherwise exposed shall be insulated from the top of the basement wall down 3 feet (914mm) below grade or the basement floor, whichever is less.
- i) **Sections N1103.3.2.1 (R403.3.2.1) Sealed air handler.** Air handlers shall have a manufacturer's designation for an air leakage of not greater than 2 percent of the design airflow rate when tested in accordance with ASHRAE 193.
- j) **Sections N1103.3.3 (E403.3.3) Duct testing (Mandatory).** Ducts shall be pressure tested to determine air leakage by one of the following methods:
 - 1) Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. Registers shall be taped or otherwise sealed during the test.
 - 2) Post construction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exceptions:

- 1) A duct air-leaking test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
 - 2) A duct air-leakage test shall not be required for ducts serving heat or energy recover ventilators that are not integrate with the duct serving heating or cooling systems.
 - 3) A duct air leakage test shall not be required where a whole house air leakage test is performed.
 - 4) A written report of the results shall be signed by the party conducting the test and provided to the Building Official.
- k) **Section N1103.5.1.1 (R403.5.1.1) Circulation systems.** Heated water circulation systems may be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the

water in the circulation loop is at the desired temperature and when there is no demand for hot water.

- l) **Section N110.3.5.3 (R403.5.3) 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 from the water heater to a distribution manifold.
 - 3) Buried in piping Supply and return piping in recirculation systems
- m) **Section N1106.4 (E406.4) ERI-based compliance.** Compliance based on an ERI analysis required that the rated design be shown to have an ERI less than or equal to the appropriate value listed in Table N1106.4 when compared to the ERI reference design.

TABLE N1106.4 (R406.4)
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
1	52
2	52
3	51
4	70
5	55
6	54
7	53
8	53

- n) **Section M140.3 Equipment and appliance sizing.** Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. Prior to permit issuance, those calculations shall be provided to the Zoning and Codes Department and shall include the following:
 - 1) The capacity of each piece of heating and cooling equipment:
 - 2) The calculation shall include, but is not limited to window efficiency and sizes, insulation R-values for floor, wall, and ceiling, orientation of the house, house color, and roof color; and

- 3) The calculations shall be submitted with every new one and two-family dwelling or any addition that will change the heating and cooling load of such a dwelling.
- 4) **Exception:** Building additions less than 100 square feet in area.

[HR-22-6-2, Sec. 1]

13-204 The 2018 International Residential Code is hereby amended by adding sections M1603.1, M1603.1.1, M1603.1.2, M1603.1.3, M1603.1.4, and M1603.1.5, which read as follows

- a) **Section M1601.1 Duct design.** Duct systems serving heating, cooling and ventilation equipment shall be unstacked in accordance with the provisions of this section and ACCA Manual D, the appliance manufacture's installation instructions, or other approved methods. A drawing of each duct system, including the size and length of each duct trunk, branch, and CFM of each duct branch run, shall be on site prior to the rough-in mechanical inspection.
- b) **M1601.1.1 Above-ground duct systems.** Above-ground duct systems shall conform to the following:
 - 1) Equipment connected to duct systems shall be designed to limit discharge air temperature to not greater than 250°F (121°C).
 - 2) Factory-made ducts shall be listed and labeled in accordance with UL 181 and installed in accordance with the manufacturer's instructions.
 - 3) Fibrous glass duct construction shall conform to the SMACNA Fibrous Glass Duct.
 - 4) Construction Standards or NAIMA Fibrous Glass Duct Construction Standards.
 - 5) Field-fabricated and shop-fabricated metal and flexible duct constructions shall conform to the SMACNA HVAC Duct Construction Standards-Metal and Flexible except as allowed by Table M1601.1.1. Galvanized steel shall conform to ASTM A 653. The use of gypsum products to construct return air ducts or plenums is permitted, provided that the air temperature does not exceed 125°F (52°C) and exposed surfaces are not subject to condensation.
 - 6) Duct systems shall be constructed of materials having a flame spread index of not greater than 200.
 - 7) Stud wall cavities and the spaces between solid floor joists to be used as air plenums shall comply with the following conditions:

- (1) These cavities or spaces shall not be used as a plenum for supply air.
 - (2) These cavities or spaces shall not be part of a required fire-resistance-rated assembly.
 - (3) Multiple floors shall not utilize the same stud wall cavity to convey air.
 - (4) Stud wall cavities and joist-space plenums shall be isolated from adjacent concealed spaces by tight-fitting fireblocking in accordance with Section R602.8.
 - (5) Stud wall cavities in the outside walls of building envelope assemblies shall not be utilized as air plenums.
- 8) Volume dampers, equipment, and other means of supply, return, and exhaust air adjustment used in system balancing shall be provided with access.

[HR-22-6-2, Sec. 1]

13-205 The 2018 International Residential Code is hereby amended by adding Sections M1603.1, M1603.1.1, M1603.1.2, M1603.1.4, and M1603.1.5, which reads as follows:

- a) **M 1603.1 Flexible Air Connectors.** Flexible air connectors, both metallic and nonmetallic, shall be tested in accordance with UL 181. Such connectors shall be listed and labeled as Class 0 or Class 1 flexible air connectors and shall be installed in accordance with the International Mechanical Code Section 304.1.
- b) **M1603.1.1 Connector length.** Flexible air connectors shall be limited in length to 14 feet (1467) mm.).
- c) **M1603.1.2 Connector penetration limitations.** Flexible air connectors shall not pass through any wall, floor or ceiling.
- d) **M1603.1.3 Air temperature.** The design temperature of air to be conveyed in flexible air ducts and flexible air connectors shall be less than 250°F (121°C).
- e) **M1603.1.4 Flexible air duct and air connector clearance.** Flexible air ducts and air connectors shall be installed with a minimum clearance to an appliance as specified in the appliance manufacturer's installation instructions.
- f) **M1603.1.5 Location.** Flexible air connectors may only be used for environmental exhaust when located within conditioned space.

[HR-22-6-2, Sec. 1]

13-206 **Section G2406. Appliance location. The following is added:** Appliances burning liquefied petroleum gas (LPG) or liquid fuel may be installed in a basement, a pit, an underfloor space, below grade or similar location; provided, however, that each area in which such appliances are located shall be equipped with a listed and approved liquefied petroleum gas or liquid fuel detection alarm (110-Volt with a battery backup, with all detectors in new construction being permanently wired into the electrical system if such permanently wired detectors are reasonably available at a comparable price in Douglas County). Detectors shall sound an alarm audible in all areas of the dwelling unit and be installed per the manufacturer's installation instructions.

a) **Section G2406.2 (303.3) Prohibited locations.** Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, hot tub rooms, storage closets, or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:

- 1) The appliance is a direct-vent appliance installed in accordance with the condition of the listing and the manufacturer' instructions.
- 2) Vented room heaters, wall furnaces, vented decorative appliances, vented gas fireplaces, vented gas fireplace heaters and decorative appliances for installation in vented solid fuel-burning fireplaces are installed in rooms that meet the required volume criteria of Section G2407.5.
- 3) A single wall-mounted unvented room heater is installed in a bathroom and such unvented room heater is equipped as specified in Section 621.6, has an input rating not greater than 6,000 Btu/h (1.76kW), and a carbon monoxide detector, meeting the requirements of Section R315, is installed in the same room as the appliance. The bathroom shall meet the required volume criteria of Section 304.5.
- 4) A single wall-mounted unvented room heater is installed in a bedroom and such unvented room heater is equipped as specified in Section 621.6, has an input rating not greater than 10,000 Btu/h (2.93 kW), and a carbon monoxide detector, meeting the requirements of Section R315, is installed in the same room as the appliance. The bedroom shall meet the required volume criteria of Section 304.5.
- 5) The appliance is installed in a room or space that opens only into a bedroom or bathroom, and such room or space is used for no other purpose and is provided with a solid weather-stripped door equipped with an approved self-closing device. All combustion air

shall be taken directly from the outdoors in accordance with Section G2407.6.

- b) **Section G2417.4.1 Fuel Gas Test Pressure.** Amended to read: The test pressure to be used shall be not less than one and one-half time the proposed maximum working pressure, but not less than 10 psig (69 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe. [Changed test pressure from 3 psig to 10 psig.]
- c) **Section P2503.5.1. Rough Plumbing.** Amended to read: DWV systems shall be tested on completion of the rough piping installation by water or air with no evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough piping has been installed, as follows:
 - 1) Water test. Each section shall be filled with water to a point not less than 10 feet (3048mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.
 - 2) Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34kPa) or 10 inches of mercury column (34kPa). This pressure shall be held without introduction of additional air for a period of 15 minutes. [Changed to allow air test on plastic DWV.][HR-23-2-2, Sec. 1]
- d) **Section P2603.5.1. Sewer Depth.** Amended to read: Building sewers that connect to private sewage disposal systems shall be not less than 12 inches (304 mm) below finished grade at the point of septic tank connection. Building sewers shall be not less than 12 inches (304 mm) below grade. [Inserted number of inches and millimeters in two locations.]
- e) **Section P2713.4 Prohibited location is added.** In no case shall tubs be installed head to head.
- f) **Section P3005.2.3. Building drain and building sewer junction.** The junction of the building drain and the building sewer shall be served by a cleanout that is located at the junction or within 10 feet (3048 mm) developed length of piping of the junction and shall be located outside the building. For the requirements of this section, removal of a water closet shall not be required to provide cleanout access.

- g) **Section P3005.4.2. Building drain and sewer size and slope.** Amended to read: Pipe sizes and slope shall be determined from Table P3005.4.2 on the basis of drainage load in fixture units (d.f.u.) computed from Table P3004.1; however no building sewer shall be less than four (4) inches in diameter. [Added minimum sewer size requirement of 4 inches.]
- h) **Section P3113.5 Total Size of Vents.** New Section added read: The drainage piping of each building and each connection to a public sewer or a private sewage disposal system shall be vented by means of one or more vent pipes, the aggregate cross-sectional area of which shall not be less than that of the largest required building sewer. Exception: When connected to a common building sewer, the drainage piping of two buildings located on the same lot and under one ownership may be vented by means of piping sized in accordance with Table P3005.4.2, provided the aggregate cross-sectional area of all vents is not less than that of the largest required common building sewer.
- i) **Section P3114.2. Installation of Air Admittance Valves.** The valves shall only be installed with prior approval from the Zoning & Codes Department, in accordance with the requirements of this section and the manufacturer's installation instructions. Air admittance valves shall be installed after the DWV testing required by Section P2503.5.1 or P2503.5.2 has been performed. [Added requirement to get prior approval for air admittance valves.]
- j) **Section P3114.3. Air Admittance Valves, Where Permitted.** The valves shall only be permitted in the alterations of existing buildings with prior approval from the Zoning and Codes Department. Individual vents, branch vents, circuit vents and stack vents shall be permitted to terminate with a connection to a permitted air admittance valve. Individual and branch type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain. [Added requirement to get prior approval for air admittance valves.]
- k) **Section P3114.8. Air Admittance Valves, Prohibited Installations.** Amended to read: Air admittance valves without an engineered design shall not be used to vent sumps or tanks of any type and shall not be installed in new construction.
 - 1) **Exception:** Island fixtures in new construction may be vented by air admittance valves that comply with Section 3114. [Added prohibition to use of non- engineered air admittance valves in new construction and added exception.]
- l) **Section P3201.2. Trap Seals and trap seal protection.** Amended to read: Traps shall have a liquid seal not less than 2 inches (51mm) and not more than 4 inches (102 mm). [Eliminated requirement of trap

primers or deep seals on floor drains for residential (still required for commercial).]

- m) **Section E3601.6.2. Service disconnect location.** Amended to read:
The service disconnecting means shall be installed at a readily accessible location either outside of the building or structure or inside the building or structure at a point limited to a distance not to exceed five (5) feet from the point of penetration of the service entrance raceway into the structure. The service entrance conductors shall be protected by a raceway from the point of service to the termination at the service disconnecting means enclosure. Service disconnecting means shall not be installed in bathrooms. Each occupant shall have access to the disconnect servicing the dwelling unit in which they reside.
- n) **Section E3604.5 Service masts as supports.** Amended to read:
Where a service mast is used for the support of service-drop conductors, it shall be a galvanized rigid conduit with a minimum trade size diameter of two (2) inches and of adequate strength to withstand the strain imposed by the service drop. Where the service mast projects above the roof surface in excess of three (3) feet, the mast shall be supported by braces or guys to withstand safely the strain imposed. Where raceway-type service masts are used, all equipment shall be approved. Only power service drop conductors shall be permitted to be attached to a service mast. [Added minimum requirement of 2-inch rigid conduit.]
- o) **Section E3609.3 Bonding for Other Systems.** Amended to read: An intersystem bonding termination for connecting intersystem bonding conductors required for other systems shall be provided external to enclosures at the service or metering equipment enclosure and at the disconnecting means for any additional buildings or structures. The intersystem bonding termination shall comply with the following:
 - 1) It shall be accessible for connection and inspection.
 - 2) It shall consist of a set of terminals with the capacity for connection of not less than three intersystem bonding conductors.
 - 3) It shall not interfere with opening the enclosure for a service, building or structure disconnecting means, or metering equipment.
 - 4) Where located at the service equipment, it shall be securely mounted and electrically connected to an enclosure for the service equipment, or shall be mounted at one of these enclosures and connected to the enclosure or to the grounding electrode conductor with a minimum 6 AWG copper conductor.
 - 5) Where located at the disconnection means for a building or structure, it shall be securely mounted and electrically connected to

the metallic enclosure for the building or structure disconnecting means, or shall be mounted at the disconnecting means and connected to the metallic enclosure or to the grounding electrode conductor with a minimum 6 AWG copper conductor.

- 6) It shall be listed as grounding and bonding equipment. [Deleted allowance in #4 for intersystem bonding on meter or raceway.]
- p) **Section E3611.2. Accessibility. Amended to read:** All mechanical elements used to terminate a grounding electrode conductor or bonding jumper to the grounding electrodes that are not buried or concrete encased shall be accessible. The location of the grounding electrode conductor connection to the grounding electrodes shall be permanently stated on a plaque or directory on the service disconnecting means.
- q) **Section E3703.8. Sump Pumps.** Sump pumps shall be served by an individual branch circuit. The circuit and its single receptacle outlet shall be in addition to any other outlets required by Section E3901.
- r) **Section E3902 General.** This section added. Ground-fault circuit-interrupter protection for personnel shall be provided as required in Sections E3901.2 through E3902.13. Arc-fault Circuit-Interrupter protection shall be provided as required by Sections E3902.14 through E 3902.16.

Exceptions:

- 1) A single receptacle outlet for refrigerators, freezers, garage door openers and sump pumps located within dedicated space for each appliance that in normal use, are not easily moved from one place to another and that cord-and-plug connected shall be permitted to be installed in accordance with Section E3909.
- 2) Arc-Fault Circuit-Interrupter protection shall be permitted to be omitted from 120 volt single station smoke detectors.
- s) **Section E3902.7 Sink receptacles and washing machines.** 125-volt, single-phase, 15- and 20-ampere receptacles that are located within 6 feet (1829) of the top inside edge of the bowl of the sink shall have ground-fault circuit-interrupter protection for personnel. [210.8(A)(7)]
 - 1) **Exception:** 125-volt, single-phase, 15- and 20-ampere single receptacles located within dedicated space serving washers, microwave ovens, ice maker, warming ovens and dishwasher.
- t) Sections E3902.9 and E3902.10 are deleted.
- u) **Section E3902.16. Arc-fault circuit-interrupter protection.** Amended to read: All branch circuits that supply 120-volt, single-phase, 15- and 20-ampere outlets installed in bedrooms only shall be protected by a

listed arc-fault circuit interrupter installed to provide protection of the branch circuit.

Exceptions:

- 1) Where a listed AFC is installed at the first outlet to provide protection for the remaining portion of the branch circuit, the portion of the branch circuit between the branch-circuit over-current device and such outlet shall be wired with metal outlet and junction boxes and RMC, MC, EMT or steel armored cable, Type AC meeting the requirements of Section E3908.8.
 - 2) AFC protection is not required for a branch circuit supplying only a fire alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, MC, EMT, or steel armored cable Type AC meeting the requirements of Section E3908.8.
- v) **Section E4002.14. Tamper-resistant receptacles. Amended to read:**
In areas specified in Section E 3901.1, 125-volt, 15- and 20-ampere receptacles may be listed tamper-resistant receptacles.

[HR-22-6-2, Sec. 1]

13-207 **SEVERABILITY.** If any section, subsection, sentence, clause or phrase in this Article or in the Residential Code is, for any reason, held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions hereof. The Board declares that it would have passed this code, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid.

[HR-22-6-2, Sec. 1]

13-208 **EXISTING RIGHTS OR VIOLATIONS.** Nothing in this Article or in the Residential Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or resolution repealed in connection with the adoption of the Residential Code; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this

[HR-22-6-2, Sec. 1]

ARTICLE 3. BUILDING CODE

13-301 **ADOPTION OF INTERNATIONAL BUILDING CODE.** The International Building Code, 2018 Edition, including the following Appendix Chapters:

Appendix

as published by the International Code Council, be and is hereby adopted as the "Building Code" of the Douglas County, Kansas, for regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures in the unincorporated areas of Douglas County, Kansas as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Building Code are hereby referred to, adopted, and made a part hereof, as if fully set out herein, with the additions, insertions, deletions and changes hereinafter provided.

The regulations hereby adopted, as amended, shall be known as the Building Code of Douglas County, Kansas, hereinafter interchangeably referred to as the "Code" or the "Building Code."

This Code shall not apply to the extent that the Residential Code adopted pursuant to Article 2 of this Chapter applies.

[HR-22-6-2, Sec. 1]

13-302 **COPIES.** Not less than one copy of the International Building Code, 2018 Edition, marked and stamped in the manner provided by K.S.A. 12-3304, shall be filed with the County Clerk and shall be open to inspection and available to the public at reasonable business hours. Subsequent references to the "Building Code" shall mean the International Building Code, 2018 Edition, as adopted and amended herein.

[HR-22-6-2, Sec. 1]

13-303 **AMENDMENTS TO BUILDING CODE.** The International Building Code, 2018 Edition is amended or supplemented as provided below.

- a) Chapter 1 of the Building Code is deleted and replaced with the provisions of Article 1 of this Chapter 13.

- b) **13-303.2 Section 1612.3. Establishment of flood hazard areas.** The title of the flood insurance study referred to and incorporated by reference in Section 1612.3 is most recently adopted The Flood Insurance Study for the Unincorporated Territory of Douglas County, Kansas.
- c) **13-303.3 Section 3412.2. Applicability.** The applicability date in Section 3412.2 is August 1, 2022.

[HR-22-6-2, Sec. 1]

- 13-304 **SEVERABILITY.** If any section, subsection, sentence, clause or phrase in this Article or in the Building Code is, for any reason, held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions hereof. The Board declares that it would have passed this code, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid.

[HR-22-6-2, Sec. 1]

- 13-305 **EXISTING RIGHTS OR VIOLATIONS.** Nothing herein or in the Building Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or resolution repealed in connection with the adoption of the Building Code; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation.

[HR-22-6-2, Sec. 1]

- 13-306 **Section 423.4 Group E Occupancies.** In areas where the shelter design wind speed for tornadoes is 250 MPH in accordance with Figure 304.2(1) of ICC 500, all new Group E occupancies with an occupant load of 50 or more shall have a storm shelter constructed in accordance with ICC 500.

- a) Exceptions:
 - 1) Group E day care facilities.
 - 2) Group E occupancies accessory to places of religious worship.
 - 3) Buildings meeting the requirements for shelter design in ICC 500.

[HR-22-6-2, Sec. 1]

- 13-307 **Section 423.4.1 Required occupant capacity.** The required occupant capacity of the storm shelter shall include all of the buildings on the site, and shall be greater than the following:
- a) The total occupant load of the classrooms, vocational rooms, and offices in the Group E occupancy.
 - b) The occupant load or any indoor assembly space that is associated with the Group E occupancy.
 - c) Exceptions: Where a new building is being added to an existing Group E campus, and where the area of the new building does not increase the floor area of the classrooms, vocational rooms, and offices on the campus by more than 25%, the storm shelter shall at a minimum accommodate the required occupant capacity for the new building.

[HR-22-6-2, Sec. 1]

ARTICLE 4. PLUMBING CODE

- 13-401 **ADOPTION OF INTERNATIONAL PLUMBING CODE.** The International Plumbing Code, 2018 Edition, including the following Appendix Chapters:

Appendix E Sizing of Water Piping System

Appendix F Structural Safety

as published by the International Code Council, be and is hereby adopted as the "Plumbing Code" of the Douglas County, Kansas, for regulating and governing the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of plumbing systems in the unincorporated areas of Douglas County, Kansas as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Plumbing Code are hereby referred to, adopted, and made a part hereof, as if fully set out herein, with the additions, insertions, deletions and changes hereinafter provided.

[HR-22-06-2, Sec. 1]

- 13-402 **COPIES.** Not less than one copy of the International Plumbing Code, 2012 Edition, marked and stamped in the manner provided by K.S.A. 12-3304, shall be filed with the County Clerk and shall be open to inspection and available to the public at reasonable business hours. Subsequent references

to the "Plumbing Code" shall mean the International Plumbing Code, 2012 Edition, as adopted and amended herein.

[HR-22-06-2, Sec. 1]

13-403 **AMENDMENTS TO PLUMBING CODE.** The International Plumbing Code, 2012 Edition is amended or supplemented as provided below.

- a) Chapter 1 of the Plumbing Code is deleted and replaced with the provisions of Article 1 of this Chapter 13.
 - 1) **Section 305.4.1. Sewer Depth.** Amended to read: The minimum building sewer depth is inserted in Section 305.4.1 as (i) 12 inches (304 mm) below finished grade at the point of septic tank connection; and (ii) 12 inches (304 mm) below grade for other building sewers. [Inserted number of inches and millimeters in two locations.] ?? should this be in here?
 - 2) **Section 312.3. Drainage and vent air test.** The first sentence of Section 312.3, prohibiting use of air for testing plastic piping, is deleted. The remainder of the Section remains as written.
 - 3) **Section 312.5. Water supply system test.** Amended to read: Upon completion of a section of or the entire water supply system, the system, or portion completed, shall be tested and proved tight under a water pressure not less than the working pressure of the system; or by an air test of not less than 50 psi (344 kPa). This pressure test shall be held for not less than 15 minutes. The water utilized for tests shall be obtained from a potable source of supply. The required tests shall be performed in accordance with this section and Section 107.
 - 4) **Section 710.1. Maximum fixture unit load.** Amended to read: The maximum number of drainage fixture units connected to a given size of building sewer, building drain or horizontal branch of the building drain shall be determined using Table 710.1(1); however no building sewer shall be less than four (4) inches in diameter. The maximum number of drainage fixture units connected to a given size of horizontal branch or vertical soil or waste stack shall be determined using table 710.1(2).
 - 5) **13-403.5 Section 903.1. Roof extension.** The standard minimum vent pipe roof extension is inserted in Section 903.1 as six (6) inches (152mm) above the roof.
 - 6) **Section 906.6 Aggregate size of vents is added.** The drainage piping of each building and each connection to a public sewer or a

private sewage disposal system shall be vented by means of one or more vent pipes, the aggregate cross-section area of which shall not be less than that of the largest required building sewer, as determined from Table 710.1(1). Vent pipes from fixtures located upstream from pumps, ejectors, backwater valves, or other devices that in any way obstruct the free flow of air and other gases between the building sewer and the outside atmosphere shall not be used for meeting the cross-section area venting requirements of this section.

(a) **Exception:** When connected to a common building sewer, the drainage piping of two (2) or more buildings, located on the same lot and under one (1) ownership, may be vented by means of piping sized in accordance with Table 710.1 (1), provided the aggregate cross-section area of all vents is not less than that of the largest required common building sewer.

- 7) **Section 918.2 Installation.** The valves shall only be installed with prior approval from the Zoning and Codes Department, in accordance with the requirements of this section, and in accordance with the manufacture's installation instruction. Air admittance valves shall be installed after the DWV test required by Section 312.2 or 312.3 has been performed.
- 8) **Section 918.2 Where permitted.** The valves shall only be permitted in the alterations of existing buildings with prior approval from the Zoning and Codes Department. Individual, branch and circuit vents shall be permitted to terminate with a connection to an individual or branch-type air admittance valve in accordance with Section 918.3.1. Stack vents and vent stacks shall be permitted to terminate to stack-type air admittance valves in accordance with Section 918.3.1.
- 9) **Section 918.8 Prohibited installations.** Air admittance valves shall not be installed in new construction and in non-neutralized special waste systems as described in Chapter 8 except where such valves are in compliance with ASSE 1049, are constructed of materials approve in accordance with Section 702.5 and are tested for chemical resistance in accordance with ASTM F 1412. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves without an engineered design shall not be utilized to vent sumps or tanks of any type.
- (a) **Exception:** Island fixtures in new construction may be vented by air admittance valves that comply with Section 918.

[HR-22-06-2, Sec. 1]

13-404 **SEVERABILITY.** If any section, subsection, sentence, clause or phrase in this Article or in the Plumbing Code is, for any reason, held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions hereof. The Board declares that it would have passed this code, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid.

[HR-22-6-2, Sec. 1]

13-405 **EXISTING RIGHTS OR VIOLATIONS.** Nothing herein or in the Plumbing Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or resolution repealed in connection with the adoption of the Plumbing Code; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation.

ARTICLE 5. MECHANICAL CODE

13-501 **ADOPTION OF INTERNATIONAL MECHANICAL CODE.** The International Mechanical Code, 2018 Edition, as published by the International Code Council, be and is hereby adopted as the Mechanical Code of Douglas County, Kansas, regulating and governing the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of mechanical systems in the unincorporated areas of Douglas County, Kansas as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Mechanical Code are hereby referred to, adopted, and made a part hereof, as if fully set out herein, with the additions, insertions, deletions and changes hereinafter provided.

The regulations hereby adopted, as amended, shall be known as the Mechanical Code of Douglas County, Kansas, hereinafter interchangeably referred to as the "Code" or the "Mechanical Code."

This Code shall not apply to the extent that the Residential Code adopted pursuant to Article 2 of this Chapter applies. [HR-22-6-2, Sec. 1]

13-502 **COPIES.** Not less than one copy of the International Mechanical Code, 2018 Edition, marked and stamped in the manner provided by K.S.A. 12-3304,

shall be filed with the County Clerk and shall be open to inspection and available to the public at reasonable business hours. Subsequent references to the "Residential Code" shall mean the International Mechanical Code, 2018 Edition, as adopted and amended herein. [HR-22-6-2, Sec. 1]

13-503 **AMENDMENTS TO MECHANICAL CODE.** The International Mechanical Code, 2018 Edition is amended or supplemented as provided below.

- a) Chapter 1 of the Mechanical Code is deleted and replaced with the provisions of Article 1 of this Chapter 13.

[HR-22-6-2, Sec. 1]

13-504 **SEVERABILITY.** If any section, subsection, sentence, clause or phrase in this Article or in the Mechanical Code is, for any reason, held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions hereof. The Board declares that it would have passed this code, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid. [HR-22-6-2, Sec. 1]

13-505 **EXISTING RIGHTS OR VIOLATIONS.** Nothing herein or in the Mechanical Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or resolution repealed in connection with the adoption of the Mechanical Code; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation. [HR-22-6-2, Sec. 1]

13-506 **Section 303.3 Prohibited locations.** Fuel-fired appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces:

- a) Sleeping rooms.
- b) Bathrooms.
- c) Toilet rooms.
- d) Storage closets.
- e) Surgical rooms.
- f) Hot tub rooms or saunas.

[HR-22-6-2, Sec. 1]

13-507 **Section 1004.6.1 Emergency Shutoff.** Any Boiler, whether for building heat or domestic hot water, having 200,000 Btu input and above, shall have an emergency shutoff located outside the boiler room. The switch must be labeled with a red tag and white letters that clearly read "EMERGENCY BOILER SHUTOFF".

- a) **Exception:** When approved by the State Boiler Inspector, the switch may be located inside the boiler room.

[HR-22-6-2, Sec. 1]

ARTICLE 6. FUEL GAS CODE

13-601 **ADOPTION OF INTERNATIONAL FUEL GAS CODE.** The International Fuel Gas Code, 2018 Edition, as published by the International Code Council, be and is hereby adopted as the Fuel Gas Code of Douglas County, Kansas, regulating and governing fuel gas systems and gas-fired appliances in the unincorporated areas of Douglas County, Kansas as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Fuel Gas Code are hereby referred to, adopted, and made a part hereof, as if fully set out herein, with the additions, insertions, deletions and changes hereinafter provided.

The regulations hereby adopted, as amended, shall be known as the Fuel Gas Code of Douglas County, Kansas, hereinafter interchangeably referred to as the "Code" or the "Fuel Gas Code."

This Code shall not apply to the extent that the Residential Code adopted pursuant to Article 2 of this Chapter applies.

[HR-22-6-2, Sec. 1]

13-602 **COPIES.** Not less than one copy of the International Fuel Gas Code, 2018 Edition, marked and stamped in the manner provided by K.S.A. 12-3304, shall be filed with the County Clerk and shall be open to inspection and available to the public at reasonable business hours. Subsequent references to the "Residential Code" shall mean the International Fuel Gas Code, 2012 Edition, as adopted and amended herein. [HR-22-6-2, Sec. 1]

13-603 **AMENDMENTS TO FUEL GAS CODE.** The International Fuel Gas Code, 2018 Edition is amended or supplemented as provided below.

- a) Chapter 1 of the Fuel Gas Code is deleted and replaced with the provisions of Article 1 of this Chapter 13.
- b) **Section 303.3 Prohibited locations.** Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, hot tub rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:
 - 1) Chapter 1 of the Fuel Gas Code is deleted and replaced with the provisions of Article 1 of this Chapter 13.
 - 2) Vented room heaters, wall furnaces, vented decorative appliances, vented gas fireplaces, vented gas fireplace heaters and decorative appliances for installation in vented solid fuel-burning fireplaces are installed in rooms that meet the required volume criteria of Section 304.5.
 - 3) A single wall-mounted unvented room heater is installed in a bathroom and such unvented room heater is equipped as specified in Section 621.6, has an input rating not greater than 6,000 Btu/h (1.76kW), and a carbon monoxide detector, meeting the requirements of Section R315 of the 2018 International Residential Code, is installed in these same room as the appliance. The bathroom shall meet the required volume criteria of Section 304.5.
 - 4) A single wall-mounted unvented room heater is installed in a bathroom and such unvented room heater is equipped as specified in Section 621.6, has an input rating not greater than 10,000 Btu/h (2.93kW), and a carbon monoxide detector, meeting the requirements of Section R315 of the 2018 International Residential Code, is installed in the same room as the appliance. The bedroom shall meet the required volume criteria of Section 304.5.
 - 5) The appliance is installed in a room or space that opens only into bedroom or bathroom, and such room or space is used for no other purpose and is provided with a solid weather-stripped door equipped with an approved self-closing device. All combustion air shall be taken directly from the outdoors in accordance with Section 304.6.
- c) Section 406.4.1. Fuel Gas Test Pressure. Section 406.4.1 is amended so that the minimum test pressure in is increased from 3 psig (20 kPa gauge) to 10 psig (69 kPa gauge).

[HR-22-6-2, Sec. 1]

13-604 **SEVERABILITY.** If any section, subsection, sentence, clause or phrase in this Article or in the Fuel Gas Code is, for any reason, held to be

unconstitutional or invalid, such decision shall not affect the validity of the remaining portions hereof. The Board declares that it would have passed this code, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid.

- 13-605 **EXISTING RIGHTS OR VIOLATIONS.** Nothing herein or in the Fuel Gas Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or resolution repealed in connection with the adoption of the Fuel Gas Code; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation. [HR-22-6-2, Sec. 1]

ARTICLE 7. ELECTRICAL CODE

- 13-701 **ADOPTION OF NATIONAL ELECTRIC CODE.** The National Electric Code, 2017 Edition, NFPA 70, including the following Appendix Chapters, as published by the National Fire Protection Association, be and is hereby adopted as the "Electric Code" of the Douglas County, Kansas, regulating and governing electrical systems and appliances in the unincorporated areas of Douglas County, Kansas as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Electric Code are hereby referred to, adopted, and made a part hereof, as if fully set out herein, with the additions, insertions, deletions and changes hereinafter provided.

The regulations hereby adopted, as amended, shall be known as the Electric Code of Douglas County, Kansas, hereinafter interchangeably referred to as the "Code" or the "Electric Code."

This Code shall not apply to the extent that the Residential Code adopted pursuant to Article 2 of this Chapter applies.

[HR-22-6-2, Sec. 1]

- 13-702 **COPIES.** Not less than one copy of the National Electric Code, 2017 Edition, NFPA 70, marked and stamped in the manner provided by K.S.A. 12-3304, shall be filed with the County Clerk and shall be open to inspection and available to the public at reasonable business hours. Subsequent references to the "Electric Code" shall mean the National Electric Code, 2017 Edition, NFPA 70, as adopted and amended herein. [HR-22-6-2, Sec. 1]

13-703 **AMENDMENTS TO ELECTRIC CODE.** The National Electric Code, 2017 Edition, NFPA 70 is amended or supplemented as provided below.

- a) **Section 230.28 Service Masts as Supports.** Amended to read:
Where a service mast is used for the support of service-drop conductors, it shall be a galvanized rigid conduit with a minimum trade size diameter of two (2) inches and of adequate strength to withstand the strain imposed by the service drop. Where the service mast projects above the roof surface in excess of three (3) feet, the mast shall be supported by braces or guys to withstand safely the strain imposed. Where raceway-type service masts are used, all equipment shall be approved. Only power service drop conductors shall be permitted to be attached to a service mast. [Added minimum requirement of 2-inch rigid conduit.]
- b) **Section 230.70(A) (1) Readily Accessible Location.** Amended to read:
The service disconnecting means shall be installed at a readily accessible location either outside of the building or structure or inside the building or structure at a point limited to a distance not to exceed six (6) feet from the point of penetration of the service entrance raceway into the structure. The service entrance conductors shall be protected by a raceway from the point of service to the termination at the service disconnecting means enclosure. [Added 3' horizontal distance limitation.]
- c) **Section 250.94 Bonding for Other Systems.** Amended to read: An intersystem bonding termination for connecting intersystem bonding conductors required for other systems shall be provided external to enclosures at the service or metering equipment enclosure and at the disconnecting means for any additional buildings or structures. The intersystem bonding termination shall comply with the following:
 - 1) Be accessible for connection and inspection.
 - 2) Consist of a set of terminals with the capacity for connection of not less than three intersystem bonding conductors.
 - 3) Not interfere with opening the enclosure for a service, building or structure disconnecting means, or metering equipment.
 - 4) At the service equipment, be securely mounted and electrically connected to an enclosure for the service equipment, or be mounted at one of these enclosures and be connected to the enclosure or to the grounding electrode conductor with a minimum 6 AWG copper conductor.
 - 5) At the disconnecting means for a building or structure, be securely mounted and electrically connected to the metallic enclosure for the building or structure disconnecting means, or be mounted at the disconnecting means or be connected to the metallic enclosure or

to the grounding electrode conductor with a minimum 6 AWG copper conductor.

- 6) The terminals shall be listed as grounding and bonding equipment. [Deleted allowance in #4 for intersystem bonding on meter or raceway.]

[HR-22-6-2, Sec. 1]

13-704 **SEVERABILITY.** If any section, subsection, sentence, clause or phrase in this Article or in the Electric Code is, for any reason, held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions hereof. The Board declares that it would have passed this code, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid. [HR-22-6-2, Sec. 1]

13-705 **EXISTING RIGHTS OR VIOLATIONS.** Nothing herein or in the Electric Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or resolution repealed in connection with the adoption of the Electric Code; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation. [HR-22-6-2, Sec. 1]

ARTICLE 8. ENERGY CONSERVATION CODE

13-801 **ADOPTION OF THE ENERGY CONSERVATION CODE.** The International Conservation Code, 2018 Edition, as published by the International Code Council, be and is hereby adopted as the Energy Conservation Code of Douglas County, Kansas regulating and governing minimum requirements for energy-efficient buildings using prescriptive and performance-related provisions in the unincorporated areas of Douglas County, Kansas as herein provided; providing for the issuance, provisions, penalties, conditions and terms of said Energy Conservation Code are hereby referred to, adopted, and made a part hereof, as if fully set out herein, with the additions, insertions, deletions and changes hereinafter provided.

The regulations hereby adopted, as amended, shall be known as the Energy Conservation Code of Douglas County, Kansas, hereinafter interchangeably referred to as the "Code" or the "Energy Conservation Code"

[HR-22-6-2, Sec. 1]

- 13-802 **COPIES.** Not less than one copy of the International Energy Conservation Code, 2018 Edition, marked and stamped in a manner provided by K.S. A. 12-3304, shall be filed with the County Clerk and shall be open to inspection and available to the public at reasonable business hours. Subsequent references to the “Energy Code” shall mean the International Conservation Code, 2018 Edition, as adopted and amended herein. [HR-22-6-2, Sec. 1]
- 13-803 **AMENDMENTS TO THE INTERNATIONAL ENERGY CONSERVATION CODE.** The International Energy Conservation Code, 2018 Edition is amended or supplemented as set forth in the succeeding sections of this Article. These amendments shall not serve to delete, modify, or amend any discretely numbered section or subsection of the 2018 International Energy Conservation Code, unless the section or subsection is specifically identified as being deleted, modified, or amended. [HR-22-6-2, Sec. 1]
- 13-804 **CERTIFICATE (Mandatory).** A permanent certificate shall be completed by the builder or other approved party and posted on the electrical panel. The certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall list the predominant R-values of insulation installed in or on ceiling, roofs, walls, foundation components such as slabs, basement walls, crawl space walls and floors and ducts outside conditioned spaces; U-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration, and the results from any required duct system and building system and building envelope air leakage testing performed on the building. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall indicate the type and efficiencies of heating, cooling, and service water heating equipment. Where a gas-fired unvented room heater, electric furnace or baseboard electric heater is installed in the residence, the certificate shall indicate “gas-fired unvented room heater,” “electric furnace,” or baseboard electric heater,” as appropriate. An efficiency shall not be listed for gas-fired unvented room heater, electric furnaces, or electric baseboard heaters. [HR-22-6-2, Sec. 1]
- 13-805 Table N1102.1. (R402.1.1). Insulation and Fenestration Requirements by Component.

Table N1102.1.1 (R402.1.1)
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a

CLIMATE ONE	FENESTRATION U-FACTOR	SKYLIGHT ^b U-FACTOR	GLA ED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE ^k	FLOOR R-VALUE	BASEMENT ^c WALL R-VALUE	SLAB ^d R-VALUE AND DEPTH ^{hi}	CRAWL SPACE ^c WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0

2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or 13 +5 h	8/13	19	5/13 ^f	0	5/13
4 except Marine	0.32	0.55	0.40	49	19 or 13 +2 h	8/13	19	10/13	10, 2fti	10/13
5 and Marine ⁴	0.32	0.55	NR	49	20 or 13 + 5 ^h	13/17	30 ^g	15/19	10, 2fti	15/19
6	0.32	0.55	NR	49	20+5 or 13 + 10 ^h	15/20	30 ^g	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	49	20+ 5 or 13+ 10 ^h	15/20	38 ^g	15/19	10, 4 ft	15/19

- a) R-values are minimums. U-factors and solar heat gain coefficient (SHGC) are maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation, the installed R-value of insulation shall not be less than the R-value specified in the table.
- b) The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
 - 1) **Exception:** In Climate Zones 1 through 3, skylights shall be permitted to be excluded from glazed fenestration SHGC requirements provided the SHGC for such skylights does not exceed 0.30.
- c) "10/13" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation on the interior of the basement wall. Alternatively, compliance with "15/19" shall be R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home.
- d) R-5 insulation shall be provided under the full slab area of a heated slab in addition to the required slab edge insulation R-values for slabs as indicated in the table. The slab edge insulation for heated slabs shall not be required to extend below the slab.
- e) There are no SHGC requirements in the Marine Zone.
- f) Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and Table 301.1. Alternatively insulation

sufficient to fill the framing cavity providing not less than an R-value of R-19.

- g) The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, "13+5" means R-13 cavity insulation plus R-5 continuous insulation.
- h) Mass walls shall be in accordance with Section E402.2.5. The second R-value applies where more than half of the insulation is on the interior of the mass wall.

[HR-22-6-2, Sec. 1]

13-806 **Section 402.2.9 Basement walls.** Walls associated with conditioned basements shall be insulated from the top of the basement wall down to 10 feet (3048 mm) below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall comply with this requirement except where the floor overhead is insulated in accordance with Section R402.1.2 and R402.2.8.

- a) **Exception:** Basement walls that are otherwise exposed wall be insulated from the top of the basement wall down to 3 feet (914mm) below grade or the basement floor, whichever is less.

[HR-22-6-2, Sec. 1]

13-807 **Section R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour in Climate zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with RESNET/IC 380, ASTM E779 or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascal). Where required by the code official, testing shall be conducted by an approved third part. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

- a) During testing:
 - 1) Exterior windows and doors, fireplace, and stove doors shall be closed, but not sealed, beyond the intended weather-stripping or other infiltration control measures.
 - 2) Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.

- 3) Interior doors, where installed at the time of the test, shall be open.
- 4) Exterior or interior terminations for continuous ventilation systems shall be sealed.
- 5) Heating and cooling systems, where installed at the time of the test, shall be turned off.
- 6) Supply and return register, where installed at the time of the test, shall be fully open.

Exception: When all reasonable efforts by an approved third party cannot verify an air leakage rate not exceeding three air changes per hour in Climate Zone 4, a written report of the efforts and results shall be made and signed by the party conducting the test and shall be provided to the code official. The code official is authorized to approve administratively a building or structure having a maximum of three and on-half air changes per hour.

[HR-22-6-2, Sec. 1]

13-808 **Section R404.3.3 Duct Testing (Mandatory).** Ducts shall be pressure tested to determine air leakage by one of the following methods:

- a) **Rough-in test:** Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
- b) **Postconstruction test:** Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.
 - 1) Exceptions:
 - (a) A duct air-leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
 - (b) A duct air-leakage test shall not be required for ducts serving heat or energy recovery ventilators that are not integrated with the ducts serving heating or cooling systems.

A written report of the results of the test shall be signed by the party conducting.

[HR-22-6-2, Sec. 1]

13-809 **Section R403.5.3 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: Removed two requirements.

- a) Piping located outside the condition space.
- b) Piping from the water heater to a distribution manifold.
- c) Piping located under a floor slab.
- d) Buried in piping.
- e) Supply and return piping in recirculation systems other than demand recirculation systems.

[HR-22-6-2, Sec. 1]

13-810 **Section R403.5.1.1 Circulation systems.** Heated water circulation systems may be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water. [HR-22-6-2, Sec. 1]

13-811 TABLE N1106.4 (R406.4), MAXIMUM ENERGY RATING INDEX

Climate Zone 4, Energy Rating Index changed from 62 to 70

TABLE
N1106.4
(R406.4)
MAXIMUM
ENERGY
RATING
INDEX

CLIMATE ZONE	ENERGY RATING INDEX
1	52
2	52
3	51
4	50
5	55
6	54
7	53
8	53

[HR-22-6-2, Sec. 1]

ARTICLE 9. SWIMMING POOL AND SPA CODE

13-901 **ADOPTION OF SWIMMING POOL AND SPACE CODE.** The International Swimming Pool and Spa Code, 2018 Edition, including the Appendix Chapter.

As published by the International Code Council, be and is hereby adopted as the “Swimming Pool and Spa Code” of the Douglas County, Kansas, for regulating and governing the design, construction, alteration, movement, renovation, replacement, repair and maintenance of swimming pools, spas, hot tubs, aquatic facilities and related equipment in the unincorporated areas of Douglas County, Kansas, as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, and conditions and terms of said Swimming Pool and Spa Code are hereby referred to, adopted, and made a part hereof, as if fully set out herein, with the additions, insertions, deletions and changes hereinafter provided.

The regulations hereby adopted, as amended, shall be known as the Swimming Pool and Spa Code of Douglas County, Kansas, hereinafter interchangeably referred to as the “Code” or the “Pool and Spa Code.”

[HR-22-6-2, Sec. 1]

13-902 **COPIES.** Not less than one copy of the International Swimming Pool and Spa Code, 2018 Edition, marked and stamped in the manner provided by K.S.A. 12-3304, shall be filed with the County Clerk and shall be open to inspection and available to the public at reasonable business hours. Subsequent references to the “Pool and Spa Code” shall mean the International Swimming Pool and Spa Code, 2018 Edition, as adopted and amended herein. [HR-22-6-2, Sec. 1]

13-903 **AMENDMENTS TO SWIMMING POOL AND SPA CODE.** The International Swimming Pool and Spa Code, 2018 Edition is amended or supplemented as provided below.

Chapter 1 of the Pool and Spa Code is deleted and replaced with the provisions of Article 1 of this Chapter 13. Section 305.1 General. The provisions of this section shall apply to the design of barriers for restricting entry into area having pools and spas. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346, the area where those spas or hot tubs are located shall not be required to comply with Sections 305.2 through 305.7. [Removed pools from this section].

[HR-22-6-2, Sec. 1]

